CONTRIBUTING ZONE PLAN

WOLF RANCH REGIONAL TRAIL PHASES 3 & 4
NORTH SIDE OF THE SAN GABRIEL RIVER FROM WOLF RANCH RIVER CAMP TO SHADOW CANYON
CITY OF GEORGETOWN, WILLIAMSON COUNTY, TEXAS

Prepared For:

H4 GEORGETOWN LP

129 Canyon View Road
Georgetown, Texas 78626

Prepared By:

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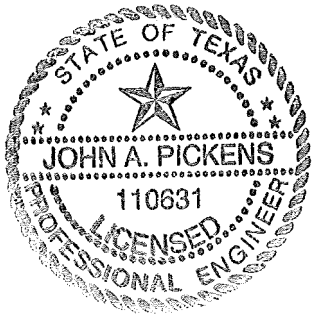
Firm No. 928
KHA Project No. 064461309 & 064461310



February 2, 2026

02/02/2026

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Kimley»Horn

SECTION 1:
EDWARDS AQUIFER APPLICATION COVER PAGE

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

Technical Review

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

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

alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Wolf Ranch Regional Trail Phases 3 & 4						**2. Regulated Entity No.:**			
3. Customer Name:, H4 Georgetown LP						**4. Customer No.:**			
5. Project Type: **(Please circle/check one)**	New X		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP X	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential X			**8. Site (acres):**			159.53
9. Application Fee:	$10,000		**10. Permanent BMP(s):**			Vegetative Filter Strips			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Williamson		**14. Watershed:**			South Fork San Gabriel River			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	X
Region (1 req.)	___	___	X
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	N/A
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. John Pickens, P.E.
Print Name of Customer/Authorized Agent 
Signature of Customer/Authorized Agent Date: February 2, 2026

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

SECTION 2:
CONTRIBUTING ZONE PLAN APPLICATION

Contributing Zone Plan Application

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 Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: John Pickens, P.E.

Date: February 2, 2026

Signature of Customer/Agent:



02/02/2026

Regulated Entity Name: Wolf Ranch Regional Trail Phases 3 & 4

Project Information

1. County: Williamson
2. Stream Basin: South Fork San Gabriel
3. Groundwater Conservation District (if applicable): N/A
4. Customer (Applicant):

   Contact Person: Logan Blok
   Entity: H4 Georgetown LP
   Mailing Address: 129 Canyon View Road
   City, State: Georgetown, TX Zip: 78626
   Telephone: (602) 751-1522 Fax: --------
   Email Address: logan.blok@hillwood.com

5. Agent/Representative (If any):

Contact Person: John Pickens, P.E.
Entity: Kimley-Horn and Associates, Inc.
Mailing Address: 10814 Jollyville Road, Campus IV, Suite 200
City, State: Austin, Texas Zip: 78759
Telephone: 757-685-7200 Fax: N/A
Email Address: john.pickens@kimley-horn.com

6. Project Location:

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

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.
The Subject Regional Trail is located along the North San Gabriel River and runs from Wolf Ranch River Camp west to Shadow Canyon. This can be seen in the Road Map and the USGS Quadrangle Map, which are Attachments A and B, respectively.

8. ☒ **Attachment A - Road Map**. A road map showing directions to and the 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 official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) clearly show:

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).

10. ☒ **Attachment C - Project Narrative**. A detailed narrative description of the proposed project is attached. 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
☐ Existing paved and/or unpaved roads
☐ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Not cleared)
☐ Other: _____

12. The type of project is:

☐ Residential: # of Lots: _
☐ Residential: # of Living Unit Equivalents: ___
☐ Commercial
☐ Industrial
☒ Other: _Regional Trail-Park

13. Total project area (size of site): __159.53 acres

Total disturbed area: 8.50 Acres

14. Estimated projected population: __0

15. The amount and type of impervious cover expected after construction is complete is shown below:

1. **Table 1 - Impervious Cover**

Impervious Cover of Proposed Project	*Sq. Ft.*	*Sq. Ft./Acre*	*Acres*
Structures/Rooftops	0	÷ 43,560 =	0
Parking	0	÷ 43,560 =	0
Other paved surfaces (CONCRETE SIDEWALK)	98,577	÷ 43,560 =	2.263
Total Impervious Cover	98,577	÷ 43,560 =	2.263

Total Impervious Cover 2.263 ÷ Total Acreage 159.53 X 100 = 1.42% Impervious Cover

16. ☒ **Attachment D - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water quality is attached. If applicable, this includes the location and description of any discharge associated with industrial activity other than construction.

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

For Road Projects Only

Complete questions 18 - 23 if this application is exclusively for a road project.

☒ N/A

18. Type of project:

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

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

☐ Concrete
☐ Asphalt concrete pavement
☐ Other: _____

20. Right of Way (R.O.W.):

Length o f R .O.W.:_____feet.

Width o f R .O.W.:_____feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____acres.

21. Pavement Area:

Length o f R .O.W.:_____feet.

Width o f R .O.W.:_____feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____acres.
Pavement area_____acres ÷ R .O.W. a rea____acres x 100 = ____% impervious cover.

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

25. ☐ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC§213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☒ N/A

26. Wastewater will be disposed of by:

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

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

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

☒ Sewage Collection System (Sewer Lines):

The sewage collection system will convey the wastewater to the N/A. The treatment facility is:

☐ Existing.
☐ Proposed.
☒ N/A

Permanent Aboveground Storage Tanks (ASTs) ≥ 500 Gallons

Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons.

☒ N/A

27. Tanks and substance stored:

2. **Table 2 - Tanks and Substance Storage**

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1			
2			
3			
4			
5			

Total x 1.5 = _____ Gallons

28. ☐ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

☐ **Attachment G - Alternative Secondary Containment Methods**. Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are attached.

29. Inside dimensions and capacity of containment structure(s):

3. **Table 3 - Secondary Containment**

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*

Total: _____ Gallons

30. Piping:

☐ All piping, hoses, and dispensers will be located inside the containment structure.
☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
☐ The piping will be aboveground
☐ The piping will be underground

31. ☐ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of: _____.

32. ☐ **Attachment H - AST Containment Structure Drawings**. A scaled drawing of the containment structure is attached that shows the following:

☐ Interior dimensions (length, width, depth and wall and floor thickness).
☐ Internal drainage to a point convenient for the collection of any spillage.
☐ Tanks clearly labeled
☐ Piping clearly labeled
☐ Dispenser clearly labeled

33. ☐ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

☐ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

Site Plan Requirements

Items 34 - 46 must be included on the Site Plan.

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

    Site Plan Scale: 1" = 100, 40 '.

35. 100-year floodplain boundaries:

    ☒ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

    ☐ No part of the project site is located within the 100-year floodplain.
    The 100-year floodplain boundaries are based on the following specific

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

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

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

38. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

39. ☒ Areas of soil disturbance and areas which will not be disturbed.

40. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

41. ☐ Locations where soil stabilization practices are expected to occur.

42. ☐ Surface waters (including wetlands).

    ☒ N/A

43. ☐ Locations where stormwater discharges to surface water.

    ☒ There will be no discharges to surface water.

44. ☐ Temporary aboveground storage tank facilities.

    ☒ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

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

    ☐ N/A

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

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

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

    ☐ N/A

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

    ☐ N/A

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

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

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

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

51. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be

recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

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

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

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

52. ☒ **Attachment J - BMPs for Upgradient Stormwater**.

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

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

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

53. ☒ **Attachment K - BMPs for On-site Stormwater**.

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

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

54. ☒ **Attachment L - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

☐ N/A

55. ☒ **Attachment M - Construction Plans**. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☐ N/A

56. ☒ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

    ☒ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☒ Signed by the owner or responsible party
    ☒ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
    ☒ Contains a discussion of record keeping procedures

    ☐ N/A

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

    ☒ N/A

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

    ☐ N/A

Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

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

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

Administrative Information

61. ☒ 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.

62. ☒ Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

63. ☒ The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

☒ The Temporary Stormwater Section (TCEQ-0602) is included with the application.

ROAD MAP

IMAGES
XREFS XREF Road Map xBorder
PLOTTED BY PICKENS, JOHN 3/20/2026 5:55 AM
DWG NAME K:\AUS_CIVIL\064461309-WOLF RANCH PHASES 3-4 TRAIL\DOC\REPORTS\TCEQ\CAD\ROAD MAP.DWG
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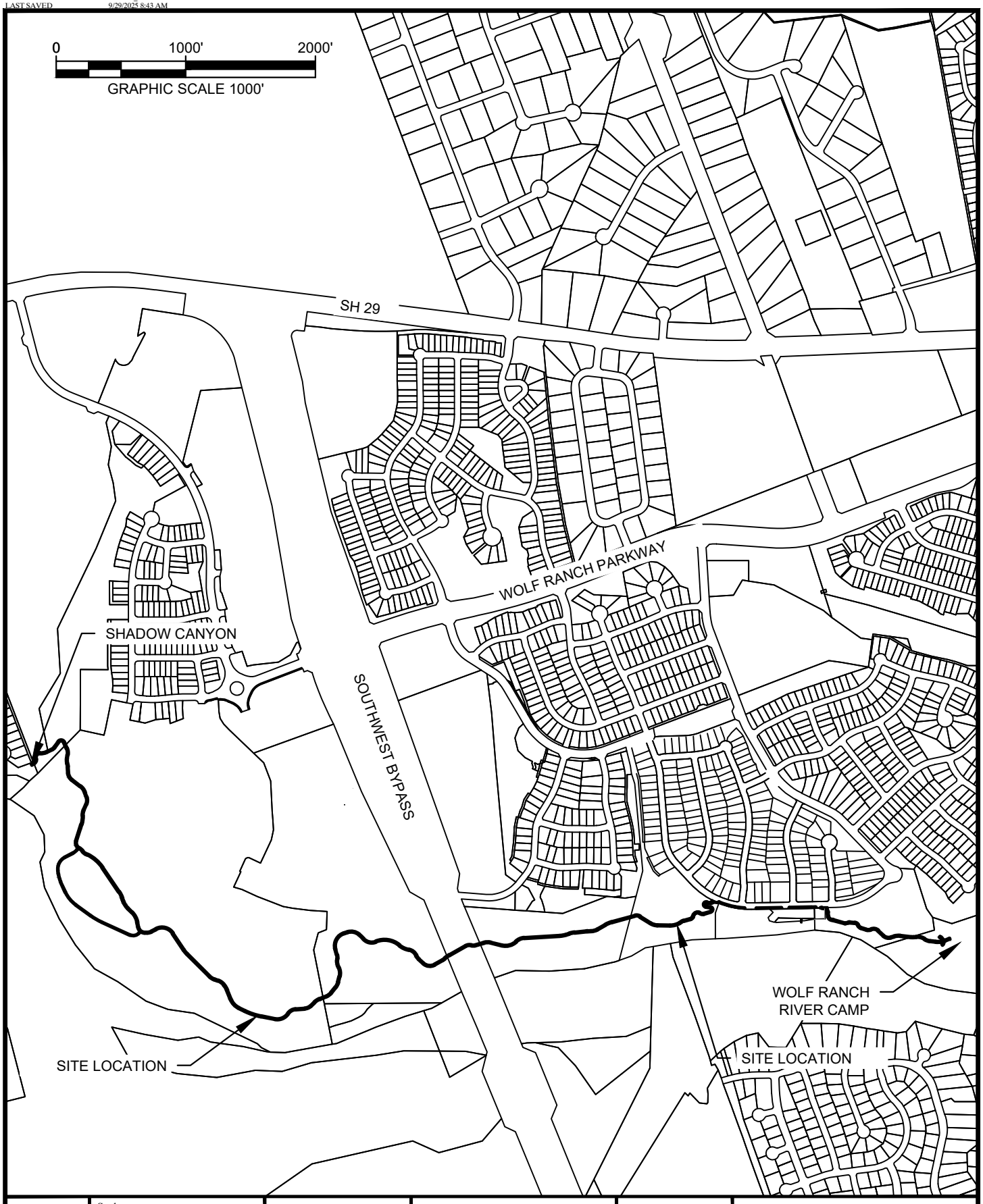

SHEET 1 OF 1 SHEETS	Scale: N.T.S. Designed by: JP Drawn by: JP Checked by: JP Date: FEBRUARY 2026 Project No. 064461309 & 310	ROAD MAP	WOLF RANCH REGIONAL TRAIL PHASES 3 & 4 City of Georgetown, Williamson County, Texas	N W E S	Kimley»Horn This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-th-ground survey and represents only the approximate relative location of property boundaries.

USGS QUADRANGLE MAP

K:\AUS_Civil\069291601 Benton - JDS\PHASE 3C\Doc\Reports\TCEQ\Attachments

Plotted By:Pickens, John Date:March 20, 2026 06:11:51am File Path:K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Doc\Reports\TCEQ\CAD\USGS Map.dwg

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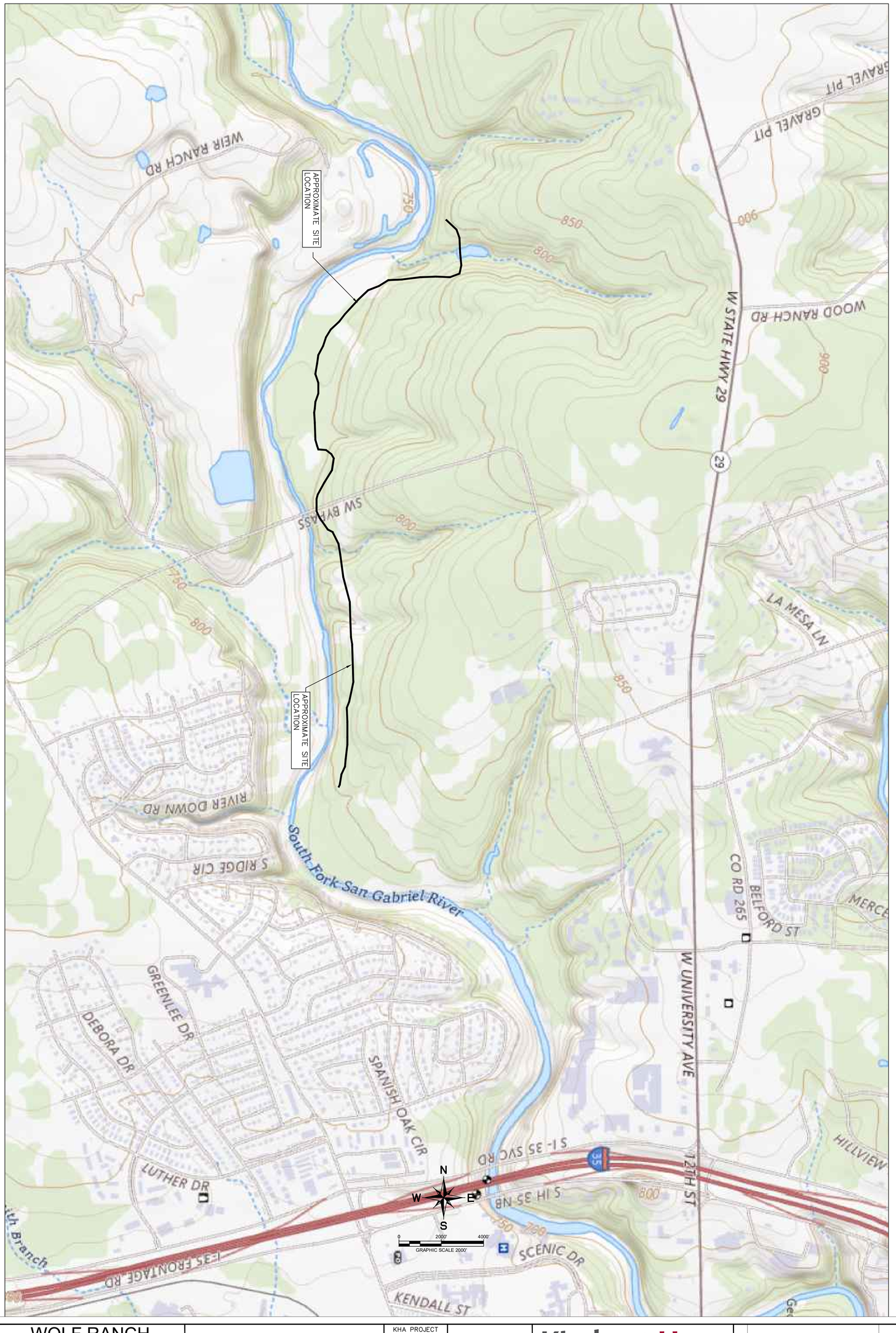

SHEET NUMBER

WOLF RANCH REGIONAL TRAIL PHASES 3 & 4

CITY OF GEORGETOWN,
WILLIAMSON COUNTY, TEXAS

USGS QUADRANGLE MAP

KHA PROJECT	064461309
DATE	FEBRUARY 2026
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	JAP
CHECKED BY:	JAP

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

Kimley»Horn

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TEXAS REGISTERED ENGINEERING FIRM F-928

No.	REVISIONS	DATE	BY

PROJECT NARRATIVE

Wolf Ranch Regional Trail Phases 3 & 4 is a portion of a larger mixed-use development, Wolf Ranch, which encompasses approximately 800 acres. Wolf Ranch Regional Trail Phases 3 & 4 encompasses approximately 159.53 acres (approximately 8.50 acres of disturbance) of open space lots along the South San Gabriel River. The Subject property is located south of SH 29 east and west of South West Bypass in the City of Georgetown, Williamson County, Texas. Phases 3 & 4 of the regional trail run from the existing Wolf Ranch River Camp Amenity Center west to regional trail constructed with the Shadow Canyon development. The existing site is undeveloped rangeland. The scope of the project consists of the following civil improvements: concrete trail, grading, and drainage culverts. The site lies over the Edwards Aquifer Contributing Zone and contains areas within the 100-year floodplain as defined by Federal Emergency Management Agency Federal Insurance Rate Map # 48491C0480F, dated December 12, 2019.

The Site, Wolf Ranch Regional Trail Phases 3 & 4, have an overall impervious cover of 2.263 acres or 1.42% as shown in the table below. The onsite permanent BMPs are designed to handle the increase in impervious cover. On-site will be natural and engineered vegetative filter strips.

All the proposed impervious cover is compliant with the limitations of the impervious allotted by the regulating entity (City of Georgetown). The percentage of impervious cover proposed is calculated for the fully developed project. The Overall proposed impervious is shown below.

WOLF RANCH REGIONAL TRAIL PHASES 3 & 4 IMPERVIOUS COVER SUMMARY

SECTION	FINAL PLAT RECORDING NUMBER	LOT NUMBER	BLOCK NUMBER	LOT TYPE	LOT AREA (ACRES)	TRAIL IMPERVIOUS COVER WITHIN LOT (ACRES)	PERCENT IMPERVIOUS COVER WITHIN EACH LOT
WOLF RANCH WEST SECTION 8 PHASE 3	2024091674	7	I	OPEN SPACE	15.72	0.023	0.15%
WOLF RANCH WEST SECTION 7B	2024087137	13	C	OPEN SPACE	15.88	0.060	0.38%
WOLF RANCH SECTION 6G	2025013862	15	A	OPEN SPACE	47.71	0.902	1.89%
WOLF RANCH FUTURE SECTION 5G	N/A	N/A	N/A	OPEN SPACE	23.64	0.390	1.65%
SOUTHWEST BYPASS	N/A			RIGHT OF WAY	3.32	0.064	1.93%
WOLF RANCH SECTION 3G	2025027690	23	A	OPEN SPACE	12.71	0.278	2.19%
WOLF RANCH SECTION 3G	2025027690	21	A	OPEN SAPCE	8.29	0.203	2.45%
WOLF RANCH SECTION 3G	2025027690	22	A	WATER QUALITY	3.69	0.069	1.87%
WOLF RANCH SECTION 1AG	2021070191	1	C	AMENITY CENTER	6.67	0.187	2.80%
WOLF RANCH SECTION 1BG	2021140830	25	C	OPEN SPACE	21.90	0.087	0.40%
				TOTAL FOR ALL LOTS	**159.53**	**2.263**	**1.42%**

FACTORS AFFECTING SURFACE WATER QUALITY

Possible factors that could affect surface water and ground water quality are:

- Petroleum drippings from vehicle movement
- Integrated Pest Management
- Landscape Maintenance
- Concrete Products
- Soil/Stock Pile
- Paint
- Oils
- Sediment and soil from disturbed areas

VOLUME AND CHARACTER OF STORMWATER

The natural topography of the site is defined by gently rolling hills. The entire site drains south to the San Gabriel River.

The proposed BMP's for the site are natural and engineered vegetative filter strips. The regional trail total impervious cover is 2.263 acres or 1.42% of the total site area which is significantly less than 20%. The vegetative filter strips were designed and sized to treat the proposed onsite and offsite flows. TCEQ TSS Removal calculations are provided on the sheets that follow.

SUITABILITY LETTER FROM AUTHORIZED AGENT

(NOT APPLICABLE)

BMPS FOR UPGRADIENT STORMWATER

(NOT APPLICABLE)

BMPs FOR ON-SITE STORMWATER

During construction, BMP's include silt fence to capture sediment from the construction area contained within the storm water runoff. Silt fence will be installed along the downstream portion of the regional trail. Rock Berms will be installed downstream of the two (2) proposed culverts crossings.

The proposed BMP's for the site are natural and engineered vegetative filter strips. The regional trail total impervious cover is 2.263 acres or 1.42% of the total site area which is significantly less than 20%. The vegetative filter strips were designed and sized to treat the proposed onsite and offsite flows.

.

After construction, all disturbed areas on the site will be re-vegetated and runoff from the proposed improvements will sheet flow to the proposed vegetative filter strips.

BMPs FOR SURFACE STREAMS

There are no existing surface streams or sensitive features being affected on site. All permanent BMPs have been designed to remove the increase in Total Suspended Solids as per current TCEQ requirements.

CONSTRUCTION PLANS

Please reference attached construction plans.

GENERAL CONSTRUCTION PLAN NOTES:

1. THESE PLANS WERE PREPARED, SEALED, SIGNED, AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE 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. ALL ELECTRIC DISTRIBUTION LINES AND INDIVIDUAL SERVICE LINES 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.
4. WHERE NO OVERHEAD INFRASTRUCTURE EXISTS, UNDERGROUND ELECTRIC UTILITY LINES SHALL BE LOCATED ALONG THE STREET AND WITHIN THE SITE. WHERE EXISTING OVERHEAD INFRASTRUCTURE IS TO BE RELOCATED, IT SHALL BE RE-INSTALLED UNDERGROUND AND THE EXISTING FACILITIES SHALL BE REMOVED AT THE DISCRETION OF THE DEVELOPMENT ENGINEER (ONLY APPLICABLE FOR NON-RESIDENTIAL AND MULTI-FAMILY DEVELOPMENT).
5. ALL ELECTRIC AND COMMUNICATION INFRASTRUCTURE SHALL COMPLY WITH UDC SECTION 13.06.
6. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
7. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED IN NOVEMBER OF 2013. ANY SPRINGS AND STREAMS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.
8. THIS SUBDIVISION IS SUBJECT TO THE DEVELOPMENT AGREEMENT BETWEEN THE WOLF LEGACY, L.P. AND THE CITY OF GEORGETOWN UNDER DOCUMENT NUMBER 2014095878, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON AUGUST 12, 2014 AND EXECUTED ON AUGUST 26, 2014.
9. THIS SUBDIVISION IS SUBJECT TO THE CITY OF GEORGETOWN ORDINANCE NUMBER 2018-66 (2014UDC) AMENDING THE OFFICIAL ZONING MAP TO BE REZONED FROM AGRICULTURE (AG) DISTRICT TO PLANNED UNIT DEVELOPMENT (PUD) KNOWN AS WOLF RANCH HILLWOOD, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018.
10. ANY HERITAGE TREE NOTED ON THIS SUBDIVISION CONSTRUCTION PLAN IS SUBJECT TO EXHIBIT H-7 OF THE CITY OF GEORGETOWN ORDINANCE NUMBER 2018-66 AMENDING THE OFFICIAL ZONING MAP TO BE REZONED FROM AGRICULTURE (AG) DISTRICT TO PLANNED UNIT DEVELOPMENT (PUD) KNOWN AS WOLF RANCH HILLWOOD PUD, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018.

MUD SIGNATURE BLOCK:

REVIEW OF THE PLANS BY THE DISTRICT IS LIMITED TO WATER, WASTEWATER, AND DRAINAGE AND DOES NOT INDICATE A REVIEW FOR ADEQUACY OF THE DESIGN OF THE FACILITIES. IN APPROVING THESE PLANS, THE DISTRICT MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

WILLIAMSON COUNTY MUD 29: DATE:

OWNER/DEVELOPER

H4 GEORGETOWN PHASE 6G, LLC
129 CANYON VIEW ROAD
GEORGETOWN, TX 78628
CONTACT: CARTER DeWALCH
PHONE: 713-516-7964
EMAIL: CARTER.DEWALCH@HILLWOOD.COM

ENGINEER

KIMLEY-HORN AND ASSOCIATES, INC.
10814 JOLLYVILLE ROAD, CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
TBPE FIRM REGISTRATION NO. F-928
CONTACT: JOHN PICKENS, P.E.
PHONE: 757-685-7200
EMAIL: JOHN.PICKENS@KIMLEY-HORN.COM

SURVEYOR

KIMLEY-HORN AND ASSOCIATES, INC.
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CONTACT: MIKE MONTGOMERY II
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EMAIL: MIKE.MONTGOMERY@KIMLEY-HORN.COM

PREPARED BY:

Kimley»Horn

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AUSTIN, TEXAS 78759
CERTIFICATE OF REGISTRATION #928
Tel. No. (512) 418-1771
Fax No. (512) 418-1791

GAS SERVICE

ATMOS ENERGY CORPORATION
3110 N INTERSTATE 35
ROUND ROCK, TEXAS 78681
TELEPHONE: (512) 310-3854
CONTACT: DAVID DOBERNECKI
WEBSITE: www.atmosenergy.com

ELECTRIC SERVICE

PEDERNALES ELECTRIC COOPERATIVE, INC. (PEC)
LIBERTY HILL OFFICE
10625 WEST HIGHWAY 8642
TELEPHONE: 877-372-0391
WEBSITE: https://www.pec.coop/

WATER SERVICE

CITY OF GEORGETOWN
300 INDUSTRIAL AVE #1
GEORGETOWN, TEXAS 78626
TELEPHONE: (512) 930-3640
CONTACT: DAVID MUNK
WEBSITE: https://gus.georgetown.org/

WASTEWATER SERVICE

CITY OF GEORGETOWN
GEORGETOWN UTILITY SYSTEMS
300-1 INDUSTRIAL AVENUE
GEORGETOWN, TEXAS 78626
TELEPHONE: (512)930-3555
CONTACT: DAVID MUNK
WEBSITE: https://gus.georgetown.org/

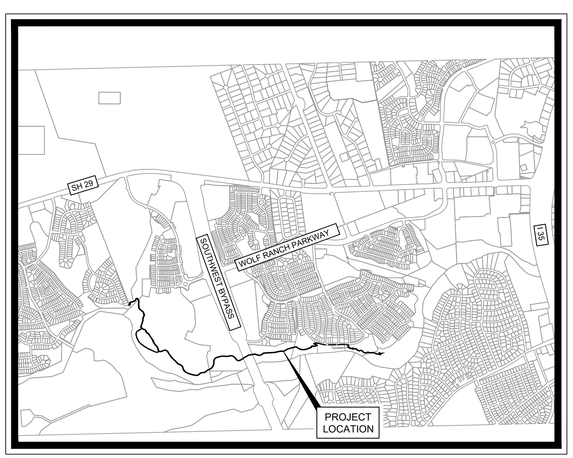
ON BEHALF OF WILLIAMSON COUNTY MUNICIPAL UTILITY DISTRICT #29

CIVIL CONSTRUCTION PLANS PAVING, GRADING, & UTILITIES

FOR

WOLF RANCH REGIONAL TRAIL PHASES 3 & 4

CITY OF GEORGETOWN, WILLIAMSON COUNTY, TEXAS



VICINITY MAP
SCALE: 1" = 2,000'

SEPTEMBER 2025

I CERTIFY THAT THESE ENGINEERING DOCUMENTS ARE COMPLETE, ACCURATE AND ADEQUATE FOR THE INTENDED PURPOSES, INCLUDING CONSTRUCTION, BUT ARE NOT AUTHORIZED FOR CONSTRUCTION PRIOR TO FORMAL CITY APPROVAL.

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5	WOLF RANCH WEST SECTION 8 PHASE 3 FINAL PLAT (2 OF 2)
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NAL TRAIL PHASES 3 & 4 IMPERMOUS COVER SUMMARY

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TOTAL FOR ALL LOTS					**159.53**	**2.263**	**1.42%**

*TOTAL LIMITS OF CONSTRUCTION: 10 ACRES
*TOTAL LIMITS OF DISTURBANCE: 8.5 ACRES

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309
DATE SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

COVER SHEET

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
1
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 18, 2026 10:20:13am File Path:K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Cad\PlanSheets\C-Cover Sheet.dwg
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GENERAL NOTES

1. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THESE PLANS, THE CITY OF GEORGETOWN "UNIFIED DEVELOPMENT CODE" AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS.
3. CONTRACTOR SHALL CONTACT ALL FRANCHISE UTILITY COMPANIES TO HAVE THEM LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE THE EXACT LOCATION AND DEPTH OF ALL FRANCHISE UTILITY SERVICES AND ANY REQUIRED RELOCATION AND/OR EXTENSIONS. SERVICES SHOWN ON THE PLANS ARE CONCEPTUAL.
4. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RELOCATION AND INSTALLATION OF FRANCHISE UTILITIES NECESSARY FOR ON AND OFF SITE CONSTRUCTION.
5. BRACING OF UTILITY POLES MAY BE REQUIRED BY UTILITY COMPANIES WHEN TRENCHING OR EXCAVATION IS IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR. THERE IS NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE VARIOUS PAY ITEMS FOR INSTALLATION OF PIPE.
6. THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY RECORDS AND PLANS AND ARE CONSIDERED APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC AND PRIVATE UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM CONTRACTOR'S OPERATIONS SHALL BE RESTORED AT THEIR EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
7. CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES.
8. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS SHOWN ON THE PLANS AND REVIEW ALL FIELD CONDITIONS, INCLUDING EXISTING GRADES AND UTILITY FLOW LINES, AND SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.
9. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY, INCLUDING, BUT NOT LIMITED TO FENCES, WALLS, PAVEMENT, GRASS, TREES, LAWN SPRINKLER AND IRRIGATION SYSTEMS AT NO COST TO THE OWNER. THIS WORK SHALL BE SUBSIDIARY TO THE CONTRACT (UNLESS OTHERWISE NOTED) AND IS NOT A SEPARATE PAY ITEM.
10. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE APPROVED CONTRACT DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN NEAT AND ACCURATE CONSTRUCTION RECORD PLANS.
13. CONNECTIONS TO EXISTING FACILITIES SHALL BE ACCOMPLISHED IN A NEAT AND PROFESSIONAL MANNER. WHEN FIELD CONDITIONS INDICATE ANY VARIANCE FROM DETAILED METHODS, THE CONTRACTOR SHALL PROVIDE COMPREHENSIVE AND DETAILED DRAWINGS (FOR APPROVAL) OF METHODS PROPOSED.
14. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
15. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
16. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO THE FINAL CONNECTION OF SERVICES.
17. CONTRACTOR SHALL VERIFY BENCHMARKS AND DATUM PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS.
18. ALL HORIZONTAL DIMENSIONS GIVEN ARE TO FACE OF CURB AND TO PIPE CENTERLINES, UNLESS OTHERWISE NOTED ON PLANS.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION STAKING. CONSTRUCTION STAKING SHALL BE PERFORMED BY A REGISTERED PUBLIC SURVEYOR IN THE STATE OF TEXAS.
20. THE CONTRACTOR SHALL TOPSOIL, SEED AND FERTILIZE ALL AREAS DISTURBED BY CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE WHATEVER MEASURES ARE NEEDED INCLUDING TEMPORARY IRRIGATION TO ENSURE FULL COVERAGE OF GRASSING. UNLESS OTHERWISE NOTED, PRIVATE LAWN AREAS AND PARKWAYS IN FRONT OF PRIVATE LAWN AREAS DISTURBED BY CONSTRUCTION SHALL BE REPLACED WITH BLOCK SOD OF A SIMILAR GRASS TO THAT EXISTING. ALL SEEDED OR SODDED AREAS SHALL RECEIVE SIX(6) INCHES OF TOPSOIL. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
21. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED SMOOTH. THE AREAS SHALL THEN BE SEEDED, IRRIGATED, AND STABILIZED AS SPECIFIED IN THE PLANS, AND MAINTAINED UNTIL SOIL IS STABILIZED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE STABILIZED AND MULCHED AS SHOWN ON THE LANDSCAPE, GRADING, AND EROSION CONTROL PLANS.
22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
23. SOD MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
24. CONTRACTOR IS TO CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL PRIMARY POINTS OF ACCESS. THIS STABILIZED EXIT SHALL BE CONSTRUCTED PER CITY DETAILS.
25. CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE SWPPP MUST BE MADE READILY AVAILABLE AT THE TIME OF AN ON-SITE INSPECTION TO: THE EXECUTIVE DIRECTOR; A FEDERAL, STATE, OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, GRADING PLANS, OR STORMWATER MANAGEMENT PLANS; LOCAL GOVERNMENT OFFICIALS; AND THE OPERATOR OF A MUNICIPAL SEPARATE STORM SEWER (MS4) RECEIVING DISCHARGES FROM THE SITE.
26. ANY ENTITY THAT MEETS THE DEFINITION OF A "PRIMARY OPERATOR" FOR A LARGE CONSTRUCTION ACTIVITY (FIVE OR MORE ACRES) SHALL BE RESPONSIBLE FOR COMPLETING AND SUBMITTING A NOTICE OF INTENT (NOI) AND A NOTICE OF TERMINATION (NOT) WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ).
27. THE CONTRACTOR MUST CONSTRUCT AND MAINTAIN A PERMANENT STABLE PROTECTIVE COVER (GRASS) FOR EROSION AND SEDIMENT CONTROL ON ALL LAND SURFACES EXPOSED OR DISTURBED BY CONSTRUCTION OF THE PERMITTED PROJECT. THE PROTECTIVE COVER MUST BE INSTALLED WITHIN FOURTEEN DAYS AFTER FINAL GRADING OF THE AFFECTED LAND SURFACE. A PERMANENT STABLE COVER MUST BE ESTABLISHED WITHIN 60 DAYS OF IT'S INSTALLATION.
28. UPON COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL PROVIDE AS-BUILT PLANS IDENTIFYING ALL DEVIATIONS OR VARIATIONS OF ORIGINAL PLANS. AS-BUILT PLANS ARE SUBSIDIARY TO ALL OTHER BID ITEMS AND SHALL NOT BE PAID FOR AS A SEPARATE LINE ITEM.
29. DURING CONSTRUCTION, ALL MATERIAL TESTING SHALL BE COORDINATED WITH THE CITY OF GEORGETOWN CONSTRUCTION INSPECTOR. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE CITY STANDARD SPECIFICATIONS. ALL SOILS TESTING IS THE RESPONSIBILITY OF AND WILL BE PAID FOR BY THE CONTRACTOR. MATERIAL TESTING SHALL BE PERFORMED BY AN INDEPENDENT TESTING LABORATORY.
30. ALL EXISTING TRAFFIC AND STREET SIGNS DISTURBED SHALL BE REINSTALLED WHERE APPLICABLE BY THE CONTRACTOR.
31. ALL EXISTING SHRUBS, TREES, PLANTING, AND OTHER VEGETATION, OUTSIDE OF PROPERTY LIMITS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH EQUIVALENT MATERIAL BY THE CONTRACTOR AT NO ADDITIONAL COST.
32. THE CONTRACTOR SHALL SALVAGE AND PROTECT ALL EXISTING POWER POLES, SIGNS, MANHOLES, TELEPHONE RISERS, WATER VALVES, ETC. DURING ALL CONSTRUCTION PHASES.
33. CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS OFFSITE FROM THE EXISTING ROADWAYS AND PROJECT SITE THAT ARE A RESULT OF THE PROPOSED CONSTRUCTION AS REQUESTED BY THE CITY OF GEORGETOWN. AT A MINIMUM, THIS TASK SHOULD OCCUR ONCE A WEEK.
34. CONNECTIONS TO EXISTING FACILITIES SHALL BE ACCOMPLISHED IN A NEAT AND PROFESSIONAL MANNER. WHEN FIELD CONDITIONS INDICATE ANY VARIANCE FROM DETAILED METHODS, THE CONTRACTOR SHALL PROVIDE COMPREHENSIVE AND DETAILED DRAWINGS (FOR APPROVAL) OF METHODS PROPOSED.
35. WATER SHALL NOT BE PERMITTED IN OPEN TRENCHES DURING CONSTRUCTION.
36. CONTRACTOR SHALL CONTACT THE DESIGNATED CONSTRUCTION INSPECTOR ASSIGNED TO THIS PROJECT AT LEAST 48 HOURS PRIOR TO STARTING CONSTRUCTION.
37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING A TRENCH SAFETY PLAN TO THE CITY OF GEORGETOWN PUBLIC WORKS DEPARTMENT AT THE TIME OF THE PRECONSTRUCTION MEETING, OR PRIOR TO BEGINNING CONSTRUCTION OF THESE IMPROVEMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY STANDARDS, TEXAS STATE LAW, AND O.S.H.A. STANDARDS FOR ALL EXCAVATION IN EXCESS OF FIVE FEET IN DEPTH. NO OPEN TRENCHES WILL BE ALLOWED OVERNIGHT WITHOUT THE PRIOR SPECIFIC WRITTEN APPROVAL OF THE CITY OF GEORGETOWN PUBLIC WORKS DEPARTMENT, OR DESIGNATED REPRESENTATIVE. ONSITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
38. CONTRACTOR TO REVIEW DESIGN INTENT OF THESE PLANS AND SUBMIT REQUESTS-FOR-INFORMATION IN A TIMELY MANNER PRIOR TO COMMENCING THAT WORK.
39. ALL APPURTENANCES INSTALLED IN PAVEMENT AREAS SHALL BE ADJUSTED AS REQUIRED TO BE FLUSH WITH FINISHED PAVEMENT.
40. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR COMPLETING AND IMPLEMENTING TRAFFIC CONTROL PLAN.

PAVING & STRIPING NOTES

1. ALL CONSTRUCTION SHALL BE IN GENERAL ACCORDANCE WITH THESE PLANS, CITY OF GEORGETOWN, TX STANDARD SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS.
2. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE NOMINATION OF THE TESTING LABORATORY AND THE PAVEMENT OF SUCH TESTING SERVICES SHALL BE MADE BY THE CONTRACTOR. THE OWNER SHALL APPROVE THE LABORATORY NOMINATED TO DO THE TESTING OF MATERIALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED DOES MEET THE REQUIREMENTS OF THE CITY'S SPECIFICATIONS AND THESE PLANS.
3. BARRIER FREE RAMPS SHALL BE CONSTRUCTED AT ALL DRIVEWAY APPROACHES PER CITY STANDARDS.
4. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
5. CONTRACTOR SHALL FURNISH AND INSTALL ALL PAVEMENT MARKINGS FOR FIRE LANES, PARKING STALLS, HANDICAPPED PARKING SYMBOLS, AND MISCELLANEOUS STRIPING WITHIN PARKING LOT AND AROUND BUILDING AS SHOWN ON THE PLANS. ALL PAINT FOR PAVEMENT MARKINGS SHALL ADHERE TO CITY OF GEORGETOWN STANDARD DETAILS AND SPECIFICATIONS.
6. REFER TO GEOTECHNICAL REPORT FOR PAVING JOINT LAYOUT PLAN.
7. REFER TO GEOTECHNICAL REPORT FOR REINFORCEMENT STEEL.
8. REFER TO GEOTECHNICAL REPORT FOR SOIL COMPACTION SPECIFICATION.
9. FIRE LANES SHALL BE DESIGNATED BY CONTINUOUS PAINTED LINES FOUR (4) INCHES IN WIDTH ON EACH SIDE OF THE FIRE LANE STARTING AT THE ENTRANCE FROM THE STREET AND TO BE CONTINUED TO THE EXIT. SUCH LINES SHALL BE BRIGHT RED IN COLOR.
10. FIRE LANES ADJACENT TO CURBS SHALL BE OUTLINED BY A FOUR (4) INCH WIDE STRIP PAINTED BRIGHT RED IN COLOR ALONG THE CURB'S GUTTER LINE.
11. THE WORDS "FIRE LANE" AND "NO PARKING" SHALL BE STENCILED IN FOUR (4) INCH HIGH WHITE LETTERS ALTERNATELY EVERY FIFTEEN (15) FEET ALONG THE RED FIRE LANE STRIPES.
12. ALL HANDICAP RAMPING, STRIPING, AND PAVEMENT MARKINGS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT THAT IS MOST CURRENT.
13. REFERENCE CITY OF GEORGETOWN, TX STANDARD CONSTRUCTION DETAILS FOR HANDICAP RAMP AND OTHER PAVING DETAILS.
14. CONTRACTOR RESPONSIBLE FOR PREPARATION, SUBMITTAL, AND APPROVAL BY CITY OF GEORGETOWN, TX OF TRAFFIC CONTROL PLAN PRIOR TO START OF CONSTRUCTION.
15. SIDEWALKS ADJACENT TO CURB SHALL BE CONNECTED TO BACK OF CURB USING LONGITUDINAL BUTT JOINT.
16. UNLESS THE PLANS SPECIFICALLY DICTATE TO THE CONTRARY, ON-SITE AND OTHER DIRECTIONAL SIGNS SHALL BE LOCATED OUT OF THE PEDESTRIAN AND AUTOMOBILE ROUTES AND SHALL BE LOCATED BETWEEN THREE TO FIVE FEET BEHIND THE NEAREST BACK OF CURB. SIGN HEIGHT, LOCATION, AND STRUCTURE SHALL BE SUCH THAT THE SIGNS POSE NO THREAT TO PUBLIC SAFETY.
17. UNLESS THE PLANS SPECIFICALLY DICTATE TO THE CONTRARY, ON-SITE AND OTHER DIRECTIONAL SIGNS SHALL BE ORIENTED SO THEY ARE READILY VISIBLE TO THE ONCOMING TRAFFIC FOR WHICH THEY ARE INTENDED, FIELD ADJUSTMENTS OF LOCATION AND ORIENTATION OF THE SIGNS ARE TO BE MADE TO ACCOMPLISH THIS.
18. THE CONTRACTOR FOR THE PROJECT SHALL NOT PLACE ANY PERMANENT PAVEMENT UNTIL ALL SLEEVING FOR ELECTRIC, GAS, TELEPHONE, CABLE TV, SITE IRRIGATION, OR ANY OTHER UNDERGROUND UTILITY HAS BEEN INSTALLED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM THAT ALL SLEEVING IS IN PLACE PRIOR TO PLACEMENT OF PERMANENT PAVEMENT.
19. BEFORE PLACING PAVEMENT, CONTRACTOR SHALL VERIFY THAT SUITABLE HANDICAPPED ROUTES (PER A.D.A. & T.A.S) EXIST TO AND FROM EVERY DOOR. IN NO CASE SHALL HANDICAP RAMP SLOPES EXCEED 1 VERTICAL TO 12 HORIZONTAL. IN NO CASE SHALL SIDEWALK CROSS SLOPES EXCEED 2.0 PERCENT. IN NO CASE SHALL LONGITUDINAL SIDEWALK SLOPES EXCEED 5.0 PERCENT. CONTRACTOR SHALL CONTACT ENGINEER PRIOR TO PAVING IF ANY EXCESSIVE SLOPES ARE ENCOUNTERED. NO CONTRACTOR CHANGE ORDERS WILL BE ACCEPTED FOR A.D.A. AND T.A.S. COMPLIANCE ISSUES.
20. STREETS, SIDEWALKS, DRIVEWAYS, AND STORM DRAINAGE FACILITIES IN THE PUBLIC RIGHT-OF-WAY SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE CITY OF GEORGETOWN INFRASTRUCTURE DESIGN & DEVELOPMENT STANDARDS MANUAL, LATEST EDITION.
21. FIRE LANES SHALL REMAIN OPEN/ACCESSIBLE AT ALL TIMES DURING CONSTRUCTION; FIRE LANE SHALL BE INSTALLED & ACCEPTED BY THE CITY PRIOR TO ANY CONSTRUCTION ABOVE THE FOUNDATION.

GRADING NOTES

1. ALL CONSTRUCTION SHALL BE IN GENERAL ACCORDANCE WITH THESE PLANS, CITY OF GEORGETOWN, TX STANDARD SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT, AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS.
2. UNLESS OTHERWISE NOTED, PROPOSED CONTOURS AND SPOT ELEVATIONS SHOWN IN PAVED AREAS REFLECT TOP OF PAVEMENT SURFACE. ADD .50' TO PAVING GRADE FOR TOP OF CURB GRADE. THE LIMITS OF EARTHWORK IN PAVED AREAS IS THE BOTTOM OF PAVEMENT.
3. THE CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL USE SILT FENCES (OR OTHER METHODS APPROVED BY THE ENGINEER AND CITY) AS REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, OR LOCAL EROSION, CONSERVATION, AND SILTATION REQUIREMENTS. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND THE ESTABLISHMENT OF A STAND OF GRASS OR OTHER GROWTH TO PREVENT EROSION. CONTRACTOR IS RESPONSIBLE FOR FILING N.O.I. AND N.O.T. WITH THE TCEQ. CONTRACTOR SOLELY RESPONSIBLE FOR ALL MANDATED SWPPP RECORD KEEPING AND REPORTING.
4. ALL EXCAVATING IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED. UNUSABLE EXCAVATED MATERIAL AND ALL WASTE RESULTING FROM SITE CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF SITE BY THE GRADING CONTRACTOR AT HIS EXPENSE.
5. BEFORE ANY EARTHWORK IS PERFORMED, THE CONTRACTOR SHALL STAKE OUT AND MARK THE LIMITS OF PAVEMENT AND OTHER ITEMS ESTABLISHED BY THE PLANS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY ENGINEERING AND SURVEYING FOR LINE AND GRADE CONTROL POINTS RELATED TO EARTHWORK.
6. REFERENCE STRUCTURAL DRAWINGS AND SPECIFICATIONS AND GEOTECHNICAL REPORT FOR STRUCTURAL SCOPE AND PAVING SUBGRADE INFORMATION.
7. THE CONTRACTOR SHALL CLEAR AND GRUB THE SITE AND PLACE, COMPACT, AND MOISTURE CONDITION ALL FILL PER THE PROJECT GEOTECHNICAL ENGINEER'S SPECIFICATIONS. THE FILL MATERIAL TO BE USED SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
8. GRADING CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES FOR ANY REQUIRED UTILITY ADJUSTMENTS AND/OR RELOCATIONS.
9. TESTING OF MATERIALS REQUIRED FOR THE CONSTRUCTION OF THE PAVING IMPROVEMENTS SHALL BE PERFORMED BY AN APPROVED AGENCY FOR TESTING MATERIALS. THE NOMINATION OF THE TESTING LABORATORY AND THE PAYMENTS FOR SUCH TESTING SERVICES SHALL BE MADE BY THE CONTRACTOR. THE OWNER SHALL APPROVE THE LABORATORY NOMINATED TO DO THE TESTING OF MATERIALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SHOW BY STANDARD TESTING PROCEDURES THAT THE WORK CONSTRUCTED DOES MEET THE REQUIREMENTS OF THE CITY'S SPECIFICATIONS AND THESE PLANS.
10. PROPOSED CONTOURS ARE APPROXIMATE. PROPOSED SPOT ELEVATIONS AND DESIGNATED GRADIENT ARE TO BE USED IN CASE OF DISCREPANCY.
11. REFER TO SITE PLAN AND/OR DIMENSION CONTROL PLAN AND FINAL PLAT FOR HORIZONTAL DIMENSIONS.
12. REFER TO EROSION CONTROL PLAN FOR EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION.
13. NO TREE SHALL BE REMOVED OR DAMAGED WITHOUT PRIOR AUTHORIZATION OF THE OWNER OR OWNER'S REPRESENTATIVE. EXISTING TREES SHALL BE PRESERVED WHENEVER POSSIBLE.
14. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO COMMENCING CONSTRUCTION AND SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES BEFORE CONSTRUCTION COMMENCES.
15. AFTER PLACEMENT OF SUBGRADE AND PRIOR TO PLACEMENT OF PAVEMENT, CONTRACTOR SHALL TEST AND OBSERVE PAVEMENT AREAS FOR EVIDENCE OF PONDING. ALL AREAS SHALL ADEQUATELY DRAIN TOWARDS THE INTENDED STRUCTURE TO CONVEY STORM RUNOFF. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER AND ENGINEER IF ANY DISCREPANCIES ARE DISCOVERED.

STORM SEWER NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE CONSTRUCTION MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE.
2. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS SHOWN, INCLUDING THE HORIZONTAL AND VERTICAL LOCATION OF CURB INLETS AND GRATE INLETS AND ALL UTILITIES CROSSING THE STORM SEWER.
3. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE STORM SEWER.
4. THE INSPECTOR SHALL INSPECT ALL "PUBLIC" CONSTRUCTION. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
5. ALL PVC TO RCP CONNECTIONS SHALL BE CONSTRUCTED WITH CONCRETE COLLARS.
6. ALL ONSITE STORM SEWER LINES SHALL BE HDPE, ALL PRIVATE STORM SHALL BE NOTED AS ON PLANS. CONTRACTOR TO CONTACT ENGINEER WITH QUESTIONS ABOUT PIPE MATERIAL PRIOR TO ORDERING. CONTRACTOR SHALL SUBMIT TECHNICAL DATA TO PROJECT ENGINEER AND CITY ENGINEER FOR APPROVAL PRIOR TO ORDERING MATERIAL.
7. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR NORTH CENTRAL TEXAS, LATEST EDITION, AND ANY SPECIAL PROVISION AS APPROVED BY THE CITY OF GEORGETOWN, TX.
8. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING FOR ALL STORM SEWER LINES AND OTHER UTILITIES.
9. EMBEDMENT FOR ALL ONSITE SEWER LINES, PUBLIC OR PRIVATE, SHALL BE PER CITY OF GEORGETOWN, TX STANDARD DETAILS.
10. REFER TO TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL UTILITY CROSSINGS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING AND IMPLEMENTING A TRENCH PROTECTION PLAN FOR ALL OPEN TRENCH EXCAVATION.
12. USE 4 FOOT JOINTS WITH BEVELED ENDS IF RADIUS OF STORM SEWER IS LESS THAN 100 FEET.
13. ALL PRIVATE LANDSCAPE AREA DRAINS SHALL BE OF MATERIAL APPROVED BY BOTH ENGINEER AND LANDSCAPE ARCHITECT.

WATER AND SANITARY SEWER NOTES

1. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE REQUIREMENTS SET FORTH IN THE CITY OF GEORGETOWN WATER AND WASTEWATER CONSTRUCTION STANDARDS AND DETAILS, LATEST EDITION.
2. WATER PIPE SHALL BE PVC C-900 DR 18, EXCEPT WHEN OTHERWISE NOTED.
3. SEWER PIPE SHALL BE MINIMUM SDR 35 PVC OR ULTRA RIB PVC SDR 26.
4. WATER MAINS SHALL HAVE THE FOLLOWING MINIMUM COVER BELOW STREET GRADES:

SIZE	COVER
6"	3.5'
8"	4.0'
10"	4.0'
12"	5.0'
LARGER	AS SHOWN ON PLANS

5. PLASTIC TAPE FOR UTILITY SERVICES SHALL BE ATTACHED TO THE ENDS OF ALL WATER AND SEWER SERVICE LINES AND EXTEND ABOVE GROUND LEVEL. THE TAPE SHALL MEET THE FOLLOWING SPECIFICATION:
   A. "GEORGETOWN MARKING TAPE" OR APPROVED EQUAL.
   B. ROLL MARKED CONTINUOUSLY, "CAUTION WATER LINE" OR "CAUTION SEWER LINE".
   C. SIX (6) INCHES IN WIDTH.
   D. RED TAPE FOR SEWER SERVICES.
   E. BLUE TAPE FOR WATER SERVICES.
6. IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY EXACT LOCATIONS OF EXISTING PUBLIC AND PRIVATE UTILITIES AND SERVICES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL CALL 811 FOR FIELD LOCATION OF EXISTING UTILITIES. CALL AT LEAST 48 HOURS BEFORE LOCATIONS ARE NEEDED. NOTE THAT THE DIG TESS SERVICE DOES NOT LOCATE ALL UTILITIES, ONLY THOSE REGISTERED WITH THE SERVICE.
7. REFER TO SITE GRADING PLANS, PAVING PLANS, AND LANDSCAPE PLANS FOR FINAL GRADES FOR DETERMINING PROPOSED MANHOLE RIM ELEVATIONS.
8. LOCATIONS AND SIZES OF EXISTING PUBLIC AND PRIVATE UTILITIES SHOWN ON THESE PLANS ARE FROM CITY AND UTILITY COMPANY RECORDS ONLY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR LOCATING ALL UTILITIES AND FOR DAMAGES RESULTING FROM FAILURE TO DO SO.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING "RECORD" PLANS TO THE ENGINEER SHOWING THE LOCATION OF WATER AND SEWER SERVICES AND ANY DEVIATIONS FROM PLANS MADE DURING CONSTRUCTION.
10. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN, COORDINATING THE HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITY SERVICES ENTERING THE BUILDING AND/OR CROSSING OTHER UTILITIES.
11. ALL WATER AND SANITARY SEWER SERVICES SHALL TERMINATE FIVE (5) FEET OUTSIDE THE BUILDING, UNLESS NOTED OTHERWISE.
12. THE SITE UTILITY CONTRACTOR SHALL PROVIDE ALL MATERIALS AND APPURTENANCES NECESSARY FOR COMPLETE INSTALLATION OF THE UTILITIES. ALL PUBLIC PIPE, STRUCTURES, AND FITTINGS SHALL BE INSPECTED BY THE CITY INSPECTOR PRIOR TO BEING COVERED. THE INSPECTOR MUST ALSO BE PRESENT DURING DISINFECTION AND PRESSURE TESTING OF ALL MAINS. THE CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
13. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITE TRENCH SAFETY DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A TRENCH EXCAVATION PROTECTION PLAN, SEALED BY A GEOTECHNICAL ENGINEER REGISTERED IN THE STATE OF TEXAS, FOR ALL TRENCHES DEEPER THAN FIVE (5) FEET.
14. THE CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING FOR ALL WATER AND SANITARY SEWER LINES AND OTHER UTILITIES.
15. REFER TO TCEQ DESIGN GUIDELINES (CHAPTER 290) FOR ALL UTILITY CROSSINGS.
16. CONTRACTOR TO SEQUENCE CONSTRUCTION AS TO AVOID INTERRUPTION OF WATER OR SANITARY SEWER SERVICE TO SURROUNDING AREAS.
17. EXISTING MANHOLE TOPS, VALVE BOXES, ETC. ARE TO BE ADJUSTED AS REQUIRED TO MATCH PROPOSED GRADES.
18. FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF TWO (2) FEET AND A MAXIMUM OF SIX (6) FEET BEHIND THE CURB LINE OF FIRE LANE AND STREET.
19. ANY

KH GENERAL NOTES

OVERALL:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THESE PLANS, CITY (OR TOWN) STANDARD DETAILS AND SPECIFICATIONS, THE FINAL GEOTECHNICAL REPORT AND ALL ISSUED ADDENDA, AND COMMONLY ACCEPTED CONSTRUCTION STANDARDS. THE CITY SPECIFICATIONS SHALL GOVERN WHERE OTHER SPECIFICATIONS DO NOT EXIST. IN CASE OF CONFLICTING SPECIFICATIONS OR DETAILS, THE MORE RESTRICTIVE SPECIFICATION AND DETAIL SHALL BE FOLLOWED.
2. THE CONTRACTOR SHALL COMPLY WITH CITY (OR TOWN) "GENERAL NOTES" FOR CONSTRUCTION, IF EXISTING AND REQUIRED BY THE CITY. FOR INSTANCES WHERE THEY CONFLICT WITH THESE KH GENERAL NOTES, THEN THE MORE RESTRICTIVE SHALL APPLY.
3. THE CONTRACTOR SHALL FURNISH ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE AUTHORITIES' SPECIFICATIONS AND REQUIREMENTS.
4. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING TO DETERMINE EXISTING CONDITIONS.
5. THE EXISTING CONDITIONS SHOWN ON THESE PLANS WERE PROVIDED BY THE TOPOGRAPHIC SURVEY PREPARED BY THE PROJECT SURVEYOR, AND ARE BASED ON THE BENCHMARKS SHOWN. THE CONTRACTOR SHALL REFERENCE THESE BENCHMARKS.
6. THE CONTRACTOR SHALL REVIEW AND VERIFY THE EXISTING TOPOGRAPHIC SURVEY SHOWN ON THE PLANS REPRESENTS EXISTING FIELD CONDITIONS PRIOR TO CONSTRUCTION, AND SHALL REPORT ANY DISCREPANCIES FOUND TO THE OWNER AND ENGINEER IMMEDIATELY.
7. IF THE CONTRACTOR DOES NOT ACCEPT THE EXISTING TOPOGRAPHIC SURVEY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY AT THEIR OWN EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED PROFESSIONAL LAND SURVEYOR TO THE OWNER AND ENGINEER FOR REVIEW.
8. CONTRACTOR SHALL PROVIDE ALL CONSTRUCTION SURVEYING AND STAKING.
9. CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL CONTROL, INCLUDING BENCHMARKS PRIOR TO COMMENCING CONSTRUCTION OR STAKING OF IMPROVEMENTS. PROPERTY LINES AND CORNERS SHALL BE HELD AS THE HORIZONTAL CONTROL.
10. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS, ELEVATIONS, AND FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE ARCHITECT, ENGINEER, AND IF APPLICABLE THE CITY AND OWNER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE CITY, ENGINEER, AND OWNER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
11. CONTRACTOR SHALL THOROUGHLY CHECK COORDINATION OF CIVIL, LANDSCAPE, MEP, ARCHITECTURAL, AND OTHER PLANS PRIOR TO COMMENCING CONSTRUCTION. OWNER/ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCY PRIOR TO COMMENCING WITH CONSTRUCTION.
12. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN THE NEAR VICINITY OF CONSTRUCTION SO AS TO HAVE THEM LOCATE THEIR EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION.
13. CONTRACTOR SHALL VERIFY IF TEXAS 811 AN ADEQUATE AMOUNT OF TIME PRIOR TO COMMENCING CONSTRUCTION OR ANY EXCAVATION.
14. CONTRACTOR SHALL USE EXTREME CAUTION AS THE SITE CONTAINS VARIOUS KNOWN AND UNKNOWN PUBLIC AND PRIVATE UTILITIES.
15. THE LOCATIONS, ELEVATIONS, DEPTH, AND DIMENSIONS OF EXISTING UTILITIES SHOWN ON THE PLANS WERE OBTAINED FROM AVAILABLE UTILITY COMPANY MAPS AND PLANS, AND ARE CONSIDERED APPROXIMATE AND INCOMPLETE. IT SHALL BE THE CONTRACTORS' RESPONSIBILITY TO VERIFY THE PRESENCE, LOCATION, ELEVATION, DEPTH, AND DIMENSION OF EXISTING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION SO THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCES. THE ENGINEER SHALL BE NOTIFIED WHEN A CONFLICT EXISTS BETWEEN PROPOSED IMPROVEMENTS AND AN EXISTING UTILITY.
16. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ANY ADJUSTMENTS AND RELOCATIONS OF EXISTING UTILITIES THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO, ADJUSTING EXISTING MANHOLES TO MATCH PROPOSED GRADE, RELOCATING EXISTING POLES AND GUY WIRES THAT ARE LOCATED IN PROPOSED DRIVEWAYS, ADJUSTING THE HORIZONTAL OR VERTICAL ALIGNMENT OF EXISTING UTILITIES TO AVOID CONFLICTS WITH PROPOSED GRADE OR CROSSING WITH A PROPOSED UTILITY, AND ANY OTHERS THAT MAY BE ENCOUNTERED THAT ARE UNKNOWN AT THIS TIME AND NOT SHOWN ON THESE PLANS.
17. CONTRACTOR SHALL ARRANGE FOR OR PROVIDE, AT ITS EXPENSE, ALL GAS, TELECOMMUNICATIONS, CABLE, OVERHEAD AND UNDERGROUND POWER LINE, AND UTILITY POLE ADJUSTMENTS NEEDED.
18. CONTRACTOR IS RESPONSIBLE FOR COORDINATING INSTALLATION OF FRANCHISE UTILITIES THAT ARE NECESSARY FOR ON-SITE AND OFF-SITE CONSTRUCTION, AND SERVICE TO THE PROPOSED DEVELOPMENT.
19. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL DAMAGES DUE TO THE CONTRACTORS' FAILURE TO EXACTLY LOCATE AND PRESERVE ALL UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF UTILITY LINES OR STRUCTURES. IF IT IS NECESSARY TO REMOVE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
20. BRACING OF UTILITY POLES MAY BE REQUIRED BY THE UTILITY COMPANIES WHEN TRENCHING OR EXCAVATING IN CLOSE PROXIMITY TO THE POLES. THE COST OF BRACING POLES WILL BE BORNE BY THE CONTRACTOR, WITH NO SEPARATE PAY ITEM FOR THIS WORK. THE COST IS INCIDENTAL TO THE PAY ITEM.
21. CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE, FEDERAL AND UTILITY OWNER REGULATIONS PERTAINING TO WORK SETBACKS FROM POWER LINES.
22. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL REQUIRED CONSTRUCTION PERMITS, APPROVALS, AND BONDS PRIOR TO CONSTRUCTION.
23. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES A COPY OF THE CONTRACT DOCUMENTS INCLUDING PLANS, GEOTECHNICAL REPORT AND ADDENDA, PROJECT AND CITY SPECIFICATIONS, AND SPECIAL CONDITIONS, COPIES OF ANY REQUIRED CONSTRUCTION PERMITS, EROSION CONTROL PLANS, SWPPP AND INSPECTION REPORTS.
24. ALL SHOP DRAWINGS AND OTHER DOCUMENTS THAT REQUIRE ENGINEER REVIEW SHALL BE SUBMITTED BY THE CONTRACTOR SUFFICIENTLY IN ADVANCE OF CONSTRUCTION OF THAT ITEM, SO THAT NO LESS THAN 10 BUSINESS DAYS FOR REVIEW AND RESPONSE IS AVAILABLE.
25. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES, JURISDICTIONAL AGENCIES, AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO USE OF THE FACILITY AND THE FINAL CONNECTION OF SERVICES.
26. CONTRACTOR SHALL ARRANGE FOR REQUIRED CITY INSPECTIONS.
27. CONTRACTOR'S BID PRICE SHALL INCLUDE ALL INSPECTION FEES.
28. ALL SYMBOLS SHOWN ON THESE PLANS (E.G. FIRE HYDRANT, METERS, VALVES, INLETS, ETC....) ARE FOR PRESENTATION PURPOSES ONLY AND ARE NOT TO SCALE. CONTRACTOR SHALL COORDINATE FINAL SIZES AND LOCATIONS WITH APPROPRIATE CITY INSPECTOR.
29. THE SCOPE OF WORK FOR THE CIVIL IMPROVEMENTS SHOWN ON THESE PLANS TERMINATES 5-FEET FROM THE BUILDING. REFERENCE THE BUILDING PLANS (E.G. ARCHITECTURAL, STRUCTURAL, MEP) FOR 5-FEET OF THE BUILDING AND WITHIN THE BUILDING FOOTPRINT.
30. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR ALL FINAL BUILDING DIMENSIONS.
31. THE PROPOSED BUILDING FOOTPRINT(S) SHOWN IN THESE PLANS WAS PROVIDED TO KIMLEY-HORN AND ASSOCIATES, INC. (KH) BY THE PROJECT ARCHITECT AT THE TIME THESE PLANS WERE PREPARED. IT MAY NOT BE THE FINAL CORRECT VERSION BECAUSE THE BUILDING DESIGN WAS ONGOING. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR CONFIRMING THE FINAL CORRECT VERSION OF THE BUILDING FOOTPRINT WITH THE ARCHITECT AND STRUCTURAL ENGINEER PRIOR TO LAYOUT. DIMENSIONS AND/OR COORDINATES SHOWN ON THESE PLANS WERE BASED ON THE ABOVE STATED ARCHITECTURAL FOOTPRINT, AND ARE THEREFORE A PRELIMINARY LOCATION OF THE BUILDING. THE CONTRACTOR IS SOLELY RESPONSIBLE TO VERIFY WHAT PART OF THE BUILDING THE ARCHITECT'S FOOTPRINT REPRESENTS (E.G. SLAB, OUTSIDE WALL, MASONRY LEDGE, ETC....) AND TO CONFIRM THE FINAL LOCATION OF THE SITE BASED ON THE FINAL ARCHITECTURAL FOOTPRINT, CIVIL DIMENSION CONTROL PLAN, SURVEY BOUNDARY AND/OR PLAT. ANY DIFFERENCES FOUND SHALL BE REPORTED TO KH IMMEDIATELY.
32. ALL CONSTRUCTION SHALL COMPLY WITH THE PROJECT'S FINAL GEOTECHNICAL REPORT (OR LATEST EDITION), INCLUDING SUBSEQUENT ADDENDA.
33. CONTRACTOR IS RESPONSIBLE FOR ALL MATERIALS TESTING AND CERTIFICATION, UNLESS SPECIFIED OTHERWISE BY OWNER. ALL MATERIALS TESTING SHALL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR AND COMPLY WITH CITY STANDARD SPECIFICATIONS AND GEOTECHNICAL REPORT. TESTING SHALL BE PERFORMED BY AN APPROVED INDEPENDENT AGENCY FOR TESTING MATERIALS. OWNER SHALL APPROVE THE AGENCY NOMINATED BY THE CONTRACTOR FOR MATERIALS TESTING.
34. ALL COPIES OF MATERIALS TEST RESULTS SHALL BE SENT TO THE OWNER, ENGINEER AND ARCHITECT DIRECTLY FROM THE TESTING AGENCY.
35. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO SHOW, BY THE STANDARD TESTING PROCEDURES OF THE MATERIALS, THAT THE WORK CONSTRUCTED MEETS THE PROJECT REQUIREMENTS AND CITY SPECIFICATIONS.
36. DUE TO THE POTENTIAL FOR DIFFERENTIAL SOIL MOVEMENT ADJACENT TO THE BUILDING, THE CONTRACTOR SHALL ADHERE TO GEOTECHNICAL REPORT'S RECOMMENDATION FOR SUBGRADE PREPARATION SPECIFIC TO FLATWORK ADJACENT TO THE PROPOSED BUILDING. THE OWNER AND CONTRACTOR ARE ADVISED TO OBTAIN A GEOTECHNICAL ENGINEER RECOMMENDATION SPECIFIC TO FLATWORK ADJACENT TO THE BUILDING, IF NONE IS CURRENTLY EXISTING.
37. ALL CONTRACTORS MUST CONFINE THEIR ACTIVITIES TO THE WORK AREA. NO ENCROACHMENTS OUTSIDE OF THE WORK AREA WILL BE ALLOWED. ANY DAMAGE RESULTING THEREFROM SHALL BE CONTRACTOR'S SOLE RESPONSIBILITY TO REPAIR.
38. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, UTILITIES, MANHOLES, POLES, GUY WIRES, VALVE COVERS, VAULT LIDS, FIRE HYDRANTS, COMMUNICATION BOXES/PEDESTALS, AND OTHER FACILITIES TO REMAIN AND SHALL REPAIR ANY DAMAGES AT NO COST TO THE OWNER.
39. THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE ANY PHYSICAL DAMAGE TO PRIVATE PROPERTY OR PUBLIC IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO: FENCES, WALLS, SIGNS, PAVEMENT, CURBS, UTILITIES, SIDEWALKS, GRASS, TREES, LANDSCAPING, AND IRRIGATION SYSTEMS, ETC.... TO ORIGINAL CONDITION OR BETTER AT NO COST TO THE OWNER.
40. ALL AREAS IN DISTURBED RIGHT-OF-WAY OR DISTURBED OFF CONSTRUCTION SHALL BE REPAIRED TO ORIGINAL CONDITION OR BETTER, INCLUDING AS NECESSARY GRADING, LANDSCAPING, CULVERTS, AND PAVEMENT.
41. THE CONTRACTOR SHALL SALVAGE ALL EXISTING POWER POLES, SIGNS, WATER VALVES, FIRE HYDRANTS, METERS, ETC... THAT ARE TO BE RELOCATED DURING CONSTRUCTION.
42. CONTRACTOR SHALL MAINTAIN ADEQUATE SITE DRAINAGE DURING ALL PHASES OF CONSTRUCTION, INCLUDING MAINTAINING EXISTING DITCHES OR CULVERTS FREE OF OBSTRUCTIONS AT ALL TIMES.
43. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND SUBMITTING A TRENCH SAFETY PLAN, PREPARED BY A PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, TO THE CITY PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING TRENCH SAFETY REQUIREMENTS IN ACCORDANCE WITH CITY, STATE, AND FEDERAL REQUIREMENTS, INCLUDING OSHA FOR ALL TRENCHES. NO OPEN TRENCHES SHALL BE ALLOWED OVERNIGHT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY.
44. THE CONTRACTOR SHALL KEEP TRENCHES FREE FROM WATER.
45. SITE SAFETY IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.
46. THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE ENGINEER'S SEAL HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF ALL REQUIRED SAFETY PROCEDURES AND PROGRAMS.
47. SIGNS RELATED TO SITE OPERATION OR SAFETY ARE NOT INCLUDED IN THESE PLANS.
48. CONTRACTOR OFFICE AND STAGING AREA SHALL BE AGREED ON BY THE OWNER AND CONTRACTOR PRIOR TO BEGINNING OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITTING REQUIREMENTS FOR THE CONSTRUCTION OFFICE, TRAILER, STORAGE, AND STAGING OPERATIONS AND LOCATIONS.
49. LIGHT POLES, SIGNS, AND OTHER OBSTRUCTIONS SHALL NOT BE PLACED IN ACCESSIBLE ROUTES.
50. ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE "TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
51. TOP RIM ELEVATIONS OF ALL EXISTING AND PROPOSED MANHOLES SHALL BE COORDINATED WITH TOP OF PAVEMENT OR FINISHED GRADE AND SHALL BE ADJUSTED TO BE FLUSH WITH THE ACTUAL FINISHED GRADE AT THE TIME OF PAVING.
52. CONTRACTOR SHALL ADJUST ALL EXISTING AND PROPOSED VALVES, FIRE HYDRANTS, AND OTHER UTILITY APPURTENANCES TO MATCH ACTUAL FINISHED GRADES AT THE TIME OF PAVING.
53. THE CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION SEQUENCING AND PHASING, AND SHALL CONTACT THE APPROPRIATE CITY OFFICIALS, INCLUDING BUILDING OFFICIAL, ENGINEERING INSPECTOR, AND FIRE MARSHALL TO LEARN OF ANY REQUIREMENTS.
54. CONTRACTOR IS RESPONSIBLE FOR PREPARATION, SUBMITTAL, AND APPROVAL BY THE CITY OF A TRAFFIC CONTROL PLAN PRIOR TO THE START OF CONSTRUCTION, AND THEN THE IMPLEMENTATION OF THE PLAN.
55. CONTRACTOR SHALL KEEP A NEAT AND ACCURATE RECORD OF CONSTRUCTION, INCLUDING ANY DEVIATIONS OR VARIANCES FROM THE PLANS.
56. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT PLANS TO THE ENGINEER AND CITY IDENTIFYING ALL DEVIATIONS AND VARIATIONS FROM THESE PLANS MADE DURING CONSTRUCTION.

EROSION CONTROL:

1. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL EROSION CONTROL AND WATER QUALITY REQUIREMENTS, LAWS, AND ORDINANCES THAT APPLY TO THE CONSTRUCTION SITE LAND DISTURBANCE.
2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE "TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000".
3. EROSION CONTROL DEVICES SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBANCE.
4. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT.
5. CONTRACTOR IS SOLELY RESPONSIBLE FOR INSTALLATION, IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL EROSION CONTROL DEVICES, BEST MANAGEMENT PRACTICES (BMPS), AND FOR UPDATING THE EROSION CONTROL PLAN DURING CONSTRUCTION AS FIELD CONDITIONS CHANGE.
6. CONTRACTOR SHALL DOCUMENT THE DATES OF INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL FOR EACH BMP EMPLOYED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE.
7. AS STORM SEWER INLETS ARE INSTALLED ON-SITE, TEMPORARY EROSION CONTROL DEVICES SHALL BE INSTALLED AT EACH INLET PER APPROVED DETAILS.
8. THE EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE AREA IT PROTECTS HAS BEEN PERMANENTLY STABILIZED.
9. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION CONTROL DEVICES NEEDED DUE TO PROJECT PHASING.
10. CONTRACTOR SHALL OBSERVE THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES AND MAKE FIELD ADJUSTMENTS AND MODIFICATIONS AS NEEDED TO PREVENT SEDIMENT FROM LEAVING THE SITE. IF THE EROSION CONTROL DEVICES DO NOT EFFECTIVELY CONTROL EROSION AND PREVENT SEDIMENTATION FROM WASHING OFF THE SITE, THEN THE CONTRACTOR SHALL NOTIFY THE ENGINEER.
11. OFF-SITE SOIL BORROW, SPOIL, AND STORAGE AREAS (IF APPLICABLE) ARE CONSIDERED AS PART OF THE PROJECT SITE AND MUST ALSO COMPLY WITH THE EROSION CONTROL REQUIREMENTS FOR THIS PROJECT. THIS INCLUDES THE INSTALLATION OF BMP'S TO CONTROL EROSION AND SEDIMENTATION AND THE ESTABLISHMENT OF PERMANENT GROUND COVER ON DISTURBED AREAS PRIOR TO FINAL APPROVAL OF THE PROJECT. CONTRACTOR IS RESPONSIBLE FOR MODIFYING THE SWPPP AND EROSION CONTROL PLAN TO INCLUDE BMPS FOR ANY OFF-SITE THAT ARE NOT ANTICIPATED OR SHOWN ON THE EROSION CONTROL PLAN.
12. ALL STAGING, STOCKPILES, SPOIL, AND STORAGE SHALL BE LOCATED SUCH THAT THEY WILL NOT ADVERSELY AFFECT STORM WATER QUALITY. PROTECTIVE MEASURES SHALL BE PROVIDED IF NEEDED TO ACCOMPLISH THIS REQUIREMENT, SUCH AS COVERING OR ENCIRCLING THE AREA WITH AN APPROPRIATE BARRIER.
13. CONTRACTORS SHALL INSPECT ALL EROSION CONTROL DEVICES, BMPS, DISTURBED AREAS, AND VEHICLE ENTRY AND EXIT AREAS WEEKLY AND WITHIN 24 HOURS OF ALL RAINFALL EVENTS OF 0.5 INCHES OR GREATER, AND KEEP A RECORD OF THIS INSPECTION IN THE SWPPP BOOKLET IF APPLICABLE, TO VERIFY THAT THE DEVICES AND EROSION CONTROL PLAN ARE FUNCTIONING PROPERLY.
14. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT/ENTRANCE, PREVENTING OFF-SITE TRACKING AND PROVIDE ACCESS IN ACCORDANCE WITH CITY SPECIFICATIONS. CONTRACTOR SHALL ENSURE THAT ALL CONSTRUCTION TRAFFIC USES THE STABILIZED ENTRANCE AT ALL TIMES FOR ALL INGRESS/EGRESS.
15. SITE ENTRY AND EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT THE TRACKING AND FLOWING OF SEDIMENT AND DIRT ONTO OFF-SITE ROADWAYS. ALL SEDIMENT AND DIRT FROM THE SITE THAT IS DEPOSITED ONTO AN OFF-SITE ROADWAY SHALL BE REMOVED IMMEDIATELY
16. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SILT AND DEBRIS FROM THE AFFECTED OFF-SITE ROADWAYS THAT ARE A RESULT OF THE CONSTRUCTION, AS REQUESTED BY OWNER AND CITY. AT A MINIMUM, THIS SHOULD OCCUR ONCE PER DAY FOR THE OFF-SITE ROADWAYS.
17. WHEN WASHING OF VEHICLES IS REQUIRED TO REMOVE SEDIMENT PRIOR TO EXITING THE SITE, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP BMP.
18. CONTRACTOR SHALL INSTALL A TEMPORARY SEDIMENT BASIN FOR ANY ON-SITE DRAINAGE AREAS THAT ARE GREATER THAN 10 ACRES, PER TCEQ AND CITY STANDARDS. IF NO ENGINEERING DESIGN HAS BEEN PROVIDED FOR A SEDIMENTATION BASIN ON THESE PLANS, THEN THE CONTRACTOR SHALL ARRANGE FOR AN APPROPRIATE DESIGN TO BE PROVIDED.
19. ALL FINES IMPOSED FOR SEDIMENT OR DIRT DISCHARGED FROM THE SITE SHALL BE PAID BY THE RESPONSIBLE CONTRACTOR.
20. WHEN SEDIMENT OR DIRT HAS CLOGGED THE CONSTRUCTION ENTRANCE VOID SPACES BETWEEN STONES OR DIRT IS BEING TRACKED ONTO A ROADWAY, THE AGGREGATE PAD MUST BE WASHED DOWN OR REPLACED. RUNOFF FROM THE WASH-DOWN OPERATION SHALL NOT BE ALLOWED TO DRAIN DIRECTLY OFF SITE WITHOUT FIRST FLOWING THROUGH ANOTHER BMP TO CONTROL SEDIMENTATION. PERIODIC RE-GRADING OR NEW STONE MAY BE REQUIRED TO MAINTAIN THE EFFECTIVENESS OF THE CONSTRUCTION ENTRANCE.
21. TEMPORARY SEEDING AND OTHER EROSION CONTROL MEASURES SHALL BE USED FOR ANY DISTURBANCE OF ANY AREA, UNLESS ADDITIONAL CONSTRUCTION IN THE AREA IS EXPECTED WITHIN 21 DAYS OF THE LAST DISTURBANCE.
22. CONTRACTOR SHALL FOLLOW GOOD HOUSEKEEPING PRACTICES DURING CONSTRUCTION, ALWAYS CLEANING UP DIRT, LOOSE MATERIAL, AND TRASH AS CONSTRUCTION PROGRESSES.
23. UPON COMPLETION OF FINE GRADING, ALL SURFACES OF DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED. STABILIZATION IS ACHIEVED WHEN THE AREA IS EITHER COVERED BY PERMANENT IMPERVIOUS STRUCTURES, SUCH AS BUILDINGS, SIDEWALK, PAVEMENT, OR A UNIFORM PERENNIAL VEGETATIVE COVERING.
24. AT THE CONCLUSION OF THE PROJECT, ALL INLETS, DRAIN PIPE, CHANNELS, DRAINAGEWAYS AND BORROW DITCHES AFFECTED BY THE CONSTRUCTION SHALL BE DREDGED, AND THE SEDIMENT GENERATED BY THE PROJECT SHALL BE REMOVED AND DISPOSED IN ACCORDANCE WITH APPLICABLE REGULATIONS.
25. ANY SEQUENCE OF CONSTRUCTION SHOWN HEREON IS A GENERAL OVERVIEW AND IS INTENDED TO CONVEY THE GENERAL CONCEPTS OF THE EROSION CONTROL DESIGN AND SHOULD NOT BE RELIED UPON FOR CONSTRUCTION PURPOSES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETAILED PHASING AND CONSTRUCTION SEQUENCING NECESSARY TO CONSTRUCT THE PROPOSED IMPROVEMENTS, INCLUDED IN THESE PLANS, IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. CONTRACTOR TO AND/OR DURING CONSTRUCTION IF ANY ADDITIONAL INFORMATION ON THE CONSTRUCTION SEQUENCE IS NECESSARY. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION AND ALL OTHER APPLICABLE LAWS.

STORM WATER DISCHARGE AUTHORIZATION:

1. CONTRACTOR SHALL COMPLY WITH THE TCEQ AND EPA STORM WATER POLLUTION PREVENTION REQUIREMENTS.
2. CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE TCEQ GENERAL PERMIT TO DISCHARGE UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM TXR 150000.
3. THE CONTRACTOR AND/OR OTHER OPERATORS OPERATORS SUBMIT A NOI TO TCEQ AT LEAST SEVEN DAYS PRIOR TO COMMENCING CONSTRUCTION (IF APPLICABLE), OR IF UTILIZING ELECTRONIC SUBMITTAL, PRIOR TO COMMENCING CONSTRUCTION. ALL PRIMARY OPERATORS SHALL PROVIDE A COPY OF THE SIGNED NOI TO THE OPERATOR OF ANY MS4 (TYPICALLY THE CITY) RECEIVING DISCHARGE FROM THE SITE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IF APPLICABLE, INCLUDING POSTING SITE NOTICE, INSPECTIONS, DOCUMENTATION, AND SUBMISSION OF ANY INFORMATION REQUIRED BY THE TCEQ, EPA (E.G. NOT).
5. ALL CONTRACTORS AND SUBCONTRACTORS PROVIDING SERVICES RELATED TO THE SWPPP SHALL SIGN THE REQUIRED CONTRACTOR CERTIFICATION STATEMENT ACKNOWLEDGING THEIR RESPONSIBILITIES AS SPECIFIED IN THE SWPPP.
6. A COPY OF THE CONTRACTOR'S SITE NOTICE CERTIFICATIONS, AND ANY REVISIONS, SHALL BE SUBMITTED TO THE CITY BY THE CONTRACTOR AND SHALL BE RETAINED ON-SITE DURING CONSTRUCTION.
7. A NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO TCEQ BY ANY PRIMARY OPERATOR WITHIN 30 DAYS AFTER ALL SOIL DISTURBING ACTIVITIES AT THE SITE HAVE BEEN COMPLETED AND A UNIFORM VEGETATIVE COVER HAS BEEN ESTABLISHED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY STRUCTURES. A TRANSFER OF OPERATIONAL CONTROL HAS OCCURRED, OR THE OPERATOR HAS OBTAINED ALTERNATIVE AUTHORIZATION UNDER A DIFFERENT PERMIT. A COPY OF THE NOT SHALL BE PROVIDED TO THE OPERATOR OF ANY MS4 RECEIVING DISCHARGE FROM THE SITE.

DEMOLITION:

1. KH IS NOT RESPONSIBLE FOR THE MEANS AND METHODS EMPLOYED BY THE CONTRACTOR TO IMPLEMENT THIS DEMOLITION PLAN. THIS PRELIMINARY DEMOLITION PLAN SIMPLY INDICATES THE KNOWN OBJECTS ON THE SUBJECT TRACT THAT ARE TO BE DEMOLISHED AND REMOVED FROM THE SITE.
2. KH DOES NOT WARRANT OR REPRESENT THAT THE PLAN, WHICH WAS PREPARED BASED ON SURVEY AND UTILITY INFORMATION PROVIDED BY OTHERS, SHOWS ALL IMPROVEMENTS AND UTILITIES, THAT THE IMPROVEMENTS AND UTILITIES ARE SHOWN ACCURATELY, OR THAT THE UTILITIES SHOWN CAN BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING ITS OWN SITE RECONNAISSANCE TO SCOPE ITS WORK AND TO CONFIRM WITH THE OWNERS OF IMPROVEMENTS AND UTILITIES THE ABILITY AND PROCESS FOR THE REMOVAL OF THEIR FACILITIES.
3. THIS PLAN IS INTENDED TO GIVE A GENERAL GUIDE TO THE CONTRACTOR, NOTHING MORE. THE GOAL OF THE DEMOLITION IS TO LEAVE THE SITE IN A CONDITION THAT IS SUITABLE FOR THE CONSTRUCTION OF THE PROPOSED DEVELOPMENT. REMOVAL OR PRESERVATION OF IMPROVEMENTS, UTILITIES, ETC. TO ACCOMPLISH THIS GOAL ARE THE RESPONSIBILITY OF THE CONTRACTOR.
4. CONTRACTOR IS STRONGLY CAUTIONED TO REVIEW THE FOLLOWING REPORTS DESCRIBING SITE CONDITIONS PRIOR TO BIDDING AND IMPLEMENTING THE DEMOLITION PLAN:
   a. ENVIRONMENTAL SITE ASSESSMENT PROVIDED BY THE OWNER,
   b. ASBESTOS BUILDING INSPECTION REPORT(S) PROVIDED BY THE OWNER,
   c. GEOTECHNICAL REPORT PROVIDED BY THE OWNER, AND/OR
   d. OTHER REPORTS THAT ARE APPLICABLE AND AVAILABLE.
5. CONTRACTOR SHALL CONTACT THE OWNER TO VERIFY WHETHER ADDITIONAL REPORTS OR AMENDMENTS TO THE ABOVE CITED REPORTS HAVE BEEN PREPARED AND TO OBTAIN/REVIEW/AND COMPLY WITH THE RECOMMENDATION OF SUCH STUDIES PRIOR TO STARTING ANY WORK ON THE SITE.
6. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS REGARDING THE DEMOLITION OF OBJECTS ON THE SITE AND THE DISPOSAL OF THE DEBRIS. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO REVIEW THE SITE, DETERMINE THE APPLICABLE REGULATIONS, RECEIVE THE REQUIRED PERMITS AND AUTHORIZATIONS, AND COMPLY.
7. KH DOES NOT REPRESENT THAT THE REPORTS AND SURVEYS REFERENCED ABOVE ARE ACCURATE, COMPLETE, OR COMPREHENSIVE SHOWING ALL ITEMS THAT WILL NEED TO BE DEMOLISHED AND REMOVED.
8. SURFACE PAVEMENT INDICATED MAY OVERLAY OTHER HIDDEN STRUCTURES, SUCH AS ADDITIONAL LAYERS OF PAVEM

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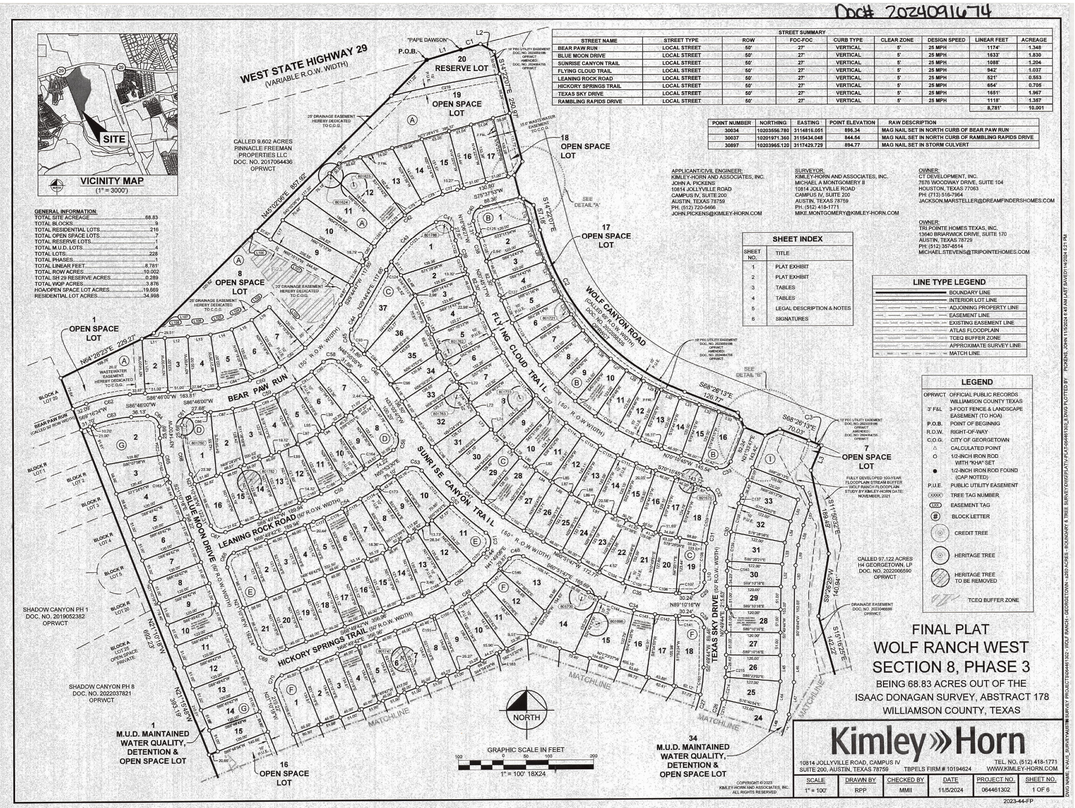

STREET SUMMARY								
STREET NAME	STREET TYPE	ROW	FOC-FOC	CURB TYPE	CLEAR ZONE	DESIGN SPEED	LINEAR FEET	ACREAGE
BEAR PAW RUN	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	1174'	1.348
BLUE MOON DRIVE	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	1633'	1.839
SUNRISE CANYON TRAIL	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	1088'	1.204
FLYING CLOUD TRAIL	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	942'	1.037
LEANING ROCK ROAD	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	521'	0.553
HICKORY SPRINGS TRAIL	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	954'	0.756
TEXAS SKY DRIVE	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	1651'	1.967
RAMBLING RAPIDS DRIVE	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	1118'	1.357
							8,781'	10.861

POINT NUMBER	NORTHING	EASTING	POINT ELEVATION	RAW DESCRIPTION
30034	10203556.780	3114816.051	896.34	MAG NAIL SET IN NORTH CURB OF BEAR PAW RUN
30037	10201971.393	3115634.048	944.64	MAG NAIL SET IN NORTH CURB OF RAMBLING RAPIDS DRIVE
30897	10203966.120	3117429.729	894.77	MAG NAIL SET IN STORM CULVERT

APPLICANT/CIVIL ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
JOHN A. PICKENS
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PHI: (512) 220-0466
JOHN.PICKENS@KIMLEY-HORN.COM

SURVEYOR:
KIMLEY-HORN AND ASSOCIATES, INC.
MICHAEL A MONTGOMERY II
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH: (512) 418-1771
MIKE.MONTGOMERY@KIMLEY-HORN.COM

OWNER:
CT DEVELOPMENT, INC.
7570 WOODWAY DRIVE, SUITE 104
HOUSTON, TEXAS 77063
PH: (713) 510-0744
JACKSON.MARSTELLER@DREAMFINDERSHOMES.COM

OWNER:
TRI POINTE HOMES TEXAS, INC.
9700 HIGHLAND CROSSING DRIVE, SUITE 170
AUSTIN, TEXAS 78729
PH: (512) 357-6514
MICHAEL.STEVENS@TRIPOINTEHOMES.COM

GENERAL INFORMATION	
TOTAL SITE ACREAGE	68.83
TOTAL BLOCKS	3
TOTAL RESIDENTIAL LOTS	216
TOTAL OPEN SPACE LOTS	7
TOTAL RESERVE LOTS	1
TOTAL M.U.D. LOTS	5
TOTAL LOTS	229
TOTAL PHASES	1
TOTAL LINEAR FEET	8,791
TOTAL ROW ACRES	10.002
TOTAL SF/ 29 RESERVE ACRES	0.283
TOTAL WQP ACRES	3.976
HOA/OPEN SPACE LOT ACRES	19.869
RESIDENTIAL LOT ACRES	34.958

SHEET INDEX

SHEET NO.	TITLE
1	PLAT EXHIBIT
2	PLAT EXHIBIT
3	TABLES
4	TABLES
5	LEGAL DESCRIPTION & NOTES
6	SIGNATURES

LINE TYPE LEGEND

	BOUNDARY LINE
	INTERIOR LOT LINE
	ADJOINING PROPERTY LINE
	EASEMENT LINE
	EXISTING EASEMENT LINE
	ATLAS FLOODPLAIN
	TCEQ BUFFER ZONE
	APPROXIMATE SURVEY LINE
	MATCH LINE

LEGEND

OPRWCT	OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY TEXAS
3' F&L	3-FOOT FENCE & LANDSCAPE EASEMENT (TO HOA)
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT-OF-WAY
C.O.G.	CITY OF GEORGETOWN
△	CALCULATED POINT
○	1/2-INCH IRON ROD WITH "KHA" SET
●	1/2-INCH IRON ROD FOUND (CAP NOTED)
P.U.E.	PUBLIC UTILITY EASEMENT
1000	TREE TAG NUMBER
	EASEMENT TAG
(B)	BLOCK LETTER
	CREDIT TREE
	HERITAGE TREE
	HERITAGE TREE TO BE REMOVED
	TCEQ BUFFER ZONE

FINAL PLAT
WOLF RANCH WEST
SECTION 8, PHASE 3
BEING 68.83 ACRES OUT OF THE
ISAAC DONAGAN SURVEY, ABSTRACT 178
WILLIAMSON COUNTY, TEXAS

Kimley»Horn
10814 JOLLYVILLE ROAD, CAMPUS IV
SUITE 200, AUSTIN, TEXAS 78759
TEL. NO. (512) 418-1771
TBPELS FIRM # 10194624
WWW.KIMLEY-HORN.COM

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.
1" = 100'	RPP	MMII	11/5/2024	064461302	1 OF 6

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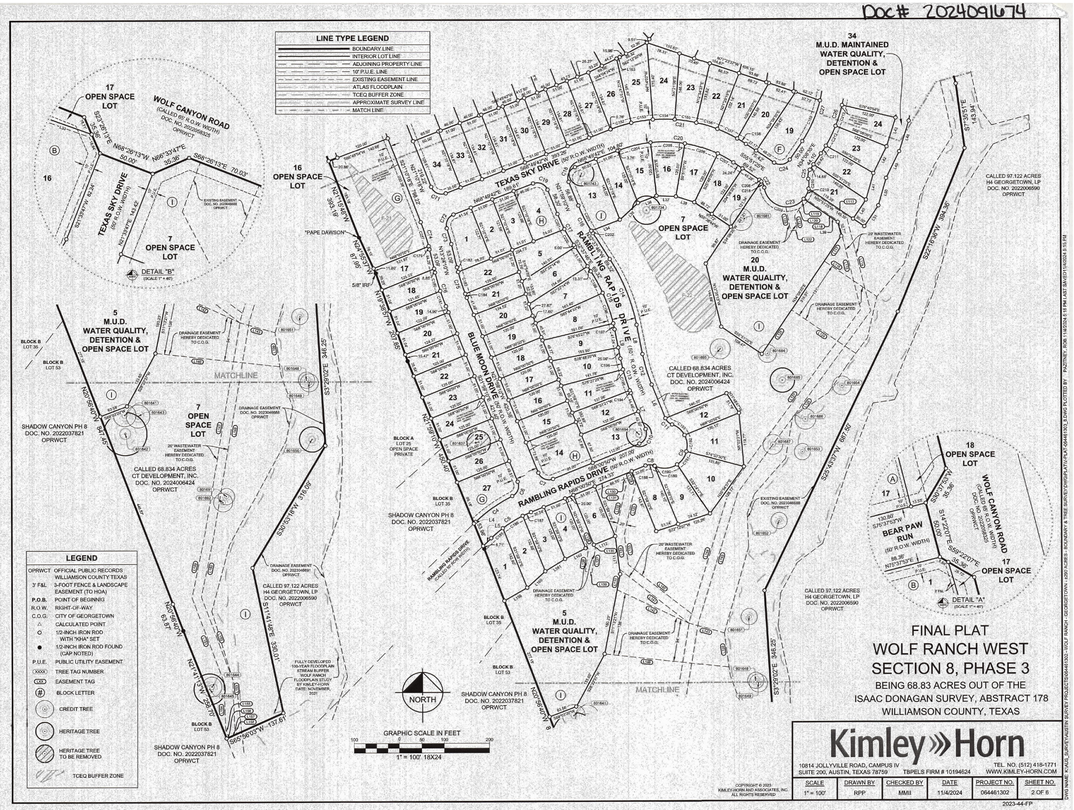
2023-44-FP

Doc# 2024091674



LEGEND

OPRWCT	OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY TEXAS
3' F&L	3-FOOT FENCE & LANDSCAPE EASEMENT (TO HOA)
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT-OF-WAY
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SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.
1" = 100'	RPP	MMII	11/4/2024	064461302	2 OF 6

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2023-44-FP

Doc#2024091674

SECTION 5 HERITAGE TREES			
TAG NO.	SPECIES	TRUNK	DIAMETER
601623	LIVE OAK	MULTI	28.50"
601624	LIVE OAK	MULTI	27.50"
601642	LIVE OAK	MULTI	48.00"
601643	LIVE OAK		26.00"
601645	LIVE OAK	MULTI	34.50"
601650	PECAN	MULTI	28.00"
601660	LIVE OAK	MULTI	27.00"
601664	DURAN OAK	MULTI	27.00"
601698	LIVE OAK		26.00"
601700	LIVE OAK	MULTI	28.00"
601723	LIVE OAK	MULTI	27.50"
601734	LIVE OAK	MULTI	33.50"
601743	LIVE OAK	MULTI	27.50"
601762	LIVE OAK	MULTI	29.00"
601763	LIVE OAK	MULTI	28.00"

SECTION 6 CREDIT TREES			
TREE NUMBER	SPECIES	TRUNK	DIAMETER
601641	LIVE OAK	MULTI	25.00"
601643	LIVE OAK		28.00"
601644	LIVE OAK	MULTI	22.00"
601648	CEDAR ELM		18.00"
601649	LIVE OAK		20.00"
601651	CEDAR ELM		18.00"
601652	CEDAR ELM	MULTI	18.00"
601653	LIVE OAK		18.00"
601684	CEDAR ELM		21.00"
601691	LIVE OAK	MULTI	24.50"
601694	LIVE OAK		20.00"
601698	DURAN OAK	MULTI	23.00"
601697	LIVE OAK		22.00"
601691	CEDAR ELM	MULTI	18.00"
601692	CEDAR ELM	MULTI	21.00"
601695	LIVE OAK	MULTI	22.50"
601721	LIVE OAK	MULTI	23.50"
601766	LIVE OAK		20.00"

SECTION 9 HERITAGE TREES TO BE REMOVED			
TREE NUMBER	SPECIES	TRUNK	DIAMETER
601722	LIVE OAK	MULTI	28.50"
601747	LIVE OAK	MULTI	27.50"
601676	LIVE OAK	MULTI	26.50"
601637	LIVE OAK		26.00"

BLOCK A		BLOCK C		BLOCK D		BLOCK F		BLOCK G		BLOCK H		BLOCK I	
LOT NO.	SQ. FT.	LOT NO.	SQ. FT.	LOT NO.	SQ. FT.	LOT NO.	SQ. FT.	LOT NO.	SQ. FT.	LOT NO.	SQ. FT.	LOT NO.	SQ. FT.
1	18,249	1	10,497	1	9,440	1	6,683	1	16,353	1	8,595	1	7,751
2	6,150	2	9,360	2	7,704	2	6,192	2	13,124	2	6,219	2	7,075
3	6,150	3	6,729	3	6,873	3	6,192	3	7,284	3	6,192	3	6,594
4	6,751	4	5,887	4	6,773	4	6,192	4	6,509	4	8,503	4	6,247
5	7,274	5	7,402	5	9,777	5	6,192	5	6,520	5	7,859	5	62,675
6	7,316	6	8,073	6	6,812	6	6,192	6	6,520	6	7,532	6	6,126
7	7,232	7	8,152	7	8,436	7	6,192	7	6,520	7	9,038	7	685,113
8	56,000	8	10,138	8	9,754	8	6,192	8	6,520	8	9,593	8	6,199
9	10,465	9	6,126	9	5,715	9	7,045	9	6,520	9	8,518	9	7,016
10	11,563	10	6,309	10	6,165	10	7,236	10	6,520	10	11,604	10	10,040
11	11,431	11	6,190	11	6,180	11	7,704	11	6,520	11	7,506	11	9,810
12	10,902	12	9,297	12	5,986	12	7,452	12	6,520	12	7,065	12	7,010
13	8,886	13	6,217	13	5,606	13	8,566	13	6,520	13	8,114	13	10,533
14	7,896	14	6,233	14	5,530	14	13,651	14	10,520	14	11,610	14	6,995
15	7,352	15	6,063	15	5,655	15	12,303	15	6,520	15	8,120	15	7,564
16	6,752	16	5,890	16	7,602	16	7,556	16	36,026	16	8,120	16	7,226
17	6,850	17	5,879			17	7,969	17	6,541	17	8,120	17	7,226
18	4,928	18	7,716	BLOCK E		18	10,464	18	6,273	18	8,120	18	8,221
19	41,964	19	6,941	LOT NO.	SQ. FT.	19	11,465	19	6,199	19	6,120	19	8,221
		20	6,385	1	6,709	20	6,217	20	6,290	20	6,235	20	64,078
BLOCK B		21	6,793	2	5,572	21	7,993	21	6,370	21	6,466	21	8,833
LOT NO.	SQ. FT.	22	6,789	3	5,572	22	7,736	22	6,375	22	6,619	22	7,134
1	7,513	23	5,882	4	5,572	23	8,193	23	6,375			23	7,006
2	6,045	24	5,688	5	5,766	24	9,506	24	6,375			24	6,969
3*	5,520	25	6,617	6	8,083	25	9,442	25	6,375			25	7,094
4	5,822	26	5,685	7	6,282	26	8,135	26	6,375			26	6,501
5	6,147	27	6,303	8	9,240	27	8,865	27	10,127			27	8,120
6	6,165	28	6,491	9	5,938	28	8,865					28	6,120
7	6,165	29	6,469	10	7,615	29	8,865					29	6,120
8	6,190	30	6,526	11	8,222	30	8,865					30	6,409
9	6,165	31	6,419	12	7,457	31	8,865					31	7,037
10	6,165	32	5,518	13	7,251	32	8,865					32	7,019
11	6,165	33	5,794	14	6,789	33	8,865					33	6,409
12	6,196	34	5,936	15	5,572	34	8,610					34	25,861
13	6,165	35	7,435	16	5,572								
14	5,892	36	6,650	17	5,572								
15*	5,520	37	12,806	18	5,572								
16	7,412			19	5,572								
17	11,665			20	5,572								
				21	6,709								

*= SMALLEST RESIDENTIAL LOT(S)

LINE TABLE		
NO.	BEARING	LENGTH
L1	N73°28'41"E	79.22'
L2	S89°01'08"E	35.05'
L3	S22°58'01"W	60.22'
L4	S45°54'51"W	4.89'
L5	N69°54'51"E	25.15'
L6	N21°39'10"W	83.02'
L7	S15°48'14"W	63.39'
L8	S34°09'50"W	16.64'
L9	N67°12'36"E	86.97'
L10	N74°11'39"E	99.23'
L11	S00°49'44"W	28.17'
L12	S89°48'02"W	51.00'
L13	S85°36'56"W	50.72'
L14	S76°09'34"W	48.74'
L15	S85°35'07"W	49.02'
L16	S54°13'34"W	48.46'
L17	N31°55'03"E	51.04'
L18	S10°09'11"E	55.27'
L19	S19°49'03"E	46.12'
L20	S20°55'47"E	49.50'
L21	S24°42'10"E	45.04'
L22	S28°44'59"E	43.86'
L23	S30°19'02"E	43.99'
L24	S35°54'08"E	44.17'
L25	S41°26'50"E	43.99'
L26	S47°05'51"E	44.37'
L27	S52°45'51"E	43.99'
L28	S58°17'18"E	44.17'
L29	S63°52'55"E	43.99'
L30	S65°16'48"E	44.64'
L31	S70°15'48"E	46.00'
L32	S75°15'48"E	46.00'
L33	S80°15'48"E	52.27'
L34	S49°42'29"E	22.92'
L35	N43°26'05"E	54.78'
L36	N69°14'20"E	44.01'
L37	S88°08'12"E	43.02'
L38	S72°12'23"E	43.02'
L39	S55°15'25"E	43.02'
L40	N34°08'35"E	51.00'
L41	S15°49'14"E	61.27'
L42	S28°09'06"W	60.98'
L43	N31°26'26"E	56.61'
L44	N08°58'02"E	67.83'
L45	N60°11'01"W	57.94'

LINE TABLE		
NO.	BEARING	LENGTH
L46	S00°11'01"E	60.07'
L47	S04°58'02"W	72.49'
L48	S17°35'28"W	71.12'
L49	S26°08'36"W	66.39'
L50	S15°48'14"W	63.39'
L51	S34°09'50"W	16.64'
L52	N03°31'21"E	50.18'
L53	N67°12'36"E	43.59'
L54	N15°19'01"E	48.83'
L55	N18°58'33"E	50.52'
L56	S24°12'48"E	41.48'
L57	S19°58'37"W	49.56'
L58	S13°19'01"W	49.78'
L59	S07°22'50"W	49.79'
L60	S01°33'32"W	49.41'
L61	S02°27'50"E	49.15'
L62	S02°27'50"E	27.66'
L63	S24°42'22"E	22.42'
L64	S24°09'22"E	42.66'
L65	S27°53'17"E	23.12'
L66	S27°53'17"E	85.07'
L67	S27°53'12"E	23.34'
L68	S31°20'41"E	30.76'
L69	S31°20'41"E	48.02'
L70	S31°20'41"E	15.26'
L71	S34°13'42"E	26.44'
L72	S34°13'42"E	30.19'
L73	S26°39'23"E	45.34'
L74	S45°41'13"E	13.58'
L75	S45°41'13"E	45.48'
L76	S45°41'13"E	31.90'
L77	S45°42'29"E	21.93'
L78	S45°42'29"E	44.93'
L79	S45°42'29"E	22.92'
L80	S50°42'51"E	31.42'
L81	S50°42'51"E	45.34'
L82	S50°42'51"E	14.09'
L83	S54°02'57"E	40.04'
L84	S54°02'57"E	44.89'
L85	S54°02'57"E	4.80'
L86	S57°27'17"E	45.99'
L87	S60°31'47"E	4.19'
L88	S60°31'47"E	41.81'
L89	S64°41'18"E	12.43'
L90	S60°31'47"E	46.09'

LINE TABLE		
NO.	BEARING	LENGTH
L91	S64°41'18"E	46.10'
L92	S64°41'18"E	33.07'
L93	S68°30'05"E	49.90'
L94	N67°53'31"E	45.29'
L95	N67°53'31"E	15.20'
L96	N67°12'36"E	45.51'
L97	N67°12'36"E	2.01'
L98	N67°12'36"E	43.59'
L99	N67°12'36"E	43.61'
L100	N63°02'26"E	20.72'
L101	N60°15'13"W	50.00'
L102	S41°13'35"E	141.89'
L103	N54°11'34"E	58.79'
L104	N65°09'21"E	44.21'
L105	N70°08'34"E	44.26'
L106	N85°36'50"E	48.40'
L107	N86°04'48"E	9.57'
L108	N86°48'00"E	50.46'
L109	N86°48'00"E	76.31'
L110	N11°13'21"E	35.53'
L111	S07°17'26"E	85.07'
L112	N68°09'56"E	51.00'
L113	S65°53'25"E	101.83'
L114	S13°39'05"E	203.35'
L115	N13°39'05"W	203.32'
L116	S65°53'25"E	149.78'
L117	S65°53'25"E	13.73'
L118	S65°53'25"E	7.12'
L119	S34°09'50"W	32.89'
L120	S15°57'25"E	31.35'
L121	S73°39'35"W	15.00'
L122	S73°39'35"W	54.88'
L123	S10°03'13"W	172.72'
L124	S34°09'50"W	117.74'
L125	S30°24'08"W	500.20'
L126	S30°24'08"W	494.33'
L127	S21°59'12"E	28.07'
L128	S12°33'06"W	117.43'
L129	S21°59'12"E	21.65'
L130	S68°09'56"W	66.55'
L131	N12°33'06"E	117.43'
L132	S03°17'26"E	67.53'
L133	S07°17'26"E	85.07'
L134	N67°12'36"W	79.24'
L135	S21°59'12"E	9.57'

LINE TABLE		
NO.	BEARING	LENGTH
L136	N21°59'12"W	124.51'
L137	S20°35'50"W	53.80'
L138	N06°05'50"E	49.90'
L139	N81°59'10"W	15.00'
L140	S81°57'25"E	177.79'
L141	N01°32'25"W	194.31'
L142	N64°05'50"W	176.14'
L143	N14°17'58"E	80.37'
L144	N17°02'43"E	305.60'
L145	N17°02'43"E	301.09'
L146	S68°39'00"W	49.90'
L147	N21°20'17"E	480.89'
L148	S68°39'00"W	49.90'
L149	S21°20'17"W	137.20'
L150	S11°40'47"W	131.76'
L151	N20°38'03"W	152.52'
L152	S20°38'03"E	195.84'
L153	S02°33'19"E	109.01'
L154	N02°33'19"W	109.28'
L155	N21°43'13"W	18.02'
L156	S65°56'03"W	20.02'
L157	S21°43'13"E	13.73'
L158	S65°53'25"E	58.28'
L159	N48°02'38"E	54.27'
L160	N48°24'48"E	51.37'
L161	N62°54'52"E	51.24'
L162	S64°04'24"W	7.83'

CURVE TABLE				
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	1°25'49"	1912.41'	47.27'	N73°16'17"E	47.26'
C2	54°04'06"	532.50'	502.51'	S41°24'25"E	484.00'
C3	1°24'19"	1213.50'	29.84'	S67°44'55"E	29.84'
C4	17°42'21"	325.00'	100.48'	S64°46'48"W	100.08'
C5	20°05'29"	275.00'	96.43'	N56°57'51"E	95.94'
C6	85°36'52"	25.00'	37.36'	S20°49'19"W	33.98'
C7	90°00'00"	25.00'	39.27'	N66°59'10"W	35.36'
C8	48°11'23"	25.00'	21.03'	S48°53'28"E	20.41'
C9	186°22'46"	50.00'	162.65'	N23°30'57"E	100.00'
C10	90°00'00"	25.00'	39.27'	S23°00'50"E	35.36'
C11	48°11'23"	25.00'	21.03'	N48°53'28"W	20.41'
C12	10°47'35"	375.00'	70.64'	N16°35'22"W	70.54'
C13	15°47'35"	425.00'	86.06'	S15°35'22"E	79.86'
C14	21°28'11"	425.00'	159.19'	N21°16'41"W	158.26'
C15	21°28'11"	375.00'	140.50'	S21°16'41"E	139.69'
C16	10°38'37"	375.00'	69.66'	N27°18'26"W	69.56'
C17	10°38'37"	425.00'	78.95'	S27°18'26"E	78.84'
C18	90°45'52"	25.00'	39.62'	N23°25'16"E	35.61'
C19	89°13'08"	25.00'	38.93'	S66°34'44"E	35.10'
C20	92°18'52"	275.00'	265.49'	S83°30'32"E	255.39'
C21	92°44'59"	325.00'	313.76'	N83°30'32"W	301.72'
C22	44°13'29"	25.00'	21.03'	S31°49'44"E	20.41'
C23	89°22'46"	50.00'	162.65'	N78°49'10"W	89.80'
C24	90°00'00"	25.00'	39.27'	S29°06'50"W	35.36'
C25	48°11'23"	25.00'	21.03'	N10°12'53"E	20.41'
C26	33°58'51"	325.00'	192.80'	N13°29'06"E	190.02'
C27	33°18'51"	275.00'	159.90'	S13°29'06"W	157.65'
C28	90°00'00"	25.00'	39.27'	S44°16'50"E	35.36'
C29	90°00'00"	25.00'	39.27'	S45°49'44"W	35.36'
C30	20°44'03"	475.00'	171.89'	N11°11'43"E	170.96'
C31	18°41'08"	525.00'	152.92'	S09°19'18"W	152.33'
C32	87°47'27"	25.00'	38.30'	S29°22'28"E	34.66'
C33	86°10'29"	25.00'	37.60'	S61°01'11"E	34.16'
C34	28°58'29"	425.00'	209.98'	S75°10'52"E	207.85'
C35	28°58'29"	325.00'	166.28'	N75°10'52"W	164.52'
C36	49°30'28"	525.00'	496.84'	N45°33'31"W	481.53'
C37	49°30'28"	425.00'	440.00'	S45°33'31"E	525.43'
C38	4°38'59"	775.00'	62.80'	N18°25'52"W	62.78'
C39	4°38'59"	825.00'	66.92'	S18°25'52"E	66.90'
C40	91°44'19"	25.00'	40.03'	N29°49'43"E	35.89'
C41	101°52'13"	25.00'	44.30'	S66°52'23"E	38.73'
C42	45°33'06"	325.00'	260.27'	S52°41'25"W	253.37'
C43	32°36'33"	275.00'	156.53'	N48°03'04"E	154.41'
C44	4°57'22"	425.00'	36.76'	N30°13'29"E	36.75'
C45	93°37'14"	25.00'	36.49'	N07°39'27"W	33.33'
C46	93°37'14"	25.00'	36.49'	N85°57'47"E	32.63'
C47	27°49'06"	675.00'	327.56'	N46°57'44"W	324.33'
C48	77°19'06"	25.00'	33.74'	N80°28'39"E	31.23'
C49	27°00'38"	400.00'	188.57'	S55°19'24"W	186.82'
C50	27°09'48"	350.00'	164.99'	S55°19'24"W	163.47'

CURVE TABLE				
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C51	90°28'26"	25.00'	41.66'	S05°55'08"E	37.00'
C52	15°42'31"	725.00'	198.68'	S85°43'32"E	198.06'
C53	86°19'39"	25.00'	37.66'	S81°01'11"E	34.16'
C54	12°36'12"	725.00'	163.33'	N82°27'36"E	163.05'
C55	12°36'12"	675.00'	162.41'	S82°27'36"W	162.06'
C56	89°37'10"	25.00'	39.10'	S31°24'55"W	35.23'
C57	15°15'25"	275.00'	75.11'	S40°59'22"E	74.88'
C58	83°37'14"	25.00'	36.49'	N89°16'18"E	33.33'
C59	39°14'19"	425.00'	291.04'	N67°36'57"E	285.37'
C60	90°00'00"	25.00'	39.27'	S23°30'50"E	35.36'
C61	90°00'00"	25.00'	39.27'	N61°46'02"E	35.36'
C62	17°29'26"	325.00'	99.21'	S79°01'13"W	98.83'
C63	17°29'26"	275.00'	83.95'	N79°01'13"E	83.62'
C64	90°00'00"	25.00'	39.27'	S48°14'02"E	35.36'
C65	17°39'18"	325.00'	101.79'	S12°12'29"E	101.38'
C66	17°39'18"	275.00'	86.32'	N12°12'29"W	85.75'
C67	90°00'00"	25.00'	39.27'	N66°10'18"W	35.36'
C68	97°01'31"	25.00'	39.27'	N23°48'42"E	35.36'
C69	90°00'00"	25.00'	39.27'	N66°10'18"W	35.36'
C70	90°00'00"	25.00'	39.27'	N23°49'42"E	35.36'
C71	90°00'00"	25.00'	39.27'	N66°10'18"W	35.36'
C72	86°17'38"	25.00'	37.65'	N25°40'53"E	34.19'
C73	4°45'48"	475.00'	39.50'	N13°26'55"W	39.49'
C74	7°48'05"	475.00'	64.41'	S17°17'14"E	64.36'
C75	8°34'59"	525.00'	78.60'	S13°14'40"E	78.53'
C76	8°34'59"	325.00'	48.70'	S13°14'40"E	48.65'
C77	6°00'07"	325.00'	34.07'	S72°57'48"W	34.03'
C78	8°24'24"	325.00'	48.59'	S66°29'56"W	48.54'
C79	9°31'46"	325.00'	48.38'	S56°52'51"W	48.34'
C80	6°42'35"	325.00'	32.40'	S33°36'09"W	32.44'
C81	18°58'38"	375.00'	124.21'	S39°34'36"W	123.78'
C82	10°54'12"	325.00'	71.57'	S54°13'39"W	71.26'
C83	11°01'55"	375.00'	72.19'	S65°07'37"W	72.08'
C84	10°58'03"	375.00'	71.78'	S76°03'34"W	71.67'
C85	5°07'25"	375.00'	33.53'	S84°12'18"W	33.52'
C86	1°44'02"	425.00'	12.86'	N85°33'59"E	12.86'
C87	8°38'56"	425.

Doc#2024091674

PLAT NOTES

1. THIS SUBDIVISION IS SUBJECT TO THE DEVELOPMENT AGREEMENT BETWEEN THE WOLF LEGACY, L.P. AND THE CITY OF GEORGETOWN UNDER DOCUMENT NUMBER 2014066878, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON AUGUST 13, 2014 AND EXECUTED ON AUGUST 28, 2014.
2. THIS SUBDIVISION IS SUBJECT TO THE CITY OF GEORGETOWN ORDINANCE NUMBER 2018-66 AMENDING THE OFFICIAL ZONING MAP TO BE RECORDED FORM AGRICULTURE (AG) DISTRICT TO PLANNED UNIT DEVELOPMENT (PUD) KNOWN AS WOLF RANCH HILLWOOD, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018.
3. WATER AND WASTEWATER PROVIDED BY THE CITY OF GEORGETOWN'S ELECTRICAL SERVICES PROVIDED BY PEDERNALES ELECTRIC COMPANY.
4. ALL STRUCTURES/OBSTRUCTIONS ARE PROHIBITED IN DRAINAGE EASEMENTS.
5. THERE ARE AREAS WITHIN THE BOUNDARIES OF THIS SUBDIVISION IN THE 100-YEAR FLOODPLAIN AS DEFINED BY COMMUNITY PANEL NO. 48491C0280, MAP NO. 48491C0280E, EFFECTIVE DATE: SEPTEMBER 26, 2008 AND COMMUNITY PANEL NO. 48491C0485, MAP NO. 48491C0485F, EFFECTIVE DATE: DECEMBER 20, 2019.
6. PRIOR TO ANY CHANNEL ALTERATION OR BRIDGE/CONSTRUCTION, WHICH WILL CHANGE EXISTING FLOOD PATTERNS ON ELEVATIONS, A LETTER OF MAP AMENDMENT MUST BE SUBMITTED TO THE CITY OF GEORGETOWN FLOODPLAIN ADMINISTRATOR FOR APPROVAL AND APPROVAL BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
7. IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATION SHOULD BE BUILT AT LEAST ONE FOOT ABOVE THE SURROUNDING GROUND, AND THE GROUND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF 1/2" PER FOOT FOR A DISTANCE OF AT LEAST 10 FEET.
8. A 15-FOOT PUBLIC UTILITY EASEMENT IS RESERVED ALONG LOT 30, BLOCK A WITHIN THIS PLAT, A 10-FOOT PUBLIC UTILITY EASEMENT IS RESERVED ALONG ALL OTHER STREET FRONTAGES WITHIN THIS PLAT.
9. PARKLAND DEDICATION REQUIREMENTS ARE BEING MET BY THE PUD AGREEMENTAS DEFINED IN THE CITY OF GEORGETOWN ORDINANCE NUMBER 2018-66.
10. THE MONUMENTS ON THIS PLAT HAVE BEEN ROTATED TO THE NAD 83/93 HARN-TEXAS CENTRAL ZONE AND NAVD 88.
11. THE MAXIMUM GROSS IMPERVIOUS COVERAGE FOR THE PARCEL IS NOL, THE MAXIMUM IMPERVIOUS COVERAGE PER RESIDENTIAL LOT IS 60%, AND THE MAXIMUM IMPERVIOUS COVERAGE PER OPEN SPACE LOT AND PARK LOT IS 5% PER GEORGETOWN ORDINANCE NUMBER 2018-66, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018. THE MAXIMUM IMPERVIOUS COVERAGE FOR NON-RESIDENTIAL LOT SHALL BE PURSUANT TO THE SITE PLAN APPLICATION BASED ON THE ZONING DESIGNATION OF THE PROPERTY.
12. THE LANDOWNER ASSUMES ALL RISKS ASSOCIATED WITH IMPROVEMENTS LOCATED IN THE RIGHT-OF-WAY, OR ROAD DRAINAGE EASEMENTS, AND AGREES TO RELEASE THE CITY OF GEORGETOWN AND WILLIAMSON COUNTY FROM LANDOWNERS INDEMNIFIES AND HOLDS THE CITY OF GEORGETOWN, WILLIAMSON COUNTY, THEIR OFFICERS, AGENTS AND EMPLOYEES HARMLESS FROM ANY LIABILITY OWING TO PROPERTY DEFECTS OR NEGLIGENCE NOT ATTRIBUTABLE TO THEM AND ACKNOWLEDGES THAT THE IMPROVEMENTS MAY BE REMOVED BY THE CITY AND/OR COUNTY AND THAT THE OWNER OF THE IMPROVEMENTS WILL BE RESPONSIBLE FOR THE RELOCATION AND/OR REPLACEMENT OF THE IMPROVEMENTS.
13. THE BAR DITCH OF ALL STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES AND ANY BRIDGES OR CULVERTS CROSSING SUCH STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES SHALL BE CONSTRUCTED AS TO BE FULLY COVERED BY THIS PLAT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THE CITY OF GEORGETOWN AND/OR WILLIAMSON COUNTY, TEXAS. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY OBLIGATION TO BUILD ANY OF THE STREETS, ROADS, OR OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR OF CONSTRUCTING ANY OF THE BRIDGES OR DRAINAGE IMPROVEMENTS IN CONNECTION THEREWITH. IT IS THE INTENT OF THIS PROVISION THAT BOTH THE CITY OF GEORGETOWN AND WILLIAMSON COUNTY ACCEPT ONLY THOSE STREETS IN THIS SUBDIVISION, OTHER THAN THOSE DRAINING OR PROTECTING THE ROAD SYSTEM AND STREETS IN THEIR RESPECTIVE JURISDICTIONS.
14. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY RESPONSIBILITY FOR THE ACCURACY OF REPRESENTATIONS BY OTHER PARTIES IN THIS PLAT, FLOODPLAIN DATA, IN PARTICULAR, MAY CHANGE DEPENDING ON SUBSEQUENT DEVELOPMENT. IT IS FURTHER UNDERSTOOD THAT THE CONSTRUCTION OF THE TRACT OF LAND COVERED BY THIS PLAT MUST INSTALL AT THEIR OWN EXPENSE ALL TRAFFIC CONTROL DEVICES AND SIGNAGE REQUIRED BY THE TRAFFIC CONTROL DEVICES IN THIS SUBDIVISION MUST FINALLY BE WITH ACCEPTED FOR MAINTENANCE BY THE CITY AND/OR COUNTY.
15. THIS PLAT IS SUBJECT TO THE PROVISIONS OF THE CITY OF GEORGETOWN WATER CONSERVATION ORDINANCE, ADOPTED APRIL 22, 2014, AS ORDINANCE 2014-023.
16. THIS PLAT IS SUBJECT TO THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS FOR PROPERTIES OVER THE EDWARDS AQUIFER RECHARGE ZONE. WATER QUALITY PONDS WITHIN THIS SUBDIVISION SHALL REMOVE 80% TSS
17. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED IN NOVEMBER 2013. ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREON.
18. ALL WATER QUALITY, SEDIMENTATION, FILTRATION, DETENTION, AND/OR RETENTION BASINS, FEATURES, AND RELATED APPURTENANCES, SHALL BE SITUATED WITHIN A DRAINAGE EASEMENT, DRAINAGE LOT, THE OWNER(S), HEIR, OR ITS ASSIGNEES OF THE TRACTS UPON WHICH ARE LOCATED SUCH EASEMENTS, APPURTENANCES, AND DETENTION WATER QUALITY FACILITIES, SHALL MAINTAIN AND BE RESPONSIBLE FOR THEIR MAINTENANCE. ROUTINE INSPECTION, AND UPKEEP.
19. RIGHT-OF-WAY EASEMENTS FOR WIDENING ROADWAYS OR IMPROVING DRAINAGE SHALL BE MAINTAINED BY THE LANDOWNER UNTIL ROAD OR DRAINAGE IMPROVEMENTS ARE ACTUALLY CONSTRUCTED ON THE PROPERTY. THE CITY OF GEORGETOWN AND/OR WILLIAMSON COUNTY SHALL MAINTAIN ONLY THE ROAD WIDENING EASEMENT FOR CONSTRUCTION, IMPROVEMENT, OR MAINTENANCE OF THE ADJACENT ROAD.
20. UNLESS OTHERWISE NOTED HEREIN, ALL EASEMENTS DEDICATED TO THE CITY OF GEORGETOWN BY THIS PLAT SHALL BE EXCLUSIVE TO THE CITY OF GEORGETOWN, AND GRANTOR COVENANTS THAT GRANTOR AND GRANTOR'S HEIRS, SUCCESSORS, AND ASSIGNS SHALL NOT CONVEY ANY OTHER EASEMENT, LICENSE, OR CONFLICTING RIGHT TO USE IN ANY MANNER, THE AREA (OR ANY PORTION THEREOF) COVERED BY THIS GRANT.
21. ALL EASEMENTS DEDICATED TO THE CITY OF GEORGETOWN BY THIS PLAT ADDITIONALLY INCLUDE THE FOLLOWING RIGHTS: (1) THE RIGHT OF THE CITY TO CHANGE THE SIZE OF ANY FACILITIES INSTALLED, MAINTAINED, OR OPERATED WITHIN THE EASEMENT AREA; (2) THE RIGHT OF THE CITY TO RELOCATE ANY FACILITIES WITHIN THE EASEMENT AREA; AND (3) THE RIGHT OF THE CITY TO REMOVE FROM THE EASEMENT AREA ALL TREES AND PARTS THEREOF, OR OTHER OBSTRUCTIONS, WHICH ENDANGER OR MAY INTERFERE WITH THE EFFICIENCY AND MAINTENANCE OF ANY FACILITIES WITHIN THE EASEMENT AREA.
22. STATE-OWNED RIVERBEDS AND BEDS OF NAVIGABLE STREAMS IN THE PUBLIC DOMAIN ARE HELD IN TRUST FOR THE PEOPLE OF THE STATE OF TEXAS BY THE GENERAL LAND OFFICE. THE GENERAL LAND OFFICE HAS AN INTEREST IN LAND HELD FOR THE FREE AND UNRESTRICTED USE OF THE NAVIGABLE RIVERS AND THE RIGHT OF PUBLIC ACCESS ITS BANKS, ACROSS ANY PORTION OF THE PROPERTY BETWEEN THIS MEAN HIGH WATER MARKS OF THE RIVER IN ITS NATURAL STATE.
23. OPEN SPACE LOTS 5, 6, 18, 19 OF BLOCK A, LOT 17 OF BLOCK B, LOTS 1 AND 2 OF BLOCK G, AND LOT 7 OF BLOCK I, SHALL BE OWNED AND MAINTAINED BY THE OWNERS ASSOCIATION OF WOLF RANCH RESIDENTIAL COMMUNITY, INC.
24. BASIS OF BEARINGS IS THE TEXAS COORDINATE SYSTEM OF 1983, CENTRAL ZONE (4203) ALL COORDINATES AND DISTANCES SHOWN HEREON ARE SURFACE VALUES. THE SURFACE ADJUSTMENT FACTOR IS 1.00008. THE UNIT OF LINEAR MEASUREMENT IS U.S. SURVEY FEET.
25. ALL SEDIMENTATION, FILTRATION, DETENTION, AND/OR RETENTION BASINS AND RELATED APPURTENANCES SHOWN HEREON, SHALL BE SITUATED WITHIN A DRAINAGE EASEMENT, DRAINAGE LOT, THE OWNER(S), HEIR, OR ITS ASSIGNEES OF THE TRACTS UPON WHICH ARE LOCATED SUCH EASEMENTS, APPURTENANCES, AND DETENTION FACILITIES SHALL MAINTAIN SAME AND BE RESPONSIBLE FOR THEIR MAINTENANCE, ROUTINE INSPECTION, AND UPKEEP.
26. ANY HERITAGE TREES AS NOTED ON THIS PLAT ARE THE PROPERTY OWNER'S RESPONSIBILITY. TO THE MAINTENANCE, CARE, PRUNING AND REMOVAL REQUIREMENTS OF THE CITY OF GEORGETOWN'S APPROVED REMOVAL DOES NOT REQUIRE MODIFICATION OF THE PLAT, (IF APPLICABLE).
27. ALL INDIVIDUAL LOTS CONTAINING HERITAGE TREES ARE CONFIGURED AND DESIGNED SO THAT THE LOT IS DEVELOPABLE FOR THE INTENDED PURPOSE WITHOUT REQUIRING REMOVAL OF THE HERITAGE TREES OR EXCEEDING THE PERCENTAGE OF ALLOWABLE DISTURBANCE WITHIN THE HERITAGE TREES' CRZ (IF APPLICABLE).
28. AN EASEMENT AND RIGHT-OF-WAY TEN (10) FEET IN WIDTH AND ALONG WOLF CANYON ROAD, AND TWO AND ONE-HALF (2.5) FEET IN WIDTH AND ALONG ALL SIDE LOT LINES, IN THIS SUBDIVISION AS HERE FOR THE CONSTRUCTION AND MAINTENANCE OF SAID DISTRIBUTION LINE OF THE GRANTORS PROPERTY, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2023051101, OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.
29. AN EASEMENT AND RIGHT-OF-WAY TEN (10) FEET IN WIDTH AND ALONG WOLF CANYON ROAD, IN THIS SUBDIVISION AS HERE FOR THE CONSTRUCTION AND MAINTENANCE OF GAS DISTRIBUTION LINE OF THE GRANTORS PROPERTY, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2023051099 AND AMENDED UNDER DOCUMENT NO. 2024064755, OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.

LEGAL DESCRIPTION:
68.83 ACRES

BEING A 68.83 ACRE TRACT OF LAND SITUATED IN THE ISAAC DONAGAN SURVEY, ABSTRACT 178 OF WILLIAMSON COUNTY, TEXAS, AND BEING ALL OF A CALLED 68.84 ACRES TRACT OF LAND DESCRIBED TO CT DEVELOPMENT, INC. AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NUMBER 2021104446 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.T.), AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 1/2-INCH IRON ROD FOUND IN THE SOUTHERLY RIGHT-OF-WAY LINE OF STATE HIGHWAY 29, A VARIABLE WIDTH RIGHT-OF-WAY, SAME BEING THE NORTH BOUNDARY LINE OF SAID 68.84 ACRE TRACT, FOR THE NORTHEAST CORNER OF A CALLED 8.62 ACRES TRACT OF LAND AS DESCRIBED TO PINNACLE FRIESIAN PROPERTIES, LLC AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2015046456 OF SAID O.P.R.W.C.T.;

THENCE, WITH SAID SOUTHERLY RIGHT-OF-WAY LINE OF STATE HIGHWAY 29 AND THE NORTH BOUNDARY LINE OF SAID 68.84 ACRES TRACT THE FOLLOWING TWO (2) COURSES AND DISTANCES:

1. NORTH 72°26'57" EAST, A DISTANCE OF 75.23 FEET TO A 1/2" IRON ROD WITH PLASTIC CAP STAMPED "PAPE DAWSON" FOUND FOR THE BEGINNING OF A CURVE;
2. IN A 24-DEGREES DIRECTION, ALONG SAID CURVE TO THE RIGHT A DISTANCE OF 45.23 FEET, WITH A CENTRAL ANGLE OF 51°49'47", A RADIUS OF 1,247.42 FEET, AND A CHORD BEARING AND DISTANCE OF NORTH 51°19'47" EAST, 43.70 FEET, TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET IN THE WESTERLY RIGHT-OF-WAY LINE OF WOLF CANYON ROAD, A CALLED 80-FOOT RIGHT-OF-WAY WIDTH, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2022039125 OF SAID O.P.R.W.C.T. AT THE NORTH CORNER OF SAID 68.84 ACRES TRACT;

THENCE, DEPARTING SAID SOUTHERLY RIGHT-OF-WAY LINE OF STATE HIGHWAY 29, WITH THE EAST BOUNDARY LINE OF SAID 68.84 ACRES TRACT AND THE WEST RIGHT-OF-WAY LINE OF WOLF CANYON ROAD THE FOLLOWING THIRTEEN (13) COURSES AND DISTANCES:

1. SOUTH 29°15'59" EAST, A DISTANCE OF 35.42 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
2. SOUTH 14°25'03" EAST, A DISTANCE OF 250.61 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
3. SOUTH 30°37'55" WEST, A DISTANCE OF 35.56 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
4. SOUTH 14°25'03" EAST, A DISTANCE OF 50.00 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
5. SOUTH 59°22'57" EAST, A DISTANCE OF 35.56 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
6. SOUTH 14°25'03" EAST, A DISTANCE OF 57.59 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET FOR THE BEGINNING OF A CURVE;
7. IN A SOUTHEASTERLY DIRECTION, ALONG SAID CURVE TO THE LEFT A DISTANCE OF 502.81 FEET, WITH A CENTRAL ANGLE OF 19°04'01", A RADIUS OF 533.70 FEET, AND A CHORD BEARING AND DISTANCE OF SOUTH 24°57'04" EAST, 500.67 FEET, TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
8. SOUTH 39°37'02" EAST, A DISTANCE OF 135.71 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
9. SOUTH 23°26'57" EAST, A DISTANCE OF 35.36 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
10. SOUTH 68°26'57" EAST, A DISTANCE OF 35.36 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
11. NORTH 66°33'03" EAST, A DISTANCE OF 35.36 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
12. SOUTH 69°26'57" EAST, A DISTANCE OF 70.72 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET FOR THE BEGINNING OF A CURVE;
13. IN A SOUTHEASTERLY DIRECTION, ALONG SAID CURVE TO THE RIGHT A DISTANCE OF 29.84 FEET, WITH A CENTRAL ANGLE OF 51°34'14", A RADIUS OF 33.15 FEET, AND A CHORD BEARING AND DISTANCE OF SOUTH 44°14'04" EAST, 28.84 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;

THENCE, DEPARTING THE WEST RIGHT-OF-WAY LINE OF WOLF CANYON ROAD, CONTINUING WITH THE EAST BOUNDARY LINE OF SAID 68.84 ACRES TRACT, OVER AND ACROSS THE REMAINDER OF A CALLED 65.472 ACRES TRACT OF LAND AND A CALLED 81.222 ACRES TRACT OF LAND, BOTH DESCRIBED TO HK GEORGETOWN, LP AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2022036091 OF SAID O.P.R.W.C.T.), THE FOLLOWING EIGHTEEN (18) COURSES AND DISTANCES:

1. SOUTH 22°58'03" WEST, A DISTANCE OF 60.22 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
2. SOUTH 11°55'02" EAST, A DISTANCE OF 166.49 FEET TO A 1/2-INCH IRON ROD WITHOUT PLASTIC CAP STAMPED "KHA" SET;
3. SOUTH 09°25'05" WEST, A DISTANCE OF 140.64 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
4. SOUTH 16°16'59" EAST, A DISTANCE OF 147.22 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
5. SOUTH 03°21'05" EAST, A DISTANCE OF 140.64 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
6. SOUTH 22°40'56" WEST, A DISTANCE OF 344.36 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
7. SOUTH 24°41'03" WEST, A DISTANCE OF 60.00 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
8. SOUTH 65°20'02" EAST, A DISTANCE OF 346.25 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
9. SOUTH 30°57'58" WEST, A DISTANCE OF 318.06 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
10. SOUTH 17°41'46" EAST, A DISTANCE OF 354.61 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
11. SOUTH 65°50'02" WEST, A DISTANCE OF 157.61 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET, IN THE EAST LINE OF A CALLED 10.00 ACRE TRACT OF LAND DESCRIBED TO SHADOW CANYON PHASE I, LLC AS SHOWN ON A PLAT RECORDED UNDER DOCUMENT NO. 2019063183 OF SAID O.P.R.W.C.T. AND THE WEST EASEMENT LINE OF SAID 81.222 ACRES TRACT;

THENCE, WITH THE WEST BOUNDARY LINE OF SAID 10.00 ACRE TRACT, SAME BEING SAID EAST BOUNDARY LINE OF SHADOW CANYON PHASE II, AND THE EAST BOUNDARY LINE OF SHADOW CANYON PHASE I, AS SHOWN ON A PLAT RECORDED UNDER DOCUMENT NO. 2019063183 OF SAID O.P.R.W.C.T.) THE FOLLOWING EIGHT (8) COURSES AND DISTANCES:

1. NORTH 31°41'15" WEST, A DISTANCE OF 256.70 FEET TO A 1/2-INCH IRON ROD FOUND;
2. NORTH 25°36'40" WEST, A DISTANCE OF 83.67 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET;
3. NORTH 25°36'40" WEST, A DISTANCE OF 84.01 FEET TO A 1/2-INCH IRON ROD FOUND;
4. NORTH 31°35'18" WEST, A DISTANCE OF 464.49 FEET TO A 1/2-INCH IRON ROD FOUND;
5. NORTH 31°35'18" WEST, A DISTANCE OF 87.49 FEET TO A 5/8" IRON ROD FOUND;
6. NORTH 34°35'57" WEST, A DISTANCE OF 1,036.63 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "PAPE-DAWSON" FOUND;
7. NORTH 31°15'48" WEST, A DISTANCE OF 360.19 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "PAPE-DAWSON" FOUND;
8. NORTH 31°31'49" WEST, A DISTANCE OF 1,000.00 FEET TO A 1/2-INCH IRON ROD FOUND FOR THE SOUTH CORNER OF SAID 10.00 ACRE TRACT;

THENCE, WITH THE WEST BOUNDARY LINE OF SAID 81.834 ACRE TRACT, SAME BEING SAID EAST BOUNDARY LINE OF SHADOW CANYON PHASE II, AND THE EAST BOUNDARY LINE OF SHADOW CANYON PHASE I, AT 785.47 FEET THE NORTHWEST CORNER OF SAID 81.834 ACRE TRACT, SAME BEING THE SOUTHEAST CORNER OF SAID 10.00 ACRE TRACT;

THENCE, WITH THE NORTH BOUNDARY LINE OF SAID 81.834 ACRES TRACT AND THE SOUTHEAST BOUNDARY LINE OF SAID 8.62 ACRES TRACT THE FOLLOWING TWO (2) COURSES AND DISTANCES:

1. NORTH 64°39'02" EAST, A DISTANCE OF 59.23 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC STAMPED "KHA" SET;
2. NORTH 64°39'02" EAST, A DISTANCE OF 601.10 FEET TO THE **POINT OF BEGINNING** AND CONTAINING 68.83 ACRES OF LAND, MORE OR LESS, IN WILLIAMSON COUNTY, TEXAS. THIS DOCUMENT WAS PREPARED BY THE OFFICE OF KIMLEY-HORN INC. IN AUSTIN, TEXAS.

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FINAL PLAT
WOLF RANCH WEST
SECTION 8, PHASE 3
BEING 68.83 ACRES OUT OF THE
ISAAC DONAGAN SURVEY, ABSTRACT 178
WILLIAMSON COUNTY, TEXAS

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SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.
N/A	RPP	MMII	11/4/2024	064461302	7 OF 6

2023-44-FP

Doc # 2024091674

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

KNOW ALL MEN BY THESE PRESENTS

THAT 2022 WE Hourglass, LLC ACTING BY AND THROUGH David Bruning, V.P. HEREIN HOLDER OF THE CERTAIN 68.84 ACRE TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2036054 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, DOES HEREBY SUBDIVIDE SAID TRACT AS SHOWN HEREON AND DESIGNATE THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON AND DESIGNATE THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON AND DESIGNATE THE SUBDIVISION NAME AS WOLF RANCH WEST SECTION 8, PHASE 3, AND DO HEREBY DEDICATE TO THE USE OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE, THIS SUBDIVISION IS TO BE KNOWN AS WOLF RANCH WEST SECTION 8, PHASE 3.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 28 DAY OF October, 2024.

2022 WE Hourglass, LLC
A TEXAS LIMITED PARTNERSHIP
BY: _____
NAME: David Bruning
TITLE: Vice President
ADDRESS: 7676 Woodway, Suite 104
Houston, Tx 77063

STATE OF TEXAS §
COUNTY OF Harris §

KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY

APPEARED David Bruning KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 28TH DAY OF October 2024.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
MY COMMISSION EXPIRES ON 11-9-2025

JUDY D. JOHNSON
Notary Public, State of Texas
Comm. Expires 11-09-2025
Notary ID 4349972-2

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

KNOW ALL MEN BY THESE PRESENTS

THAT CT DEVELOPMENT, INC. AND THROUGH Brian Howell OWNER OF THE CERTAIN 68.84 ACRE TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2036054 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, DOES HEREBY DEDICATE TO THE USE OF GEORGETOWN ANY EASEMENTS CONTAINED TO THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON AND DESIGNATE THE SUBDIVISION NAME AS WOLF RANCH WEST SECTION 8, PHASE 3, AND DO HEREBY DEDICATE TO THE USE OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE, THIS SUBDIVISION IS TO BE KNOWN AS WOLF RANCH WEST SECTION 8, PHASE 3.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 28 DAY OF October 2024.

CT DEVELOPMENT, INC.
A TEXAS LIMITED PARTNERSHIP
BY: _____
NAME: David Bruning
TITLE: Vice President
ADDRESS: 7676 Woodway, Suite 104
Houston, Tx 77063

STATE OF TEXAS §
COUNTY OF Harris §

KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED David Bruning KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 28 DAY OF October 2024.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
MY COMMISSION EXPIRES ON 11-9-2025

JUDY D. JOHNSON
Notary Public, State of Texas
Comm. Expires 11-09-2025
Notary ID 4349972-2

STATE OF TEXAS §
COUNTY OF WILLIAMSON §

KNOW ALL MEN BY THESE PRESENTS

THAT TRI POINTE HOMES TEXAS, INC. ACTING BY AND THROUGH BRIAN HAWES, ITS DIVISION PRESIDENT - OWNER, OF THAT THE CERTAIN 68.84 ACRE TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2036054 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, DOES HEREBY CERTIFY THERE ARE NO LIENHOLDERS OF THE CERTAIN TRACT OF LAND DOES HEREBY CERTIFY THERE ARE NO EASEMENT HOLDERS EXCEPT AS SHOWN HEREON, DOES HEREBY SUBDIVIDE SAID TRACT AS SHOWN HEREON AND DESIGNATE THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON, WAIVER, MAP NO. 48491C0280E, EFFECTIVE DATE: SEPTEMBER 26, 2008 AND COMMUNITY PANEL NO. 48491C0485F, MAP NO. 48491C0485F, EFFECTIVE DATE: DECEMBER 20, 2019 AND LOT AND BLOCK LINES AND DO HEREBY DEDICATE TO THE USE OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE, THIS SUBDIVISION IS TO BE KNOWN AS WOLF RANCH WEST SECTION 8, PHASE 3.

THE FULLY DEVELOPED, CONCENTRATED STORMWATER RUNOFF IS CONTAINED WITHIN THE DRAINAGE EASEMENTS SHOWN AND/OR TO CLEAR THE PUBLIC RIGHTS-OF-WAY HEREON. THIS SUBDIVISION IS TO BE KNOWN AS WOLF RANCH WEST SECTION 8, PHASE 3.

TO CERTIFY WHICH, WITNESS BY MY HAND AND SEAL AT GEORGETOWN, WILLIAMSON, TEXAS.

THIS 4TH DAY OF OCTOBER, 2024.

TRI POINTE HOMES TEXAS, INC.
1340 BRAMBLE DRIVE, SUITE 170
AUSTIN, TX 78729

BY: _____
BRYAN HAWES, DIVISION PRESIDENT.
TRI POINTE HOMES, INC.
1340 BRAMBLE DRIVE, SUITE 170
AUSTIN, TEXAS 78729

STATE OF TEXAS §
COUNTY OF Williamson §

KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Brian Howell KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 5TH DAY OF October 2024.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS
MY COMMISSION EXPIRES ON 5-8-2027

MICHAEL LEE STEVENS
Notary Public, State of Texas
Comm. Expires 05-08-2027
Notary ID 13448273-3

FLOODPLAIN ADMINISTRATOR:

BASED UPON THE ABOVE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER A REVIEW OF THE PLAT AS DEPICTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLIES WITH THE REQUIREMENTS OF CHAPTER 19.44, FLOOD DAMAGE PREVENTION, OF THE GEORGETOWN MUNICIPAL CODE, THE GEORGETOWN DRAINAGE CRITERIA MANUAL AND THE NATIONAL FLOOD INSURANCE PROGRAM. I FURTHER RELY ON THE CERTIFICATIONS OF THE FACTS ALLEGED, THE CITY OF GEORGETOWN DISCLAIMS ANY RESPONSIBILITY FOR ANY MISREPRESENTATIONS OR INDEPENDENT VERIFICATION OF THE REPRESENTATION, FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED HEREWITH.

