TEXAS COMMISSION ON ENVIROMENTAL QUALITY
CONTRIBUTING ZONE PLAN
for Construction Activities at:

10 Federal
3975 US 290
Dripping Springs, Texas 78620

Operator(s):

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
3301 Atlantic Ave.
Raleigh, NC 27604

Prepared by:

Engineering Surveys & Services
1113 Fay Street
Columbia, MO 65201
Phone: 573-449-2646
Texas Registered Engineering Firm #17700

Project Number: 15964

CZP Preparation Date:

November 14, 2024

Revised: 2/5/24

Estimated Project Dates:
Project Start Date: February 2024
Project Completion Date: February 2025

2/5/24

MATTHEW A. KRIETE
TX PROFESSIONAL ENGINEER
126148

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FORM 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: 10 Federal					**2. Regulated Entity No.:**				
3. Customer Name: KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC					**4. Customer No.:**				
5. Project Type: **(Please circle/check one)**	(New)		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	(CZP)	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		(Non-residential)			**8. Site (acres):**		2.62 acres	
9. Application Fee:	$4,000		**10. Permanent BMP(s):**			Bioretention Basin			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Hays		**14. Watershed:**			Gatlin Creek-Onion Creek			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer X Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda X 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 __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

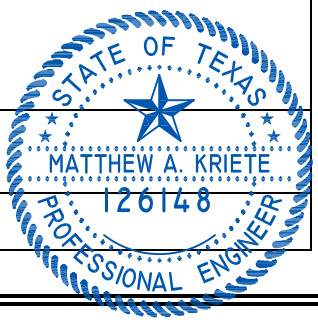
I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

Matthew A. Kriete

Print Name of Customer/Authorized Agent

2/5/24

Signature of Customer/Authorized Agent Date



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

FORM 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.

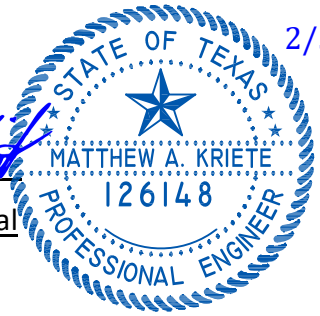
Signature

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: Matthew A. Kriete

Date: 2/5/2024

Signature of Customer/Agent: 2/5/24



Regulated Entity Name: 10 Federal

Project Information

1. County: Hays
2. Stream Basin: Gatlin Creek-Onion Creek
3. Groundwater Conservation District (if applicable): Hays Trinity
4. Customer (Applicant):

   Contact Person: Bruce Orr
   Entity: KGE MT 3975 US 290 Dripping Springs TX LLC
   Mailing Address: 3301 Atlantic Ave.
   City, State: Raleigh, NC Zip: 27604
   Telephone: 919-695-1110 Fax: _____
   Email Address: dreed@10federal.com

5. Agent/Representative (If any):

Contact Person: Matthew A. Kriete
Entity: Engineering Surveys & Services
Mailing Address: 1113 Fay Street
City, State: Columbia, MO Zip: 65201
Telephone: 573-449-2646 Fax: _____
Email Address: mkriete@ess-inc.com

6. Project Location:

☐ The project site is located inside the city limits of _____.
☒ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of Dripping Springs.
☐ 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 site is located 1.74 Miles West of the intersection oF US 290 and Sawyer Ranch Road.

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: _____

13. Total project area (size of site): 2.62 Acres

Total disturbed area: 2.57 Acres

14. Estimated projected population: N/A

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

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	*Sq. Ft.*	*Sq. Ft./Acre*	*Acres*
Structures/Rooftops	36,100	÷ 43,560 =	0.83
Parking	2,060	÷ 43,560 =	0.05
Other paved surfaces	32,670	÷ 43,560 =	0.75
Total Impervious Cover	70,830	÷ 43,560 =	1.63

Total Impervious Cover 1.63 **÷ Total Acreage** 2.62 **X 100 =** 62**% 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
- ☐ Asphaltic concrete pavement
- ☐ Other: _____

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

Length of R.O.W.: _____ feet.
Width of R.O.W.: _____ feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

21. Pavement Area:

Length of pavement area: _____ feet.
Width of pavement area: _____ feet.
L x W = _____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
Pavement area _____ acres ÷ R.O.W. area _____ 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 _____ (name) Treatment Plant. 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:

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):

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" = 20'.

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 (including date of material) sources(s): FIRM Panel: 48209C0109F.

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 insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.

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

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

☐ N/A

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.

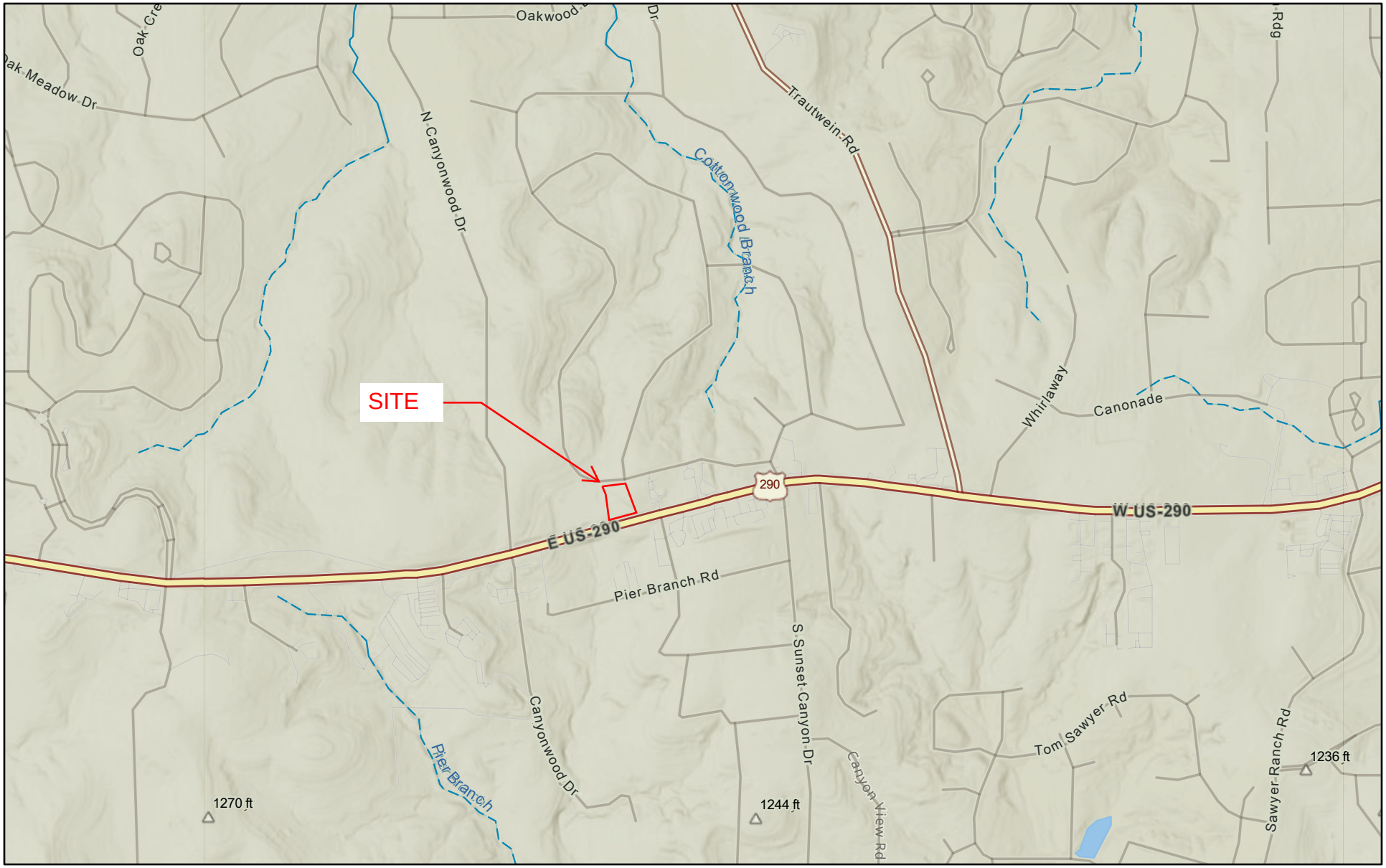
63. ☒ The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements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

ATTACHMENT A

Road Map

10 Federal Road Map



11/15/2023

World Hillshade

1:23,280

0 0.15 0.3 0.6 mi

0 0.28 0.55 1.1 km

ATTACHMENT B

USGS Quadrangle Map

USGS science for a changing world

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

The National Map US Topo

DRIPPING SPRINGS QUADRANGLE
TEXAS
7.5-MINUTE SERIES

Site Location

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 1979 - 2022
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
3°54'
69 MILS
0°28'
8 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
NU
Grid Zone Designation
14R

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1
MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET

CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

TEXAS
QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

1 Hammetts Crossing
2 Shingle Hills
3 Bee Cave
4 Henly
5 Signal Hill
6 Rough Hollow
7 Driftwood
8 Mountain City
ADJOINING QUADRANGLES

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

DRIPPING SPRINGS, TX
2022

NSN 7643015939593
NGA REF NO. USSX24K12001

ATTACHMENT C

Project Narrative

PROJECT NARRATIVE

The general scope of the work for the project is as follows:

The project consists of demolition of 5 existing 1 story storage facilities. After demolition construction of one, four-story storage facility, associated parking lots, sewer and utility systems, and stormwater detention system shall be built in one phase. Soil disturbing activities will include: clearing and grubbing, installing erosion and sediment controls, grading, installation of underground utilities, building foundations, parking lot construction, and preparation for final seeding, mulching, and landscaping in coordination with complying with Edwards Aquifer Rules and Regulations.

What is the function of the construction activity?

☐ Residential ☒ Commercial ☐ Industrial ☐ Road Construction ☐ Linear Utility

☐ Other (please specify):

Estimated Project Start Date: **2 / 1 / 2024**

Estimated Project Completion Date: **2 / 1 / 2025**

1) PERMANENT BMPs

The Site will treat stormwater runoff by installing a bioretention basin and pervious pavement onsite. This will be utilized to provide 80% TSS removal for any imperviousness over 35%.

2) SOILS, SLOPES, VEGETATION, AND CURRENT DRAINAGE PATTERNS

Soil type(s): The current soil type include a variety of different soils in the manmade fill. This includes sandy lean clay, clayey gravel, fat clays, and lean clay. Natural soils include sandy gravel and lean clay.

Slopes: Pre project the site consisted of manmade fill for the existing development. The slopes on the Northern section were relatively flat with 1-5% while the slopes falling towards the roads were steeper between 5-30%. Post construction the top of the site will remain relatively flat with slopes between 1-2% while the site will continue to fall away with slopes 3:1 daylight slopes.

Drainage Patterns (describe current drainage patterns and note any changes due to grading or fill activities): The site drains in two different directions off the site. Pre project each out these two study points combines to drain to the south where it enters the culvert to pass under US 290 and eventually goes into Onion Creek. Post project the site will drain in a similar fashion with flow continuing to go into each of the three study points.

Vegetation: Pre project the site consists of grass, weeds, brush, and trees. few trees exist along the property boundaries. Post project the site will consist of impervious areas and zeroscape/turf green space areas.

3) CONSTRUCTION SITE ESTIMATES

The following are estimates of the construction site.

Total site area:	2.62 acres
Construction project area to be disturbed:	2.57 acres
Percentage impervious area before construction:	62 %

Curve Number before construction:	87
Percentage impervious area after construction:	62 %
*Note Pervious Pavement included in calculation	
Runoff coefficient after construction:	93

[84(1.0) +98(1.62)] / 2.62 = 93

Estimated disturbed area of off-site borrow and fill areas: 0.0 acres

4) RECEIVING WATERS

Description of receiving waters: The site drains into a concrete drainage structure which is a part of Garlin Creek-Onion Creek watershed that is part of Edwards Aquifer Contributing Zone. These waters are not listed by TCEQ as 303d impaired waters or waters subject to Total Maximum Daily Loads (TMDLs). Verification can be found with the current 303d List.

To prevent any bacterial contamination, portable toilets will be located on site.

To reduce TSS load Bioretention and pervious pavers will be utilized to comply with Edwards Aquifer regulations.

Description of receiving storm sewer systems: Runoff from the North side of the site, Hidden Hills Dr., and Adjacent Parcels is conveys to an existing 24" RCP that conveys runoff South to HWY 290

Description of post-construction storm water management controls: The site will have an above ground bioretention basin and unground detention designed to control post-developed flows. All discharge pipes from the site will discharge drainage ditch on the north and south portion of the site respectively.

Stormwater velocity reduction methods at outfall(s): All outfalls will consist of flared end sections with rip-rap and geotextile fabric.

5) JURISDICTIONAL WETLANDS AND/OR OTHER SURFACE WATERS

There are no jurisdictional wetlands or other surface waters onsite. A previous riverine existed near the site but has been filled by TXDOT before 1980.

6) SITE FEATURES AND SENSITIVE AREAS TO BE PROTECTED

An Environmental Assessment was conducted for this site by Terracon. No sensitive areas were identified.

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.

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.

The site description, controls, maintenance, and inspection requirements for the stormwater 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.

ATTACHMENT D

Factors Affecting Surface Water Quality

FACTORS AFFECTING SURFACE WATER QUALITY

1. WATER QUALITY IMPACT

This development will be a storage facility, no Industrial activity that will affect surface water quality is to be expected. The site will consist of impervious areas as well as a building. When runoff goes over these area's it will pick up TSS, Oils/Hydrocarbons, and associated contamination (Tires, heavy metals. Etc.)

2. CONSTRUCTION SUPPORT ACTIVITIES

Construction support activities such as areas for equipment staging, repair, equipment refueling, and material storage providing sole and direct support to the construction project, and controls shall be implemented to minimize pollutant discharges. These designated construction support areas are shown on the SWPPP maps indicated in Section 5 of this Attachment.

3. ENDANGERED SPECIES CERTIFICATION

Is there evidence of endangered/threatened species or critical habitats on or near the project area?

☐ Yes ☒ No

Describe how this determination was made:

Due to the pre-disturbed nature of the site, no endangered species presence was identified.

If yes, describe the species and/or critical habitat: N/A

4. HISTORIC PRESERVATION

Are there any historic sites on or near the construction site?

☐ Yes ☐ No ☒ Not Applicable

5. APPLICABLE FEDERAL, TRIBAL, STATE OR LOCAL PROGRAMS

State of Texas Water Code requirements administered through the Texas Commission on Environmental Quality (TCEQ) apply. No local programs apply. No tribal programs apply. Permits for the state and local land disturbance programs are included.

ATTACHMENT E

Volume and Character of Storm Water

VOLUME AND CHARACTER OF STORMWATER

1. DETENTION AND SITE HYDROLOGY

Design Standard(s):	▪ 2017 Hays County Development Regulations
	▪ 2022 City of Austin, Texas Drainage Criteria Manual
	▪TxDOT – Developer Drainage Requirements
Soil Types:	▪ USDA National Resources Conservation Maps
Runoff Coefficients:	▪ Austin, TX Environmental Criteria Manual
Maps:	▪ USGS Topographic Map
	▪ Global Land Surveying, Inc. ALTA Survey 11/02/2022

To control the post developed runoff rate to less than the predeveloped rate, the development includes a bioretention basin and underground detention that will intercept site runoff and to mitigate the impact of the impervious area over 35% and control the peak discharge rate to less than the lower of the predeveloped or 35% impervious site for the 2-yr, 5-yr, 10-yr, 25-yr, 50-yr, and 100-yr storms. For this analysis all pervious pavement is assumed to be impervious. The basin is designed utilizing the SCS method as outlined by the City of Austin, Texas Drainage Criteria Manual.

Curve Numbers, and runoff rates for each drainage area and study point are enclosed in Appendix M. Time of concentration calculations have been provided in Appendix M. Both existing conditions and 35% impervious conditions have been calculated.

Drainage area maps were developed for Pre and Post Developed Conditions and offsite area conveyed to the site are enclosed in Appendix M. As Runoff is conveyed offsite in two directions with a common confluence, three study points have been created to confirm no increase in runoff rates to the impact of runoff to all discharge points from the site to the adjacent right of way and properties.

Discharge to Study Point 2 is detained within the bioretention basin, while discharge to Study Point 3 is detained in an underground detention basin. These facilities are designed so the post developed discharge is less at each study point and combined Study Point 1 for the 2-, 5-, 10-, 25-,50-, and 100-yr storm.

Table 1 - 5 provides a summary of these study points. This table shows the existing discharge of the site, discharge of the site at 35% impervious, and post developed discharge, the post developed conditions will be lower than if the site was 35% impervious.

Table 1: Study Point Runoff

2-yr Storm	Study Point 1	Study Point 2	Study Point 3
Pre	13.79	6.23	7.55
35% impervious	13.59	6.49	7.12
Post	13.06	6.07	7.08

Table 2: Study Point Runoff

5-yr Storm	Study Point 1	Study Point 2	Study Point 3
Pre	19.82	9.14	10.70
35% impervious	19.65	9.39	10.30
Post	18.87	8.80	10.15

Table 3: Study Point Runoff

10-yr Storm	Study Point 1	Study Point 2	Study Point 3
Pre	25.86	12.05	13.85
35% impervious	25.72	12.29	13.48
Post	25.32	11.97	13.41

Table 4: Study Point Runoff

25-yr Storm	Study Point 1	Study Point 2	Study Point 3
Pre	35.31	16.60	18.77
35% impervious	35.18	16.82	18.45
Post	35.02	16.59	18.43

Table 5: Study Point Runoff

50-yr Storm	Study Point 1	Study Point 2	Study Point 3
Pre	43.68	20.62	23.13
35% impervious	43.57	20.83	22.84
Post	43.41	20.60	22.81

Table 6: Study Point Runoff

100-yr Storm	Study Point 1	Study Point 2	Study Point 3
Pre	53.37	25.28	28.18
35% impervious	53.27	25.46	27.92
Post	53.00	25.15	27.85

An emergency spillway is provided at the 1% storm water surface elevation in the bioretention basin. The freeboard for the spillway is 1' at the elevation of 1228.60'. The underground Basin can safely convey the 1% storm.

Detention for the 2-, 5-, 10-, 25-, 50-, and 100-year storms is required per Complying with the Edwards Aquifer Rules have been provided. This basin has been sized per the Dripping Springs TCSS Manual; max discharge rate controlled to the predeveloped rate.

2. STORMWATER CHARACTERISTICS

The site matches the existing imperviousness area of 62% imperviousness. The bioretention basin will provide 80% TSS removal for impervious area greater than 35%. The Bioretention is sized to adequately provide treatment for the entire site. The Basin and the underground detention are designed to hold the stormwater up to a 100-year – 24-hour storm event and discharge less than pre-developed.

ATTACHMENT F

Suitability Letter From Authorized Agent

SUITABILITY LETTER FROM AUTHORIZED AGENT

1) OSSF DESCRIPTION AND DESIGN

10-Federal proposed to develop a multi-story self-storage facility at 3975B East Highway 290 in Hay County Texas, south of Hidden Hills Drive, 1,100-ft east of Canyonwood Dr. The 2.62-acre property is in the Extraterritorial Jurisdiction (ETJ) of Dripping Springs and in the Edwards Aquifer Contributing Zone. The existing site has five 1-story storage unit buildings, with a one bed – one bath apartment on site, served by a low-pressure dosing system. The proposed development includes a 4-story storage unit which includes two bathrooms and an office.

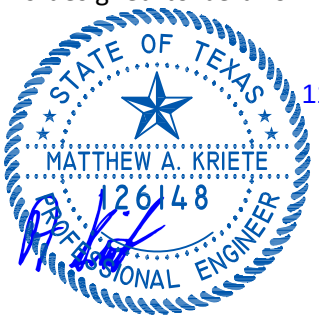
The proposed OSSF is to be located within manmade fill. Soils in the area are noted to be Clayey Sand with Gravel (SC). Sieve analysis noted these soils contain 23% gravel. Ground water was not encountered in any onsite borings. Soils are classified as Class IV due to the manmade fill nature of the soils.

The proposed OSSF facility location has a limited area of surface runoff. The upstream area will be graded to divert runoff from dosing area.

The design flow is based on the anticipated demand for the self-storage facility and the assumption that one staff person will be present 8 hours per day. To generate the demand, the International Transportation Engineers Trip Generation Manual – 11th addition was utilized. ITE 151 describes "mini-warehouses" as generating 1.45 trips per day per 1,000 sf, which is one trip in and one trip out. Therefore, the facility will see an average of 153 visitors per day on average, assuming 1.5 visitors per car Conservatively assuming each visit is 1 hour long, an 8-hour equivalency of 19.13 person was calculated, which was added to the full-time staff. Therefore, the design flow for this system is 101 gallons per day.

The system is designed to be a low-pressure dosing system that is 1,006 SF and will treat the entire building.

Sincerely,



11/15/23

Matthew A. Kriete, P.E.
Texas Professional Engineer 126148
Texas Professional Engineering Firm 17700

ATTACHMENT G

N/A

ATTACHMENT H

N/A

ATTACHMENT I

N/A

ATTACHMENT J

BMPs for Upgradient Stormwater

BMPs FOR UPGRADIENT STORMWATER

1. Upgradient Stormwater

The neighboring property runoff that sheet flows on our site is currently undeveloped. No additional pollutants are expected to originate from this neighboring property.

ATTACHMENT K

BMPs Onsite

BMPs FOR ON-SITE STORMWATER

1) PERMANENT STRUCTURAL BMPs

BMP:	**Retention Basin (Extended Wet Detention Basin, Detention Ponds/Lakes)**
Responsible Staff:	
Location:	Where indicated in the civil construction plans.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.
Description:	
The retention basin will permanently store stormwater creating and pond or lake. The water level will temporarily rise during rain events to provide detention so the post developed storm runoff is less than or equal to the pre developed runoff from the same area for the design storms required by the governing authority. Extended dry detention basin(s) may have a littoral bench consisting of a shallow bench around the waterline that will be planted with wetland plants. The entire basin area above the permanent waterline shall be permanently seeded and mulched or seeded with erosion control blanket, however indicated in the civil construction plans. Construct as detailed in the civil construction plans.	
Maintenance & Inspection:	
All basin areas, outfall structure(s), and corresponding earthen dam(s) shall be inspected during routine SWPPP inspections for erosion, sediment disposition, poor vegetation establishment, trash, hazardous materials, nuisance animals (primarily geese), rodent damage, and proper operation. Inspect the embankment, emergency spillway, and outlet for erosion damage, piping, settling, seepage, animal burrowing, or slumping along the toe or around the barrel and repair immediately. The retention basin shall be kept clean of sediment, trash, debris, oil, grease, nuisance animals, and hazardous materials. Verify that the outfall structure is operating property by temporarily causing the water level to rise during rain events and draining the basin back to the permanent water level within 2 days of the end of the rain event. Remove all debris, trash, etc. after major storm events. Verify wetland vegetation in littoral bench (if applicable) is healthy and vigorous. All repairs/maintenance shall be done immediately.	
BMP:	**Porous Pavement and/or Pervious Pavers**
Responsible Staff:	

Location:	Where indicated in the civil construction plans.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.
Description:	
Porous pavement and pervious paver systems are an alternative to traditional pavement in that they contain voids to allow water to infiltrate to the rock base beneath. In Missouri an underdrain system is typically incorporated into the rock subbase for drainage because of the impervious clay soils. These pavements typically have less design strength and are to be installed only in areas of light traffic. Construction traffic on the systems after installation should not be allowed. Never apply sand, ash, cinders, etc. to the surface, even during ice/snow periods because it will clog the pavement voids. Install per the manufacturer's written instructions and as detailed in the civil construction plans.	
Maintenance & Inspection:	
All pavement/pavers shall be inspected during routine SWPPP inspections for proper functioning, clogging, spalling, cracking, structural integrity, and as recommended by the manufacturer. The primary goal of maintenance shall be to prevent the pavement surface and underlying rock and underdrain system (if required) from clogging. No runoff from disturbed areas shall be allowed onto the pavement/paver system after installation. Ponding on the surface may indicate clogging. If clogged, the system shall be cleaned via a vacuum sweeper truck immediately. Inspect all areas draining onto the pavement for proper vegetation or other surface stabilization. The system shall be vacuum cleaned a minimum every 6 months during project construction. Items removed from system shall be disposed of offsite as legally allowed. All repairs/maintenance shall be done immediately.	

BMP:	**Underground Detention Basin**
Responsible Staff:	
Location:	Where indicated in the civil construction plans.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.

Description:
The underground detention basin will temporarily store stormwater during rain events so the post developed storm runoff is less than or equal to the pre developed runoff from the same area for the design storms required by the governing authority. The basin will be dry most of the time and will only temporarily pond stormwater during and immediately after rain events.
Maintenance & Inspection:
All systems shall be inspected during routine SWPPP inspections for proper functioning, clogging, and structural integrity. The system shall be cleaned when sediment has reached 3" in depth or greater. Items removed from system shall be disposed of offsite as legally allowed. All repairs/maintenance shall be done immediately.

2) PERMANENT NON-STRUCTURAL BMPs

BMP:	**Permanent Seeding**
Responsible Staff:	
Location:	All disturbed areas except sodded areas, surfaced areas, solid rock, or areas consisting of primarily broken rock.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet and/or as necessary.

Description:	
	Permanent seeding is the establishment of perennial vegetation for graded areas that will be undisturbed for longer than 6 months. Permanent seeding and planting shall be performed within 14 days after final grade is reached or within 7 days after final grade is reached if the slope of the area is greater than 3:1 (3 feet horizontal to 1 foot vertical) or if the slope is greater than 3% and greater than 150 feet in length, unless temporary stabilization is applied. Permanent seeding shall be completed per the project specifications or landscape plan. If no specification/plan is provided, the following methods can be applied:
	Seedbed Preparation:

For broadcast seeding and drilling, loosen the soil via tilling to a depth of 4 inches. For no-till drilling, the soil does not need to be loosened unless the site has surface compaction. If compacted, till 4 inches deep.

Soil Amendments:

Obtain a minimum of three soil tests from various areas on the site and add fertilizer and lime according to the test results. Test soil to determine fertilizer requirements. Use a complete fertilizer containing Nitrogen (N), phosphoric acid (P), and potassium (k). 50% of the Nitrogen shall be slow release sulfer coated urea. Mix the soil amendments into the top 3 inches of soil.

Seed:

All seeding operations shall be performed by either "Drilling" or "Cultipacker" process or approved equivalent. Seed shall be covered by +1/4" topsoil. Any of the following three types of see may be used in their perspective planting timeframes:

Type	% Mix by Weight	Seeding Rate (lbs. PLS/acre)	Seeding Rate (lb/acre)
Green Spangletop	4	0.3	As Recommended by Manufacturer
Bermudagrass	30	2.4	
Sideoats Grama (South Texas)	46	3.6	
Buffalograss (Texoka)	20	1.6	

The percent mixture by weight is for pure live seed (PLS). Weed seed shall not exceed 1.0% by weight of the mix. A seed mix certification shall be approved by the Operator prior to seeding.

Mulch:

All mulch shall consist of clean, bright, plant residues and be free of weed seeds, mold, and rot. No more than 15% of the ground surface shall be visible after mulching. Install per manufacturer's recommendations. Straw mulch shall be applied at a minimum rate of 2,500 lbs/acre.

Planting Dates:

Apply permanent seed and mulch according to the following: February 1 – May 15. Seeding and mulching outside these dates shall be done according to temporary seeding requirements with reseeding at 50% the permanent seeding rates done during the next allowable permanent seeding planting dates.

Maintenance & Inspection:

All seeded areas shall be inspected during routine SWPPP inspections for erosion, germination, vigorous seedlings, uniform density with at least 70% ground cover, disease, drought stress, and seed wash out. Water 1 inch deep every 7 day stretch with less than ½ inch total rain accumulation until grass is 3 inches tall. Do not mow until grass is 4 inches tall, and then mow at a 3 inch height, minimum. All repairs/maintenance shall be done immediately. The contractor shall maintain the seeded areas including watering until a "stand of grass" is obtained. A "stand of grass" shall consist of 75% - 80% coverage, a minimum of one (1) inch in height. Re-seeding will be required in washed areas. Protect seeding areas from excessive water runoff and traffic prior to establishing vegetation. May require periodic mowing and weed control.

BMP:	**Sodding**
Responsible Staff:	
Location:	Where indicated on the civil construction plans or landscape plans.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.

Description:
Sodding is the laying of vegetative cover that includes both grass plants and their established root system. Sodding shall be completed per the project specifications or landscape plan. If no specification/plan is provided, the following methods can be applied:
Soil Preparation:
Loosen the soil if the site has surface compaction. If compacted, till 4 inches deep.
Soil Amendments:
Per the sod manufacturer. If the manufacturer provides no written soil amendment requirements, obtain a minimum of three soil tests from various areas on the site and add fertilizer and lime according to the test results. If soil tests are not available, spread lime evenly at a rate of 92 pounds per 1,000 square feet of area. Spread evenly a 5.5-16-16 fertilizer at a rate of 7 pounds per 1,000 square feet of area. Mix the soil amendments into the top 4 inches of soil.
Sod:
Sod shall consist of, or a mixture of: Cynodon dactylon (Common Bermudagrass)/Stenotaphrum secundatum (St. Augustine grass). Install in staggered rows with offset joints. Lay rows perpendicular

	to the slope. Tamp or roll all sod (supplying 15-25 lbs per square inch compression) immediately after installation to provide root contact with the soil. Water thoroughly to a depth of 2 inches upon installation.
	Sodding Dates:
	Sodding can be done at any time of the year except when the ground is frozen or there is a ground cover such as snow or ice.
Maintenance & Inspection:	
All sodded areas shall be inspected during routine SWPPP inspections for erosion, vigorous growth, uniform density with at least 95% ground cover, disease, and drought stress. Water as necessary to prevent drying out. During summer months this can be every day. Do not mow until grass is 4 inches tall, and then mow at a 3 inch height, minimum. All repairs/maintenance shall be done immediately.	

ATTACHMENT L

N/A

ATTACHMENT M

Plans

(4) KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY

HAYS COUNTY, TEXAS
DRIPPING SPRINGS ETJ
SITE PLAN
JUNE 9, 2023
REVISED: JANUARY 19, 2024

SURVEY DISCLAIMER

ALTA SURVEY PREPARED BY "GLOBAL LAND SURVEYING, INC.", DATED NOVEMBER 2, 2022. ENGINEERING SURVEYS & SERVICES CANNOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY.

LEGEND

	PROPERTY LINE
	POWER LINE
SS	STORM SEWER LINE
X	FENCE LINE
750	EXISTING CONTOUR
FES	FLARED END SECTION
FH	FIRE HYDRANT
HDPE	HIGH DENSITY POLYETHYLENE PIPE
PVC	POLYVINYL CHLORIDE PIPE
WM	WATER METER
WV	WATER VALVE
	CHAIN LINK FENCE
	COLUMN
	POWER POLE
	LIGHT POLE
	WATER METER
	POWER LINE
	IRRIGATION CONTROL VALVE
	GUY WIRE
	GAS MARKER
	SILT FENCE
750	TEMPORARY DIVERSION DIKE
S	FINISH CONTOUR
W	PROPOSED SANITARY SEWER LINE
UE	PROPOSED WATER LINE
	PROPOSED UNDERGROUND ELECTRIC
	PROPOSED STORM SEWER
	PROPOSED WATER VALVE
	PROPOSED FIRE HYDRANT & VALVE
	THRUST BLOCK
	CONCRETE SIDEWALK
	STANDARD DUTY PAVEMENT
	PERVIOUS MATERIAL
	CONCRETE PAVEMENT

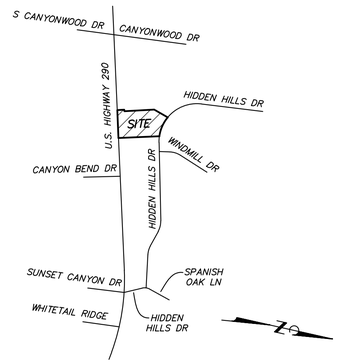
UTILITY NOTES

WATER
WEST TRAVIS COUNTY PUA
13215 BEE CAVE PARKWAY, BUILDING B, SUITE 110
BEE CAVE, TEXAS 78738
CONTACT: 512-263-0100

ELECTRIC
PEDERNALES ELECTRIC COOPERATIVE, INC.
661 HIGHWAY 290 WEST
DRIPPING SPRINGS, TEXAS 78620
CONTACT: 888-554-4732

TELECOMMUNICATIONS
FRONTIER

SEWER
ONSITE SEWAGE FACILITY



SITE LOCATION MAP

NOT TO SCALE

IMPERVIOUS AREA

PRE PROJECT
PERVIOUS = 0.99 ACRES
IMPERVIOUS = 1.63 ACRE
TOTAL = 2.62 ACRES

POST PROJECT
PERVIOUS = 0.99 ACRE
IMPERVIOUS = 1.63 ACRES (INCLUDING PERVIOUS PAVEMENT)
TOTAL = 2.62 ACRES

PARKING NOTE

PROVIDED PARKING
ACCESSIBLE SPACES = 1 SPACES
STANDARD SPACES = 10 SPACES
TOTAL PROVIDED = 11 SPACES

MICHELLE FISCHER
CITY ADMINISTRATOR

CHAD GILPIN, PE. (2)
CITY ENGINEER

HAYS COUNTY FIRE MARSHALL

WEST TRAVIS PUA

HAYS COUNTY
TRANSPORTATION DEPARTMENT

CITY OF DRIPPING SPRINGS SITE DEVELOPMENT PERMIT #SD2023-0013

(2) TxDOT NO ADVERSE IMPACT NOTE

DRAINAGE FOR THIS DEVELOPMENT HAS BEEN DESIGNED AS SUCH THAT THERE WILL BE NO ADVERSE IMPACTS ON THE CAPACITY, FUNCTION OR INTEGRITY OF TEXAS DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY DRAINAGE FACILITIES.

PROPERTY OWNER

10FSS 3975 US HWY 290 E DRIPPING SPRINGS TX LLC
3301 ATLANTIC AVE
RALEIGH, NC 27604-1695

(1) STORMWATER NOTE

1. SITE IS LOCATED IN EDWARDS AQUIFER CONTRIBUTING ZONE.
2. THIS PROPERTY IS PART OF THE GATLIN CREEK ONION CREEK WATERSHED.
3. STORMWATER UTILITIES AND BIORETENTION BASIN WILL BE PRIVATELY OWNED AND OPERATED BY THE OWNER.
4. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN APPROVING THESE PLANS, THE CITY MUST RELY UPON THE ADEQUACY OF WORK OF THE DESIGN ENGINEER.
5. A WATER QUALITY BMP MAINTENANCE PLAN HAS BEEN PREPARED FOR THIS DEVELOPMENT AND IS ON FILE AT CITY HALL IN SITE DEVELOPMENT CASE #SD2023-0013.

ZONING NOTE

THIS PROPERTY IS LOCATED IN UNZONED HAYS COUNTY IN THE ETJ OF DRIPPING SPRINGS.

FLOODPLAIN NOTE

THIS PROPERTY IS LOCATED IN ZONE "X" AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN BY COMMUNITY PANEL NO. 48209C0109F DATED SEPTEMBER 2, 2005.