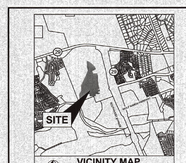
WESLEY WRIGHT, P.E., CFM, FLOODPLAIN COORDINATOR
CITY OF GEORGETOWN

DATE: 11/15/2024

PLANNING DIRECTOR:

I, SOFIA NELSON, PLANNING DIRECTOR OF THE CITY OF GEORGETOWN, TEXAS, DO HEREBY CERTIFY THIS PLAT IS APPROVED FOR FILING OF RECORD WITH THE CO

Doc #20240871137



VICINITY MAP
(1" = 3000')

SHEET INDEX	
SHEET NO.	TITLE
1	PLAT (NORTH) & DETAILS
2	PLAT (SOUTH) & DETAILS
3	PLAT DETAILS & TABLES
4	LEGAL DESCRIPTION & NOTES
5	SIGNATURES

NORTH

GRAPHIC SCALE IN FEET
1" = 100' 18X24

STREET SUMMARY								
STREET NAME	STREET TYPE	ROW	FOC-FOC	CURB TYPE	CLEAR ZONE	DESIGN SPEED	LINEAR FEET	ACREAGE
WRANGLER TRAIL	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	406'	0.502
SPRING MOUNTAIN COVE	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	434'	0.685
HIGH GROVE COURT	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	529'	0.654
MOON RIDGE ROAD	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	668'	0.737
SUNLIGHT TERRACE	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	578'	0.619
CRIMSON SUNSET DRIVE	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	1452'	1.561
MORNING MIST DRIVE	LOCAL STREET	50'	27'	VERTICAL	5'	25 MPH	358'	0.343
							4,685'	5.411

POINT NUMBER	NORTHING	EASTING	POINT ELEVATION	RAW DESCRIPTION
30054	10203356.785	3134816.051	844.34	MAG NAIL SET IN NORTH CURB OF BEAR PAW RUN
30037	10201971.380	3115434.048	844.54	MAG NAIL SET IN NORTH CURB OF RAMBLING RAPIDS DRIVE
30097	10203965.120	3117439.729	894.77	MAG NAIL SET IN STORM CULVERT

APPLICANT/CIVIL ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
JOHN A. PICKENS
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH: (512) 720-5486
JOHN.PICKENS@KIMLEY-HORN.COM

SURVEYOR:
KIMLEY-HORN AND ASSOCIATES, INC.
MICHAEL A. MONTGOMERY II
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH: (512) 418-1771
MIKE.MONTGOMERY@KIMLEY-HORN.COM

OWNER:
GI GEORGETOWN, LP
9300 TURTLE CREEK BLVD
DALLAS, TEXAS 75219
PH: (512) 516-7964
CARTER.DAWALCH@HILLWOOD.COM

GENERAL INFORMATION:
TOTAL SITE ACREAGE 44.78
R.O.W. ACREAGE 5.41
TOTAL OPEN SPACE 17.51
OPEN SPACE LOT ACREAGE 17.51
RESIDENTIAL LOT ACREAGE 17.91
TOTAL BLOCKS 9
TOTAL RESIDENTIAL LOTS 117
TOTAL OPEN SPACE LOTS 5
M.U.D. LOTS 3
TOTAL LOTS 125
TOTAL PHASES 1
TOTAL LINEAR FEET OF PROPOSED STREETS ..... 4,685'

LINE TYPE LEGEND
- BOUNDARY LINE
- INTERIOR LOT LINE
- ADJOINING PROPERTY LINE
- 10' P.U.E. LINE
- EXISTING EASEMENT LINE
- ATLAS FLOODPLAIN
- 100 YEAR FLOODPLAIN LINE
- TCEQ BUFFER ZONE
- APPROXIMATE SURVEY LINE
- MATCH LINE

LEGEND

O.P.R.W.C.T.	OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT-OF-WAY
C.O.G.	CITY OF GEORGETOWN
P.U.E.	PUBLIC UTILITY EASEMENT
△	CALCULATED POINT
○	1/2-INCH IRON ROD WITH "KHA" SET
●	1/2-INCH IRON ROD FOUND (CAP NOTED)
XXXX	TREE TAG NUMBER
(EM)	EASEMENT TAG
(B)	BLOCK LETTER
(SE)	5-FT SIDEWALK EASEMENT HEREBY DEDICATED TO C.O.G.
	CREDIT TREE
	HERITAGE TREE
	TREE TO BE REMOVED
	TCEQ BUFFER ZONE

PHASE 7B CREDIT TREES				
TREE NUMBER	SPECIES	TRUNK	DIAMETER	STATUS
801846	CEDAR ELM		23"	REMAIN
801647	CEDAR ELM		19"	REMAIN
801655	POST OAK	MULTI	22"	REMAIN
801674	LIVE OAK	MULTI	23"	REMAIN
801675	LIVE OAK		19"	REMAIN
801676	LIVE OAK	MULTI	18.8"	REMAIN
801677	LIVE OAK		19"	REMAIN
801680	LIVE OAK	MULTI	25.5"	REMAIN
801891	LIVE OAK		19"	REMAIN
801892	LIVE OAK		18"	REMAIN
801909	LIVE OAK		18"	REMAIN
801910	LIVE OAK		19"	REMAIN
801911	LIVE OAK		18"	REMAIN
801914	LIVE OAK		19"	REMAIN
801918	LIVE OAK	MULTI	24.5"	REMAIN
801922	CEDAR ELM		19"	REMAIN
801925	CEDAR ELM		19"	REMAIN
801926	CEDAR ELM		20"	REMAIN
801928	CEDAR ELM		19"	REMAIN
801930	CEDAR ELM		22"	REMAIN
801931	LIVE OAK		22"	REMAIN
801932	LIVE OAK		19"	REMAIN
801933	LIVE OAK		19"	REMAIN
801934	LIVE OAK		20"	REMAIN
801935	CEDAR ELM		19"	REMAIN
801936	CEDAR ELM		19"	REMAIN
801941	LIVE OAK	MULTI	25.5"	REMAIN
801942	LIVE OAK	MULTI	21.5"	REMAIN
801943	LIVE OAK	MULTI	21"	REMAIN
801966	LIVE OAK	MULTI	23.5"	REMAIN
801968	LIVE OAK	MULTI	22"	REMAIN
801969	LIVE OAK	MULTI	21.5"	REMAIN
801969	LIVE OAK		18"	REMAIN
801968	LIVE OAK		21"	REMAIN

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C1	36°48'46"	1217.50'	664.05'	S51°38'34"E	646.21'
C2	2°47'21"	1217.50'	59.27'	S34°913'1E	59.26'
C3	4°50'04"	1202.50'	102.78'	S85°13'13"E	102.75'
C4	110°43'55"	50.00'	115.96'	S22°42'46"E	98.74'
C5	13°21'08"	25.00'	5.83'	N89°32'29"E	5.81'
C6	8°18'24"	325.50'	47.12'	S04°99'12"E	47.08'
C7	90°00'00"	25.00'	39.27'	N45°00'00"W	35.36'
C8	1°45'54"	975.00'	30.04'	S88°07'01"W	30.05'
C9	0°11'58"	725.00'	2.52'	N31°23'59"E	2.52'
C10	287°53'06"	60.00'	301.47'	N89°36'30"W	70.83'
C11	90°00'00"	25.00'	24.46'	N56°18'18"E	23.56'
C12	13°56'42"	1217.50'	11.32'	N7°39'39"E	11.32'
C13	89°04'58"	25.00'	40.81'	N25°08'38"W	36.29'
C14	36°26'59"	365.00'	193.98'	N81°56'26"W	191.73'
C15	4°29'00"	415.00'	32.47'	N55°06'25"E	32.47'
C16	83°28'22"	25.00'	36.42'	N40°36'41"E	33.29'
C17	83°28'30"	25.00'	36.42'	S37°10'56"E	33.29'
C18	1°25'49"	415.00'	83.36'	S73°06'38"E	83.36'
C19	93°04'55"	25.00'	40.61'	N85°46'22"E	36.29'
C20	82°51'58"	25.00'	36.15'	N41°29'41"W	33.05'
C21	87°33'22"	25.00'	38.20'	N41°39'06"W	34.59'
C22	48°11'23"	25.00'	21.03'	N25°13'16"W	20.41'
C23	48°11'23"	25.00'	21.03'	N73°24'39"W	20.41'
C24	87°33'22"	25.00'	38.20'	N47°39'06"W	34.59'
C25	48°11'23"	25.00'	21.03'	S64°28'53"E	20.41'
C26	91°28'48"	25.00'	39.89'	N48°42'52"E	35.79'
C27	28°28'53"	1005.00'	499.58'	S14°14'28"W	494.45'
C28	90°00'00"	25.00'	39.27'	N45°00'00"E	35.36'
C29	90°00'00"	25.00'	39.27'	N45°00'00"W	35.36'
C30	84°25'16"	25.00'	36.84'	S47°42'22"E	33.59'
C31	47°17'23"	325.00'	268.20'	S66°43'27"E	260.62'
C32	6°17'25"	275.00'	30.19'	N58°43'22"W	30.18'
C33	173°57'36"	425.00'	103.58'	N83°11'12"E	103.29'
C34	90°00'00"	25.00'	39.27'	N45°00'00"W	35.36'
C35	90°00'00"	25.00'	39.27'	N45°00'00"W	35.36'
C36	14°04'08"	325.50'	79.92'	S82°57'57"W	79.67'
C37	90°00'00"	25.00'	39.27'	N45°00'00"E	35.36'
C38	84°25'16"	25.00'	36.84'	S47°42'22"E	33.59'
C39	47°17'23"	325.00'	268.20'	S66°43'27"E	260.62'
C40	6°17'25"	275.00'	30.19'	N58°43'22"W	30.18'
C41	173°57'36"	425.00'	103.58'	N83°11'12"E	103.29'
C42	90°00'00"	25.00'	39.27'	N45°00'00"W	35.36'
C43	14°04'08"	325.50'	79.92'	S82°57'57"W	79.67'
C44	90°00'00"	25.00'	39.27'	N45°00'00"E	35.36'
C45	84°25'16"	25.00'	36.84'	S47°42'22"E	33.59'
C46	47°17'23"	325.00'	268.20'	S66°43'27"E	260.62'
C47	6°17'25"	275.00'	30.19'	N58°43'22"W	30.18'
C48	173°57'36"	425.00'	103.58'	N83°11'12"E	103.29'
C49	90°00'00"	25.00'	39.27'	N45°00'00"W	35.36'
C50	86°10'29"	25.00'	37.60'	N54°23'12"E	34.16'
C51	12°25'58"	725.00'	157.23'	S86°49'29"E	156.93'
C52	4°14'36"	1217.50'	90.17'	S84°34'58"E	90.15'
C53	9°41'22"	1217.50'	205.88'	S89°20'05"E	205.63'
C54	2°48'14"	1217.50'	59.58'	S81°41'52"E	59.57'
C55	2°49'23"	1217.50'	59.99'	S48°53'04"E	59.98'
C56	2°48'14"	1217.50'	59.58'	S84°08'15"E	59.57'
C57	2°49'23"	1217.50'	59.99'	S45°10'55"E	59.98'
C58	2°48'14"	1217.50'	59.58'	S42°27'38"E	59.57'
C59	2°49'17"	1217.50'	59.97'	S37°39'22"E	59.59'
C60	51°40'52"	60.00'	54.12'	N58°29'33"E	52.35'
C61	9°52'51"	365.00'	62.95'	N71°37'31"W	62.87'
C62	9°16'47"	365.00'	59.09'	N81°12'20"W	59.03'
C63	9°13'33"	365.00'	58.77'	S89°32'30"W	58.71'
C64	2°03'46"	365.00'	13.14'	S83°33'50"W	13.14'
C65	69°06'40"	50.00'	57.69'	N31°15'33"W	54.55'

CURVE TABLE					
NO.	DELTA	RADIUS	LENGTH	CHORD BEARING	CHORD
C131	37°36'03"	25.00'	16.41'	S42°23'34"W	16.11'
C132	23°37'32"	25.00'	10.31'	S11°48'46"W	10.24'
C133	82°49'09"	25.00'	36.14'	S35°48'50"W	33.07'
C134	1°18'31"	375.09'	8.56'	S76°35'15"W	8.56'
C135	101°35'42"	25.00'	44.33'	S50°47'51"E	38.75'
C136	0°08'52"	375.09'	0.64'	N78°33'31"E	0.64'
C137	20°26'05"	135.00'	48.33'	N68°33'19"E	48.07'
C138	1°36'50"	1217.50'	34.33'	S53°54'27"W	34.32'
C139	9°58'42"	1263.90'	21.89'	S37°03'38"W	21.87'
C140	70°06'31"	25.00'	30.59'	N46°41'22"E	28.72'
C141	9°40'58"	325.09'	54.92'	N76°34'16"E	54.86'
C142	9°51'01"	375.09'	64.49'	N76°39'31"E	64.41'
C143	62°06'04"	15.00'	16.26'	S50°40'43"W	15.47'
C144	9°40'58"	335.09'	56.61'	S76°34'16"W	56.55'
C145	11°38'14"	25.00'	5.08'	S55°40'37"W	5.07'
C146	0°58'47"	1217.50'	20.82'	N82°15'56"E	20.82'

LINE TABLE			
NO.	BEARING	LENGTH	
L1	N22°58'03"E	60.22'	
L2	S56°32'10"W	10.00'	
L3	S11°15'19"W	72.54'	
L4	S71°06'27"E	46.61'	
L5	S64°22'41"W	155.82'	
L6	N89°33'35"E	49.41'	
L7	N88°43'34"E	153.27'	
L8	N89°43'57"E	61.83'	
L9	N84°13'48"E	42.01'	
L10	S28°17'19"E	53.61'	
L11	S89°20'13"W	20.00'	
L12	S52°20'40"W	9.86'	
L13	S52°20'40"W	9.86'	
L14	S56°17'24"W	25.50'	
L15	N07°28'30"E	20.00'	
L16	S82°31'30"E	183.80'	
L17	N70°44'14"E	4.86'	
L18	N37°31'30"W	53.61'	
L19	N37°31'30"W	31.05'	
L20	S82°31'30"E	22.37'	
L21	N82°31'30"W	14.53'	
L22	S65°50'00"W	112.89'	
L23	S65°50'00"W	20.02'	
L24	S21°41'13"E	105.49'	
L25	S21°41'13"E	114.96'	
L26	S76°38'07"E	53.61'	
L27	S76°26'03"E	15.26'	
L28	S77°38'16"E	187.12'	
L29	S77°38'16"E	187.12'	
L30	S77°38'16"E	187.12'	

LINE TABLE			
NO.	BEARING	LENGTH	
L31	S77°38'16"E	187.12'	
L32	S77°38'16"E	187.12'	
L33	S77°38'16"E	187.12'	
L34	S77°38'16"E	187.12'	
L35	S77°38'16"E	187.12'	
L36	S77°38'16"E	187.12'	
L37	S77°38'16"E	187.12'	
L38	S77°38'16"E	187.12'	
L39	S77°38'16"E	187.12'	
L40	S77°38'16"E	187.12'	
L41	S77°38'16"E	187.12'	
L42	S77°38'16"E	187.12'	
L43	S77°38'16"E	187.12'	
L44	S77°38'16"E	187.12'	
L45	S77°38'16"E	187.12'	
L46	S77°38'16"E	187.12'	
L47	S77°38'16"E	187.12'	
L48	S77°38'16"E	187.12'	
L49	S77°38'16"E	187.12'	
L50	S77°38'16"E	187.12'	
L51	S77°38'16"E	187.12'	
L52	S77°38'16"E	187.12'	
L53	S77°38'16"E	187.12'	
L54	S77°38'16"E	187.12'	
L55	S77°38'16"E	187.12'	
L56	S77°38'16"E	187.12'	
L57	S77°38'16"E	187.12'	
L58	S77°38'16"E	187.12'	
L59	S77°38'16"E	187.12'	
L60	S77°38'16"E	187.12'	
L61	S77°38'16"E	187.12'	
L62	S77°38'16"E	187.12'	
L63	S77°38'16"E	187.12'	
L64	S77°38'16"E	187.12'	
L65	S77°38'16"E	187.12'	
L66	S77°38'16"E	187.12'	
L67	S77°38'16"E	187.12'	
L68	S77°38'16"E	187.12'	
L69	S77°38'16"E	187.12'	
L70	S77°38'16"E	187.12'	
L71	S77°38'16"E	187.12'	
L72	S77°38'16"E	187.12'	
L73	S77°38'16"E	187.12'	
L74	S77°38'16"E	187.12'	
L75	S77°38'16"E	187.12'	
L76	S77°38'16"E	187.12'	
L77	S77°38'16"E	187.12'	
L78	S77°38'16"E	187.12'	
L79	S77°38'16"E	187.12'	
L80	S77°38'16"E	187.12'	
L81	S77°38'16"E	187.12'	
L82	S77°38'16"E	187.12'	
L83	S77°38'16"E	187.12'	
L84	S77°38'16"E	187.12'	
L85	S77°38'16"E	187.12'	
L86	S77°38'16"E	187.12'	
L87	S77°38'16"E	187.12'	
L88	S77°38'16"E	187.12'	
L89	S77°38'16"E	187.12'	
L90	S77°38'16"E	187.12'	
L91	S77°38'16"E	187.12'	
L92	S77°38'16"E	187.12'	
L93	S77°38'16"E	187.12'	
L94	S77°38'16"E	187.12'	
L95	S77°38'16"E	187.12'	
L96	S77°38'16"E	187.12'	
L97	S77°38'16"E	187.12'	
L98	S77°38'16"E	187.12'	
L99	S77°38'16"E	187.12'	
L100	S77°38'16"E	187.12'	
L101	S77°38'16"E	187.12'	
L102	S77°38'16"E	187.12'	
L103	S77°38'16"E	187.12'	
L104	S77°38'16"E	187.12'	
L105	S77°38'16"E	187.12'	
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L107	S77°38'16"E	187.12'	
L108	S77°38'16"E	187.12'	
L109	S77°38'16"E	187.12'	
L110	S77°38'16"E	187.12'	
L111	S77°38'16"E	187.12'	
L112	S77°38'16"E	187.12'	
L113	S77°38'16"E	187.12'	
L114	S77°38'16"E	187.12'	
L115	S77°38'16"E	187.12'	
L116	S77°38'16"E	187.12'	
L117	S77°38'16"E	187.12'	
L118	S77°38'16"E	187.12'	
L119	S77°38'16"E	187.12'	
L120	S77°38'16"E	187.12'	
L121	S77°38'16"E	187.12'	
L122	S77°38'16"E	187.12'	

BLOCK A		
LOT NO.	ACRES	SQ. FT.
1	0.023	1,008

BLOCK B		
LOT NO.	ACRES	SQ. FT.
1	0.225	9,799
2	0.405	17,419
3	0.350	6,965
4	0.152	6,630
5	0.191	8,316
6	0.356	6,095

BLOCK C		
LOT NO.	ACRES	SQ. FT.
1	2.957	128,810
2	0.153	6,667
3	0.141	6,146
4	0.147	6,400
5	0.155	6,758
6	0.158	6,885
7	0.158	6,885
8	0.158	6,885
9	0.158	6,885
10	0.158	6,885
11	0.158	6,885
12	0.158	6,885
13	16.553	691,852
14	0.175	7,616
15	0.140	6,120
16	0.140	6,120
17	0.147	6,423
18	0.152	6,624
19	0.165	7,191
20	0.191	8,296
21	0.220	9,583

BLOCK D		
LOT NO.	ACRES	SQ. FT.
1	0.143	6,240
2	0.128	5,569
3	0.141	6,334

BLOCK E		
LOT NO.	ACRES	SQ. FT.
1	0.186	8,099
2	0.116	5,040
3	0.116	5,040
4	0.116	5,040
5	0.116	5,040
6	0.116	5,040
7	0.116	5,040
8	0.145	6,319
9	0.135	5,891
10	0.136	5,939
11	0.145	6,303
12	0.138	5,992
13	0.122	5,324
14	0.123	5,373
15	0.139	6,068
16	0.120	5,243
17	0.116	5,040
18	0.116	5,040
19	0.116	5,040
20	0.116	5,040
21	0.116	5,040
22	0.116	5,040
23	0.116	5,040
24	0.116	5,040
25	0.322	14,012

BLOCK F		
LOT NO.	ACRES	SQ. FT.
1	0.116	5,040
2	0.116	5,040
3	0.116	5,040
4	0.116	5,040
5	0.116	5,040
6	0.116	5,040
7	0.129	5,607
8	0.145	6,319
9	0.135	5,891
10	0.136	5,939
11	0.145	6,303
12	0.138	5,992
13	0.122	5,324
14	0.123	5,373
15	0.139	6,068
16	0.120	5,243
17	0.116	5,040
18	0.116	5,040
19	0.116	5,040
20	0.116	5,040
21	0.116	5,040
22	0.116	5,040
23	0.116	5,040
24	0.116	5,040
25	0.322	14,012

BLOCK G		
LOT NO.	ACRES	SQ. FT.
1	0.133	5,797
2	0.126	5,472
3	0.126	5,472
4	0.116	5,040
5	0.124	5,391
6	0.131	5,723
7	0.139	6,066
8	0.886	38,603
9	0.366	15,935
10	0.116	5,152
11	0.119	5,140
12	0.119	5,155
13	0.120	5,229
14	0.154	6,700
15	0.169	7,352
16	0.116	5,040
17	0.116	5,040
18	0.116	5,040
19	0.116	5,040
20	0.116	5,040
21	0.116	5,040
22	0.135	5,869
23	0.123	5,369
24	0.123	5,341
25	0.169	7,341
26	0.158	6,865

BLOCK H		
LOT NO.	ACRES	SQ. FT.
1	0.195	8,510
2	0.131	5,719
3	0.126	5,504
4	0.165	7,166
5	0.180	7,832
6	0.144	6,286
7	0.224	9,760

BLOCK I		
LOT NO.	ACRES	SQ. FT.
1	0.241	10,510
2	0.137	5,949
3	0.126	5,514
4	0.122	5,302
5	0.116	5,061
6	0.116	5,040
7	0.129	5,640

PHASE 7B HERITAGE TREES				
TAG NO.	SPECIES	TRUNK	DIAMETER	STATUS
801223	LIVE OAK	MULTI	37.50"	REMAIN
801685	LIVE OAK	MULTI	32.00"	REMAIN
801684	LIVE OAK	MULTI	33.50"	REMAIN
801889	CEDAR ELM	MULTI	27.00"	REMAIN
801927	LIVE OAK		26.00"	REMAIN
801929	LIVE OAK	MULTI	26.00"	REMAIN
801937	LIVE OAK	MULTI	30.00"	REMAIN
801942	LIVE OAK	MULTI	28.50"	REMAIN
801948	LIVE OAK	MULTI	32.50"	REMAIN
801949	LIVE OAK	MULTI	38.50"	REMAIN
801950	LIVE OAK	MULTI	36.50"	REMAIN

SECTION 7B HERITAGE TREES TO BE REMOVED				
TAG NO.	SPECIES	TRUNK	DIAMETER	STATUS
801224	LIVE OAK	MULTI	28.00"	TO BE REMOVED
801952	LIVE OAK	MULTI	27.50"	TO BE REMOVED

FINAL PLAT
WOLF RANCH WEST
SECTION 7B SUBDIVISION
BEING 44.78 ACRES OUT OF THE
ISAAC DONAGAN SURVEY, ABSTRACT 178
JOSEPH THOMPSON SURVEY, ABSTRACT 608
WILLIAMSON COUNTY, TEXAS

Kimley»Horn
10814 JOLLYVILLE ROAD, CAMPUS IV
SUITE 200, AUSTIN, TEXAS 78759
TBPELS FIRM # 10194624
TEL: NO. (512) 418-1771
WWW.KIMLEY-HORN.COM

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.
1" = 100'	RPP	MMII	10/06/2024	064461303	1 OF 5

2023-39-FP

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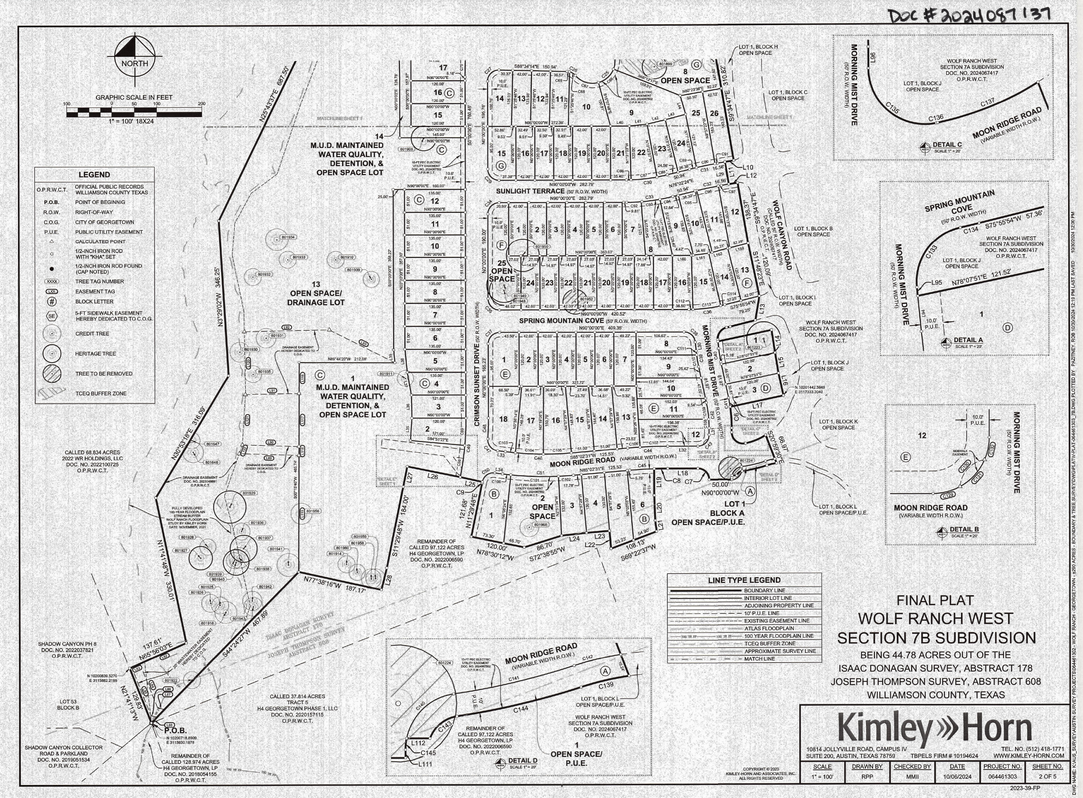

LEGEND

O.P.R.W.C.T.	OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT-OF-WAY
C.O.G.	CITY OF GEORGETOWN
P.U.E.	PUBLIC UTILITY EASEMENT
△	CALCULATED POINT
○	1/2-INCH IRON ROD WITH "KHA" SET
●	1/2-INCH IRON ROD FOUND (CAP NOTED)
XXXX	TREE TAG NUMBER
(EM)	EASEMENT TAG
(B)	BLOCK LETTER
(SE)	5-FT SIDEWALK EASEMENT HEREBY DEDICATED TO C.O.G.
	CREDIT TREE
	HERITAGE TREE
	TREE TO BE REMOVED
	TCEQ BUFFER ZONE

LINE TYPE LEGEND
- BOUNDARY LINE
- INTERIOR LOT LINE
- ADJOINING PROPERTY LINE
- 10' P.U.E. LINE
- EXISTING EASEMENT LINE
- ATLAS FLOODPLAIN
- 100 YEAR FLOODPLAIN LINE
- TCEQ BUFFER ZONE
- APPROXIMATE SURVEY LINE
- MATCH LINE

FINAL PLAT
WOLF RANCH WEST
SECTION 7B SUBDIVISION
BEING 44.78 ACRES OUT OF THE
ISAAC DONAGAN SURVEY, ABSTRACT 178
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SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.
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2023-39-FP

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Doc #20240871137

LEGAL DESCRIPTION:
TRACT 1 - 44.78 ACRES

BEING A 44.78 ACRES TRACT OF LAND SITUATED IN BOTH THE ISAAC DONAGAN SURVEY, ABSTRACT 178, AND THE JOSEPH THOMAS SURVEY, ABSTRACT 608, WILLIAMSON COUNTY, TEXAS, AND BEING A PORTION OF A CALLED 68.834 ACRES TRACT OF LAND, AND A PORTION OF A CALLED 97.122 ACRES TRACT OF LAND, BOTH DESCRIBED TO IH4 GEORGETOWN, LP AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2022006590 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, AND BEING ALL OF THE REMAINDER OF A CALLED 37.814 ACRES TRACT OF LAND AS DESCRIBED IN SAID DOCUMENT, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET, FOR THE SOUTHWEST CORNER OF SAID 97.122 ACRES TRACT, SAME BEING THE NORTHWEST CORNER OF A CALLED 37.814 ACRES TRACT OF LAND DESCRIBED TO IH4 GEORGETOWN PHASE 1, LLC, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2020157115 OF SAID O.P.R.W.C.T., THE SOUTHEAST CORNER OF SHADOW CANYON PHASE 8 LOT 53, BLOCK B, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 202207331 OF SAID O.P.R.W.C.T., AND THE SOUTHWEST CORNER OF A CALLED 1.04 ACRE TRACT OF LAND DESCRIBED TO SHADOW CANYON COLLECTOR ROAD & PARKLAND AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2019054155, O.P.R.W.C.T.;

THENCE, NORTH 07°28'30" EAST, WITH THE WEST BOUNDARY LINE OF SAID 97.122 ACRES TRACT, SAME BEING THE EAST BOUNDARY LINE OF SAID LOT 53, A DISTANCE OF 139.65 FEET TO A 1/2-INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET, FOR THE SOUTH CORNER OF A CALLED 68.834 ACRES TRACT OF LAND DESCRIBED TO 2022 WR HOLDINGS, LLC, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2022150735 OF SAID O.P.R.W.C.T.;

THENCE, DEPARTING SAID WEST BOUNDARY LINE OF THE 97.122 ACRES TRACT AND SAID EAST BOUNDARY LINE OF LOT 53, WITH THE SOUTHEAST BOUNDARY LINE OF SAID 68.834 ACRES TRACT, AND CROSSING SAID 97.122 ACRES TRACT AND SAID 68.572 ACRES TRACT, THE FOLLOWING SEVE

Doc # 2024087137

STATE OF TEXAS §
COUNTY OF WILLIAMSON §
KNOW ALL MEN BY THESE PRESENTS

THAT THIRD COAST BANK, A TEXAS STATE BANK, FORMERLY KNOW AS THIRD COAST BANK SSB, A STATE SAVINGS BANK ACTING BY AND THROUGH Tiffany Weber, LIEN HOLDER OF THE CERTAIN 66.972 ACRES TRACT, AND THE 67.022 ACRES TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED OF TRUST RECORDED IN DOCUMENT NO. 2022069081 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, DOES HEREBY SUBORDINATE SAID TRACT AS SHOWN HEREON, AND DO FURTHER HEREBY JOIN, APPROVE, AND CONSENT TO ALL PLAT NOTES AND REQUIREMENTS SHOWN HEREON, AND DO HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS, AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE. THIS SUBDIVISION IS TO BE KNOW AS WOLF RANCH WEST SECTION 7B.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 28th DAY OF October 2024.

THIRD COAST BANK,
A TEXAS STATE BANK,
(FORMERLY KNOWN AS THIRD COAST BANK SSB, A STATE SAVINGS BANK)

BY: Tiffany Weber

NAME: Tiffany Weber

TITLE: Bank Officer

ADDRESS: 8733 Highway 6 N. Ste C
Houston Tx 77095

STATE OF TEXAS §
COUNTY OF Harris §
KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Tiffany Weber KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 28th DAY OF October 2024.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

MY COMMISSION EXPIRES ON: 11-02-2024

MARIETTA HUSTADO
Notary Public, State of Texas
Comm. Expires 11-02-2024
Notary ID 132769797

SURVEYOR'S CERTIFICATION:

I, MICHAEL A MONTGOMERY, II, REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE FROM AN ACTUAL SURVEY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON AND THAT ALL BOUNDARY CORNERS, ANGLE POINTS, POINTS OF CURVATURE, AND OTHER POINTS OF VISIBLE UTILITY LINES OR ROADS IN PLACE, EXCEPT AS SHOWN ON THE ACCOMPANYING PLAT, AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF GEORGETOWN, TEXAS.

October 24, 2024

MICHAEL A MONTGOMERY II, R.P.L.S.
REGISTERED PROFESSIONAL
LAND SURVEYOR NO. 6960
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH: (512) 418-1771
MIKE.MONTGOMERY@KIMLEY-HORN.COM

STATE OF TEXAS
6960
MICHAEL A MONTGOMERY II
REGISTERED
PROFESSIONAL LAND SURVEYOR

STATE OF TEXAS §
COUNTY OF WILLIAMSON §
KNOW ALL MEN BY THESE PRESENTS

THAT HA GEORGETOWN, LP, A TEXAS LIMITED PARTNERSHIP, ACTING BY AND THROUGH HWG J. NAGJA ITS PRESIDENT, SOLE OWNER OF THE 66.972 ACRES TRACT, AND THE 67.022 ACRES TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2022069081 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, DOES HEREBY SUBORDINATE SAID TRACT AS SHOWN HEREON DOES HEREBY COVENANT TO ALL RESTRICTIONS LISTED HEREIN, WHICH SHALL RUN WITH THE LAND, AND DOES HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS, AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE. HA GEORGETOWN, LP, HEREBY BINDS ITS HEIRS, SUCCESSORS, AND ASSIGNS TO WARRANT AND FOREVER DEFEND SUCH DEDICATIONS, ALL AND SINGULAR, TO THE CITY OF GEORGETOWN AGAINST EVERY PERSON WHOMSOEVER CLAIMING OR TO CLAIM THE SAME, OR ANY PART THEREOF. THIS SUBDIVISION IS TO BE KNOW AS WOLF RANCH WEST SECTION 7B.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 25 DAY OF October 2024.

HA GEORGETOWN, LP
A TEXAS LIMITED PARTNERSHIP

BY: BOH INVESTMENTS GP, LLC
A DELAWARE LIMITED LIABILITY COMPANY,
ITS GENERAL PARTNER

NAME:

TITLE: President, Fred Fuller

ADDRESS: 3000 Tillar Creek Dr
Dallas

STATE OF TEXAS §
COUNTY OF WILLIAMSON §
KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Fred Fuller KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 25 DAY OF October 2024.

NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

MY COMMISSION EXPIRES ON: 1/22/26

SHANNON DEAN
Notary Public, State of Texas
Comm. Expires 01-22-2026
Notary ID 132834422

ENGINEER'S CERTIFICATION:

I, JOHN A. PICKENS, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS SUBDIVISION IS IN THE ESMARAC ALOFT RECORD ZONE 2AD IS ENCROACHED BY A STAR A FLOOD AREA, AS DEFINED HEREIN, AND AS DEFINED BY THE FLOOD INSURANCE RATE MAPS (FIRM) FOR WILLIAMSON COUNTY AND INCORPORATED AREAS, TEXAS COMMUNITY PANEL NO. 48491C0440E, MAP NO. 48491C0440E, EFFECTIVE DATE: SEPTEMBER 26, 2008, AND COMMUNITY PANEL NO.: 48491C0445F, MAP NO. 48491C0445F, EFFECTIVE DATE: DECEMBER 20, 2019, AND THAT EACH LOT CONFORMS TO THE CITY OF GEORGETOWN REGULATIONS.

THAT FULLY DEVELOPED, CONCENTRATED STORMWATER RUNOFF IS CONTAINED WITHIN STREET/DRAINAGE EASEMENTS SHOWN AND/OR PUBLIC RIGHTS-OF-WAY DEDICATED BY THIS PLAT.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT GEORGETOWN, WILLIAMSON, TEXAS.

THIS 24th OF OCTOBER 2024.

JOHN A. PICKENS
REGISTERED PROFESSIONAL ENGINEER NO. 110631
STATE OF TEXAS, KIMLEY-HORN AND ASSOCIATES, INC.
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH: (512) 339-9776
JOHN.PICKENS@KIMLEY-HORN.COM

STATE OF TEXAS
110631
JOHN A. PICKENS
LICENSED
PROFESSIONAL ENGINEER

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FLOODPLAIN ADMINISTRATOR:

BASED UPON THE ABOVE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER A REVIEW OF THE PLAT AS REPRESENTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLIES WITH THE REQUIREMENTS OF CHAPTER 16.64, FLOOD DAMAGE PREVENTION, OF THE GEORGETOWN MUNICIPAL CODE, TIRE. I FURTHER FIND THAT I HAVE RELIED ON THE ABOVE REPRESENTATIONS IN MAKING THIS FINDING AND THAT, EXCEPT FOR THE FACTS ALLEGED, THE CITY OF GEORGETOWN DISCLAIMS ANY RESPONSIBILITY TO ANY MEMBER OF THE PUBLIC OR INDEPENDENT VERIFICATIONS OF THE REPRESENTATION, FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED WITH IT.

10/3/2024

WESLEY WRIGHT, P.E., CFM, FLOODPLAIN COORDINATOR
CITY OF GEORGETOWN

DATE

PLANNING DIRECTOR:

I, SOFIA NELSON, PLANNING DIRECTOR OF THE CITY OF GEORGETOWN, TEXAS, DO HEREBY CERTIFY THIS PLAT IS APPROVED FOR FILING OF RECORD WITH THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

10/9/2024

SOFIA NELSON, PLANNING DIRECTOR

DATE

COUNTY CLERK'S CERTIFICATION:

I, NANCY E. RISTER, CLERK OF THE COUNTY COURT OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FORGOING INSTRUMENT IN WRITING WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON

THE 31st DAY OF October 2024, A.D., AT 3:45 O'CLOCK P.M., AND DULY RECORDED THIS

THE 31st DAY OF October 2024, A.D., AT 4:07 O'CLOCK P.M., IN THE OFFICIAL PUBLIC RECORDS OF SAID COUNTY IN

DOCUMENT NO. 2024087137 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS, THE DATE LAST SHOWN ABOVE WRITTEN.

NANCY E. RISTER, CLERK COUNTY COURT OF WILLIAMSON COUNTY, TEXAS

BY: DEPUTY

FINAL PLAT
WOLF RANCH WEST
SECTION 7B SUBDIVISION

BEING 44.78 ACRES OUT OF THE
ISAAC DONAGAN SURVEY, ABSTRACT 178
JOSEPH THOMPSON SURVEY, ABSTRACT 608
WILLIAMSON COUNTY, TEXAS

Kimley»Horn

10814 JOLLYVILLE ROAD, CAMPUS IV
SUITE 200, AUSTIN, TEXAS 78759

TBPELS FIRM # 10194624

TEL. NO. (512) 418-1771
WWW.KIMLEY-HORN.COM

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.
N/A	RPP	MMII	10/06/2024	064461303	5 OF 5

2023-39-FP

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Plotted By: Pickens, John Date: April 18, 2026 10:26:01am File Path: K:\sus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Final Plat-Section7B.dwg

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2026 KIMLEY-HORN AND ASSOCIATES, INC.
10814 JOLLYVILLE ROAD, CAMPUS IV, SUITE 200, AUSTIN, TX 78759
PHONE: 512-418-1771
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER
04/18/2026

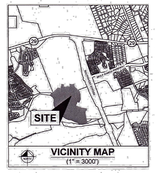
KHA PROJECT 064461309
DATE: SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

WOLF RANCH
WEST SECTION 7B
FINAL PLAT (2 OF 2)

WOLF RANCH
REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
7
OF 53

2025-28-CON



VICINITY MAP
(1" = 3000')

APPLICANT/CIVIL ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
JOHN A. PICKENS
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH: (512) 720-5466
JOHN.PICKENS@KIMLEY-HORN.COM

SURVEYOR:
KIMLEY-HORN AND ASSOCIATES, INC.
MICHAEL A. MONTGOMERY II
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH: (512) 418-1771

OWNER:
1H GEORGETOWN, PHASE 6G, LLC
3000 TURTLE CREEK BLVD
DALLAS, TEXAS 75219
PH: (512) 515-7964
CARTER.DARNALL@HILLWOOD.COM

IAL SUBMITTAL DATE: AUGUST 24, 2023
ST RE-SUBMITTAL DATE: SEPTEMBER 21, 2024
OND RE-SUBMITTAL DATE: DECEMBER 2, 2024
RD RE-SUBMITTAL DATE: JANUARY 20, 2025

GENERAL INFORMATION:	
TOTAL SITE ACREAGE	89.42
R.O.W. ACREAGE	9.09
M.U.D. LOT ACREAGE	3.27
OPEN SPACE/AMENITY LOT ACREAGE	52.29
RESIDENTIAL LOT ACREAGE	26.77
TOTAL RESIDENTIAL LOTS	111
TOTAL NON-RESIDENTIAL LOTS	7
TOTAL OPEN SPACE LOTS	6
TOTAL AMENITY LOTS	1
M.U.D. MAINTAINED WATER QUALITY, DETENTION, & OPEN SPACE LOTS	2
TOTAL LOTS	126
TOTAL PHASES	1
TOTAL LINEAR FEET OF PROPOSED STREETS	6,895

STREET SUMMARY								
STREET NAME	STREET TYPE	ROW	FOC-FOC	CURB TYPE	CLEAR ZONE	DESIGN SPEED	LINEAR FEET	ACREAGE
CRIMSON SUNSET DRIVE	LOCAL STREET	60'	27'	VERTICAL	6'	20 MPH	2,707'	3.385
LOOKOUT MOUNTAIN ROAD	LOCAL STREET	60'	27'	VERTICAL	6'	20 MPH	677'	0.731
MORNING MIST DRIVE	LOCAL STREET	60'	27'	VERTICAL	5'	20 MPH	1,651'	1.872
DOUBLE SPUR TRAIL	LOCAL STREET	60'	27'	VERTICAL	6'	20 MPH	921'	1.012
SUNDOWN TRAIL	LOCAL STREET	50'	27'	VERTICAL	5'	20 MPH	939'	1.093
							6,895'	8.093

BENCHMARK TABLE				
POINT NUMBER	NORTHING	EASTING	POINT ELEVATION	DESCRIPTION
99096	10230514.7501	3117585.338	799.43	1/2-INCH IRON ROD W/ "HOA" CAP, IN WEST R.O.W. LINE MORNING MIST DR. AND EAST BOUNDARY LINE LOT 2, BLOCK C

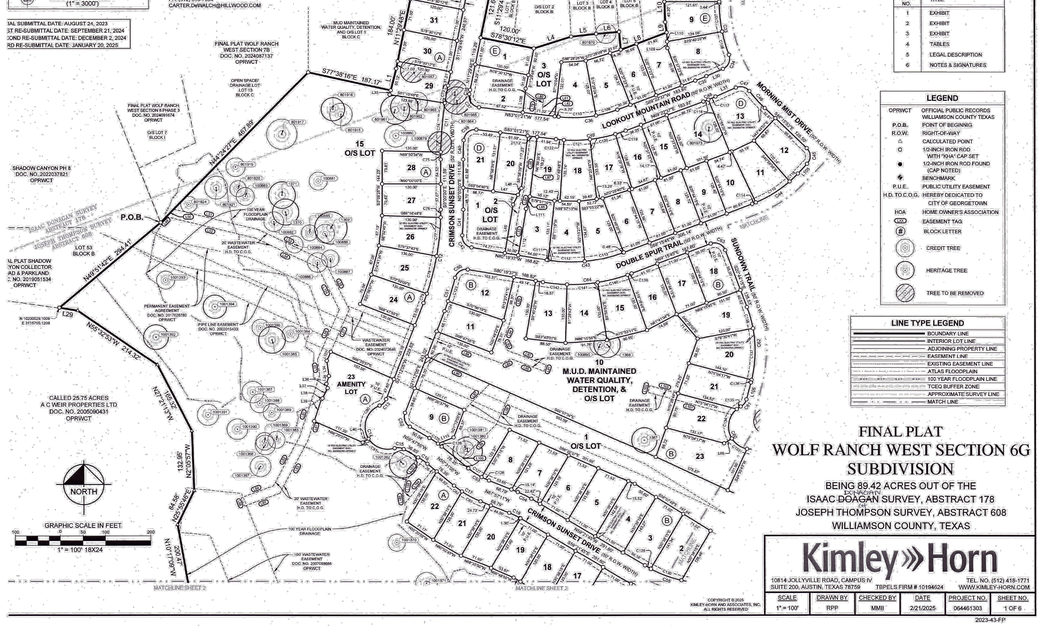
SHEET INDEX	
SHEET NO.	TITLE
1	EXHIBIT
2	EXHIBIT
3	EXHIBIT
4	TABLES
5	LEGAL DESCRIPTION
6	NOTES & SIGNATURES

LEGEND

OPRWCT	OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY, TEXAS
P.O.B.	POINT OF BEGINNING
R.O.W.	RIGHT-OF-WAY
△	CALCULATED POINT
○	1/2-INCH IRON ROD WITH "HOA" CAP SET
●	1/2-INCH IRON ROD FOUND (CAP NOTED)
⚡	BENCHMARK
P.U.E.	PUBLIC UTILITY EASEMENT
H.O. TO C.O.G.	HEREBY DEDICATED TO CITY OF GEORGETOWN
HOA	HOME OWNER'S ASSOCIATION
ESMT	EASEMENT TAG
(B)	BLOCK LETTER
	CREDIT TREE
	HERITAGE TREE
	TREE TO BE REMOVED

LINE TYPE LEGEND

	BOUNDARY LINE
	INTERIOR LOT LINE
	ADJOINING PROPERTY LINE
	EASEMENT LINE
	EXISTING EASEMENT LINE
	ATLAS FLOODPLAIN
	100 YEAR FLOODPLAIN LINE
	TCEQ BUFFER ZONE
	APPROXIMATE SURVEY LINE
	MATCH LINE


MATCHLINE SHEET 1
MATCHLINE SHEET 2
MATCHLINE SHEET 3
FINAL PLAT WOLF RANCH WEST SECTION 7B DOC. NO. 202408137 OPRWCT
FINAL PLAT WOLF RANCH WEST SECTION 7A DOC. NO. 202408137 OPRWCT
FINAL PLAT WOLF RANCH WEST SECTION 7B DOC. NO. 202408137 OPRWCT
MOON RIDGE ROAD 50' R.O.W. DOC. NO. 202408137 OPRWCT
LOOKOUT MOUNTAIN ROAD 60' R.O.W.
MORNING MIST DRIVE 60' R.O.W.
CRIMSON SUNSET DRIVE 60' R.O.W.
DOUBLE SPUR TRAIL 60' R.O.W.
SUNDOWN TRAIL 50' R.O.W.
P.O.B.
15 O/S LOT
1 O/S LOT
2 O/S LOT
3 O/S LOT
23 AMENITY LOT
10 M.U.D. MAINTAINED WATER QUALITY, DETENTION, & O/S LOT
MUD MAINTAINED WATER QUALITY, DETENTION, & OPEN SPACE LOT 1, BLOCK C
OPEN SPACE/ DRAINAGE LOT LOT 2, BLOCK C
SHADOW CANYON PH 8 DOC. NO. 2022037821 OPRWCT
FINAL PLAT SHADOW CANYON COLLECTOR, ROAD & PARKLAND DOC. NO. 2019051334 OPRWCT
LOT 53 BLOCK B
CALLED 25.75 ACRES A.C.WEIR PROPERTIES LTD DOC. NO. 2006090431 OPRWCT
REMAINDER OF CALLED 64.920 ACRES 1H GEORGETOWN, LP DOC. NO. 2020157115 OPRWC
N 10230021.1838 E 3115785.1248
N 10230021.0839 E 3115811.5253
N 10230014.7501 E 3117585.338
N 10230014.7501 E 3117585.338
N 10230014.7501 E 3117585.338

Doc#2025013802

LEGAL DESCRIPTION:
89.42 ACRES

BEING A 89.42 ACRES TRACT OF LAND SITUATED IN THE ISAAC DONAGAN SURVEY, ABSTRACT 178 AND THE JOSEPH THOMPSON SURVEY, ABSTRACT 608 OF WILLIAMSON COUNTY, TEXAS; BEING ALL OF A CALLED 89.42 ACRES TRACT OF LAND DESCRIBED IN THE SPECIAL WARRANTY DEED TO WR 89 LLC RECORDED IN DOCUMENT NO. 2025003318 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.T.) AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS;

BEGINNING AT A ½ INCH IRON ROD WITH PLASTIC CAP STAMPED "KHA" SET IN THE NORTHWEST BOUNDARY LINE OF SAID 126.974 ACRES TRACT, FOR THE SOUTHEAST CORNER OF SAID 47.122 ACRES TRACT AND THE NORTHWEST CORNER OF SAID 87.814 ACRES TRACT, THE SOUTHEAST CORNER OF SAID 64.520 ACRES TRACT; FOR THE SOUTHEAST CORNER OF LOT 93, BLOCK B, SHADOW CANYON PHASE 8, A LEGAL SUBDIVISION, AS SHOWN ON PLAT RECORDED UNDER DOCUMENT NO. 2022078172 OF SAID O.P.R.W.C.T.;

THENCE, OVER AND ACROSS SAID 87.122 ACRES TRACT, SAID 64.520 ACRES TRACT, AND SAID 126.974 ACRES TRACT THE FOLLOWING FIFTY-SIX (56) COURSES AND DISTANCES:

1. NORTH 44°24'27" EAST, A DISTANCE OF 467.89 FEET TO A CALCULATED POINT;
2. SOUTH 77°38'16" EAST, A DISTANCE OF 187.17 FEET TO A CALCULATED POINT;
3. NORTH 14°09'56" EAST, A DISTANCE OF 50.72 FEET TO A CALCULATED POINT;
4. NORTH 11°29'48" EAST, A DISTANCE OF 194.05 FEET TO A CALCULATED POINT;
5. NORTH 11°29'14" EAST, A DISTANCE OF 46.00 FEET TO A CALCULATED POINT;
6. SOUTH 78°30'32" EAST, A DISTANCE OF 120.93 FEET TO A CALCULATED POINT;
7. SOUTH 71°44'24" EAST, A DISTANCE OF 50.51 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A CURVE;
8. WITH SAID CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 90°11'59", A RADIUS OF 725.00 FEET, A CHORD BEARING AND DISTANCE OF SOUTH 11°25'56" WEST, 2.52 FEET, AND AN ARC LENGTH OF 2.52 FEET TO A CALCULATED POINT;
9. SOUTH 11°29'46" WEST, A DISTANCE OF 151.48 FEET TO A CALCULATED POINT;
10. SOUTH 78°30'32" EAST, A DISTANCE OF 120.50 FEET TO A CALCULATED POINT;
11. NORTH 72°36'56" EAST, A DISTANCE OF 86.73 FEET TO A CALCULATED POINT;
12. NORTH 61°45'52" EAST, A DISTANCE OF 59.70 FEET TO A CALCULATED POINT;
13. NORTH 49°43'31" EAST, A DISTANCE OF 61.44 FEET TO A CALCULATED POINT;
14. SOUTH 64°57'28" EAST, A DISTANCE OF 34.80 FEET TO A CALCULATED POINT;
15. NORTH 66°23'35" EAST, A DISTANCE OF 196.53 FEET TO A CALCULATED POINT;
16. NORTH 01°31'05" WEST, A DISTANCE OF 24.14 FEET TO A CALCULATED POINT;
17. NORTH 01°55'50" WEST, A DISTANCE OF 36.19 FEET TO A CALCULATED POINT;
18. NORTH 16°49'30" EAST, A DISTANCE OF 59.54 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A CURVE;
19. WITH SAID CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 01°14'54", A RADIUS OF 975.00 FEET, A CHORD BEARING AND DISTANCE OF NORTH 86°37'03" EAST, 30.03 FEET, AND AN ARC LENGTH OF 30.04 FEET TO A CALCULATED POINT;
20. NORTH 87°09'56" EAST, A DISTANCE OF 66.87 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A CURVE;
21. WITH SAID CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 90°09'57", A RADIUS OF 25.00 FEET, A CHORD BEARING AND DISTANCE OF SOUTH 48°04'04" EAST, 35.36 FEET, AND AN ARC LENGTH OF 39.33 FEET TO A CALCULATED POINT;
22. NORTH 46°59'06" EAST, A DISTANCE OF 59.84 FEET TO A CALCULATED POINT;
23. NORTH 36°09'39" EAST, A DISTANCE OF 3.49 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A CURVE;
24. WITH SAID CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 11°18'54", A RADIUS OF 25.00 FEET, A CHORD BEARING AND DISTANCE OF NORTH 03°49'52" EAST, 5.07 FEET, AND AN ARC LENGTH OF 4.94 FEET TO A CALCULATED POINT;
25. NORTH 87°29'05" EAST, A DISTANCE OF 52.04 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A CURVE;
26. WITH SAID CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 82°45'54", A RADIUS OF 15.00 FEET, A CHORD BEARING AND DISTANCE OF NORTH 50°41'54" EAST, 19.47 FEET, AND AN ARC LENGTH OF 19.28 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A REVERSE CURVE;
27. WITH SAID CURVE TO THE LEFT, HAVING A CENTRAL ANGLE OF 09°49'08", A RADIUS OF 335.00 FEET, A CHORD BEARING AND DISTANCE OF NORTH 76°54'51" EAST, 56.58 FEET, AND AN ARC LENGTH OF 56.81 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A REVERSE CURVE;
28. WITH SAID CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 29°59'52", A RADIUS OF 125.00 FEET, A CHORD BEARING AND DISTANCE OF NORTH 77°59'38" EAST, 21.87 FEET, AND AN ARC LENGTH OF 21.91 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A COMPOUND CURVE;
29. WITH SAID CURVE TO THE RIGHT, HAVING A CENTRAL ANGLE OF 11°13'47", A RADIUS OF 125.00 FEET, A CHORD BEARING AND DISTANCE OF NORTH 87°37'25" EAST, 24.32 FEET, AND AN ARC LENGTH OF 24.41 FEET TO A CALCULATED POINT;
30. SOUTH 01°59'27" EAST, A DISTANCE OF 52.00 FEET TO A CALCULATED POINT;
31. SOUTH 88°00'33" WEST, A DISTANCE OF 13.75 FEET TO A CALCULATED POINT;
32. SOUTH 31°45'53" EAST, A DISTANCE OF 52.74 FEET TO A CALCULATED POINT;
33. SOUTH 43°57'23" EAST, A DISTANCE OF 59.89 FEET TO A CALCULATED POINT;
34. SOUTH 46°15'53" EAST, A DISTANCE OF 399.53 FEET TO A CALCULATED POINT;
35. SOUTH 25°49'54" EAST, A DISTANCE OF 159.66 FEET TO A CALCULATED POINT;
36. SOUTH 33°24'08" EAST, A DISTANCE OF 226.78 FEET TO A CALCULATED POINT;
37. SOUTH 15°51'45" EAST, A DISTANCE OF 41.05 FEET TO A CALCULATED POINT;
38. SOUTH 10°25'00" EAST, A DISTANCE OF 60.79 FEET TO A CALCULATED POINT;
39. SOUTH 13°36'12" WEST, A DISTANCE OF 74.63 FEET TO A CALCULATED POINT;
40. SOUTH 24°50'49" WEST, A DISTANCE OF 167.30 FEET TO A CALCULATED POINT;
41. NORTH 65°47'21" WEST, A DISTANCE OF 60.03 FEET TO A CALCULATED POINT FOR THE BEGINNING OF A CURVE;
42. WITH SAID CURVE TO THE LEFT, HAVING A CENTRAL ANGLE OF 90°00'00", A RADIUS OF 25.00 FEET, A CHORD BEARING AND DISTANCE OF SOUTH 69°58'43" WEST, 35.36 FEET, AND AN ARC LENGTH OF 39.27 FEET TO A CALCULATED POINT;
43. SOUTH 24°58'43" WEST, A DISTANCE OF 191.00 FEET TO A CALCULATED POINT;
44. SOUTH 65°01'17" EAST, A DISTANCE OF 10.00 FEET TO A CALCULATED POINT;
45. SOUTH 24°58'43" WEST, A DISTANCE OF 191.21 FEET TO A CALCULATED POINT;
46. SOUTH 73°36'54" EAST, A DISTANCE OF 65.10 FEET TO A CALCULATED POINT;
47. SOUTH 65°36'36" EAST, A DISTANCE OF 152.98 FEET TO A CALCULATED POINT;
48. SOUTH 69°29'00" EAST, A DISTANCE OF 46.26 FEET TO A CALCULATED POINT;
49. SOUTH 69°59'07" EAST, A DISTANCE OF 196.06 FEET TO A CALCULATED POINT;
50. SOUTH 75°09'48" EAST, A DISTANCE OF 72.91 FEET TO A CALCULATED POINT;
51. SOUTH 83°15'11" EAST, A DISTANCE OF 136.10 FEET TO A CALCULATED POINT;
52. SOUTH 80°20'09" EAST, A DISTANCE OF 150.69 FEET TO A CALCULATED POINT;
53. SOUTH 22°20'09" EAST, A DISTANCE OF 19.80 FEET TO A CALCULATED POINT;
54. SOUTH 69°47'51" WEST, A DISTANCE OF 67.65 FEET TO A CALCULATED POINT;
55. SOUTH 14°59'02" WEST, A DISTANCE OF 136.86 FEET TO A CALCULATED POINT;
56. SOUTH 12°26'08" WEST, A DISTANCE OF 620.59 FEET TO A CALCULATED POINT IN THE SOUTH BOUNDARY LINE OF SAID 126.974 ACRES TRACT, SAME BEING THE NORTH BOUNDARY LINE OF A CALLED 12.836 ACRES TRACT OF LAND DESCRIBED TO A.C. WEIR PROPERTIES, LTD, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2003093401 OF SAID O.P.R.W.C.T.;

THENCE, WITH SAID SOUTH BOUNDARY LINE OF THE 126.974 ACRES TRACT AND SAID NORTH BOUNDARY LINE OF SAID 12.836 ACRES TRACT NORTH 89°28'16" WEST, A DISTANCE OF 1,147.67 FEET TO AN ELECTRICAL POWER IN SAID 126.974 ACRES TRACT AND SAID NORTH BOUNDARY LINE OF THE 12.836 ACRES TRACT, FOR THE EAST CORNER OF A CALLED 25.774 ACRES TRACT OF LAND DESCRIBED TO A.C. WEIR PROPERTIES, LTD, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2010063421 OF SAID O.P.R.W.C.T.;

THENCE, WITH SAID SOUTH BOUNDARY LINE OF THE 126.974 ACRES TRACT AND THE NORTHEAST BOUNDARY LINE OF SAID 25.774 ACRES TRACT, THE FOLLOWING SEVENTEEN (17) COURSES AND DISTANCES:

1. NORTH 65°11'41" WEST, A DISTANCE OF 78.84 FEET TO A CALCULATED POINT;
2. NORTH 40°52'27" WEST, A DISTANCE OF 42.54 FEET TO A CALCULATED POINT;
3. NORTH 64°49'06" WEST, A DISTANCE OF 540.64 FEET TO A CALCULATED POINT;
4. NORTH 61°39'10" WEST, A DISTANCE OF 205.52 FEET TO A CALCULATED POINT;
5. SOUTH 69°21'16" WEST, A DISTANCE OF 190.11 FEET TO A CALCULATED POINT;
6. NORTH 59°59'58" WEST, A DISTANCE OF 394.49 FEET TO A CALCULATED POINT;
7. NORTH 81°57'36" WEST, A DISTANCE OF 205.62 FEET TO A CALCULATED POINT;
8. NORTH 38°59'06" WEST, A DISTANCE OF 205.21 FEET TO A CALCULATED POINT;
9. NORTH 31°57'06" WEST, A DISTANCE OF 237.71 FEET TO A CALCULATED POINT;
10. NORTH 24°59'12" WEST, A DISTANCE OF 284.19 FEET TO A CALCULATED POINT;
11. NORTH 15°17'59" WEST, A DISTANCE OF 209.47 FEET TO A CALCULATED POINT;
12. NORTH 25°18'46" EAST, A DISTANCE OF 94.56 FEET TO A CALCULATED POINT;
13. NORTH 33°10'03" WEST, A DISTANCE OF 130.95 FEET TO A CALCULATED POINT;
14. NORTH 23°21'13" WEST, A DISTANCE OF 294.32 FEET TO A CALCULATED POINT;
15. NORTH 31°57'57" WEST, A DISTANCE OF 214.52 FEET TO A CALCULATED POINT;
16. NORTH 65°52'52" WEST, A DISTANCE OF 41.02 FEET TO A CALCULATED POINT;
17. NORTH 49°51'42" EAST, A DISTANCE OF 295.41 FEET TO THE **POINT OF BEGINNING** AND CONTAINING 89.42 ACRES OF LAND, MORE OR LESS, IN WILLIAMSON COUNTY, TEXAS. THIS DOCUMENT WAS PREPARED IN THE OFFICE OF KIMLEY-HORN INC. IN AUSTIN, TEXAS.

FINAL PLAT
WOLF RANCH WEST SECTION 6G SUBDIVISION
BEING 89.42 ACRES OUT OF THE
ISAAC DONAGAN SURVEY, ABSTRACT 178
JOSEPH THOMPSON SURVEY, ABSTRACT 608
WILLIAMSON COUNTY, TEXAS

Kimley»Horn
10814 JOLLYVILLE ROAD, CAMPUS IV
SUITE 200, AUSTIN, TEXAS 78759
TEL. NO. (512) 418-1771
TBPELS FIRM # 10194624
WWW.KIMLEY-HORN.COM

SCALE	DRAWN BY	CHECKED BY	DATE	PROJECT NO.	SHEET NO.
N/A	RPP	MMII	2/21/2025	064461303	5 OF 6

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2023-43-FP

Doc#2025013862

PLAT NOTES

1. THIS SUBDIVISION IS SUBJECT TO THE DEVELOPMENT AGREEMENT BETWEEN THE WOLF LEGACY, L.P. AND THE CITY OF GEORGETOWN UNDER DOCUMENT NUMBER 2018069878, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON AUGUST 13, 2018 AND EXECUTED ON AUGUST 28, 2018.
2. THIS SUBDIVISION IS SUBJECT TO THE CITY OF GEORGETOWN ORDINANCE NUMBER 2016-66 AMENDING THE OFFICIAL ZONING MAP TO BE INCORPORATED FARMHOUSE TRACT (FH) DISTRICT. TO ESTABLISH AND DEFINE THE EAST CORNER OF A CALLED 25.774 ACRES TRACT OF LAND DESCRIBED TO A.C. WEIR PROPERTIES, LTD, AS SHOWN ON INSTRUMENT RECORDED UNDER DOCUMENT NO. 2010063421 OF SAID O.P.R.W.C.T.;
3. WATER AND WASTEWATER PROVIDED BY THE CITY OF GEORGETOWN. ELECTRICAL SERVICES PROVIDED BY PEDERNALES ELECTRIC COMPANY.
4. ALL LOTS AND DOUBLE FRONTAGE LOTS ARE PROHIBITED IN DRAINAGE EASEMENTS.
5. THERE ARE AREAS WITHIN THE BOUNDARIES OF THIS SUBDIVISION IN THE 100-YEAR FLOODPLAIN AS DEFINED BY COMMUNITY PANEL NO. 48491C0610G MAP NO. 48491C0605E, EFFECTIVE DATE: SEPTEMBER 26, 2008 AND COMMUNITY PANEL NO. 48245B0640E, MAP NO. 48491C0640F, EFFECTIVE DATE: DECEMBER 20, 2019.
6. PRIOR TO ANY CHANNEL ALTERATION OR BRIDGE CONSTRUCTION, WHICH WILL CHANGE EXISTING FLOOD PATTERNS OR ALTER THE 100-YEAR FLOODPLAIN, APPROVAL MUST BE OBTAINED FROM THE CITY OF GEORGETOWN FLOODPLAIN ADMINISTRATOR. FOR APPROVAL AND ARE APPROVED BY FEDERAL EMERGENCY MANAGEMENT AGENCY.
7. IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATION SHOULD BE BUILT AT LEAST ONE-FOOT ABOVE THE SURROUNDING GROUND AND THE GROUND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF 1/2" PER FOOT FOR A DISTANCE OF AT LEAST 10 FEET.
8. A 59 FOOT PUBLIC UTILITY EASEMENT IS RESERVED ALONG ALL OTHER STREET FRONTAGES WITHIN THIS PLAT.
9. PARKLAND DEDICATION REQUIREMENTS ARE SATISFIED BY THE AGREEMENTS DEFINED IN THE CITY OF GEORGETOWN ORDINANCE NUMBER 2018-66.
10. ANY HERITAGE TREE OR CROSS TIMBER AS NOTED ON THIS PLAT IS SUBJECT TO EXHIBIT H-7 OF THE CITY OF GEORGETOWN ORDINANCE NO. 2018-66, AMENDING THE CITY'S ZONING MAP TO BE ZEDERICS FROM AGRICULTURE (AG) DISTRICT TO PLANNED UNIT DEVELOPMENT (PUD) NUMBER (AS) WOLF RANCH HILLWOOD APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018.
11. NORTH 19°57'54" WEST, A DISTANCE OF 284.19 FEET TO A CALCULATED POINT;
12. NORTH 29°52'52" WEST, A DISTANCE OF 237.71 FEET TO A CALCULATED POINT;
13. NORTH 22°54'12" WEST, A DISTANCE OF 294.32 FEET TO A CALCULATED POINT;
14. NORTH 30°52'52" WEST, A DISTANCE OF 214.52 FEET TO A CALCULATED POINT;
15. NORTH 57°52'52" WEST, A DISTANCE OF 41.02 FEET TO A CALCULATED POINT;
16. NORTH 49°51'42" EAST, A DISTANCE OF 295.41 FEET TO THE **POINT OF BEGINNING** AND CONTAINING 89.42 ACRES OF LAND, MORE OR LESS, IN WILLIAMSON COUNTY, TEXAS. THIS DOCUMENT WAS PREPARED IN THE OFFICE OF KIMLEY-HORN INC. IN AUSTIN, TEXAS.
17. THE LANDOWNER ASSUMES ALL RISKS ASSOCIATED WITH IMPROVEMENTS LOCATED IN THE RIGHT-OF-WAY, OR ROAD WIDENING EASEMENTS, BY PLACING ANYTHING IN THE RIGHT OF WAY OR ROAD WIDENING EASEMENTS, THE LANDOWNER AGREES AND HOLDS THE CITY OF GEORGETOWN, WILLIAMSON COUNTY, THEIR OFFICERS, AGENTS AND EMPLOYEES HARMLESS FROM ANY LIABILITY, DAMAGES, OR CLAIMS ARISING OUT OF THE PERFORMANCE OF WORK OR ACTIVITY. THE LANDOWNER ACKNOWLEDGES THAT THE IMPROVEMENTS MAY BE REMOVED BY THE CITY AND/OR COUNTY, AND THAT THE OWNER OF THE IMPROVEMENTS WILL BE RESPONSIBLE FOR THE RELOCATION AND/OR REPLACEMENT OF THE IMPROVEMENTS.
18. THE BUILDING OF ALL STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES AND ANY BRIDGES OR CULVERTS NECESSARY TO BE CONSTRUCTED WITH THEM IN THIS SUBDIVISION ARE THE RESPONSIBILITY OF THE OWNER OR DEVELOPER OF THE TRACT, IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THE CITY OF GEORGETOWN AND/OR WILLIAMSON COUNTY, TEXAS. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY OBLIGATION TO BUILD ANY OF THE STREETS, ROADS, OR OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR TO CONSTRUCT ANY OF THE BRIDGES, DRAINAGE IMPROVEMENTS OR CULVERTS NECESSARY THEREWITH. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY RESPONSIBILITY FOR DRAINAGE WAYS OR EASEMENTS IN THE SUBDIVISION, OTHER THAN THOSE DRAINING OR PROTECTING THE ROAD SYSTEM AND STREETS IN THEIR RESPECTIVE JURISDICTIONS.
19. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY RESPONSIBILITY FOR THE ACCURACY OF REPRESENTATIONS BY OTHER PARTIES IN THIS PLAT. FLOODPLAIN DATA, IN PARTICULAR, MAY CHANGE DEPENDING ON SUBSEQUENT DEVELOPMENT. IT IS FURTHER UNDERSTOOD THAT THE OWNERS OF THE TRACT OF LAND COVERED BY THIS PLAT MUST INSTALL AT THEIR OWN EXPENSE ALL TRAFFIC CONTROL DEVICES AND ROADWAY MARKINGS THAT MAY BE REQUIRED BEFORE THE STREETS IN THE SUBDIVISION HAVE FINALLY BEEN ACCEPTED FOR MAINTENANCE BY THE CITY AND/OR COUNTY.
20. THIS PLAT IS SUBJECT TO THE PROVISIONS OF THE CITY OF GEORGETOWN WATER CONSERVATION ORDINANCE.
21. THIS PLAT IS SUBJECT TO THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS FOR PROPERTIES OVER THE EDWARDS AQUIFER RECHARGE ZONE. WATER QUALITY PONDS WITHIN THIS SUBDIVISION SHALL REMAIN IN 59A.
22. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED IN NOVEMBER 2015, AND SUBMITTED TO THE TCEQ. THE RESULTS OF THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.
23. ALL WATER QUALITY, SEDIMENTATION, FILTRATION, DETENTION, AND/OR RETENTION BASINS, FEATURES, AND RELATIVE APPURTENANCES, SHALL BE SITUATED WITHIN A DRAINAGE EASEMENT OR DRAINAGE LOT. THE OWNERS, HOA, OR ITS ASSIGNEES SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF ALL WATER QUALITY CONTROLS ON LOT 59A. WATER QUALITY FACILITIES SHALL MAINTAIN AND BE RESPONSIBLE FOR ANY MAINTENANCE OF THE DESIGNED DETENTION AREA(S).
24. RIGHT-OF-WAY EASEMENTS FOR WIDENING ROADWAYS OR IMPROVING DRAINAGE SHALL BE MAINTAINED BY THE LANDOWNER UNTIL ROAD OR DRAINAGE IMPROVEMENTS ARE ACCEPTED FOR MAINTENANCE BY THE APPROPRIATE JURISDICTION. THE LANDOWNER GRANTS THE RIGHT AT ANY TIME TO TAKE POSSESSION OF ANY ROAD RIGHT-OF-WAY EASEMENT FOR CONSTRUCTION, IMPROVEMENT, OR MAINTENANCE OF THE ADJACENT ROAD.
25. UNLESS OTHERWISE NOTED HEREIN, ALL EASEMENTS DEDICATED TO THE CITY OF GEORGETOWN BY THE PLAT SHALL BE EXCLUSIVE TO THE CITY OF GEORGETOWN, AND GRANTOR COVENANTS THAT GRANTOR AND GRANTOR'S HEIRS, SUCCESSORS, AND ASSIGNS SHALL NOT CONVEY ANY OTHER EASEMENT, LICENSE, OR CONFLICTING RIGHT TO USE IN ANY MANNER, THE AREA (OR ANY PORTION THEREOF) COVERED BY THIS GRANT.
26. ALL EASEMENTS DEDICATED TO THE CITY OF GEORGETOWN BY THIS PLAT ADDITIONALLY INCLUDE THE FOLLOWING RIGHTS: (1) THE RIGHT OF THE CITY TO CHANGE THE SIZE OF ANY FACILITIES INSTALLED, MAINTAINED, OR OPERATED WITHIN THE EASEMENT AREA; (2) THE RIGHT OF THE CITY TO RELOCATE ANY FACILITIES WITHIN THE EASEMENT AREA AND (3) THE RIGHT OF THE CITY TO REMOVE FROM THE EASEMENT AREA ALL OBSTRUCTIONS, INCLUDING TREES, WHICH ENDANGER OR MAY INTERFERE WITH THE EFFICIENCY AND MAINTENANCE OF ANY FACILITIES WITHIN THE EASEMENT AREA.
27. STATE-OWNED RIVERBEDS AND BEDS OF NAVIGABLE STREAMS IN THE PUBLIC DOMAIN ARE HELD IN TRUST FOR THE PUBLIC. THERE IS A PERPETUITY EASEMENT FOR THE USE AND ENJOYMENT OF THE PUBLIC IN AND ON THE ACCESS EASEMENT FOR THE FREE AND UNOBSTRUCTED USE OF THE NAVIGABLE RIVER AND THE RIGHT OF PORTAGE ALONG ITS BANKS, ACROSS ANY PORTION OF THE PROPERTY BETWEEN THE MEAN HIGH WATER MARKS OF THE RIVER IN ITS NATURAL STATE.
28. BASIS OF BEARINGS IS THE TEXAS COORDINATE SYSTEM OF 1983, CENTRAL ZONE (4203). ALL COORDINATES AND DISTANCES SHOWN HEREON ARE SURFACE VALUES. THE SURFACE ADJUSTMENT FACTOR IS 1.00004. THE UNIT OF LINEAR MEASUREMENT IS U.S. SURVEY FEET.
29. NO DEVELOPMENT SHALL BEGIN PRIOR TO THE ISSUANCE OF A FLOODPLAIN DEVELOPMENT PERMIT FOR EACH OF THE FOLLOWING LOTS: CENTERVIEW LOT 19, BLOCK A.
30. ALL INDIVIDUAL LOTS CONTAINING HERITAGE TREES ARE CONFIGURED AND DESIGNED SO THAT THE LOT IS DEVELOPABLE FOR THE INTENDED PURPOSE WITHOUT REQUIRING REMOVAL OF THE HERITAGE TREES OR EXCEEDING THE PERCENTAGE OF ALLOWABLE DISTURBANCE WITHIN THE HERITAGE TREES DRZ.

STATE OF TEXAS $
COUNTY OF WILLIAMSON $

KNOW ALL MEN BY THESE PRESENTS

THAT THIRD COAST BANK, A TEXAS STATE BANK, FORMERLY KNOWN AS THIRD COAST BANK SSB, A STATE SAVINGS BANK ACTING BY AND THROUGH ITS UNDERSIGNED DULY AUTHORIZED OFFICER, DOES HEREBY CERTIFY THAT IT IS THE HOLDER OF THE CERTAIN 89.42 ACRES TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2025003318 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS. DOES HEREBY CONSENT TO THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON, AND DO FURTHER HEREBY JOIN, APPROVE, AND CONSENT TO ALL PLAT NOTES AND REQUIREMENTS SHOWN HEREON, AND DO HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN, MAY DEEM APPROPRIATE. THIS SUBDIVISION IS TO BE KNOW AS WOLF RANCH WEST SECTION 6G.

TO CERTIFY WHICH, WITNESS MY HAND THIS 26th DAY OF February, 2025.

THIRD COAST BANK,
A TEXAS STATE BANK
(FORMERLY KNOWN AS THIRD COAST BANK SSB, A STATE SAVINGS BANK)

BY: _____
NAME: Carolyn Alexander
TITLE: EVP
ADDRESS: 8133 HWY 6 N STE C
Houston, TX 77095

STATE OF TEXAS $
COUNTY OF HARRIS $

KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Carolyn Alexander KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 26th DAY OF February 2025.

Laura V Shumpert
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

MY COMMISSION EXPIRES ON: 11/1/25

Laura V Shumpert
My Commission Expires
November 1, 2025
Notary ID 132552-7

FLOODPLAIN ADMINISTRATOR:

BASED UPON THE ABOVE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER A REVIEW OF THE PLAT AS REPRESENTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLIES WITH THE FLOODPLAIN REGULATIONS OF THE CITY OF GEORGETOWN, TEXAS. I FURTHER UNDERSTAND THAT THE ABOVE CERTIFICATION IS MADE SOLELY UPON SUCH REPRESENTATIONS AND SHOULD NOT BE RELIED UPON FOR CONFIRMATION OF THE FACTS ALLEGED. THE CITY OF GEORGETOWN DISCLAIMS ANY RESPONSIBILITY TO ANY MEMBER OF THE PUBLIC OR INDEPENDENT VERIFICATION OF THE REPRESENTATION, FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED WITH IT.

_____ 02/07/2025
WESLEY WRIGHT, CFM, FLOODPLAIN COORDINATOR, DATE
CITY OF GEORGETOWN

ENGINEER'S CERTIFICATION:

I, JOHN A. PICKENS, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS SUBDIVISION IS IN THE EDWARDS AQUIFER RECHARGE ZONE AND IS ENCROACHED BY A ZONE A FLOOD AREA, AS DENOTED HEREON, AND AS DEFINED BY FEMA FLOOD INSURANCE RATE MAPS (FIRM) FOR WILLIAMSON COUNTY AND INCORPORATED AREAS, TEXAS COMMUNITY PANEL NO. 48491C0610E, MAP NO. 48491C0605E, EFFECTIVE DATE: SEPTEMBER 26, 2008, AND COMMUNITY PANEL NO. 48245B0640E, MAP NO. 48491C0640F, EFFECTIVE DATE: DECEMBER 20, 2019, AND THAT EACH LOT CONFORMS TO THE CITY OF GEORGETOWN REGULATIONS.

THE FULLY DEVELOPED, CONCENTRATED STORMWATER RUNOFF IS CONTAINED WITHIN THE DRAINAGE EASEMENTS SHOWN AND/OR PUBLIC RIGHTS-OF-WAY DEDICATED TO THE PUBLIC.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT GEORGETOWN, WILLIAMSON, TEXAS,
THIS 13th DAY OF February, 2025.

JOHN A. PICKENS
REGISTERED PROFESSIONAL ENGINEER NO. 110631
KIMLEY-HORN AND ASSOCIATES, INC.
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH. (512) 720-5448
JOHN.PICKENS@KIMLEY-HORN.COM

STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER
02/13/25

SURVEYOR'S CERTIFICATION:

I, MICHAEL A. MONTGOMERY, II, REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE FROM AN ACTUAL SURVEY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON AND THAT THERE ARE NO APPARENT DISCREPANCIES, CONFLICTS, OVERLAPPING OF IMPROVEMENTS, VISIBLE UTILITY LINES OR ROADS IN PLACE, EXCEPT AS SHOWN ON THIS PLAT, AND THAT ALL MONUMENTS SHOWN HEREON WERE FOUND OR PROPERLY PLACED UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF GEORGETOWN, TEXAS.

02-13-2025
MICHAEL A. MONTGOMERY, II, R.P.L.S.
KIMLEY-HORN AND ASSOCIATES, INC.
LAND SURVEYOR NO. 6990
10814 JOLLYVILLE ROAD
CAMPUS IV, SUITE 200
AUSTIN, TEXAS 78759
PH. (512) 418-1771
MIKE.MONTGOMERY@KIMLEY-HORN.COM

STATE OF TEXAS
MICHAEL A. MONTGOMERY II
6990
REGISTERED
PROFESSIONAL
LAND SURVEYOR

STATE OF TEXAS $
COUNTY OF WILLIAMSON $

KNOW ALL MEN BY THESE PRESENTS

THAT WR GEORGETOWN PHASE 6G, LLC, A TEXAS LIMITED LIABILITY COMPANY, ACTING BY AND THROUGH ITS SOLE OWNER OF THE CERTAIN 89.42 ACRES TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2025003318 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS. DOES HEREBY CONSENT TO THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON, AND DO FURTHER HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN, MAY DEEM APPROPRIATE. THIS SUBDIVISION IS TO BE KNOW AS WOLF RANCH WEST SECTION 6G.

TO CERTIFY WHICH, WITNESS MY HAND THIS 7th DAY OF February, 2025.

WR GEORGETOWN PHASE 6G, LLC
A TEXAS LIMITED LIABILITY COMPANY

BY: _____
NAME: Duke Kerrigan
TITLE: VICE PRESIDENT
ADDRESS: 3000 Turtle Blvd
Dallas TX 75219

STATE OF TEXAS $
COUNTY OF WILLIAMSON $

KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Duke Kerrigan KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 7th DAY OF February, 2025.

Connie McMinn
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

MY COMMISSION EXPIRES ON: October 31, 2026

CONNIE MCMINN
Notary Public, State of Texas
Comm. Expires 10/31/2026
Notary ID 132552-7

PLANNING DIRECTOR:

I

Doc#2025027690

FINAL PLAT OF WOLF RANCH WEST, SECTION 3G

A 64.838 TRACT OF LAND BEING OUT OF A CALLED 53.527 ACRE TRACT CONVEYED TO HA GEORGETOWN PHASE 3G, LLC, RECORDED IN DOCUMENT NO. 2024081887 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, BEING OUT OF A CALLED 0.598 ACRE TRACT, CONVEYED TO WILLIAMSON COUNTY MUNICIPAL UTILITY DISTRICT NO. 29, RECORDED IN DOCUMENT NO. 2020072628 OF SAID OFFICIAL PUBLIC RECORDS, AND BEING OUT OF A REMNANT PORTION OF A CALLED 236.714 ACRE TRACT CONVEYED TO HA GEORGETOWN, LP, RECORDED IN DOCUMENT NO. 2018054153 OF SAID OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS.

0' 100' 200' 300'
SCALE: 1"=100'
WOLF RANCH WEST, SECTION 3G
WOLF RANCH WEST, SECTION 4G, DOC. NO. 2024017405 (O.P.R.)
P.O.B
GRID N: 10200881.6
GRID E: 3121158.3
HA GEORGETOWN PHASE 3G, LLC DOC. NO. 2024081887 (O.P.R.)
A CALLED 2.788 ACRE TRACT GEORGETOWN INDEPENDENT SCHOOL DISTRICT DOC. NO. 2019087189 (O.P.R.)
WOLF RANCH WEST, SECTION 4G
WOLF RANCH WEST, SECTION 4G, DOC. NO. 2024017405 (O.P.R.)
BM-109
BM-101
WOLF RANCH WEST, SECTION 4G, DOC. NO. 2024017405 (O.P.R.)
WOLF RANCH WEST, SECTION 4G, DOC. NO. 2020117688 (O.P.R.)
BLUE BLAZE TRAIL (50' ROW)
HIGH SUMMIT DRIVE (50' ROW)
GRID N: 10200518.3
GRID E: 3120330.1
WOLF RANCH WEST, SECTION 2G, DOC. NO. 2022070050 (O.P.R.)

DOC # 20250027690

FINAL PLAT OF WOLF RANCH WEST, SECTION 3G

A 66.838 TRACT OF LAND BEING OUT OF A CALLED 53.527 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 3G, LLC, RECORDED IN DOCUMENT NO. 2024081887 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, BEING OUT OF A CALLED 0.598 ACRE TRACT, CONVEYED TO WILLIAMSON COUNTY MUNICIPAL UTILITY DISTRICT NO. 29, RECORDED IN DOCUMENT NO. 2020072628 OF SAID OFFICIAL PUBLIC RECORDS, AND BEING OUT OF A REMNANT PORTION OF A CALLED 236.714 ACRE TRACT CONVEYED TO H4 GEORGETOWN, LP, RECORDED IN DOCUMENT NO. 2018054155 OF SAID OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS.

FIELD NOTES
FOR

A 66.838 TRACT OF LAND BEING OUT OF A CALLED 53.527 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 3G, LLC, RECORDED IN DOCUMENT NO. 2024081887 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, BEING OUT OF A CALLED 0.598 ACRE TRACT, CONVEYED TO WILLIAMSON COUNTY MUNICIPAL UTILITY DISTRICT NO. 29, RECORDED IN DOCUMENT NO. 2020072628 OF SAID OFFICIAL PUBLIC RECORDS, AND BEING OUT OF A REMNANT PORTION OF A CALLED 236.714 ACRE TRACT CONVEYED TO H4 GEORGETOWN, LP, RECORDED IN DOCUMENT NO. 2018054155 OF SAID OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS WITH BEARINGS BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 NAD 83 (NA2011) EPOCH 2010.00;

COMMENCING at an iron rod with cap stamped "Pape-Dawson" found on a point being the southeast corner of Wolf Ranch West, Section 4B, Phase 2, a subdivision according to the plat recorded in Document No. 2019114626 of said Official Public Records, said point being on the west right-of-way line of Joy Wolf Drive, a 65 foot right-of-way, of Wolf Ranch West, Section 4B, Phase 1, a subdivision according to the plat recorded in Document No. 2019034869 of said Official Public Records, same being the northeast corner of said 53.527 acre tract for the northeast corner and POINT OF BEGINNING hereof;

THENCE, departing the south boundary line of said Wolf Ranch West, Section 4B, Phase 2, with the east right-of-way line of said Joy Wolf Drive, same being the east boundary line of said 53.527 acre tract the following four (4) courses and distances:

1. S 20°43'20" E, a distance of 69.42 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
2. S 24°16'40" W, a distance of 35.36 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
3. S 20°43'20" E, a distance of 65.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof, and
4. S 65°43'20" E, a distance of 35.36 feet to ½" iron rod with yellow cap marked "Pape-Dawson" found on the northwest corner of said Joy Wolf Drive, of Wolf Ranch West, Section 1AG, a subdivision according to the plat recorded in Document No. 202107019I of said Official Public Records for an angle point hereof;

THENCE, continuing with the west right-of-way line of said Joy Wolf Drive, and the north right-of-way line of River Overlook Road, a 65 foot-right-of-way of said Wolf Ranch West, Section 1AG , same being the east and south boundary line of said 53.527 acre tract the following fifteen (15) courses and distances:

1. S 20°43'20" E, a distance of 16.18 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of curvature hereof,
2. along the arc of a curve to the left, having a radius of 332.50 feet, a central angle of 09°14'58", a chord bearing and distance of S 25°20'49" E, 53.82 feet, an arc length of 53.88 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of tangency hereof,
3. S 29°58'17" E, a distance of 362.29 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of curvature hereof,
4. along the arc of a curve to the right, having a radius of 15.00 feet, a central angle of 87°10'02", a chord bearing and distance of S 13°36'43" W, 20.69 feet, an arc length of 22.82 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of non-tangency hereof,
5. S 31°12'54" E, a distance of 50.02 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of curvature hereof,
6. along the arc of a curve to the right, having a radius of 15.00 feet, a central angle of 87°16'53", a chord bearing and distance of S 79°09'49" E, 20.70 feet, an arc length of 22.85 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of reverse curvature hereof,
7. along the arc of a curve to the left, having a radius of 532.50 feet, a central angle of 28°23'56", a chord bearing and distance of S 49°43'21" E, 261.24 feet, an arc length of 263.93 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of non-tangency hereof,
8. S 63°55'18" E, a distance of 265.58 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of curvature hereof,
9. along the arc of a curve to the right, having a radius of 257.50 feet, a central angle of 19°48'28", a chord bearing and distance of S 54°01'04" E, 92.02 feet, an arc length of 92.48 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of tangency hereof, and
10. S 44°06'50" E, a distance of 481.10 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of curvature hereof,
11. along the arc of a curve to the right, having a radius of 70.50 feet, a central angle of 94°17'15", a chord bearing and distance of S 03°01'47" W, 103.36 feet, an arc length of 116.02 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of tangency hereof,
12. S 50°10'24" W, a distance of 70.48 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of curvature hereof,
13. along the arc of a curve to the right, having a radius of 475.00 feet, a central angle of 38°43'00", a chord bearing and distance of S 69°31'54" W, 314.90 feet, an arc length of 320.97 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of tangency hereof,
14. S 88°53'25" W, a distance of 86.60 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof, and
15. S 01°06'35" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found on a southwest terminus of said River Overlook Road, same being a southeast corner of said 53.527 acre tract for an angle point hereof,

THENCE, S 88°53'25" W, with a north boundary line of said Wolf Ranch West, Section 1 AG, same being a south boundary line of said 53.527 acre tract, a distance of 78.06 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an interior ell corner hereof;

THENCE, S 00°45'45" E, with a west boundary line of said Wolf Ranch West, Section 1AG, with the east boundary line of said 53.527 acre tract, in part, with the east line of said 0.598 acre tract, and in part with the east boundary line of the Remnant Portion of said 236.714 acre tract, a distance of 1,171.65 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found on the north boundary line of The Resubdivision of Riverview Estates, a subdivision according to the plat recorded in Cabinet V, Slide 57 of the Plat Records of Williamson County, Texas, said point being the southeast corner of said Wolf Ranch West, Section 1AG, same being the southeast corner of the Remnant Portion of said 236.714 acre tract for the southernmost southeast corner hereof;

THENCE with the south boundary line of said 236.714 acre tract, same being the north boundary line of said Resubdivision of Riverview Estates, in part, with the north boundary line of a called 68.080 acre tract, conveyed to LAMY 2243 LTD., recorded in Document No. 2013003282 of said Official Public Records, and the north boundary line of the Remnant Portion of a called 1022.6 acre tract, conveyed to A.C. Weir Properties, LTD., recorded in Document No. 2005090431 of said Official Public Records, the following twelve (12) courses and distances:

1. N 84°42'31" W, a distance of 23.60 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
2. S 80°13'16" W, a distance of 188.97 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
3. S 85°28'21" W, a distance of 89.16 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
4. S 85°27'47" W, a distance of 403.54 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
5. S 87°39'56" W, a distance of 248.99 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
6. S 80°20'51" W, a distance of 366.12 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
7. S 59°30'47" W, a distance of 122.13 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
8. S 70°07'47" W, a distance of 135.27 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
9. S 77°49'02" W, a distance of 243.17 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
10. S 85°58'39" W, a distance of 269.27 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof,
11. N 88°44'51" W, a distance of 261.33 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for an angle point hereof, and
12. S 71°09'02" W, a distance of 173.04 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set on the east right-of-way line of Southwest Bypass, a variable width right-of-way, a dedicated 20.942 acre tract to the City of Georgetown, recorded in Document No. 2021073 of said Official Public Records, said point being the northwest corner of the Remnant Portion of said 1022.6 acre tract, same being the southwest corner of said 236.714 acre tract for the southwest corner hereof;

THENCE N 22°23'05" W, departing the north boundary line of the Remnant Portion of said 1022.6 acre tract, with the east right-of-way line of said Southwest Bypass, same being the west boundary line of said 236.714 acre tract, a distance of 584.91 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found on the southwest corner of Wolf Ranch West, Section 4G, a subdivision according to the plat recorded in Document No. 2024017405 of said Official Public Records, same being a northwest corner of said 236.714 acre tract for the westernmost northwest corner hereof;

THENCE, departing the east right-of-way line of said Southwest Bypass, with the south boundary line of said Wolf Ranch West, Section 4G, same being the north boundary line of said 236.714 acre tract, the following five (5) courses and distances:

1. S 85°47'23" E, a distance of 328.73 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof,
2. S 86°07'41" E, a distance of 431.46 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof,
3. N 69°02'33" E, a distance of 366.32 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof,
4. S 84°30'48" E, a distance of 139.06 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof, and
5. N 80°46'31" E, a distance of 85.26 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found on the west boundary line of said 53.527 acre tract, said point being the southeast corner of said Wolf Ranch West, Section 4G, same being a northeast corner of said 236.714 acre tract hereof,

THENCE N 14°46'09" E, departing the north boundary line of said 236.714 acre tract, with the east boundary line of said Wolf Ranch West, Section 4G same being the west boundary line of said 53.527 acre tract, a distance of 203.35 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,

THENCE continuing with the east and south boundary line of said Wolf Ranch West, Section 4G, with the west and north boundary line of said 53.527 acre tract, the following nine (9) courses and distances:

1. N 05°13'10" W, a distance of 674.37 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
2. N 17°58'59" W, a distance of 80.98 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
3. N 07°47'19" W, a distance of 60.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
4. N 13°33'40" W, a distance of 150.16 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
5. N 69°16'40" E, a distance of 139.77 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
6. S 65°43'20" E, a distance of 35.36 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof,
7. N 69°48'42" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of curvature hereof,
8. N 27°18'29" E, a distance of 33.44 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for an angle point hereof, and
9. N 11°59'00" W, a distance of 68.90 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found on the south boundary line of said Wolf Ranch West, Section 4B, Phase2, said point being the northeast corner of said Wolf Ranch West, Section 4G, same being the northernmost northwest corner of said 53.527 acre tract for the northwest corner hereof,

THENCE N 69°16'40" E, with the south boundary line of said Wolf Ranch West, Section 4B, Phase 2, same being the north boundary line of said 53.527 acre tract, a distance of 638.67 feet to the POINT OF BEGINNING, and containing 66.838 acres in the City of Georgetown, Williamson County Texas. Said tract being described in accordance with an exhibit prepared under job no. 51127–31 by Pape-Dawson Engineers, Inc.

STATE OF TEXAS §
COUNTY OF Williamson §
KNOW ALL MEN BY THESE PRESENTS

THAT H4 GEORGETOWN PHASE 3G, LLC, AS OWNER OF THE CERTAIN 53.527 ACRES OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2024081887 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, DO HEREBY SUBDIVIDE SAID TRACT AS SHOWN HEREON, DO HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE. I HEREBY BIND MY HEIRS, SUCCESSORS, AND ASSIGNS TO WARRANT AND FOREVER DEFEND SUCH DEDICATIONS, ALL AND SINGULAR, TO THE CITY OF GEORGETOWN AGAINST EVERY PERSON WHOMSOEVER CLAIMING OR TO CLAIM THE SAME OR ANY PART THEREOF. THIS SUBDIVISION S T O BE KNOWN AS:

WOLF RANCH WEST, SECTION 3G

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 14th DAY OF March 2025.

H4 GEORGETOWN PHASE 3G, LLC
A TEXAS LIMITED LIABILITY COMPANY

BY: _____
NAME: Drake Ferguson
TITLE: Vice President
ADDRESS: 3000 Turtle Creek Blvd. Dallas, TX 75219

STATE OF TEXAS §
COUNTY OF Williamson §
KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Drake Ferguson, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 14th DAY OF March 2025.

_____
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

ALYSSA SIERS
Notary ID #133501370
My Commission Expires
February 7, 2029

MY COMMISSION EXPIRES: 2/07/29

STATE OF TEXAS §
COUNTY OF Harris §
KNOW ALL MEN BY THESE PRESENTS

I, THIRD COAST BANK, A STATE BANK, LIEN HOLDER OF THE CERTAIN 53.527 ACRES OF LAND SHOWN HEREON, AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2025000287 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, ACTING BY AND THROUGH Tiffany Weber DO HEREBY CONSENT TO THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON; DO FURTHER HEREBY JOIN, APPROVE AND COVENANT TO ALL RESTRICTIONS LISTED HEREIN AND DO HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 5th DAY OF March 2025.

BY: Third Coast Bank, a Texas State bank
NAME: Jeff Weber (Tiffany Weber)
TITLE: Bank Officer
ADDRESS: 20202 HIGHWAY 59 NORTH, SUITE 350 HUMBLE, TEXAS 77338

STATE OF TEXAS §
COUNTY OF Harris §
KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Tiffany Weber, Bank Officer of Third Coast Bank, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 5 DAY OF March 2025

Leslie K Thompson
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

Leslie K Thompson
My Commission Expires
11/11/2025
Notary ID
133142821

MY COMMISSION EXPIRES: 11/11/25

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

SHEET 5 OF 8 2023-36-FP

Plotted By: Pickens, John Date: April 18, 2026 11:15:41am File Path: K:\Surv_Civil\06461309-wolf ranch phases 3-4 trail\Civil\Plansheets\C-Final Plat-Section3G.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

DOC # 20250027690

FINAL PLAT OF WOLF RANCH WEST, SECTION 3G

A 66.838 TRACT OF LAND BEING OUT OF A CALLED 53.527 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 3G, LLC, RECORDED IN DOCUMENT NO. 2024081887 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, BEING OUT OF A CALLED 0.598 ACRE TRACT, CONVEYED TO WILLIAMSON COUNTY MUNICIPAL UTILITY DISTRICT NO. 29, RECORDED IN DOCUMENT NO. 2020072628 OF SAID OFFICIAL PUBLIC RECORDS, AND BEING OUT OF A REMNANT PORTION OF A CALLED 236.714 ACRE TRACT CONVEYED TO H4 GEORGETOWN, LP, RECORDED IN DOCUMENT NO. 2018054155 OF SAID OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS.

DETAIL "A"
SCALE: 1" = 100'


S41°36'12"E
33.51'
S41°36'12"E
33.51'
N48°23'48"E
33.51'
N48°23'48"E
33.51'
S41°36'12"E
33.51'
N48°23'48"E
33.51'
S41°36'12"E
33.51'
N48°23'48"E
33.51'
S41°36'12

Doc#20210701911



LOCATION MAP

SCALE: 1"= 2,000'

LEGEND

DOC. NO.	DOCUMENT NUMBER
OPR	OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS
PR	PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS
DR	DEED RECORDS OF WILLIAMSON COUNTY, TEXAS
FD. I.R.	FOUND IRON ROD
ROW	RIGHT OF WAY
VOL.	VOLUME
PG.	PAGE(S)
POB	POINT OF BEGINNING
PUE	PUBLIC UTILITY EASEMENT
DE	DRAINAGE EASEMENT
PD	PAPE-DAWSON
(SURVEYOR)	FOUND IRON ROD (UNLESS NOTED OTHERWISE)
	SET 1/2" IRON ROD (PD)
	100 YEAR FLOODPLAIN

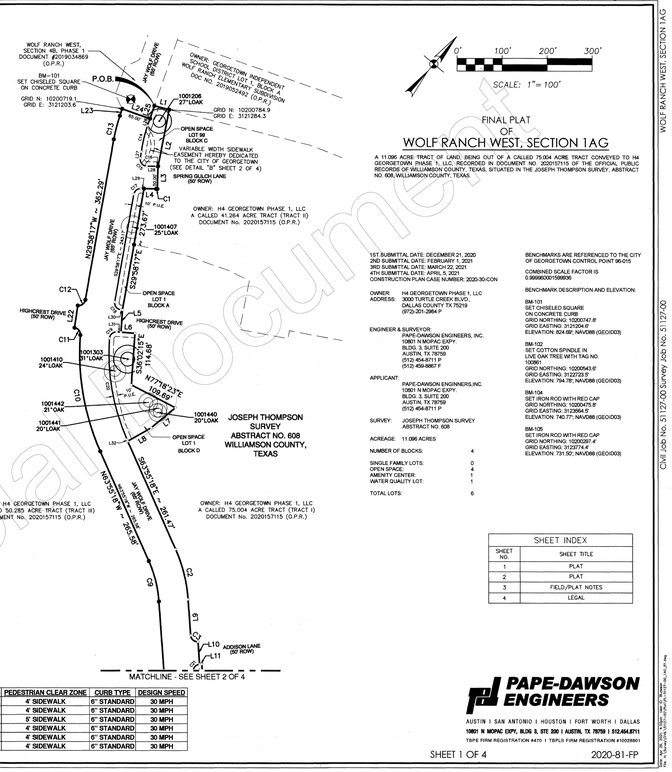
SECTION 1AG CREDIT TREES

Tree Number	Species	Trunk	Diameter
1001019	LOAK	Single	23
1001021	LOAK	Single	18
1001022	LOAK	Single	21
1001023	LOAK	Single	18
1001024	LOAK	Single	18
1001025	LOAK	Single	18
1001026	LOAK	Single	21
1001028	LOAK	Single	23
1001029	LOAK	Single	18
1001407	LOAK	Single	25
1001410	LOAK	Single	24
1001440	LOAK	Single	20
1001441	LOAK	Single	20
1001442	LOAK	Single	21
1001521	POAK	Single	22

SECTION 1AG HERITAGE TREES

Tree Number	Species	Trunk	Diameter	Removed	Tree
1322	LOAK	Multi	40.5	X	
1001206	LOAK	Single	27		
1001279	LOAK	Single	35		
1001280	LOAK	Single	32		
1001281	LOAK	Double	33.5		
1001282	LOAK	Single	34		
1001284	LOAK	Double	42		
1001285	LOAK	Single	27		
1001286	LOAK	Double	33		
1001287	LOAK	Multi	40.5		
1001288	LOAK	Single	30		
1001289	LOAK	Multi	36.5	X	
1001303	LOAK	Single	31		
1001316	LOAK	Single	27	X	

STREET NAME	CLASSIFICATION	PAVEMENT WIDTH	PEDESTRIAN CLEAR ZONE	CURB TYPE	DESIGN SPEED
ADDISON LN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
HIGHCREST	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
JAY WOLF DRIVE	MAJOR/RESIDENTIAL COLLECTOR (65' ROW)	37' BOC-BOC	5' SIDEWALK	6" STANDARD	30 MPH
RIVER OVERLOOK RD	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
SENDERO TRAIL	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
SPRING GULCH LN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH



FINAL PLAT OF WOLF RANCH WEST, SECTION 1AG

A 11.096 ACRE TRACT OF LAND, BEING OUT OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC, RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS.

1ST SUBMITTAL DATE: DECEMBER 21, 2020
2ND SUBMITTAL DATE: FEBRUARY 1, 2021
3RD SUBMITTAL DATE: MARCH 22, 2021
4TH SUBMITTAL DATE: APRIL 5, 2021
CONSTRUCTION PLAN CASE NUMBER: 2020-30-CON

OWNER: H4 GEORGETOWN PHASE 1, LLC
ADDRESS: 3000 TURTLE CREEK BLVD. DALLAS COUNTY TX 75219
(972)-201-2864 P

ENGINEER & SURVEYOR:
PAPE-DAWSON ENGINEERS, INC.
10801 N MOPAC EXPY.
BLDG. 3, SUITE 200
AUSTIN, TX 78759
(512) 454-8711 P
(512) 459-8867 F

APPLICANT:
PAPE-DAWSON ENGINEERS,INC.
10801 N MOPAC EXPY.
BLDG. 3, SUITE 200
AUSTIN, TX 78759
(512) 454-8711 P

SURVEY: JOSEPH THOMPSON SURVEY ABSTRACT NO. 608

ACREAGE: 11.096 ACRES

NUMBER OF BLOCKS: 4

SINGLE FAMILY LOTS: 0
OPEN SPACE: 4
AMENITY CENTER: 1
WATER QUALITY LOT: 1

TOTAL LOTS: 6

BENCHMARKS ARE REFERENCED TO THE CITY OF GEORGETOWN CONTROL POINT 96-015

COMBINED SCALE FACTOR IS 0.99996000159936

BENCHMARK DESCRIPTION AND ELEVATION:

BM-101
SET CHISELED SQUARE ON CONCRETE CURB
GRID NORTHING: 10200747.8'
GRID EASTING: 3121204.6'
ELEVATION: 824.69', NAVD88 (GEOID03)

BM-102
SET COTTON SPINDLE IN LIVE OAK TREE WITH TAG NO. 100861
GRID NORTHING: 10200543.6'
GRID EASTING: 3122723.5'
ELEVATION: 794.78', NAVD88 (GEOID03)

BM-104
SET IRON ROD WITH RED CAP
GRID NORTHING: 10200047.6'
GRID EASTING: 3123774.4'
ELEVATION: 731.92', NAVD88 (GEOID03)

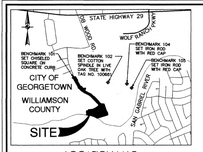
SHEET INDEX	
SHEET NO.	SHEET TITLE
1	PLAT
2	PLAT
3	FIELD/PLAT NOTES
4	LEGAL

PAPE-DAWSON ENGINEERS

AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

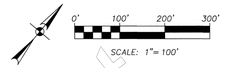
WOLF RANCH WEST, SECTION 1AG
Civil Job No. 51127-00 Survey Job No. 51127-00

Doc#20210701911



LOCATION MAP

SCALE: 1"= 2,000'



FINAL PLAT OF WOLF RANCH WEST, SECTION 1AG

A 11.096 ACRE TRACT OF LAND, BEING OUT OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC, RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS.

LEGEND

DOC. NO.	DOCUMENT NUMBER
OPR	OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS
PR	PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS
DR	DEED RECORDS OF WILLIAMSON COUNTY, TEXAS
FD. I.R.	FOUND IRON ROD
ROW	RIGHT OF WAY
VOL.	VOLUME
PG.	PAGE(S)
POB	POINT OF BEGINNING
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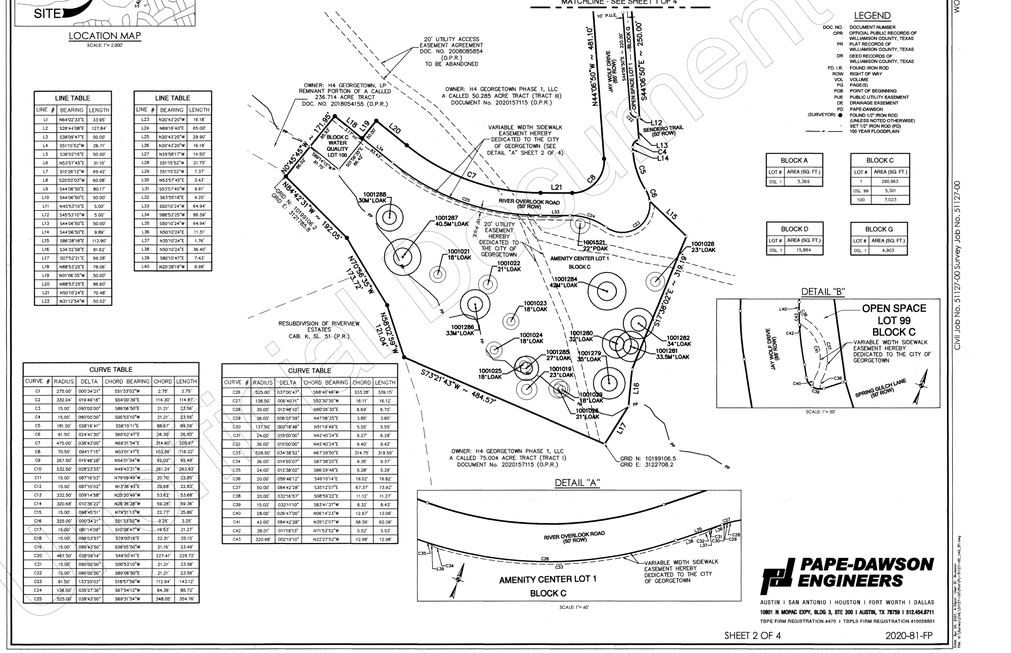
DE	DRAINAGE EASEMENT
PD	PAPE-DAWSON
(SURVEYOR)	FOUND IRON ROD (UNLESS NOTED OTHERWISE)
	SET 1/2" IRON ROD (PD)
	100 YEAR FLOODPLAIN



LINE TABLE		
LINE #	BEARING	LENGTH
L1	N64°02'33"E	33.95'
L2	S28°41'08"E	127.84'
L3	S38°09'41"E	33.16'
L4	S51°15'52"W	26.71'
L5	S38°12'15"E	50.00'
L6	N51°37'45"E	31.16'
L7	S12°26'12"W	69.42'
L8	S20°02'50"W	60.08'
L9	S44°06'50"E	80.17'
L10	S44°06'50"E	50.00'
L11	N45°53'10"E	50.00'
L12	S44°06'50"E	9.88'
L13	S44°06'50"E	113.96'
L14	S24°32'38"E	81.62'
L15	S07°52'21"E	99.28'
L16	N88°53'25"E	78.06'
L17	S01°06'35"W	50.00'
L18	N88°53'25"E	86.60'
L19	S01°06'35"W	9.88'
L20	N88°53'25"E	86.46'
L21	S01°06'35"W	75.98'
L22	N31°12'54"W	50.02'

LINE TABLE		
LINE #	BEARING	LENGTH
L23	N20°42'29"W	16.18'
L24	N88°16'40"E	85.00'
L25	N20°42'29"W	29.90'
L26	N20°42'29"W	16.18'
L27	N29°59'17"W	14.58'
L28	S31°15'52"W	21.76'
L29	S51°15'52"W	7.27'
L30	N53°57'47"E	3.42'
L31	S53°57'45"W	8.81'
L32	S63°55'15"E	4.20'
L33	S01°10'24"W	64.54'
L34	S88°52'25"W	86.58'
L35	S01°10'24"W	64.94'
L36	N50°10'24"E	11.31'
L37	N35°10'24"E	1.78'
L38	N35°10'24"E	36.42'
L39	S80°16'47"E	7.42'
L40	N20°28'18"W	6.58'

CURVE TABLE				
CURVE #	RADIUS	DELTA	CHORD BEARING	CHORD	LENGTH
C1	275.00'	03°04'21"	S01°33'50"W	14.76'	14.76'
C2	332.04'	019°49'18"	S54°00'28"E	114.30'	114.85'
C3	15.00'	090°00'00"	S89°06'50"E	21.21'	23.56'
C4	15.00'	090°00'00"	S00°53'10"W	21.21'	23.56'
C5	185.50'	028°16'41"	S58°15'11"E	88.83'	89.58'
C6	61.50'	024°41'35"	S80°02'47"E	26.30'	25.80'
C7	675.00'	028°43'00"	N69°31'54"E	334.80'	338.34'
C8	70.50'	094°11'15"	N03°01'47"E	103.26'	116.02'
C9	267.50'	019°49'18"	N54°00'28"W	92.07'	92.49'
C10	332.50'	028°23'03"	N49°43'23"W	261.24'	263.92'
C11	15.00'	087°18'53"	N79°59'49"W	20.76'	22.85'
C12	15.00'	091°41'07"	N13°36'47"E	21.58'	23.83' feet
C13	332.50'	009°14'58"	N29°20'36"W	53.62'	53.68'
C14	332.04'	010°36'23"	N38°36'28"W	61.26'	61.34'
C15	15.00'	096°45'51"	N79°21'13"W	22.77'	25.88'
C16	325.00'	000°34'21"	S01°33'50"W	3.25'	3.25'
C17	15.00'	081°14'09"	S03°28'47"W	19.52'	21.27'
C18	15.00'	098°53'51"	S76°03'16"E	22.31'	25.15'
C19	15.00'	089°43'50"	S09°05'56"W	21.16'	23.49'
C20	482.50'	028°18'14"	S49°50'41"E	227.41'	229.72'
C21	15.00'	090°00'00"	S00°53'10"W	21.21'	23.56'
C22	15.00'	090°00'00"	S89°06'50"E	21.21'	23.56'
C23	61.50'	133°20'03"	S18°57'58"W	112.84'	143.12'
C24	138.50'	035°37'36"	S87°54'12"W	84.36'	85.72'
C25	525.00'	038°43'00"	S69°31'54"W	348.00'	354.76'

CURVE TABLE				
CURVE #	RADIUS	DELTA	CHORD BEARING	CHORD	LENGTH
C26	525.00'	031°00'47"	S68°40'48"W	333.28'	339.15'
C27	138.50'	000°46'01"	S53°16'37"W	18.11'	18.12'
C28	30.00'	012°48'10"	S60°26'35"E	6.69'	6.70'
C29	58.00'	008°23'50"	N47°58'25"E	3.80'	3.80'
C30	137.50'	002°18'48"	N51°19'49"E	5.55'	5.55'
C31	24.00'	015°00'00"	N42°40'24"E	6.27'	6.28'
C32	36.00'	015°00'00"	N42°40'24"E	9.40'	9.42'
C33	528.50'	074°38'52"	N67°29'50"E	314.78'	319.59'
C34	36.00'	014°53'07"	S87°38'25"E	9.30'	9.37'
C35	24.00'	012°38'02"	S88°29'48"E	5.28'	5.29'
C36	30.00'	056°45'12"	S49°10'14"E	19.02'	19.82'
C37	50.00'	084°42'28"	S35°13'07"E	67.37'	73.92'
C38	20.00'	032°16'57"	S08°58'22"E	11.12'	11.27'
C39	15.02'	032°11'10"	S83°41'27"W	8.32'	8.43'
C40	28.00'	026°47'00"	N06°14'13"W	12.97'	13.09'
C41	42.00'	084°42'28"	N35°13'07"W	56.58'	62.09'
C42	28.00'	011°18'57"	N75°52'52"W	5.52'	5.53'
C43	320.68'	002°51'10"	N22°27'52"W	12.98'	12.98'

WOLF RANCH WEST, SECTION 1AG
Civil Job No. 51127-00 Survey Job No. 51127-00

Doc#20210701911

FINAL PLAT OF WOLF RANCH WEST, SECTION 1AG

A 11.096 ACRE TRACT OF LAND, BEING OUT OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC, RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS.

FIELD NOTES FOR

A 11.096 ACRE TRACT OF LAND, BEING OUT OF A CALLED 75.004 ACRE TRACT (TRACT I) CONVEYED TO H4 GEORGETOWN PHASE 1, LLC, RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS; SAID 11.096 ACRE TRACT BEING MORE FULLY DESCRIBED AS FOLLOWS, WITH BEARINGS BASED ON THE TEXAS COORDINATE SYSTEM ESTABLISHED FOR THE CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 (NAD 83 (2011) EPOCH 2010.00;

BEGINNING at a ½" iron rod with yellow cap marked "Pape-Dawson" found at the southwest corner of Georgetown Independent School District, Lot 1, Block A, Wolf Ranch Elementary, a subdivision according to the plat recorded in Document No. 2019034924 of the Official Public Records of Williamson County, Texas, same being the northwest corner of a called 41.264 acre tract (Tract III) conveyed to H4 Georgetown, LP recorded in Document No. 2020157115 of the Official Public Records, same being the southeast corner of Wolf Ranch West, Section 4B, Phase 1, a subdivision according to the plat recorded in Document No. 2019034869 of said Official Public Records, for the POINT OF BEGINNING hereof;

THENCE N 64°02'33" E, departing the west boundary line of said Wolf Ranch West, Section 4B, Phase 1, with the south boundary line of said Georgetown Independent School District, Lot 1, Block A, same being a north boundary line of said 75.004 acre tract, a distance of 33.95 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for the northeast corner of a called 41.264 acre tract (Tract II) conveyed to H4 Georgetown, LP recorded in Document No. 2020157115 of said Official Public Records, same being the northwest corner of said 75.004 acre tract hereof;

THENCE departing the south boundary line of said Georgetown Independent School District, Lot 1, Block A, with the east line of said 75.004 acre tract, same being the west line of said 41.264 acre tract the following four (4) courses and distances:

1. S 28°41'08" E, a distance of 127.84 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of non-tangent curvature hereof;
2. S 38°09'41" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point of non-tangent curvature hereof;
3. along the arc of a curve to the left, having a radius of 275.00 feet, a central angle of 03°34'21", a chord bearing and distance of S 51°33'02" W, 2.75 feet, an arc length of 2.75 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangency hereof;
4. S 51°15'52" W, a distance of 26.71 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof;

THENCE S 29°58'17" E, in part with the west boundary line of said 41.264 acre tract, same being the east line of said 75.004 acre tract, and in part through the interior of said 75.004 acre tract, a distance of 273.67 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;

THENCE continuing through the interior of said 75.004 acre tract, the following twenty-four (24) courses and distances:

1. S 38°09'15" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
2. N 53°57'45" E, a distance of 31.10 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
3. S 36°02'15" E, a distance of 114.68 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
4. N 77°18'23" E, a distance of 109.69 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
5. S 10°29'17" W, a distance of 69.42 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
6. S 20°02'50" W, a distance of 60.08 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
7. S 63°55'15" E, a distance of 261.47 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
8. along the arc of a curve to the right, having a radius of 332.04 feet, a central angle of 19°49'18", a chord bearing and distance of S 54°00'28" E, 114.30 feet, an arc length of 114.85 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangency hereof;
9. S 44°06'50" E, a distance of 80.17 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
10. along the arc of a curve to the left, having a radius of 15.00 feet, a central angle of 90°00'00", a chord bearing and distance of S 89°06'50" E, 21.21 feet, an arc length of 23.56 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangency hereof;
11. S 44°06'50" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
12. N 45°53'10" E, a distance of 5.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
13. S 44°06'50" E, a distance of 250.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
14. S 45°53'10" W, a distance of 5.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
15. S 44°06'50" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangent curvature hereof;
16. along the arc of a curve to the left, having a radius of 15.00 feet, a central angle of 90°00'00", a chord bearing and distance of S 00°53'10" W, 21.21 feet, an arc length of 23.56 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangency hereof;
17. S 44°06'50" E, a distance of 9.88 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
18. along the arc of a curve to the right, having a radius of 181.50 feet, a central angle of 28°16'41", a chord bearing and distance of S 58°15'11" E, 88.67 feet, an arc length of 89.58 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangency hereof;
19. along the arc of a curve to the right, having a radius of 61.50 feet, a central angle of 24°41'35", a chord bearing and distance of S 80°02'47" E, 26.30 feet, an arc length of 26.50 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point hereof;
20. S 86°28'18" E, a distance of 112.90 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
21. S 17°38'02" E, a distance of 319.19 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
22. S 24°32'38" E, a distance of 81.62 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
23. S 07°52'21" E, a distance of 99.28 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
24. S 73°31'43" W, a distance of 484.57 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a point in the south line of said 75.004 acre tract, same being a point in the north line of a called Resubdivision of Riverview Estates, a subdivision according to the plat recorded in Cabinet K, Side 31, of the Plat Records of Williamson County, Texas hereof;

THENCE with the south line of said 75.004 acre tract, same being the north line of said Riverview Estates, the following three (3) courses and distances:

1. N 58°02'56" W, a distance of 121.04 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof;
2. N 70°56'35" W, a distance of 173.72 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof;
3. N 84°42'31" W, a distance of 192.05 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for the southwest corner of said 75.004 acre tract, same being the southeast corner of the Remnant Portion of a called 236.774 acre tract conveyed to H4 Georgetown, LP recorded in Document No. 2018054155 of said Official Public Records, also being a point in the north line of said Riverview Estates hereof;

THENCE N 00°45'45" W, departing the north line of said Riverview Estates, with in part the west line of said 75.004 acre tract, same being the east line of said Remnant Portion, and in part the west line of a called 50.285 acre tract (Tract III) conveyed to H4 Georgetown Phase 1, LLC, recorded in Document No. 2020157115 of said Official Public records, a distance of 171.95 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof;

THENCE with the west line of said 75.004 acre tract, same being the east line of said 50.285 acre tract, the following sixteen (16) courses and distances:

1. N 88°53'25" E, a distance of 78.06 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found hereof;
2. N 01°06'35" W, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof;
3. N 88°53'25" E, a distance of 86.60 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
4. along the arc of a curve to the left, having a radius of 475.00 feet, a central angle of 38°43'00", a chord bearing and distance of N 69°31'54" E, 314.90 feet, an arc length of 320.97 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangency hereof;
5. N 50°10'24" E, a distance of 70.48 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
6. along the arc of a curve to the left, having a radius of 70.50 feet, a central angle of 94°11'15", a chord bearing and distance of N 03°01'47" E, 103.26 feet, an arc length of 116.02 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangency hereof;
7. N 44°06'50" W, a distance of 481.10 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
8. along the arc of a curve to the left, having a radius of 267.50 feet, a central angle of 19°49'18", a chord bearing and distance of N 54°01'04" W, 92.07 feet, an arc length of 92.49 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangency hereof;
9. N 63°55'15" W, a distance of 265.58 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
10. along the arc of a curve to the right, having a radius of 532.50 feet, a central angle of 28°23'03", a chord bearing and distance of N 49°43'23" W, 261.24 feet, an arc length of 263.92 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangency hereof;
11. along the arc of a curve to the left, having a radius of 15.00 feet, a central angle of 87°18'53", a chord bearing and distance of N 79°59'49" W, 20.76 feet, an arc length of 22.85 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangency hereof;
12. N 31°37'54" W, a distance of 50.02 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangent curvature hereof;
13. along the arc of a curve to the left, having a radius of 15.00 feet, a central angle of 87°10'02", a chord bearing and distance of N 13°36'47" E, 20.68 feet, an arc length of 22.82 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangency hereof;
14. N 29°58'17" W, a distance of 362.29 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof;
15. along the arc of a curve to the right, having a radius of 332.50 feet, a central angle of 09°14'58", a chord bearing and distance of N 25°20'48" W, 53.62 feet, an arc length of 53.68 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangency hereof;
16. N 20°42'29" W, a distance of 16.18 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for a southwest corner of said Wolf Ranch West, Phase 4B, Section 1, same being a northwest corner of said 75.004 acre tract, also being a easterly corner of said 50.285 acre tract hereof;

THENCE N 69°16'40" E, with the south line of said Wolf Ranch West, Phase 4B, Section 1, same being the north line of said 75.004 acre tract, a distance of 85.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" found for the southeast corner of said Wolf Ranch West, Phase 4B, Section 1 hereof;

THENCE N 20°42'29" W, with the east line of said Wolf Ranch West, Phase 4B, Section 1, same being a northwesterly line of said 75.004 acre tract, a distance of 29.90 feet to the POINT OF BEGINNING and containing 11.096 acres in Williamson County, Texas. 53.62 feet, said being prepared in accordance with a survey made on the ground and a plat prepared by Pape Dawson Engineers, Inc. under Job No. 51127-00.

PLAT NOTES

1. THIS SUBDIVISION IS SUBJECT TO THE DEVELOPMENT AGREEMENT BETWEEN THE WOLF LEGACY, L.P. AND THE CITY OF GEORGETOWN RECORDED IN DOCUMENT NO. 2008042501 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, AS AMENDED BY THE FIRST AMENDMENT APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON AUGUST 12, 2014 AND EXECUTED ON AUGUST 20, 2014.
2. THIS SUBDIVISION IS SUBJECT TO THE CITY OF GEORGETOWN ORDINANCE NUMBER 2018-66 AMENDING THE OFFICIAL ZONING MAP TO BE RECORDED FROM AGRICULTURE (AG) DISTRICT TO PLANNED UNIT DEVELOPMENT (PUD) DISTRICT, KNOWN AS WOLF RANCH HILLWOOD, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018.
3. WATER AND WASTEWATER PROVIDED BY CITY OF GEORGETOWN. ELECTRIC SERVICES PROVIDED BY GEORGETOWN UTILITY SYSTEMS.
4. ALL STRUCTURES/OBSTRUCTIONS ARE PROHIBITED IN DRAINAGE EASEMENTS.
5. THERE ARE AREAS WITHIN THE BOUNDARIES OF THIS SUBDIVISION IN THE 100-YEAR FLOOD

Doc #2021140830

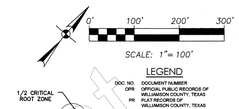
FINAL PLAT OF WOLF RANCH WEST, SECTION 1BG

A 62.936 ACRE TRACT OF LAND, BEING OUT OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608 AND C. STUBBLEFIELD SURVEY, ABSTRACT NO. 558 BOTH BEING IN WILLIAMSON COUNTY, TEXAS.



LOCATION MAP

SCALE: 1"= 2,000'



LEGEND

DOC NO.	DOCUMENT NUMBER
OPR	OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS
PR	PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS
DR	DEED RECORDS OF WILLIAMSON COUNTY, TEXAS
FD. I.R.	FOUND IRON ROD
ROW	RIGHT OF WAY
VOL	VOLUME
PG	PAGE(S)
POB	POINT OF BEGINNING
PUE	PUBLIC UTILITY EASEMENT
DE	DRAINAGE EASEMENT
PD	PAPE-DAWSON
(SURVEYOR) ●	FOUND 1/2" IRON ROD (UNLESS NOTED OTHERWISE)
○	SET 1/2" IRON ROD (PD)
	100 YEAR FLOODPLAIN
	BOUNDARY LINE
△	CALCULATED POINT

1/2 CRITICAL ROOT ZONE
CREDIT TREE
HERITAGE TREE
CRITICAL ROOT ZONE

SHEET INDEX	
SHEET NO.	SHEET TITLE
1	PLAT
2	PLAT
3	PLAT
4	TABLES
5	FIELD/PLAT NOTES
6	LEGAL

1ST SUBMITTAL DATE: MAY 17, 2021
2ND SUBMITTAL DATE: JUNE 21, 2021

OWNER: H4 GEORGETOWN PHASE 1, LLC
ADDRESS: 3000 TURTLE CREEK BLVD., DALLAS COUNTY TX 75219 (972) 201-2864 P

ACREAGE: 62.936 ACRES

ENGINEER, SURVEYOR, & APPLICANT: PAPE-DAWSON ENGINEERS, INC. 10801 N MOPAC EXPY., BLDG 3, SUITE 200 AUSTIN, TX 78759 (512) 454-8711 P (512) 459-8867 F

SURVEY: JOSEPH THOMPSON SURVEY ABSTRACT NO. 608 C. STUBBLEFIELD SURVEY ABSTRACT NO. 558

NUMBER OF BLOCKS:	10
SINGLE FAMILY LOTS:	165
OPEN SPACE LOT:	5
KARST FEATURE LOT:	1
WATER QUALITY LOT:	1
WATER QUALITY POND LOT:	1
TOTAL LOTS:	173

COMBINED SCALE FACTOR IS 0.99999000159899

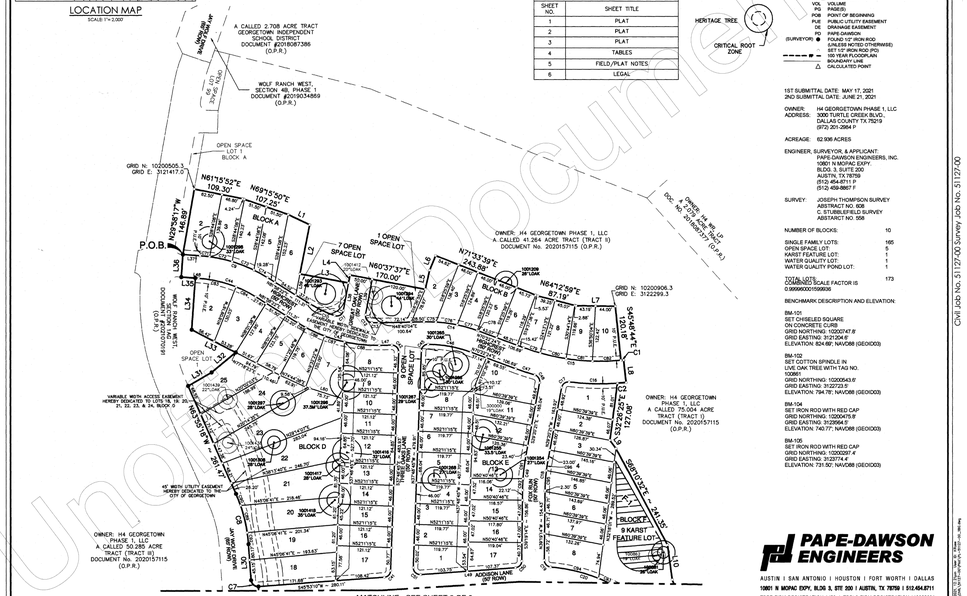
BENCHMARK DESCRIPTION AND ELEVATION:

BM-101
SET CHISELED SQUARE ON CONCRETE CURB
GRID NORTHING: 10200747.8'
GRID EASTING: 3123124.8'
ELEVATION: 824.662', NAVD88 (GEOID03)

BM-102
SET COTTON SPINDLE IN LIVE OAK TREE WITH TAG NO. 10060
GRID NORTHING: 10200543.6'
GRID EASTING: 3122723.5'
ELEVATION: 784.78', NAVD88 (GEOID03)

BM-104
SET IRON ROD WITH RED CAP
GRID NORTHING: 10200478.9'
GRID EASTING: 3120994.5'
ELEVATION: 740.77', NAVD88 (GEOID03)

BM-105
SET IRON ROD WITH RED CAP
GRID NORTHING: 10200397.4'
GRID EASTING: 3120774.1'
ELEVATION: 731.50', NAVD88 (GEOID03)



STREET NAME	CLASSIFICATION	PAVEMENT WIDTH	PEDESTRIAN CLEAR ZONE	CURB TYPE	DESIGN SPEED
ADDISON LN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
ASHMORE LN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
FOX RUN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
GREAT OAK LN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
HIGHCREST	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
RIVER TRACE	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
RUNNING FAWN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
SENDERO TRAIL	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
SOUTH PARK VISTA	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH
THREE OAKS LN	RESIDENTIAL STREET (50' ROW)	28' BOC-BOC	4' SIDEWALK	6" STANDARD	30 MPH

PAPE-DAWSON ENGINEERS

AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #100288601

SHEET 1 OF 6 2021-25-FP

WOLF RANCH WEST, SECTION 1BG

Civil Job No. 51127-00 Survey Job No. 51127-00

Unofficial Document

Doc #2021140830

FINAL PLAT OF WOLF RANCH WEST, SECTION 1BG

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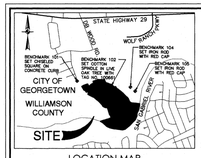

LOCATION MAP

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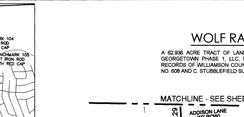

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(SURVEYOR) ●	FOUND 1/2" IRON ROD (UNLESS NOTED OTHERWISE)
○	SET 1/2" IRON ROD (PD)
	100 YEAR FLOODPLAIN
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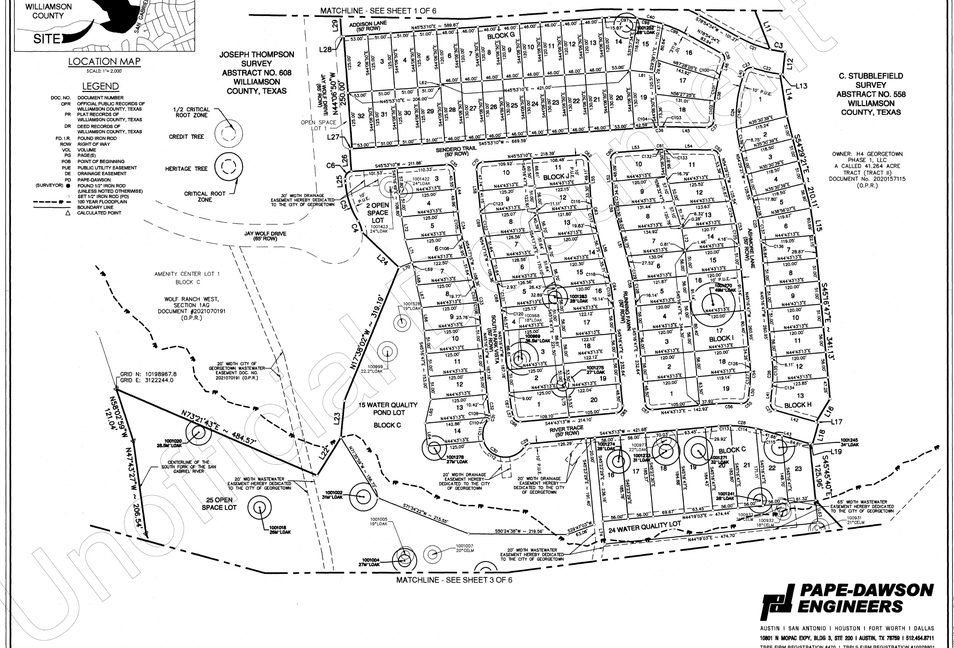
△	CALCULATED POINT

1/2 CRITICAL ROOT ZONE
CREDIT TREE
HERITAGE TREE
CRITICAL ROOT ZONE

JOSEPH THOMPSON SURVEY ABSTRACT NO. 608 WILLIAMSON COUNTY, TEXAS

C. STUBBLEFIELD SURVEY ABSTRACT NO. 558 WILLIAMSON COUNTY, TEXAS

OWNER: H4 GEORGETOWN PHASE 1, LLC A CALLED 41.264 ACRE TRACT (TRACT II) DOCUMENT No. 2020157115 (O.P.R.)



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TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #100288601

SHEET 2 OF 6 2021-25-FP

WOLF RANCH WEST, SECTION 1BG

Civil Job No. 51127-00 Survey Job No. 51127-00

Unofficial Document

Doc #2021140830

FINAL PLAT OF WOLF RANCH WEST, SECTION 1BG

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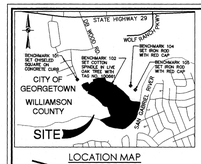

LOCATION MAP

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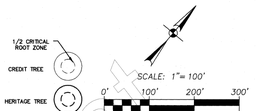

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	100 YEAR FLOODPLAIN
	BOUNDARY LINE
△	CALCULATED POINT

1/2 CRITICAL ROOT ZONE
CREDIT TREE
HERITAGE TREE
CRITICAL ROOT ZONE

OWNER: H4 GEORGETOWN PHASE 1, LLC A CALLED 41.264 ACRE TRACT (TRACT II) DOCUMENT No. 2020157115 (O.P.R.)

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SHEET 3 OF 6 2021-25-FP

WOLF RANCH WEST, SECTION 1BG

Civil Job No. 51127-00 Survey Job No. 51127-00

Unofficial Document

Doc #2021140830

FINAL PLAT OF WOLF RANCH WEST, SECTION 1BG

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CURVE TABLE					
CURVE #	RADIUS	DELTA	CHORD BEARING	CHORD	LENGTH
C1	485.00'	000°42'23"	N44°05'45"E	6.00'	6.00'
C2	536.50'	001°07'38"	S44°44'32"W	19.11'	19.11'
C3	275.00'	007°01'36"	N59°48'16"E	33.70'	33.72'
C4	61.50'	024°41'30"	N80°02'47"W	26.30'	26.50'
C5	185.50'	028°18'47"	N58°51'11"W	88.87'	89.58'
C6	15.00'	090°00'00"	N00°53'07"E	21.21'	23.56'
C7	15.00'	090°00'00"	N89°06'53"W	21.21'	23.56'
C8	332.04'	019°48'18"	N54°02'39"W	114.30'	114.87'
C9	325.00'	028°00'37"	N67°58'04"E	157.31'	158.88'
C10	275.00'	022°49'16"	N79°43'34"E	108.81'	109.52'
C11	15.00'	098°51'00"	N20°03'07"E	22.79'	25.88'
C12	15.00'	098°51'00"	S78°47'53"E	22.79'	25.88'
C13	325.00'	022°49'16"	N79°43'34"E	128.59'	129.44'
C14	325.00'	021°42'21"	N58°31'41"E	122.39'	123.12'
C15	485.00'	023°57'12"	N71°54'51"E	201.37'	203.56'
C16	535.00'	011°30'14"	N51°32'15"E	107.24'	107.42'
C17	15.00'	084°37'47"	N13°58'53"E	20.58'	22.68'
C18	385.00'	009°58'54"	N34°16'18"W	66.99'	67.07'
C19	15.00'	089°12'23"	N82°28'18"W	20.50'	23.57'
C20	365.00'	014°25'56"	S84°41'36"W	104.47'	105.44'
C21	275.00'	015°30'30"	S71°58'46"W	74.60'	74.82'
C22	325.00'	010°54'11"	N82°46'05"E	61.76'	61.85'
C23	15.00'	090°00'00"	N45°06'53"E	21.21'	23.56'
C24	275.00'	033°23'55"	S37°47'24"W	158.04'	160.30'
C25	535.00'	009°12'34"	N49°53'34"W	85.90'	85.99'
C26	535.00'	013°09'02"	N39°42'16"W	122.50'	122.74'
C27	15.00'	090°00'00"	N74°53'46"W	19.28'	20.94'
C28	385.00'	009°58'54"	S34°16'18"E	66.99'	67.07'
C29	15.00'	052°01'32"	S18°42'27"W	13.16'	13.62'
C30	50.50'	187°53'52"	S86°37'37"W	99.76'	163.94'
C31	15.00'	051°48'54"	N39°20'34"W	13.11'	13.57'
C32	325.00'	009°58'14"	N48°53'54"W	53.85'	53.91'
C33	275.00'	009°58'14"	N48°53'54"W	58.80'	58.90'
C34	425.00'	009°00'28"	N49°47'01"W	66.75'	66.82'
C35	15.00'	089°02'10"	N89°47'49"W	21.00'	23.28'
C36	325.00'	009°49'13"	S48°38'48"W	27.40'	27.41'
C37	15.00'	092°02'19"	S04°47'37"W	21.58'	24.10'
C38	325.00'	020°12'46"	S31°13'16"E	114.15'	114.70'
C39	15.00'	060°00'00"	S81°28'16"E	19.28'	20.94'
C40	315.00'	033°01'24"	N82°23'25"E	178.00'	181.56'
C41	15.00'	083°41'54"	S02°03'34"W	20.02'	21.91'
C42	15.00'	082°31'11"	S84°34'31"E	21.85'	24.48'
C43	325.00'	033°18'15"	N85°51'13"E	186.27'	188.92'
C44	275.00'	033°18'15"	N85°51'13"E	133.12'	134.44'
C45	15.00'	089°57'28"	N06°14'58"E	20.86'	23.07'
C46	275.00'	020°52'47"	N80°20'24"E	95.80'	96.29'
C47	535.00'	004°53'27"	N85°50'11"E	44.55'	44.57'
C48	15.00'	083°01'42"	S71°31'15"E	20.27'	22.26'
C49	435.00'	004°56'51"	S34°16'18"E	75.66'	75.76'
C50	15.00'	085°12'24"	S03°16'58"W	20.31'	22.31'
C51	15.00'	094°18'55"	N85°57'48"W	22.35'	25.21'
C52	15.00'	274°47'32"	S89°28'53"W	18.22'	19.58'
C53	485.00'	009°12'34"	N49°53'34"W	77.87'	77.96'
C54	275.00'	019°10'12"	N39°43'17"W	53.42'	53.52'
C55	15.00'	089°32'55"	N10°08'42"E	20.94'	23.18'
C56	325.00'	009°41'56"	N49°34'11"E	54.90'	55.02'
C57	15.00'	060°00'00"	N89°43'13"E	21.21'	23.56'
C58	425.00'	009°18'08"	S48°53'51"E	69.67'	69.00'
C59	275.00'	010°28'05"	S49°20'57"E	50.17'	50.24'
C60	535.00'	010°50'12"	S49°14'47"E	100.92'	101.07'
C61	275.00'	004°49'57"	S48°18'08"W	23.19'	23.19'
C62	15.00'	060°00'00"	S01°04'47"E	21.21'	23.56'
C63	325.00'	010°28'05"	S49°20'57"E	59.30'	59.38'
C64	275.00'	009°18'08"	S48°53'51"E	60.82'	60.88'
C65	15.00'	060°00'00"	S01°04'47"E	21.21'	23.56'
C66	15.00'	083°49'19"	S86°37'52"W	20.04'	21.94'
C67	275.00'	009°10'41"	N48°32'08"W	29.84'	29.85'
C68	425.00'	009°02'28"	N49°47'01"W	66.75'	66.82'
C69	275.00'	009°02'28"	N49°47'01"W	58.90'	58.96'
C70	15.00'	091°09'57"	N07°31'51"E	21.47'	23.87'

CURVE TABLE					
CURVE #	RADIUS	DELTA	CHORD BEARING	CHORD	LENGTH
C71	325.00'	003°45'56"	N55°50'47"E	21.36'	21.36'
C72	325.00'	009°00'26"	N63°16'44"E	51.07'	51.06'
C73	325.00'	009°08'28"	N71°18'05"E	51.79'	51.85'
C74	325.00'	009°06'10"	N79°51'11"E	34.60'	34.62'
C75	325.00'	004°39'42"	N83°59'35"E	26.44'	26.46'
C76	325.00'	008°22'05"	N57°30'47"E	47.42'	47.46'
C77	325.00'	008°09'38"	N65°46'30"E	46.24'	46.28'
C78	325.00'	000°31'07"	N70°08'51"E	2.94'	2.94'
C79	485.00'	004°39'28"	N88°04'36"E	39.88'	39.89'
C80	485.00'	008°56'36"	N83°28'26"E	58.74'	58.77'
C81	485.00'	008°56'36"	N83°21'53"E	58.74'	58.77'
C82	485.00'	007°26'34"	N48°10'18"E	62.98'	63.00'
C83	275.00'	017°52'56"	N42°14'47"E	85.48'	85.82'
C84	275.00'	010°27'28"	N76°54'33"E	48.54'	48.61'
C85	325.00'	002°24'12"	N80°19'57"E	13.62'	13.62'
C86	325.00'	008°06'34"	N74°30'54"E	45.96'	46.00'
C87	325.00'	008°06'34"	N66°24'21"E	45.96'	46.00'
C88	325.00'	013°41'00"	N55°30'34"E	77.42'	77.62'
C89	332.04'	010°37'33"	N53°51'11"W	61.49'	61.58'
C90	332.04'	009°40'54"	N61°32'46"W	27.50'	27.50'
C91	435.00'	006°38'14"	S32°39'28"E	50.36'	50.39'
C92	435.00'	003°20'39"	S37°38'55"E	25.39'	25.39'
C93	365.00'	007°09'38"	S73°20'10"E	45.56'	45.59'
C94	365.00'	017°16'47"	S83°07'03"E	109.66'	110.08'
C95	365.00'	006°33'28"	N36°52'31"W	44.04'	44.06'
C96	385.00'	002°20'23"	N37°35'54"W	15.57'	15.57'
C97	315.00'	011°17'21"	N51°31'56"E	61.96'	62.07'
C98	315.00'	010°42'28"	N62°33'47"E	58.06'	58.14'
C99	315.00'	010°58'35"	N73°25'16"E	60.25'	60.35'
C100	325.00'	003°54'39"	S23°02'47"E	22.45'	22.77'
C101	325.00'	009°32'35"	S29°51'51"E	48.42'	48.47'
C102	325.00'	007°40'37"	S37°25'57"E	44.08'	44.11'
C103	325.00'	002°53'23"	S41°36'37"E	16.39'	16.39'
C104	325.00'	001°56'34"	S45°51'27"E	11.02'	11.02'
C105	425.00'	006°53'28"	N49°51'58"W	51.10'	51.13'
C106	425.00'	001°56'27"	N53°18'30"W	14.80'	14.80'
C107	375.00'	004°50'31"	N51°59'59"W	31.68'	31.69'
C108	375.00'	004°06'57"	N47°21'45"W	27.28'	27.27'
C109	15.00'	035°19'16"	N68°01'23"W	8.52'	8.67'
C110	15.00'	025°29'28"	N12°10'56"W	8.82'	8.67'
C111	50.00'	058°52'36"	N27°52'57"E	49.16'	51.39'
C112	50.00'	130°58'17"	S58°11'09"W	90.99'	114.29'
C113	275.00'	009°26'32"	S47°26'39"W	18.11'	18.12'
C114	275.00'	011°39'28"	S56°12'36"W	55.87'	55.97'
C115	275.00'	007°47'03"	S63°56'47"W	18.58'	18.58'
C116	325.00'	004°00'18"	S48°58'39"E	22.57'	22.72'
C117	325.00'	009°27'49"	S51°57'05"E	53.44'	53.49'
C118	375.00'	003°12'00"	S52°58'53"E	20.95'	20.95'
C119	375.00'	006°06'04"	S48°51'23"E	39.87'	39.89'
C120	425.00'	001°24'27"	N45°58'58"W	10.43'	10.43'
C121	425.00'	007°36'00"	N50°39'11"W	56.34'	56.38'
C122	375.00'	007°37'01"	N50°32'39"W	49.07'	49.11'
C123	375.00'	001°30'17"	N44°07'56"W	9.85'	9.85'
C124	485.00'	002°40'50"	N52°39'37"W	21.07'	21.04'
C125	485.00'	005°32'33"	N48°03'34"W	46.92'	46.92'
C126	375.00'	004°33'06"	N43°00'44"W	21.78'	21.77'
C127	375.00'	008°36'36"	N37°35'12"W	31.74'	31.75'
C128	425.00'	009°22'51"	S47°58'13"E	39.90'	39.91'
C129	425.00'	003°51'17"	S52°37'17"E	29.08'	29.09'
C130	375.00'	008°56'47"	S51°38'35"E	58.52'	58.54'
C131	275.00'	004°31'18"	S40°22'23"E	21.70'	21.70'
C132	275.00'	004°18'36"	S44°57'27"E	20.67'	20.67'
C133	275.00'	000°31'31"	S50°07'31"W	2.52'	2.52'
C134	325.00'	002°01'11"	N35°17'21"W	13.16'	13.16'
C135	325.00'	009°49'57"	N40°15'52"W	55.04'	55.04'
C136	535.00'	000°23'08"	N45°23'21"W	3.60'	3.60'
C137	535.00'	009°13'39"	N49°28'54"W	68.94'	68.99'
C138	535.00'	002°23'28"	N52°46'37"W	21.97'	21.98'
C139	275.00'	008°50'14"	N50°04'14"W	42.37'	42.42'
C140	275.00'	004°23'40"	N33°22'16"W	118.98'	117.86'

LINE TABLE		
LINE #	BEARING	LENGTH
L1	N75°41'54"E	52.66'
L2	S28°49'08"E	110.71'
L3	N60°37'37"E	109.51'
L4	N29°22'23"W	17.70'
L5	N27°57'46"W	43.33'
L6	N17°42'47"W	35.00'
L7	N25°57'50"E	87.19'
L8	S46°16'42"E	49.89'
L9	S76°

Doc#2021140830

FINAL PLAT OF WOLF RANCH WEST, SECTION 1BG

A 62.936 ACRE TRACT OF LAND, BEING OUT OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC, RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608 AND C. STUBBLEFIELD SURVEY, ABSTRACT NO. 558 BOTH BEING IN WILLIAMSON COUNTY, TEXAS.

PLAT NOTES

1. WATER AND WASTEWATER PROVIDED BY CITY OF GEORGETOWN. ELECTRIC SERVICES PROVIDED BY GEORGETOWN UTILITY SERVICES.
2. ALL STRUCTURES/ OBSTRUCTIONS ARE PROHIBITED IN DRAINAGE EASEMENTS.
3. THERE ARE AREAS WITHIN THE BOUNDARIES OF THIS SUBDIVISION IN THE 100-YEAR FLOODPLAIN AS DEFINED BY FIRM MAP NUMBER 48491C0480F, EFFECTIVE DATE OF DECEMBER 20, 2019.
4. PRIOR TO ANY CHANNEL ALTERATION OR BRIDGE CONSTRUCTION, WHICH WILL CHANGE EXISTING FLOOD PATTERNS OR ELEVATIONS, A LETTER OF MAP AMENDMENT MUST BE SUBMITTED TO THE CITY OF GEORGETOWN FLOODPLAIN ADMINISTRATOR FOR APPROVAL AND APPROVAL BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
5. IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATION SHOULD BE BUILT AT LEAST ONE-FOOT ABOVE THE SURROUNDING GROUND, AND THE GROUND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF 1/2" PER FOOT FOR A DISTANCE OF AT LEAST 10 FEET.
6. A 10-FOOT PUBLIC UTILITY EASEMENT IS DEDICATED ALONG ALL STREET FRONTAGES WITHIN THIS PLAT.
7. PARKLAND DEDICATION REQUIREMENTS ARE BEING MET BY THE PARKLAND IMPROVEMENTS AGREEMENT BETWEEN THE CITY OF GEORGETOWN AND H4 WR, LP AND H4 GEORGETOWN FILED JULY 17, 2018.
8. ANY HERITAGE TREE OR CREDIT TREE AS NOTED ON THIS PLAT IS SUBJECT TO EXHIBIT H-7 OF THE CITY OF GEORGETOWN ORDINANCE NO. 2018-26 AMENDING THE OFFICIAL ZONING MAP TO BE REZONED FROM AGRICULTURE (AG) DISTRICT TO PLANNED UNIT DEVELOPMENT (PUD) KNOWN AS WOLF RANCH HILLWOOD, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018.
9. THE MONUMENTS OF THIS PLAT HAVE BEEN ROTATED TO THE NAD 83/93 HARN-TEXAS CENTRAL ZONE AND NAVD 88.
10. ALL INDIVIDUAL LOTS CONTAINING HERITAGE TREES ARE CONFIGURED AND DESIGNED SO THAT THE LOT IS DEVELOPABLE FOR THE INTENDED PURPOSE WITHOUT REQUIRING REMOVAL OF THE HERITAGE TREES OR EXCEEDING THE PERCENTAGE OF ALLOWABLE DISTURBANCE WITHIN THE HERITAGE TREES CRZ.
11. THE MAXIMUM GROSS IMPERVIOUS COVER FOR THE PARCEL IS 50%. THE MAXIMUM IMPERVIOUS COVERAGE PER RESIDENTIAL LOT IS 60%, AND THE MAXIMUM IMPERVIOUS COVERAGE PER OPEN SPACE LOT AND PARK LOT IS 5% PER GEORGETOWN ORDINANCE NUMBER 2018-26, APPROVED BY THE CITY OF GEORGETOWN CITY COUNCIL ON NOVEMBER 13, 2018. THE MAXIMUM IMPERVIOUS COVERAGE PER NON-RESIDENTIAL LOT SHALL BE PURSUANT TO THE UDC AT THE TIME OF SITE PLAN APPLICATION BASED ON THE ZONING DESIGNATION OF THE PROPERTY.
12. THE LANDOWNER ASSUMES ALL RISKS ASSOCIATED WITH IMPROVEMENTS LOCATED IN THE RIGHT-OF-WAY, OR ROAD WIDENING EASEMENTS. BY PLACING ANYTHING IN THE RIGHT-OF-WAY OR ROAD WIDENING EASEMENTS, THE LANDOWNER INDEMNIFIES AND HOLDS THE CITY OF GEORGETOWN, WILLIAMSON COUNTY, THEIR OFFICERS, AGENTS AND EMPLOYEES HARMLESS FROM ANY LIABILITY OWING TO PROPERTY DEFECTS OR NEGLIGENCE NOT ATTRIBUTABLE TO THEM AND ACKNOWLEDGES THAT THE IMPROVEMENTS MAY BE REMOVED BY THE CITY AND/OR COUNTY AND THE OWNER OF THE IMPROVEMENTS WILL BE RESPONSIBLE FOR THE RELOCATION AND/ OR REPLACEMENT OF THE IMPROVEMENTS.
13. THE BUILDING OF ALL STREETS, ROADS, AND OTHER PUBLIC THOROUGHFARES AND ANY BRIDGES OR CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED IS THE RESPONSIBILITY OF THE OWNERS OF THE TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS PRESCRIBED BY THE CITY OF GEORGETOWN AND/ OR WILLIAMSON COUNTY, TEXAS. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY OBLIGATION TO BUILD ANY OF THE STREETS, ROADS, OR OTHER PUBLIC THOROUGHFARES SHOWN ON THIS PLAT OR OF CONSTRUCTING ANY OF THE BRIDGES OR DRAINAGE IMPROVEMENTS IN CONNECTION THEREWITH. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUME ANY RESPONSIBILITY FOR DRAINAGE WAYS OR EASEMENTS IN THE SUBDIVISION, OTHER THAN THOSE DRAINING OR PROTECTING THE ROAD SYSTEM AND STREETS IN THEIR RESPECTIVE JURISDICTIONS.
14. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY RESPONSIBILITY FOR THE ACCURACY OF THE REPRESENTATIONS BY OTHER PARTIES IN THIS PLAT. FLOODPLAIN DATA, IN PARTICULAR, MAY CHANGE DEPENDING ON SUBSEQUENT DEVELOPMENT. IT IS FURTHER UNDERSTOOD THAT THE OWNERS OF THE TRACT OF LAND COVERED BY THIS PLAT MUST INSTALL AT THEIR OWN EXPENSE ALL TRAFFIC CONTROL DEVICES AND SIGNAGE THAT MAY BE REQUIRED BEFORE THE STREETS IN THE SUBDIVISION HAVE FINALLY BEEN ACCEPTED FOR MAINTENANCE BY THE CITY AND/OR COUNTY.
15. THIS SUBDIVISION IS SUBJECT TO THE CITY OF GEORGETOWN WATER CONSERVATION ORDINANCE.
16. THIS SUBDIVISION IS SUBJECT TO THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS FOR PROPERTIES OVER THE EDWARDS AQUIFER RECHARGE ZONE. WATER QUALITY PONDS WITHIN THIS SUBDIVISION SHALL REMOVE 85% TSS.
17. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED IN SEPTEMBER OF 2017. ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.
18. ALL SEDIMENTATION, FILTRATION, DETENTION, AND/OR RETENTION BASINS AND RELATED APPURTENANCES SHOWN SHALL BE SITUATED WITHIN A DRAINAGE EASEMENT OR DRAINAGE LOT. THE OWNERS, HOA, OR ASSIGNEES OF THE TRACTS UPON WHICH ARE LOCATED SUCH EASEMENTS, APPURTENANCES, AND DETENTION FACILITIES SHALL MAINTAIN SAME AND BE RESPONSIBLE FOR THEIR MAINTENANCE, ROUTINE INSPECTION, AND UPKEEP.
19. RIGHT-OF-WAY EASEMENTS FOR WIDENING ROADWAYS OR IMPROVING DRAINAGE SHALL BE MAINTAINED BY THE LANDOWNER UNTIL ROAD OR DRAINAGE IMPROVEMENTS ARE ACTUALLY CONSTRUCTED IN THE PROPERTY. THE CITY AND/OR COUNTY HAVE THE RIGHT AT ANY TIME TO TAKE POSSESSION OF ANY ROAD WIDENING EASEMENT FOR CONSTRUCTION, IMPROVEMENT, OR MAINTENANCE OF THE ADJACENT ROAD.
20. OPEN SPACE LOT 2, BLOCK C, OPEN SPACE LOT 25, BLOCK C, AND WATER QUALITY POND LOT 15, BLOCK C ARE DESGINATED AS DRAINAGE EASEMENTS.

FIELD NOTES FOR

A 62.936 ACRE TRACT OF LAND, BEING OUT OF A REMNANT PORTION OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC, RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, WILLIAMSON COUNTY, TEXAS. SAID 62.936 ACRE TRACT BEING MORE FULLY DESCRIBED AS FOLLOWS, WITH BEARINGS BASED ON THE TEXAS COORDIANTE SYSTEM ESTABLISHED FOR THE CENTRAL ZONE FROM THE NORTH AMERICAN DATUM OF 1983 NAD 83 (NA2011) EPOCH 2010.00;

BEGINNING at a ½" iron rod with yellow cap marked "Pape-Dawson" set for the POINT OF BEGINNING hereof,

THENCE N 29°58'17" W, with the east line of said Wolf Ranch West, Section 1AG, same being the west line of said 75.004 acre tract, a distance of 146.89 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for the southwest corner of a called 41.264 acre tract conveyed to H4 Georgetown Phase 1, LLC, recorded in Document No. 2020157115 of the Official Public Records of Williamson County, Texas, same being the northwest corner of said 75.004 acre tract hereof;

THENCE departing the east line of said Wolf Ranch West, Section 1AG, with the northeast line of said 75.004 acre tract, same being southwest line of said 41.264 acre tract, the following thirty-four (34) courses and distances:

1. N 61°15'52" E, a distance of 109.30 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
2. N 69°15'50" E, a distance of 107.25 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
3. N 75°41'54" E, a distance of 52.66 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
4. S 28°44'08" E, a distance of 110.71 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
5. N 60°37'37" E, a distance of 109.51 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
6. N 29°22'23" W, a distance of 17.75 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
7. N 60°37'37" E, a distance of 170.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
8. N 27°07'49" W, a distance of 43.33 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
9. N 17°43'47" W, a distance of 35.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
10. N 71°33'39" E, a distance of 243.88 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
11. N 64°12'59" E, a distance of 87.19 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
12. N 50°51'50" E, a distance of 87.19 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
13. S 45°48'44" E, a distance of 120.18 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangent curvature hereof,
14. along the arc of a curve to the left, having a radius of 485.00 feet, a central angle of 00°42'32", a chord bearing and distance of N 44°05'45" E, 6.00 feet, an arc length of 6.00 feet to a calculated point of non-tangency hereof,
15. S 46°16'42" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
16. along the arc of a curve to the right, having a radius of 536.55 feet, a central angle of 02°02'28", a chord bearing and distance of S 44°44'32" W, 19.11 feet, an arc length of 19.11 feet to a calculated point of non-tangency hereof,
17. S 32°26'25" E, a distance of 127.08 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
18. S 76°07'38" E, a distance of 22.93 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
19. S 68°10'32" E, a distance of 241.35 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
20. S 47°41'19" E, a distance of 77.50 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
21. S 61°22'47" E, a distance of 99.52 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangent curvature hereof,
22. along the arc of a curve to the left, having a radius of 275.00 feet, a central angle of 07°01'36", a chord bearing and distance of N 59°48'16" E, 33.70 feet, an arc length of 33.73 feet to a calculated point of non-tangency hereof,
23. S 33°42'32" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
24. S 56°49'12" W, a distance of 6.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
25. S 49°08'26" E, a distance of 95.37 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
26. S 54°29'21" E, a distance of 210.11 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
27. S 47°47'34" E, a distance of 82.84 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
28. S 45°16'47" E, a distance of 341.13 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
29. S 08°49'26" E, a distance of 60.08 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
30. N 65°52'15" E, a distance of 6.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
31. S 24°07'45" E, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
32. S 65°52'15" W, a distance of 6.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
33. S 45°45'40" E, a distance of 125.96 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
34. S 84°10'00" E, a distance of 384.65 feet to a calculated point on the north line of River Ridge Section One, a subdivision according to the plat recorded in Cabinet D, Slide 194 of the Plat Records of Williamson County, Texas, same being the southeast corner of said 75.004 acre tract, also being the southwest corner of said 41.264 acre tract for the southeast corner hereof,

THENCE with the north line of said River Ridge Section One, same being the south line of said 75.004 acre tract, the following thirteen courses and distances:

1. S 09°13'51" W, a distance of 239.87 feet to a calculated point hereof,
2. S 24°35'41" W, a distance of 152.14 feet to a calculated point hereof,
3. S 15°11'48" W, a distance of 68.29 feet to a calculated point hereof,
4. S 00°58'21" E, a distance of 64.02 feet to a calculated point hereof,
5. S 22°23'03" W, a distance of 204.09 feet to a calculated point hereof,
6. S 43°49'35" W, a distance of 346.85 feet to a calculated point hereof,
7. S 50°57'43" W, a distance of 266.63 feet to a calculated point hereof,
8. S 74°32'14" W, a distance of 110.96 feet to a calculated point hereof,
9. N 82°48'18" W, a distance of 406.55 feet to a calculated point hereof,
10. N 75°41'12" W, a distance of 191.41 feet to a calculated point hereof,
11. N 61°52'51" W, a distance of 151.90 feet to a calculated point hereof,
12. N 47°43'27" W, a distance of 206.54 feet to a calculated point hereof,
13. N 58°02'59" W, a distance of 121.04 feet to a calculated point for a southwest corner of said Wolf Ranch West, Section 1AG, same being a western corner of said 75.004 acre tract, also being a point in the north line of said River Ridge Section One hereof,

THENCE with the west line of said 75.004 acre tract, same being the east line of said Wolf Ranch West, Section 1AG, the following twenty-four (24) courses and distances:

1. N 73°21'43" E, a distance of 484.57 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
2. N 07°52'21" W, a distance of 99.28 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
3. N 34°32'58" W, a distance of 81.62 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
4. N 17°38'02" W, a distance of 319.19 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
5. N 86°28'18" W, a distance of 112.90 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangent curvature hereof,
6. along the arc of a curve to the left, having a radius of 61.50 feet, a central angle of 24°41'30", a chord bearing and distance of N 60°02'47" W, 26.30 feet, an arc length of 26.50 feet to a calculated point of non-tangency hereof,
7. along the arc of a curve to the right, having a radius of 181.50 feet, a central angle of 28°16'41", a chord bearing and distance of N 58°15'11" W, 88.67 feet, an arc length of 89.58 feet to a calculated point of tangency hereof,
8. N 44°06'50" W, a distance of 9.89 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of tangent curvature hereof,
9. along the arc of a curve to the right, having a radius of 15.00 feet, a central angle of 90°00'00", a chord bearing and distance of N 00°53'10" E, 21.21 feet, an arc length of 23.56 feet to a calculated point of tangency hereof,
10. N 44°06'50" W, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
11. N 45°53'10" E, a distance of 5.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
12. N 44°06'50" W, a distance of 250.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
13. S 45°53'10" W, a distance of 5.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
14. N 44°06'50" W, a distance of 50.00 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangent curvature hereof,
15. along the arc of a curve to the right, having a radius of 15.00 feet, a central angle of 90°00'00", a chord bearing and distance of N 89°06'50" W, 21.21 feet, an arc length of 23.56 feet to a calculated point of non-tangency hereof,
16. N 44°06'50" W, a distance of 80.17 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set for a point of non-tangent curvature hereof,
17. along the arc of a curve to the left, having a radius of 332.04 feet, a central angle of 19°49'18", a chord bearing and distance of N 54°00'39" W, 114.30 feet, an arc length of 114.87 feet to a calculated point of non-tangency hereof,
18. N 63°55'18" W, a distance of 261.47 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
19. N 20°02'03" E, a distance of 60.08 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
20. N 10°26'12" E, a distance of 69.42 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
21. S 77°18'23" W, a distance of 109.69 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
22. N 36°02'15" W, a distance of 114.68 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
23. S 53°57'45" W, a distance of 31.10 feet to a ½" iron rod with yellow cap marked "Pape-Dawson" set hereof,
24. N 36°02'15" W, a distance of 50.00 feet to the POINT OF BEGINNING and containing 62.936 acres in Williamson County, Texas, Said tract being described in accordance with a survey made on the ground and a plat prepared by Pape Dawson Engineers, Inc. under Job No. 51127-00.

PAPE-DAWSON ENGINEERS

AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

SHEET 5 OF 6 — 2021-25-FP

WOLF RANCH WEST, SECTION 1BG — Civil Job No. 51127-00 Survey Job No. 51127-00

Date: Aug 04, 2021, 12:20pm User ID: KRose File: H:\Survey\CIVIL\51127-00\Plat\PL-51127-00_1BG.dwg

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Doc#2021140830

FINAL PLAT OF WOLF RANCH WEST, SECTION 1BG

A 62.936 ACRE TRACT OF LAND, BEING OUT OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC, RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SITUATED IN THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608 AND C. STUBBLEFIELD SURVEY, ABSTRACT NO. 558 BOTH BEING IN WILLIAMSON COUNTY, TEXAS.

STATE OF TEXAS §
COUNTY OF Dallas § KNOW ALL MEN BY THESE PRESENTS

THAT H4 GEORGETOWN PHASE 1, LLC, AS OWNERS OF CERTAIN 62.936 ACRE TRACT OF LAND BEING OUT OF A CALLED 75.004 ACRE TRACT CONVEYED TO H4 GEORGETOWN PHASE 1, LLC RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, DO HEREBY SUBDIVIDE SAID TRACT AS SHOWN HEREON; DO HEREBY COVENANT TO ALL RESTRICTIONS LISTED HEREIN, WHICH SHALL RUN WITH THE LAND; DO HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE. I HEREBY BIND MY HEIRS, SUCCESSORS, AND ASSIGNS TO WARRANT AND FOREVER DEFEND SUCH DEDICATIONS, ALL AND SINGULAR, TO THE CITY OF GEORGETOWN AGAINST EVERY PERSON WHOMSOEVER CLAIMING OR TO CLAIM THE SAME OR ANY PART THEREOF, BY THROUGH OR UNDER H4 GEORGETOWN PHASE 1, LLC BUT NOT OTHERWISE. THIS SUBDIVISION IS TO BE KNOWN AS WOLF RANCH WEST, SECTION 1BG.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 9 DAY OF August, 2021

BY: [signature]
NAME: Fred Balda
TITLE: President

H4 GEORGETOWN PHASE 1, LLC
3000 TURTLE CREEK
DALLAS, TX 75219

STATE OF TEXAS §
COUNTY OF Dallas § KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Fred Balda, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 9 DAY OF August 2021

Shanna Dear
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

SHANNON SUSAN DEAR
Notary Public, State of Texas
Comm. Expires 01-22-2022
Notary ID 10935492

MY COMMISSION EXPIRES: 1/22/22

STATE OF TEXAS §
COUNTY OF Harris § KNOW ALL MEN BY THESE PRESENTS

I, TEXAS CAPITAL BANK, N.A., LIEN HOLDER OF THE CERTAIN 75.004 TRACT OF LAND SHOWN HEREON AND DESCRIBED IN A DEED RECORDED IN DOCUMENT NO. 2020157115 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, DO HEREBY CONSENT TO THE SUBDIVISION OF SAID TRACT AS SHOWN HEREON, AND DO FURTHER HEREBY JOIN, APPROVE AND CONSENT TO ALL PLAT NOTES AND REQUIREMENTS SHOWN HEREON, AND DO HEREBY DEDICATE TO THE CITY OF GEORGETOWN THE STREETS, ALLEYS, RIGHTS-OF-WAY, EASEMENTS AND PUBLIC PLACES SHOWN HEREON FOR SUCH PUBLIC PURPOSES AS THE CITY OF GEORGETOWN MAY DEEM APPROPRIATE. THIS SUBDIVISION IS TO BE KNOWN AS WOLF RANCH WEST, SECTION 1AG.

TO CERTIFY WHICH, WITNESS BY MY HAND THIS 11 DAY OF August, 2021

BY: Tom Mil
NAME: TOM MILLER
TITLE: VICE PRESIDENT

STATE OF TEXAS §
COUNTY OF Harris § KNOW ALL MEN BY THESE PRESENTS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, ON THIS DAY PERSONALLY APPEARED Tom Miller, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS 11 DAY OF August 2021

[signature]
NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS

MARINITA HURTADO
Notary Public, State of Texas
Comm. Expires 11-02-2024
Notary ID 132760797

MY COMMISSION EXPIRES: 11-02-2024

ENGINEER'S CERTIFICATION

I, MICHAEL S. FISHER, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS (WOLF RANCH WEST, SECTION 1BG) IS IN THE EDWARDS AQUIFER RECHARGE ZONE AND IS ENCROACHED BY A ZONE "AE" FLOOD AREA, AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT ADMINISTRATION FLOOD HAZARD BOUNDARY MAP, COMMUNITY PANEL NUMBER 48491C0480F, EFFECTIVE DATE DECEMBER 20, 2019, AND THAT EACH LOT CONFORMS TO THE CITY OF GEORGETOWN REGULATIONS.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT TRAVIS, COUNTY, TEXAS THIS 13 DAY OF AUGUST 2021

STATE OF TEXAS — MICHAEL S. FISHER — 87704 — LICENSED PROFESSIONAL ENGINEER

8/13/21

MICHAEL S. FISHER
REGISTERED PROFESSIONAL ENGINEER NO. 87704
PAPE-DAWSON ENGINEERS, INC.
TBPE, FIRM REGISTRATION NO. 470
TBPLS, FIRM REGISTRATION NO. 10028801
10801 N MOPAC EXPY,
BLDG. 3, SUITE 200
AUSTIN, TEXAS, 78759

SURVEYOR'S CERTIFICATION

I, ~~PARKER GRAHAM,~~ VALERIE ZURCHER REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE FROM AN ACTUAL SURVEY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON, AND THAT THERE ARE NO APPARENT DISCREPANCIES, CONFLICTS, OVERLAPPING OF IMPROVEMENTS, VISIBLE UTILITY LINES OR ROADS IN PLACE, EXCEPT AS SHOWN ON THE ACCOMPANYING PLAT, AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF GEORGETOWN, TEXAS.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT TRAVIS, COUNTY, TEXAS THIS 13th DAY OF August, 2021

STATE OF TEXAS — REGISTERED — VALERIE ZURCHER — 6222 — PROFESSIONAL LAND SURVEYOR

~~PARKER J. GRAHAM~~ VALERIE ZURCHER
REGISTERED PROFESSIONAL LAND SURVEYOR NO. ~~5556~~ 6222
PAPE-DAWSON ENGINEERS, INC.
TBPE, FIRM REGISTRATION NO. 470
TBPLS, FIRM REGISTRATION NO. 10028801
10801 N MOPAC EXPY,
BLDG. 3, SUITE 200
AUSTIN, TEXAS, 78759

BASED UPON THE ABOVE REPRESENTATIONS OF THE ENGINEER OR SURVEYOR WHOSE SEAL IS AFFIXED HERETO, AND AFTER A REVIEW OF THE PLAT AS REPRESENTED BY THE SAID ENGINEER OR SURVEYOR, I FIND THAT THIS PLAT COMPLIES WITH THE REQUIREMENTS OF CHAPTER 15.44, FLOOD DAMAGE PREVENTION, OF THE GEORGETOWN MUNICIPAL CODE. THIS CERTIFICATION IS MADE SOLELY UPON SUCH REPRESENTATIONS AND SHOULD NOT BE RELIED UPON FOR VERIFICATIONS OF FACTS ALLEGED. THE CITY OF GEORGETOWN DISCLAIMS ANY RESPONSIBILITY TO ANY MEMBER OF THE PUBLIC OR INDEPENDENT VERIFICATIONS OF THE REPRESENTATION, FACTUAL OR OTHERWISE, CONTAINED IN THIS PLAT AND THE DOCUMENTS ASSOCIATED WITH IT.

WESLEY WRIGHT, P.E., CFM, FLOODPLAIN COORDINATOR
CITY OF GEORGETOWN, TEXAS
DATE 08/20/21

THIS SUBDIVISION TO BE KNOWN AS THE FINAL PLAT OF WOLF RANCH WEST, SECTION 1BG, HAS BEEN ACCEPTED AND APPROVED FOR FILING OF RECORD WITH THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS, ACCORDING TO THE MINUTES OF THE MEETING OF THE GEORGETOWN PLANNING AND ZONING COMMISSION OF THE 17th DAY OF August 2021, A.D.

~~TRAVIS PERTHUIS~~, CHAIRMAN — Chere Heintzmann — DATE 8/18/2021

KAYLAH MCCORD, SECRETARY — DATE 8/18/2021

I, SOFIA NELSON, PLANNING DIRECTOR OF THE CITY OF GEORGETOWN, TEXAS, DO HEREBY CERTIFY THIS PLAT IS APPROVED FOR FILING OF RECORD WITH THE COUNTY CLERK OF WILLIAMSON COUNTY, TEXAS.

SOFIA NELSON, PLANNING DIRECTOR — DATE 8/18/21

STATE OF TEXAS §
COUNTY OF WILLIAMSON § KNOW ALL MEN BY THESE PRESENTS

I, NANCY RISTER, CLERK OF THE COUNTY COURT OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT IN WRITING, WITH ITS CERTIFICATION OF AUTHENTICATION, WAS FILED FOR RECORD IN MY OFFICE ON THE 15th DAY OF September 2021, A.D., AT 2:30 O'CLOCK, P.M. AND DULY RECORDED THIS THE 15th DAY OF September 2021, A.D., AT 3:03 O'CLOCK, P.M. IN THE OFFICIAL PUBLIC RECORDS OF SAID COUNTY IN DOCUMENT NO. 2021140830.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT THE COUNTY COURT OF SAID COUNTY, AT MY OFFICE IN GEORGETOWN, TEXAS, THE DATE LAST SHOWN ABOVE WRITTEN.

NANCY RISTER, CLERK,
COUNTY COURT OF WILLIAMSON COUNTY, TEXAS

BY: Brenda McKenzie, DEPUTY

COUNTY COURT — WILLIAMSON COUNTY, TEXAS

PAPE-DAWSON ENGINEERS

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TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

SHEET 6 OF 6 — 2021-25-FP

WOLF RANCH WEST, SECTION 1BG — Civil Job No. 51127-00 Survey Job No. 51127-00

Unofficial Document

No.	REVISIONS	DATE	BY

Kimley»Horn

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10814 JOLLYVILLE ROAD, CAMPUS IV, SUITE 200, AUSTIN, TX 78759
PHONE: 512-418-1771
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS — JOHN A. PICKENS — 110631 — LICENSED PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309
DATE SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

WOLF RANCH WEST SECTION 1BG FINAL PLAT (2 OF 2)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER 14 OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 18, 2026 11:33:24am File Path: K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Final Plat-Section1BG.dwg
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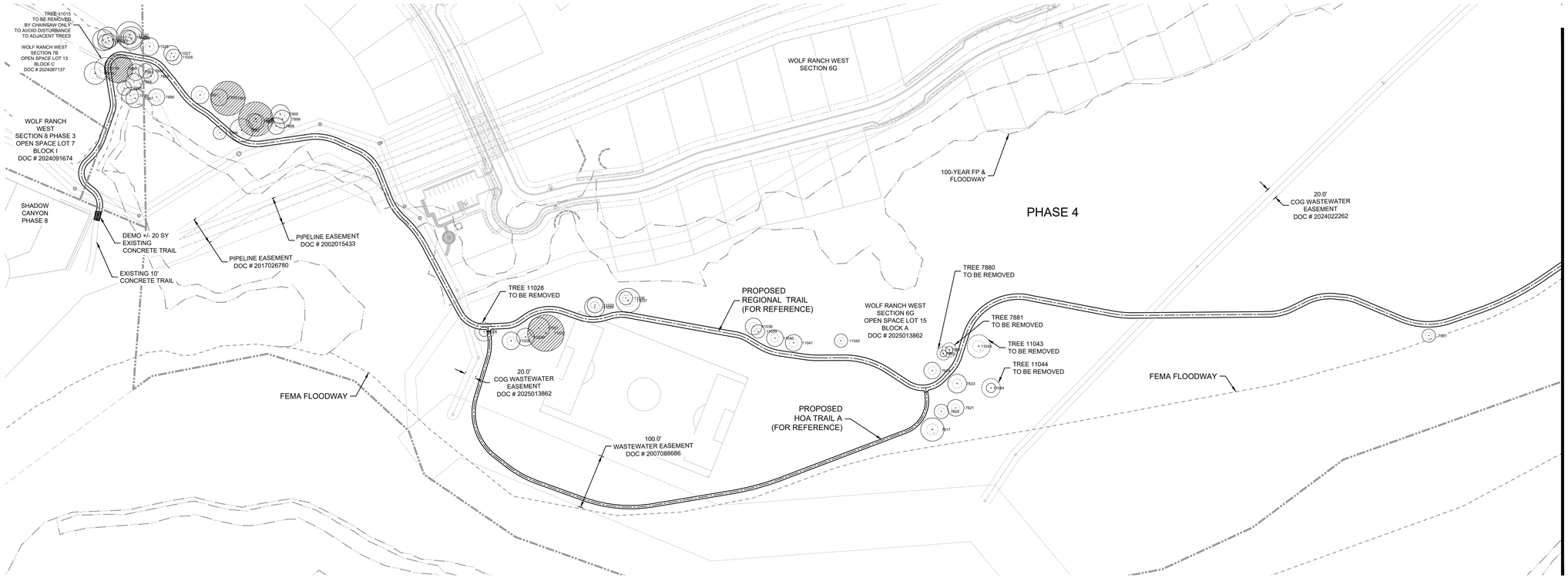


TREE LEGEND

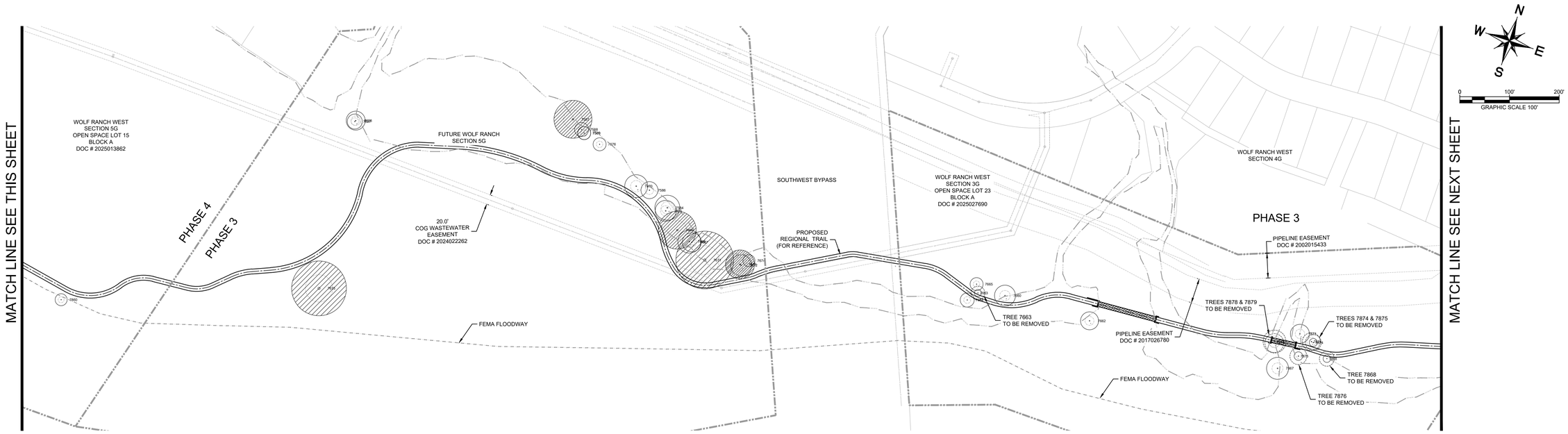
- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- 632 EXISTING CONTOUR
- FEMA ZONE "A"
- EXISTING FENCE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING OVERHEAD UTILITY POLE



No.	REVISIONS	DATE	BY

Kimley»Horn

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TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER

04/18/2026

KHA PROJECT 064461309
DATE SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

EXISTING CONDITIONS AND DEMOLITION PLAN (1 OF 2)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
15
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 04:40:13pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Existing Conditions and Demolition Plan.dwg
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Plotted By:Pickens, John Date:April 19, 2026 04:59:24pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-1-Existing Conditions and Demolition Plan.dwg
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TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

N W E S

0 100' 200'

GRAPHIC SCALE 100'

LEGEND

- PROPERTY LINE
- 632 EXISTING CONTOUR
- FEMA ZONE "A"
- EXISTING FENCE
- EXISTING OVERHEAD UTILITY LINE
- EXISTING OVERHEAD UTILITY POLE

MATCH LINE SEE PREVIOUS SHEET

WOLF RANCH WEST SECTION 4G

WOLF RANCH WEST SECTION 3G

WOLF RANCH WEST SECTION 3G OPEN SPACE LOT 23 BLOCK A DOC # 2025027690

WOLF RANCH WEST SECTION 3G OPEN SPACE LOT 21 BLOCK A DOC # 2025027690

VALVE SITE EASEMENT DOC # 2017026780

PIPELINE EASEMENT DOC # 2017026780

TREE 7873 TO BE REMOVED

RIVER OVERLOOK ROAD

WATER QUALITY POND

WATER QUALITY POND

WOLF RANCH WEST SECTION 3G WQ LOT 22 BLOCK A DOC # 2025027690

FEMA FLOODWAY

PIPELINE EASEMENT DOC # 2002015433

PROPOSED REGIONAL TRAIL (FOR REFERENCE)

PHASE 4

DEMO APPROXIMATELY 35 SY OF EXISTING CONCRETE SIDEWALK

TREE 11006 TO BE REMOVED

100-YEAR FP & FLOODWAY

TREES 7647 & 7648 TO BE REMOVED

± 170 LF OF HOA FENCE TO BE REMOVED COORDINATE REMOVAL WITH HILLWOOD

PROPOSED REGIONAL TRAIL (FOR REFERENCE)

± 240 LF OF SPLIT RAIL FENCE TO BE REMOVED

WOLF RANCH WEST SECTION 1AG AMENITY CENTER LOT 1 BLOCK C DOC # 2021070191

WOLF RANCH WEST SECTION 1BG

DEMO APPROXIMATELY 165 SY OF EXISTING CONCRETE TRAIL & MAINTENANCE PATH

EXISTING 10' TRAIL TO REMAIN

TREE 7607 TO BE REMOVED

EXISTING 10' TRAIL TO REMAIN

20.0' COG UTILITY EASEMENT DOC # 2021140830

FEMA FLOODWAY

WOLF RANCH WEST SECTION 1BG OPEN SPACE LOT 25 BLOCK C DOC # 2021140830

No.	REVISIONS	DATE	BY

Kimley»Horn

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PHONE: 512-418-1771
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER

04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

EXISTING CONDITIONS AND DEMOLITION PLAN (2 OF 2)

WOLF RANCH REGIONAL TRAIL

PHASE 3 & 4

CITY OF GEORGETOWN

WILLIAMSON COUNTY, TEXAS

SHEET NUMBER

16

OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 04:51:45pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Overall Trail plan.dwg
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SHEET NUMBER	17 OF 53
2025-28-CON	

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

OVERALL TRAIL PLAN (1 OF 2)

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

04/18/2026

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PHONE: 512-418-1771
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TEXAS REGISTERED ENGINEERING FIRM F-928

No.	REVISIONS	DATE	BY

Plotted By:Pickens, John Date:April 19, 2026 04:57:22pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Overall Trail plan.dwg
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TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

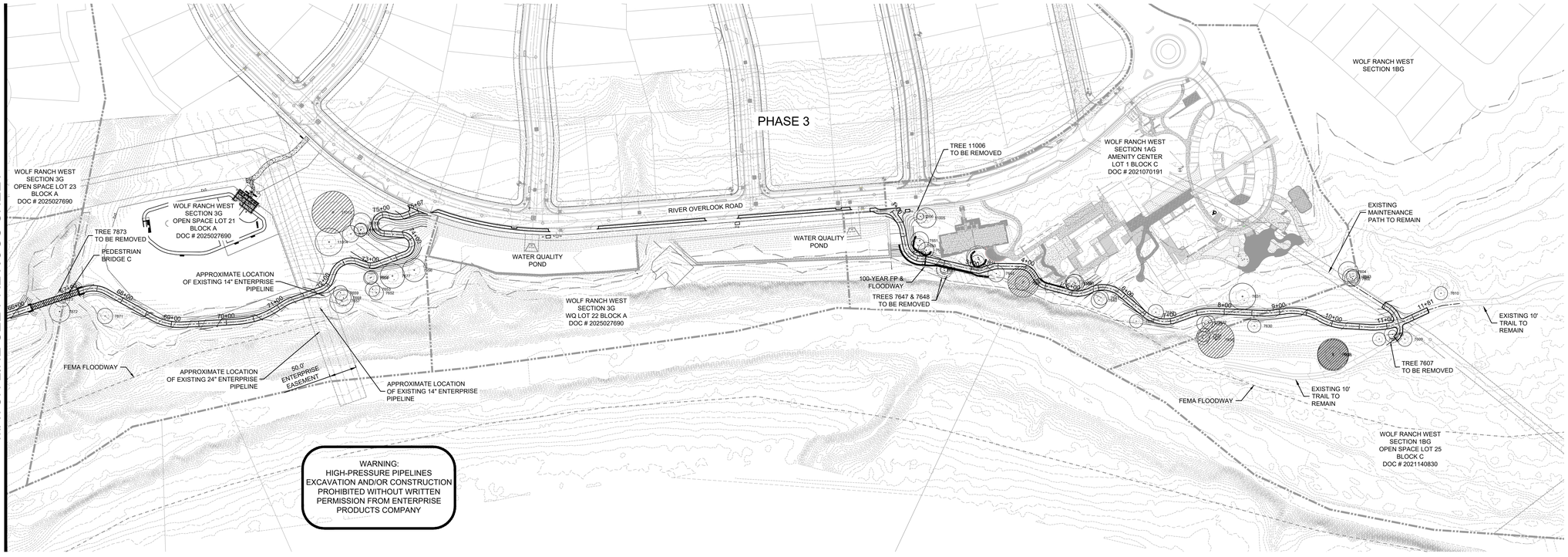
NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

N W E S

0 100' 200'

GRAPHIC SCALE 100'



No.	REVISIONS	DATE	BY

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STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED PROFESSIONAL ENGINEER

04/18/2026

KHA PROJECT	064461309
DATE:	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

OVERALL TRAIL PLAN (2 OF 2)

WOLF RANCH REGIONAL TRAIL

PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
18
OF 53

2025-28-CON

WARNING:
HIGH-PRESSURE PIPELINES
EXCAVATION AND/OR CONSTRUCTION
PROHIBITED WITHOUT WRITTEN
PERMISSION FROM ENTERPRISE
PRODUCTS COMPANY

LEGEND

- PROPERTY LINE
- 632 — PROPOSED CONTOUR
- 632 — EXISTING CONTOUR
- (SF) — SILT FENCE
- STABALIZED CONSTRUCTION ENTRANCE/EXIT
- (IP) — INLET PROTECTION
- (RB) — ROCK BERM
- LIMITS OF CONSTRUCTION
- EXISTING TREE (TO BE REMOVED)
- J-HOOK

NOTE:

1. ANY PRUNING OF HERITAGE TREES SHALL REQUIRE A SEPARATE PERMIT FROM THE CITY OF GEORGETOWN PRIOR TO PERFORMING THE PRUNING.

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

No.	REVISIONS	DATE	BY

Kimley»Horn

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04/18/2026

KHA PROJECT 064461309
DATE SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

EROSION CONTROL & TREE PRESERVATION PLAN (1 OF 5)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
19
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 07:07:56pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Erosion Control.dwg
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TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

NOTE:

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LEGEND

- PROPERTY LINE
- 632 PROPOSED CONTOUR
- 632 EXISTING CONTOUR
- SF SILT FENCE
- STABALIZED CONSTRUCTION ENTRANCE/EXIT
- IP INLET PROTECTION
- RB ROCK BERM
- LIMITS OF CONSTRUCTION
- EXISTING TREE (TO BE REMOVED)
- J-HOOK

No.	REVISIONS	DATE	BY

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04/18/2026

KHA PROJECT 064461309
DATE: SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
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EROSION CONTROL & TREE PRESERVATION PLAN (2 OF 5)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
20
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 18, 2026 07:12:56pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Erosion Control Plan.dwg
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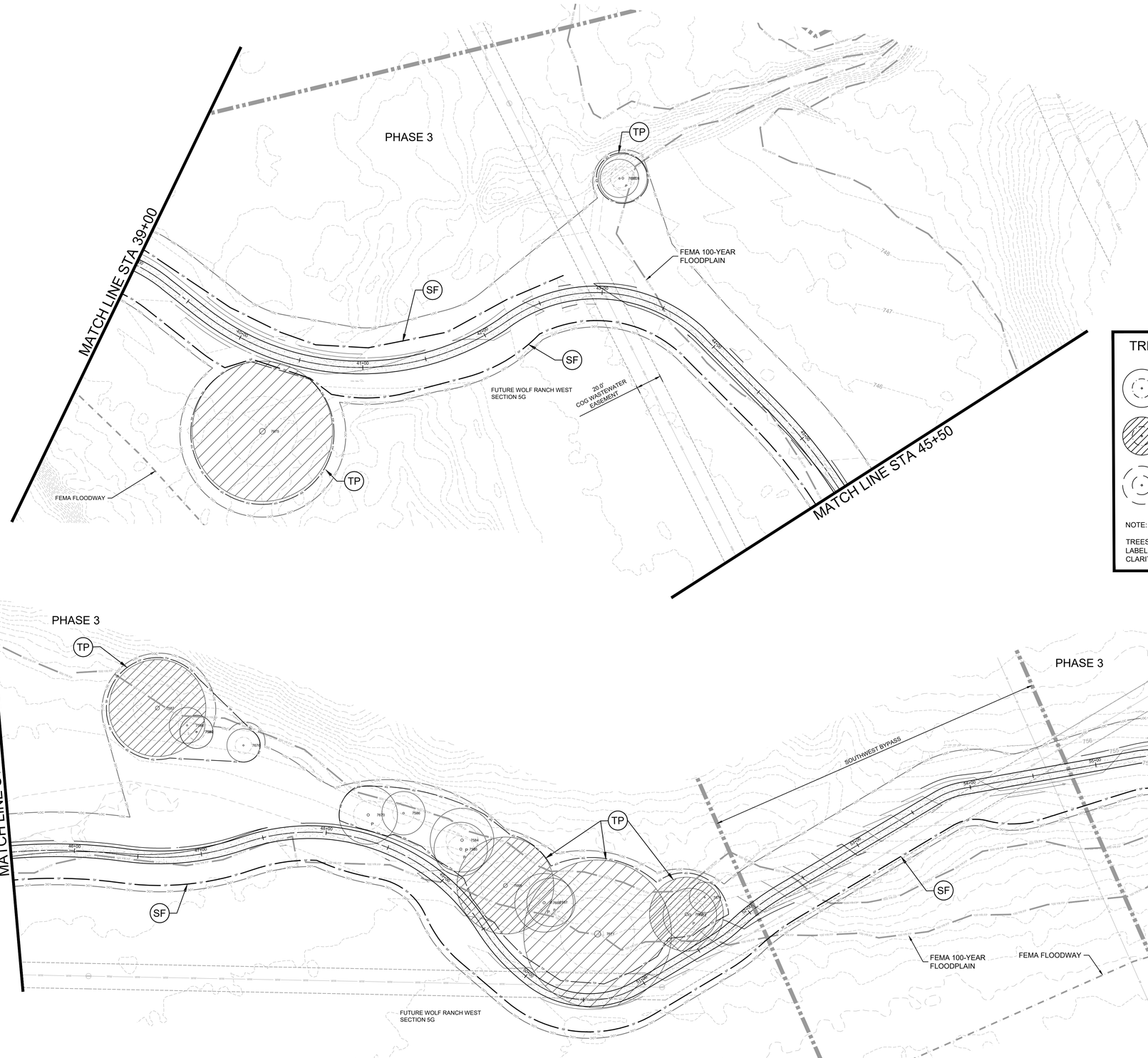

0 40' 80'
GRAPHIC SCALE 40'

LEGEND

- PROPERTY LINE
- 632 PROPOSED CONTOUR
- 632 EXISTING CONTOUR
- SF SILT FENCE
- STABALIZED CONSTRUCTION ENTRANCE/EXIT
- IP INLET PROTECTION
- RB ROCK BERM
- LIMITS OF CONSTRUCTION
- EXISTING TREE (TO BE REMOVED)
- J-HOOK

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

NOTE:

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DATE:	SEPTEMBER 2025
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EROSION CONTROL & TREE PRESERVATION PLAN (3 OF 5)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
21
OF 53
2025-28-CON

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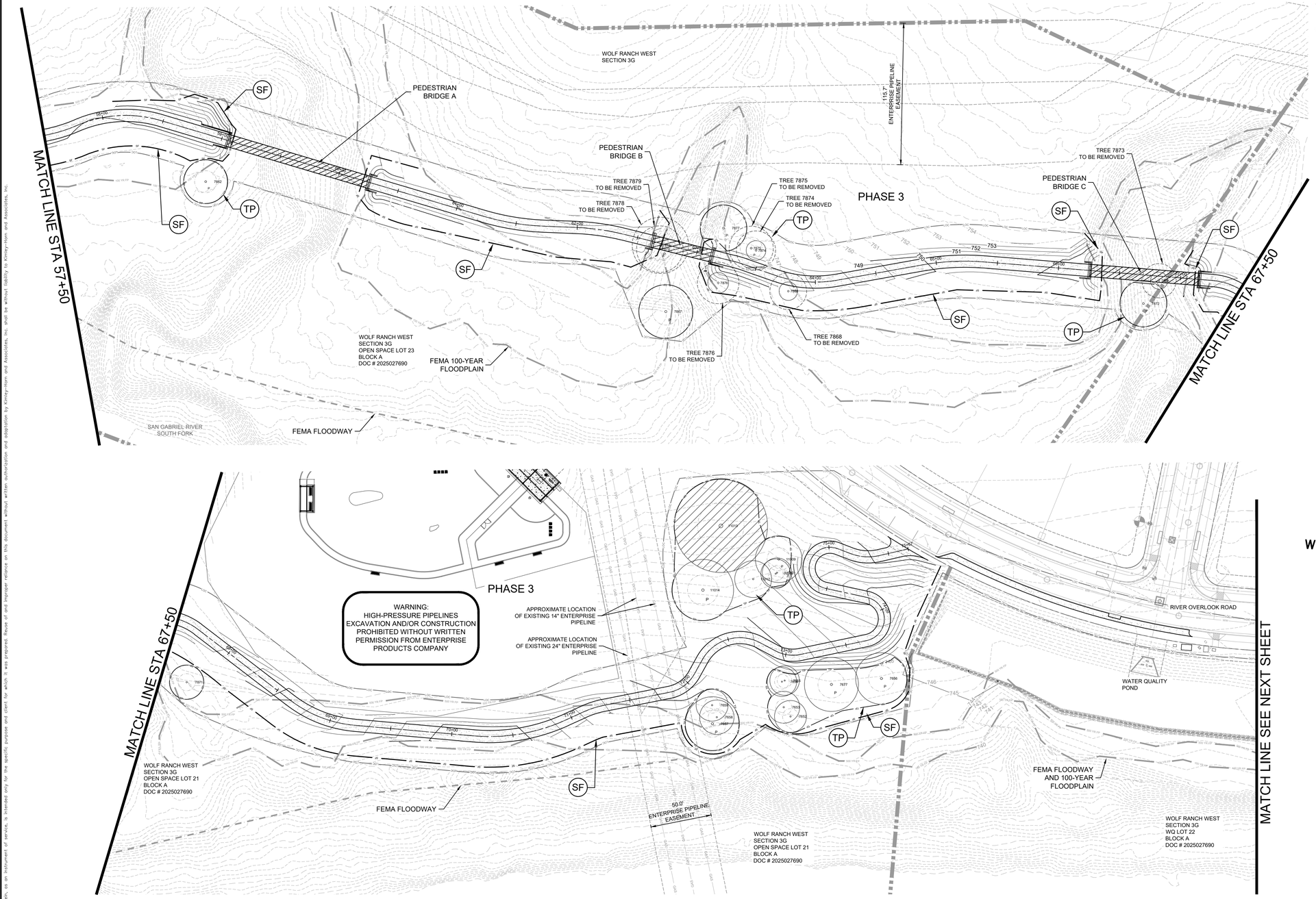

N W E S

0 40' 80'
GRAPHIC SCALE 40'

LEGEND

- PROPERTY LINE
- 632 PROPOSED CONTOUR
- 632 EXISTING CONTOUR
- SF SILT FENCE
- STABALIZED CONSTRUCTION ENTRANCE/EXIT
- IP INLET PROTECTION
- RB ROCK BERM
- LIMITS OF CONSTRUCTION
- EXISTING TREE (TO BE REMOVED)
- J-HOOK

NOTE:

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TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

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04/18/2026

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EROSION CONTROL & TREE PRESERVATION PLAN (4 OF 5)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
22
OF 53

2025-28-CON

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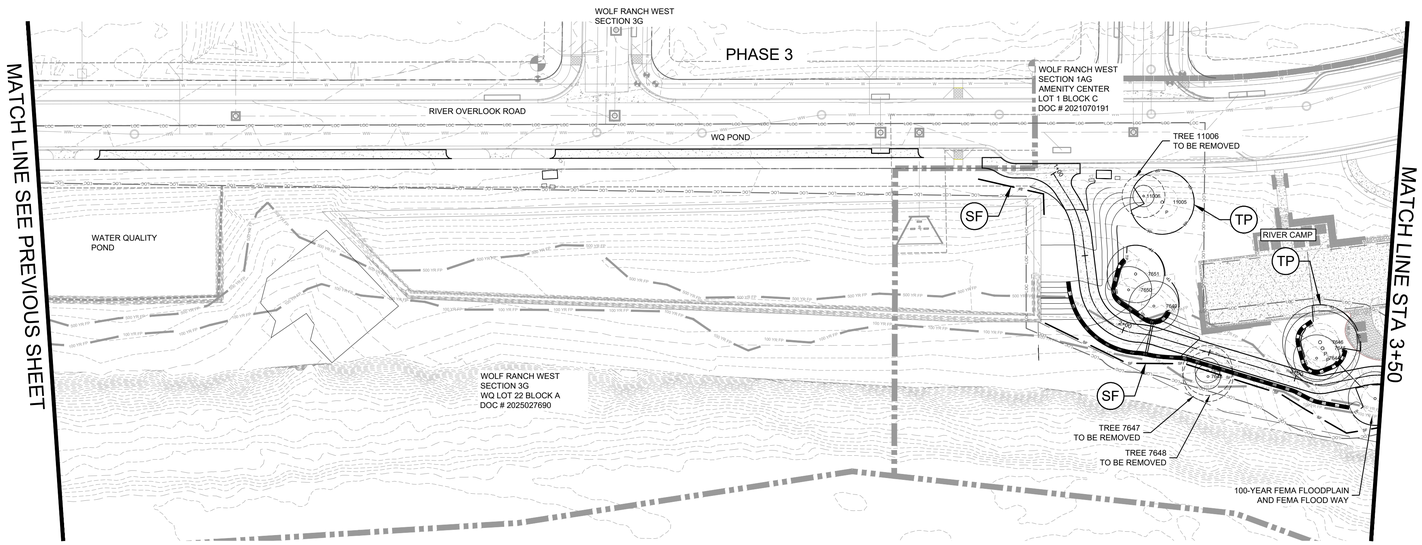

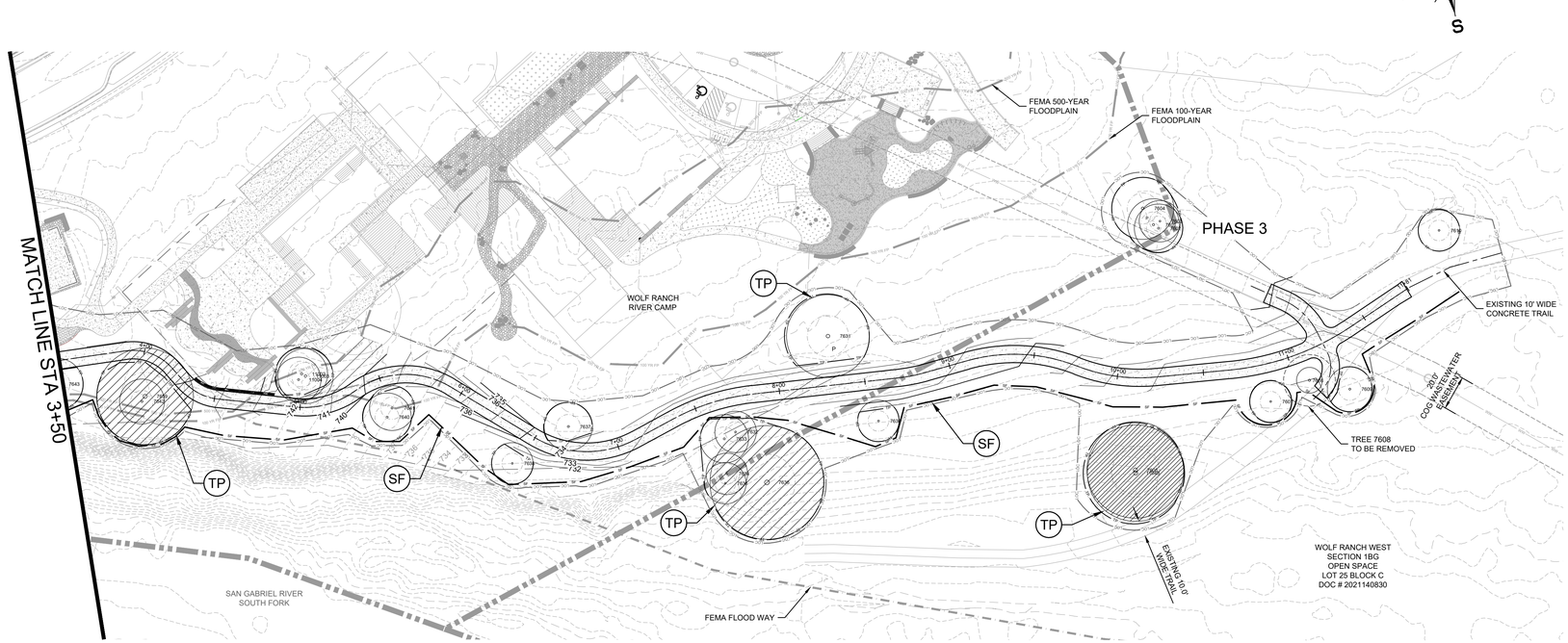

N
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0 40' 80'
GRAPHIC SCALE 40'

LEGEND

- PROPERTY LINE
- 632 PROPOSED CONTOUR
- 632 EXISTING CONTOUR
- SF SILT FENCE
- STABALIZED CONSTRUCTION ENTRANCE/EXIT
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TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

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04/18/2026

KHA PROJECT	064461309
DATE:	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

EROSION CONTROL & TREE PRESERVATION PLAN (5 OF 5)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
23
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 07:48:41pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Erosion Control Plan.dwg
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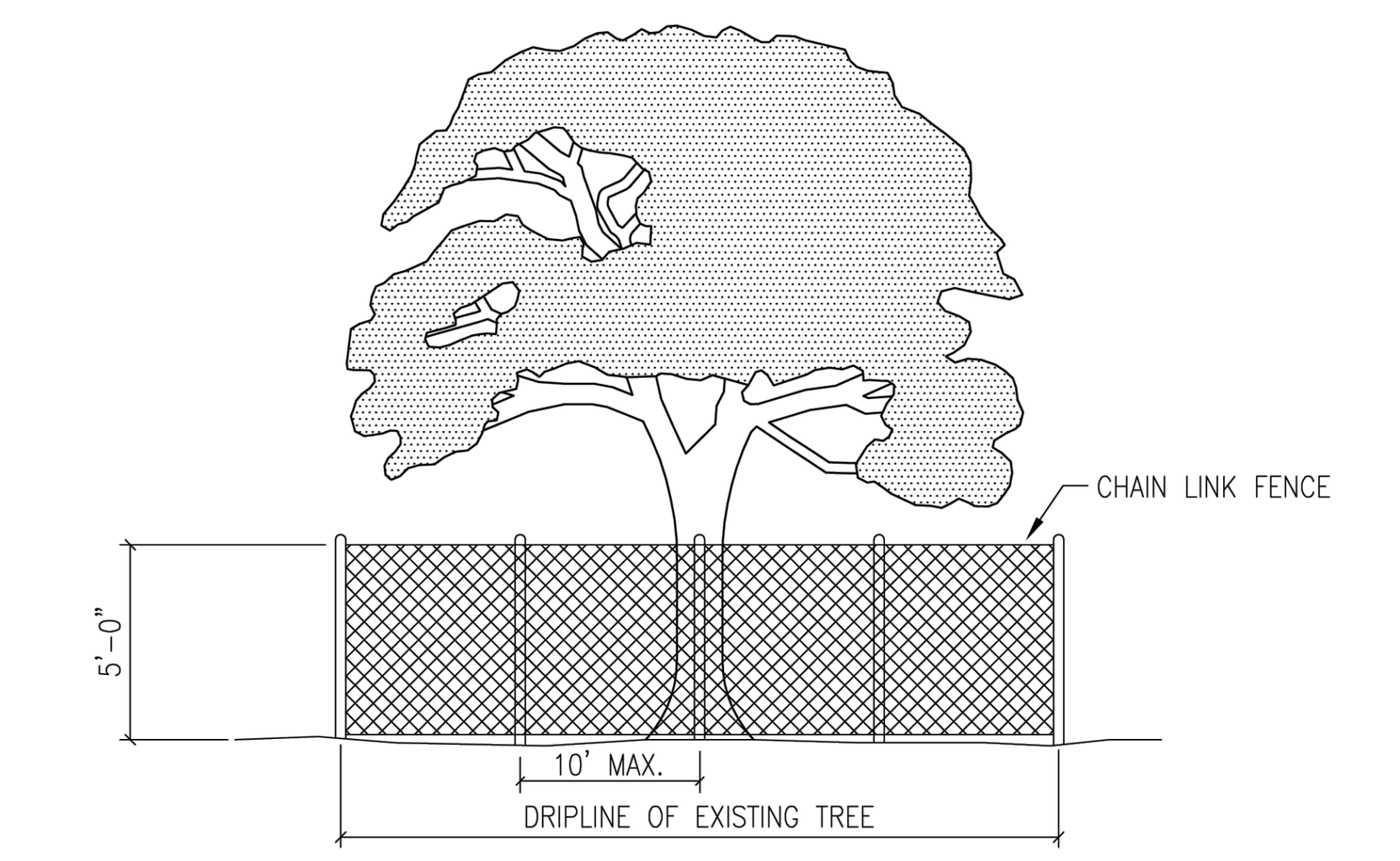
WOLF RANCH REGIONAL TRAIL PHASES 3 AND 4 HERITAGE AND PROTECTED TREE SCHEDULE

TAG NO.	DESCRIPTION SPECIES DIA (INCHES)	NUMBER OF TRUNKS	STEMS (INCHES)	TOTAL INCHES	STATUS	TREE TYPE	TAG NO. RECORDED PLAT	RECORDED PLAT & DOC NUMBER	PRESERVED 18" TO 26" TREE TO BE USED AS A CREDIT TREE FOR MITIGATION FOR PROTECTED TREE REMOVAL
7584	CEDAR ELM	SINGLE	25"	25"	TO REMAIN	PROTECTED	N/A	N/A	YES
7585	LIVE OAK	SINGLE	21"	21"	TO REMAIN	PROTECTED	N/A	N/A	YES
7586	CEDAR ELM	MULTI	12" + 10"	17"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7587	LIVE OAK	MULTI	27" + 10"	38"	TO REMAIN	HERITAGE	N/A	N/A	N/A
7588	CEDAR ELM	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7590	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7601	LIVE OAK	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7602	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7603	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7604	LIVE OAK	MULTI	13" + 10"	18"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 1AG FINAL PLAT, DOC. NO. 2021070191	YES
7606	LIVE OAK	MULTI	21" + 14"	28"	TO REMAIN	HERITAGE	1001018	A HERITAGE TREE ON WOLF RANCH WEST SECTION 1BG FINAL PLAT, DOC. NO. 2021140830	N/A
7607	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7608	LIVE OAK	MULTI	9" + 6" + 6"	15"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7609	LIVE OAK	MULTI	9" + 8"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7610	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7617	SYCAMORE	SINGLE	21"	21"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	YES
7621	CEDAR ELM	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7623	SYCAMORE	SINGLE	17"	17"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7624	CEDAR ELM	MULTI	11" + 9"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7625	SYCAMORE	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7627	LIVE OAK	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7628	LIVE OAK	SINGLE	19"	19"	TO REMAIN	PROTECTED	N/A	N/A	YES
7630	CEDAR ELM	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7631	LIVE OAK	SINGLE	24"	24"	TO REMAIN	PROTECTED	1001019	A HERITAGE TREE ON WOLF RANCH WEST SECTION 1AG FINAL PLAT, DOC. NO. 2021070191	N/A
7632	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7633	LIVE OAK	MULTI	9" + 9"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7634	CEDAR ELM	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7635	CEDAR ELM	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7636	LIVE OAK	MULTI	15" +14"+12"+10"	33"	TO REMAIN	HERITAGE	1001020	A HERITAGE TREE ON WOLF RANCH WEST SECTION 1BG FINAL PLAT, DOC. NO. 2021140830	N/A
7637	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7638	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7639	LIVE OAK	MULTI	24" + 8"	28"	TO REMAIN	HERITAGE	1001287	A HERITAGE TREE ON WOLF RANCH WEST SECTION 1AG FINAL PLAT, DOC. NO. 2021070191	N/A
7640	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7641	LIVE OAK	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7642	LIVE OAK	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7643	LIVE OAK	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7644	LIVE OAK	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7645	LIVE OAK	SINGLE	21"	21"	TO REMAIN	PROTECTED	1001288	A HERITAGE TREE ON WOLF RANCH WEST SECTION 1AG FINAL PLAT, DOC. NO. 2021070191	N/A
7646	LIVE OAK	SINGE	21"	21"	TO REMAIN	PROTECTED	1001288	A HERITAGE TREE ON WOLF RANCH WEST SECTION 1AG FINAL PLAT, DOC. NO. 2021070191	N/A
7647	LIVE OAK	SINGLE	14"	14"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7648	LIVE OAK	SINGLE	14"	14"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7649	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7650	LIVE OAK	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7651	LIVE OAK	SINGLE	16"	16"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7652	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7653	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7654	CEDAR ELM	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7655	CEDAR ELM	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7656	LIVE OAK	SINGLE	21"	21"	TO REMAIN	PROTECTED	1044	A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
7657	LIVE OAK	SINGLE	22"	22"	TO REMAIN	PROTECTED	1047	A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
7658	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7659	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7660	OAK	MULTI	14" + 13"	21"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	YES
7662	OAK	MULTI	12" + 11"	18"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	YES
7663	OAK	SINGLE	14"	14"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7664	OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7665	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7667	LIVE OAK	SINGLE	19"	19"	TO REMAIN	PROTECTED	N/A	N/A	YES
7668	LIVE OAK	MULTI	16" + 14"	23"	TO REMAIN	PROTECTED	N/A	N/A	YES
7669	LIVE OAK	MULTI	17"+16"+15"+10"	38"	TO REMAIN	HERITAGE	N/A	N/A	N/A
7670	CEDAR ELM	MULTI	19"+10"	23"	TO REMAIN	PROTECTED	N/A	N/A	YES
7671	LIVE OAK	MULTI	34"+26"+22"	58"	TO REMAIN	HERITAGE	N/A	N/A	N/A
7672	LIVE OAK	SINGLE	21"	21"	TO REMAIN	PROTECTED	N/A	N/A	YES
7673	LIVE OAK	MULTI	15"+15"+16"	29"	TO REMAIN	HERITAGE	N/A	N/A	N/A
7674	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7675	LIVE OAK	MULTI	36"+19"+19"	55"	TO REMAIN	HERITAGE	N/A	N/A	N/A
7676	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7677	LIVE OAK	SINGLE	22"	22"	TO REMAIN	PROTECTED	1045	A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
7847	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7860	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7861	PECAN	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7867	OAK	MULTI	13"+9"+8"	22"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	YES
7868	CEDAR ELM	SINGLE	15"	15"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7871	OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7872	CEDAR ELM	MULTI	14"+10"	19"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	YES
7873	CEDAR ELM	SINGLE	14"	14"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7874	OAK	SINGLE	16"	16"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7875	OAK	SINGLE	18"	18"	TO BE REMOVED	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
7876	OAK	SINGLE	17"	17"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7877	OAK	SINGLE	19"	19"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	YES
7878	LIVE OAK	MULTI	16"+14"	23"	TO BE REMOVED	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
7879	LIVE OAK	SINGLE	19"	19"	TO BE REMOVED	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
7880	CEDAR ELM	SINGLE	12"	12"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7881	SYCAMORE	SINGLE	13"	13"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
7882	OAK	SINGLE	21"	21"	TO REMAIN	PROTECTED	100882	CREDIT TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	N/A
7883	CEDAR ELM	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7884	CEDAR ELM	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7885	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7886	CEDAR ELM	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7887	CEDAR ELM	SINGLE	17"	17"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7888	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7889	CEDAR ELM	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7890	CEDAR ELM	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7891	CEDAR ELM	SINGLE	16"	16"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7892	LIVE OAK	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7893	LIVE OAK	MULTI	23"+16"	31"	TO REMAIN	HERITAGE	1371	HERITAGE TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	N/A
7894	CEDAR ELM	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7895	LIVE OAK	MULTI	18"+15"	26"	TO REMAIN	HERITAGE	801918	CREDIT TREE ON WOLF RANCH WEST SECTION 7B FINAL PLAT, DOC NO. 2024087137	N/A
7896	OAK	SINGLE	31"	31"	TO REMAIN	HERITAGE	1370	HERITAGE TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	N/A
7897	CEDAR ELM	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7898	OAK	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7899	LIVE OAK	SINGLE	16"	16"	TO REMAIN	PROTECTED	N/A	N/A	N/A
7900	LIVE OAK	SINGLE	17"	17"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11002	LIVE OAK	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11003	LIVE OAK	SINGLE	16"	16"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11004	LIVE OAK	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11005	LIVE OAK	SINGLE	18"	18"	TO REMAIN	PROTECTED	1042	A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
11006	LIVE OAK	SINGLE	12"	12"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
11009	LIVE OAK	SINGLE	19"	19"	TO REMAIN	PROTECTED	1042	A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
11010	POST OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11011	POST OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11012	LIVE OAK	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11013	LIVE OAK	MULTI	30"+16"	38"	TO REMAIN	HERITAGE	1291	A HERITAGE TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
11014	POST OAK	SINGLE	25"	25"	TO REMAIN	PROTECTED	1046	A CREDIT TREE ON WOLF RANCH WEST SECTION 3G FINAL PLAT, DOC. NO. 2025027690	N/A
* 11015	CEDAR ELM	SINGLE	20"	20"	TO BE REMOVED	PROTECTED	801943	CREDIT TREE ON WOLF RANCH WEST SECTION 7B FINAL PLAT, DOC NO. 2024087137	N/A *
11016	CEDAR ELM	SINGLE	20"	20"	TO REMAIN	PROTECTED	801926	CREDIT TREE ON WOLF RANCH WEST SECTION 7B FINAL PLAT, DOC NO. 2024087137	N/A
11017	LIVE OAK	MULTI	13"+12"	19"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 7B FINAL PLAT, DOC NO. 2024087137	YES
11018	LIVE OAK	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11019	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11020	LIVE OAK	MULTI	13"+12"	19"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 7B FINAL PLAT, DOC NO. 2024087137	YES
11021	LIVE OAK	MULTI	17"+14"	24"	TO REMAIN	PROTECTED	801942	CREDIT TREE ON WOLF RANCH WEST SECTION 7B FINAL PLAT, DOC NO. 2024087137	N/A
11022	LIVE OAK	SINGLE	13"	13"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11023	LIVE OAK	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11024	LIVE OAK	MULTI	14"+13"	21"	TO REMAIN	PROTECTED	801925	CREDIT TREE WOLF RANCH WEST SECTION 7B FINAL PLAT, DOC NO. 2024087137	N/A
11025	RED OAK	SINGLE	16"	16"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11026	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11027	LIVE OAK	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11028	COTTONWOOD	SINGLE	17"	17"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
11029	WILLOW	SINGLE	16"	16"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11030	WILLOW	SINGLE	16"	16"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11031	WILLOW	SINGLE	19"	19"	TO REMAIN	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	YES
11032	WILLOW	MULTI	14"+12"+10"+10"+6"	33"	TO REMAIN	HERITAGE	N/A	NOT A HERITAGE TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	N/A
11033	SYCAMORE	SINGLE	14"	14"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11034	WILLOW	SINGLE	18"	18"	TO REMAIN	PROTECTED	N/A	N/A	YES
11036	SYCAMORE	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11037	WILLOW	SINGLE	22"	22"	TO REMAIN	PROTECTED	1001370	CREDIT TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	N/A
11038	WILLOW	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11039	SYCAMORE	MULTI	10" + 4"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11040	WILLOW	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11041	WILLOW	SINGLE	15"	15"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11042	WILLOW	SINGLE	12"	12"	TO REMAIN	PROTECTED	N/A	N/A	N/A
11043	COTTONWOOD	SINGLE	21"	21"	TO BE REMOVED	PROTECTED	N/A	NOT A CREDIT TREE ON WOLF RANCH WEST SECTION 6G FINAL PLAT, DOC NO. 2025013862	N/A
11044	COTTONWOOD	SINGLE	17"	17"	TO BE REMOVED	PROTECTED	N/A	N/A	N/A
11045	LIVE OAK	MULTI	21"+13"	28"	TO REMAIN	HERITAGE	1001018	A HERITAGE TREE ON WOLF RANCH WEST SECTION 1BG FINAL PLAT, DOC. NO. 2021140830	N/A

* TREE NUMBER 11015 IS A CREDIT TREE ON THE WOLF RANCH WEST SECTION 7B FINAL PLAT. THIS TREE WILL BE REMOVED WITH THE WOLF RANCH REGIONAL TRAIL CONSTRUCTION AND MITIGATED AT 3:1.

Wolf Ranch Regional Trail Tree Mitigation Fee Summary With Protected Tree Credits

MITIGATION FEE SUMMARY	
Total Heritage Tree Inches Removed	**0**
Total Credit Tree (Previously Used As Heritage Tree Mitigtion on Final Plats) Inches Removed	**20**
Total Protected Tree (12" to 25") Inches Removed	**271**
Total Heritage Tree Mitigation Inches Required (3:1) Ratio	**0**
Total Credit Tree (Previously Used As Heritage Tree Mitigation on Final Plats) Mitigation Inches Required (3:1) Ratio	**60**
Total Protected Tree Mitigation Inches Required (40% Of The Total Protected Tree (12" to 25") Inches Required (1:1) Ratio	**109**
Total Mitigation Inches Required (Heritage Tree/Credit Tree Previously Used As Heritage Tree Mitigation and Protected Tree)	**169**
Mitigation Fee Per Inch	**$200.00**
Total Heritage Tree Heritage Tree/Credit Tree Previously Used As Heritage Tree Mitigation and Protected Tree Fee Required To The City of Georgetown (No Credits)	**$33,800.00**
TREE MITIGATION FEE SUMMARY WITH PROTECTED TREE PRESERVATION CREDITS APPLIED	
Total Protected Tree (18" to 26") Inches Preserved and not included as Credit Trees on Previous Final Plats (To Be Used For Heritage/Credit Tree Previously Used As Heritage Tree Mitigation on Final Plats and Protected Tree Mitigation Inch Credits)	**364**
Allowable Protected Tree (18" to 26") Preservation Inches To Be Used As Credits for Heritage Tree/Credit Trees Previously Used As Heritage Tree Mitigation on Final Plats (50% Of The HeritageTree Removal Mitigation Inches-50% of 60 inches) Per The PUD	**30**
Allowable Protected Tree (18" to 26") Preservation Inches To Be Used As Credits for Protected Tree Mitigation (75% Of The Protected Tree Removal Mitigation Inches-75% of 109 inches) Per The PUD	**81**
Total Heritage Tree/Credit Trees Previously Used As Heritage Tree Mitigation on Final Plats Mitigation Inches Required (After Protected Tree Preservation Credit Inches Applied)	**30**
Total Protected Tree Mitigation Inches Required (After Protected Tree Preservation Credit Inches Applied)	**28**
Total Heritage Tree/Credit Trees Previously Used As Heritage Tree Mitigation on Final Plats and Protected Tree Mitigation Inches Required (After Protected Tree Preservation Credit Inches Applied)	**58**
GRAND TOTAL MITIGATION FEE OWED TO THE CITY OF GEORGETOWN	
Grand Total Heritage Tree/Credit Tree Previously Used As Heritage Tree Mitigation on Final Plats and Protected Tree Mitigation Fee Required To The City of Georgetown (With Protected Tree Preservation Credit Inches Applied)	**$11,600.00** *

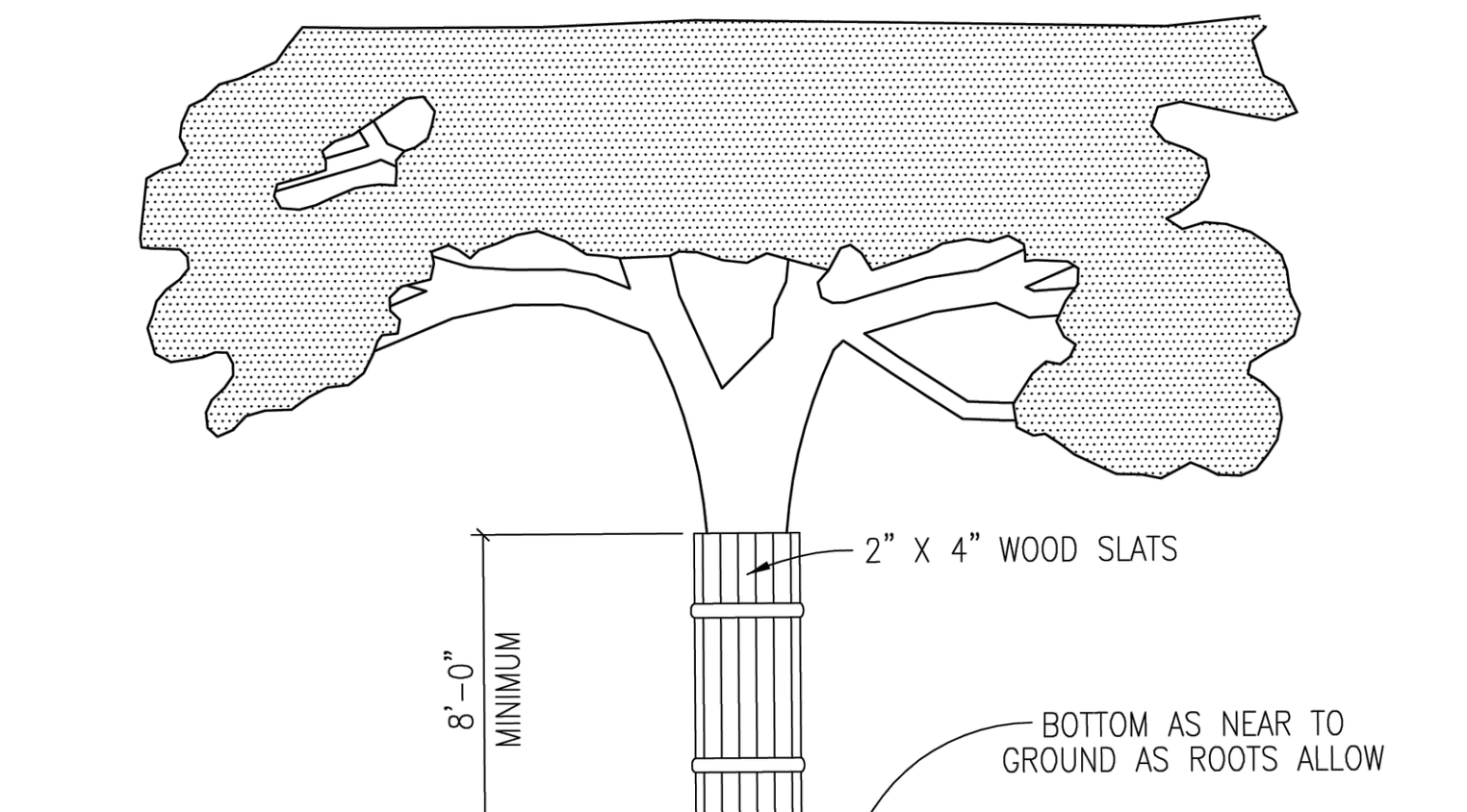


NOTES:

1. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING).
2. FENCES SHALL COMPLETELY SURROUND THE TREE, OR CLUSTERS OF TREES; WILL BE LOCATED AT THE OUTERMOST LIMIT OF THE TREE BRANCHES (DRIPLINE), AND WILL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MATERIALS.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN SIX INCHES (6") CUT OR FILL, OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY.
   C. WOUNDS TO EXPOSED ROOTS, TRUNKS OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES, SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING AND FIRE.
3. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
   B. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN SIX FEET (6'-0") TO BUILDING.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

GEORGETOWN TEXAS EST. 1848 — Georgetown Utility Systems "Your Community Owned Utility"
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TREE PROTECTION – CHAIN LINK FENCE
REVISION NOTE: ADOPTED 6/21/2006
DRAWING NAME: EC09
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



NOTES:

1. WHERE ANY EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN FOUR FEET (4'-0") TO A TREE TRUNK; PROTECT THE TRUNK WITH STRAPPED-ON-PLANKING TO A HEIGHT OF EIGHT FEET (8'-0"), OR TO THE LIMITS OF LOWER BRANCHING IN ADDITION TO THE REDUCED FENCING PROVIDED.
2. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO (2) DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE, AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
3. PRIOR EXCAVATION OR GRADE CUTTING WITHIN TREE DRIPLINE. MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT, TO MINIMIZE DAMAGE TO REMAINING ROOTS.
4. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES SHOULD BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS SHOULD BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
5. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
6. NO LANDSCAPE TOPSOIL DRESSING GREATER THE FOUR INCHES (4") SHALL BE PERMITTED WITHIN THE DRIPLINE OF A TREE. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
7. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

GEORGETOWN TEXAS EST. 1848 — Georgetown Utility Systems "Your Community Owned Utility"
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TREE PROTECTION – WOOD SLATS
REVISION NOTE: ADOPTED 6/21/2006
DRAWING NAME: EC10
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB

<u>PROTECTION OF CRITICAL ROOT ZONE NOTES</u>

1. NO CONSTRUCTION OR DISTURBANCE SHALL OCCUR WITHIN AN AREA THAT CONSTITUTES MORE THAN 50% OF THE TOTAL CRZ AND 1/2 THE RADIAL DISTANCE OF THE CRZ FOR EACH TREE BEING PRESERVED. THIS DEFINED AREA SHALL BE FLAGGED AND ENCIRCLED WITH PROTECTIVE FENCING DURING CONSTRUCTION.
2. CUT OR FILL GREATER THAN 4" IN DEPTH AND SEVERING OF MAJOR ROOTS SHALL BE CONSIDERED DISTURBANCE.
3. WITHIN THE PROTECTED CRZ, ONLY FLATWORK, DECKING, OR SIMILAR CONSTRUCTION, MAY BE APPROVED AND SHALL NOT AFFECT THE BRANCHING OF THE TREE.
4. TREE PROTECTION SHALL REMAIN IN PALACE FOR THE LIFE OF THE PROJECT.

NOTE:

1. ANY PRUNING OF HERITAGE TREES SHALL REQUIRE A SEPARATE PERMIT FROM THE CITY OF GEORGETOWN PRIOR TO PERFORMING THE PRUNING.

PER PUD ORDINANCE 2018-66:

Exhibit H-7

b. Protected Trees removed for mullti-family and commercial uses: Mitigation shall be provided at a 1:1 inch basis for 40% of the total diameter inches of Protected Trees removed, measured at DBH
c. Heritage Trees removed with a DBH of 26-inches or greater: Mitigation shall be provided at a 3:1 inch basis for the total diameter inches of Heritage Trees removed, measured at DBH

Credit Trees

4. Credit Trees
   a. Existing single-trunk trees with a DBH between 18 and 26 inches and located in the following areas will also be counted as Credit Trees:
      i. Residential lot street yards
      ii. Medians
      iii. Parkways
      iv. Parks or public amenities
      v. Within the Wolf Ranch Parkway or DB Wood ROW
   b. Credit Trees preserved may be used for mitigation requirements within the Tree Plan as follows:
      i. Credit Trees with a DBH between 18 and 26 inches can be applied towards a maximum of 50% of the required mitigation inches for Heritage Tree removal within the overall Tree Plan for the applicable plat
      ii. Credit Trees can be applied towards a maximum of 75% of the required mitigation inches for Protected Tree removal within the overall Tree Plan for the applicable plat (as currently allowed by the existing UDC)

No.	REVISIONS	DATE	BY

Kimley»Horn
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10814 JOLLYVILLE ROAD, CAMPUS IV, SUITE 200, AUSTIN, TX 78759
PHONE: 512-418-1771
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS — JOHN A. PICKENS — 110631 — LICENSED PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309
DATE SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

TREE PRESERVATION CALCS

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
24
OF 53

2025-28-CON

Plotted By: Pickens, John Date: May 17, 2026 02:26:24pm File Path: K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Cad\PlanSheets\C-Erosion Control Plan.dwg
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Plotted By:Pickens, John Date:April 19, 2026 08:03:59pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Access Plan.dwg

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SHEET NUMBER 25 OF 53	WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS	ACCESS PLAN	KHA PROJECT 064461309 DATE SEPTEMBER 2025 SCALE: AS SHOWN DESIGNED BY: JAP DRAWN BY: RRJ CHECKED BY: JAP

04/16/2026

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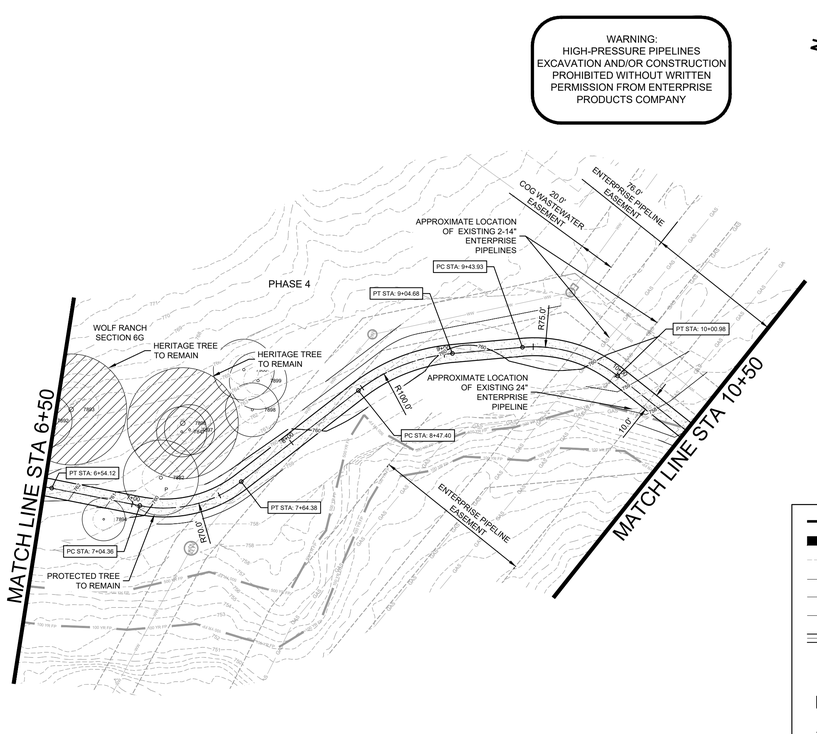
TEXAS REGISTERED ENGINEERING FIRM F-928

No.	REVISIONS	DATE	BY

2025-28-CON





WARNING:
HIGH-PRESSURE PIPELINES
EXCAVATION AND/OR CONSTRUCTION
PROHIBITED WITHOUT WRITTEN
PERMISSION FROM ENTERPRISE
PRODUCTS COMPANY

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

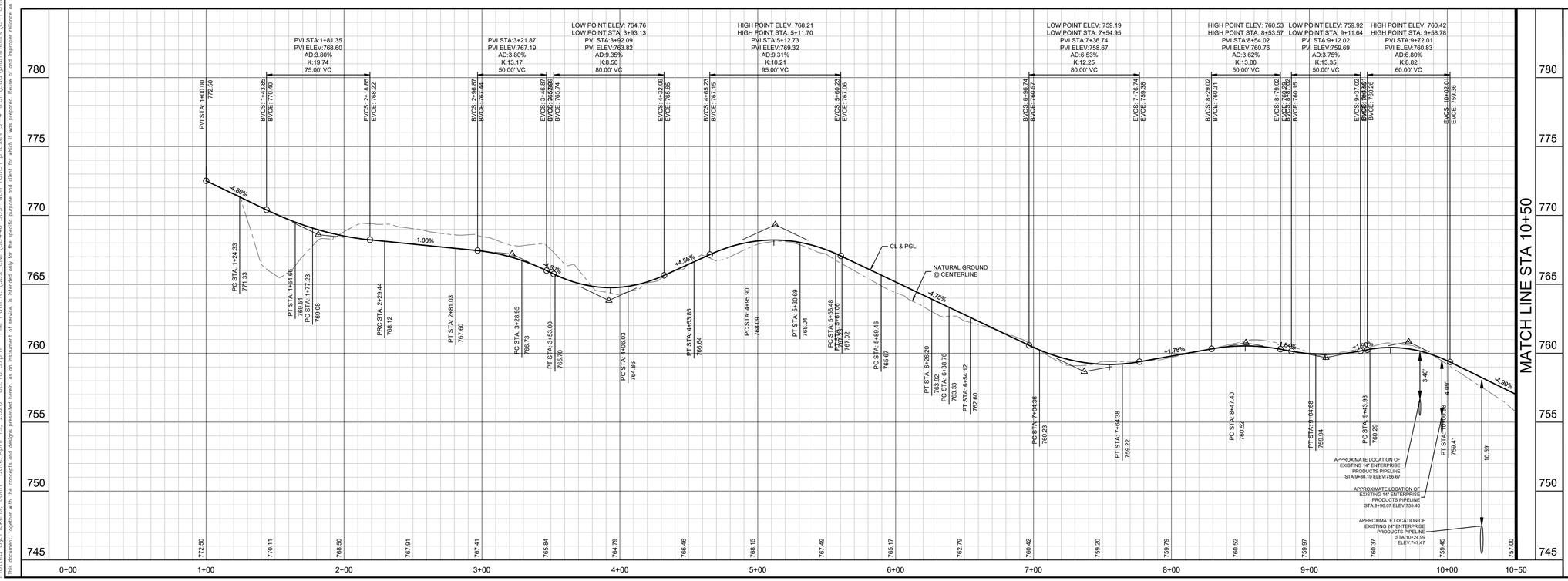
NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- PHASE LINE
- 555 EXISTING CONTOUR
- 555 PROPOSED CONTOUR
- W PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED FIRE HYDRANT
- WW PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

REGIONAL TRAIL A WEST (PHASE 4)



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

ADD BENCHMARKS HERE

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT
064461309

DATE
SEPTEMBER 2025

SCALE: AS SHOWN

DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

REGIONAL TRAIL
A PLAN & PROFILE
(1 OF 9)

WOLF RANCH
REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
26
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 18, 2026 08:10:37pm File Path:K:\pus_civil\064461309-wolf ranch phases 3-4 trail\Civil\plansheets\C-Paving Plan and Profile.dwg
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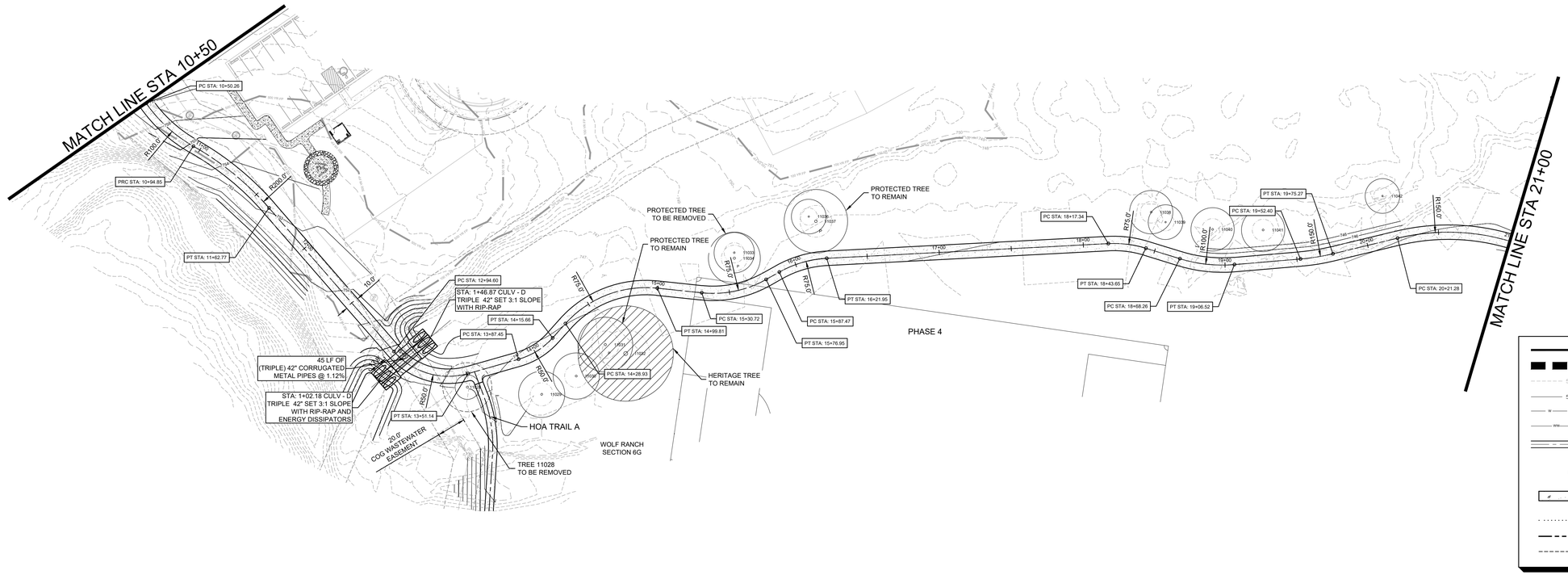

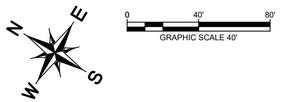

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- PHASE LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
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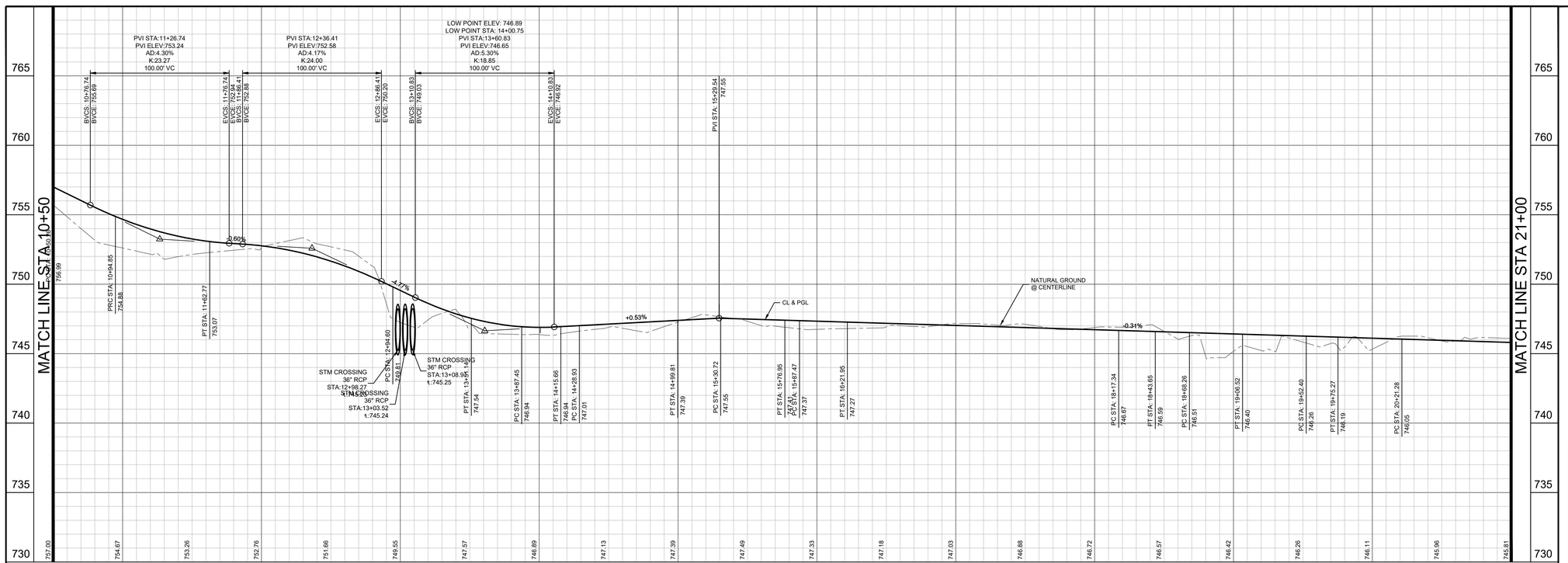
REGIONAL TRAIL A WEST (PHASE 4)



PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

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No.	REVISIONS	DATE	BY

Kimley»Horn

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PHONE: 512-418-1771
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED PROFESSIONAL ENGINEER

04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

REGIONAL TRAIL A PLAN & PROFILE (2 OF 9)

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
27
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 18, 2026 08:16:21pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Paving Plan and Profile.dwg
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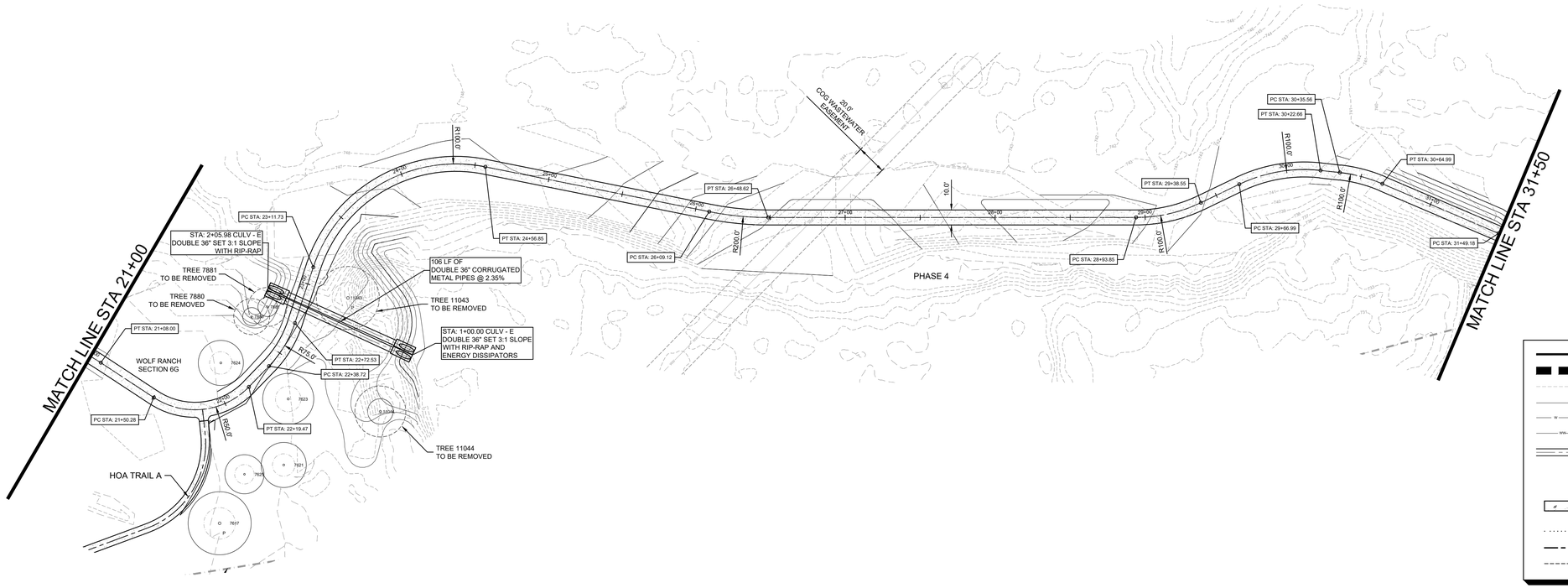

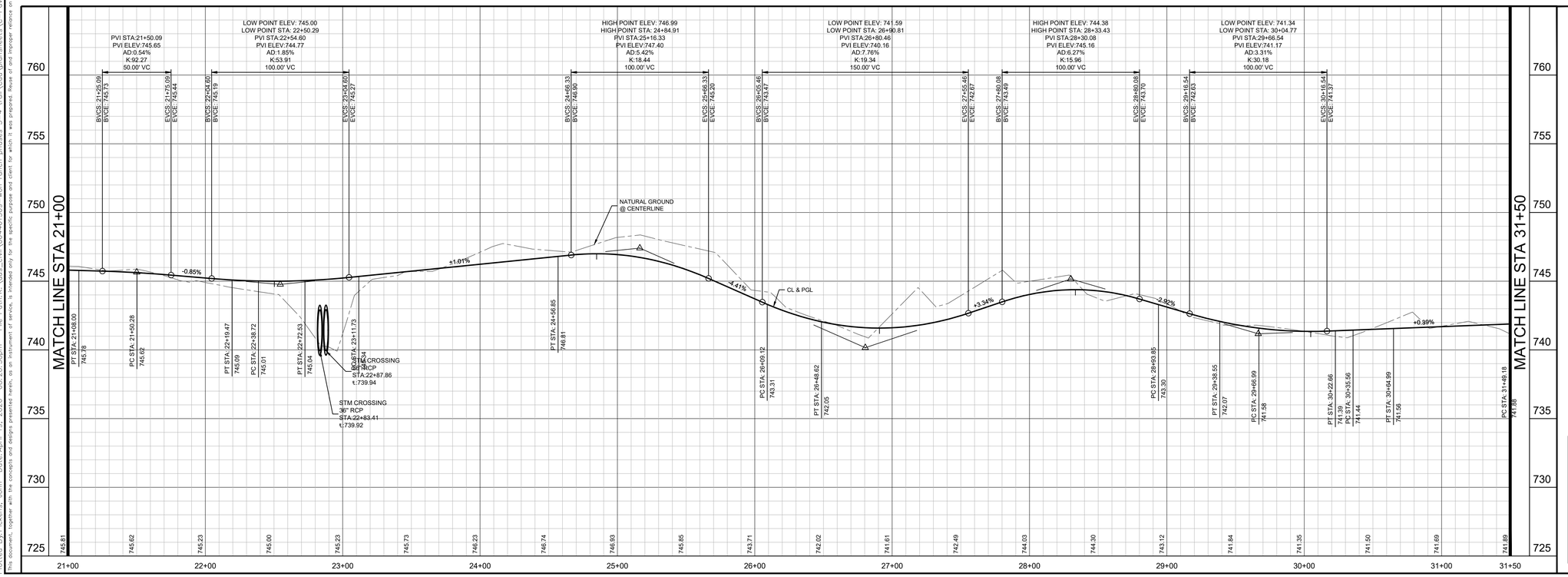

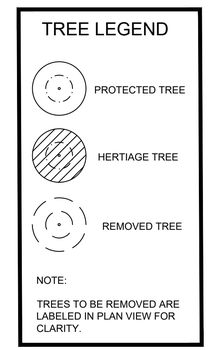

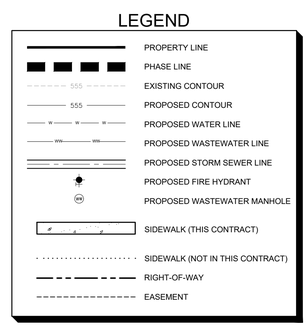

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PROFESSIONAL ENGINEER

04/18/2026

KHA PROJECT 064461309
DATE: SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

REGIONAL TRAIL A PLAN & PROFILE (3 OF 9)

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
28
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 08:20:58pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Paving Plan and Profile.dwg
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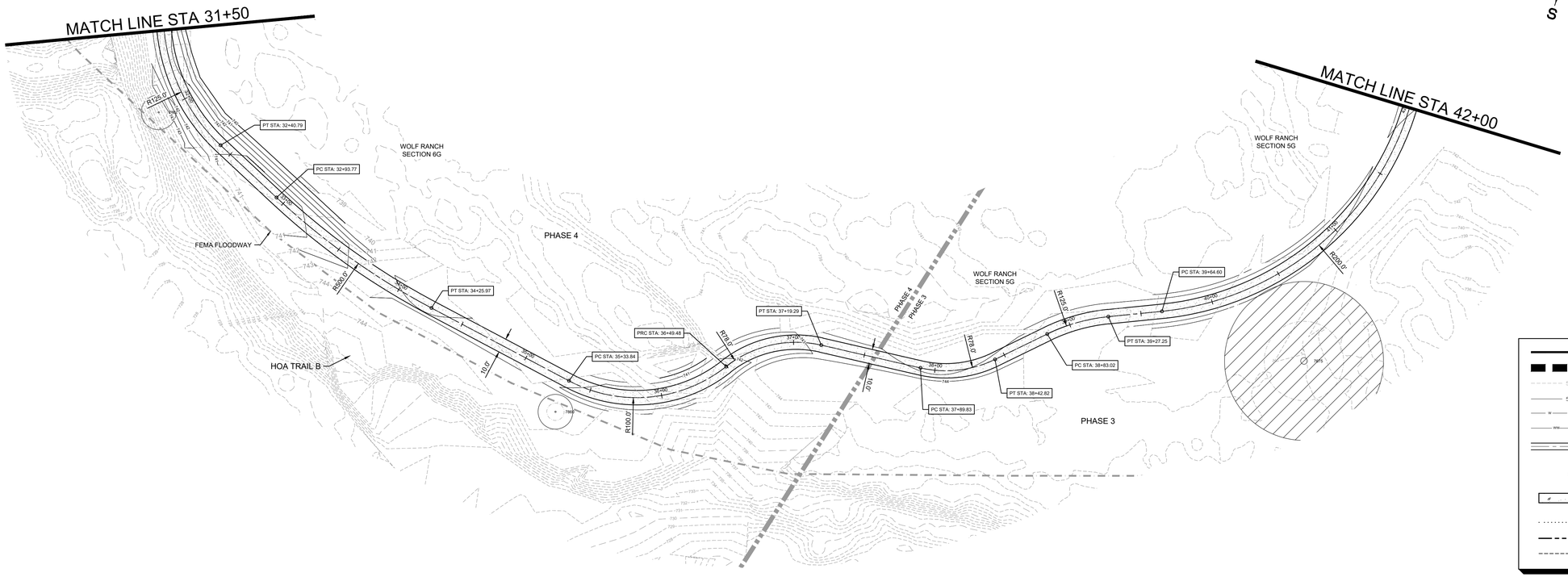


TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

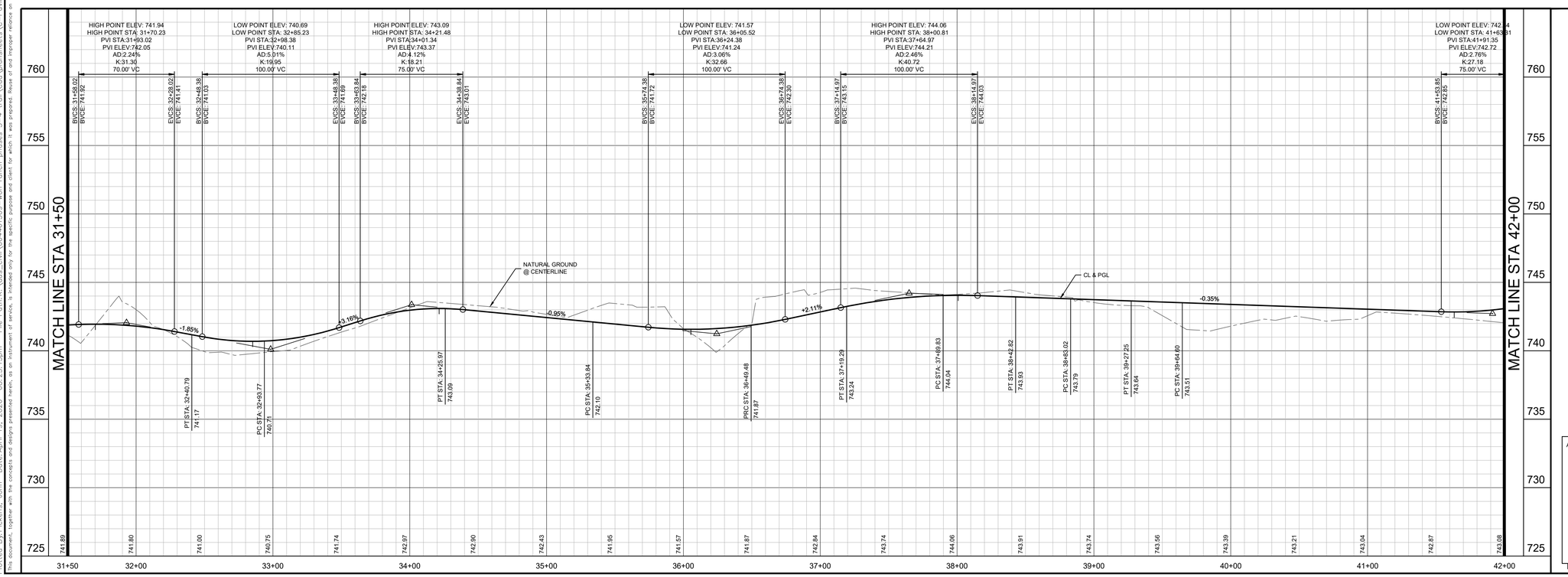
NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- PHASE LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED WATER LINE
- PROPOSED WASTEWATER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

REGIONAL TRAIL A WEST (PHASE 3 & 4)



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

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04/18/2026

KHA PROJECT	064461309
DATE:	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

REGIONAL TRAIL A PLAN & PROFILE (4 OF 9)

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
29
OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 19, 2026 08:25:20pm File Path: K:\cas_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Paving Plan and Profile.dwg
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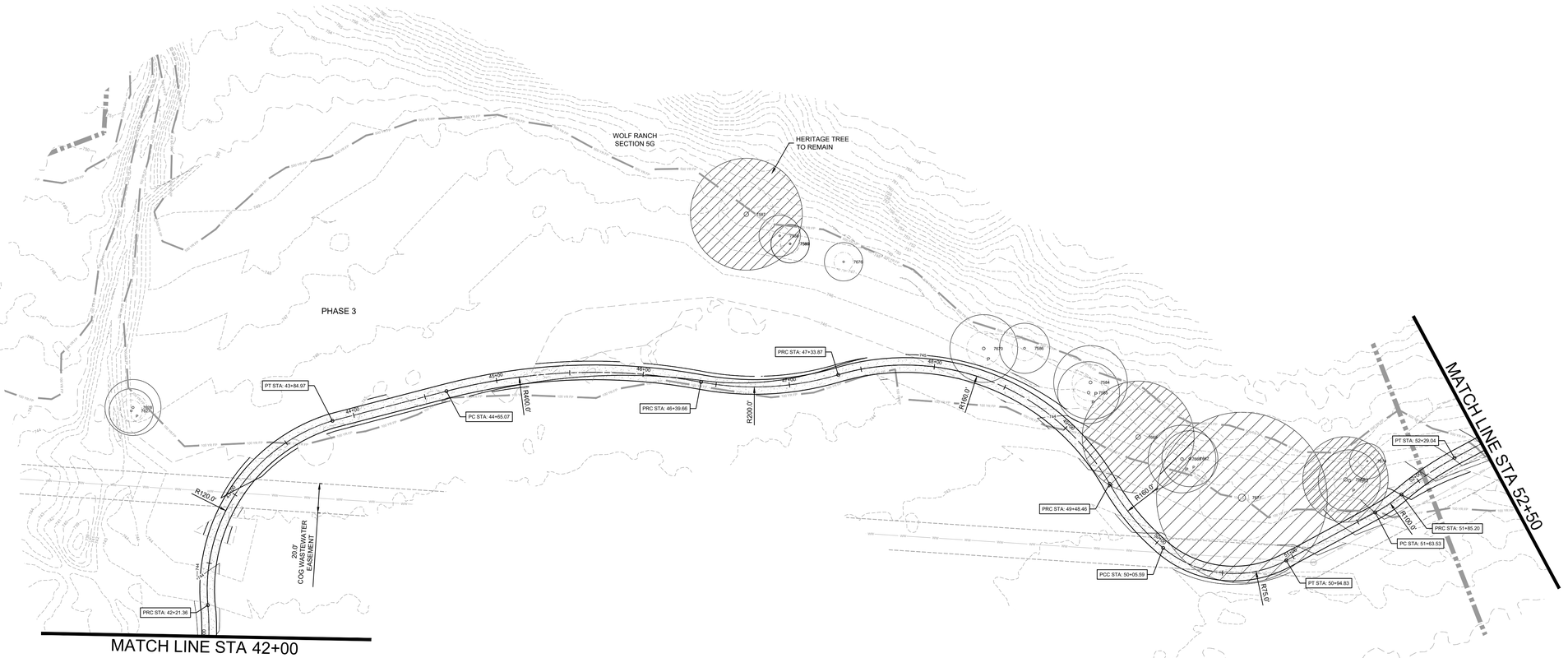

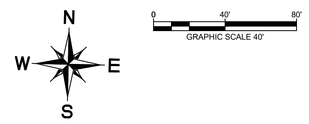

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
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- EXISTING CONTOUR
- PROPOSED CONTOUR
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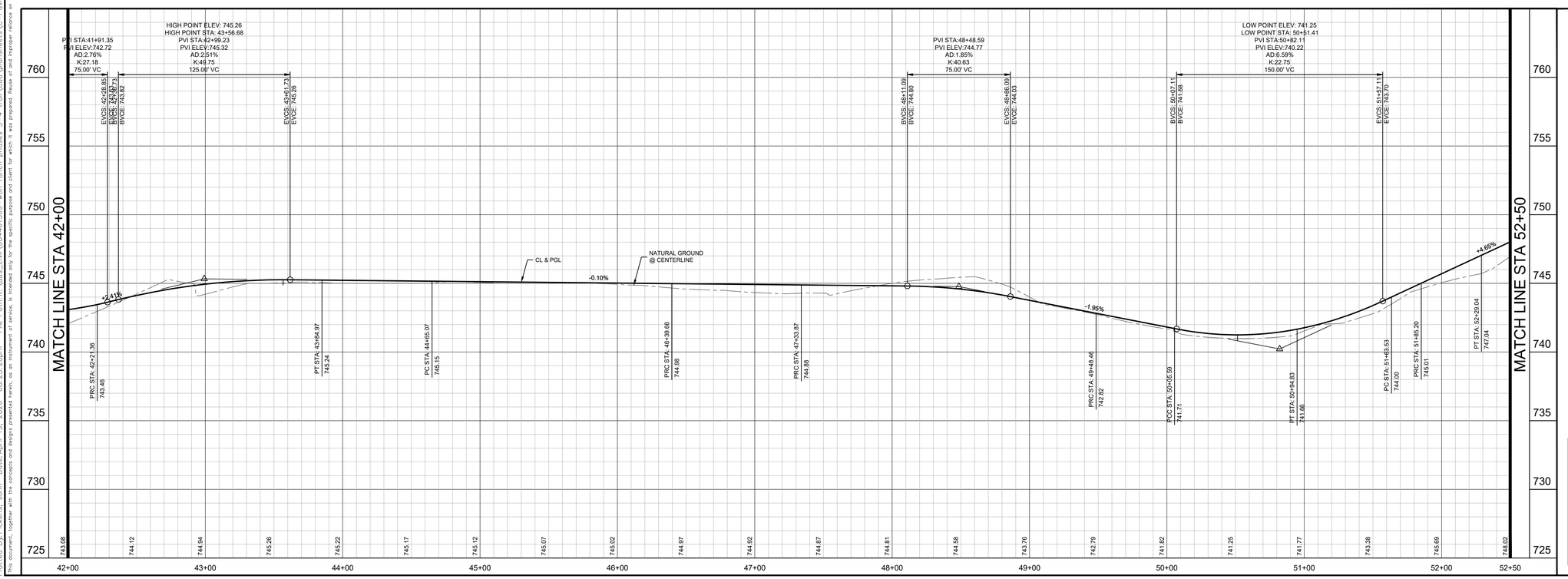
- PROPOSED WASTEWATER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

REGIONAL TRAIL A WEST (PHASE 3)



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

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STATE OF TEXAS
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110631
LICENSED PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309
DATE: SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

REGIONAL TRAIL A PLAN & PROFILE (5 OF 9)

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
30
OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 19, 2026 08:46:42pm File Path: K:\Jax_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Paving Plan and Profile 2.dwg
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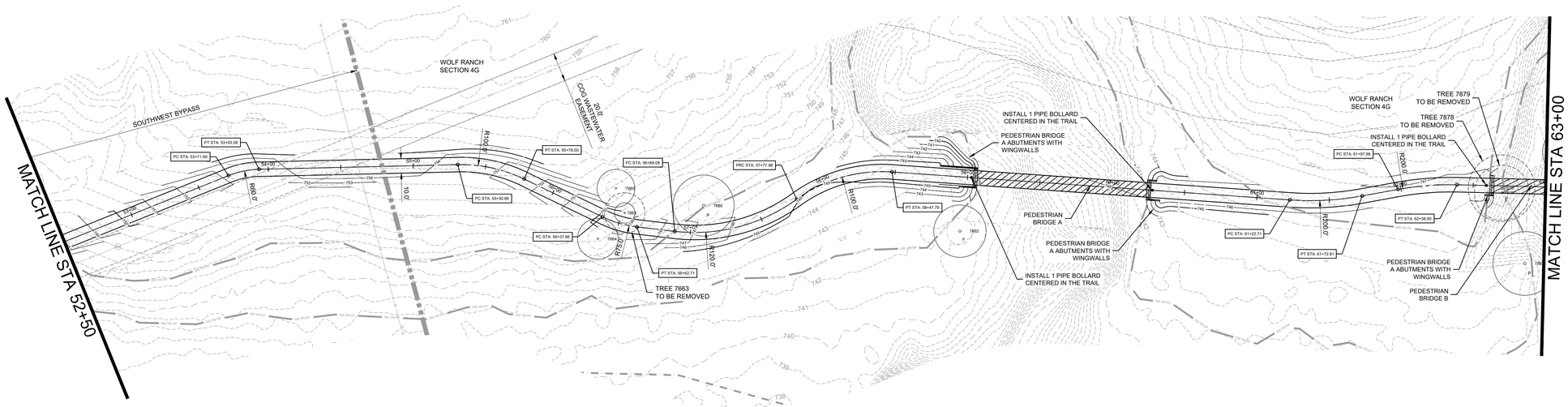

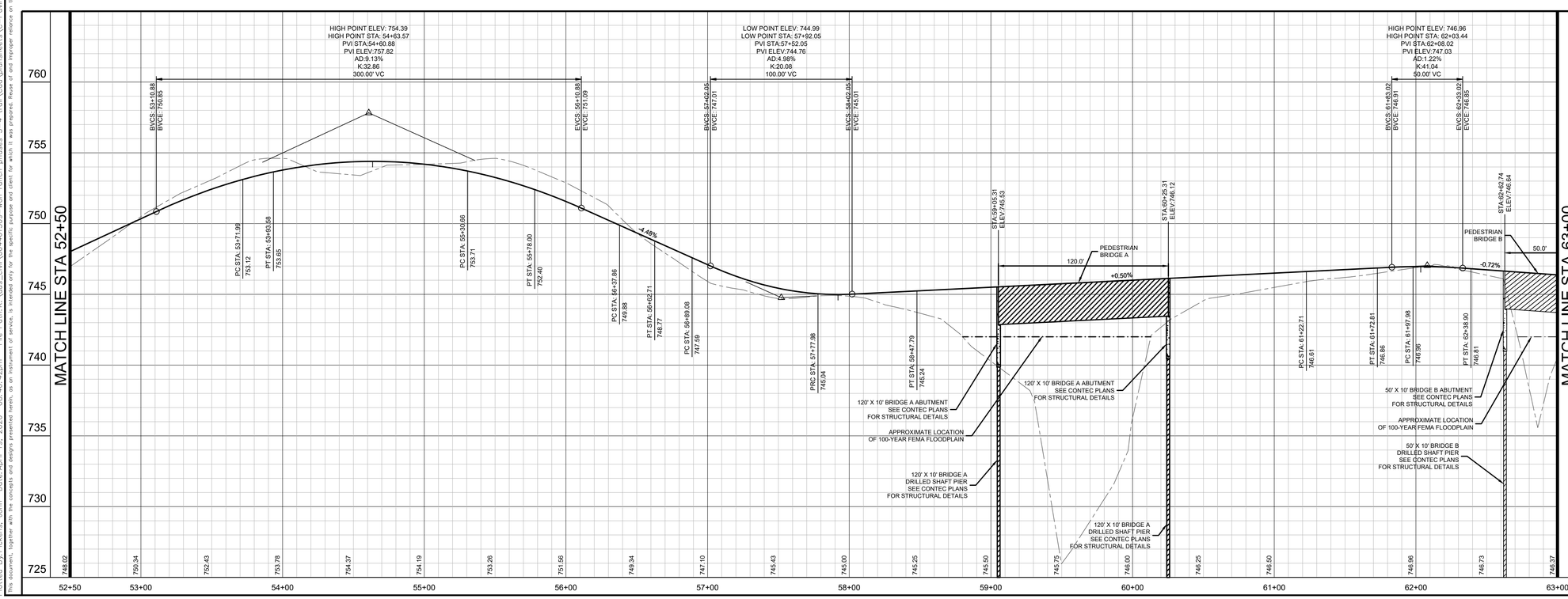

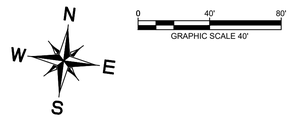

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

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PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

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04/18/2026

KHA PROJECT 064461309
DATE: SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

REGIONAL TRAIL A PLAN & PROFILE (6 OF 9)

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
31
OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 19, 2026 08:48:29pm File Path: K:\cas_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Paving Plan and Profile 2.dwg
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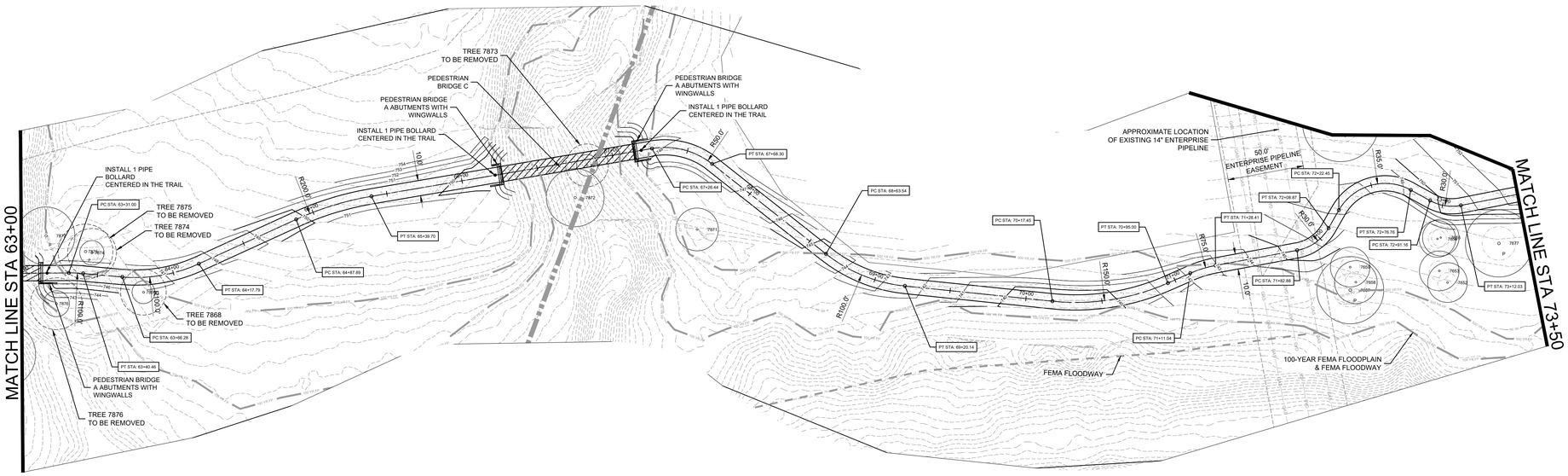

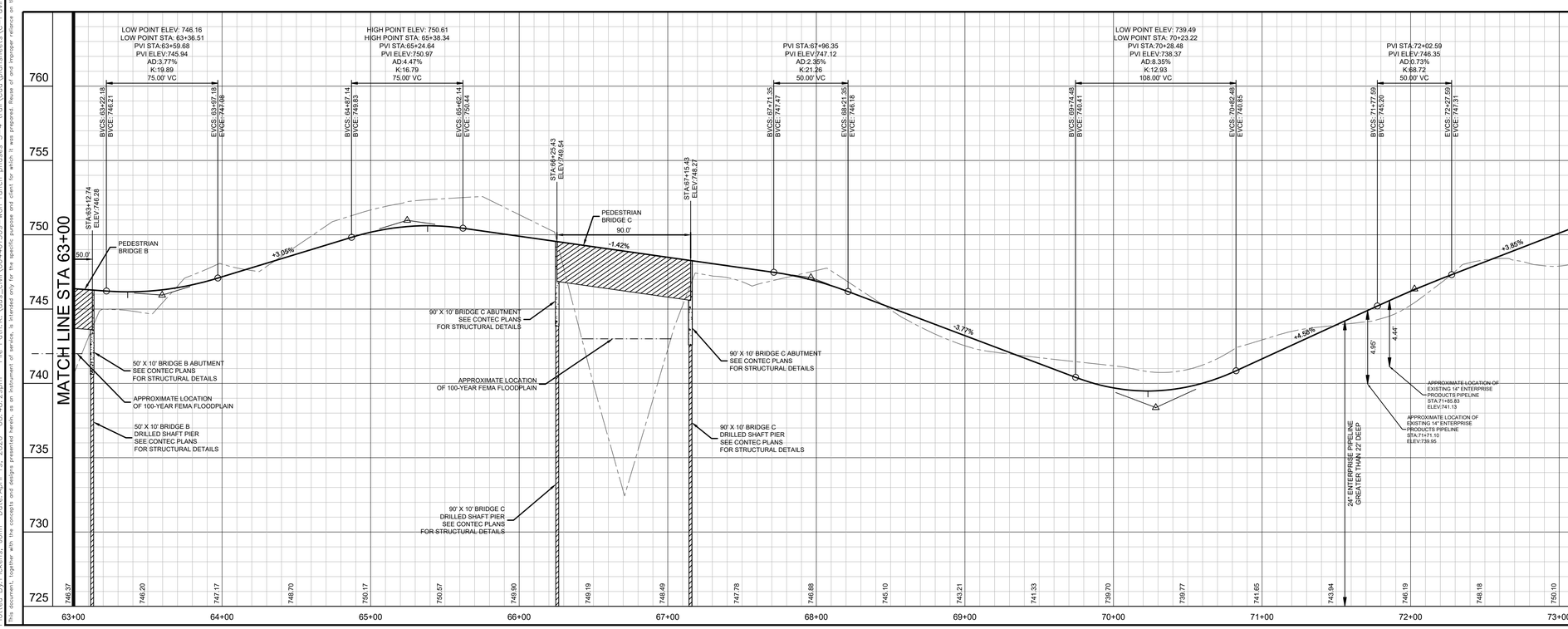

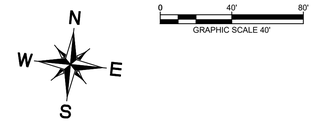

TREE LEGEND

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- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

BENCHMARKS

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04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

REGIONAL TRAIL A PLAN & PROFILE (7 OF 9)

WOLF RANCH REGIONAL TRAIL

PHASE 3 & 4

CITY OF GEORGETOWN

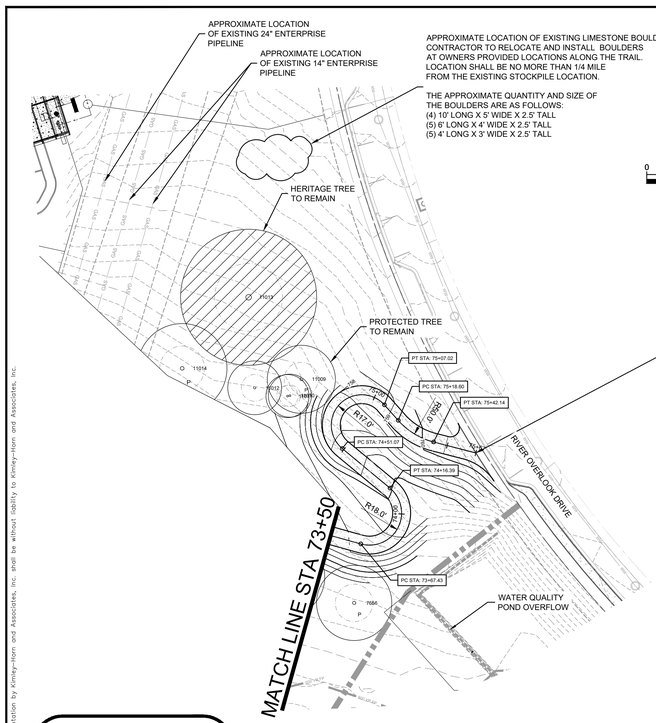
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER

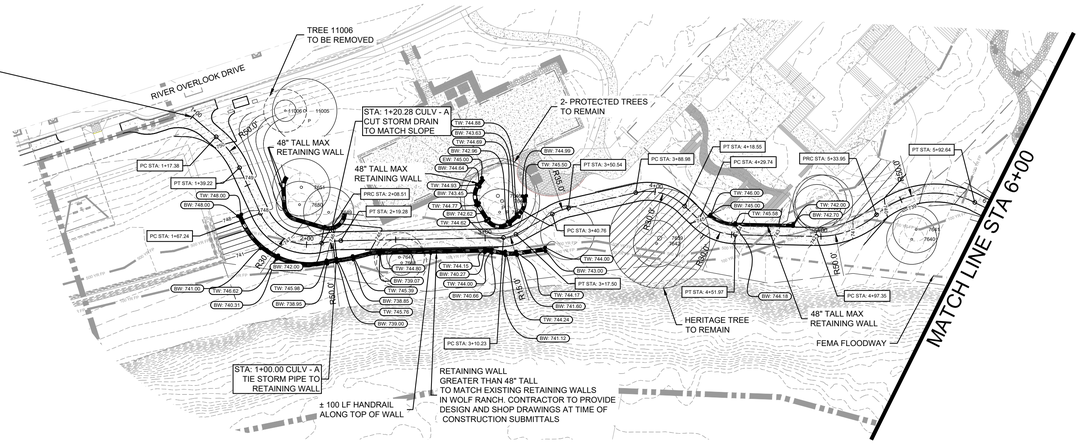
32

OF 53

2025-28-CON



SEE SHEET 35 FOR MORE DETAIL ON REGIONAL TRAIL A CONNECTION TO EXISTING SIDEWALK





TREE LEGEND

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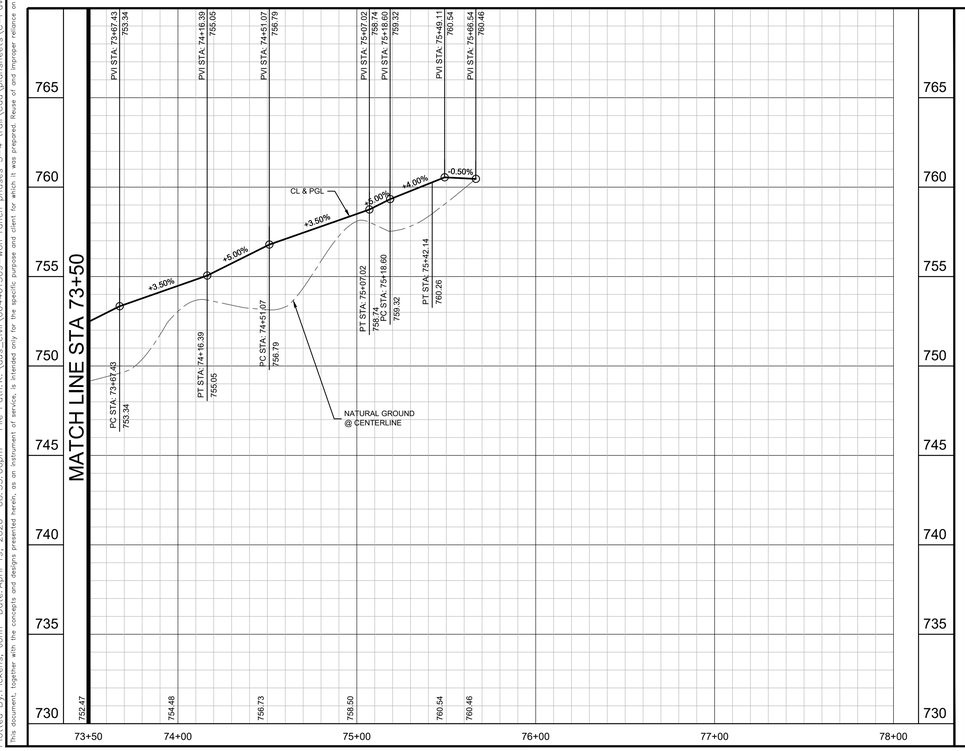
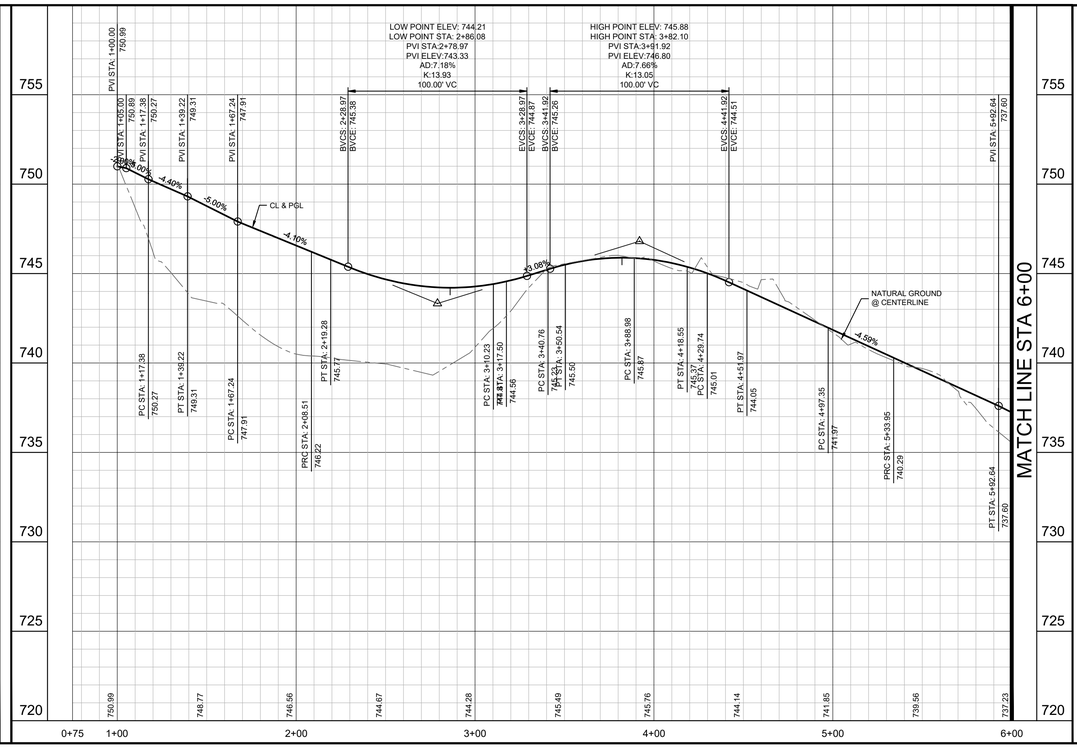
- EASEMENT

WARNING:
HIGH-PRESSURE PIPELINES
EXCAVATION AND/OR CONSTRUCTION
PROHIBITED WITHOUT WRITTEN
PERMISSION FROM ENTERPRISE
PRODUCTS COMPANY

REGIONAL TRAIL A WEST (PHASE 3)



REGIONAL TRAIL A EAST (PHASE 3)



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

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DRAWN BY:	RRJ
CHECKED BY:	JAP

REGIONAL TRAIL A PLAN & PROFILE (8 OF 9)

WOLF RANCH
REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
33
OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 19, 2026 08:55:00pm File Path: K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Paving Plan and Profile 2.dwg
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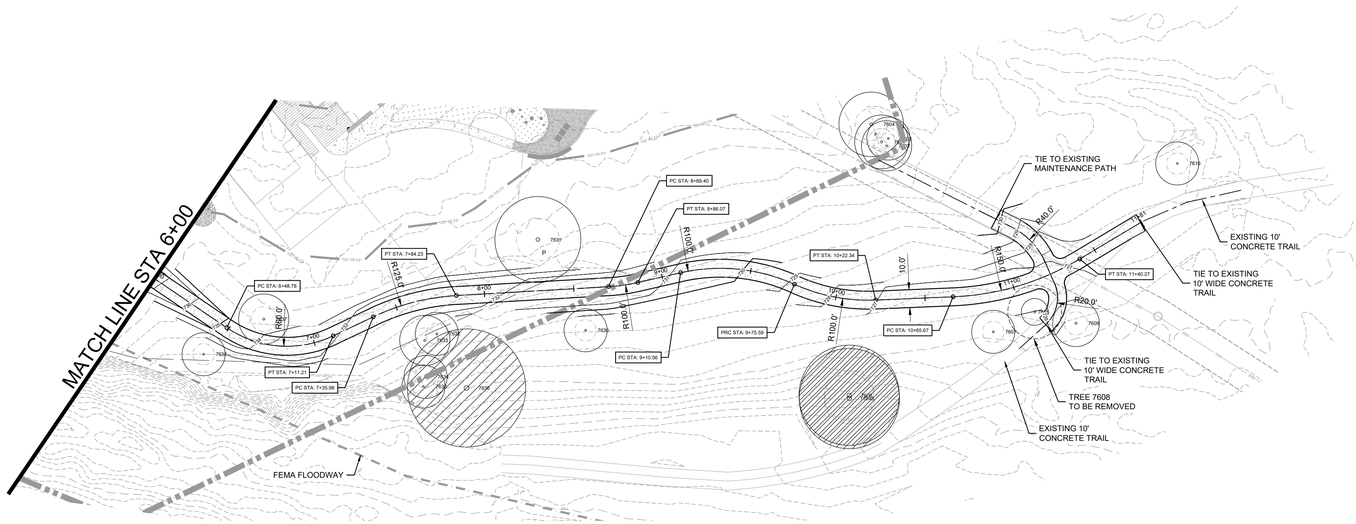

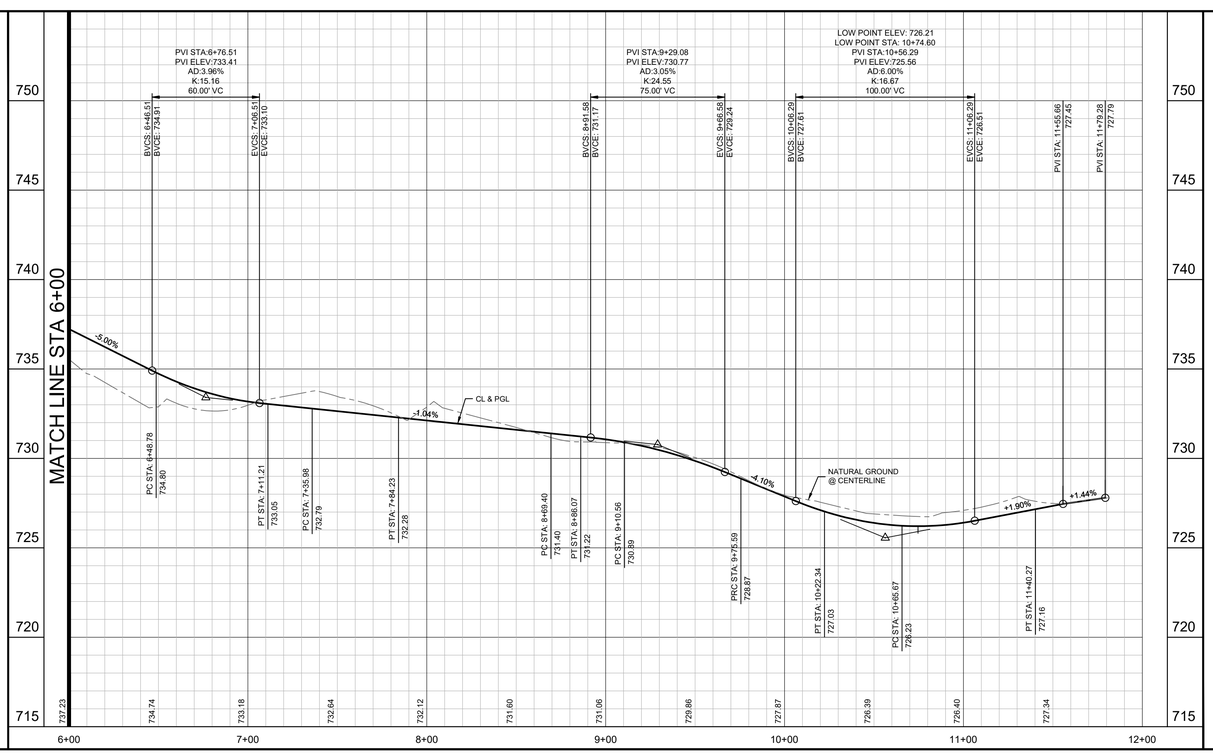

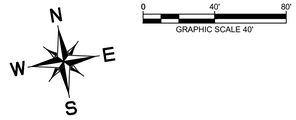

0 40' 80'
GRAPHIC SCALE 40'

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- PHASE LINE
- 555 EXISTING CONTOUR
- 555 PROPOSED CONTOUR
- W PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
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04/18/2026

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DATE: SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
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PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS
ADD BENCHMARKS HERE

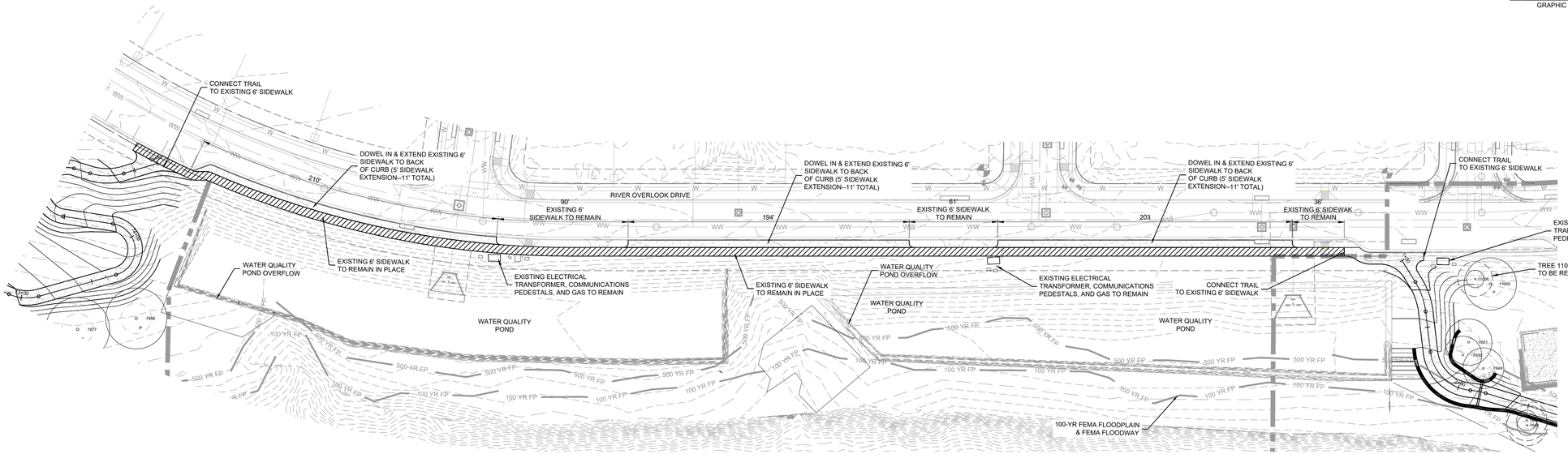
REGIONAL TRAIL A EAST (PHASE 3)

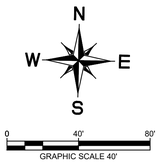
REGIONAL TRAIL A PLAN & PROFILE (9 OF 9)

WOLF RANCH
REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
34
OF 53

2025-28-CON





TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- PHASE LINE
- 555 EXISTING CONTOUR
- 555 PROPOSED CONTOUR
- W PROPOSED WATER LINE
- WW PROPOSED WASTEWATER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

BENCHMARKS

ADD BENCHMARKS HERE

No.	REVISIONS	DATE	BY

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TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309	
DATE:	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

REGIONAL TRAIL A EXISTING SIDEWALK CONNECTION PLAN

WOLF RANCH REGIONAL TRAIL

PHASE 3 & 4

CITY OF GEORGETOWN

WILLIAMSON COUNTY, TEXAS

SHEET NUMBER

35

OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 18, 2026 09:07:08pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\1C-Existing Sidewalk Trail Connection Plan.dwg
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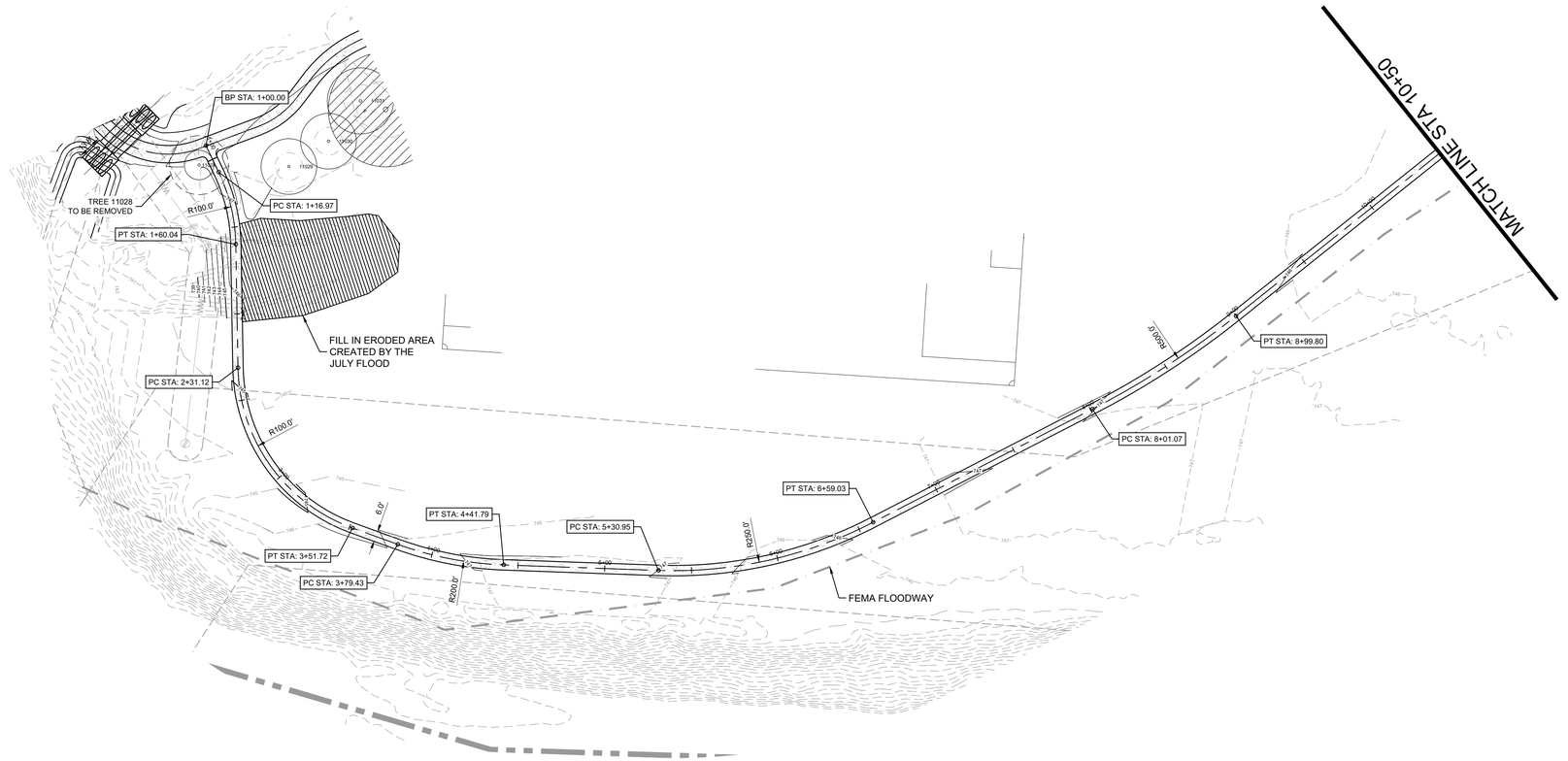



0 40' 80'
GRAPHIC SCALE 40'

TREE LEGEND

- PROTECTED TREE
- HERTIAGE TREE
- REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- PHASE LINE
- 555 EXISTING CONTOUR
- 555 PROPOSED CONTOUR
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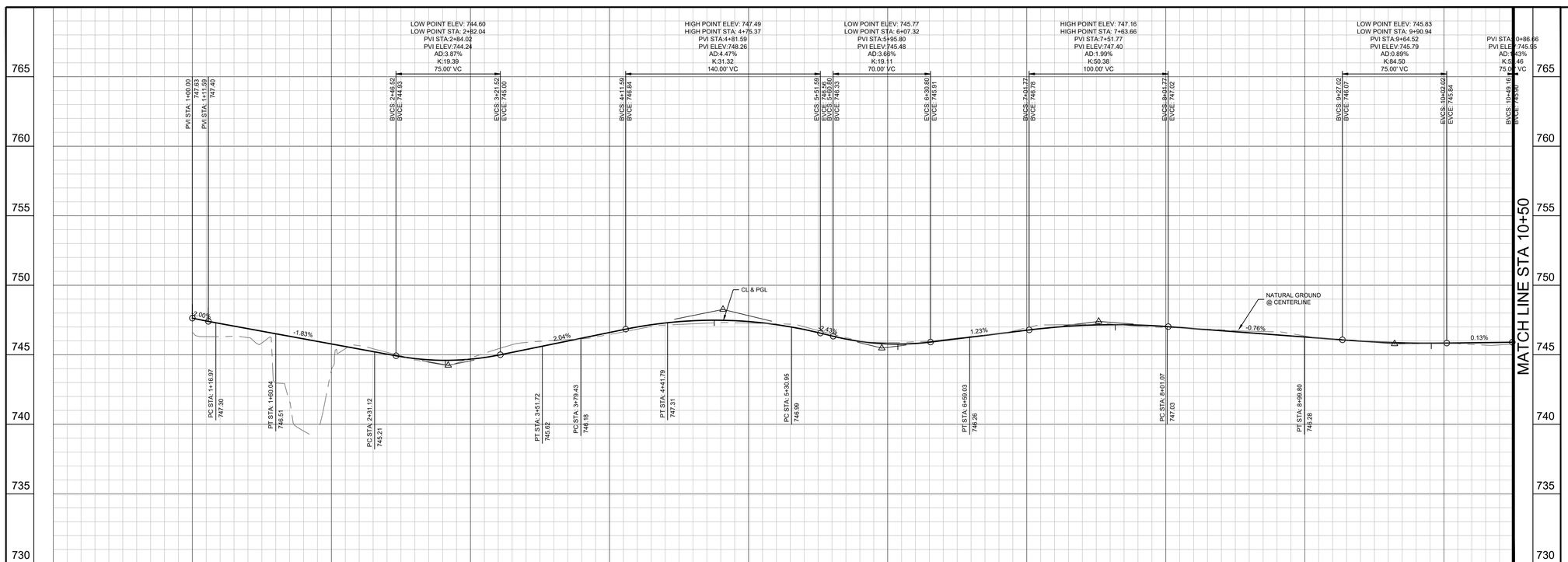
- WW PROPOSED WASTEWATER LINE
- PROPOSED STORM SEWER LINE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

HOA TRAIL A (PHASE 4)



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

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STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

HOA TRAILS PLAN & PROFILES (1 OF 2)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
36
OF 53

2025-28-CON

Plotted By:Pickens, John Date: April 19, 2026 09:21:37pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Civil\plansheets\C-HOA Trail Plan and Profile.dwg
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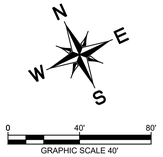
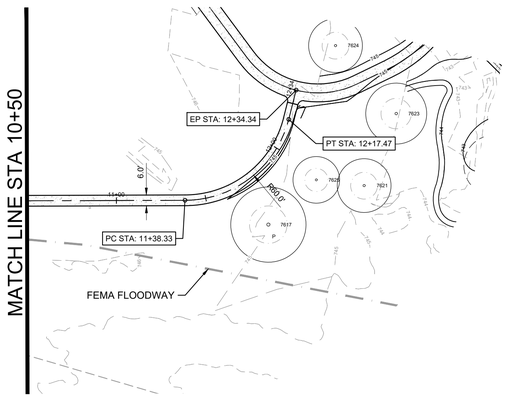
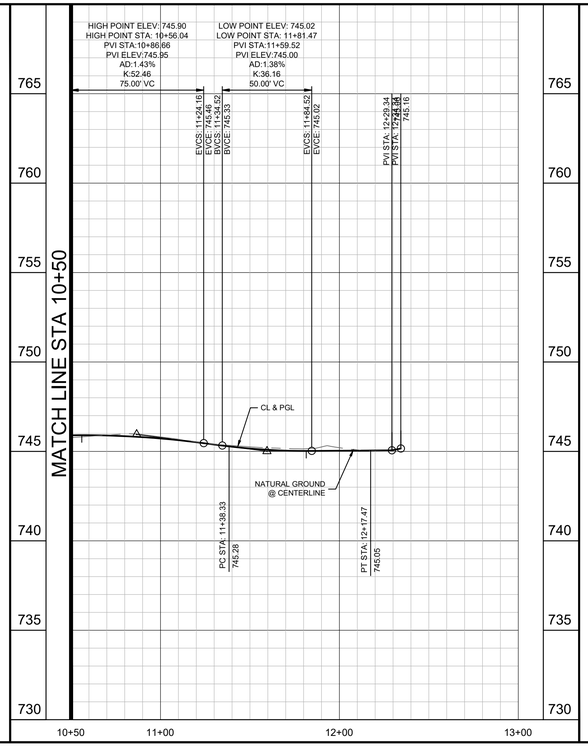


0 40' 80'

GRAPHIC SCALE 40'



HOA TRAIL A (PHASE 4)



PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

ADD BENCHMARKS HERE

TREE LEGEND

PROTECTED TREE

HERTIAGE TREE

REMOVED TREE

NOTE:

TREES TO BE REMOVED ARE LABELED IN PLAN VIEW FOR CLARITY.