PROPERTY DESCRIPTION

SUNSET CANYON SEC 1-C, LOT 17-B

BENCH MARK

SEE ALTA

SURVEY CONTROL POINTS

SEE ALTA

(1) SHEET INDEX

10 FEDERAL CONSTRUCTION, LLC
DRIPPING SPRINGS PROPERTY

Engineering Surveys & Services
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(3) KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

Revised
(1) SEPTEMBER 20, 2023
CITY COMMENTS
(2) DECEMBER 20, 2023
(3) JANUARY 11, 2024
(4) JANUARY 19, 2024

Design: JH Drawn: SK

COVER

Sheet
C0.01

ES&S PROJECT NO. 15964

P:\GENERAL PROJECTS\15964-10FED-DRIPPINGSPRINGS\CAD\15964 COVER & DETAILS.DWG 1/19/2024

SEQUENCE OF EVENTS

1. PRIOR TO CONSTRUCTION, COORDINATE AND HAVE A PRE-CONSTRUCTION MEETING REGARDING SWPPP TRAINING WITH CONSTRUCTION PERSONNEL.
2. DETERMINE ALL UTILITY FIELD LOCATES AS NECESSARY.
3. CONSTRUCT TEMPORARY CONSTRUCTION ENTRANCE AND CONCRETE WASH OUT. INSTALL ALL PERIMETER EROSION AND SEDIMENT CONTROL PER PLAN.
4. ROUGH GRADE PONDS TO 100% CAPACITY. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO CLEARING, EXCAVATION AND EMBANKMENT ACTIVITIES. THE PONDS AND OUTLETS SHALL BE MAINTAINED AND FUNCTIONAL AS TEMPORARY DETENTION AND SEDIMENTATION BASINS THROUGHOUT CONSTRUCTION UNTIL INSTALLATION OF THE PERMANENT PONDS IS COMPLETE.
5. EXCAVATE AREA REQUIRED FOR DETENTION BASIN. THE DETENTION BASIN EXCAVATION SHALL SERVE AS A SEDIMENT TRAP THROUGHOUT CONSTRUCTION ACTIVITIES.
6. INSTALL DETENTION BASIN AND OUTFALL PIPE. DISTURB ONLY THE AREA NECESSARY FOR INSTALLATION. COMMENCE OVEREXCAVATION OF HIGH PLASTIC SOILS IN AREA AROUND BUILDINGS. FOLLOW DIRECTION OF PLANS AND GEOTECHNICAL REPORT.
7. COMMENCE CLEARING AND GRUBBING PER PLAN. CONTRACTOR SHALL REMOVE ALL STUMPS BY EXCAVATING TO INCLUDE REMOVAL OF ASSOCIATED ROOT SYSTEM. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS.
8. STRIP TOPSOIL IN GRADING AREAS. STOCKPILE IN AREAS SHOWN ON PLANS.
9. COMMENCE SITE GRADING. FILL ACTIVITIES SHALL MEET THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
10. UTILIZE ONSITE FILL MATERIALS FOR OVEREXCAVATED AREAS. FOLLOW GEOTECHNICAL REPORT REQUIREMENTS FOR FILL MATERIAL.
11. INSTALL STORM SEWERS PER PLAN. INSTALL INLET PROTECTION IMMEDIATELY UPON COMPLETION OF EACH STORM STRUCTURE.
12. INSTALL SITE UTILITIES AS GRADING ALLOWS.
13. FINALIZE BUILDING SUBGRADE PREPARATION IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT.
14. REMOVE CONSTRUCTION SEDIMENT FROM SEDIMENT TRAP. FINISH GRADING OF DETENTION BASIN, PER PLANS.
15. BEGIN BUILDING CONSTRUCTION.
16. FINALIZE PAVEMENT SUBGRADE PREPARATION. INSTALL BASE MATERIAL AS REQUIRED FOR PAVED AREAS. REMOVE INLET PROTECTION AROUND INLETS NO MORE THAN 48 HOURS PRIOR TO PLACING STABILIZED BASE COURSE.
17. COMMENCE PAVEMENT AND SIDEWALK CONSTRUCTION. REMOVE TEMPORARY CONSTRUCTION ENTRANCE ONLY PRIOR TO PAVEMENT CONSTRUCTION IN THAT AREA (PAVE THIS AREA LAST).
18. COMPLETE FINISH GRADING, TOPSOIL PLACEMENT, SEED AND MULCH ALL DISTURBED AREAS. EXCESS TOPSOIL SHALL BE SPREAD AND SEEDED ON PHASE 2 AREA, PER THE ENGINEER.
19. INSTALL ALL LANDSCAPING.
20. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL WHEN ALL DISTURBED AREAS ARE STABILIZED.

TEMPORARY TRAFFIC GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND ANY APPLICABLE SAFETY AND DESIGN CODES. ALL TEMPORARY TRAFFIC CONTROL PLANS SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE MUTCD.
2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE, WORKER, AND TRAFFIC SAFETY.
3. CONTRACTOR SHALL KEEP WORK SPACE LENGTHS AS SHORT AS PRACTICAL TO SAFELY COMPLETE WORK ACTIVELY BEING PERFORMED ON EACH DAY.
4. ALL TRAFFIC CONTROL CHANNELIZERS SHALL BE REMOVED FROM THE TRAVEL LANES AT NIGHT AND STEEL STREET PLATES INSTALLED AS REQUIRED TO PROVIDE A FULL ROADWAY WIDTH TO TRAFFIC.
5. CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL AS THE WORK ZONE SPECIALIST (WZS) WHO IS KNOWLEDGEABLE, COMPETENT BY TRAINING AND/OR CERTIFICATION AND EXPERIENCE IN THE PRINCIPLES OF PROPER TEMPORARY TRAFFIC CONTROL IN ACCORDANCE WITH CHAPTER 6 OF THE MUTCD, AT THE PROJECT LEVEL WHO HAS THE PRIMARY RESPONSIBILITY, WITH SUFFICIENT AUTHORITY, FOR IMPLEMENTING THE TEMPORARY TRAFFIC CONTROL PLAN AND OTHER SAFETY AND MOBILITY ASPECTS OF THE PROJECT. CONTRACTOR SHALL SUBMIT PROOF THAT THEIR WZS TRAINING OBTAINED FROM A QUALIFIED PERSON AS DEFINED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
6. CONTRACTOR SHALL MONITOR TRAFFIC FLOW THROUGH THE WORK ZONE AND MAKE ADJUSTMENTS TO THE TRAFFIC CONTROL PLAN, WITH THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION, AS REQUIRED. PROVIDE FLAGGER(S) IF TRAFFIC DOES NOT EFFECTIVELY SELF REGULATE.

CONSTRUCTION NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
3. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL IDENTIFIED PROPERTY CORNERS, LAND SURVEY CORNERS, AND ACCESSORIES. THE CONTRACTOR SHALL CAUSE THE CORNERS AND ACCESSORIES TO BE REFERENCED BY A LICENSED LAND SURVEYOR, AND ANY SUCH CORNER OR ACCESSORIES DISTURBED OR DESTROYED DURING CONSTRUCTION SHALL BE RESET BY THE SURVEYOR AT THE ORIGINAL LOCATION, AND FILE THE RESTORATIONS AND MONUMENT DOCUMENTS AS THE LAW REQUIRES.
4. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEERING SURVEYS AND SERVICES FOR REVIEW AND APPROVAL FOR ALL MATERIALS BEFORE ORDERING.
5. ALL DIMENSIONS ARE TO BACK OF CURB, FACE OF SIDEWALK, OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
6. ALL STRIPING SHALL BE 4" WIDE WHITE LINES, ACCESSIBLE SPACES SHALL BE 4" WIDE BLUE LINES AND ALL STRIPING SHALL BE A MINIMUM OF 2 COATS.
7. CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
8. STANDARD DUTY AND HEAVY DUTY PAVEMENT MAY BE CONCRETE OR ASPHALT UNLESS OTHERWISE NOTED. INTEGRAL CURB MAY BE USED FOR CONCRETE PAVEMENT.
9. CONTRACTOR SHALL NOTIFY ADJACENT PROPERTY OWNERS IN WRITING 30 DAYS PRIOR TO CONSTRUCTION.
10. IF A CONFLICT EXISTS BETWEEN THE CIVIL PLANS AND CIVIL SPECIFICATIONS, THE CIVIL PLANS SHALL GOVERN.

HAZARDOUS SUBSTANCE NOTE

1. SUBSTANCES REGULATED BY FEDERAL LAW UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) OR THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA) WHICH ARE TRANSPORTED, STORED OR USED FOR MAINTENANCE, CLEANING OR REPAIRS SHALL BE MANAGED ACCORDING TO THE PROVISIONS OF RCRA AND CERCLA.
2. ALL PAINTS, SOLVENTS, PETROLEUM PRODUCTS AND PETROLEUM WASTE PRODUCTS (EXCEPT FUELS) AND STORAGE CONTAINERS (SUCH AS DRUMS, CANS OR CARTONS) SHALL BE STORED SUCH THAT THESE MATERIALS ARE NOT EXPOSED TO STORM WATER. SUFFICIENT PRACTICES OF SPILL PREVENTION, CONTROL AND/OR MANAGEMENT SHALL BE PROVIDED TO PREVENT ANY SPILLS OF THESE POLLUTANTS FROM ENTERING A WATER OF THE STATE. ANY CONTAINMENT SYSTEM USED TO IMPLEMENT THIS REQUIREMENT SHALL BE CONSTRUCTED OF MATERIALS COMPATIBLE WITH THE SUBSTANCES CONTAINED AND SHALL ALSO PREVENT THE CONTAMINATION OF GROUNDWATER.
3. THE APPLICANT SHALL NOTIFY BY TELEPHONE AND IN WRITING THE WATER QUALITY DIVISION MC-148, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), POST OFFICE BOX 13087, AUSTIN, TEXAS 78711, 512-239-4671, OF ANY OIL SPILLS OR IF HAZARDOUS SUBSTANCES ARE FOUND DURING THE PROSECUTION OF WORK UNDER THIS PERMIT.

GRADING AND STORM SEWER CONSTRUCTION NOTES

1. ALL STORM SEWER PIPES AND INLETS SHALL MEET HEAVY DUTY TRAFFIC (HS20) LOADING AND BE INSTALLED ACCORDINGLY.
2. CONCRETE STORM SEWER INLETS & JUNCTION BOXES SHALL BE INSTALLED PER CITY OF DRIPPING SPRINGS REQUIREMENTS AND AS DETAILED IN THESE PLANS.
3. ALL HDPE PIPE SHALL BE ADS N-12 ST SOIL TIGHT, SMOOTH INTERIOR PIPE OR APPROVED EQUAL. INSTALLATION SHALL FOLLOW THE "EMBEDMENT OF PLASTIC STORM SEWER PIPE" DETAIL.
4. PVC PIPE MAY BE USED IN LIEU OF HDPE FOR DIAMETERS LESS THAN 15". PVC PIPE SHALL BE SDR 35 OR GREATER, AS REQUIRED BY DEPTH.
5. CONTRACTOR SHALL ADJUST ALL GRATES, MANHOLES, VALVE BOXES, ETC. TO MATCH FINISH GRADES, AS REQUIRED.
6. ALL STRUCTURE CONNECTIONS SHALL BE WATERTIGHT.
7. ALL CONCRETE STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED CONCRETE INVERT FROM INVERT IN TO INVERT OUT.
8. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE FLUSH WITH FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER". TOP OF BOXES SHALL BE SLOPED TO MATCH PAVEMENT GRADE.
9. PIPE LENGTHS ARE GIVEN FROM CENTER OF STRUCTURE.
10. ALL SITES USED FOR IMPORTING OR EXPORTING OF FILL MATERIAL SHALL HAVE AN ACTIVE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) PERMIT TO DISCHARGE, AS REQUIRED.
11. CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS, TREES AND BRUSH, AND OTHER MATERIAL CREATED AS A RESULT OF CONSTRUCTION. MATERIAL SHALL BE DISPOSED OF IN COMPLIANCE WITH ALL APPLICABLE LAWS AND REGULATIONS. BURNING ON SITE SHALL BE ALLOWED BY PERMIT ONLY.
12. CONTRACTOR SHALL REMOVE ALL STUMPS BY EXCAVATING TO INCLUDE REMOVAL OF ASSOCIATED ROOT SYSTEM.
13. CONTRACTOR SHALL NOT ADVANCE TRENCH EXCAVATION BEYOND AMOUNT THAT CAN ACCOMMODATE PIPE INSTALLATION AND BACKFILLING AT THE END OF EACH DAY.
14. ENGINEERED FILL SHOULD BE FREE OF FROZEN SOIL, ORGANICS, RUBBISH, LARGE ROCKS, WOOD, OR OTHER DELETERIOUS MATERIAL. COHESIVE FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 95 PERCENT OF THE "STANDARD" MAXIMUM DRY DENSITY AND BE WITHIN -3 TO +3 PERCENT OF OPTIMUM MOISTURE CONTENT AS DESCRIBED BY ASTM D698. GRANULAR FILLS SHOULD BE UNIFORMLY COMPACTED TO AT LEAST 95 PERCENT OF THE "STANDARD" MAXIMUM DRY DENSITY AND SHOULD BE WITHIN THE RANGE OF -3 TO +3 PERCENT OF OPTIMUM MOISTURE CONTENT. PLACE FILL MATERIAL IN LOOSE LIFTS NOT TO EXCEED 8 INCHES IN THICKNESS.
15. ROCKS AND STONES THAT EXCEED THE THICKNESS OF THE LOOSE LIFT FILL LAYER SHOULD BE REMOVED AND DISPOSED OF OFF THE IMMEDIATE CONSTRUCTION AREA.
16. FILLS PLACED IN AREAS WHERE THE NATURAL SLOPE IS GREATER THAN 5H:1V (HORIZONTAL TO VERTICAL) SHOULD BE BENCHED INTO THE EXISTING GRADE TO REDUCE THE POTENTIAL FOR SLIPPAGE BETWEEN EXISTING SLOPES AND ENGINEERED FILL. BENCHES SHOULD BE LEVEL AND WIDE ENOUGH TO ACCOMMODATE COMPACTION AND EARTH MOVING EQUIPMENT.
17. FILL AND SUBGRADE CONSTRUCTION SHOULD NOT BE STARTED ON FOUNDATION SOIL, PARTIALLY COMPLETED FILL, OR SUBGRADES THAT CONTAIN FROST OR ICE. FILL SHOULD NOT BE CONSTRUCTED USING FROZEN SOIL. FROZEN SOIL SHOULD BE REMOVED PRIOR TO PLACING FILL MATERIAL.
18. AFTER STRIPPING AND GRUBBING OPERATIONS ARE COMPLETED AND PRIOR TO FILL PLACEMENT, AREAS TO BE FILLED SHALL BE PROOF ROLLED USING A LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY SOFT AND UNSUITABLE AREAS. SOFT MATERIAL MAY BE MOISTURE CONDITIONED AND REUSED AS ENGINEERED FILL, UNSUITABLE AND DELETERIOUS MATERIAL SHALL BE REMOVED FROM SITE.
19. ALL FILL SUBGRADE SHALL BE SCARIFIED TO A DEPTH OF 6" AND RECOMPACTED TO AT LEAST 95 PERCENT MAXIMUM DRY DENSITY WITHIN THE RANGE OF -3 TO +3 PERCENT OPTIMUM MOISTURE CONTENT PER STANDARD PROCTOR (ASTM D698).
20. ALL NEW UTILITY TRENCHES SHOULD BE BACKFILLED IN ACCORDANCE WITH APPROPRIATE CONTROLLED ENGINEERED FILL SPECIFICATIONS.
21. FIELD DENSITY TESTS SHOULD BE CONDUCTED IN ACCORDANCE WITH ASTM D6938 (NUCLEAR METHODS) OR ASTM D 1556 (SAND CONE METHOD). FIELD DENSITY TESTS SHOULD BE PERFORMED AT THE RATE OF ONE TEST PER 2,500 SQUARE FEET PER LIFT WITHIN THE BUILDING AND 3,000 SQUARE FEET PER LIFT BENEATH PAVEMENTS, SIDEWALKS, AND OTHER POTENTIAL STRUCTURAL AREAS WITH A MINIMUM OF 3 TESTS PER LIFT AND ONE TEST PER 100 LINEAL FEET PER LIFT FOR FOUNDATION, TRENCH AND WALL BACKFILL.
22. PARKING AREAS SHALL BE PROOF-ROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK TO IDENTIFY ANY SOFT OR UNSUITABLE AREAS, PRIOR TO BASE ROCK PLACEMENT. THE PROOF-ROLL SHALL BE OBSERVED BY A GEOTECHNICAL ENGINEER. AREAS IDENTIFIED AS UNSUITABLE SHALL BE OVER EXCAVATED AND RECONSTRUCTED WITH ENGINEERED FILL.
23. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS FOR ALL LANDSCAPED AND PAVED AREAS.
24. CONTRACTOR SHALL PLACE STOCKPILED TOPSOIL FROM SITE IN ALL LANDSCAPE AREAS TO A MINIMUM DEPTH OF OF 4", UNLESS NOTED OTHERWISE IN PROJECT SPECIFICATIONS. ANY EXCESS TOPSOIL SHALL BE DISPOSED OF ONSITE PER OWNER.
25. ALL SOIL CLASSIFIED AS CH BY THE UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D2487) SHALL BE REMOVED FROM WITHIN 8' OF FINISH SUBGRADE OF THE BUILDING, OR WHEN CL SOILS OR LIMESTONE IS ENCOUNTERED.
26. PAVEMENT, SIDEWALK, AND THE PAVILION SUBGRADES SHALL BE PLACED DIRECTLY ON CLAY SUBGRADE.
27. THE BUILDING SUBGRADES SHALL CONSIST OF THE FOLLOWING:
    a. 2 FEET OF SELECT FILL EXTENDED TO THE EDGE OF THE BUILDING PAD AND CONSISTING OF
    i. NON-EXPANSIVE SOILS WITH A LIQUID LIMIT OF 35 OR LESS AND A PLASTIC INDEX BETWEEN 4 AND 15.
    ii. COMPACTED TO 95% MDD WITH A MOISTURE CONTENT BETWEEN -3 AND 3 OF OMC.
    iii. ATTERBURG LIMIT TESTS SHALL BE TAKEN EVERY 5,000 SF PER LIFT.
    b. 10 FEET OF MOISTURE CONDITIONED SOIL BELOW SELECT FILL. EXTENDING AT LEAST 5 FEET BEYOND THE BUILDING FOOTPRINT MOISTURE CONDITIONED TO 5% ABOVE OMC.
    i. THESE SOILS MUST BE PLACED IN 8-INCH LOOSE LIFTS AND COMPACTED TO 93 TO 97 PERCENT MDD.
28. SEE THE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.

RETAINING WALL NOTES

1. ALL RETAINING WALLS SHALL BE REINFORCED CONCRETE DESIGNED BY OTHERS. DESIGN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. ALL REQUIRED WALL PLAN APPROVALS/PERMITS FROM GOVERNING AUTHORITIES SHALL BE OBTAINED BY THE CONTRACTOR.
3. WALL PLANS SHALL BE APPROVED BY THE OWNER PRIOR TO SUBMITTING TO ANY REGULATING AUTHORITIES OR STARTING WALL CONSTRUCTION.
4. ALL WALL PLANS, PROFILES, CROSS-SECTIONS, AND CALCULATIONS REQUIRING REGULATORY APPROVAL SHALL BE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TEXAS.
5. PRIOR TO STARTING WALL CONSTRUCTION, CONTRACTOR SHALL ARRANGE FOR WALL CONSTRUCTION INSPECTION AS REQUIRED IN THE NOTE BELOW.
6. FOLLOWING WALL CONSTRUCTION THE CONTRACTOR SHALL SUBMIT A "CERTIFICATION OF CONFORMANCE" INDICATING THAT THE BACKFILL AND FOUNDATION MATERIAL USED MET THE REQUIREMENTS OF THE ORIGINAL DESIGN. THIS CERTIFICATE MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE THE STATE OF TEXAS AND, AT A MINIMUM, INDICATE THE WALL WAS INSPECTED AT THE FOLLOWING SPECIFIC MILESTONES:

    FOR CONCRETE WALLS:
    a. FOOTINGS PRIOR TO POURING WITH REBAR IN PLACE
    b. WALLS PRIOR TO POURING WITH REBAR IN PLACE
    c. AT THE BEGINNING OF THE BACKFILL OPERATION
    d. FOLLOWING COMPLETION OF THE WALL
7. RETAINING WALLS IN EXCESS OF THIRTY (30) INCHES ARE REQUIRED TO HAVE A FENCE OR GUARDRAIL PROTECTING THE PUBLIC FROM INJURY. THE FENCE OR GUARDRAIL MUST BE A MINIMUM OF THIRTY SIX (36) INCHES IN HEIGHT AND THE VERTICAL BALUSTERS AND BOTTOM RAIL MUST BE SITUATED SO THAT A FOUR (4) INCH SPHERE CANNOT PASS BETWEEN ANY PORTIONS OF THE FENCE. HORIZONTAL BALUSTERS WILL NOT BE PERMITTED.

TCEQ PERMIT

T.P.D.E.S. GENERAL PERMIT NO. _____

STORM WATER POLLUTION PREVENTION PLAN NOTES

1. CONTRACTOR SHALL FOLLOW STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL T.P.D.E.S. PERMIT FOR GENERAL CONSTRUCTION. A COPY OF THIS PLAN AND PERMIT SHALL REMAIN ON SITE THROUGHOUT CONSTRUCTION.
2. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED AND APPROVAL HAS BEEN RECEIVED FROM ALL GOVERNING AUTHORITIES. CONTRACTOR SHALL UTILIZE TOPSOIL FROM SITE IN LANDSCAPED AREAS WITH ANY EXCESS BEING REMOVED FROM SITE.
3. IMMEDIATELY UPON COMPLETION OF FINISH GRADING IN EACH AREA, ALL LANDSCAPING AREAS SHALL BE SEEDED AND MULCHED.
4. SHOULD CONSTRUCTION STOP FOR LONGER THAN 14 DAYS, THE SITE SHALL BE SEEDED AS SPECIFIED IN THE SWPPP.
5. LAND DISTURBANCE SITES SHOULD BE INSPECTED ON A REGULAR SCHEDULE AND WITHIN A REASONABLE TIME PERIOD (NOT TO EXCEED 48 HOURS) FOLLOWING HEAVY RAINS (RESULTING IN STORM WATER RUNOFF). REGULARLY SCHEDULED INSPECTION SHALL BE AT A MINIMUM OF ONCE PER WEEK. ANY DEFICIENCIES SHALL BE NOTED IN A WEEKLY REPORT OF THE INSPECTION AND CORRECTED WITHIN SEVEN CALENDAR DAYS OF THE REPORT.
6. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
7. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
8. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
9. CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
10. ALL SLOPES GREATER THAN 3:1 SHALL BE REINFORCED BY NORTH AMERICAN GREEN P300 PERMANENT TURF REINFORCEMENT MAT OR APPROVED EQUAL.
11. CONTRACTOR SHALL REMOVE ALL TRASH, DEBRIS, TREES & BRUSH AND OTHER MATERIAL CREATED AS A RESULT OF THE CONSTRUCTION WORK AND THE SITE SHALL BE RETURNED TO ITS ORIGINAL CONDITION.
12. ALL PERIMETER LANDSCAPED AREAS SHALL BE GRASS COVERED.
13. IN ORDER TO TERMINATE A STATE OPERATING PERMIT, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REQUIRES THAT THE PERMITTEE REMOVE THE SITE NOTICE AND WRITE A LETTER TO THE LOCAL AUTHORITY REQUESTING TERMINATION OF THE LOCAL PERMIT. A PERMIT IS ELIGIBLE FOR TERMINATION WHEN EITHER PERENNIAL VEGETATION, PAVEMENT, BUILDINGS, OR STRUCTURES USING PERMANENT MATERIALS COVER ALL AREAS THAT HAVE BEEN DISTURBED. VEGETATIVE COVER SHOULD BE AT LEAST 70% OF FULLY ESTABLISHED PLANT DENSITY OVER 100% OF THE DISTURBED AREA.
14. THE SITE CONTRACTOR SHALL INCLUDE MAINTENANCE OF ALL BMP'S AS PART OF THEIR CONTRACT AND SHALL BE RESPONSIBLE FOR THE PROJECT UNTIL THE T.P.D.E.S. PERMIT IS TERMINATED.

SUBSTITUTION AND ALTERNATIVE MATERIALS NOTE

1. THE FOLLOWING MATERIALS WILL BE CONSIDERED ACCEPTABLE AS ALTERNATIVE/SUBSTITUTE MATERIAL.
    a. STANDARD DUTY CONCRETE CAN BE SUBSTITUTED WITH STANDARD DUTY ASPHALT IN PARKING STALLS AND HEAVY-DUTY ASPHALT IN DRIVE AISLES. THE DUMPSTER PAD AND DRIVEWAY APPROACH SHALL BE CONCRETE. ACCESSIBLE PARKING STALLS SHALL REMAIN STANDARD DUTY CONCRETE.
    b. WATER MAIN, SERVICE FITTINGS, AND PIPES MAY BE SUBSTITUTED WITH EQUIVALENT ALTERNATIVE MATERIAL. ACCEPTABLE MATERIALS, SELECTED AS APPROPRIATE FOR PIPE SIZE, INCLUDE:
        i 280 PSI PRESSURE RATED, GASKETED BELL AND JOINT PVC
        ii DUCTILE IRON (BAGGED)
        iii SMALL DIAMETER TUBING: PEX-A, PEX-B, SDR9 PVC
    c. STORM: HDPE CAN BE SUBSTITUTED WITH RCP AND CMP (ALUMINIZED/SMOOTH WALL). CMP MUST BE INSTALLED UNDER MANUFACTURERS OBSERVATION. RCP AND PERFORATED HDPE MAY NOT BE SUBSTITUTED.
    d. ROUND STORM STRUCTURES MAY BE USED IN LIEU OF RECTANGULAR STRUCTURES AT THE CONTRACTOR'S DISCRETION.

ALL SUBSTITUTIONS MUST BE NOTED IN THE BID PROVIDING A DEDUCTED ALTERNATIVE VALUE VERSUS THE AS DESIGNATED MATERIALS. ALL SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER AND OWNER PRIOR TO USE.

UTILITY CONSTRUCTION NOTES

1. LOCATION OF SITE UTILITIES SHALL BE VERIFIED BY CONTRACTOR AND THE PROPER UTILITY COMPANY PROVIDING SERVICE PRIOR TO THE START OF CONSTRUCTION.
2. EXISTING UTILITIES SHALL BE VERIFIED IN FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
3. UTILITY TIE-INS ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO MEP PLANS FOR EXACT TIE-IN OF ALL UTILITIES.
4. SITE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH CITY OF WACO REQUIREMENTS WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
5. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS, BACKFILL OF TRENCHES THROUGH ANY IMPROVED AREAS, SUCH AS STREET, DRIVES OR PARKING LOTS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY (ASTM D-698).
6. PROPOSED ELECTRIC, TELEPHONE, AND TELEVISION LINES ARE SHOWN FOR COORDINATION PURPOSES ONLY. SYSTEM DESIGN PREPARED BY EACH RESPECTIVE AGENCY. REFER TO MEP PLANS FOR CONDUIT REQUIREMENTS.
7. ALL UNDERGROUND UTILITY CONDUITS SHALL BE PLACED 48" BELOW FINISH GRADE UNLESS NOTED OTHERWISE.
8. ALL UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
9. TOPS OF EXISTING HANDHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED FINISHED ELEVATIONS.
10. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 3000 P.S.I.
11. ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODE AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
12. REFER TO ARCHITECTURAL PLANS FOR SITE LIGHTING ELECTRICAL PLAN.
13. PVC CONDUIT SHALL BE SCHEDULE 40 PVC WITH LONG SWEEPS ONLY (36" MINIMUM RADIUS) AND CONTAIN PULLTAPE, UNLESS OTHERWISE NOTED.
14. SITE CONTRACTOR SHALL PROVIDE AND INSTALL THE CONCRETE PAD FOR THE TRANSFORMER PER THE ELECTRIC COMPANY SPECIFICATIONS.
15. SITE CONTRACTOR SHALL CONTACT ONCOR ELECTRIC DELIVERY TO COORDINATE INSTALLATION OF NEW TRANSFORMERS.
16. A MINIMUM 18" OF VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN THE OUTSIDE OF THE ELECTRIC CONDUIT AND THE OUTSIDE OF THE WATER, STORM SEWER, SANITARY SEWER, OR GAS PIPE AT ALL CROSSINGS.
17. STUBS FOR FUTURE UTILITIES SHOULD BE CLEARLY MARKED AND ES&S CONTACTED FOR DATA COLLECTION.

ALLOWANCE NOTE

THE CONTRACTOR SHALL INCLUDE AS PART OF THE BASE BID AN ALLOWANCE FOR THE REMOVAL OF ROCK AND IMPORT OF SOILS INCLUDING A UNIT COST TIMES THE QUANITY BELOW. FINAL PAYMENT WILL BE BASED ON THIS UNIT PRICE TIMES THE FIELD MEASURED QUANTITY.

IMPORT:	4,800 CUBIC YARDS
ROCK:	750 CUBIC YARDS
TRENCH ROCK:	60 CUBIC YARDS

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3975 E. US 290
HAYS COUNTY, TEXAS

3

1/11/2024

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

Revised
1 SEPTEMBER 20, 2023
2 JANUARY 11, 2024

Design: JH Drawn: SK

GENERAL NOTES

Sheet
C0.02

ES&S PROJECT NO. 15964

Texas Commission on Environmental Quality
Contributing Zone Plan
General Construction Notes

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

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

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

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

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

1. This Organized Sewage Collection System (SCS) must be constructed in accordance with 30 Texas Administrative Code (TAC) §213.5(c), the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules and any local government standard specifications.
2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the SCS plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.
3. A written notice of construction must be submitted to the presiding TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.
4. Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.
5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. These controls must remain in place until the disturbed areas have been permanently stabilized.
6. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the TCEQ of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing and the applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.
7. Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of 6 inches.
8. Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.
9. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.

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

   It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.
10. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).
11. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe manufacturer: _____.

    If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: _____.

    Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.
12. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.
    If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet __ of __. (For potential future laterals).

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

Equation C.3 $$T = \frac{0.085 \times D \times K}{Q}$$

Where:

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

(C) Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table C.3:

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

(D) An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.
(E) If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
(F) Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.
(G) A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.

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

(b) If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:
(1) For a collection pipe with inside diameter less than 27 inches, deflection measurement requires a rigid mandrel.
(A) *Mandrel Sizing.*
(i) A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.
(ii) If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID controlled pipe.
(iii) All dimensions must meet the appropriate standard.
(B) *Mandrel Design.*
(i) A rigid mandrel must be constructed of a metal or a rigid plastic material that can withstand 200 psi without being deformed.
(ii) A mandrel must have nine or more odd number of runners or legs.
(iii) A barrel section length must equal at least 75% of the inside diameter of a pipe.
(iv) Each size mandrel must use a separate proving ring.
(C) *Method Options.*
(i) An adjustable or flexible mandrel is prohibited.
(ii) A test may not use television inspection as a substitute for a deflection test.
(iii) If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis.

(2) For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection.
(3) A deflection test method must be accurate to within plus or minus 0.2% deflection.
(4) An owner shall not conduct a deflection test until at least 30 days after the final backfill.
(5) Gravity collection system pipe deflection must not exceed five percent (5%).
(6) If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least 30 days.

All manholes must be tested to meet or exceed the requirements of 30 TAC §217.58.
(a) All manholes must pass a leakage test.
(b) An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.
(1) Hydrostatic Testing.
(A) The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour.
(B) To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water, and maintain the test for at least one hour.
(C) A test for concrete manholes may use a 24-hour wetting period before testing to allow saturation of the concrete.
(2) Vacuum Testing.
(A) To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole.
(B) No grout must be placed in horizontal joints before testing.
(C) Stub-outs, manhole boots, and pipe plugs must be secured to prevent movement while a vacuum is drawn.
(D) An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole.
(E) A test head must be placed at the inside of the top of a cone section, and the seal inflated in accordance with the manufacturer's recommendations.
(F) There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test.
(G) A test does not begin until after the vacuum pump is off.
(H) A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.

All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system.

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

TCEQ WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES

1. This water distribution system must be constructed in accordance with the current Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D. When conflicts are noted with local standards, the more stringent requirement shall be applied. At a minimum, construction for public water systems must always meet TCEQ's "Rules and Regulations for Public Water Systems."
2. All newly installed pipes and related products must conform to American National Standards Institute (ANSI)/NSF International Standard 61 and must be certified by an organization accredited by ANSI [§290.44(a)(1)].
3. Plastic pipe for use in public water systems must bear the NSF International Seal of Approval (NSF-pw) and have an ASTM design pressure rating of at least 150 psi or a standard dimension ratio of 26 or less [§290.44(a)(2)].
4. No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply [§290.44(a)(3)].
5. All water line crossings of wastewater mains shall be perpendicular [§290.44(e)(4)(B)].
6. Water transmission and distribution lines shall be installed in accordance with the manufacturer's instructions. However, the top of the water line must be located below the frost line and in no case shall the top of the water line be less than 24 inches below ground surface [§290.44(a)(4)].
7. The maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures is 0.25 percent [§290.44(b)].
8. The contractor shall install appropriate air release devices with vent openings to the atmosphere covered with 16-mesh or finer, corrosion resistant screening material or an acceptable equivalent [§290.44(d)(1)].
9. The contractor shall not place the pipe in water or where it can be flooded with water or sewage during its storage or installation [§290.44(f)(1)].
10. When waterlines are laid under any flowing or intermittent stream or semi-permanent body of water the waterline shall be installed in a separate watertight pipe encasement. Valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested [§290.44(f)(2)].
11. Pursuant to 30 TAC §290.44(a)(5), the hydrostatic leakage rate shall not exceed the amount allowed or recommended by the most current AWWA formulas for PVC pipe, cast iron and ductile iron pipe. Include the formulas in the notes on the plans.
    - The hydrostatic leakage rate for polyvinyl chloride (PVC) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-605 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

      $$Q = \frac{LD\sqrt{P}}{148{,}000}$$

      Where:
      - Q = the quantity of makeup water in gallons per hour,
      - L = the length of the pipe section being tested, in feet,
      - D = the nominal diameter of the pipe in inches, and
      - P = the average test pressure during the hydrostatic test in pounds per square inch (psi).
    - The hydrostatic leakage rate for ductile iron (DI) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-600 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

      $$L = \frac{SD\sqrt{P}}{148{,}000}$$

      Where:
      - L = the quantity of makeup water in gallons per hour,
      - S = the length of the pipe section being tested, in feet,
      - D = the nominal diameter of the pipe in inches, and
      - P = the average test pressure during the hydrostatic test in pounds per square inch (psi).
12. The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet §290.44(e)(1)-(4).
13. The separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant [§290.44(e)(5)].
14. Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater line, wastewater lateral, or wastewater service line regardless of construction [§290.44(e)(6)].
15. Suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line [§290.44(e)(7)].
16. Waterlines shall not be installed closer than ten feet to septic tank drainfields [§290.44(e)(8)].
17. The contractor shall disinfect the new waterlines in accordance with AWWA Standard C-651-14 or most recent, then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer [§290.44(f)(3)].
18. Dechlorination of disinfecting water shall be in strict accordance with current AWWA Standard C655-09 or most recent.

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DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/19/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
LICENSED PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JANUARY 19, 2024

Revised

Design: JH Drawn: SK

TCEQ GENERAL NOTES

Sheet
4 C0.03

ES&S PROJECT NO. 15964

P:\GENERAL PROJECTS\15964-10FTD--DRIPPINGSPRINGS\CAD\15964_COVER & DETAILS.DWG - 1/19/2024

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 25
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS

RIGHT OF WAY LINE

U.S. HIGHWAY 290
(VARIABLE WIDTH R.O.W.)
ASPHALT PAVEMENT

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

500 GALLON PUMP TANK

CLEANOUT

30' X 70' ACCESS EASEMENT (P.P.) (ITEM 11(H)) (STRAIGHT-TWO EASEMENT ESTATE)

FOUND 1/2" IRON ROD OAK HOT LEGGE

(PLAT=S 74°57'28" W 15.00')
N 74°57'28" E 15.00'

15.0'

15.0'

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

10' FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
3,765.1 SQ. FT.

ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
4,065.8 SQ. FT.

ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
5,433.1 SQ. FT.

ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
5,352.3 SQ. FT.

ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
6,257.3 SQ. FT.

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED.

TRACT ONE
LOT 17-B
114,148 SQ. FT.
(2.620 ACRES)

LOT 18
SUNSET CANYON
SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

15' WATER EASEMENT (P.P.)

C1

HIDDEN HILLS DRIVE
(60' PUBLIC RIGHT-OF-WAY)
(NO ASPHALT PAVEMENT A/O)

LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

50' B.L. (P.P.)

S 74°50'30" W 219.43'

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

GRAVEL DRIVE
GRAVEL AREA
BOLLARD (TYPICAL)
SIGN
GATE
WELL AREA
500 GALLON PUMP TANK
750 GALLON SEPTIC TANK
PUMP HOUSE
WATER WELL
3-WAY VALVE
LOW PRESSURE DOSING BED DISTRIBUTION PIPES
GUY WIRE (TYP.)
BOTTOM OF BANK
TOP OF BANK
EDGE OF PAVEMENT
WIRE W/ BOLLOR
STONE
ASPHALT AREA
TRAIL TO MOUNT VERNON
GAS LINE MARKER
GAS LINE MARKER (TYP.)
FOUND 1/2" IRON ROD (BRS)
SET 1/2" IRON ROD W/ CAP "ESS"
FOUND 1/2" IRON ROD (BRS)
SET 1/2" IRON ROD W/ CAP "ESS"
FOUND 1/2" IRON ROD OAK HOT LEGGE
SET 1/2" IRON ROD W/ CAP "ESS"
FOUND 1/2" IRON ROD (BRS)
SET 1/2" IRON ROD W/ CAP "ESS"
FOUND 1/2" IRON ROD (BRS)
SET 1/2" IRON ROD W/ CAP "ESS"

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N

0 1"
SCALE: 1" = 30'

3 KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
SEPTEMBER 20, 2023

Revised
3 JANUARY 11, 2024

Design: MAK Drawn: SK

EXISTING CONDITIONS PLAN

Sheet
C1.01

ES&S PROJECT NO. 15964

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-10EFD--DRIPPINGSPRINGS\CAD\15964_SITE PLAN.DWG 1/12/2024

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

LOT 18
SUNSET CANYON
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(3969 HIGHWAY 290 AVG LLC)

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

S 74°50'33" W 2[illegible].43'

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

1 LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

LOT 392
1 SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

RAZE
ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
3,765.1 SQ. FT.