LEGEND

- PROPERTY LINE
- PHASE LINE
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- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED PROFESSIONAL ENGINEER

04/18/2026

KHA PROJECT
064461309

DATE
SEPTEMBER 2025

SCALE: AS SHOWN

DESIGNED BY: JAP

DRAWN BY: RRJ

CHECKED BY: JAP

HOA TRAILS PLAN & PROFILES (2 OF 2)

WOLF RANCH REGIONAL TRAIL

PHASE 3 & 4

CITY OF GEORGETOWN

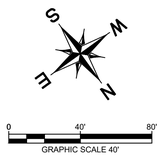
WILLIAMSON COUNTY, TEXAS

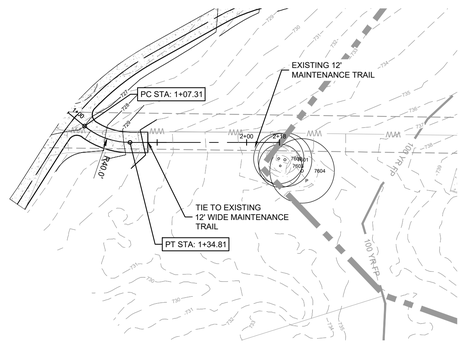
SHEET NUMBER

37

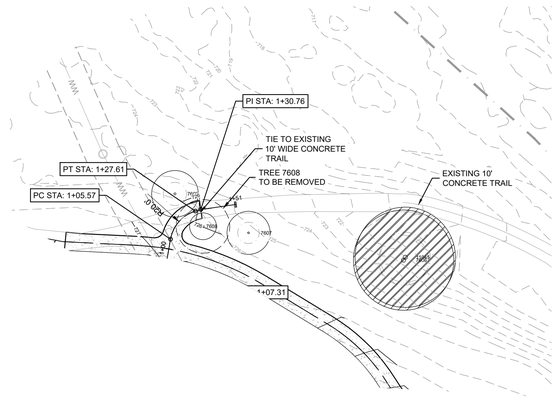
OF 53

2025-28-CON









TREE LEGEND

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- HERTIAGE TREE
- REMOVED TREE

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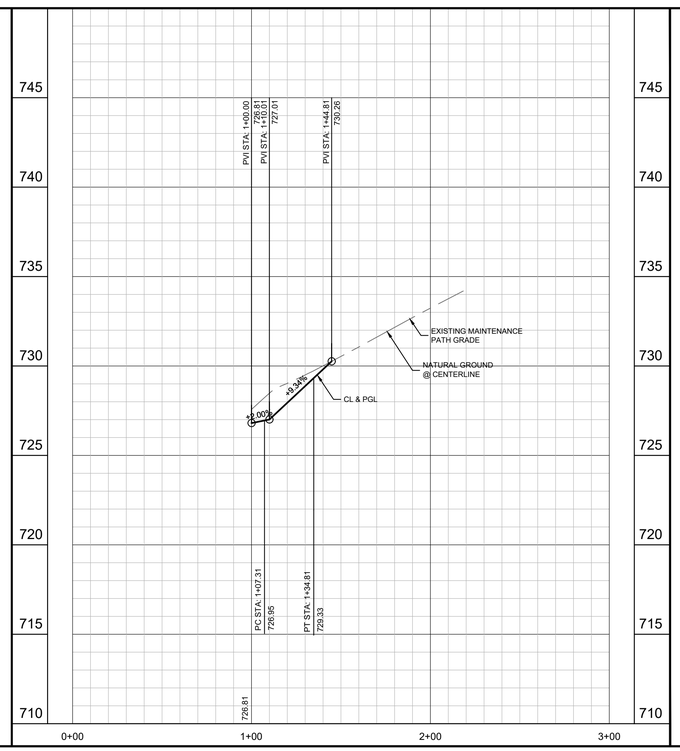
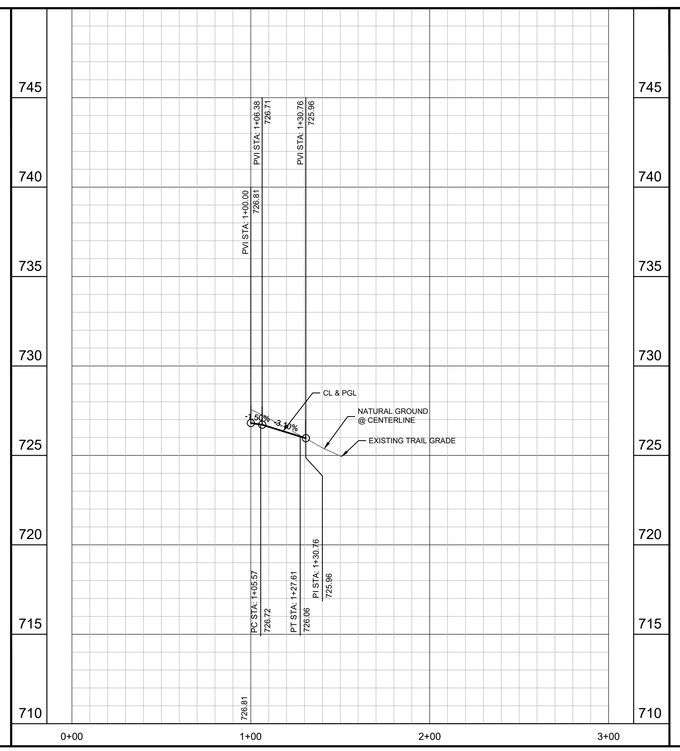
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER MANHOLE
- SIDEWALK (THIS CONTRACT)
- SIDEWALK (NOT IN THIS CONTRACT)
- RIGHT-OF-WAY
- EASEMENT

MAINTENANCE TRAIL



REGIONAL TRAIL B



PROFILE SCALE

1" = 40' HORIZONTAL
1" = 4' VERTICAL

BENCHMARKS

ADD BENCHMARKS HERE

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JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

REGIONAL TRAIL B AND MAINTENANCE TRAIL PLAN & PROFILES

WOLF RANCH REGIONAL TRAIL PHASE 3 & 4

CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
38
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 09:23:41pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-HOA Trail Plan and Profile.dwg
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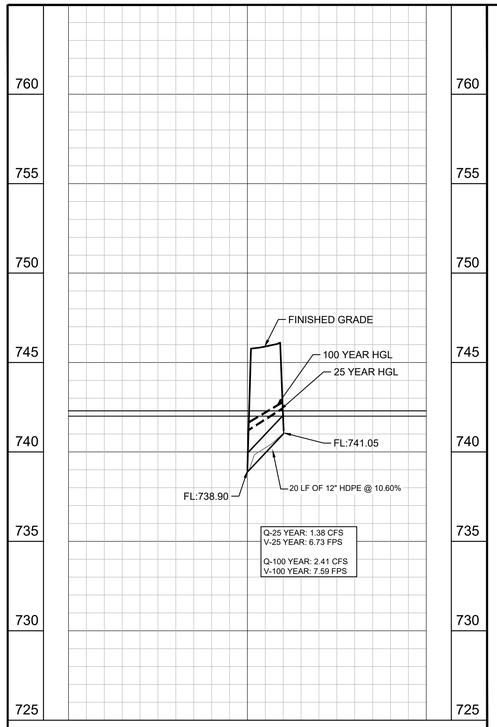
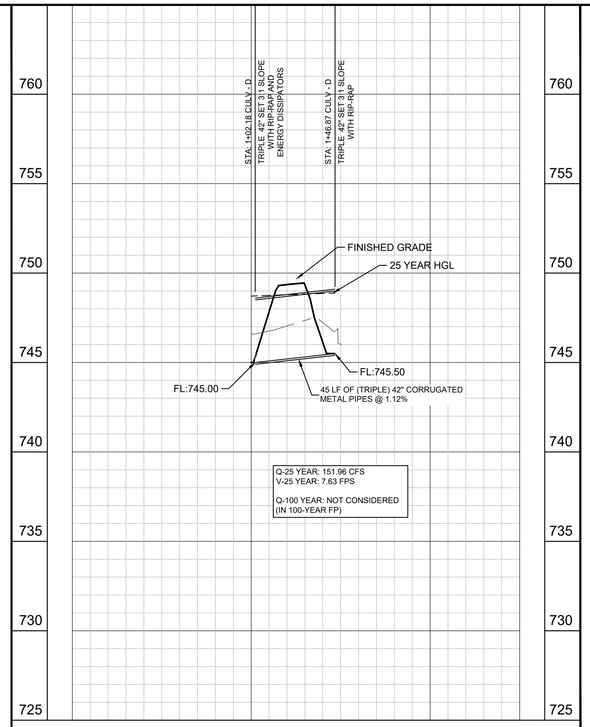
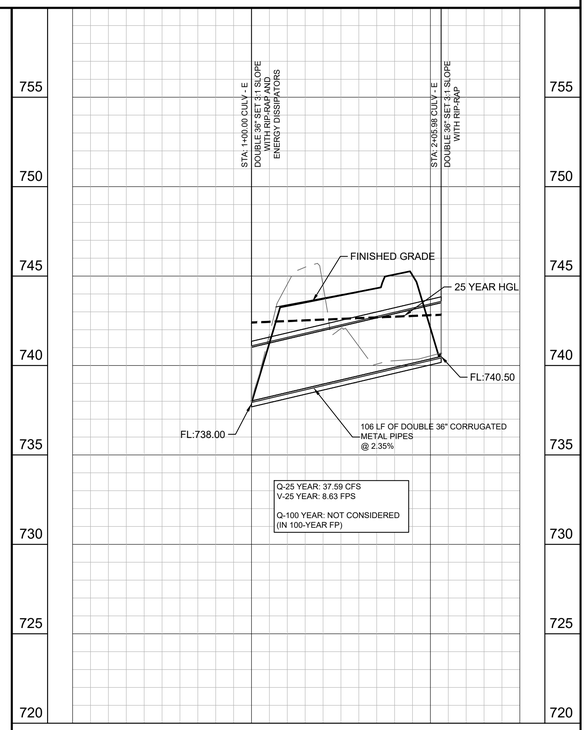
CULV - A



CULV - D



CULV - E



PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
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110631
LICENSED
PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

STORM PROFILES

WOLF RANCH
REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
39
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 09:29:51pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Storm Plan and Profile.dwg
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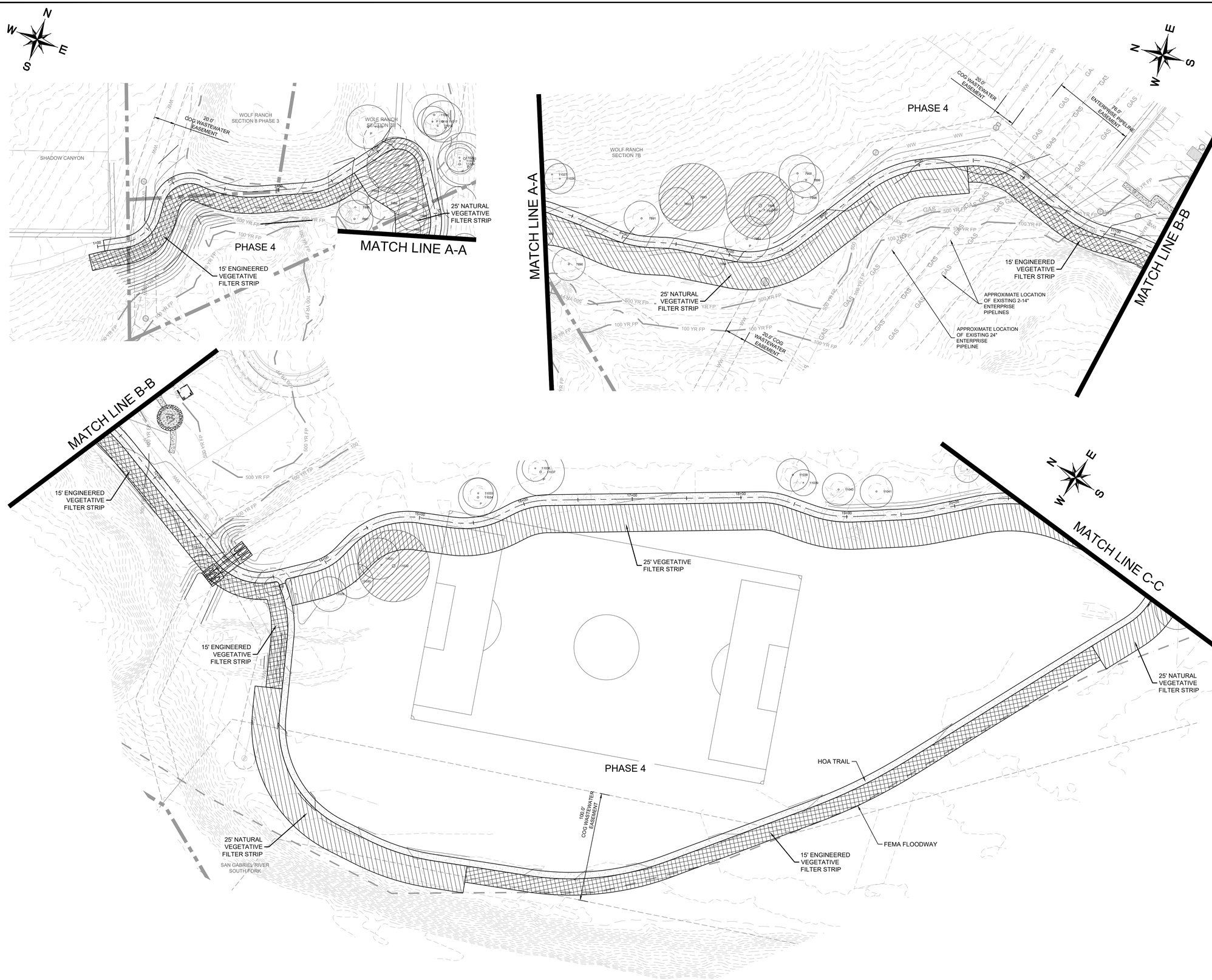

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PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

WATER QUALITY PLAN (1 OF 5)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
40
OF 53
2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 10:47:28pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Water Quality Plan.dwg

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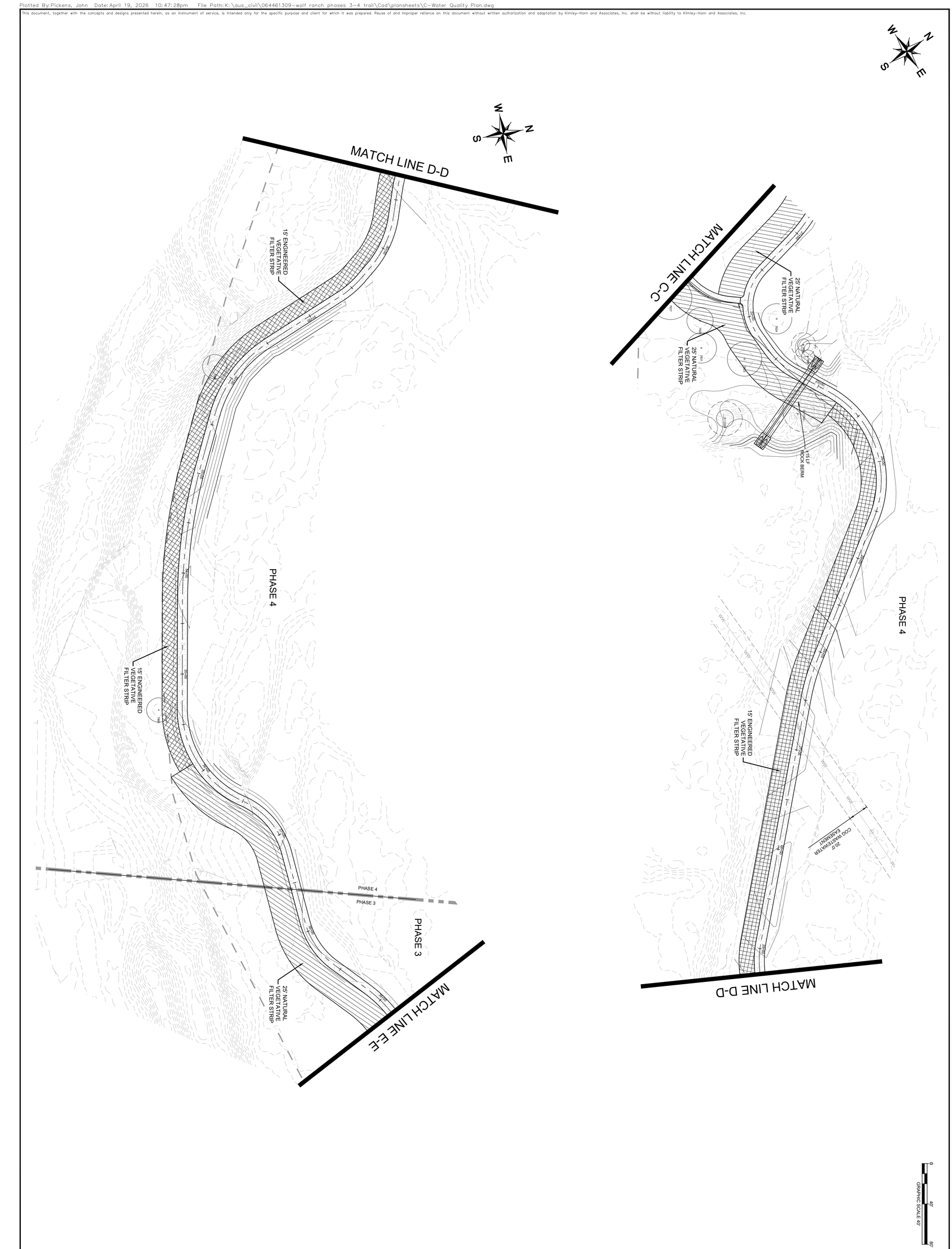

SHEET NUMBER 41 OF 53	WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS	WATER QUALITY PLAN (2 OF 5)	KHA PROJECT 064461309 DATE SEPTEMBER 2025 SCALE: AS SHOWN DESIGNED BY: JAP DRAWN BY: RRJ CHECKED BY: JAP

04/18/2026

JOHN A. PICKENS 119631 LICENSED PROFESSIONAL ENGINEER

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2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 10:49:20pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Water Quality Plan.dwg

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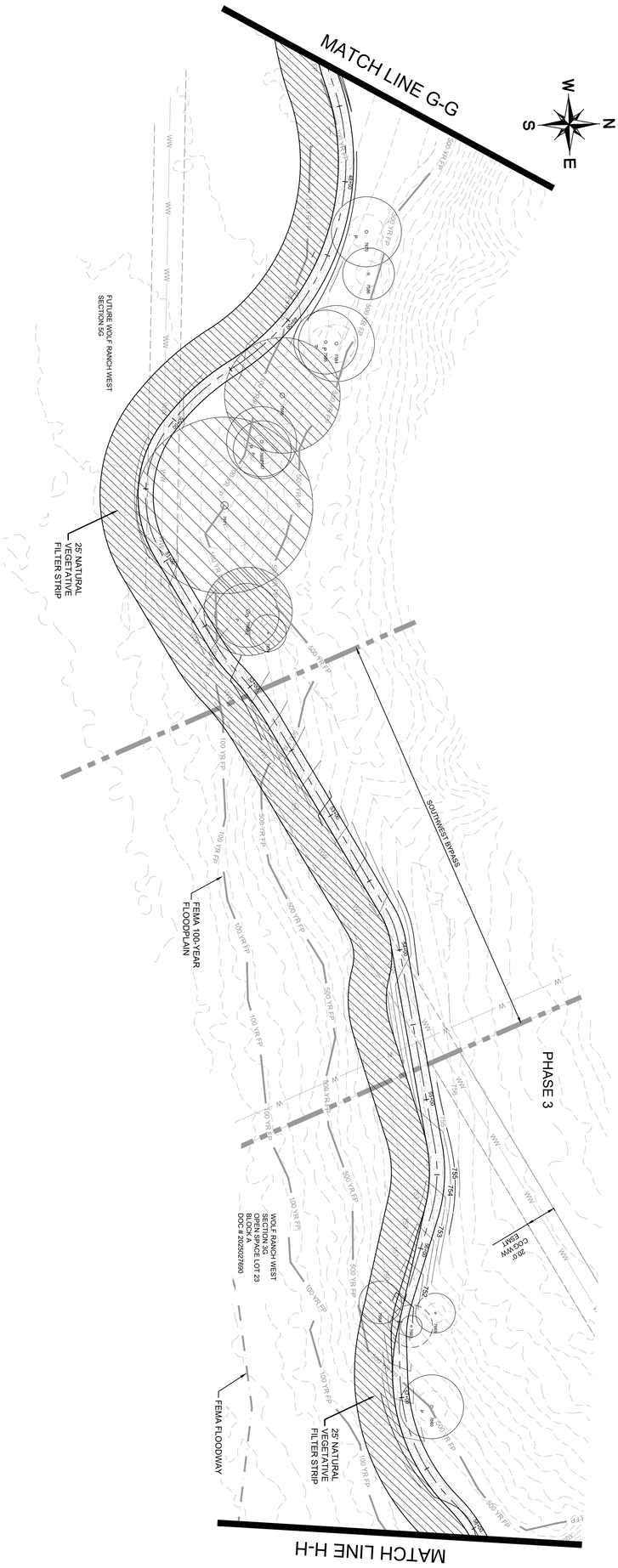

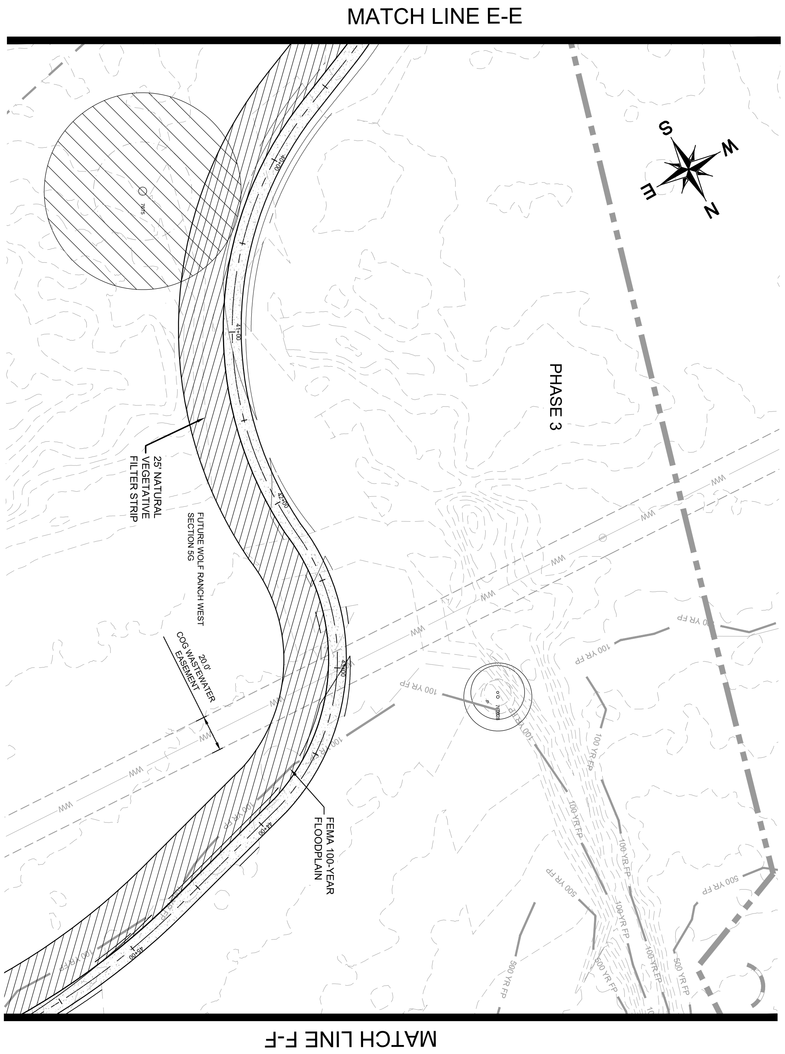

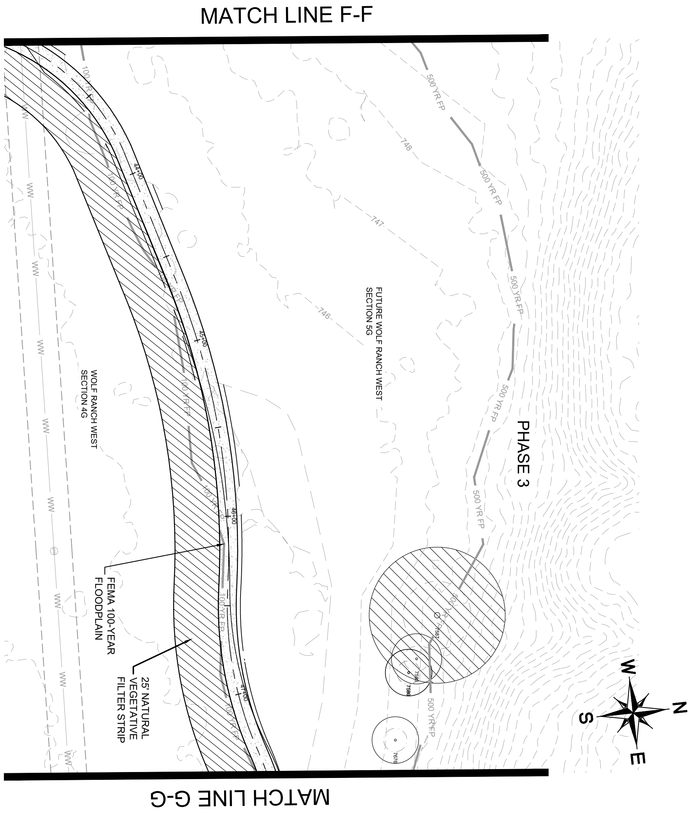

GRAPHIC SCALE 40'

SHEET NUMBER 42 OF 53	WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS	WATER QUALITY PLAN (3 OF 5)	KHA PROJECT 064461309 DATE SEPTEMBER 2025 SCALE: AS SHOWN DESIGNED BY: JAP DRAWN BY: RRJ CHECKED BY: JAP	04/18/2026

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2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 10:50:24pm File Path:K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Water Quality Plan.dwg
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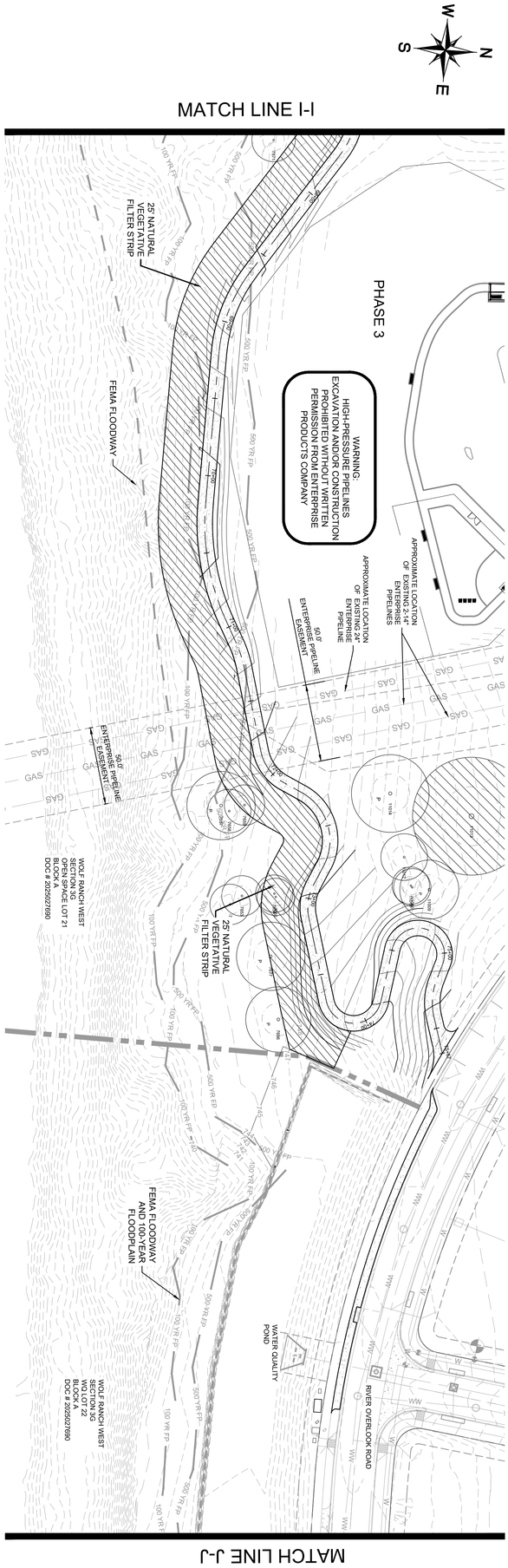

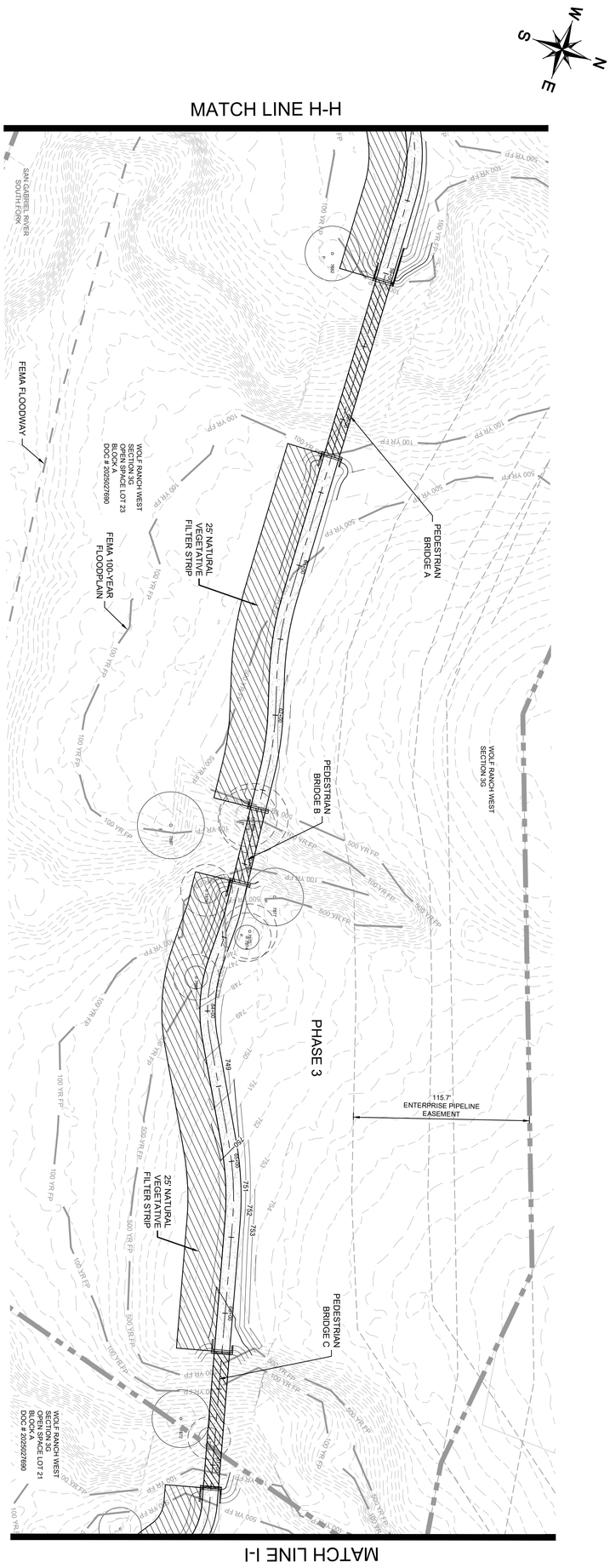

GRAPHIC SCALE 40'

SHEET NUMBER 43 OF 53	WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS	WATER QUALITY PLAN (4 OF 5)	KHA PROJECT 064461309 DATE SEPTEMBER 2025 SCALE: AS SHOWN DESIGNED BY: JAP DRAWN BY: RRJ CHECKED BY: JAP	04/18/2026

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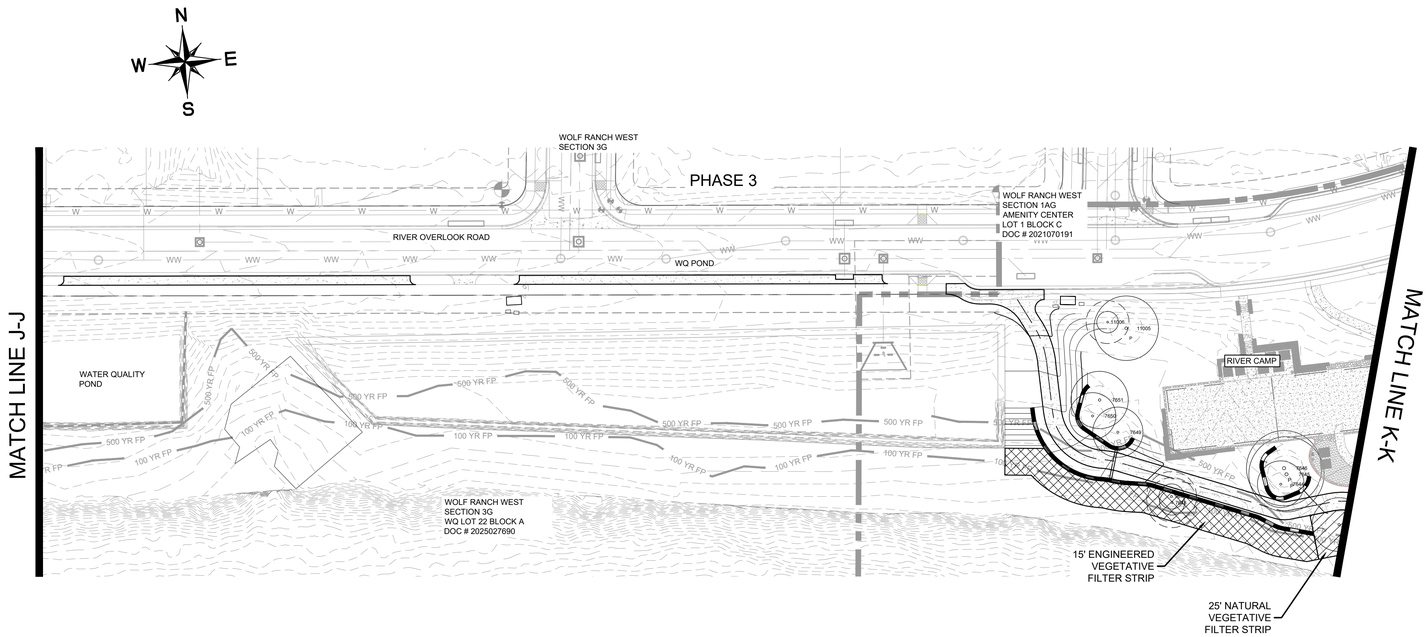
2025-28-CON





0 40' 80'
GRAPHIC SCALE 40'

LEGEND

- PROPERTY LINE
- 632 PROPOSED CONTOUR
- 632 EXISTING CONTOUR
- SF SILT FENCE
- STABALIZED CONSTRUCTION ENTRANCE/EXIT
- IP INLET PROTECTION
- RB ROCK BERM
- LOC LIMITS OF CONSTRUCTION
- EXISTING TREE (TO BE REMOVED)
- J-HOOK

No.	REVISIONS	DATE	BY

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04/18/2026

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DRAWN BY:	RRJ
CHECKED BY:	JAP

WATER QUALITY PLAN (5 OF 5)

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
44
OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 18, 2026 10:51:08pm File Path: K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Water Quality Plan.dwg
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LEGEND

X-1 / 9.9 ac	AREA DESIGNATOR / AREA IN ACRES
A-1	INLET NUMBER
	PROPERTY LINE
	EXISTING STORM DRAIN LINE
	PROPOSED DRAINAGE DIVIDE
	PROPOSED STORM DRAIN LINE
	PROPOSED STORM GRATE INLET
	PROPOSED STORM HEADWALL
	PROPOSED STORM MANHOLE
	PROPOSED STORM JUNCTION BOX
	PROPOSED STORM AREA INLET
	PROPOSED STORM CURB INLET
	PROPOSED FLOW DIRECTION
XXX	EXISTING MAJOR CONTOUR
XXX	EXISTING MINOR CONTOUR
XXX	PROPOSED MAJOR CONTOUR
XXX	PROPOSED MINOR CONTOUR
	TIME OF CONCENTRATION PATH

N
W E
S

0 400' 800'
GRAPHIC SCALE 400'

BENCHMARKS

ADD BENCHMARKS HERE

No.	REVISIONS	DATE	BY

Kimley»Horn

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JOHN A. PICKENS
110631
LICENSED
PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT: 064461309			
DATE: SEPTEMBER 2025	SCALE: AS SHOWN	DESIGNED BY: JAP	DRAWN BY: RRJ
		CHECKED BY: JAP	

DRAINAGE AREA MAP

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
45
OF 53
2025-28-CON

Plotted By: Pickens, John Date: April 18, 2026 10:53:28pm File Path: K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Drainage Area Map.dwg
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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Wolf Ranch Regional Trail Phases 3 & 4
Date Prepared: 10/10/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

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

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

County =	Williamson		
Total project area included in plan * =	159.53	acres	
Predevelopment impervious area within the limits of the plan * =	0.00	acres	
Total post-development impervious area within the limits of the plan* =	2.26	acres	
Total post-development impervious cover fraction * =	0.01		
P =	32	inches	
$L_{M\ TOTAL\ PROJECT}$ =	2095	lbs.	85% REDUCTION PER COG — Changed Formula

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 1

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

Drainage Basin/Outfall Area No. = 1 VFS

Total drainage basin/outfall area =	159.53	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	2.26	acres
Post-development impervious fraction within drainage basin/outfall area =	0.01	
$L_{M\ THIS\ BASIN}$ =	2095	lbs.

85% REDUCTION PER COG — Changed Formula

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:
A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	159.53	acres
A_I =	2.26	acres
A_P =	157.27	acres
L_R =	4440	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 2095 lbs.

F = 0.47

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	0.38	inches
Post Development Runoff Coefficient =	0.04	
On-site Water Quality Volume =	8219	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1644	
Total Capture Volume (required water quality volume(s) x 1.20) =	9863	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Wolf Ranch Regional Trail Phases 3 & 4
Date Prepared: 10/10/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
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where:
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P = Average annual precipitation, inches

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

County =	Williamson	
Total project area included in plan * =	159.53	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	2.26	acres
Total post-development impervious cover fraction * =	0.01	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	1970	lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 1

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

Drainage Basin/Outfall Area No. = 1 VFS

Total drainage basin/outfall area =	159.53	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	2.26	acres
Post-development impervious fraction within drainage basin/outfall area =	0.01	
$L_{M\ THIS\ BASIN}$ =	1970	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:
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L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	159.53	acres
A_I =	2.26	acres
A_P =	157.27	acres
L_R =	4440	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 1970 lbs.

F = 0.44

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	0.34	inches
Post Development Runoff Coefficient =	0.04	
On-site Water Quality Volume =	7382	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1476	
Total Capture Volume (required water quality volume(s) x 1.20) =	8858	cubic feet

DRAINAGE AREA AND FLOW TABLE

Peak Flow Calculation - Rational Method		RUNOFF COEFFICIENT (C)					RAINFALL INTENSITY (I)				PEAK RUNOFF (Q)			
DRAINAGE AREA	AREA (ACRES)	C 2-YEAR	C 10-YEAR	C 25-YEAR	C 100-YEAR	Tc (min)	I 2-YEAR	I 10-YEAR	I 25-YEAR	I 100-YEAR	Q 2-YEAR	Q 10-YEAR	Q 25-YEAR	Q 100-YEAR
A	0.18	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	0.69	1.05	1.38	2.41
B	6.07	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	23.15	35.27	46.56	81.21
C	29.50	0.54	0.60	0.65	0.73	15	4.26	6.44	7.92	12.78	76.07	114.96	151.96	276.02
D	4.70	0.54	0.60	0.65	0.73	8	5.48	8.31	10.20	16.02	15.58	23.63	31.19	55.11
E	4.90	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	18.69	28.47	37.59	65.55
F	17.02	0.54	0.60	0.65	0.73	10	5.05	7.66	9.40	14.88	52.03	78.79	104.02	185.36
G	79.02	0.54	0.60	0.65	0.73	25	3.31	4.99	6.16	10.26	157.94	238.69	316.51	593.28
H	15.60	0.54	0.60	0.65	0.73	10	5.05	7.66	9.40	14.88	47.69	72.22	95.34	169.89
I	106.17	0.54	0.60	0.65	0.73	25	3.31	4.99	6.16	10.26	212.21	320.70	425.26	797.12
J	17.09	0.54	0.60	0.65	0.73	10	5.05	7.66	9.40	14.88	52.24	79.12	104.45	186.12
K	1.22	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	4.65	7.09	9.36	16.32
L	18.60	0.54	0.60	0.65	0.73	10	5.05	7.66	9.40	14.88	56.86	86.11	113.68	202.56
M	2.53	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	9.65	14.70	19.41	33.85
N	0.03	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	0.11	0.17	0.23	0.40
O	0.03	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	0.11	0.17	0.23	0.40
P	0.03	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	0.11	0.17	0.23	0.40
Q	0.18	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	0.69	1.05	1.38	2.41
R	4.79	0.54	0.60	0.65	0.73	5	6.31	9.61	11.79	18.28	18.27	27.83	36.74	64.08

BENCHMARKS

ADD BENCHMARKS HERE

No.	REVISIONS	DATE	BY

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STATE OF TEXAS
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LICENSED PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309
DATE: SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

DRAINAGE CALCULATIONS

WOLF RANCH
REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
46
OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 19, 2026 10:55:06pm File Path: K:\Aus_Civil\064461309-wolf ranch phases 3-4 trail\Civil\plansheets\C-DrainageCalculations.dwg
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GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 – 10%
	200 FEET	2 ACRES	10 – 20%
	100 FEET	1 ACRE	20 – 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 – 10%

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES
DRAWING NAME: EC01
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB

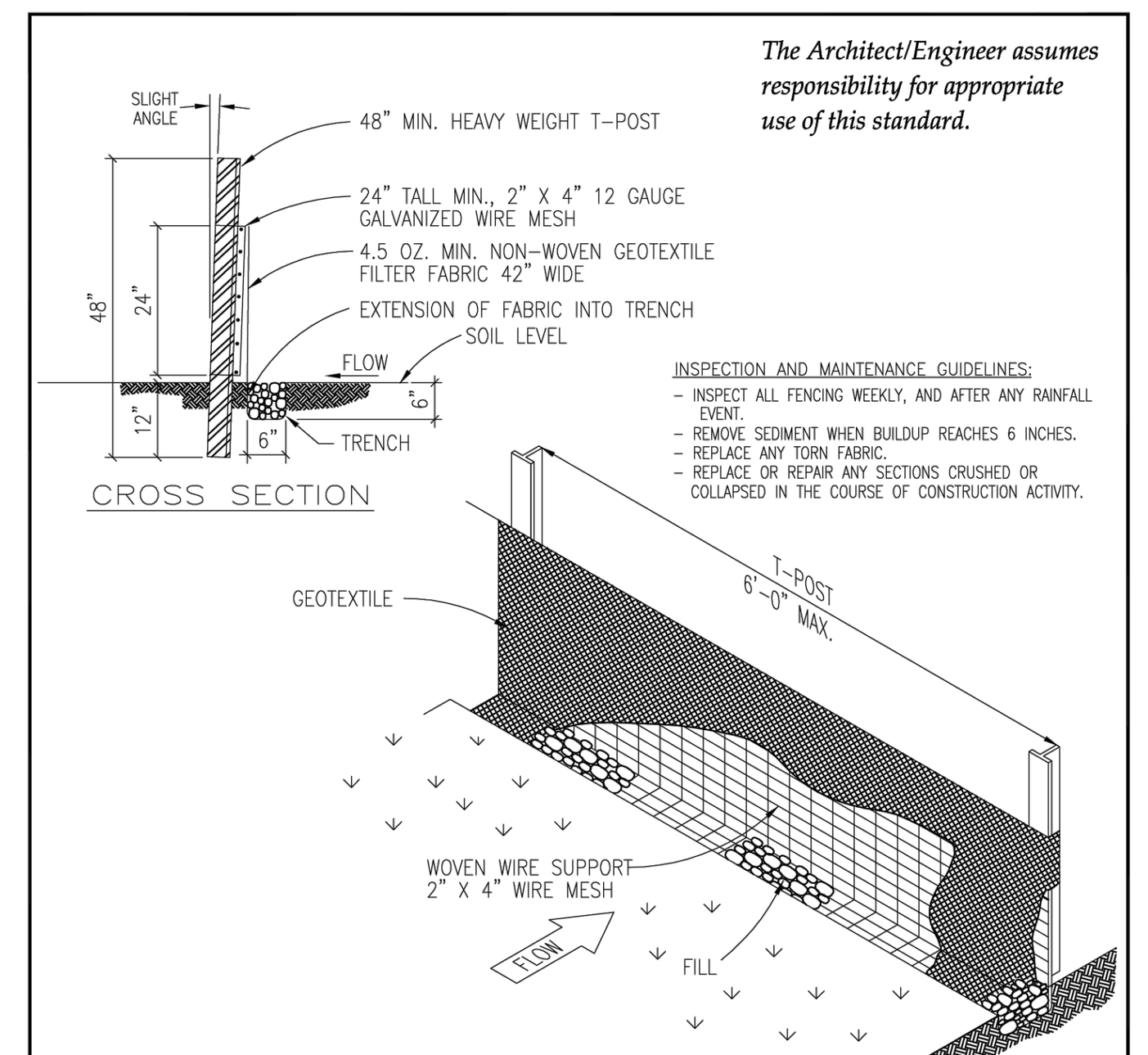
NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
3. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
4. ALL PLANTING SHALL BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100lb/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 82% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION ABATEMENT PLAN.
6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10–DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS . RAINFALL OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1–1/2 INCHES HIGH WITH 95% *COVERAGE*, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
8. A MINIMUM OF FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY CONSTRUCTION.
9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIPLINE.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED–ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE FENCING.
13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
14. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
16. THE CONTRACTOR IS TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4 INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED. ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'–4') BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNERS EXPENSE.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES
DRAWING NAME: EC01A
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB

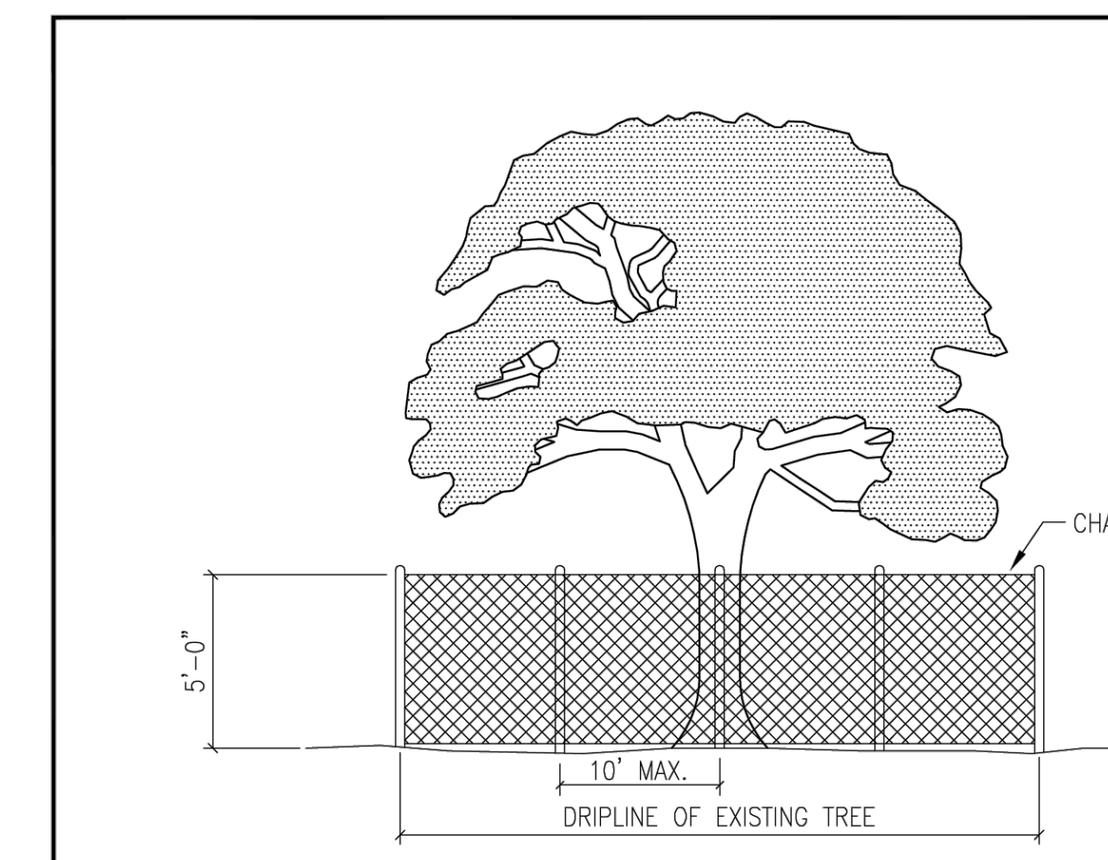
The Architect/Engineer assumes responsibility for appropriate use of this standard.



INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

INSTALLATION:
- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T–POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T–POST WITH 11 1/2 GAUGE GALVANIZED T–POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
- ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
SILT FENCE DETAIL
DRAWING NAME: EC02
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB

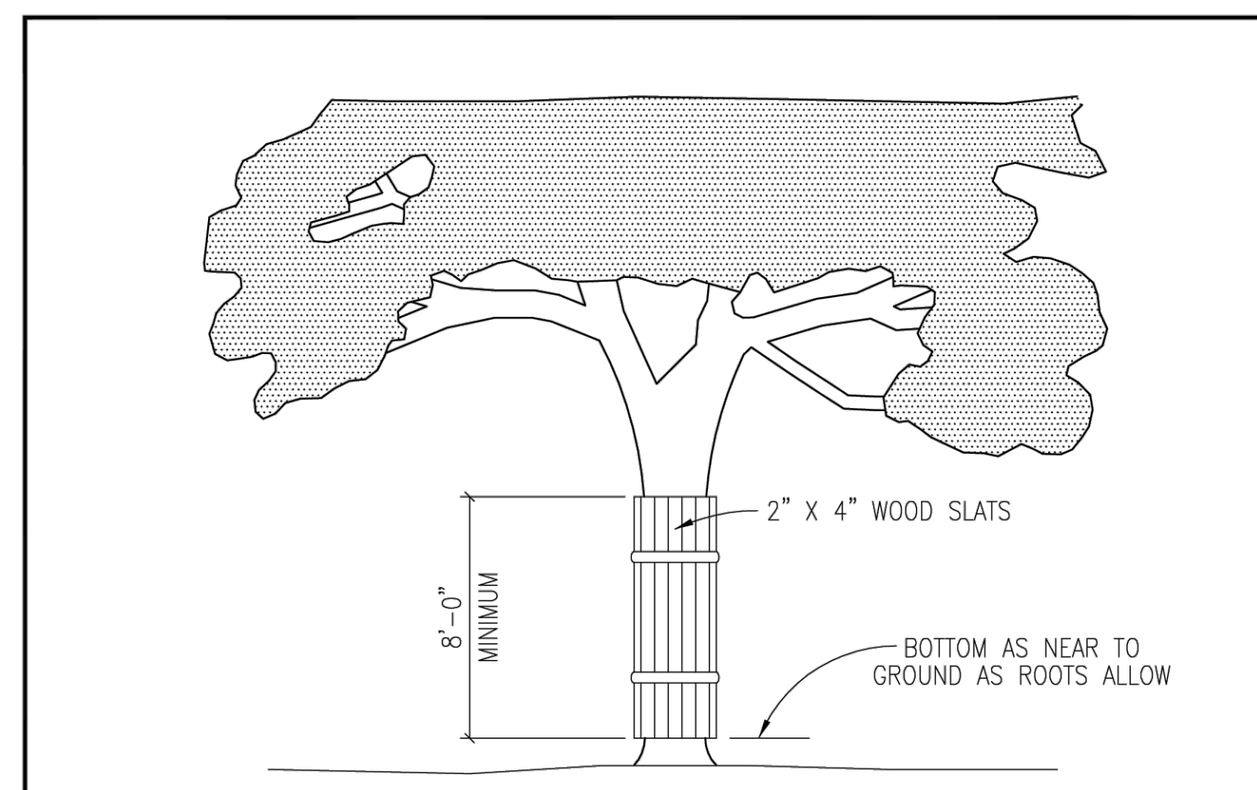


NOTES:

1. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING).
2. FENCES SHALL COMPLETELY SURROUND THE TREE, OR CLUSTERS OF TREES; WILL BE LOCATED AT THE OUTERMOST LIMIT OF THE TREE BRANCHES (DRIPLINE), AND WILL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MATERIALS.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN SIX INCHES (6") CUT OR FILL, OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY.
   C. WOUNDS TO EXPOSED ROOTS, TRUNKS OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES, SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING AND FIRE.
3. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
   B. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN SIX FEET (6'–0") TO BUILDING.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TREE PROTECTION – CHAIN LINK FENCE
DRAWING NAME: EC09
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB

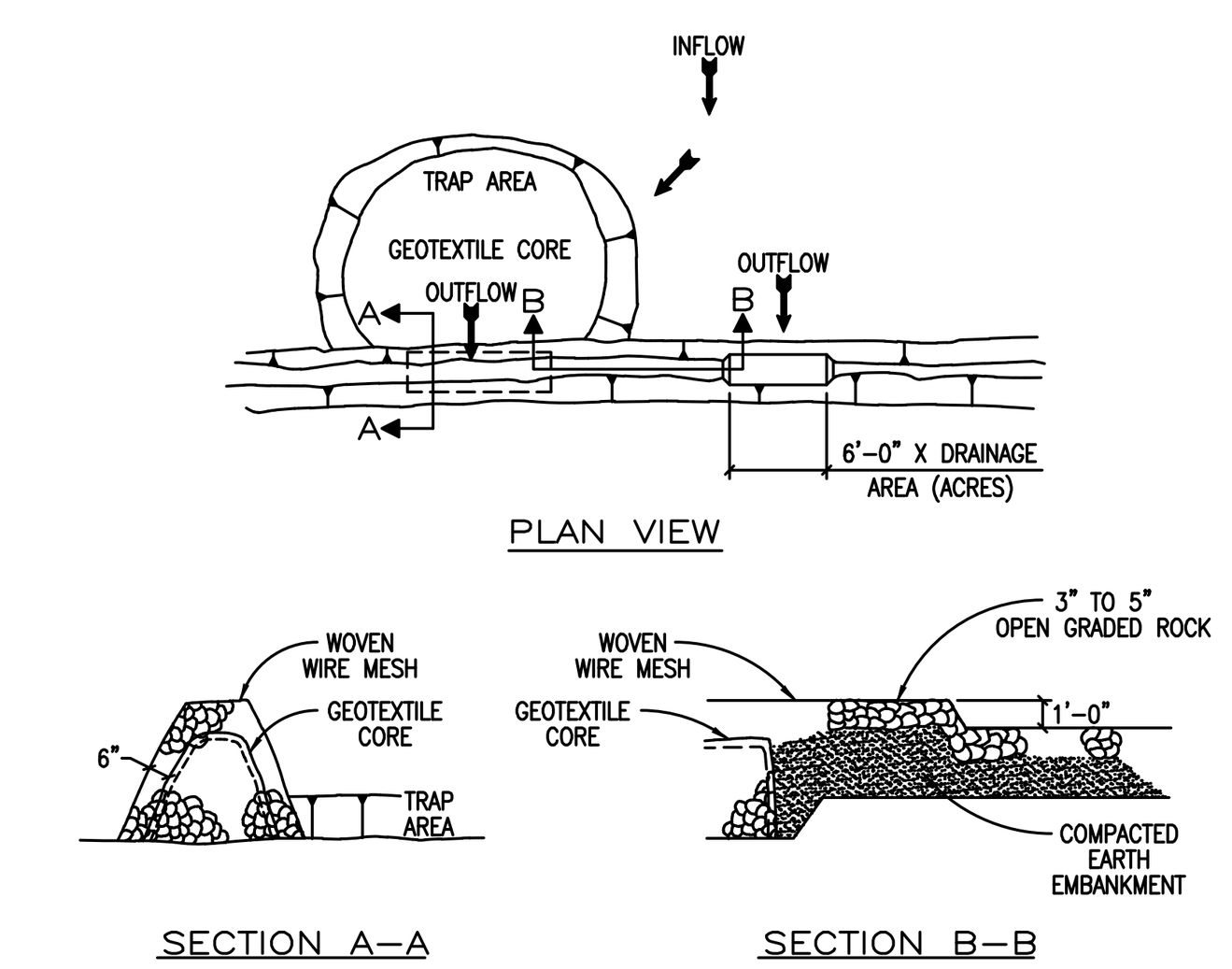


NOTES:

1. WHERE ANY EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN FOUR FEET (4'–0") TO A TREE TRUNK; PROTECT THE TRUNK WITH STRAPPED–ON–PLANKING TO A HEIGHT OF EIGHT FEET (8'–0"), OR TO THE LIMITS OF LOWER BRANCHING IN ADDITION TO THE REDUCED FENCING PROVIDED.
2. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO (2) DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE, AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
3. PRIOR EXCAVATION OR GRADE CUTTING WITHIN TREE DRIPLINE. MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT, TO MINIMIZE DAMAGE TO REMAINING ROOTS.
4. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES SHOULD BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS SHOULD BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.
5. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
6. NO LANDSCAPE TOPSOIL DRESSING GREATER THE FOUR INCHES (4") SHALL BE PERMITTED WITHIN THE DRIPLINE OF A TREE. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
7. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TREE PROTECTION – WOOD SLATS
DRAWING NAME: EC10
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB



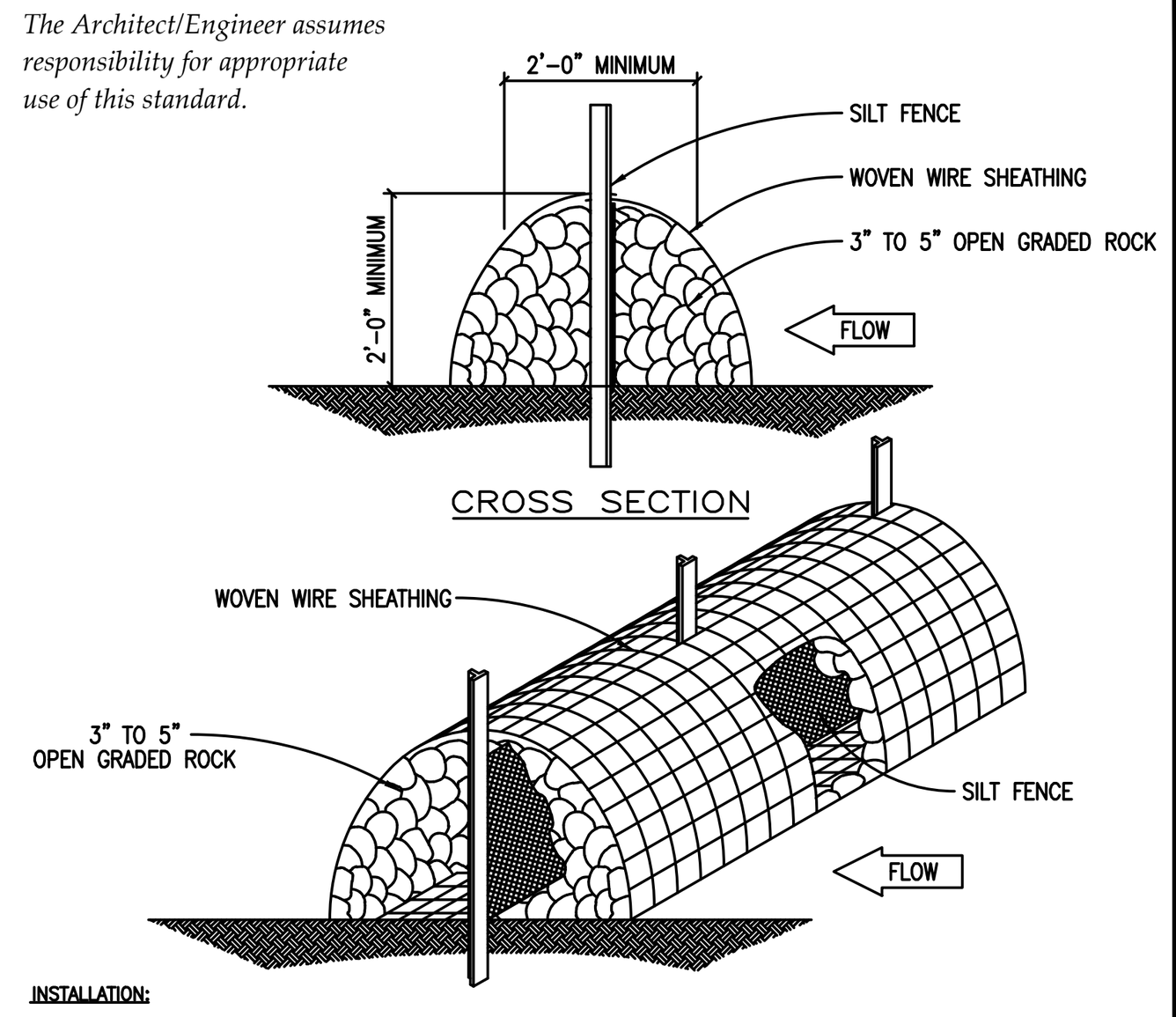
INSTALLATION:
- LOCATE THE SEDIMENT TRAP SO AS TO DISTURB AS FEW TREES AS POSSIBLE.
- CLEAR AND GRUB THE AREA UNDER THE EMBANKMENT OF ALL VEGETATION AND ROOT MATS.
- LAYOUT THE WIRE MESH AND THEN THE GEOTEXTILE FABRIC.
- CONSTRUCT THE GEOTEXTILE CORE AND CORRESPONDING ROCK EMBANKMENT TO THE DESIGNATED HEIGHT AND CONFIGURATION.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE. SECURE WITH TIE WIRE.
- PLACE THE EMBANKMENT MATERIAL IN 8 TO 12 INCH LIFTS AND MACHINE COMPACT.

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. REPAIR SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
- TRASH AND OTHER DEBRIS SHOULD BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO HALF OF THE DESIGN DEPTH OF THE TRAP.
- SEDIMENT REMOVED FROM THE TRAP SHOULD BE DEPOSITED IN AN APPROVED SPOILS AREA AND IN SUCH A MANNER THAT IT WILL NOT CAUSE ADDITIONAL SILTATION.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
SEDIMENT TRAP DETAIL
DRAWING NAME: EC07
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB

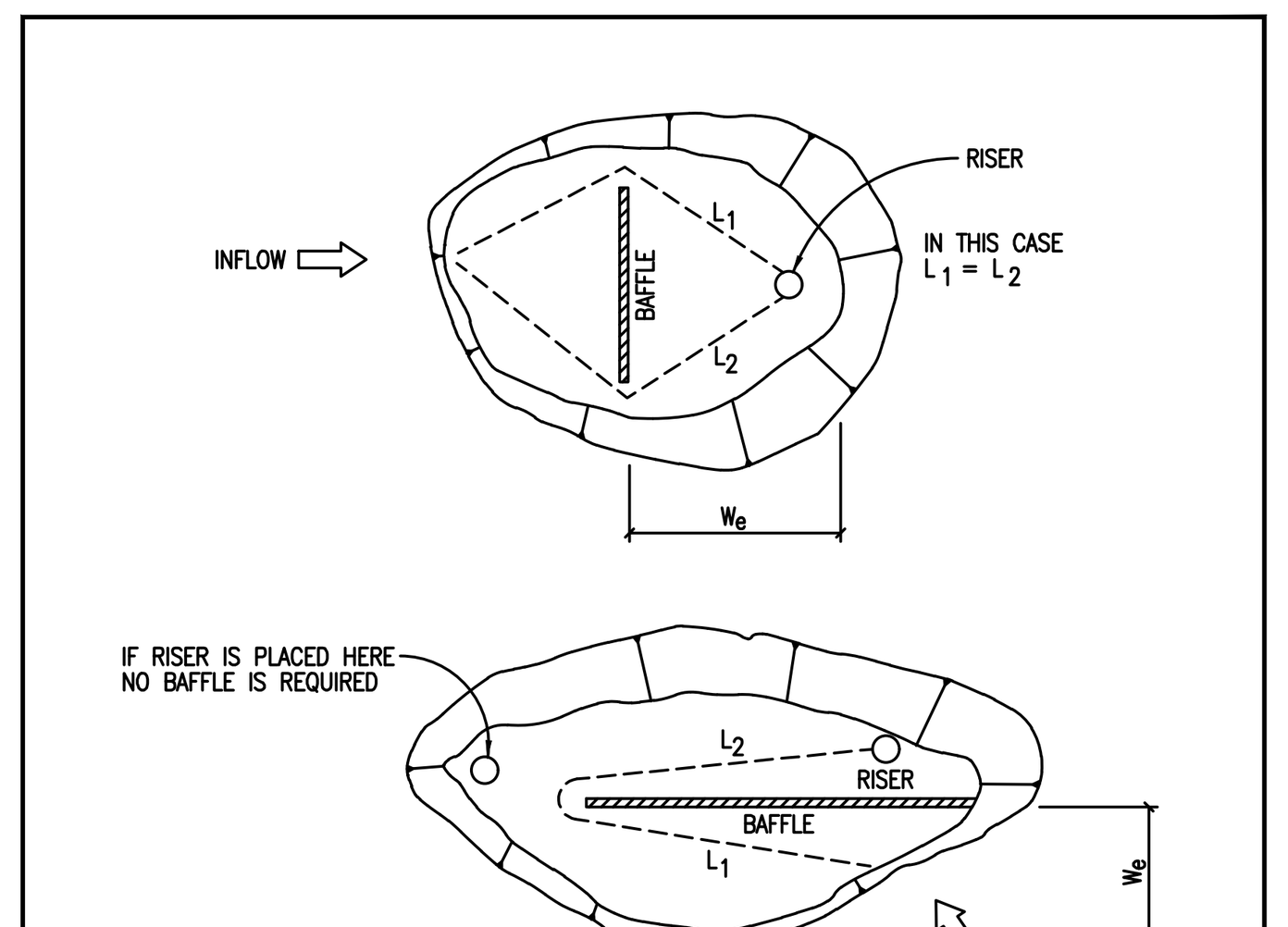
The Architect/Engineer assumes responsibility for appropriate use of this standard.



INSTALLATION:
- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WOVEN WIRE FABRIC ON THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCIRCLE THE FINISHED SIZE OF THE BERM.
- INSTALL THE SILT FENCE ALONG THE CENTER OF THE PROPOSED BERM PLACEMENT. INSTALLATION SHOULD BE AS DESCRIBED IN DRAWING NO. EC–02 "SILT FENCE DETAIL".
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE AND ON BOTH SIDES OF THE SILT FENCE TO THE DESIGNATED HEIGHT.
- WRAP THE STRUCTURE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS IT'S SHAPE.
- SECURE WITH TIE WIRE.
- THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE CONTRACTOR. FOR THE INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE ON ROCK BERM.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACES WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
HIGH SERVICE ROCK BERM DETAIL
DRAWING NAME: EC04
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB



SEDIMENT BASIN BAFFLE DESIGN

$W_e = A / (L_1 + L_2)$

W_e = EFFECTIVE WIDTH OF BASIN

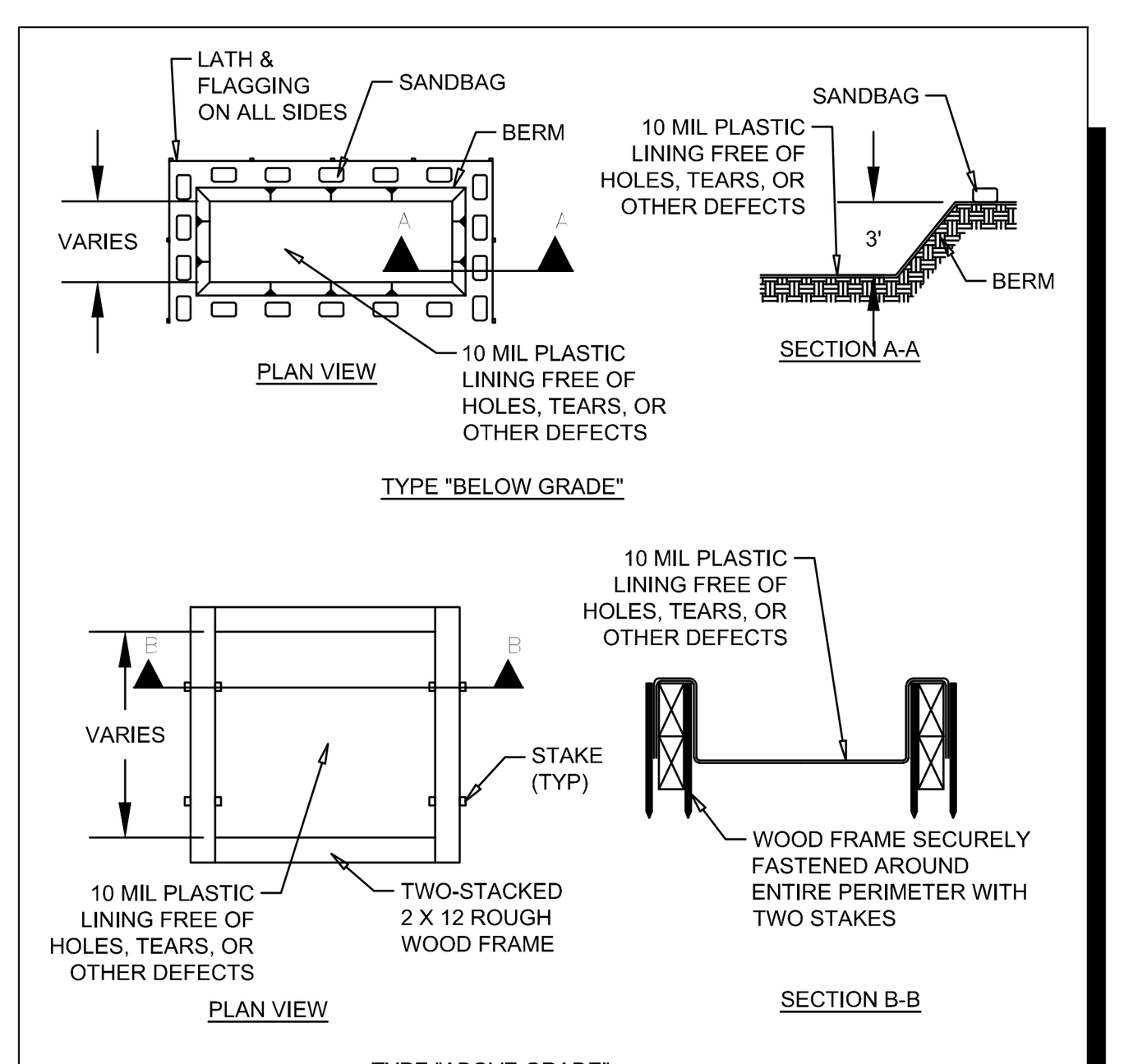
A = SURFACE AREA OF BASIN WHEN FILLED TO RISER CREST

L_1, L_2 = SHORTEST TRAVEL DISTANCE AROUND THE BAFFLE FROM INLET TO OUTLET

INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. CHECK THE EMBANKMENT, SPILLWAYS, AND OUTLET FOR EROSION DAMAGE, AND INSPECT THE EMBANKMENT FOR PIPING AND SETTLEMENT. REPAIR SHOULD BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
- TRASH AND OTHER DEBRIS SHOULD BE REMOVED AFTER EACH RAINFALL TO PREVENT CLOGGING OF THE OUTLET STRUCTURE.
- ACCUMULATED SILT SHOULD BE REMOVED AND THE BASIN SHOULD BE RE–GRADED TO ITS ORIGINAL DIMENSIONS AT SUCH POINT THAT THE CAPACITY OF THE IMPOUNDMENT HAS BEEN REDUCED TO 1/2 OF ITS ORIGINAL STORAGE CAPACITY.
- THE REMOVED SEDIMENT SHOULD BE STOCKPILED OR REDISTRIBUTED IN AREAS THAT ARE PROTECTED FROM EROSION.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

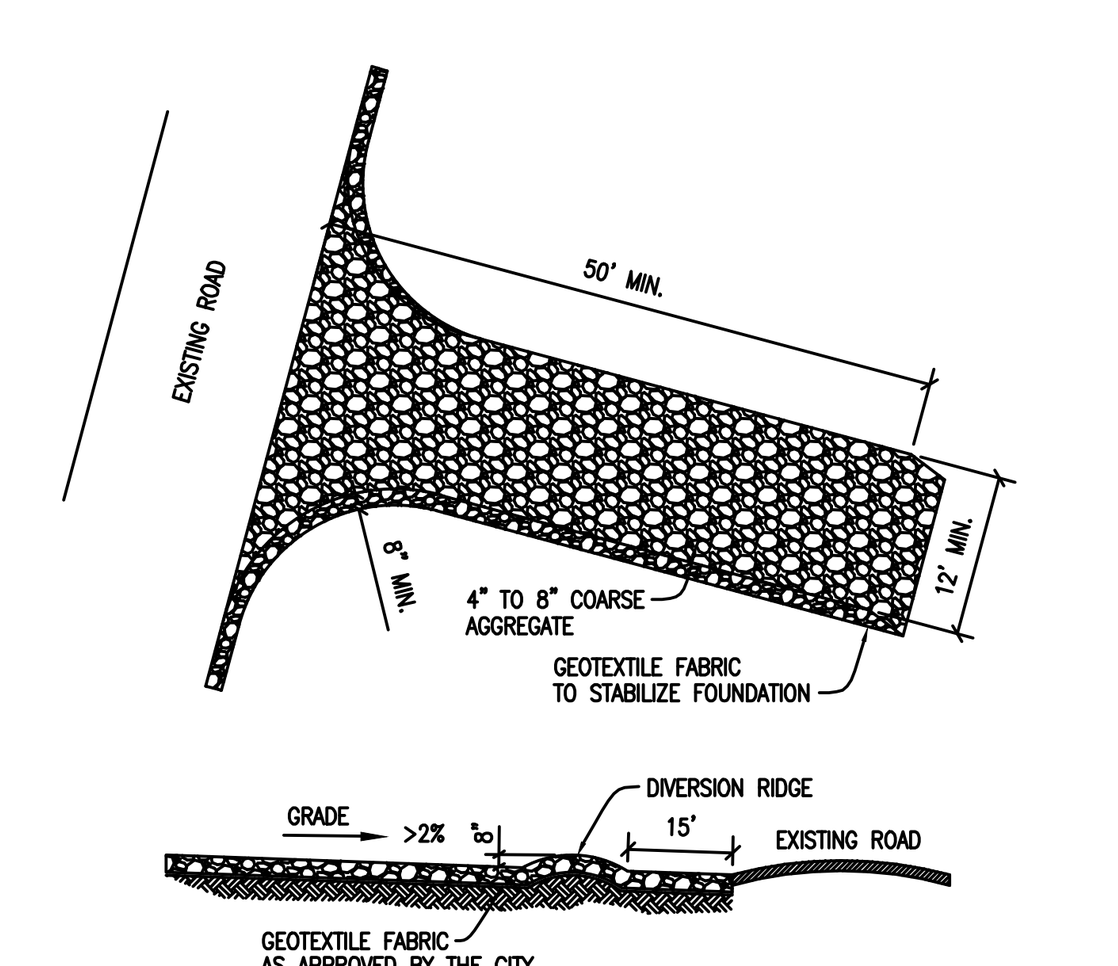
REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
SEDIMENT BASIN BAFFLE DESIGN
DRAWING NAME: EC08
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB



GENERAL NOTES:

- DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
- WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
- WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF AND AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.

CONCRETE TRUCK WASHOUT PIT



INSTALLATION:
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

INSPECTIONS AND MAINTENANCE GUIDELINES:
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS–OF–WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS–OF–WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
STABILIZED CONSTRUCTION ENTRANCE
DRAWING NAME: EC06
SCALE: NTS DATE: 1/2003 DRAWN BY: MRS APPROVED BY: TRB

No.	REVISIONS	DATE	BY

Kimley»Horn

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STATE OF TEXAS
JOHN A. PICKENS
110631
LICENSED PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309
DATE SEPTEMBER 2025
SCALE: AS SHOWN
DESIGNED BY: JAP
DRAWN BY: RRJ
CHECKED BY: JAP

EROSION CONTROL DETAILS

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER
47
OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 19, 2026 10:56:08pm File Path: K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Erosion Control Details.dwg

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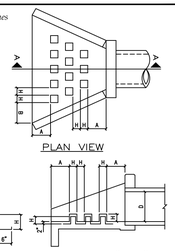


PLAN VIEW

BARS

SECTION "A–A"

NOTES:

1. USE CLASS "A" CONCRETE, 3,000 PSI AT 28 DAYS, UNLESS NOTED.
2. REINFORCING STEEL – ASTM A615, GRADE 40, UNLESS NOTED.
3. LAP REINFORCING 30 BAR DIAMETERS MIN. AT SPLICES, UNLESS NOTED.
4. CHAMFER EXPOSED EDGES OF CONCRETE 3/4", UNLESS NOTED.
5. PLACE REINFORCING WITH THE CENTER OF THE OUTSIDE BARS 2 INCHES FROM THE SURFACE OF THE CONCRETE.

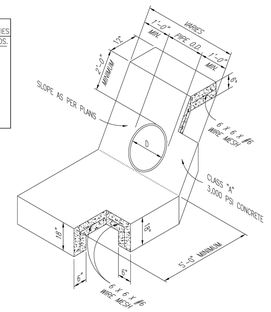
TABLE OF DIMENSIONS FOR ENERGY DISSIPATOR DETAIL

D PIPE DIAMETER (INCHES)	NUMBER OF ROWS OF DISSIPATORS	NUMBER OF DISSIPATORS IN FRONT ROW	H (INCHES)	A (INCHES)	B (INCHES)
12	1	3	4	4	9.1875
18	2	4	4 1/2	9 1/2	15.5625
24	2	5	6	14 3/4	16 1/2
30	3	6	7 1/2	12 1/2	14 3/8
36	3	6	9	16 1/4	18 5/16
42	3	6	10 1/2	20	22 1/4
48	3	6	12	23 3/4	26 1/4
54	3	6	13 1/2	27 1/2	27 3/4
60	3	6	15	31 1/4	31 5/8

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
ENERGY DISSIPATER DETAIL

REVISED DATE: ADOPTED 6/21/2006
DRAWING NAME: SD20
SCALE: NTS
DRAWN BY: MPS
DATE: 1/2003
CHECKED BY: TRB

MINIMUM RIP-RAP QUANTITIES	
PIPE	SQ. YDS.
18"	6.2
24"	6.9
27"	7.8
30"	9.5
36"	10.4
42"	12.0
48"	14.3
54"	16.4



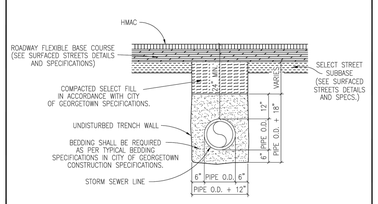
NOTES:

1. WHEN HEADWALLS AND WINGWALLS ARE REQUIRED, THEY SHALL CONFORM TO THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARDS, OR AS DIRECTED BY THE CITY.
2. ENERGY DISSIPATERS SHALL BE REQUIRED IF PIPE VELOCITY IS GREATER THAN 5.0 F.P.S. OR AS DIRECTED BY THE CITY OF GEORGETOWN.
3. SUPPORT REINFORCING WIRE MESH REQUIRED AS SUPPORT FOR APPROACH SLAB AND SHALL BE SUPPORTED BY REBAR CHAIRS OR OTHER APPROVED METHODS.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TYPICAL CONCRETE RIP-RAP AT PIPE

REVISED DATE: ADOPTED 6/21/2006
DRAWING NAME: SD19
SCALE: NTS
DRAWN BY: MPS
DATE: 1/2003
CHECKED BY: TRB



NOTES:

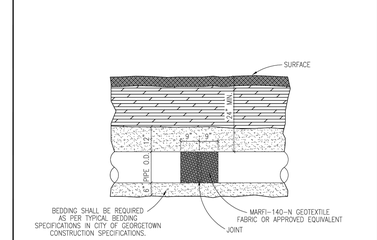
1. DENSITY TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS.
2. CONTRACTOR OR ENGINEER MAY USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL (SEE C9 FLOWABLE BACKFILL FOR THE SPECIFICATION).

TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TRENCH AND EMBEDMENT DETAIL UNDER PROPOSED ROADWAY FOR STORM SEWER

REVISED DATE: ADOPTED 6/21/2006
DRAWING NAME: SD41
SCALE: NTS
DRAWN BY: MPS
DATE: 1/2003
CHECKED BY: TRB



NOTES

1. PIPE SHALL BE REINFORCED CONCRETE PIPE CLASS III UNLESS THE DEPTH OF PIPE REQUIRES A STRONGER CLASS.
2. ALL FITTINGS AND WYES SHALL BE MANUFACTURED AND NOT CONSTRUCTED ON THE PROJECT WITHOUT PRIOR APPROVAL FROM THE CITY.
3. ALL JOINTS SHALL BE WRAPPED WITH MARFI-140-N GEOTEXTILE FABRIC OR APPROVED EQUIVALENT. EACH JOINT SHALL BE WRAPPED WITH 18" WIDE FABRIC CENTERED ON THE JOINT.

The Architect/Engineer assumes responsibility for appropriate use of this standard.

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TRENCH AND EMBEDMENT DETAIL (PROFILE) FOR STORM SEWER

REVISED DATE: ADOPTED 6/21/2006
DRAWING NAME: SD42
SCALE: NTS
DRAWN BY: MPS
DATE: 1/2003
CHECKED BY: TRB

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STATE OF TEXAS
JOHN A. PICKENS
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04/18/2026

KHA PROJECT	064461309
DATE	SEPTEMBER 2025
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	RRJ
CHECKED BY:	JAP

WOLF RANCH
REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

STORM DETAILS

SHEET NUMBER
48
OF 53

2025-28-CON

Plotted By:Pickens, John Date:April 19, 2026 10:57:23pm File Path:K:\cus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Storm Drain Details.dwg
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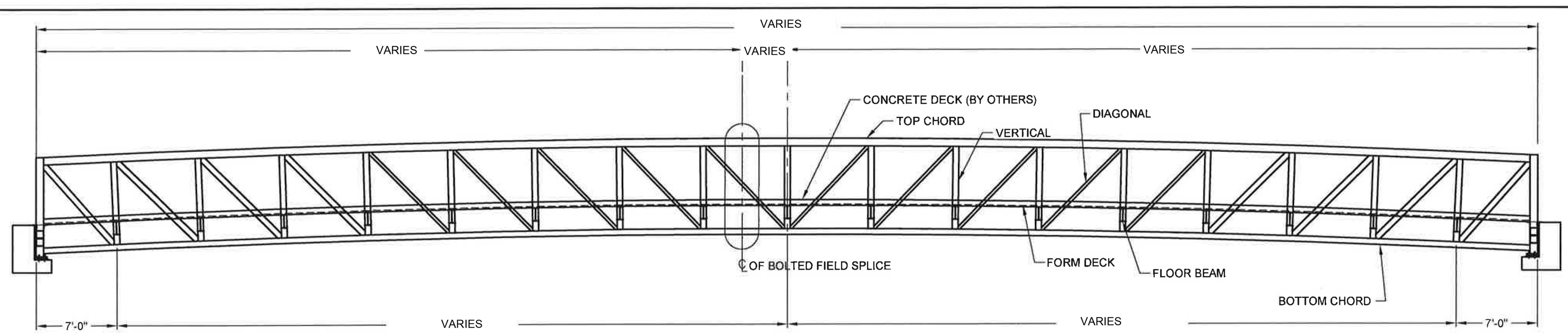

GENERAL NOTES

1. DESIGN PROCEDURE IS IN ACCORDANCE WITH "LRFD BRIDGE DESIGN SPECIFICATIONS" 6TH EDITION & "GUIDE SPECIFICATIONS FOR DESIGN OF PEDESTRIAN BRIDGES" BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) 2009.
2. BRIDGE MEMBERS ARE FABRICATED FROM HIGH STRENGTH, LOW ALLOY, ENHANCED ATMOSPHERIC CORROSION RESISTANT ASTM A847 COLD-FORMED WELDED SQUARE AND RECTANGULAR TUBING, AND ASTM A588, ASTM A606, OR ASTM A709-50W PLATE AND STRUCTURAL SHAPES (Fy=50,000 PSI).
3. CONCRETE DECK: GALVANIZED FORM DECK SUPPLIED BY CONTECH. CONCRETE, REINFORCING AND EXPANSION MATERIAL SUPPLIED BY OTHERS. SEE CONCRETE DECK SHEET.
4. THE GAS METAL ARC WELDING PROCESS OR FLUX CORED ARC WELDING PROCESS WILL BE USED. WELDING TO BE IN ACCORDANCE WITH AWS D1.1.
5. ALL TOP AND BOTTOM CHORD SHOP SPLICES TO BE COMPLETE PENETRATION TYPE WELDS. WELD BETWEEN TOP CHORD AND END VERTICAL SHALL BE AS DETAILED.
6. UNLESS OTHERWISE NOTED, WELDED CONNECTIONS SHALL BE FILLET WELDS (OR HAVE THE EFFECTIVE THROAT OF A FILLET WELD) OF A SIZE EQUAL TO THE THICKNESS OF THE LIGHTEST GAGE MEMBER IN THE CONNECTION. WELDS SHALL BE APPLIED AS FOLLOWS:
   A. BOTH ENDS OF VERTICALS, DIAGONALS, AND FLOOR BEAMS SHALL BE WELDED ALL AROUND.
   B. BRACE DIAGONALS WILL BE WELDED ALL AROUND.
   C. MISCELLANEOUS NON-STRUCTURAL MEMBERS WILL BE STITCH WELDED TO THEIR SUPPORTING MEMBERS.
7. BRIDGE DESIGN WAS ONLY BASED ON COMBINATIONS OF THE FOLLOWING LOADS WHICH WILL PRODUCE MAXIMUM CRITICAL MEMBER STRESSES.
   A. 90 PSF UNIFORM LIVE LOADING ON THE FULL DECK AREA OR ONE 10,000 LB VEHICLE LOAD. THE LOAD SHALL BE DISTRIBUTED AS A FOUR-WHEEL VEHICLE WITH 80% OF THE LOAD ON THE REAR WHEELS. THE WHEEL TRACK WIDTH OF THE VEHICLE SHALL BE 6'-0" AND THE WHEEL BASE SHALL BE 10'-0". THE VEHICLE SHALL BE POSITIONED SO AS TO PRODUCE THE MAXIMUM STRESSES IN EACH MEMBER, INCLUDING DECKING.
   B. 35 PSF WIND LOAD ON THE FULL HEIGHT OF THE BRIDGE, AS IF ENCLOSED.
   C. 20 PSF UPWARD FORCE APPLIED AT THE WINDWARD QUARTER POINT OF THE TRANSVERSE BRIDGE WIDTH (AASHTO 3.8.2).
8. CLEANING: ALL EXPOSED SURFACES OF STEEL SHALL BE CLEANED IN ACCORDANCE WITH STEEL STRUCTURES PAINTING COUNCIL SURFACES PREPARATION SPECIFICATIONS NO. 7 BRUSH-OFF BLAST CLEANING. SSPC-SP7-LATEST EDITION.
9. MINIMUM MATERIAL THICKNESS OF 1/4" ON ALL STRUCTURAL MEMBERS.

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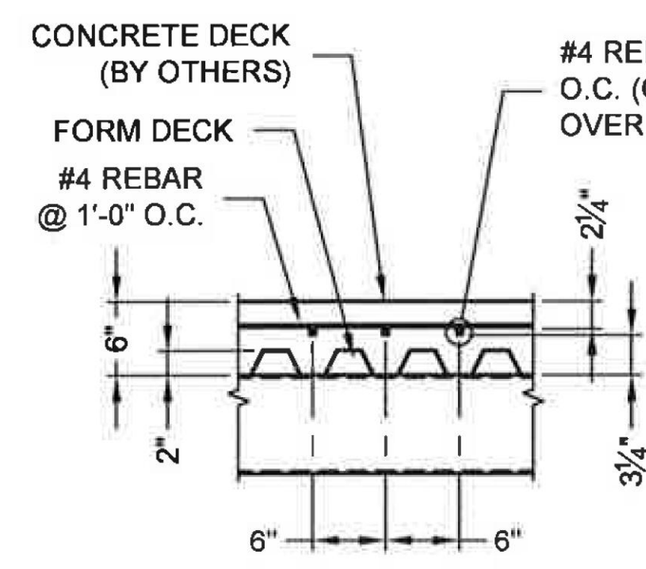
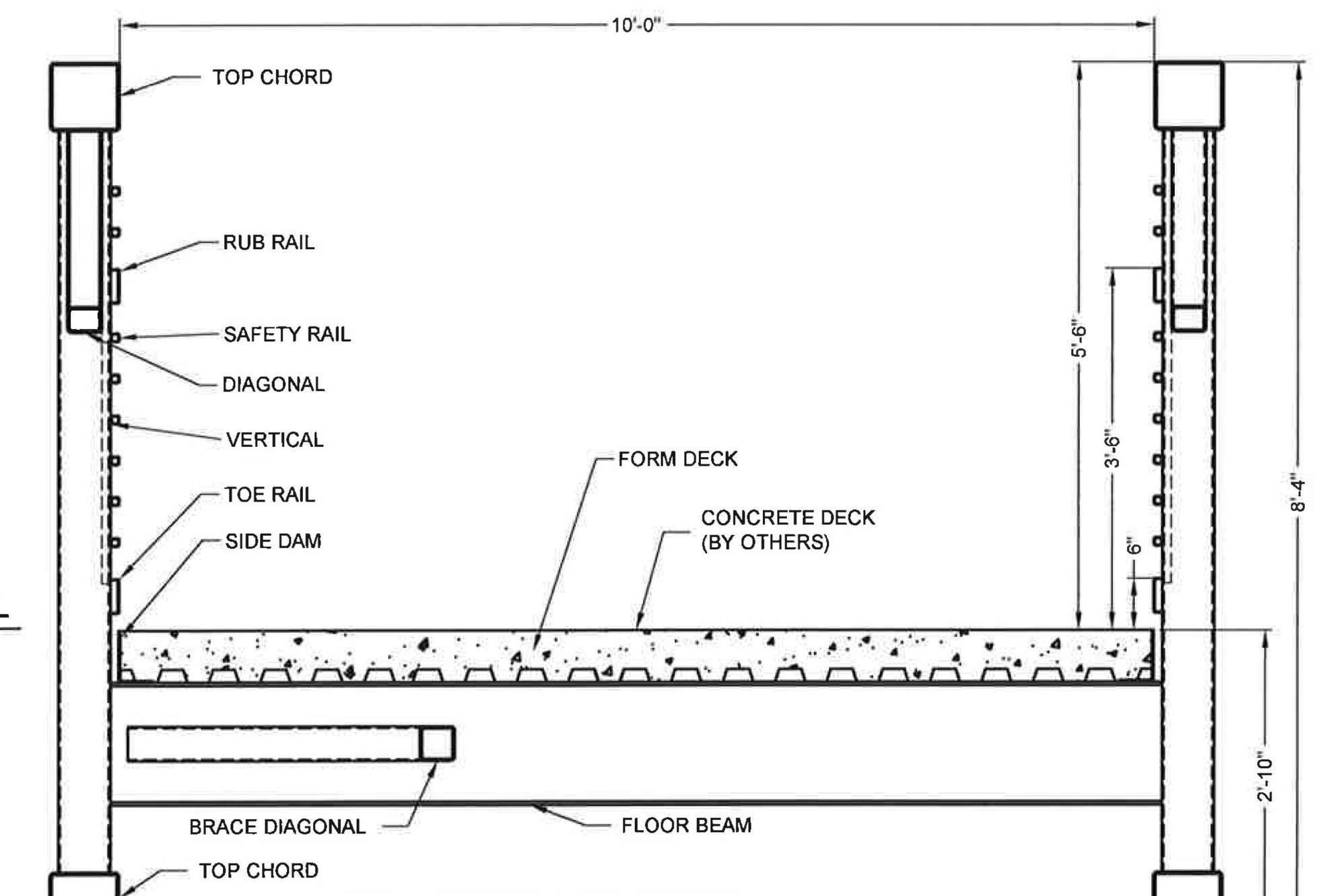


(2/1) TYP SLAB REINFORCEMENT DETAIL

f'c = 3,500 PSI (MINIMUM 28 DAY STRENGTH)
GRADE 60 REINFORCING (fy = 60,000 PSI)



(1/1) BRIDGE SECTION

COMBINE REACTIONS AS PER LOCAL OR GOVERNING BUILDING CODES AS REQUIRED

BRIDGE REACTIONS (+ DOWNWARD LOAD, - UPWARD LOAD)	P (LBS)	H (LBS)	L (LBS)
DEAD LOAD ②	31,825		
UNIFORM LIVE LOAD	29,250		
VEHICLE LOAD	5,000		
WIND UPLIFT 20 PSF WINDWARD / LEEWARD	-11,060 / -3,883		
WIND	±9,435	18,960	
THERMAL ②			4,775

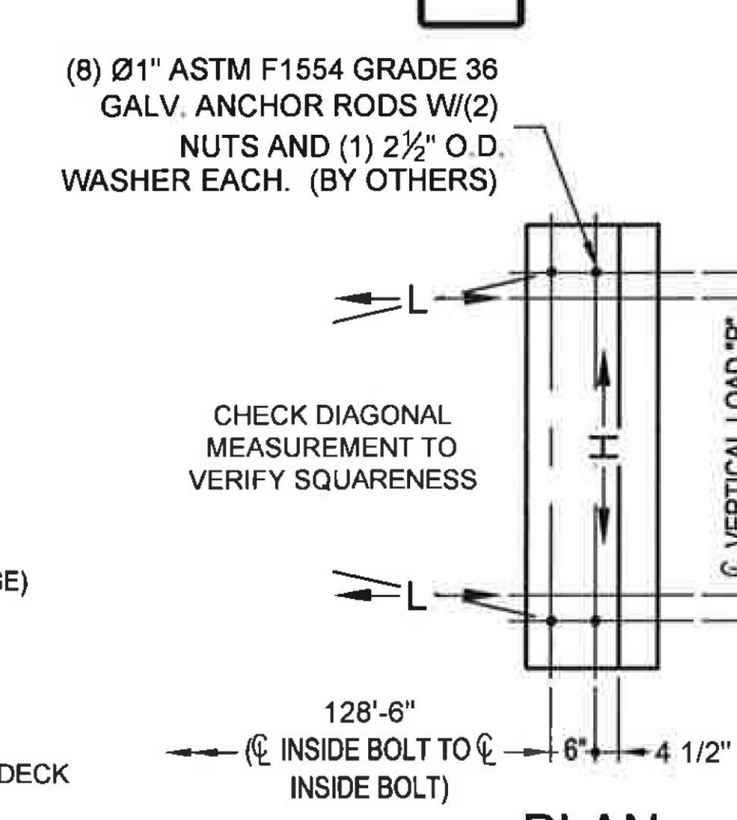
"P" - VERTICAL LOAD EACH BASE PLATE (4 PER BRIDGE)
"H" - HORIZONTAL LOAD EACH FOOTING (2 PER BRIDGE)
"L" - LONGITUDINAL LOAD EACH BASE PLATE (4 PER BRIDGE)

① BRIDGE LIFTING WEIGHT: 48,000 LBS

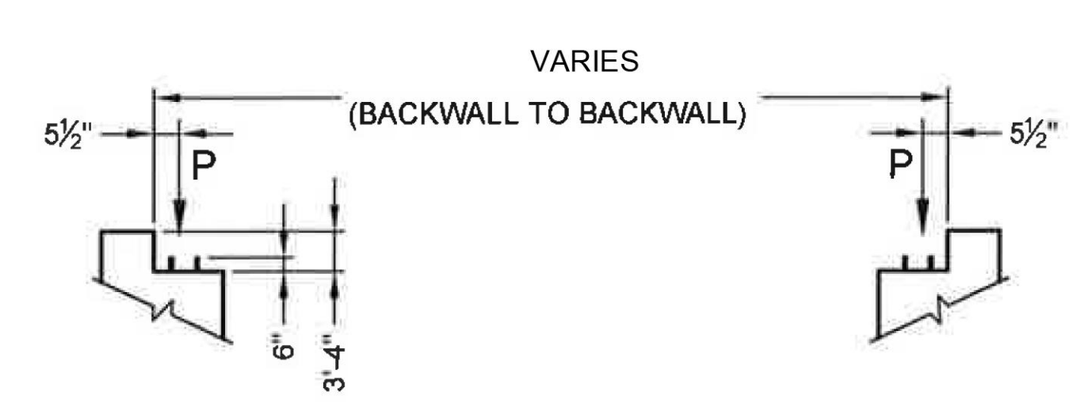
② BRIDGE FINAL WEIGHT: 127,300 LBS

①DOES NOT INCLUDE WEIGHT OF CONCRETE DECK

②INCLUDES WEIGHT OF CONCRETE DECK



PLAN



ANCHOR BOLT ELEVATION

CONTECH FABRICATION DRAWING

AISC CERTIFIED FABRICATOR

AASHTO EXPRESS PEDESTRIAN BRIDGE STANDARD CONCRETE DECK

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
8301 State Highway 29 North, Alexandria, MN 56308
800-328-2047 320-852-7500 320-852-7067 FAX

EXPRESS

DATE: 10/12/2015	
DESIGNED: XXX	DRAWN: XXX
CHECKED: XXX	APPROVED: XXX
PROJECT No.: XXXXXX	SEQUENCE No.: XX
SHEET: 1 OF 1	

MARK	DATE	REVISION DESCRIPTION	BY

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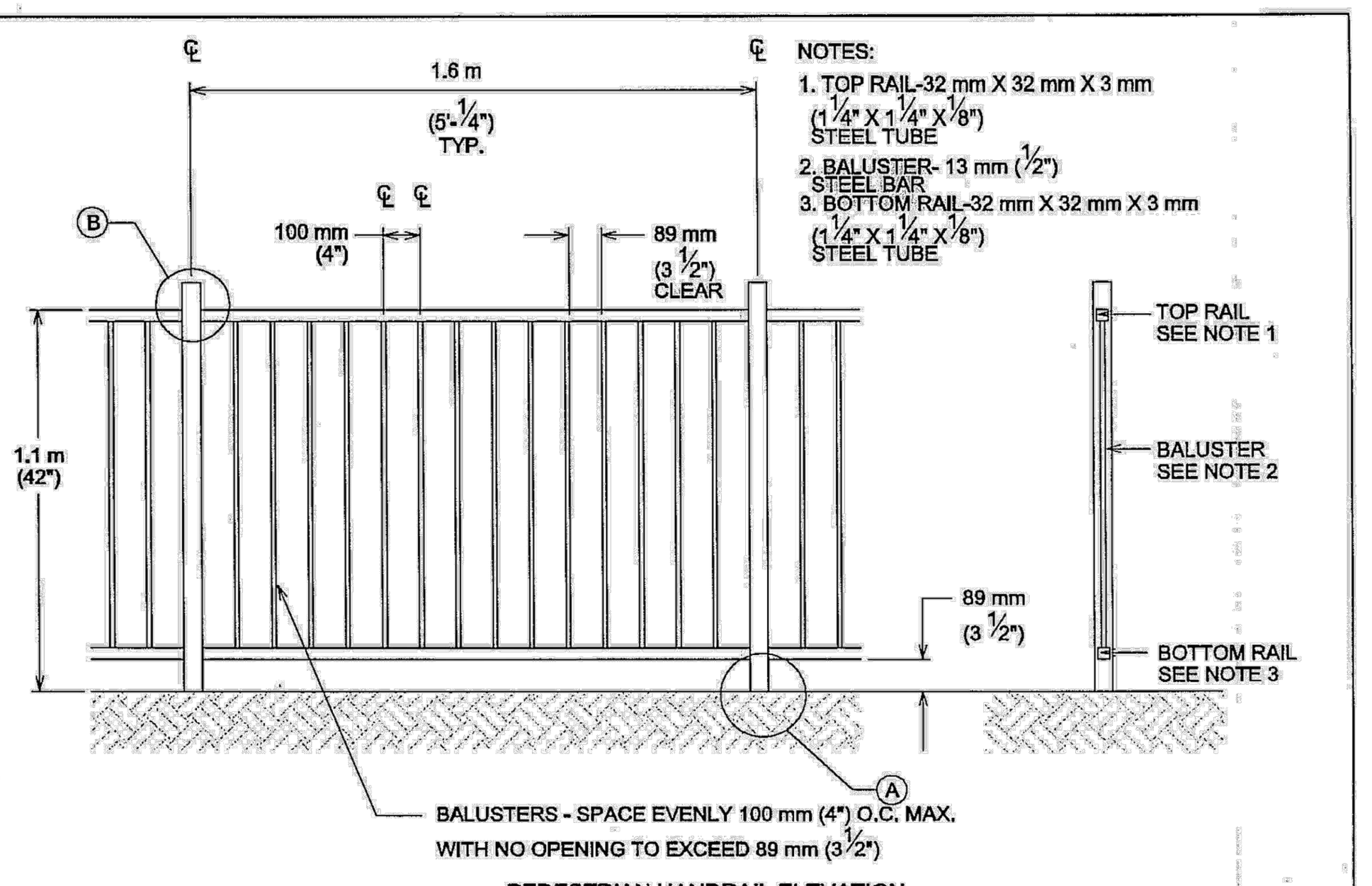
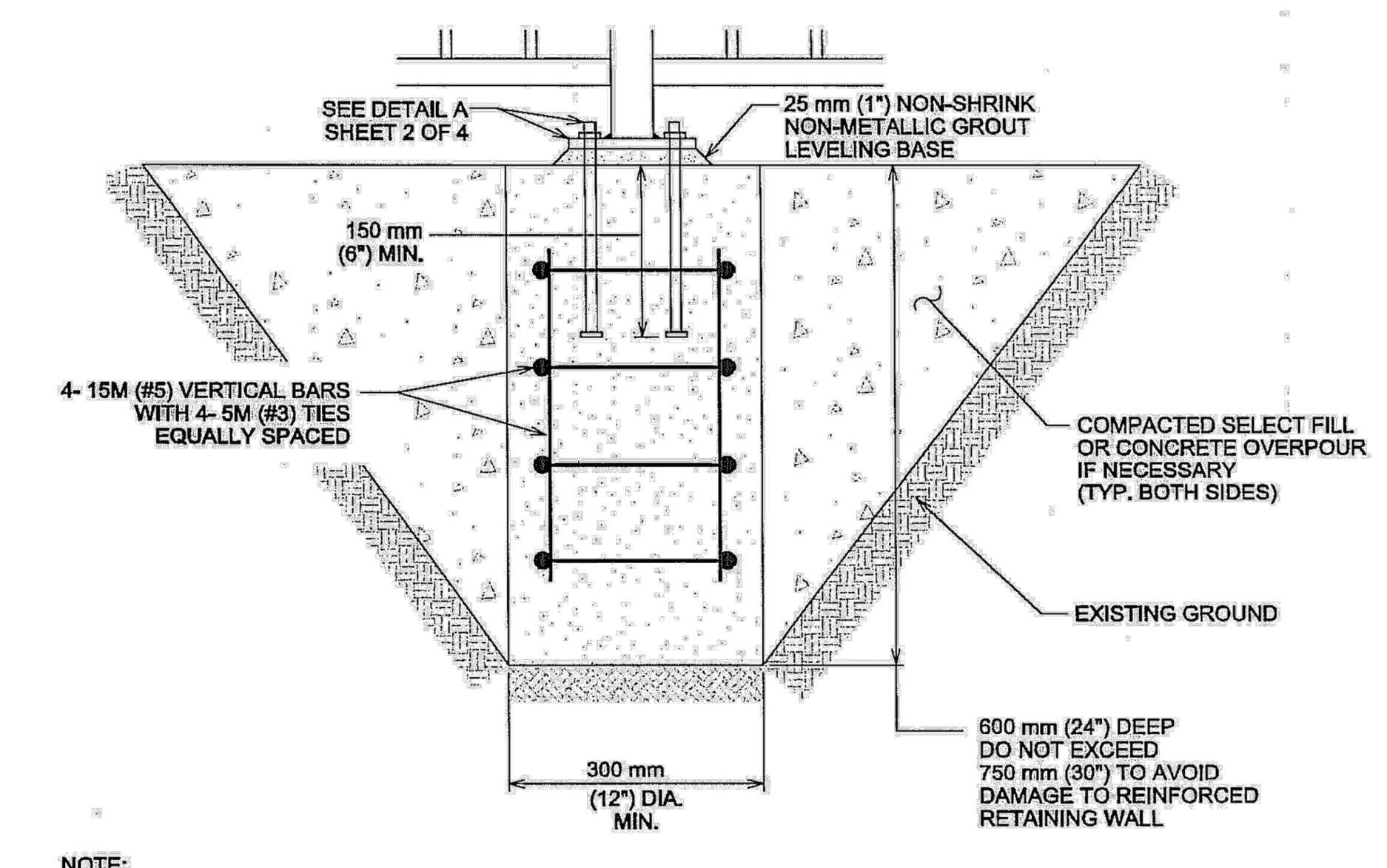


NOTES:
1. TOP RAIL-32 mm X 32 mm X 3 mm (1¼" X 1¼" X ⅛") STEEL TUBE
2. BALUSTER- 13 mm (½") STEEL BAR
3. BOTTOM RAIL-32 mm X 32 mm X 3 mm (1¼" X 1¼" X ⅛") STEEL TUBE

PEDESTRIAN HANDRAIL ELEVATION

HANDRAIL FINISH NOTES:
1. PRIOR TO PAINTING, COMPONENTS SHALL BE DEGREASED USING A FULL SPRAY SYSTEM. HAND WIPED CLEANING IS NOT ACCEPTABLE. FOLLOWING DEGREASING, AND PRIOR TO PAINTING, COMPONENTS SHALL BE DRIED IN A ,BAKING OVEN.
2. THE PAINT SHALL BE NON-TOXIC, LEAD-FREE, ELECTROSTATICALLY APPLIED POWDER COAT. LIQUID SPRAY OR DIP TYPE APPLICATION IS NOT ACCEPTABLE. THE PAINT SHALL BE BAKE CURED IN AN OVEN SYSTEM, NOT AIR-DRIED.

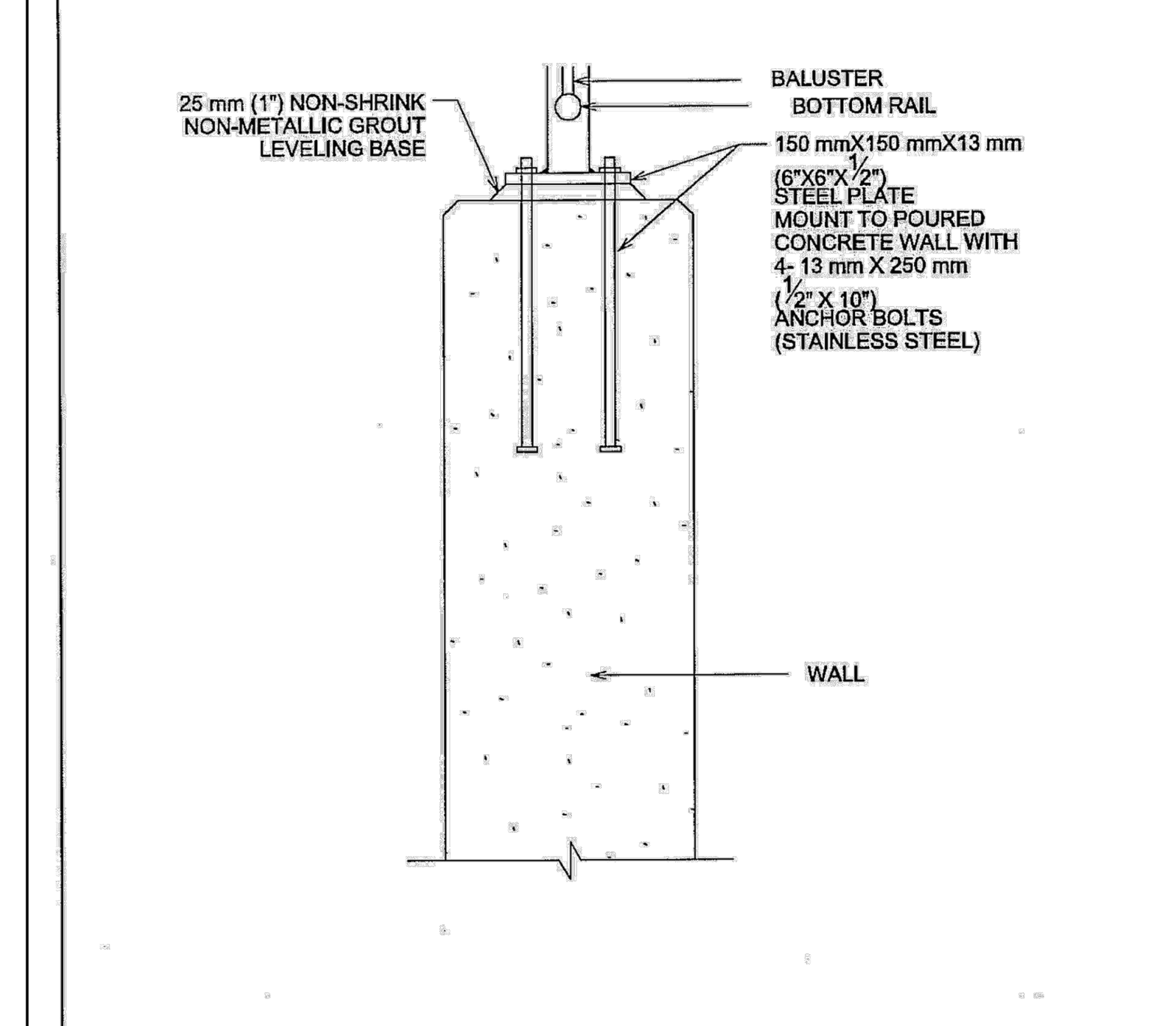
CITY OF AUSTIN — DEPARTMENT OF PUBLIC WORKS — ADOPTED — PEDESTRIAN HANDRAIL — THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. — STANDARD NO. 707S-1 1 OF 4



NOTE:
CONTRACTOR SHALL HAND DIG AS NECESSARY TO PROVIDE STABLE SIDE SLOPES FOR PIER. ENTIRE EXCAVATION SHALL BE FILLED WITH CONCRETE SUCH THAT MINIMUM 300 mm (12") DIAMETER WITH REINFORCEMENT IS MAINTAINED. CONTRACTOR SHALL NOTIFY ENGINEER OR DESIGNATED REPRESENTATIVE 48 HOURS IN ADVANCE OF INSTALLATION FOR OBSERVATION.

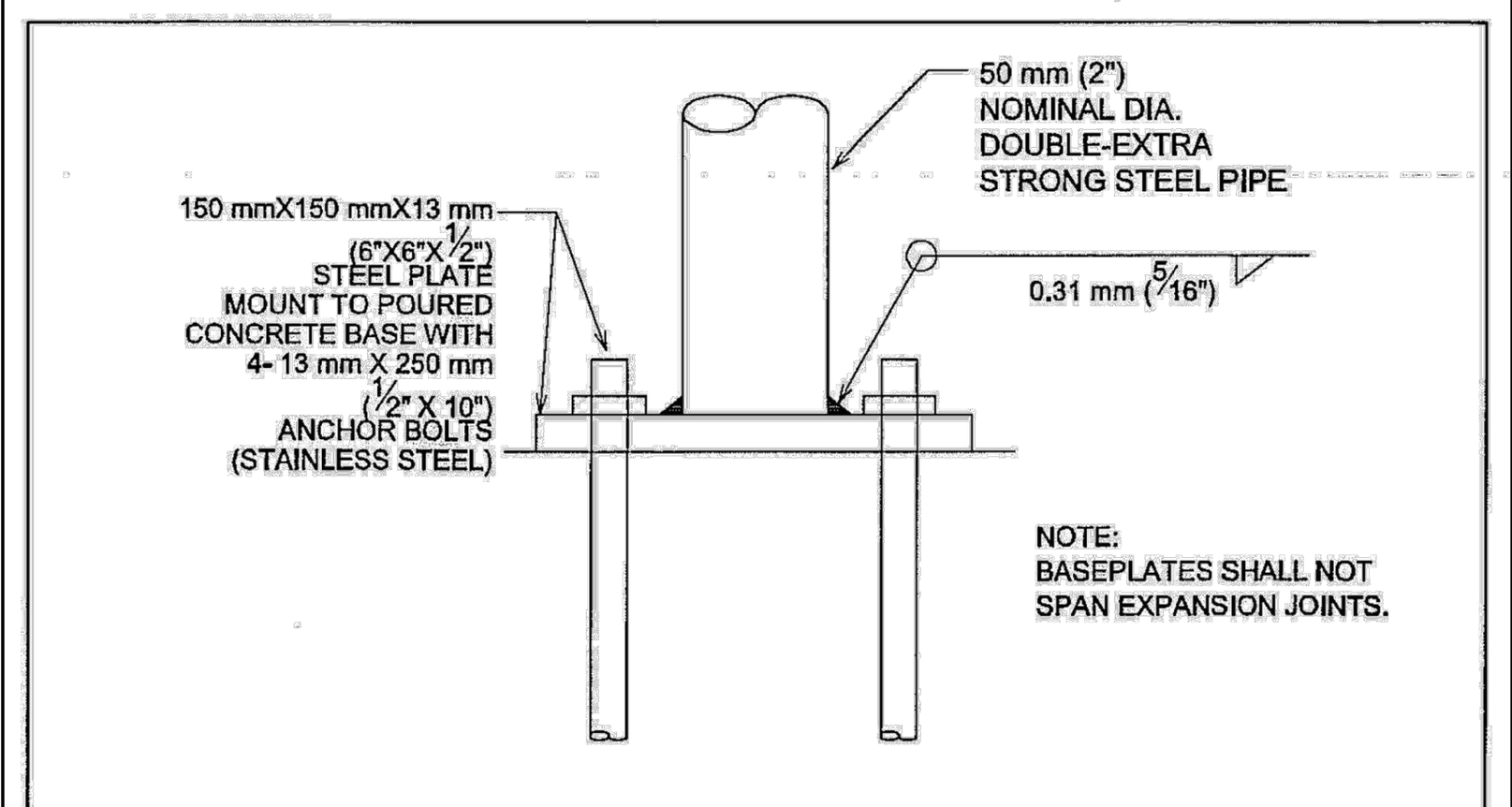
DRILLED PIER CONCRETE BASE DETAIL

CITY OF AUSTIN — DEPARTMENT OF PUBLIC WORKS — ADOPTED — PEDESTRIAN HANDRAIL — THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. — STANDARD NO. 707S-1 3 OF 4

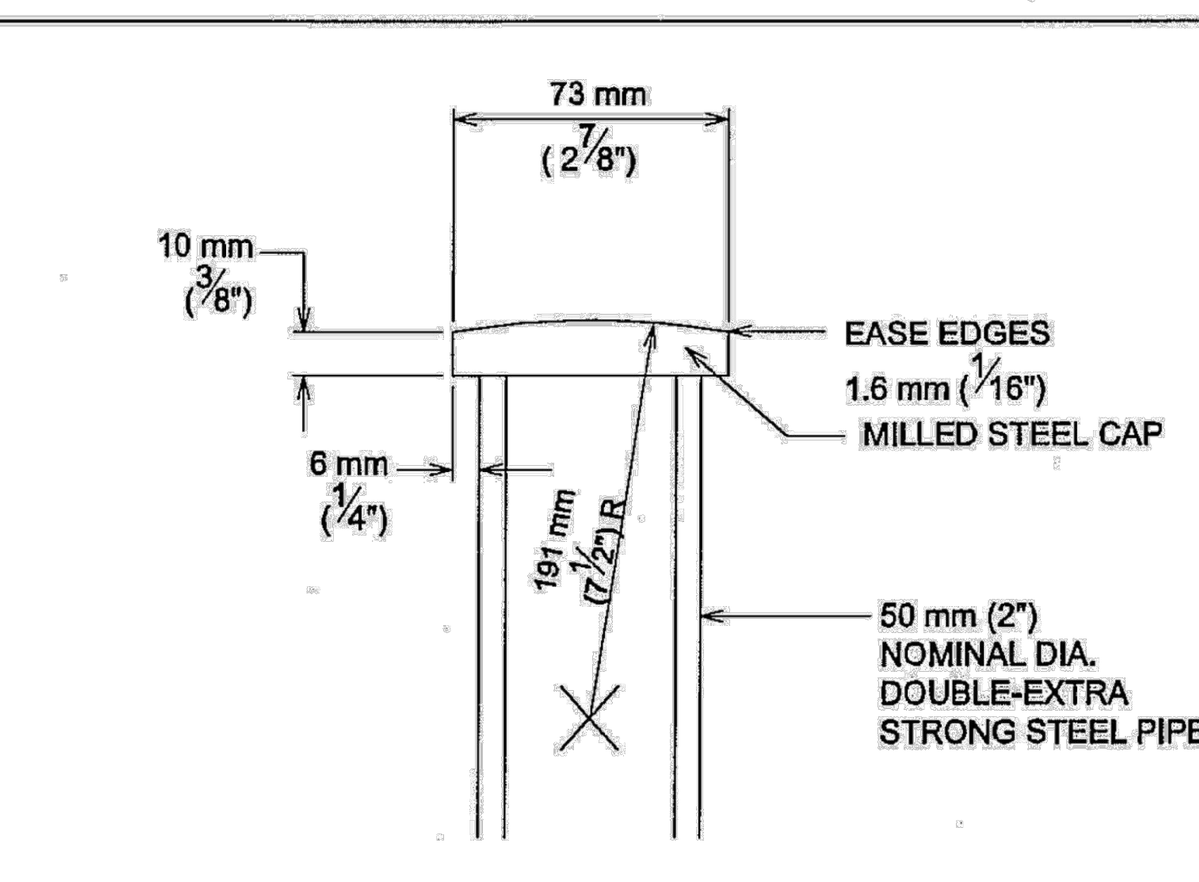


WALL MOUNTING DETAIL

CITY OF AUSTIN — DEPARTMENT OF PUBLIC WORKS — ADOPTED — PEDESTRIAN HANDRAIL — THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. — STANDARD NO. 707S-1 4 OF 4



A. BASE PLATE DETAIL

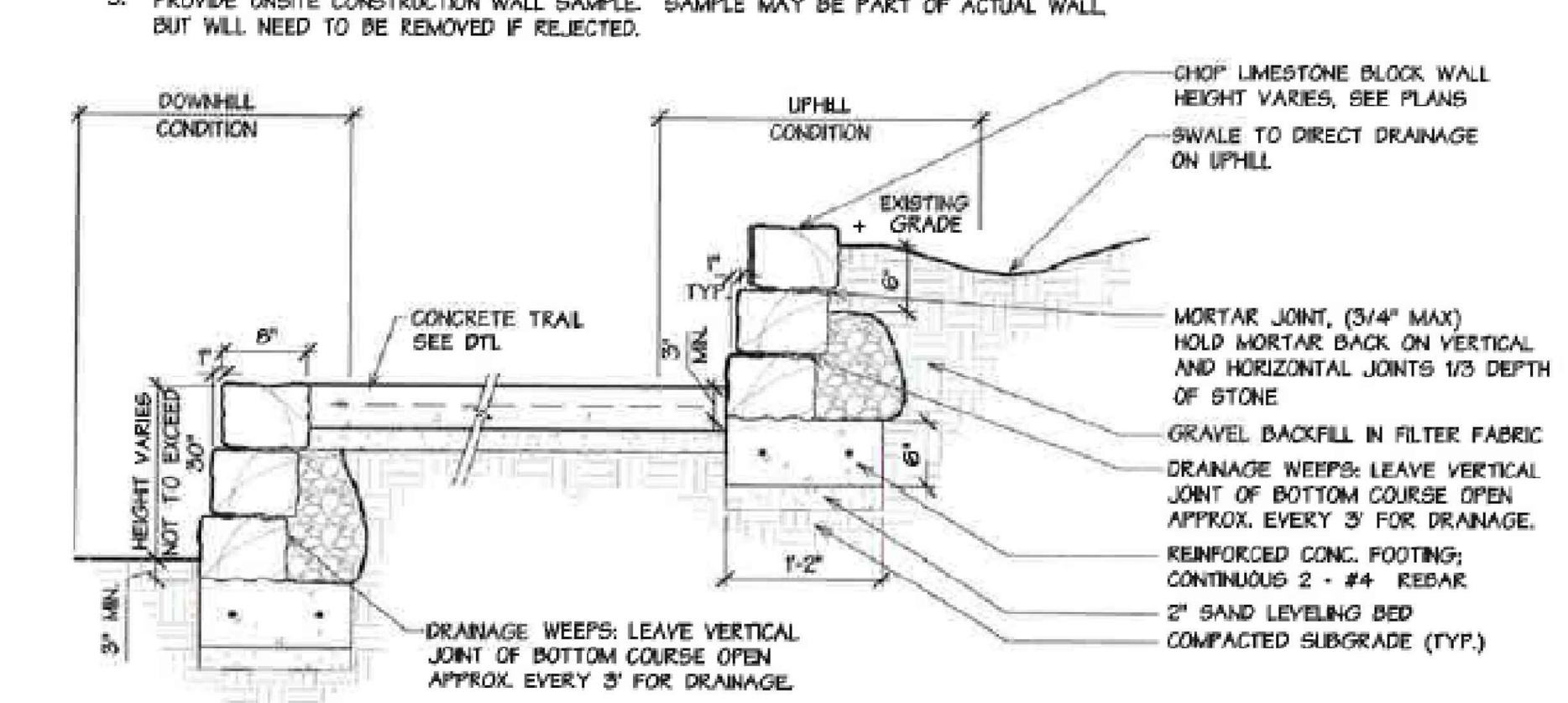


B. CAP SECTION

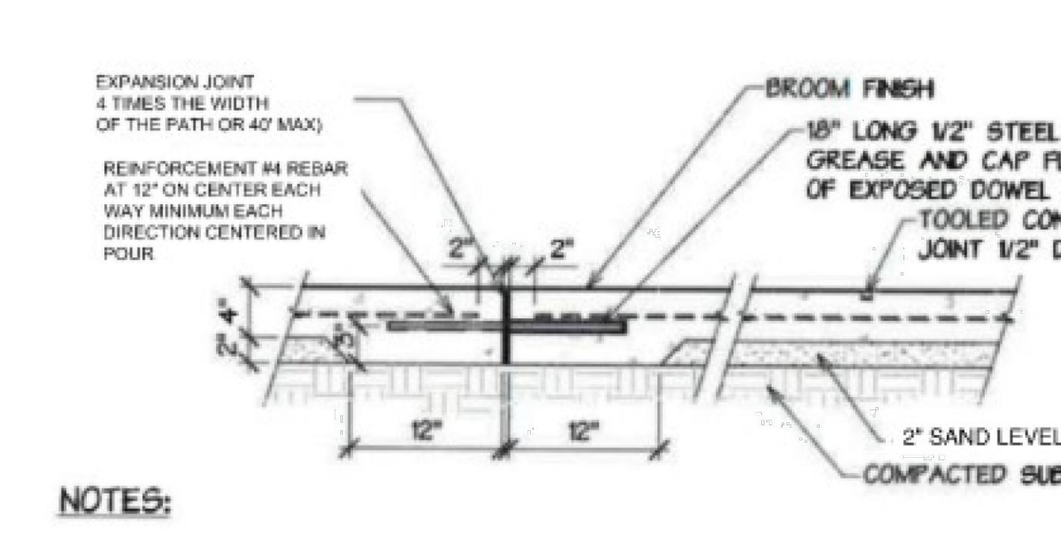
CITY OF AUSTIN — DEPARTMENT OF PUBLIC WORKS — ADOPTED — PEDESTRIAN HANDRAIL — THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. — STANDARD NO. 707S-1 2 OF 4

3. Retaining walls will only be used when absolutely necessary, to stabilize slopes and only if natural rock cut will not suffice. Retaining walls under forty-eight inches (48") tall shall be constructed of native materials, as detailed below:

LIMESTONE NOTES:
1. CHOP BLOCK LIMESTONE FOR WALLS SHALL BE 8" HEIGHT X 8" DEPTH X VARYING LENGTH. COLORS INCLUDE CREAMS, RUSTS, AND TANS AT RANDOM.
2. PROVIDE SAMPLE OF STONE FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO DELIVERY TO SITE.
3. PROVIDE ONSITE CONSTRUCTION WALL SAMPLE. SAMPLE MAY BE PART OF ACTUAL WALL BUT WILL NEED TO BE REMOVED IF REJECTED.



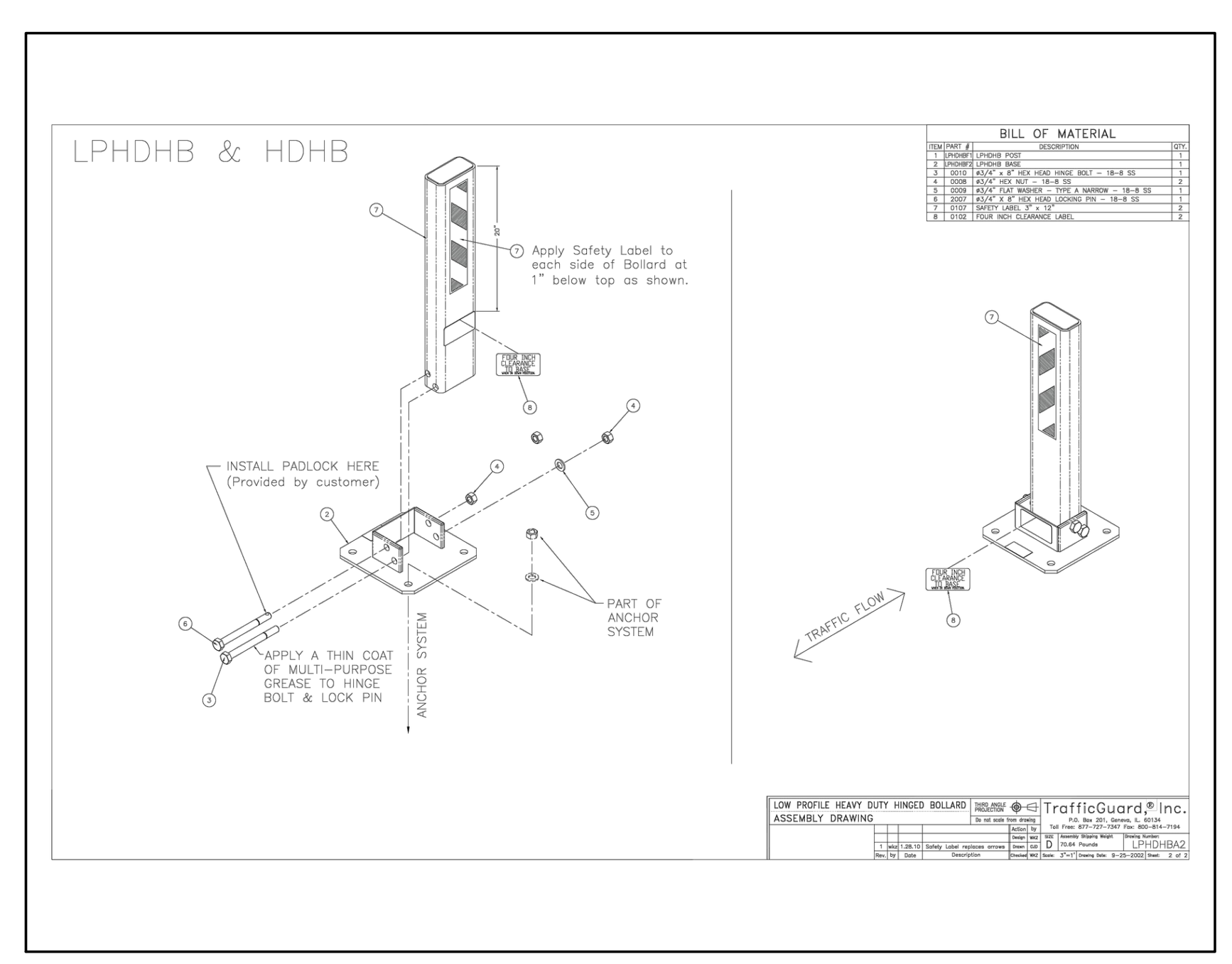
48" TALL MAXIMUM RETAINING WALL DETAIL



NOTES:
1. SEE TRAIL NOTES & ACCESSIBLE TRAIL NOTES ON CONSTRUCTION PLANS.
2. EXPANSION JOINTS TO BE ½" ASPHALT IMPREGNATED FIBERBOARD.
3. EXPANSION JOINTS ARE TO BE 4TIME THE WIDTH OF THE PATH OR 40' MAX.
4. CONTROL JOINTS AR TO BE SPACED AT 1 TIME THE WIDTH OF THE PATH, UNLESS SHOWN OTHERWISE ON PLAN.
5. ALL EDGES ARE TO BE TOOLED WITH ½" RADIUS, MAXIMUM ½" CHANGE IN ELEVATION AT WALK/LAWN EDGE.

CONCRETE TRAIL DETAIL

CONCRETE TRAIL DETAIL



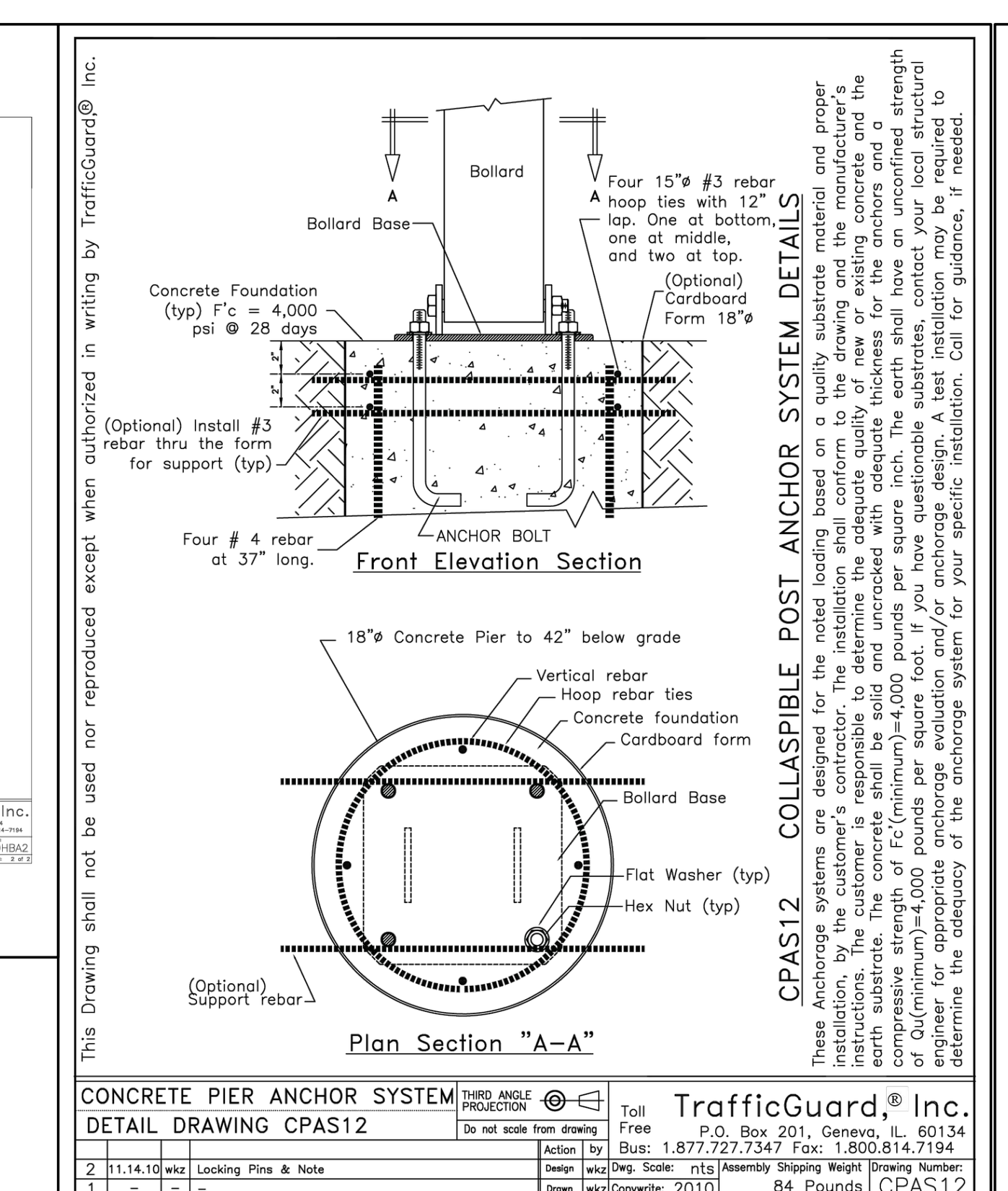
INSTALLATION INSTRUCTIONS FOR: (HDHB & LPHDHB)

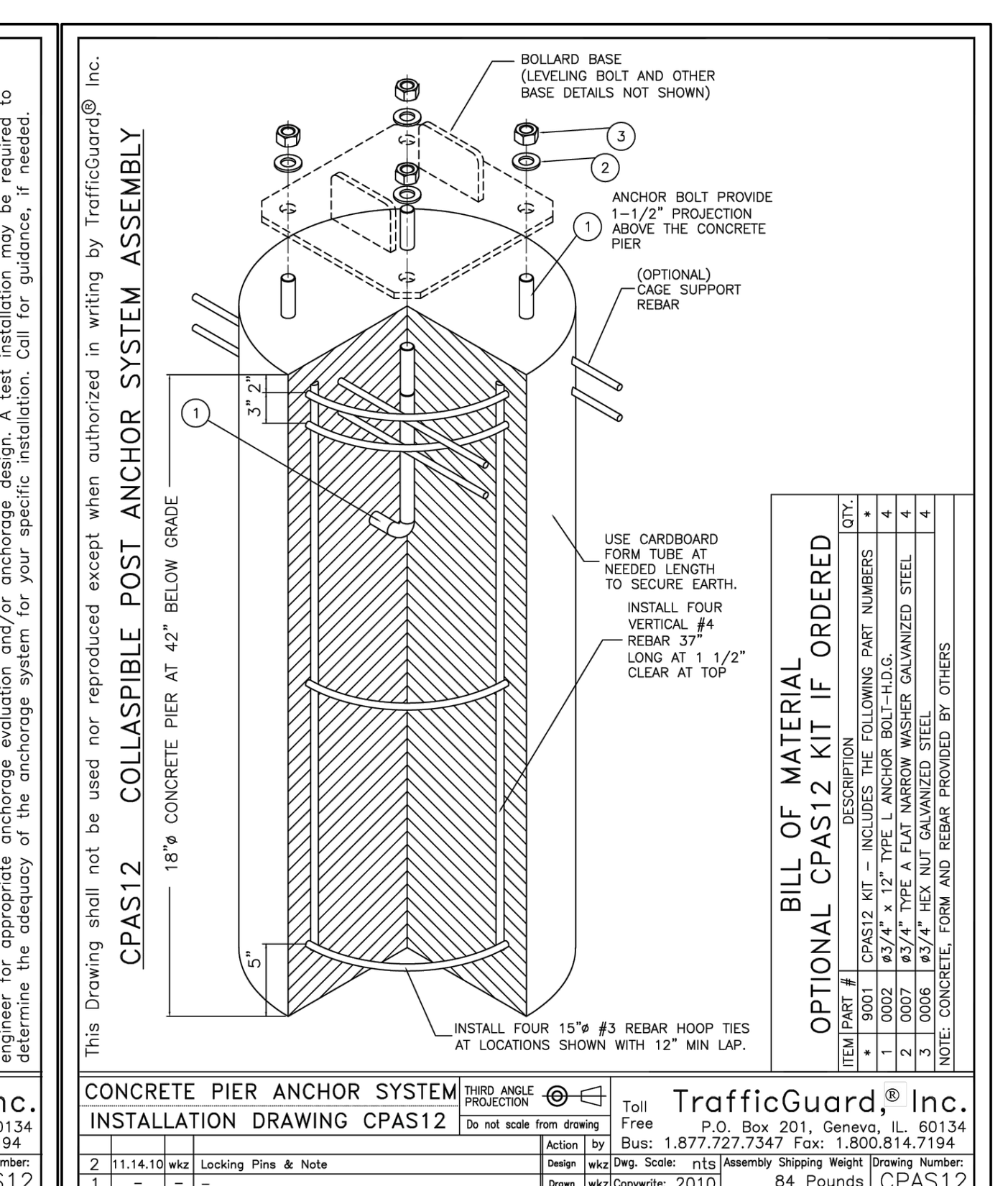
LOW PROFILE HEAVY DUTY HINGED BOLLARD

1. Verify that all Low Profile Heavy Duty Hinged Bollard parts are in the shipment package as shown on the "Bill of Material".
2. Provide Low Profile Heavy Duty Hinged Bollard Anchor System (see included Anchor System Drawing—BAS) of your choice at a location to suit your specific needs.
3. Install LPHDHB Base (Item 2) true and level on your selected Anchor System using the flat washers and hex nuts included in your Anchor System Kit. Use S.S. shims to level if needed. Torque hex nuts to Minimum 100 ft-lbs for Anchor Systems CPAS and ESAS. Torque hex nuts for other Anchor Systems to Manufacturers Specification.
4. Install LPHDHB Post (Item 1) to LPHDHB Base (Item 2) using Hinge Bolt (Item 3), Flat Washer (Item 5), and Hex Nut (Item 4) as shown. Tack Weld Hex Nut to Hinge Bolt or Chisel Hinge Bolt Threads such that Hex Nut cannot be easily removed.
5. Install Locking Pin thru UP Position Bollard Post, and install Padlock where shown. A Hex Nut (Item 4) is included in case a padlock is not available.
6. Install the four Labels at the locations shown.
7. Check the functional operation of the Low Profile Heavy Duty Hinged Bollard.

* Note: S.S. shims, tools, grease, and padlocks are not provided.

LOW PROFILE HEAVY DUTY HINGED BOLLARD ASSEMBLY DRAWING — ZABEL ENGINEERING — TrafficGuard,® Inc. — LPHDHBA2





BOLLARD DETAIL

No.	REVISIONS	DATE	BY

Kimley»Horn

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10814 JOLLYVILLE ROAD, CAMPUS IV, SUITE 200, AUSTIN, TX 78759
PHONE: 512-418-1771
WWW.KIMLEY-HORN.COM
TEXAS REGISTERED ENGINEERING FIRM F-928

STATE OF TEXAS — JOHN A. PICKENS — 110631 — LICENSED PROFESSIONAL ENGINEER
04/18/2026

KHA PROJECT 064461309	DATE SEPTEMBER 2025	SCALE: AS SHOWN	DESIGNED BY: JAP	DRAWN BY: RRJ	CHECKED BY: JAP

TRAIL & DRAINAGE DETAILS

WOLF RANCH REGIONAL TRAIL
PHASE 3 & 4
CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

SHEET NUMBER 49 OF 53

2025-28-CON

Plotted By: Pickens, John Date: April 19, 2026 11:01:34pm File Path: K:\aus_civil\064461309-wolf ranch phases 3-4 trail\Cad\plansheets\C-Paving Details.dwg
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Plotted By:Pickens, John Date:May 17, 2026 01:25:10pm File Path:K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Cad\PlanSheets\C-Tree Impact Cals.dwg

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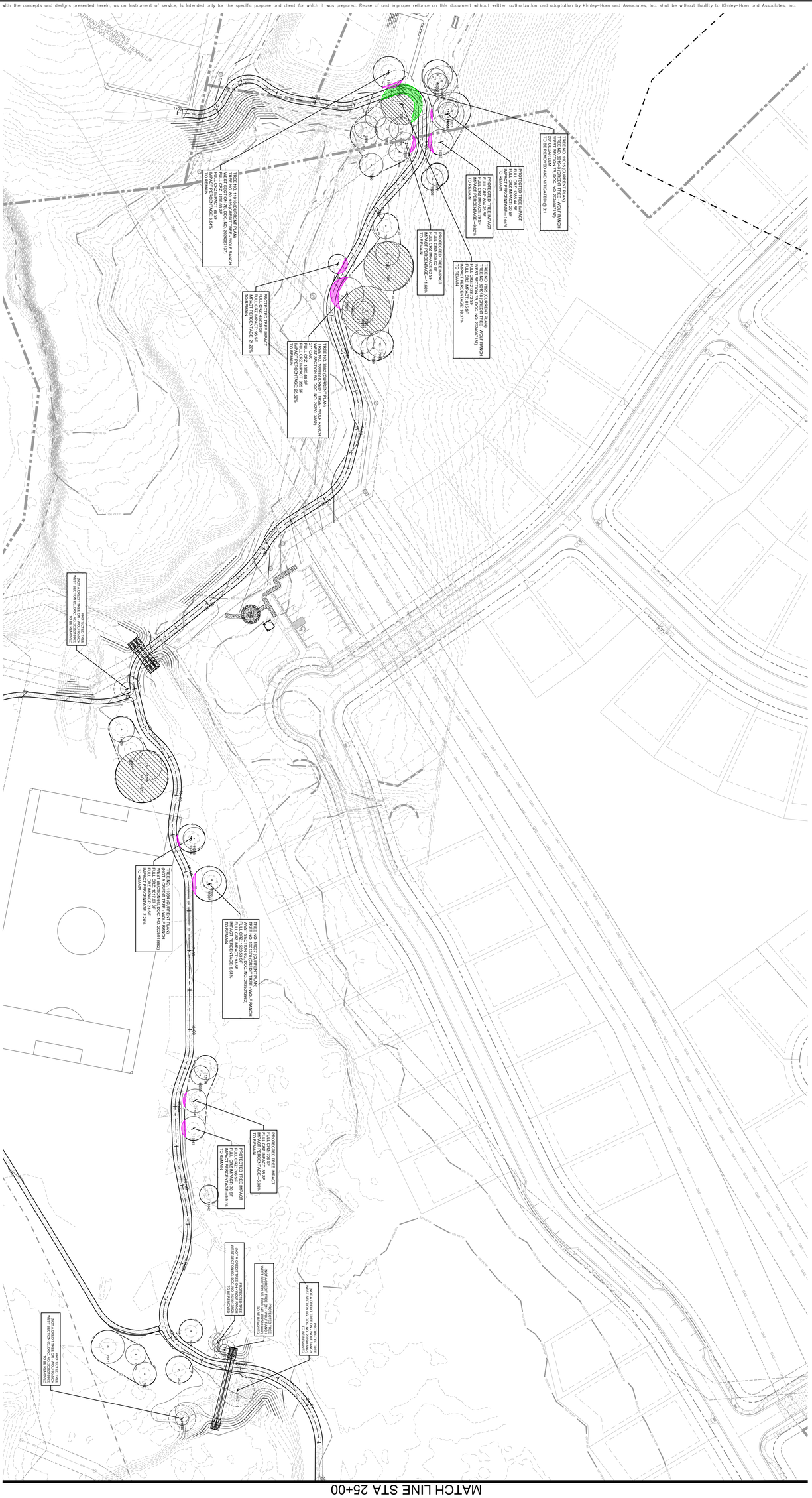

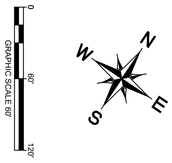

SHEET NUMBER 50 OF 53	WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS	TREE IMPACT EXHIBIT (SHEET 1 OF 4)	KHA PROJECT 064461309 DATE SEPTEMBER 2025 SCALE: AS SHOWN DESIGNED BY: JAP DRAWN BY: RRJ CHECKED BY: JAP	04/18/2026

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TEXAS REGISTERED ENGINEERING FIRM F-928

No.	REVISIONS	DATE	BY

2025-28-CON

Plotted By:Pickens, John Date:May 17, 2026 01:28:53pm File Path:K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Cad\PlanSheets\C-Tree Impact Cals.dwg

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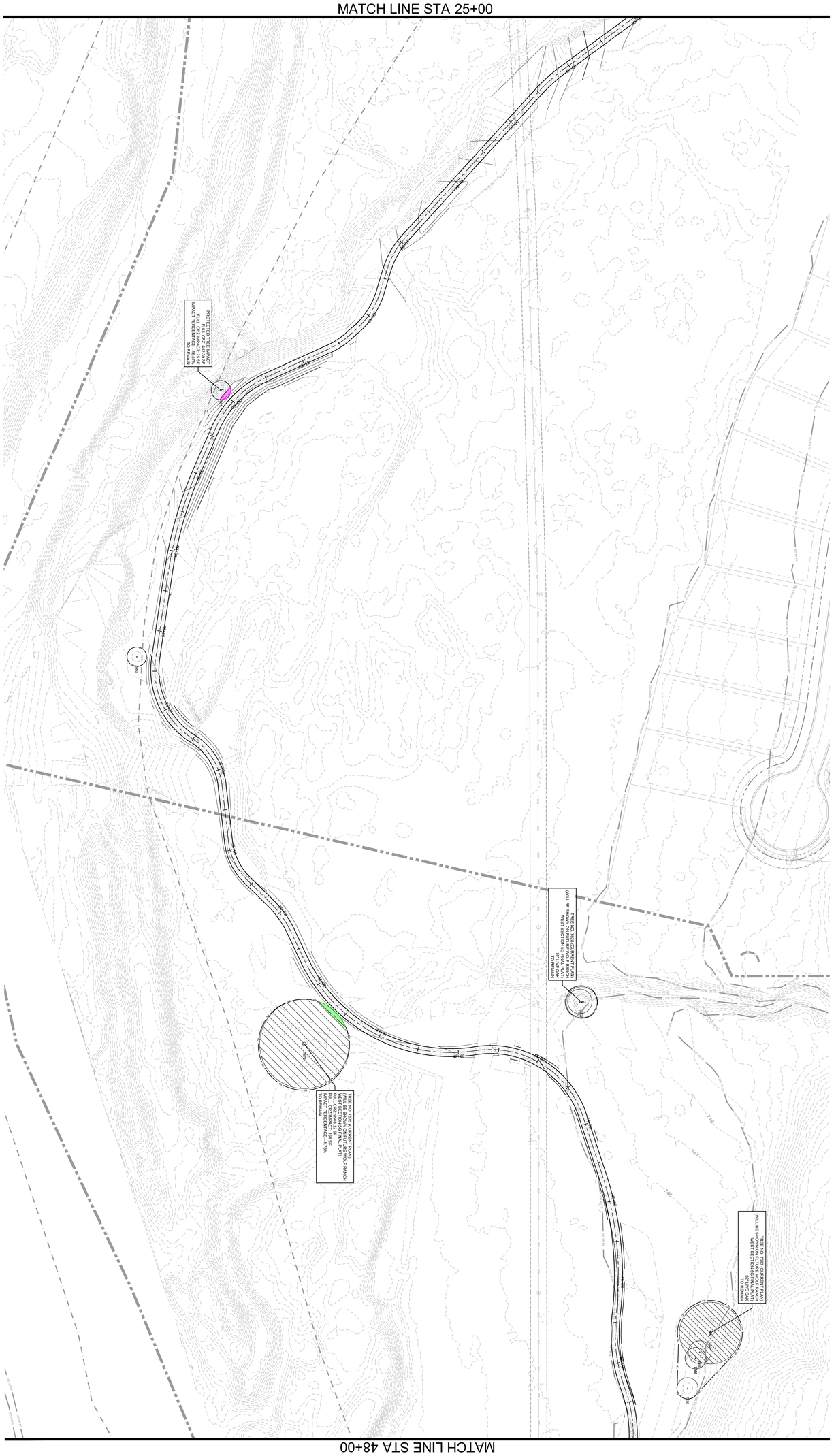

SHEET NUMBER 51 OF 53	WOLF RANCH REGIONAL TRAIL PHASE 3 & 4 CITY OF GEORGETOWN WILLIAMSON COUNTY, TEXAS	TREE IMPACT EXHIBIT (SHEET 2 OF 4)	KHA PROJECT 064461309 DATE SEPTEMBER 2025 SCALE: AS SHOWN DESIGNED BY: JAP DRAWN BY: RRJ CHECKED BY: JAP	04/18/2026	Kimley»Horn © 2026 KIMLEY-HORN AND ASSOCIATES, INC. 10814 JOLLYVILLE ROAD, CAMPUS IV, SUITE 200, AUSTIN, TX 78759 PHONE: 512-418-1771 WWW.KIMLEY-HORN.COM TEXAS REGISTERED ENGINEERING FIRM F-928

No.	REVISIONS	DATE	BY

2025-28-CON

Plotted By:Pickens, John Date:May 17, 2026 01:39:55pm File Path: K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Cad\PlanSheets\C-Tree Impact Cals.dwg

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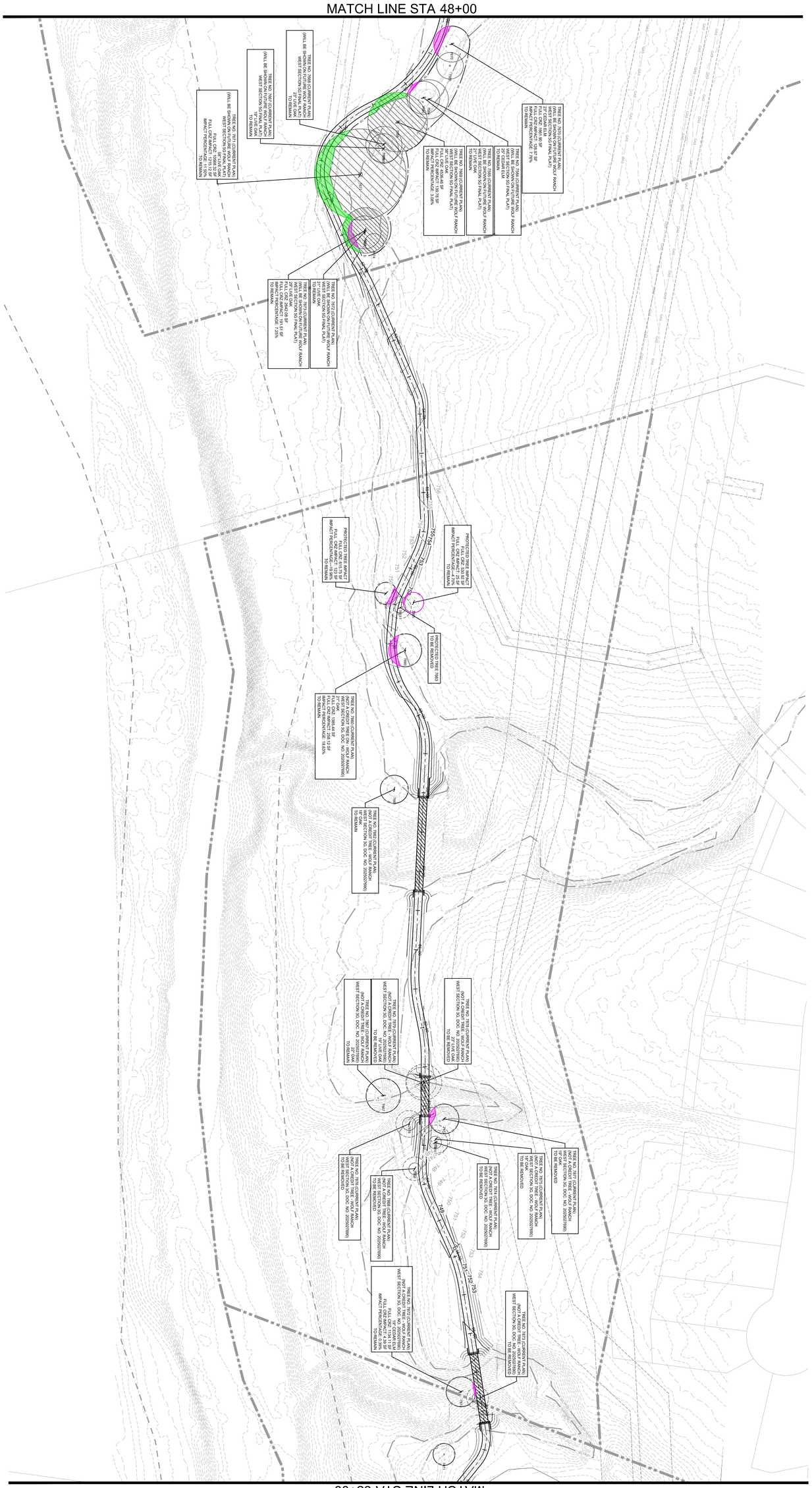
MATCH LINE STA 48+00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(WILL BE REMOVED WITH FUTURE WEST SECTION OF FINAL PLAT)
TO REMAIN
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(WILL BE REMOVED WITH FUTURE WEST SECTION OF FINAL PLAT)
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TO REMAIN
PROTECTED TREE
TO BE REMOVED
TREE NO. 7990 (CURRENT PLAN)
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TO REMAIN
TREE NO. 7989 (CURRENT PLAN)
(WILL BE REMOVED WITH FUTURE WEST SECTION OF FINAL PLAT)
TO REMAIN
TREE NO. 7988 (CURRENT PLAN)
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TO REMAIN
TREE NO.

Plotted By:Pickens, John Date:May 17, 2026 02:03:32pm File Path:K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Cad\PlanSheets\C-Tree Impact Cals.dwg
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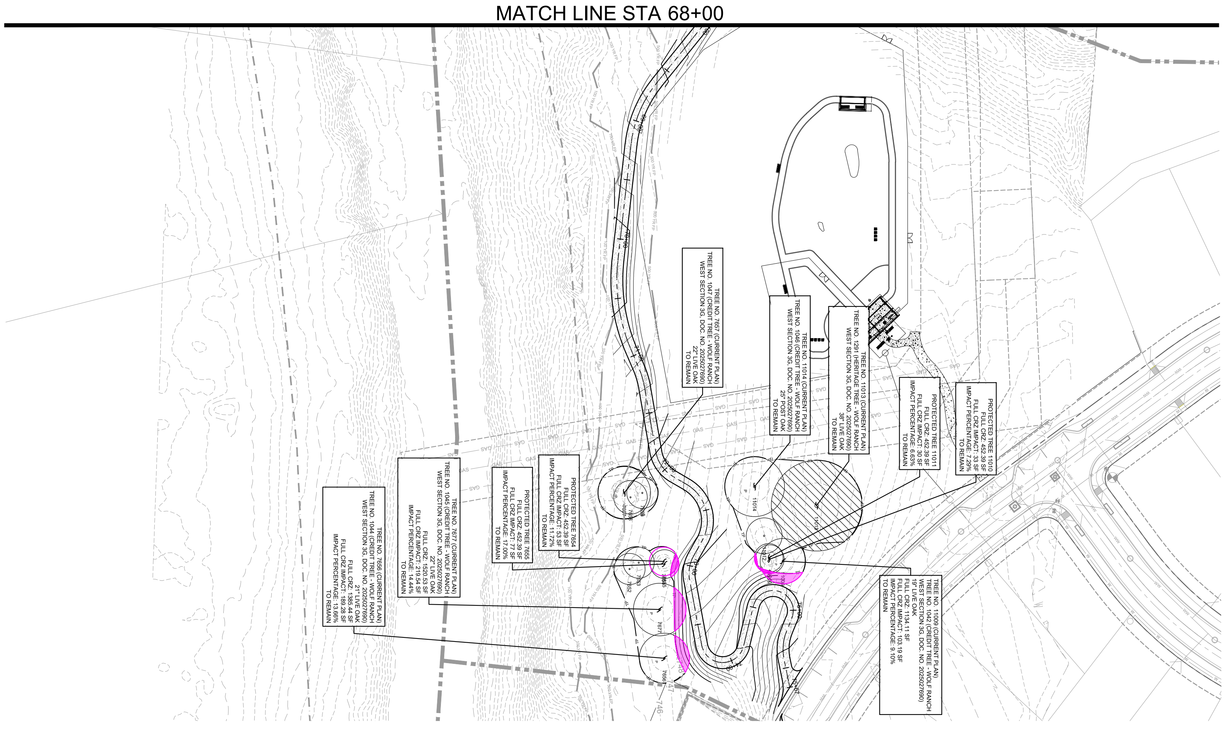
MATCH LINE STA 68+00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TO REMAIN
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FULL CRZ: 1,385.44 SF
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IMPACT PERCENTAGE: 14.14%
TO REMAIN
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FULL CRZ: 452.39 SF
IMPACT PERCENTAGE: 17.92%
TO REMAIN
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TO REMAIN
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TO REMAIN
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IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3563 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3562 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3561 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3560 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3559 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3558 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3557 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3556 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3555 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3554 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3553 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3552 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3551 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3550 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3549 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3548 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3547 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3546 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3545 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3544 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3543 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3542 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3541 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3540 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3539 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3538 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3537 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3536 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3535 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3534 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3533 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3532 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3531 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3530 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3529 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3528 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3527 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3526 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3525 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3524 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3523 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3522 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3521 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3520 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3519 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3518 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3517 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3516 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3515 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3514 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3513 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3512 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3511 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3510 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3509 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3508 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3507 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3506 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3505 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3504 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3503 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3502 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3501 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3500 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3499 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3498 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3497 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3496 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3495 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3494 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3493 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3492 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3491 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3490 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3489 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3488 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3487 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3486 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3485 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3484 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3483 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3482 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3481 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3480 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3479 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3478 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3477 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3476 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3475 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3474 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3473 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3472 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3471 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3470 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3469 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3468 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3467 (CURRENT PLAN)
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FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3466 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3465 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3464 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3463 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3462 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3461 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3460 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3459 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3458 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3457 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3456 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3455 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3454 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3453 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3452 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3451 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3450 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3449 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3448 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3447 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3446 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3445 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3444 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3443 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3442 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3441 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3440 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3439 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3438 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3437 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3436 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3435 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3434 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3433 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3432 (CURRENT PLAN)
WEST SECTION 3D, DOC. NO. 2025051789)
FULL CRZ: 1,385.44 SF
IMPACT PERCENTAGE: 13.92%
TO REMAIN
TREE NO. 3431 (

Inspection, Maintenance, Repair and Retrofit Plan for Wolf Ranch Regional Trail Phases 3 & 4

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

The following sections address inspection and maintenance taken from the TNRCC Manual, "Complying with Edward Aquifer Rules: Technical Guidance on Best Management Practices."