RAZE
ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
4,065.8 SQ. FT.

RAZE
ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
5,433.1 SQ. FT.

RAZE
ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
5,352.3 SQ. FT.

RAZE
ONE STORY CONCRETE BUILDING
HEIGHT = 11.4'
6,257.3 SQ. FT.

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

10' FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

15' WATER EASEMENT (P.P.)

50' ELL (P.P.)

30' X 70' JOINT USE ACCESS EASEMENT (P.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

PROTECT

PROTECT FENCE ALONG HWY 290

PROTECT UP

REMOVE

REMOVE GRAVEL

REMOVE FENCE

REMOVE FENCE & WALL
CHAIN LINK FENCE ON CONCRETE WALL

REMOVE BUILDING (typical)

REMOVE GRAVEL AREA

REMOVE GRAVEL DRIVE

REMOVE PUMP HOUSE

REMOVE WATER TANK

REMOVE LOW PRESSURE DOSING BED DISTRIBUTION PIPES

REMOVE 3-WAY VALVE

REMOVE ACCESS

REMOVE GUY WIRE (typ.)

PLUG WELL PER TCEQ REQUIREMENTS 4

500 GALLON PUMP TANK

750 GALLON SEPTIC TANK

ABANDONED SANITARY SEWER

CLEANOUT

SIGN

GATE

MAIL BOX

METERED END SECTION 24" RCP INV= 1213

METERED END SECTION 24" RCP INV= 1214

24" RCP INV=1213.48

24" CMP INV=1213.73

24" CMP

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

FOUND 1/2" IRON ROD (MRD)

TP1

TP2

C1

BOTTOM OF BANK

TOP OF BANK

EDGE OF PAVEMENT

DRIVE

SHED

SHRUBS

GRAVEL DRIVE

DEMOLITION NOTES:
1. PRIOR TO GRADING, THE CONTRACTOR SHALL PLUG THE EXISTING WELL PER TCEQ REQUIREMENTS.
2. PLUGGING REPORT SHALL BE SUBMITTED TO HAYES COUNTY PRIOR TO PROCEEDING WITH GRADING.
3. EXISTING TANKS SHALL BE REMOVED PER 30 TAC 285.36.

C:\USERS\MEL\ENGINEERING SURVEYS & SERVICES\PROJECTS - GENERAL PROJECTS\15964-LORD-DRIPPINGSPRINGS\CAD\15964 SITE PLAN.DWG 1/19/2024 2:47:11 PM MEL

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Texas Registered Engineering Firm #17700

N

0 1"
SCALE: 1" = 20'

3 KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

DRIPPING SPRINGS PROPERTY

3975 E. US 290
HAYS COUNTY, TEXAS

1/19/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
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Date
JUNE 9, 2023

Revised
1 SEPTEMBER 20, 2023
CITY COMMENTS
3 JANUARY 11, 2024
4 JANUARY 19, 2024

Design: MAK Drawn: SK

DEMOLITION PLAN

Sheet
1 C2.01

ES&S PROJECT NO. 15964

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
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C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

LOT 18
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SECTION 1-C
VOLUME 3, PAGE 49
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(3969 HIGHWAY 290 AVG LLC)

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N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
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S 15°13'11" E 395.36'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

MAIL BOX

GRAVEL DRIVE

CONCRETE PAVEMENT (1)

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

WALL WITH FENCE (SEE DETAIL)

10' FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

FIRE LANE

PERVIOUS PAVEMENT

STANDARD DUTY ASPHALT

STANDARD DUTY ASPHALT WITH CONCRETE CURB & GUTTER

END CURB & GUTTER

BOLLARDS

1" CRUSHED STONE SURFACE

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

8' CONCRETE SIDEWALK (1)

6' CONCRETE SIDEWALK (2)

HD CONCRETE OVERHEAD DOOR

WHEEL STOP (TYP) (1)

BIORETENTION & DETENTION BASIN

15' WATER EASEMENT (P.P.)

3' CURB CUT (SEE DETAIL)

CONCRETE DRIVEWAY

5' CONCRETE SIDEWALK (1)

HIDDEN HILLS DRIVE
(60' RIGHT-OF-WAY PER PLAT)
ASPHALT PAVEMENT

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

(1) LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

(1) LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

FOUND 1/2" IRON ROD (MRD)

FOUND 1/2" IRON ROD NO CAP

50' B.L. (P.P.)

TOP OF BANK

BOTTOM OF BANK

EDGE OF PAVEMENT

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Texas Registered Engineering Firm #17700

N

0 1"
SCALE: 1" = 20'

(3) KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

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Date
JUNE 9, 2023

Revised
(1) SEPTEMBER 20, 2023
CITY COMMENTS
(3) JANUARY 11, 2024

Design: MAK Drawn: SK

SITE PLAN

Sheet
(1)C3.01

ES&S PROJECT NO. 15964

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-10FED-DRIPPINGSPRINGS\CAD\15964_SITE PLAN.DWG 1/12/2024

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SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE
UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

LOT 392
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(PLAT=S 15°13'01" E 395.45')
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5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

HIDDEN HILLS DRIVE
(60' RIGHT-OF-WAY PER PLAT)
ASPHALT PAVEMENT

BIORETENTION & DETENTION BASIN

15' WATER EASEMENT (P.P.)

50' B.L. (P.P.)

BOLLARDS

FOUND 1/2" IRON ROD (MRD)

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

MAIL BOX

GRAVEL DRIVE

EDGE OF PAVEMENT

TOP OF BANK

BOTTOM OF BANK

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N

0 1"
SCALE: 1" = 20'

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/19/2024

STATE OF TEXAS
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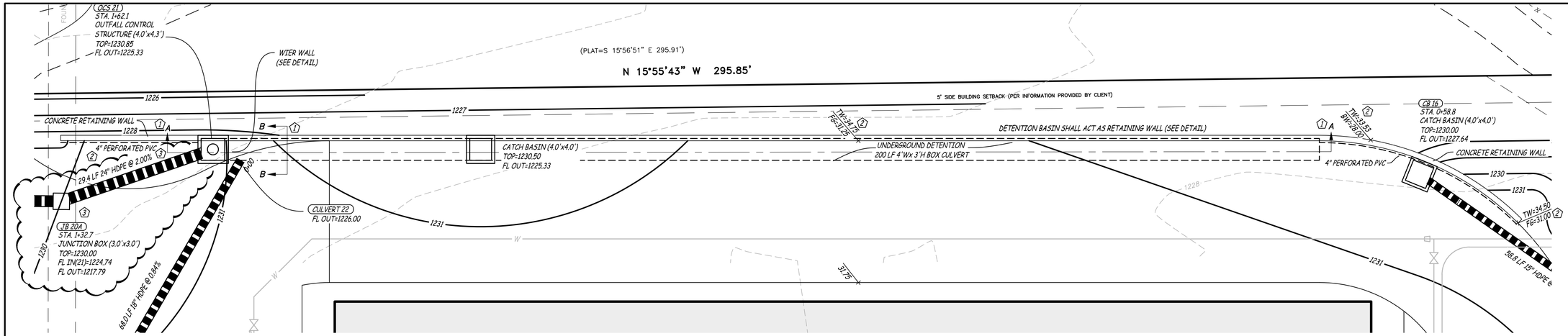
Design: MAK Drawn: SK

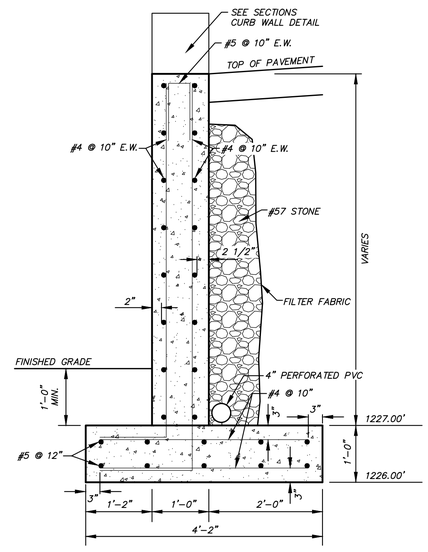
GRADING & DRAINAGE PLAN

Sheet
1C4.01

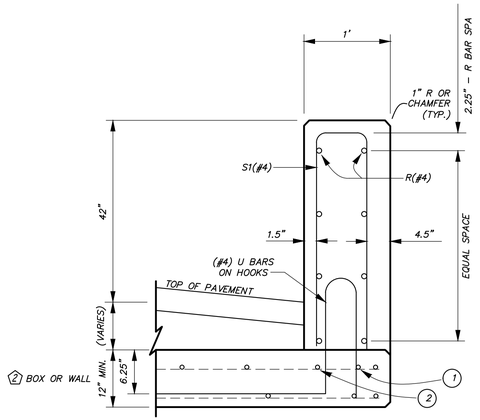
ES&S PROJECT NO. 15964

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-10FED--DRIPPINGSPRINGS\CAD\15964_SITE PLAN.DWG 1/19/2024



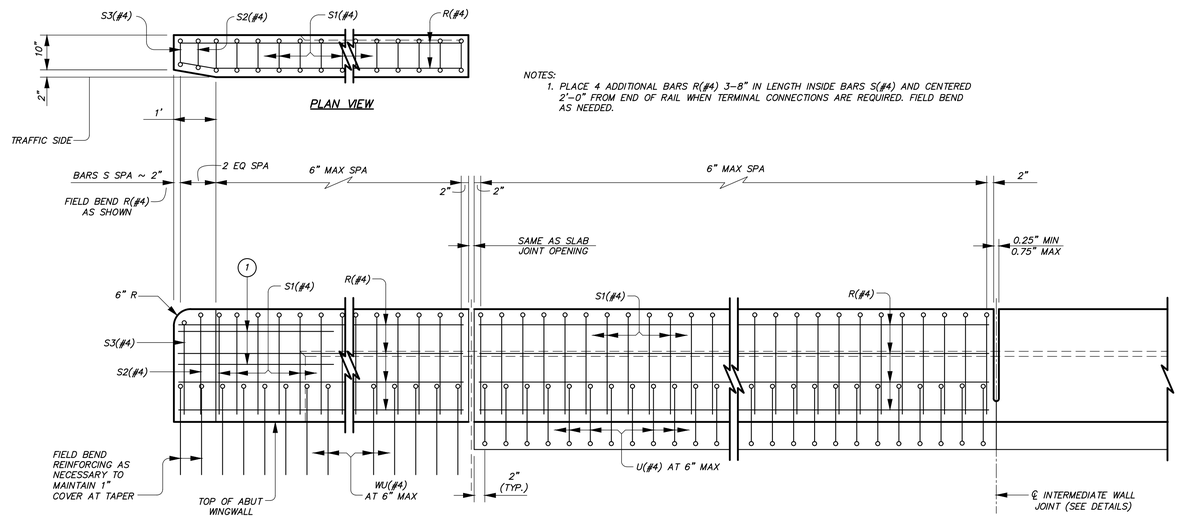


② CONCRETE RETAINING WALL DETAIL
NOT TO SCALE



NOTES:
1. AS AN AID IN SUPPORTING REINFORCEMENT, ADDITIONAL LONGITUDINAL BARS MAY BE USED IN THE SLAB WITH THE APPROVAL OF THE ENGINEER.
2. TOP LONGITUDINAL SLAB BAR MAY BE ADJUSTED LATERALLY 3" PLUS OR MINUS TO TIE REINFORCING.

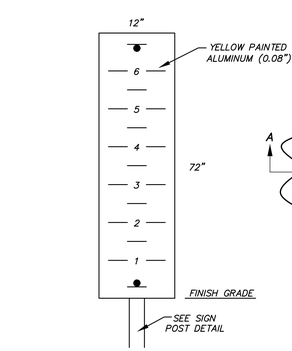
① SECTIONS CURB WALL
NOT TO SCALE



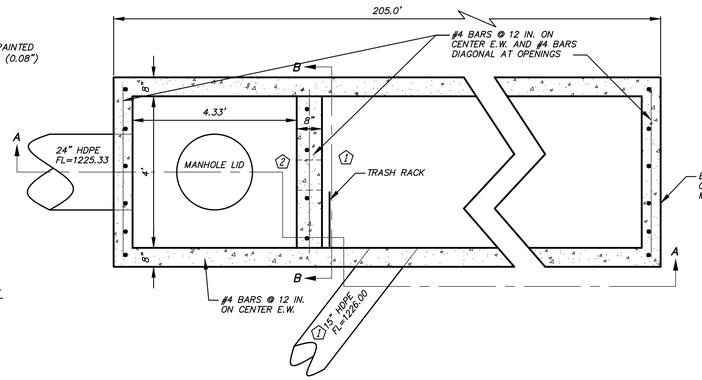
NOTES:
1. PLACE 4 ADDITIONAL BARS R(#4) 3'-8" IN LENGTH INSIDE BARS S(#4) AND CENTERED 2'-0" FROM END OF RAIL WHEN TERMINAL CONNECTIONS ARE REQUIRED. FIELD BEND AS NEEDED.

AT ABUT WINGWALL | AT BENTS WITH SLAB EXP JOINTS | AT SLAB | AT BENTS WITHOUT SLAB EXP JOINTS

① ELEVATION CURB WALL
NOT TO SCALE

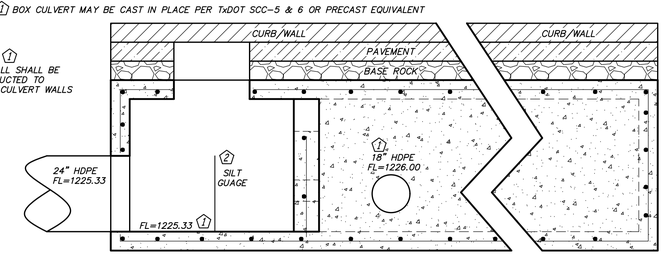


② SILT GAUGE DETAIL
NOT TO SCALE



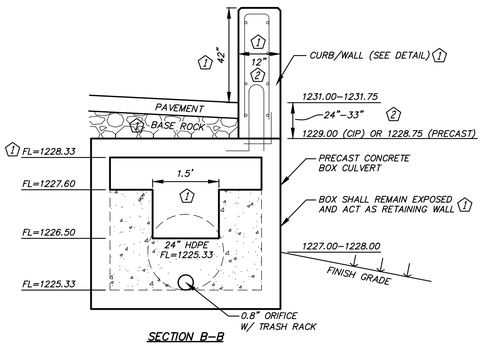
PLAN VIEW

① BOX CULVERT MAY BE CAST IN PLACE PER TxDOT SCC-5 & 6 OR PRECAST EQUIVALENT



SECTION A–A

OUTFALL CONTROL STRUCTURE 21 (OCS 21)
NOT TO SCALE



SECTION B–B

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Texas Registered Engineering Firm #11700

N

0 1"
SCALE: 1" = 10'

3 KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

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Design: MAK Drawn: SK

DETENTION BASIN PLAN

Sheet
①C4.02

ES&S PROJECT NO. 15964

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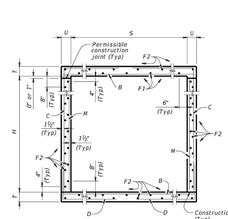
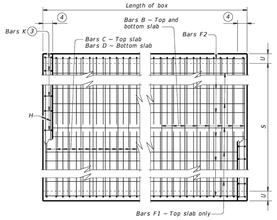
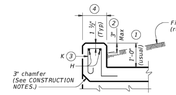
DATE:
FILE:



TYPICAL SECTION



PLAN OF REINF STEEL



SECTION THRU CURB

(1) 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 1'-0", refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CH) standard sheet. Refer to the Rail Anchorage Curb (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.

(2) For vehicle safety, the following requirements must be met:
- For structures without bridge rail, construct curbs no more than 3" above finished grade.
- For structures with bridge rail, construct curbs flush with finished grade.

Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

(3) For curbs less than 1'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, Bars K may be omitted.

(4) 1'-0" typical. 2'-3" when the Rail Anchorage Curb (RAC) standard sheet is referred to elsewhere in the plans.

The Contractor may replace Bars B, C, D, E, F1, F2, M, Y, and/or Z with deformed welded wire reinforcement (WWR) meeting the requirements of ASTM A1064. The area of required reinforcement may be reduced by the ratio of 60 ksi / 70 ksi. Spacing of WWR is limited to 4" Min and 18" Max. When required, provide lap splices in the WWR of the same length required for the equivalent bar size, rounded up for wire sizes between conventional bar sizes. The lap length required for WWR is never less than the lap length required for uncoated #4 bars.

Example conversion: Replacing No. 6 Gr 60 at 6" Spacing with WWR.
Required WWR = (0.44 sq. in. per 0.5 ft.) x (60 ksi / 70 ksi) = 0.755 sq. in. per ft.
If D30.6 wire is used to meet the 0.755 sq. in. per ft. requirement in this example, the required spacing = (0.306 sq. in.) / (0.755 sq. in. per ft.) x (12 in. per ft.) = 4.86". Max spacing. Required lap length for the provided D30.6 wire is 2'-1" (the same minimum lap length required for uncoated #5 bars, as listed under MATERIAL NOTES).

CONSTRUCTION NOTES:
Do not use permanent forms.
Chamfer the bottom edge of the top slab 3" at the entrance.
Optionally, raise construction joints shown at the flow line by a maximum of 6". If this option is taken, Bars M may be cut off or raised, Bars C and D may be reversed.

MATERIAL NOTES:
Provide Grade 60 reinforcing steel.
Provide galvanized reinforcing steel if required elsewhere in the plans.
Provide Class C concrete (f'c = 3,600 psi) for culvert barrel and curb, with the following exceptions: provide Class S concrete (f'c = 4,000 psi) for top slabs of:
- culverts with overlay,
- culverts with 1-to-2 course surface treatment, or
- culverts with the top slab as the final riding surface.

Provide Class H concrete where required, as follows:
- Uncoated or galvanized – #4 = 1'-0" Min
- Uncoated or galvanized – #5 = 2'-1" Min

GENERAL NOTES:
Designed according to AASHTO LRFD Bridge Design Specifications for the range of fill heights shown.
See the Single Box Culverts Cast-In-Place Miscellaneous Detail (SCC-MD) standard sheet for details pertaining to skewed ends, angle sections, and lengthening.

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bar dimensions shown are out-to-out of bar.

BARS C | BARS D | BARS K (#4) (Spa = 1'-0" Max) (Length = 4'-2")

HL93 LOADING SHEET 1 OF 2

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS CAST-IN-PLACE
0' TO 30' FILL

SCC-3 & 4

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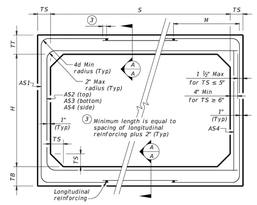
FILE:

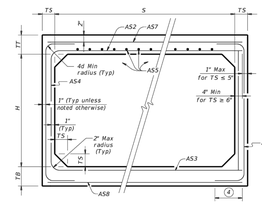
BOX DATA

SECTION DIMENSIONS								REINFORCING (sq. in. / ft.) (2)						(1) Lift Weight
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)	Fill Height (ft.)	M (in.)	AS1	AS2	AS3	AS4	AS5	AS7	AS8	(tons)
4	2	7.5	6	5	< 2	-	0.18	0.27	0.15	0.12	0.18	0.18	0.14	4.5
4	2	5	5	5	2 < 3	38	0.18	0.19	0.17	0.12	-	-	-	3.6
4	2	5	5	5	3 - 5	38	0.13	0.13	0.13	0.12	-	-	-	3.6
4	2	5	5	5	10	38	0.12	0.12	0.12	0.12	-	-	-	3.6
4	2	5	5	5	15	38	0.14	0.16	0.16	0.12	-	-	-	3.6
4	2	5	5	5	20	38	0.18	0.20	0.21	0.12	-	-	-	3.6
4	2	5	5	5	25	38	0.23	0.25	0.25	0.12	-	-	-	3.6
4	2	5	5	5	30	38	0.28	0.30	0.30	0.12	-	-	-	3.6
4	3	7.5	6	5	< 2	-	0.18	0.31	0.18	0.12	0.18	0.18	0.14	5.0
4	3	5	5	5	2 < 3	38	0.15	0.23	0.20	0.12	-	-	-	4.1
4	3	5	5	5	3 - 5	38	0.12	0.16	0.16	0.12	-	-	-	4.1
4	3	5	5	5	10	38	0.12	0.14	0.14	0.12	-	-	-	4.1
4	3	5	5	5	15	38	0.12	0.18	0.18	0.12	-	-	-	4.1
4	3	5	5	5	20	38	0.14	0.23	0.24	0.12	-	-	-	4.1
4	3	5	5	5	25	38	0.17	0.29	0.29	0.12	-	-	-	4.1
4	3	5	5	5	30	38	0.21	0.35	0.35	0.12	-	-	-	4.1
4	4	7.5	6	5	< 2	-	0.18	0.33	0.20	0.12	0.18	0.18	0.14	5.5
4	4	5	5	5	2 < 3	38	0.12	0.26	0.23	0.12	-	-	-	4.6
4	4	5	5	5	3 - 5	38	0.12	0.18	0.18	0.12	-	-	-	4.6
4	4	5	5	5	10	38	0.12	0.15	0.15	0.12	-	-	-	4.6
4	4	5	5	5	15	38	0.12	0.19	0.20	0.12	-	-	-	4.6
4	4	5	5	5	20	38	0.12	0.25	0.25	0.12	-	-	-	4.6
4	4	5	5	5	25	38	0.14	0.31	0.31	0.12	-	-	-	4.6
4	4	5	5	5	30	38	0.17	0.37	0.37	0.12	-	-	-	4.6



CORNER OPTION "A" CORNER OPTION "B"

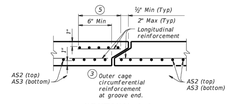
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

(4) Length is equal to spacing of longitudinal reinforcing plus 2". (10" Min) (Typ)



SECTION A-A
(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:
Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)."

(2) NOTE: #4 U-BARS MUST BE CAST INTO BOX PRIOR TO DELIVERY (SEE CURB WALL DETAIL)

(3) For box length = 8'-0"

(2) AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS PRECAST 4'-0" SPAN

SCP-4

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BILLS OF REINFORCING STEEL (For Box Length = 40 feet)

SECTION DIMENSIONS				(5) FILL HEIGHT	Bars B					Bars C					Bars D					Bars M – #4				Bars F1 – #4 at 18" Spa		Bars F2 – #4 at 18" Spa		Bars H 4 – #4		Bars K		QUANTITIES				
																															Per Foot of Barrel		Curb		Total	
S	H	T	U		No.	Size	Spa	Length	Weight	No.	Size	Spa	Length	Weight	No.	Size	Spa	Length	Weight	" Y "	" Z "	No.	Size	Spa	Length	Weight	No.	Length	Wt	No.	Length	Wt	No.	Wt	Conc (CY)	Reinf (Lb)	Conc (CY)	Reinf (Lb)	Conc (CY)	Reinf (Lb)
3'-0"	2'-0"	8"	7"	30	108	#5	9"	3'-11"	441	108	#4	9"	5'-4"	385	2'-6"	2'-10"	108	#4	9"	5'-1"	367	2'-10"	2'-3"	108	9"	2'-0"	144	3	39'-9"	80	19	39'-9"	505	3'-11"	10	10	28	0.292	48.1	0.3	38	12.0	1,960
3'-0"	3'-0"	8"	7"	30	108	#5	9"	3'-11"	441	108	#4	9"	6'-4"	457	3'-6"	2'-10"	108	#4	9"	5'-1"	367	2'-10"	2'-3"	108	9"	3'-0"	216	3	39'-9"	80	23	39'-9"	611	3'-11"	10	10	28	0.335	54.3	0.3	38	13.7	2,210
4'-0"	2'-0"	8"	7"	30	108	#5	9"	4'-11"	554	162	#4	6"	5'-8"	613	2'-6"	3'-2"	162	#4	6"	5'-5"	586	3'-2"	2'-3"	108	9"	2'-0"	144	3	39'-9"	80	21	39'-9"	558	4'-11"	13	12	33	0.342	63.4	0.4	46	14.1	2,581
4'-0"	3'-0"	8"	7"	30	108	#5	9"	4'-11"	554	162	#4	6"	6'-8"	721	3'-6"	3'-2"	162	#4	6"	5'-5"	586	3'-2"	2'-3"	108	9"	3'-0"	216	3	39'-9"	80	25	39'-9"	664	4'-11"	13	12	33	0.385	70.5	0.4	46	15.8	2,867
4'-0"	4'-0"	8"	7"	30	108	#5	9"	4'-11"	554	162	#4	6"	7'-8"	830	4'-6"	3'-2"	162	#4	6"	5'-5"	586	3'-2"	2'-3"	108	9"	4'-0"	289	3	39'-9"	80	25	39'-9"	664	4'-11"	13	12	33	0.428	75.1	0.4	46	17.5	3,049

(5) For direct traffic culverts (Fill height ≤ 2 ft.), identify the required box size and select the option with the minimum fill height.

HL93 LOADING SHEET 2 OF 2

Texas Department of Transportation | Bridge Division Standard

SINGLE BOX CULVERTS CAST-IN-PLACE
0' TO 30' FILL

SCC-3 & 4

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DRIPPING SPRINGS PROPERTY

3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

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Date
JUNE 9, 2023

Revised
1 SEPTEMBER 20, 2023
CITY COMMENTS
2 DECEMBER 20, 2023
3 JANUARY 11, 2024

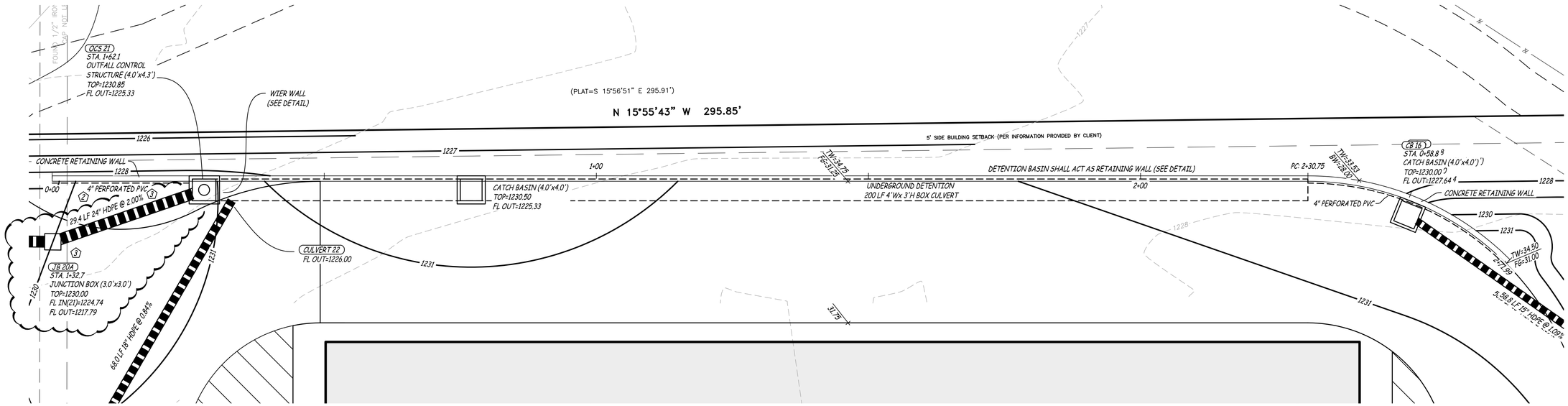
Design: JH Drawn: SK

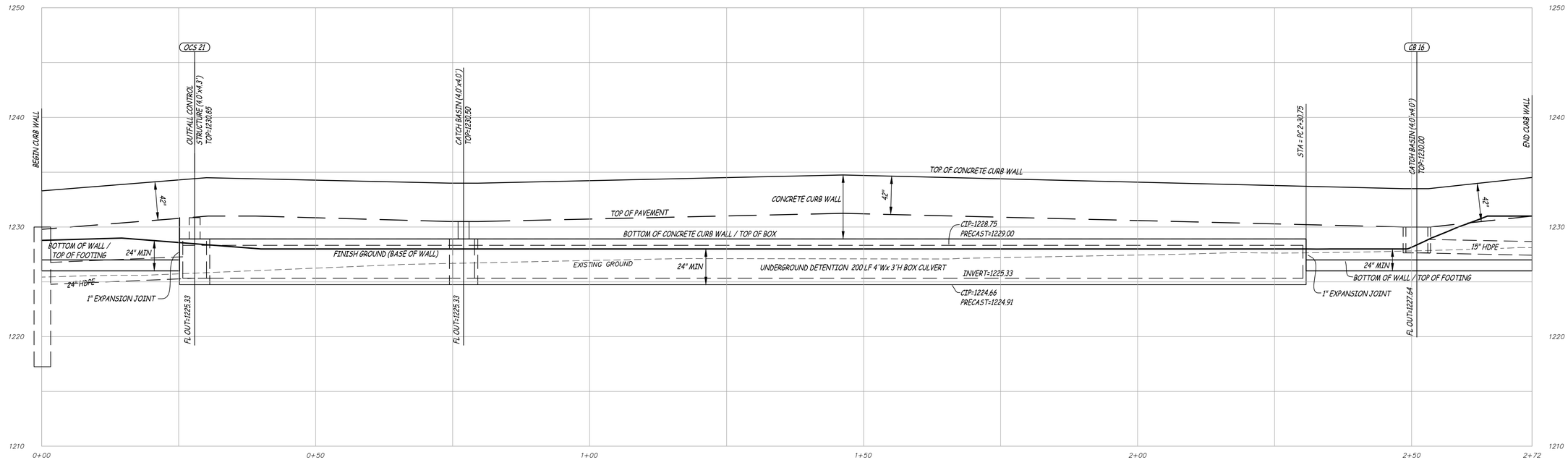
DETENTION BASIN DETAILS

Sheet
1 C4.03

ES&S PROJECT NO. 15964

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-10FTD-DRIPPINGSPRINGS\CAD\15964_COVER & DETAILS.DWG 1/12/2024





CONCRETE WALL
SCALE – HORIZ. 1" = 10'
VERT. 1" = 5'

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0 1"
SCALE: 1" = 10'

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HAYS COUNTY, TEXAS

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1/11/2024

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Date
DECEMBER 20, 2023

Revised
3 JANUARY 11, 2024

Design: MAK Drawn: SK

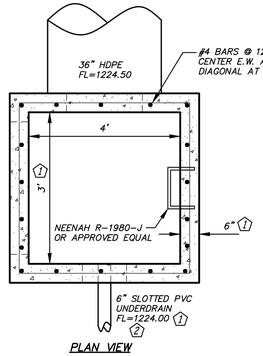
DETENTION BASIN PLAN

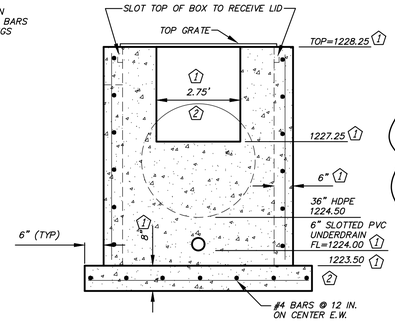
Sheet
C4.04

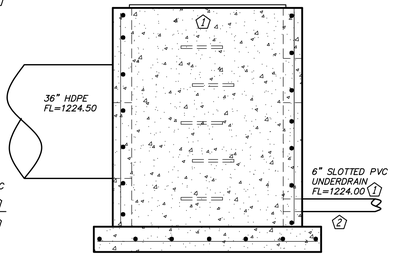
ES&S PROJECT NO. 15964

Underground Detention			25 - YEAR EVENT	100 - YEAR EVENT
ELEVATION (FT)	STAGE (FT)	STORAGE (CUFT)	DISCHARGE (CFS)	DISCHARGE (CFS)
1225.33	0.00	0	0.000	0.000
1225.48	0.15	120	0.006	0.006
1225.63	0.30	240	0.009	0.009
1225.78	0.45	360	0.011	0.011
1225.93	0.60	480	0.013	0.013
1226.08	0.75	600	0.014	0.014 (2)
1226.23	0.90	720	0.016	0.016
1226.38	1.05	840	0.017	0.017
1226.53	1.20	960	0.044	0.044
1226.68	1.35	1080	0.399	0.399
1226.83	1.50	1200	0.964	0.964
1226.98	1.65	1320	1.679	1.679
1227.13	1.80	1440	2.516	2.516
1227.28	1.95	1560	3.459	3.459
1227.43	2.10	1680	4.499	4.499
1227.58	2.25	1800	5.625	5.625
1227.73	2.40	1920	7.218	7.218
1227.88	2.55	2040	9.177	9.177
1228.03	2.70	2160	-	11.310
1228.18	2.85	2280	-	13.560
1228.33	3.00	2400	-	-

BIORETENTION			25 - YEAR EVENT	100 - YEAR EVENT
ELEVATION (FT)	STAGE (FT)	STORAGE (CUFT)	DISCHARGE (CFS)	DISCHARGE (CFS)
1227.00	0.00	0	0.000	0.000
1227.10	0.10	202	0.000	0.000
1227.20	0.20	404	0.000	0.000
1227.30	0.30	607	0.000	0.000
1227.40	0.40	809	0.000	0.000
1227.50	0.50	1011	0.000	0.000 (2)
1227.60	0.60	1213	0.291	0.291
1227.70	0.70	1415	0.820	0.820
1227.80	0.80	1618	1.507	1.507
1227.90	0.90	1820	2.319	2.319
1228.00	1.00	2022	3.240	3.240
1228.10	1.10	2290	4.258	4.258
1228.20	1.20	2558	5.365	5.365
1228.30	1.30	2825	6.975	6.975
1228.40	1.40	3093	9.998	9.998
1228.50	1.50	3361	-	13.840
1228.60	1.60	3629	-	18.320
1228.70	1.70	3897	-	-
1228.80	1.80	4164	-	-
1228.90	1.90	4432	-	-
1229.00	2.00	4700	-	-

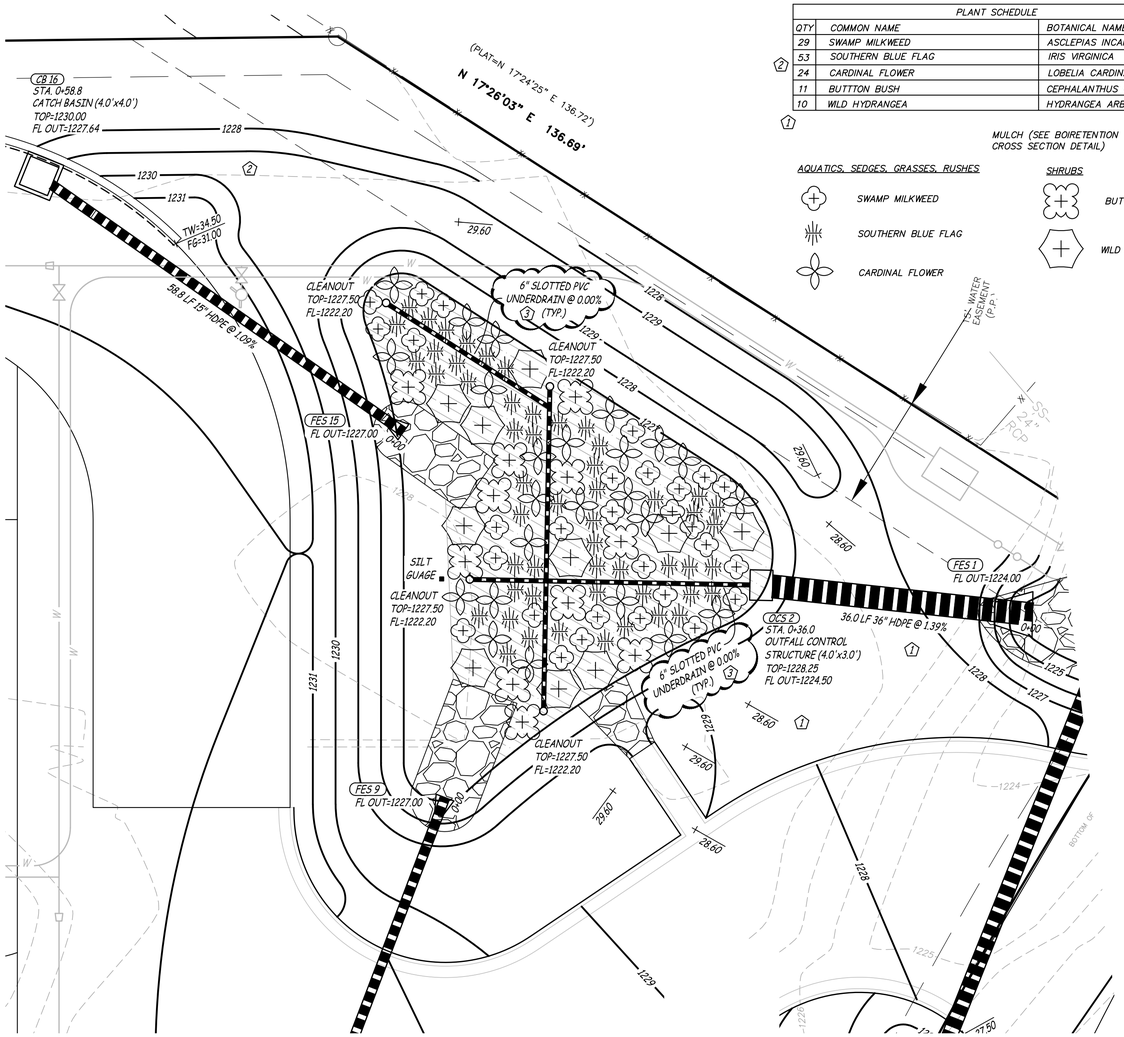






OUTFALL CONTROL STRUCTURE 2 (OCS 2)

NOT TO SCALE



PLANT SCHEDULE		
QTY	COMMON NAME	BOTANICAL NAME
29	SWAMP MILKWEED	ASCLEPIAS INCARNATA
53	SOUTHERN BLUE FLAG	IRIS VIRGINICA
24	CARDINAL FLOWER	LOBELIA CARDINALIS
11	BUTTTION BUSH	CEPHALANTHUS OCCIDENTALIS
10	WILD HYDRANGEA	HYDRANGEA ARBORESCENS

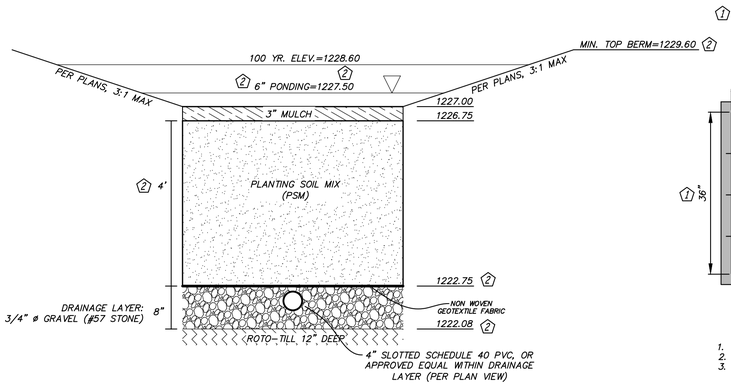
MULCH (SEE BOIRETENTION CROSS SECTION DETAIL)

AQUATICS, SEDGES, GRASSES, RUSHES

- SWAMP MILKWEED
- SOUTHERN BLUE FLAG
- CARDINAL FLOWER

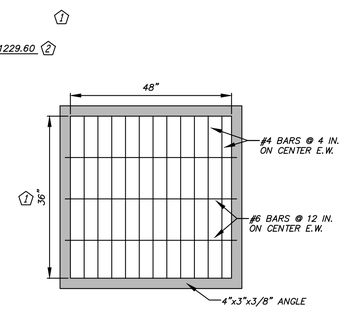
SHRUBS

- BUTTONBUSH
- WILD HYDRANGEA



BIORETENTION TYPICAL CROSS SECTION

NOT TO SCALE



TOP GRATE

1. WELD ALL CONNECTIONS.
2. APPLY GALVANIZED COATING AFTER ASSEMBLY.
3. GRATE SHALL BE ANCHORED TO BOX.

BIORETENTION FACILITY NOTES

1. THE BIORETENTION FACILITY AREA SHALL BE USED AS A TEMPORARY SEDIMENT TRAP UNTIL CONTRIBUTING DRAINAGE AREA IS STABILIZED.
2. AFTER THE ENTIRE CONTRIBUTING DRAINAGE AREA IS STABILIZED VIA VEGETATION OR CONSTRUCTED IMPERVIOUS SURFACES, ALL SEDIMENT SHALL BE COMPLETELY REMOVED AND DEPOSITED ONSITE IN AN AREA OUTSIDE THE CONTRIBUTING DRAINAGE AREA FOR THIS FACILITY, AS DIRECTED BY THE OWNER.
3. GEOTEXTILE FABRIC SHALL BE NEEDLE PUNCHED NON WOVEN POLYPROPYLENE FABRIC: MSD TYPE 4, OR APPROVED EQUAL.
4. ALL SAND AND GRAVEL IS TO BE NATURAL AND UNCRUSHED.
5. THE PLANTING SOIL MIXTURE (PSM) SHALL CONSIST OF A MIXTURE OF PLANTING SOIL, MULCH, AND SAND CONSISTING OF THE FOLLOWING:
   - (1) 20–30% PLANTING SOIL
   - (1) 20–30% ORGANIC COMPOST
   - (1) 50–60% SAND (ASTM C33 FINE AGGREGATE)

   THE PSM SHALL HAVE A COEFFICIENT OF PERMEABILITY OF AT LEAST 1 FT/DAY
6. PLANTING SOIL: THE USDA TEXTURAL CLASSIFICATION SHALL BE LOAMY SAND OR SANDY LOAM. PRIOR TO PURCHASE, A SAMPLE OF THE PLANTING SOIL SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER. PLANTING SOIL SHALL MEET THE FOLLOWING CRITERIA:
   - 50 – 85% SAND (2.0 – 0.050 MM, TEST METHOD: AASHTO T88)
   - 0 – 50% SILT (0.050 – 0.002 MM, TEST METHOD: AASHTO T88)
   - 2 – 5% CLAY (LESS THAN 0.002MM, TEST METHOD: AASHTO T88)
   - 3 – 10% ORGANIC MATTER (C/N RATIO ≤ 25, TEST METHOD: AASHTO T194)

   NO TIME EXTENSIONS WILL BE GRANTED FOR FAILURE TO MEET THE MINIMUM REQUIREMENTS. ONCE THE STOCKPILE OF THE PLANTING SOIL HAS BEEN SAMPLED, NO MATERIAL SHALL BE ADDED TO THE STOCKPILE.
7. ORGANIC COMPOST: COMPOST SHALL BE A HOMOGENEOUS AND FRIABLE MIXTURE OF PARTIALLY DECOMPOSED ORGANIC MATTER RESULTING FROM COMPOSTING. COMPOST SHALL NOT CONTAIN MORE THAN 1 PERCENT FOREIGN MATTER. FOREIGN MATTER IS DEFINED AS ANY MATTER OVER A 2 MM DIMENSION HAVING INORGANIC CONSTITUENTS SUCH AS METAL, GLASS, AND SYNTHETIC POLYMERS (E.G. PLASTIC AND RUBBER).
8. THE PSM SHALL BE A UNIFORM MIX, FREE OF PLANT RESIDUE, STONES, STUMPS, ROOTS, OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES EXCLUDING MULCH.
9. AFTER REMOVAL OF SEDIMENT, THE FACILITY SHALL BE EXCAVATED TO THE DIMENSIONS AND GRADES SHOWN ON THE PLANS. THE BOTTOM OF THE EXCAVATION SHALL BE ROTO-TILLED A MINIMUM 12" DEEP.
10. THE PSM SHALL BE PLACED USING LOW GROUND-CONTACT PRESSURE EQUIPMENT, OR BY EXCAVATORS AND/OR BACKHOES OPERATING ON THE GROUND ADJACENT TO THE FACILITY. NO HEAVY EQUIPMENT SHALL BE USED WITHIN THE FACILITY DURING OR AFTER THE PLACEMENT OF THE PSM. THE PSM SHALL BE PLACED IN 12" LIFTS AND SHALL BE SATURATED OVER THE ENTIRE AREA AFTER THE PLACEMENT OF EACH LIFT. FINAL ELEVATIONS SHALL BE WITHIN 1" OF THE PLANS.
11. ONCE THE PSM HAS BEEN PLACED, THE ENTIRE FACILITY SHALL BE COVERED WITH 3" OF WELL AGED, SHREDDED HARDWOOD BARK MULCH. MULCHING SHALL BE COMPLETE WITHIN 24 HOURS.
12. INSTALL PLANTS PER SPECIFICATONS.
13. ANY PLANT SUBSTITUTIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO ORDERING.

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N

0 1"
SCALE: 1" = 10'

(3) KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

Revised	
(1)	SEPTEMBER 20, 2023
	CITY COMMENTS
(2)	DECEMBER 20, 2023
(3)	JANUARY 11, 2024

Design: MAK Drawn: SK

BIORETENTION PLAN & PROFILE

Sheet
(2) (1) C4.05

ES&S PROJECT NO. 15964

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

MITERED END SECTION 24" RCP W/= 12'X3'

MAIL BOX

15.0'

15.0'

OCS 21
STA. 1+62.1
OUTFALL CONTROL STRUCTURE (4.0'x4.3')
TOP=1230.85
FL OUT=1225.33

WIER WALL (SEE DETAIL)

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

DETENTION BASIN SHALL ACT AS RETAINING WALL (SEE DETAIL)

4" PERFORATED PVC

CONCRETE RETAINING WALL

CB 16
STA. 0+58.8
CATCH BASIN (4.0'x4.0')
TOP=1230.00
FL OUT=1227.64

LOT 18
SUNSET CANYON
SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

FES 20
FL OUT=1215.14

132.7 LF 24" HDPE @ 2.00%

1+00

29.4 LF 24" HDPE @ 2.00%

CATCH BASIN (4.0'x4.0')
TOP=1230.50
FL OUT=1225.33

UNDERGROUND DETENTION
200 LF 4'Wx 3'H BOX CULVERT

0+00

CULVERT 22
FL OUT=1226.00

JB 20A
STA. 1+32.7
JUNCTION BOX (3.0'x3.0')
TOP=1230.00
FL IN(21)=1224.74
FL OUT=1217.79

69.0 LF 18" HDPE @ 0.84%

39.8 LF 15" HDPE @ 1.00%

FES 15
FL OUT=1227.00

0+00

15' WATER EASEMENT (P.P.)

OCS 2
STA. 0+36.0
OUTFALL CONTROL STRUCTURE (4.0'x3.0')
TOP=1228.25
FL OUT=1224.50

FES 1
FL OUT=1224.00

12 LF 24" CMP

36.0 LF 36" HDPE @ 1.39%

0+00

FES 29
FL OUT=1223.68

FES 9
FL OUT=1227.00

0+00

65.0 LF 24" RCP @ 0.92%

FES 30
FL OUT=1224.00

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

CI 23
STA. 0+68.0
CURB INLET (3.0'x2.0')
TOP=1230.75
GUTTER=1230.25
FL IN(24)=1226.77
FL OUT=1226.57

1+00

175.0 LF 18" HDPE @ 0.50%

2+00

TP2

TP1

1+00

170.0 LF 15" HDPE @ 0.50%

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

CI 24
STA. 2+43.0
CURB INLET (3.0'x2.0')
TOP=1230.50
GUTTER=1230.00
FL OUT=1227.65

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

GUY WIRE (TYP.)

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

CI 10
STA. 1+70.0
CURB INLET (3.0'x2.0')
TOP=1230.50
GUTTER=1230.00
FL OUT=1227.85

50' B.L. (P.P.)

FOUND 1/2" IRON ROD W/ CAP

S 74°50'33" W 2.43'

FOUND 1/2" IRON ROD (MRD)

EDGE OF PAVEMENT

BOTTOM OF BANK

TOP OF BANK

GRAVEL DRIVE

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Texas Registered Engineering Firm #17700

N

0 1"
SCALE: 1" = 20'

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
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3975 E. US 290
HAYS COUNTY, TEXAS

1/19/2024

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4 JANUARY 19, 2024

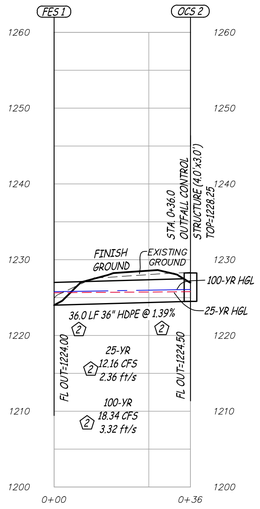
Design: MAK Drawn: SK

STORM SEWER PLAN

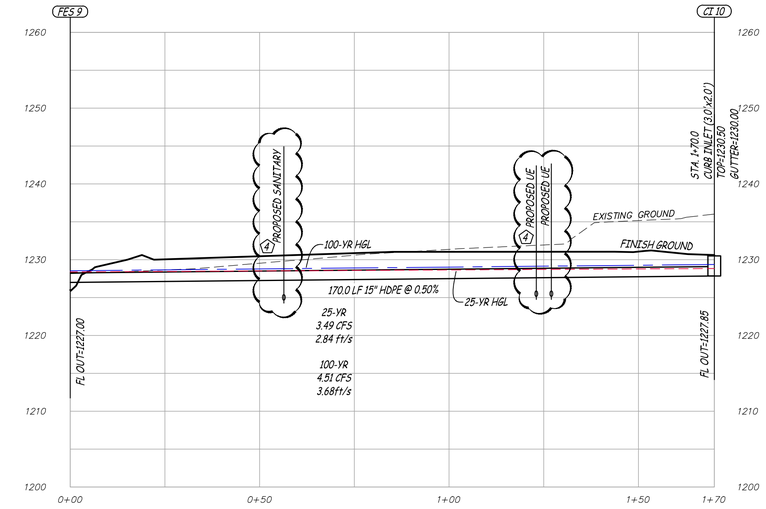
Sheet
1C5.01

ES&S PROJECT NO. 15964

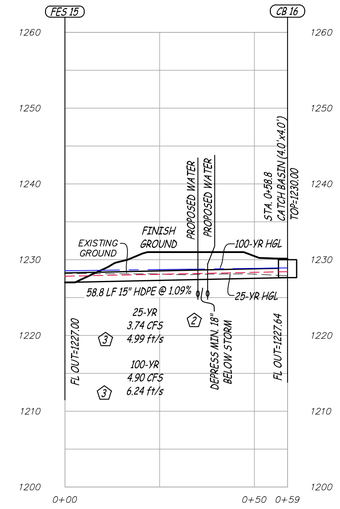
\\192.168.0.90\PROJECTS\GENERAL PROJECTS\15964-10ED--DRIPPINGSPRINGS\CAD\15964 SITE PLAN.DWG 1/19/2024



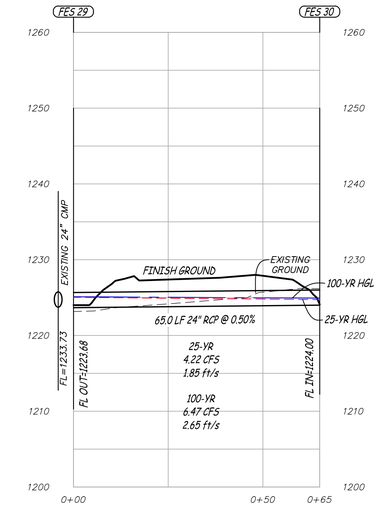
FES 1 THRU OCS 2
SCALE – HORIZ. 1" = 20'
VERT. 1" = 10'



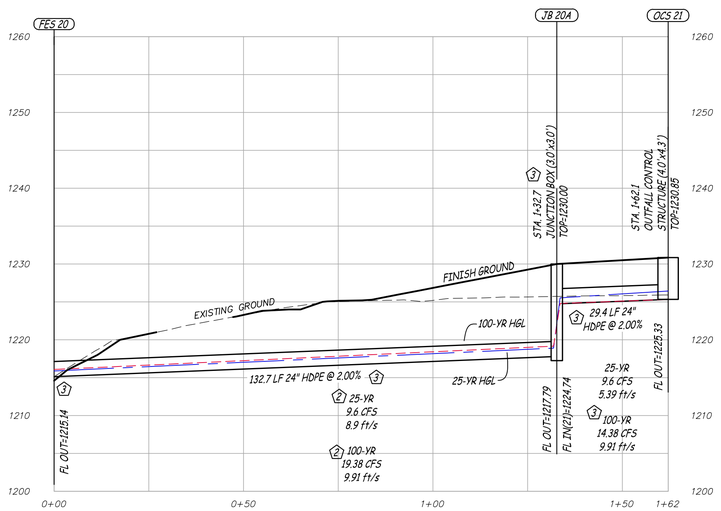
FES 9 THRU CI 10
SCALE – HORIZ. 1" = 20'
VERT. 1" = 10'



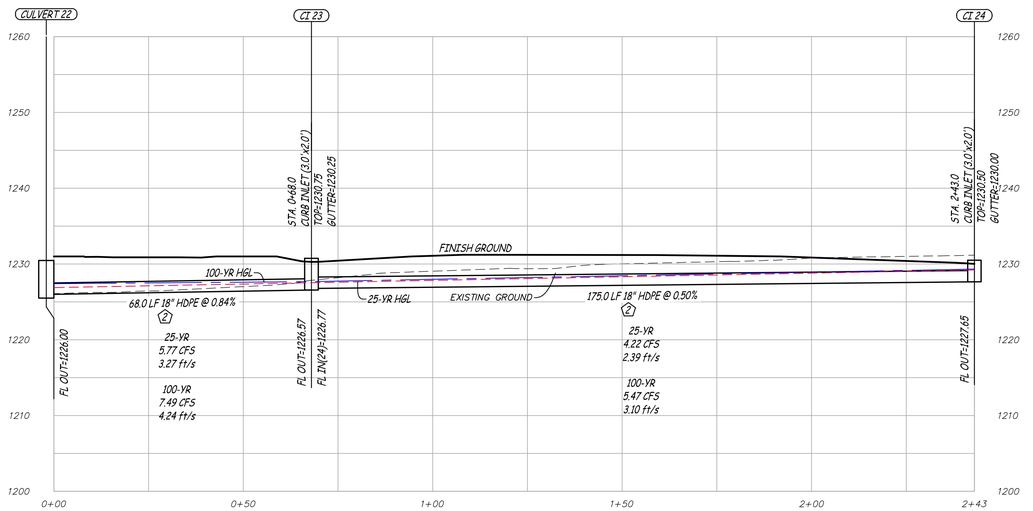
FES 15 THRU CI 16
SCALE – HORIZ. 1" = 20'
VERT. 1" = 10'



FES 29 THRU FES 30
SCALE – HORIZ. 1" = 20'
VERT. 1" = 10'



FES 20 THRU BASIN 21
SCALE – HORIZ. 1" = 20'
VERT. 1" = 10'



CULVERT 22 THRU CI 24
SCALE – HORIZ. 1" = 20'
VERT. 1" = 10'

REVISION NOTES
1. ADDED 25-YR & 100-YR HGL.
2. ADDED FLOW RATES AND VELOCITIES.

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DRIPPING SPRINGS PROPERTY

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HAYS COUNTY, TEXAS

1/19/2024

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Design: MAK Drawn: SK

STORM SEWER PROFILES

Sheet
1 C6.01

ES&S PROJECT NO. 15964

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17–A
SUNSET CANYON
SECTION 1–C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

LOT 18
SUNSET CANYON
SECTION 1–C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

LOT 392
SUNSET CANYON
SECTION 1–C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

TRACT ONE
LOT 17–B
114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE
UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

BIORETENTION & DETENTION BASIN

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

S 74°50'33" W 219.43'

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

15.0'
15.0'
88

MITERED END SECTION
24" RCP INV= 1213.1

MITERED END SECTION
24" RCP INV= 1214.6

FOUND 1/2" IRON ROD
CAP NOT LEGIBLE

30' X 70'
ACCESS EASEMENT
(P.P.)
ITEM (10h)
(TRACT TWO EASEMENT ESTATE)

GRAVEL DRIVE

FOUND 1/2" IRON ROD
CAP NOT LEGIBLE

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

10' FRONT BUILDING SETBACK
(PER INFORMATION PROVIDED BY CLIENT)

75.0' RIGHT OF WAY
RESERVE
(P.P.)
ITEM (10h)
CONSTRUCTION OF
FUTURE BUILDINGS
IS RESTRICTED

FOUND 1/2" IRON ROD
(MRD)

BOTTOM OF BANK

TOP OF BANK

6" C-900 PVC W/ TRACER WIRE (FIRE)

10.0' (MIN.)

11.5' (MIN.)

45° BENDS

FH

8"x8" TEE

8"x6" REDUCER

8" C-900 PVC W/ TRACER WIRE (FIRE)

1" DR9 PVC W/ (DOM.)

8"x6"x1" TEE

6" C-900 PVC W/ TRACER WIRE (FIRE)

1000 GAL SEPTIC TANK
FL=1228.00

38.3' TO DETENTION

PUMP TANK
(SEE DETAIL)

36.3' TO WATER SERVICE

60 LF 6" SDR35 PVC @ 1.0% MIN

CLEANOUT
TOP=1231.90
FL=1228.70

TWO-WAY CO
TOP=1231.90
FL=1228.70

TP2

TP1

DRIP FIELD
(SEE DETAIL)

20' EFFLUENT FIELD SETBACK

C1

71.2' TO WATER MAIN

UE

UE
(SEE MEP)

T

GUY WIRE (TYP.)

5' SIDE BUILDING SETBACK
(PER INFORMATION PROVIDED BY CLIENT)

50' B.L. (P.P.)

FOUND 1/2" IRON ROD
NO CAP

22.5° & 11.25° BENDS

1" C-900 PVC W/ TRACER WIRE (FIRE)

1" DR9 PVC (DOM.)

15' WATER EASEMENT (P.P.)

1" TAPPING SLEEVE

24" RCP
FL=1223.48

BF1

1" DC BFP

1" WM

WV's

1/2 WIDTH OF ROAD SHALL REMAIN OPEN DURING CONSTRUCTION

8" TAPPING SLEEVE & VALVE

TRENCH PATCH
(SEE DETAIL)

24" CMP
FL=1225.28

8" (APPROXIMATE LOCATION)

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

N

0 1"
SCALE: 1" = 20'

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-LOFT--DRIPPINGSPRINGS\CAD\15964 SITE PLAN.DWG 1/19/2024 4:49:36 PM MAK

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3975 E. US 290
HAYS COUNTY, TEXAS

1/19/2024

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PROFESSIONAL ENGINEER

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Design: MAK Drawn: SK

UTILITY PLAN

Sheet
1 C7.01

ES&S PROJECT NO. 15964

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.O.B. ITEM (10h) (TRACT TWO EASEMENT ESTATE)

15.0'
15.0'
68.8'

20'x50' TEMPORARY CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

SILT FENCE / SEDIMENT LOG

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

10' FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

LOT 18
SUNSET CANYON
SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

15' WATER EASEMENT (P.P.)

TEMPORARY SEDIMENT TRAP
FILTER RING (DCS 2)

FES 1

4 ROCK BERM

24" RCP
FL=1223.48

24" CMP
FL=1223.73

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

DIVERSION DIKE

C1

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

TOPSOIL STOCKPILE

SILT FENCE

5' SIDE BUILDING SETBACK
(PER INFORMATION PROVIDED BY CLIENT)

LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

S 74°50'33" W 277.43'

FOUND 1/2" IRON ROD (MRD)

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

50' R.L. (P.P.)

FOUND 1/2" IRON ROD

MITERED END SECTION 24" RCP INV.= 1213.3

MITERED END SECTION 24" RCP INV.= 1214.6

MAIL BOX

GRAVEL DRIVE

ASPHALT PAVEMENT

EDGE OF PAVEMENT

BOTTOM OF BANK

TOP OF BANK

SILT FENCE / SEDIMENT LOG

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N

0 1"
SCALE: 1" = 20'

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Design: MAK Drawn: SK

INITIAL EROSION CONTROL PLAN

Sheet
1 C8.01

ES&S PROJECT NO. 15964

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CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

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114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE
UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

LOT 296
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VOLUME 2, PAGE 286
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N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

S 74°50'33" W 2[illegible].43'

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

15.0'

SILT FENCE / SEDIMENT LOG

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

INLET PROTECTION

FES 20

CB 20A

OCS 21

CB 16

CI 23

CI 24

CI 10

FES 1

FES 2

FES 9

FES 3'

OCS 2

FILTER RING

STRAW WATTLE

BSM & UNDERDRAIN SHALL NOT BE INSTALLED UNTIL MIN. 80% OF UPSTREAM AREA IS STABILIZED

15' WATER EASEMENT (P.P.)

24" RCP FES=1223.48

4' ROCK BERM

BAGGED GRAVEL INLET FILTER

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

TP1

TP2

TOPSOIL STOCKPILE

SEDIMENT LOG (TYP)

SILT FENCE

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

50' BLL (P.P.)

FOUND 1/2" IRON ROD (MRD)

BOTTOM OF BANK

TOP OF BANK

EDGE OF PAVEMENT

MITERED END SECTION 24" RCP INV= 1213.3

MITERED END SECTION 24" RCP INV= 1214.4

MAIL BOX

GRAVEL DRIVE

UTILITY POLE (TYP)

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N

0 1"
SCALE: 1" = 20'

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FINAL EROSION CONTROL PLAN

Sheet
1 C8.02

ES&S PROJECT NO. 15964

\\192.168.0.90\PROJECTS\GENERAL PROJECTS\15964-10ED - DRIPPINGSPRINGS\CAD\15964 SITE PLAN.DWG 1/19/2024

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

LOT 18
SUNSET CANYON
SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE
UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.O.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

15.0'

15.0'

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

10' FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

1.75% MAX CROSS SLOPE (TYP)
4.75% MAX RUNNING SLOPE (TYP)

LANDINGS 1.75% MAX CROSS SLOPE IN ALL DIRECTIONS (TYP)

ACCESSIBLE STALLS 1.75% MAX CROSS SLOPE IN ALL DIRECTIONS (TYP)

1.75% MAX CROSS SLOPE (TYP)
4.75% MAX RUNNING SLOPE (TYP)

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

15' WATER EASEMENT (P.P.)

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

C1

MAIL BOX

GRAVEL DRIVE

TOP OF BANK

STAKE

BOTTOM OF BANK

EDGE OF PAVEMENT

FOUND 1/2" IRON ROD (MRD)

FOUND 1/2" IRON ROD

50' ELL (P.P.)

ACCESSIBILITY NOTES

CODE REQUIRES THE FOLLOWING:

1. SIDEWALK SHALL NOT EXCEED 5% (1'-0" IN 20'-0") SLOPE WITH A 2% (1'-0" IN 50'-0") CROSS-SLOPE AND SHALL BE 5' WIDE EXCEPT AS NOTED ON SITE PLAN. PROVIDE STAIRS, RAMPS, CURBS, ETC., AS NOTED AND DETAILED.
2. PARKING AREAS FOR ACCESSIBLE SPACES AND ACCESS AISLE SHALL NOT EXCEED A 2% (1'-0" IN 50'-0") IN ANY DIRECTION. OTHER PORTIONS OF THE ACCESSIBLE ROUTE SHALL NOT EXCEED A 5% (1'-0" IN 20'-0") LONGITUDINAL SLOPE NOR A 2% (1'-0" IN 50'-0") CROSS-SLOPE. OTHER PARKING AREAS AND CROSS-SLOPE OR DRIVES SHALL NOT EXCEED A 5% (1'-0" IN 20'-0") SLOPE.
3. RAMPS SHALL NOT EXCEED 8.33% (1'-0" IN 12'-0") SLOPE WITH A 2% (1'-0" IN 50'-0") CROSS-SLOPE AND SHALL BE 5' WIDE EXCEPT AS NOTED ON SITE LAYOUT PLAN. RISE OF RAMP SHALL NOT EXCEED 6".
4. ALL SIDEWALK INTERSECTIONS SHALL HAVE A 5' x 5' LANDING AT 1/4" PER 1' MAX SLOPE IN ALL DIRECTIONS.

THESE PLANS AND SPECIFICATIONS HAVE BEEN DESIGNED WITH TOLERANCE BELOW THE CODE TO IMPROVE POST CONSTRUCTION COMPLIANCE. REFERENCE THE PLAN SHEETS AND DETAILS FOR SPECIFIED GRADES AND MAXIMUM GRADES.

FAIR HOUSING ACCESSIBILITY GUIDELINES

(FROM FAIR HOUSING ACT DESIGN MANUAL, REVISED APRIL 1998)

THE DESIGN REQUIREMENTS OF THE GUIDELINES TO WHICH NEW BUILDINGS AND DWELLING UNITS MUST COMPLY ARE PRESENTED IN ABRIDGED FORM BELOW. DWELLING UNITS ARE NOT SUBJECT TO THESE REQUIREMENTS ONLY IN THE RARE INSTANCE WHERE THERE ARE EXTREMES OF TERRAIN OR UNUSUAL CHARACTERISTICS OF THE SITE.

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-10ED--DRIPPINGSPRINGS\CAD\15964 SITE PLAN.DWG 1/12/2024

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N

0 1"
SCALE: 1" = 20'

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

3 1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

Revised
1 SEPTEMBER 20, 2023
CITY COMMENTS
2 JANUARY 11, 2024

Design: MAK Drawn: SK

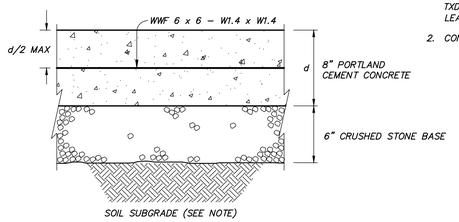
ACCESSIBILITY PLAN

Sheet
1 C9.01

ES&S PROJECT NO. 15964

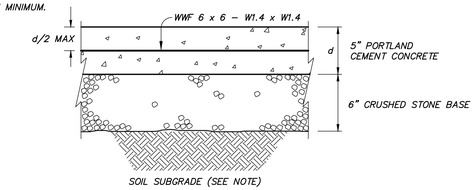
CONCRETE PAVEMENT NOTES:

1. SOIL SUBGRADE SHALL BE SCARIFIED TO 6" MINIMUM DEPTH AND MIXED WITH 7% HYDRATED LIME BY DRY UNIT WEIGHT PER TXDOT SPECIFICATION ITEM 260 TO AT LEAST 1' BEYOND EDGE OF PAVEMENT.
2. CONCRETE SHALL BE 3,500 PSI MINIMUM.



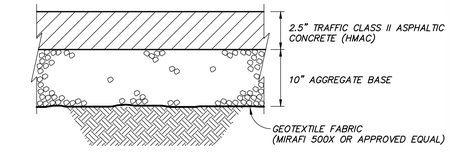
NOTE: TOP OF REINFORCEMENT SHALL BE A MINIMUM OF 2" BELOW THE TOP OF PAVEMENT.

HEAVY DUTY CONCRETE PAVEMENT
NOT TO SCALE

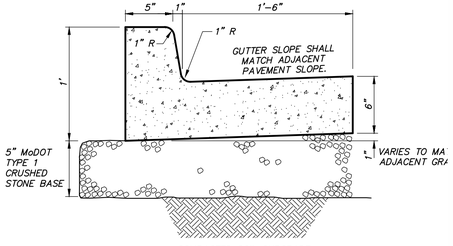


NOTE: TOP OF REINFORCEMENT SHALL BE A MINIMUM OF 2" BELOW THE TOP OF PAVEMENT.

STANDARD DUTY CONCRETE PAVEMENT (ALTERNATE)
NOT TO SCALE

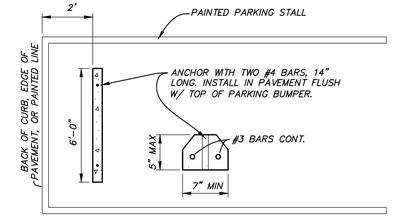


STANDARD DUTY ASPHALT PAVEMENT
NOT TO SCALE



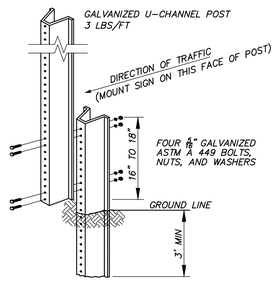
NOTES:
1. CURB AND GUTTER MAY BE INTEGRAL IF CONCRETE PAVEMENT IS USED.
2. INSTALL TRANSVERSE EXPANSION JOINTS TO MATCH ADJACENT PAVEMENT,OR AT EVERY 150' MAX.
3. INSTALL SAW–CUT JOINTS TO MATCH ADJACENT PAVEMENT OR EVERY 10' MAX.
4. SAW–CUT JOINTS SHALL EXTEND THROUGH THE ENTIRE CURB SECTION FROM THE TOP OF CURB TO A DEPTH OF 2" BELOW THE GUTTER SURFACE.

6" CONCRETE CURB & GUTTER SECTION
NOT TO SCALE



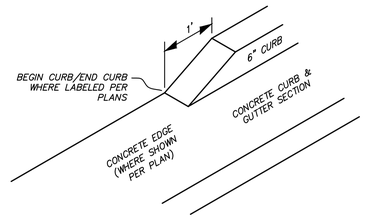
NOTES:
1. CONCRETE SHALL BE A MINIMUM 5,000 PSI AND AIR–ENTRAINED.
2. PROVIDE A MINIMUM 2 SLOTS ON THE BOTTOM OF THE BUMPER FOR DRAINAGE.

CONCRETE PARKING BUMPER
NOT TO SCALE

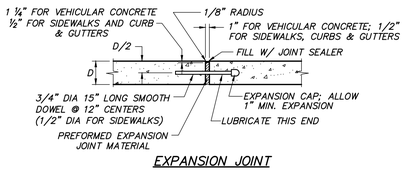


NOTES:
1. STUB HEIGHT AND SPLICE LAP SHALL BE 16" TO 18".
2. SPLICE SHALL NOT EXTEND BELOW THE GROUND.
3. ONLY ONE SPLICE WILL BE ALLOWED PER POST.
4. USE OF SPLICE IS OPTIONAL.
5. SIGNS SHALL BE 7' MIN. FROM FINISH GRADE TO BOTTOM OF LOWEST MOUNTED SIGN.

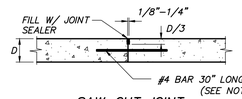
SIGN POST DETAIL
NOT TO SCALE



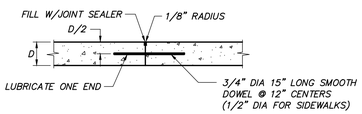
BEGIN CURB / END CURB DETAIL
NOT TO SCALE



EXPANSION JOINT



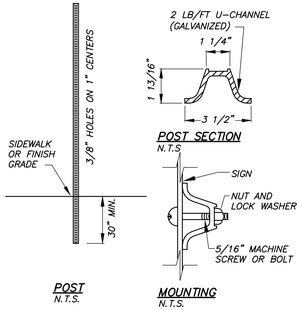
SAW–CUT JOINT

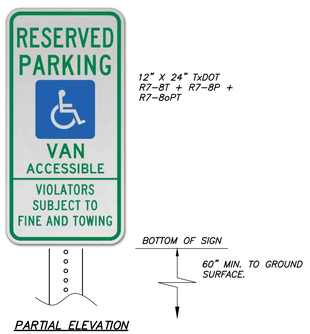


CONSTRUCTION JOINT

NOTES:
1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL SUBMIT A PAVEMENT JOINT PLAN OF ALL CONCRETE PAVEMENT FOR APPROVAL.
2. CONCRETE PAVEMENT SHALL HAVE SAW–CUT OR CONSTRUCTION JOINTS EVERY 10 FEET FOR 4 INCH THICK PAVEMENT, 12 FEET FOR 5 INCH THICK PAVEMENT, AND 15 FEET FOR 6 INCH THICK PAVEMENT OR GREATER. PANELS SHALL BE CUT SUCH THAT PANELS ARE NEARLY SQUARE AND DO NOT EXCEED 1.4 LENGTH TO WIDTH RATIO. EXPANSION JOINTS SHALL BE PROVIDED AT ALL FIXED STRUCTURES, SUCH AS: LIGHT STANDARD FOUNDATIONS, SEWER STRUCTURES, BUILDINGS, WALLS, BOTTOM OF STAIRS, ROOF DRAINS, ETC., AND EVERY 150 FEET MAXIMUM. DOWEL BARS SHALL BE PROVIDED AT TRANSVERSE JOINTS IN ALL HEAVY DUTY PAVEMENT DRIVE AISLES.
3. THIS DETAIL APPLIES TO ALL CONCRETE PAVEMENT FOR PARKING LOTS, DRIVE/ACCESS AISLES, CURBS & GUTTERS, AND SIDEWALKS.
4. INCLUDE BAR WITH TRANSVERSE SAW–CUT JOINTS FOR HEAVY DUTY PAVEMENT. OMIT BAR WITH SAW–CUT JOINTS FOR STANDARD DUTY PAVEMENT AND SIDEWALKS.
5. PROVIDE CONSTRUCTION JOINT AT END OF DAYS WORK OR IF CONCRETE PLACEMENT IS SUSPENDED FOR MORE THAN 30 MINUTES.
6. SAW–CUT JOINTS SHALL BE CUT WITHIN 12 HOURS OF INITIAL SET OF CONCRETE. RAVELED JOINTS WILL NOT BE ACCEPTED.
7. ELASTOMERIC POLYURETHANE JOINT SEALANT IS REQUIRED FOR ALL JOINTS AND SHALL BE LIGHT GRAY IN COLOR.
8. OMIT DOWEL BARS FOR EXPANSION JOINTS AT BUILDINGS, LIGHT STANDARDS, AND ROOF DRAINS.