Silt Fence:

1. Inspection shall be made weekly and after each rainfall event, in accordance with Section 1.4.3 of RG-348.

2. Tom fabric shall be replaced or a second line of fencing parallel to the tom section shall be implemented as needed.

3. Accumulated silt shall be removed when it reaches a depth of six (6) inches. The silt shall be disposed of on an approved site and in such a manner that will not contribute to additional siltation.

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

Stabilized Construction Entrance:

1. The entrance shall be maintained in a condition that will prevent tracking or flowing of sediment onto public roadway. This may require periodic top dressing with additional stone as conditions demand. As well as repair and clean out of any measure device used to trap sediment. All sediments that are spilled, dropped, washed or tracked onto public roadway must be removed immediately.

2. Entrance shall be properly graded to prevent run-off from leaving the construction site.

Concrete Washout Area:

1. Routine inspection in accordance with Section 1.4.18 of RG-348 of the area to ensure that sufficient quantity and volume remain to contain all liquid and concrete waste generated by washout operations.

2. Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.

3. When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials used to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

Rock Berm

1. Inspection should be made weekly and after each rainfall in accordance to Section 1.4.5 of RG-348. If placed in streambeds, inspection should occur on a daily basis.

2. Accumulated silt shall be removed when it reaches a depth of six (6) inches. The silt shall be disposed of on an approved site and in such a manner that will not contribute to additional siltation.

3. Loose wire sheathing shall be repaired immediately when necessary and the berm shall be reshaped as needed during inspection.

4. Berm shall be replaced if the structure ceases to function as initially intended due to factors such as silt accumulation, washout, construction traffic damage, etc.

5. When all upstream areas are stabilized and the accumulated silt has been removed, the rock berm should be removed and disposed of.

VEGETATIVE FILTER STRIPS

VEGETATIVE FILTER STRIPS

First Two Months: The first two months are the most important for vegetative filter strips, or until they are well established. The following guidelines should be followed most closely during this time period. After the vegetative filter strips have been well established, little additional maintenance is necessary.

Pest Management: An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

Seasonal Mowing and Lawn Care: If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetated filter strip area

Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the site can help assure a dense and healthy vegetative cover.

Inspection: Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

Debris and Litter Removal: Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to

reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.
Sediment Removal: Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.
Grass Reseeding and Mulching: A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance such as weeding or replanting should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the vegetation is initially established.

Responsible Party for Maintenance: H4 Georgetown, LP

Address: 129 Canyon View Road

City, State, Zip: Georgetown, Texas 78626

Telephone Number: ~~(662) 816-2787~~ 972-201-2800

Signature of Responsible Party:

Authorized Representative
Hillwood Communities, Austin General Manager

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

During construction, Best Management Practices include the use of silt fence and inlet protection to capture sediment from the construction area contained within the storm water runoff. Silt fence will be installed along the downstream portion of the regional trail. After construction, all disturbed areas on the site will be re-vegetated and runoff from the proposed improvements will sheet flow across the vegetative filter strips. All proposed water quality BMP's are shown in the construction drawings. The TSS Removal calculations are shown on the Drainage Calculations Sheet. Please refer to the Erosion and Sedimentation Control for proposed temporary BMPs.

SECTION 3:
STORM WATER POLLUTION PREVENTION PLAN

STORM WATER POLLUTION PREVENTION PLAN (SWP3)

Wolf Ranch Regional Trail Phases 3 & 4

Williamson County, Texas

FEBRUARY 2026

Project Owner:

H4 Georgetown, LP
129 Canyon View Road
Georgetown, Texas 78626

Project Contractor:

TBD

Prepared By:

KIMLEY-HORN AND ASSOCIATES, INC.
10814 Jollyville Road, Campus IV, Suite 200
Austin, Texas 78759
(512) 418-1771

TBPE
Firm No. 928
KHA Project No. 069291601

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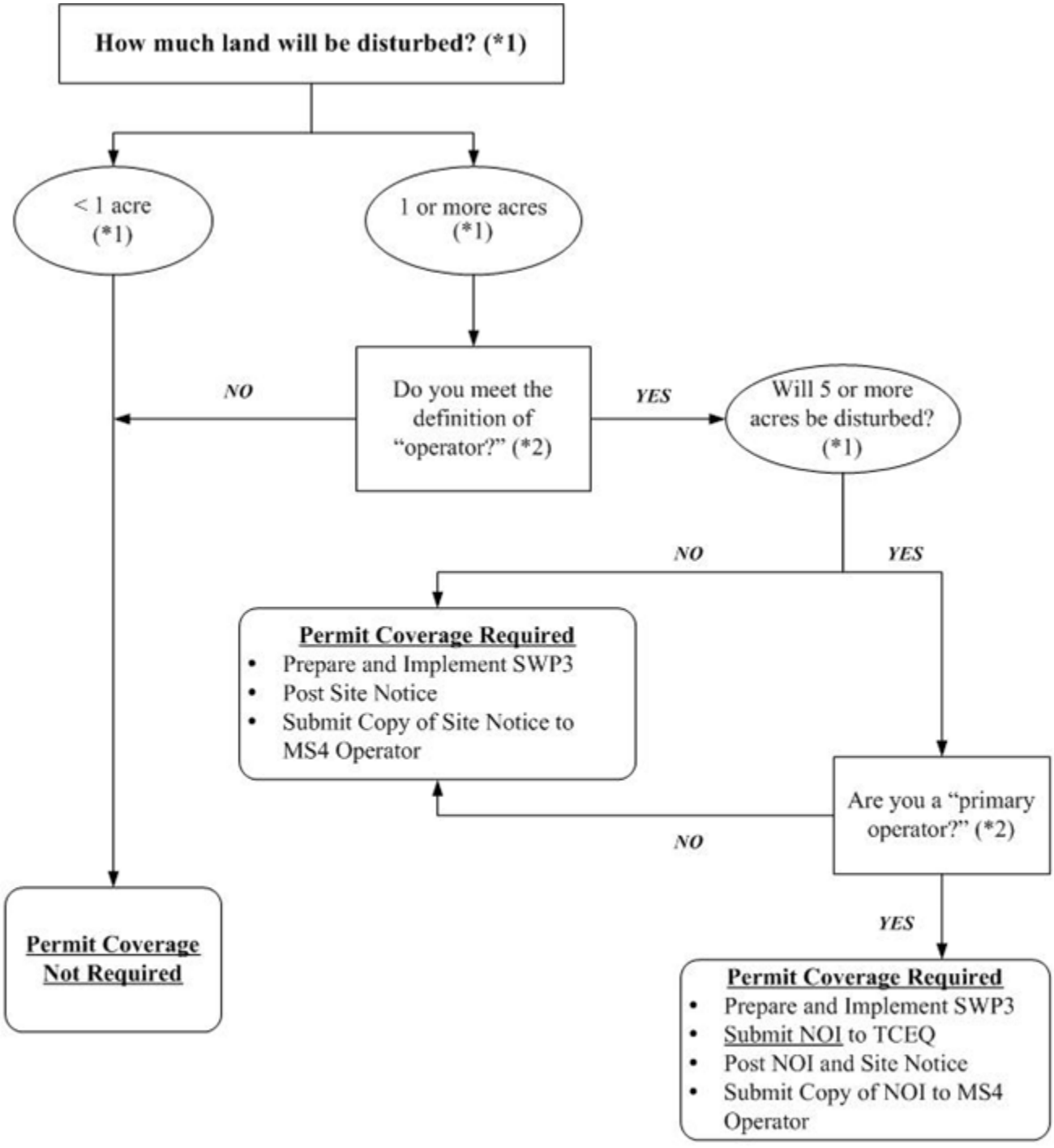


(*1) To determine the size of the construction project, use the size of the entire area to be disturbed, and include the size of the larger common plan of development or sale, if the project is part of a larger project (refer to Part I.B., "Definitions," for an explanation of "larger common plan of development or sale").

(*2) Refer to the definitions for "operator," "primary operator," and "secondary operator" in Part I., Section B. of this permit.

STORM WATER POLLUTION PREVENTION PLAN REVISIONS

Provide a general description and document the date of any revisions to the storm water pollution prevention plan during the course of this construction project. Revisions may be necessary as a result of site inspections or because of a change in the circumstances of the construction project (such as schedule change or a modification in design).

The Storm Water Pollution Prevention Plan (SWP3) must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing best management practices (BMPs) are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.

REVISION (Refer to attachments if necessary)	DATE	SIGNATURE

1.0 INTRODUCTION

On April 10, 2003, responsibility for the administration of storm water protection associated with construction activities in Texas was delegated by the U.S. Environmental Protection Agency (EPA) to the Texas Commission on Environmental Quality (TCEQ). The Texas Pollutant Discharge Elimination System (TPDES) program in Texas meets or exceeds the National Pollutant Discharge Elimination System (NPDES) standards established on a federal level. This SWP3 has been developed in accordance with the TPDES requirements. Additional local requirements may apply and this SWP3 should be updated accordingly (Appendix O).

The purpose of the SWP3 is to provide guidelines for preventing or minimizing sediment and other pollutants that may originate on the site from flowing into municipal storm systems or jurisdictional waters during the construction period. This plan also addresses the principal activities known to disturb significant amounts of ground surface during construction. Stabilization measures must begin within fourteen (14) days of stoppage of construction activities (Appendix I). The permit coverage requirements terminate when areas disturbed for this project reach full stabilization (i.e., when disturbed areas are paved or achieve 70 percent native background vegetative coverage). Revisions to this plan will be made as necessary to accurately reflect project activities and storm water pollution prevention measures.

The storm water management controls included in this SWP3 focus on providing control of pollutant discharges with practical approaches that use readily available techniques, expertise, materials, and equipment. The necessary forms for implementing the SWP3 are found in the appendices of this document, including the Inspector's Qualifications, Inspection Form, Notice of Intent (NOI), Notice of Termination (NOT), and construction site notice. The SWP3 must be implemented prior to the start of construction activities.

The Project Owner's and the Contractor's roles and responsibilities for implementation and maintenance of the elements of the SWP3 are shown in a checklist in Appendix F of this document. Appendix F also includes a description of primary and secondary operators, along with associated responsibilities. The Project Owner and each Contractor must complete the checklist in Appendix F and sign the included certification statement. The certification statement indicates that each operator understands and accepts their roles and responsibilities with respect to storm water pollution prevention for this project.

A. Project Name and Location

Wolf Ranch Regional Trail Phases 3 & 4 – City of Georgetown, Williamson County, Texas (See Appendix A for a project location map).

B. Owner Information

Name: H4 Georgetown, LP
Address: 129 Canyon View Road
Georgetown, Texas 78626

Representative: Logan Blok
Title: Development Manager
Telephone: (602) 751-1522
Fax: _____

C. Contractor Information

Name:
Address:
Representative:
Title: _____
Telephone:
Fax: _____

D. Subcontractor Information

Name: _____
Address: _____
_____
Representative: _____
Title: _____
Telephone: _____
Fax: _____

Name: _____
Address: _____
_____
Representative: _____
Title: _____
Telephone: _____
Fax: _____

E. Discharges Eligible for Authorization

The general permit for construction activities allows for storm water discharges from construction activities, construction support activities, and authorized non-storm water discharges. Under the general permit, construction support activities include, but are not limited to:

- concrete and asphalt batch plants,
- rock crushers,
- equipment staging areas,
- material storage yards,
- material borrow areas, and
- excavated material disposal areas.

Storm water discharges from these construction support activities are authorized under the general permit for construction activities provided:

- the activity is located within one mile of the permitted construction site and is directly supporting the construction activities,
- the SWP3 for the permitted construction activities is developed to include the controls and measures to reduce erosion and discharge of pollutants in storm water runoff from the construction support activities, and

- the construction support activities either do not operate beyond the completion date of the construction activity or, at the time that they do, are authorized under separate Texas Pollutant Discharge Elimination System (TPDES) authorization.

The following non-storm water discharges are also authorized under the general permit for construction activities:

- Discharges from firefighting activities,
- Uncontaminated fire hydrant flushings,
- Water from routine external washing of vehicles, the external portion of buildings or structures, and pavement (where detergents and soaps are not used),
- Uncontaminated water used to control dust,
- Potable water sources, including waterline flushings,
- Uncontaminated air conditioning condensate,
- Uncontaminated groundwater or spring water, and
- Lawn watering and similar Irrigation drainage.

Part II.A.3 of the general permit contains additional information and requirements for non-storm water discharges. Discharges of storm water runoff from concrete batch plants may be authorized provided that the benchmark sampling and associated requirements located in Part V of the general permit are met. The wash out of concrete trucks associated with off-site facilities may be conducted in accordance with the requirements of Part V of the general permit. The Operator will be responsible for updating the SWP3 to meet Part V requirements, if applicable. A non-storm water discharge inventory is located in Appendix L.

F. Obtaining Coverage under the General Permit

Construction activities, including the activities associated with this project, disturbing five (5) acres or more (definition of a large construction activity) are required to comply with the following requirements of the general permit to obtain permit coverage:

a) Develop a SWP3 according to the provisions of the general permit that covers either the entire site or all portions of the site for which the applicant is the operator and implement that plan prior to commencing construction activities.

b) Primary operators must submit a NOI:

   1) at least seven days prior to commencing construction activities if mailing a paper NOI, or

   2) prior to commencing construction activities if utilizing electronic submittal.

   A copy of the NOI form is located in Appendix H. Instructions for NOI submittal relating to primary operator additions or changes are also located in Appendix H.

c) Post a site notice where it is safely and readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction. The site notice must be maintained until completion of the construction activity.

   1) For linear construction activities, the site notice must be placed in a publicly accessible location near where construction is actively underway. A copy of the construction site notice is located in Appendix H.

d) All primary operators must also post a copy of the signed NOI at the construction site in a location where it is readily available for viewing by the general public, local, state, and federal authorities prior to starting construction activities until completion of the construction activity. If multiple crews will be conducting construction activities under the general permit simultaneously, copies of the signed NOI should be posted at each separate construction site.

e) All primary operators must provide a copy of the signed NOI at least seven days prior to commencement of construction activities to any secondary operator and to the operator of any municipal separate storm sewer system (MS4) receiving construction site discharge. The names and addresses of all MS4 operators receiving a copy of the NOI are to be recorded in this SWP3 (Appendix H).

f) Secondary operators are regulated under the general construction permit but are not required to submit a NOI provided that:

   1) a primary operator(s) at the site has submitted a NOI, or

   2) another operator(s) is required to submit a NOI and the secondary operator has provided notification to the operator(s) of the need to obtain coverage.

   Additional information for secondary operators seeking alternative coverage is located in the general permit.

Questions about the TPDES construction permit program can be directed to the TCEQ Storm Water and General Permits Team at (512) 239-4515. A copy of the TPDES General Permit (TXR150000) for Storm Water Discharges from Construction Activities has been included in Appendix G for reference.

G. Notice of Change Letter

If the Operator becomes aware that he/she failed to submit any relevant facts, or submitted incorrect information in a NOI, the correct information must be provided to the TCEQ in a Notice of Change (NOC) letter within fourteen (14) days after discovery. In addition, if relevant information provided in the NOI changes, a NOC letter must be submitted to the TCEQ within fourteen (14) days of the change. A copy of the NOC must be provided to the operator of any MS4 receiving discharge from the construction activity. The names and addresses of all MS4 operators receiving a copy of the NOC must be included in this SWP3 (Appendix H).

H. Notice of Termination

Authorization under the general permit must be terminated by submitting a completed and signed NOT form provided in Appendix H. The NOT must be submitted to the TCEQ, and a copy of the NOT must be provided to the operator of any municipal separate storm sewer system (MS4) receiving the discharge within thirty (30) days after final stabilization has been achieved on all portions of the site that are the responsibility of the permittee, or another permitted contractor has assumed control over all areas of the site that have not been finally stabilized. The names and addresses of all MS4 operators receiving a copy of the NOT must be recorded in this SWP3 (Appendix H).

I. Termination of Coverage for Secondary Operators

Each operator that obtained authorization of the general permit without submitting a NOI must remove the site notice and complete the applicable portion of the notice related to removal of the notice. A copy of

the completed notice must be submitted to the operator of any MS4 receiving site discharge within 30 days of any the following conditions:

a) final stabilization has been achieved on all portions of the site that are the responsibility of the permittee,

b) a transfer of operational control has occurred, or

c) the operator has obtained alternative authorization under an individual TPDES permit or alternative TPDES general permit.

J. SWP3 Availability

This SWP3 must be retained on-site at the construction site, or if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. This SWP3 must be made readily available at the time of an on-site inspection.

K. Hazardous Materials

The following potential pollutant sources may be present at the site due to the nature of the construction activities. An inventory of materials is located in Appendix L. Controls for potential pollutants are listed and described in Appendices C and D.

- Solvents
- Stains/paints
- Fuels
- Oils
- Grease
- Pesticides
- Fertilizer
- Sediment/total suspended solids
- Trash
- Paving
- Concrete curing compound
- Glue adhesives
- Joint compound
- Concrete, painting, and brick wash
- Excavation pump-out water
- Concrete

2.0 SITE DESCRIPTION

A. General Site Description

The construction site is located in the City of Georgetown, Williamson County, Texas (Appendix A). The site covers an area of approximately 159.53-acres and is a part of a known larger common plan of development. The construction site is generally located along the San Gabriel south of SH 29, east and west of Southwest Bypass.

This site is located over the Edwards Aquifer Contributing Zone and is not located on Indian Country Lands. If information about the Edwards Aquifer Zone or Indian Country Lands changes, the Operator should update this SWP3 accordingly.

B. Nature of Construction Activity

The purpose of the construction project is to construct a concrete regional trail to serve as an amenity. The table in Appendix B should be updated to depict the anticipated schedule for the project.

C. Estimate of Total Site Area and Disturbed Area

The amount of area involved in the project is estimated to be 159.63-acres of platted area. The total disturbed areas are projected to total approximately 8.50-acres.

D. Storm Water Discharge Locations and Quality Data

No data is available describing quality of storm water discharges from the site. Information will be added to this plan as it is received.

E. Information on Soil Types

A soils map showing the project site and surrounding area is included in Appendix A. The predominant soil types found on the project site are Brackett gravelly clay loam (BkE), 3 to 12 percent slopes; Eckrant cobbly clay (EaD), 1 to 8 percent slopes; and Denton silty clay (DnB), 1 to 3 percent slopes. A description of these soils is located in Appendix A (USDA, 2019).

F. Receiving Waters and Wetlands

The site lies to the north of the South Fork San Gabriel River, the sites receiving body of water. This portion of the river is not listed on the 2008 Texas 303(d) list of impaired waters.

New sources or new discharges of the constituents of concern to impaired waters are not authorized by the general construction permit (unless otherwise allowable under 30 TAC Chapter 305 and applicable state law). Impaired waters are those that do not meet applicable water quality standards and are listed on the EPA approved CWA 303(d) list. Pollutants of concern are those for which the water body is listed as impaired.

If discharges are expected to enter into a receiving water body located on the 303(d) list, constituents of concern are those for which the water body is listed as impaired. Discharges of the constituents of

concern to impaired water bodies for which there is a total maximum daily load (TMDL) are not eligible for the general permit unless they are consistent with the approved TMDL. The receiving water does not have a known published TMDL. Permittees must incorporate the conditions and requirements applicable to their discharges, including monitoring frequency and reporting required by TCEQ rules, into this SWP3 in order to be eligible for coverage under the general permit.

There are no known wetlands on the site. If any wetlands are identified on the site, the Operator should update this SWP3 accordingly.

G. Threatened and Endangered Species

Are endangered or threatened species and critical habitats on or near the project area?

☐ Yes ☒ No

H. Discharges to the Edwards Aquifer Recharge Zone

Discharges cannot be authorized by the general permit where prohibited by 30 Texas Administrative Code (TAC) Chapter 213.

1. New Discharges

   For new discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone, operators must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of the general construction permit. A copy of 30 TAC Chapter 213 is located in Appendix Q.

2. Existing Discharges

   For existing discharges, the requirements of the agency-approved Water Pollution Abatement Plan under the Edwards Aquifer Rules are in addition to the requirements of the general construction permit. Best management practices and maintenance schedules for structural storm water controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in storm water runoff are in addition to the requirements in the general construction permit. A copy of the 30 TAC Chapter 213 is located in Appendix Q.

For discharges from large construction activities located on the Edwards Aquifer recharge zone or the Edwards Aquifer contributing zone, applicants must also submit a copy of the NOI to the appropriate TCEQ regional office. For discharges from large construction activities by operators not required to submit a NOI, a copy of the construction site notice must be submitted to the appropriate TCEQ regional office.

Counties:	**Contact:**
Comal, Bexar, Medina, Uvalde, and Kinney	TCEQ Water Program Manager San Antonio Regional Office 14250 Judson Road San Antonio, Texas (210) 490-3096
Williamson, Travis, and Hays	TCEQ Water Program Manager Austin Regional Office 2800 South IH 35, Suite 100 Austin, Texas 78704-5712 (512) 339-2929

3.0 BEST MANAGEMENT PRACTICE MEASURES AND CONTROLS

A. MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL

The entire limits of construction, detailed in the Erosion and Sedimentation Control Plan, are subject to disturbance during construction activities. The construction will have one (1) staging and spoils area located within the limits of construction that will be used to store and save topsoil and trenching materials. The contractor will try to minimize disturbance of the natural ground as much as possible during the construction process and will not leave the designated limits of construction for the project.

B. PHASE CONSTRUCTION ACTIVITY

This project is proposed to be constructed in one single phase. The contractor will install all silt fencing prior to beginning any construction or demolition. An exception will be made with the proposed J-hooks, as identified on the Erosion and Sedimentation Control Plan found in site's construction plan set. J-hooks are to be installed over trenched areas after soils have been replaced, compacted and graded. Specific areas where J-hooks are to be utilized are shown on the Erosion and Sedimentation Control Plan. Soil stabilization will take place after J Hooks have been installed.

The sequence of major activities for Wolf Ranch Regional Trail Phases 3 & 4 of the development will be as follows:

Phase 1 (total disturbed area approximately 8.50 acres):

1) Install tree protection and initiate tree mitigation measures.
2) Install erosion controls as indicated on approved plan.
3) Contact City of Georgetown to schedule the preconstruction coordination meeting.
4) Evaluate temporary erosion control installation. Review construction schedule with the erosion control plan.
5) Construct the Regional Trail.

Phase 2 (total disturbed area approximately 8.50 acres):

6) Complete construction and install landscaping and/or re-vegetation.
7) Re-vegetate disturbed areas or complete a developer's contract for the re-vegetation along with the engineer's concurrence letter.
8) Project engineer inspects job and writes concurrence letter to the City. Final inspection is scheduled upon receipt of letter.

Final Phase (all temporary E&S to be removed, and no disturbed area)

9) Upon re-vegetation per City of Georgetown requirements, remove temporary erosion/sedimentation controls.

C. CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT

BMP Description: **Silt Fence – Perimeter and J-Hooks**	
Installation Schedule:	Prior to commencing construction activities.
Maintenance and Inspection:	If a standard-strength fabric is used, it can be reinforced with wire mesh behind the filter fabric. This increases the effective life of the fence. The maximum life expectancy for synthetic fabric silt fences is about six (6) months, depending on the amount of rainfall and runoff. Burlap fences have a much shorter useful life span, usually up to two (2) months. Inspect silt fences regularly and frequently, as well as after each rainfall event, to make sure that they are intact and that there are no gaps where the fence meets the ground or tears along the length of the fence. If you find gaps or tears, repair or replace the fabric immediately. Remove accumulated sediments from the fence base when the sediment reaches one-third (1/3) to one-half (1/2) the fence height. Remove sediment more frequently if accumulated sediment is creating noticeable strain on the fabric and the fence might fail from a sudden storm event. When you remove the silt fence, remove the accumulated sediment as well.
Responsible Staff:	TBD

***BMP Description*: Rock Berms – Check Dam**	
***Installation Schedule*:**	Prior to commencing construction activities.
***Maintenance and Inspection*:**	Inspect the berm after every rainfall to make sure sediment has not built up and that vehicles have not damaged it. It is important to make repairs at the first sign of deterioration to keep the berm functioning properly.
***Responsible Staff*:**	TBD

D. STABILIZE SOILS

***BMP Description:* Seeding**	
☒ ***Permanent***	☒ ***Temporary***
Installation Schedule:	After final grading in areas not to be landscaped. Bare soils should be stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.
Maintenance and Inspection:	Low-maintenance areas are mowed infrequently or not at all and do not receive lime or fertilizer regularly. Plants must be able to persist with minimal maintenance over long periods of time. Use grass and legume mixtures for these sites because legumes fix nitrogen from the atmosphere. Sites suitable for low-maintenance vegetation include steep slopes, stream or channel banks, some commercial properties, and "utility" turf areas such as road banks.

	Grasses should emerge within 4-28 days and legumes 5-28 days after seeding, with legumes following grasses. A successful stand has the following characteristics: • Vigorous dark green or bluish green (not yellow) seedlings • Uniform density, with nurse plants, legumes, and grasses well intermixed • Green leaves that remain green throughout the summer--at least at the plant bases Inspect seeded areas for failure and, if needed, reseed and repair them as soon as possible. If a stand has inadequate cover, reevaluate the choice of plant materials and quantities of lime and fertilizer. Depending on the condition of the stand, repair by overseeding or reseeding after complete seedbed preparation. If timing is bad, overseed with rye grain or German millet to thicken the stand until a suitable time for seeding perennials. Consider seeding temporary, annual species if the season is not appropriate for permanent seeding. If vegetation fails to grow, test the soil to determine if low pH or nutrient imbalances are responsible. On a typical disturbed site, full plant establishment usually requires refertilization in the second growing season. Use soil tests to determine if more fertilizer needs to be added. Do not fertilize cool season grasses in late May through July. Grass that looks yellow might be nitrogen deficient. Do not use nitrogen fertilizer if the stand contains more than 20% legumes.
Responsible Staff:	TBD

BMP Description: **Soil Roughening**	
☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	After interim and rough grading activities, prior to final site work or utility construction
Maintenance and Inspection:	Inspect roughened areas after storms to see if re-roughening is needed. Regular inspection should indicate where additional erosion and sediment control measures are needed. If rills (small watercourses that have steep sides and are usually only a few inches deep) appear, fill, regrade, and reseed them immediately.
Responsible Staff:	TBD

BMP Description: **Hydro-mulching**	
☐ ***Permanent***	☒ ***Temporary***

Installation Schedule:	Bare soils should be stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.
Maintenance and Inspection:	Anchor mulches to resist wind displacement. When protection is no longer needed, remove netting and compost it or dispose of it in a landfill. Inspect mulched areas frequently to identify areas where it has loosened or been removed, especially after rainstorms. Reseed these areas, if necessary, and replace the mulch cover immediately. Apply mulch binders at rates recommended by the manufacturer. If washout, breakage, or erosion occurs, repair, reseed and remulch surfaces, and install new netting. Continue inspections until vegetation is firmly established.
Responsible Staff:	TBD

E. PROTECT SLOPES

There are no excessive slopes located within the construction area; therefore, no additional controls are proposed to protect slopes

F. PROTECT STORM DRAIN INLETS

BMP Description: **Bagged Gravel Inlet Filter**

Installation Schedule:	Prior to stabilization of associated drainage areas
Maintenance and Inspection:	Inspection should be made weekly and after each rainfall. Repair or replacement should be made promptly as needed by the contractor. Remove sediment when buildup reaches a depth of three (3) inches. Removed sediment should be deposited in a suitable area and in such a manner that it will not erode. Check placement of device to prevent gaps between device and curb. Inspect filter fabric and patch or replace if torn or missing. Structures should be removed and the area stabilized only after the remaining drainage area has been properly stabilized.
Responsible Staff:	TBD

There are no storm drain inlets located within the construction area for the public wastewater line; therefore, no controls are proposed to protect storm drain inlets at the time of its construction.

G. ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS

BMP Description: **Silt Fence – Perimeter and J-Hooks**

Installation Schedule:	Prior to commencing construction activities.
Maintenance and Inspection:	If a standard-strength fabric is used, it can be reinforced with wire mesh behind the filter fabric. This increases the effective life of the fence. The maximum life expectancy for synthetic fabric silt fences is about six (6) months, depending on the amount of rainfall and runoff. Burlap fences

	have a much shorter useful life span, usually up to two (2) months. Inspect silt fences regularly and frequently, as well as after each rainfall event, to make sure that they are intact and that there are no gaps where the fence meets the ground or tears along the length of the fence. If you find gaps or tears, repair or replace the fabric immediately. Remove accumulated sediments from the fence base when the sediment reaches one-third (1/3) to one-half (1/2) the fence height. Remove sediment more frequently if accumulated sediment is creating noticeable strain on the fabric and the fence might fail from a sudden storm event. When you remove the silt fence, remove the accumulated sediment as well.
Responsible Staff:	TBD

***BMP Description*: Rock Berms – Check Dam**	
***Installation Schedule*:**	Prior to commencing construction activities.
***Maintenance and Inspection*:**	Inspect the berm after every rainfall to make sure sediment has not built up and that vehicles have not damaged it. It is important to make repairs at the first sign of deterioration to keep the berm functioning properly.
***Responsible Staff*:**	TBD

H. RETAIN SEDIMENT ON-SITE .

***BMP Description:* Sediment Basin**	
Installation Schedule:	Prior to commencing construction activities.
Maintenance and Inspection:	Sediment basins should be inspected regularly (at least as often as required by the TPDES Construction General Permit) to check for damage and to ensure that obstructions are not diminishing the effectiveness of the structure. Sediment shall be removed and the basin shall be re-graded to its original dimensions when the sediment storage capacity of the impoundment has been reduced by 20 percent. The removed sediment may be stockpiled or redistributed onsite in areas that are protected by erosion and sediment controls. Inspect temporary stabilization of the embankment and graded basin and the velocity dissipaters at the outlet and spillway for signs of erosion. Repair any eroded areas that are found. Install additional erosion controls if erosion is frequently evident.
Responsible Staff:	TBD

I. ESTABLISH STABILIZED CONSTRUCTION EXITS

***BMP Description:* Stabilized Construction Entrance/Exit**	
Installation Schedule:	Prior to commencing construction activities.
Maintenance and Inspection:	Maintain stabilization of the site entrances until the rest of the construction site has been fully stabilized. You might need to add stone and gravel periodically to each stabilized construction site entrance to

	keep the entrance effective. Sweep up soil tracked offsite immediately for proper disposal. For sites with wash racks at each site entrance, construct sediment traps and maintain them for the life of the project. Periodically remove sediment from the traps to make sure they keep working
Responsible Staff:	TBD

J. ADDITIONAL BMPS

No additional BMPs proposed.

4.0 EXAMPLE PRACTICES

A. Example Stabilization Practices

1. Temporary Stabilization

   Top soil stock piles and disturbed portions of the site where construction activity temporarily ceases for at least 21 days will be stabilized with temporary seed and mulch no later than 14 days from the last construction activity in that area. Areas of the site which are to be paved will be temporarily stabilized until pavement can be applied.

2. Permanent Stabilization

   Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 14 days after the last construction activity.

B. Example Structural Practices

1. Interceptor Swale

   An interceptor swale is a small v-shaped or parabolic channel which collects runoff and directs it to a desired location. It can either have a natural grass lining or, depending upon slope and design velocity, a protective lining of erosion matting, stone or concrete. The interceptor swale can either be used to direct sediment-laden flow from disturbed areas into a controlled outlet or to direct “clean” runoff around disturbed areas. Since the swale is easy to install during early grading operations, it can serve as the first line of defense in reducing runoff across disturbed areas. As a method of reducing runoff across the disturbed construction area, it reduces the requirements of structural measures to capture sediment from runoff since the flow is reduced. By intercepting sediment-laden flow downstream of the disturbed area, runoff can be directed into a sediment basin or other BMP for sedimentation as opposed to long runs of silt fence, straw bales or other filtration method.

2. Silt Fence

   A silt fence consists of geotextile fabric supported by poultry netting or other backing stretched between either wooden or metal posts with the lower edge of the fabric securely embedded in the soil. The fence is typically located downstream of disturbed areas to intercept runoff in the form of sheet flow. Silt fence provides both filtration and time for sedimentation to reduce sediment and the

velocity of the runoff. Properly designed silt fence is economical since it can be relocated during construction and reused on other projects. Silt fence is normally used as perimeter control located downstream of disturbed areas. It is only feasible for non-concentrated, sheet flow conditions.

3. Fiber Roll/Sediment Log

   Fiber rolls/sediment logs are tightly compacted tubular cylinders composed of straw, flax, coconut fiber, or other similar types of material wrapped with a fiber mesh. They must be secured with stakes. When installed at the base of an embankment or on a slope, fiber rolls are effective at controlling sediment and reducing erosion rates. They achieve this by intercepting storm water runoff, thereby reducing the velocity of the flow and dispersing concentrated runoff as sheet flows. Fiber rolls are also water-permeable and are effective at trapping eroded sediment. It is important not to crush fiber rolls when they are installed. If more than one sock is placed in a row, the socks should be overlapped; not abutted.

4. Inlet Control

   Inlet protection consists of a variety of methods of intercepting sediment at low point inlets through the use of stone, filter fabric and other materials. This is normally located at the inlet, providing either detention or filtration to reduce sediment and floatable materials in storm water. Inlet protection is normally used as a secondary defense in site erosion control due to the limited effectiveness and applicability of the technique. It is normally used in new developments that include new inlets or roads with new curb inlets or during major repairs to existing roadways. Inlet protection has limited use in developed areas due to the potential for loading, traffic safety and pedestrian safety and maintenance problems. Inlet protection can reduce sediment in a storm sewer system by serving as a back system to onsite controls or by reducing sediment loads from controls with limited effectiveness such as straw bale dikes.

5. Check Dams

   Check dams are small barriers consisting of straw bales, rock, or earth berms placed across a drainage swale or ditch. They reduce the velocity of small concentrated flows, provide a limited barrier for sediment and help disperse concentrated flows, reducing potential erosion. Check dams are used for long drainage swales or ditches in which permanent vegetation may not be established and erosive velocities are present. They are typically used in conjunction with other techniques such as inlet protection, rip rap or other sediment reduction techniques. Check dams provide limited treatment. They are more useful in reducing flow to acceptable levels.

6. Erosion Control Mats

   An erosion control mat (ECM) is a geomembrane or biodegradable fabric placed over disturbed areas to limit the effects of erosion due to rainfall and runoff across barren soil. Erosion control mats are manufactured by a wide variety of vendors addressing a wide variety of conditions such as vegetation establishment and high velocity flow. Types of matting include organic (jute, straw) and synthetic (plastic and glass fiber) materials. Mats can provide both temporary and/or permanent stabilization for disturbed soil or barren areas. It is used for difficult areas to stabilize such as steep slopes, temporary or permanent drainage swales, embankments or high traffic (pedestrian) areas. Some mats are reusable, reducing the initial cost of the installation.

7. Stabilized Construction Entrance

   A stabilized construction entrance consists of a pad consisting of gravel, crushed stone, recycled concrete or other rock like material on top of geotextile filter cloth to facilitate the wash down and removal of sediment and other debris from construction equipment prior to exiting the construction site. For added effectiveness, a wash rack area can be incorporated into the design to further reduce sediment tracking. For long term projects, cattle guards or other type of permanent rack system can be used in conjunction with a wash rack. This directly addresses the problem of silt and mud deposition in roadways used for construction site access. Stabilized construction entrances are used primarily for sites in which significant truck traffic occurs on a daily basis. It reduces the need to remove sediment from streets. If used properly, it also directs the majority of traffic to a single location, reducing the number and quantity of disturbed areas on the site and providing protection for other structural controls through traffic control.

8. Earth Dike

   An earth dike is constructed along the uphill perimeter of a site. A portion of the dike will divert run-on around the construction site. The remaining portion of the dike will collect runoff from the disturbed area and direct the runoff to the sediment basin.

9. Triangular Sediment Filter Dike

   A triangular sediment filter dike is a self-contained silt fence consisting of filter fabric wrapped around welded wire fabric shaped into a triangular cross section. While similar in use to a silt fence, the dike is reusable, sturdier, transportable, and can be used on paved areas in situations where it is impractical to install embedded posts for support. Triangular filter dikes are used in place of silt fence, treating sediment flow at the perimeter of construction areas and at the perimeter of the site. Also, the dikes can serve as stream protection devices by preventing sediment from entering the streams or as check dams in small swales. Triangular sediment filter dikes are especially useful for construction areas surrounded by pavement, where silt fence or hay bale installation is impracticable. Since they can be anchored without penetration (through the use of rock), pavement damage can be minimized. Triangular dikes are used to provide perimeter control by detaining sediment on a disturbed site with drainage that would otherwise flow onto adjacent properties. Triangular dikes also serve as sediment trapping devices when used in areas of sheet flow across disturbed areas or are placed along stream banks to prevent sediment-laden sheet flow from entering the stream. The dikes can be subjected to more concentrated flows and a higher flow rate than silt fence.

10. Sediment Basin

    Sediment basins are required, where feasible, for sites with drainage areas of ten (10) or more acres. Additional information for sedimentation basins is located in Appendix M.

11. Tree Protection

    Tree protection prevents the disturbance of existing trees and their roots on a construction site. Trees are not the same shape below ground as they are above, so it is difficult to predict the length or location of their roots. One common method used to identify the critical root zone is to define the tree's "drip line" – the area directly below the branches of the tree. Many roots extend beyond the longest branches a distance equal to two or more times the height of the tree. For this reason, it is

recommended to protect as much of the area beyond the drip line as feasible. An example of tree protection is to tie continuous nylon string with two-foot tundra weight orange streamers to eight-foot minimum metal t-posts driven two feet into the ground. Four-foot minimum orange plastic fencing per manufacturer's recommendations will surround the critical root zone to keep equipment off the rooting area. If a fence cannot be erected, cushion the rooting area with six inches of wood chips, wood, or brick paths. Where root areas must be graded, cut large roots instead of tearing them with equipment.

C. Waste Control and Disposal

1. Waste Materials

   All waste materials will be collected and stored in a securely lidded metal dumpster rented from a local waste management company, which is a licensed solid waste management company. The dumpster will meet all local and any State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied periodically or more often if necessary, and the trash will be hauled to an appropriate waste management facility. No construction waste materials will be buried onsite. Staging areas for construction materials should have secondary containment. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer. The individual who manages the day-to-day site operations will be responsible for seeing that these procedures are followed.

2. Hazardous Waste

   All hazardous waste materials will be disposed of in the manner specified by local or State regulations or by the manufacturer. Site personnel will be instructed in these practices and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.

3. Sanitary Waste

   All sanitary waste will be collected from the portable units periodically by a licensed sanitary waste management contractor, as required by local regulation.

4. Offsite Vehicle Tracking and Dust Control

   A stabilized construction entrance has been provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be swept to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin. If dust is visible when dump trucks are leaving the site due to construction activities, dust suppression techniques such as wetting the soil will be employed.

D. Timing of Controls/Measures

The contractor and the operator shall review the SWP3 requirements prior to beginning construction activities. The following is a sample erosion control sequence:

- Site Mobilization: Prior to any construction on the site a stabilized construction entrance shall be installed.
- Clearing and Rough Grading: Prior to any grading of the site, erosion control measures shall be installed. These controls may include but are not limited to silt fences, sedimentation ponds and vegetated swales. The installation is required to prevent sediment from leaving disturbed areas.
- Storm Drain Installation: In addition to maintaining the devices installed during initial grading, supplemental control measures will need to be installed. These devices will include devices shown on the plan such as storm drain inlet protection and sediment traps. Inlet protection devices prevent sedimentation from entering the inlet and subsequently, the storm sewer system

as well as the receiving water body. Other devices may be required as shown on the erosion control plan or requested by the inspector or operator.

- Installation of Public Utilities: Additional control measures are likewise not required during installation of public utilities. However, maintenance of existing control measures installed during previous phases must continue.
- Pavement Installation: In addition to maintaining the control measures installed during initial grading and storm drain installation phases, supplemental measures should be installed. Upon completion of paving and curb backfill operations, control measures should be installed behind curbs at handicap ramps and along parkways where sediment could enter streets and/or paved areas.
- Final Grading: Additional control measures are not required during final grading. However, maintenance of existing control measures installed during previous phases will continue.
- Building Construction: In addition to maintaining previously installed control measures, a strict policy will be enacted which minimizes vehicle traffic from entering non-paved areas. Construction materials will be unloaded from existing paved surfaces where possible, thereby preventing disturbing control measures already in place and reducing sediment tracking into paved areas. Areas where construction activity temporarily ceases for more than 21 days will be stabilized with a temporary seed and mulch within 14 days of the last disturbance. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch. After the entire site is stabilized, the accumulated sediment will be removed and the erosion control measures will be removed.

5.0 RELEASES OF REPORTABLE QUANTITIES

Because construction activities may handle certain hazardous substances over the course of the project, spills of these substances in amounts that equal or exceed Reportable Quantity (RQ) levels are a possibility. Material management practice guidelines are located in Appendix K.

EPA has issued regulations that define what reportable quantity levels are for oil and hazardous substances. These regulations are found at 40 CFR Part 110 Part 117, or 40 CFR Part 302. A list of RQs are included in Appendix M. If there is a RQ release during the construction period, then you must take the following steps:

- Notify TCEQ immediately at (800) 832-8224.
- Notify the National Response Center immediately at (800) 424-8802.
- Within fourteen (14) days, submit a written description of the release to TCEQ providing the date and circumstances of the release and the steps to be taken to prevent another release.
- Modify the pollution prevention plan to include the date of release, the circumstances leading to the release, and steps taken to prevent reoccurrence of the release.

6.0 STATE AND LOCAL PROGRAMS

The TPDES program meets or exceeds the NPDES standards established on a federal level. This SWP3 has been developed in accordance with the requirements of the TPDES requirements. Information for Williamson County has been included in Appendix N. Additional local requirements may apply and this SWP3 should be updated accordingly.

Storm water from the project construction area discharges into the storm sewer system of Williamson County (MS4).

Construction projects that discharge storm water to an MS4 are required to:

- submit a copy of the signed NOI to the operator of the MS4 at least seven days prior to the commencement of construction activities,
- post a copy of the signed NOI and construction site notice at the project site at all times,
- submit a copy of any NOCs to the operator of the MS4,
- submit a copy of the NOT to the operator of the MS4, and
- keep and maintain a list of the names and address of MS4s that receive NOI, NOT, and/or NOC forms (Appendix H).

7.0 INSPECTION AND MAINTENANCE

A. Inspection Schedule

1. All disturbed areas, as well as all erosion and sediment control devices, will be inspected according to one of the following schedules:

   a) at least every seven (7) calendar days and within 24 hours after a rainfall of 0.5 inch or greater, or

   b) every seven (7) days on the same day of the week each week, regardless of whether or not there has been a rainfall event since the previous inspection.

2. Inspections may occur on either schedule provided that this SWP3 reflects the current schedule and that any changes are in accordance with the following:

   a) the schedule is changed a maximum of one time each month,

   b) the schedule change must be implemented at the beginning of a calendar month, and

   c) the reason for the schedule change must be documented in this SWP3 (an inspection schedule form is located in Appendix E).

B. Inspection Reports

1. Completed inspection reports (Appendix E) will include the following information:
   a) scope of the inspection,
   b) date of the inspection,
   c) name(s) of personnel making the inspection,
   d) reference to qualifications of inspection personnel,
   e) observed major construction activities, and
   f) actions taken as a result of the inspection.
2. All disturbed areas (on and off-site), areas for material storage locations where vehicles enter or exit the site, and all of the erosion and sediment controls that were identified as part of the SWP3 must be inspected. The inspection report must state whether the site was in compliance or identify any incidents of non-compliance. The report will be signed by the qualified inspector in accordance with the TPDES general permit and filed in the SWP3. A sample Inspection Report is included in Appendix E, along with an Inspector Qualification Form. All reports and inspections required by the general construction permit will be completed by a duly authorized representative. A copy of a Delegation of Signatories to Reports letter is included in Appendix J.
3. The operator should correct any damage or deficiencies as soon as practicable after the inspection, but in no case later than seven (7) calendar days after the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3, and wherever possible, those changes implemented before the next storm event or as soon as practicable. A list of maintenance guidelines is included in Appendix E.
4. Inspection reports will be kept in the Operator's file, along with the SWP3, for at least three years from the date that the NOT is submitted to the TCEQ for the construction site.

C. Final Stabilization

Final stabilization of the construction site has been achieved when all soil disturbing activities at the site have been completed, and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures. If a vegetative cover cannot be established, equivalent permanent stabilization measures (such as riprap, gabions, or geotextiles) can be employed. When these conditions have been met, BMPs can be removed from the construction area.

8.0 RECORD RETENTION

The permittee must retain the following records for a minimum period of three (3) years from the date that a NOT is submitted. Records include:

- A copy of the SWP3,
- All data used to complete the NOI, if an NOI is required for coverage under this general permit,
- All reports and actions required by this permit, including a copy of the construction site notice, and
- All records of submittal of forms submitted to the operator of any MS4 receiving the discharge and to the secondary operator of a large construction site, if applicable.

9.0 CONCRETE BATCH PLANTS (IF APPLICABLE)

A. Storm Water Runoff from Concrete Batch Plants

Discharges of storm water runoff from concrete batch plants may be authorized under the general permit provided that the requirements in Part IV of the permit are met (Appendix G). If discharges are not covered under the general permit, then discharges must be authorized under an alternative permit. Authorization for discharge or land disposal of concrete batch plant wastewater must be obtained under an alternative permit.

B. Benchmark Sampling Requirements

Operators of concrete batch plants must sample the storm water runoff from the concrete batch plant according to the requirements of the general permit. A table of benchmark monitoring values is located in Part IV.A. of the general permit. Analytical results that exceed a benchmark value are not a violation of the general construction permit. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. Benchmark sampling records should be included in Appendix P.

C. Additional BMP and SWP3 Requirements

The following items are additional requirements for concrete batch plants. The Operator is responsible for updating the SWP3 as appropriate. Additional information for concrete batch plant requirements is located in Part IV of the general construction permit. Records and information for the concrete batch plant should be included in Appendix P.

1. A description of potential pollutant sources associated with the concrete batch plant must be kept in the SWP3.

2. The site map in Appendix A must include the following information:

    a) the location of all outfalls for storm water discharges associated with concrete batch plants;

    b) a depiction of the drainage area and the direction of flow to the outfall(s);

    c) structural controls used within the drainage area(s);

    d) the locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activity areas; areas used for the treatment, storage, or disposal of wastes; liquid storage tanks; material process and storage areas; and loading and unloading areas; and

    e) the locations of the following: any bag house or other dust control device(s); recycle/sedimentation pond, clarifier or other device used for the treatment of facility wastewater; areas with significant materials; and areas where major spills or leaks have occurred.

3. A list of materials handled at the concrete batch plant that may be exposed to storm water and that have a potential to affect the quality of storm water discharges associated with concrete batch plants must be kept in this SWP3.

4. A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to storm water and that drain to storm water outfalls associated with concrete batch plants must be developed, maintained, and updated.

5. A summary of existing storm water discharge sampling data must be maintained if available.

6. Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

7. Areas where potential spills that can contribute pollutants to storm water runoff, and the drainage areas from these locations must be identified. Include material handling procedures, storage requirements, and use of equipment information. Procedures for cleaning up spills must be identified and made available to the appropriate personnel.

8. Qualified facility personnel must be identified to inspect designated equipment and areas of the facility specified in this SWP3. Inspection frequency must be specified based upon a consideration of the level of concrete production but must be a minimum of once per month while the facility is in operation. The inspection must take place while the facility is in operation and include all areas that are exposed to storm water at the site. Records of inspections must be maintained in Appendix P.

9. An employee training program must be developed to educate personnel. At a minimum, training must occur prior to the initiation of operation of the concrete batch plant.

10. A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of storm water discharges must be included with this SWP3.

11. Include a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

12. At least once per year, one or more qualified personnel shall conduct a compliance evaluation of the plant. Evaluation requirements are listed in Part IV.B.3 of the general permit.

10.0 CONCRETE TRUCK WASH OUT (IF APPLICABLE)

The wash out of concrete trucks at the construction site is authorized, provided that the requirements in Part V of the general permit are met. Authorization is limited to the land disposal of wash out water from concrete trucks. Any other direct discharge of concrete production waste eater must be authorized under a separate general permit or individual permit.

A. Wash Out Requirements

1. Direct discharge of concrete truck wash-out water to surface water in the state, including discharge to storm sewers, is prohibited by the general permit.

2. Concrete truck wash-out water should be discharged to areas at the construction site where structural controls have been established to prevent direct discharge to surface waters, or to areas that have minimal slope that allow infiltration and filtering of wash out water to prevent direct discharge to surface waters. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the site.

3. Wash out of concrete trucks during rainfall events shall be minimized. The direct discharge of concrete wash out water is prohibited at all times, and the operator should have BMPs sufficient to prevent the discharge of concrete truck wash out as the result of rain.

4. The discharge of wash out water should not cause or contribute to groundwater contamination.

5. The Operator is responsible for showing concrete wash out areas on a map (Appendix A).

11.0 REFERENCES

North Central Texas Council of Governments (NCTCOG). 2010. Integrated Storm Water Management Technical Manual. http://iswm.nctcog.org/technical_manual.asp.

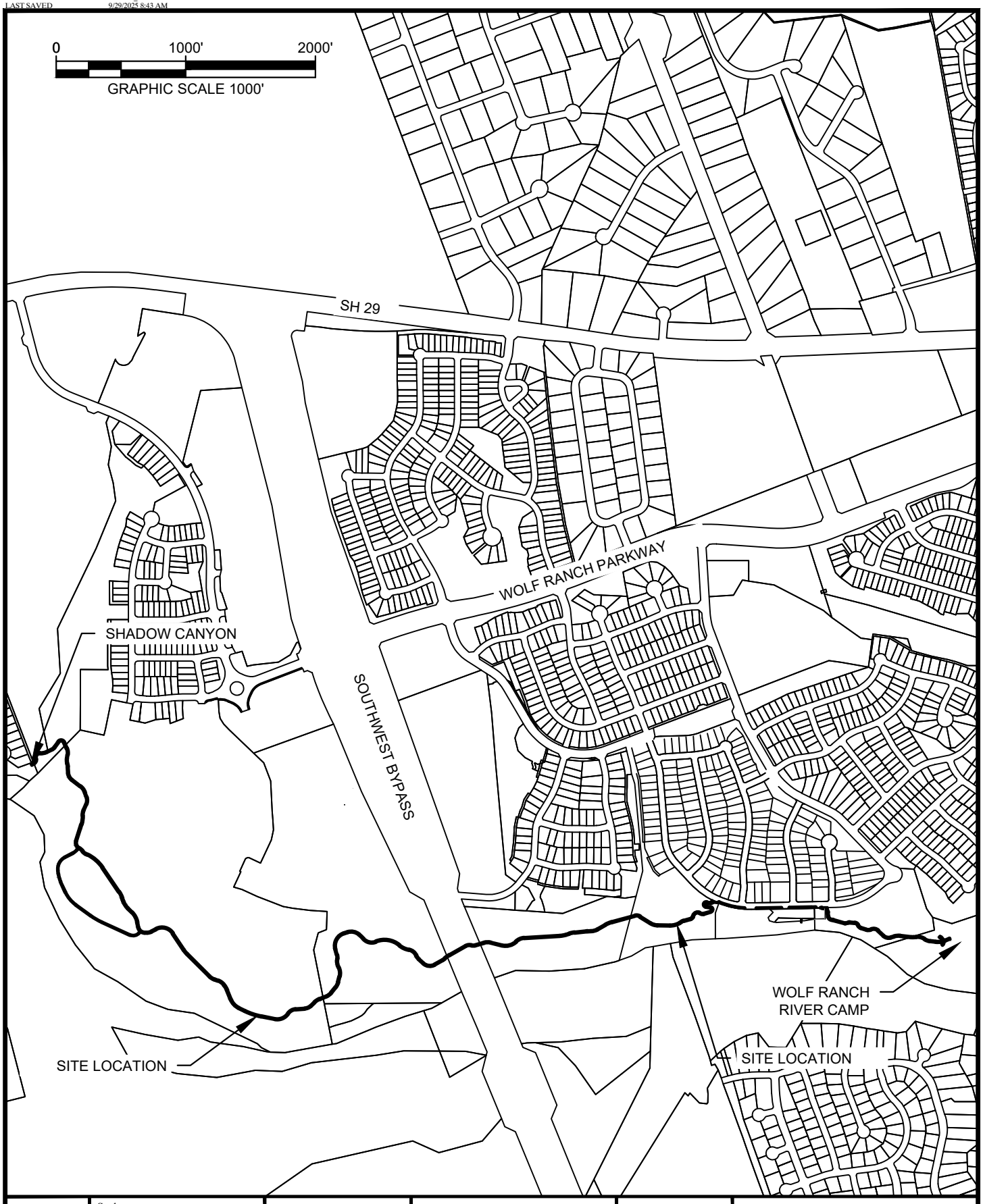
Texas Commission on Environmental Quality (TCEQ). 2014. "2014 Texas Water Quality Inventory and 303(d) List." [Online] (accessed on June 27, 2016). Available URL: http://www.tceq.texas.gov/assets/public/waterquality/swqm/assess/14txir/2014_basin12.pdf.

United States Department of Agriculture (USDA). 2016. Soil Survey of Williamson County, Texas. "Web Soil Survey." [Online] (accessed on June 27, 2016). Available URL: http://websoilsurvey.nrcs.usda.gov/app/

APPENDIX A

PROJECT MAPS

IMAGES
XREFS XREF Road Map xBorder
PLOTTED BY PICKENS, JOHN 3/20/2026 5:55 AM
DWG NAME K:\AUS_CIVIL\064461309-WOLF RANCH PHASES 3-4 TRAIL\DOC\REPORTS\TCEQ\CAD\ROAD MAP.DWG
LAST SAVED 9/29/2025 8:43 AM



SHEET 1 OF 1 SHEETS	Scale: N.T.S. Designed by: JP Drawn by: JP Checked by: JP Date: FEBRUARY 2026 Project No. 064461309 & 310	ROAD MAP	WOLF RANCH REGIONAL TRAIL PHASES 3 & 4 City of Georgetown, Williamson County, Texas	N W E S	Kimley»Horn This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-th-ground survey and represents only the approximate relative location of property boundaries.

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Plotted By:Pickens, John Date:March 20, 2026 06:11:51am File Path:K:\AUS_Civil\064461309-Wolf Ranch Phases 3-4 Trail\Doc\Reports\TCEQ\CAD\USGS Map.dwg

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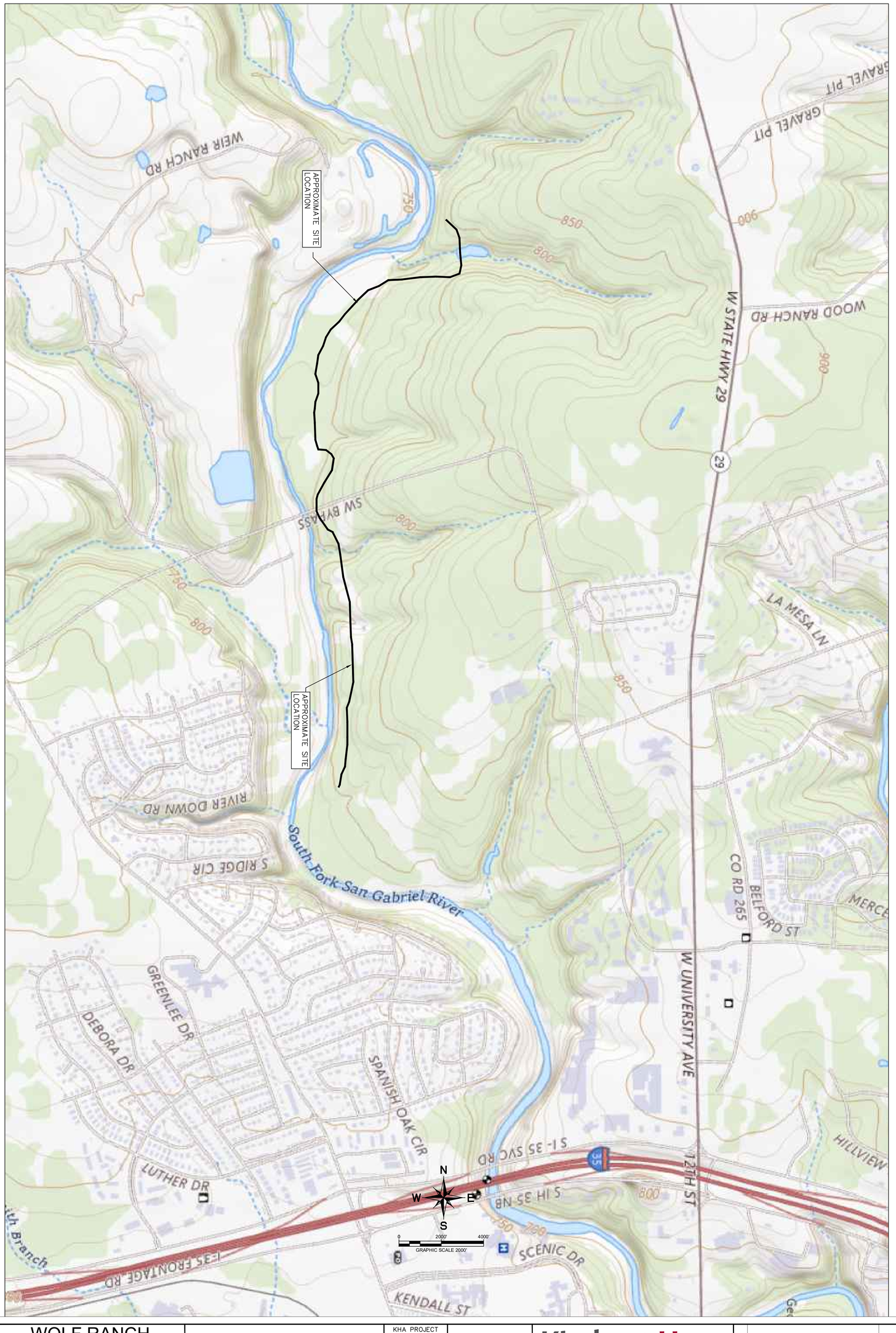

SHEET NUMBER

WOLF RANCH REGIONAL TRAIL PHASES 3 & 4

CITY OF GEORGETOWN,
WILLIAMSON COUNTY, TEXAS

USGS QUADRANGLE MAP

KHA PROJECT	064461309
DATE	FEBRUARY 2026
SCALE:	AS SHOWN
DESIGNED BY:	JAP
DRAWN BY:	JAP
CHECKED BY:	JAP

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

Kimley»Horn

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No.	REVISIONS	DATE	BY

Map/Figure Notes:

- The Operator is solely responsible for selection, implementation, maintenance, and effectiveness of all BMPs.
- Best management practices shown on the attached figures are suggested controls only. The Operator will record BMPs (whether called out on the original SWP3 or not) directly on the site map.
- If information is not shown or if site conditions change from the attached figures, the Operator is responsible for updating the maps. The following information should be included on maps.
  - drainage patterns and approximate slopes anticipated after major grading activities,
  - areas where soil disturbance will occur,
  - locations of all major structural controls either planned or in place,
  - locations where stabilization practices are expected to be used,
  - locations of off-site material, waste, borrow, fill, or equipment storage areas,
  - surface waters (including wetlands) either adjacent or in close proximity,
  - locations where storm water discharges from the site directly to a surface water body or a MS4, and
  - vehicle wash areas
  - designated points on the site where vehicles will exit onto paved roads
- Where the amount of information required to be included on the map would result in a single map being difficult to interpret, the operator shall develop a series of maps that collectively include the required information.

APPENDIX B

CONSTRUCTION ACTIVITY SCHEDULE

Construction Activity Schedule

Activities	Start Date	Finish Date
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

*Construction activity sequences for linear projects may be conducted on a rolling basis. As a result, construction activities may be at different stages at different locations in the project area. The Contractor is required to complete and update the schedule and adjust as necessary.

APPENDIX C

BEST MANAGEMENT PRACTICE CHECKLIST AND FACT SHEETS

EROSION AND SEDIMENT CONTROL CHECKLIST

Instructions: Check each item and fill in the blanks below to evaluate compliance for each drainage area and location.

Stabilization Practices:

☐ Stabilization will be initiated on all disturbed areas where construction activity will not occur for a period of more than 21 calendar days by the 14th day after construction activity has permanently or temporarily ceased. Stabilization measures to be used include:

- ☐ Temporary Seeding
- ☐ Permanent Seeding
- ☐ Mulching
- ☐ Sod Stabilization
- ☐ Geotextiles
- ☐ Other _____

Structural Practices

☐ Flows from upstream areas will be diverted from exposed soils to the degree attainable. Measures to be used include:

- ☐ Earth Dike
- ☐ Drainage Swale
- ☐ Interceptor Dike and Swale
- ☐ Pipe Slope Drain
- ☐ Other _____

For Drainage locations serving less than 10 disturbed acres, Sediment *Basin will be installed and will include:*

- ☐ Sediment Trap
- ☐ Silt Fence or equivalent along all sideslopes & downstream boundaries

For Drainage locations serving 10 or more disturbed acres, a Sediment Basin will be installed (See Appendix N), if a Sediment Basin is not attainable on-site, Sediment Controls will be installed & will include:

- ☐ Sediment Trap
- ☐ Silt Fence or equivalent along all sideslopes & downstream boundaries
- ☐ Sediment Basin

FINAL STABILIZATION / TERMINATION CHECKLIST

1. All soil disturbing activities are complete.

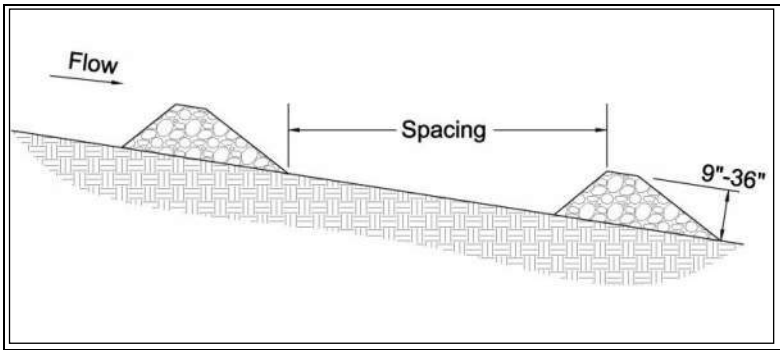
2. Temporary erosion and sediment control measures have been, or will be, removed at an appropriate time.

3. All areas of the construction site not otherwise covered by a permanent pavement or structure have been stabilized with a uniform perennial vegetative cover with a density of 70% or equivalent measures have been employed.

2.0 Erosion Controls

2.1 Check Dam

Erosion Control



Description: Check dams are small barriers consisting of loose rock, rock bags, or organic filter tubes placed across a drainage swale or ditch. They reduce the velocity of small concentrated flows, provide a limited barrier for sediment and reduce the potential for erosion of the swale or ditch.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Heights between 9 inches and 36 inches
- Top of the downstream dam should be at the same elevation as the toe of the upstream dam

ADVANTAGES / BENEFITS:

- Reduced velocities in long drainage swales or ditches
- May be used with other channel protection measures
- Provides some sediment removal

DISADVANTAGES / LIMITATIONS:

- Cannot be used in live stream channels
- Minor ponding upstream of the check dams
- Extensive maintenance or replacement of the dams required after heavy flows or high velocity flows
- Mowing hazard from loose rocks if all rock is not removed at end of construction

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Remove silt when it reaches approximately ⅓ the height of the dam or 12 inches, whichever is less

TARGETED POLLUTANTS

- ◒ Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control

Slope Protection

Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.30-0.50
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ● Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations:

- *None*

2.1.1 Primary Use

Check dams are used in long drainage swales or ditches to reduce erosive velocities. They are typically used in conjunction with other channel protection techniques such as vegetation lining and turf reinforcement mats. Check dams provide limited treatment to sediment-laden flows. They are more useful in reducing flow velocities to acceptable levels for stabilization methods. Check dams may be used in combination with stone outlet sediment traps, where the check dams prevent erosion of the swale while the sediment trap captures sediment at the downstream end of the swale.

2.1.2 Applications

Check dams are typically used in swales and drainage ditches along linear projects such as roadways. They can also be used in short swales down a steep slope, such as swales down a highway embankment, to reduce velocities. Check dams shall not be used in live stream channels.

Check dams should be installed before the contributing drainage area is disturbed, so as to mitigate the effects on the swale from the increase in runoff. If the swale itself is graded as part of the construction activities, check dams are installed immediately upon completion of grading to control velocities in the swale until stabilization is completed.

2.1.3 Design Criteria

General Criteria

- Typically, the dam height should be between 9 inches and 36 inches, depending on the material of which they are made. The height of the check dam shall always be less than one-third the depth of the channel.
- Dams should be spaced such that the top of the downstream dam is at the same elevation as the toe of the upstream dam. On channel grades flatter than 0.4 percent, check dams should be placed at a distance that allows small pools to form between each check dam.
- The top of the side of the check dam shall be a minimum of 12 inches higher than the middle of the dam. In addition, the side of the dams shall be embedded a minimum of 18 inches into the side of the drainage ditch, swale or channel to minimize the potential for flows to erode around the side of the dam.
- Larger flows (greater than 2-year, 24-hour design storm) must pass the check dam without causing excessive upstream flooding.
- Check dams should be used in conjunction with other sediment reduction techniques prior to releasing flow offsite.
- Use geotextile filter fabric under check dams of 12 inches in height or greater. The fabric shall meet the following minimum criteria:
    - Tensile Strength, ASTM D4632 Test Method for Grab Breaking Load and Elongation of Geotextiles, 250-lbs.
    - Puncture Rating, ASTM D4833 Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products, 135-lbs.
    - Mullen Burst Rating, ASTM D3786 Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method, 420-psi.
    - Apparent Opening Size, ASTM D4751 Test Method for Determining Apparent Opening Size of a Geotextile, U.S. Sieve No. 20 (max).
- Loose, unconfined soil, wood chips, compost, and other material that can float or be transported by runoff shall not be used to construct check dams.

Rock Check Dams

- Stone shall be well graded with stone size ranging from 3 to 6 inches in diameter for a check dam height of 24 inches or less. The stone size range for check dams greater than 24 inches is 4 to 8 inches in diameter.
- Rock check dams shall have a minimum top width of 2 feet with side slopes of 2:1 or flatter.

Rock Bag Check Dams

- Rock bag check dams should have a minimum top width of 16 inches.
- Bag length shall be 24 inches to 30 inches, width shall be 16 inches to 18 inches and thickness shall be 6 inches to 8 inches and having a minimum weight of 40 pounds.
- Minimum rock bag dam height of 12 inches would consist of one row of bags stacked on top of two rows of bag. The dam shall always be one more row wide than it is high, stacked pyramid fashion.
- Bags should be filled with pea gravel, filter stone, or aggregate that is clean and free of deleterious material.
- Sand bags shall not be used for check dams, due to their propensity to break and release sand that is transported by the concentrated flow in the drainage swale or ditch.
- Bag material shall be polypropylene, polyethylene, polyamide or cotton burlap woven fabric, minimum unit weight 4-ounces-per-square-yard, Mullen burst strength exceeding 300-psi as determined by ASTM D3786, Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method, and ultraviolet stability exceeding 70 percent.
- PVC pipes may be installed through the dam to allow for controlled flow through the dam. Pipe should be schedule 40 or heavier polyvinyl chloride (PVC) having a nominal internal diameter of 2 inches.

Sack Gabion Check Dams

- Sack gabion check dams may be used in channels with a contributing drainage area of 5 acres or less.
- Sack gabions shall be wrapped in galvanized steel, woven wire mesh. The wire shall be 20 gauge with 1 inch diameter, hexagonal openings.
- Wire mesh shall be one piece, wrapped around the rock, and secured to itself on the downstream side using wire ties or hog rings.
- Sack gabions shall be staked with ¾ inch rebar at a maximum spacing of three feet. Each wire sack shall have a minimum of two stakes.
- Stone shall be well graded with a minimum size range from 3 to 6 inches in diameter.

Organic Filter Tube Check Dams

- Organic filter tubes may be used as check dams in channels with a contributing drainage area of 5 acres or less.
- Organic filter tubes shall be a minimum of 12 inches in diameter.
- Filter material used within tubes to construct check dams shall be limited to coir, straw, aspen fiber and other organic material with high cellulose content. The material should be slow to decay or leach nutrients in standing water.
- Staking of filter tubes shall be at a maximum of 4 foot spacing and shall alternate through the tube and on the downstream face of the tube.
- Unless superseded by requirements in this section, filter tubes and filter material shall comply with the

criteria in *Section 3.6 Organic Filter Tubes*.

2.1.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.9 Check Dam (Rock). Specifications are also available in the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (TxDOT 2004), Item 506.2.A and Item 506.4.C.1.

2.1.5 Inspection and Maintenance Requirements

Check dams should be inspected regularly (at least as often as required by the TPDES Construction General Permit). Silt must be removed when it reaches approximately 1/3 the height of the dam or 12 inches, whichever is less. Inspectors should monitor the edges of the dam where it meets the sides of the drainage ditch, swale or channel for evidence of erosion due to bypass or high flows. Eroded areas shall be repaired. If erosion continues to be a problem, modifications to the check dam or additional controls are needed.

Care must be used when taking out rock check dams in order to remove as much rock as possible. Loose rock can create an extreme hazard during mowing operations once the area has been stabilized.

2.1.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be adapted for the site by the designer. Dimensions and notes appropriate for the application must also be added by the designer.

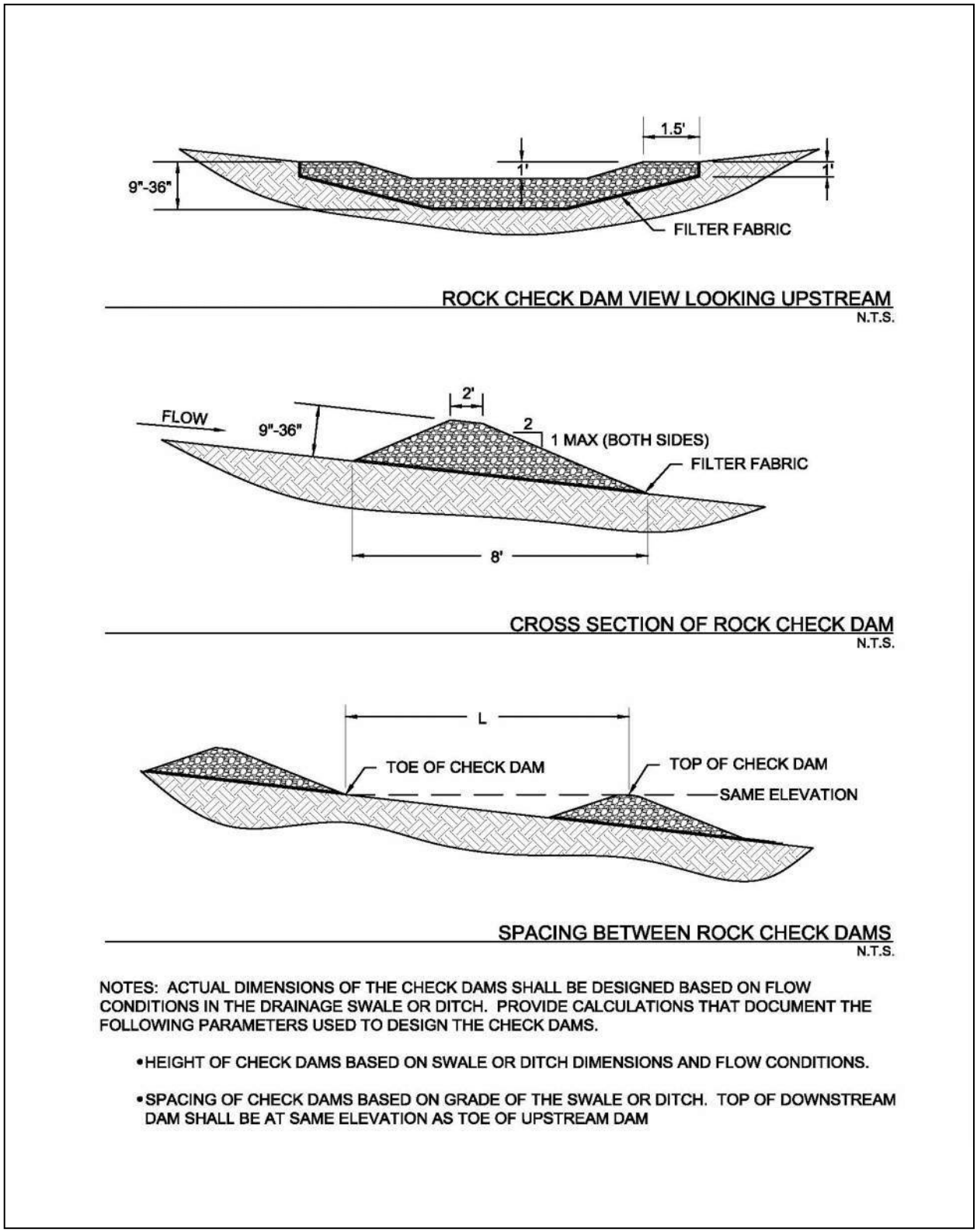
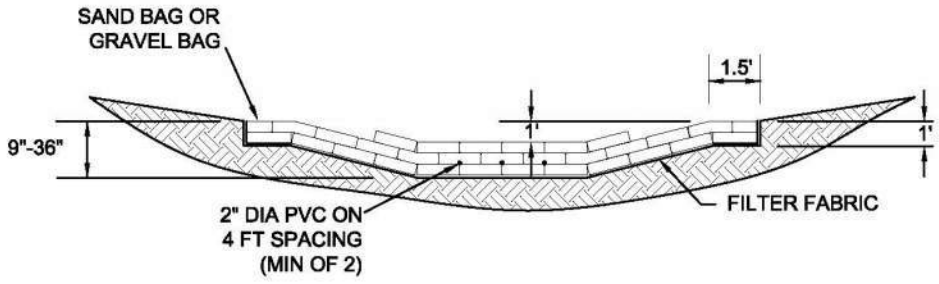
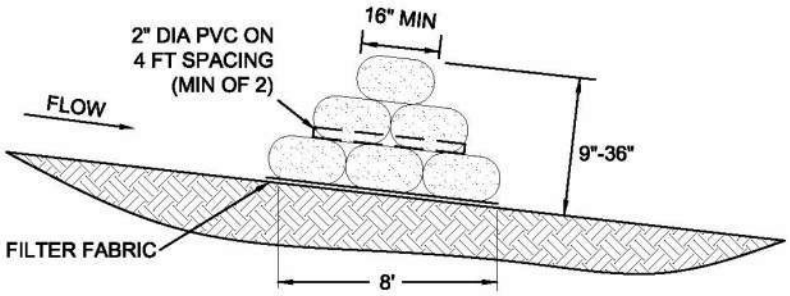


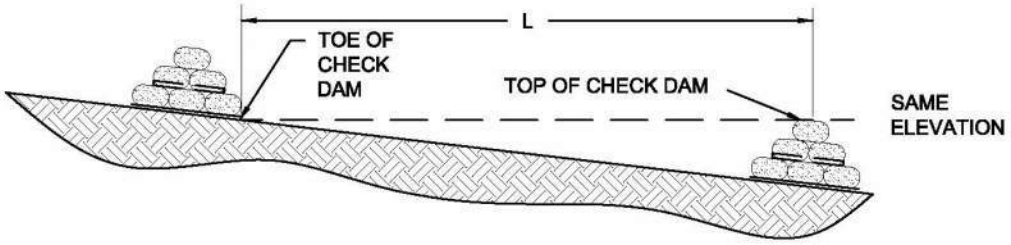
Figure 2.1 Schematics of Rock Check Dams
(Source: Modified from Stormwater Management Manual for Western Washington)



ROCK BAG CHECK DAM VIEW LOOKING UPSTREAM
N.T.S.



CROSS SECTION OF ROCK BAG CHECK DAM
N.T.S.



SPACING BETWEEN ROCK BAG CHECK DAMS
N.T.S.

NOTES: ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE CHECK DAMS.

- HEIGHT OF CHECK DAMS BASED ON SWALE OR DITCH DIMENSIONS AND FLOW CONDITIONS.
- SPACING OF CHECK DAMS BASED ON GRADE OF THE SWALE OR DITCH. TOP OF DOWNSTREAM DAM SHALL BE AT SAME ELEVATION AS TOE OF UPSTREAM DAM.

Figure 2.2 Schematics of Rock Bag Check Dams

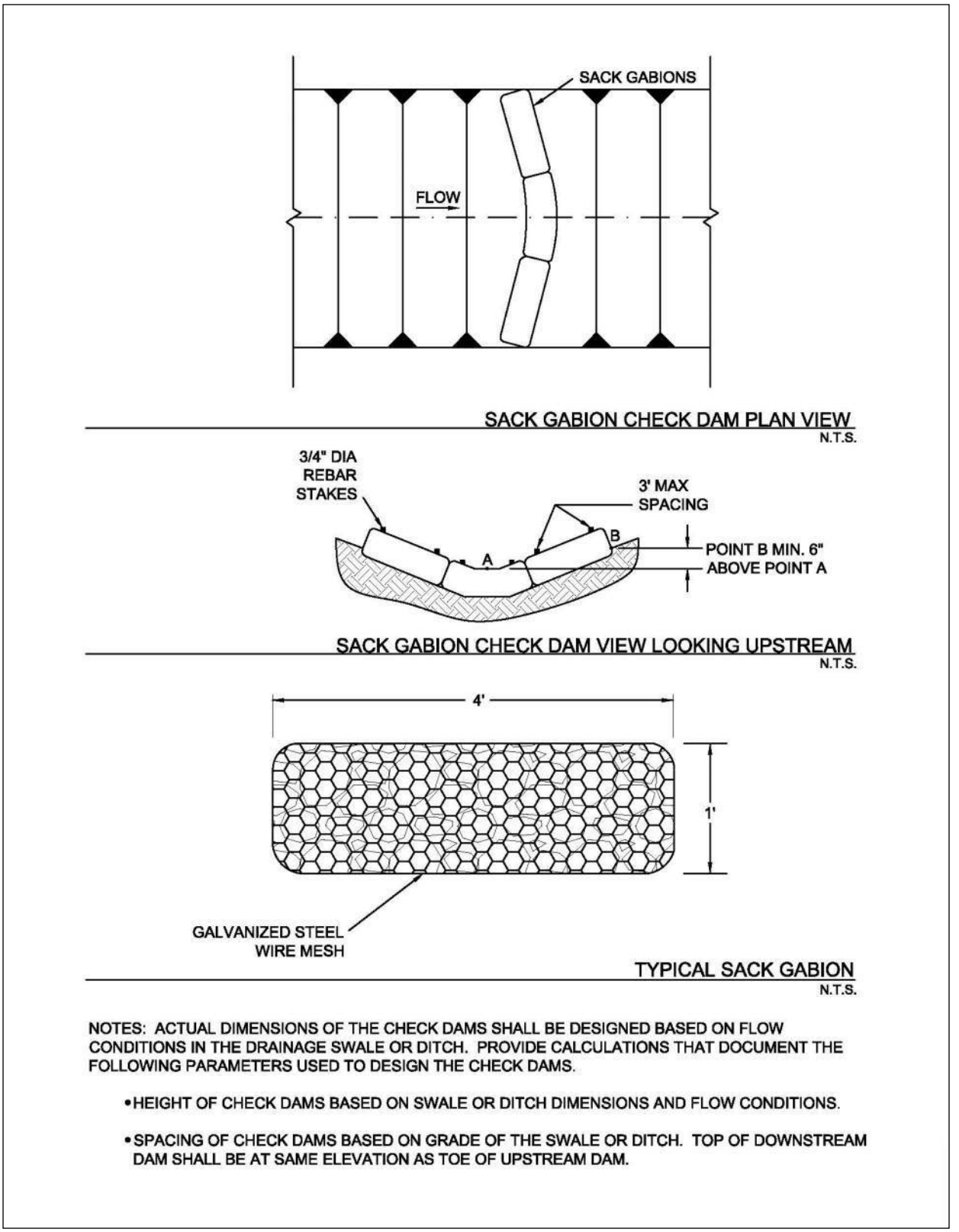
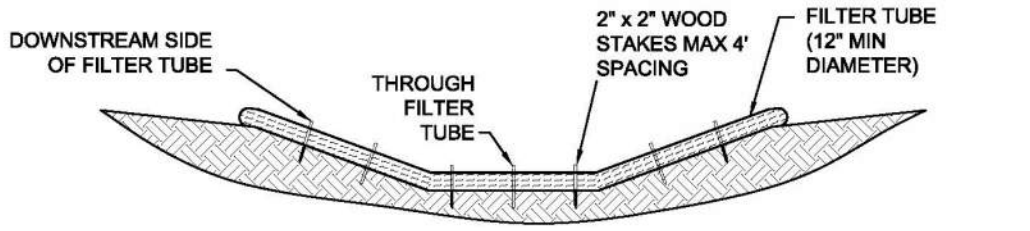
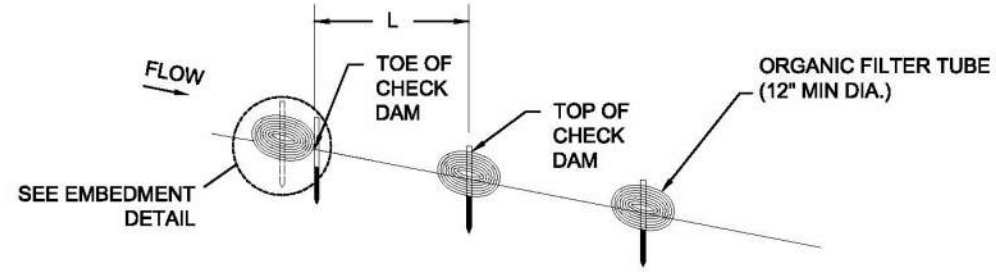


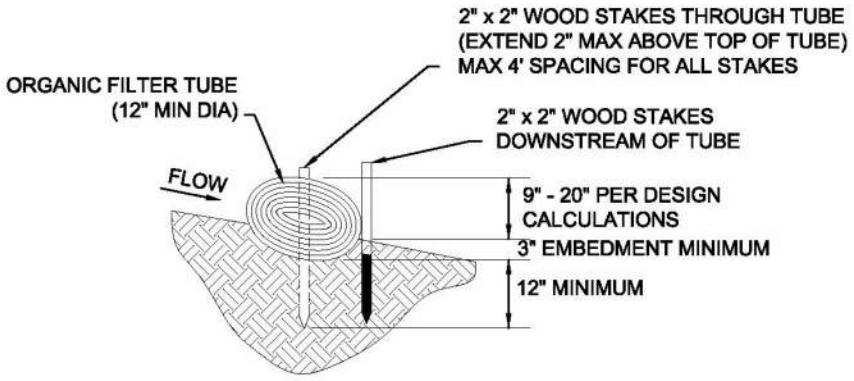
Figure 2.3 Schematics of Sack Gabion Check Dams
(Source: Modified from Texas Department of Transportation Detail Sheet EC (2)-93)



ORGANIC FILTER TUBE CHECK DAM VIEW LOOKING UPSTREAM
N.T.S.



ORGANIC FILTER TUBE CHECK DAM PROFILE
N.T.S.



EMBEDMENT DETAIL FOR ORGANIC FILTER TUBE CHECK DAM
N.T.S.

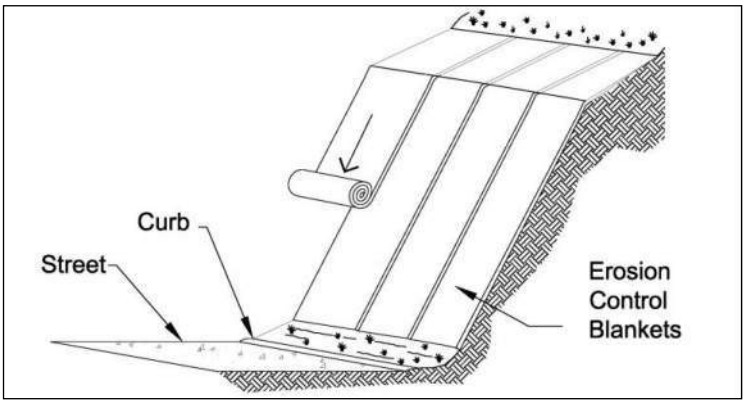
NOTES: ACTUAL DIMENSIONS OF THE CHECK DAMS SHALL BE DESIGNED BASED ON FLOW CONDITIONS IN THE DRAINAGE SWALE OR DITCH. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS USED TO DESIGN THE CHECK DAMS.

- HEIGHT OF CHECK DAMS BASED ON SWALE OR DITCH DIMENSIONS AND FLOW CONDITIONS.
- SPACING OF CHECK DAMS BASED ON GRADE OF THE SWALE OR DITCH. TOP OF DOWNSTREAM DAM SHALL BE AT SAME ELEVATION AS TOE OF UPSTREAM DAM.

Figure 2.4 Schematics of Organic Filter Tube Check Dams
(Source: Modified from City of Plano BMP S-7)

2.3 Erosion Control Blankets

Erosion Control



Description: An erosion control blanket (ECB) is a temporary, degradable, rolled erosion control product that reduces soil erosion and assists in the establishment and growth of vegetation. ECBs, also known as soil retention blankets, are manufactured by many companies and are composed primarily of processed, natural, organic materials that are woven, glued, or structurally bound together with natural fiber netting or mesh on one or both sides.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- ECB selected based on slope, flow rate and length of service
- Specify preparation of soil surface to ensure uniform contact with blanket
- Installation and anchoring according to manufacturer's recommendations

ADVANTAGES / BENEFITS:

- Holds seed and soil in place until vegetation is established
- Effective for slopes, embankments and small channels

DISADVANTAGES / LIMITATIONS:

- Not for use on slopes greater than 2:1 or in channels with shear stresses greater than 2.0 pounds per square foot

MAINTENANCE REQUIREMENTS:

- Replace or re-anchor loosened blankets
- Remove sediment deposited on blankets

TARGETED POLLUTANTS

- ● Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Waste

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier
Channel Protection
Temporary Stabilization
Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.90 (*Ground cover*)
Fe=0.65
(*Perimeter w/o vegetation*)

IMPLEMENTATION CONSIDERATIONS

- ● Capital Costs
- ◒ Maintenance
- ◒ Training
- ● Suitability for Slopes > 5%

Other Considerations:

- *Life expectancy, partial degradation, and mowing/ maintenance issues for ECBs left in place as part of final stabilization*

2.3.1 Primary Use

Erosion control blankets (ECBs) are used to hold seed and soil in place until vegetation is established on disturbed areas. They can be used on many types of disturbed areas, but are particularly effective for slopes and embankments and in small drainage swales.

ECBs seeded for vegetation may be used as a perimeter control. When used in combination with other sediment barriers, such as silt fence or organic filter tubes, blankets may be used as a perimeter control with or without vegetation.

2.3.2 Applications

ECBs may be used on many types of disturbed areas but are most applicable on gradual to steep (2:1) cut/fill slopes and in swales and channels with low to moderate flow velocities. In these applications they may provide temporary stabilization by themselves or may be used with seeding to provide final stabilization. ECBs are also used to establish vegetation in channels where velocities are less than 6.0 feet per second.

When seeded for establishment of vegetation, ECBs can be an effective perimeter along the down slope side of linear construction projects (roads and utilities). ECBs with vegetation are also used as perimeter controls for new development, particularly at the front on residential lots in new subdivisions. ECBs are an effective aid in establishing vegetated filter strips.

2.3.3 Design Criteria

- The designer shall specify the manufacturer, type of erosion control blanket to be used, and dimensioned limits of installation based on the site topography and drainage.
- The type and class of erosion control blanket must be specified in accordance with the manufacturer's guidance for the slope of the area to be protected, the flow rate (sheet flow on cut/fill slopes) or velocity (concentrated flow in swales) of stormwater runoff in contact in with the ECB, and the anticipated length of service.
- ECBs should meet the applicable "Minimum Performance Standards for TxDOT" as published by TxDOT in its "Erosion Control Report" and/or be listed on the most current annual "Approved Products List for TxDOT" applicable to TxDOT Item 169 Soil Retention Blanket and its Special Provisions.
- ECBs shall be installed vertically down slope (across contours) on cut/fill slopes and embankments and along the contours (parallel to flow) in swales and drainage ditches.
- ECBs designed to remain onsite as part of final stabilization shall have netting or mesh only on one side (the exposed side) of the ECB. The ECB shall be installed with the side that does not have netting or mesh in contact with the soil surface. All materials in the ECB, including anchors, should be 100 percent biodegradable within three years.
- On cut/fill slopes and drainage ditches or swales designed to receive erosion control blankets for temporary or final stabilization, installation of the ECBs shall be initiated immediately after completing grading of the slope or drainage way, and in no case later than 14 days after completion of grading these features. Do not delay installation of ECBs on these highly-erodible areas until completion of construction activities and stabilization of the remainder of the site.
- Unless the ECB is seeded to establish vegetation, perimeter control applications shall be limited to thirty foot wide drainage areas (i.e. linear construction projects) for an 8 foot width of ECB. When seeded for vegetation, use of ECBs for perimeter control shall follow the criteria in the *Section 3.15 Vegetated Filter Strips and Buffers*.
- Prior to the installation of the ECB, all rocks, dirt clods, stumps, roots, trash and any other obstructions that would prevent the ECB from lying in direct contact with the soil shall be removed.

- Anchor trenching shall be located along the top of slope of the installation area, except for small areas with less than 2 percent slope.
- Installation and anchoring shall conform to the recommendations shown within the manufacturer's published literature for the erosion control blanket. Anchors (staples) shall be a minimum of 6 inches in length and 1 inch wide. They shall be made of 11-gauge wire, or equivalent, unless the ECB is intended to remain in place with final stabilization and biodegrade.
- Particular attention must be paid to joints and overlapping material. Overlap along the sides and at the ends of ECBs should be per the manufacturer's recommendations for site conditions and the type of ECB being installed. At a minimum, the end of each roll of ECB shall overlap the next roll by 3 feet and the sides of rolls shall overlap 4 inches.
- After installation, the blankets should be checked for uniform contact with the soil, security of the lap joints, and flushness of the staples with the ground.
- When ECBs are installed to assist with establishing vegetation, seeding shall be completed before installation of the ECB. Criteria for seeding are provided in *Section 2.9 Vegetation*.
- Turf Reinforcement Mats should be used instead of ECBs for permanent erosion control and for stabilizing slopes greater than 2:1.
- ECBs are limited to use in swales and channels that have shear stresses of less than 2.0 pounds per square foot. Turf reinforcement mats shall be used in open channels with higher shear stresses.

2.3.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.15 Erosion Control Blankets and in Item 169 of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (TxDOT, 2004).

2.3.5 Inspection and Maintenance Requirements

Erosion control blankets should be inspected regularly (at least as often as required by the TPDES Construction General Permit) for bare spots caused by weather or other events. Missing or loosened blankets must be replaced or re-anchored.

Check for excess sediment deposited from runoff. Remove sediment and/or replace blanket as necessary. In addition, determine the source of excess sediment and implement appropriate measures to control the erosion. Also check for rill erosion developing under the blankets. If found, repair the eroded area. Determine the source of water causing the erosion and add controls to prevent its reoccurrence.

2.3.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. The designer is responsible for working with ECB manufacturers to ensure the proper ECB is specified based on the site topography and drainage. Installation measures should be dictated by the ECB manufacturer and are dependent on the type of ECB installed. Manufacturer's recommendations for overlap, anchoring, and stapling shall always be followed. Criteria shown here are applicable only when they are more stringent than those provided by the manufacturer.

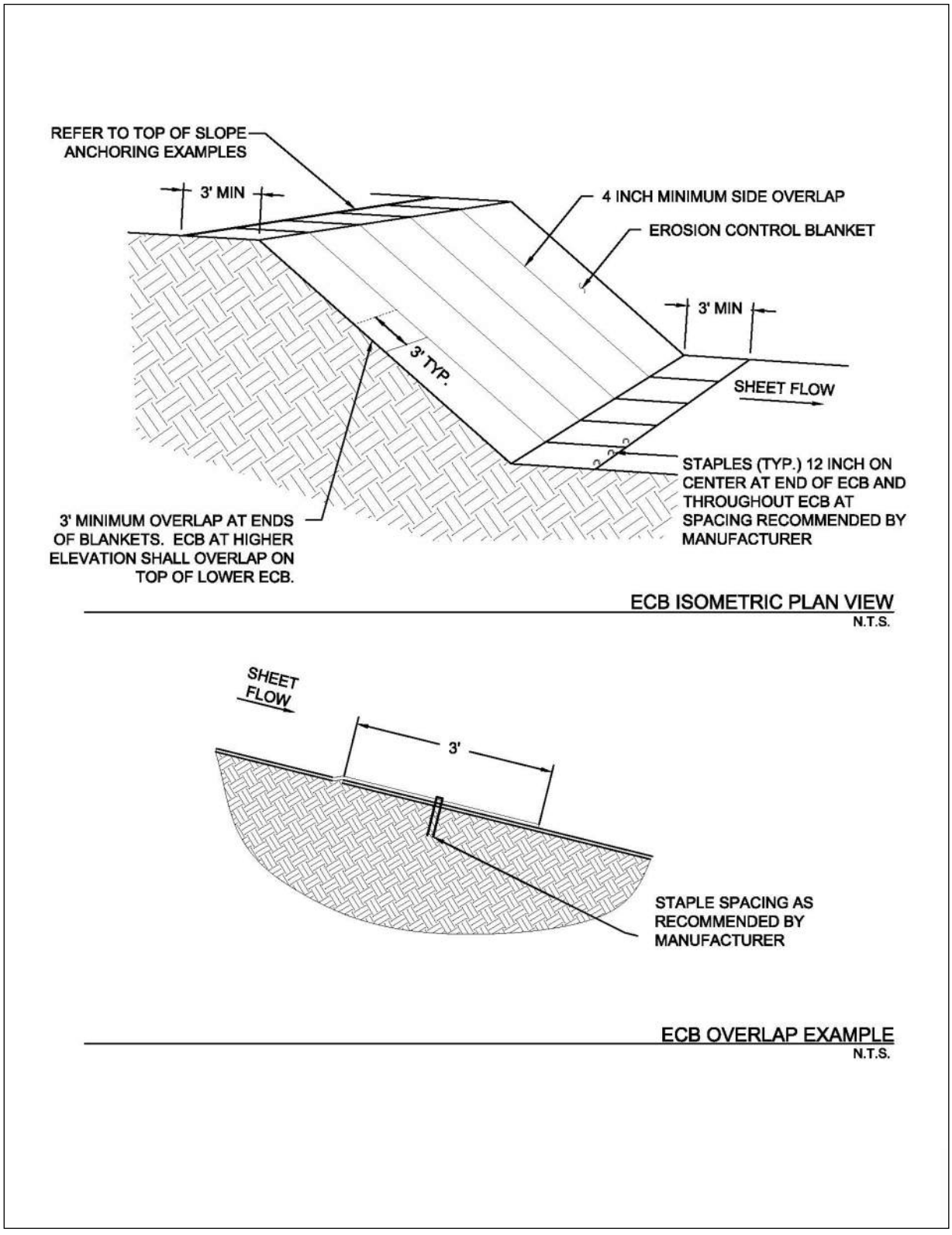
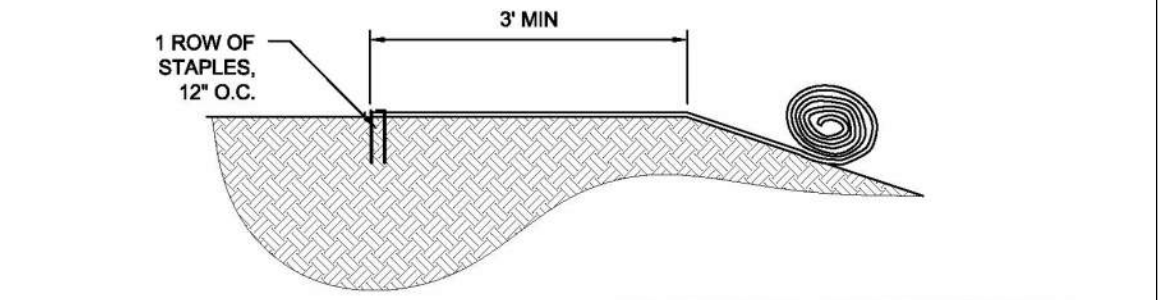


Figure 2.7 Schematics of Erosion Control Blankets



TOP OF SLOPE ANCHOR EXAMPLE 1
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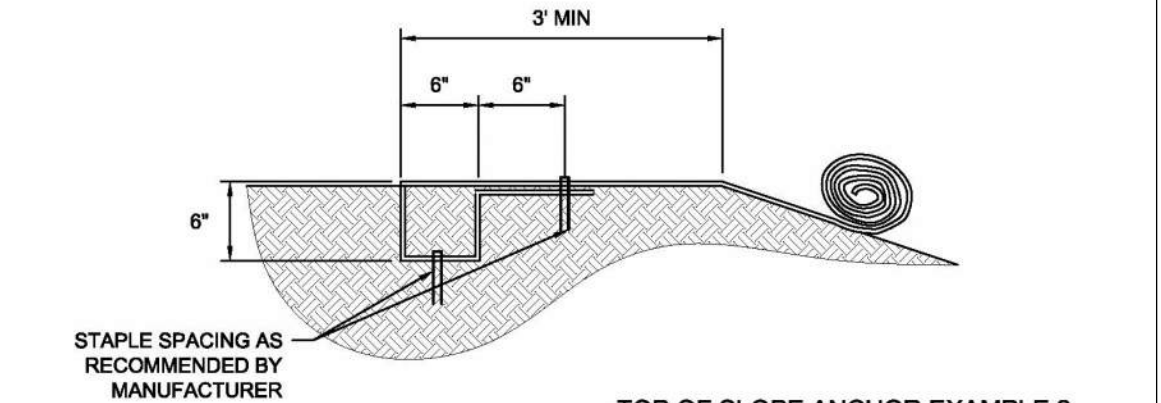


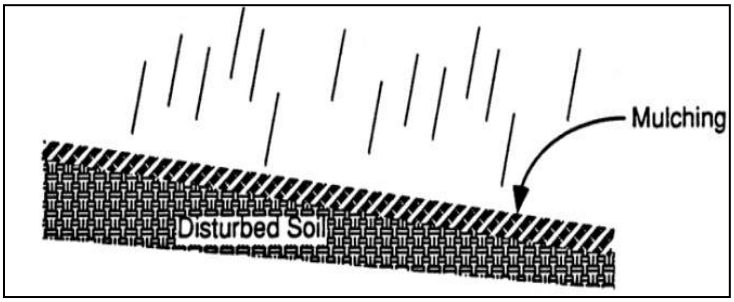
TOP OF SLOPE ANCHOR EXAMPLE 2
N.T.S.

NOTE: ANCHORING METHODS PROVIDED ARE EXAMPLES OF THE TYPE OF ANCHORING THE ECB MANUFACTURER MAY RECOMMEND. THERE ARE MORE THAN A DOZEN DIFFERENT TOP OF SLOPE ANCHORING METHODS BASED ON TYPE OF ECB, TYPE OF SOIL, SPECIFIED PERFORMANCE PERIOD, SLOPE STEEPNESS, ETC. ALWAYS FOLLOW THE MANUFACTURER'S RECOMMENDATIONS FOR ANCHORING BASED ON THE SITE-SPECIFIC APPLICATION.

Figure 2.8 Anchor Examples for Erosion Control Blankets
(Sources: American Excelsior Company and Western Excelsior Corporation)

2.5 Mulching

Erosion Control



Description: Mulching is the application of a uniform layer of organic material over barren areas to reduce the effects of erosion from rainfall. Types of mulch include compost mixtures, straw, wood chips, bark, or other fibers. Commercialized surface treatments that combine straw or other mulch material with organic or inorganic soil binding systems are also available and are particularly useful on steep slopes.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Specify even, uniform application
- Thickness of 1 to 2 inches, depending on application
- Application criteria specific to type of mulch
- Anchor mulch on slopes of 3:1 to 1.5:1
- Do not use mulch on slopes steeper than 1.5:1

ADVANTAGES / BENEFITS:

- Provides immediate stabilization of bare areas
- May be used with seeding for final stabilization
- Decreases soil moisture loss
- Decreases velocity of sheet flow
- Reduces volume of sediment-laden flow

DISADVANTAGES / LIMITATIONS:

- Subject to removal by wind or water
- Results in lower soil temperature, which may yield longer seed germination periods
- Should not be applied within the ordinary high-water mark of natural surface waters or within the design flow depth of constructed ditches and channels

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Replace regularly in high traffic areas to maintain uniform thickness
- Maintain a stockpile of excess mulch at the site to repair problem spots

TARGETED POLLUTANTS

- ◒ Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control

Slope Protection

Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.75-0.90

(Depends on coverage)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations:

- *Availability of materials for mulch*
- *Application depends on slope*

2.5.1 Primary Use

Mulch may be used by itself to temporarily stabilize bare areas or with seed to establish final stabilization of bare areas. Mulch protects the soil from erosion and moisture loss by lessening the effects of wind, water, and sunlight. It also decreases the velocity of sheet flow, thereby reducing the volume of sediment-laden water flow leaving the mulched area.

2.5.2 Applications

Mulch may be applied on most areas disturbed by construction that require surface protection including:

- Freshly seeded or planted areas;
- Disturbed areas at risk of erosion due to the time period being unsuitable for growing vegetation;
- Disturbed areas that are not conducive to vegetation for temporary stabilization; or
- Steep slopes of 3:1 to 1.5:1, provided the mulch is anchored to the soil by use of soil stabilizers, netting, or crimping.

Mulch is frequently applied with seeding for vegetation. In these cases, refer to *Section 2.9 Vegetation* for related criteria that may affect mulching.

Mulch may also be applied with commercially available polymers for soil surface treatment to bind the mulch with the soil. This method is particularly useful on steep slopes. Related criteria are available in *Section 2.7 Soil Surface Treatments*.

2.5.3 Design Criteria

General

- Specific design information is required for the use of this control. The designer shall specify the type of mulch to be used, the application rate and/or thickness, and the type of anchoring (if applicable) based on site conditions.
- Choice of mulch depends largely on slope and soil type, in addition to availability of materials.
- Netting, adhesive polymers, or other methods of anchoring the mulch are required on slopes of 3:1 to 1.5:1. Do not use mulch on slopes steeper than 1.5:1.
- Mulch should be applied in an even and uniform manner where concentrated water flow is negligible. Do not apply mulch within the ordinary high-water mark of natural surface waters or within the design flow depth of constructed ditches and channels.
- Hay should not be used as mulch.
- Organic mulches may be distributed by hand or by mechanical means, provided a uniform thickness is achieved.
- When mulch is used with vegetation for final stabilization, fertilization and soil treatment for vegetation establishment should be done prior to placement of mulch, with the exception of hydroseeding or when seed is distributed following straw mulch spread during winter months.
- Table 2.1 on the following page contains a summary of mulch types and general guidelines.

Table 2.1 Mulch Standards and Guidelines			
Mulch Material	*Quality Standards*	*Application Rates*	*Remarks*
Straw	Air-dried, free of mold and not rotten. Certified Weed Free.	1.5 to 2 tons per acre	Cost-effective when applied with adequate thickness. Straw must be held in place by crimping, netting, or soil stabilizer.
Chipped Site Vegetation	Should include gradation from fine to coarse to promote interlocking properties. Must be free of waste materials such as plastic bags, metal debris, etc.	10 to 12 tons per acre	Cost-effective method to dispose of vegetative debris from site. Best application is for temporary stabilization where construction will resume. Use cautiously on areas where vegetation will be established, as wood chips will deplete soil nitrogen.
Erosion Control Compost (Wood Chip and Compost Mixture)	Shall meet the Physical Requirements in Table 1 of TxDOT Special Specification 1001.	Approx. 10 tons per acre	Special caution is advised regarding the source and composition of wood mulches. Ensure compost is free of herbicides. Ensure wood chips are from unpainted and untreated wood.
Hydraulic Mulch	Must not contain sawdust, cardboard, paper, paper byproducts, plastics, or synthetics. No petroleum-based tackifiers.	Follow the manufacturer's recommendations. Application rate increases with slope steepness.	May be particularly effective on slopes steeper than 3:1. Ensure wood fibers are from unpainted and untreated wood.

Straw Mulch

- Straw mulch shall be free of weed and grass seed.
- Straw mulch shall be air-dried, free of mold, and not rotten.
- Straw fibers shall be a minimum of 4 inches and a maximum of 8 inches in length.
- Straw mulch must be anchored by using a tractor-drawn crimper to punch into the soil, by placing degradable netting above the mulch, or by application of a soil stabilizer (*Section 2.7 Soil Surface Treatments*).

Chipped Site Vegetation

- Chipped site vegetation is suitable mulch for temporary stabilization before construction will resume in an area of the construction site.
- Ensure the cleared vegetation is free of trash, litter, and debris prior to chipping.

- Chipped pieces shall be a minimum of 2 inches and a maximum of 6 inches in length.
- Chipped woody vegetation that is greater than 50% wood chips by volume may result in mulch that depletes nitrogen in the soil. It is useful as mulch for temporary stabilization where construction activity will resume and result in removal of the mulch. However, it should be used with care on areas where vegetation will be established for final stabilization.
- Chipped vegetation that is greater than 50 percent wood chips by volume may require treatment with a nitrogen fertilizer when used for mulch with seeding.
- Chipped vegetation that includes green matter will include seeds. It should not be used on areas that have specific landscaping requirements.

Erosion Control Compost (Wood Chip and Compost Mixture)

- Wood chip and compost mixture used for mulch shall meet the criteria for Erosion Control Compost in TxDOT Special Specification 1001.
- Wood chips for the mixture shall be less than or equal to 5 inches in length with 95 percent passing a 2 inch screen and less than 30 percent passing a 1 inch screen. Mulch should not contain chipped manufactured boards or chemically treated wood such as particleboard, railroad ties, or similar treated wood.
- Compost for the mixture shall meet the Physical Requirements specified in Table 1 of 2004 TxDOT Special Specification 1001, Compost. It must be free of herbicides and other chemicals.
- Mixing of the Erosion Control Compost into the soil surface is allowed when vegetation is established for final stabilization, except for drill seeding, in which case it is best to leave the mulch as an undisturbed top layer.

Hydraulic Mulch (Including Bonded Fiber Matrix)

- Hydraulic mulch shall consist of a mixture of shredded wood fiber and a stabilizing binder. The mulch must not contain sawdust, cardboard, paper or paper byproducts.
- Shredded wood fiber shall be long strand, whole wood fibers that are:
    - Minimum of 25 percent of fibers 3/8 inch long;
    - Minimum of 50 percent held on a No. 25 sieve;
    - Free from paint, printing ink, varnish, petroleum products, seed germination inhibitors; and
    - Free from synthetic or plastic materials.
- Mulch binders may be organic or inorganic polymers. Asphaltic emulsions and other petroleum-based tackifiers shall not be used.
- The stabilizing emulsion must be nonflammable, non-toxic to aquatic organisms, and free from growth or germination inhibiting factors.
- Areas hydraulically mulched shall be protected from all traffic, including foot traffic, a minimum of 24 hours to allow the mulch to dry and cure. Depending on the mulch, up to 48 hours of protection may be required. Always follow manufacturer's recommendations.
- Hydraulic mulch provides limited to no protection until cured. Do not apply when rain is forecast within the next 24 hours.
- Hydraulic mulch may be particularly effective on slopes steeper than 3:1.

2.5.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.16 Mulching. Specifications for

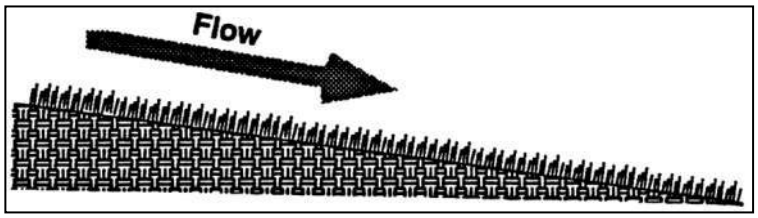
compost may be found in Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (TxDOT 2004) Item 161.

2.5.5 Inspection and Maintenance Requirements

Mulched areas should be inspected regularly (at least as often as required by the TPDES Construction General Permit) for thin or bare spots caused by natural decomposition or weather related events. Mulch in high traffic areas should be replaced on a regular basis to maintain uniform protection. Excess mulch should be brought to the site and stockpiled for use during the maintenance period to dress problem spots.

2.9 Vegetation

Erosion Control



Description: Vegetation, used as an erosion control, is the sowing or sodding of grasses, small grains, or legumes to provide temporary and final vegetative stabilization for disturbed areas.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Specify preparation of the soil surface before seeding or sodding
- Minimum of 4 to 6 inches of top soil required, depending on subsurface conditions
- Specify soil amendments depending on soil conditions
- Select seed or sod species appropriate for the climate, season, and soil

ADVANTAGES / BENEFITS:

- More effective and easier to maintain than sediment controls during a long construction period
- May be used for temporary or final stabilization

DISADVANTAGES / LIMITATIONS:

- Not appropriate for areas with heavy pedestrian, vehicular traffic, or concentrated, high velocity flow
- May require days to weeks for adequate establishment
- Alternate erosion control is needed until vegetation is established

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Protect newly seeded areas from excessive runoff, high velocity flow, and traffic until vegetation is established
- Water and fertilize until vegetation is established
- Reseed and/or provide mulch or another control for bare spots
- Rake accumulations of sediment from the vegetation

TARGETED POLLUTANTS

- ● Sediment
- ◒ Nutrients & Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control

Slope Protection

Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.90
(*When fully established; lower while vegetation is first growing*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations:

- *Design is unique to soil and other conditions at each site*
- *Watering and other maintenance required until vegetation is established*

2.9.1 Primary Use

Vegetation is used as a temporary or final stabilization measure for areas disturbed by construction. As a temporary control, vegetation is used to stabilize stockpiles, earthen dikes, and barren areas that are inactive for longer than two weeks. As a final control at the end of construction, grasses and other vegetation provide good protection from erosion along with some filtering for overland runoff. Subjected to acceptable runoff velocities, vegetation can provide a positive method of long-term stormwater management as well as a visual amenity to the site.

Other control measures may be required to assist during the establishment of vegetation. These other controls include erosion control blankets, mulching, swales, and dikes to direct flow around newly seeded areas and proper grading to limit runoff velocities during construction.

2.9.2 Applications

Vegetation effectively reduces erosion in channels and swales and on stockpiles, dikes, and mild to medium slopes. Vegetative strips can provide some protection and sediment trapping when used as a perimeter control for utility and site development construction. Refer to *Section 3.15 Vegetated Filter Strips and Buffers* for more information.

In many cases, the initial cost of temporary seeding may be high compared to tarps or covers for stockpiles or other barren areas subject to erosion. This initial cost should be weighed with the amount of time the area is to remain inactive, since vegetation is more effective and the maintenance cost for vegetated areas is much less than most structural controls.

2.9.3 Design Criteria

General

- Vegetation is a highly effective erosion control when the vegetation is fully established. Until then, additional controls are needed. Sediment controls should not be removed from vegetated areas until the vegetation is established.
- On grades steeper than 20:1 (5 percent), anchored mulch or erosion control blankets are required to protect seeded areas until vegetation is established. Refer to *Section 2.5 Mulching* and *Section 2.3 Erosion Control Blankets* for design criteria.
- Vegetation may be used by itself for channel protection when the channel grade is less than 2 percent and the temporary control design storm (2-year, 24-hour) and the conveyance storm (25-year, 24-hour) flow velocities are less than 6 feet per second.
- If the velocity of the temporary control design storm is greater than 2 feet per second, erosion control blankets shall be used in the channel while vegetation is being established. Turf reinforcement mats are required when the velocity exceeds 6 feet per second. Refer to *Section 2.3 Erosion Control Blankets* and *Section 2.8 Turf Reinforcement Mats* for design criteria.
- Stabilization of channels with vegetation is limited to channels that have side slopes of 3:1 or flatter.
- On cut/fill slopes and channels designed to receive temporary or final vegetation, establishment of vegetation shall be initiated immediately after completing grading of the cut/fill slope or channel, and in no case later than 14 days after completion of grading on these features. It is not acceptable to delay establishing vegetation on these highly-erodible areas until completion of construction activities and stabilization of the remainder of the site.

Surface Preparation

- Unless infeasible, remove and stockpile existing topsoil at the start of grading activities. Store topsoil in a series of small stockpiles instead of one large stockpile to decrease the loss of aerobic soil micro-organisms during stockpiling.

- Interim or final grading must be completed prior to seeding or sodding.
- To minimize soil compaction of areas to be vegetated, limit vehicle and equipment traffic in these areas to the minimum necessary to accomplish grading.
- Install all necessary erosion structures such as dikes, swales, diversions, etc. prior to seeding or sodding.
- Spread stockpiled topsoil evenly over the disturbed area to be vegetated.
- Depth of topsoil shall be a minimum of 4 inches, with 6 inches required where the topsoil is over rock, gravel or otherwise unsuitable material for root growth. After spreading stockpiled topsoil, provide additional top soil as needed to achieve these depths.
- Compost Manufactured Topsoil as specified in TxDOT Special Specification 1001 may be used to achieve the specified depths or when it's infeasible to stockpile topsoil. Topsoil may also be acquired from another construction site if there is no space to stockpile the topsoil at that site.
- Topsoil shall have an organic content of 10 to 20 percent using ASTM D2974 Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils.
- Topsoil that does not meet the organic content requirement shall be amended with General Use Compost as specified in TxDOT Special Specification 1001. Amendment should be three parts of topsoil to one part compost by volume thoroughly blended.
- Seed bed should be well pulverized and loosened to a minimum depth of 3 inches and then raked to have a uniform surface.
- When establishing vegetation from seed, groove or furrow slopes steeper than 3:1 on the contour line before seeding.

Plant Selection, Fertilization and Seeding

- Use only high quality, USDA certified seed.
- Use an appropriate species or species mixture adapted to the local climate, onsite soil conditions and the season as shown below, or consult with the local office of the Natural Resource Conservation Service (NRCS) or Texas AgriLife Extension Service for selection of proper species and application technique in this area.
- Seeding rate should be in accordance with the Tables 2.4, 2.5 and 2.6 as follow in this section or as recommended by the Natural Resources Conservation Service (NRCS) or Texas AgriLife Extension Service.
- Chemical fertilization is not recommended at the time of seeding, because it typically stimulates and is consumed by fast growing weeds that out-compete the slower growing grasses and legumes. If the topsoil has not been amended by compost as discussed above, an 0.5 inch layer of General Use Compost (TxDOT Special Specification 1001) is recommended as a surface treatment to protect the seed and provide slow release nutrients
- Evenly apply seed using a seed drill, cultipacker, terraseeding, or hydroseeder.
- Hydro-seeding should not be used on slopes of 5:1 or steeper unless Bonded Fiber Matrix is used.
- Seeded areas shall be thoroughly watered immediately after planting. Water shall be applied at a rate that moistens the top 6 inches of soil without causing runoff. Provide water daily for the first 14 days after seeding and thereafter as needed to aid in establishment of vegetation.
- Use appropriate mulching techniques (*Section 2.5 Mulching*) where necessary, especially during cold periods of the year. Mulch consisting of chipped site vegetation is discouraged, since the wood content may result in depleting nitrogen from the soil.

Sodding

- Use of sod should be limited to planned landscapes due to the relatively high water use of most types of sod grass.
- When sod is necessary to achieve immediate stabilization, buffalograss (*Buchloe dactyloides*) is recommended. Other types of sod may be used in landscaping when specified by a landscape architect for a commercial property or a homebuyer for a residential lot.
- The sod should be mowed prior to sod cutting so that the height of the grass shall not exceed 3 inches and should not be harvested or planted when its moisture condition is so excessively wet or dry that its survival shall be affected.
- Sod shall have a healthy, virile, system of dense, thickly matted roots throughout a minimum soil thickness of 0.75 inch.
- Sod shall be planted within 3 days after it is excavated.
- In areas subject to direct sunlight, pre-moisten prepared sod bed by watering immediately prior to placing sod.
- Sodded areas shall be thoroughly watered immediately after they are planted.

Temporary Vegetation

The following table lists recommended plant species for the North Central Texas region depending on the season for planting.

Table 2.4 Recommended Grass Mixture for Temporary Erosion Control

Season	*Common Name*	*Pure Live Seed Rate (Lbs/Acre)*
Sep 1 - Nov 30	Tall Fescue Western Wheat Grass Wheat (Red, Winter)	4.5 5.6 34.0
May 1 - Aug 31	Foxtail Millet	34.0
Feb 15 – May 31 Sep 1 – Dec 31	Annual Rye	20.0

Areas receiving temporary seeding and vegetation shall be landscaped, re-seeded or sodded with perennial species to establish final vegetation at the end of construction.

Vegetation for Final Stabilization

Sodding or seeding may be used to establish vegetation for final stabilization of areas disturbed by construction activity. The vegetation must achieve a cover that is 70 percent of the native background vegetative cover to be considered final stabilization. Sod will achieve this coverage quicker than seeding; however, sod is usually more expensive than seeding. Sod is most cost-effective for small areas or areas of concentrated flow or heavy pedestrian traffic where it will be difficult to establish vegetation by seeding.

Grass seed for establishing final stabilization can be sown at the same time as seeding for temporary (annual) vegetation. Drought tolerant native vegetation is recommended rather than exotics as a long-term water conservation measure. Native grasses can be planted as seed or placed as sod. Buffalo 609, for example, is a hybrid grass that is placed as sod. Fertilizers are not normally used to establish native grasses, but mulching is effective in retaining soil moisture for the native plants.

Table 2.5 Recommended Grass Mixture for Final Stabilization of Upland in Rural Areas

County	Planting Date	Clay Soils Species and Pure Live Seed Rate (Lbs/Acre)		Sandy Soils Species and Pure Live Seed Rate (Lbs/Acre)	
Erath Hood Johnson Palo Pinto Parker Somervell Tarrant Wise	February 1 – May 15	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Little Bluestem (Native) Blue Grama (Hachita) Illinois Bundleflower	0.3 2.7 0.9 1.0 0.9 1.0	Green Sprangletop Sand Lovegrass Bermudagrass Weeping Lovegrass (Ermelo) Sand Dropseed Partridge Peal	0.3 0.5 1.8 0.8 0.4 1.0
Collin Dallas Denton Ellis Kaufman Navarro Rockwell	February 1 – May 15	Green Sprangletop Bermudagrass Sideoats Grama (El Reno) Little Bluestem (Native) Buffalograss (Texoka) Illinois Bundleflower	0.3 1.2 2.7 2.0 1.6 1.0	Green Sprangletop Bermudagrass Weeping Lovegrass (Ermelo) Sand Lovegrass Sand Dropseed Partridge Pea	0.3 1.8 0.6 0.6 0.4 1.0
Hunt	February 1 – May 15	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Little Bluestem (Native) Illinois Bundleflower	0.3 3.2 1.8 1.7 1.0	Green Sprangletop Bermudagrass Bahiagrass (Pensacola) Sand Lovegrass Weeping Lovegrass (Ermelo) Partridge Pea	0.3 1.5 6.0 0.6 0.8 1.0

(Source: TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges, Item 164)

Table 2.6 Recommended Grass Mixture for Final Stabilization of Upland in Urban Areas

County	Planting Date	Clay Soils Species and Pure Live Seed Rate (Lbs/Acre)		Sandy Soils Species and Pure Live Seed Rate (Lbs/Acre)	
Erath Hood Johnson Palo Pinto Parker Somervell Tarrant Wise	February 1 – May 15	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Buffalograss (Texoka)	0.3 3.6 2.4 1.6	Green Sprangletop Sideoats Grama (El Reno) Bermudagrass Sand Dropseed	0.3 3.6 2.1 0.3
Collin Dallas Denton Ellis Kaufman Navarro Rockwell	February 1 – May 15	Green Sprangletop Sideoats Grama (El Reno) Buffalograss (Texoka) Bermudagrass	0.3 3.6 1.6 2.4	Green Sprangletop Buffalograss (Texoka) Bermudagrass Sand Dropseed	0.3 1.6 3.6 0.4
Hunt	February 1 – May 15	Green Sprangletop Bermudagrass Sideoats Grama (Haskell)	0.3 2.4 4.5	Green Sprangletop Bermudagrass	0.3 5.4

(Source: TxDOT Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges, Item 164)

Vegetation for final stabilization of channels requires grasses that are tolerant of periodic inundation, such as Bermuda grass, Kentucky bluegrass or a grass-legume mixture.

Additional Considerations

- Conditions for establishing vegetation vary significantly from site to site. Therefore, specifics of the vegetation design should be prepared based on the soil, slopes, drainage patterns, and the purpose of the vegetation at a each site.
- For construction activities that include landscaping in the development plans, the landscape architect should be consulted when specifying vegetation for temporary or final stabilization of disturbed areas.
- Vegetation is easier to establish if equipment and vehicle traffic is managed onsite to minimize soil compaction by traffic in the disturbed area that will be vegetated.
- Establishing a good vegetative cover is dependent on the season of the year. Projects that commence in the fall of the year may not be candidates for using vegetation as an erosion control.
- Where vegetation is used in swales and channels it may be necessary to use sod, rather than seeding, to establish an erosion resistant surface that accommodates rainfall runoff flows.
- Mulch should be used to enhance vegetative growth, in that mulch protects seeds from heat, prevents soil moisture loss, and provides erosion protection until the vegetation is established. Compost mulch has the additional benefit of providing some slow-release nutrients.
- Fertilizers have both beneficial and adverse effects. Fertilizers provide nutrients to the vegetation, but fertilizers are also a source of unwanted nutrients in streams and lakes. In this latter regard, they are a pollutant. The use of native vegetation rather than exotics reduces the need for fertilizers. Organic fertilizers, such as compost mulch, are generally preferred over chemical fertilizers. They provide a slow release of nutrients over a longer period of time and are less likely to cause environmental problems.
- Steep slopes represent a problem for establishing vegetation. Hydraulic mulches are useful for establishing vegetation on slopes. Refer to *Section 2.5 Mulching*.

2.9.4 Design Guidance and Specifications

Additional criteria for the application of vegetation in channels are in *Section 3.6.3 of the iSWM Criteria Manual* and design guidance is in *Section 3.2 of the Hydraulics Technical Manual*.

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Item 202 Landscaping. Additional specifications for the following components of this item are in the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (TxDOT 2004):

- Topsoil, Item 160.
- Compost, Item 161.
- Sodding for Erosion Control, Item 162.
- Seeding for Erosion Control, Item 163.
- Fertilization, Item 164.
- Vegetative Watering 165.

2.9.5 Inspection and Maintenance Requirements

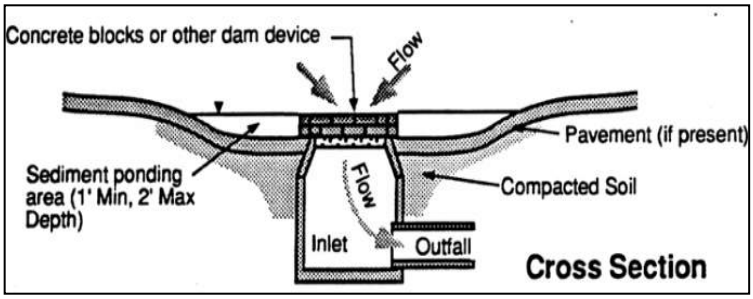
Protect newly seeded areas from excessive runoff and traffic until vegetation is established. Include a watering and fertilizing schedule in the iSWM Construction Plan facilitate the establishment of the vegetation. Vegetation for final stabilization must be maintained until the vegetative cover is 70 percent of the native background vegetative cover.

Vegetation should be inspected regularly (at least as often as required by the TPDES Construction General Permit) to ensure that the plant material is established properly and remains healthy. Bare spots shall be reseeded and/or protected from erosion by mulch or other measures. Accumulated sediment

deposited by runoff should be removed to prevent smothering of the vegetation. In addition, determine the source of excess sediment and implement appropriate measures to control the erosion.

3.4 Inlet Protection

Sediment Control



Description: Inlet protection consists of a variety of methods to intercept sediment at low point inlets through the use of depressed grading, filter stone, filter fabric, inlet inserts, organic filter tubes and other materials. The protection devices are placed around or across the inlet openings to provide localized detention or filtration of sediment and floatable materials in stormwater. Protection devices may be assembled onsite or purchased as manufactured assemblies.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Evaluate drainage patterns to ensure inlet protection will not cause flooding of roadway, property or structures
- Never block entire inlet opening
- Size according to drainage area and flow rates
- Include flow bypass for clogged controls and large storm events

ADVANTAGES / BENEFITS:

- May be the only feasible sediment control when all construction is located within rights-of-way

DISADVANTAGES / LIMITATIONS:

- Limited effectiveness and reliability
- High maintenance requirements
- Has potential to flood roadways or adjacent properties

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Check for and remove blockage of inlet after every storm event
- Remove sediment before it reaches half the design height or volume of the inlet protection, more frequently for curb inlets
- Repair or replace damaged materials
- Clean or replace filter stone and organic filter tubes is when clogged with sediment

TARGETED POLLUTANTS

- ◒ Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier
Channel Protection
Temporary Stabilization
Final Stabilization
Waste Management
Housekeeping Practices

Fe=0.35-0.65
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ● Maintenance
- ○ Training
- ○ Suitability for Slopes > 5%

Other Considerations:

- *Traffic hazards*
- *Passage of larger storm events without causing flooding*
- *Flow diversion to other inlets or drainage points*

3.4.1 Primary Use

Inlet protection is typically used as a secondary sediment barrier, due to its limited effectiveness and numerous disadvantages. It is used to reduce sediment in storm sewer systems by serving as a back-up system for areas that have newly applied erosion controls or for other sediment controls that cannot achieve adequate sediment removal by themselves.

Inlet protection may be used as a primary sediment control only when all other primary controls are infeasible because of site configuration or the type of construction activity.

3.4.2 Applications

Inlet protection is best applied at low point (sump) inlets where stormwater runoff will pond behind the protection measure, and then either filter through the protection measure or flow over a weir created by it. Most inlet protection measures depend on ponding to be effective. These types of inlet protection are not applicable to on-grade curb inlets, where the inlet protection will cause stormwater runoff to bypass the inlet and overload downstream inlets. Only inlet protection measures that allow for use of the inlet opening (e.g. inlet inserts) are applicable as inlet protection for on-grade inlets.

Inlet protection is normally used in new developments with new inlets and roads that are not in public use. It has limited applications in developed areas due to the potential for flooding, traffic safety, pedestrian safety, and maintenance problems. Potential applications in developed areas are on parking lot inlets where water can pond without causing damage and during major repairs to existing roadways where no other controls are viable.

The application of inlet protection is highly variable due to the wide variety of inlet configurations (existing and new) and site conditions. The schematics in Section 6 show example applications; however, applications in most cases must be site adapted. Different methods and materials may be used. It is the responsibility of the designer to ensure that the methods and materials applied for inlet protection are appropriate to the site and flow conditions following the design criteria in Section 3.

3.4.3 Design Criteria

General

- Drainage patterns shall be evaluated to ensure inlet protection will not divert flow or flood the roadway or adjacent properties and structures.
- Inlet protection measures or devices that completed block the inlet are prohibited. They must also include a bypass capability in case the protection measures are clogged.
- Inlet protection must be designed to pass the conveyance storm (25-year, 24-hour) without creating a road hazard or damaging adjacent property. This may be accomplished by any of the following measures:
    - An overflow weir on the protection measure.
    - An existing positive overflow swale on the inlet.
    - Sufficient storage volume around the inlet to hold the ponded water until it can all filter into the inlet.
    - Other engineered method.
- Positive overflow drainage is critical in the design of inlet protection. If overflow is not provided for at the inlet, temporary means shall be provided to route excess flows through established swales, streets, or other watercourses to minimize damage due to flooding.
- Filter fabric and wire mesh used for inlet protection shall meet the material requirements specified in *Section 3.10 Silt Fence*.

- Block and gravel (crushed stone or recycled concrete) protection is used when flows exceed 0.5 cubic feet per second and it is necessary to allow for overtopping to prevent flooding.
- The tube and filler for organic filter tubes shall be in accordance with the criteria in *Section 3.6 Organic Filter Tube*.
- Bags used to secure inlet protection devices on pavement shall be filled with aggregate, filter stone, or crushed rock that is less likely than sand to be washed into an inlet if the bag is broken. Filled bags shall be 24 to 30 inches long, 16 to 18 inches wide, and 6 to 8 inches thick. Bags shall be polypropylene, polyethylene, or polyamide woven fabric with a minimum unit weight of 4 ounces per square yard and meet the following criteria:
    - Greater than 300 psi Mullen Burst Strength using ASTM D3786 Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method.
    - Greater than 70 percent UV Stability using ASTM D4355 Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture, and Heat in a Xenon Arc Type Apparatus.

Curb Inlet Protection

- Municipality approval is required before installing inlet protection on public streets.
- Special caution must be exercised when installing curb inlet protection on publicly traveled streets or in developed areas. Ensure that inlet protection is properly designed, installed and maintained to avoid flooding of the roadway or adjacent properties and structures.
- A two inch overflow gap or weir is required on all curb inlet protection devices.
- Traffic cones, warning signs, or other measures shall be installed to warn motorists when the inlet protection measures extend beyond the gutter line.
- 2 inch X 4 inch Weir Protection:
    - Bend wire mesh around the 2 inch x 4 inch board and staple to the board. Bend wire mesh around the bottom of the board, the curb opening, and along the pavement to form a cage for the rock.
    - Rock bags shall be placed perpendicular to the curb, at both ends of the wooden frame, to disrupt the flow and direct water into the rock filter. Stack the bags two high if needed.
- Organic Filter Tube Protection:
    - The diameter of the tube shall be at least 2 inches less than the height of the inlet opening. The tube should not be allowed to block the entire opening, since it will clog.
    - The tube shall be placed on 4 inch x 4 inch or 2 inch x 4 inch wire mesh to prevent the tube from sagging into the inlet.
    - The tube should be long enough to extend a minimum of 12 inches past the curb opening on each side of the inlet.
- Hog Wire Weir Protection:
    - The filter fabric and wire mesh shall extend a minimum of 12 inches past the curb opening on each side of the inlet.
    - Filter fabric shall be placed on 2 inch x 4 inch wire mesh to prevent the tube from sagging into the inlet.
    - Rock bags are used to hold the wire mesh and filter fabric in contact with the pavement. At least one bag shall be placed on either side of the opening, parallel to and up against the concrete curb. The bags are in intended to disrupt and slow the flow and ensure it does not go under the fabric. Add bags if needed.

- If a board is used to anchor the wire mesh and fabric instead of rock bags, the board shall be secured with concrete nails at 3 inches on center. Upon removal clean any dirt or debris from the nailing locations, apply chemical sanding agent, and apply non-shrink grout flush with surface of concrete.

- Block and Gravel Protection:
  - Concrete blocks shall be standard 8 inch x 8 inch x 16 inch concrete masonry units and shall be in accordance with ASTM C139, Concrete Masonry Units for Construction. Filter gravel shall be ¾ inch washed stone containing no fines. Angular shaped stone is preferable to rounded shapes.
  - Concrete blocks are to be placed on their sides in a single row around the perimeter of the inlet, with ends abutting. Openings in the blocks should face outward, not upward. ½ inch x ½ inch wire mesh shall then be placed over the outside face of the blocks covering the holes. Filter gravel shall then be piled against the wire mesh to the top of the blocks with the base of the stone being a minimum of 18 inches from the blocks.
  - Alternatively, where loose stone is a concern (streets, etc.), the filter gravel may be placed in appropriately sized filter fabric bags.
  - Periodically, when the gravel filter becomes clogged, the gravel must be removed and cleaned in a proper manner or replaced with new gravel and piled back against the wire mesh.
- Organic Filter Tube On-Grade Protection:
  - Organic filter tubes may be used to provide sediment control at on-grade curb inlets where the tube will not be a traffic hazard, such as on residential streets where the pavement adjacent to the curb is allocated to parked cars. Tubes should not be used in this manner where they will extend into an active travel lane.
  - The filter tube shall be secured in a U-shape by rock bags. Runoff flowing in the gutter will pond within the U until it filters through the tube or overflows around the end.
- Inlet protection shall be phased on curb inlets being constructed. Controls shall be installed on the pipe inlet at the bottom of the catch basin as soon as it is installed and while the inlet box and top are being formed or placed.

Area Inlet Protection

- Installation methods for protection on area inlets vary depending on the type of inlet (drop, "Y," or other) and the type and use of the surface surrounding the inlet (parking lot, playground, etc.). It is the responsibility of the designer to appropriately adapt inlet protection measures and their installation methods for each site condition. Several types may be needed on one project.
- Filter Fabric Protection:
  - Filter fabric protection is appropriate where the drainage area is less than one acre and the basin slope is less than five (5) percent. Filter fabric, posts, and wire mesh shall meet the material requirements specified in *Section 3.10 Silt Fence*.
  - A 6 inch wide trench is to be cut 6 inches deep at the toe of the fence to allow the fabric to be laid below the surface and backfilled with compacted earth or gravel. This entrenchment prevents any bypass of runoff under the fence.
  - Stone overflow structures, according to the criteria in *Section 3.10 Silt Fence* shall be installed where flow to the inlet is concentrated and more than 1 cubic feet per second.
- Excavated Impoundment Protection:
  - Excavated inlet protection is usually the most effective type of area inlet protection; however, it is only applicable to drop inlets. It should not be applied to Y inlets because it will undermine the concrete pad surrounding the inlet opening. Nor can it be used for inlets on pavement.

  - With this protection method, it is necessary to install weep holes to allow the impoundment to drain completely.
  - The impoundment shall be sized such that the volume of excavation is equal to or exceeds the runoff volume from the temporary control design storm (2-year, 24-hour) for the inlet's drainage area.
  - The trap shall have a minimum depth of one foot and a maximum depth of 2 feet as measured from the top of the inlet and shall have side slopes of 2:1 or flatter.

- Block and Gravel Protection:
  - Block and gravel inlet protection is the most stable area inlet protection and can handle more concentrated flows. It may be installed on paved or vegetated surfaces. Loose stone shall be carefully removed from vegetated surfaces at the end of construction to prevent the stone from becoming a mowing hazard.
  - The inlet protection may be one or two blocks high. Single block heights are applicable for drainage areas up to 3 acres in size. The double block height shall be used for larger drainage areas.
  - Concrete blocks shall be standard 8 inch x 8 inch x 16 inch concrete masonry units and shall be in accordance with ASTM C139, Concrete Masonry Units for Construction. Filter gravel shall be ¾ inch washed stone containing no fines. Angular shaped stone is preferable to rounded shapes.
- Organic Filter Tube Protection:
  - Organic filter tubes may be used on paved or unpaved surfaces.
  - On paved surfaces, tubes shall be secured in place by rock bags. On unpaved surfaces, the tubes shall be embedded in the ground a minimum of 3 inches and staked at 4 foot spacing.
  - Designer shall provide calculations and specify the diameter of tube to be used based on the inlet's drainage area and the flow rate of runoff to the inlet. The minimum allowable diameter is 12 inches.

Proprietary Inlet Protection

- Numerous proprietary protection devices are available from commercial vendors. The devices often have the advantage of being reusable on several projects if they are maintained in good condition.
- It is the policy of this manual not to recommend any specific commercial vendors for proprietary controls. However, this subsection is included in order to provide municipalities with a rationale for approving the use of a proprietary inlet protection device within their jurisdiction.
- The designer shall work with the supplier to provide the municipality with flow calculations or independent third-party tests that document the device's performance for conditions similar to the ones in which it is proposed to be installed. The conditions that should be considered include: type and size of inlet, inlet configuration, size of contributing drainage area, design flow rate, soil particle sizes to be removed, and other pollutants to be removed.
- The designer or vendor of the proprietary device shall provide a minimum of three references for projects where the device has been installed and maintained in operation at a construction site for at least six months. Local references are preferred; but references from other regions can be accepted if a similarity between the reference project and the proposed application can be demonstrated.
- Proprietary devices must not completely block the inlet. The device shall have a minimum of a 2 inch wide opening for the length of the inlet when it will be used in areas that water can safely pond to depths deeper than the design depths for the inlet. If ponding is not an option, then the device must have overflow capacity equal to the inlet design flow rate.
- Some proprietary devices are available with replaceable pads or filters. These pads or filters have the added benefit or removing pollutants such as metals and oils in addition to removing sediment.

These types of inserts are recommended in applications where prior or current land use in or adjacent to the construction areas may result in the discharge of pollutants.

- Proprietary protection devices shall be in accordance with the General criteria at the beginning of this section and any criteria listed under Curb Inlet Protection and Area Inlet Protection that are not specific to an inlet protection method.

3.4.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.15 Inlet Protection.

3.4.5 Inspection and Maintenance Requirements

Inlet protection should be inspected regularly (at least as often as required by the TPDES Construction General Permit). Inlet controls should also be inspected after every storm event to check for collapse into the inlet or other damages that may block flow in the inlet. In addition to routine inspection, inlet protection devices should be observed and monitored during larger storm events to verify that they are not ponding or diverting water in a manner that floods a roadway or damages property.

Floatable debris and other trash caught by the inlet protection should be removed after each storm event. Sediment should also be removed from curb inlet protection after each storm event because of the limited storage area associated with curb inlets.

Sediment collected at area inlet protection should be removed before it reaches half the height of the protection device. Sediment should be removed from inlets with excavated impoundment protection before the volume of the excavation is reduced by 50 percent. In addition, the weep holes should be checked and kept clear of blockage.

Concrete blocks, 2 inch x 4 inch boards, stakes, and other materials used to construct inlet protection should be checked for damaged and repaired or replaced if damaged.

When filter fabric or organic filter tubes are used, they should be cleaned or replaced when the material becomes clogged. For systems using filter stone, when the filter stone becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced.

Because of the potential for inlet protection to divert runoff or cause localized flooding, remove inlet protection as soon as the drainage area contributing runoff to the inlet is stabilized. Ensure that all inlet protection devices are removed at the end of the construction.

3.4.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.

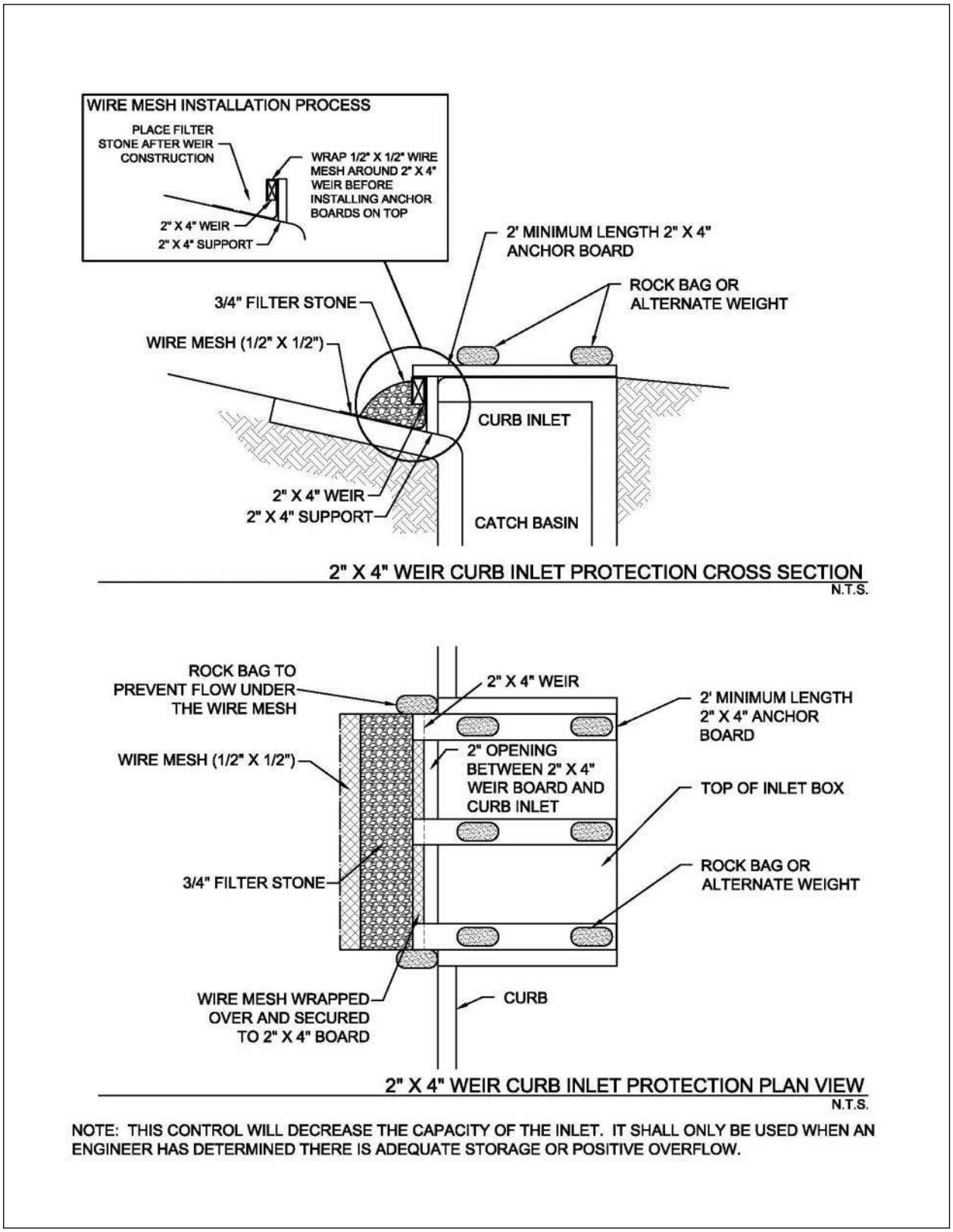


Figure 3.5 Schematics of 2"x4" Weir Curb Inlet Protection
(Source: Modified from Washington Suburban Sanitary Commission Detail SC-16.0)

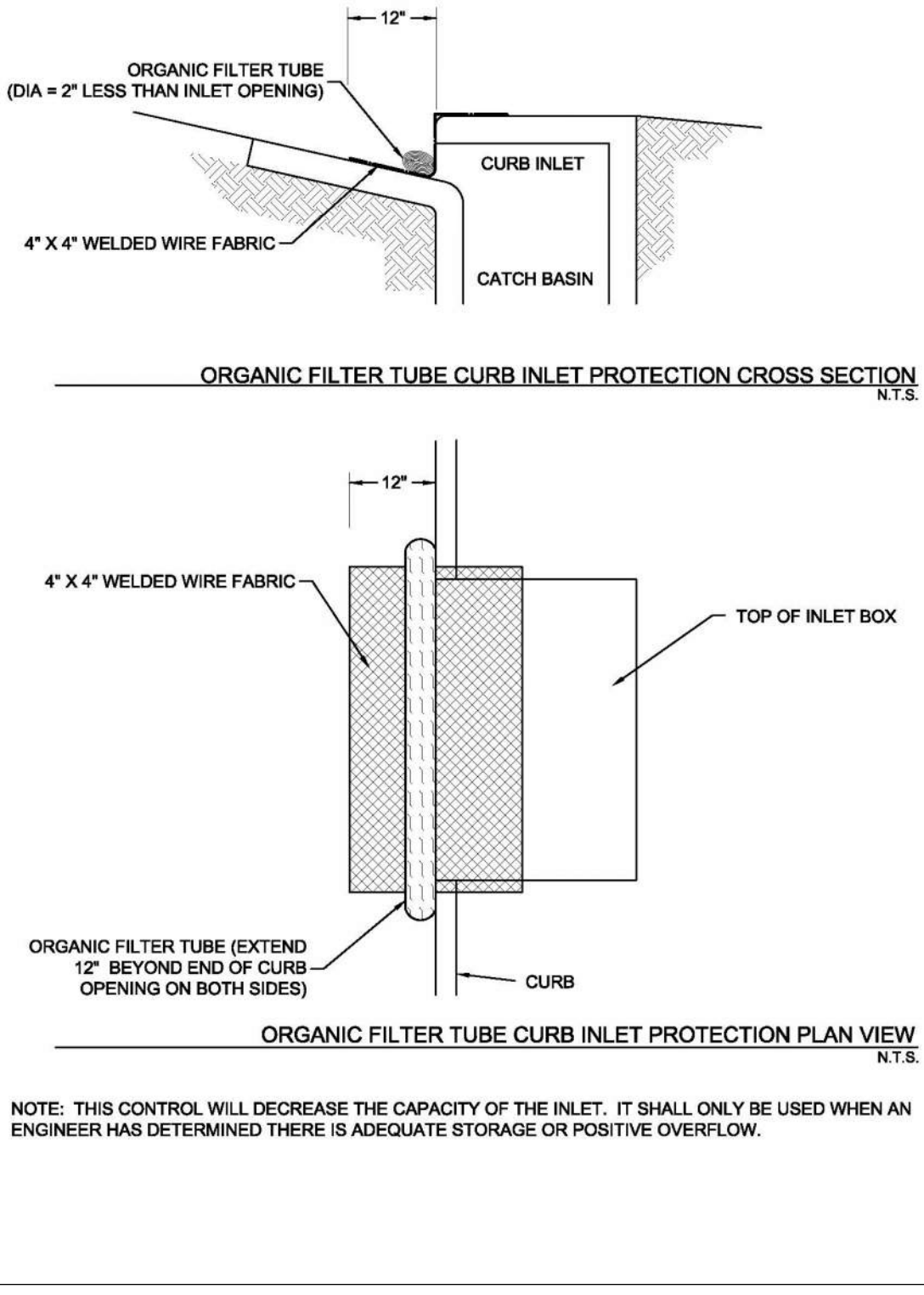


Figure 3.6 Schematics of Organic Filter Tube Curb Inlet Protection
(Source: Modified from City of Plano BMP SP-4)

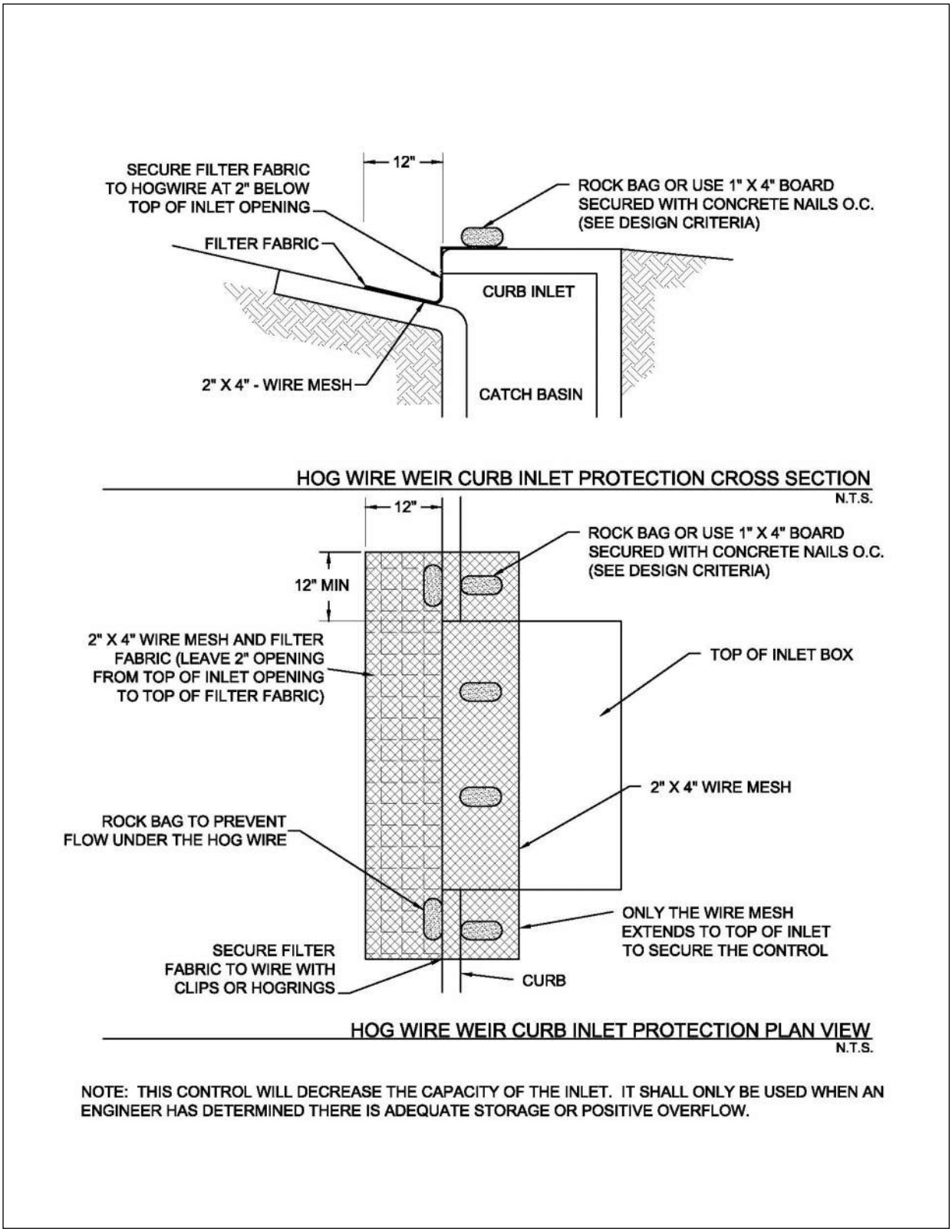
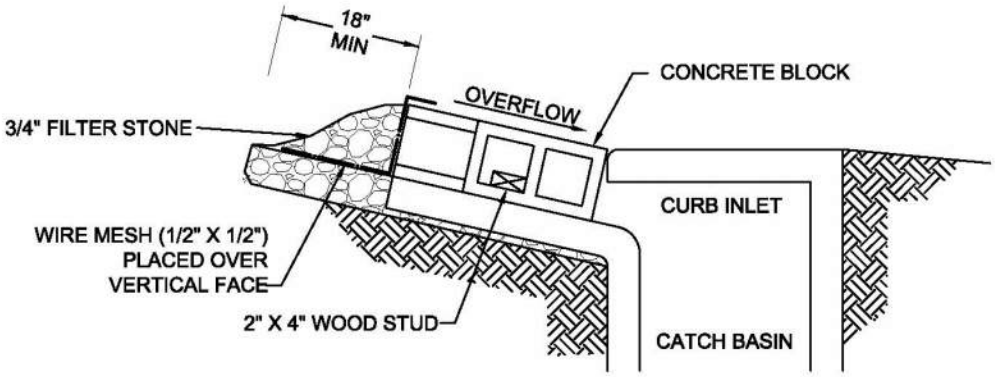
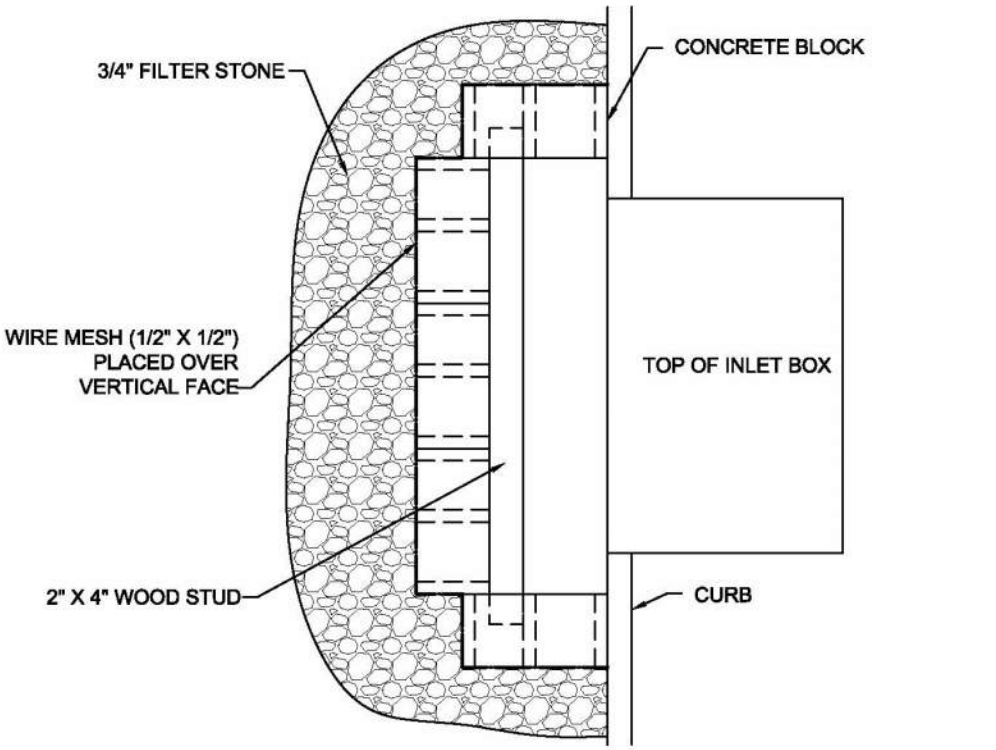


Figure 3.7 Schematics of Hog Wire Weir Curb Inlet Protection
(Source: Modified from City of Round Rock Detail E-03)



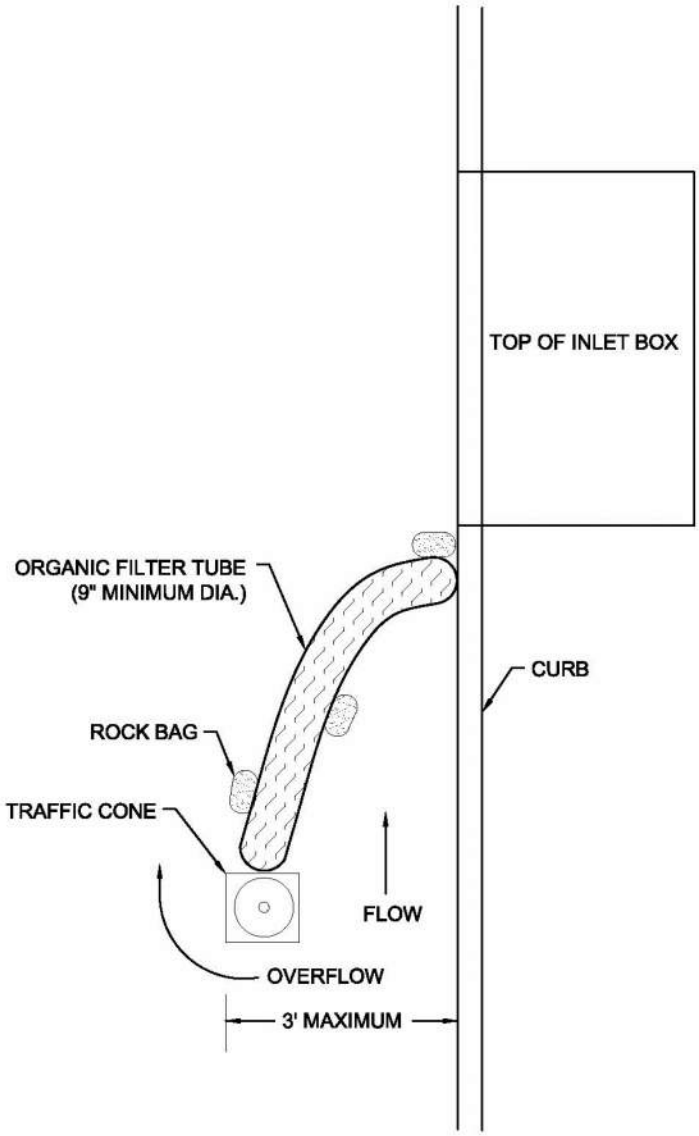
BLOCK AND GRAVEL FILTER CURB INLET PROTECTION CROSS SECTION
N.T.S.