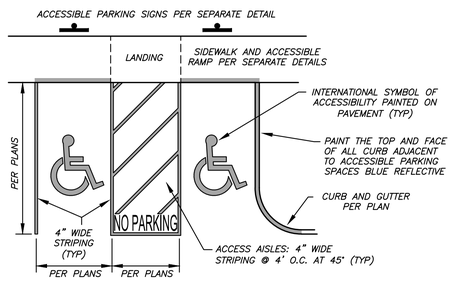
CONCRETE PAVEMENT JOINTS
NOT TO SCALE





NOTES:
1. SEE SITE PLAN SHEET(S) FOR SIGN LOCATIONS.
2. ALL SIGNS SHALL BE 0.80 ENGINEER GRADE REFLECTIVE ALUMINUM.

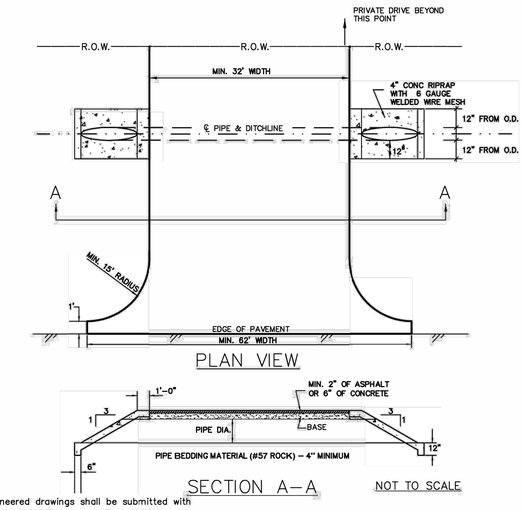
ACCESSIBLE PARKING STALL SIGNAGE
NOT TO SCALE



NOTES:
1. ALL ACCESSIBLE STRIPING SHALL BE BLUE REFLECTIVE.
2. ALL PAVEMENT WITHIN ACCESSIBLE PARKING AREAS SHALL BE AT 1.7% OR LESS SLOPE IN ALL DIRECTIONS.
3. THE WORDS "NO PARKING" SHALL BE PAINTED IN ALL ACCESS AISLES ADJACENT TO PARKING SPACE. THE WORDS MUST BE PAINTED IN ALL CAPITAL LETTERS WITH A LETTER HEIGHT OF AT LEAST TWELVE INCHES AND A STROKE WIDTH OF AT LEAST TWO INCHES. THE WORDS SHALL BE CENTERED IN EACH ACCESS AISLE.

ACCESSIBLE PARKING STALL STRIPING
NOT TO SCALE

HAYS COUNTY DRIVEWAY STANDARD



PLAN VIEW

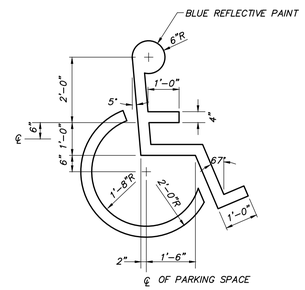
SECTION A–A NOT TO SCALE

NOTES:
- Engineered drawings shall be submitted with commercial driveway permit applications.
- Driveways shall be constructed of either **6"** of class "A" concrete reinforced with **#3** bars at **18" OC** both ways over **2"** of compacted base, or **2"** of asphalt over **8"** of compacted base.
- SET's shall be constructed of **4"** of class "A" concrete reinforced with **6ga** welded wire mesh with a minimum slope of **3:1 (6:1** on pipes larger than D2).
- Culvert flowline shall match the flowline of the ditch, with min. **4"** thickness of pipe bedding material (**#57** rock).
- An expansion joint shall be placed at the ROW line, with **#4** smooth bars placed depth **12" OC.**
- Special conditions may apply to pipes larger than D2 pipe–arched **21"X15".**

HAYS COUNTY, TEXAS
COMMERCIAL DRIVEWAY CULVERT–STYLE

18" X 12" REFLECTIVE ALUMINUM (80 MIL). RED LETTERS ON WHITE BACKGROUND.

FIRE LANE SIGN
NOT TO SCALE



ACCESSIBLE SYMBOL
NO SCALE

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DRIPPING SPRINGS PROPERTY

3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

Date
JUNE 9, 2023

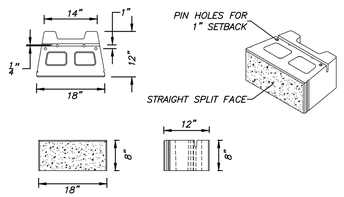
Revised
1 SEPTEMBER 20, 2023
CITY COMMENTS
3 JANUARY 11, 2024

Design: JH Drawn: SK

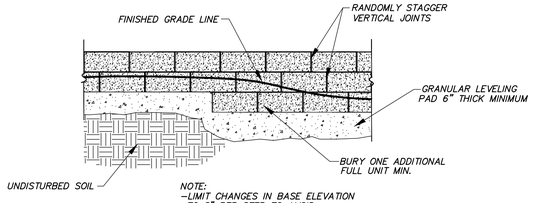
SITE DETAILS

Sheet
3C10.01

ES&S PROJECT NO. 15964

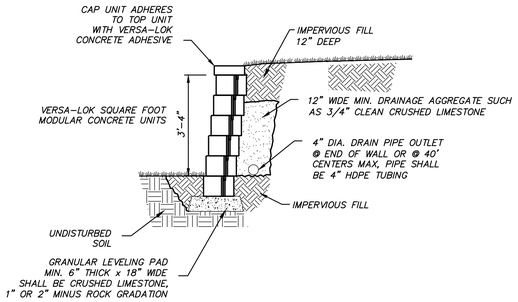


VERSA-LOK SQUARE FOOT UNIT

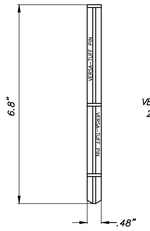


NOTE:
-LIMIT CHANGES IN BASE ELEVATION TO 8" PER STEP TO AVOID DIFFERENTIAL SETTLEMENT
-STEP OFTEN ENOUGH TO MAINTAIN MINIMUM REQUIRED EMBEDMENT

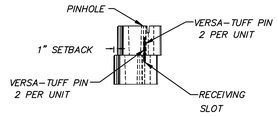
STEPPING BASE DETAIL



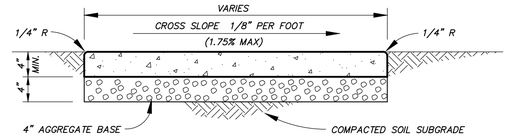
TYPICAL SECTION
UNREINFORCED RETAINING WALL



VERSA-TUFF PIN



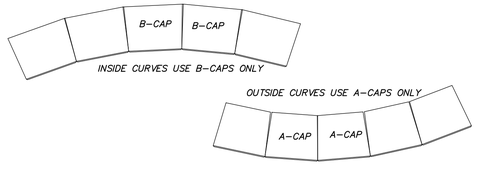
1" SETBACK PINNING DETAIL
CROSS SECTION



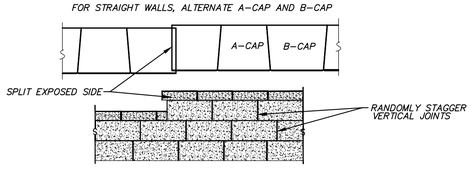
NOTES:
1. SIDEWALK SHALL BE 5-8% AIR-ENTRAINED, 6 BAG MIX, 4,000 PSI PORTLAND CEMENT CONCRETE.
2. INSTALL TRANSVERSE EXPANSION JOINTS TO MATCH STREET OR CURB AND GUTTER EXPANSION JOINTS AND AT ALL DRIVEWAY APPROACHES, FIXED STRUCTURES, BUILDINGS, AND SIDEWALK RAMPS. SPACING SHALL NOT EXCEED 100'.
3. FOR SIDEWALKS UP TO 6 FT. WIDE, INSTALL TRANSVERSE SAW-CUT JOINTS AT SPACING EQUAL TO SIDEWALK WIDTH.
4. FOR SIDEWALKS WIDER THAN 6 FT., INSTALL LONGITUDINAL SAW JOINT AT CENTERLINE OR AT A SPACING NOT TO EXCEED 5 FT. TRANSVERSE SAW-CUT JOINT SPACING EQUAL TO HALF SIDEWALK WIDTH.
5. IF SIDEWALK IS REINFORCED, NO STEEL SHALL BE PLACED THROUGH AN EXPANSION JOINT.
6. SEE SEPARATE DETAIL FOR ADDITIONAL CONCRETE JOINT REQUIREMENTS.

CONCRETE SIDEWALK
NOT TO SCALE

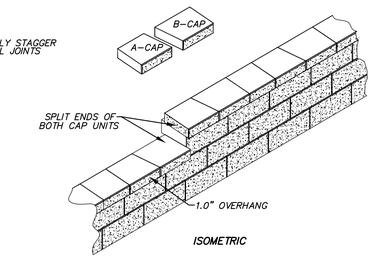
GENERAL NOTES FOR CAPPING:
1. CAPS SHALL BE ADHERED TO WALL USING VERSA-LOK CONCRETE ADHESIVE.
2. CAPS MAY BE PLACED WITH A 1/2" TO 1" OVERHANG OF TOP COURSE.
3. WHEN SPLITTING CAP UNIT FOR WALL END DO NOT USE A CAP SECTION LESS THAN 6" WIDE
4. DO NOT OVERHANG CAP AT END OF COURSE MORE THAN 1"



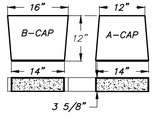
PLAN VIEW



PROFILE

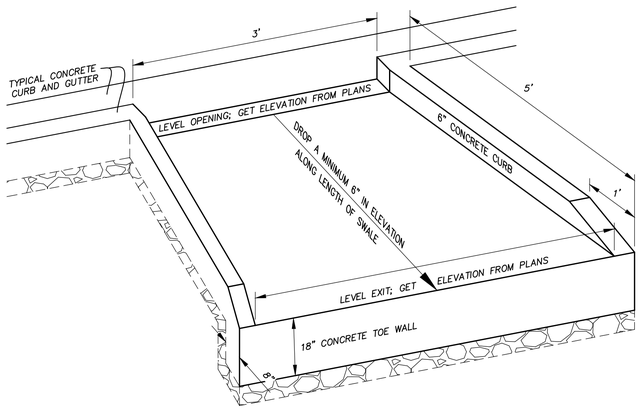


ISOMETRIC



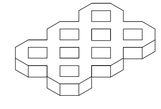
CAPPING DETAIL

SEGMENTAL BLOCK RETAINING WALL DETAIL
NOT TO SCALE

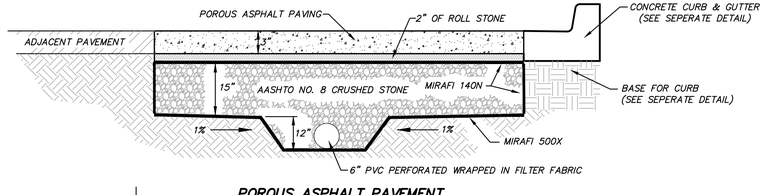


NOTES:
1. SWALE CAN BE POURED INTEGRALLY WITH CONCRETE CURB AND GUTTER OR SEPARATELY. IF POURED SEPARATELY INSTALL DOWELED CONSTRUCTION JOINT PER SEPARATE DETAIL.

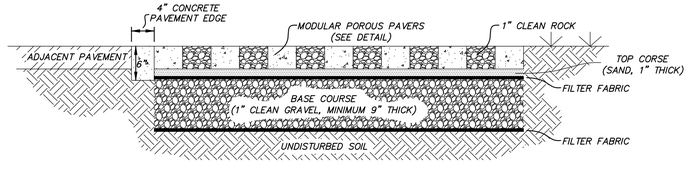
CURB CUT WITH CONCRETE SWALE
NOT TO SCALE



MODULAR POROUS PAVER BLOCK
NOT TO SCALE



POROUS ASPHALT PAVEMENT
NOT TO SCALE



MODULAR POROUS PAVER BLOCK FILTER STRIP (ALTERNATE)
NOT TO SCALE

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3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

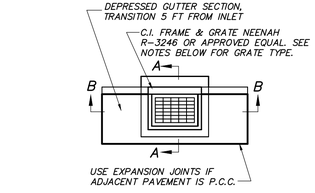
Revised
1 SEPTEMBER 20, 2023 CITY COMMENTS
3 JANUARY 11, 2024

Design: JH Drawn: SK

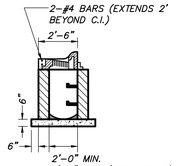
SITE DETAILS

Sheet
1C10.02

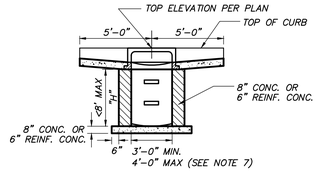
ES&S PROJECT NO. 15964



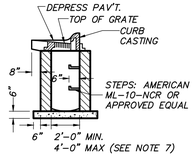
PLAN – SINGLE



SECTION A–A
ALTERNATE



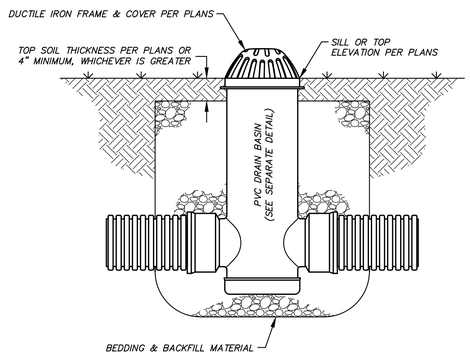
SECTION B–B



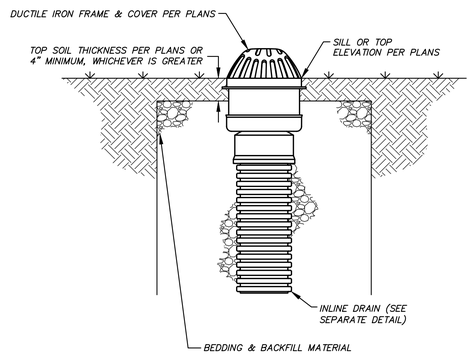
SECTION A–A

NOTES:
1. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS WITH 6% AIR.
2. INSTALL WEEP HOLES PER SEPARATE DETAIL.
3. REINFORCED CONCRETE SHALL BE #4 BARS AT 12" CTRS, BOTH WAYS AND #4 BARS DIAGONAL AT PIPE OPENINGS FOR BOXES UP TO 4.0' WIDTH AND <8' HEIGHT. SEE SEPARATE DETAIL FOR CONCRETE BOX DESIGN FOR DIMENSIONS THAT EXCEED THESE MAXIMUMS.
4. FORM ALL INVERTS FOR SMOOTH FLOW THRU STRUCTURE WITH NON SHRINK GROUT.
5. STEPS NOT REQUIRED WHERE "H" IS LESS THAN 4' PLACE STEPS ON VACANT WALL WHEN POSSIBLE. STAGGER STEPS 2" FROM CENTERLINE OF FRAME AND GRATE. TOP STEP SHALL BE 24" BELOW GRATE. STEP SPACING SHALL BE 16" TO BOTTOM OF STRUCTURE.
6. GRATE SHALL BE NEENAH TYPE C IF AT LOW POINT (SUMP) OR TYPE L BICYCLE VANE GRATE WHEN INLET IS SET ON GRADE (NOT IN SUMP).
7. FOR STRUCTURES LARGER THAN 3'x2' FOR SINGLE INLETS, OR 6'–2"x2' FOR DOUBLE INLETS, INSTALL REINFORCED CONCRETE TOP WITH 3'x2' OR 6'–2"x2' OPENING.
8. FOR BOXES <4' WIDE AND <8' TALL TOP REINFORCEMENT SHALL BE #4 BARS @ 8" E.W. WITH #4 BARS DIAGONAL AT OPENING. BOXES >4' WIDE AND >8' TALL REINFORCEMENT SHALL BE PER SEPARATE DETAIL.
9. TOP ELEVATION SHOWN ON THE PLAN SHALL BE THE CENTER OF THE CURB RETURN OF THE CASTING.
10. SLOPE THE TOP TO MATCH ADJACENT GRADE IF NOT LOCATED AT LOW POINT. MAINTAIN WATERTIGHTNESS.

CURB INLET
NOT TO SCALE



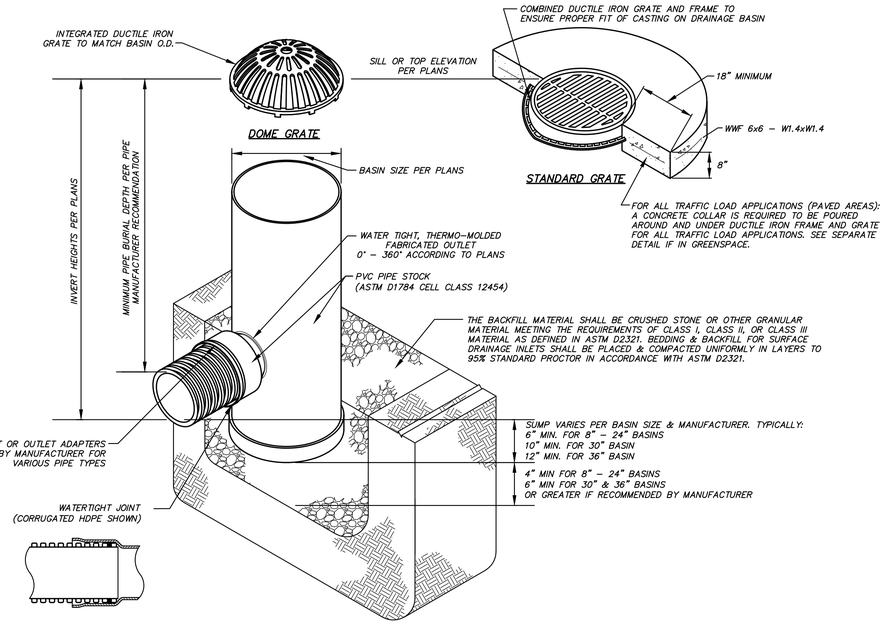
DRAIN BASIN



INLINE DRAIN

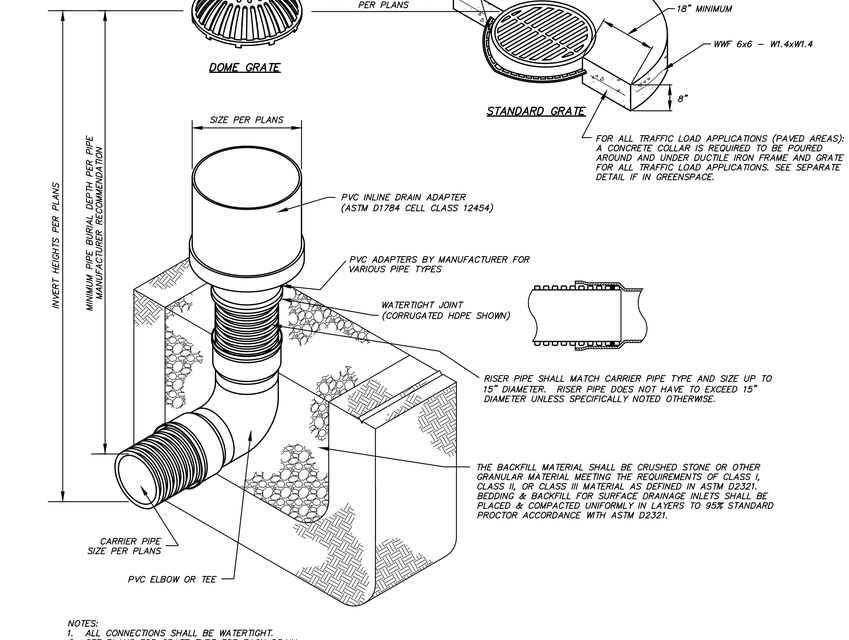
NOTES:
1. THE BEDDING & BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. ALL BEDDING & BACKFILL SHALL BE PLACED & COMPACTED UNIFORMLY IN LIFTS TO 95% STANDARD PROCTOR IN ACCORDANCE WITH ASTM D2321.

PVC BASIN/DRAIN INSTALLATION FOR NON–TRAFFIC/GREENSPACE AREAS ONLY
NOT TO SCALE



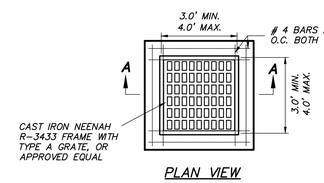
NOTES:
1. ALL CONNECTIONS SHALL BE WATERTIGHT.
2. SEE PLANS FOR GRATE TYPE FOR EACH BASIN.
3. ALL FRAMES & GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70–50–05, OR 80–55–06.
4. ALL STANDARD OR SOLID GRATES SHALL BE MEET H–20 LOAD RATING. DOME GRATES HAVE NO LOAD RATING.
5. DRAIN BASINS SHALL BE CUSTOM MANUFACTURED AS A SINGLE UNIT ACCORDING TO PLAN DIMENSIONS. RISERS SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY ENGINEER.
6. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE & PVC PIPE.

PVC DRAIN BASIN & GRATE
NOT TO SCALE

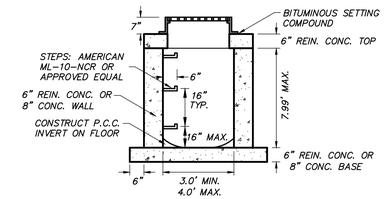


NOTES:
1. ALL CONNECTIONS SHALL BE WATERTIGHT.
2. SEE PLANS FOR GRATE TYPE FOR EACH DRAIN.
3. ALL FRAMES & GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70–50–05, OR 80–55–06.
4. ALL STANDARD OR SOLID GRATES SHALL BE MEET H–20 LOAD RATING. DOME GRATES HAVE NO LOAD RATING.
5. DRAIN ADAPTER SHALL BE CUSTOM MANUFACTURED AS A SINGLE UNIT ACCORDING TO PLAN DIMENSIONS. RISERS SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY ENGINEER.
6. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE & PVC PIPE.

PVC INLINE DRAIN & GRATE
NOT TO SCALE



PLAN VIEW



SECTION A–A

NOTES:
1. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS WITH 6% AIR.
2. REINFORCING STEEL SHALL BE GRADE 60.
3. INSTALL WEEP HOLES IN STRUCTURE PER SEPARATE DETAIL.
4. REINFORCED CONCRETE SHALL BE #4 BARS AT 12" CTRS, BOTH WAYS AND #4 BARS DIAGONAL AT PIPE OPENINGS.
5. FORM ALL INVERTS FOR SMOOTH FLOW THRU STRUCTURE.
6. SEE SEPARATE DETAIL FOR CONCRETE BOX DESIGN FOR DIMENSIONS THAT EXCEED THE MAXIMUMS LISTED HERE.
7. STEPS NOT REQUIRED WHERE "H" IS LESS THAN 4', PLACE STEPS ON VACANT WALL WHEN POSSIBLE. STAGGER STEPS 2" EACH WAY FROM CENTERLINE OF FRAME AND LID.

CATCH BASIN
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1/11/2024

STATE OF TEXAS
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126148
PROFESSIONAL ENGINEER

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Date
JUNE 9, 2023

Revised
1 SEPTEMBER 20, 2023
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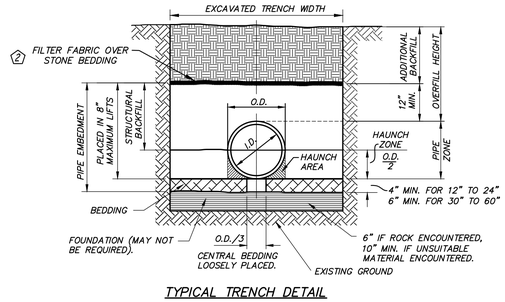
3 JANUARY 11, 2024

Design: JH Drawn: SK

STORM SEWER DETAILS

Sheet
3C11.01

ES&S PROJECT NO. 15964



TYPICAL TRENCH DETAIL

BACKFILL NOTES:

1. BEDDING, HAUNCH, AND STRUCTURAL BACKFILL SHALL BE IN CONFORMANCE WITH AASHTO M145 A1 OR A-3 COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D698.
2. ALL PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ASTM D2321 LATEST ADDITION.
3. HAUNCH, STRUCTURAL, AND ADDITIONAL BACKFILL SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES AND COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DEFINED BY ASTM D698.

TABLE I
CORRUGATED HDPE AND POLYVINYL CHLORIDE CIRCULAR PIPE

SPECIFIED DIA OF PIPE (IN.)	MIN OVERFILL HEIGHT (FT)	HDPE MAX OVERFILL HEIGHT* (FT)	POLYVINYL CHLORIDE MAX OVERFILL HEIGHT* (FT)		VIRGIN RESIN (AASHTO M294) OVERFILL HEIGHT* (FT)			ENGINEERED COMPOUND (RECYCLED, ASTM F2648) OVERFILL HEIGHT* (FT)			TRENCH WIDTH (IN.)
			SDR 35#	SDR 26#	CLASS 1**	CLASS 2**	CLASS 3**	CLASS 1**	CLASS 2**	CLASS 3**	
12	2	26	15	30	43	29	21	27	19	12	34
15	2	28	15	30	45	30	22	27	20	13	39
18	2	24	15	30	40	27	19	25	18	11	44
24	2	20	15	30	36	25	17	22	16	12	55
30	2.5	17	N/A	N/A	29	21	15	16	12	6	67
36	2.5	19	N/A	N/A	34	23	16	21	15	10	76
42	2.5	19	N/A	N/A	31	23	16	17	13	7	84
48	2.5	17	N/A	N/A	30	20	14	18	13	10	95
54	2.5	9	N/A	N/A	33	22	15	N/A	N/A	N/A	104
60	2.5	9	N/A	N/A	33	22	15	20	15	10	113

TABLE ASSUMES STANDARD PROCTOR DENSITY OF 95%

* MAXIMUM OVERFILL MEASURED FROM THE TOP OF PIPE TO SURFACE

** CLASS 1 – CRUSHED ROCK, ANGULAR; AASHTO M43 – 5, 6, 56, 57, 67

** CLASS 2 – CLEAN, COURSE GRAINED SOILS TO BORDERLINE CLEAN FINES; AASHTO M43 – 5, 6, 56, 57, 67; AASHTO M145 – A1, A3

** CLASS 3 – COURSE GRAINED SOILS WITH FINES AND INORGANIC FINE-GRAINED SOILS; AASHTO M43 – GRAVEL AND SAND WITH <10% FINES; AASHTO M145 – A-2-4, A-2-5, A-2-6, A-4, OR A-6 WITH >30% RETAINED ON #200 SIEVE

** REFER TO CURRENT ADS INC. DRAINAGE HANDBOOK FOR A COMPLETE LISTING OF SUITABLE MATERIALS

PER ASTM D-3034 FOR PIPE UP TO 15" AND ASTM F679 OVER 15"

TABLE II
MINIMUM COVER FOR CONSTRUCTION LOADS

PIPE DIA. (IN.)	MINIMUM COVER (FT) FOR INDICATED AXLE LOADS (THOUSANDS OF POUNDS)			
	18–50	50–75	75–110	110–150
12–36	2.0	2.5	3.0	3.0
42–48	3.0	3.0	3.5	4.0

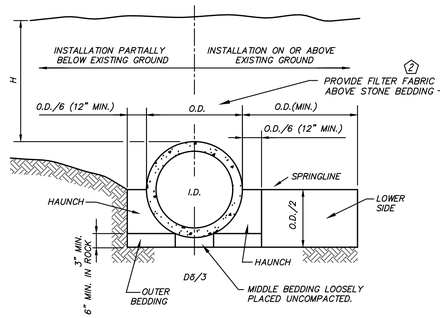
THE CONTRACTOR SHALL PROVIDE MINIMUM COVER PLUS ANY ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. IN UNPAVED SITUATIONS, THE SURFACE MUST BE MAINTAINED TO A LEVEL AND NON-RUTTED CONDITION.

LEGEND

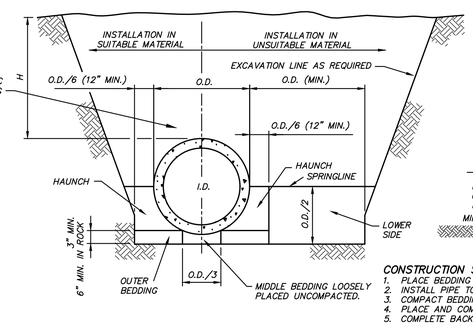
I.D. = NORMAL INSIDE DIAMETER OF PIPE.
O.D. = OUTSIDE DIAMETER OF PIPE.
H = FILL COVER HEIGHT OVER PIPE (FEET).
MIN. = MINIMUM
MAX = MAXIMUM
= UNDISTURBED SOIL

CONSTRUCTION SEQUENCE:

1. PLACE BEDDING MATERIAL TO GRADE.
2. COMPACT BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
3. INSTALL PIPE TO GRADE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE SPRINGLINE.
5. COMPLETE BACKFILL ACCORDING TO SPECIFICATIONS.



EMBANKMENT INSTALLATIONS



TRENCH INSTALLATION

BEDDING AND COMPACTION REQUIREMENTS
(% MAX. DRY DENSITY PER ASTM D698)

INSTALLATION TYPE	BEDDING THICKNESS	HAUNCH AND OUTER BEDDING			LOWER SIDE BEDDING		
		CATEGORY 1 SOIL (A)	CATEGORY 2 SOIL (B)	CATEGORY 3 SOIL (C)	CATEGORY 1 SOIL (A)	CATEGORY 2 SOIL (B)	CATEGORY 3 SOIL (C)
1	O.D./24 MINIMUM, NOT LESS THAN 3". IF ROCK FOUNDATION, USE O.D./12 MINIMUM, NOT LESS THAN 6".	95	N/A	N/A	90	95	100
2	O.D/24 MINIMUM, NOT LESS THAN 3". IF ROCK FOUNDATION, USE O.D./12 MINIMUM, NOT LESS THAN 6".	90	95	N/A	85	90	95
3	O.D./24 MINIMUM, NOT LESS THAN 3". IF ROCK FOUNDATION, USE O.D./12 MINIMUM, NOT LESS THAN 6".	85	90	95	85	90	95
4	O.D./24 MINIMUM, NOT LESS THAN 3". IF ROCK FOUNDATION, USE O.D./12 MINIMUM, NOT LESS THAN 6".	NO COMPACTION REQUIRED	NO COMPACTION REQUIRED	85	NO COMPACTION REQUIRED	NO COMPACTION REQUIRED	85

(A) WELL GRADED MIXTURE OF STONE FRAGMENTS, GRAVEL AND SAND IN ACCORANCE W/ AASHTO M 145 GROUP A-1 OR A-3
(B) LOW PLASTIC GRANULAR MATERIAL IN ACCORDANCE W/ AASHTO M145 GROUP A-2 OR A-4
(C) SILTY CLAYS IN ACCORDANCE W/ AASHTO M145 GROUP A-5, A-6, OR A-7

LEGEND

I.D.= NORMAL INSIDE DIAMETER OF PIPE.
O.D. = OUTSIDE DIAMETER OF PIPE.
H = FILL COVER HEIGHT OVER PIPE (FEET)
MIN. = MINIMUM
= UNDISTURBED SOIL

CONSTRUCTION SEQUENCE:

1. PLACE BEDDING MATERIAL TO GRADE. DO NOT COMPACT.
2. INSTALL PIPE TO GRADE.
3. COMPACT BEDDING OUTSIDE THE MIDDLE THIRD OF THE PIPE.
4. PLACE AND COMPACT THE HAUNCH AREA UP TO THE SPRINGLINE.
5. COMPLETE BACKFILL ACCORDING TO SPECIFICATIONS.

GENERAL NOTES:

1. MULTIPLE PIPE CULVERTS SHALL BE INSTALLED WITH A MINIMUM CLEARANCE BETWEEN PIPES OF 1/2 O.D. OR 12", WHICHEVER IS GREATER, BUT NOT TO EXCEED 36".
2. USE MINIMUM CLASS III PIPE UNLESS NOTED OTHERWISE. CLASS IV & V SHALL BE USED AS REQUIRED BY BACKFILL DEPTH. CLASS I AND CLASS II REINFORCED CONCRETE PIPE SHALL ONLY BE USED FOR SEWERS IN TRENCHES OUTSIDE ROADBEDS, STREET LIMITS, PARKING LOTS AND INFLUENCE OF ANY STRUCTURE.

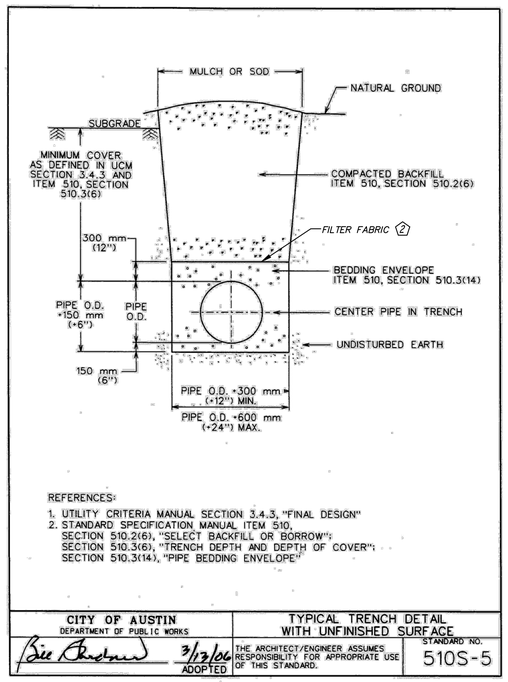
MAXIMUM HEIGHT OF FILL OVER RCP CULVERTS

INSTALLATION TYPE	PIPE CLASS (FEET)				
	CLASS I	CLASS II	CLASS III	CLASS IV	CLASS V
TYPE 1	14	18	21	33	50
TYPE 2	9	12	16	25	38
TYPE 3	7	10	12	19	30
TYPE 4	5	7	8	13	19

NOTE: IF FILL HEIGHT EXCEEDS 50 FEET, A SPECIAL DESIGN CONCRETE PIPE WILL BE REQUIRED USING TYPE 1 INSTALLATION.

EMBEDMENT OF PLASTIC STORM SEWER PIPE

NOT TO SCALE



REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510,
   SECTION 510.2(6), "SELECT BACKFILL OR BORROW";
   SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER";
   SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
Bill Anderson 3/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5

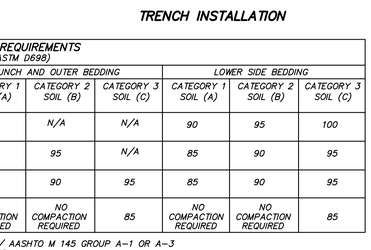
EMBEDMENT OF RCP STORM SEWER PIPE

NOT TO SCALE

REQUIREMENTS FOR CULVERT PIPES AND SAFETY PIPE RUNNERS

Pipe I.D.	RCP Wall "B" Thickness	TP Wall Thickness (8)	"D" (1)	Slope	Min Length of Unit	Single Pipe		Multiple Pipes	
						Skew	Pipe Runners Required	Skew	Pipe Runners Required
12"	2"	1.15"	17.00"	3:1	2' - 11"	≤ 45°	No	≤ 45°	No
				4:1	3' - 6"				
				6:1	4' - 9"				
15"	2 1/4"	1.30"	20.50"	3:1	3' - 8"	≤ 45°	No	≤ 45°	No
				4:1	4' - 7"				
				6:1	6' - 5"				
18"	2 1/2"	1.60"	24.00"	3:1	4' - 6"	≤ 45°	No	≤ 45°	No
				4:1	5' - 8"				
				6:1	8' - 0"				
24"	3"	1.95"	31.00"	3:1	6' - 2"	≤ 45°	No	= 30°	No
				4:1	7' - 10"			> 30°	Yes
				6:1	11' - 3"				
30"	3 1/2"	2.65"	38.50"	3:1	7' - 10"	= 15°	No	= 15°	No
				4:1	10' - 1"	> 15°	Yes	> 15°	Yes
				6:1	14' - 8"				
36"	4"	2.75"	45.50"	3:1	9' - 5"	= 0°	No	≥ 0°	Yes
				4:1	12' - 3"				
				6:1	17' - 11"	> 0°	Yes		
42"	4 1/2"	2.7"	52.50"	3:1	11' - 1"	≥ 0°	Yes	≥ 0°	Yes
				4:1	14' - 5"				
				6:1	21' - 2"				

PLAN
(Showing bell end connection.)