BLOCK AND GRAVEL FILTER CURB INLET PROTECTION PLAN VIEW
N.T.S.

NOTES:
1. DO NOT INSTALL ON INLETS IN A PUBLIC STREET OR OTHER ACTIVE TRAVEL LANE. BLOCK AND GRAVEL FILTER IS INTENDED FOR USE ON LOW POINT (SUMP) INLETS IN PARKING LOTS AND OTHER PAVEMENT THAT IS NOT AN ACTIVE TRAVEL LANE. THIS INLET PROTECTION METHOD ALLOWS FOR FULL USE OF THE INLET DESIGN CAPACITY.
2. INSTALL TRAFFIC CONES AS NEEDED TO MINIMIZE THE POTENTIAL FOR CARS HITTING THE BLOCK AND GRAVEL.

Figure 3.8 Schematics of Block and Gravel Filter Curb Inlet Protection

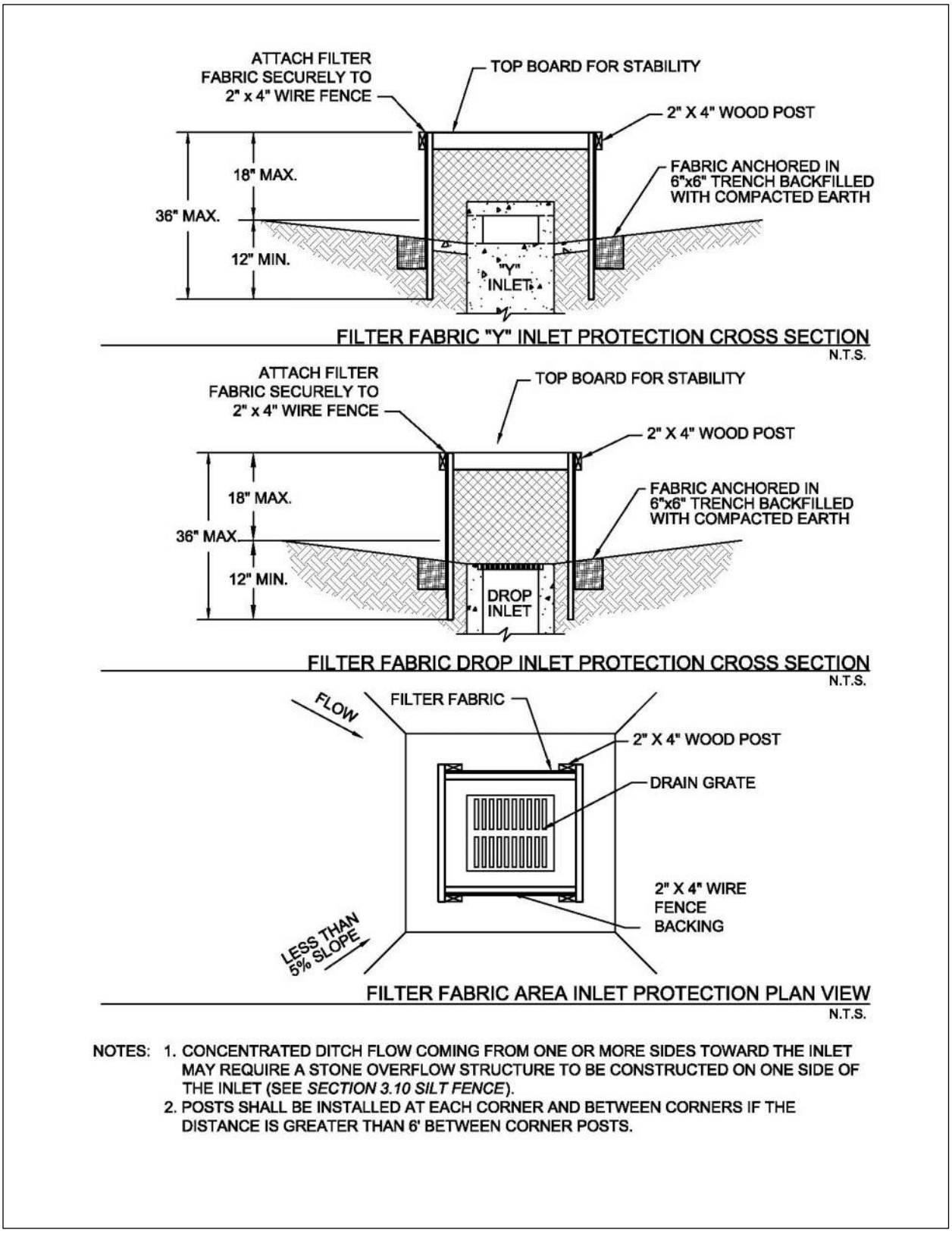


ORGANIC FILTER TUBE ON-GRADE CURB INLET PROTECTION DETAIL

N.T.S.

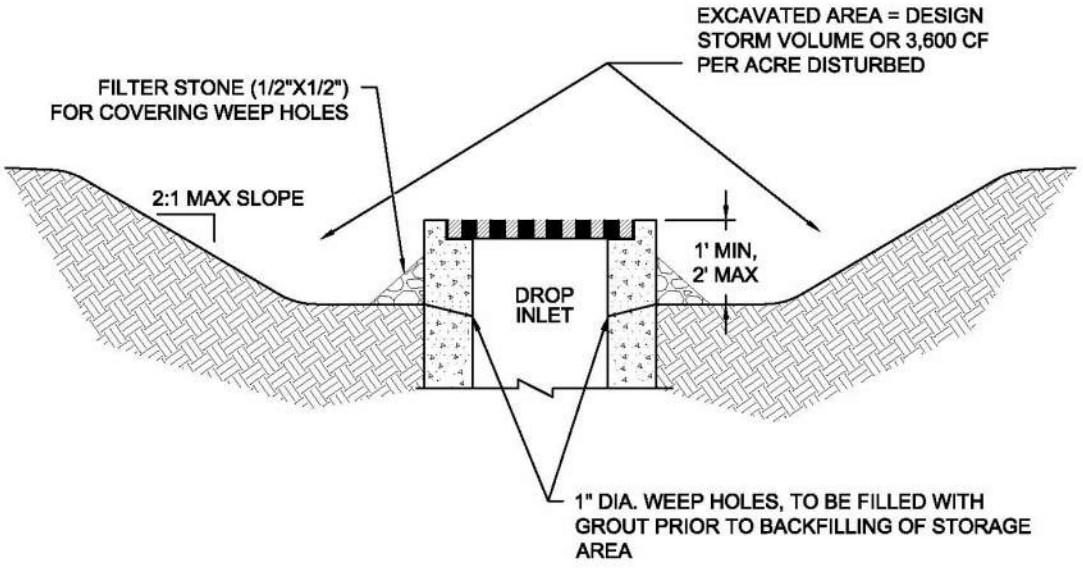
NOTES: 1. THIS DETAIL IS INTENDED FOR USE WITH ON-GRADE INLETS (NOT A LOW POINT) WHERE WATER WOULD BE DIVERTED INSTEAD OF PONDING BEHIND THE OTHER TYPES OF INLET PROTECTION.
2. DO NOT INSTALL ON INLETS WHERE THE ORGANIC FILTER TUBE WOULD EXTEND INTO AN ACTIVE TRAVEL LANE.

Figure 3.9 Schematic of Organic Filter Tube On-Grade Curb Inlet Protection

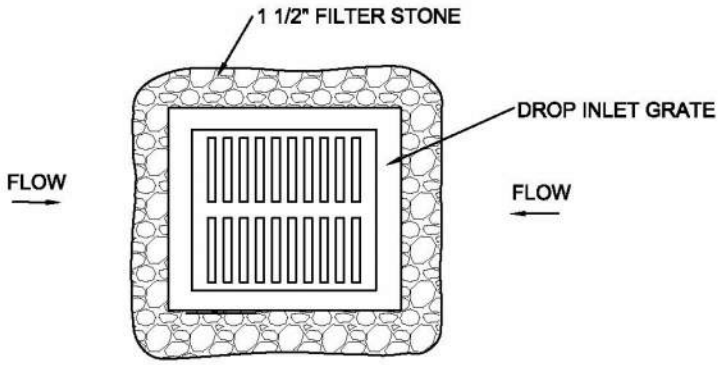


NOTES: 1. CONCENTRATED DITCH FLOW COMING FROM ONE OR MORE SIDES TOWARD THE INLET MAY REQUIRE A STONE OVERFLOW STRUCTURE TO BE CONSTRUCTED ON ONE SIDE OF THE INLET (SEE *SECTION 3.10 SILT FENCE*).
2. POSTS SHALL BE INSTALLED AT EACH CORNER AND BETWEEN CORNERS IF THE DISTANCE IS GREATER THAN 6' BETWEEN CORNER POSTS.

Figure 3.10 Schematics of Filter Fabric Area Inlet Protection
(Source: City of Plano BMP SP-4)

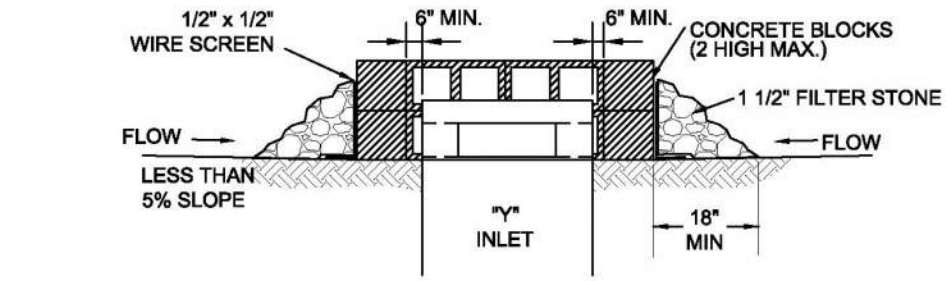


EXCAVATED IMPOUNDMENT DROP INLET PROTECTION CROSS SECTION
N.T.S.

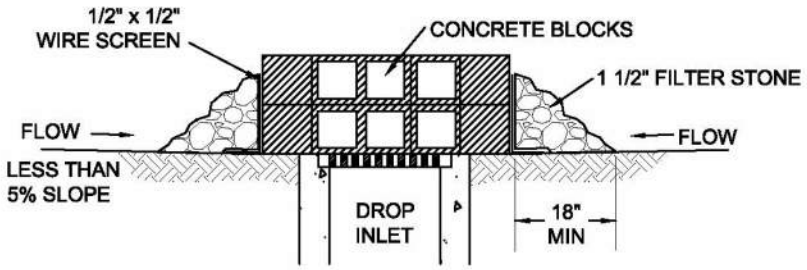


EXCAVATED IMPOUNDMENT AREA INLET PROTECTION PLAN VIEW
N.T.S.

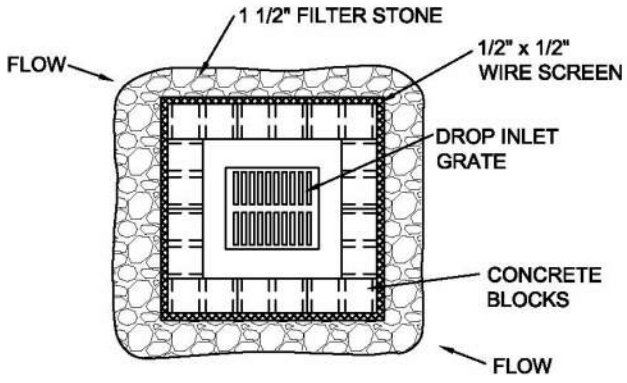
Figure 3.11 Schematics of Excavated Impoundment Area Inlet Protection



BLOCK AND GRAVEL "Y" INLET PROTECTION CROSS SECTION
N.T.S.



BLOCK AND GRAVEL DROP INLET PROTECTION CROSS SECTION
N.T.S.



BLOCK AND GRAVEL AREA INLET PROTECTION PLAN VIEW
N.T.S.

Figure 3.12 Schematics of Block and Gravel Area Inlet Protection
(Source: Modified from City of Plano BMP SP-4)

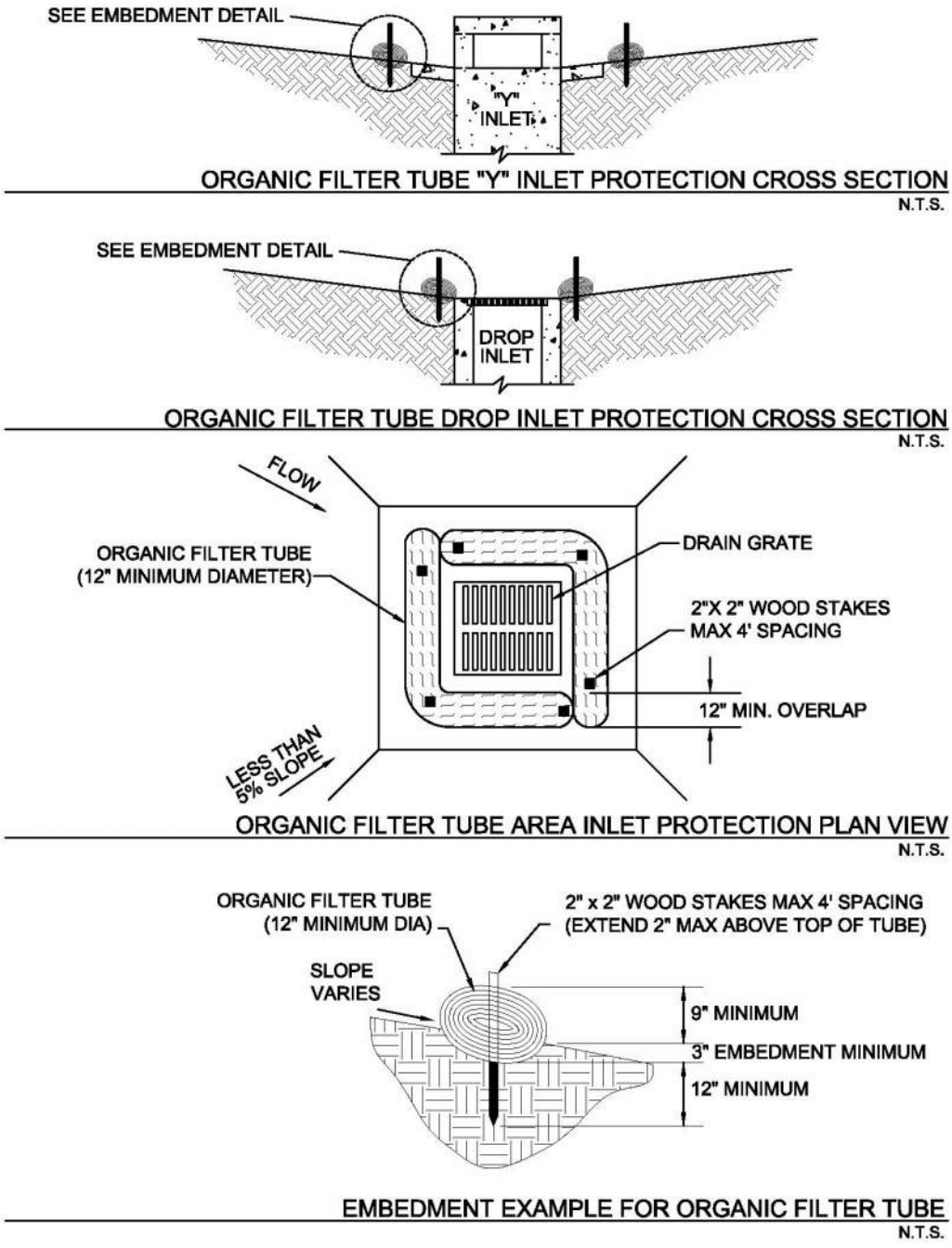
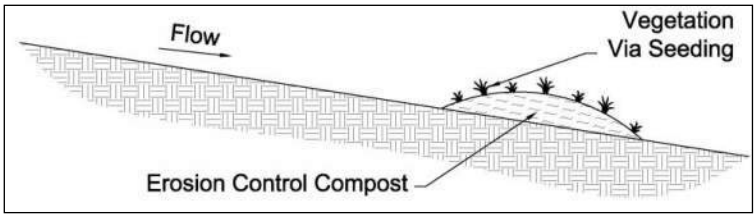


Figure 3.13 Schematics of Organic Filter Tube Area Inlet Protection

3.5 Organic Filter Berm

Sediment Control



Description: Organic filter berms, also called compost filter berms, are linear berms constructed of a mix of compost and wood chips. They are placed on a contour to control runoff. The organic filter berm provides both filtration and time for sediment settling by reducing the velocity of the runoff.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Maximum drainage area of 0.25 acre per 100 linear feet of berm
- Maximum 200 feet distance of flow to silt fence; 50 feet if slope exceeds 10 percent
- 1½ to 3 feet high, top width of 2 to 3 feet, and base of 3 to 5 feet for trapezoidal shaped berms
- 1 to 2 feet high and 2 to 4 feet wide for windrow (triangular) berms

ADVANTAGES / BENEFITS:

- Economical means to trap sediment
- Most effective with coarse to silty soil types
- May be tilled into the soil at end of project, thus adding organic content to the soil

DISADVANTAGES / LIMITATIONS:

- Localized flooding due to minor ponding upslope of the filter berm
- Not for use in swales or low areas where berms will be subject to concentrated flow
- Can interfere with construction operations
- Repeated clogging may require replacement of berm with another control

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Repair undercutting and other failures
- Remove sediment when before it reaches one-half the height of the berm
- Maintain dimensions of the berm by replacing organic filter material when necessary

TARGETED POLLUTANTS

- ● Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.50-0.75
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ● Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations

- *Effects of ponding on adjacent areas and property*

3.5.1 Primary Use

Organic filter berms are used as perimeter controls down slope of disturbed areas and on side slopes where stormwater may runoff the area. They are very well suited to sites with small disturbed drainage areas that are not subjected to concentrated flows and that will ultimately be seeded, sodded, or landscaped.

3.5.2 Applications

Properly designed, the organic filter berm is economical due to the ease of installation and because it can be tilled into the soil at the end of project, limiting the cost of removal and adding to the organic content of the soil. The berms are used as perimeter control devices for both development sites and linear (roadway) type projects. They are most effective with coarse to silty soil types. Additional controls, such as a passive treatment system, may be needed to remove fine silts and clay soils suspended in stormwater.

3.5.3 Design Criteria

- Filter berms are to be constructed along a line of constant elevation (along a contour line) where possible.
- Berms can interfere with construction operations; therefore planning of access routes onto the site is critical.
- Maximum drainage area shall be 0.25 acre per 100 linear feet of filter berm.
- Maximum flow to any 20 foot section of filter berm shall be 1cubic feet per second.
- Maximum distance of flow to berm shall be 200 feet or less. If the slope exceeds 10 percent the flow distance shall be less than 50 feet.
- Maximum slope adjacent to the filter berm shall be 4:1.
- Trapezoidal shaped berms should be 1½ to 3 feet high with a top width of 2 to 3 feet and a base of 3 to 6 feet wide.
- Windrow (triangular) shaped berms should be 1 to 2 feet high and 2 to 4 feet wide.
- Berm side slopes shall be 2:1 or flatter.
- Roughen the soil surface before placing the berm to increase adherence of the compost.
- Compost shall conform to the requirements for Erosion Control Compost in Item 161 of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (TxDOT 2004).
- Organic filter berms should be stabilized by seeding if there are no other sediment controls down slope of the filter berm. Seeding shall be as specified in *Section 2.9 Vegetation* at a seed loading of 1 lb. per 10 linear feet for small berms (1ft. by 2 ft.) or 2.25 lbs per 10 linear ft. for larger berms (1.5 ft. by 3 ft.)

3.5.4 Design Guidance and Specifications

Specifications for Erosion Control Compost to be used as filter material may be found in Item 161 of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (TxDOT 2004).

3.5.5 Inspection and Maintenance Requirements

Filter berms should be inspected regularly (at least as often as required by the TPDES Construction General Permit) for buildup of excess sediment, undercutting, and other failures. Silt must be removed

when before it reaches half the height of the berm. Silt may be raked from the disturbed side of the device to clean side the berm for the first few times that it becomes clogged to prevent ponding. Repeated clogging of the berm at one location will require replacement of the organic filter material or may require installation of another control to prevent failure of the berm.

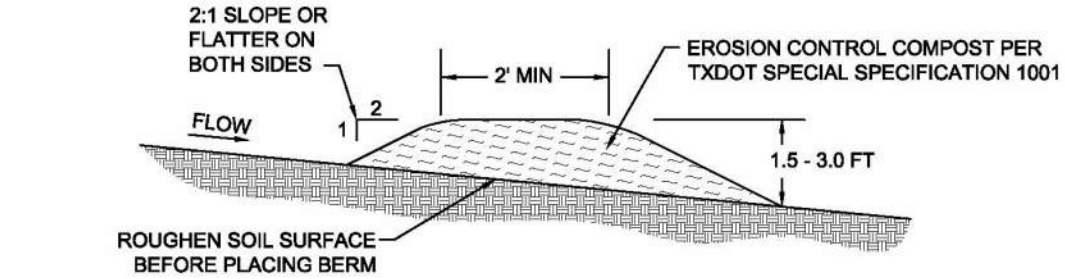
Dimensions of the berm must be maintained by replacing organic filter material when necessary. Typically excess material is stockpiled onsite for repairs to berms disturbed by construction activity.

There shall be no signs of erosion, breeching or runoff around or under the berm.

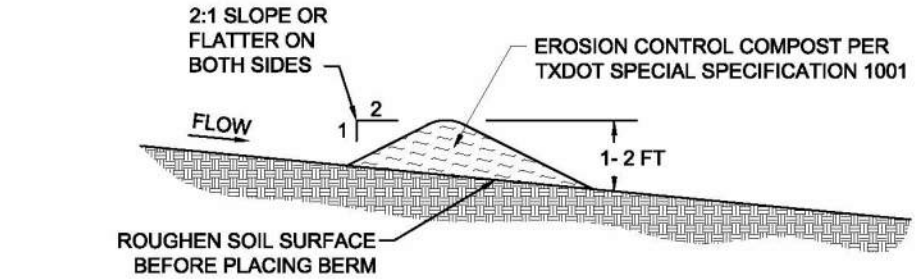
3.5.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.



TRAPEZOIDAL SHAPED ORGANIC FILTER BERM
N.T.S.



TRIANGULAR SHAPED ORGANIC FILTER BERM
N.T.S.

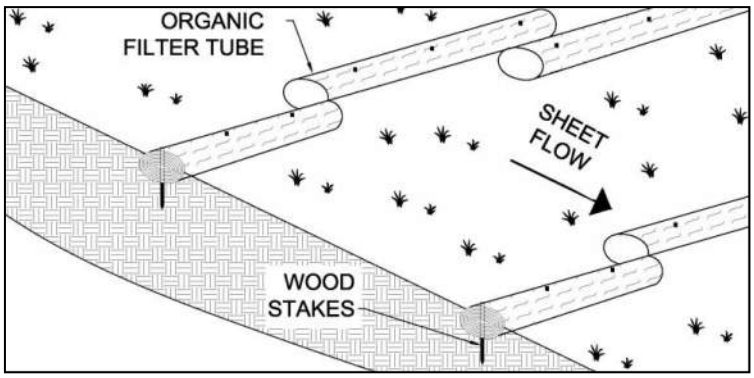
NOTE: DIMENSIONS OF THE BERM SHALL BE DESIGNED BASED ON FLOW CONDITIONS. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETERS TO DESIGN THE SWALE:

- SIZE OF CONTRIBUTING DRAINAGE AREA
- DESIGN STORM
- FLOW RATE
- BERM HEIGHT AND WIDTH

Figure 3.14 Schematics of Organic Filter Berm

3.6 Organic Filter Tubes

Sediment Control



Description: Organic filter tubes are comprised of an open weave, mesh tube that is filled with a filter material (compost, wood chips, straw, coir, aspen fiber, or a mixture of materials). The tube may be constructed of geosynthetic material, plastic, or natural materials. Organic filter tubes are also called fiber rolls, fiber logs, wattles, mulch socks, and/or coir rolls. Filter tubes detain flow and capture sediment as linear controls along the contours of a slope or as a perimeter control down-slope of a disturbed area.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Tube diameter when filled shall be specified on the plans
- 3 inch minimum embedment in soil
- 18 inch minimum overlap at ends of tubes
- Spacing based on drainage area and slope
- Must be staked on soil and secured with rockbags on pavement
- Turn ends of tube lines upslope a minimum of 10 feet

ADVANTAGES / BENEFITS:

- Effective means to treat sheet flow over a short distance
- Relatively easy to install
- May be used on steep slopes
- Can provide perimeter control on paved surfaces or where soil type prevents embedment of other controls
- Work well as perimeter controls around stockpiles

DISADVANTAGES / LIMITATIONS:

- Difficult to remove when wet and/or filled with sediment
- Relatively small effective areas for sediment capture

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Repair eroded areas underneath the organic filter tubes
- Re-align and stake tubes that are dislodged by flow
- Remove sediment before it reaches half the height of the exposed tube

TARGETED POLLUTANTS

- ● Sediment
- ○ Nutrients & Toxic Materials
- ◒ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.50-0.75
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations:

- *None*

3.6.1 Primary Use

Organic filter tubes are long, flexible controls that are used along a line of constant elevation (along a contour) on slopes. They are used as perimeter controls down slope of disturbed areas, around temporary stockpiles and on side slopes where stormwater may runoff the area. The tubes maintain sheet flow, slow velocities, and capture sediment. When used in series on slopes, they also shorten the slope length and protect the slope from erosion.

3.6.2 Applications

Organic filter tubes include a wide variety of tube and filter materials. Organic filter tubes are used as a perimeter sediment barrier, similar to silt fence, for development projects and linear projects, such as roadways and utilities. They work well on individual residential lots and on lots being re-developed, where space may be limited. Organic filter tubes are most effective with coarse to silty soil types. Additional controls may be needed to remove fine silts and clay soils suspended in stormwater.

Organic filter tubes can be used on paved surfaces where it's not possible to stake a silt fence. Applications on paved surfaces include perimeter controls for soil stockpiles, pavement repair areas, utility trenching, and building demolition. When compost filter material is used in tubes on pavement, the material has the added benefit of removing some oil and grease from stormwater runoff.

Applications on slopes include temporary sediment control during construction and erosion control of the disturbed soil on the slope. Organic filter tubes may be used to control sheet flow on slopes when final stabilization measures are being applied and established.

Organic filter tubes may also be used for inlet protection and, in limited cases, as check dams in small drainage swales. Refer to *Section 3.4 Inlet Protection* and *Section 2.1 Check Dam* for the design criteria to use organic filter tubes in these applications.

3.6.3 Design Criteria

General Criteria

- Filter tubes should be installed along the contour.
- Tubes shall be staked with 2 inch by 2 inch wooden stakes at a maximum spacing of 4 feet. Rebar or similar metal stakes may be used instead of wooden stakes.
- When placed on pavement, sand or rock bags shall be placed abutting the down-slope side of the tubes to prevent runoff from dislodging the tubes. At a minimum, bags shall be placed one foot from each end of the tube and at the middle of the tube.
- Filter tubes shall be embedded a minimum of three inches when placed on soil. Placement on rock shall be designed as placement on pavement.
- The end of tubes shall overlap a minimum of 18 inches when multiple tubes are connected to form a linear control along a contour or a perimeter.
- Loose mulch material shall be placed against the log on the upstream side to facilitate contact with the ground.
- The last 10 feet (or more) at the ends of a line of tubes shall be turned upslope to prevent bypass by stormwater. Additional upslope lengths of tubes may be needed every 200 to 400 linear feet, depending on the traverse slope along the line of tubes.
- The most common sizes of tubes are 6 to 24 inches in diameter; however, tubes are available in sizes as small as 4 inches and up to 36 inches in diameter. The designer shall specify a diameter based on the site application. Tubes less than 8 inches in diameter when filled will require more frequent maintenance if used.

- Manufactured organic filter tube products shall have documentation of a minimum 75 percent soil retention using ASTM D7351 Standard Test Method for Determination of Sediment Retention Device Effectiveness in Sheet Flow Applications.
- When using manufactured tubes, the manufacturer's recommendations for diameter and spacing based on slope, flow velocities, and other site conditions shall be followed when they are more stringent than the design criteria in this section.
- When used as a perimeter control on grades of 10:1 or less, criteria in the following table shall be used as a guide for the size and installation rate of the organic filter tube.

Table 3.1 Perimeter Control Applications*

Drainage Area (Max)	*Max Flow Length to the Tube*	*Tube Diameter (Min)*
1/3 Acre per 100 feet	145 feet	18 inches
1/4 Acre per 100 feet	110 feet	15 inches
1/5 Acre per 100 feet	85 feet	12 inches
1/8 Acre per 100 feet	55 feet	9 inches

(Source: Modified and expanded from City of Plano Fact Sheet SP-13)
*Applicable on grades of 10:1 or flatter.

- When installing organic filter tubes along contours on slopes, criteria in the following table shall be used as a general guide for size and spacing of the tubes. Actual tube diameter and spacing shall be specified by the designer. The designer shall consider the tube manufacturers recommendations, the soil type, flow volume on the slope, required performance life, and erosion control measures that may be used in conjunction with the tubes.

Table 3.2 Maximum Spacing for Slope Protection

	Tube Diameter (Min)			
Slope (H:V)	*9 Inches*	*12 Inches*	*18 Inches*	*24 Inches*
5:1 to 10:1	35 feet	40 feet	55 feet	60 feet
4:1	30 feet	40 feet	50 feet	50 feet
3:1	25 feet	35 feet	40 feet	40 feet
2:1	20 feet	25 feet	30 feet	30 feet
1:1	10 feet	15 feet	20 feet	20 feet

(Source: Modified and expanded from Iowa Statewide Urban Design and Specifications Standards for Filter Socks)

Tube Material

- The designer shall specify the type of mesh based on the required life of the tube. At a minimum, the mesh shall have a rated life of one year under field conditions.
- If the tubes will be left onsite as part of the final stabilization, they must be constructed of 100 percent biodegradable jute, coir, sisal or similar natural fiber or 100 percent UV photodegradable plastic, polyester or geosynthetic material.
- Mesh tubes may be oval or round in cross-section.
- Mesh for the tubes shall be open and evenly woven. Size of weave openings shall be specified based on filter material. Openings may range from ½ inch for Erosion Control Compost to 2 inches for straw and coir.
- Mesh openings should not exceed ½ inch in diameter.

Filter Material

- Different filter materials have different properties and will affect sheet flow differently. The designer shall specify the type of material to be used (or excluded) on a particular site.
- Straw filter material shall be Certified Weed Free Forage. The straw must be in good condition, air-dried, and not rotten or moldy.
- Compost shall conform to the requirements for Erosion Control Compost in Item 161 of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (TxDOT 2004).
- Compost may provide some oil and grease removal; however, the large percentage of fines in compost will result in less filtering and more ponding of stormwater.
- Wood chips shall be 100 percent untreated chips and free of inorganic debris, such as plastic, glass, metal, etc. Wood chip size shall not be smaller than 1 inch and shall not exceed 3 inches in diameter. Shavings shall not be more than 5% of the total mass.

3.6.4 Design Guidance and Specifications

Specifications for Erosion Control Compost to be used as filter material may be found in Item 161 of the Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges (TxDOT 2004).

3.6.5 Inspection and Maintenance Requirements

Organic filter tubes should be inspected regularly (at least as often as required by the TPDES Construction General Permit). The filter tube should be checked to ensure that it is in continuous contact with the soil at the bottom of the embedment trench. Closely check for rill erosion that may develop under the filter tubes. Eroded spots must be repaired and monitored to prevent reoccurrence. If erosion under the tube continues, additional controls are needed.

Staking shall be checked to ensure that the filter tubes are not moving due to stormwater runoff. Repair and re-stake slumping filter tubes. Tubes that are split, torn or unraveling shall be repaired or replaced.

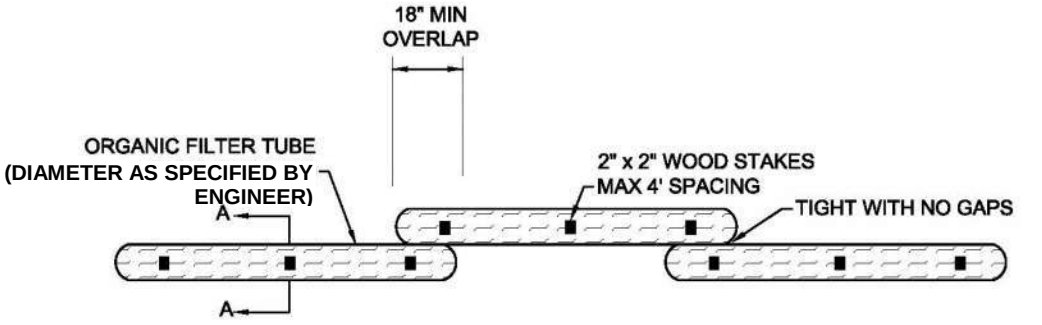
Check the filter tube material to make sure that it has not become clogged with sediment or debris. Clogged filter tubes usually lead to standing water behind the filter tube after the rain event. Sediment shall be removed from behind the filter tube before it reaches half the height of the exposed portion of the tube.

When sediment control is no longer needed on the site, the tubes may be split open and the filter material may be used for mulching during establishment of vegetation for final stabilization if it meets the criteria in *Section 2.5 Mulching*.

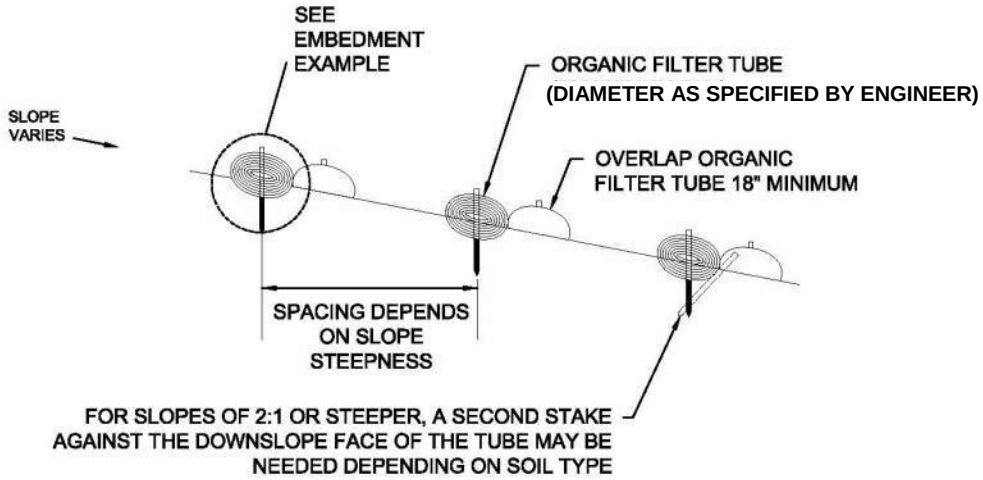
3.6.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.



ORGANIC FILTER TUBE PERIMETER CONTROL PLAN VIEW
N.T.S.



ORGANIC FILTER TUBE SLOPE PROTECTION PROFILE
N.T.S.

NOTES:

1. TYPE OF NETTING, FILTER MATERIAL, DIAMETER OF TUBE, AND SPACING OF TUBES SHALL BE SPECIFIED BY THE DESIGNER BASED ON THE FOLLOWING SITE PARAMETERS.
   - SIZE OF CONTRIBUTING DRAINAGE AREA
   - STEEPNESS OF SLOPE
   - GROUND CONDITIONS (SOIL OR PAVEMENT)
2. DESIGNER SHALL SHOW ON THE DRAWINGS THE LOCATIONS WHERE TUBES ARE TO BE TURNED UPSLOPE. UPSLOPE LENGTHS SHALL BE MINIMUM OF 10 FEET.

Figure 3.15 Schematics of Organic Filter Tubes

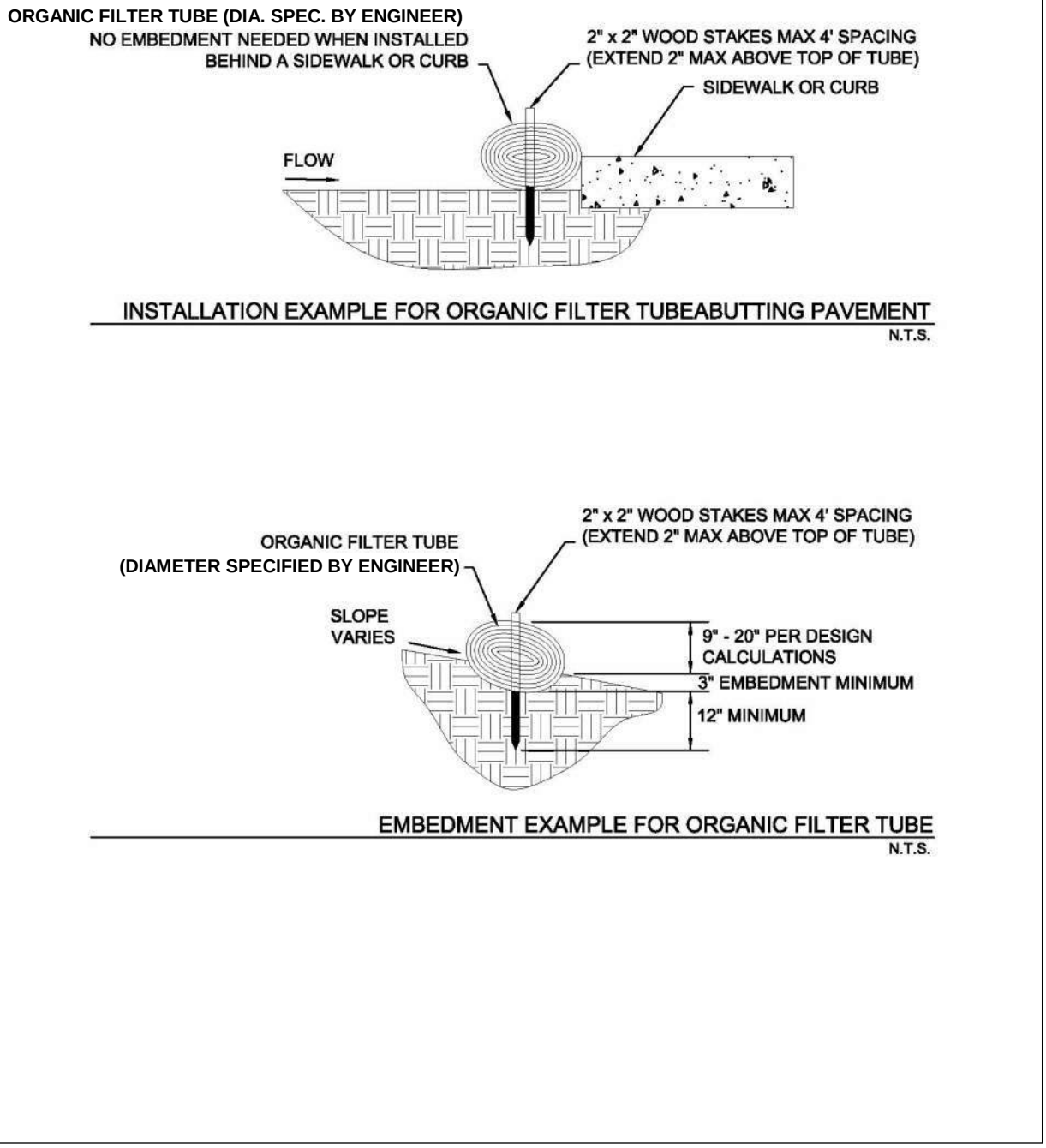
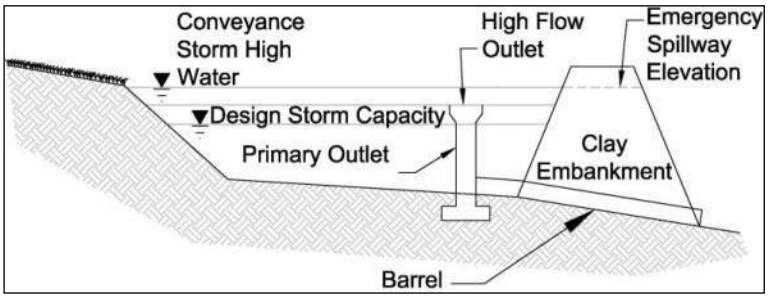


Figure 3.16 Examples of Organic Filter Tube Installation Methods

3.9 Sediment Basin

Sediment Control



Description: A sediment basin is an embankment with a controlled outlet that detains stormwater runoff, resulting in the settling of suspended sediment. The basin provides treatment for the runoff as well as detention and controlled release of runoff, decreasing erosion and flood impacts downstream.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Minimum 4:1 length to width ratio
- Maximum embankment height and storage capacity limited by TCEQ requirements
- Minimum dewatering time of 36 hours
- Safely pass 25-year, 24-hour storm event without structure damage

ADVANTAGES / BENEFITS:

- Effective at removing suspended sand and loam
- May be both a temporary and permanent control
- Can be used in combination with passive treatment

DISADVANTAGES / LIMITATIONS:

- Effectiveness depends on type of outlet
- Limited effectiveness in removing fine silt and clay
- May require a relatively large portion of the site
- Storm events that exceed the design storm event may damage the structure and cause downstream impacts

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Remove obstructions from discharge structures
- Remove sediment and re-grade basin when storage capacity reduced by 20 percent

TARGETED POLLUTANTS

- ● Sediment
- ◒ Nutrients & Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control

Slope Protection

Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.50-0.90
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ● Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes > 5%

Other Considerations:

- *Public safety*
- *Mosquito breeding habitat*
- *Requires comprehensive planning and design*

3.9.1 Primary Use

Sediment basins should be used for all sites with adequate open space for a basin and where the site topography directs a majority of the site drainage to one point. Sediment basins are necessary as either temporary or permanent controls for sites with disturbed areas of 10 acres and larger that are part of a common drainage area unless specific site conditions limit their use.

3.9.2 Applications

Sediment basins serve as treatment devices that can be used on a variety of project types. They are normally used in site development projects in which large areas of land are available for the basin, a minor stream or off-line drainage way crosses the site, or a specific water feature is planned for the site. Sediment basins are highly effective at reducing sediment and other pollutants for design storm conditions. Sediment basins are typically easier to maintain than other structural controls (e.g. silt fences, etc).

A sediment basin by itself does not typically remove a sufficient percentage of fine silts and clays to be an effective sediment barrier. Table 3.3 provides a summary of sediment basin effectiveness based on soil type.

Table 3.3 Sediment Basin Effectiveness for Different Soil Types

Soil Type	*Runoff Potential*	*Settling Rate*	*Sediment Basin Effectiveness*	*Efficiency Rating (Fe)*
Sand	Low	High	High	0.90
Sandy Loam	Low	High	High	0.90
Sandy Silt Loam	Moderate	Moderate	Moderate	0.75
Silt Loam	Moderate	Moderate	Moderate	0.75
Silty Clay Loam	Moderate	Low	Low	0.75
Clay Loam	Great	Low	Low	0.50
Clay	Great	Low	Low	0.50

(Source: Michigan Department of Environmental Quality Soil Erosion and Sedimentation Control Training Manual)

When the disturbed area contains a high percentage of fine silt or clay soil types, the sediment basin may be used with a passive or active treatment system to remove these finer suspended solids. Design criteria may be found in *Section 3.1 Active Treatment System* and *Section 3.7 Passive Treatment System*.

3.9.3 Design Criteria

Texas Administrative Code Title 30, Chapter 299 (30 TAC 299), Dams and Reservoirs, contains specific requirements for dams that:

- Have a height greater than or equal to 25 feet and a maximum storage capacity greater than or equal to 15 acre-feet; or
- Have a height greater than six feet and a maximum storage capacity greater than or equal to 50 acre feet.

If the size of the detention basin meets or exceeds the above applicability, the design must be in accordance with state criteria, and the final construction plans and specifications must be submitted to the TCEQ for review and approval.

The following design criteria are for temporary sediment basins that are smaller than the TCEQ thresholds. The sediment basin shall be designed by a licensed engineer in the State of Texas. The criteria and schematics are the minimum and, in some cases, only concept level. It is the responsibility of the engineer to design and size the embankment, outfall structures, overflow spillway, and downstream

energy dissipaters and stabilization measures. Alternative designs may be acceptable if submitted to the reviewing municipality with supporting design calculations.

Sediment Basin Location and Planning

- Design of the sediment basin should be coordinated with design of the permanent drainage infrastructure for the development.
- The basin shall not be located within a mapped 100-year floodplain unless its effects on the floodplain are modeled, and the model results are approved by the reviewing municipality.
- Basins shall not be located on a live stream that conveys stormwater from upslope property through the construction site.
- Basins may be located at the discharge point of a drainage swale that collects runoff from construction activities, or the basin may be located off-channel with a swale or dike constructed to divert runoff from disturbed areas to the basin. Design criteria for these controls are in *Section 2.2 Diversion Dike* and *Section 2.4 Interceptor Swale*.
- Sediment basins must be designed, constructed, and maintained to minimize mosquito breeding habitats by minimizing the creation of standing water.
- Temporary stabilization measures should be specified for all areas disturbed to create the basin.

Basin Size

- Minimum capacity of the basin shall be the calculated volume of runoff from a 2-year, 24-hour duration storm event plus sediment storage capacity of at least 1,000 cubic feet.
- The basin must be laid out such that the effective flow length to width ratio of the basin is a minimum of 4:1. Settling efficiencies are dependent on flow velocity, basin length, and soil type. Smaller particle sizes require slower velocities and longer basins. Basin dimensions should be designed based on flow velocities and anticipated particle sizes.
- Stoke's equation for settling velocities, as modified to Newton's equation for turbulent flow, may be used to estimate length required based on depth of the basin.

  Settling Velocity (ft/s) = 1.74 $[(\rho_p - \rho)gd/\rho]^{1/2}$ **(3.1)**

  Where:

  ρ_p = density of particles (lb/ ft^3)

  ρ = density of water (lb/ft^3)

  g = gravitational acceleration (ft/s^2)

  d = diameter of particles (ft)
- The effective length of sediment basins may be increased with baffles. Baffles shall be spaced at a minimum distance of 100 feet. Spacing should be proportional to the flow rate, with greater spacing for higher flow rates. Check the flow velocity in the cross section created by the baffles to ensure settling will occur.
- Baffles may be constructed by using excavated soil to create a series of berms within the basin; however, porous baffles are recommended. Porous baffles may consist of coir fiber, porous geotextiles, porous turbidity barriers, and similar materials. Porous materials disrupt the flow patterns, decrease velocities, and increase sedimentation.
- Basins have limited effectiveness on suspended clay soil particles. The basin's length to width ratio typically should be 10:1 to effectively remove suspended clay particles. The use of passive treatment systems can significantly reduce this ratio and improve removal rates. Criteria are in *Section 3.7 Passive Treatment System*.

Embankment

- Top width shall be determined by the engineer based on the total height of the embankment as measured from the toe of the slope on the downstream side.
- Embankment side slopes shall be 3:1 or flatter.
- The embankment shall be constructed with clay soil, minimum Plasticity Index of 30 using ASTM D4318 Standard Test for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- Clay soil for the embankment shall be placed in 8 inch lifts and compacted to 95 percent Standard Proctor Density at optimum moisture content using ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort.
- The embankment should be stabilized with rock riprap or temporary vegetation.

Outlet and Spillway

- The primary outlet shall have a minimum design dewatering time of 36 hours for the temporary control design storm (2-year, 24-hour).
- Whenever possible, the outlet shall be designed to drain the basin in less than 72 hours to minimize the potential for breeding mosquitoes.
- The basin's primary outlet and spillway shall be sized to pass the difference between the conveyance storm (25-year, 24-hour) and the temporary control design storm without causing damage to the embankment and structures.
- Unless infeasible, the primary outlet structure should withdraw water from the surface of the impounded water. Outlet structures that do this include surface skimmers, solid risers (non-perforated), flashboard risers, and weirs.
- Surface skimmers use a floating orifice to discharge water from the basin. Skimmers have the advantage of being able to completely drain the detention basin. Skimmers typically result in the greatest sediment removal efficiency for a basin, because they allow for a slower discharge rate than other types of surface outlets. Due to this slower discharge rate, a high flow riser may still be needed to discharge the conveyance storm if a large enough spillway is not feasible due to site constraints.
- Discharge rates for surface skimmers are dependent on the orifice configuration in the skimmer. Use manufacturer's flow rate charts to select the skimmer based on the flow rate needed to discharge the design storm from the basin within a selected time period (i.e. Q=Volume/time).
- Risers shall be designed using the procedures in *Section 3.9.7 Design Procedures*.
- Weir outlets should be designed using the guidance in *Section 2.2.2 of the Hydraulics Technical Manual*.
- Use of overflow risers and weirs result in a pool of water that should be accounted for in the design capacity of the basin. These outlet structures are good options when the temporary sediment basin will be retained as a permanent site feature upon completion of construction. If the basin is temporary and standing water is not acceptable during construction, the construction plans shall include procedures for dewatering the basin following criteria in *Section 3.3 Dewatering Controls*.
- Flashboard risers function like an overflow riser pipe, but they contain a series of boards that allow for adjustment of the pool level. The boards may be removed for draining the basin to a lower level. However, this operation can be difficult and a safety hazard when done manually.
- A perforated riser may be used as an outlet when surface discharge is not feasible. A perforated rise has the advantage of dewatering the basin; however, it also results in the lowest sediment removal efficiency. Perforated risers provide a relatively rapid drawdown of the pool, and they discharge water from the entire water column, resulting in more suspended sediment being discharged than with a surface outlet.

- Size and spacing of the orifices on a perforated riser shall be designed to provide the minimum detention time while allowing for the drawdown of detained water.
- Gravel (1½ to 3 inches) may be placed around the perforated riser to aid sediment removal, particularly the removal of fine soil particles, and to keep trash from plugging the perforations. The gravel is most effective when the basin will be used for less than a year. When installed for longer periods of time, the gravel may become clogged with fine sediments and require cleaning while submerged.
- The outlet of the outfall pipe (barrel) shall be stabilized with riprap or other materials designed using the conveyance storm flow rate and velocity. Velocity dissipation measures shall be used to reduce outfall velocities in excess of 5 feet per second.
- The outfall pipe through the embankment shall be provided with anti-seep collars connected to the exterior of the pipe section or at a normal joint of the pipe material. The anti-seep collar material shall be compatible with the pipe material used and shall have a watertight bond to the exterior of the pipe section. The size and number of collars shall be selected by the designer in accordance with the following formula and table:

  Collar Outside Dimension = X + Diameter of pipe in feet

  Example: Pipe Length = 45 feet
  Barrel Pipe Diameter = 12 inches = 1 foot
  2 anti-seep collars

  Anti-seep Collar Dimensions:
  3.4 feet (from table) + 1.0 foot (Pipe dia.) = 4.4 feet
  Use 2 anti-seep collars each being 4.4 feet square or 4.4 feet diameter if round.

Table 3.4 Number and Spacing of Anti-Seep Collars

	X Values - Feet			
Pipe Length	*Number of Anti-Seep Collars*			
	1	**2**	**3**	**4**
40	6.0	3.0		
45	6.8	3.4		
50	7.5	3.8	2.5	
55		4.2	2.8	
60		4.5	3.0	
65		4.9	3.3	
70		5.3	3.5	2.6
75		5.6	3.8	2.8
80		6.0	4.0	3.0

- Risers used to discharge high flows shall be equipped with an anti-vortex device and trash rack.
- Spillways shall be constructed in undisturbed soil material (not fill) and shall not be placed on the embankment that forms the basin.

3.9.4 Design Guidance and Specifications

Design guidance for temporary sediment basins is in *Section 3.9.7 Design Procedures*. Criteria for sediment basins that will become permanent detention basins are in *Section 3.6.3 of the iSWM Criteria Manual*. Additional design guidance for different types of outlet structures is in *Section 2.2 of the Hydraulics Technical Manual*.

No specification for construction of this item is currently available in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments.

3.9.5 Inspection and Maintenance Requirements

Sediment basins should be inspected regularly (at least as often as required by the TPDES Construction General Permit) to check for damage and to insure that obstructions are not diminishing the effectiveness of the structure. Sediment shall be removed and the basin shall be re-graded to its original dimensions when the sediment storage capacity of the impoundment has been reduced by 20 percent. The removed sediment may be stockpiled or redistributed onsite in areas that are protected by erosion and sediment controls.

Inspect temporary stabilization of the embankment and graded basin and the velocity dissipaters at the outlet and spillway for signs of erosion. Repair any eroded areas that are found. Install additional erosion controls if erosion is frequently evident.

3.9.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. Dimensions of the sediment basin, embankment, and appurtenances shall be designed by an engineer licensed in the State of Texas. Construction drawings submitted to the municipality for review shall include, but are not limited to, the following information and supporting calculations.

- Embankment height, side slopes and top width.
- Dimensions of the skimmer, riser, weir or other primary outlet.
- Diameter of outfall pipe (barrel).
- Pool elevation for the temporary control design storm and conveyance storm.
- Outfall pipe flow rate and velocity for the temporary control design storm and conveyance storm.
- Spillway cross section, slope, flow rate, and velocity for the conveyance storm.
- Depth, width, length, and mean stone diameter for riprap apron or other velocity dissipation device at the outfall pipe and spillway discharge points.

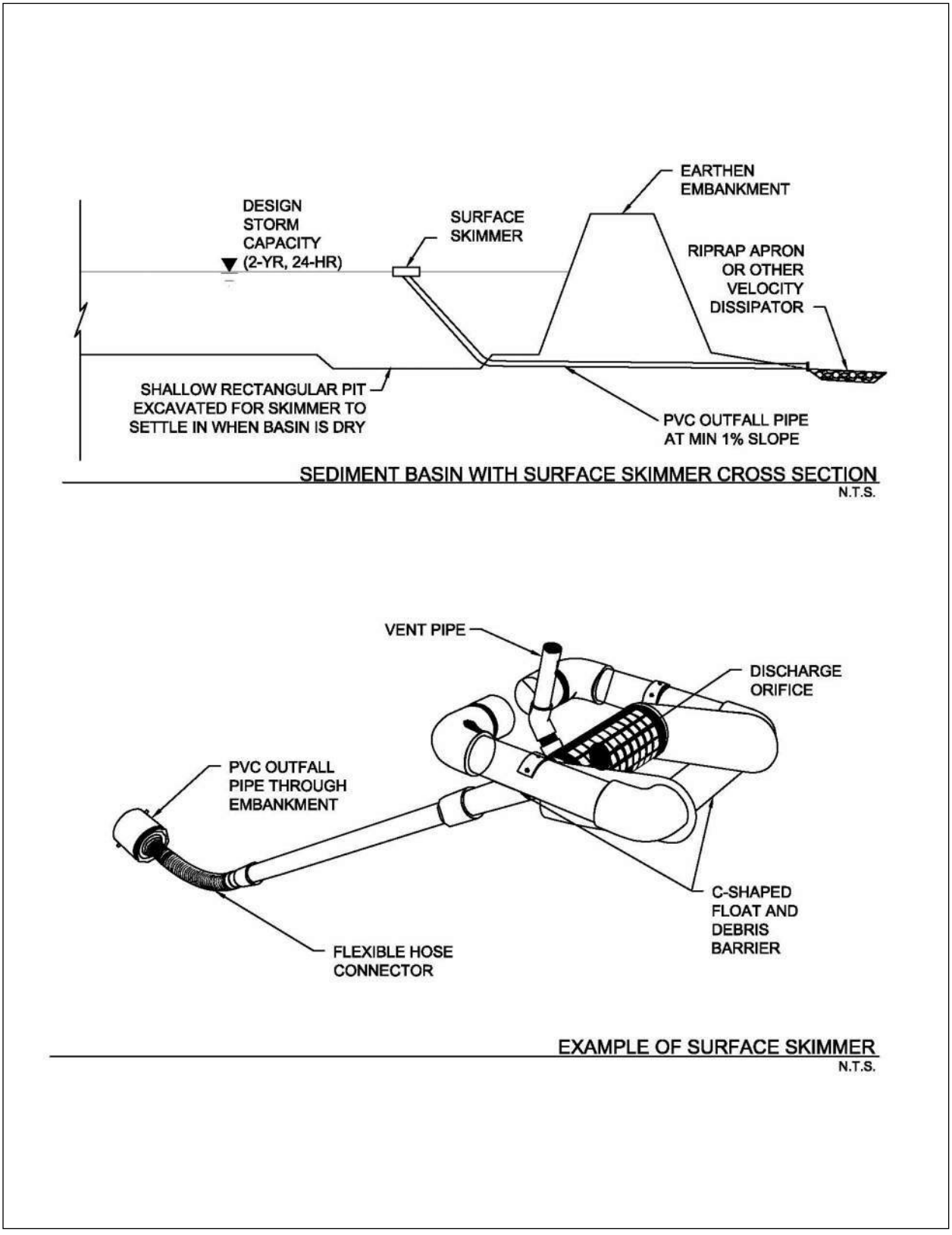


Figure 3.19 Schematics of Sediment Basin with Surface Skimmer
(Source: J.W. Faircloth & Son, Inc.)

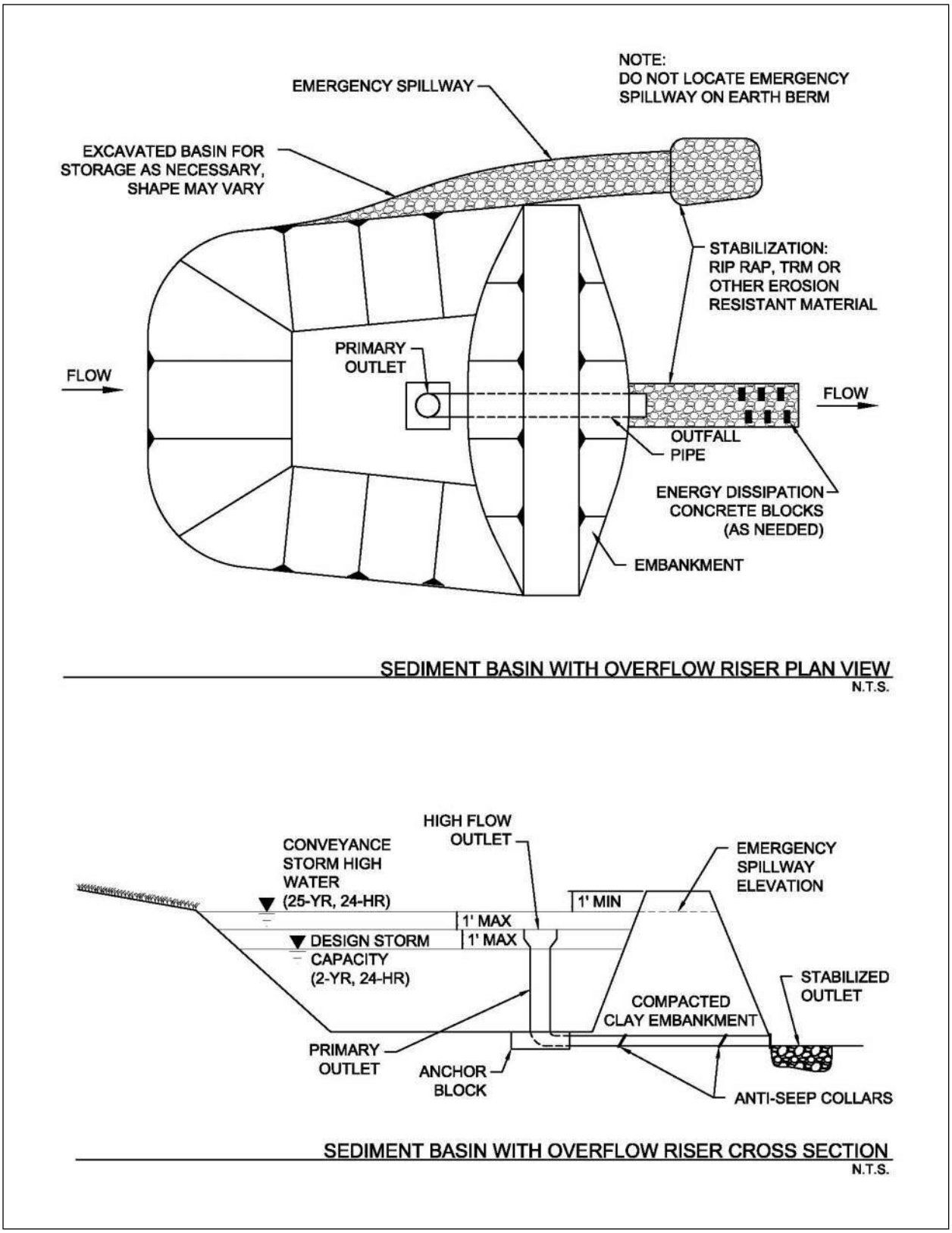


Figure 3.20 Schematics of Sediment Basin with Overflow Riser

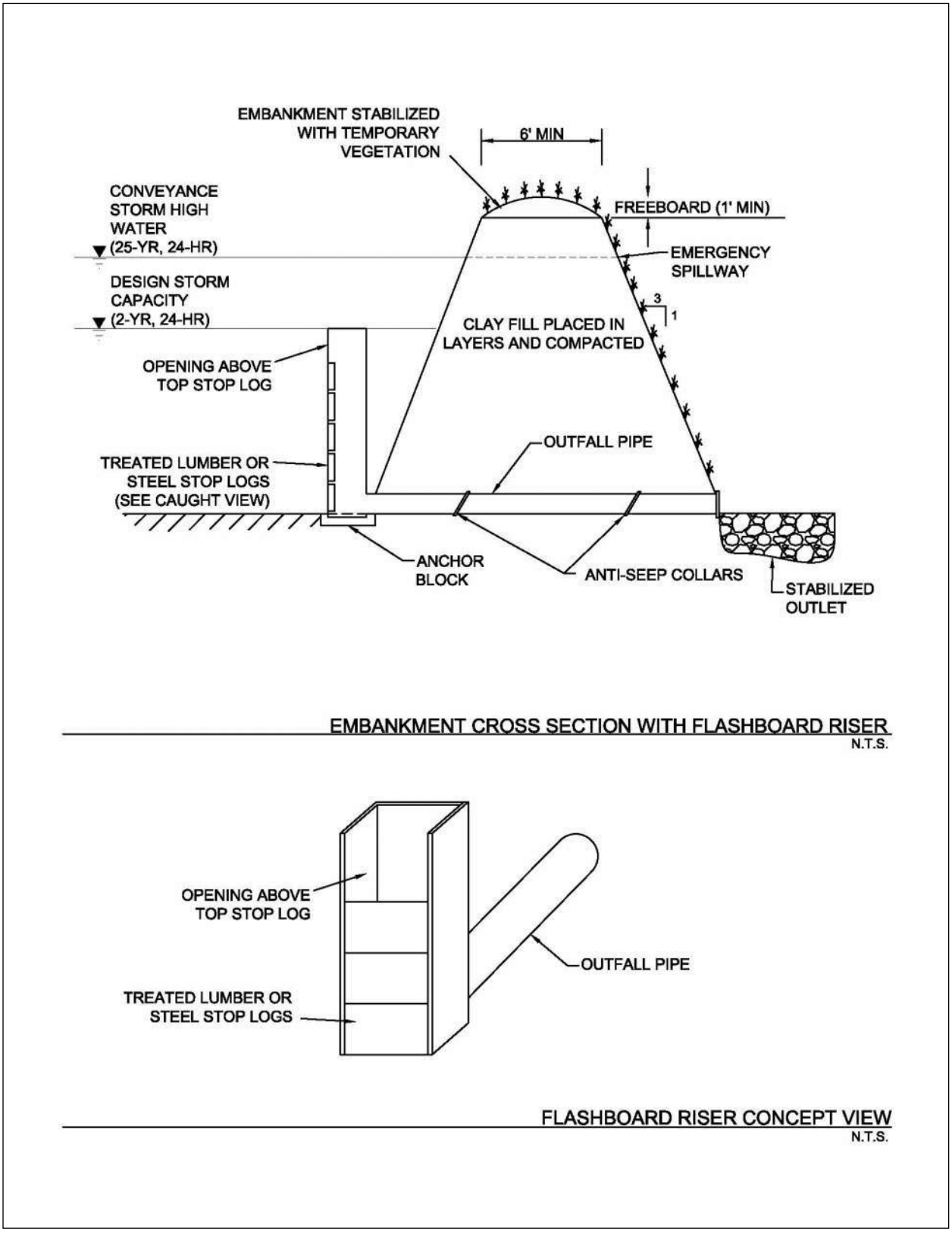


Figure 3.21 Schematics of Basin Embankment with Flashboard Riser

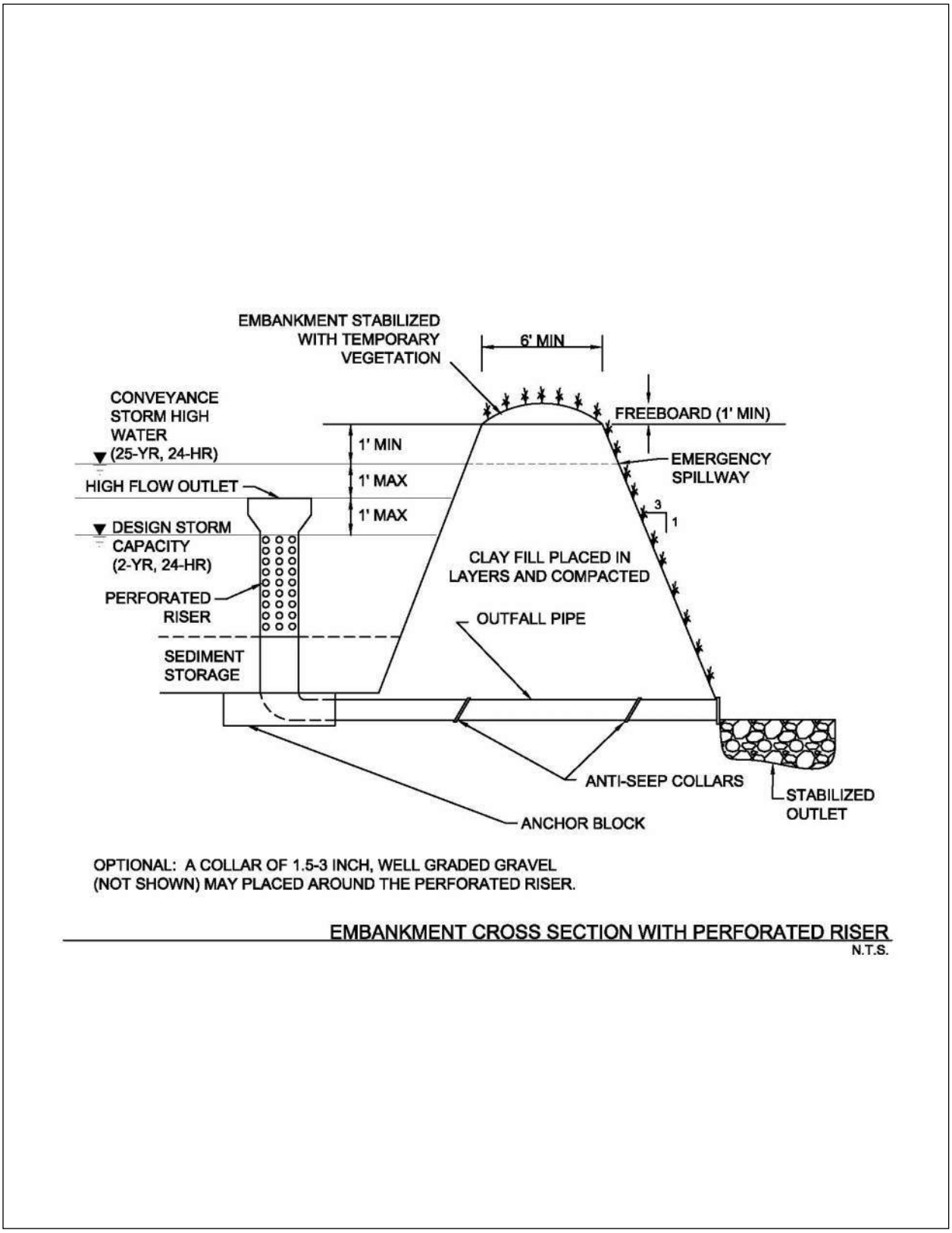


Figure 3.22 Schematic of Basin Embankment with Perforated Riser

3.9.7 Design Procedures

The following procedures provide a step-by-step method for the design of a temporary sediment basin that is smaller than the TCEQ thresholds for state requirements to apply. Criteria in *Section 3.8 of the iSWM Criteria Manual* should be used for the design of permanent basins (dry detention/extended dry detention) and stormwater ponds. *Section 3.9.8 Design Form* should be used to document the design values calculated for the temporary sediment basin.

These design procedures are provided as an example of the steps required to design a temporary sediment basin and are based on a specific type of primary outlet. When designing a sediment basin for a construction site, it's the engineer's responsibility to select the type of outlet that is appropriate based on criteria in the preceding sections and to modify the following procedures as needed to use appropriate calculations for the selected outlet, particularly in Steps 12, 13, and 14.

Step 1 Determine the required basin volume.

The basin volume shall be the calculated volume of runoff from the temporary control design storm (2-year, 24-hour) from each disturbed acre draining to the basin. When rainfall data is not available, a design volume of 3600 cubic feet of storage per acre drained may be used.

For a natural basin, the storage volume may be approximated as follows:

$$V_1 = 0.4 \times A_1 \times D_1 \qquad (3.2)$$

where:

V_1 = the storage volume in cubic feet

A_1 = the surface area of the flooded area at the crest of the basin outlet, in square feet

D_1 = the maximum depth in feet, measured from the low point in the basin to the crest of the basin riser

Note 1: The volumes may be computed from more precise contour information or other suitable methods.

Note 2: Conversion between cubic feet and cubic yards is as follows:

Number of cubic feet x 0.037 = number of cubic yards

If the volume of the basin is inadequate or embankment height becomes excessive, pursue the use of excavation to obtain the required volume.

Step 2 Determine the basin shape.

The shape of the basin must be such that the length-to-width ratio is at least 4 to 1 according to the following equation:

$$\text{Length-to-width Ratio} = \frac{L}{We} \qquad (3.3)$$

where:

We = A/L = the effective width

A = the surface area of the normal pool

L = the length of the flow path from the inflow to the outflow. If there is more than one inflow point, any inflow that carries more than 30 percent of the peak rate of inflow must meet these criteria.

The correct basin length can be obtained by proper site selection, excavation, or the use of baffles. Baffles increase the flow length by interrupting flow and directing it through the basin in a circuitous path to prevent short-circuiting. Porous baffles are recommended. Spacing of baffles should be wide enough to not cause a channeling effect within the basin. Analyze the

flow cross section and velocity between baffles to ensure that velocities are not too fast for settling to occur.

Step 3 Design the embankment.

The side slopes of the embankment should be 3:1 or flatter.

Top width shall be determined by the engineer based on the total height of the embankment.

The area under the embankment should be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots, or other objectionable materials. The pool area should also be cleared of all brush and trees.

The embankment fill material should be clay soil from an approved borrow area. It should be clean soil, free from roots, woody vegetation, oversized stones, and rocks.

Step 4 Select the type(s) of outlet(s).

The outlets for the basin may consist of a combination of a primary outlet and emergency spillway or a primary outlet alone. In either case, the outlet(s) must pass the peak runoff expected from the drainage area for the conveyance storm (25-year, 24-hour) without damage to the embankment, structures, or basin.

Step 5 Determine whether the basin will have a separate emergency spillway.

A side channel emergency spillway is required for sediment basins receiving stormwater from more than 10 acres.

Step 6 Determine the elevation of the crest of the basin outlet riser for the required volume.

Step 7 Estimate the elevation of the conveyance storm and the required height of the dam.

(a) If an emergency spillway is included, the crest of the basin outlet riser must be at least 1.0 foot below the crest of the emergency spillway.

(b) If an emergency spillway is included, the elevation of the peak flow through the emergency spillway (which will be the design high water for the conveyance storm) must be at least 1.0 foot below the top of embankment.

(c) If an emergency spillway is not included, the crest of the basin outlet riser must be at least 3 feet below the top of the embankment.

(d) If an emergency spillway is not included, the elevation of the design high water for the conveyance storm must be 2.0 feet below the top of the embankment.

Step 8 Determine the peak rate of runoff for a 25-year storm.

Using SCS TR 55 Urban Hydrology for Small Watersheds or other methods, determine the peak rate of runoff expected from the drainage area of the basin for the conveyance storm. The "C" factor or "CN" value used in the runoff calculation should be derived from analysis of the contributing drainage area at the peak of land disturbance (condition which will create greatest peak runoff).

Step 9 Design the basin outlet.

(a) If an emergency spillway is included, the basin outfall must at least pass the peak rate of runoff from the basin drainage area for the temporary control design storm (2-year, 24-hour).

Q_p = the 2-year peak rate of runoff.

(b) If an emergency spillway is not included, the basin outfall must pass the peak rate of runoff from the basin drainage area for the conveyance storm (25-year, 24-hour).

Q_{25} = the 25-year peak rate of runoff.

(c) Refer to Figure 3.23, where h is the difference between the elevation of the crest of the basin outlet riser and the elevation of the crest of the emergency spillway.

(d) Enter Figure 3.24 with Q_p. Choose the smallest riser which will pass the required flow with the available head, h.

(e) Refer to Figure 3.23, where H is the difference in elevation of the centerline of the outlet of the outfall and the crest of the emergency spillway. L is the length of the barrel through the embankment.

(f) Enter Table 3.5 or Table 3.6 with H. Choose the smallest size outlet that will pass the flow provided by the riser. If L is other than 70 feet, make the necessary correction.

(g) The basin riser shall consist of a solid (non-perforated), vertical pipe or box of corrugated metal joined by a watertight connection to a horizontal pipe (outfall) extending through the embankment and discharging beyond the downstream toe of the fill. Another approach is to utilize a perforated vertical riser section surrounded by filter stone.

(h) The basin outfall, which extends through the embankment, shall be designed to carry the flow provided by the riser with the water level at the crest of the emergency spillway. The connection between the riser and the outfall must be watertight. The outlet of the outfall must be protected to prevent erosion or scour of downstream areas.

(i) Weirs, skimmers and other types of outlets may be used if accompanied with appropriate calculations.

Step 10 Design the emergency spillway.

(a) The emergency spillway must pass the remainder of the 25-year peak rate of runoff not carried by the basin outlet.

(b) Compute: $Q_e = Q_{25} - Q_p$

(c) Refer to Figure 3.25 and Table 3.7.

(d) Determine approximate permissible values for b, the bottom width; s, the slope of the exit channel; and X, minimum length of the exit channel.

(e) Enter Table 3.7 and choose the exit channel cross-section which passes the required flow and meets the other constraints of the site.

(f) Notes:

1. The maximum permissible velocity for vegetated waterways must be considered when designing an exit channel.

2. For a given Hp, a decrease in the exit slope from S as given in the table decreases spillway discharge, but increasing the exit slope from S does not increase discharge. If an exit slope (Se) steeper than S is used, then the exit should be considered an open channel and analyzed using the Manning's Equation.

3. Data to the right of heavy vertical lines should be used with caution, as the resulting sections will be either poorly proportioned or have excessive velocities.

(g) The emergency spillway should not be constructed over fill material.

(h) The emergency spillway should be stabilized with rock riprap or temporary vegetation upon completion of the basin.

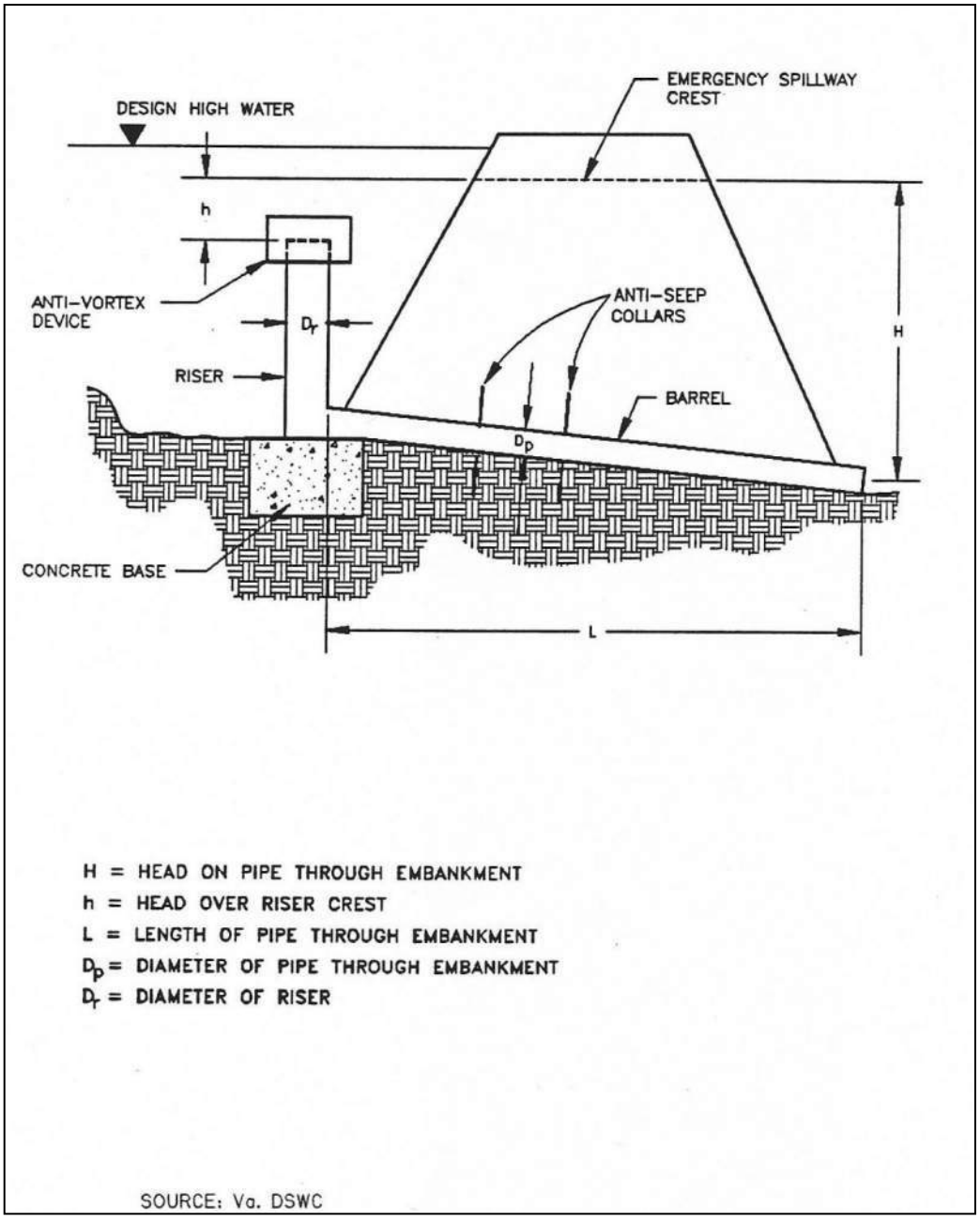


Figure 3.23 Example of Basin Outlet Design

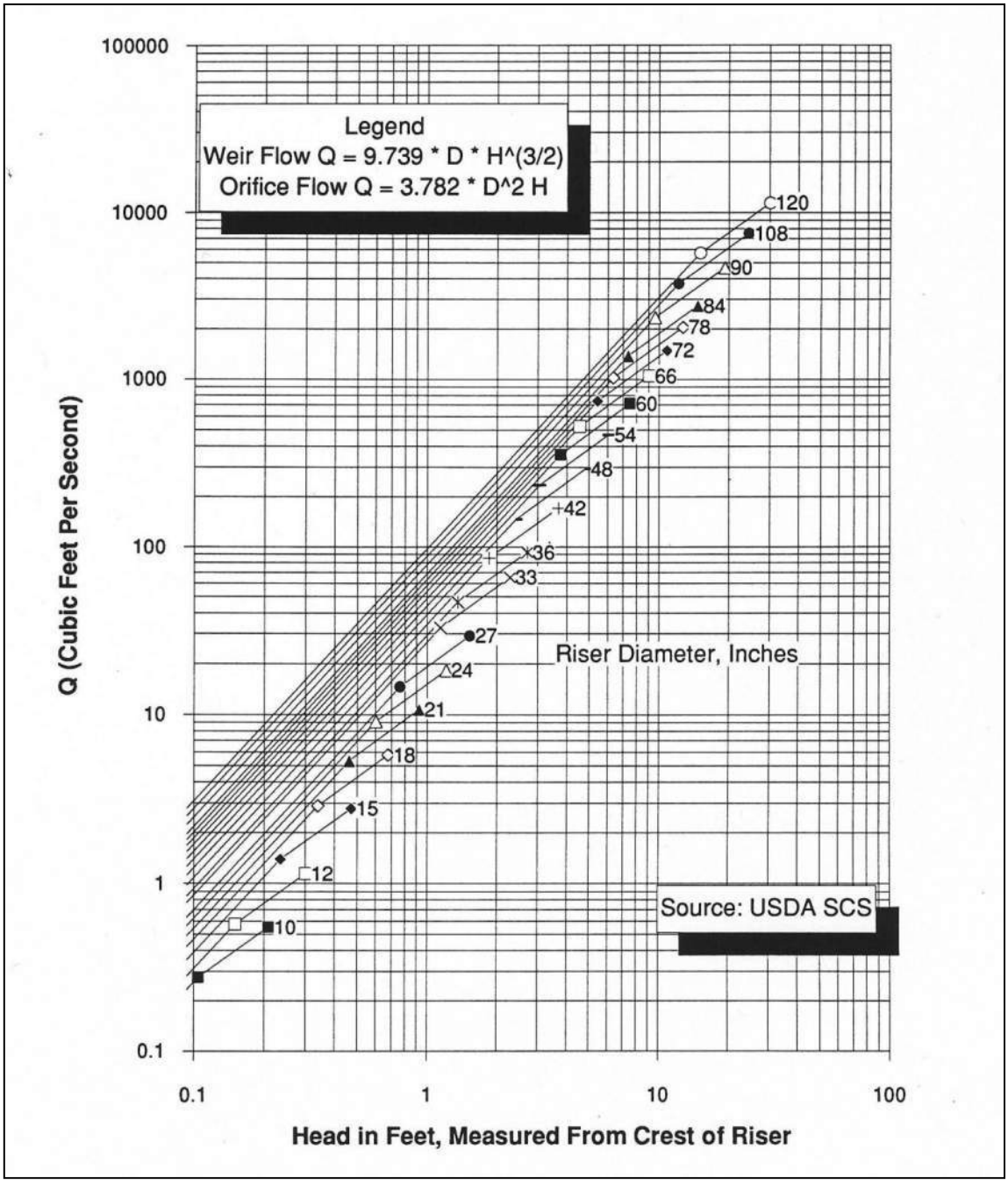
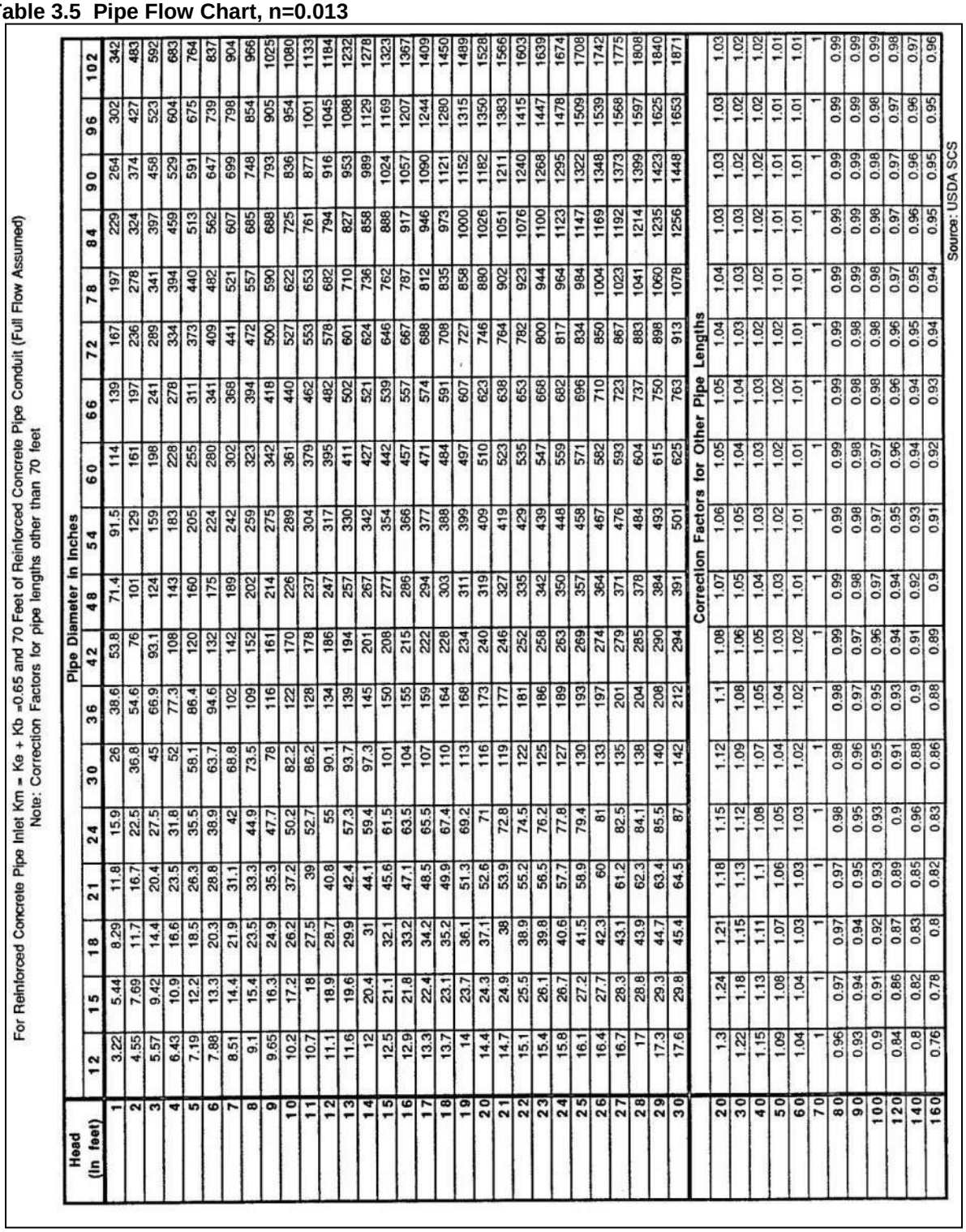


Figure 3.24 Riser Inflow Curves for Basin Outlet Design

Table 3.5 Pipe Flow Chart, n=0.013

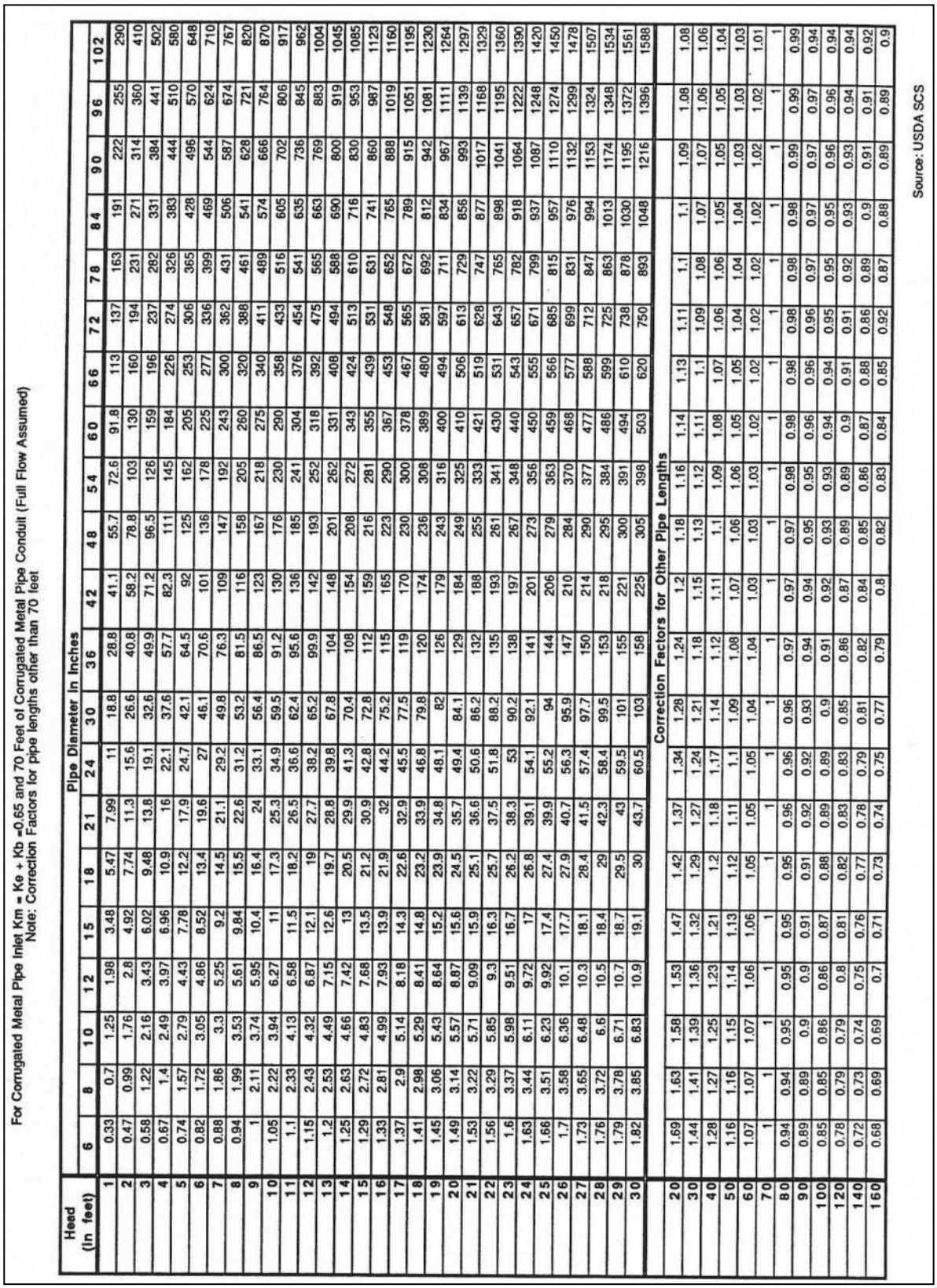


For Reinforced Concrete Pipe Inlet Km = Ke + Kb =0.65 and 70 Feet of Reinforced Concrete Pipe Conduit (Full Flow Assumed)
Note: Correction Factors for pipe lengths other than 70 feet

Head (in feet)	Pipe Diameter in Inches																	
	12	15	18	21	24	30	36	42	48	54	60	66	72	78	84	90	96	102
1	3.22	5.44	8.29	11.8	15.9	26	38.6	53.8	71.4	91.5	114	139	167	197	229	264	302	342
2	4.55	7.69	11.7	16.7	22.5	36.8	54.6	76	101	129	161	197	236	278	324	374	427	483
3	5.57	9.42	14.4	20.4	27.5	45	66.9	93.1	124	159	198	241	289	341	397	458	523	592
4	6.43	10.9	16.6	23.5	31.8	52	77.3	108	143	183	228	278	334	394	459	529	604	683
5	7.19	12.2	18.5	26.3	35.5	58.1	86.4	120	160	205	255	311	373	440	513	591	675	764
6	7.88	13.3	20.3	28.8	38.9	63.7	94.6	132	175	224	280	341	409	482	562	647	739	837
7	8.51	14.4	21.9	31.1	42	68.8	102	142	189	242	302	368	441	521	607	699	798	904
8	9.1	15.4	23.5	33.3	44.9	73.5	109	152	202	259	323	394	472	557	685	748	854	966
9	9.65	16.3	24.9	35.3	47.7	78	116	161	214	275	342	418	500	590	688	793	905	1025
10	10.2	17.2	26.2	37.2	50.2	82.2	122	170	226	289	361	440	527	622	725	836	954	1080
11	10.7	18	27.5	39	52.7	86.2	128	178	237	304	379	462	553	653	761	877	1001	1133
12	11.1	18.9	28.7	40.8	55	90.1	134	186	247	317	395	482	578	682	794	916	1045	1184
13	11.6	19.6	29.9	42.4	57.3	93.7	139	194	257	330	411	502	601	710	827	953	1088	1232
14	12	20.4	31	44.1	59.4	97.3	145	201	267	342	427	521	624	736	858	989	1129	1278
15	12.5	21.1	32.1	45.6	61.5	101	150	208	277	354	442	539	646	762	888	1024	1169	1323
16	12.9	21.8	33.2	47.1	63.5	104	155	215	286	366	457	557	667	787	917	1057	1207	1367
17	13.3	22.4	34.2	48.5	65.5	107	159	222	294	377	471	574	688	812	946	1090	1244	1409
18	13.7	23.1	35.2	49.9	67.4	110	164	228	303	388	484	591	708	835	973	1121	1280	1450
19	14	23.7	36.1	51.3	69.2	113	168	234	311	399	497	607	727	858	1000	1152	1315	1489
20	14.4	24.3	37.1	52.6	71	116	173	240	319	409	510	623	746	880	1026	1182	1350	1528
21	14.7	24.9	38	53.9	72.8	119	177	246	327	419	523	638	764	902	1051	1211	1383	1566
22	15.1	25.5	38.9	55.2	74.5	122	181	252	335	429	535	653	782	923	1076	1240	1415	1603
23	15.4	26.1	39.8	56.5	76.2	125	186	258	342	439	547	668	800	944	1100	1268	1447	1639
24	15.8	26.7	40.6	57.7	77.8	127	189	263	350	448	559	682	817	964	1123	1295	1478	1674
25	16.1	27.2	41.5	58.9	79.4	130	193	269	357	458	571	696	834	984	1147	1322	1509	1708
26	16.4	27.7	42.3	60	81	133	197	274	364	467	582	710	850	1004	1169	1348	1539	1742
27	16.7	28.3	43.1	61.2	82.5	135	201	279	371	476	593	723	867	1023	1192	1373	1568	1775
28	17	28.8	43.9	62.3	84.1	138	204	285	378	484	604	737	883	1041	1214	1399	1597	1808
29	17.3	29.3	44.7	63.4	85.5	140	208	290	384	493	615	750	898	1060	1235	1423	1625	1840
30	17.6	29.8	45.4	64.5	87	142	212	294	391	501	625	763	913	1078	1256	1448	1653	1871
Correction Factors for Other Pipe Lengths																		
20	1.3	1.24	1.21	1.18	1.15	1.12	1.1	1.08	1.07	1.06	1.05	1.05	1.04	1.04	1.03	1.03	1.03	1.03
30	1.22	1.18	1.15	1.13	1.12	1.09	1.08	1.06	1.05	1.05	1.04	1.04	1.03	1.03	1.03	1.02	1.02	1.02
40	1.15	1.13	1.11	1.1	1.08	1.07	1.05	1.05	1.04	1.03	1.03	1.03	1.02	1.02	1.02	1.02	1.02	1.02
50	1.09	1.08	1.07	1.06	1.05	1.04	1.04	1.03	1.03	1.02	1.02	1.02	1.02	1.01	1.01	1.01	1.01	1.01
60	1.04	1.04	1.03	1.03	1.03	1.02	1.02	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	0.96	0.97	0.97	0.97	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
90	0.93	0.94	0.94	0.95	0.95	0.96	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99
100	0.9	0.91	0.92	0.93	0.93	0.95	0.95	0.96	0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.99
120	0.84	0.86	0.87	0.89	0.9	0.91	0.93	0.94	0.94	0.95	0.96	0.96	0.96	0.97	0.97	0.97	0.97	0.98
140	0.8	0.82	0.83	0.85	0.96	0.88	0.9	0.91	0.92	0.93	0.94	0.94	0.95	0.95	0.96	0.96	0.96	0.97
160	0.76	0.78	0.8	0.82	0.83	0.86	0.88	0.89	0.9	0.91	0.92	0.93	0.94	0.94	0.95	0.95	0.95	0.96

Source: USDA SCS

Table 3.6 Pipe Flow Chart, n=0.025



For Corrugated Metal Pipe Inlet Km = Ke + Kb =0.65 and 70 Feet of Corrugated Metal Pipe Conduit (Full Flow Assumed)
Note: Correction Factors for pipe lengths other than 70 feet

Head (in feet)	Pipe Diameter In Inches																							
	6	8	10	12	15	18	21	24	30	36	42	48	54	60	66	72	78	84	90	96	102
1	0.33	0.7	1.25	1.98	3.48	5.47	7.99	11	18.8	28.8	41.1	55.7	72.6	91.8	113	137	163	191	222	255	290
2	0.47	0.99	1.76	2.8	4.92	7.74	11.3	15.6	26.6	40.8	58.2	78.8	103	130	160	194	231	271	314	360	410
3	0.58	1.22	2.16	3.43	6.02	9.48	13.8	19.1	32.6	49.9	71.2	96.5	126	159	196	237	282	331	384	441	502
4	0.67	1.4	2.49	3.97	6.96	10.9	16	22.1	37.6	57.7	82.3	111	145	184	226	274	326	383	444	510	580
5	0.74	1.57	2.79	4.43	7.78	12.2	17.9	24.7	42.1	64.5	92	125	162	205	253	306	365	428	496	570	648
6	0.82	1.72	3.05	4.86	8.52	13.4	19.6	27	46.1	70.6	101	136	178	225	277	336	399	469	544	624	710
7	0.88	1.86	3.3	5.25	9.2	14.5	21.1	29.2	49.8	76.3	109	147	192	243	300	362	431	506	587	674	767
8	0.94	1.99	3.53	5.61	9.84	15.5	22.6	31.2	53.2	81.5	116	158	205	260	320	388	461	541	628	721	820
9	1	2.11	3.74	5.95	10.4	16.4	24	33.1	56.4	86.5	123	167	218	275	340	411	489	574	666	764	870
10	1.05	2.22	3.94	6.27	11	17.3	25.3	34.9	59.5	91.2	130	176	230	290	358	433	516	605	702	806	917
11	1.1	2.33	4.13	6.58	11.5	18.2	26.5	36.6	62.4	95.6	136	185	241	304	376	454	541	635	736	845	962
12	1.15	2.43	4.32	6.87	12.1	19	27.7	38.2	65.2	99.9	142	193	252	318	392	475	565	663	769	883	1004
13	1.2	2.53	4.49	7.15	12.6	19.7	28.8	39.8	67.8	104	148	201	262	331	408	494	588	690	800	919	1045
14	1.25	2.63	4.66	7.42	13	20.5	29.9	41.3	70.4	108	154	208	272	343	424	513	610	716	830	953	1085
15	1.29	2.72	4.83	7.68	13.5	21.2	30.9	42.8	72.8	112	159	216	281	355	439	531	631	741	860	987	1123
16	1.33	2.81	4.99	7.93	13.9	21.9	32	44.2	75.2	115	165	223	290	367	453	548	652	765	888	1019	1160
17	1.37	2.9	5.14	8.18	14.3	22.6	32.9	45.5	77.5	119	170	230	300	378	467	565	672	789	915	1051	1195
18	1.41	2.98	5.29	8.41	14.8	23.2	33.9	46.8	79.8	120	174	236	308	389	480	581	692	812	942	1081	1230
19	1.45	3.06	5.43	8.64	15.2	23.9	34.8	48.1	82	126	179	243	316	400	494	597	711	834	967	1111	1264
20	1.49	3.14	5.57	8.87	15.6	24.5	35.7	49.4	84.1	129	184	249	325	410	506	613	729	856	993	1139	1297
21	1.53	3.22	5.71	9.09	15.9	25.1	36.6	50.6	86.2	132	188	255	333	421	519	628	747	877	1017	1168	1329
22	1.56	3.29	5.85	9.3	16.3	25.7	37.5	51.8	88.2	135	193	261	341	430	531	643	765	898	1041	1195	1360
23	1.6	3.37	5.98	9.51	16.7	26.2	38.3	53	90.2	138	197	267	348	440	543	657	782	918	1064	1222	1390
24	1.63	3.44	6.11	9.72	17	26.8	39.1	54.1	92.1	141	201	273	356	450	555	671	799	937	1087	1248	1420
25	1.66	3.51	6.23	9.92	17.4	27.4	39.9	55.2	94	144	206	279	363	459	566	685	815	957	1110	1274	1450
26	1.7	3.58	6.36	10.1	17.7	27.9	40.7	56.3	95.9	147	210	284	370	468	577	699	831	976	1132	1299	1478
27	1.73	3.65	6.48	10.3	18.1	28.4	41.5	57.4	97.7	150	214	290	377	477	588	712	847	994	1153	1324	1507
28	1.76	3.72	6.6	10.5	18.4	29	42.3	58.4	99.5	153	218	295	384	486	599	725	863	1013	1174	1348	1534
29	1.79	3.78	6.71	10.7	18.7	29.5	43	59.5	101	155	221	300	391	494	610	738	878	1030	1195	1372	1561
30	1.82	3.85	6.83	10.9	19.1	30	43.7	60.5	103	158	225	305	398	503	620	750	893	1048	1216	1396	1588
Correction Factors for Other Pipe Lengths																					
20	1.69	1.63	1.58	1.53	1.47	1.42	1.37	1.34	1.28	1.24	1.2	1.18	1.16	1.14	1.13	1.11	1.1	1.1	1.09	1.08	1.08
30	1.44	1.41	1.39	1.36	1.32	1.29	1.27	1.24	1.21	1.18	1.15	1.13	1.12	1.11	1.1	1.09	1.08	1.07	1.07	1.06	1.06
40	1.28	1.27	1.25	1.23	1.21	1.2	1.18	1.17	1.14	1.12	1.11	1.1	1.09	1.08	1.07	1.06	1.06	1.05	1.05	1.05	1.04
50	1.16	1.16	1.15	1.14	1.13	1.12	1.11	1.1	1.09	1.08	1.07	1.06	1.06	1.05	1.05	1.04	1.04	1.04	1.03	1.03	1.03
60	1.07	1.07	1.07	1.06	1.06	1.05	1.05	1.05	1.04	1.04	1.03	1.03	1.03	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.01
70	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
80	0.94	0.94	0.95	0.95	0.95	0.95	0.96	0.96	0.96	0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99
90	0.89	0.89	0.9	0.9	0.91	0.91	0.92	0.92	0.93	0.94	0.94	0.95	0.95	0.96	0.96	0.96	0.97	0.97	0.97	0.97	0.94
100	0.85	0.85	0.86	0.86	0.87	0.88	0.89	0.89	0.9	0.91	0.92	0.93	0.93	0.94	0.94	0.95	0.95	0.95	0.96	0.96	0.94
120	0.78	0.79	0.79	0.8	0.81	0.82	0.83	0.83	0.85	0.86	0.87	0.89	0.89	0.9	0.91	0.91	0.92	0.93	0.93	0.94	0.94
140	0.72	0.73	0.74	0.75	0.76	0.77	0.78	0.79	0.81	0.82	0.84	0.85	0.86	0.87	0.88	0.86	0.89	0.9	0.91	0.91	0.92
160	0.68	0.69	0.69	0.7	0.71	0.73	0.74	0.75	0.77	0.79	0.8	0.82	0.83	0.84	0.85	0.92	0.87	0.88	0.89	0.89	0.9

Source: USDA SCS

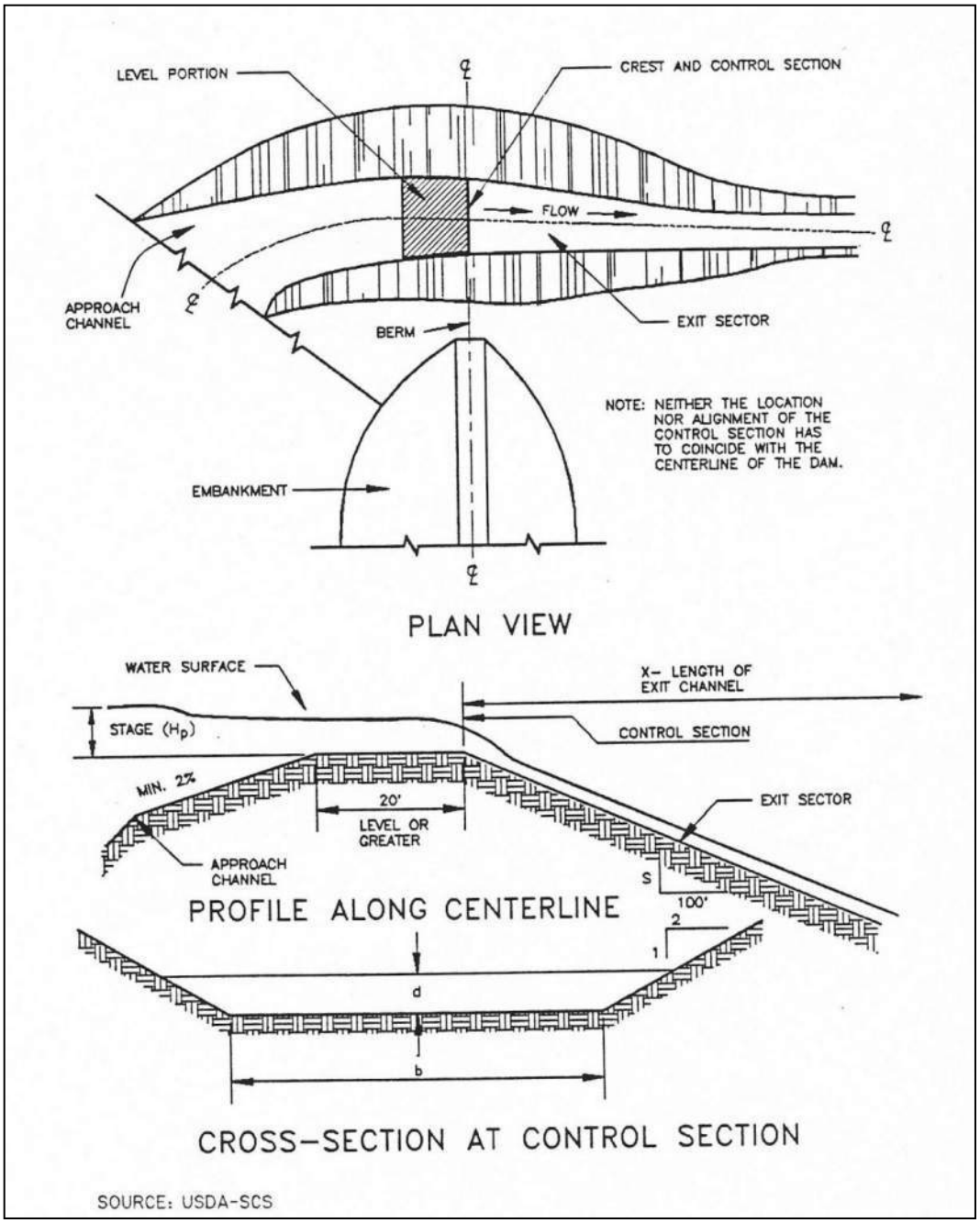


Figure 3.25 Example of Excavated Earth Spillway Design

Table 3.7 Design Data for Earth Spillways

Stage (Hp) In Feet	Spillway Variables	Bottom Width (b) In Feet																
		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
0.5	Q	6	7	8	10	11	13	14	15	17	18	20	21	22	24	25	27	28
	V	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	S	3.9	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	X	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
0.6	Q	8	10	12	14	16	18	20	22	24	26	28	30	32	34	35	37	39
	V	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	S	3.7	3.7	3.7	3.7	3.6	3.7	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	X	36	36	36	36	36	36	37	37	37	37	37	37	37	37	37	37	37
0.7	Q	11	13	16	18	20	23	25	28	30	33	35	38	41	43	44	46	48
	V	3.2	3.2	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
	S	3.5	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
	X	39	40	40	40	41	41	41	41	41	41	41	41	41	41	41	41	41
0.8	Q	13	16	19	22	26	29	32	35	38	42	45	46	48	51	54	57	60
	V	3.5	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	S	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
	X	44	44	44	44	44	45	45	45	45	45	45	45	45	45	45	45	45
0.9	Q	17	20	24	28	32	35	39	43	47	51	53	57	60	64	68	71	75
	V	3.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
	S	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
	X	47	47	48	48	48	48	48	48	48	48	49	49	49	49	49	49	49
1	Q	20	24	29	33	38	42	47	51	56	61	63	68	72	77	81	86	90
	V	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	S	3.1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	X	51	51	51	51	52	52	52	52	52	52	52	52	52	52	52	52	52
1.1	Q	23	28	34	39	44	49	54	60	65	70	74	79	84	89	95	100	105
	V	4.2	4.2	4.2	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	S	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	X	55	55	55	55	55	55	55	56	56	56	56	56	56	56	56	56	56
1.2	Q	28	33	40	45	51	58	64	69	76	80	86	92	98	104	110	116	122
	V	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
	S	2.9	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
	X	58	58	59	59	59	59	59	59	60	60	60	60	60	60	60	60	60
1.3	Q	32	38	46	53	58	65	73	80	86	91	99	106	112	119	125	133	140
	V	4.5	4.6	4.6	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
	S	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	X	62	62	62	63	63	63	63	63	63	63	63	64	64	64	64	64	64
1.4	Q	37	44	51	59	66	74	82	90	96	103	111	119	127	134	143	150	158
	V	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9
	S	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
	X	65	66	66	66	66	67	67	67	67	67	67	68	68	68	68	68	69

Table 3.7 Design Data for Earth Spillways (continued)

Stage (Hp) In Feet	Spillway Variables	Bottom Width (b) In Feet																
		8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
1.5	Q	41	50	58	66	75	85	92	101	108	116	125	133	142	150	160	169	178
	V	4.8	4.9	5	5	5	5	5	5	5	5	5	5	5	5	5.1	5.1	5.1
	S	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5
	X	69	69	70	70	71	71	71	71	71	71	71	72	72	72	72	72	72
1.6	Q	46	56	65	75	84	94	104	112	122	132	142	149	158	168	178	187	197
	V	5	5.1	5.1	5.1	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2
	S	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	X	72	74	74	75	75	76	76	76	76	76	76	76	76	76	76	76	76
1.7	Q	52	62	72	83	94	105	115	126	135	145	156	167	175	187	196	206	217
	V	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
	S	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	X	76	78	79	80	80	80	80	80	80	80	80	80	80	80	80	80	80
1.8	Q	58	69	81	93	104	116	127	138	150	160	171	182	194	204	214	226	233
	V	5.3	5.4	5.4	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.6	5.6
	S	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	X	80	82	83	84	84	84	84	84	84	84	84	84	84	84	84	84	84
1.9	Q	64	76	88	102	114	127	140	152	164	175	188	201	213	225	235	248	260
	V	5.5	5.5	5.5	5.6	5.6	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
	S	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
	X	84	85	86	87	88	88	88	88	88	88	88	88	88	88	88	88	88
2	Q	71	83	97	111	125	138	153	164	178	193	204	218	232	245	256	269	283
	V	5.6	5.7	5.7	5.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.9	5.9	5.9	5.9	5.9
	S	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	X	88	90	91	91	91	91	92	92	92	92	92	92	92	92	92	92	92
2.1	Q	77	91	107	122	135	149	162	177	192	207	220	234	250	267	276	291	305
	V	5.7	5.8	5.9	5.9	5.9	5.9	5.9	6	6	6	6	6	6	6	6	6	6
	S	2.4	2.4	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	X	92	93	95	95	95	95	95	95	95	96	96	96	96	96	96	96	96
2.2	Q	84	100	116	131	146	163	177	194	210	224	238	253	269	288	301	314	330
	V	5.9	5.9	6	6	6	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.2	6.2	6.2	6.2
	S	2.4	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
	X	96	98	99	99	99	99	99	100	100	100	100	100	100	100	100	100	100
2.3	Q	90	108	124	140	158	175	193	208	226	243	258	275	292	306	323	341	354
	V	6	6.1	6.1	6.1	6.2	6.2	6.2	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
	S	2.4	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	X	100	102	102	103	103	103	104	104	104	105	105	105	105	105	105	105	105
2.4	Q	99	116	136	152	170	189	206	224	241	260	275	294	312	327	346	364	378
	V	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	S	2.3	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	X	105	105	106	107	107	108	108	108	108	109	109	109	109	109	109	109	109

Source: USDA - SCS

Step 11 Re-estimate the elevation of the design high water and the top of the dam based upon the design of the basin outlet and the emergency spillway.

Step 12 Design the anti-vortex device and trash rack.

If an outfall riser is used, an anti-vortex device and trash rack shall be attached to the top of the basin riser to improve the flow of water into the outfall and prevent floating debris from being carried out of the basin.

This design procedure for the anti-vortex device and trash rack refers only to round riser pipes of corrugated metal. There are numerous ways to provide protection for concrete pipe; these include various hoods and grates and rebar configurations which should be a part of project-specific design and will frequently be a part of a permanent structure.

Refer to Figure 3.26 and Table 3.8. Choose cylinder size, support bars, and top requirements from Table 3.8 based on the diameter of the riser pipe.

Step 13 Design the anchoring for the basin outlet.

The basin outlet must be firmly anchored to prevent its floating.

If the riser is over 10 feet high, the forces acting on the spillway must be calculated. A method of anchoring the spillway which provides a safety factor of 1.25 must be used (downward forces = 1.25 x upward forces).

If the riser is 10 feet or less in height, choose one of the two methods in Figure 3.27 to anchor the basin outlet.

Determine the number and spacing of anti-seep collars for the outfall pipe through the embankment.

Step 14 Provide for dewatering.

(a) Use a modified version of the discharge equation for a vertical orifice and a basic equation for the area of a circular orifice.

Naming the variables:

- A = flow area of orifice, in square feet
- D = diameter of circular orifice, in inches
- h = average driving head (maximum possible head measured from radius of orifice to crest of basin outlet divided by 2), in feet
- Q = volumetric flow rate through orifice needed to achieve approximate 6-hour drawdown, cubic feet per second
- S = total storage available in dry storage area, cubic feet
- Q = S/21,600 seconds

(b) An alternative approach for dewatering is the use of a perforated riser (0.75" to 1" diameter holes spaced every 12 inch horizontally and 8 inch vertically) with 1½ inch to 2 inch filter stone stacked around the exterior.

Use S for basin and find Q. Then substitute in calculated Q and find A:

$$A = \frac{Q}{(0.6) \times (64.32 \times \frac{h}{2})} \qquad (3.4)$$

Then, substitute in calculated A and find d:

$$d^* = 2 \times \frac{(A)}{(3.14)} \qquad (3.5)$$

Diameter of the dewatering orifice should never be less than 3 inches in order to help prevent clogging by soil or debris.

Flexible tubing should be at least 2 inches larger in diameter than the calculated orifice to promote improved flow characteristics.

Additional design guidance for orifices and perforated risers are in *Section 2.2.2 of the Hydraulics Technical Manual*.

(c) If a surface skimmer is used as the basin's primary outlet, it may also be used to dewater the basin. Orifice flowrates for the skimmer will be provided by the manufacturer.

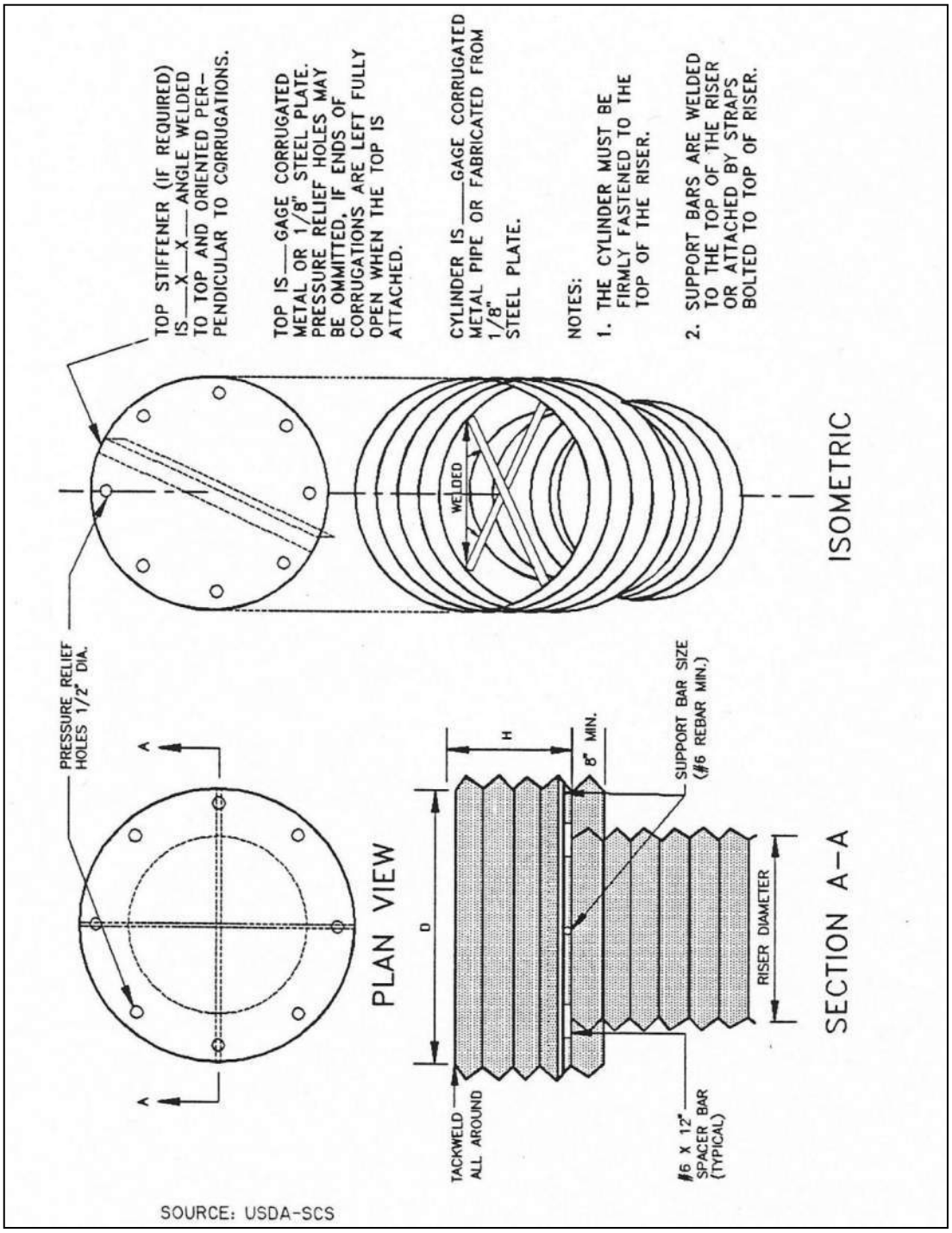


Figure 3.26 Example of Anti-Vortex Design for Corrugated Metal Pipe Riser

Table 3.8 Trash Rack and Anti-Vortex Device Design Table

Riser Diam., in.	Cylinder		Height inches	Minimum Size Support Bar	Minimum Top	
	Diameter inches	Thickness gage			Thickness	Stiffener
12	18	16	6	#6 Rebar or 1 ½ x 1 ½ x 3/16 angle	16 ga. (F&C)	-
15	21	16	7	" "	" "	-
18	27	16	8	" "	" "	-
21	30	16	11	" "	16 ga.(C), 14 ga.(F)	-
24	36	16	13	" "	" "	-
27	42	16	13	" "	" "	-
36	54	14	17	#8 Rebar	14 ga.(C), 12 ga.(F)	-
42	60	16	19	" "	" "	-
48	72	16	21	1 ¼" pipe or 1 ½ x 1 ½ x ¼ angle	14 ga.(C), 10 ga.(F)	-
54	78	16	25	" "	" "	-
60	90	14	29	1 ½" pipe or 1 ½ x 1 ½ x ¼ angle	12 ga.(C), 8 ga.(F)	-
66	96	14	33	2" pipe or 2 x 2 x 3/16 angle	12 ga.(C), 8	2 x 2 x ¼ angle
72	102	14	36	" "	" "	2 ½ x 2 ½ x ¼ angle
78	114	14	39	2 ½" pipe or 2 ½ x ¼ angle	" "	" "
84	120	12	42	2 ½" pipe or 2 ½ x 2 ½ x ¼ angle	" "	2 ½ x 2 ½ x 5/16 angle

Note$_1$: The criterion for sizing the cylinder is that the area between the inside of the cylinder and the outside of the riser is equal to or greater than the area inside the riser. Therefore, the above table is invalid for use with concrete pipe risers.
Note$_2$: Corrugation for 12"-36" pipe measures 2 ⅔ x ½"; for 42"-84" the corrugation measures 5" x 1" or 8" x 1".
Note$_3$: C = corrugated; F = flat.

Source: Adapted from USDA-SCS and Carl M. Henshaw Drainage Products Information.

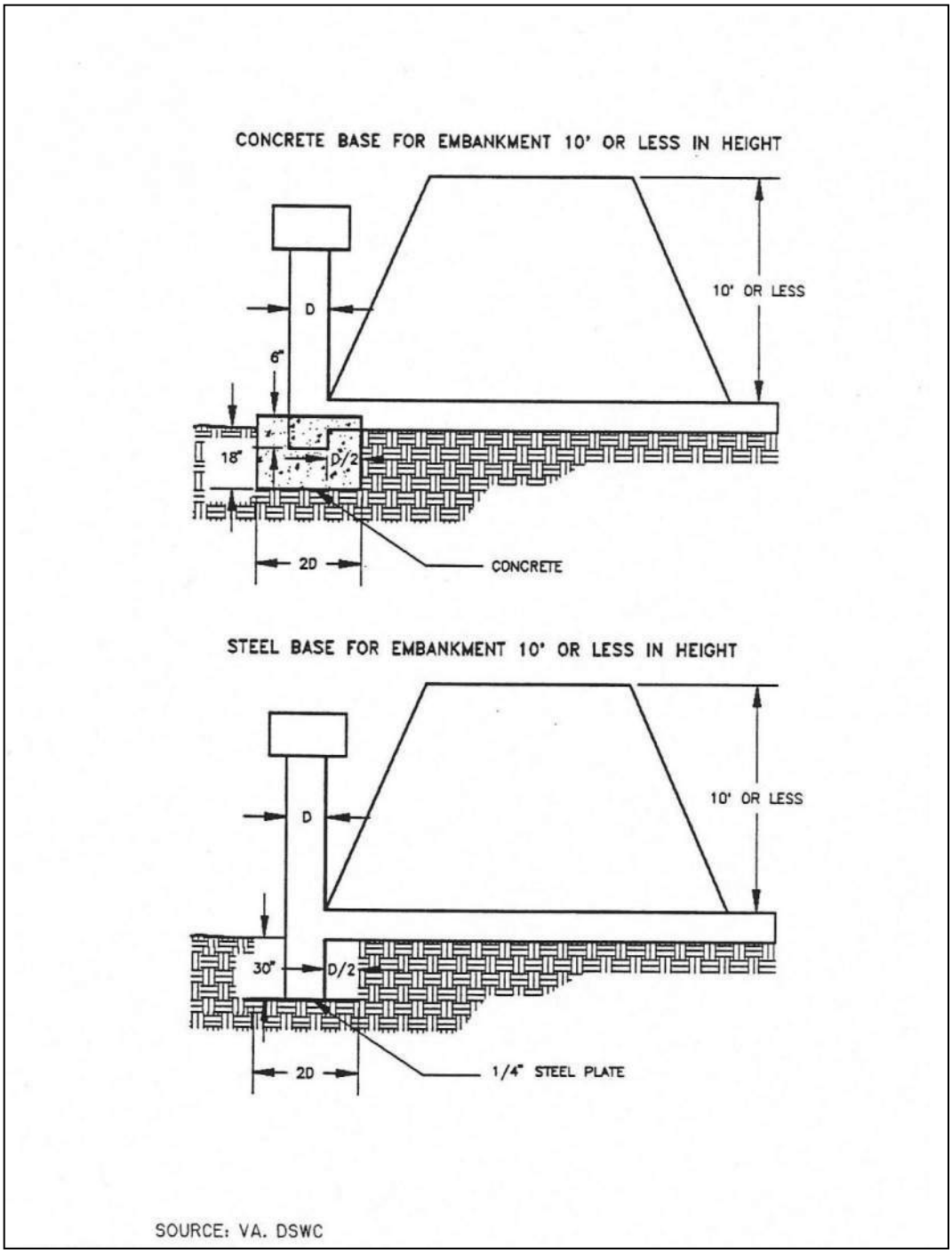


Figure 3.27 Riser Pipe Base Design for Embankment Less Than 10 Feet High

3.9.8 Design Form

Note: This design form is for basins designed with a riser as its primary outlet. It is provided as an example of the type of documentation required for a sediment basin. Different calculations will be needed for other types of outlets.

Project _____

Basin # _____ Location _____

Total area draining to basin: _____ acres.

Total disturbed area draining to basin: _____ acres.

Basin Volume Design

1. Minimum required volume is the lesser of

   a.) (3600 cu. ft. x _____ total drainage acres) / 27 = _____ cu. yds.

   b.) 2 yr, 24 hr storm volume in cubic yards = _____ cu. yds.

2. Total available basin volume at crest of riser* = _____ cu. yds. at elevation _____.
   (From Storage - Elevation Curve)

   * Minimum = Lesser of 3600 cubic feet/acre of Total Drainage Area or
   2yr. 24 hr. storm volume from Disturbed Area drained

3. Excavate _____ cu. yds. to obtain required volume*.

   *Elevation corresponding to required volume = invert of the dewatering orifice.

4. Diameter of dewatering orifice = _____ in.

5. Diameter of flexible tubing = _____ in. (diameter of dewatering orifice plus 2 inches).

Preliminary Design Elevations

6. Crest of Riser = _____

   Top of Dam = _____

   Design High Water = _____

   Upstream Toe of Dam = _____

Basin Shape

7. Length of Flow / Effective Width = L / We = _____

   If > 2, baffles are not required _____

   If < 2, baffles are required _____

Runoff

8. Q_2 = _____ cfs (From TR-55)

9. Q_{25} = _____ cfs (From TR-55)

Basin Outlet Design

10. With emergency spillway, required basin outlet capacity $Q_p = Q_2$ = _____ cfs. (riser and outfall)

    Without emergency spillway, required basin outlet capacity $Q_p = Q_{25}$ = _____ cfs. (riser and outfall)

11. With emergency spillway:

    Assumed available head (h) = _____ ft. (Using Q_2)

    h = Crest of Emergency Spillway Elevation - Crest of Riser Elevation

    Without emergency spillway:

    h = Design High Water Elevation - Crest of Riser Elevation

12. Riser diameter (D_r) = _____ in. Actual head (h) = _____ft.

    (Figure 3.23)

    Note: Avoid orifice flow conditions.

13. Barrel length (l) = _____ ft.

    Head (H) on outfall through embankment = _____ ft.

    (Figure 3.24)

14. Barrel Diameter = _____ in.

    (From Table 3.5 [concrete pipe] or Table 3.6 [corrugated pipe]).

15. Trash rack and anti-vortex device

    Diameter = _____ inches.

    Height = _____ inches.

    (From Table 3.8).

Emergency Spillway Design

16. Required spillway capacity $Q_e = Q_{25} - Q_p$ = _____ cfs.

17. Bottom width (b) = _____ ft.; the slope of the exit channel(s) = _____ ft./foot; and the minimum length of the exit channel (x) = _____ ft.
    (From Figure 3.25 and Table 3.7).

Final Design Elevations

18. Top of Dam = _____

    Design High Water = _____

    Emergency Spillway Crest = _____

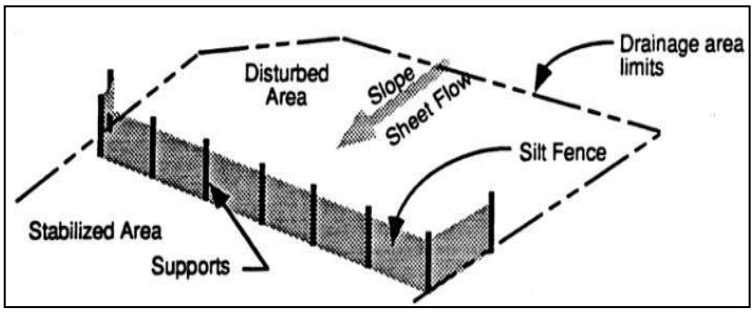
    Basin Riser Crest = _____

    Dewatering Orifice Invert = _____

    Elevation of Upstream Toe of Dam
    (if excavation was performed) = _____

3.10 Silt Fence

Sediment Control



Description: A silt fence consists of geotextile fabric supported by wire mesh netting or other backing stretched between metal posts with the lower edge of the fabric securely embedded six-inches in the soil. The fence is typically located downstream of disturbed areas to intercept runoff in the form of sheet flow. A silt fence provides both filtration and time for sediment settling by reducing the velocity of the runoff.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Maximum drainage area of 0.25 acre per 100 linear feet of silt fence
- Maximum 200 feet distance of flow to silt fence; 50 feet if slope exceeds 10 percent
- Minimum fabric overlap of 3 feet at abutting ends; join fabric to prevent leakage
- Turn end of silt fence line upslope a minimum of 10 feet
- Install stone overflow structure at low points or spaced at approximately 300 feet if no apparent low point

ADVANTAGES / BENEFITS:

- Economical means to treat sheet flow
- Most effective with coarse to silty soil types

DISADVANTAGES / LIMITATIONS:

- Limited effectiveness with clay soils due to clogging
- Localized flooding due to minor ponding at the upslope side of the silt fence
- Not for use as check dams in swales or low areas subject to concentrated flow
- Not for use where soil conditions prevent a minimum toe-in depth of 6 inches or installation of support posts to a depth of 12 inches
- Can fail structurally under heavy storm flows, creating maintenance problems and reducing effectiveness

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Repair undercutting, sags and other fence failures
- Remove sediment before it reaches half the height of the fence
- Repair or replace damaged or clogged filter fabric

TARGETED POLLUTANTS

- ● Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

- **Perimeter Control**
- **Slope Protection**
- **Sediment Barrier**
- **Channel Protection**
- **Temporary Stabilization**
- **Final Stabilization**
- **Waste Management**
- **Housekeeping Practices**

Fe=0.50-0.75
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ● Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations:

- *Effects of ponding or the redirection of flow onto adjacent areas and property*

3.10.1 Primary Use

Silt fence is normally used as a perimeter control on the down slope side of disturbed areas and on side slopes where stormwater may runoff the area. It is only feasible for non-concentrated, sheet flow conditions. If it becomes necessary to place a silt fence where concentrated flows may be occur (e.g. where two silt fences join at an angle, or across minor channels or gullies), it will be necessary to reinforce the silt fence at that area by a rock berm or sand bag berm, or other structural measures that will support the silt fence.

3.10.2 Applications

Silt fence is an economical means to treat overland, non-concentrated flows for all types of projects. Silt fences are used as perimeter control devices for both site developers and linear (roadway) type projects. They are most effective with coarse to silty soil types. Due to the potential of clogging and limited effectiveness, silt fences should be used with caution in areas that have predominantly clay soil types. In this latter instance, a soils engineer or soil scientist should confirm the suitability of silt fence for that application. Additional controls may be needed to remove fine silts and clay soils suspended in stormwater.

3.10.3 Design Criteria

- Fences are to be constructed along a line of constant elevation (along a contour line) where possible.
- Silt fence can interfere with construction operations; therefore, planning of access routes onto the site is critical.
- Maximum drainage area shall be 0.25 acre per 100 linear feet of silt fence.
- Maximum flow to any 20 foot section of silt fence shall be 1 CFS.
- Maximum distance of flow to silt fence shall be 200 feet or less. If the slope exceeds 10 percent the flow distance shall be less than 50 feet.
- Maximum slope adjacent to the fence shall be 2:1.
- Silt fences shall not be used where there is a concentration of water in a channel, drainage ditch or swale, nor should it be used as a control on a pipe outfall.
- If 50 percent or less soil, by weight, passes the U.S. Standard Sieve No. 200; select the apparent opening size (A.O.S.) to retain 85percent of the soil.
- If 85 percent or more of soil by weight, passes the U.S. Standard Sieve No. 200, silt fences shall not be used unless the soil mass is evaluated and deemed suitable by a soil scientist or geotechnical engineer concerning the erodiblity of the soil mass, dispersive characteristics, and the potential grain-size characteristics of the material that is likely to be eroded.
- Stone overflow structures or other outlet control devices shall be installed at all low points along the fence or spaced at approximately 300 feet if there is no apparent low point.
- Filter stone for overflow structure shall be 1 ½ inches washed stone containing no fines. Angular shaped stone is preferable to rounded shapes.
- Silt fence fabric must meet the following minimum criteria:
    - Tensile Strength, ASTM D4632 Test Method for Grab Breaking Load and Elongation of Geotextiles, 90-lbs.
    - Puncture Rating, ASTM D4833 Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products, 60-lbs.
    - Mullen Burst Rating, ASTM D3786 Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method, 280-psi.

  - Apparent Opening Size, ASTM D4751 Test Method for Determining Apparent Opening Size of a Geotextile, U.S. Sieve No. 30(max) to No. 100 (min).
  - Ultraviolet Resistance, ASTM D4355 Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture, and Heat in a Xenon Arc Type Apparatus, Minimum 70 percent.
- Fence posts shall be steel and may be T-section or L-section, 1.3 pounds per linear foot minimum, and 4 feet in length minimum. Wood posts may be used depending on anticipated length of service and provided they are 4 feet in length minimum and have a nominal cross section of 2 inches by 4 inches for pine or 2 inches by 2 inches for hardwoods.
- Silt fence shall be supported by steel wire fence fabric as follows:
  - 4 inch x 4 inch mesh size, W1.4 /1.4, minimum 14 gauge wire fence fabric;
  - Hog wire, 12 gauge wire, small openings installed at bottom of silt fence;
  - Standard 2 inch x 2 inch chain link fence fabric; or
  - Other welded or woven steel fabrics consisting of equal or smaller spacing as that listed herein and appropriate gauge wire to provide support.
- Silt Fence shall consist of synthetic fabric supported by wire mesh and steel posts set a minimum of 1-foot depth and spaced not more than 6-feet on center.
- A 6 inch wide trench is to be cut 6 inches deep at the toe of the fence to allow the fabric to be laid below the surface and backfilled with compacted earth or gravel to prevent bypass of runoff under the fence. Fabric shall overlap at abutting ends a minimum of 3 feet and shall be joined such that no leakage or bypass occurs. If soil conditions prevent a minimum toe-in depth of 6 inches or installation of support post to depth of 12 inches, silt fences shall not be used.
- Sufficient room for the operation of sediment removal equipment shall be provided between the silt fence and other obstructions in order to properly maintain the fence.
- The last 10 feet (or more) at the ends of a line of silt fence shall be turned upslope to prevent bypass of stormwater. Additional upslope runs of silt fence may be needed every 200 to 400 linear feet, depending on the traverse slope along the line of silt fence.

3.10.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.5 Silt Fence and in the Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (TxDot 2004) Item 506.2.J and Item 506.4.C.9.

The American Society for Testing and Materials has established standard specifications for silt fence materials (ASTM D6461) and silt fence installation (ASTM D6462).

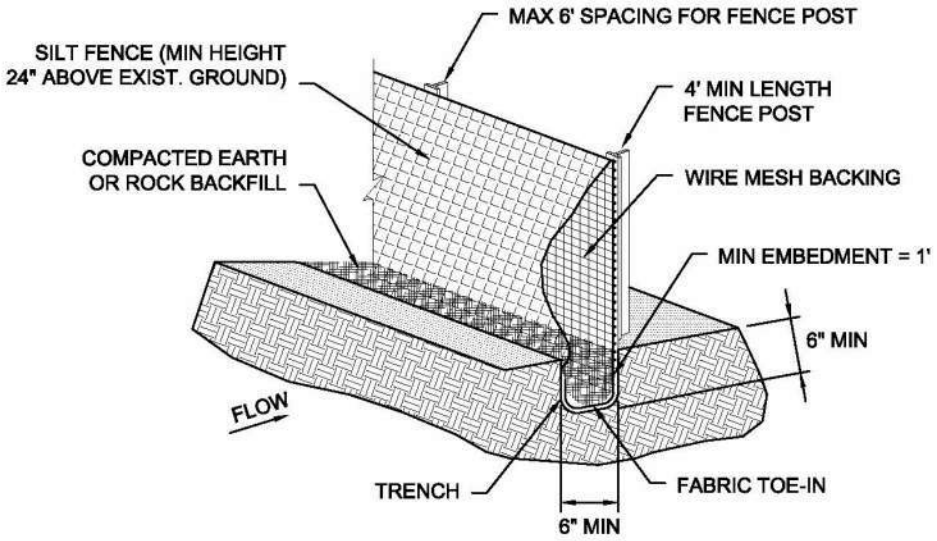
3.10.5 Inspection and Maintenance Requirements

Silt fence should be inspected regularly (at least as often as required by the TPDES Construction General Permit) for buildup of excess sediment, undercutting, sags, and other failures. Sediment should be removed before it reaches half the height of the fence. In addition, determine the source of excess sediment and implement appropriate measures to control the erosion. Damaged or clogged fabric must be repaired or replaced as necessary.

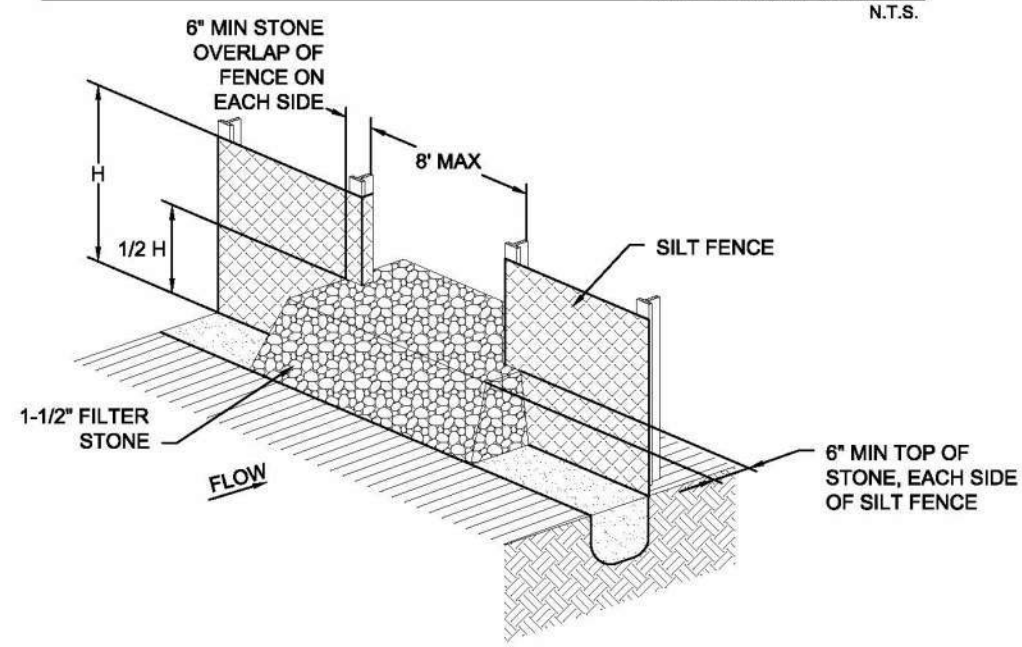
3.10.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.



SILT FENCE EXAMPLE
N.T.S.



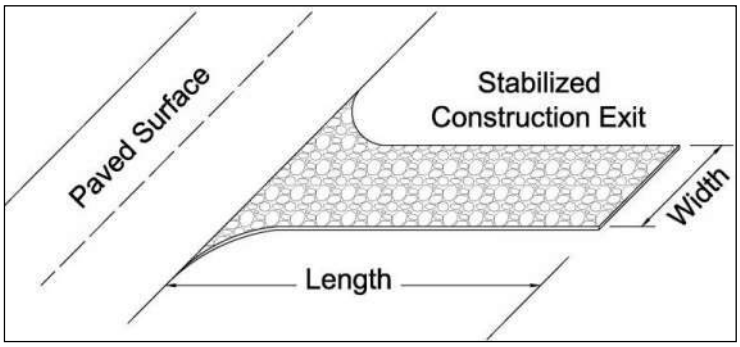
STONE OVERFLOW STRUCTURE EXAMPLE
N.T.S.