LONGITUDINAL ELEVATION
(Showing bell end connection.)

SAFETY PIPE RUNNER DIMENSIONS

Max Safety Pipe Runner Length	Required Pipe Runner Size		
	Pipe Size	Pipe O.D.	Pipe I.D.
11' - 2"	3" STD	3.500"	3.068"
15' - 6"	3 1/2" STD	4.000"	3.548"
20' - 10"	4" STD	4.500"	4.026"
35' - 4"	5" STD	5.563"	5.047"

(1) Dimension "D" is based on reinforced concrete pipe (RCP) meeting the requirements of ASTM C-76, Class III, (RCP Wall "B" thickness). Adjust "D" for any other wall thickness used. For thermoplastic pipe (TP) take into account the annular space requirements for grouted connections.

(2) Slope as shown elsewhere in plans. Slope of 3:1 or flatter is required for vehicle safety.

(3) Toewall to be used only when dimension is shown elsewhere in the plans.

(4) Fill the top 4" of void between precast end treatments with concrete riprap. Concrete riprap is considered subsidiary to the Item 467, "Safety End Treatment."

(5) Adjust clear distance between pipes to provide for the minimum distance between safety end treatments.

(6) Measured along slope.

(7) Provide cement stabilized bedding and backfill in accordance with the Item 400, "Excavation and Backfill for Structures." Bedding and backfill is considered subsidiary to the Item 467, "Safety End Treatment." When concrete riprap is specified around the safety end treatment, backfill as directed by Engineer.

(8) Thermoplastic pipe wall thickness may vary. Adjust accordingly. Thermoplastic pipe requires the safety end treatments to have a bell end for grouted connections.

GENERAL NOTES:

Precast safety end treatment for reinforced concrete pipe (RCP), and thermoplastic pipe (TP) may be used for TYPE II end treatment as specified in Item "Safety End Treatment."

When precast safety end treatment is used as a Contractor's alternate to mitered RCP, riprap will not be required unless noted otherwise on the plans.

Synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing in riprap concrete unless noted otherwise.

Manufacture this product in accordance with Item 467, "Safety End Treatment" except as noted below :

A. Provide minimum reinforcing of #4 at 6" (Grade 40) or #4 at 9" (Grade 60) each way or 6"x6" – D12 x D12 or 5"x5" – D10 x D10 welded wire reinforcement (WWR).
B. For precast (steel formed) sections, provide Class "C" concrete (f'c = 3,600 psi).

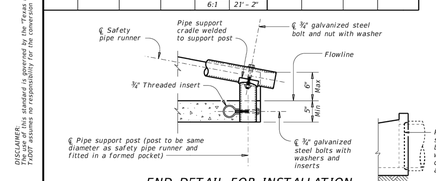
At the option and expense of the Contractor, the next larger size of safety end treatment may be furnished as long as the "D" dimension cast is that of the required size of pipe.

Pipe runners are designed for a traversing load of 1,800 Lbs at yield as recommended by Research Report 280-1, "Safety Treatment of Roadside Cross-Drainage Structures", Texas Transportation Institute, March 1981.

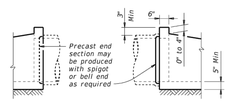
Provide safety pipe runners, cross pipes, pipe support posts, and pipe stubs meeting the requirements of ASTM A53 (Type E or S, Grade B), ASTM A500 (Grade B), or API 5LX52.

Galvanize all steel components except reinforcing steel after fabrication. Repair galvanizing damaged during transport or construction in accordance with the specifications.

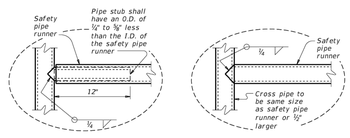
Connect RCP using the Optional Joint for RCP detail shown or in accordance with Item 464 "Reinforced Concrete Pipe." Connect TP by grouting. See Pipe and Box Grouted Connections (PBGC) standard for grouted connections with TP and precast safety end treatment.

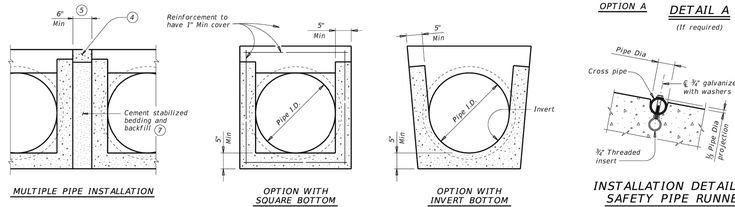


END DETAIL FOR INSTALLATION OF SAFETY PIPE RUNNERS
(If required)



OPTIONAL JOINT FOR RCP
(Showing joint between RCP and precast safety end treatment)





SECTION A-A

Texas Department of Transportation — Bridge Division Standard

(3) PRECAST SAFETY END TREATMENT
TYPE II ~ CROSS DRAINAGE

PSET-SC

File: CD-PSET-SC-21.dgn	DN: RLW	CK: KLR	DW: JTR	CK: GAF
©TxDOT February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS 12-21: Added (4)" (7)	DIST	COUNTY		SHEET NO.

DISCLAIMER:
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(3) KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

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Date
JUNE 9, 2023

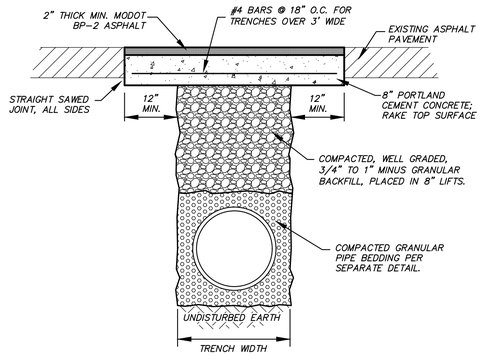
Revised
(1) SEPTEMBER 20, 2023
CITY COMMENTS
(2) DECEMBER 19, 2023
(3) JANUARY 11, 2024

Design: JH Drawn: SK

STORM SEWER DETAILS

Sheet
(1)C11.02

ES&S PROJECT NO. 15964

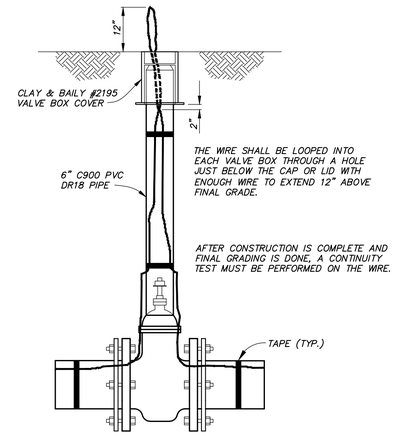


EXISTING ASPHALT PAVEMENT

NOTES:
1. CONCRETE SHALL BE 4,000 PSI WITH 6% AIR.
2. REINFORCEMENT SHALL BE GRADE 60.
3. A MINIMUM OF 5' OF CONCRETE CURB AND GUTTER SHALL BE REPLACED. WHERE THE REPAIR WILL BE WITHIN 5' OF A JOINT, REPLACE CONCRETE CURB AND GUTTER TO THE JOINT. NO SECTION OF CONCRETE CURB AND GUTTER SHALL BE LESS THAN 5' LONG.
4. CLEAN GRANULAR MATERIAL IS NOT SUITABLE TRENCH BACKFILL.

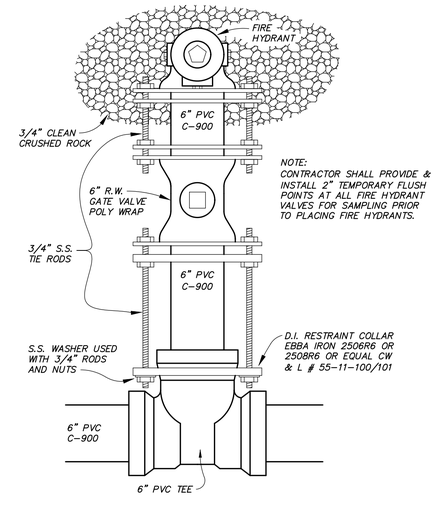
TRENCH PATCHING WITHIN PAVED AREAS

NOT TO SCALE



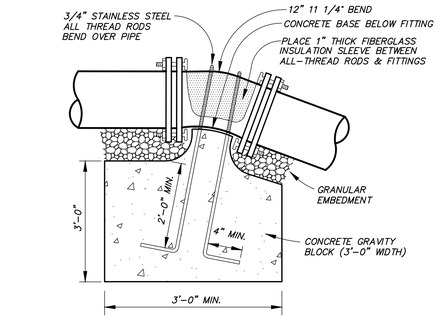
TYPICAL VALVE INSTALLATION

NOT TO SCALE



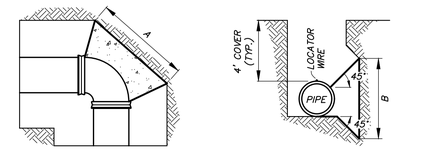
FIRE HYDRANT DETAIL

NOT TO SCALE



VERTICAL THRUST BLOCK DETAIL

NOT TO SCALE

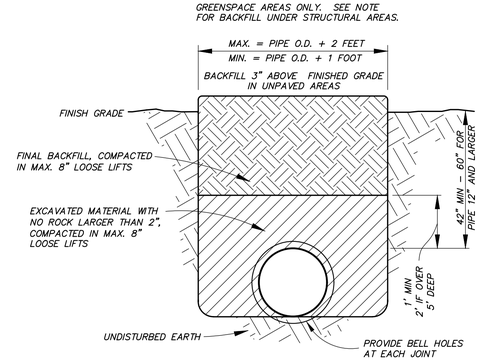


PLAN SECTION

PIPE SIZE	11 1/4° BEND		22 1/2° BEND		45° BEND		90° BEND		TEE	
	A	B	A	B	A	B	A	B	A	B
4" & 6"	1'-0"	0'-6"	1'-3"	0'-9"	1'-6"	1'-0"	2'-0"	1'-6"	2'-6"	1'-9"
8"	1'-0"	0'-9"	1'-6"	1'-0"	2'-0"	1'-6"	2'-9"	2'-0"	3'-3"	2'-3"
12"	1'-6"	1'-0"	2'-3"	1'-6"	3'-0"	2'-0"	4'-0"	2'-9"	5'-0"	3'-3"
16"	2'-0"	1'-6"	3'-0"	2'-0"	4'-0"	2'-9"	5'-6"	3'-9"	6'-0"	4'-0"

THRUST BLOCK DETAIL

NOT TO SCALE



NOTE:
ALL TRENCHES UNDER PAVEMENT, BUILDINGS, RETAINING WALLS, OR OTHER STRUCTURAL AREAS SHALL BE BACKFILLED AND COMPACTED WITH CONTROLLED ENGINEERED FILL PER THE PROJECT SPECIFICATIONS.

PVC WATER PIPE EMBEDMENT DETAIL

NOT TO SCALE

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1/11/2024

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WATER DETAILS

Sheet
1 C12.01

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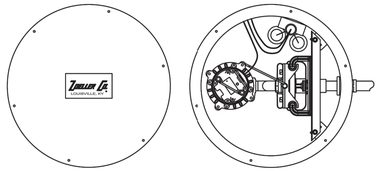
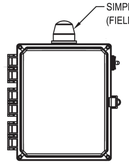
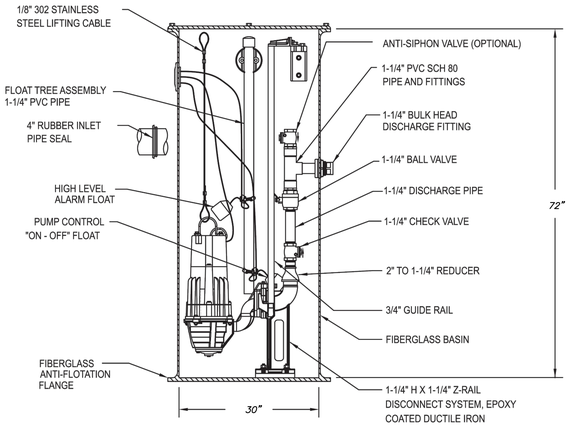






WET WELL DETAIL

NOT TO SCALE

PUMP DETAILS

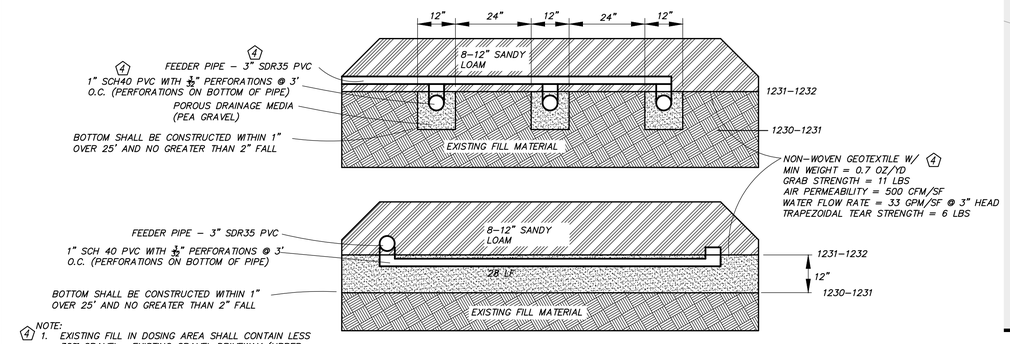
	CURRENT OPERATIONS
AVERAGE FLOW IN LIFT STATION	100.6 GPD
STATIC HEAD	7.25 FT
TOTAL DYNAMIC HEAD	10.3 FT
DOSAGE RATE	15 GPM
DESIGN PUMP	ZOELLER 810 ~60 208V/1 HP SUBMERSIBLE PUMP (ELECTRIC = SINGLE PHASE)
PUMP DISCHARGE OUTLET SIZE	0'-3"
PUMP TIME	5.2 MIN
CYCLES PER DAY	1.3 CYCLES

WET WELL ELEVATIONS

TOP	1231.00
FEEDER PIPE	1229.00
FL IN	1227.60
PUMP ON	1226.60
ALARM ON	1227.50
PUMP OFF	1224.55
WET WELL FLOOR	1224.00
LIFT STATION BASE	1223.50

WET WELL AND VALVE VAULT NOTES:

1. CONTRACTOR SHALL SELECT PUMP AND/OR PACKAGE PUMP SYSTEM MEETING REQUIREMENTS NOTED AND SUBMIT TO ENGINEER FOR FINAL DESIGN AND APPROVAL.
2. FLOATS ARE SHOWN AN A VISUAL REPRESENTATION. WATER ELEVATION DEVICE TO BE SELECTED BY CONTRACTOR.



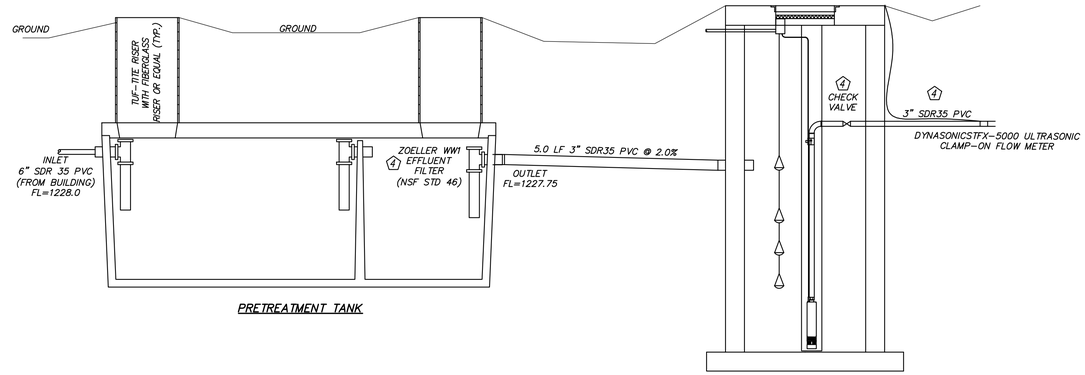
4 NOTE:
1. EXISTING FILL IN DOSING AREA SHALL CONTAIN LESS 30% GRAVEL. EXISTING GRAVEL DRIVEWAY (UPPER 6"-8" OF SOILS) SHALL BE REMOVED AND REPLACED SILTY CLAY LOAM SOILS.
2. A MIN OF 12" OF SOILS SHALL BE PROVIDED BETWEEN FRACTURED OR SOLID ROCK & CONTAINING LESS THAN 30% GRAVEL.

DOSING TRENCH DETAIL

NOT TO SCALE

CONTROL PANEL REQUIREMENTS

1. ELECTRICAL SERVICE DESIGN AND PERMITTING TO CONTROL PANEL SHALL BE BY CONTRACTOR
2. UTILIZE CORROSIVE RESISTANT EQUIPMENT IN THE WET WELL.
3. PROVIDE A WATERTIGHT SEAL AND SEPARATE STRAIN RELIEF FOR ALL FLEXIBLE CABLE.
4. EQUIPMENT SHALL COMPLY WITH WEATHERPROOF EQUIPMENT; NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA) 4 AT A MINIMUM AND 4X WHERE NECESSARY. AND NEMA STANDARD 250-2014, PUBLISHED DECEMBER 15, 2014.
5. INSTALL A ONE HUNDRED TEN VOLT (110V) POWER RECEPTACLE AT THE CONTROL PANEL LOCATED OUTDOORS TO FACILITATE MAINTENANCE.
6. PROVIDE GROUND FAULT CIRCUIT INTERRUPTION (GFCI) PROTECTION FOR ALL OUTDOOR RECEPTACLES.
7. ALARM SYSTEMS WITH AN UNINTERRUPTED POWER SERVICE SHALL BE PROVIDED FOR PUMPING SYSTEMS.
4 8. VISUAL AND AUDIO ALARM SHALL HAVE A MANUAL "SILENCE" SWITCH.



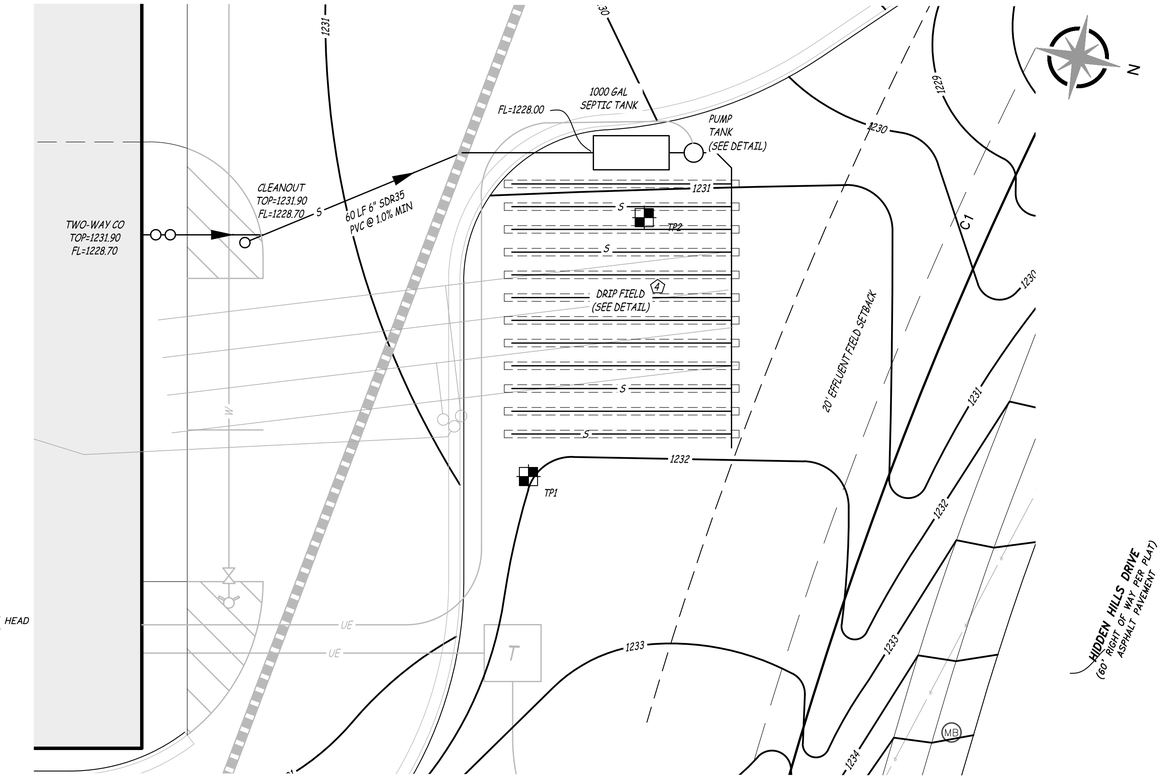
PRETREATMENT TANK

WET WELL

4 NOTES:
1. ALL TOPS/LIDS SHALL BE SET 3" HIGHER THAN SURROUNDING GRADE. BACKFILL AROUND EACH VIA SLOPING UP FLUSH WITH TOPS/LIDS ALLOWING FOR EASY MOWING OVER THE TOP. FINAL GRADE SHALL DIRECT ALL SURFACE RUNOFF AROUND THE TOPS/LIDS, NOT ACROSS.
2. TANK SHALL BE REINFORCED CONCRETE (ASTM C1227), FIBERGLASS, OR REINFORCED POLYETHENE WITH WATER TIGHT AND STURDY CONSTRUCTION AND SHALL BE MARKED WITH MANUFACTURER'S NAME, ADDRESS, AND TANK CAPACITY.
3. TANK RISERS SHALL BE A MIN DIAMETER OF 12".
4. DIRECTION OF FLOW SHALL BE LABELED ON TANK.
5. FLOWLINES CAN BE ADJUSTED TO ACCOUNT FOR SPECIFIC TANK MANUFACTURER REQUIREMENTS. MAINTAIN TOP/LID ELEVATIONS AS SHOWN. OBTAIN APPROVAL OF ALL ADJUSTMENTS PRIOR TO ORDERING.
6. PRETREATMENT TANK SHALL BE 1000 GALLON AND SHALL BE FITTED WITH INLET TEE AND OUTLOT TEE.
7. OUTLET TEE SHALL BE FITTED WITH FILTER.
8. TANKS SHALL BE BEDDED AND BACKFILLED WITH SAND, SANDY LOAM, OR PEA GRAVEL.
9. INSPECTION
   - 9.1. TANK EXCAVATION, BEDDING, AND BACKFILL MUST BE OBSERVED BY A CERTIFIED PROFESSIONAL.
   - 9.2. TANKS SHALL BE FILLED AND OBSERVED FOR LEAKS AFTER 24-HOURS. ANY LEAKS FOUND MUST BE REPAIRED.
   - 9.3. DOSING FIELD SHALL BE INSPECTED FOR PLAN CONFORMANCE BY A CERTIFIED PROFESSIONAL
   - 9.4. ADDITIONAL OBSERVATIONS MUST BE MADE AS REQUIRED BY THE HAYS COUNTY HEALTH DEPARTMENT.
   - 9.5. PRIOR TO SUBSTANTIAL COMPLETION, ALL COMPONENTS OF THE PUMP AND CONTROLS SHALL BE TESTED AND CONFIRMED TO OPERATE AS DESIGNED, INCLUDING ALARMS, PUMP DOSING RATE, PUMP ON/OFF, CONTROL LOGGING. ETC.

TANK - WET WELL CROSS SECTION

NOT TO SCALE



PLAN VIEW

SCALE: 1":10'

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4 JANUARY 19, 2024

Design: JH Drawn: SK

SANITARY SEWER DETAILS

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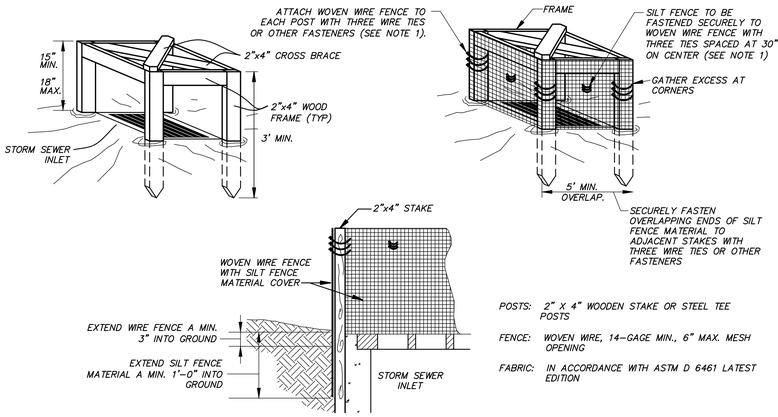
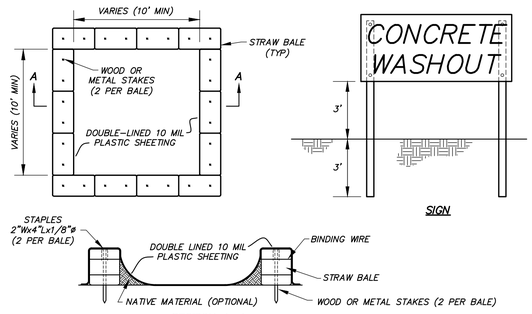


1. ATTACH THE WOVEN WIRE FENCE TO EACH POST AND THE GEOTEXTILE TO THE WOVEN WIRE FENCE (SPACED EVERY 30") WITH THREE WIRE TIES OR OTHER FASTENERS, ALL SPACED WITHIN THE TOP 8" OF THE FABRIC. ATTACH EACH TIE DIAGONALLY 45 DEGREES THROUGH THE FABRIC, WITH EACH PUNCTURE AT LEAST 1" VERTICALLY APART.
2. WHEN TWO SECTIONS OF SILT FENCE MATERIAL ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED ACROSS TWO POSTS.
3. MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE SWPPP. DEPTH OF ACCUMULATED SEDIMENTS MAY NOT EXCEED ONE-THIRD THE HEIGHT OF THE FABRIC. MAINTENANCE CLEANING MUST BE CONDUCTED REGULARLY TO PREVENT ACCUMULATED SEDIMENTS FROM REACHING ONE-THIRD THE HEIGHT OF THE SILT FENCE MATERIAL.
4. ALL SILT FENCE SHALL INCLUDE WIRE SUPPORT.

SILT FENCE INLET PROTECTION

NOT TO SCALE



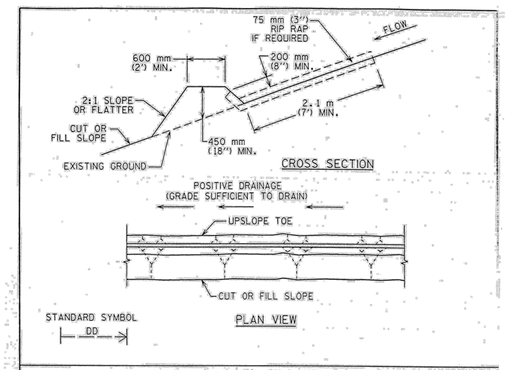
SIGN

SECTION A-A

NOTES:
1. ALL CONCRETE WASTE MATERIAL, INCLUDING WASHOUT WATER, SHALL BE TOTALLY CONTAINED.
2. SEE SWPPP FOR MORE DETAILS.
3. UPON PROJECT COMPLETION CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL CONCRETE WASTE FROM THE OWNER'S PROPERTY PER ALL APPLICABLE SOLID WASTE REGULATIONS.
4. CONSTRUCT SIGN OF WEATHER PROOF MATERIALS OF A SIZE EASILY READABLE BY CONCRETE TRUCK DRIVERS. PLACE SIGN WITHIN 10' OF WASHOUT.
5. CONTRACTOR SHALL CONTAIN WASHOUT WATERS AT ALL TIMES.

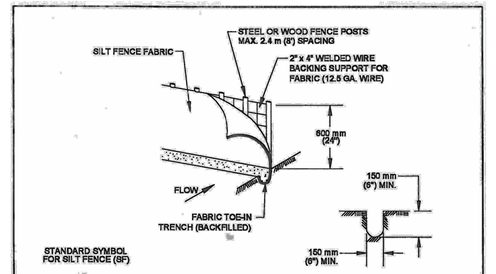
CONCRETE WASHOUT AREA

NOT TO SCALE



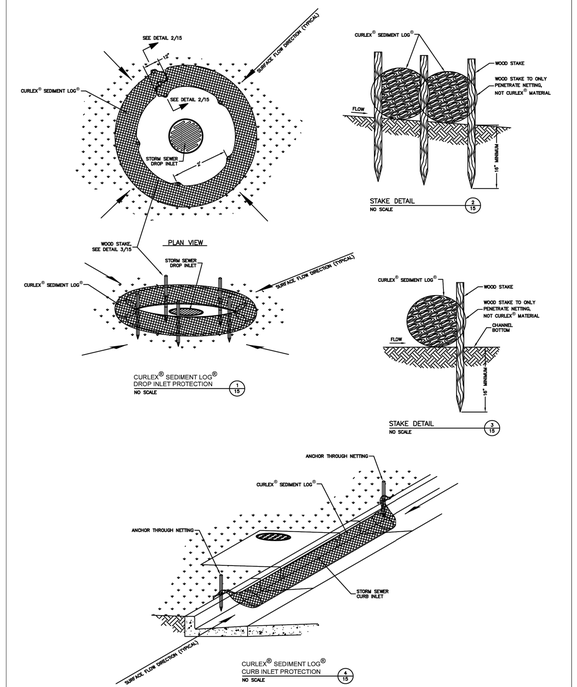
GENERAL NOTES :
1. ALL DIKES SHALL BE MACHINE COMPACTED.
2. ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. a. DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL HAVE ITS OUTLET FLOW DIRECTED TO AN UNDISTURBED STABILIZED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE.
   b. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE, SUCH AS A ROCK BERM, BRUSH BERM, STONE OUTLET STRUCTURE, SEDIMENT TRAP OR SEDIMENT BASIN OR TO AN AREA PROTECTED BY ANY OF THESE PRACTICES.
4. UNLESS OTHERWISE SPECIFIED, EROSION STABILIZATION SHALL BE OPEN GRADED ROCK 75 TO 125 mm (3 TO 5 inches) IN DIAMETER EMBEDDED IN SOIL SURFACE.
5. INSPECTION SHALL BE CONDUCTED WEEKLY OR AFTER EACH RAINFALL EVENT.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	DIVERSION DIKE	
3.27.00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 622S-1

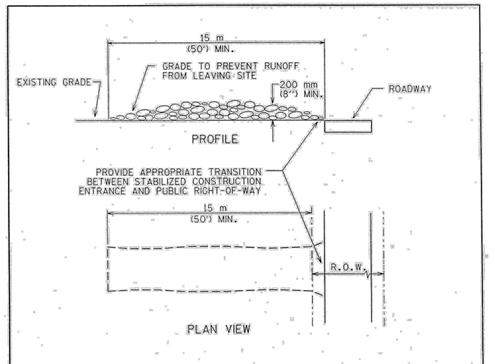


1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 Inches) DEPTH, USE STEEL POSTS.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 Inches) DEEP AND 150 mm (6 Inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 Inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	
9/1/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1

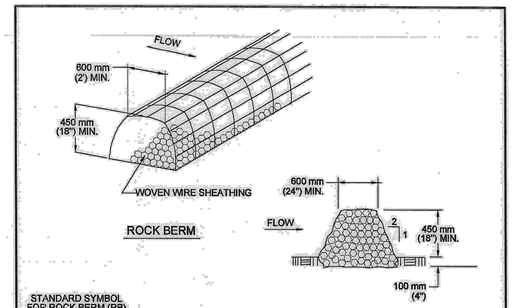


AMERICAN EXCELSIOR COMPANY ARLINGTON, TEXAS	SHEET DESCRIPTION: CURLEX® SEDIMENT LOG® INLET PROTECTION DETAILS	DATE 3/27/17	DRAWN BY
		SCALE: NONE	PROJECT NO.
			SHEET NO. 15



NOTES:
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: 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 DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



NOTES:
1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1

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1113 Fay Street, Columbia, MO 65201
573 - 449 - 2646
www.ess-inc.com
Texas Registered Engineering Firm #17700

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

DRIPPING SPRINGS PROPERTY

3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

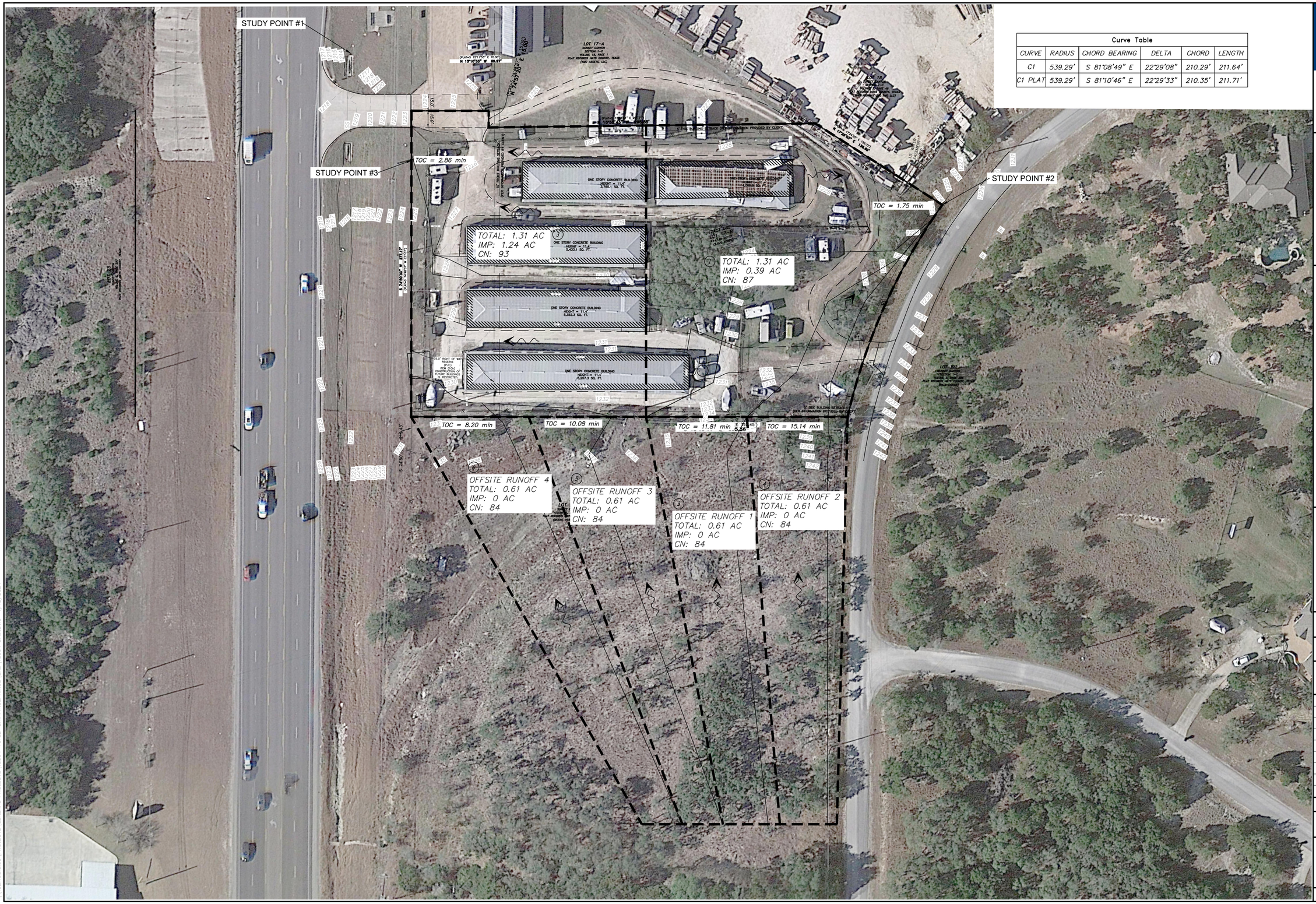
Revised
1 SEPTEMBER 20, 2023
CITY COMMENTS
3 JANUARY 11, 2024