NOTES: 1. DESIGN SHALL SHOW ON THE DRAWINGS THE LOCATIONS WHERE OVERFLOW STRUCTURES SHALL BE INSTALLED. OVERFLOW STRUCTURES ARE REQUIRED AT ALL LOW POINTS AND AT A SPACING OF APPROXIMATELY 300 FT WHERE NO LOW POINT IS APPARENT.
2. DESIGNER SHALL ON THE DRAWINGS THE LOCATIONS WHERE SILT FENCE IS TO BE TURNED UPSLOPE. UPSLOPE LENGTHS SHALL BE A MINIMUM OF 10 FEET.

Figure 3.28 Schematics of Silt Fence

3.11 Stabilized Construction Exit

Sediment Control



Description: A stabilized construction exit is a pad of crushed stone, recycled concrete or other rock material placed on geotextile filter cloth to dislodge soil and other debris from construction equipment and vehicle tires prior to exiting the construction site. The object is to minimize the tracking of soil onto public roadways where it will be suspended by stormwater runoff.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Slope exit away from offsite paved surface
- Minimum width and length dependent on size of disturbed area, which correlates to traffic volume
- 6 inches minimum thickness of stone layer
- Stone of 3 to 5 inches in size
- Add a wheel cleaning system when inspections reveal the stabilized exit does not prevent tracking

ADVANTAGES / BENEFITS:

- Reduces tracking of soil onto public streets
- Directs traffic to a controlled access point
- Protects other sediment controls by limiting the area disturbed

DISADVANTAGES / LIMITATIONS:

- Effectiveness dependent on limiting ingress and egress to the stabilized exit
- A wheel washing system may also be required to remove clay soil from tires, particularly in wet conditions

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Replace rock when sediment in the void area between the rocks is visible on the surface
- Periodically re-grade and top dress with additional stone to maintain efficiency

TARGETED POLLUTANTS

- ◒ Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier
Channel Protection
Temporary Stabilization
Final Stabilization
Waste Management
Housekeeping Practices

Fe=N/A

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ○ Suitability for Slopes > 5%

Other Considerations:

- *None*

3.11.1 Primary Use

Stabilized construction exits are used to remove soil, mud and other matter from vehicles that drive off of a construction site onto public streets. Stabilized exits reduce the need to remove sediment from streets. When used properly, they also control traffic by directing vehicles a single (or two for larger sites) location. Controlling traffic onto and off of the site reduces the number and quantity of disturbed areas and provides protection for other sediment controls by decreasing the potential for vehicles to drive over the control.

3.11.2 Applications

Stabilized construction exits are used on all construction sites with a disturbed area of one acre or larger and are a recommended practice for smaller construction sites. A stabilized exit is used on individual residential lots until the driveway is placed. Stabilized construction exits may be used in conjunction with wheel cleaning systems as described in *Section 3.16 Wheel Cleaning Systems*.

3.11.3 Design Criteria

- Limit site access to one route during construction, if possible; two routes for linear and larger projects.
- Prevent traffic from avoiding or shortcutting the full length of the construction exit by installing barriers. Barriers may consist of silt fence, construction safety fencing, or similar barriers.
- Design the access point(s) to be at the upslope side of the construction site. Do not place construction access at the lowest point on the construction site.
- Stabilized construction exits are to be constructed such that drainage across the exit is directed to a controlled, stabilized outlet onsite with provisions for storage, proper filtration, and removal of wash water.
- The exit must be sloped away from the paved surface so that stormwater from the site does not discharge through the exit onto roadways.
- Minimum width of exit shall be 15 feet.
- The construction exit material shall be a minimum thickness of 6 inches. The stone or recycled concrete used shall be 3 to 5 inches in size with little or no fines.
- The geotextile fabric must meet the following minimum criteria:
    - Tensile Strength, ASTM D4632 Test Method for Grab Breaking Load and Elongation of Geotextiles, 300 lbs.
    - Puncture Strength, ASTM D4833 Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products, 120 lbs.
    - Mullen Burst Rating, ASTM D3786 Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method, 600 psi.
    - Apparent Opening Size, ASTM D4751 Test Method for Determining Apparent Opening Size of a Geotextile, U.S. Sieve No. 40 (max).
- Rock by itself may not be sufficient to remove clay soils from wheels, particularly in wet conditions. When necessary, vehicles must be cleaned to remove sediment prior to entering paved roads, streets, or parking lots. Refer to *Section 3.16 Wheel Cleaning Systems* for additional controls.
- Using water to wash sediment from streets is prohibited
- Minimum dimensions for the stabilized exit shall be as follows:

Table 3.9 Minimum Exit Dimensions		
Disturbed Area	*Min. Width of Exit*	*Min. Length of Exit*
< 1 Acre	15 feet	20 feet
≥ 1 Acre but < 5 Acres	25 feet	50 feet
≥ 5 Acres	30 feet	50 feet

- If a wheel cleaning system is used, the width of the stabilized exit may be reduced to funnel traffic into the system. Refer to *Section 3.16 Wheel Cleaning*.

3.11.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.10 Stabilized Construction Entrance and in the Standard Specifications for Construction and Maintenance of Highways, Streets and Bridges (TxDOT 2004) Item 506.2.E and Item 506.4.C.5.

3.11.5 Inspection and Maintenance Requirements

Construction exits should be inspected regularly (at least as often as required by the TPDES Construction General Permit). The stabilized construction exit shall be maintained in a condition that prevents tracking or flow of sediment onto paved surfaces. Periodic re-grading and top dressing with additional stone must be done to keep the efficiency of the exit from diminishing. The rock shall be re-graded when ruts appear. Additional rock shall be added when soil is showing through the rock surface.

Additional controls are needed if inspections reveal a properly installed and maintained exit, but tracking of soil outside the construction area is still evident. Additional controls may be daily sweeping of all soil spilled, dropped, or tracked onto public rights-of-way or the installation of a wheel cleaning system.

3.11.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.

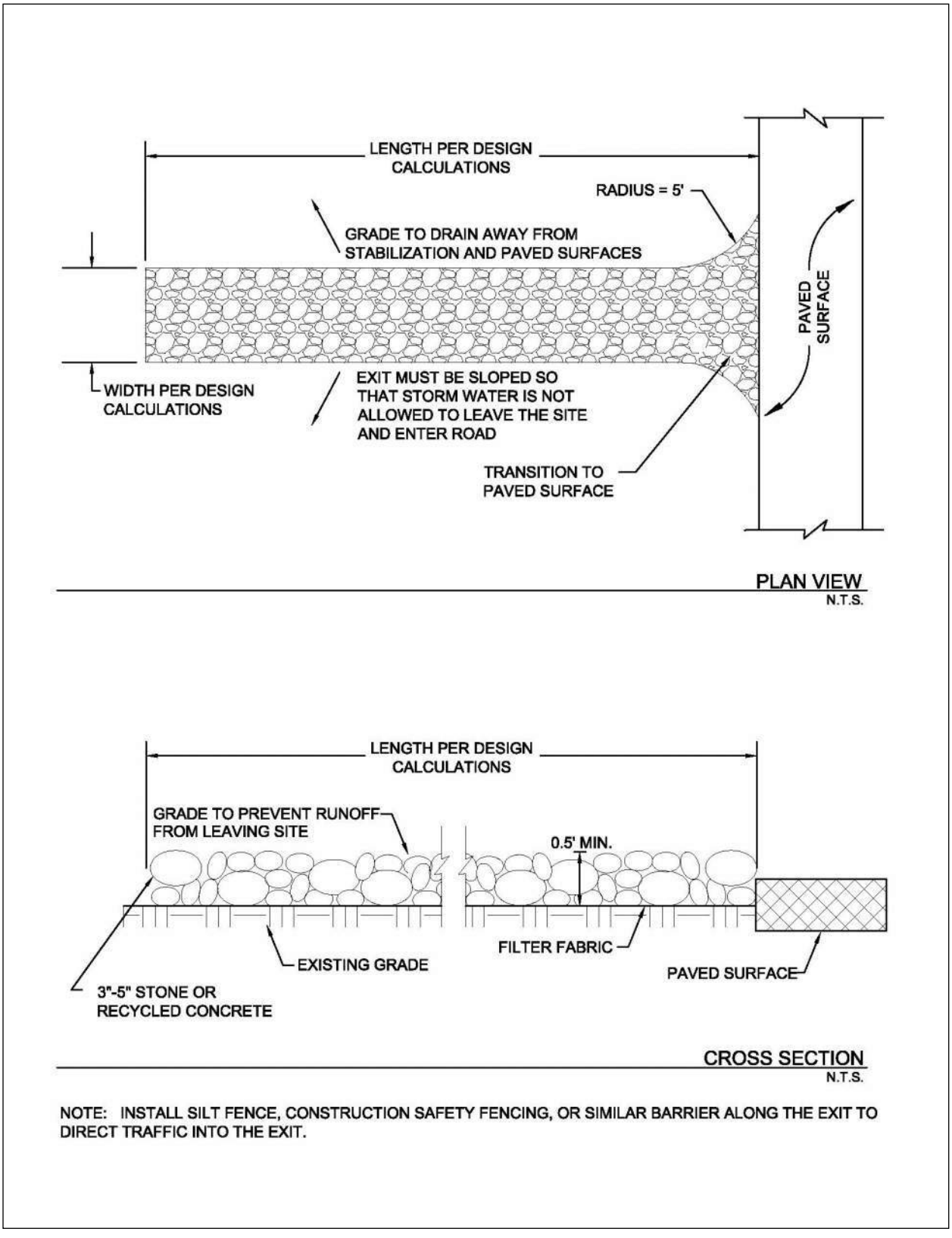
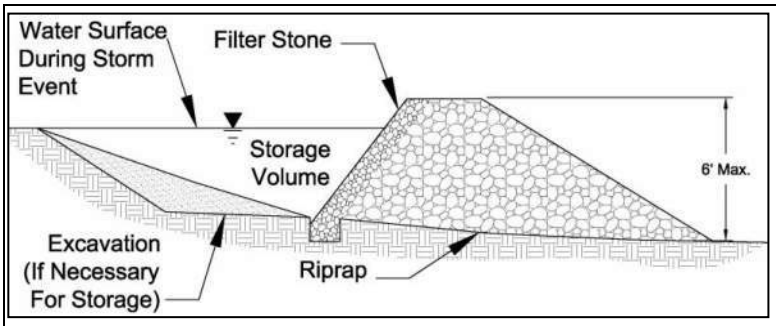


Figure 3.29 Schematics of Stabilized Construction Exit

3.12 Stone Outlet Sediment Trap

Sediment Control



Description: A stone outlet sediment trap is a small detention area formed by placing a stone embankment with an integral stone filter outlet across a drainage swale for the purpose of detaining sediment-laden runoff from construction activities. The sediment trap detains runoff long enough to allow most of the suspended sediment to settle while still allowing for diffused flow of runoff.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Maximum contributing drainage area of 10 acres for excavated trap and 5 acres for bermed trap
- Provide storage volume for the 2-year, 24-hour design storm
- Maximum embankment height of 6 feet
- Embankment slope of 1.5:1 or flatter
- 2 foot minimum top width

ADVANTAGES / BENEFITS:

- Effectively traps sediment in a drainage swale
- Reduces flow velocities
- Relatively long effective life

DISADVANTAGES / LIMITATIONS:

- Amount of land required
- Can cause minor upstream flooding, possibly impacting construction operations
- Not for use in “live” (normally flowing) channels

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Replace filter stone when it appears to be silted in such that efficiency is diminished
- Remove trash and debris after each storm event
- Remove deposited sediment when before the storage capacity is reduced by one third or has reached a depth of one foot, whichever is less

TARGETED POLLUTANTS

- ● Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier
Channel Protection
Temporary Stabilization
Final Stabilization
Waste Management
Housekeeping Practices

Fe=0.50-0.85
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ● Suitability for Slopes > 5%

Other Considerations:

- *Re-grading and stabilization of the control area after construction*

3.12.1 Primary Use

A sediment trap is used where flows are concentrated in a drainage swale or channel. The sediment trap detains and temporarily impounds stormwater, which allows for settling of sediment as the water is slowly discharged from the trap. Sediment traps may be used in combination with check dams when erosive velocities exist in the swale upstream of the sediment trap.

3.12.2 Applications

Temporary stone outlet sediment traps are installed at locations where concentrated flows require a protected outlet to contain sediment or spread flow prior to discharge. They are an effective, long term (12 – 18 months) application for sediment control on large construction sites where a sediment basin is not feasible due to site or construction method restrictions. Several traps may be used to control sediment on drainage sub-basins within the construction site, instead of one large sediment basin at the discharge point from the entire construction site. Sediment traps may also be used with a passive treatment system to provide better removal of fine silt and clay soil particles.

3.12.3 Design Criteria

- Design calculations are required for the use of this control. The designer shall provide drainage computations and dimensions for the stone outlet, berms, and excavated areas associated with this control.
- The maximum drainage area contributing to the trap shall be less than 10 acres for the excavated stone outlet sediment trap and 5 acres or less for the bermed trap.
- The minimum storage volume shall be the volume of runoff from the temporary control design storm (2-year, 24 hour) for the sediment trap's drainage area.
- The surface area of the design storage area shall not be less than 1 percent of the area draining to the device.
- The maximum height of the rock shall be 6 feet, as measured from the toe of the slope on the downstream side to the low point in the rock dam.
- Minimum width of the rock dam at the top shall be 2 feet.
- Rock dam slope shall be 1.5:1 or flatter.
- The rock dam shall have a depressed area, over the center of swale, to serve as the outlet with a minimum width of 4 feet.
- A six inch minimum thickness layer of 1½ inch filter stone shall be placed on the upstream face of the stone embankment when the stormwater runoff contains fine silt and clay soil particles.
- The embankment shall be comprised of well graded stone with a size range of 6 to 12 inches in diameter. The stone may be enclosed in wire mesh or gabion basket and anchored to the channel bottom to prevent washing away.
- The dam shall consist of stone riprap or a combination of compacted fill with a stone riprap outlet.
- Fill placed to constrict the swale for construction of the excavated stone outlet sediment trap and fill placed for the berm in the bermed stone outlet sediment trap shall consist of clay material, minimum Plasticity Index of 30, using ASTM D4318 Standard Test for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
- Fill shall be placed in 8 inch loose lifts (maximum) and compacted to 95% Standard Proctor Density at optimum moisture content using ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort.
- The outlet shall be designed to have a minimum freeboard of 6" at design flow.

- Rock shall be placed on geotextilefilter fabric meeting the following minimum criteria:
  - Tensile Strength, ASTM D4632 Test Method for Grab Breaking Load and Elongation of Geotextiles, 250-lbs.
  - Puncture Rating, ASTM D4833 Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products, 135-lbs.
  - Mullen Burst Rating, ASTM D3786 Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method, 420-psi.
  - Apparent Opening Size, ASTM D4751 Test Method for Determining Apparent Opening Size of a Geotextile, U.S. Sieve No. 20 (max).
- The geotextile fabric, covered with a layer of stone, shall extend past the base of the embankment on the downstream side a minimum of 2 feet.

3.12.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.12 Stone Outlet Sediment Trap.

3.12.5 Inspection and Maintenance Requirements

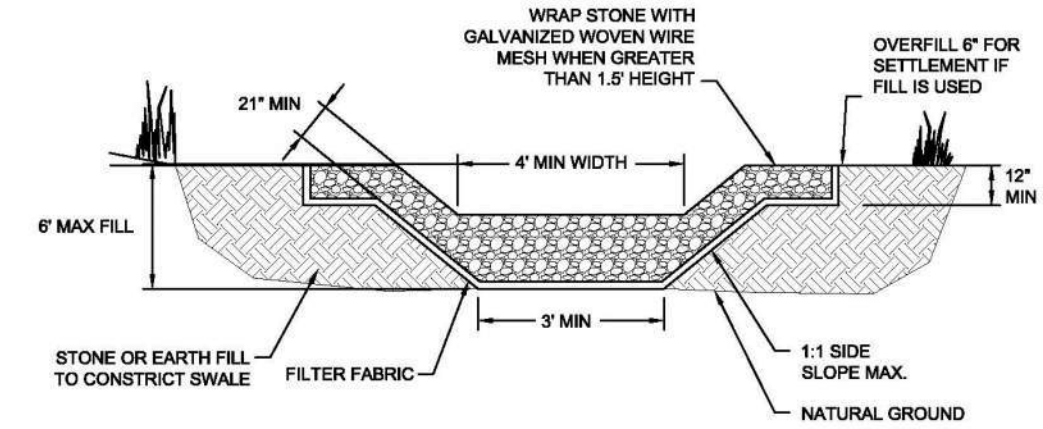
The stone outlet sediment trap should be inspected regularly (at least as often as required by the TPDES Construction General Permit) to check for clogging of the void spaces between stones. If the filter stone appears to be clogged, such that the basin will not completely drain, then the filter stone will require maintenance. If the filter stone is not completely clogged it may be raked with a garden rake to allow the water to release from the basin. If filter stone is completely clogged with mud and sediment, then the filter stone will have to be removed and replaced. Failure to keep the filter stone material properly maintained will lead to clogging of the stone riprap embankment. When this occurs, the entire stone rip-rap structure will need to be replaced. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced.

Trash and debris should be removed from the trap after each storm event to prevent it from plugging the rock. Deposited sediment shall be removed before the storage capacity is decreased by one-third, or sediment has reached a depth of one foot, whichever is less. The removed sediment shall be stockpiled or redistributed in areas that are protected with erosion and sediment controls.

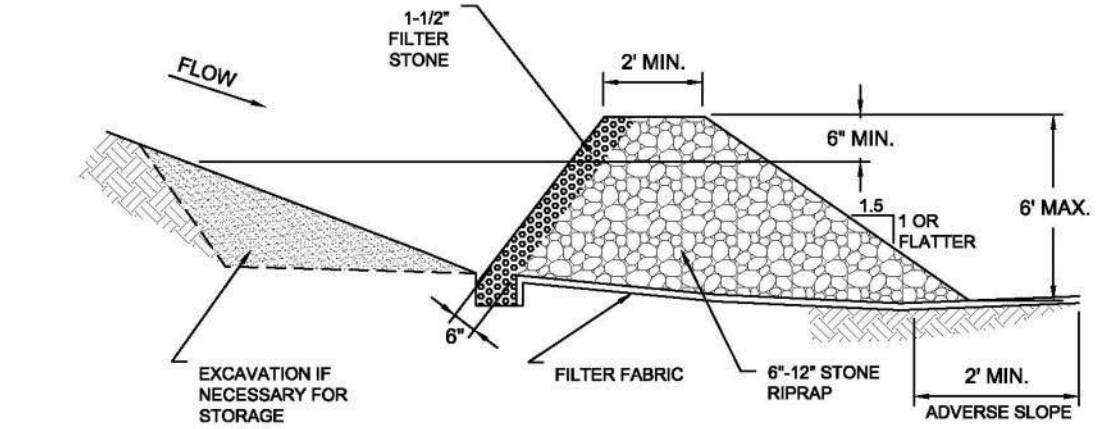
3.12.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.



EXCAVATED STONE OUTLET SEDIMENT TRAP VIEW LOOKING UPSTREAM
N.T.S.

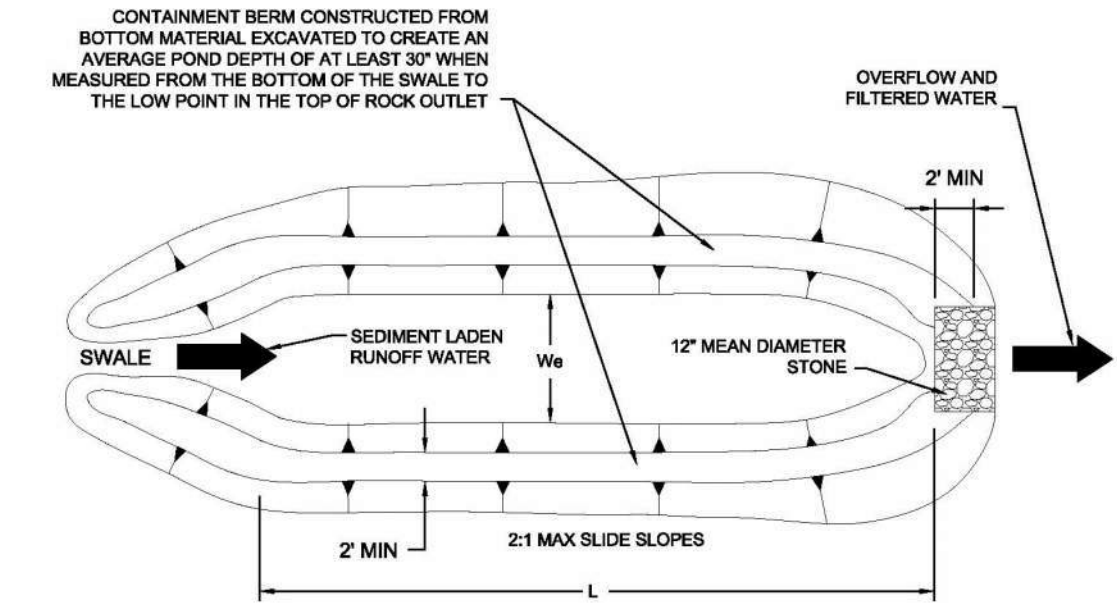


EXCAVATED STONE OUTLET SEDIMENT TRAP SECTION VIEW
N.T.S.

NOTE: ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETER USED TO DESIGN THE TRAP.

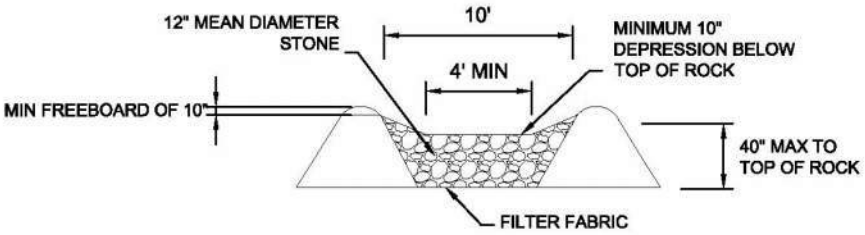
- SIZE OF CONTRIBUTING DRAINAGE AREA
- DESIGN STORM VOLUME AND FLOW RATE AT THE TRAP
- HEIGHT, SLOPE, AND LENGTH OF STONE OUTLET
- STORAGE VOLUME
- EXTENT OF GRADING TO PROVIDE THE CONTROLLED OUTLET

Figure 3.30 Schematics of Excavated Stone Outlet Sediment Trap



BERMED STONE OUTLET SEDIMENT TRAP PLAN VIEW

N.T.S.



BERMED STONE OUTLET SEDIMENT TRAP SECTION VIEW

N.T.S.

NOTE: ACTUAL DIMENSIONS OF THE SEDIMENT TRAP SHALL BE DESIGNED BASED ON FLOW CONDITIONS AND SITE TOPOGRAPHY. PROVIDE CALCULATIONS THAT DOCUMENT THE FOLLOWING PARAMETER USED TO DESIGN THE TRAP.

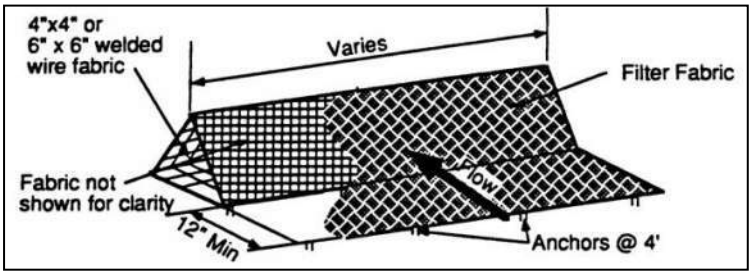
- SIZE OF CONTRIBUTING DRAINAGE AREA
- DESIGN STORM VOLUME AND FLOW RATE AT THE TRAP
- HEIGHT, SLOPE, AND LENGTH OF STONE OUTLET
- STORAGE VOLUME
- EXTENT OF GRADING TO PROVIDE THE CONTROLLED OUTLET

TRIBUTARY AREA (ACRES)	L (FT)	We (FT)
< 0.5	59	13
0.51-1.0	82	16
1.01-1.5	102	20
1.51-2.0	118	23
2.01-2.5	131	26
2.51-3.0	144	30
3.01-3.5	154	30
3.51-4.0	167	33
4.01-4.5	177	36
4.51-5.0	187	36

Figure 3.31 Schematics of Bermed Stone Outlet Sediment Trap
(Source: City of Chesterfield Department of Public Works Detail SC 7.2)

3.13 Triangular Sediment Filter Dike

Sediment Control



Description: A triangular sediment filter dike is a self-contained silt fence consisting of filter fabric wrapped around welded wire fabric and shaped into a triangular cross section. While similar in use to a silt fence, the dike is reusable, sturdier, transportable, and can be used on paved areas or in situations where it is impractical to install embedded posts for support.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Maximum drainage area of 0.25 acre per 100 linear feet of dike
- Maximum 200 feet distance of flow to filter dike; 50 feet if slope exceeds 10 percent
- Overlap ends of filter material 6 inches to cover dike-to-dike junction; secure with shoat rings

ADVANTAGES / BENEFITS:

- Can be installed on paved surfaces or where the soil type prevents embedment of other controls
- Withstands more concentrated flow and higher flow rates than silt fence

DISADVANTAGES / LIMITATIONS:

- Localized flooding due to minor ponding at the upslope side of the filter dike
- Not effective where there are substantial concentrated flows
- Not effective along contours due to the potential for flow concentration and overtopping

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Remove sediment before it reaches 6 inches in depth
- Clean or replace fabric if clogged
- Repair or replace dike when structural deficiencies are found

TARGETED POLLUTANTS

- ● Sediment
- ○ Nutrients & Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control

Slope Protection

Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.50-0.75
(*Depends on soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ◒ Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations:

- *Effects of ponding on adjacent areas and property*

3.13.1 Primary Use

Triangular filter dikes are used in place of silt fence, treating sediment flow at the perimeter of construction areas and at the perimeter of the site. Also, the dikes can serve as stream protection devices by preventing sediment from entering the streams or as check dams in small swales.

Triangular sediment filter dikes are especially useful for construction areas surrounded by pavement, where silt fence, filter berm, or other sediment control installations are impractical.

3.13.2 Applications

Triangular dikes are used to provide perimeter control by detaining sediment on a disturbed site with drainage that would otherwise flow onto adjacent properties. Triangular dikes function as sediment trapping devices when used in areas of sheet flow across disturbed areas or are placed along stream banks to prevent sediment-laden sheet flow from entering the stream. The dikes can be subjected to more concentrated flows and a higher flow rate than silt fence.

Dikes can be used on a variety of surfaces where other controls are not effective. They may be installed on paved surfaces and where the soil type prevents embedment of other sediment controls.

3.13.3 Design Criteria

- Dikes are to be installed along a line of constant elevation (along a contour line).
- Maximum drainage area shall be 0.25 acre per 100 linear feet of dike.
- Maximum flow to any 20 foot section of dike shall be 1 CFS.
- Maximum distance of flow to dike shall be 200 feet or less. If the slope exceeds 10 percent, the flow distance shall be less than 50 feet.
- Maximum slope adjacent to the dike shall be 2:1.
- If 50 percent or less of soil, by weight, passes the U.S. Standard Sieve No. 200, select the apparent opening size (A.O.S.) to retain 85 percent of the soil.
- If 85 percent or more of soil, by weight, passes the U.S. Standard Sieve No. 200, triangular sediment dike shall not be used due to clogging.
- The filter fabric shall meet the following minimum criteria:
    - Tensile Strength, ASTM D4632 Test Method for Grab Breaking Load and Elongation of Geotextiles 90-lbs.
    - Puncture Rating, ASTM D4833 Test Method for Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products, 60-lbs.
    - Mullen Burst Rating, ASTM D3786 Standard Test Method for Hydraulic Bursting Strength of Textile Fabrics-Diaphragm Bursting Strength Tester Method, 280-psi.
    - Apparent Opening Size, ASTM D4751 Test Method for Determining Apparent Opening Size of a Geotextile, U.S. Siev No. 30 (max) to 100 (min).
    - Ultraviolet Resistance, ASTM D4355 Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture, and Heat in a Xenon Arc Type Apparatus, Minimum 70 percent.
- The internal support for the dike structure shall be 6-gauge 6 inch x 6 inch wire mesh or 6-guage 4 inch x 4 inch welded wire fabric folded into triangular form eighteen (18) inches on each side.
- Tie-in to the existing grade should be accomplished by:

  (i) embedding the fabric six-inches below the top of ground on the upslope side;

(ii) extending the fabric to form a 12 inch skirt on the upstream slope and covering it with 3 to 5 inches of 1½ inch washed filter stone; or

(iii) entrenching the base of the triangular dike four inches below ground.

For (ii) above, the skirt and the upslope portion of the triangular dike skeleton should be anchored by metal staples on two-foot centers, driven a minimum of six inches into the ground (except where crossing pavement or exposed limestone). When installed on pavement, the washed rock in option (ii) may be replaced by bags filled with 1½ inch washed filter stone placed at 4 foot spacing to anchor the end of the filter fabric to the pavement.

- Filter material shall lap over ends six (6) inches to cover dike-to-dike junction; each junction shall be secured by shoat rings. Where the dike is placed on pavement, two rock bags shall be used to anchor the overlap to the pavement. Additional bags shall be used as needed to ensure continuous contact with the pavement (no gaps).
- Sand bags or large rock should be used as ballast inside the triangular dike section to stabilize the dike against the effects of high flows.
- Sufficient room for the operation of sediment removal equipment shall be provided between the dike and other obstructions in order to properly remove sediment.
- The ends of the dike shall be turned upgrade to prevent bypass of stormwater.
- When used as a perimeter control on drainage areas larger than 0.5 acres, a stone overflow structure, similar to the one shown in *Section 3.10 Silt Fence*, may be necessary at low points to act as a controlled overflow point in order to prevent localized flooding and failure of the dike.
- If used as check dams in small swales (drainage areas less than 3 acres), the dikes shall be installed according to the spacing and other criteria in *Section 2.1 Check Dam*.

3.13.4 Design Guidance and Specifications

Specifications for construction of this item may be found in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments, Section 201.8 Triangular Sediment Filter Dike.

3.13.5 Inspection and Maintenance Requirements

Triangular sediment filter dikes should be inspected regularly (at least as often as required by the TPDES Construction General Permit). Sediment should be removed before it reaches 6 inches in depth. If the fabric becomes clogged, it should be cleaned or, if necessary, replaced. If structural deficiencies are found, the dike should be immediately repaired or replaced.

The integrity of the filter fabric is important to the effectiveness of the dike. Overlap between dike sections must be checked on a regular basis and repaired if deficient.

3.13.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.

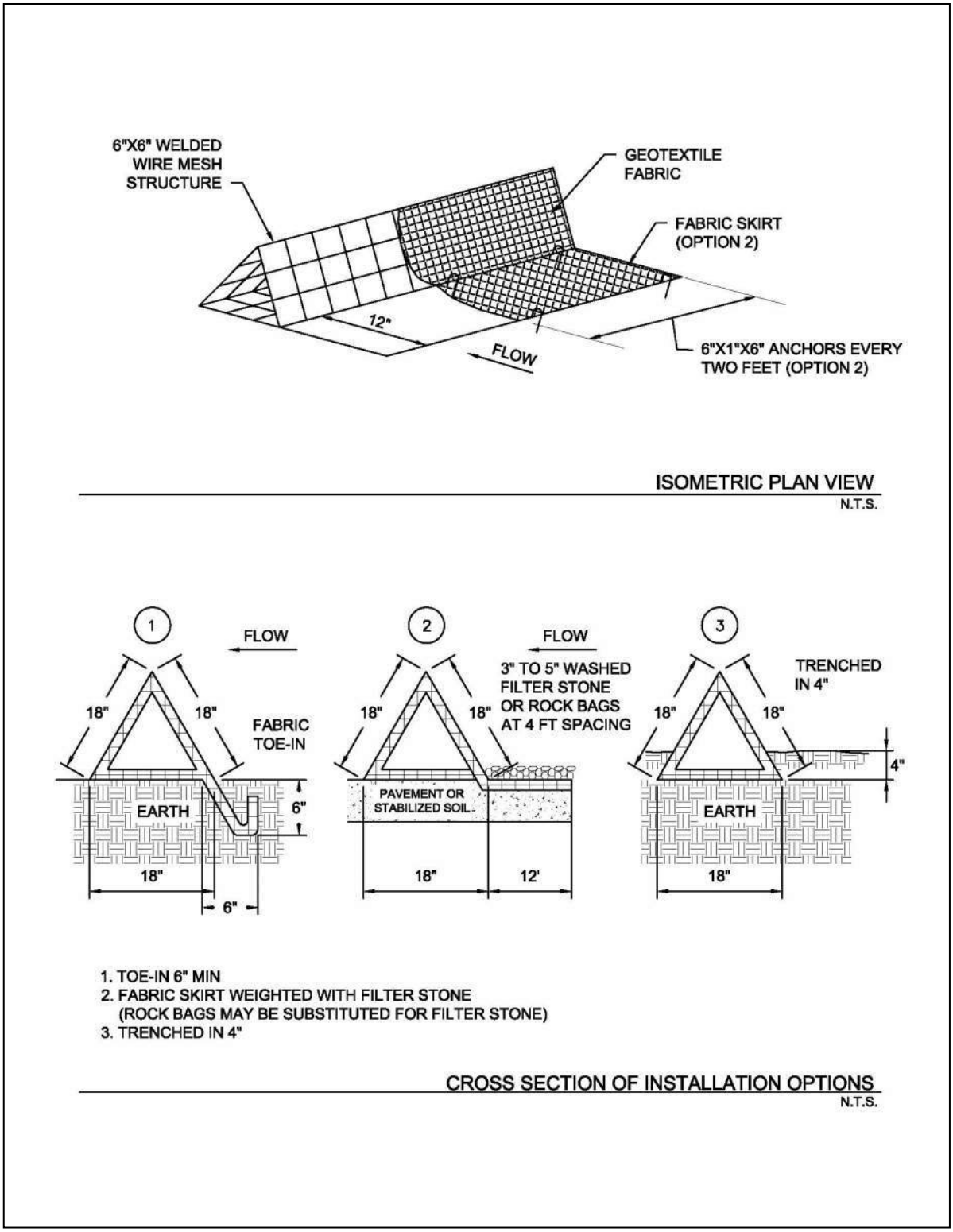
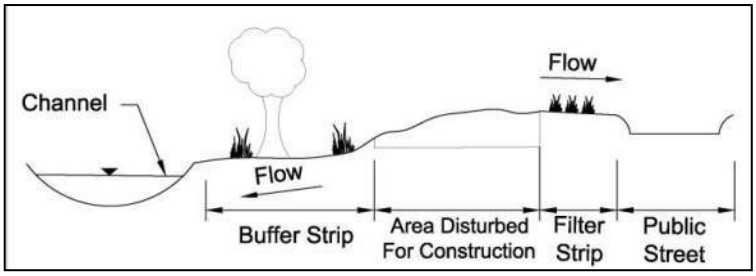


Figure 3.32 Schematics of Triangular Sediment Filter Dike

3.15 Vegetated Filter Strips and Buffers

Sediment Control



Description: Buffer strips (existing vegetation) and filter strips (planted vegetation) are sections of vegetated land adjacent to disturbed areas. They are designed with low slopes to convey sheet flow runoff from disturbed areas, resulting in the removal of sediment and other pollutants as the runoff passes through vegetation and infiltration occurs.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Minimum width (direction of flow across the vegetation) dependent on slope of disturbed area
- Maximum ratio of disturbed area to vegetated area dependent on slope
- Existing vegetation must meet criteria for type and coverage
- Dense grass required for planted vegetation
- Demarcate limits of vegetation and protect from traffic

ADVANTAGES / BENEFITS:

- Effective secondary control for removing clay particles
- Disperses flow and slows velocities to decrease erosion potential in receiving water
- Preserves the character of existing riparian corridor
- May become part of the permanent stormwater controls

DISADVANTAGES / LIMITATIONS:

- Appropriate as a primary control only for drainage areas of 2 acres or less and under certain site conditions
- Maximum 150 feet of flow to vegetated strip or buffer is used as a primary control
- Cannot treat large volumes or concentrated flows
- Not effective as a perimeter control when the perimeter cuts across contours instead of following contours
- Must limit access to vegetated portion of the site

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Rake accumulations of sediment from the vegetation
- Repair bare areas

TARGETED POLLUTANTS

- ● Sediment
- ◒ Nutrients & Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier

Channel Protection

Temporary Stabilization

Final Stabilization

Waste Management

Housekeeping Practices

Fe=0.35-0.85
(*Depends on many conditions in addition to soil type*)

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ○ Maintenance
- ○ Training
- ◒ Suitability for Slopes > 5%

Other Considerations:

- *Coordination with final landscaping*

3.15.1 Primary Use

Vegetated filter strips and buffers are used to reduce the velocity of sheet flow and reduce the volume of runoff through infiltration. In the process, sediment is removed as the runoff is filtered through the vegetation and infiltration occurs.

Vegetated filter strips and buffers are frequently used a secondary sediment control, since their performance is highly variable. They may be used as a primary sediment control only for small areas and under select site conditions.

3.15.2 Applications

Vegetated buffers are most applicable on development projects that are adjacent or near to floodplains, wetlands, streams and other natural waterways. Vegetated strips may be established along roads and property lines as a perimeter control for development. They are also applicable along the down slope side of utility line projects.

Vegetated buffers may be a primary sediment control for small areas where the conditions meet design criteria. They are also commonly used as a secondary control with other perimeter controls to provide higher levels of sediment removal. Vegetated areas have more capability to remove fine particle sizes than many conventional sediment controls. Combinations such as an organic filter tube or silt fence at the upslope edge of a vegetated strip are very effective.

In addition to perimeter control, vegetated strips are applicable for slope protection. Strips may be established at regular intervals to interrupt long or steep slopes. The strips maintain sheet flow, decrease velocities, and decrease erosion on the slopes.

3.15.3 Design Criteria

Vegetated buffers should be preserved along existing floodplains, wetlands, channels, and other natural waters whenever possible, even when the buffer is not a primary sediment control. Check for local requirements, as many municipalities mandate a vegetated buffer to maintain the character of the riparian corridor along a natural waterway. Vegetated buffers are encouraged to protect existing waterways by decreasing velocities, dispersing flow, and attenuating volume before the runoff reaches the waterway. If the development plans necessitate disturbing the riparian corridor, phase the development (when possible) to retain a vegetated buffer until final grading and landscaping at the end construction.

The evaluation and use of vegetated strips and buffers for use as a sediment control are unique to each site. The designer should carefully consider slope, vegetation, soils, depth to impermeable layer, depth to ground water, and runoff sediment characteristics before specifying a vegetated strip or buffer as a primary sediment control. This consideration is especially true for buffer strips of existing vegetation. If the buffer is not correctly planned, the first storm event can damage the natural vegetation beyond repair.

Design criteria in this section are only applicable when a vegetated strip or buffer is intended to be a primary or secondary sediment control for the construction site. As discussed above, a vegetated buffer may be preserved for other reasons that do not necessitate the use of these criteria if other sediment controls are provided for the construction site.

General

- Maximum slope of the vegetated strip or buffer shall be 5% across the width of the vegetation in the direction of flow.
- To maintain sheet flow, maximum distance of flow to the vegetated filter shall be 150 feet.
- Vegetated buffers and strips may only serve as a primary sediment control when the contributing drainage area has a slope of 15% or less. On steeper slopes, another perimeter control (e.g. organic filter tube, silt fence) may be installed at the upslope edge of the vegetated buffer or strip as a primary control, with the vegetation serving as a secondary control.

- Maximum disturbed area contributing runoff to the vegetated strip or buffer shall be 2 acres.
- Vegetated filter strips and buffers shall be a minimum of 15 feet wide. Width shall be increased based on the slope of the disturbed area as shown in the following table. Although the slope of the disturbed area may be up 15%, the slope of the vegetated strip or buffer is still limited to 5% maximum if used as a primary control for sediment.

Table 3.10 Sizing of Vegetated Buffers and Strips

Maximum Slope of Contributing Drainage Area	*Maximum Ratio of Disturbed Area to Vegetated Area*	*Minimum Width of Vegetated Area (Direction of Flow)*
5%	8:1	15 feet
10%	5:1	30 feet
15%	3:1	50 feet

- Access to vegetated buffers and strips shall be prohibited. These areas shall be protected from all traffic. No activities should occur in these areas, including no parking of the workers' vehicles, no eating of lunch, etc.
- Install controlled and stabilized ingress/egress points to manage traffic and direct it away from vegetation. Fence the vegetation or provide other means of protection to prevent vehicles and equipment from driving on the vegetated areas.
- Vegetated buffers and filter strips should not be used when high ground water, shallow depth to bedrock, or low soil permeability will inhibit infiltration of runoff.

Buffers of Existing Vegetation

- Fencing, flagged stakes spaced at a maximum of 6 feet, or other measures shall be used to clearly mark existing vegetation that is being preserved as a buffer before the start of any clearing, grubbing, or grading.
- Existing vegetation must be well established to be used as a vegetated buffer. It may be a mix of trees, sapling/shrubs, vines and herbaceous plants. However, the herbaceous plants shall cover at least 80 percent of the ground area.
- Bare soil shall not be visible within the buffer. Area between herbaceous plants shall be covered with a natural litter of organic matter (e.g. leaves, dead grass).
- Lots with a thick stand of existing grasses may preserve strips of the grasses as perimeter control in addition to using vegetation as a buffer along a natural waterway.

Strips of Planted Vegetation

- Vegetated strips should only be used when the site perimeter is along (parallel to) contours. Erosion of the vegetated strip will be a problem when the strip is placed along roads or site perimeters that cut across contours, resulting in runoff flowing along, instead of across, the filter strip.
- Minimize vehicle and equipment traffic and other activities that could compact soils on areas that will be planted for vegetated strips.
- Sod is required when the strip is intended to immediately function as a sediment control.
- Erosion control blankets (ECBs) should be used to prevent erosion and provide sediment control while establishing vegetation for a filter strip. If ECBs are not used, than another perimeter control is required until the vegetation is mature. Refer to *Section 2.3 Erosion Control Blankets*.
- Refer to the *Section 2.9 Vegetation* for criteria on establishing vegetation.
- When using vegetated strips for slope protection, spacing of the strips should be designed based on

slope steepness and type of soil. The strips may be planted directly on the slope grade when the slope is flatter than 2:1. For slopes of 2:1 and steeper, vegetation should be established on terraces. Terraces shall have a transverse slope of 1 percent in the opposite direction of the slope (i.e. back into the ground).

3.15.4 Design Guidance and Specifications

Guidance for analysis of the hydraulic loading on filter strips is in *Section 13.3 of the Stormwater Controls Technical Manual*.

No specification for vegetated filter strips and buffers is currently available in the Standard Specifications for Public Works Construction – North Central Texas Council of Governments.

3.15.5 Inspection and Maintenance Requirements

Vegetated filter strips and buffers should be inspected regularly (at least as often as required by the TPDES Construction General Permit). If rill erosion is developing, additional controls are needed to spread the flow before it enters the vegetated area. Rake light accumulations of sediment from the vegetation. Remove trash that accumulates in the vegetation. Additional sediment controls (e.g. a line of organic filter tubes or silt fence), are needed if sediment accumulations are large enough to bury the vegetation.

Inspect established planted vegetation for bare areas and place sod or install seeded erosion control blankets, as appropriate. Mow as needed after planted vegetation is mature.

3.15.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.

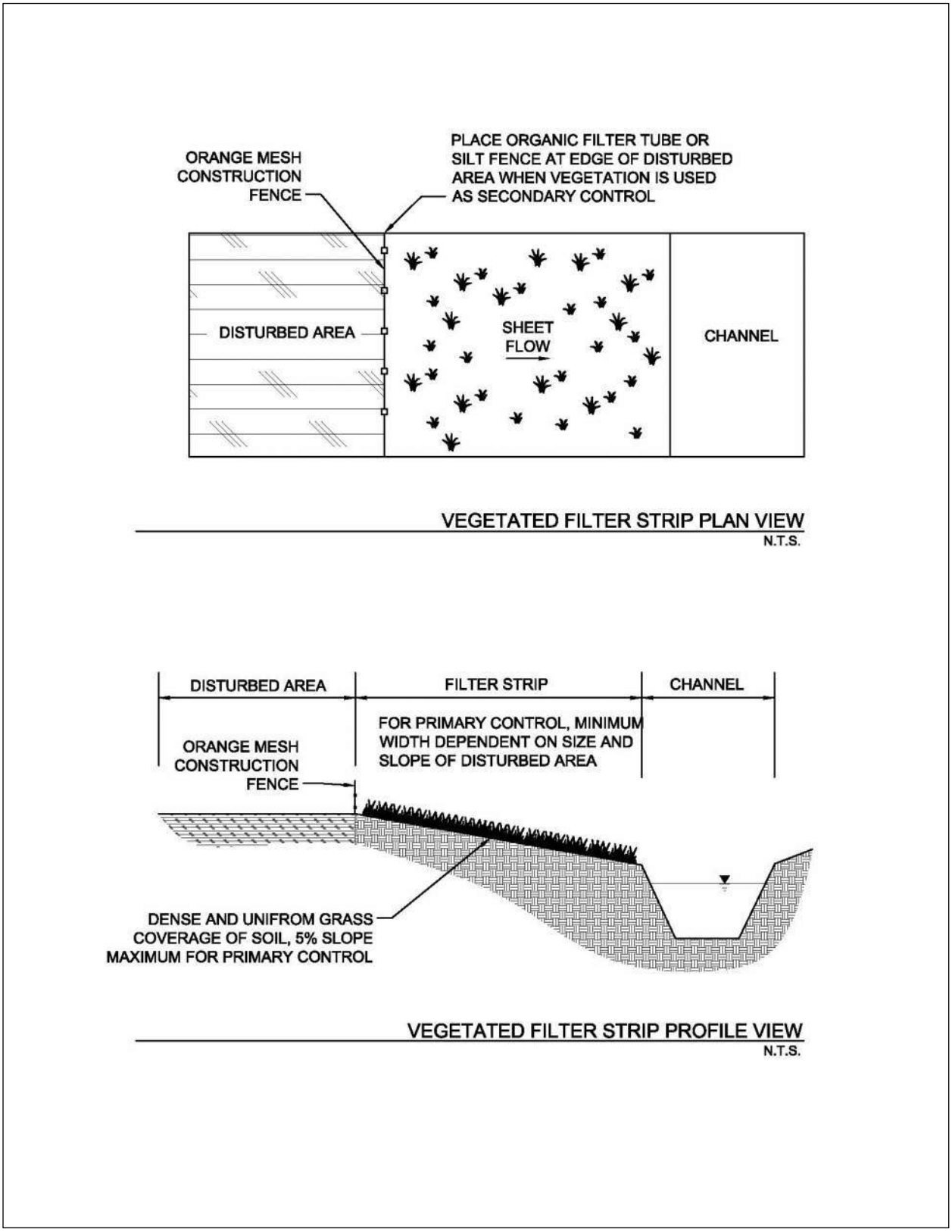


Figure 3.35 Schematics of Vegetated Filter Strip

4.3 Concrete Waste Management

Waste Control

Description: Concrete waste at construction sites comes in two forms: 1) excess fresh concrete mix, including residual mix washed from trucks and equipment, and 2) concrete dust and concrete debris resulting from demolition. Both forms have the potential to impact water quality through stormwater runoff contact with the waste. The objective of concrete waste management is to dispose of these wastes in a manner that protects surface and ground water.

KEY CONSIDERATIONS

DESIGN CRITERIA:

- Prohibit the discharge of untreated concrete washout water
- Prohibit dumping waste concrete anywhere except at pre-determined, regulated, recycling or disposal sites
- Provide a washout containment with a minimum of 6 cubic feet of containment volume for every 10 cubic yards of concrete placed
- Minimum 1 foot freeboard on containment
- Minimum 10 mil plastic lining of containment
- Washout water evaporation and concrete recycling are the recommended disposal methods
- Educate drivers and operators on proper disposal and equipment cleaning procedures

LIMITATIONS:

- Does not address concrete sawcutting waste

MAINTENANCE REQUIREMENTS:

- Inspect regularly
- Check for and repair any damage to washout containment areas
- Clean up any overflow of washout pits
- Regularly remove and properly dispose of concrete waste

TARGETED POLLUTANTS

- ○ Sediment
- ● Nutrients & Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ● Other Construction Wastes

APPLICATIONS

Perimeter Control
Slope Protection
Sediment Barrier
Channel Protection
Temporary Stabilization
Final Stabilization
Waste Management
Housekeeping Practices

IMPLEMENTATION CONSIDERATIONS

- ◒ Capital Costs
- ◒ Maintenance
- ● Training
- ○ Suitability for Slopes > 5%

Other Considerations:

- *None*

4.3.1 Primary Use

Concrete waste management is used to prevent the discharge of concrete wash water and waste into stormwater runoff. A number of water quality parameters can be affected by the introduction of concrete, especially fresh concrete. Concrete affects the pH of runoff, causing significant chemical changes in water bodies and harming aquatic life. Suspended solids in the form of both cement and aggregated dust are also generated from both fresh and demolished concrete waste.

4.3.2 Applications

Concrete waste management is applicable to all construction sites where existing concrete is being demolished or new concrete is being placed, regardless of the size of the total area disturbed. It is also applicable on repair and maintenance projects that may not be required to implement erosion and sediment controls.

4.3.3 Design Criteria

- The discharge of washout water to an inlet, swale, or any portion of the storm drainage system or a natural drainage system (e.g. channel) shall be prohibited.
- Construction plan notes shall state that the discharge of concrete washout to anything except a designated containment area is prohibited.
- Show the location of the concrete washout containment on the drawings, or require the contractor to provide this information.
- The contractor should be required to designate the site superintendent, foreman, or other person who is responsible for concrete placement to also be responsible for concrete waste management.

Unacceptable Waste Concrete Disposal Practices

- Dumping in vacant areas on the job-site.
- Illicit dumping onto off-site lots or any other placed not permitted to receive construction demoliotion debris.
- Dumping into ditches, drainage facilities, or natural water ways.
- Using concrete waste as fill material or bank stabilization.

Recommended Disposal Procedures

- Identify pre-determined, regulated, facilities for disposal of solid concrete waste. Whenever possible, haul the concrete waste to a recycling facility. Disposal facilities must have a Class IV (or more stringent) municipal solid waste permit from the TCEQ.
- A concrete washout pit or other containment shall be installed a minimum of 50 feet away from inlets, swales, drainage ways, channels, and other waters, if the site configuration provides sufficient space to do so. In no case shall concrete washout occur closer than 20 feet from inlets, swales, drainage ways, channels and other waters.
- Provide a washout area with a minimum of 6 cubic feet of containment volume for every 10 cubic yards of concrete poured. Alternatively, the designer may provide calculations sizing the containment based on the number of concrete trucks and pumps to be washed out.
- The containment shall be lined with plastic (minimum 10 millimeters thick) or an equivalent measure to prevent seepage to groundwater.
- Mosquitoes do not typically breed in the high pH of concrete washout water. However, the concrete washout containment should be managed in a manner that prevents the collection of other water that could be a potential breeding habitat.

  - Do not excavate the washout area until the day before the start of concrete placement to minimize the potential for collecting stormwater.
  - Do not discharge any water or wastewater into the containment except for concrete washout to prevent dilution of the high pH environment that is hostile to mosquitoes.
  - Remove the waste concrete and grade the containment closed within a week of completing concrete placement. Do not leave it open to collect stormwater.
  - If water must be pumped from the containment, it shall be collected in a tank, neutralized to lower the pH, and then hauled to a treatment facility for disposal. Alternatively, it may be hauled to a batch plant that has an onsite collection facility for concrete washout water.
  - Do **not** pump water directly from the containment to the Municipal Separate Storm Sewer System or a natural drainage way without treating for removal of fine particles and neutralization of the pH.

- Multiple concrete washout areas may be needed for larger projects to allow for drying time and proper disposal of the washout water and waste concrete.
- Portable, pre-fabricated, concrete washout containers are commercially available and are an acceptable alternative to excavating a washout area.
- Evaporation of the washout water and recycling of the concrete waste is the preferred disposal method. After the water has evaporated from the washout containment, the remaining cuttings and fine sediment shall be hauled from the site to a concrete recycling facility or a solid waste disposal facility.
- Remove waste concrete when the washout containment is half full. Always maintain a minimum of one foot freeboard.
- Use waste and recycling haulers and facilities approved by the local municipality.
- When evaporation of the washout water is not feasible, discharge from the collection area shall only be allowed if a passive treatment system is used to remove the fines. Criteria are in *Section 3.7 Passive Treatment System*. Mechanical mixing is required within the containment for passive treatment to be effective. The pH must be tested, and discharge is allowed only if the pH does not exceed 8.0. The pH may be lowered by adding sulfuric acid to the water. Dewatering of the collection area after treatment shall follow the criteria in *Section 3.3 Dewatering Controls*.
- Care shall be exercised when treating the concrete washout water for discharge. Monitoring must be implemented to verify that discharges do not violate groundwater or surface water quality standards.
- On large projects that are using a nearby batch plant, a washout facility associated with the plant and under the plant's TPDES Multi-Sector General Permit may be used instead of installing an onsite containment area for truck washout.

Education

- Drivers and equipment operators should be instructed on proper disposal and equipment washing practices (see above).
- Supervisors must be made aware of the potential environmental consequences of improperly handled concrete waste.

Enforcement

- The construction site manager or foreman must ensure that employees and pre-mix companies follow proper procedures for concrete disposal and equipment washing.
- Employees violating disposal or equipment cleaning directives must be re-educated or disciplined if necessary.

Demolition Practices

- Monitor weather and wind direction to ensure concrete dust is not entering drainage structures and surface waters.
- Spray water on structures being demolished to wet them before start of demolition operations. Reapply water whenever dust is observed.
- Construct sediment traps or other types of sediment detention devices downstream of demolition activities to capture and treat runoff from demolition wetting operations.

4.3.4 Design Guidance and Specifications

No specification for concrete waste management is currently available in the Standard Specifications for Public Works – North Central Texas Council of Governemtns.

4.3.5 Inspection and Maintenance Requirements

Concrete waste management controls should be inspected regularly (at least as often as required by the TPDES Construction General Permit) for proper handling of concrete waste. Check concrete washout pits and make repairs as needed. Washout pits should not be allowed to overflow. Maintain a schedule to regularly remove concrete waste and prevent over-filling.

If illicit dumping of concrete is found, remove the waste and reinforce proper disposal methods through education of employees.

4.3.6 Example Schematics

The following schematics are example applications of the construction control. They are intended to assist in understanding the control's design and function.

The schematics are **not for construction**. They may serve as a starting point for creating a construction detail, but they must be site adapted by the designer. In addition, dimensions and notes appropriate for the application must be added by the designer.

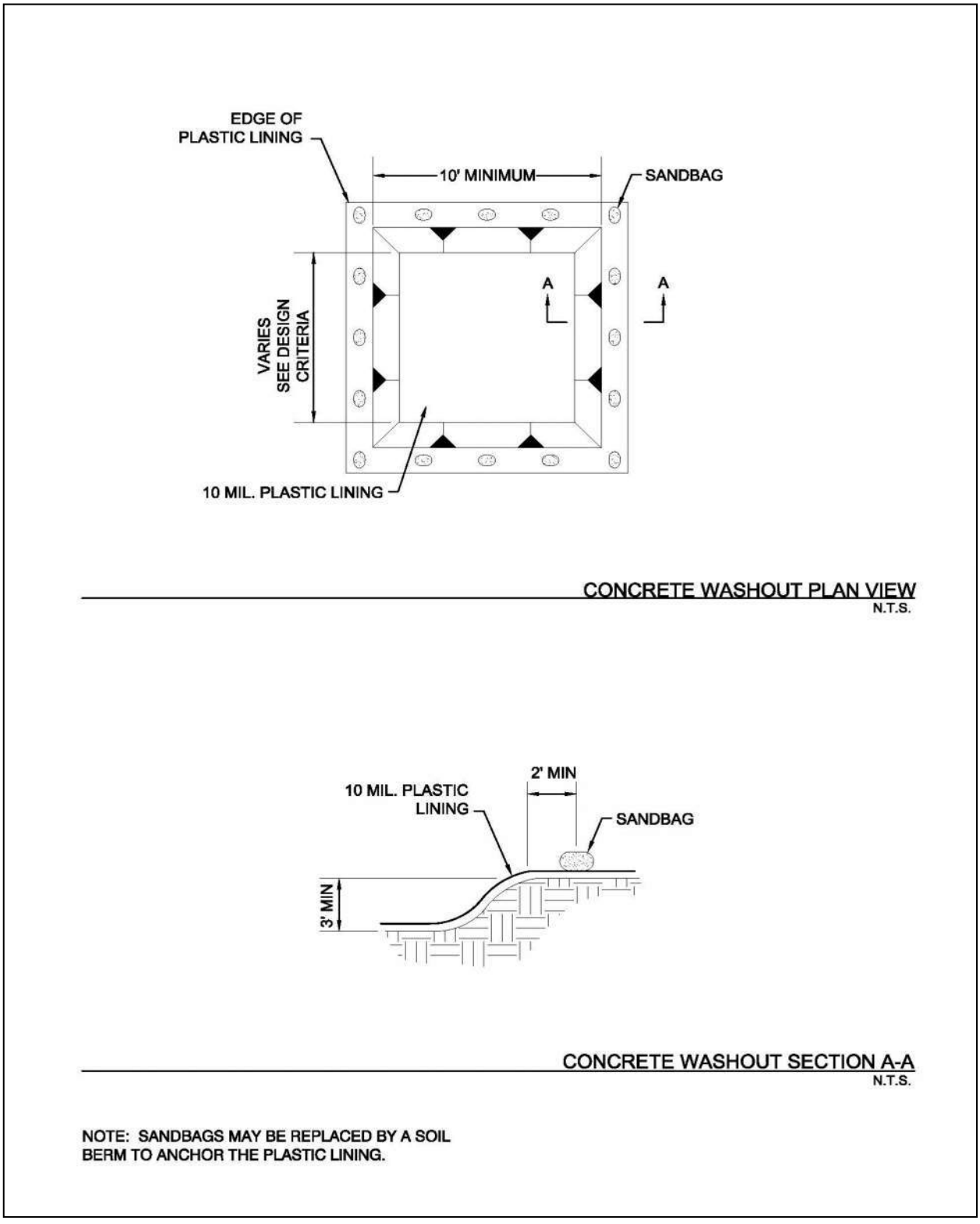


Figure 4.1 Schematics of Concrete Washout Containment

Best Management Practice Measures and Controls

Best Management Practice (BMP)	In Use	Maintained Post Construction?
Interceptor Swale		
Diversion Dike		
Pipe Slope Drain		
Vegetation		
Mulching		
Erosion Control Blankets		
Channel Protection		
Dust Control		
Silt Fence		
Organic Filter Berm		
Triangular Sediment Filter Dike		
Inlet Protection		
Stone Outlet Sediment Trap		
Sediment Basin		
Check Dam		
Temporary Sediment Tank		
Stabilized Construction Entrance		
Wheel Wash		
Debris and Trash Management		
Chemical Management		
Concrete Waste Management		
Concrete Sawcutting Waste Management		
Sandblasting Waste Management		
Lime Stabilization Management		
Sanitary Facilities		
Other*		
Other*		

***If another BMP is being used, include the BMP information in Appendix D.**

APPENDIX D

INSPECTION AND MAINTENANCE REPORTS

Inspector Qualifications*

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
□ Training Course _____
□ Supervised Experience _____
□ Other _____

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
□ Training Course _____
□ Supervised Experience _____
□ Other _____

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
□ Training Course _____
□ Supervised Experience _____
□ Other _____

**Personnel conducting inspections must be knowledgeable of the general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site.*

INSPECTION SCHEDULE

Inspections must be conducted:

- **Option 1** – at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inch or greater
- **Option 2** – at least once every 7 calendar days, regardless of whether or not there has been a rainfall event since the previous inspection.

Any changes to the schedule are conducted in accordance with the following:

- the schedule is changed a maximum of one time each month,
- the schedule change must be implemented at the beginning of a calendar month, and
- the reason for the schedule change must be documented below.

Date	Schedule Option	Reason for Schedule Change

Construction Site SWP3 Inspection Report

Status		
	☐ Complies	
	☐ Warning	No.
	☐ Project Shutdown	

SWP3	On-Site		Up-to-date	
	Yes	No[1]	Yes	No[2]

General Information		
	Project:	Date:
	Address:	Inspector:
		Qualifications: see Appendix E of SWP3
		Weather Conditions:
	Owner:	Contractor:

BMP	BMP In Use		Maint. Req'd		Comments
	Yes	No	Yes[2]	No	

[1]The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3.

[2]Items marked in this column need to be addressed in the Actions to be Taken table.

ACTIONS TO BE TAKEN	RESPONSIBLE PERSON(S)	DUE DATE	DATE COMPLETED	INITIALS

NOTE: These reports will be kept on file as part of the Storm Water Pollution Prevention Plan for at least three years. A copy of the SWP3 will be kept at the site at all times during construction.

CERTIFICATION STATEMENT: *"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."*

Name:	
Address:	
Telephone:	
Site Location:	
Inspector Signature:	Date:

MAINTENANCE GUIDELINES

1. Below are some maintenance practices to be used to maintain erosion and sediment controls:
   - All control measures will be inspected according to the schedule identified in Appendix E.
   - All measures will be maintained in good working order. The operator should correct any damage or deficiencies as soon as practicable after the inspection, but in no case later than seven (7) calendar days after the inspection.
   - BMP Maintenance (as applicable)
     - Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.
     - Silt fence will be inspected for depth of sediment, tears, to see of the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
     - Drainage swale will be inspected and repaired as necessary.
     - Inlet control will be inspected and repaired as necessary.
     - Check dam will be inspected and repaired as necessary.
     - Straw bale dike will be inspected and repaired as necessary.
     - Diversion dike will be inspected and any breaches promptly repaired.
     - Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
     - If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee must to work with the owner or operator of the property to remove the sediment.
     - Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

2. To maintain the above practices, the following will be performed:
   - Maintenance and repairs will be conducted before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. Following an inspection, deficiencies should be corrected no later than seven (7) calendar days after the inspection.
   - Any necessary revisions to the SWP3 as a result of the inspection must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event.
   - Personnel selected for inspection and maintenance responsibilities must be knowledgeable of the general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site.

APPENDIX E

ROLES AND RESPONSIBILITIES CHECKLIST AND CERTIFICATION STATEMENT

PRIMARY AND SECONDARY OPERATOR GENERAL RESPONSIBILITIES

DEFINITIONS:

Operator - The person or persons associated with a large or small construction activity that is either a primary or secondary operator as defined below:

Primary Operator – the person or persons associated with a large or small construction activity that meets either of the following two criteria:

(a.) the person or persons have operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications, or

(b.) the person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a storm water pollution prevention plan (SWP3) for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Secondary Operator – The person whose operational control is limited to the employment of other operators or to the ability to approve or disapprove changes to plans and specifications. A secondary operator is also defined as a primary operator and must comply with the permit requirements for primary operators if there are no other operators at the construction site.

Please note that both Owners and Contractors can meet the definition of being an Operator and will need to fulfill the associated requirements. The Roles and Responsibilities Checklist and Certification Statement located in Appendix F are to be completed and signed by the Owner and Contractor(s).

Secondary Operators and Primary Operators with Control Over Construction Plans and Specifications

All secondary operators and primary operators with control over construction plans and specifications must:

(a.) ensure the project specifications allow or provide that adequate BMPs are developed to meet the requirements of the general permit,

(b.) ensure that the SWP3 indicates the areas of the project where they have control over project specifications, including the ability to make modifications in specifications,

(c.) ensure all other operators affected by modifications in project specifications are notified in a timely manner so that those operators may modify their best management practices as necessary to remain compliant with the conditions of this general permit, and

(d.) ensure that the SWP3 for portions of the project where they are operators indicates the name and site-specific TPDES authorization numbers for permittees with the day-to-day operational control over those activities necessary to ensure compliance with the SWP3 and other permit conditions. If the party with day-to-day operational control has not been authorized or has abandoned

the site, the person with control over project specifications is considered to be the responsible party until the authority is transferred to another party and the SWP3 is updated.

Primary Operators with Day-to-Day Operational Control

Primary Operators with day-to-day operational control of those activities at a project that are necessary to ensure compliance with the SWP3 and other permit conditions must ensure that the SWP3 accomplishes the following requirements:

(a.) meets the requirements of the general permit for those portions of the project where they are operators,
(b.) the parties responsible for implementation of BMPs described in the SWP3,
(c.) indicates areas of the project where they have operational control over day-to-day activities, and
(d.) includes, for areas where they have operational control over day-to-day activities, the name and site-specific TPDES authorization number of the parties with control over project specifications, including the ability to make modifications in specifications.

Roles and Responsibilities Checklist

Role/Responsibility	Project Owner*	Primary Operator	Secondary Operator
Development of initial design specifications			
Payment for proposed construction activity			
Maintain SWP3 records for three years from the date that a NOT is submitted			
Complete, sign, and postmark NOI at least seven days prior to beginning of construction activity, or Complete, sign, and electronically submit NOI prior to the beginning of construction activity			
Post a copy of the signed NOI at project site and maintain through duration of project			
Post copy of completed construction site notice(s) at project site through duration of project			
Provide a copy of the signed NOI to any secondary operator and to the operator of any MS4 receiving construction site discharge, at least seven days prior to commencing construction activities			
Maintain schedule of major construction activities, keep a copy with SWP3, and retain a copy of the SWP3 at the construction site at all times			
Update SWP3 to reflect daily operations (e.g., revisions, installation dates, grading operation dates, BMP maintenance, and inspection information)			
Update SWP3 to reflect changes in the Contractor's contact information			
Identify, maintain and modify BMPs (as necessary) to control erosion and sedimentation due to construction activities throughout life of project			
Provide stabilized construction entrances and sediment barriers, and clean existing rock and/or add rock to prevent mud and dirt from entering streets or alleys			
Maintain and/or replace sediment barriers and silt traps (if installed), etc. throughout life of project			
Maintain erosion control on stockpiles without blocking drainage paths			
Perform SWP3 inspections in accordance with TPDES General Permit, and keep inspection reports with SWP3			
Based on inspection results, modify SWP3 and pollution prevention controls to maintain that storm water (or identified non-storm water discharges) are the only discharges leaving the site			

Role/Responsibility	Project Owner*	Primary Operator	Secondary Operator
Provide proper management of project-generated trash and debris, including debris collected from storm water protection devices			
Stabilize all disturbed areas related to construction for temporary or permanent ceasing of activities			
Comply with all State and local sanitary sewer or septic system regulations			
Provide copies of all SWP3 records to the Project Owner			
Complete, sign, and submit NOT form to the TCEQ and MS4 Operators when the project has been completed and stabilized			
Complete applicable portion of the site notice related to removal of the notice and submit to the operator of any MS4 receiving site discharge			

**Please note that the Project Owner can meet the definition of an operator. Please refer to the definitions of "primary operator" and "secondary operator" for more information.*

Each operator engaged in activities that disturb surface soils must be identified and must sign the following certification statement. Signatory requirement guidance and an additional certification statement form are attached (Appendix F).

Certification Statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign this document and can provide documentation in proof of such authorization upon request."

Project Owner

Name: L. Michael Cox

Title: President

Company: JDS RR LLC

Signature: _____

Date: _____

Operator Type: _____

General Contractor

Name: _____

Title: _____

Company: _____

Signature: _____

Date: _____

Operator Type: _____

Subcontractor (as appropriate)

Name: _____

Title: _____

Company: _____

Signature: _____

Date: _____

Operator Type: _____

Subcontractor (as appropriate)

Name: _____

Title: _____

Company: _____

Signature: _____

Date: _____

Operator Type: _____

NOTICE OF INTENT (NOI) LOG			
Name	**Company**	**Date Submitted NOI**	**TPDES Permit No.**

APPENDIX F

TPDES GENERAL PERMIT (TXR150000) FOR STORM WATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR150000,
effective March 5, 2018, and amended January 28, 2022

Construction sites that discharge stormwater associated with construction activity located in the state of Texas may discharge to surface water in the state only according to monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the Commission of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, on March 5, 2028.

EFFECTIVE DATE: March 5, 2023

ISSUED DATE: February 27, 2023

For the Commission

TPDES GENERAL PERMIT NUMBER TXR150000

RELATING TO STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

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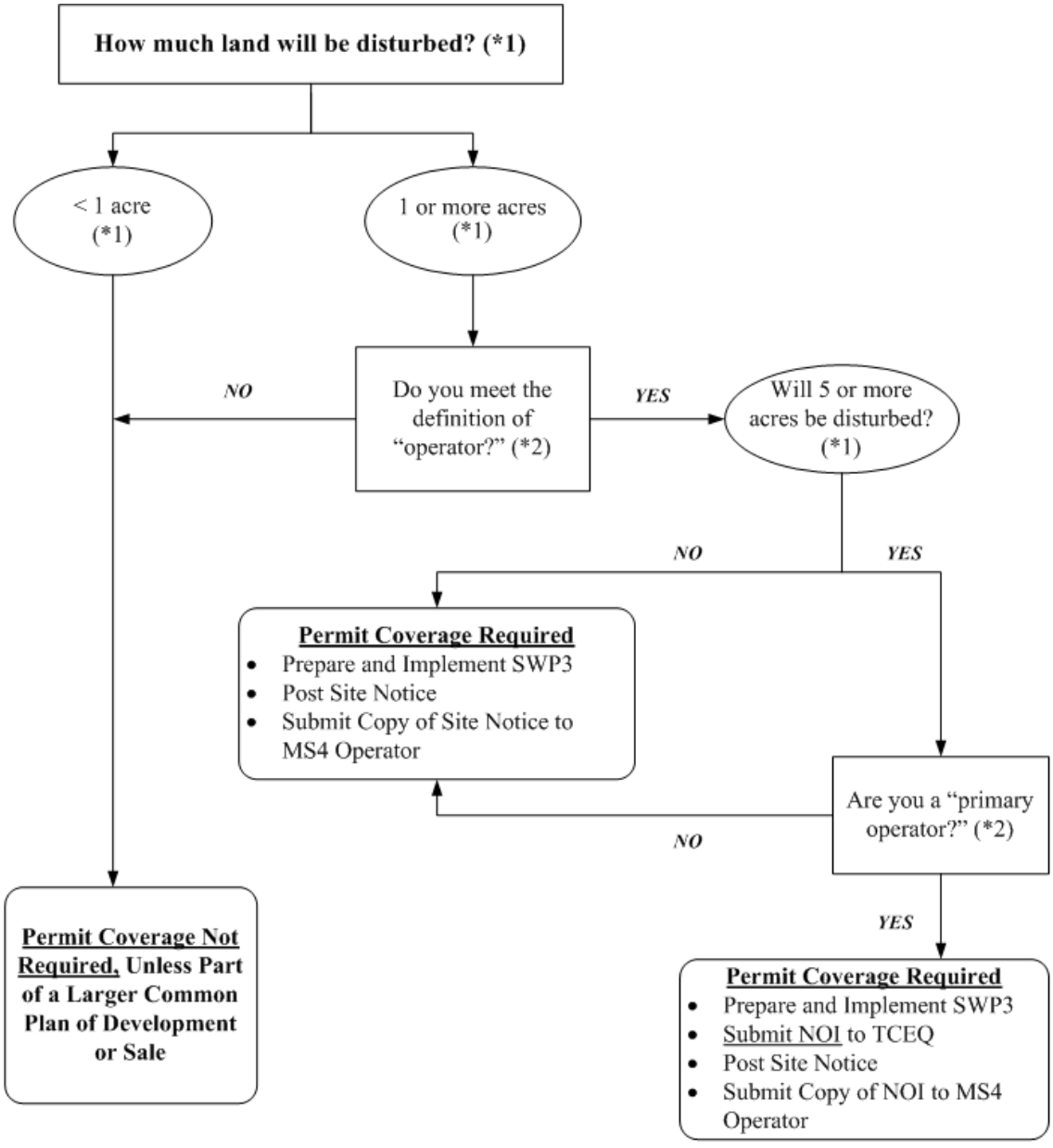
Part I. Flow Chart and Definitions

Section A. Flow Chart to Determine Whether Coverage is Required

When calculating the acreage of land area disturbed, include the disturbed land-area of all construction and construction support activities.



(*1) ***To determine the size of the construction project, use the size of the entire area to be disturbed, and include the size of the larger common plan of development or sale, if the project is part of a larger project (refer to Part I.B., "Definitions," for an explanation of "common plan of development or sale").***

(*2) ***Refer to the definitions for "operator," "primary operator," and "secondary operator" in Part I., Section B. of this permit.***

Section B. Definitions

Arid Areas – Areas with an average annual rainfall of zero (0) to ten (10) inches.

Best Management Practices (BMPs) – Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Commencement of Construction – The initial disturbance of soils associated with clearing, grading, or excavation activities, as well as other construction-related activities (e.g., demolition; grubbing; stockpiling of fill material; placement of raw materials at the site).

Common Plan of Development – A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development (also known as a "common plan of development or sale") is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities. A common plan of development does not necessarily include all construction projects within the jurisdiction of a public entity (e.g., a city or university). Construction of roads or buildings in different parts of the jurisdiction would be considered separate "common plans," with only the interconnected parts of a project being considered part of a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.). Where discrete construction projects occur within a larger common plan of development or sale but are located one quarter (¼) mile or more apart, and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale, provided that any interconnecting road, pipeline or utility project that is part of the same "common plan" is not included in the area to be disturbed.

Construction Activity – Includes soil disturbance activities, including clearing, grading, excavating, construction-related activity (e.g., stockpiling of fill material, demolition), and construction support activity. This does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing rights-of-way, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

Construction Support Activity – A construction-related activity that specifically supports construction activity, which can involve earth disturbance or pollutant-generating activities of its own, and can include, but are not limited to, activities associated with concrete or asphalt batch plants, rock crushers, equipment staging or storage areas, chemical storage areas, material storage areas, material borrow areas, and excavated material disposal areas. Construction support activity must only directly support the construction activity authorized under this general permit.

Dewatering – The act of draining accumulated stormwater or groundwater from building foundations, vaults, trenches, and other similar points of accumulation.

Discharge – For the purposes of this permit, the drainage, release, or disposal of pollutants in stormwater and certain non-stormwater from areas where soil disturbing activities (e.g., clearing, grading, excavation, stockpiling of fill material, and demolition), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck wash out, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

Drought-Stricken Area – For the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html.

Edwards Aquifer – As defined under Texas Administrative Code (TAC) § 213.3 of this title (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone – Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the Texas Commission on Environmental Quality (TCEQ) and the appropriate regional office. The Edwards Aquifer Map Viewer, located at https://www.tceq.texas.gov/gis/edwards-viewer.html

Edwards Aquifer Contributing Zone – The area or watershed where runoff from precipitation flows downgradient to the recharge zone of the Edwards Aquifer. The contributing zone is located upstream (upgradient) and generally north and northwest of the recharge zone for the following counties: all areas within Kinney County, except the area within the watershed draining to Segment No. 2304 of the Rio Grande Basin; all areas within Uvalde, Medina, Bexar, and Comal Counties; all areas within Hays and Travis Counties, except the area within the watersheds draining to the Colorado River above a point 1.3 miles upstream from Tom Miller Dam, Lake Austin at the confluence of Barrow Brook Cove, Segment No. 1403 of the Colorado River Basin; and all areas within Williamson County, except the area within the watersheds draining to the Lampasas River above the dam at Stillhouse Hollow reservoir, Segment No. 1216 of the Brazos River Basin. The contributing zone is illustrated on the Edwards Aquifer map viewer at https://www.tceq.texas.gov/gis/edwards-viewer.html

Effluent Limitations Guideline (ELG) – Defined in 40 Code of Federal Regulations (CFR) § 122.2 as a regulation published by the Administrator under § 304(b) of the Clean Water Act (CWA) to adopt or revise effluent limitations.

Facility or Activity – For the purpose of this permit, referring to a construction site, the location of construction activity, or a construction support activity that is regulated under this general permit, including all contiguous land and fixtures (for example, ponds and materials stockpiles), structures, or appurtenances used at a construction site or industrial site.

Final Stabilization – A construction site status where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (that is, evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, or gabions) have been employed.

(b) For individual lots in a residential construction site by either:

(1) the homebuilder completing final stabilization as specified in condition (a) above; or

(2) the homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization. If temporary stabilization is not feasible, then the homebuilder may fulfill this requirement by retaining perimeter controls or BMPs, and informing the homeowner of the need for removal of temporary controls and the establishment of final stabilization. Fulfillment of this requirement must be documented in the homebuilder's stormwater pollution prevention plan (SWP3).

(c) For construction activities on land used for agricultural purposes (such as pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface water and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) temporary erosion control measures (for example, degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) the temporary erosion control measures are selected, designed, and installed to achieve 70% of the native background vegetative coverage within three years.

High-Level Radioactive Waste – Meaning as assigned by 42 United States Code (U.S.C.) Section 10101 (12) and includes spent nuclear fuel as defined by 42 U.S.C. Section 10101 (23).

Hyperchlorination of Waterlines – Treatment of potable water lines or tanks with chlorine for disinfection purposes, typically following repair or partial replacement of the waterline or tank, and subsequently flushing the contents.

Impaired Water – A surface water body that is identified as impaired on the latest approved CWA § 303(d) List or waters with an EPA-approved or established total maximum daily load (TMDL) that are found on the latest EPA approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, which lists the category 4 and 5 water bodies.

Indian Country Land – (1) All land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation; (2) all dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. (40 CFR § 122.2)

Indian Tribe – Any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian Reservation (40 CFR § 122.2).

Infeasible – Not technologically possible, or not economically practicable and achievable in light of best industry practices. (40 CFR § 450.11(b)).

Large Construction Activity – Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities).

Linear Project – Includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

Low Rainfall Erosivity Waiver (LREW) – A written submission to the executive director from an operator of a construction site that is considered as small construction activity under the permit, which qualifies for a waiver from the requirements for small construction activities, only during the period of time when the calculated rainfall erosivity factor is less than five (5).

Minimize – To reduce or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) – A separate storm sewer system owned or operated by the United States, a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, that discharges to surface water in the state.

Notice of Change (NOC) – Written notification to the executive director from a discharger authorized under this permit, providing changes to information that was previously provided to the agency in a notice of intent form.

Notice of Intent (NOI) – A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) – A written submission to the executive director from a discharger authorized under this general permit requesting termination of coverage.

Operator – The person or persons associated with a large or small construction activity that is either a primary or secondary operator as defined below:

Primary Operator – The person or persons associated with construction activity that meets either of the following two criteria:

(a) the person or persons have on-site operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

(b) the person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a Stormwater Pollution Prevention Plan (SWP3) for the site or other permit conditions (for example, they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Secondary Operator – The person or entity, often the property owner, whose operational control is limited to:

(a) the employment of other operators, such as a general contractor, to perform or supervise construction activities; or

(b) the ability to approve or disapprove changes to construction plans and specifications, but who does not have day-to-day on-site operational control over construction activities at the site.

Secondary operators must either prepare their own SWP3 or participate in a shared SWP3 that covers the areas of the construction site, where they have control over the construction plans and specifications.

If there is not a primary operator at the construction site, then the secondary operator is defined as the primary operator and must comply with the requirements for primary operators.

Outfall – For the purpose of this permit, a point source at the point where stormwater runoff associated with construction activity discharges to surface water in the state and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other water of the U.S. and are used to convey waters of the U.S.

Permittee – An operator authorized under this general permit. The authorization may be gained through submission of a notice of intent, by waiver, or by meeting the requirements for automatic coverage to discharge stormwater runoff and certain non-stormwater discharges from construction activity.

Point Source – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff (40 CFR § 122.2).

Pollutant – Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any surface water in the state. The term "pollutant" does not include tail water or runoff water from irrigation or rainwater runoff from cultivated or uncultivated rangeland, pastureland, and farmland. For the purpose of this permit, the term “pollutant” includes sediment.

Pollution – The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose (Texas Water Code (TWC) § 26.001(14)).

Rainfall Erosivity Factor (R factor) – The total annual erosive potential that is due to climatic effects, and is part of the Revised Universal Soil Loss Equation (RUSLE).

Receiving Water – A "Water of the United States" as defined in 40 CFR § 122.2 or a surface water in the state into which the regulated stormwater discharges.

Semi-arid Areas – Areas with an average annual rainfall of 10 to 20 inches.

Separate Storm Sewer System – A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains), designed or used for collecting or conveying stormwater; that is not a combined sewer, and that is not part of a publicly owned treatment works (POTW).

Small Construction Activity – Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities).

Steep Slopes – Where a state, Tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

Stormwater (or Stormwater Runoff) – Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity – Stormwater runoff, as defined above, from a construction activity.

Structural Control (or Practice) – A pollution prevention practice that requires the construction of a device, or the use of a device, to reduce or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: silt fences, earthen dikes, drainage swales, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Surface Water in the State – Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Temporary Stabilization – A condition where exposed soils or disturbed areas are provided a protective cover or other structural control to prevent the migration of pollutants. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either permanent stabilization can be achieved or until further construction activities take place.

Thawing Conditions – For the purposes of this permit, thawing conditions are expected based on the historical likelihood of two (2) or more days with daytime temperatures greater than 32 degrees Fahrenheit (℉). This date can be determined by looking at historical weather data.

NOTE: The estimation of thawing conditions is for planning purposes only. During construction, the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

Total Maximum Daily Load (TMDL) – The total amount of a pollutant that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Turbidity – A condition of water quality characterized by the presence of suspended solids and/or organic material.

Waters of the United States – Waters of the United States or waters of the U.S. means the term as defined in 40 CFR § 122.2.

Part II. Permit Applicability and Coverage

Section A. Discharges Eligible for Authorization

1. Stormwater Associated with Construction Activity

   Discharges of stormwater runoff and certain non-stormwater discharges from small and large construction activities may be authorized under this general permit, except as described in Part II.C. of this permit.

2. Discharges of Stormwater Associated with Construction Support Activities

   Discharges of stormwater runoff and certain non-stormwater discharges from construction support activities as defined in Part I.B. of this general permit may be authorized, provided that the following conditions are met:

   (a) the construction support activities are located within one (1) mile from the boundary of the construction site where the construction activity authorized under the permit is being conducted that requires the support of these activities;

   (b) an SWP3 is developed and implemented for the permitted construction site according to the provisions in Part III.F. of this general permit, including appropriate controls and measures to reduce erosion and the discharge of pollutants in stormwater runoff according to the provisions in Part IV. of this general permit;

   (c) the activities are directly related to the construction site;

   (d) the activities are not a commercial operation, nor serve other unrelated construction projects; and

   (e) the activities do not continue to operate beyond the completion of the construction activity at the project it supports.

   Construction support activities that operate outside the terms provided in (a) through (e) above must obtain authorization under a separate Texas Pollutant Discharge Elimination System (TPDES) permit, which may include the TPDES Multi-Sector General Permit (MSGP), TXR050000 (related to stormwater discharges associated with industrial activity), an alternative general permit (if available), or an individual water quality permit.

3. Non-Stormwater Discharges

   The following non-stormwater discharges from sites authorized under this general permit are also eligible for authorization under this general permit:

(a) discharges from emergency fire-fighting activities (emergency fire-fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, or similar activities);

(b) uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);

(c) water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where solvents, detergents, and soaps are not used, where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;

(d) uncontaminated water used to control dust;

(e) potable water sources, including waterline flushings, but excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life;

(f) uncontaminated air conditioning condensate;

(g) uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and

(h) lawn watering and similar irrigation drainage.

4. Other Permitted Discharges

   Any discharge authorized under a separate National Pollutant Discharge Elimination System (NPDES), TPDES, or TCEQ permit may be combined with discharges authorized by this general permit, provided those discharges comply with the associated permit.

Section B. Concrete Truck Wash Out

The wash out of concrete trucks at regulated construction sites must be performed in accordance with the requirements of Part VI of this general permit.

Section C. Limitations on Permit Coverage

1. Post Construction Discharges

   Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under this general permit. Discharges originating from the sites are not authorized under this general permit following the submission of the Notice of Termination (NOT) or removal of the appropriate TCEQ site notice, as applicable, for the regulated construction activity.

2. Prohibition of Non-Stormwater Discharges

   Except as otherwise provided in Part II.A. of this general permit, only discharges that are composed entirely of stormwater associated with construction activity may be authorized under this general permit.

3. Compliance with Water Quality Standards

   Discharges to surface water in the state that would cause, have the reasonable potential to cause, or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses of surface water in the state are not eligible for coverage under this general permit. The executive director may require an application for an individual permit or alternative general permit (see Parts II.H.2. and 3.) to authorize discharges to surface water in the state if the executive director determines that any activity will cause, has the reasonable potential to cause, or contribute to a violation of water quality standards or is found to cause, has the reasonable potential to cause, or contribute to, the impairment of a designated use. The executive director may also require an application for an individual permit considering factors described in Part II.H.3. of this general permit.

4. Impaired Receiving Waters and Total Maximum Daily Load (TMDL) Requirements

   The permittee shall determine whether the authorized discharge is to an impaired water body on the latest EPA-approved CWA § 303(d) List or waters with an EPA-approved or established TMDL that are found on the latest EPA-approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, which lists the category 4 and 5 water bodies.

   New sources or new discharges of the pollutants of concern to impaired waters are not authorized by this permit unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are those that do not meet applicable water quality standard(s) and are listed as category 4 or 5 in the current version of the *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, and waterbodies listed on the CWA § 303(d) List. Pollutants of concern are those for which the water body is listed as impaired.

   Discharges of the pollutants of concern to impaired water bodies for which there is a TMDL are not eligible for coverage under this general permit unless they are consistent with the approved TMDL. Permittees must incorporate the conditions and requirements applicable to their discharges into their SWP3, in order to be eligible for coverage under this general permit. For consistency with the construction stormwater-related items in an approved TMDL, the SWP3 must be consistent with any applicable condition, goal, or requirement in the TMDL, TMDL Implementation Plan (I-Plan), or as otherwise directed by the executive director.

5. Discharges to the Edwards Aquifer Recharge or Contributing Zone

   Discharges cannot be authorized by this general permit where prohibited by 30 TAC Chapter 213 (relating to Edwards Aquifer). In addition, commencement of construction (see definition for commencement of construction in Part I.B. above)) at a site regulated under 30 TAC Chapter 213, may not begin until the appropriate Edwards Aquifer Protection Plan (EAPP) has been approved by the TCEQ's Edwards Aquifer Protection Program.

   (a) For new discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone (CZ), operators must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

(b) For existing discharges located within the Edwards Aquifer Recharge Zone, the requirements of the agency-approved Water Pollution Abatement Plan (WPAP) under the Edwards Aquifer Rule are in addition to the requirements of this general permit. BMPs and maintenance schedules for structural stormwater controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in stormwater runoff are in addition to the requirements in this general permit for this pollutant.

(c) For discharges located within ten (10) stream miles upstream of the Edwards Aquifer recharge zone, applicants shall also submit a copy of the NOI to the appropriate TCEQ regional office.

Counties: Comal, Bexar, Medina, Uvalde, and Kinney

Contact: TCEQ Water Program Manager
San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
(210) 490-3096

Counties: Williamson, Travis, and Hays

Contact: TCEQ Water Program Manager
Austin Regional Office
12100 Park 35 Circle
Room 179, Building A
Austin, Texas 78753
(512) 339-2929

6. Discharges to Specific Watersheds and Water Quality Areas

Discharges otherwise eligible for coverage cannot be authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

7. Protection of Streams and Watersheds by Other Governmental Entities

This general permit does not limit the authority or ability of federal, other state, or local governmental entities from placing additional or more stringent requirements on construction activities or discharges from construction activities.

8. Indian Country Lands

Stormwater runoff from construction activities occurring on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of stormwater require authorization under federal NPDES regulations, authority for these discharges must be obtained from the U.S. Environmental Protection Agency (EPA).

9. Exempt Oil and Gas Activities

The CWA § 402(l)(2) provides that stormwater discharges from construction activities related to oil and gas exploration, production, processing, or treatment, or transmission facilities are exempt from regulation under this permit. The term “oil and gas exploration, production, processing, or treatment operations, or transmission facilities” is defined in 33 U.S.C. Annotated § 1362 (24).

The exemption in CWA § 402(l)(2) *includes* stormwater discharges from construction activities regardless of the amount of disturbed acreage, which are necessary to prepare a site for drilling and the movement and placement of drilling equipment, drilling waste management pits, in field treatment plants, and in field transportation infrastructure (e.g., crude oil pipelines, natural gas treatment plants, and both natural gas transmission pipeline compressor and crude oil pumping stations) necessary for the operation of most producing oil and gas fields. Construction activities are defined in 33 U.S. Code § 1362(24) and interpreted by EPA in the final rule. *See* June 12, 2006 Amendments to the NPDES Regulations for Storm Water Discharges Associated with Oil and Gas Exploration, Production, Processing, or Treatment Operations or Transmission Facilities (71 FR 33628, Part V. Terminology).

The exemption *does not include* stormwater discharges from the construction of administrative buildings, parking lots, and roads servicing an administrative building at an oil and gas site, as these are considered traditional construction activities.

As described in 40 CFR § 122.26(c)(1)(iii) [*regulations prior to 2006*], discharges from oil and gas construction activities are waived from CWA § 402(l)(2) permit coverage *unless* the construction activity (or construction support activity) has had a discharge of stormwater resulting in the discharge of a reportable quantity of oil or hazardous substances or the discharge contributes to a violation of water quality standards.

Exempt oil and gas activities which have lost their exemption as a result of one of the above discharges, must obtain permit coverage under this general permit, an alternative general permit, or a TPDES individual permit prior to the next discharge.

10. Stormwater Discharges from Agricultural Activities

Stormwater discharges from agricultural activities that are not point source discharges of stormwater are not subject to TPDES permit requirements. These activities may include clearing and cultivating ground for crops, construction of fences to contain livestock, construction of stock ponds, and other similar agricultural activities. Discharges of stormwater runoff associated with the construction of facilities that are subject to TPDES regulations, such as the construction of concentrated animal feeding operations, would be point sources regulated under this general permit.

11. Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened aquatic or aquatic-dependent species or its critical habitat are not authorized by this permit, unless the requirements of the Endangered Species Act are satisfied. Federal requirements related to endangered species apply to all TPDES permitted discharges and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved. If a permittee has concerns over potential impacts to listed species, the permittee may contact TCEQ for additional information.

12. Storage of High-Level Radioactive Waste

Discharges of stormwater from construction activities associated with the construction of a facility that is licensed for the storage of high-level radioactive waste by the United States Nuclear Regulatory Commission under 10 CFR Part 72 are not authorized by this general permit. Texas Health and Safety Code (THSC) § 401.0525 prohibits TCEQ from issuing any TPDES authorizations for the construction or operation of these facilities.

Discharges of stormwater from the construction activities associated with the construction of a facility located at the site of currently or formerly operating nuclear power reactors and currently or formerly operating nuclear research and test reactors operated by a university are not prohibited under THSC § 401.0525 and continue to be regulated under this general permit.

13. Other

    Nothing in Part II. of the general permit is intended to negate any person's ability to assert *force majeure* (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC § 70.7

Section D. Deadlines for Obtaining Authorization to Discharge

1. Large Construction Activities

   (a) New Construction – Discharges from sites where the commencement of construction activity occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

   (b) Ongoing Construction – Operators of large construction activities continuing to operate after the effective date of this permit, and authorized under the TPDES Construction General Permit (CGP) TXR150000 (effective on March 5, 2018, and amended on January 28, 2022), must submit an NOI to renew authorization or an NOT to terminate coverage under this general permit within 90 days of the effective date of this general permit. During this interim or grace period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the issued and amended 2018 TPDES CGP.

2. Small Construction Activities

   (a) New Construction – Discharges from sites where the commencement of construction activity occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

   (b) Ongoing Construction – Discharges from ongoing small construction activities that commenced prior to the effective date of this general permit, and that do not meet the conditions to qualify for termination of this permit as described in Part II.F. of this general permit, must meet the requirements to be authorized, either under this general permit or a separate TPDES permit, within 90 days of the effective date of this general permit. During this interim period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the issued and amended 2018 TPDES CGP.

Section E. Obtaining Authorization to Discharge

1. Automatic Authorization for Small Construction Activities with Low Potential for Erosion

   Operators of small construction activity, as defined in Part I.B. of this general permit, shall not submit an NOI for coverage, unless otherwise required by the executive director.

   Operators of small construction activities, which occur in certain counties and during periods of low potential for erosion that do not meet the conditions of the waiver described in Part II.G. of this general permit, may be automatically authorized under this general permit if all the following conditions are met prior to the commencement of construction.

   (a) The construction activity occurs in a county and during the corresponding date range(s) listed in Appendix A;

(b) The construction activity is initiated and completed, including either final or temporary stabilization of all disturbed areas, within the time frame identified in Appendix A for the location of the construction site;

(c) All temporary stabilization is adequately maintained to effectively reduce or prohibit erosion, permanent stabilization activities have been initiated, and a condition of final stabilization is completed no later than 30 days following the end date of the time frame identified in Appendix A for the location of the construction site; the permittee signs a completed TCEQ Small Construction Site Notice for low potential for erosion (Form TCEQ-20964), including the certification statement;

(d) A signed and certified copy of the TCEQ Small Construction Site Notice for low potential for erosion is posted at the construction site in a location where it is readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and maintained in that location until final stabilization has been achieved;

NOTE: Posted TCEQ site notices may have a redacted signature as long as there is an original signed and certified TCEQ site notice, with a viewable signature, located on-site and available for review by any applicable regulatory authority.

(e) A copy of the signed and certified TCEQ Small Construction Site Notice for low potential for erosion is provided to the operator of any MS4 receiving the discharge at least two (2) days prior to commencement of construction activities;

(f) Discharges of stormwater runoff or other non-stormwater discharges from any supporting concrete batch plant or asphalt batch plant is separately authorized under an individual TPDES permit, another TPDES general permit, or under an individual TCEQ permit where stormwater and non-stormwater is disposed of by evaporation or irrigation (discharges are adjacent to water in the state); and

(g) Any non-stormwater discharges are either authorized under a separate permit or authorization, are not considered by TCEQ to be a wastewater, or are captured and routed for disposal at a publicly operated treatment works or licensed waste disposal facility.

If all of the conditions in (a) – (h) above are met, then the operator(s) of small construction activities with low potential for erosion are not required to develop a SWP3.

If an operator is conducting small construction activities and any of the above conditions (a) – (h) are not met, the operator cannot declare coverage under the automatic authorization for small construction activities with low potential for erosion and must meet the requirements for automatic authorization (all other) small construction activities, described below in Part II.E.2.

For small construction activities that occur during a period with a low potential for erosion, where automatic authorization under this section is not available, an operator may apply for and obtain a waiver from permitting (Low Rainfall Erosivity Waiver – LREW), as described in Part II.G. of this general permit. Waivers from coverage under the LREW do not allow for any discharges of non-stormwater and the operator must ensure that discharges on non-stormwater are either authorized under a separate permit or authorization.

2. Automatic Authorization for Small Construction Activities

Operators of small construction activities as defined in Part I.B. of this general permit shall not submit an NOI for coverage, unless otherwise required by the executive director.

Operators of small construction activities, as defined in Part I.B. of this general permit or as defined but who do not meet in the conditions and requirements located in Part II.E.1 above, may be automatically authorized for small construction activities, provided that they meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit, that covers either the entire site or all portions of the site for which the applicant is the operator, and implement the SWP3 prior to commencing construction activities;

(b) all operators of regulated small construction activities must post a copy of a signed and certified TCEQ Small Construction Site Notice (Form TCEQ-20963), the notice must be posted at the construction site in a location where it is safely and readily available for viewing by the general public, local, state, and federal authorities, at least two (2) days prior to commencing construction activity , and maintain the notice in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the TCEQ site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public; local, state, and federal authorities);

(c) operators must maintain a posted TCEQ Small Construction Site Notice on the approved TCEQ form at the construction site until final stabilization has been achieved; and

> NOTE: Posted TCEQ site notices may have a redacted signature as long as there is an original signed and certified TCEQ Small Construction Site Notice, with a viewable signature, located on-site and available for review by an applicable regulatory authority.

(d) provide a copy of the signed and certified TCEQ Small Construction Site Notice to the operator of any municipal separate storm sewer system (MS4) receiving the discharge at least two (2) days prior to commencement of construction activities.

(e) if signatory authority is delegated by an authorized representative, then a Delegation of Signatory form must be submitted as required by 30 TAC § 305.128 (relating to Signatories to Reports). Operators for small construction activities must submit this form via mail following the instructions on the approved TCEQ paper form. A new Delegation of Signatory form must be submitted if the delegation changes to another individual or position.

As described in Part I.B of this general permit, large construction activities include those that will disturb less than five (5) acres of land, but that are part of a larger common plan of development or sale that will ultimately disturb five (5) or more acres of land and must meet the requirements of Part II.E.3. below.

3. Authorization for Large Construction Activities

Operators of large construction activities that qualify for coverage under this general permit must meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit that covers either the entire site or all portions of the site where the applicant is the operator. The SWP3 must be developed and implemented prior to obtaining coverage and prior to commencing construction activities;

(b) primary operators of large construction activities must submit an NOI prior to commencing construction activity at a construction site. A completed NOI must be submitted to TCEQ electronically using the online ePermits system on TCEQ's website.

Operators with an electronic reporting waiver must submit a completed paper NOI to TCEQ at least seven (7) days prior to commencing construction activity to obtain provisional coverage 48-hours from the postmark date for delivery to the TCEQ. An authorization is no longer provisional when the executive director finds the NOI is administratively complete, and an authorization number is issued to the permittee for the construction site indicated on the NOI.

If an additional primary operator is added after the initial NOI is submitted, the additional primary operator must meet the same requirements for existing primary operator(s), as indicated above.

If the primary operator changes due to responsibility at the site being transferred from one primary operator to another after the initial NOI is submitted, the new primary operator must submit an electronic NOI, unless they request and obtain a waiver from electronic reporting, at least ten (10) days prior to assuming operational control of a construction site and commencing construction activity.

(c) all operators of large construction activities must post a TCEQ Large Construction Site Notice on the approved TCEQ form (Form TCEQ-20961) in accordance with Part III.D.2. of this permit. The TCEQ site notice must be located where it is safely and readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and must be maintained in that location until final stabilization has been achieved. For linear construction activities, e.g., pipeline or highway, the TCEQ site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public, local, state, and federal authorities;

(d) two days prior to commencing construction activities, all primary operators must:

i. provide a copy of the signed NOI to the operator of any MS4 receiving the discharge and to any secondary construction operator, and

ii. list in the SWP3 the names and addresses of all MS4 operators receiving a copy;

(e) if signatory authority is delegated by an authorized representative, then a Delegation of Signatories form must be submitted as required by 30 TAC § 305.128 (relating to Signatories to Reports). Primary operators must submit this form electronically using the State of Texas Environmental Electronic Reporting System (STEERS), TCEQ's online permitting system, or by paper if the permittee requested and obtained an electronic reporting waiver. A new Delegation of Signatories form must be submitted, if the delegation changes to another individual or position;

(f) all persons meeting the definition of "secondary operator" in Part I of this permit are hereby notified that they are regulated under this general permit, but are not required to submit an NOI, provided that a primary operator at the site has submitted an NOI, or prior to commencement of construction activities, a primary operator is required to submit an NOI and the secondary operator has provided notification to the operator(s) of the need to obtain coverage (with records of notification available upon request). Any secondary operator notified under this provision may alternatively submit an NOI under this general permit, may seek coverage under an alternative TPDES individual permit, or may seek coverage under an alternative TPDES general permit if available; and

(g) all secondary operators of large construction activities must post a copy of the signed and certified TCEQ Large Construction Site Notice for Secondary Operators on the approved TCEQ form (Form TCEQ-20962) and provide a copy of the signed and certified TCEQ site notice to the operator of any MS4 receiving the discharge at least two (2) days prior to the commencement construction activities.

NOTE: Posted TCEQ site notices may have a redacted signature as long as there is an original signed and certified TCEQ Large Construction Site Notice for Secondary Operators, with a viewable signature, located on-site and available for review by an applicable regulatory authority.

Applicants must submit an NOI using the online ePermits system (accessed using STEERS) available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

4. Waivers for Small Construction Activities:

Operators of certain small construction activities may obtain a waiver from coverage under this general permit, if applicable. The requirements are outlined in Part II.G. below.

5. Effective Date of Coverage

(a) Operators of small construction activities as described in either Part II.E.1. or II.E.2. above are authorized immediately following compliance with the applicable conditions of Part II.E.1. or II.E.2. Secondary operators of large construction activities as described in Part II.E.3. above are authorized immediately following compliance with the applicable conditions in Part II.E.3. For activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(b) Primary operators of large construction activities as described in Part II.E.3. above that electronically submit an NOI are authorized immediately following confirmation of receipt of the electronic form by the TCEQ, unless otherwise notified by the executive director.

Operators with an electronic reporting waiver are provisionally authorized 48-hours from the date that a completed paper NOI is postmarked for delivery to the TCEQ, unless otherwise notified by the executive director. An authorization is no longer provisional when the executive director finds the NOI is administratively complete and an authorization number is issued to the permittee for the construction site indicated on the NOI.

For construction activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction activities may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(c) Operators are not prohibited from submitting late NOIs or posting late site notices to obtain authorization under this general permit. The TCEQ reserves the right to take appropriate enforcement action for any unpermitted activities that may have occurred between the time construction commenced and authorization under this general permit was obtained.

(d) If operators that submitted NOIs have active authorizations for construction activities that are ongoing when this general permit expires on March 5, 2028, and a new general permit is issued, a 90-day interim (grace) period is granted to provide coverage that is administratively continued until operators with active authorizations can obtain coverage under the newly issued CGP. The 90-day grace period starts on the effective date of the newly issued CGP.

6. Contents of the NOI

The NOI form shall require, at a minimum, the following information:

(a) the TPDES CGP authorization number for existing authorizations under this general permit, where the operator submits an NOI to renew coverage within 90 days of the effective date of this general permit;

(b) the name, address, and telephone number of the operator filing the NOI for permit coverage;

(c) the name (or other identifier), address, county, and latitude/longitude of the construction project or site;

(d) the number of acres that will be disturbed by the applicant;

(e) the estimated construction project start date and end date;

(f) confirmation that the project or site will not be located on Indian Country lands;

(g) confirmation if the construction activity is associated with an oil and gas exploration, production, processing, or treatment, or transmission facility (see Part II.C.9.)

(h) confirmation that the construction activities are not associated with the construction of a facility that is licensed for the storage of high-level radioactive waste by the United States Nuclear Regulatory Commission under 10 CFR Part 72 (see Part II.C.12.);

(i) confirmation that a SWP3 has been developed in accordance with all conditions of this general permit, that it will be implemented prior to commencement of construction activities, and that it is compliant with any applicable local sediment and erosion control plans; for multiple operators who prepare a shared SWP3, the confirmation for an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator;

(j) name of the receiving water(s);

(k) the classified segment number for each classified segment that receives discharges from the regulated construction activity (if the discharge is not directly to a classified segment, then the classified segment number of the first classified segment that those discharges reach); and

(l) the name of all surface waters receiving discharges from the regulated construction activity that are on the latest EPA-approved CWA § 303(d) List of impaired waters or *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* as not meeting applicable state water quality standards.

7. Notice of Change (NOC)

(a) If relevant information provided in the NOI changes, the operator that has submitted the NOI must submit an NOC to TCEQ at least fourteen (14) days before the change occurs. Where a 14-day advance notice is not possible, the operator must submit an NOC to TCEQ within fourteen (14) days of discovery of the change. If the operator becomes aware that it failed to submit any relevant facts or submitted

incorrect information in an NOI, the correct information must be submitted to TCEQ in an NOC within fourteen (14) days after discovery.

(b) Information on an NOC may include, but is not limited to, the following:

i. a change in the description of the construction project;

ii. an increase in the number of acres disturbed (for increases of one (1) or more acres);

iii. or the name of the operator (where the name of the operator has changed).

(c) Electronic NOC.

Applicants must submit an NOC using the online ePermits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. All waivers from electronic reporting are not transferrable. Electronic reporting waivers expire on the same date as the authorization to discharge, except for temporary waivers that expire one (1) year from issuance. A copy of the NOC form or letter must also be placed in the SWP3 and provided to the operator of any MS4 receiving the discharge. Operators are authorized immediately following confirmation of receipt of the electronic form by the TCEQ, unless otherwise notified by the executive director.

(d) Paper NOC.

Applicants who request and obtain an electronic reporting waiver shall submit the NOC on a paper form provided by the executive director, or by letter if an NOC form is not available.

(e) A copy of the NOC form or letter must also be placed in the SWP3 and provided to the operator of any MS4 receiving the discharge. A list that includes the names and addresses of all MS4 operators receiving a copy of the NOC (or NOC letter) must be included in the SWP3. Information that may not be included on an NOC includes but is not limited to the following:

i. transfer of operational control from one operator to another, including a transfer of the ownership of a company. A transfer of ownership of a company includes changes to the structure of a company, such as changing from a partnership to a corporation or changing corporation types, so that the filing or charter number that is on record with the Texas Secretary of State (SOS) must be changed.

ii. coverage under this general permit is not transferable from one operator to another. Instead, the new operator will need to submit an NOI or LREW, as applicable, and the previous operator will need to submit an NOT.

iii. a decrease in the number of acres disturbed. This information must be included in the SWP3 and retained on site.

8. Signatory Requirement for NOI Forms, NOT Forms, NOC Forms, and Construction Site Notices

NOI forms, NOT forms, NOC forms, and Construction Site Notices that require a signature must be signed according to 30 TAC § 305.44 (relating to Signatories for Applications).

Section F. Terminating Coverage

1. Notice of Termination (NOT) Required

   Each operator that has submitted an NOI for authorization of large construction activities under this general permit must apply to terminate that authorization following the conditions described in this section of the general permit.

   Authorization of large construction must be terminated by submitting an NOT electronically via the online ePermits system available through the TCEQ website, or on a paper NOT form to TCEQ supplied by the executive director with an approved waiver from electronic reporting. Authorization to discharge under this general permit terminates at midnight on the day a paper NOT is postmarked for delivery to the TCEQ or immediately following confirmation of the receipt of the NOT submitted electronically by the TCEQ.

   Applicants must submit an NOT using the online ePermits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge, except for temporary waivers that expire one (1) year from issuance.

   The NOT must be submitted to TCEQ, and a copy of the NOT provided to the operator of any MS4 receiving the discharge (with a list in the SWP3 of the names and addresses of all MS4 operators receiving a copy), within 30 days after any of the following conditions are met:

   (a) final stabilization has been achieved on all portions of the site that are the responsibility of the operator;

   (b) a transfer of operational control has occurred (See Section II.F.4. below); or

   (c) the operator has obtained alternative authorization under an individual TPDES permit or alternative TPDES general permit.

   Compliance with the conditions and requirements of this permit is required until the NOT is submitted and approved by TCEQ.

2. Minimum Contents of the NOT

   The NOT form shall require, at a minimum, the following information:

   (a) if authorization for construction activity was granted following submission of an NOI, the permittee's site-specific TPDES authorization number for a specific construction site;

   (b) an indication of whether final stabilization has been achieved at the site and a NOT has been submitted or if the permittee is simply no longer an operator at the site;

   (c) the name, address, and telephone number of the permittee submitting the NOT;

   (d) the name (or other identifier), address, county, and location (latitude/longitude) of the construction project or site; and

   (e) a signed certification that either all stormwater discharges requiring authorization under this general permit will no longer occur, or that the applicant is no longer the operator of the facility or construction site, and that all temporary structural erosion controls have either been removed, will be removed on a schedule defined in the SWP3, or have been transferred to a new operator if the new operator has applied for permit coverage. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

3. Termination of Coverage for Small Construction Sites and for Secondary Operators at Large Construction Sites

   (a) Each operator that has obtained automatic authorization for small construction or is a secondary operator for large construction must perform the following when terminating coverage under the permit:

      i. remove the TCEQ site notice;

      ii. complete the applicable portion of the TCEQ site notice related to removal of the TCEQ site notice; and

      iii. submit a copy of the completed TCEQ site notice to the operator of any MS4 receiving the discharge (or provide alternative notification as allowed by the MS4 operator, with documentation of such notification included in the SWP3).

   (b) The activities described in Part II.F.3.(a) above must be completed by the operator within 30 days of meeting any of the following conditions:

      i. final stabilization has been achieved on all portions of the site that are the responsibility of the operator;

      ii. a transfer of day-to-day operational control over activities necessary to ensure compliance with the SWP3 and other permit conditions has occurred (See Section II.F.4. below); or

      iii. the operator has obtained alternative authorization under an individual or general TPDES permit.

   For Small Construction Sites and Secondary Operators at Large Construction Sites, authorization to discharge under this general permit terminates immediately upon removal of the applicable TCEQ construction site notice. Compliance with the conditions and requirements of this permit is required until the TCEQ construction site notice is removed. The construction site notice cannot be removed until final stabilization has been achieved.

4. Transfer of Day-to-Day Operational Control

   (a) When the primary operator of a large construction activity changes or operational control over activities necessary to ensure compliance with the SWP3 and other permit conditions is transferred to another primary operator, the original operator must do the following:

      i. submit an NOT within ten (10) days prior to the date that responsibility for operations terminates, and the new operator must submit an NOI at least ten (10) days prior to the transfer of operational control, in accordance with condition (c) below; and

      ii. submit a copy of the NOT from the primary operator terminating its coverage under the permit and its operational control of the construction site and submit a copy of the NOI from the new primary operator to the operator of any MS4 receiving the discharge in accordance with Part II.F.1. above.

   (b) For transfer of operational control, operators of small construction activities and secondary operators of large construction activities who are not required to submit an NOI must do the following:

      i. the existing operator must remove the original TCEQ construction site notice, and the new operator must post the required TCEQ construction site notice prior to the transfer of operational control, in accordance with the conditions in Part II.F.4.(c) i or ii below; and

ii. a copy of the TCEQ construction site notice, which must be completed and provided to the operator of any MS4 receiving the discharge, in accordance with Part II.F.3. above.

(c) Each operator is responsible for determining its role as an operator as defined in Part I.B. and obtaining authorization under the permit, as described above in Part II.E. 1. - 3. Where authorization has been obtained by submitting an NOI for coverage under this general permit, permit coverage is not transferable from one operator to another. A transfer of operational control can include changes to the structure of a company, such as changing from a partnership to a corporation, or changing to a different corporation type such that a different filing (or charter) number is established with the Texas Secretary of State (SOS). A transfer of operational control can also occur when one of the following criteria is met, as applicable:

i. another operator has assumed control over all areas of the site that do not meet the definition for final stabilization;

ii. all silt fences and other temporary erosion controls have either been removed, scheduled for removal as defined in the SWP3, or transferred to a new operator, provided that the original permitted operator has attempted to notify the new operator in writing of the requirement to obtain permit coverage. Records of this notification (or attempt at notification) shall be retained by the operator transferring operational control to another operator in accordance with Part VI of this permit. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal; or

iii. a homebuilder has purchased one (1) or more lots from an operator who obtained coverage under this general permit for a common plan of development or sale. The homebuilder is considered a new operator and shall comply with the requirements of this permit. Under these circumstances, the homebuilder is only responsible for compliance with the general permit requirements as they apply to the lot(s) it has operational control over in a larger common plan of development, and the original operator remains responsible for common controls or discharges, and must amend its SWP3 to remove the lot(s) transferred to the homebuilder.

Section G. Waivers from Coverage

The executive director may waive the otherwise applicable requirements of this general permit for stormwater discharges from small construction activities under the terms and conditions described in this section.

1. Waiver Applicability and Coverage

Operators of small construction activities may apply for and receive a waiver from the requirements to obtain authorization under this general permit, when the calculated rainfall erosivity (R) factor for the entire period of the construction project is less than five (5).

The operator must submit a Low Rainfall Erosivity Waiver (LREW) certification form to the TCEQ electronically via the online ePermits system available through the TCEQ website. The LREW form is a certification by the operator that the small construction activity will commence and be completed within a period when the value of the calculated R factor is less than five (5).

Applicants who request and obtain an electronic reporting waiver shall submit the LREW on a paper form provided by the executive director at least seven (7) days prior to commencing construction activity to obtain provisional coverage 48-hours from the postmark date for delivery to the TCEQ. An authorization is no longer provisional when the executive director finds the LREW is administratively complete, and an authorization number is issued to the permittee for the construction site indicated on the LREW. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge, except for temporary waivers that expire one (1) year from issuance.

This LREW from coverage does not apply to any non-stormwater discharges, including what is allowed under this permit. The operator must ensure that all non-stormwater discharges are either authorized under a separate permit or authorization or are captured and routed to an authorized treatment facility for disposal.

2. Steps to Obtaining a Waiver

The construction site operator may calculate the R factor to request a waiver using the following steps:

(a) estimate the construction start date and the construction end date. The construction end date is the date that final stabilization will be achieved.

(b) find the appropriate Erosivity Index (EI) zone in Appendix B of this permit.

(c) find the EI percentage for the project period by adding the results for each period of the project using the table provided in Appendix D of this permit, in EPA Fact Sheet 2.1, or in USDA Handbook 703, by subtracting the start value from the end value to find the percent EI for the site.

(d) refer to the Isoerodent Map (Appendix C of this permit) and interpolate the annual isoerodent value for the proposed construction location.

(e) multiply the percent value obtained in Step (c) above by the annual isoerodent value obtained in Step (d). This is the R factor for the proposed project. If the value is less than five (5), then a waiver may be obtained. If the value is five (5) or more, then a waiver may not be obtained, and the operator must obtain coverage under Part II.E.2. of this permit.

Alternatively, the operator may calculate a site-specific R factor utilizing the following online calculator: https://lew.epa.gov/, or using another available resource.

A copy of the LREW certification form is not required to be posted at the small construction site.

3. Effective Date of an LREW

Unless otherwise notified by the executive director, operators of small construction activities seeking coverage under an LREW are provisionally waived from the otherwise applicable requirements of this general permit 48-hours from the date that a completed paper LREW certification form is postmarked for delivery to TCEQ, or immediately upon receiving confirmation of approval of an electronic submittal, made via the online ePermits system available through the TCEQ website.

Applicants seeking coverage under an LREW must submit an application for an LREW using the online ePermits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

4. Activities Extending Beyond the LREW Period

   If a construction activity extends beyond the approved waiver period due to circumstances beyond the control of the operator, the operator must either:

   (a) recalculate the R factor using the original start date and a new projected ending date, and if the R factor is still under five (5), submit a new LREW form at least two (2) days before the end of the original waiver period; or

   (b) obtain authorization under this general permit according to the requirements for automatic authorization for small construction activities in Part II.E.2. of this permit, prior to the end of the approved LREW period.

Section H. Alternative TPDES Permit Coverage

1. Individual Permit Alternative

   Any discharge eligible for coverage under this general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC Chapter 305 (relating to Consolidated Permits). Applications for individual permit coverage must be submitted at least 330 days prior to commencement of construction activities to ensure timely authorization. Existing coverage under this general permit should not be terminated until an individual permit is issued and in effect.

2. General Permit Alternative

   Any discharges eligible for authorization under this general permit may alternatively be authorized under a separate general permit according to 30 TAC Chapter 205 (relating to General Permits for Waste Discharges), as applicable.

3. Individual Permit Required

   The executive director may require an operator of a construction site, otherwise eligible for authorization under this general permit, to apply for an individual TPDES permit in the following circumstances:

   (a) the conditions of an approved TMDL or TMDL I-Plan on the receiving water;

   (b) the activity being determined to cause, has a reasonable potential to cause, or contribute to a violation of water quality standards or being found to cause, or contribute to, the loss of a designated use of surface water in the state; and

   (c) any other consideration defined in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges) including 30 TAC § 205.4(c)(3)(D), which allows the commission to deny authorization under the general permit and require an individual permit if a discharger has been determined by the executive director to have been out of compliance with any rule, order, or permit of the commission, including non-payment of fees assessed by the executive director.

      A discharger with a TCEQ compliance history rating of “unsatisfactory” is ineligible for coverage under this general permit. In that case, 30 TAC § 60.3 requires the executive director to deny or suspend an authorization to discharge under a general permit. However, per TWC § 26.040(h), a discharger is entitled to a hearing before the commission prior to having an authorization denied or suspended for having an “unsatisfactory” compliance history.

   Denial of authorization to discharge under this general permit or suspension of a permittee’s authorization under this general permit for reasons other than compliance history shall be done according to commission rules in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

Section I. Permit Expiration

1. This general permit is effective for a term not to exceed five (5) years. All active discharge authorizations expire on the date provided on page one (1) of this permit. Following public notice and comment, as provided by 30 TAC § 205.3 (relating to Public Notice, Public Meetings, and Public Comment), the commission may amend, revoke, cancel, or renew this general permit. All authorizations that are active at the time the permit term expires will be administratively continued as indicated in Part II.I.2. below and in Part II.D.1.(b) and D.2.(b) of this permit.
2. If the executive director publishes a notice of the intent to renew or amend this general permit before the expiration date, the permit will remain in effect for existing, authorized discharges until the commission takes final action on the permit. Upon issuance of a renewed or amended permit, permittees may be required to submit an NOI within 90 days following the effective date of the renewed or amended permit, unless that permit provides for an alternative method for obtaining authorization.
3. If the commission does not propose to reissue this general permit within 90 days before the expiration date, permittees shall apply for authorization under an individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit. No new NOIs will be accepted nor new authorizations honored under the general permit after the expiration date.

Part III. Stormwater Pollution Prevention Plans (SWP3)

All regulated construction site operators shall prepare an SWP3, prior to submittal of an NOI, to address discharges authorized under Parts II.E.2. and II.E.3. of this general permit that will reach waters of the U.S. This includes discharges to MS4s and privately owned separate storm sewer systems that drain into surface water in the state or waters of the U.S.

Individual operators at a site may develop separate SWP3s that cover only their portion of the project, provided reference is made to the other operators at the site. Where there is more than one (1) SWP3 for a site, operators must coordinate to ensure that BMPs and controls are consistent and do not negate or impair the effectiveness of each other. Regardless of whether a single comprehensive SWP3 is developed or separate SWP3s are developed for each operator, it is the responsibility of each operator to ensure compliance with the terms and conditions of this general permit in the areas of the construction site where that operator has control over construction plans and specifications or day-to-day operations.

An SWP3 must describe the implementation of practices that will be used to minimize to the extent practicable the discharge of pollutants in stormwater associated with construction activity and non-stormwater discharges described in Part II.A.3., in compliance with the terms and conditions of this permit.

An SWP3 must also identify any potential sources of pollution that have been determined to cause, have a reasonable potential to cause, or contribute to a violation of water quality standards or have been found to cause or contribute to the loss of a designated use of surface water in the state from discharges of stormwater from construction activities and construction support activities. Where potential sources of these pollutants are present at a construction site, the SWP3 must also contain a description of the management practices that will be used to prevent these pollutants from being discharged into surface water in the state or waters of the U.S.

> NOTE: Construction support activities can also include vehicle repair areas, fueling areas, etc. that are present at a construction site solely for the support construction activities and are only used by operators at the construction site.

The SWP3 is intended to serve as a road map for how the construction operator will comply with the effluent limits and other conditions of this permit. Additional portions of the effluent limits are established in Part IV. of the permit.

Section A. Shared SWP3 Development

For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site is encouraged. Operators of small and large construction activities must independently obtain authorization under this permit but may work together with other regulated operators at the construction site to prepare and implement a single, comprehensive SWP3, which can be shared by some or all operators, for the construction activities that each of the operators are performing at the entire construction site.

1. The SWP3 must include the following:
   (a) for small construction activities – the name of each operator that participates in the shared SWP3;
   (b) for large construction activities – the name of each operator that participates in the shared SWP3, the general permit authorization numbers of each operator (or the date that the NOI was submitted to TCEQ by each operator that has not received an authorization number for coverage under this permit); and
   (c) for large and small construction activities – the signature of each operator participating in the shared SWP3.
2. The SWP3 must clearly indicate which operator is responsible for satisfying each shared requirement of the SWP3. If the responsibility for satisfying a requirement is not described in the plan, then each permittee is entirely responsible for meeting the requirement within the boundaries of the construction site where they perform construction activities. The SWP3 must clearly describe responsibilities for meeting each requirement in shared or common areas.
3. The SWP3 may provide that one operator is responsible for preparation of a SWP3 in compliance with the CGP, and another operator is responsible for implementation of the SWP3 at the project site.

Section B. Responsibilities of Operators

1. Secondary Operators and Primary Operators with Control Over Construction Plans and Specifications

   All secondary operators and primary operators with control over construction plans and specifications shall:
   (a) ensure the project specifications allow or provide that adequate BMPs are developed to meet the requirements of Part III of this general permit;
   (b) ensure that the SWP3 indicates the areas of the project where they have control over project specifications, including the ability to make modifications in specifications;
   (c) ensure that all other operators affected by modifications in project specifications are notified in a timely manner so that those operators may modify their BMP s as necessary to remain compliant with the conditions of this general permit; and

(d) ensure that the SWP3 for portions of the project where each operator has control indicates the name and site-specific TPDES authorization number(s) for operators with the day-to-day operational control over those activities necessary to ensure compliance with the SWP3 and other permit conditions. If a primary operator has not been authorized or has abandoned the site, the secondary operator is considered to be the responsible party and must obtain authorization as a primary operator under the permit, until the authority for day-to-day operational control is transferred to another primary operator. The new primary operator must update or develop a new SWP3 that will reflect the transfer of operational control and include any additional updates to the SWP3 to meet requirements of the permit.

2. Primary Operators with Day-to-Day Operational Control

Primary operators with day-to-day operational control of those activities at a project that are necessary to ensure compliance with an SWP3 and other permit conditions must ensure that the SWP3 accomplishes the following requirements:

(a) meets the requirements of this general permit for those portions of the project where they are operators;

(b) identifies the parties responsible for implementation of BMPs described in the SWP3;

(c) indicates areas of the project where they have operational control over day-to-day activities; and

(d) the name and site-specific TPDES authorization number of the parties with control over project specifications, including the ability to make modifications in specifications for areas where they have operational control over day-to-day activities.

Section C. Deadlines for SWP3 Preparation, Implementation, and Compliance

The SWP3 must be prepared prior to obtaining authorization under this general permit, and implemented prior to commencing construction activities that result in soil disturbance. The SWP3 must be prepared so that it provides for compliance with the terms and conditions of this general permit.

Section D. Plan Review and Making Plans Available

1. The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. The SWP3 must be made readily available at the time of an on-site inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site. If the SWP3 is retained off-site, then it shall be made available as soon as reasonably possible. In most instances, it is reasonable that the SWP3 shall be made available within 24 hours of the request.

   NOTE: The SWP3 may be prepared and kept electronically, rather than in paper form, if the records are: (a) in a format that can be read in a similar manner as a paper record; (b) legally valid with no less evidentiary value than their paper equivalent; and (c) immediately accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

2. Operators with authorization for construction activity under this general permit must post a TCEQ site notice at the construction site at a place readily available for viewing by the general public, and local, state, and federal authorities.

(a) Primary and secondary operators of large construction activities must each post a TCEQ construction site notice, respective to their role as an operator at the construction site, as required above and according to requirements in Part II.E.3. of this general permit.

(b) Primary and secondary operators of small construction activities must post the TCEQ site notice as required in Part III.D.2.(a) above and for the specific type of small construction described in Part II.E.1. and 2. of the permit.

(c) If the construction project is a linear construction project, such as a pipeline or highway, the notices must be placed in a publicly accessible location near where construction is actively underway. TCEQ construction site notices for small and large construction activities at these linear construction sites may be relocated, as necessary, along the length of the project, but must still be readily available for viewing by the general public; local, state, and federal authorities; and contain the following information:

i. the site-specific TPDES authorization number for the project if assigned;

ii. the operator name, contact name, and contact phone number;

iii. a brief description of the project; and

iv. the location of the SWP3.

3. This permit does not provide the general public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that permittees allow members of the general public access to a construction site.

Section E. Revisions and Updates to SWP3s

The permittee must revise or update the SWP3, including the site map, within seven (7) days of when any of the following occurs:

1. a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;
2. changing site conditions based on updated plans and specifications, new operators, new areas of responsibility, and changes in BMPs; or
3. results of inspections or investigations by construction site personnel authorized by the permittee, operators of a municipal separate storm sewer system receiving the discharge, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

Section F. Contents of SWP3

The SWP3 must be developed and implemented by primary operators of small and large construction activities and include, at a minimum, the information described in this section and must comply with the construction and development effluent guidelines in Part IV. of the general permit.

1. A site or project description, which includes the following information:

(a) a description of the nature of the construction activity;

(b) a list of potential pollutants and their sources;

(c) a description of the intended schedule or sequence of activities that will disturb soils for major portions of the site, including estimated start dates and duration of activities;

(d) the total number of acres of the entire property and the total number of acres where construction activities will occur, including areas where construction support activities (defined in Part I.B. of this general permit) occur;

(e) data describing the soil or the quality of any discharge from the site;

(f) a map showing the general location of the site (e.g., a portion of a city or county map);

(g) a detailed site map (or maps) indicating the following:

i. property boundary(ies);

ii. drainage patterns and approximate slopes anticipated before and after major grading activities;

iii. areas where soil disturbance will occur (note any phasing), including any demolition activities;

iv. locations of all controls and buffers, either planned or in place;

v. locations where temporary or permanent stabilization practices are expected to be used;

vi. locations of construction support activities, including those located off-site;

vii. surface waters (including wetlands) either at, adjacent, or in close proximity to the site, and also indicate whether those waters are impaired;

NOTE: Surface waters adjacent to or in close proximity to the site means any receiving waters within the site and all receiving waters within one mile downstream of the site's discharge point(s).

viii. locations where stormwater discharges from the site directly to a surface water body or a municipal separate storm sewer system;

ix. vehicle wash areas; and

x. designated points on the site where vehicles will exit onto paved roads (for instance, this applies to construction transition from unstable dirt areas to exterior paved roads).

Where the amount of information required to be included on the map would result in a single map being difficult to read and interpret, the operator shall develop a series of maps that collectively include the required information.

(h) the location and description of support activities authorized under the permittee's NOI, including asphalt plants, concrete plants, and other activities providing support to the construction site that is authorized under this general permit;

(i) the name of receiving waters at or near the site that may be disturbed or that may receive discharges from disturbed areas of the project;

(j) a copy of this TPDES general permit (an electronic copy of this TPDES general permit or a current link to this TPDES general permit on the TCEQ webpage is acceptable);

(k) the NOI and the acknowledgement of provisional and non-provisional authorization for primary operators of large construction sites, and the TCEQ site notice for small construction sites and for secondary operators of large construction sites;

(l) if signatory authority is delegated by an authorized representative, then a copy of the formal notification to TCEQ, as required by 30 TAC 305.128 relating to Signatories to Reports must be filed in the SWP3 and made available for review upon request by TCEQ or local MS4 Operator. For primary operators of large construction activities, the formal notification to TCEQ must be submitted either electronically through

STEERS, TCEQ's electronic reporting system, or, if qualifying for an electronic reporting waiver, by paper on a Delegation of Signatories form. For operators or small construction activities, the formal notification to TCEQ must be submitted by paper on a Delegation of Signatories form.

(m) stormwater and allowable non-stormwater discharge locations, including storm drain inlets on site and in the immediate vicinity of the construction site where construction support activities will occur; and

(n) locations of all pollutant-generating activities at the construction site and where construction support activities will occur, such as the following: Paving operations; concrete, paint and stucco washout and water disposal; solid waste storage and disposal; and dewatering operations.

2. A description of the BMPs that will be used to minimize pollution in runoff.

The description must identify the general timing or sequence for installation and implementation. At a minimum, the description must include the following components:

(a) General Requirements

i. Erosion and sediment controls must be designed to retain sediment on-site to the extent practicable with consideration for local topography, soil type, and rainfall.

ii. Control measures must be properly selected, installed, and maintained according to good engineering practices, and the manufacturer's or designer's specifications.

iii. Controls must be developed to minimize the offsite transport of litter, construction debris, construction materials, and other pollutants required of Part IV.D.

(b) Erosion Control and Stabilization Practices

The SWP3 must include a description of temporary and permanent erosion control and stabilization practices for the construction site, where small or large construction activity will occur. The erosion control and stabilization practices selected by the permittee must be compliant with the requirements for sediment and erosion control, located in Part IV. of this permit. The description of the SWP3 must also include a schedule of when the practices will be implemented. Site plans must ensure that existing vegetation at the construction site is preserved where it is possible.

i. Erosion control and stabilization practices may include but are not limited to: establishment of temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, slope texturing, temporary velocity dissipation devices, flow diversion mechanisms, and other similar measures.

ii. The following records must be maintained and either attached to or referenced in the SWP3, and made readily available upon request to the parties listed in Part III.D.1 of this general permit:

(A) the dates when major grading activities occur;

(B) the dates when construction activities temporarily or permanently cease on a portion of the site; and

(C) the dates when stabilization measures are initiated.

iii. Erosion control and stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily ceased and will not resume for a period exceeding fourteen (14) calendar days. Stabilization

measures that provide a protective cover must be initiated immediately in portions of the site where construction activities have permanently ceased. The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Except as provided in (A) through (D) below, these measures must be completed as soon as practicable, but no more than fourteen (14) calendar days after the initiation of soil stabilization measures:

(A) where the immediate initiation of vegetative stabilization measures after construction activity has temporarily or permanently ceased due to frozen conditions, non-vegetative controls must be implemented until thawing conditions (as defined in Part I.B. of this general permit) are present, and vegetative stabilization measures can be initiated as soon as practicable.

(B) in arid areas, semi-arid areas, or drought-stricken areas, as they are defined in Part I.B. of this general permit, where the immediate initiation of vegetative stabilization measures after construction activity has temporarily or permanently ceased or is precluded by arid conditions, other types of erosion control and stabilization measures must be initiated at the site as soon as practicable. Where vegetative controls are infeasible due to arid conditions, and within fourteen (14) calendar days of a temporary or permanent cessation of construction activity in any portion of the site, the operator shall immediately install non-vegetative erosion controls in areas of the construction site where construction activity is complete or has ceased. If non-vegetative controls are infeasible, the operator shall install temporary sediment controls as required in Part III.F.2.(b)iii.(C) below.

(C) in areas where non-vegetative controls are infeasible, the operator may alternatively utilize temporary perimeter controls. The operator must document in the SWP3 the reason why stabilization measures are not feasible, and must demonstrate that the perimeter controls will retain sediment on site to the extent practicable. The operator must continue to inspect the BMPs at the frequencies established in Part III.F.8.(c) for unstabilized sites.

(D) the requirement for permittees to initiate stabilization is triggered as soon as it is known with reasonable certainty that construction activity at the site or in certain areas of the site will be stopped for 14 or more additional calendar days. If the initiation or completion of vegetative stabilization is prevented by circumstances beyond the control of the permittee, the permittee must employ and implement alternative stabilization measures immediately. When conditions at the site changes that would allow for vegetative stabilization, then the permittee must initiate or complete vegetative stabilization as soon as practicable.

iv. Final stabilization must be achieved prior to termination of permit coverage.

v. TCEQ does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left un-vegetated or un-stabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

(c) Sediment Control Practices

The SWP3 must include a description of any sediment control practices used to remove eroded soils from stormwater runoff, including the general timing or sequence for implementation of controls. Controls selected by the permittee must be compliant with the requirements in Part IV. of this permit.

i. Sites With Drainage Areas of Ten (10) or More Acres

(A) Sedimentation Basin(s) or Impoundments

(1) A sedimentation basin or similar impoundment is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time. A sedimentation basin or impoundment may be temporary or permanent, and must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone permanent stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin or similar impoundment. Capacity calculations shall be included in the SWP3. Sedimentation basins must be designed for and appropriate for controlling runoff at the site and existing detention or retention ponds at the site may not be appropriate.

(2) Where rainfall data is not available, or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until final stabilization of the site.

(3) If a sedimentation basin or impoundment is not feasible, then the permittee shall provide equivalent control measures until final stabilization of the site. In determining whether installing a sediment basin or impoundment is feasible, the permittee may consider factors such as site soils, slope, available area, public safety, precipitation patterns, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins or impoundments are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins or impoundments.

(4) Unless infeasible, when discharging from sedimentation basins and impoundments, the permittee shall utilize outlet structures that withdraw water from the surface.

(B) Perimeter Controls: At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

ii. Controls for Sites with Drainage Areas Less than Ten (10) Acres:

(A) Sediment traps and sediment basins may be used to control solids in stormwater runoff for drainage locations serving less than ten (10) acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(B) Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in the SWP3.

(C) If sedimentation basins or impoundments are used, the permittee shall comply with the requirements in Part IV.F. of this general permit.

3. Description of Permanent Stormwater Controls

A description of any stormwater control measures that will be installed during the construction process to control pollutants in stormwater discharges that may occur after construction operations have been completed must be included in the SWP3. Permittees are responsible for the installation and maintenance of stormwater management measures, as follows:

(a) permittees authorized under the permit for small construction activities are responsible for the installation and maintenance of stormwater control measures prior to final stabilization of the site; or

(b) permittees authorized under the permit for large construction activities are responsible for the installation and maintenance of stormwater control measures prior to final stabilization of the site and prior to submission of an NOT.

4. Other Required Controls and BMPs

(a) Permittees shall minimize, to the extent practicable, the off-site vehicle tracking of sediments and dust. The SWP3 shall include a description of controls utilized to control the generation of pollutants that could be discharged in stormwater from the site.

(b) The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to minimize pollutants from these materials.

(c) The SWP3 must include a description of potential pollutant sources in discharges of stormwater from all areas of the construction site where construction activity, including construction support activities, will be located, and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

(d) Permittees shall place velocity dissipation devices at discharge locations and along the length of any outfall channel (i.e., runoff conveyance) to provide a non-erosive flow velocity from the structure to a water course, so that the natural physical and biological characteristics and functions are maintained and protected.

(e) Permittees shall design and utilize appropriate controls in accordance with Part IV. of this permit to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water from the site.

(f) Permittees shall ensure that all other required controls and BMPs comply with all of the requirements of Part IV. of this general permit.

(g) For demolition of any structure with at least 10,000 square feet of floor space that was built or renovated before January 1, 1980, and the receiving waterbody is impaired for polychlorinated biphenyls (PCBs):

i. implement controls to minimize the exposure of PCB-containing building materials, including paint, caulk, and pre-1980 fluorescent lighting fixtures to precipitation and to stormwater; and

ii. ensure that disposal of such materials is performed in compliance with applicable state, federal, and local laws.

5. Documentation of Compliance with Approved State and Local Plans

   (a) Permittees must ensure that the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by federal, state, or local officials.

   (b) SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or stormwater management site plans or site permits approved by state or local official for which the permittee receives written notice.

   (c) If the permittee is required to prepare a separate management plan, including but not limited to a WPAP or Contributing Zone Plan in accordance with 30 TAC Chapter 213 (related to the Edwards Aquifer), then a copy of that plan must be either included in the SWP3 or made readily available upon request to authorized personnel of the TCEQ. The permittee shall maintain a copy of the approval letter for the plan in its SWP3.

6. Maintenance Requirements

   (a) All protective measures identified in the SWP3 must be maintained in effective operating condition. If, through inspections or other means, as soon as the permittee determines that BMPs are not operating effectively, then the permittee shall perform maintenance as necessary to maintain the continued effectiveness of stormwater controls, and prior to the next rain event if feasible. If maintenance prior to the next anticipated storm event is impracticable, the reason shall be documented in the SWP3 and maintenance must be scheduled and accomplished as soon as practicable. Erosion and sediment controls that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery.

   (b) If periodic inspections or other information indicates a control has been used incorrectly, is performing inadequately, or is damaged, then the operator shall replace or modify the control as soon as practicable after making the discovery.

   (c) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.

   (d) If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee shall work with the owner or operator of the property to remove the sediment.

7. Observation and Evaluation of Dewatering Controls Pursuant to Part IV.C. of this General Permit

   (a) Personnel provided by the permittee must observe and evaluate dewatering controls at a minimum of once per day on the days where dewatering discharges from the construction site occur. Personnel conducting these evaluations must be knowledgeable of this general permit, the construction activities at the site, and the SWP3 for the site. Personnel conducting these evaluations are not required to have signatory authority for reports under 30 TAC § 305.128 (relating to Signatories to Reports).

(b) Requirements for Observations and Evaluations

i. A report summarizing the scope of any observation and evaluation must be completed within 24-hours following the evaluation. The report must also include, at a minimum, the following:

(A) date of the observations and evaluation;

(B) name(s) and title(s) of personnel making the observations and evaluation;

(C) approximate times that the dewatering discharge began and ended on the day of evaluation, or if the dewatering discharge is a continuous discharge that continues after normal business hours, indicate that the discharge is continuous (this information can be reported by personnel initiating the dewatering discharge);

(D) estimates of the rate (in gallons per day) of discharge on the day of evaluation;

(E) whether or not any indications of pollutant discharge were observed at the point of discharge (e.g., foam, oil sheen, noticeable odor, floating solids, suspended sediments, or other obvious indicators of stormwater pollution); and

(F) major observations, including: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

ii. Actions taken as a result of evaluations, including the date(s) of actions taken, must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

iii. The names and qualifications of personnel making the evaluations for the permittee may be documented once in the SWP3 rather than being included in each report.

8. Inspections of All Controls

(a) Personnel provided by the permittee must inspect disturbed areas (cleared, graded, or excavated) of the construction site that do not meet the requirements of final stabilization in this general permit, all locations where stabilization measures have been implemented, areas of construction support activity covered under this permit, stormwater controls (including pollution prevention controls) for evidence of, or the potential for, the discharge of pollutants, areas where stormwater typically flows within the construction site, and points of discharge from the construction site.

i. Personnel conducting these inspections must be knowledgeable of this general permit, the construction activities at the site, and the SWP3 for the site.

ii. Personnel conducting these inspections are not required to have signatory authority for inspection reports under 30 TAC § 305.128 (relating to Signatories to Reports).

(b) Requirements for Inspections

i. Inspect all stormwater controls (including sediment and erosion control measures identified in the SWP3) to ensure that they are installed properly, appear to be operational, and minimizing pollutants in discharges, as intended.

ii. Identify locations on the construction site where new or modified stormwater controls are necessary.

iii. Check for signs of visible erosion and sedimentation that can be attributed to the points of discharge where discharges leave the construction site or discharge into any surface water in the state flowing within or adjacent to the construction site.

iv. Identify any incidents of noncompliance observed during the inspection.

v. Inspect locations where vehicles enter or exit the site for evidence of off-site sediment tracking.

vi. If an inspection is performed when discharges from the construction site are occurring: identify all discharge points at the site, and observe and document the visual quality of the discharge (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, and other such indicators of pollutants in stormwater).

vii. Complete any necessary maintenance needed, based on the results of the inspection and in accordance with the requirements listed in Part III.F.6. above.

(c) Inspection frequencies:

i. Inspections of construction sites must be conducted at least once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, unless as otherwise provided below in Part III.F.8.(c)ii. – v. below.

(A) If a storm event produces 0.5 inches or more of rain within a 24-hour period (including when there are multiple, smaller storms that alone produce less than 0.5 inches but together produce 0.5 inches or more in 24 hours), you are required to conduct one inspection within 24 hours of when 0.5 inches of rain or more has fallen. When the 24-hour inspection time frame occurs entirely outside of normal working hours, you must conduct an inspection by no later than the end of the next business day.

(B) If a storm event produces 0.5 inches or more of rain within a 24-hour period on the first day of a storm and continues to produce 0.5 inches or more of rain on subsequent days, you must conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the last day of the storm that produces 0.5 inches or more of rain (i.e., only two (2) inspections would be required for such a storm event). When the 24-hour inspection time frame occurs entirely outside of normal working hours, you must conduct an inspection by no later than the end of the next business day.

ii. Inspection frequencies must be conducted at least once every month in areas of the construction site that meet final stabilization or have been temporarily stabilized.

iii. Inspection frequencies for construction sites, where runoff is unlikely due to the occurrence of frozen conditions at the site, must be conducted at least once every month until thawing conditions begin to occur (see definitions for thawing conditions in Part I.B.). The SWP3 must also contain a record of the approximate beginning and ending dates of when frozen conditions occurred at the site, which resulted in inspections being conducted monthly, while those

conditions persisted, instead of at the interval of once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

iv. In arid, semi-arid, or drought-stricken areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater. The SWP3 must also contain a record of the total rainfall measured, as well as the approximate beginning and ending dates of when drought conditions occurred at the site, which resulted in inspections being conducted monthly, while those conditions persisted, instead of at the interval of once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

v. As an alternative to the inspection schedule in Part III.F.8.(c)i. above, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, then the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.

vi. The inspection procedures described in Part III.F.8.(c)i. – v above can be performed at the frequencies and under the applicable conditions indicated for each schedule option, provided that the SWP3 reflects the current schedule and that any changes to the schedule are made in accordance with the following provisions: the inspection frequency schedule can only be changed a maximum of once per calendar month and implemented within the first five (5) business days of a calendar month; and the reason for the schedule change documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(d) Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may provide inspection personnel with limited access to the areas described in Part III.F.8.(a) above.

i. Inspection of linear construction sites could require the use of vehicles that could compromise areas of temporary or permanent stabilization, cause additional disturbance of soils, and result in the increase the potential for erosion. In these circumstances, controls must be inspected at least once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, but representative inspections may be performed.

ii. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described in Part III.F.8.(a) above. The conditions of the controls along each inspected 0.25-mile portion may be considered as representative of the condition of controls along that reach extending from the end of the 0.25-mile portion to either the end of the next 0.25-mile inspected portion, or to the end of the project, whichever occurs first.

As an alternative to the inspection schedule described in Part III.F.8.(c)i. above, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.

iii. the SWP3 for a linear construction site must reflect the current inspection schedule. Any changes to the inspection schedule must be made in accordance with the following provisions:

(A) the schedule may be changed a maximum of one time each month;

(B) the schedule change must be implemented at the beginning of a calendar month, and

(C) the reason for the schedule change must be documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(e) Adverse Conditions.

Requirements for inspections may be temporarily suspended for adverse conditions. Adverse conditions are conditions that are either dangerous to personnel (e.g., high wind, excessive lightning) or conditions that prohibit access to the site (e.g., flooding, freezing conditions). Adverse conditions that result in the temporary suspension of a permit requirement to inspect must be documented and included as part of the SWP3. Documentation must include:

i. the date and time of the adverse condition,

ii. names of personnel that witnessed the adverse condition, and

iii. a narrative for the nature of the adverse condition.

(f) In the event of flooding or other adverse conditions which prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable. Inspection Reports.

i. A report summarizing the scope of any inspection must be completed within 24-hours following the inspection. The report must also include the date(s) of the inspection and major observations relating to the implementation of the SWP3. Major observations in the report must include: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

ii. Actions taken as a result of inspections, including the date(s) of actions taken, must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

iii. The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

(g) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable. If necessary, modify your site map to reflect changes to your stormwater controls that are no longer accurately reflected on the current site map.

9. The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-stormwater components of the discharge, as listed in Part II.A.3. of this permit.

10. The SWP3 must include the information required in Part III.B. of this general permit.

11. The SWP3 must include pollution prevention procedures that comply with Part IV.D. of this general permit.

Part IV. Erosion and Sediment Control Requirements Applicable to All Sites

Except as provided in 40 CFR §§ 125.30-125.32, any discharge regulated under this general permit, with the exception of sites that obtained waivers based on low rainfall erosivity, must achieve, at a minimum, the following effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available (BPT). The BPT are also required by and must satisfy the Effluent Limitations Guideline (ELG) permitting requirement for application of 40 CFR § 450.24 New Source Performance Standards (NSPS), 40 CFR § 450.22 Best Available Technology Economically Achievable (BAT), and 40 CFR § 450.23 Best Conventional Pollutant Control Technology (BCT).

Section A. Erosion and Sediment Controls

Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:

1. control stormwater volume and velocity within the site to minimize soil erosion in order to minimize pollutant discharges;
2. control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge point(s);
3. minimize the amount of soil exposed during construction activity;
4. minimize the disturbance of steep slopes;
5. minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
6. provide and maintain appropriate natural buffers around surface water in the state. Direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. If providing buffers is infeasible, the permittee shall document the reason that natural buffers are infeasible and shall implement additional erosion and sediment controls to reduce sediment load;
7. preserve native topsoil at the site, unless the intended function of a specific area of the site dictates that the topsoil be disturbed or removed, or it is infeasible; and
8. minimize soil compaction. In areas of the construction site where final vegetative stabilization will occur or where infiltration practices will be installed, either:
   (a) restrict vehicle and equipment use to avoid soil compaction; or
   (b) prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible.

   Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.
9. TCEQ does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute “surface water” for the purposes of triggering the buffer requirement in Part IV.A.(6) above.

Section B. Soil Stabilization

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next workday, following the day when the earth-disturbing activities have temporarily or permanently ceased. Temporary stabilization must be completed no more than fourteen (14) calendar days after initiation of soil stabilization measures, and final stabilization must be achieved prior to termination of permit coverage. In arid, semi-arid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative non-vegetative stabilization measures must be employed as soon as practicable. Refer to Part III.F.2.(b) for complete erosion control and stabilization practice requirements. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

Section C. Dewatering

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited, unless managed by appropriate controls to address sediment and prevent erosion. Operators must observe and evaluate the dewatering controls once per day while the dewatering discharge occurs as described in Part III.F.7. of this general permit.

Section D. Pollution Prevention Measures

Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:

1. minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
2. minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater;
3. minimize the exposure of waste materials by closing waste container lids at the end of the workday and during storm events. For waste containers that do not have lids, where the container itself is not sufficiently secure enough to prevent the discharge of pollutants absent a cover and could leak, the permittee must provide either a cover (e.g., a tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation, stormwater, and wind, or a similarly effective means designed to minimize the discharge of pollutants (e.g., secondary containment). Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use);
4. minimize exposure of wastes by implementing good housekeeping measures. Wastes must be cleaned up and disposed of in designated waste containers on days of operation at the site. Wastes must be cleaned up immediately if containers overflow;

5. minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the release. You must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release; and
6. minimize exposure of sanitary waste by positioning portable toilets so that they are secure and will not be tipped or knocked over, and so that they are located away from surface water in the state and stormwater inlets or conveyances.

Section E. Prohibited Discharges

The following discharges are prohibited:

1. wastewater from wash out of concrete, unless managed by an appropriate control;
2. wastewater from wash out and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3. fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
4. soaps or solvents used in vehicle and equipment washing; and
5. toxic or hazardous substances from a spill or other release.

Section F. Surface Outlets

When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible. If infeasible, the permittee must provide documentation in the SWP3 to support the determination, including the specific conditions or time periods when this exception will apply.

Part V. Stormwater Runoff from Concrete Batch Plants

Discharges of stormwater runoff from concrete batch plants present at regulated construction sites and operated as a construction support activity may be authorized under the provisions of this general permit, provided that the following requirements are met for concrete batch plant(s) authorized under this permit. Only the discharges of stormwater runoff and non-stormwater from concrete batch plants that meet the requirements of a construction support activity can be authorized under this permit (see the requirements for "Non-Stormwater Discharges" in Part II.A.3. and "Discharges of Stormwater Associated with Construction Support Activity" in Part II.A.2.).

If discharges of stormwater runoff or non-stormwater from concrete batch plants are not authorized under this general permit, then discharges must be authorized under an alternative general permit or individual permit [see the requirement in Part II.A.2.(c)].

This permit does not authorize the discharge or land disposal of any wastewater from concrete batch plants at regulated construction sites. Authorization for these wastes must be obtained under an individual permit or an alternative general permit.

Section A. Benchmark Sampling Requirements

1. Operators of concrete batch plants authorized under this general permit shall sample the stormwater runoff from the concrete batch plants according to the requirements of this section of this general permit, and must conduct evaluations on the effectiveness of the SWP3 based on the following benchmark monitoring values:

Table 1. Benchmark Parameters

Benchmark Parameter	Benchmark Value	Sampling Frequency	Sample Type
Oil and Grease (*1)	15 mg/L	1/quarter (*2) (*3)	Grab (*4)
Total Suspended Solids (*1)	50 mg/L	1/quarter (*2) (*3)	Grab (*4)
pH	6.0 – 9.0 Standard Units	1/quarter (*2) (*3)	Grab (*4)
Total Iron (*1)	1.3 mg/L	1/quarter (*2) (*3)	Grab (*4)

(*1) All analytical results for these parameters must be obtained from a laboratory that is accredited based on rules located in 30 TAC § 25.4 (a) or through the National Environmental Laboratory Accreditation Program (NELAP). Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §§ 136.1(c) and 122.44(i)(1)(iv).

(*2) When discharge occurs. Sampling is required within the first 30 minutes of discharge. If it is not practicable to take the sample, or to complete the sampling, within the first 30 minutes, sampling must be completed within the first hour of discharge. If sampling is not completed within the first 30 minutes of discharge, the reason must be documented and attached to all required reports and records of the sampling activity.

(*3) Sampling must be conducted at least once during each of the following periods. The first sample must be collected during the first full quarter that a stormwater discharge occurs from a concrete batch plant authorized under this general permit.

January through March
April through June
July through September
October through December

For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a stormwater discharge occurred at least once following submission of the NOI or following the date that automatic authorization was obtained under Part II.E.2., and prior to terminating coverage.