Design: JH Drawn: SK

EROSION CONTROL DETAILS

Sheet
3 C14.01

ES&S PROJECT NO. 15964



Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

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N

0 1"
SCALE: 1" = 20'

3 KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

DRIPPING SPRINGS PROPERTY

3976B E. US 290
DRIPPING SPRINGS, HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
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Date
SEPTEMBER 20, 2023

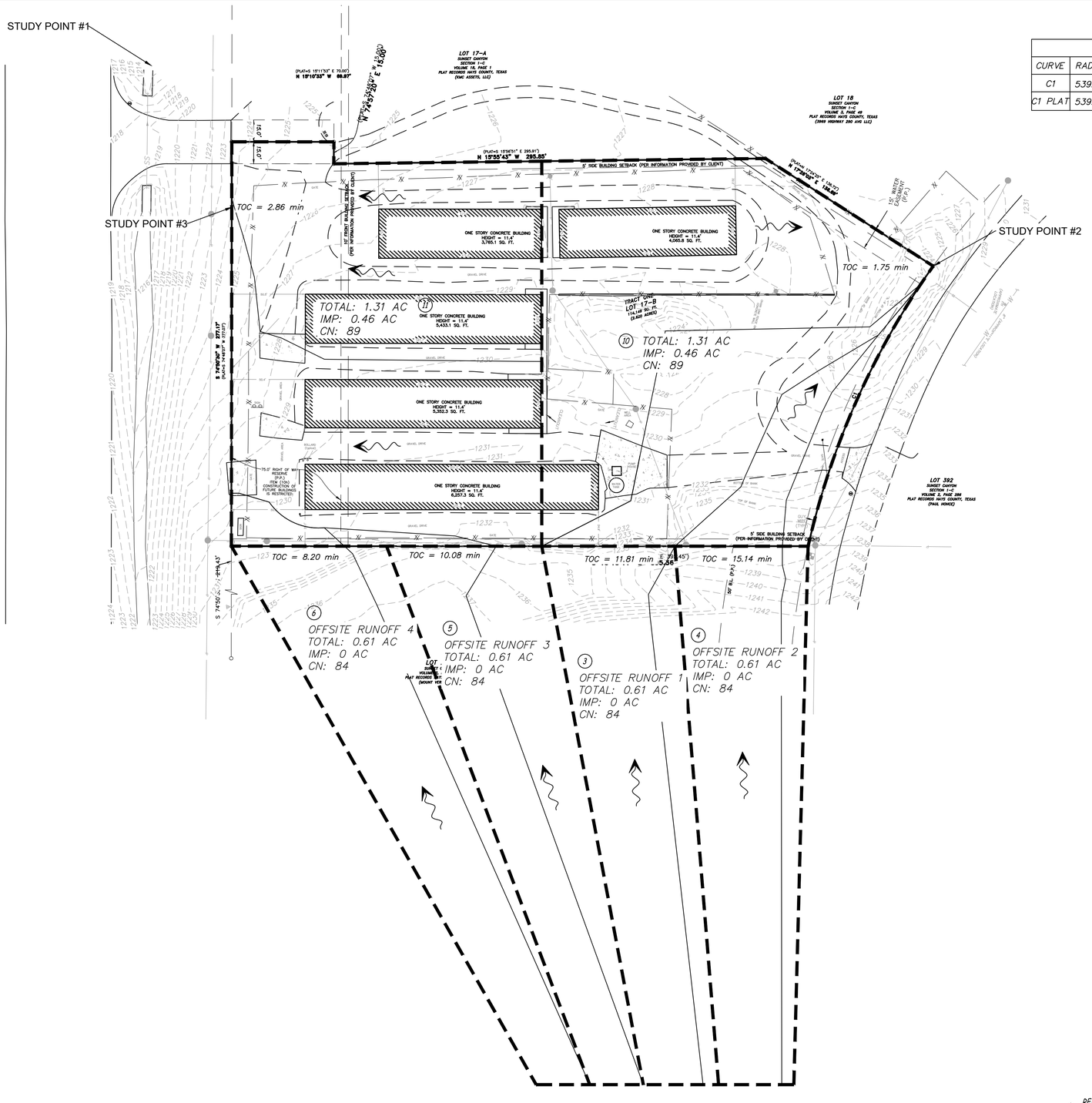
Revised
3 JANUARY 11, 2024

Design: MAK Drawn: SK

PRE-DEVELOPMENT DRAINAGE AREA MAP

Sheet
C15.01

ES&S PROJECT NO. 15964



Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

REVISION NOTES
1. ADDED FLOW INDICATORS

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Texas Registered Engineering Firm #17700

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0 1"
SCALE: 1" = 20'

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3976B E. US 290
DRIPPING SPRINGS, HAYS COUNTY, TEXAS

(3) 1/11/2024

STATE OF TEXAS
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LICENSED PROFESSIONAL
ENGINEER 126148

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Date
SEPTEMBER 20, 2023

Revised
(2) DECEMBER 20, 2023
(3) JANUARY 11, 2024

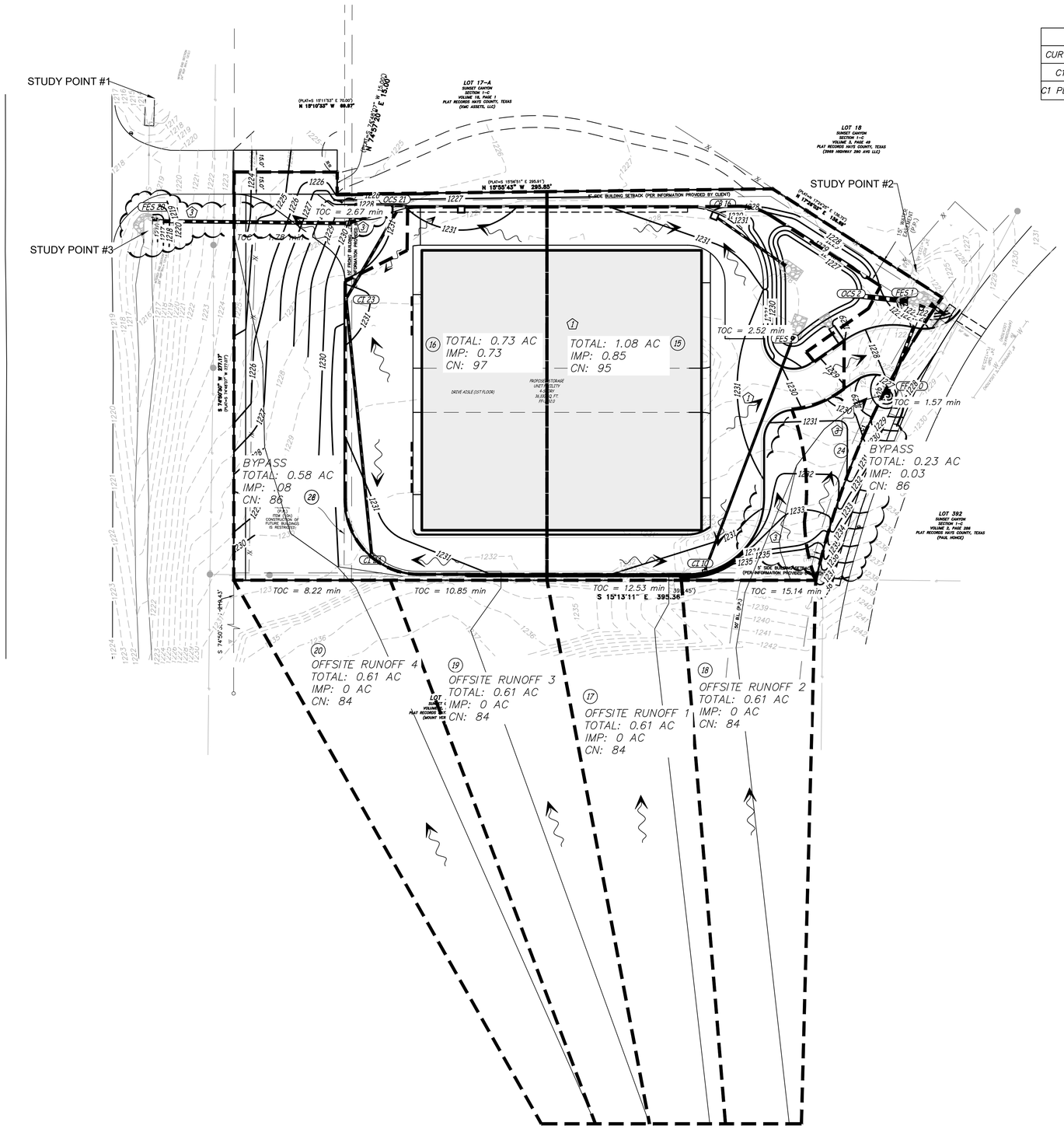
Design: MAK Drawn: SK

35% IMPERVIOUS DRAINAGE AREA MAP

Sheet
C15.02

ES&S PROJECT NO. 15964

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'



REVISION NOTES
1. ADDED FLOW INDICATORS

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SCALE: 1" = 20'

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DRIPPING SPRINGS PROPERTY
3976B E. US 290
DRIPPING SPRINGS, HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
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Date
SEPTEMBER 20, 2023

Revised
1 SEPTEMBER 20, 2023
2 DECEMBER 20, 2023
3 JANUARY 11, 2024

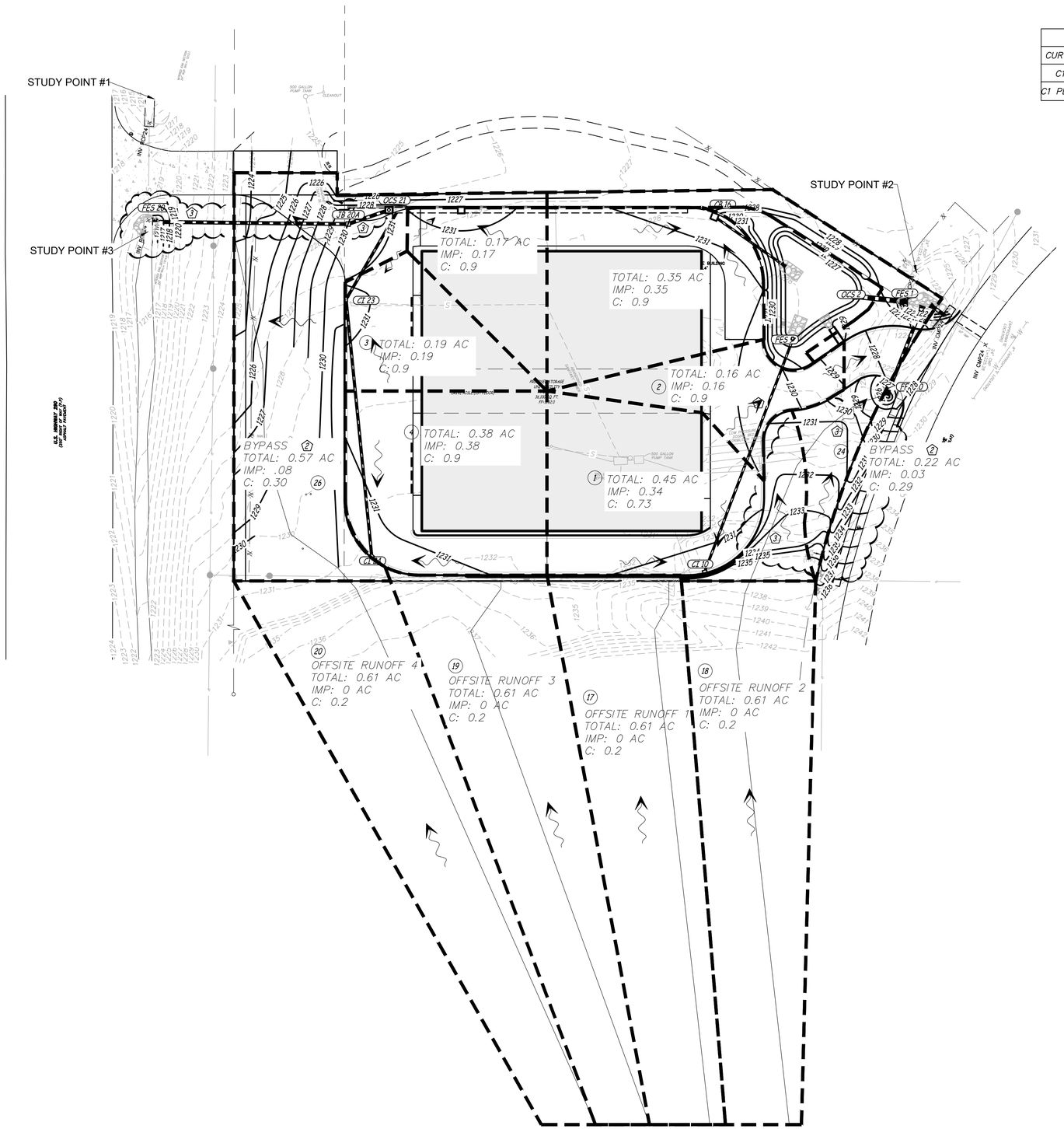
Design: MAK Drawn: SK

POST DEVELOPMENT DRAINAGE AREA MAP

Sheet
C15.03

ES&S PROJECT NO. 15964

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'



REVISION NOTES
1. ADDED FLOW INDICATORS

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KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3976B E. US 290
DRIPPING SPRINGS, HAYS COUNTY, TEXAS

3

1/11/2024

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Date
SEPTEMBER 20, 2023

Revised
1 SEPTEMBER 20, 2023
2 DECEMBER 20, 2023
3 JANUARY 11, 2024

Design: MAK Drawn: SK

STORM SEWER DRAINAGE MAP

Sheet
C15.04

ES&S PROJECT NO. 15964

ATTACHMENT N

Inspections, Maintenance, Repair and Retrofit Plan

Best Management Practice (BMP) Inspection Schedule for Site Owner

This is a schedule for when site owner's maintenance personnel should inspect BMP's. Owner should use the BMP inspection forms included with this document for these inspections.

BMP Type	Annually Between August 1 to October 31	After Heavy Rainfall
Bioretention Basins	x	x
Concrete Box Underground Detention	x	x
Porous Pavement	x	x

*Inspect every 6 months during the first year of operation. Adjust the inspection interval based on previous observations of sediment/trash accumulation and high water elevations.

Best Management Practice (BMP) Maintenance Schedule for Site Owner

The following is a list of typical recurring BMP maintenance items and the frequency of when they need to be done by the site Owner. These items are separate from repair work needed when inspection deficiencies are found.

BMP: Bioretention Basins	**Frequency**
Initial Establishment (1-3 years after construction)	
Water plants daily for two weeks after planting unless adequate rainfall.	Daily
Water plants weekly for first growing season unless adequate rainfall.	Weekly
Remove weeds/invasive/nuisance plants.	Monthly, Seasonally
Perpetual Maintenance	
Remove all litter, trash, debris, etc.	Monthly
Remove sediment if blocking flow or function; if over 2" deep anywhere	As needed
Mow surrounding turf areas to keep grass 3-4 inches tall.	Seasonally, as needed.
Verify structural components functional (inflow/outflow points, etc.)	Semiannually
Monitor and repair eroding areas.	Monthly
Obtain soil test. Regulate soil pH to within 5.5 to 7.5.	As needed
Treat/replace diseased plants.	As needed
Remove and replace dead vegetation.	Semiannually, Spring & Fall
Replace damaged/non functional tree stakes and wires until trees are established (typically within 3 years of planting).	Annually
Remulch bare areas. Use shredded hardwood mulch only.	Annually, as needed
Replace mulch. Use shredded hardwood mulch only.	Every 2-3 years, as needed
Unclog underdrains via cleanouts.	Semiannually, as needed
Address animal damage (Canada Geese, muskrats, deer rubs, etc.).	Semiannually, as needed

BMP: Concrete Box Underground Detention	**Frequency**
Perpetual Maintenance	
Remove litter and debris.	Monthly
Monitor sediment accumulation and remove accumulated sediment about every 10 years or when the accumulated sediment volume exceeds 10-20% of the basin volume, or when accumulation reaches 6 inches or if resuspension is observed.	10-25 years
Inspect Outfall Structure to verify no clogging, damage, stability, or other factors are present that would recuce or prevent proper function.	Yearly
BMP: Porous Pavement	**Frequency**
Initial Maintenance Immediately after Construction	
Protect porous pavement from sediment/dirty runoff at all times. Remove all sediment from area draining to porous pavement and stabilize adjacent green space areas with vegetation, erosion control blankets, sod, mulch, etc.	Continually
Perpetual Maintenance	
Educate maintenance staff about the existence of the porous pavement and special maintenance required. Never apply sand, cinders, ash, etc. on porous pavement or on area draining to porous pavement during winter. Minimize salt application to area draining to porous pavement.	Continually
Maintain signs indicating the presence and location of the porous pavement	As needed
Prevent sediment from being washed onto porous pavement. Keep landscape areas that drain to porous pavement well maintained.	Continually

Rake and remove fallen leaves and debris from deciduous trees and shrubs in areas that drain to porous pavement.	Annually or as needed
Remove debris and clear obstructions from overflow devices for the porous pavement. Typically these are curb inlets, curb cuts, etc.	Annually or as needed
Mow grass to less than four inches and remove grass clippings in all landscape areas that drain to porous pavement. Reseed bare spots.	Every week or every other week during growing season
Minimize pesticide and fertilizer application within all landscape areas draining to the porous pavement.	Continually
Re-supply granular material between modular pavers per manufacturer recommendations (typically sand, gravel, or mulch material).	Annually or as needed
Maintain drainage in underdrain pipe system. Locate all cleanouts for the underdrain system and keep visible at surface.	As needed
Vacuum sweep porous pavement.	1 -2 times per year. More often if necessary.
Remove and replace porous pavement if it is still clogged after all other remediation options have failed. Visible surface ponding or runoff across the porous pavement during rain events are signs of clogging.	As needed

Site Owner Stormwater BMP Inspection Form - BIORETENTION BASIN

Address: *3975 US 290, DRIPPING SPRINGS, TX* Owner: *KGE MT 3975 US 290 Dripping Springs TX LLC*

Legal: *LOT 17-B, SUNSET CANYON, SECTION 1-C, ACCORDING TO THE MAP OR PLAT THEREOF, RECORDED IN VOLUME 18, PAGE 1, PLAT RECORDS, HAYS COUNTY, TEXAS, SAID LOT BEING A REPLAT OF LOT 17, SUNSET CANYON, SECTION 1-C, AS RECORDED IN VOLUME 3, PAGE 49, PLAT RECORDS, HAYS COUNTY, TEXAS.*

Date: _____ Inspector: _____ Phone #: (___) ___-_____

I. REASON FOR INSPECTION

☐ Annual Between August 1 to Oct. 31 ☐ Routine ☐ Follow-up

☐ After Major Storm ☐ Response to Complaint ☐ Other: _____

II. BMP'S AND INSPECTION RESULTS

Item	Inspection Results*				BMP's in General
1	□	Plans missing or unsure of BMP purpose	□	Plans reviewed and BMP purpose clear	Review a copy of the design plans for this BMP. Be familiar with this BMP intent and purpose.
2	□	BMP removed	□	BMP Present	BMP has been destroyed or removed from the property
3	□	Poor appearance	□	Looks ok	Overall the BMP has poor appearance or does not appear to be well maintained.
4	□	Unauthorized modifications	□	No modifications	BMP has unauthorized modifications that reduce its effectiveness.
5	□	Trash/yard waste	□	No trash/yard waste	Trash, debris, or yard waste has accumulated on/in BMP.
6	□	Contaminated	□	Uncontaminated	Evidence of oil, gasoline, contaminants or other pollutants.
7	□	Smells	□	Doesn't smell	Unpleasant odors from the BMP.
Item	**Inspection Results**				**BMP: Bioretention Basin**
8	□	Sediment accumulated	□	No sediment accumulated	Sediment depth exceeds 2 inches on more than 10% of the vegetated/mulched area or interferes with BMP performance.
9	□	Erosion or scouring	□	No erosion or scouring	Eroded or scoured areas visible.
10	□	Erosion or scouring	□	No erosion or scouring	Storm sewer outlet(s) (flared end sections) and rip-rap for the basin are eroding or scouring.
11	□	Excessive dead growth present	□	No excessive dead growth present	Excessive dead growth from previous year present within bioretention plantings. Needs to be removed.
12	□	Poor vegetation	□	Proper vegetation	Bioretention vegetation is sparse or bare or eroded patches occur in more than 10% of the BMP. Vegetation in poor health, widespread disease apparent.
13	□	Plant height excessive	□	Plant height acceptable	Some bioretention vegetation is excessively tall; hinders maintenance, shades out other smaller bioretention plants.
14	□	Plant density excessive	□	Plant density acceptable	Plant density blocks or impedes free movement of stormwater through the basin.
15	□	Nuisance plants	□	No nuisance plants	Nuisance weeds, invasive or noxious vegetation are present.
16	□	Excessive brush/trees	□	Proper vegetation	Growth of brush and trees does not allow for proper maintenance.

17	□	Long tem ponded water	□	No long tem ponded water	Ponded water more than 3 days after storm is observed within the basin and appears not to drain freely or soil is excessively soggy.
18	□	Clogged	□	Not clogged	Basin inlet/outlet(s) clogged or obstructed with sediment and/or debris.
19	□	Flow	□	No flow	Small quantities of water flow through the BMP, even when it has been dry for weeks, and an eroded, muddy channel has formed in the bottom.
20	□	Obstructed	□	Open	Stone diaphragm obstructed or covered with weeds or sediment.
21	□	Issues with underdrain	□	No issues with underdrain	All cleanouts for the underdrain system are located and tops are removable (in working order).
22	□	Poor condition	□	Good Condition	Surrounding slopes have bare spots, areas of sparse grass, or signs of erosion/damage.

***(If an item in the left column is checked, corrective maintenance is required)**

1. Is maintenance needed at this time? ☐ Yes ☐ No
2. Are mosquitoes or mosquito larvae present? ☐ **Yes** ☐ **No**
3. Comments/Notes: _____

_____

_____

_____

_____

III. FOLLOW-UP

1. Describe corrective actions needed: _____

_____

_____

_____

_____

2. Date(s) corrected: _____

_____

_____

Inspected by: _____

Signature

_____

[Print Full Name]

Stormwater BMP Owner Inspection Form - CONCRETE BOX UNDERGROUND DETENTION
CPS Transportation Facility

Address: *3975 US 290, DRIPPING SPRINGS, TX* Owner: *KGE MT 3975 US 290 Dripping Springs TX LLC*

Legal: *LOT 17-B, SUNSET CANYON, SECTION 1-C, ACCORDING TO THE MAP OR PLAT THEREOF, RECORDED IN VOLUME 18, PAGE 1, PLAT RECORDS, HAYS COUNTY, TEXAS, SAID LOT BEING A REPLAT OF LOT 17, SUNSET CANYON, SECTION 1-C, AS RECORDED IN VOLUME 3, PAGE 49, PLAT RECORDS, HAYS COUNTY, TEXAS.*

Date: _____ Inspector: _____ Phone #: (___) ___-_____

I. REASON FOR INSPECTION

☐ Routine ☐ Response to Complaint ☐ Follow-up

☐ Water Quality Storm ☐ Initial ☐ Other: _____

II. BMP'S AND INSPECTION RESULTS

Item		Inspection Results*			BMP's in General
1	□	Apparent problems	□	No problems	BMP does not appear to be well maintained.
2	□	Construction flaws	□	No flaws	BMP observed to have significant construction flaws which lessens its effectiveness.
3	□	Unauthorized modifications	□	No modifications	BMP has unauthorized modifications that reduce its effectiveness.
4	□	BMP removed	□	BMP Present	BMP has been destroyed or removed from the property
5	□	Trash	□	No trash	Trash and debris has accumulated on/in BMP. Yard waste in BMP.
6	□	Contaminated	□	Uncontaminated	Evidence of oil, gasoline, contaminants or other pollutants.
7	□	Smells	□	Doesn't smell	Unpleasant odors from the BMP.
Item		**Inspection Results**			**BMP: Dry Detention Basin**
3	□	Sediment accumulated	□	No accumulated sediment	Sediment in box has reduced storage volume.
6	□	Insects	□	No insects	Wasps, hornets, bees, or other nuisance insects interfere with maintenance activities. Excessive or nuisance levels.
7	□	Standing water	□	No standing water	Water is observed within the box 48 hours after storm and appears not to drain freely. Excessive ponding of water within BMP.
8	□	Contaminated	□	No contaminants	Prevalent and visible contaminants such as oil, trash, etc.
9	□	Outfall structure/pipes repairs needed	□	Outfall structure/pipes are sound	Outfall structures/pipes show signs of corrosion, spalls, leaks, deformation, damage, crushing or other material failure.
10	□	Low flow orifice clogged	□	Low flow orifice not clogged	Low flow orifice at concrete outfall structure is clogged or obstructed with sediment and/or debris, non-functioning. Excessive ponding/wetness around low flow orifice.
11	□	Outfall structure grate(s) need cleaning	□	Outfall grate(s) are clean	Debris, trash, etc. has accumulated on concrete outfall structure grate(s).

*(If an item in the left column is checked, corrective maintenance is required)

1. Is maintenance needed at this time? ☐ Yes ☐ No
2. Are mosquitoes or mosquito larvae present? ☐ **Yes** ☐ **No**
3. Comments/Notes: _____

III. FOLLOW-UP

1. Describe corrective actions needed: _____
2. Date corrected: _____

Site Owner Stormwater BMP Inspection Form - POROUS ASPHALT PAVEMENT

Address: *3975 US 290, DRIPPING SPRINGS, TX* Owner: *KGE MT 3975 US 290 Dripping Springs TX LLC*

LOT 17-B, SUNSET CANYON, SECTION 1-C, ACCORDING TO THE MAP OR PLAT THEREOF, RECORDED IN VOLUME 18, PAGE 1, PLAT RECORDS, HAYS COUNTY, TEXAS, SAID LOT BEING A REPLAT OF LOT 17, SUNSET CANYON, SECTION 1-C, AS RECORDED IN VOLUME 3, PAGE 49, PLAT RECORDS, HAYS COUNTY, TEXAS.

Legal: _____

Date: _____ Inspector: _____ Phone #: ( ) -

I. REASON FOR INSPECTION

☐ Annual Between August 1 to Oct. 31 ☐ Routine ☐ Follow-up

☐ After Major Storm ☐ Resonse to Complaint ☐ Other: _____

II. BMP'S AND INSPECTION RESULTS

Item	Inspection Results*				BMP's in General
1	□	Plans missing or unsure of BMP purpose	□	Plans reviewed and BMP purpose clear	Review a copy of the design plans for this BMP. Be familiar with this BMP intent and purpose.
2	□	BMP removed	□	BMP Present	BMP has been destroyed or removed from the property
3	□	Poor appearance	□	Looks ok	Overall the BMP has poor appearance or does not appear to be well maintained.
4	□	Unauthorized modifications	□	No modifications	BMP has unauthorized modifications that reduce its effectiveness.
5	□	Trash/yard waste	□	No trash/yard waste	Trash, debris, or yard waste has accumulated on/in BMP.
6	□	Contaminated	□	Uncontaminated	Evidence of oil, gasoline, contaminants or other pollutants.
7	□	Smells	□	Doesn't smell	Unpleasant odors from the BMP.
Item	**Inspection Results**				**BMP: Porous Asphalt Pavement**
8	□	Debris on surface	□	Debris free	Pavement surface has evidence of debris, ponded water, oil accumulation, clogging of pores, surface sealant, or other damage.
	□	Ponded water	□	Draining freely	
	□	Oil present	□	No oil apparent	
9	□	Pavement in poor condition	□	Pavement in good condition	Surface of porous pavement is excessively worn, breaking up, spalling, damaged, etc.
10	□	Obstructed	□	No obstructions	Overflow devices are obstructed or debris has collected.
11	□	Sediment accumulated	□	No sediment accumulated	Sediment, yard waste/cinders/sand/etc. has accumulated on porous pavement.
12	□	Cleanouts missing/non functional	□	All cleanouts located and functional	All cleanouts for the underdrain system are located and tops are removable (in working order).
13	□	Underdrain pipe non functional	□	Underdrain pipe functional	Underdrain piping is damaged, clogged, in need of repair or any other failure to prevent proper flow.
14	□	Signs damaged / missing	□	Signs functional	Porous pavement signs are missing, damaged, fallen over, or not functioning.

***(If an item in the left column is checked, corrective maintenance is required)**

1. Is maintenance needed at this time? ☐ Yes ☐ No
2. Are mosquitoes or mosquito larvae present? ☐ Yes ☐ No

3. Comments/Notes: _____

_____

_____

_____

_____

_____

_____

_____

III. FOLLOW-UP

1. Describe corrective actions needed: _____

_____

_____

_____

_____

2. Date(s) corrected: _____

_____

_____

Inspected by: _____

Signature

_____

[Print Full Name]

ATTACHMENT O

N/A

ATTACHMENT P

N/A

FORM 3

Temporary Stormwater Section

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Matthew A. Kriete

Date: 2/5/24 2/5/24

Signature of Customer/Agent:

Regulated Entity Name: 10 Federal

Project Information

Potential Sources of Contamination

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

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

   ☒ The following fuels and/or hazardous substances will be stored on the site: Diesel fuel

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

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

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

☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☐ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions**. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☐ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

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

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

☒ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Gatlin Creek - Onion Creek

Temporary Best Management Practices (TBMPs)

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

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

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

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

☒ A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

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

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

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

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

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

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

ATTACHMENT A

Spill Response Plan

SPILL RESPONSE ACTIONS

1. MATERIAL HANDLING AND WASTE MANAGEMENT

Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) which are transported, stored or used for maintenance, cleaning or repairs shall be managed according to the provisions of RCRA and CERCLA.

The following materials or substances with known hazardous properties are expected to be present onsite during construction:

Concrete/Additives/Wastes
Detergents
Paints/Solvents
Acids
Solids and construction wastes
Soil stabilization additives
Cleaning solvents
Petroleum based products
Pesticides
Fertilizers
Sanitary wastes

All paints, solvents, petroleum products and petroleum waste products (except fuels) and storage containers (such as drums, cans or cartons) shall be stored such that these materials are not exposed to storm water. Sufficient practices of spill prevention, control and/or management shall be provided to prevent any spills of these pollutants from entering a water of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The jobsite superintendent shall be responsible for ensuring that these procedures are followed.

a) Good Housekeeping

The following good housekeeping practices shall be followed onsite during the construction project.

(i) An effort shall be made to store only enough products required to do the job.
(ii) All materials stored onsite shall be stored in a neat, orderly manner and, if possible, under a roof or in a containment area. At a minimum, all containers shall be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.
(iii) Products shall be kept in their original containers with the original manufacturer's label in

legible condition.

(iv) Substances shall not be mixed with one another unless recommended by the manufacturer.
(v) Whenever possible, all of a product shall be used up before disposing of the container.
(vi) Manufacturer's recommendations for proper use and disposal shall be followed.
(vii) The job site superintendent shall be responsible for daily inspections to ensure proper use and disposal of materials.
(viii) Fertilizers shall be applied in the minimum amounts recommended by the manufacturer.
(ix) All paint containers shall be tightly sealed and stored when not required for use. Excess paint shall not be dumped into the storm sewer system but shall be properly disposed of according to manufacturer's instructions and State regulations.

b) Hazardous Products

These practices shall be used to reduce the risks associated with hazardous materials. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site shall be obtained and used for the proper management of potential wastes that may result from these products. An MSDS shall be posted in the immediate area where such product is stored and/or used and another copy of each MSDS shall be maintained in the SWPPP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties shall be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.

(i) Products shall be kept in original containers with the original labels in legible condition.
(ii) Original labels and material safety data sheets (MSDS's) shall be procured and used for each material.
(iii) If surplus product must be disposed of, manufacturer's or local/state/federal recommended methods for proper disposal shall be followed.

c) Hazardous Waste

All hazardous waste materials shall be disposed of by the Contractor in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. Site personnel shall be instructed in these practices by the job superintendent, who shall be responsible for seeing that these practices are followed.

d) Product Specific Practices

The following product specific practices shall be followed on the job site.

(i) Petroleum Products

All onsite vehicles shall be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers that are clearly labeled. Any petroleum storage tanks used

onsite shall have an impervious dike or berm containment structure constructed around it to contain any spills which may occur. Drip pans shall be provided for all dispensers. Any asphalt substances used onsite shall be applied according to the manufacturer's recommendations. The location of any fuel tanks and/or equipment storage areas shall be identified on the SWPPP maps by the Contractor once the locations have been determined.

(ii) Fertilizers

Fertilizers shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked in the soil to limit exposure to stormwater. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.

(iii) Paints, Paint Solvents, and Cleaning Solvents

All containers shall be tightly sealed and stored when not in use. Excess paint and solvents shall not be discharged to the storm sewer system but shall be properly disposed of according to manufacturer's instructions or state and federal regulations.

BMP:	**Construction Waste Materials Containment**
Responsible Staff:	
Location:	
Installation Schedule:	

Description:

All non-hazardous waste materials shall be collected and stored in an appropriately covered container and/or securely lidded metal dumpster rented from a local waste management company which must be a solid waste management company licensed to do business in the project area. The dumpster shall comply with all local and state solid waste management regulations.

All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied a minimum of twice per week or more often if necessary, and the trash shall be hauled to a landfill approved by the state for legal disposal offsite. No construction waste or trash materials of any kind shall be buried on site. All personnel shall be instructed regarding the correct procedures for waste disposal.

All waste dumpsters and roll-off containers shall be located in an area where the likelihood of the containers contributing to storm water discharges is negligible. If required, additional BMPs shall be implemented, such as sandbags around the base, to prevent wastes from contributing to storm water discharges. The location of waste dumpsters and roll-off containers shall be identified on the SWPPP maps by the Contractor once the locations have been determined.

Maintenance & Inspection:	
All dumpsters and/or other waste storage areas shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Dumpsters shall be emptied before trash accumulation prevents complete closure of the lid(s). If trash and construction debris are exceeding the dumpster capacity more dumpsters shall be provided or they shall be emptied more often.	
Removal Requirements:	Remove when all waste contributing construction is complete.

BMP:	**Sanitary Facilities**
Responsible Staff:	
Location:	
Installation Schedule:	
Description:	
Temporary sanitary facilities (portable toilets) shall be provided by a licensed portable facility provider in complete compliance with local and state regulation. Facilities shall be sized to accommodate the maximum anticipated work force on any given day. Facilities shall be property anchored to prevent tip over or other uncontrolled movement. All sanitary facilities shall be located in an area where the likelihood of the unit contributing to storm water discharges is negligible. The location of sanitary facilities shall be identified on the SWPPP maps by the Contractor once the locations have been determined.	
Maintenance & Inspection:	
All sanitary facilities shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Sanitary facilities shall be regularly emptied, serviced and repaired. Sanitary waste shall be disposed per all applicable state and local requirements.	
Removal Requirements:	Remove when construction is complete and all construction staff has left the site or when other onsite sanitary facilities are available and permission for their use by construction staff is approved by the Operator.

BMP:	**Hazardous Waste Containment**
Responsible Staff:	
Location:	
Installation Schedule:	
Description:	
All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids shall be stored in structurally sound and sealed containers in a designated hazardous materials storage area and segregated from other non-waste materials. Additionally, all hazardous material will be disposed of in accordance with federal, state, and local regulations. Hazardous waste materials shall not be disposed of into on-site dumpsters.	
Maintenance & Inspection:	
All hazardous storage areas shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. The storage areas shall be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material safety data sheets, material inventory, and emergency contact numbers shall be maintained in the office trailer or other clearly designated area.	
Removal Requirements:	Remove when all hazardous waste contributing construction is complete.

2. ESTABLISH PROPER BUILDING MATERIAL STAGING AREAS

BMP:	**Staging Area**
Responsible Staff:	
Location:	
Installation Schedule:	
Description:	
Construction equipment and materials shall be stored at a designed staging area. The staging area is typically located in a proposed parking area and shall consist of an all-weather granular surface that will also be the granular base for the parking lot pavement. The location of all staging areas shall be redlined on the SWPPP maps. Storm water shall be directed away from the staging area.	
Maintenance & Inspection:	
All staging areas shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. The staging area(s) shall be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function. The granular surface shall be kept clean and inspected for signs of settlement or rutting. All repairs shall be made immediately.	
Removal Requirements:	Remove when all construction materials have been removed and the storage of construction equipment is no longer necessary.

3. DESIGNATE WASHOUT AREAS

BMP:	**Concrete Washout Area**
Responsible Staff:	
Location:	Where indicated on the civil construction plans & where necessary to contain all concrete waste and wash water.