(*4) A grab sample shall be collected from the stormwater discharge resulting from a storm event that is at least 0.1 inches of measured precipitation that occurs at least 72 hours from the previously measurable storm event. The sample shall be collected downstream of the concrete batch plant, and where the discharge exits any BMPs utilized to handle the runoff from the batch plant, prior to commingling with any other water authorized under this general permit.

2. The permittee must compare the results of sample analyses to the benchmark values above, and must include this comparison in the overall assessment of the SWP3's effectiveness. Analytical results that exceed a benchmark value are not a violation of this permit, as these values are not numeric effluent limitations. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. The operator must investigate the cause for each exceedance and must document the results of this investigation in the SWP3 by the end of the quarter following the sampling event.

   The operator's investigation must identify the following:

   (a) any additional potential sources of pollution, such as spills that might have occurred;

   (b) necessary revisions to good housekeeping measures that are part of the SWP3;

   (c) additional BMPs, including a schedule to install or implement the BMPs; and

   (d) other parts of the SWP3 that may require revisions in order to meet the goal of the benchmark values.

   Background concentrations of specific pollutants may also be considered during the investigation. If the operator is able to relate the cause of the exceedance to background concentrations, then subsequent exceedances of benchmark values for that pollutant may be resolved by referencing earlier findings in the SWP3. Background concentrations may be identified by laboratory analyses of samples of stormwater run-on to the permitted facility, by laboratory analyses of samples of stormwater run-off from adjacent non-industrial areas, or by identifying the pollutant is a naturally occurring material in soils at the site.

Section B. Best Management Practices (BMPs) and SWP3 Requirements

Minimum SWP3 Requirements – The following are required in addition to other SWP3 requirements listed in this general permit, which include, but are not limited to the applicable requirements located in Part III.F.8. of this general permit, as follows:

1. Description of Potential Pollutant Sources – The SWP3 must provide a description of potential sources (activities and materials) that can cause, have a reasonable potential to cause or contribute to a violation of water quality standards or have been found to cause, or contribute to, the loss of a designated use of surface water in the state in stormwater discharges associated with concrete batch plants authorized under this permit. The SWP3 must describe the implementation of practices that will be used to minimize to the extent practicable the discharge of pollutants in stormwater discharges associated with industrial activity and non-stormwater discharges (described in Part II.A.3. of this general permit), in compliance with the terms and conditions of this general permit, including the protection of water quality, and must ensure the implementation of these practices.

   The following must be developed, at a minimum, in support of developing this description:

   (a) Drainage – The site map must include the following information:

      i. the location of all outfalls for stormwater discharges associated with concrete batch plants that are authorized under this permit;

      ii. a depiction of the drainage area and the direction of flow to the outfall(s);

      iii. structural controls used within the drainage area(s);

iv. the locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activities (including fueling, repair, and storage areas for vehicles and equipment scheduled for maintenance); areas used for the treatment, storage, or disposal of wastes; liquid storage tanks; material processing and storage areas; and loading and unloading areas; and

v. the locations of the following: any bag house or other dust control device(s); recycle/sedimentation pond, clarifier or other device used for the treatment of facility wastewater (including the areas that drain to the treatment device); areas with significant materials; and areas where major spills or leaks have occurred.

(b) Inventory of Exposed Materials – A list of materials handled at the concrete batch plant that may be exposed to stormwater and precipitation and that have a potential to affect the quality of stormwater discharges associated with concrete batch plants that are authorized under this general permit.

(c) Spills and Leaks – A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to stormwater and precipitation and that drain to stormwater outfalls associated with concrete batch plants authorized under this general permit must be developed, maintained, and updated as needed.

(d) Sampling Data – A summary of existing stormwater discharge sampling data must be maintained, if available.

2. Measures and Controls – The SWP3 must include a description of management controls to regulate pollutants identified in the SWP3's "Description of Potential Pollutant Sources" from Part V.B.1. of this permit, and a schedule for implementation of the measures and controls. This must include, at a minimum:

(a) Good Housekeeping – Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

i. Operators must prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant materials from paved portions of the site that are exposed to stormwater. Measures used to minimize the presence of these materials may include regular sweeping or other equivalent practices. These practices must be conducted at a frequency that is determined based on consideration of the amount of industrial activity occurring in the area and frequency of precipitation, and shall occur at least once per week when cement or aggregate is being handled or otherwise processed in the area.

ii. Operators must prevent the exposure of fine granular solids, such as cement, to stormwater. Where practicable, these materials must be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(b) Spill Prevention and Response Procedures – Areas where potential spills that can contribute pollutants to stormwater runoff and precipitation, and the drainage areas from these locations, must be identified in the SWP3. Where appropriate, the SWP3 must specify material handling procedures, storage requirements, and use of equipment. Procedures for cleaning up spills must be identified in the SWP3 and made available to the appropriate personnel.

(c) Inspections – Qualified facility personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) must be identified to inspect designated equipment and areas of the facility specified in the SWP3. Personnel conducting these inspections are not required to have signatory authority for inspection reports under 30 TAC § 305.128. Inspections of facilities in operation must be performed

once every seven (7) days. Inspections of facilities that are not in operation must be performed at a minimum of once per month. The current inspection frequency being implemented at the facility must be recorded in the SWP3. The inspection must take place while the facility is in operation and must, at a minimum, include all areas that are exposed to stormwater at the site, including material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas. Follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained and be made readily available for inspection upon request.

(d) Employee Training – An employee training program must be developed to educate personnel responsible for implementing any component of the SWP3, or personnel otherwise responsible for stormwater pollution prevention, with the provisions of the SWP3. The frequency of training must be documented in the SWP3, and at a minimum, must consist of one (1) training prior to the initiation of operation of the concrete batch plant.

(e) Record Keeping and Internal Reporting Procedures – A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of stormwater discharges, must be included in the SWP3. Inspection and maintenance activities must be documented and records of those inspection and maintenance activities must be incorporated in the SWP3.

(f) Management of Runoff – The SWP3 shall contain a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

3. Comprehensive Compliance Evaluation – At least once per year, one or more qualified personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) shall conduct a compliance evaluation of the plant. The evaluation must include the following:

(a) visual examination of all areas draining stormwater associated with regulated concrete batch plants for evidence of, or the potential for, pollutants entering the drainage system. These include, but are not limited to: cleaning areas, material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down and equipment cleaning areas. Measures implemented to reduce pollutants in runoff (including structural controls and implementation of management practices) must be evaluated to determine if they are effective and if they are implemented in accordance with the terms of this permit and with the permittee's SWP3. The operator shall conduct a visual inspection of equipment needed to implement the SWP3, such as spill response equipment.

(b) based on the results of the evaluation, the following must be revised as appropriate within two (2) weeks of the evaluation: the description of potential pollutant sources identified in the SWP3 (as required in Part V.B.1., "Description of Potential Pollutant Sources"); and pollution prevention measures and controls identified in the SWP3 (as required in Part V.B.2., "Measures and Controls"). The revisions may include a schedule for implementing the necessary changes.

(c) the permittee shall prepare and include in the SWP3 a report summarizing the scope of the evaluation, the personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in response to the findings of the evaluation. The report must identify any incidents of noncompliance. Where the report does not identify incidences of noncompliance, the report must contain a statement that the evaluation did not identify any

incidence(s), and the report must be signed according to 30 TAC § 305.128 (relating to Signatories to Reports).

(d) the Comprehensive Compliance Evaluation may substitute for one of the required inspections delineated in Part V.B.2.(c) of this general permit.

Section C. Prohibition of Wastewater Discharges

Wastewater discharges associated with concrete production including wastewater disposal by land application are not authorized under this general permit. These wastewater discharges must be authorized under an alternative TCEQ water quality permit or otherwise disposed of in an authorized manner. Discharges of concrete truck wash out at construction sites may be authorized if conducted in accordance with the requirements of Part VI of this general permit.

Part VI. Concrete Truck Wash Out Requirements

This general permit authorizes the land disposal of wash out from concrete trucks at construction sites regulated under this general permit, provided the following requirements are met. Any discharge of concrete production wastewater to surface water in the state must be authorized under a separate TCEQ general permit or individual permit.

A. Discharge of concrete truck wash out water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.

B. Concrete truck wash out water shall be disposed in areas at the construction site where structural controls have been established to prevent discharge to surface water in the state, or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent discharge to surface water in the state. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.

C. Wash out of concrete trucks during rainfall events shall be minimized. The discharge of concrete truck wash out water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck wash out as the result of rainfall or stormwater runoff.

D. The disposal of wash out water from concrete trucks, made under authorization of this general permit must not cause or contribute to groundwater contamination.

E. If a SWP3 is required to be implemented, the SWP3 shall include concrete wash out areas on the associated site map.

Part VII. Retention of Records

The permittee must retain the following records for a minimum period of three (3) years from the date that a NOT is submitted as required in Part II.F.1. and 2. of this permit. For activities in which an NOT is not required, records shall be retained for a minimum period of three (3) years from the date that the operator terminates coverage under Section II.F.3. of this permit. Records include:

A. a copy of the SWP3;

B. all reports and actions required by this permit, including a copy of the TCEQ construction site notice;

C. all data used to complete the NOI, if an NOI is required for coverage under this general permit; and

D. all records of submittal of forms submitted to the operator of any MS4 receiving the discharge and to the secondary operator of a large construction site, if applicable.

Part VIII. Standard Permit Conditions

A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the permit and statutes under which it was issued (CWA and TWC), and is grounds for enforcement action, for terminating, revoking and reissuance, or modification, or denying coverage under this general permit, or for requiring a discharger to apply for and obtain an individual TPDES permit, based on rules located in TWC § 23.086, 30 TAC § 305.66, and 40 CFR § 122.41 (a).

B. Authorization under this general permit may be modified, suspended, revoked and reissued, terminated or otherwise suspended for cause, based on rules located in TWC § 23.086, 30 TAC § 305.66, and 40 CFR § 122.41(f). Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition. The permittee must furnish to the executive director, upon request and within a reasonable time, any information necessary for the executive director to determine whether cause exists for modifying, revoking and reissuing, terminating or, otherwise suspending authorization under this permit, based on rules located in TWC § 23.086, 30 TAC § 305.66, and 40 CFR § 122.41 (h). Additionally, the permittee must provide to the executive director, upon request, copies of all records that the permittee is required to maintain as a condition of this general permit.

C. It is not a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the permit conditions.

D. Inspection and entry shall be allowed under TWC Chapters 26-28, Texas Health and Safety Code §§ 361.032-361.033 and 361.037, and 40 CFR § 122.41(i). The statement in TWC § 26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.

E. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under TWC Chapter 7 for violations including but not limited to the following:

1. negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA § 402, or any requirement imposed in a pretreatment program approved under CWA §§ 402(a)(3) or 402(b)(8);
2. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance; and
3. knowingly violating CWA §303 and placing another person in imminent danger of death or serious bodily injury.

F. All reports and other information requested by the executive director must be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

G. Authorization under this general permit does not convey property or water rights of any sort and does not grant any exclusive privilege.

H. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

I. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

J. The permittee shall comply with the monitoring and reporting requirements in 40 CFR § 122.41(j) and (l), as applicable.

K. Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §§ 136.1(c) and 122.44(i)(1)(iv).

Part IX. Fees

A. A fee of must be submitted along with the NOI:

1. $225 if submitting an NOI electronically, or
2. $325 if submitting a paper NOI.

B. Fees are due upon submission of the NOI. An NOI will not be declared administratively complete unless the associated fee has been paid in full.

C. No separate annual fees will be assessed for this general permit. The Water Quality Annual Fee has been incorporated into the NOI fees as described above.

Appendix A: Automatic Authorization

Periods of Low Erosion Potential by County – Eligible Date Ranges

Andrews: Nov. 15 - Apr. 30

Archer: Dec. 15 - Feb. 14

Armstrong: Nov. 15 - Apr. 30

Bailey: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Baylor: Dec. 15 - Feb. 14

Borden: Nov. 15 - Apr. 30

Brewster: Nov. 15 - Apr. 30

Briscoe: Nov. 15 - Apr. 30

Brown: Dec. 15 - Feb. 14

Callahan: Dec. 15 - Feb. 14

Carson: Nov. 15 - Apr. 30

Castro: Nov. 15 - Apr. 30

Childress: Dec. 15 - Feb. 14

Cochran: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Coke: Dec. 15 - Feb. 14

Coleman: Dec. 15 - Feb. 14

Collingsworth: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Concho: Dec. 15 - Feb. 14

Cottle: Dec. 15 - Feb. 14

Crane: Nov. 15 - Apr. 30

Crockett: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Crosby: Nov. 15 - Apr. 30

Culberson: Nov. 1 - May 14

Dallam: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Dawson: Nov. 15 - Apr. 30

Deaf Smith: Nov. 15 - Apr. 30

Dickens: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Dimmit: Dec. 15 - Feb. 14

Donley: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Eastland: Dec. 15 - Feb. 14

Ector: Nov. 15 - Apr. 30

Edwards: Dec. 15 - Feb. 14

El Paso: Jan. 1 - Jul. 14, or May 15 - Jul. 31, or Jun. 1 - Aug. 14, or Jun. 15 - Sept. 14, or Jul. 1 - Oct. 14, or Jul. 15 - Oct. 31, or Aug. 1 - Apr. 30, or Aug. 15 - May 14, or Sept. 1 - May 30, or Oct. 1 - Jun. 14, or Nov. 1 - Jun. 30, or Nov. 15 - Jul. 14

Fisher: Dec. 15 - Feb. 14

Floyd: Nov. 15 - Apr. 30

Foard: Dec. 15 - Feb. 14

Gaines: Nov. 15 - Apr. 30

Garza: Nov. 15 - Apr. 30

Glasscock: Nov. 15 - Apr. 30

Hale: Nov. 15 - Apr. 30

Hall: Feb. 1 - Mar. 30

Hansford: Nov. 15 - Apr. 30

Hardeman: Dec. 15 - Feb. 14

Hartley: Nov. 15 - Apr. 30

Haskell: Dec. 15 - Feb. 14

Hockley: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Howard: Nov. 15 - Apr. 30

Hudspeth: Nov. 1 - May 14

Hutchinson: Nov. 15 - Apr. 30

Irion: Dec. 15 - Feb. 14

Jeff Davis: Nov. 1 - Apr. 30 or Nov. 15 - May 14

Jones: Dec. 15 - Feb. 14

Kent: Nov. 15 - Jan. 14 or Feb. 1 - Mar. 30

Kerr: Dec. 15 - Feb. 14

Kimble: Dec. 15 - Feb. 14

King: Dec. 15 - Feb. 14

Kinney: Dec. 15 - Feb. 14

Knox: Dec. 15 - Feb. 14

Lamb: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Loving: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Lubbock: Nov. 15 - Apr. 30

Lynn: Nov. 15 - Apr. 30

Martin: Nov. 15 - Apr. 30

Mason: Dec. 15 - Feb. 14

Maverick: Dec. 15 - Feb. 14

McCulloch: Dec. 15 - Feb. 14

Menard: Dec. 15 - Feb. 14

Midland: Nov. 15 - Apr. 30

Mitchell: Nov. 15 - Apr. 30

Moore: Nov. 15 - Apr. 30

Motley: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Nolan: Dec. 15 - Feb. 14

Oldham: Nov. 15 - Apr. 30

Parmer: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30
Pecos: Nov. 15 - Apr. 30
Potter: Nov. 15 - Apr. 30
Presidio: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Randall: Nov. 15 - Apr. 30
Reagan: Nov. 15 - Apr. 30
Real: Dec. 15 - Feb. 14
Reeves: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Runnels: Dec. 15 - Feb. 14
Schleicher: Dec. 15 - Feb. 14
Scurry: Nov. 15 - Apr. 30
Shackelford: Dec. 15 - Feb. 14
Sherman: Nov. 15 - Apr. 30
Stephens: Dec. 15 - Feb. 14
Sterling: Nov. 15 - Apr. 30
Stonewall: Dec. 15 - Feb. 14
Sutton: Dec. 15 - Feb. 14
Swisher: Nov. 15 - Apr. 30
Taylor: Dec. 15 - Feb. 14
Terrell: Nov. 15 - Apr. 30
Terry: Nov. 15 - Apr. 30
Throckmorton: Dec. 15 - Feb. 14
Tom Green: Dec. 15 - Feb. 14
Upton: Nov. 15 - Apr. 30
Uvalde: Dec. 15 - Feb. 14
Val Verde: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30
Ward: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30
Wichita: Dec. 15 - Feb. 14
Wilbarger: Dec. 15 - Feb. 14
Winkler: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Yoakum: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Young: Dec. 15 - Feb. 14
Wheeler: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28
Zavala: Dec. 15 - Feb. 14

Appendix B: Storm Erosivity (EI) Zones in Texas

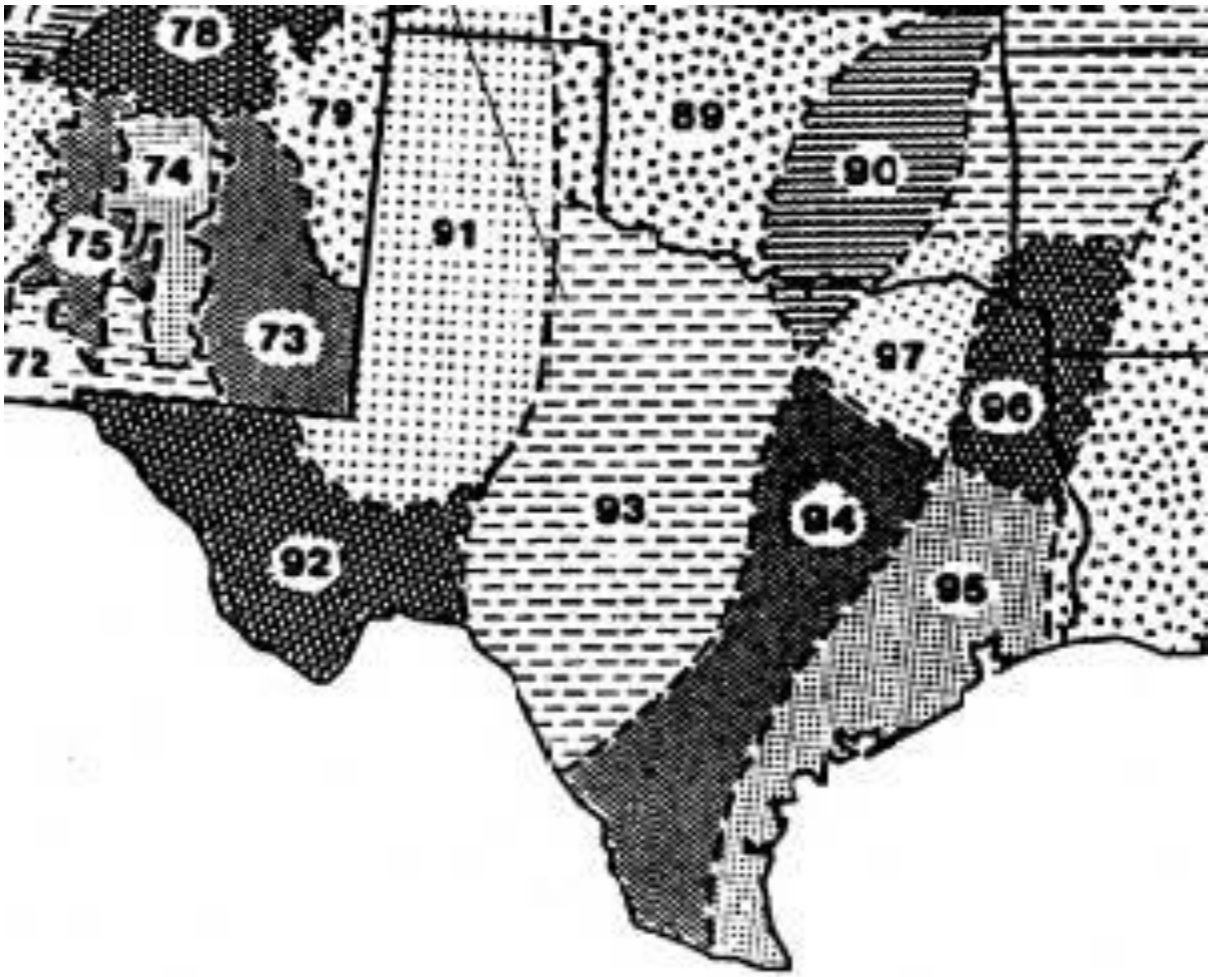


Figure B. EI Distribution Zones

Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix C: Isoerodent Map

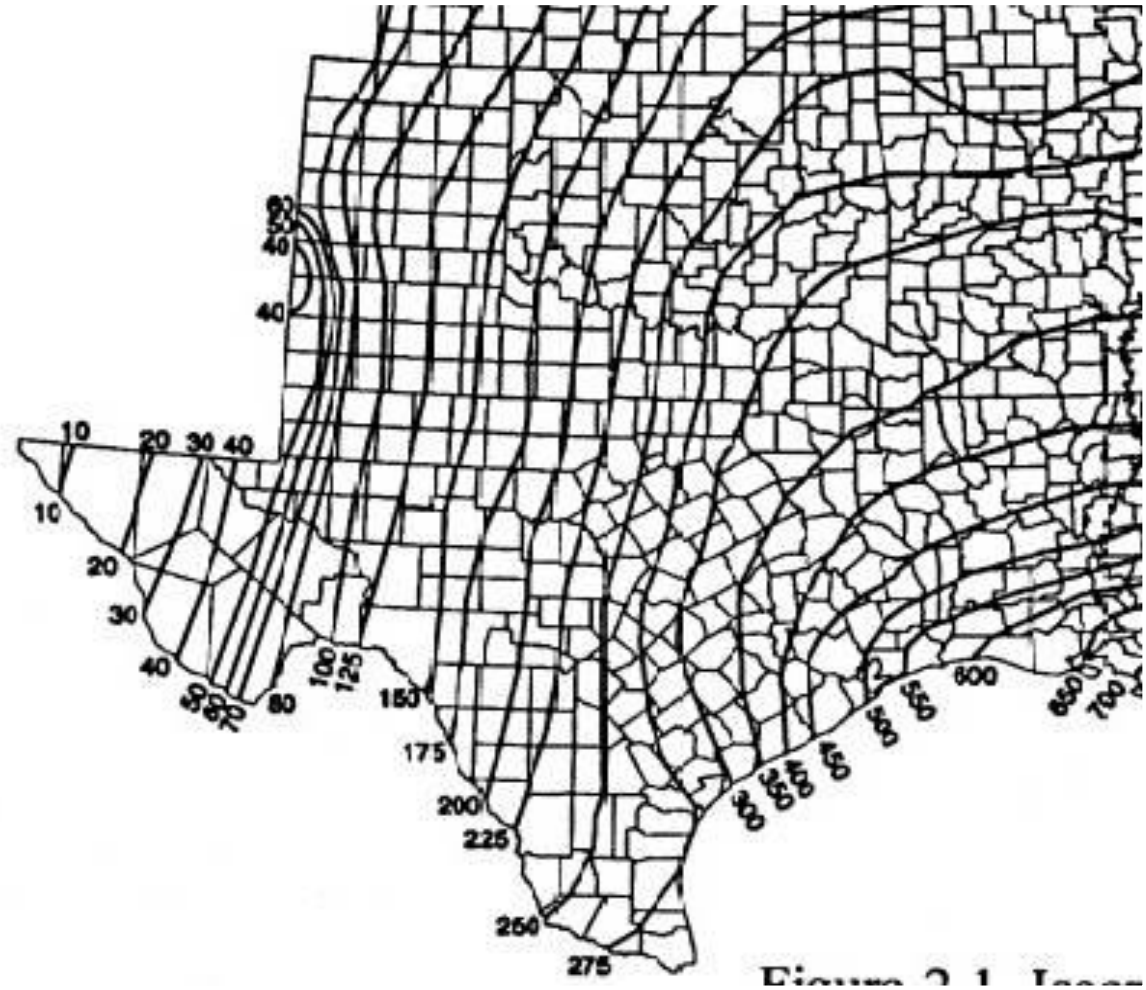


Figure C. Isoerodent Map of Texas. Units are hundreds ft*tonf*in(ac*h*yr)$^{-1}$

Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix D: Erosivity Indices for EI Zones in Texas

Table D. EI as percentage of average annual computed selected geographic areas (EI number) by date period (month/day).

Date Periods* (Month/Day)

EI #	1/1	1/16	1/31	2/15	3/1	3/16	3/31	4/15	4/30	5/15	5/30	6/14	6/29	7/14	7/29	8/13	8/28	9/12	9/27	10/12	10/27	11/11	11/26	12/11	12/31
89	0	1	1	2	3	4	7	2	8	27	38	48	55	62	69	76	83	90	94	97	98	99	100	100	100
90	0	1	2	3	4	6	8	13	21	29	37	46	54	60	65	69	74	81	87	92	95	97	98	99	100
91	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100	100
92	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100	100
93	0	1	1	2	3	4	6	8	13	25	40	49	56	62	67	72	76	80	85	91	97	98	99	99	100
94	0	1	2	4	6	8	10	15	21	29	38	47	53	57	61	65	70	76	83	88	91	94	96	98	100
95	0	1	3	5	7	9	11	14	18	27	35	41	46	51	57	62	68	73	79	84	89	93	96	98	100
96	0	2	4	6	9	12	17	23	30	37	43	49	54	58	62	66	70	74	78	82	86	90	94	97	100
97	0	1	3	5	7	10	14	20	28	37	48	56	61	64	68	72	77	81	86	89	92	95	98	99	100
106	0	3	6	9	13	17	21	27	33	38	44	49	55	61	67	71	75	78	81	84	86	90	94	97	100

*Each period begins on the date listed in the table above and lasts until the day before the following period. The final period begins on December 11 and ends on December 31.

Table adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service.

APPENDIX G

SITE NOTICE, NOTICE OF INTENT, NOTICE OF CHANGE AND NOTICE OF TERMINATION FORMS

Operator Notes

Construction Site Notice

The construction site notice located in Appendix H should be posted along with a signed copy of the Notice of Intent. The site notice must be located where it is safely and readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction.

Notice of Intent (NOI)

The TPDES General Permit TXR 150000 requires that a NOI be submitted before construction activities begin. The NOI is essentially an application and contains items such as important information about your site, including site location, owner information, operator (general contractor) information, receiving water(s), and a brief description of the project.

TCEQ has developed a form to be used by industrial facilities and construction activities when they submit NOIs. This form indicates all the information that you are required to provide and must be used in order for the NOI to be processed correctly.

Primary Operators

Please note that both Owners and Contractors can meet the definition of being a "primary operator."

Primary operators must submit a NOI at least seven days prior to commencing construction activities, or if utilizing electronic submittal, prior to commencing construction activities.

If an additional primary operator is added after the initial NOI is submitted, the new primary operator must:

- submit a paper NOI at least seven days before assuming operational control, or
- submit an electronic NOI prior to assuming operational control.

If the primary operator changes after the initial NOI is submitted, the new primary operator must:

- submit a paper NOI at least ten days before assuming operational control, or
- submit an electronic NOI at least ten days before assuming operational control

All primary operators must post a copy of the signed NOI at the construction site in allocation where it is readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities. A copy of the signed NOI must be submitted to the operator of any MS4 receiving the discharge and to any secondary operator, at least seven days prior to commencing construction activities. A list of the MS4 operators receiving a copy of the NOI is located in Appendix H.

Secondary Operators

Secondary operators are not required to submit a NOI, provided that another operator(s) at the site has submitted a NOI, or is required to submit a NOI and the secondary operator has provided notification to the operator(s) of the need to obtain coverage under the permit. Please refer to the general permit for more information.

NOI Fees

Please note the fees associated with NOI submission:

- $325 if submitting a paper NOI, or
- $225 if submitting an electronic NOI.

No separate annual fees will be assessed. The Water Quality Annual fee has been incorporated into the NOI fees.

It is anticipated that there will be projects where more than one entity (e.g., the owner, developer, or general contractor) will need to submit an NOI so that the requirements for an operator are met. In this case, those persons will share the Storm Water Pollution Plan, and the submittal of the NOI and the TPDES Permit Number will need to be recorded in the NOI log located in Appendix F.

Please refer to the general permit and NOI form instructions for more information.

Notice of Change (NOC)

The operators are responsible for updating the SWP3 to implement and maintain sediment controls and submit a Notice of Change (NOC) if off-site material, waste, borrow, fill or equipment storage areas are being utilized and are not under a separate permit. An operator must submit a NOC letter in conformance with TPDES General Permit TXR150000 if they become aware of any incorrect information in an NOI or failed to submit any relevant facts.

Information that may be included on an NOC includes, but is not limited to, the following: the description of the construction project, an increase in the number of acres disturbed (for increases of one or more acres), or the operator name. A transfer of operational control from one operator to another, including a transfer of the ownership of a company, may not be included in an NOC. A transfer of ownership of a company includes changes to the structure of a company, such as changing from a partnership to a corporation or changing corporation types, so that the filing number (or charter number) that is on record with the Texas Secretary of State must be changed.

An NOC is not required for notifying TCEQ of a decrease in the number of acres disturbed. This information must be included in the storm water pollution prevention plan (SWP3) and retained on site.

A list of the MS4 operators receiving a copy of the NOC is located in Appendix H.

Notice of Termination (NOT)

Any operator that has submitted a NOI must apply to terminate authorization of the general permit. The NOT is a form which should be completed and submitted to the TCEQ within 30 days of the following:

- final stabilization has been achieved on all portions of the site that are the responsibility of the permittee,

- a transfer of operational control has occurred, or
- the operator has obtained alternative authorization under an individual TPDES permit or alternative TPDES general permit.

Information to be included on the NOT includes the location of the construction site; the name, address, and telephone number of the operator terminating coverage; the TPDES General Permit Number; an indication of why coverage under the permit should be terminated for the operator; and a signed certification statement.

Authorization under the general permit terminates at midnight on the day the NOT is postmarked for delivery to the TCEQ. If the NOT is submitted electronically, the permit terminates immediately following confirmation of receipt of the NOT by TCEQ.

Note that when there is a change in operators of a construction activity, then the new operator must submit an NOI.

NOT's should be submitted to MS4 Operator(s). A list of the MS4 operator(s) receiving a copy of the NOT is located in Appendix H.

Record of Submittals to MS4s

Form Type	MS4 Name	Address	Date Submitted

TCEQ Office Use Only
Permit No:
CN:
RN:

Notice of Intent (NOI) for an Authorization for Stormwater Discharges Associated with Construction Activity under TPDES General Permit TXR150000

IMPORTANT INFORMATION

Please read and use the General Information and Instructions prior to filling out each question in the NOI form.

Use the NOI Checklist to ensure all required information is completed correctly. **Incomplete applications delay approval or result in automatic denial.**

Once processed your permit authorization can be viewed by entering the following link into your internet browser: http://www2.tceq.texas.gov/wq_dpa/index.cfm or you can contact TCEQ Stormwater Processing Center at 512-239-3700.

ePERMITS

Effective September 1, 2018, this paper form must be submitted to TCEQ with a completed electronic reporting waiver form (TCEQ-20754).

To submit an NOI electronically, enter the following web address into your internet browser and follow the instructions: https://www3.tceq.texas.gov/steers/index.cfm

APPLICATION FEE AND PAYMENT

The application fee for submitting a paper NOI is $325. The application fee for electronic submittal of a NOI through the TCEQ ePermits system (STEERS) is $225.

Payment of the application fee can be submitted by mail or through the TCEQ ePay system. The payment and the NOI must be mailed to separate addresses. To access the TCEQ ePay system enter the following web address into your internet browser: http://www.tceq.texas.gov/epay.

Provide your payment information for verification of payment:

- If payment was mailed to TCEQ, provide the following:
  - Check/Money Order Number: Click here to enter text
  - Name printed on Check: Click here to enter text
- If payment was made via ePay, provide the following:
  - Voucher Number: Click here to enter text
  - A copy of the payment voucher is attached to this paper NOI form.

RENEWAL (This portion of the NOI is not applicable after June 3, 2018)

Is this NOI for a renewal of an existing authorization? ☐ Yes ☐ No

If Yes, provide the authorization number here: TXR15 Click here to enter text

NOTE: If an authorization number is not provided, a new number will be assigned.

SECTION 1. OPERATOR (APPLICANT)

a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? CN Click here to enter text

(Refer to Section 1.a) of the Instructions)

b) What is the Legal Name of the entity (applicant) applying for this permit? (The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)

Click here to enter text

c) What is the contact information for the Operator (Responsible Authority)?

Prefix (Mr. Ms. Miss): Click here to enter text

First and Last Name: Click here to enter text Suffix: Click here to enter text

Title: Click here to enter text Credentials: Click here to enter text

Phone Number: Click here to enter text Fax Number: Click here to enter text

E-mail: Click here to enter text

Mailing Address: Click here to enter text

City, State, and Zip Code: Click here to enter text

Mailing Information if outside USA:

Territory: Click here to enter text

Country Code: Click here to enter text Postal Code: Click here to enter text

d) Indicate the type of customer:

☐ Individual
☐ Limited Partnership
☐ General Partnership
☐ Trust
☐ Sole Proprietorship (D.B.A.)
☐ Corporation
☐ Estate
☐ Federal Government
☐ County Government
☐ State Government
☐ City Government
☐ Other Government
☐ Other: Click here to enter text

e) Is the applicant an independent operator? ☐ Yes ☐ No

(If a governmental entity, a subsidiary, or part of a larger corporation, check No.)

f) Number of Employees. Select the range applicable to your company.

☐ 0-20 ☐ 251-500

☐ 21-100 ☐ 501 or higher

☐ 101-250

g) Customer Business Tax and Filing Numbers: (**Required** for Corporations and Limited Partnerships. **Not Required** for Individuals, Government, or Sole Proprietors.)

State Franchise Tax ID Number: Click here to enter text.

Federal Tax ID: Click here to enter text.

Texas Secretary of State Charter (filing) Number: Click here to enter text.

DUNS Number (if known): Click here to enter text.

SECTION 2. APPLICATION CONTACT

Is the application contact the same as the applicant identified above?

☐ Yes, go to Section 3

☐ No, complete this section

Prefix (Mr. Ms. Miss): Click here to enter text.

First and Last Name: Click here to enter text. Suffix: Click here to enter text.

Title: Click here to enter text. Credential: Click here to enter text.

Organization Name: Click here to enter text.

Phone Number: Click here to enter text. Fax Number: Click here to enter text.

E-mail: Click here to enter text.

Mailing Address: Click here to enter text.

Internal Routing (Mail Code, Etc.): Click here to enter text.

City, State, and Zip Code: Click here to enter text.

Mailing information if outside USA:

Territory: Click here to enter text.

Country Code: Click here to enter text. Postal Code: Click here to enter text.

SECTION 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) If this is an existing permitted site, what is the Regulated Entity Number (RN) issued to this site? RN Click here to enter text.

(Refer to Section 3.a) of the Instructions)

b) Name of project or site (the name known by the community where it's located): Click here to enter text

c) In your own words, briefly describe the type of construction occurring at the regulated site (residential, industrial, commercial, or other): Click here to enter text

d) County or Counties (if located in more than one): Click here to enter text

e) Latitude: Click here to enter text Longitude: Click here to enter text

f) Site Address/Location

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete *Section A*.

If the site does not have a physical address, provide a location description in *Section B*. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

Section A:

Street Number and Name: Click here to enter text

City, State, and Zip Code: Click here to enter text

Section B:

Location Description: Click here to enter text

City (or city nearest to) where the site is located: Click here to enter text

Zip Code where the site is located: Click here to enter text

SECTION 4. GENERAL CHARACTERISTICS

a) Is the project or site located on Indian Country Lands?

☐ Yes, do not submit this form. You must obtain authorization through EPA Region 6.

☐ No

b) Is your construction activity associated with a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources?

☐ Yes. Note: The construction stormwater runoff may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization through EPA Region 6.

☐ No

c) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site? Click here to enter text

d) What is the Secondary SIC Code(s), if applicable? Click here to enter text

e) What is the total number of acres to be disturbed? Click here to enter text

f) Is the project part of a larger common plan of development or sale?

☐ Yes

☐ No. The total number of acres disturbed, provided in e) above, must be 5 or more. If the total number of acres disturbed is less than 5, do not submit this form. See the requirements in the general permit for small construction sites.

g) What is the estimated start date of the project? Click here to enter text

h) What is the estimated end date of the project? Click here to enter text

i) Will concrete truck washout be performed at the site? ☐ Yes ☐ No

j) What is the name of the first water body(ies) to receive the stormwater runoff or potential runoff from the site? Click here to enter text

k) What is the segment number(s) of the classified water body(ies) that the discharge will eventually reach? Click here to enter text

l) Is the discharge into a Municipal Separate Storm Sewer System (MS4)?

☐ Yes ☐ No

If Yes, provide the name of the MS4 operator: Click here to enter text

Note: The general permit requires you to send a copy of this NOI form to the MS4 operator.

m) Is the discharge or potential discharge from the site within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?

☐ Yes, complete the certification below.

☐ No, go to Section 5

I certify that the copy of the TCEQ-approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) that is included or referenced in the Stormwater Pollution Prevention Plan will be implemented. ☐ Yes

SECTION 5. NOI CERTIFICATION

a) I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000). ☐ Yes

b) I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas. ☐ Yes

c) I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed. ☐ Yes

d) I certify that a Stormwater Pollution Prevention Plan has been developed, will be implemented prior to construction and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the Construction General Permit (TXR150000). ☐ Yes

Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3, provided all obligations are confirmed by at least one operator.

SECTION 6. APPLICANT CERTIFICATION SIGNATURE

Operator Signatory Name: Click here to enter text.

Operator Signatory Title: Click here to enter text.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): _____Date: _____

NOTICE OF INTENT CHECKLIST (TXR150000)

Did you complete everything? Use this checklist to be sure!

Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

Confirm each item (or applicable item) in this form is complete. This checklist is for use by the applicant to ensure a complete application is being submitted. **Missing information may result in denial of coverage under the general permit.** (See NOI process description in the General Information and Instructions.)

APPLICATION FEE

If paying by check:

☐ Check was mailed **separately** to the TCEQs Cashier's Office. (See Instructions for Cashier's address and Application address.)

☐ Check number and name on check is provided in this application.

If using ePay:

☐ The voucher number is provided in this application and a copy of the voucher is attached.

RENEWAL

☐ If this application is for renewal of an existing authorization, the authorization number is provided.

OPERATOR INFORMATION

☐ Customer Number (CN) issued by TCEQ Central Registry

☐ Legal name as filed to do business in Texas. (Call TX SOS 512-463-5555 to verify.)

☐ Name and title of responsible authority signing the application.

☐ Phone number and e-mail address

☐ Mailing address is complete & verifiable with USPS. www.usps.com

☐ Type of operator (entity type). Is applicant an independent operator?

☐ Number of employees.

☐ For corporations or limited partnerships – Tax ID and SOS filing numbers.

☐ Application contact and address is complete & verifiable with USPS. http://www.usps.com

REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

☐ Regulated Entity Number (RN) (if site is already regulated by TCEQ)

☐ Site/project name and construction activity description

☐ County

☐ Latitude and longitude http://www.tceq.texas.gov/gis/sqmaview.html

☐ Site Address/Location. Do not use a rural route or post office box.

GENERAL CHARACTERISTICS

☐ Indian Country Lands –the facility is not on Indian Country Lands.

☐ Construction activity related to facility associated to oil, gas, or geothermal resources

☐ Primary SIC Code that best describes the construction activity being conducted at the site. www.osha.gov/oshstats/sicser.html

☐ Estimated starting and ending dates of the project.

☐ Confirmation of concrete truck washout.

☐ Acres disturbed is provided and qualifies for coverage through a NOI.

☐ Common plan of development or sale.

☐ Receiving water body or water bodies.

☐ Segment number or numbers.

☐ MS4 operator.

☐ Edwards Aquifer rule.

CERTIFICATION

☐ Certification statements have been checked indicating Yes.

☐ Signature meets 30 Texas Administrative Code (TAC) §305.44 and is original.

Instructions for Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

By Regular Mail:
TCEQ
Stormwater Processing Center (MC228)
P.O. Box 13087
Austin, Texas 78711-3087

By Overnight or Express Mail:
TCEQ
Stormwater Processing Center (MC228)
12100 Park 35 Circle
Austin, TX

Application Fee:

The application fee of $325 is required to be paid at the time the NOI is submitted. Failure to submit payment at the time the application is filed will cause delays in acknowledgment or denial of coverage under the general permit. Payment of the fee may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

Mailed Payments:

Use the attached General Permit Payment Submittal Form. The application fee is submitted to a different address than the NOI. Read the General Permit Payment Submittal Form for further instructions, including the address to send the payment.

ePAY Electronic Payment: http://www.tceq.texas.gov/epay

When making the payment you must select Water Quality, and then select the fee category "General Permit Construction Storm Water Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

TCEQ Contact List:

Application – status and form questions:	512-239-3700, swpermit@tceq.texas.gov
Technical questions:	512-239-4671, swgp@tceq.texas.gov
Environmental Law Division:	512-239-0600
Records Management - obtain copies of forms:	512-239-0900
Reports from databases (as available):	512-239-DATA (3282)
Cashier's office:	512-239-0357 or 512-239-0187

Notice of Intent Process:

When your NOI is received by the program, the form will be processed as follows:

- **Administrative Review**: Each item on the form will be reviewed for a complete response. In addition, the operator's legal name must be verified with Texas Secretary of State as valid and active (if applicable). The address(es) on the form must be verified with the US Postal service as receiving regular mail delivery. Do not give an overnight/express mailing address.

- **Notice of Deficiency:** If an item is incomplete or not verifiable as indicated above, a notice of deficiency (NOD) will be mailed to the operator. The operator will have 30 days to respond to the NOD. The response will be reviewed for completeness.
- **Acknowledgment of Coverage:** An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.

  or

  Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

For NOIs submitted **electronically** through ePermits, provisional coverage under the general permit begins immediately following confirmation of receipt of the NOI form by the TCEQ.

For **paper** NOIs, provisional coverage under the general permit begins **7 days after a completed NOI is postmarked for delivery** to the TCEQ.

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site http://www.tceq.texas.gov. Search using keyword TXR150000.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated project or site changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted no later than 10 days prior to the change in Operator status.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. After final acknowledgment of coverage under the general permit, the program will assign a Customer Number and Regulated Entity Number, if one has not already been assigned to this customer or site.

For existing customers and sites, you can find the Customer Number and Regulated Entity Number by entering the following web address into your internet browser: http://www15.tceq.texas.gov/crpub/ or you can contact the TCEQ Stormwater Processing Center at 512-239-3700 for assistance. On the website, you can search by your permit number, the Regulated Entity (RN) number, or the Customer Number (CN). If you do not know these numbers, you can select "Advanced Search" to search by permittee name, site address, etc.

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all authorizations as changes occur. For this permit, a Notice of Change form must be submitted to the program area.

INSTRUCTIONS FOR FILLING OUT THE NOI FORM

Renewal of General Permit. Dischargers holding active authorizations under the expired General Permit are required to submit a NOI to continue coverage. The existing permit number is required. If the permit number is not provided or has been terminated, expired, or denied, a new permit number will be issued.

Section 1. OPERATOR (APPLICANT)

a) Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. **This is not a permit number, registration number, or license number**.

If the applicant is an existing TCEQ customer, the Customer Number is available at the following website: http://www15.tceq.texas.gov/crpub/. If the applicant is not an existing TCEQ customer, leave the space for CN blank.

b) Legal Name of Applicant

Provide the current legal name of the applicant. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, as filed in the county. You may contact the SOS at 512-463-5555, for more information related to filing in Texas. If filed in the county, provide a copy of the legal documents showing the legal name.

c) Contact Information for the Applicant (Responsible Authority)

Provide information for the person signing the application in the Certification section. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. The mailing address must be recognized by the US Postal Service. You may verify the address on the following website: https://tools.usps.com/go/ZipLookupAction!input.action.

The phone number should provide contact to the applicant.

The fax number and e-mail address are optional and should correspond to the applicant.

d) Type of Customer (Entity Type)

Check only one box that identifies the type of entity. Use the descriptions below to identify the appropriate entity type. Note that the selected entity type also indicates the name that must be provided as an applicant for an authorization.

Individual

An individual is a customer who has not established a business, but conducts an activity that needs to be regulated by the TCEQ.

Partnership

A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). If the customer is a 'General Partnership' or 'Joint Venture' filed in the county (not filed with TX SOS), the legal name of each partner forming the 'General Partnership' or 'Joint Venture' must be provided. Each 'legal entity' must apply as a co-applicant.

Trust or Estate

A trust and an estate are fiduciary relationships governing the trustee/executor with respect to the trust/estate property.

Sole Proprietorship (DBA)

A sole proprietorship is a customer that is owned by only one person and has not been incorporated. This business may:

1. be under the person's name
2. have its own name (doing business as or DBA)
3. have any number of employees.

If the customer is a Sole Proprietorship or DBA, the 'legal name' of the individual business 'owner' must be provided. The DBA name is not recognized as the 'legal name' of the entity. The DBA name may be used for the site name (regulated entity).

Corporation

A customer that meets all of these conditions:

1. is a legally incorporated entity under the laws of any state or country
2. is recognized as a corporation by the Texas Secretary of State
3. has proper operating authority to operate in Texas

The corporation's 'legal name' as filed with the Texas Secretary of State must be provided as applicant. An 'assumed' name of a corporation is not recognized as the 'legal name' of the entity.

Government

Federal, state, county, or city government (as appropriate)

The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the applicant. A department name or other description of the organization is not recognized as the 'legal name'.

Other

This may include a utility district, water district, tribal government, college district, council of governments, or river authority. Provide the specific type of government.

e) Independent Entity

Check No if this customer is a subsidiary, part of a larger company, or is a governmental entity. Otherwise, check Yes.

f) Number of Employees

Check one box to show the number of employees for this customer's entire company, at all locations. This is not necessarily the number of employees at the site named in the application.

g) Customer Business Tax and Filing Numbers

These are required for Corporations and Limited Partnerships. These are not required for Individuals, Government, and Sole Proprietors.

State Franchise Tax ID Number

Corporations and limited liability companies that operate in Texas are issued a franchise tax identification number. If this customer is a corporation or limited liability company, enter the Tax ID number.

Federal Tax ID

All businesses, except for some small sole proprietors, individuals, or general partnerships should have a federal taxpayer identification number (TIN). Enter this number here. Use no prefixes, dashes, or hyphens. Sole proprietors, individuals, or general partnerships do not need to provide a federal tax ID.

TX SOS Charter (filing) Number

Corporations and Limited Partnerships required to register with the Texas Secretary of State are issued a charter or filing number. You may obtain further information by calling SOS at 512-463-5555.

DUNS Number

Most businesses have a DUNS (Data Universal Numbering System) number issued by Dun and Bradstreet Corp. If this customer has one, enter it here.

Section 2. APPLICATION CONTACT

Provide the name and contact information for the person that TCEQ can contact for additional information regarding this application.

Section 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) Regulated Entity Number (RN)

The RN is issued by TCEQ's Central Registry to sites where an activity is regulated by TCEQ. This is not a permit number, registration number, or license number. Search TCEQ's Central Registry to see if the site has an assigned RN at http://www15.tceq.texas.gov/crpub/. If this regulated entity has not been assigned an RN, leave this space blank.

If the site of your business is part of a larger business site, an RN may already be assigned for the larger site. Use the RN assigned for the larger site.

If the site is found, provide the assigned RN and provide the information for the site to be authorized through this application. The site information for this authorization may vary from the larger site information.

An example is a chemical plant where a unit is owned or operated by a separate corporation that is accessible by the same physical address of your unit or facility. Other examples include industrial parks identified by one common address but different corporations have control of defined areas within the site. In both cases, an RN would be assigned for the physical address location and the permitted sites would be identified separately under the same RN.

b) Name of the Project or Site

Provide the name of the site or project as known by the public in the area where the site is located. The name you provide on this application will be used in the TCEQ Central Registry as the Regulated Entity name.

c) Description of Activity Regulated

In your own words, briefly describe the primary business that you are doing that requires this authorization. Do not repeat the SIC Code description.

d) County

Provide the name of the county where the site or project is located. If the site or project is located in more than one county, provide the county names as secondary.

e) Latitude and Longitude

Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to: http://www.tceq.texas.gov/gis/sqmaview.html.

f) Site Address/Location

If a site has an address that includes a street number and street name, enter the complete address for the site in *Section A*. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

If a site does not have an address that includes a street number and street name, provide a complete written location description in *Section B*. For example: "The site is located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1."

Provide the city (or nearest city) and zip code of the site location.

Section 4. GENERAL CHARACTERISTICS

a) Indian Country Lands

If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA Region 6, Dallas. Do not submit this form to TCEQ.

b) Construction activity associated with facility associated with exploration, development, or production of oil, gas, or geothermal resources

If your activity is associated with oil and gas exploration, development, or production, you may be under jurisdiction of the Railroad Commission of Texas (RRC) and may need to obtain authorization from EPA Region 6.

Construction activities associated with a facility related to oil, gas or geothermal resources may include the construction of a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a

carbon dioxide geologic storage facility; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel.

Where required by federal law, discharges of stormwater associated with construction activities under the RRC's jurisdiction must be authorized by the EPA and the RRC, as applicable. Activities under RRC jurisdiction include construction of a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources, such as a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility under the jurisdiction of the RRC; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel. The RRC also has jurisdiction over stormwater from land disturbance associated with a site survey that is conducted prior to construction of a facility that would be regulated by the RRC. Under 33 U.S.C. §1342(l)(2) and §1362(24), EPA cannot require a permit for discharges of stormwater from field activities or operations associated with {oil and gas} exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities unless the discharge is contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the facility. Under §3.8 of this title (relating to Water Protection), the RRC prohibits operators from causing or allowing pollution of surface or subsurface water. Operators are encouraged to implement and maintain best management practices (BMPs) to minimize discharges of pollutants, including sediment, in stormwater during construction activities to help ensure protection of surface water quality during storm events.

For more information about the jurisdictions of the RRC and the TCEQ, read the Memorandum of Understanding (MOU) between the RRC and TCEQ at 16 Texas Administrative Code, Part 1, Chapter 3, Rule 3.30, by entering the following link into an internet browser: http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=30 or contact the TCEQ Stormwater Team at 512-239-4671 for additional information.

c) Primary Standard Industrial Classification (SIC) Code

Provide the SIC Code that best describes the construction activity being conducted at this site.

Common SIC Codes related to construction activities include:

- 1521 - Construction of Single Family Homes
- 1522 - Construction of Residential Buildings Other than Single Family Homes
- 1541 - Construction of Industrial Buildings and Warehouses

- 1542 - Construction of Non-residential Buildings, other than Industrial Buildings and Warehouses
- 1611 - Highway and Street Construction, except Highway Construction
- 1622 - Bridge, Tunnel, and Elevated Highway Construction
- 1623 - Water, Sewer, Pipeline and Communications, and Power Line Construction

For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Local Government Assistance Section at 800-447-2827 for assistance.

d) Secondary SIC Code

Secondary SIC Code(s) may be provided. Leave this blank if not applicable. For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Environmental Assistance Section at 800-447-2827 for assistance.

e) Total Number of Acres Disturbed

Provide the approximate number of acres that the construction site will disturb. Construction activities that disturb less than one acre, unless they are part of a larger common plan that disturbs more than one acre, do not require permit coverage. Construction activities that disturb between one and five acres, unless they are part of a common plan that disturbs more than five acres, do not require submission of an NOI. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

If you have any questions about this item, please contact the stormwater technical staff by phone at 512-239-4671 or by email at swgp@tceq.texas.gov.

f) Common Plan of Development

Construction activities that disturb less than five acres do not require submission of an NOI unless they are part of a common plan of development or for sale where the area disturbed is five or more acres. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

For more information on what a common plan of development is, refer to the definition of "Common Plan of Development" in the Definitions section of the general permit or enter the following link into your internet browser: www.tceq.texas.gov/permitting/stormwater/common_plan_of_development_steps.html

For further information, go to the TCEQ stormwater construction webpage enter the following link into your internet browser: www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If you have any further questions about the Common Plan of Development you can contact the TCEQ Stormwater Team at 512-239-4671 or the TCEQ Small Business and Environmental Assistance at 800-447-2827.

g) Estimated Start Date of the Project

This is the date that any construction activity or construction support activity is initiated at the site. If renewing the permit provide the original start date of when construction activity for this project began.

h) Estimated End Date of the Project

This is the date that any construction activity or construction support activity will end and final stabilization will be achieved at the site.

i) Will concrete truck washout be performed at the site?

Indicate if you expect that operators of concrete trucks will washout concrete trucks at the construction site.

j) Identify the water body(s) receiving stormwater runoff

The stormwater may be discharged directly to a receiving stream or through a MS4 from your site. It eventually reaches a receiving water body such as a local stream or lake, possibly via a drainage ditch. You must provide the name of the water body that receives the discharge from the site (a local stream or lake).

If your site has more than one outfall you need to include the name of the first water body for each outfall, if they are different.

k) Identify the segment number(s) of the classified water body(s)

Identify the classified segment number(s) receiving a discharge directly or indirectly. Enter the following link into your internet browser to find the segment number of the classified water body where stormwater will flow from the site: www.tceq.texas.gov/waterquality/monitoring/viewer.html or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

You may also find the segment number in TCEQ publication GI-316 by entering the following link into your internet browser: www.tceq.texas.gov/publications/gi/gi-316 or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:

- 0100 (Canadian River Basin)
- 0200 (Red River Basin)
- 0300 (Sulfur River Basin)
- 0400 (Cypress Creek Basin)
- 0500 (Sabine River Basin)

Call the Water Quality Assessments section at 512-239-4671 for further assistance.

l) Discharge into MS4 – Identify the MS4 Operator

The discharge may initially be into a municipal separate storm sewer system (MS4). If the stormwater discharge is into an MS4, provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, county, or utility district, but possibly can be another form of government. Please note that the Construction General Permit requires the Operator to supply the MS4 with a

copy of the NOI submitted to TCEQ. For assistance, you may call the technical staff at 512-239-4671.

m) Discharges to the Edwards Aquifer Recharge Zone and Certification

The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

See maps on the TCEQ website to determine if the site is located within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer by entering the following link into an internet browser: www.tceq.texas.gov/field/eapp/viewer.html or by contacting the TCEQ Water Quality Division at 512-239-4671 for assistance.

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site-specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required before construction can begin.

For questions regarding the Edwards Aquifer Protection Program, contact the appropriate TCEQ Regional Office. For projects in Hays, Travis and Williamson Counties: Austin Regional Office, 12100 Park 35 Circle, Austin, TX 78753, 512-339-2929. For Projects in Bexar, Comal, Kinney, Medina and Uvalde Counties: TCEQ San Antonio Regional Office, 14250 Judson Rd., San Antonio, TX 78233-4480, 210-490-3096.

Section 5. NOI CERTIFICATION

Note: Failure to indicate Yes to all of the certification items may result in denial of coverage under the general permit.

a) Certification of Understanding the Terms and Conditions of Construction General Permit (TXR150000)

Provisional coverage under the Construction General Permit (TXR150000) begins 7 days after the completed paper NOI is postmarked for delivery to the TCEQ. Electronic applications submitted through ePermits have immediate provisional coverage. You must obtain a copy and read the Construction General Permit before submitting your application. You may view and print the Construction General Permit for which you are seeking coverage at the TCEQ web site by entering the following link into an internet browser: www.tceq.texas.gov/goto/construction or you may contact the TCEQ Stormwater processing Center at 512-239-3700 for assistance.

b) Certification of Legal Name

The full legal name of the applicant as authorized to do business in Texas is required. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at 512-463 5555, for more information related to filing in Texas.

c) Understanding of Notice of Termination

A permittee shall terminate coverage under the Construction General Permit through the submittal of a NOT when the operator of the facility changes, final stabilization has

been reached, the discharge becomes authorized under an individual permit, or the construction activity never began at this site.

d) Certification of Stormwater Pollution Prevention Plan

The SWP3 identifies the areas and activities that could produce contaminated runoff at your site and then tells how you will ensure that this contamination is mitigated. For example, in describing your mitigation measures, your site's plan might identify the devices that collect and filter stormwater, tell how those devices are to be maintained, and tell how frequently that maintenance is to be carried out. You must develop this plan in accordance with the TCEQ general permit requirements. This plan must be developed and implemented before you complete this NOI. The SWP3 must be available for a TCEQ investigator to review on request.

Section 6. APPLICANT CERTIFICATION SIGNATURE

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

If you are a corporation:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

If you are a municipality or other government entity:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the TCEQ's Environmental Law Division at 512-239-0600.

30 Texas Administrative Code

§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the

corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

Texas Commission on Environmental Quality
General Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

Instructions:

- Complete items 1 through 5 below:
- Staple your check in the space provided at the bottom of this document.
- *Do not mail this form with your NOI form.*
- *Do not mail this form to the same address as your NOI.*

Mail this form and your check to either of the following:

By Regular U.S. Mail
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, TX 78711-3088

By Overnight or Express Mail
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

Fee Code: GPA General Permit: TXR150000

1. Check or Money Order No: Click here to enter text
2. Amount of Check/Money Order: Click here to enter text
3. Date of Check or Money Order: Click here to enter text
4. Name on Check or Money Order: Click here to enter text
5. NOI Information:

   If the check is for more than one NOI, list each Project or Site (RE) Name and Physical Address exactly as provided on the NOI. **Do not submit a copy of the NOI with this form, as it could cause duplicate permit application entries!**

   If there is not enough space on the form to list all of the projects or sites the authorization will cover, then attach a list of the additional sites.

   Project/Site (RE) Name: Click here to enter text

   Project/Site (RE) Physical Address: Click here to enter text

Staple the check or money order to this form in this space.

TCEQ Office Use Only
Permit No.:
RN:
CN:
Region:

RESET FORM

Notice of Change to an Authorization for Stormwater Discharges Associated With Construction Activity under TPDES General Permit TXR150000

IMPORTANT – Please read the following information and INSTRUCTIONS before filling out this form.

ePERMITS: Sign up now for online NOC: https://www3.tceq.texas.gov/steers/index.cfm

This form will be returned for any of the following reasons:

1) The permit number is not provided, is invalid, or is no longer active,
2) Wet ink signature of person meeting signatory requirements is not provided,
3) The current permittee is not the applicant, and;
4) A requested change in operator name is not a legal name change.

This form cannot be used for a change in operator. Refer to your general permit for information.

What is the permit number of the authorization to be changed?

TXR15_____ or TXRCW_____

1) APPLICANT INFORMATION

a) What is the full Legal Name of the current operator as on the authorization?

_____

b) What is the Customer Number (CN) assigned to this operator? You may search for your CN at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

CN_____

c) What is the name and title of the person signing the application? (The person must be an executive official meeting signatory requirements in TAC 305.44(a).)

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____ Suffix: _____
Title: _____Credential: _____

d) What is the Regulated Entity Reference Number (RN) assigned to this site?

RN_____

2) APPLICATION CONTACT

If TCEQ needs additional information regarding this application, who should be contacted?

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____ Suffix:_____
Title:_____ Credential:_____
Organization Name:_____
Phone Number:_____ Extension:_____ Fax Number:_____
E-mail Address:_____
Mailing Address:_____
Internal Routing (Mail Code, Etc.):_____
City:_____ State:_____ ZIP Code:_____
Mailing Information if outside USA:
Territory: _____ Country Code:_____ Postal Code: _____

3) REQUESTED CHANGE TO PERMITTED INFORMATION

What information has changed or needs to be corrected? Check one or more of the following options and enter the new information below.

☐ Operator legal name change with Texas Secretary of State (TX SOS).
Fill out sections a) and b) as applicable.
Note: Permits are not transferable. If a change in entity has occurred, this NOC will not be processed.

☐ Address and contact information for the operator. Fill out section b).

☐ Site Information (Regulated Entity). Fill out section c).
Note: Permits under a general permit are site specific. If a change in site location has occurred, this NOC will not be processed.

☐ General characteristics relating to the regulated activity. Fill out section d).

a) Operator Legal Name Change

i. What is the NEW active Legal Name with TX SOS or on other legal document?
New Legal Name: _____

ii. What is the TX SOS Filing Number for us to confirm this official name change?
This is only applicable to Limited Partnerships or Corporations.
TX SOS Filing number: _____

b) Address and Contact Information for Operator
Verify mailing addresses with USPS: http://zip4.usps.com/zip4/welcome.jsp.

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____ Suffix:_____
Title:_____ Credential:_____
Organization Name:_____

Phone Number:_____ Extension:_____ Fax Number:_____
E-mail Address:_____
Mailing Address:_____
Internal Routing (Mail Code, Etc.):_____
City:_____ State:_____ZIP Code:_____
Mailing Information if outside USA:
Territory: _____Country Code:_____ Postal Code: _____

c) Regulated Entity (Site) Information Correction

i. Is this a change to the location of the permitted activity?
☐ Yes This NOC will not be processed since the authorizations are site specific.
☐ No Continue with NOC form.

ii. Corrected Name of Project or Site:

_____

iii. Updated Physical Address (new 911 address):
Street Number:_____Street Name:_____
City:_____ State: Texas ZIP Code:_____

iv. Corrected location access description, if no physical address (street number/street name):

v. Corrected Latitude:_____ N

vi. Corrected Longitude:_____W

vii. Corrected County (Counties if >1):_____

d) Change in General Characteristics Provided on Original Form
Identify the specific change and provide the updates information. If an attachment is needed, please reference it below.

4) OPERATOR CERTIFICATION

I, _____ _____
Typed or printed name *Title*

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature:_____ Date:_____
(Use blue ink)

Notice of Change (NOC) for Authorizations for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

General Information and Instructions

GENERAL INFORMATION

Where to Send the NOC:

BY REGULAR U.S. MAIL
Texas Commission on Environmental Quality
Stormwater Processing Center (MC228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality
Stormwater Processing Center (MC228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact list:

Application – status and form questions:	*512/239-3700, swpermit@tceq.texas.gov*
Technical questions:	*512/239-4671, swgp@tceq.texas.gov*
Environmental Law Division:	*512/239-0600*
Records Management - obtain copies of forms:	*512/239-0900*
Reports from databases (as available):	*512/239-DATA (3282)*
Cashier's office:	*512/239-0357 or 512/239-0187*

NOC Process:

1. Administrative Review: The form will be reviewed to ensure the request is from the permittee (operator) on the authorization, the permit is active and initial coverage was acknowledged. Each item on the form will be reviewed for a complete response. In addition, the operator's legal name change must be verified with Texas Secretary of State (if applicable). The address(s) on the form must be verified with the US Postal Service (USPS) as an address receiving regular mail delivery. Never give an overnight/express mailing address.
If an item is incomplete or not verifiable, the operator may be notified by letter, phone call or email. In some instances as noted at the beginning of the form, the request may simply be returned.

2. NOC Confirmation: An updated Acknowledgment Certificate will be mailed to the operator only if the NOC is to change information provided on the acknowledgment certificate. The original coverage effective date will not change.

General Permit (Your Permit) and Forms

You may view and print your general permit on the TCEQ web site http://www.tceq.texas.gov. Search using key word TXR150000. General Permit Forms (NOI, Waiver, NOT, and NOC) and instructions are available on the TCEQ web site http://www.tceq.texas.gov.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a NOT and the new operator must submit a NOI. The NOI must be submitted not later than 10 days prior to the change in Operator status. Note that the NOT is effective on the postmarked date. It may be necessary to not terminate the existing permit until coverage by the new entity is confirmed.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. You can find the information on the Central Registry web site at http://www12.tceq.texas.gov/crpub/index.cfm.

You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled "Additional ID".

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all associated authorizations as changes occur. For General Permits, a Notice of Change form must be submitted to the program area for approval to update the CN and RN data in central registry.

INSTRUCTIONS FOR FILLING OUT THE NOC FORM

1) APPLICANT INFORMATION

a) Legal Name

Provide the current legal name of the permittee, as on the permit.

b) Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. You may search for your CN at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch.

If the name(s) provided do not match the current permittee name(s), this form will be returned. It is the responsibility of the permittee(s) to comply with the general permit.

Note: If a change is being made to the CN and the CN has other TCEQ authorization types, it is the entity's responsibility to update those authorizations at the same time. If an authorization has been cancelled or terminated, the name cannot be changed on the permit. Because of this, a new CN may be issued for the new name.

c) Person Signing this Application

Provide the name and title of the person signing the application. The person must be an executive official meeting signatory requirements in TAC §305.44.

d) Regulated Entity Reference Number (RN)

This is a number issued by TCEQ's Central Registry to sites (a location where a regulated activity occurs) regulated by TCEQ. This is not a permit number, registration number, or license number. Search for your RN: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch.

If the site has changed or the information provided indicates a new location, this form will be returned. It is the responsibility of the permittee to comply with the general permit.

2) APPLICATION CONTACT

Provide the name, title and contact information of the person that TCEQ can contact for additional information regarding this application.

3) REQUESTED CHANGE TO PERMITTED INFORMATION

Check one or more of the available options indicating the information in the form that is to be updated. Provide the updated information in 3 a) for Legal Name Change, 3 b) for Address and Contact Information Change, 3 c) for Regulated Entity Site Information Change, or 3 d) for General Characteristics Change, as applicable.

a) Legal Name Change

Provide the new legal name. If the entity is a Limited Partnership or Corporation, the name change must be verifiable with Texas Secretary of State. The TX SOS filing number must be provided to verify only a name change occurred. You may contact the SOS at (512)463 5555, for more information related to filing in Texas. If filed in the county where doing business, provide a copy of the legal documents showing the legal name change.

Legal name changes of a Corporation and Limited Partnership will be verified with Texas Secretary of State. If the entity is filed as a new entity with a new filing number, then the change cannot be made through a NOC. The permits are not transferable. If the operator changes, the old entity must terminate their permit and the new entity must submit a form for a new permit.

b) Address and Contact Information Change

Indicate the type of address and contact information for the operator that has changed from the original NOI or last NOC submitted to TCEQ.

Verify mailing addresses with USPS http://zip4.usps.com/zip4/welcome.jsp for regular mail delivery (not overnight express mail). If you find that the address is not verifiable please indicate the address is used by the USPS for regular mail delivery. Failure to provide a valid mailing address will delay or prohibit us from updating the permit.

Please note that address updates relating to a general permit authorization can ONLY be made through a Notice of Change. Address changes submitted through any other form cannot be processed.

c) Regulated Entity Site Information Change

The NOC form is only for use to update or correct information submitted on the original application or last NOC for the authorization. The authorization under a general permit is site specific. If this change is related to a new location, a Notice of Change will not be processed.

Provide the updated site name, updated site addresses, corrected latitude and longitude, and/or corrected county, as applicable to your NOC request. A new physical address for an existing location is usually the result of a newly assigned 911 address for emergencies.

If providing a corrected latitude and longitude, enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to http://www.tceq.texas.gov/gis/sqmaview.html
or http://nationalmap.gov/ustopo/.

d) Change in General Characteristics Provided on Original Form

Describe any other change that is not addressed through any question in this section of the application.

4) OPERATOR CERTIFICATION

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

IF YOU ARE A CORPORATION:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at 512/239-0600.

30 Texas Administrative Code
§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

TCEQ Office Use Only
Permit No:
CN:
RN:
Region:

Notice of Termination (NOT) for Authorizations under TPDES General Permit TXR150000

IMPORTANT INFORMATION:

Please read and use the General Information and Instructions prior to filling out each question in the form.

Effective September 1, 2018, this paper form must be submitted to TCEQ with a completed electronic reporting waiver form (TCEQ-20754).

ePermits: This form is available on our online permitting system.
Sign up for online permitting at: https://www3.tceq.texas.gov/steers/

What is the permit number to be terminated?

TXR15 TXRCW

Section 1. OPERATOR (Permittee)

a) What is the Customer Number (CN) issued to this entity?

CN

b) What is the Legal Name of the current permittee?

c) Provide the contact information for the Operator (Responsible Authority).

Prefix (Mr. Ms. or Miss):

First and Last Name: Suffix:

Title: Credentials:

Phone Number: Fax Number:

Email:

Mailing Address:

City, State, and Zip Code:

Country Mailing Information, if outside USA:

Section 2. APPLICATION CONTACT

This is the person TCEQ will contact if additional information is needed regarding this application.

Is the application contact the same as the permittee identified above?

☐ Yes, go to Section 3.

☐ No, complete section below

Prefix (Mr. Ms. or Miss):

First and Last Name: Suffix:

Title: Credentials:

Phone Number: Fax Number:

Email:

Mailing Address:

City, State, and Zip Code:

Country Mailing Information, if outside USA:

Section 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) TCEQ issued RE Reference Number (RN): RN

b) Name of project or site as known by the local community:

c) County, or counties if more than 1:

d) Latitude: Longitude:

e) Site Address/Location:

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete Section 3A.

If the site does not have a physical address, provide a location description in Section 3B. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

Section 3A: Physical Address of Project or Site:

Street Number and Name:

City, State, and Zip Code:

Section 3B: Site Location Description:

Location description:

City where the site is located or, if not in a city, what is the nearest city:

Zip Code where the site is located:

Section 4. REASON FOR TERMINATION

Check the reason for termination:

☐ Final stabilization has been achieved on all portions of the site that are the responsibility of the Operator and all silt fences and other temporary erosion controls have been removed, or scheduled for removal as defined in the SWP3.

☐ Another permitted Operator has assumed control over all areas of the site that have not been finally stabilized, and temporary erosion controls that have been identified in the SWP3 have been transferred to the new Operator.

☐ The discharge is now authorized under an alternate TPDES permit.

☐ The activity never began at this site that is regulated under the general permit.

Section 5. CERTIFICATION

Signatory Name:

Signatory Title:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): _____Date: _____

Instructions for Notice of Termination (NOT) for Authorizations under TPDES General Permit TXR150000

GENERAL INFORMATION

Where to Send the Notice of Termination (NOT):

BY REGULAR U.S. MAIL:
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL:
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact List:

Application status and form questions:	512-239-3700, swpermit@tceq.texas.gov
Technical questions:	512-239-4671, swgp@tceq.texas.gov
Environmental Law Division:	512-239-0600
Records Management - obtain copies of forms:	512-239-0900
Reports from databases (as available):	512-239-DATA (3282)
Cashier's office:	512-239-0357 or 512-239-0187

Notice of Termination Process:

A Notice of Termination is **effective on the date postmarked for delivery to TCEQ.**

When your NOT is received by the program, the form will be processed as follows:

1) Administrative Review: The form will be reviewed to confirm the following:
   - the permit number is provided;
   - the permit is active and has been approved;
   - the entity terminating the permit is the current permittee;
   - the site information matches the original permit record; and
   - the form has the required original signature with title and date.

2) Notice of Deficiency: If an item is incomplete or not verifiable as indicated above, a phone call will be made to the applicant to clear the deficiency. A letter will not be sent to the permittee if unable to process the form.

3) Confirmation of Termination: A Notice of Termination Confirmation letter will be mailed to the operator.

Change in Operator:

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted not later than 10 days prior to the change in Operator status.

INSTRUCTIONS FOR FILLING OUT THE FORM

The majority of permit information related to the current operator and regulated entity are available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

Section 1. Operator (Current Permittee):

a) Customer Number (CN)
TCEQ's Central Registry assigns each customer a number that begins with CN, followed by nine digits. This is not a permit number, registration number, or license number. The Customer Number, for the current permittee, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

b) Legal Name of Operator
The operator must be the same entity as previously submitted on the original Notice of Intent for the permit number provided. The current operator name, as provided on the current authorization, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

c) Contact Information for the Operator (Responsible Authority)
Provide information for person signing the NOT application in the Certification section. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. Update the address if different than previously submitted for the Notice of Intent or Notice of Change. The mailing address must be recognized by the US Postal Service. You may verify the address on the following website: https://tools.usps.com/go/ZipLookupAction!input.action.

The phone number should provide contact to the operator.

The fax number and e-mail address are optional and should correspond to the operator.

Section 2. Application Contact:

Provide the name, title and contact information of the person that TCEQ can contact for additional information regarding this application.

Section 3. Regulated Entity (RE) Information on Project or Site:

a) Regulated Entity Reference Number (RN)
A number issued by TCEQ's Central Registry to sites where an activity regulated by TCEQ. This is not a permit number, registration number, or license number. The Regulated Entity Reference Number is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

b) Name of the Project or Site
Provide the name of the site as known by the public in the area where the site is located.

c) County
Identify the county or counties in which the regulated entity is located.

d) Latitude and Longitude
Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. The latitude and longitude as provided on the current authorization is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

e) Site/Project (RE) Physical Address/Location Information
The physical address/location information, as provided on the current authorization, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

Section 3A. If a site has an address that includes a street number and street name, enter the complete address for the site. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate the site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

Section 3B. If a site does not have an address that includes a street number and street name, provide a complete written location description. For example: "The site is located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1."

Provide the city (or nearest city) and Zip Code of the facility location.

Section 4. Reason for Termination:

The Notice of Termination form is only for use to terminate the authorization (permit). The Permittee must indicate the specific reason for terminating by checking one of the options. If the reason is not listed then provide an attachment that explains the reason for termination.

Please read your general permit carefully to determine when to terminate your permit. Permits will not be reactivated after submitting a termination form. The termination is effective on the date postmarked for delivery to TCEQ.

Section 5. Certification:

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code §305.44.

IF YOU ARE A CORPORATION:
The regulation that controls who may sign an application form is 30 Texas Administrative Code §305.44(a), which is provided below. According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a), which is provided below. According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statutes under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a) (3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at 512-239-0600.

30 Texas Administrative Code §305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

APPENDIX H

RECORD OF TEMPORARY/PERMANENT CEASING OF CONSTRUCTION ACTIVITIES

Record of Temporary/Permanent Ceasing of Construction Activities

Project Activity Area	Date Activities Ceased	Temporary* or Permanent	Date Soil Stabilization Implemented	Date Activities Resumed	Initials

*** "Temporarily Ceased" means inactive for less than 21 consecutive days.**

APPENDIX I

DELEGATION OF SIGNATORIES

Executive Director
Texas Commission on Environmental Quality
Storm Water and Pretreatment Team
P.O. Box 13087, MC-148
Austin, TX 78711-3087

Subject: Delegation of Signatories to Reports

Facility/Company/Site Name: _____
TPDES Permit Number: _____

Dear Executive Director:

This letter serves to designate the following people or positions as authorized personnel for signing reports, storm water pollution prevention plans, certifications or other information requested by the Executive Director or required by the general permit, as set forth by 30 TAC §305.128 (see page 2).

Name or Position	
Name or Position	
Name or Position	
Name or Position	

I understand that this authorization does not extend to the signing of a Notice of Intent for obtaining coverage under a storm water general permit.

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in 30 TAC §305.44 (see page 2).

Sincerely,

_____ _____ _____
Name Title Date

RELEVANT PROVISIONS

305.128(a) All reports requested by permits and other information requested by the executive director shall be signed by a person described in §305.44(a) of this title (relating to Signatories to Applications) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) the authorization is made in writing by a person described in §305.44(a) of this title (relating to Signatories to Applications);

(2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity or for environmental matters for the applicant, such as the position of plant manager, operator of a well or well field, environmental manager, or a position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

(3) the written authorization is submitted to the executive director.

(b) If an authorization under this section is no longer accurate because of a change in individuals or position, a new authorization satisfying the requirements of this section must be submitted to the executive director prior to or together with any reports, information, or applications to be signed by an authorized representative.

(c) Any person signing a report required by a permit shall make the certification set forth in §305.44(b) of this title (relating to Signatories to Applications).

305.44(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

(b) A person signing an application shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

APPENDIX J

MATERIAL MANAGEMENT PRACTICES

MATERIAL MANAGEMENT PRACTICES

The following are the material management practices that will be used to reduce risk of spills or other accidental exposure of materials and substances to storm water runoff:

1. Good Housekeeping: The following good housekeeping practices will be followed onsite during the construction project:
   - An effort will be made to store only enough product required to do the job.
   - All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
   - Products will be kept in their original containers with the original manufacturer's label.
   - Substances will not be mixed with one another unless recommended by the manufacturer.
   - Whenever possible, all of a product will be used up before disposing of the container.
   - Manufacturers' recommendations for proper use and disposal will be followed.
   - Designated areas for equipment maintenance and repair (control of oil, grease and fuel spills).
   - Waste receptacles with regular collection for litter and construction debris.
   - Equipment washdown area on-site with appropriate control of wash waters (including concrete truck wash down).
   - Protected storage areas for chemicals, paints, solvents, fertilizers and other potentially toxic materials.
   - Adequately maintained sanitary facilities.
   - Proper control of raw materials stored on-site (for example, sand, aggregate and cement used in the manufacture of concrete or stockpiles of topsoil).
   - Street sweeping or cleaning.
   - Removal of inlet protection barriers during major rainfall events if flooding occurs and verification that reinforced filter fabric fences are in proper condition prior to all rainfall events.
   - The site superintendent will ensure proper use and disposal of materials onsite.
2. Hazardous Products: The following practices are used to reduce the risks associated with hazardous materials.
   - Products will be kept in original containers unless they are not re-sealable.
   - Paints, solvents, fertilizer, fuel (small containers), and other stored chemical substances will be kept within an enclosure to protect the containers and the floor of the enclosure, from wind, precipitation, and storm water runoff.
   - Fuel storage and filling areas will be bermed off to provide collection of any spills and prevent exposure to storm water runoff.
   - Original labels and Material Safety Data Sheets (MSDS) will be retained on-site and available for review by workers.
   - If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

PRODUCT SPECIFIC PRACTICES

The following product specific practices will be followed onsite:

1. Petroleum Products: All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.
2. Fertilizers: Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Storage will be in a covered shed.
3. Paints: All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or State and local regulations.
4. Concrete Trucks: Discharges of concrete truck wash out at construction sites may be authorized if conducted in accordance with the requirements of Part V of the general permit.

SPILL CONTROL PRACTICES

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be maintained on-site in the material data sheets (MSDS) and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Contact the MS4 Operator, TCEQ (800-832-8224), and the National Response Center (800-424-8802) to inform of any spill of toxic or hazardous material regardless of the size.

The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

APPENDIX K

NON-STORM WATER DISCHARGE INVENTORY

NON-STORM WATER DISCHARGE INVENTORY

Mark the materials or substances listed below expected to be present onsite during construction:

☐ Concrete	☐ Detergents	☐ Paints (enamel/latex)
☐ Metal Studs	☐ Fuels	☐ Lubricants
☐ Fertilizers	☐ Petroleum Based Products	☐ Cleaning Solvents
☐ Masonry Block	☐ Electrical Equipment and Materials	☐ Asphalt and Asphalt Related Products
☐ Tar	☐ Roof Shingles	☐ Wood
☐ Steel Products	☐ _____	☐ _____
☐ _____	☐ _____	☐ _____

AUTHORIZED NON STORMWATER DISCHARGES ANTICIPATED DURING THE PROJECT

Mark the following non-storm water discharges expected to occur from the site during the construction period (refer to general permit in Appendix G for additional information):

- ☐ discharges from firefighting activities,
- ☐ uncontaminated fire hydrant flushings, which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants,
- ☐ water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred and where the purpose is to remove mud, dirt, or dust,
- ☐ uncontaminated water used to control dust,
- ☐ potable water sources including waterline flushings,
- ☐ uncontaminated air conditioning condensate,
- ☐ uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents,
- ☐ lawn watering and similar irrigation drainage,
- ☐ runoff from concrete batch plants (refer to Part IV of general permit),
- ☐ concrete truck wash out (refer to Part V of general permit).

APPENDIX L

REPORTABLE QUANTITIES OF HAZARDOUS SUBSTANCES

The Reportable Quantities link is provided below. A table to help with determining if a reportable discharge or spill has occurred can be found through this link.

https://www.tceq.texas.gov/response/spills/spill_rq.html

Each substance in Table 117.3 that is listed in Table 302.4, 40 CFR part 302, is assigned the reportable quantity listed in Table 302.4 for that substance.

TABLE 117.3 -- REPORTABLE QUANTITIES OF HAZARDOUS SUBSTANCES DESIGNATED PURSUANT TO SECTION 311 OF THE CLEAN WATER ACT

Note: The first number under the column headed "RQ" is the reportable quantity in pounds. The number in parentheses is the metric equivalent in kilograms. For convenience, the table contains a column headed "Category" which lists the code letters "X", "A", "B", "C", and "D" associated with reportable quantities of 1, 10, 100, 1000, and 5000 pounds, respectively.

Table 117.3_Reportable Quantities of Hazardous Substances Designated Pursuant to Section 311 of the Clean Water Act

Material	Category	RQ in pounds (kilograms)
Acetaldehyde	C	1,000 (454)
Acetic acid	D	5,000 (2,270)
Acetic anhydride	D	5,000 (2,270)
Acetone cyanohydrin	A	10 (4.54)
Acetyl bromide	D	5,000 (2,270)
Acetyl chloride	D	5,000 (2,270)
Acrolein	X	1 (0.454)
Acrylonitrile	B	100 (45.4)
Adipic acid	D	5,000 (2,270)
Aldrin	X	1 (0.454)
Allyl alcohol	B	100 (45.4)
Allyl chloride	C	1,000 (454)
Aluminum sulfate	D	5,000 (2,270)
Ammonia	B	100 (45.4)
Ammonium acetate	D	5,000 (2,270)
Ammonium benzoate	D	5,000 (2,270)
Ammonium bicarbonate	D	5,000 (2,270)
Ammonium bichromate	A	10 (4.54)
Ammonium bifluoride	B	100 (45.4)
Ammonium bisulfite	D	5,000 (2,270)
Ammonium carbamate	D	5,000 (2,270)
Ammonium carbonate	D	5,000 (2,270)
Ammonium chloride	D	5,000 (2,270)
Ammonium chromate	A	10 (4.54)
Ammonium citrate dibasic	D	5,000 (2,270)
Ammonium fluoborate	D	5,000 (2,270)
Ammonium fluoride	B	100 (45.4)
Ammonium hydroxide	C	1,000 (454)
Ammonium oxalate	D	5,000 (2,270)
Ammonium silicofluoride	C	1,000 (454)
Ammonium sulfamate	D	5,000 (2,270)

Ammonium sulfide	B	100 (45.4)
Ammonium sulfite	D	5,000 (2,270)
Ammonium tartrate	D	5,000 (2,270)
Ammonium thiocyanate	D	5,000 (2,270)
Amyl acetate	D	5,000 (2,270)
Aniline	D	5,000 (2,270)
Antimony pentachloride	C	1,000 (454)
Antimony potassium tartrate	B	100 (45.4)
Antimony tribromide	C	1,000 (454)
Antimony trichloride	C	1,000 (454)
Antimony trifluoride	C	1,000 (454)
Antimony trioxide	C	1,000 (454)
Arsenic disulfide	X	1 (0.454)
Arsenic pentoxide	X	1 (0.454)
Arsenic trichloride	X	1 (0.454)
Arsenic trioxide	X	1 (0.454)
Arsenic trisulfide	X	1 (0.454)
Barium cyanide	A	10 (4.54)
Benzene	A	10 (4.54)
Benzoic acid	D	5,000 (2,270)
Benzonitrile	D	5,000 (2,270)
Benzoyl chloride	C	1,000 (454)
Benzyl chloride	B	100 (45.4)
Beryllium chloride	X	1 (0.454)
Beryllium fluoride	X	1 (0.454)
Beryllium nitrate	X	1 (0.454)
Butyl acetate	D	5,000 (2,270)
Butylamine	C	1,000 (454)
n-Butyl phthalate	A	10 (4.54)
Butyric acid	D	5,000 (2,270)
Cadmium acetate	A	10 (4.54)
Cadmium bromide	A	10 (4.54)
Cadmium chloride	A	10 (4.54)
Calcium arsenate	X	1 (0.454)
Calcium arsenite	X	1 (0.454)
Calcium carbide	A	10 (4.54)
Calcium chromate	A	10 (4.54)
Calcium cyanide	A	10 (4.54)
Calcium dodecylbenzenesulfonate	C	1,000 (454)
Calcium hypochlorite	A	10 (4.54)
Captan	A	10 (4.54)
Carbaryl	B	100 (45.4)
Carbofuran	A	10 (4.54)
Carbon disulfide	B	100 (45.4)
Carbon tetrachloride	A	10 (4.54)
Chlordane	X	1 (0.454)
Chlorine	A	10 (4.54)
Chlorobenzene	B	100 (45.4)
Chloroform	A	10 (4.54)
Chlorosulfonic acid	C	1,000 (454)
Chlorpyrifos	X	1 (0.454)
Chromic acetate	C	1,000 (454)
Chromic acid	A	10 (4.54)
Chromic sulfate	C	1,000 (454)
Chromous chloride	C	1,000 (454)

Cobaltous bromide	C	1,000 (454)
Cobaltous formate	C	1,000 (454)
Cobaltous sulfamate	C	1,000 (454)
Coumaphos	A	10 (4.54)
Cresol	B	100 (45.4)
Crotonaldehyde	B	100 (45.4)
Cupric acetate	B	100 (45.4)
Cupric acetoarsenite	X	1 (0.454)
Cupric chloride	A	10 (4.54)
Cupric nitrate	B	100 (45.4)
Cupric oxalate	B	100 (45.4)
Cupric sulfate	A	10 (4.54)
Cupric sulfate, ammoniated	B	100 (45.4)
Cupric tartrate	B	100 (45.4)
Cyanogen chloride	A	10 (4.54)
Cyclohexane	C	1,000 (454)
2,4-D Acid	B	100 (45.4)
2,4-D Esters	B	100 (45.4)
DDT	X	1 (0.454)
Diazinon	X	1 (0.454)
Dicamba	C	1,000 (454)
Dichlobenil	B	100 (45.4)
Dichlone	X	1 (0.454)
Dichlorobenzene	B	100 (45.4)
Dichloropropane	C	1,000 (454)
Dichloropropene	B	100 (45.4)
Dichloropropene-Dichloropropane (mixture).	B	100 (45.4)
2,2-Dichloropropionic acid	D	5,000 (2,270)
Dichlorvos	A	10 (4.54)
Dicofol	A	10 (4.54)
Dieldrin	X	1 (0.454)
Diethylamine	B	100 (45.4)
Dimethylamine	C	1,000 (454)
Dinitrobenzene (mixed)	B	100 (45.4)
Dinitrophenol	A	10 (45.4)
Dinitrotoluene	A	10 (4.54)
Diquat	C	1,000 (454)
Disulfoton	X	1 (0.454)
Diuron	B	100 (45.4)
Dodecylbenzenesulfonic acid	C	1,000 (454)
Endosulfan	X	1 (0.454)
Endrin	X	1 (0.454)
Epichlorohydrin	B	100 (45.4)
Ethion	A	10 (4.54)
Ethylbenzene	C	1,000 (454)
Ethylenediamine	D	5,000 (2,270)
Ethylenediamine-tetraacetic acid (EDTA).	D	5,000 (2,270)
Ethylene dibromide	X	1 (0.454)
Ethylene dichloride	B	100 (45.4)
Ferric ammonium citrate	C	1,000 (454)
Ferric ammonium oxalate	C	1,000 (454)
Ferric chloride	C	1,000 (454)
Ferric fluoride	B	100 (45.4)
Ferric nitrate	C	1,000 (454)

Ferric sulfate	C	1,000 (454)
Ferrous ammonium sulfate	C	1,000 (454)
Ferrous chloride	B	100 (45.4)
Ferrous sulfate	C	1,000 (454)
Formaldehyde	B	100 (45.4)
Formic acid	D	5,000 (2,270)
Fumaric acid	D	5,000 (2,270)
Furfural	D	5,000 (2,270)
Guthion	X	1 (0.454)
Heptachlor	X	1 (0.454)
Hexachlorocyclopentadiene	A	10 (4.54)
Hydrochloric acid	D	5,000 (2,270)
Hydrofluoric acid	B	100 (45.4)
Hydrogen cyanide	A	10 (4.54)
Hydrogen sulfide	B	100 (45.4)
Isoprene	B	100 (45.4)
Isopropanolamine dodecylbenzenesulfonate.	C	1,000 (454)
Kepone	X	1 (0.454)
Lead acetate	A	10 (4.54)
Lead arsenate	X	1 (0.454)
Lead chloride	A	10 (4.54)
Lead fluoborate	A	10 (4.54)
Lead fluoride	A	10 (4.54)
Lead iodide	A	10 (4.54)
Lead nitrate	A	10 (4.54)
Lead stearate	A	10 (4.54)
Lead sulfate	A	10 (4.54)
Lead sulfide	A	10 (4.54)
Lead thiocyanate	A	10 (4.54)
Lindane	X	1 (0.454)
Lithium chromate	A	10 (4.54)
Malathion	B	100 (45.4)
Maleic acid	D	5,000 (2,270)
Maleic anhydride	D	5,000 (2,270)
Mercaptodimethur	A	10 (4.54)
Mercuric cyanide	X	1 (0.454)
Mercuric nitrate	A	10 (4.54)
Mercuric sulfate	A	10 (4.54)
Mercuric thiocyanate	A	10 (4.54)
Mercurous nitrate	A	10 (4.54)
Methoxychlor	X	1 (0.454)
Methyl mercaptan	B	100 (45.4)
Methyl methacrylate	C	1,000 (454)
Methyl parathion	B	100 (45.4)
Mevinphos	A	10 (4.54)
Mexacarbate	C	1,000 (454)
Monoethylamine	B	100 (45.4)
Monomethylamine	B	100 (45.4)
Naled	A	10 (4.54)
Naphthalene	B	100 (45.4)
Naphthenic acid	B	100 (45.4)
Nickel ammonium sulfate	B	100 (45.4)
Nickel chloride	B	100 (45.4)
Nickel hydroxide	A	10 (4.54)

Nickel nitrate	B	100 (45.4)
Nickel sulfate	B	100 (45.4)
Nitric acid	C	1,000 (454)
Nitrobenzene	C	1,000 (454)
Nitrogen dioxide	A	10 (4.54)
Nitrophenol (mixed)	B	100 (45.4)
Nitrotoluene	C	1,000 (454)
Paraformaldehyde	C	1,000 (454)
Parathion	A	10 (4.54)
Pentachlorophenol	A	10 (4.54)
Phenol	C	1,000 (454)
Phosgene	A	10 (4.54)
Phosphoric acid	D	5,000 (2,270)
Phosphorus	X	1 (0.454)
Phosphorus oxychloride	C	1,000 (454)
Phosphorus pentasulfide	B	100 (45.4)
Phosphorus trichloride	C	1,000 (454)
Polychlorinated biphenyls	X	1 (0.454)
Potassium arsenate	X	1 (0.454)
Potassium arsenite	X	1 (0.454)
Potassium bichromate	A	10 (4.54)
Potassium chromate	A	10 (4.54)
Potassium cyanide	A	10 (4.54)
Potassium hydroxide	C	1,000 (454)
Potassium permanganate	B	100 (45.4)
Propargite	A	10 (4.54)
Propionic acid	D	5,000 (2,270)
Propionic anhydride	D	5,000 (2,270)
Propylene oxide	B	100 (45.4)
Pyrethrins	X	1 (0.454)
Quinoline	D	5,000 (2,270)
Resorcinol	D	5,000 (2,270)
Selenium oxide	A	10 (4.54)
Silver nitrate	X	1 (0.454)
Sodium	A	10 (4.54)
Sodium arsenate	X	1 (0.454)
Sodium arsenite	X	1 (0.454)
Sodium bichromate	A	10 (4.54)
Sodium bifluoride	B	100 (45.4)
Sodium bisulfite	D	5,000 (2,270)
Sodium chromate	A	10 (4.54)
Sodium cyanide	A	10 (4.54)
Sodium dodecylbenzenesulfonate	C	1,000 (454)
Sodium fluoride	C	1,000 (454)
Sodium hydrosulfide	D	5,000 (2,270)
Sodium hydroxide	C	1,000 (454)
Sodium hypochlorite	B	100 (45.4)
Sodium methylate	C	1,000 (454)
Sodium nitrite	B	100 (45.4)
Sodium phosphate, dibasic	D	5,000 (2,270)
Sodium phosphate, tribasic	D	5,000 (2,270)
Sodium selenite	B	100 (45.4)
Strontium chromate	A	10 (4.54)
Strychnine	A	10 (4.54)
Styrene	C	1,000 (454)
Sulfuric acid	C	1,000 (454)

Sulfur monochloride	C	1,000 (454)
2,4,5-T acid	C	1,000 (454)
2,4,5-T amines	D	5,000 (2,270)
2,4,5-T esters	C	1,000 (454)
2,4,5-T salts	C	1,000 (454)
TDE	X	1 (0.454)
2,4,5-TP acid	B	100 (45.4)
2,4,5-TP acid esters	B	100 (45.4)
Tetraethyl lead	A	10 (4.54)
Tetraethyl pyrophosphate	A	10 (4.54)
Thallium sulfate	B	100 (45.4)
Toluene	C	1,000 (454)
Toxaphene	X	1 (0.454)
Trichlorfon	B	100 (45.4)
Trichloroethylene	B	100 (45.4)
Trichlorophenol	A	10 (4.54)
Triethanolamine dodecylbenzenesulfonate.	C	1,000 (454)
Triethylamine	D	5,000 (2,270)
Trimethylamine	B	100 (45.4)
Uranyl acetate	B	100 (45.4)
Uranyl nitrate	B	100 (45.4)
Vanadium pentoxide	C	1,000 (454)
Vanadyl sulfate	C	1,000 (454)
Vinyl acetate	D	5,000 (2,270)
Vinylidene chloride	B	100 (45.4)
Xylene (mixed)	B	100 (45.4)
Xylenol	C	1,000 (454)
Zinc acetate	C	1,000 (454)
Zinc ammonium chloride	C	1,000 (454)
Zinc borate	C	1,000 (454)
Zinc bromide	C	1,000 (454)
Zinc carbonate	C	1,000 (454)
Zinc chloride	C	1,000 (454)
Zinc cyanide	A	10 (4.54)
Zinc fluoride	C	1,000 (454)
Zinc formate	C	1,000 (454)
Zinc hydrosulfite	C	1,000 (454)
Zinc nitrate	C	1,000 (454)
Zinc phenolsulfonate	D	5,000 (2,270)
Zinc phosphide	B	100 (45.4)
Zinc silicofluoride	D	5,000 (2,270)
Zinc sulfate	C	1,000 (454)
Zirconium nitrate	D	5,000 (2,270)
Zirconium potassium fluoride	C	1,000 (454)
Zirconium sulfate	D	5,000 (2,270)
Zirconium tetrachloride	D	5,000 (2,270)

– [50 FR 13513, Apr. 4, 1985, as amended at 51 FR 34547, Sept. 29, 1986; 54 FR 33482, Aug. 14, 1989; 58 FR 35327, June 30, 1993; 60 FR 30937, June 12, 1995]

APPENDIX M

SEDIMENTATION BASIN INFORMATION

Sites With Drainage Areas of Ten or More Acres

A sedimentation basin is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time.

A sedimentation basin may be temporary or permanent and must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone permanent stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. Capacity calculations shall be included in Appendix M of this SWP3.

Where rainfall data is not available or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until final stabilization of the site.

If a sedimentation basin is not feasible, then the permittee shall provide equivalent control measures until final stabilization of the site. In determining whether installing a sediment basin is feasible, the permittee may consider factors such as site soils, slope, available area, public safety, precipitation patterns, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins.

Sites With Drainage Areas Less than Ten Acres

Sediment traps and sediment basins may be used to control solids in storm water runoff for drainage locations serving less than ten (10) acres.

Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in Appendix N of this SWP3.

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SECTION 4: ADDITIONAL FORMS

Copy of Notice of Intent

TCEQ Office Use Only
Permit No:
CN:
RN:

Notice of Intent (NOI) for an Authorization for Stormwater Discharges Associated with Construction Activity under TPDES General Permit TXR150000

IMPORTANT INFORMATION

Please read and use the General Information and Instructions prior to filling out each question in the NOI form.

Use the NOI Checklist to ensure all required information is completed correctly. **Incomplete applications delay approval or result in automatic denial.**

Once processed your permit authorization can be viewed by entering the following link into your internet browser: http://www2.tceq.texas.gov/wq_dpa/index.cfm or you can contact TCEQ Stormwater Processing Center at 512-239-3700.

ePERMITS

Effective September 1, 2018, this paper form must be submitted to TCEQ with a completed electronic reporting waiver form (TCEQ-20754).

To submit an NOI electronically, enter the following web address into your internet browser and follow the instructions: https://www3.tceq.texas.gov/steers/index.cfm

APPLICATION FEE AND PAYMENT

The application fee for submitting a paper NOI is $325. The application fee for electronic submittal of a NOI through the TCEQ ePermits system (STEERS) is $225.

Payment of the application fee can be submitted by mail or through the TCEQ ePay system. The payment and the NOI must be mailed to separate addresses. To access the TCEQ ePay system enter the following web address into your internet browser: http://www.tceq.texas.gov/epay.

Provide your payment information for verification of payment:

- If payment was mailed to TCEQ, provide the following:
  - Check/Money Order Number: Click here to enter text
  - Name printed on Check: Click here to enter text
- If payment was made via ePay, provide the following:
  - Voucher Number: Click here to enter text
  - A copy of the payment voucher is attached to this paper NOI form.

RENEWAL (This portion of the NOI is not applicable after June 3, 2018)

Is this NOI for a renewal of an existing authorization? ☐ Yes ☐ No

If Yes, provide the authorization number here: TXR15 Click here to enter text

NOTE: If an authorization number is not provided, a new number will be assigned.

SECTION 1. OPERATOR (APPLICANT)

a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? CN Click here to enter text

(Refer to Section 1.a) of the Instructions)

b) What is the Legal Name of the entity (applicant) applying for this permit? (The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)

Click here to enter text

c) What is the contact information for the Operator (Responsible Authority)?

Prefix (Mr. Ms. Miss): Click here to enter text

First and Last Name: Click here to enter text Suffix: Click here to enter text

Title: Click here to enter text Credentials: Click here to enter text

Phone Number: Click here to enter text Fax Number: Click here to enter text

E-mail: Click here to enter text

Mailing Address: Click here to enter text

City, State, and Zip Code: Click here to enter text

Mailing Information if outside USA:

Territory: Click here to enter text

Country Code: Click here to enter text Postal Code: Click here to enter text

d) Indicate the type of customer:

☐ Individual
☐ Limited Partnership
☐ General Partnership
☐ Trust
☐ Sole Proprietorship (D.B.A.)
☐ Corporation
☐ Estate
☐ Federal Government
☐ County Government
☐ State Government
☐ City Government
☐ Other Government
☐ Other: Click here to enter text

e) Is the applicant an independent operator? ☐ Yes ☐ No

(If a governmental entity, a subsidiary, or part of a larger corporation, check No.)

f) Number of Employees. Select the range applicable to your company.

☐ 0-20 ☐ 251-500

☐ 21-100 ☐ 501 or higher

☐ 101-250

g) Customer Business Tax and Filing Numbers: (**Required** for Corporations and Limited Partnerships. **Not Required** for Individuals, Government, or Sole Proprietors.)

State Franchise Tax ID Number: Click here to enter text.

Federal Tax ID: Click here to enter text.

Texas Secretary of State Charter (filing) Number: Click here to enter text.

DUNS Number (if known): Click here to enter text.

SECTION 2. APPLICATION CONTACT

Is the application contact the same as the applicant identified above?

☐ Yes, go to Section 3

☐ No, complete this section

Prefix (Mr. Ms. Miss): Click here to enter text.

First and Last Name: Click here to enter text. Suffix: Click here to enter text.

Title: Click here to enter text. Credential: Click here to enter text.

Organization Name: Click here to enter text.

Phone Number: Click here to enter text. Fax Number: Click here to enter text.

E-mail: Click here to enter text.

Mailing Address: Click here to enter text.

Internal Routing (Mail Code, Etc.): Click here to enter text.

City, State, and Zip Code: Click here to enter text.

Mailing information if outside USA:

Territory: Click here to enter text.

Country Code: Click here to enter text. Postal Code: Click here to enter text.

SECTION 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) If this is an existing permitted site, what is the Regulated Entity Number (RN) issued to this site? RN Click here to enter text.

(Refer to Section 3.a) of the Instructions)

b) Name of project or site (the name known by the community where it's located): Click here to enter text

c) In your own words, briefly describe the type of construction occurring at the regulated site (residential, industrial, commercial, or other): Click here to enter text

d) County or Counties (if located in more than one): Click here to enter text

e) Latitude: Click here to enter text Longitude: Click here to enter text

f) Site Address/Location

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete *Section A*.

If the site does not have a physical address, provide a location description in *Section B*. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

Section A:

Street Number and Name: Click here to enter text

City, State, and Zip Code: Click here to enter text

Section B:

Location Description: Click here to enter text

City (or city nearest to) where the site is located: Click here to enter text

Zip Code where the site is located: Click here to enter text

SECTION 4. GENERAL CHARACTERISTICS

a) Is the project or site located on Indian Country Lands?

☐ Yes, do not submit this form. You must obtain authorization through EPA Region 6.

☐ No

b) Is your construction activity associated with a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources?

☐ Yes. Note: The construction stormwater runoff may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization through EPA Region 6.

☐ No

c) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site? Click here to enter text

d) What is the Secondary SIC Code(s), if applicable? Click here to enter text

e) What is the total number of acres to be disturbed? Click here to enter text

f) Is the project part of a larger common plan of development or sale?

☐ Yes

☐ No. The total number of acres disturbed, provided in e) above, must be 5 or more. If the total number of acres disturbed is less than 5, do not submit this form. See the requirements in the general permit for small construction sites.

g) What is the estimated start date of the project? Click here to enter text

h) What is the estimated end date of the project? Click here to enter text

i) Will concrete truck washout be performed at the site? ☐ Yes ☐ No

j) What is the name of the first water body(ies) to receive the stormwater runoff or potential runoff from the site? Click here to enter text

k) What is the segment number(s) of the classified water body(ies) that the discharge will eventually reach? Click here to enter text

l) Is the discharge into a Municipal Separate Storm Sewer System (MS4)?

☐ Yes ☐ No

If Yes, provide the name of the MS4 operator: Click here to enter text

Note: The general permit requires you to send a copy of this NOI form to the MS4 operator.

m) Is the discharge or potential discharge from the site within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?

☐ Yes, complete the certification below.

☐ No, go to Section 5

I certify that the copy of the TCEQ-approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) that is included or referenced in the Stormwater Pollution Prevention Plan will be implemented. ☐ Yes

SECTION 5. NOI CERTIFICATION

a) I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000). ☐ Yes

b) I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas. ☐ Yes

c) I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed. ☐ Yes

d) I certify that a Stormwater Pollution Prevention Plan has been developed, will be implemented prior to construction and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the Construction General Permit (TXR150000). ☐ Yes

Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3, provided all obligations are confirmed by at least one operator.

SECTION 6. APPLICANT CERTIFICATION SIGNATURE

Operator Signatory Name: Click here to enter text.

Operator Signatory Title: Click here to enter text.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): _____Date: _____

NOTICE OF INTENT CHECKLIST (TXR150000)

Did you complete everything? Use this checklist to be sure!

Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

Confirm each item (or applicable item) in this form is complete. This checklist is for use by the applicant to ensure a complete application is being submitted. **Missing information may result in denial of coverage under the general permit.** (See NOI process description in the General Information and Instructions.)

APPLICATION FEE

If paying by check:

☐ Check was mailed **separately** to the TCEQs Cashier's Office. (See Instructions for Cashier's address and Application address.)

☐ Check number and name on check is provided in this application.

If using ePay:

☐ The voucher number is provided in this application and a copy of the voucher is attached.

RENEWAL

☐ If this application is for renewal of an existing authorization, the authorization number is provided.

OPERATOR INFORMATION

☐ Customer Number (CN) issued by TCEQ Central Registry

☐ Legal name as filed to do business in Texas. (Call TX SOS 512-463-5555 to verify.)

☐ Name and title of responsible authority signing the application.

☐ Phone number and e-mail address

☐ Mailing address is complete & verifiable with USPS. www.usps.com

☐ Type of operator (entity type). Is applicant an independent operator?

☐ Number of employees.

☐ For corporations or limited partnerships – Tax ID and SOS filing numbers.

☐ Application contact and address is complete & verifiable with USPS. http://www.usps.com

REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

☐ Regulated Entity Number (RN) (if site is already regulated by TCEQ)

☐ Site/project name and construction activity description

☐ County

☐ Latitude and longitude http://www.tceq.texas.gov/gis/sqmaview.html

☐ Site Address/Location. Do not use a rural route or post office box.

GENERAL CHARACTERISTICS

☐ Indian Country Lands –the facility is not on Indian Country Lands.

☐ Construction activity related to facility associated to oil, gas, or geothermal resources

☐ Primary SIC Code that best describes the construction activity being conducted at the site. www.osha.gov/oshstats/sicser.html

☐ Estimated starting and ending dates of the project.

☐ Confirmation of concrete truck washout.

☐ Acres disturbed is provided and qualifies for coverage through a NOI.

☐ Common plan of development or sale.

☐ Receiving water body or water bodies.

☐ Segment number or numbers.

☐ MS4 operator.

☐ Edwards Aquifer rule.

CERTIFICATION

☐ Certification statements have been checked indicating Yes.

☐ Signature meets 30 Texas Administrative Code (TAC) §305.44 and is original.

Instructions for Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

By Regular Mail:
TCEQ
Stormwater Processing Center (MC228)
P.O. Box 13087
Austin, Texas 78711-3087

By Overnight or Express Mail:
TCEQ
Stormwater Processing Center (MC228)
12100 Park 35 Circle
Austin, TX

Application Fee:

The application fee of $325 is required to be paid at the time the NOI is submitted. Failure to submit payment at the time the application is filed will cause delays in acknowledgment or denial of coverage under the general permit. Payment of the fee may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

Mailed Payments:

Use the attached General Permit Payment Submittal Form. The application fee is submitted to a different address than the NOI. Read the General Permit Payment Submittal Form for further instructions, including the address to send the payment.

ePAY Electronic Payment: http://www.tceq.texas.gov/epay

When making the payment you must select Water Quality, and then select the fee category "General Permit Construction Storm Water Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

TCEQ Contact List:

Application – status and form questions:	512-239-3700, swpermit@tceq.texas.gov
Technical questions:	512-239-4671, swgp@tceq.texas.gov
Environmental Law Division:	512-239-0600
Records Management - obtain copies of forms:	512-239-0900
Reports from databases (as available):	512-239-DATA (3282)
Cashier's office:	512-239-0357 or 512-239-0187

Notice of Intent Process:

When your NOI is received by the program, the form will be processed as follows:

- **Administrative Review**: Each item on the form will be reviewed for a complete response. In addition, the operator's legal name must be verified with Texas Secretary of State as valid and active (if applicable). The address(es) on the form must be verified with the US Postal service as receiving regular mail delivery. Do not give an overnight/express mailing address.

- **Notice of Deficiency:** If an item is incomplete or not verifiable as indicated above, a notice of deficiency (NOD) will be mailed to the operator. The operator will have 30 days to respond to the NOD. The response will be reviewed for completeness.
- **Acknowledgment of Coverage:** An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.

  or

  Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

For NOIs submitted **electronically** through ePermits, provisional coverage under the general permit begins immediately following confirmation of receipt of the NOI form by the TCEQ.

For **paper** NOIs, provisional coverage under the general permit begins **7 days after a completed NOI is postmarked for delivery** to the TCEQ.

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site http://www.tceq.texas.gov. Search using keyword TXR150000.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated project or site changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted no later than 10 days prior to the change in Operator status.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. After final acknowledgment of coverage under the general permit, the program will assign a Customer Number and Regulated Entity Number, if one has not already been assigned to this customer or site.

For existing customers and sites, you can find the Customer Number and Regulated Entity Number by entering the following web address into your internet browser: http://www15.tceq.texas.gov/crpub/ or you can contact the TCEQ Stormwater Processing Center at 512-239-3700 for assistance. On the website, you can search by your permit number, the Regulated Entity (RN) number, or the Customer Number (CN). If you do not know these numbers, you can select "Advanced Search" to search by permittee name, site address, etc.

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all authorizations as changes occur. For this permit, a Notice of Change form must be submitted to the program area.

INSTRUCTIONS FOR FILLING OUT THE NOI FORM

Renewal of General Permit. Dischargers holding active authorizations under the expired General Permit are required to submit a NOI to continue coverage. The existing permit number is required. If the permit number is not provided or has been terminated, expired, or denied, a new permit number will be issued.

Section 1. OPERATOR (APPLICANT)

a) Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. **This is not a permit number, registration number, or license number**.

If the applicant is an existing TCEQ customer, the Customer Number is available at the following website: http://www15.tceq.texas.gov/crpub/. If the applicant is not an existing TCEQ customer, leave the space for CN blank.

b) Legal Name of Applicant

Provide the current legal name of the applicant. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, as filed in the county. You may contact the SOS at 512-463-5555, for more information related to filing in Texas. If filed in the county, provide a copy of the legal documents showing the legal name.

c) Contact Information for the Applicant (Responsible Authority)

Provide information for the person signing the application in the Certification section. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. The mailing address must be recognized by the US Postal Service. You may verify the address on the following website: https://tools.usps.com/go/ZipLookupAction!input.action.

The phone number should provide contact to the applicant.

The fax number and e-mail address are optional and should correspond to the applicant.

d) Type of Customer (Entity Type)

Check only one box that identifies the type of entity. Use the descriptions below to identify the appropriate entity type. Note that the selected entity type also indicates the name that must be provided as an applicant for an authorization.

Individual

An individual is a customer who has not established a business, but conducts an activity that needs to be regulated by the TCEQ.

Partnership

A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). If the customer is a 'General Partnership' or 'Joint Venture' filed in the county (not filed with TX SOS), the legal name of each partner forming the 'General Partnership' or 'Joint Venture' must be provided. Each 'legal entity' must apply as a co-applicant.

Trust or Estate

A trust and an estate are fiduciary relationships governing the trustee/executor with respect to the trust/estate property.

Sole Proprietorship (DBA)

A sole proprietorship is a customer that is owned by only one person and has not been incorporated. This business may:

1. be under the person's name
2. have its own name (doing business as or DBA)
3. have any number of employees.

If the customer is a Sole Proprietorship or DBA, the 'legal name' of the individual business 'owner' must be provided. The DBA name is not recognized as the 'legal name' of the entity. The DBA name may be used for the site name (regulated entity).

Corporation

A customer that meets all of these conditions:

1. is a legally incorporated entity under the laws of any state or country
2. is recognized as a corporation by the Texas Secretary of State
3. has proper operating authority to operate in Texas

The corporation's 'legal name' as filed with the Texas Secretary of State must be provided as applicant. An 'assumed' name of a corporation is not recognized as the 'legal name' of the entity.

Government

Federal, state, county, or city government (as appropriate)

The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the applicant. A department name or other description of the organization is not recognized as the 'legal name'.

Other

This may include a utility district, water district, tribal government, college district, council of governments, or river authority. Provide the specific type of government.

e) Independent Entity

Check No if this customer is a subsidiary, part of a larger company, or is a governmental entity. Otherwise, check Yes.

f) Number of Employees

Check one box to show the number of employees for this customer's entire company, at all locations. This is not necessarily the number of employees at the site named in the application.

g) Customer Business Tax and Filing Numbers

These are required for Corporations and Limited Partnerships. These are not required for Individuals, Government, and Sole Proprietors.

State Franchise Tax ID Number

Corporations and limited liability companies that operate in Texas are issued a franchise tax identification number. If this customer is a corporation or limited liability company, enter the Tax ID number.

Federal Tax ID

All businesses, except for some small sole proprietors, individuals, or general partnerships should have a federal taxpayer identification number (TIN). Enter this number here. Use no prefixes, dashes, or hyphens. Sole proprietors, individuals, or general partnerships do not need to provide a federal tax ID.

TX SOS Charter (filing) Number

Corporations and Limited Partnerships required to register with the Texas Secretary of State are issued a charter or filing number. You may obtain further information by calling SOS at 512-463-5555.

DUNS Number

Most businesses have a DUNS (Data Universal Numbering System) number issued by Dun and Bradstreet Corp. If this customer has one, enter it here.

Section 2. APPLICATION CONTACT

Provide the name and contact information for the person that TCEQ can contact for additional information regarding this application.

Section 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) Regulated Entity Number (RN)

The RN is issued by TCEQ's Central Registry to sites where an activity is regulated by TCEQ. This is not a permit number, registration number, or license number. Search TCEQ's Central Registry to see if the site has an assigned RN at http://www15.tceq.texas.gov/crpub/. If this regulated entity has not been assigned an RN, leave this space blank.

If the site of your business is part of a larger business site, an RN may already be assigned for the larger site. Use the RN assigned for the larger site.

If the site is found, provide the assigned RN and provide the information for the site to be authorized through this application. The site information for this authorization may vary from the larger site information.

An example is a chemical plant where a unit is owned or operated by a separate corporation that is accessible by the same physical address of your unit or facility. Other examples include industrial parks identified by one common address but different corporations have control of defined areas within the site. In both cases, an RN would be assigned for the physical address location and the permitted sites would be identified separately under the same RN.

b) Name of the Project or Site

Provide the name of the site or project as known by the public in the area where the site is located. The name you provide on this application will be used in the TCEQ Central Registry as the Regulated Entity name.

c) Description of Activity Regulated

In your own words, briefly describe the primary business that you are doing that requires this authorization. Do not repeat the SIC Code description.

d) County

Provide the name of the county where the site or project is located. If the site or project is located in more than one county, provide the county names as secondary.

e) Latitude and Longitude

Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to: http://www.tceq.texas.gov/gis/sqmaview.html.

f) Site Address/Location

If a site has an address that includes a street number and street name, enter the complete address for the site in *Section A*. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

If a site does not have an address that includes a street number and street name, provide a complete written location description in *Section B*. For example: "The site is located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1."

Provide the city (or nearest city) and zip code of the site location.

Section 4. GENERAL CHARACTERISTICS

a) Indian Country Lands

If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA Region 6, Dallas. Do not submit this form to TCEQ.

b) Construction activity associated with facility associated with exploration, development, or production of oil, gas, or geothermal resources

If your activity is associated with oil and gas exploration, development, or production, you may be under jurisdiction of the Railroad Commission of Texas (RRC) and may need to obtain authorization from EPA Region 6.

Construction activities associated with a facility related to oil, gas or geothermal resources may include the construction of a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a

carbon dioxide geologic storage facility; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel.

Where required by federal law, discharges of stormwater associated with construction activities under the RRC's jurisdiction must be authorized by the EPA and the RRC, as applicable. Activities under RRC jurisdiction include construction of a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources, such as a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility under the jurisdiction of the RRC; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel. The RRC also has jurisdiction over stormwater from land disturbance associated with a site survey that is conducted prior to construction of a facility that would be regulated by the RRC. Under 33 U.S.C. §1342(l)(2) and §1362(24), EPA cannot require a permit for discharges of stormwater from field activities or operations associated with {oil and gas} exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities unless the discharge is contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the facility. Under §3.8 of this title (relating to Water Protection), the RRC prohibits operators from causing or allowing pollution of surface or subsurface water. Operators are encouraged to implement and maintain best management practices (BMPs) to minimize discharges of pollutants, including sediment, in stormwater during construction activities to help ensure protection of surface water quality during storm events.

For more information about the jurisdictions of the RRC and the TCEQ, read the Memorandum of Understanding (MOU) between the RRC and TCEQ at 16 Texas Administrative Code, Part 1, Chapter 3, Rule 3.30, by entering the following link into an internet browser: http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=30 or contact the TCEQ Stormwater Team at 512-239-4671 for additional information.

c) Primary Standard Industrial Classification (SIC) Code

Provide the SIC Code that best describes the construction activity being conducted at this site.

Common SIC Codes related to construction activities include:

- 1521 - Construction of Single Family Homes
- 1522 - Construction of Residential Buildings Other than Single Family Homes
- 1541 - Construction of Industrial Buildings and Warehouses

- 1542 - Construction of Non-residential Buildings, other than Industrial Buildings and Warehouses
- 1611 - Highway and Street Construction, except Highway Construction
- 1622 - Bridge, Tunnel, and Elevated Highway Construction
- 1623 - Water, Sewer, Pipeline and Communications, and Power Line Construction

For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Local Government Assistance Section at 800-447-2827 for assistance.

d) Secondary SIC Code

Secondary SIC Code(s) may be provided. Leave this blank if not applicable. For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Environmental Assistance Section at 800-447-2827 for assistance.

e) Total Number of Acres Disturbed

Provide the approximate number of acres that the construction site will disturb. Construction activities that disturb less than one acre, unless they are part of a larger common plan that disturbs more than one acre, do not require permit coverage. Construction activities that disturb between one and five acres, unless they are part of a common plan that disturbs more than five acres, do not require submission of an NOI. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

If you have any questions about this item, please contact the stormwater technical staff by phone at 512-239-4671 or by email at swgp@tceq.texas.gov.

f) Common Plan of Development

Construction activities that disturb less than five acres do not require submission of an NOI unless they are part of a common plan of development or for sale where the area disturbed is five or more acres. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

For more information on what a common plan of development is, refer to the definition of "Common Plan of Development" in the Definitions section of the general permit or enter the following link into your internet browser: www.tceq.texas.gov/permitting/stormwater/common_plan_of_development_steps.html

For further information, go to the TCEQ stormwater construction webpage enter the following link into your internet browser: www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If you have any further questions about the Common Plan of Development you can contact the TCEQ Stormwater Team at 512-239-4671 or the TCEQ Small Business and Environmental Assistance at 800-447-2827.

g) Estimated Start Date of the Project

This is the date that any construction activity or construction support activity is initiated at the site. If renewing the permit provide the original start date of when construction activity for this project began.

h) Estimated End Date of the Project

This is the date that any construction activity or construction support activity will end and final stabilization will be achieved at the site.

i) Will concrete truck washout be performed at the site?

Indicate if you expect that operators of concrete trucks will washout concrete trucks at the construction site.

j) Identify the water body(s) receiving stormwater runoff

The stormwater may be discharged directly to a receiving stream or through a MS4 from your site. It eventually reaches a receiving water body such as a local stream or lake, possibly via a drainage ditch. You must provide the name of the water body that receives the discharge from the site (a local stream or lake).

If your site has more than one outfall you need to include the name of the first water body for each outfall, if they are different.

k) Identify the segment number(s) of the classified water body(s)

Identify the classified segment number(s) receiving a discharge directly or indirectly. Enter the following link into your internet browser to find the segment number of the classified water body where stormwater will flow from the site: www.tceq.texas.gov/waterquality/monitoring/viewer.html or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

You may also find the segment number in TCEQ publication GI-316 by entering the following link into your internet browser: www.tceq.texas.gov/publications/gi/gi-316 or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:

- 0100 (Canadian River Basin)
- 0200 (Red River Basin)
- 0300 (Sulfur River Basin)
- 0400 (Cypress Creek Basin)
- 0500 (Sabine River Basin)

Call the Water Quality Assessments section at 512-239-4671 for further assistance.

l) Discharge into MS4 – Identify the MS4 Operator

The discharge may initially be into a municipal separate storm sewer system (MS4). If the stormwater discharge is into an MS4, provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, county, or utility district, but possibly can be another form of government. Please note that the Construction General Permit requires the Operator to supply the MS4 with a

copy of the NOI submitted to TCEQ. For assistance, you may call the technical staff at 512-239-4671.

m) Discharges to the Edwards Aquifer Recharge Zone and Certification

The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

See maps on the TCEQ website to determine if the site is located within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer by entering the following link into an internet browser: www.tceq.texas.gov/field/eapp/viewer.html or by contacting the TCEQ Water Quality Division at 512-239-4671 for assistance.

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site-specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required before construction can begin.

For questions regarding the Edwards Aquifer Protection Program, contact the appropriate TCEQ Regional Office. For projects in Hays, Travis and Williamson Counties: Austin Regional Office, 12100 Park 35 Circle, Austin, TX 78753, 512-339-2929. For Projects in Bexar, Comal, Kinney, Medina and Uvalde Counties: TCEQ San Antonio Regional Office, 14250 Judson Rd., San Antonio, TX 78233-4480, 210-490-3096.

Section 5. NOI CERTIFICATION

Note: Failure to indicate Yes to all of the certification items may result in denial of coverage under the general permit.

a) Certification of Understanding the Terms and Conditions of Construction General Permit (TXR150000)

Provisional coverage under the Construction General Permit (TXR150000) begins 7 days after the completed paper NOI is postmarked for delivery to the TCEQ. Electronic applications submitted through ePermits have immediate provisional coverage. You must obtain a copy and read the Construction General Permit before submitting your application. You may view and print the Construction General Permit for which you are seeking coverage at the TCEQ web site by entering the following link into an internet browser: www.tceq.texas.gov/goto/construction or you may contact the TCEQ Stormwater processing Center at 512-239-3700 for assistance.

b) Certification of Legal Name

The full legal name of the applicant as authorized to do business in Texas is required. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at 512-463 5555, for more information related to filing in Texas.

c) Understanding of Notice of Termination

A permittee shall terminate coverage under the Construction General Permit through the submittal of a NOT when the operator of the facility changes, final stabilization has

been reached, the discharge becomes authorized under an individual permit, or the construction activity never began at this site.

d) Certification of Stormwater Pollution Prevention Plan

The SWP3 identifies the areas and activities that could produce contaminated runoff at your site and then tells how you will ensure that this contamination is mitigated. For example, in describing your mitigation measures, your site's plan might identify the devices that collect and filter stormwater, tell how those devices are to be maintained, and tell how frequently that maintenance is to be carried out. You must develop this plan in accordance with the TCEQ general permit requirements. This plan must be developed and implemented before you complete this NOI. The SWP3 must be available for a TCEQ investigator to review on request.

Section 6. APPLICANT CERTIFICATION SIGNATURE

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

If you are a corporation:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

If you are a municipality or other government entity:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the TCEQ's Environmental Law Division at 512-239-0600.

30 Texas Administrative Code

§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the

corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

Texas Commission on Environmental Quality
General Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

Instructions:

- Complete items 1 through 5 below:
- Staple your check in the space provided at the bottom of this document.
- *Do not mail this form with your NOI form.*
- *Do not mail this form to the same address as your NOI.*

Mail this form and your check to either of the following:

By Regular U.S. Mail
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, TX 78711-3088

By Overnight or Express Mail
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

Fee Code: GPA General Permit: TXR150000

1. Check or Money Order No: Click here to enter text
2. Amount of Check/Money Order: Click here to enter text
3. Date of Check or Money Order: Click here to enter text
4. Name on Check or Money Order: Click here to enter text
5. NOI Information:

   If the check is for more than one NOI, list each Project or Site (RE) Name and Physical Address exactly as provided on the NOI. **Do not submit a copy of the NOI with this form, as it could cause duplicate permit application entries!**

   If there is not enough space on the form to list all of the projects or sites the authorization will cover, then attach a list of the additional sites.

   Project/Site (RE) Name: Click here to enter text

   Project/Site (RE) Physical Address: Click here to enter text

Staple the check or money order to this form in this space.

TCEQ Office Use Only
Permit No.:
RN:
CN:
Region:

RESET FORM

Notice of Change to an Authorization for Stormwater Discharges Associated With Construction Activity under TPDES General Permit TXR150000

IMPORTANT – Please read the following information and INSTRUCTIONS before filling out this form.

ePERMITS: Sign up now for online NOC: https://www3.tceq.texas.gov/steers/index.cfm

This form will be returned for any of the following reasons:

1) The permit number is not provided, is invalid, or is no longer active,
2) Wet ink signature of person meeting signatory requirements is not provided,
3) The current permittee is not the applicant, and;
4) A requested change in operator name is not a legal name change.

This form cannot be used for a change in operator. Refer to your general permit for information.

What is the permit number of the authorization to be changed?

TXR15_____ or TXRCW_____

1) APPLICANT INFORMATION

a) What is the full Legal Name of the current operator as on the authorization?

_____

b) What is the Customer Number (CN) assigned to this operator? You may search for your CN at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch

CN_____

c) What is the name and title of the person signing the application? (The person must be an executive official meeting signatory requirements in TAC 305.44(a).)

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____ Suffix: _____
Title: _____Credential: _____

d) What is the Regulated Entity Reference Number (RN) assigned to this site?

RN_____

2) APPLICATION CONTACT

If TCEQ needs additional information regarding this application, who should be contacted?

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____ Suffix:_____
Title:_____ Credential:_____
Organization Name:_____
Phone Number:_____ Extension:_____ Fax Number:_____
E-mail Address:_____
Mailing Address:_____
Internal Routing (Mail Code, Etc.):_____
City:_____ State:_____ ZIP Code:_____
Mailing Information if outside USA:
Territory: _____ Country Code:_____ Postal Code: _____

3) REQUESTED CHANGE TO PERMITTED INFORMATION

What information has changed or needs to be corrected? Check one or more of the following options and enter the new information below.

☐ Operator legal name change with Texas Secretary of State (TX SOS).
Fill out sections a) and b) as applicable.
Note: Permits are not transferable. If a change in entity has occurred, this NOC will not be processed.

☐ Address and contact information for the operator. Fill out section b).

☐ Site Information (Regulated Entity). Fill out section c).
Note: Permits under a general permit are site specific. If a change in site location has occurred, this NOC will not be processed.

☐ General characteristics relating to the regulated activity. Fill out section d).

a) Operator Legal Name Change

i. What is the NEW active Legal Name with TX SOS or on other legal document?
New Legal Name: _____

ii. What is the TX SOS Filing Number for us to confirm this official name change?
This is only applicable to Limited Partnerships or Corporations.
TX SOS Filing number: _____

b) Address and Contact Information for Operator
Verify mailing addresses with USPS: http://zip4.usps.com/zip4/welcome.jsp.

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____ Suffix:_____
Title:_____ Credential:_____
Organization Name:_____

Phone Number:_____ Extension:_____ Fax Number:_____
E-mail Address:_____
Mailing Address:_____
Internal Routing (Mail Code, Etc.):_____
City:_____ State:_____ZIP Code:_____
Mailing Information if outside USA:
Territory: _____Country Code:_____ Postal Code: _____

c) Regulated Entity (Site) Information Correction

i. Is this a change to the location of the permitted activity?
☐ Yes This NOC will not be processed since the authorizations are site specific.
☐ No Continue with NOC form.

ii. Corrected Name of Project or Site:

_____

iii. Updated Physical Address (new 911 address):
Street Number:_____Street Name:_____
City:_____ State: Texas ZIP Code:_____

iv. Corrected location access description, if no physical address (street number/street name):

v. Corrected Latitude:_____ N

vi. Corrected Longitude:_____W

vii. Corrected County (Counties if >1):_____

d) Change in General Characteristics Provided on Original Form
Identify the specific change and provide the updates information. If an attachment is needed, please reference it below.

4) OPERATOR CERTIFICATION

I, _____ _____
Typed or printed name *Title*

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature:_____ Date:_____
(Use blue ink)

Notice of Change (NOC) for Authorizations for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

General Information and Instructions

GENERAL INFORMATION

Where to Send the NOC:

BY REGULAR U.S. MAIL
Texas Commission on Environmental Quality
Stormwater Processing Center (MC228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality
Stormwater Processing Center (MC228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact list:

Application – status and form questions:	*512/239-3700, swpermit@tceq.texas.gov*
Technical questions:	*512/239-4671, swgp@tceq.texas.gov*
Environmental Law Division:	*512/239-0600*
Records Management - obtain copies of forms:	*512/239-0900*
Reports from databases (as available):	*512/239-DATA (3282)*
Cashier's office:	*512/239-0357 or 512/239-0187*

NOC Process:

1. Administrative Review: The form will be reviewed to ensure the request is from the permittee (operator) on the authorization, the permit is active and initial coverage was acknowledged. Each item on the form will be reviewed for a complete response. In addition, the operator's legal name change must be verified with Texas Secretary of State (if applicable). The address(s) on the form must be verified with the US Postal Service (USPS) as an address receiving regular mail delivery. Never give an overnight/express mailing address.
If an item is incomplete or not verifiable, the operator may be notified by letter, phone call or email. In some instances as noted at the beginning of the form, the request may simply be returned.

2. NOC Confirmation: An updated Acknowledgment Certificate will be mailed to the operator only if the NOC is to change information provided on the acknowledgment certificate. The original coverage effective date will not change.

General Permit (Your Permit) and Forms

You may view and print your general permit on the TCEQ web site http://www.tceq.texas.gov. Search using key word TXR150000. General Permit Forms (NOI, Waiver, NOT, and NOC) and instructions are available on the TCEQ web site http://www.tceq.texas.gov.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a NOT and the new operator must submit a NOI. The NOI must be submitted not later than 10 days prior to the change in Operator status. Note that the NOT is effective on the postmarked date. It may be necessary to not terminate the existing permit until coverage by the new entity is confirmed.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. You can find the information on the Central Registry web site at http://www12.tceq.texas.gov/crpub/index.cfm.

You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled "Additional ID".

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all associated authorizations as changes occur. For General Permits, a Notice of Change form must be submitted to the program area for approval to update the CN and RN data in central registry.

INSTRUCTIONS FOR FILLING OUT THE NOC FORM

1) APPLICANT INFORMATION

a) Legal Name

Provide the current legal name of the permittee, as on the permit.

b) Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. You may search for your CN at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch.

If the name(s) provided do not match the current permittee name(s), this form will be returned. It is the responsibility of the permittee(s) to comply with the general permit.

Note: If a change is being made to the CN and the CN has other TCEQ authorization types, it is the entity's responsibility to update those authorizations at the same time. If an authorization has been cancelled or terminated, the name cannot be changed on the permit. Because of this, a new CN may be issued for the new name.

c) Person Signing this Application

Provide the name and title of the person signing the application. The person must be an executive official meeting signatory requirements in TAC §305.44.

d) Regulated Entity Reference Number (RN)

This is a number issued by TCEQ's Central Registry to sites (a location where a regulated activity occurs) regulated by TCEQ. This is not a permit number, registration number, or license number. Search for your RN: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch.

If the site has changed or the information provided indicates a new location, this form will be returned. It is the responsibility of the permittee to comply with the general permit.

2) APPLICATION CONTACT

Provide the name, title and contact information of the person that TCEQ can contact for additional information regarding this application.

3) REQUESTED CHANGE TO PERMITTED INFORMATION

Check one or more of the available options indicating the information in the form that is to be updated. Provide the updated information in 3 a) for Legal Name Change, 3 b) for Address and Contact Information Change, 3 c) for Regulated Entity Site Information Change, or 3 d) for General Characteristics Change, as applicable.

a) Legal Name Change

Provide the new legal name. If the entity is a Limited Partnership or Corporation, the name change must be verifiable with Texas Secretary of State. The TX SOS filing number must be provided to verify only a name change occurred. You may contact the SOS at (512)463 5555, for more information related to filing in Texas. If filed in the county where doing business, provide a copy of the legal documents showing the legal name change.

Legal name changes of a Corporation and Limited Partnership will be verified with Texas Secretary of State. If the entity is filed as a new entity with a new filing number, then the change cannot be made through a NOC. The permits are not transferable. If the operator changes, the old entity must terminate their permit and the new entity must submit a form for a new permit.

b) Address and Contact Information Change

Indicate the type of address and contact information for the operator that has changed from the original NOI or last NOC submitted to TCEQ.

Verify mailing addresses with USPS http://zip4.usps.com/zip4/welcome.jsp for regular mail delivery (not overnight express mail). If you find that the address is not verifiable please indicate the address is used by the USPS for regular mail delivery. Failure to provide a valid mailing address will delay or prohibit us from updating the permit.

Please note that address updates relating to a general permit authorization can ONLY be made through a Notice of Change. Address changes submitted through any other form cannot be processed.

c) Regulated Entity Site Information Change

The NOC form is only for use to update or correct information submitted on the original application or last NOC for the authorization. The authorization under a general permit is site specific. If this change is related to a new location, a Notice of Change will not be processed.

Provide the updated site name, updated site addresses, corrected latitude and longitude, and/or corrected county, as applicable to your NOC request. A new physical address for an existing location is usually the result of a newly assigned 911 address for emergencies.

If providing a corrected latitude and longitude, enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to http://www.tceq.texas.gov/gis/sqmaview.html
or http://nationalmap.gov/ustopo/.

d) Change in General Characteristics Provided on Original Form

Describe any other change that is not addressed through any question in this section of the application.

4) OPERATOR CERTIFICATION

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

IF YOU ARE A CORPORATION:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at 512/239-0600.

30 Texas Administrative Code
§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

TCEQ Office Use Only
Permit No:
CN:
RN:
Region:

Notice of Termination (NOT) for Authorizations under TPDES General Permit TXR150000

IMPORTANT INFORMATION:

Please read and use the General Information and Instructions prior to filling out each question in the form.

Effective September 1, 2018, this paper form must be submitted to TCEQ with a completed electronic reporting waiver form (TCEQ-20754).

ePermits: This form is available on our online permitting system.
Sign up for online permitting at: https://www3.tceq.texas.gov/steers/

What is the permit number to be terminated?

TXR15 TXRCW

Section 1. OPERATOR (Permittee)

a) What is the Customer Number (CN) issued to this entity?

CN

b) What is the Legal Name of the current permittee?

c) Provide the contact information for the Operator (Responsible Authority).

Prefix (Mr. Ms. or Miss):

First and Last Name: Suffix:

Title: Credentials:

Phone Number: Fax Number:

Email:

Mailing Address:

City, State, and Zip Code:

Country Mailing Information, if outside USA:

Section 2. APPLICATION CONTACT

This is the person TCEQ will contact if additional information is needed regarding this application.

Is the application contact the same as the permittee identified above?

☐ Yes, go to Section 3.

☐ No, complete section below

Prefix (Mr. Ms. or Miss):

First and Last Name: Suffix:

Title: Credentials:

Phone Number: Fax Number:

Email:

Mailing Address:

City, State, and Zip Code:

Country Mailing Information, if outside USA:

Section 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) TCEQ issued RE Reference Number (RN): RN

b) Name of project or site as known by the local community:

c) County, or counties if more than 1:

d) Latitude: Longitude:

e) Site Address/Location:

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete Section 3A.

If the site does not have a physical address, provide a location description in Section 3B. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

Section 3A: Physical Address of Project or Site:

Street Number and Name:

City, State, and Zip Code:

Section 3B: Site Location Description:

Location description:

City where the site is located or, if not in a city, what is the nearest city:

Zip Code where the site is located:

Section 4. REASON FOR TERMINATION

Check the reason for termination:

☐ Final stabilization has been achieved on all portions of the site that are the responsibility of the Operator and all silt fences and other temporary erosion controls have been removed, or scheduled for removal as defined in the SWP3.

☐ Another permitted Operator has assumed control over all areas of the site that have not been finally stabilized, and temporary erosion controls that have been identified in the SWP3 have been transferred to the new Operator.

☐ The discharge is now authorized under an alternate TPDES permit.

☐ The activity never began at this site that is regulated under the general permit.

Section 5. CERTIFICATION

Signatory Name:

Signatory Title:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): _____Date: _____

Instructions for Notice of Termination (NOT) for Authorizations under TPDES General Permit TXR150000

GENERAL INFORMATION

Where to Send the Notice of Termination (NOT):

BY REGULAR U.S. MAIL:
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL:
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact List:

Application status and form questions:	512-239-3700, swpermit@tceq.texas.gov
Technical questions:	512-239-4671, swgp@tceq.texas.gov
Environmental Law Division:	512-239-0600
Records Management - obtain copies of forms:	512-239-0900
Reports from databases (as available):	512-239-DATA (3282)
Cashier's office:	512-239-0357 or 512-239-0187

Notice of Termination Process:

A Notice of Termination is **effective on the date postmarked for delivery to TCEQ.**

When your NOT is received by the program, the form will be processed as follows:

1) Administrative Review: The form will be reviewed to confirm the following:
   - the permit number is provided;
   - the permit is active and has been approved;
   - the entity terminating the permit is the current permittee;
   - the site information matches the original permit record; and
   - the form has the required original signature with title and date.

2) Notice of Deficiency: If an item is incomplete or not verifiable as indicated above, a phone call will be made to the applicant to clear the deficiency. A letter will not be sent to the permittee if unable to process the form.

3) Confirmation of Termination: A Notice of Termination Confirmation letter will be mailed to the operator.

Change in Operator:

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted not later than 10 days prior to the change in Operator status.

INSTRUCTIONS FOR FILLING OUT THE FORM

The majority of permit information related to the current operator and regulated entity are available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

Section 1. Operator (Current Permittee):

a) Customer Number (CN)
TCEQ's Central Registry assigns each customer a number that begins with CN, followed by nine digits. This is not a permit number, registration number, or license number. The Customer Number, for the current permittee, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

b) Legal Name of Operator
The operator must be the same entity as previously submitted on the original Notice of Intent for the permit number provided. The current operator name, as provided on the current authorization, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

c) Contact Information for the Operator (Responsible Authority)
Provide information for person signing the NOT application in the Certification section. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. Update the address if different than previously submitted for the Notice of Intent or Notice of Change. The mailing address must be recognized by the US Postal Service. You may verify the address on the following website: https://tools.usps.com/go/ZipLookupAction!input.action.

The phone number should provide contact to the operator.

The fax number and e-mail address are optional and should correspond to the operator.

Section 2. Application Contact:

Provide the name, title and contact information of the person that TCEQ can contact for additional information regarding this application.

Section 3. Regulated Entity (RE) Information on Project or Site:

a) Regulated Entity Reference Number (RN)
A number issued by TCEQ's Central Registry to sites where an activity regulated by TCEQ. This is not a permit number, registration number, or license number. The Regulated Entity Reference Number is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

b) Name of the Project or Site
Provide the name of the site as known by the public in the area where the site is located.

c) County
Identify the county or counties in which the regulated entity is located.

d) Latitude and Longitude
Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. The latitude and longitude as provided on the current authorization is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

e) Site/Project (RE) Physical Address/Location Information
The physical address/location information, as provided on the current authorization, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

Section 3A. If a site has an address that includes a street number and street name, enter the complete address for the site. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate the site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

Section 3B. If a site does not have an address that includes a street number and street name, provide a complete written location description. For example: "The site is located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1."

Provide the city (or nearest city) and Zip Code of the facility location.

Section 4. Reason for Termination:

The Notice of Termination form is only for use to terminate the authorization (permit). The Permittee must indicate the specific reason for terminating by checking one of the options. If the reason is not listed then provide an attachment that explains the reason for termination.

Please read your general permit carefully to determine when to terminate your permit. Permits will not be reactivated after submitting a termination form. The termination is effective on the date postmarked for delivery to TCEQ.

Section 5. Certification:

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code §305.44.

IF YOU ARE A CORPORATION:
The regulation that controls who may sign an application form is 30 Texas Administrative Code §305.44(a), which is provided below. According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a), which is provided below. According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statutes under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a) (3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at 512-239-0600.

30 Texas Administrative Code §305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

Agent Authorization Form

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

I Duke Kerrigan,
Print Name

Vice President,
Title - Owner/President/Other

of H4 Georgetown LP,
Corporation/Partnership/Entity Name

have authorized John Pickens, P.E.
Print Name of Agent/Engineer

of Kimley-Horn and Associates, Inc.
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.

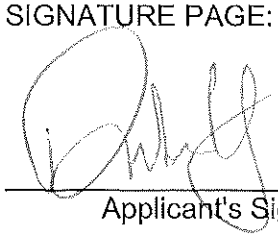
2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

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

4-15-26

Date

THE STATE OF Texas §

County of Williamson §

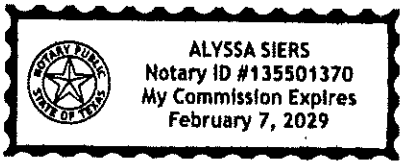
BEFORE ME, the undersigned authority, on this day personally appeared Duke Kerrigan known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 15 day of April, 2026.

Alyssa Siers
NOTARY PUBLIC

Alyssa Siers
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: February 7, 2029



Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Wolf Ranch Regional Trail Phases 3 & 4
Regulated Entity Location: The Subject Regional Trail is located along the North San Gabriel River and runs from Wolf Ranch River Camp west to Shadow Canyon
Name of Customer: H4 Georgetown LP Contact Person: Logan Blok
Phone: (602) 751-1522 Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

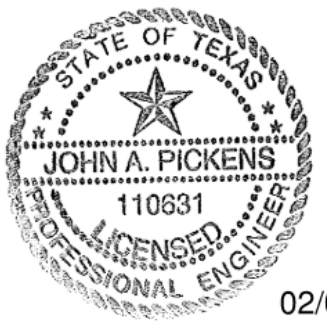
☐ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	N/A Acres	$ 0
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	N/A Acres	$ 0
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	159.53 Acres	$ 10,000
Sewage Collection System	N/A L.F.	$ 0
Lift Stations without sewer lines	N/A Acres	$ 0
Underground or Aboveground Storage Tank Facility	N/A Tanks	$ 0
Piping System(s)(only)	N/A Each	$ 0
Exception	N/A Each	$ 0
Extension of Time	N/A Each	$ 0

Signature: Date: February 2, 2026 Application Fee Schedule



02/02/2026

Application Fee Schedule

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

Water Pollution Abatement Plants and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

Check Payable to the "Texas Commission on Environmental Quality"

Core Data Form

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	**3. Regulated Entity Reference Number** *(if issued)*
CN		**RN**

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	02/02/2026

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

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

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

H4 Georgetown LP,

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID**	**10. DUNS Number** *(if applicable)*
N/A	N/A	830792522	N/A

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

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

13. Independently Owned and Operated?
☐ **Yes** ☒ **No**

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

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

15. Mailing Address:	129 CANYON VIEW ROAD						
	City	GEORGETOWN	**State**	TX	**ZIP**	78626	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	Logan.blok@hillwood.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
602-751-1522		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

Wolf Ranch Regional Trail Phases 3 & 4

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City	GEORGETOWN	**State**	TX	**ZIP**	78626	**ZIP + 4**	
24. County	WILLIAMSON							

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

25. Description to Physical Location:	SOUTH OF SH 29 ALONG THE SOUTH SAN GABRIEL RIVER, EAST AND WEST OF SOUTH WEST BYPASS FROM WOLF RANCH RIVER CAMP AMENITY CENTER WEST TO SHADOW CANYON				
26. Nearest City			**State**	**Nearest ZIP Code**	
Georgetown			TX	78626	

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

27. Latitude (N) In Decimal:	30.619782762201513		**28. Longitude (W) In Decimal:**	-97.71914238987561	
Degrees 30	Minutes 37	Seconds 11.2188	Degrees 97	Minutes 43	Seconds 8.9112

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
1521	1611	236116	237310

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

REGIONAL TRAIL-PARK AMENITY

34. Mailing Address:	129 CANYON VIEW ROAD							
	City	GEORGETOWN	**State**	TX	**ZIP**	78626	**ZIP + 4**	
35. E-Mail Address:	Logan.blok@hillwood.com							

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
602-751-1522		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	JOHN PICKENS	**41. Title:**	PROJECT MANAGER

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
757-685-7200		( ) -	JOHN.PICKENS@KIMLEY-HORN.COM

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	KIMLEY-HORN & ASSOCIATES	**Job Title:**	PROJECT MANAGER
Name *(In Print):*	JOHN PICKENS	**Phone:**	757-685-7200
Signature:		**Date:**	02/02/2026

Owner Authorization Form

Edwards Aquifer Protection Program

Landowner Authorization

I, DAVID BRUNING, VICE PRESIDENT of CT Development Inc.

am the owner of the property located at:

Wolf Ranch West Section 8 Phase 3, Block I, Lot 7

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize H4 GEORGETOWN LP

To conduct The design, submittal, and construction of the Wolf Ranch Regional Trail Phases 3 & 4.

At Wolf Ranch West Section 8 Phase 3, Block I, Lot 7

Landowner Acknowledgement

I understand that CT Development Inc.

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

4/15/26

Date

THE STATE OF TEXAS §

County of HARRIS §

BEFORE ME, the undersigned authority, on this day personally appeared

DAVID BRUNING, VICE PRESIDENT

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 15th day of APRIL, 2026

NOTARY PUBLIC

THOMAS E LAIRD
Notary Public, State of Texas
Comm. Expires 09-17-2029
Notary ID 135531402

Thomas E. Laird

Typed Or Printed Name of Notary

MY COMMISSION EXPIRES: 09/17/2029

Owner Authorization Form

Edwards Aquifer Protection Program

Landowner Authorization

I, Pat Nelson of Tri Pointe Homes Texas Inc.

am the owner of the property located at:

Wolf Ranch West Section 8 Phase 3, Block I, Lot 7

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize H4 GEORGETOWN LP

To conduct The design, submittal, and construction of the Wolf Ranch Regional Trail Phases 3 & 4.

At Wolf Ranch West Section 8 Phase 3, Block I, Lot 7

Landowner Acknowledgement

I understand that Tri Pointe Homes Texas Inc.

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

4/29/26

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared

Pat Nelson

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 23rd day of April 2026

Norma Linda Contreras

NOTARY PUBLIC

Norma Linda Contreras

Typed Or Printed Name of Notary

MY COMMISSION EXPIRES: 03/07/2027

NORMA LINDA CONTRERAS
Notary Public, State of Texas
Comm. Expires 03-07-2027
Notary ID 124087184

Owner Authorization Form

Edwards Aquifer Protection Program

Landowner Authorization

I, Duke Kerrigan of H4 Georgetown Phase 7, LLC.

am the owner of the property located at:

Wolf Ranch West Section 7B, Block C, Lot 13

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize H4 GEORGETOWN LP

To conduct The design, submittal, and construction of the Wolf Ranch Regional Trail Phases 3 & 4.

At Wolf Ranch West Section 7B, Block C, Lot 13

Landowner Acknowledgement

I understand that H4 Georgetown Phase 7, LLC.

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

4-15-26

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared

Duke Kerrigan

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 15 day of April 2026

Alyssa Siers
NOTARY PUBLIC

Alyssa Siers
Typed Or Printed Name of Notary

MY COMMISSION EXPIRES: February 7, 2029

ALYSSA SIERS
Notary ID #135501370
My Commission Expires
February 7, 2029

Owner Authorization Form

Edwards Aquifer Protection Program

Landowner Authorization

I, Duke Kerrigan of H4 Georgetown Phase 6G, LLC.

am the owner of the property located at:

Wolf Ranch West Section 6G, Block A, Lot 15

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize H4 GEORGETOWN LP

To conduct The design, submittal, and construction of the Wolf Ranch Regional Trail Phases 3 & 4.

At Wolf Ranch West Section 6G, Block A, Lot 15

Landowner Acknowledgement

I understand that H4 Georgetown Phase 6G, LLC.

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

4-15-26

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared

Duke Kerrigan

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 15 day of April 2026

Alyssa Siers

NOTARY PUBLIC

Alyssa Siers

Typed Or Printed Name of Notary

MY COMMISSION EXPIRES: February 7, 2029

ALYSSA SIERS
Notary ID #135501370
My Commission Expires
February 7, 2029

Owner Authorization Form

Edwards Aquifer Protection Program

Landowner Authorization

I, Duke Kerrigan of H4 Georgetown Phase 1, LLC.

am the owner of the property located at:

Future Wolf Ranch West Section 5G

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize H4 GEORGETOWN LP

To conduct The design, submittal, and construction of the Wolf Ranch Regional Trail Phases 3 & 4.

At Future Wolf Ranch West Section 5G

Landowner Acknowledgement

I understand that H4 Georgetown Phase 1, LLC.

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

4-15-26

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared

Duke Kerrigan

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 15 day of April 2026

Alyssa Siers

NOTARY PUBLIC

ALYSSA SIERS
Notary ID #135501370
My Commission Expires
February 7, 2029

Alyssa Siers

Typed Or Printed Name of Notary

MY COMMISSION EXPIRES: February 7, 2029

Owner Authorization Form

Edwards Aquifer Protection Program

Landowner Authorization

I, Duke Kerrigan of H4 Georgetown Phase 3G, LLC.

am the owner of the property located at:

Wolf Ranch West Section 3G, Block A, Lot 21

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize H4 GEORGETOWN LP

To conduct The design, submittal, and construction of the Wolf Ranch Regional Trail Phases 3 & 4.

At Wolf Ranch West Section 3G, Block A, Lot 21

Landowner Acknowledgement

I understand that H4 Georgetown Phase 3G, LLC.

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

4-15-26

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared

Duke Kerrigan

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 15 day of April 2024

Alyssa Siers

NOTARY PUBLIC

Alyssa Siers

Typed Or Printed Name of Notary

MY COMMISSION EXPIRES: February 7, 2029

ALYSSA SIERS
Notary ID #135501370
My Commission Expires
February 7, 2029

Owner Authorization Form

Edwards Aquifer Protection Program

Landowner Authorization

I, Duke Kerrigan of Owners Association of Wolf Ranch Residential Community Association, Inc.

am the owner of the property located at:

Wolf Ranch West Section 1AG, Block C, Lot 1

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize H4 GEORGETOWN LP

To conduct The design, submittal, and construction of the Wolf Ranch Regional Trail Phases 3 & 4.

At Wolf Ranch West Section 1AG, Block C, Lot 1

Landowner Acknowledgement

I understand that Owners Association of Wolf Ranch Residential Community Association, Inc.

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

Landowner Signature

4-13-26

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared

Duke Kerrigan

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 15 day of April 2026

Alyssa Siers

NOTARY PUBLIC

Alyssa Siers

Typed Or Printed Name of Notary

MY COMMISSION EXPIRES: February 7, 2029

ALYSSA SIERS
Notary ID #135501370
My Commission Expires
February 7, 2029