Installation Schedule:	After grading and before any infrastructure in constructed.
Description:	
Concrete trucks shall only be allowed to wash out or discharge surplus concrete and wash water in specifically designated areas which have been prepared to prevent contact between the concrete, wash water, and stormwater runoff from the site. The washout may be constructed by creating an aboveground storage area a minimum 10' x 10' x 2' deep from straw bales or sandbags double lined with a10 mil minimum polyethylene sheeting. Washout areas may also be prefabricated units brought to the site to be emptied when full by the company providing the unit. They may also be constructed either by digging a minimum 10' x 10' pit 1' deep and surrounding it with an earthen dike a minimum 1' tall to give it a total depth of 2' and lining it with minimum 10 mil polyethylene sheeting. The washout shall be constructed so all stormwater is directed away from the washout area. Size according to anticipated concrete waste produced. The project may require the use of multiple concrete washout areas. All concrete washout areas shall be located a minimum 50' from any stormwater conveyance like a storm sewer or swale and a minimum 100' from any natural water body like a stream, pond, or lake. Temporary weatherproof signage that says "CONCRETE WASHOUT" in a manner clearly visible by construction truck drivers while driving onsite shall be placed next to each washout. The contractor shall be responsible for coordinating and enforcing proper use of the washout by all construction personnel. The hardened material from the washout(s) shall be hauled offsite and disposed of in the same manner as other non-hazardous construction waste materials or may be broken up and used on site as deemed appropriate by the Contractor and approved by the Operator. Disposal shall be per all applicable solid waste regulations.	
Maintenance & Inspection:	
All washouts shall be inspected daily to ensure all concrete washing is being discharged into the washout(s), no tears or leaks are present, and to identify when concrete waste needs to be removed. Inspect all signage to ensure it is in good condition and is still legible by all drivers. Remove all concrete waste when it has reached 75% of the storage capacity of the washout. The plastic lining shall be replaced if it is damaged during concrete waste removal. Inspect to verify that no storm water runoff is capable of draining into the washout. All repairs shall be made immediately.	
Removal Requirements:	Remove when all concrete construction is complete.

4. ESTABLISH PROPER EQUIPMENT/VEHICLE FUELING AND MAINTENANCE PRACTICES

BMP:		**Vehicle/Equipment Fueling and Maintenance**
Responsible Staff:		
Location:		

Installation Schedule:		
	Description:	
	Only minor equipment maintenance shall occur onsite. All major equipment/vehicle maintenance shall be performed off-site. Vehicle/equipment maintenance and fueling area(s) shall be clearly marked and be kept clean and dry. A spill kit shall be kept nearby. Drip pans, drip clothes, or absorbent pads shall be used when replacing spent fluids. Spent fluids shall be collected and stored in appropriate labeled containers in the proper storage areas. Recycle fluids whenever possible. Dispose of fuels, oils, lubricants, solvents, and other hazardous materials offsite per federal, state and local requirements. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. No fueling, servicing, maintenance, or repair of equipment or machinery shall be done within 50 feet of a stormwater drainage way, or within 100 feet of a classified stream, lake/pond, losing stream, or sinkhole.	
	Maintenance & Inspection:	
	All equipment/vehicle fueling and maintenance facilities shall be inspected during routine SWPPP inspections for proper functioning, usage, and general condition. Vehicles and equipment shall be inspected on each day of use. Leaks shall be repaired immediately. Any problem vehicle(s) or equipment shall be removed from the project site. Inspect to verify there is an ample supply of spill-cleanup materials onsite.	
Removal Requirements:		Remove when the need for construction vehicles onsite is no longer necessary.

5. CONTROL EQUIPMENT/VEHICLE WASHING

All equipment/vehicle washing not related to dirt/mud removal at the construction entrance/exit BMP shall be done offsite.

6. SPILL PREVENTION AND CONTROL PLAN

BMP:	**Spill Prevention and Response Procedures**

Responsible Staff:	
Spill Prevention & Response Coordinator:	
Installation Schedule:	Training will begin prior to the start of project construction. All other procedures shall begin with the start of project construction.

Description:

All onsite personnel shall be trained in the spill prevention, proper handling, and cleanup procedures of spilled materials. No spilled hazardous materials or hazardous wastes shall be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge shall be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of the contaminated storm water.

Report to the Operator, Engineer, local Fire Department, local Sheriff's Department, Texas Commission on Environmental Quality (TCEQ), and EPA any noncompliance with the SWPPP that will endanger public health or the environment. Also, if the spill contains a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40CFR110, 40CFR117, and 40CFR302, follow the directions on the Reportable Quantity Release Form which can be found in section 9 below. Any information shall be provided orally immediately after the Contractor becomes aware of the circumstances. A written submission shall also be provided to Engineer, Owner, TCEQ, and EPA within five (5) days of the time the Contractor becomes aware of the circumstances. The following events require immediate verbal: a) any unanticipated bypass which exceeds any effluent limitation in the permit, b) any upset which exceeds any effluent limitation in the permit, and c) a violation of a maximum daily discharge limitation for any of the pollutants listed by the TCEQ in the permit. The written submission shall contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the non-compliance.

a) In order to minimize the potential for a spill of hazardous materials to come into contact with storm water, the following steps shall be implemented:

   (i) All materials with hazardous properties (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete curing compounds and additives, etc.) shall be stored in a secure location, with their lids on, preferably under cover, when not in use.

   (ii) The minimum practical quantity of all such materials shall be kept on the job site.

   (iii) A spill control and containment kit (containing, for example, absorbent materials, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) shall be provided at the storage site.

   (iv) Manufacturer's recommended methods for spill cleanup shall be clearly posted and site personnel shall be trained regarding these procedures and the location of the information and cleanup supplies.

b) In the event of a spill, the following procedures shall be followed:

(i) All spills shall be cleaned up immediately after discovery.

(ii) The spill area shall be kept well ventilated and personnel shall wear appropriate protective clothing to prevent injury from contact with the hazardous substances.

(iii) The project manager and the Engineer of Record shall be notified immediately.

(iv) Spills of toxic or hazardous materials shall be reported to the appropriate federal, state, and/or local government agency, regardless of the size of the spill. Spills of amounts that exceed Reportable Quantities of certain substances specifically mentioned in federal regulations (40 CFR 110, 40 CFR 117, and 40 CFR 302) shall be immediately reported to the EPA National Response Center, telephone 1-800-424-8802. Contact the Operator, Engineer, local Fire Department, local Sheriff's Department, City of Dripping Springs Public Works, TCEQ, and EPA immediately after the onset of a "hazardous condition". The applicant shall notify by telephone and in writing the Texas Commission on Environmental Quality (TCEQ), State Emergency Response Commission, 1(800) 832-8224, of any oil spills or if hazardous substances are found during the prosecution of work under this permit. Additional reporting may be required based on type of soil or spill severity, see TCEQ's emergency response section and SWPPP for all reporting requirements.

(v) If the spill exceeds a Reportable Quantity, the SWPPP shall be modified within seven (7) calendar days of knowledge of the discharge to provide a description of the release, the circumstances leading to the release, and the date of the release, the plans shall identify measures to prevent the recurrence of such releases and to respond to such releases. The Reportable Quantity Release form located in Section 9 below shall be completed in accordance with this requirement.

c) The Spill Prevention and Response Coordinator shall designate the individuals who shall receive spill prevention and response training. These individuals shall each become responsible for a particular phase of prevention and response. The names of these personnel shall be posted in the material storage area and in the office trailer/construction headquarters onsite.

BMP:	**Soil Contamination**
Responsible Staff:	
Spill Prevention & Response Coordinator:	
Installation Schedule:	Training will begin prior to the start of project construction. All other procedures shall begin with the start of project construction.
Description:	
Soil contamination is either solid or liquid hazardous substances mixed with the naturally occurring soil. Soil contamination results when hazardous substances are either spilled or buried directly in the soil or migrate to the soil from a spill that has occurred elsewhere. Soil contamination is typically identified in the field via visual and/or odor	

means. No soil contamination is known to exist on the site pre construction. If it is suspected contaminated soil has been discovered onsite or if soil contamination occurs resulting from spills of materials with hazardous properties the Operator shall be immediately notified. Immediate contamination procedures per federal, state, and local requirements shall be implemented by the Contractor. A plan to permanently mitigate the contaminated soil shall be developed by the Contractor and Operator that adheres to all federal, state, and local requirements. The plan shall be implemented by the Contractor.

7. ANY ADDITIONAL BMPS

None.

8. ALLOWABLE NON-STORMWATER DISCHARGE MANAGEMENT

Certain non-stormwater discharges are allowed under the TPDES General Permit No. TXR150000, and it is the intent of this SWPPP to allow such discharges. These types of discharges shall be allowed under the conditions that no pollutants shall be allowed to come in contact with the discharge water prior to or after its discharge. The control measures which have been outlined previously in this SWPPP shall be strictly followed to ensure that no contamination of these non-stormwater discharges takes place. The following allowable non-stormwater discharges which may occur from the job site include:

a) Discharges from firefighting activities
b) Fire hydrant flushing (see note below)
c) Waters used to wash vehicles where detergents are not used
d) Waters used to control dust. Water used in fashion shall only be applied so there is no site runoff.
e) Potable water sources such as waterline flushing (see note below), landscape irrigation, routine exterior building wash down that does not use detergent (see note below)
f) Pavement wash waters where spills or leaks of hazardous materials have not occurred or detergents have not been used
g) Air conditioning condensate
h) Springs and other uncontaminated groundwater, including dewatering ground water infiltration
i) Foundation or footing drains where no contamination with process materials such as solvents is present

NOTE: The Contractor shall neutralize any super-chlorinated water from water distribution pipes before releasing it into the environment. Neutralization techniques are available from the Operator's Engineer.

9. REPORTABLE QUANTITY RELEASE FORM

The discharges of hazardous substances or oil in storm water discharges from construction sites shall be prevented or minimized in accordance with the SWPPP. When a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under 40CFR110, 40CFR117, and 40CFR302 occurs, the following steps shall be taken:

1. All measures shall be taken to contain and abate the spill and to prevent the discharge of the pollutant(s) to storm water or off-site.

2. Notice must be provided to the National Response Center (NRC) at 1-800-424-8802, and TCEQ at 1-512-239-4671, in accordance with regulations referenced above as soon as site staff has knowledge of the discharge.

3. Contact the Operator, Engineer, local Fire Department, Joint Communications, local Sheriff's Department, City of Kerrville Public Works, TCEQ, and EPA immediately upon knowledge of release.

4. The SWPPP shall be modified within seven (7) calendar days of knowledge of the discharge to provide a description of the release, the circumstances leading to the release, and the date of the release. The plans shall identify measures to prevent the recurrence of such releases and to respond to such releases.

Date of Spill	Material Spilled	Approximate Quantity of Spill (in gallons)	Agency(s) Notified	Date of Notification	SWPPP Revision Date

ATTACHMENT B

Potential Sources of Contamination

POTENTIAL SOURCES OF CONTAMINATION

1 POTENTIAL SOURCES OF POLLUTION

Sediment is the principal stormwater pollutant of concern for this project. There are, however, other pollutants that may be found, usually in substantially smaller amounts, in stormwater runoff from construction sites. Potential sources of pollutants to stormwater runoff from this project are noted in the following table:

Potential Construction Site Pollutants										
Possible Source	Pollutants									Location
	Sediment	Nutrients	Heavy Metals	pH (acids & bases)	Pesticides & herbicides	Oil & grease	Bacteria & viruses	Trash, debris, solids	Other toxic chemicals	
Clearing & Grubbing	X							X		Within clearing limits
Grading & site excavation	X									Within grading limits
Vehicle Tracking	X					X				Construction roads onsite and/or nearest public roadway(s) providing site access
Topsoil stripping & stockpiling	X									Within grading limits
Paving Operations	X							X		Paving areas
Concrete washout & waste			X	X				X		Designated concrete wash-out area(s)
Structure construction/painting/ cleaning		X		X				X	X	Structure location(s) & designated wash out area(s)
Demolition and debris disposal	X							X		Demo areas
Dewatering operations	X	X								Where necessary. Typically, footing and trenching locations.
Drilling and blasting operations	X			X				X		Where necessary in cut areas.

Material delivery and storage	X	X	X	X	X	X		X	X	Designated staging area(s)
Material use during building process		X	X	X	X	X		X	X	Building construction area(s)
Solid waste (trash and debris)								X	X	Designated trash receptacle(s)
Hazardous waste			X	X	X	X			X	Designated staging area(s) and building construction area(s)
Contaminated spills		X	X	X	X	X			X	Designated staging areas and building construction area(s)
Sanitary/septic waste		X		X			X		X	Designated port-a-potty area(s)
Vehicle/equipment use and storage						X			X	Designated vehicle storage and refuel area(s)
Landscaping operations	X	X						X		Landscaping area(s)

ATTACHMENT C

Sequence of Major Activities

SEQUENCE OF MAJOR ACTIVITIES

1. Prior to construction, coordinate and have a pre-construction meeting regarding swppp training with construction personnel.

2. Determine all utility field locates as necessary.

3. Construct temporary construction entrance and concrete wash out. Install all perimeter erosion and sediment control per plan.

4. Rough grade ponds to 100% capacity. Either the permanent outlet structure or a temporary outlet must be constructed prior to clearing, excavation and embankment activities. The ponds and outlets shall be maintained and functional as temporary detention and sedimentation basins throughout construction until installation of the permanent ponds is complete.

5. Excavate area required for detention basin. The detention basin excavation shall serve as a sediment trap throughout construction activities.

6. Install detention basin and outfall pipe. Disturb only the area necessary for installation. Commence overexcavation of high plastic soils in area around buildings. Follow direction of plans and geotechnical report.

7. Commence clearing and grubbing per plan. Contractor shall remove all stumps by excavating to include removal of associated root system. Contractor shall obtain all required permits.

8. Strip topsoil in grading areas. Stockpile in areas shown on plans.

9. Commence site grading. Fill activities shall meet the requirements of the geotechnical report.

10. Utilize onsite fill materials for overexcavated areas. Follow geotechnical report requirements for fill material.

11. Install storm sewers per plan. Install inlet protection immediately upon completion of each storm structure.

12. Install site utilities as grading allows.

13. Finalize building subgrade preparation in accordance with the project geotechnical report.

14. Remove construction sediment from sediment trap. Finish grading of detention basin, per plans.

15. Begin building construction.

16. Finalize pavement subgrade preparation. Install base material as required for paved areas. Remove inlet protection around inlets no more than 48 hours prior to placing stabilized base course.

17. Commence pavement and sidewalk construction. Remove temporary construction entrance only prior to pavement construction in that area (pave this area last).

18. Complete finish grading, topsoil placement, seed and mulch all disturbed areas. Excess topsoil shall be spread and seeded on phase 2 area, per the engineer.

19. Install all landscaping.

20. Remove all temporary erosion and sediment control when all disturbed areas are stabilized.

Sequence of Events					
Construction Activity	**Proposed Initiation Date**	**Proposed Completion Date**	**Actual Initiation Date**	**Actual Completion Date**	**Contractor Responsible for Implementation**
1. Prior to construction, coordinate and have a pre-construction meeting regarding SWPPP Training with construction personnel.					
2. Determine all utility field locates as necessary.					
3. Construct temporary construction entrance and concrete wash out. Install all perimeter erosion and sediment control per plan.					
4. Excavate area required for detention basin. The detention basin excavation shall serve as a sediment trap throughout construction activities.					
5. Install detention basin and outfall pipe. disturb only the area necessary for installation. Commence over excavation of high plastic soils in area around buildings. follow direction of plans and geotechnical report.					
6. Commence clearing and grubbing per plan. contractor shall remove all stumps by excavating to include removal of associated root system. Contractor shall obtain all required permits.					
7. Strip topsoil in grading areas. Stockpile in areas shown on plans.					

Sequence of Events					
Construction Activity	**Proposed Initiation Date**	**Proposed Completion Date**	**Actual Initiation Date**	**Actual Completion Date**	**Contractor Responsible for Implementation**
8. commence site grading. fill activities shall meet the requirements of the geotechnical report.					
9. Utilize onsite fill materials for over excavated areas. Follow geotechnical report requirements for fill material.					
10. Install storm sewers per plan. Install inlet protection immediately upon completion of each storm structure.					
11. Install site utilities as grading allows.					
12. Finalize building subgrade preparation in accordance with the project geotechnical report.					
13. Remove construction sediment from sediment trap. Finish grading of detention basin, per plans.					
14. Begin building construction.					
15. Finalize pavement subgrade preparation. Install base material as required for paved areas. Remove inlet protection around inlets no more than 48 hours prior to placing stabilized base course.					

Sequence of Events					
Construction Activity	**Proposed Initiation Date**	**Proposed Completion Date**	**Actual Initiation Date**	**Actual Completion Date**	**Contractor Responsible for Implementation**
16. Commence pavement and sidewalk construction. Remove temporary construction entrance only prior to pavement construction in that area (pave this area last).					
17. Complete finish grading, topsoil placement, seed/sod and mulch all disturbed areas. Excess topsoil shall be hauled offsite, per the engineer.					
18. Install landscaping.					
19. Remove all temporary erosion and sediment control when all disturbed areas are stabilized.					
20. Others:					
21.					

ATTACHMENT D

Temporary Best Management Practices and Measures

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

Erosion and Sediment Control BMPS

1. GENERAL

The BMPs shall be constructed or applied in accordance with this Attachment, maps or construction plans, and all State or local requirements. Good engineering practices shall be used if there is a lack of information or changes are proposed for a BMP. The Contractor shall install the BMPs in the order indicated in the construction plans. BMPs shall be applied within the timeframe specified in the permit.

The Contractor shall be responsible for implementing all aspects of the SWPPP, including all BMPs. The Contractor may designate these tasks to certain subcontractors as they see fit, but the ultimate responsibility for implementing these BMPs and ensuring their proper functioning remains with the Contractor. An Implementation Schedule can be found in Attachment I.

To ensure that controls are adequately implemented, it is important that the work crews who install the BMPs are experienced or adequately trained. Improperly installed BMPs have little or no effect and may adversely affect the pollution of stormwater. It is important that all workers on the construction site are aware of the BMPs, so they do not inadvertently disturb or remove them.

2. MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL

BMP:	**Topsoiling: Removal, Stockpiling, and Replacement**
Responsible Staff:	
Location:	Within project grading areas only.
Installation Schedule:	After all perimeter erosion and sediment controls are in place and after clearing and grubbing is completed.
Description:	
Topsoil shall meet the definition provided in the specifications. If specifications are not provided it shall be defined as the top layer of the soil profile usually richest in organic matter and nutrients consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects larger than 2 inches (50 mm) in diameter; and	

free of weeds, roots, toxic materials, or other nonsoil materials. A pH range of 5.0-7.5 is acceptable. Topsoil will be stripped to a minimum depth of 4" or as indicated in the geotechnical report or specifications for the project. Depths of removal may also vary as encountered in the field and directed by the geotechnical engineer. The topsoil will be stockpiled where indicated in the civil construction plans. The stockpile(s) will be in areas that will not interfere with construction phases and at least 15 feet away from concentrated flows. A silt fence shall immediately be installed around the perimeter of each stockpile, in accordance with silt fence design specifications per this SWPPP. If stockpiles are to remain for longer than 14 days, they shall be temporarily seeded as indicated in this SWPPP. Stockpiles that will remain longer than 6 months shall be permanently seeded as indicated in this SWPPP. All rough grading operations within landscape areas shall be completed 4" below finish grade to allow the placement of 4" of topsoil (or depth per specifications). To provide an optimum growing medium and allow for rainfall infiltration, the topsoil shall be placed in one lift with light compaction not to exceed 85-90% maximum dry density according to ASTM D698. Do not drive over any areas of topsoil placement to avoid further compaction.
Maintenance & Inspection:
All areas shall be inspected during routine SWPPP inspections to ensure the stockpiles and surrounding silt fence(s) are stable and functioning as intended. Inspect the silt fence(s) per the silt fence BMP description in this SWPPP. If required, inspect vegetation establishment on stockpile and correct as necessary. Inspect topsoil that has been spread for erosion, over compaction, and poor vegetation establishment. Correct over compacted areas by tilling 4" deep and smoothing and reseeding or sodding. Determine cause of erosion and correct as necessary immediately. Fertilize, reseed and mulch, (or resod if required) and water all areas of poor vegetation establishment.

Removal Requirements:	At the completion of the project, remove all silt fence from stockpiles. Remove all stockpiles by spreading leftover topsoil onsite in areas directed by Operator. Seed, mulch, and water all disturbed areas.

3. PHASE CONSTRUCTION ACTIVITY

BMP:	**Phased Grading**
Responsible Staff:	
Location:	Project grading limits.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.
Description:	
Because of the relatively small project area, it is not practical to perform phased grading at this site. To minimize potential erosion, only areas necessary to construct the construction exit(s), perimeter sediment control, and the temporary sediment trap(s) shall be disturbed initially. These areas shall be cleared, grubbed, and graded and the	

construction exit(s) shall be installed. Further clearing, grubbing, and grading shall then proceed only within areas where immediate earthwork is needed. Erosion and sediment controls shall be implemented immediately after construction allows but no later than 14 days after construction ceases.
Maintenance & Inspection:
Responsible staff shall be constantly aware of the construction schedule and make whatever adjustments may be necessary to minimize the amount of disturbed area at any one time. Inspections shall be made weekly to ensure all graded areas are property stabilized immediately after completion of construction or if there will be a break in land disturbance activities longer than 14 days.

4. TEMPORARY NON-STRUCTURAL BMPs

BMP:	**Construction Entrance/Exit**
Responsible Staff:	
Location:	Where indicated on the civil construction plans.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.
Description:	
A temporary rock construction exit is a stone base pad installed to provide an exit area where vehicles can drop the mud and caked soil from their tires to avoid transporting it onto public roads. The mud and dirt that ends up on the street is called “track out” and is the #1 complaint of construction sites. A larger stone should comprise the surface of the exit to vibrate/jar the truck and flex the rubber to encourage mud and soil to drop off. Provide water via a water truck and wash all tires and wheel wells of all vehicles prior to leaving the site. Direct all runoff into a sediment trap set up on the downstream side of the exit pad. Install as detailed in the civil construction plans.	
Maintenance & Inspection:	
All construction exits shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Shovel or wash off the rock surface often to prevent soil build up and clogging of the stone. This may need to be several times a day. If surface becomes smooth or clogged, top-dress with clean 2-3 inch stone immediately. Remove sediment from the sediment trap when it has reached ½ the design depth. All sediment removed shall be placed onsite as fill in non structural areas or as directed by the Operator. All repairs/maintenance shall be done immediately.	
Removal Requirements:	Remove when all disturbed areas are stabilized or all construction vehicles have been permanently demobilized. The area is considered stabilized when perennial vegetation or permanent materials (buildings, pavement, etc) cover all areas that have been disturbed. Vegetative cover shall be at least 70% of fully established density over the entire disturbed

	area that is to be vegetated. Areas disturbed during removal of the BMP shall be smooth graded and permanently seeded and mulched.

BMP:	**Pavement/Curb & Gutter Sweeping**
Responsible Staff:	
Location:	Where necessary.
Description:	
Pavement/curb & gutter sweeping involves picking up and removing all trash, debris, and sediment from onsite land disturbance activities that has accumulated on all public and private paved surfaces near the project site. This can be done by hand via broom, or via mechanical street sweeping and vacuum machines. The sediment shall be picked up and disposed of as onsite fill, it shall not be washed off the pavement into storm sewers or other drainage ways via pressure washing or water trucks.	
Maintenance & Inspection:	
All onsite and nearby offsite paved surfaces shall be inspected during routine SWPPP inspections for trash, debris, and sediment deposition on the surface. All sediment shall be removed immediately. The cause of the trash, debris, and/or sediment deposition shall be identified and immediately corrected.	

BMP:	**Temporary Erosion Control Blankets**
Responsible Staff:	
Location:	Where indicated on the civil construction plans.
Installation Schedule:	Immediately after the application area is finish graded.
Description:	
Temporary erosion control blankets control erosion by providing a protective surface cover commonly consisting of straw, coconut, wood, or other plant fibers woven into a plastic, nylon, or cotton net matrix. They can also consist of photodegradable netting. Install per the manufacturer's written recommendations. Typically, permanent grass seed is installed and the mat is rolled over the seed and nailed or pinned down. The grass grows up through the mat and the mat and grass work together to prevent surface erosion for a limited period of time. Eventually the plant fibers in the mat decay and/or the net matrix breaks down typically via the sun's UV rays. By this time, the grass should be fully established, providing the necessary erosion control. Erosion control blankets only function properly if STORMWATER RUNOFF DRAINS OVER THE TOP OF THE BLANKET. Therefore it is critical that all weeds/vegetation/stumps/etc. be removed and the ground smoothed immediately prior to blanket installation. Then	

grass and fertilizer should be applied followed by the blanket installation as tightly anchored to the ground using adequate staples/pins/anchors.
Maintenance & Inspection:
All blankets shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Inspect for tears, blowouts, erosion, and undermining beneath the blankets. Areas that show erosion shall be repaired by pulling back that portion of the blanket, adding tamped topsoil, reseeding, and resecuring the blankets. Blankets that have become dislodged or damaged shall be repaired or replaced and resecured immediately. Trash and debris shall be removed immediately. Vegetation shall be inspected and maintained per the permanent seeding BMP description. All repairs/maintenance shall be done immediately.

Removal Requirements:	Should be none. If still onsite at the end of the blanket lifespan, verify it is breaking down and is not exposed to possibly get caught in mowing equipment. Repair as necessary.

BMP:	**Soil Roughening**
Responsible Staff:	
Location:	All disturbed slopes 3:1 or steeper.
Installation Schedule:	Immediately after applicable slope has reached plan grade.

Description:
Surface roughening are practices that roughen a slope surface to reduce surface runoff velocities, therefore minimizing soil erosion and sedimentation during construction. Either track walking with a dozer up and down the slope (NOT parallel or along the slope) or using a sheep's foot roller to create minimum 1" dimples are acceptable practices. Immediately after completion of roughening, stabilize the surface via vegetation establishment, rip-rap, or however indicated in the construction plans. Do no roughen with finish grading.
Maintenance & Inspection:
All roughening shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Inspect for erosion. Areas that show erosion shall be repaired immediately. Trash and debris shall be removed immediately. Vegetation shall be inspected and maintained per the permanent or temporary seeding BMP description. All repairs/maintenance shall be done immediately.

Removal Requirements:	None.

BMP:	**Dust Control & Air Emissions**
Responsible Staff:	
Location:	Where necessary based on current site conditions.
Installation Schedule:	Immediately when current site conditions warrant.
Description:	
Open burning will only be allowed per state and local regulations. Contractor is responsible for obtaining all necessary burning permits. In Texas, state regulation places a limit on the amount of visible dust that can leave a property boundary. For more information research state regulation 30 TAC Chapter 111, Subchapter A. Minimize wind erosion and control dust via the following methods: 1. Cover 30% or more of disturbed surface with non-erodible material. 2. Roughening the disturbed areas to produce ridges perpendicular to the prevailing wind. Ridges should be about six (6) inches in height. 3. Frequent watering of disturbed areas.	
Maintenance & Inspection:	
All dust control shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Verify onsite dust creation is below state and local requirements.	

5. ADDITIONAL BMPS

BMP:	**Stormwater Outfalls**
Responsible Staff:	
Location:	Where shown on the construction plans. Contractor shall redline on the SWPPP site maps for clarity.
Installation Schedule:	
Description:	

Stormwater outfalls are all points where stormwater drains away from the outer limits of the project area. These can be swales, creeks, or rivers, or storm sewers that daylight with a flared end section/headwall/end or pipe.
Maintenance & Inspection:
All stormwater outfalls and 50 feet downstream shall be inspected during routine SWPPP inspections for proper functioning, stability, erosion, sediment disposition, and general condition. All repairs/maintenance shall be done immediately.

BMP:	**Management of Excavation Spoil Materials**
Responsible Staff:	
Location:	Where indicated in the construction plans.
Installation Schedule:	
Description:	
Excavation spoil materials result from localized grading that occurs post mass grading for footings, docks/truckwells, utility trenches, geowells, etc. These materials must be properly managed to prevent them from contributing to storm water discharges. The materials generated from the development of this project shall be managed by the following method: mixed with on-site fill. If they must be temporarily stockpiled, they shall be placed where all storm water runoff will drain to a BMP and temporarily seeded and mulched immediately after construction.	
Maintenance & Inspection:	
All excavation spoil materials shall be inspected during routine SWPPP inspections for proper functioning, stability, erosion, and general condition. Verify all stockpiles drain to properly functioning BMPs and no untreated storm water runoff is occurring. All repairs/maintenance shall be done immediately.	
BMP:	**Dewatering (if necessary)**
Responsible Staff:	
Location:	
Installation Schedule:	
Description:	

Dewatering operations from footing/trench/etc. excavations shall not be discharged offsite without treatment. Turbid dewatering discharge shall be directed to another BMP to allow filtering or settling prior to discharging offsite. *(below to be filled in by Contractor)* Dewatering Methods: Dewatering Maximum Flow: GPM BMP(s) Dewatering Will be Directed To:
Maintenance & Inspection:
All dewatering operations shall be inspected during routine SWPPP inspections for proper functioning, stability, erosion, and general condition. Verify all dewatering discharge drains to properly functioning BMP(s) and no untreated storm water runoff is occurring. Verify the BMP(s) are properly handling the amount of dewatering discharge they are receiving. All repairs/maintenance shall be done immediately.

ATTACHMENT E

N/A

ATTACHMENT F

Structural Practices

STRUCTURAL PRACTICES

1. Structural BMPS

1. GENERAL

The BMPs shall be constructed or applied in accordance with this Attachment, maps or construction plans, and all State or local requirements. Good engineering practices shall be used if there is a lack of information or changes are proposed for a BMP. The Contractor shall install the BMPs in the order indicated in the construction plans. BMPs shall be applied within the timeframe specified in the permit.

The Contractor shall be responsible for implementing all aspects of the SWPPP, including all BMPs. The Contractor may designate these tasks to certain subcontractors as they see fit, but the ultimate responsibility for implementing these BMPs and ensuring their proper functioning remains with the Contractor. An Implementation Schedule can be found in Attachment I.

To ensure that controls are adequately implemented, it is important that the work crews who install the BMPs are experienced or adequately trained. Improperly installed BMPs have little or no effect and may adversely affect the pollution of stormwater. It is important that all workers on the construction site are aware of the BMPs so they do not inadvertently disturb or remove them.

2. TEMPORARY STRUCTURAL BMPs

BMP:	**Diversion Dike**
Responsible Staff:	
Location:	Where indicated on the civil construction plans.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.
Description:	
Diversion dikes consist of a combination of an earthen ridge and excavated channel constructed to direct sediment laden runoff to another BMP. These are often installed at the perimeter of disturbed areas and can be installed within the grading areas for temporary service. If installed within grading areas, grading activities should be implemented to keep intact the diversion dike for as long as possible. Install as detailed in the civil construction plans.	

Maintenance & Inspection:	
All diversion dikes shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Immediately remove trash/debris from the flow area and rebuild the ridge as needed. Remove built up sediment when it has reached 1/3 the height of the ridge. Take care to avoid undermining the fence during sediment removal. All repairs/maintenance shall be done immediately.	
Removal Requirements:	Remove when the disturbed area draining to the BMP is stabilized. The area is considered stabilized when perennial vegetation or permanent materials (buildings, pavement, etc) cover all areas that have been disturbed. Vegetative cover shall be at least 70% of fully established density over the entire disturbed area that is to be vegetated. Areas disturbed during removal of the BMP shall be smooth graded and permanently seeded and mulched.

BMP:	**Silt Fence**
Responsible Staff:	
Location:	Where indicated on the civil construction plans & as necessary.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.
Description:	
Silt fence consists of a geotextile fabric that is attached to supporting posts and trenched into the ground. This is applied where sheet erosion (not channelized) occurs over small areas. It is typically installed at the same elevation following the contour of the land. Its purpose is to filter sediment laden runoff on the uphill side. Install as detailed in the civil construction plans.	
Maintenance & Inspection:	
All silt fence shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Verify the fence posts are still structurally sound, the fabric is still securely attached to the fence posts, and the fabric is still trenched into the ground with no runoff occurring under the fence. Remove built up sediment when it has reached 1/3 the height of the fence. Take care to avoid undermining the fence during sediment removal. All repairs/maintenance shall be done immediately.	
Removal Requirements:	Remove when the disturbed area draining to the BMP is stabilized. The area is considered stabilized when perennial vegetation or permanent materials (buildings, pavement, etc) cover all areas that have been disturbed.

	Vegetative cover shall be at least 70% of fully established density over the entire disturbed area that is to be vegetated. Areas disturbed during the removal of the BMP shall be smooth graded and permanently seeded and mulched.

BMP:	**Sediment Logs / Fiber Rolls**
Responsible Staff:	
Location:	Where indicated on the civil construction plans & as necessary.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet.
Description:	
Sediment logs consist of compressed excelsior, coconut, or other fibers compressed in a tubular netting. They typically are 9" or 12" in diameter (sometimes larger) and 10' to 25' lengths. They are typically placed across channel bottoms, or on the contour on hill slopes to break up slope lengths and slow overland flow. They are typically staked in place with wooden stakes. Sediment logs are used to slow water velocity, trap sediment, and enhance revegetation. They are often used in place of silt fence, rock ditch checks, or straw bale ditch checks. Acceptable products are American Excelsior Company AEC Curlex Sediment Log or or approved equal. Sediment Log diameters are shown on the civil construction plans. Install per the manufacturer written instructions.	
Maintenance & Inspection:	
All sediment logs shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Verify the posts are still structurally sound, and the log is still trenched into the ground with no runoff occurring under the log. Remove built up sediment when it has reached 1/2 the height of the log. Take care to avoid undermining the log during sediment removal. All repairs/maintenance shall be done immediately.	
Removal Requirements:	Remove when the disturbed area draining to the BMP is stabilized. The area is considered stabilized when perennial vegetation or permanent materials (buildings, pavement, etc) cover all areas that have been disturbed. Vegetative cover shall be at least 70% of fully established density over the entire disturbed area that is to be vegetated. Areas disturbed during the removal of the BMP shall be smooth graded and permanently seeded and mulched.

BMP:	**Silt Fence Inlet Protection**
Responsible Staff:	
Location:	Where indicated on the civil construction plans.
Installation Schedule:	Immediately after construction of each storm sewer inlet.
Description:	
Silt fence inlet protection is reinforced silt fence installed completely around a stormwater inlet to filter and pond sediment laden runoff to allow drop out of the sediment before it drains into the inlet. Install as detailed in the civil construction plans.	
Maintenance & Inspection:	
All inlet protection shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Verify the fabric and wire support is still in good condition with no rips, holes, or signs of stretching or stress. Verify the posts and supports are still structurally sound, the fabric is still securely attached to the posts and supports, and the fabric is still trenched into the ground with no runoff occurring under the fence. Remove built up sediment when it has reached 1/3 the height of the fence. All sediment removed shall be placed onsite as fill in non structural areas or as directed by the Operator. All repairs/maintenance shall be done immediately.	
Removal Requirements:	Remove when the disturbed area draining to the BMP is stabilized. The area is considered stabilized when perennial vegetation or permanent materials (buildings, pavement, etc) cover all areas that have been disturbed. Vegetative cover shall be at least 70% of fully established density over the entire disturbed area that is to be vegetated. Areas disturbed during removal of the BMP shall be smooth graded and permanently seeded and mulched.

2. Structural BMPS

General Information			
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications	**See Section 6 of SWPPP.**		
Describe present phase of construction.			
Type of Inspection: **❑ Regular (7 calendar day) ❑ Pre-storm event ❑ During storm event ❑ Post-storm event**			
Weather Information			
Has there been a storm event since the last inspection? ❑Yes ❑No **If yes, provide:** **Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):**			
Weather at time of this inspection? **❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds** **❑ Other: Temperature:**			
Have any discharges occurred since the last inspection? ❑Yes ❑No **If yes, describe:**			
Is there any discharges at the time of inspection? ❑Yes ❑No **If yes, describe:**			

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."

Print name and title: _____

Inspector's Signature: _____ Date: _____

3. Site-specific BMPs

Carry a copy of the SWPPP maps during inspections.

Site-Specific BMPs					
BMP	**BMP Installed? (yes, no, or N/A)**	**BMP Maintenance Required? (yes, no, or N/A)**	**Corrective Action Needed and Notes**	**Responsible Party for Corrective Action**	**Implementation Date of Corrective Action**
Site Staff Training on Erosion & Sediment					
Site Staff Training on Spill Prevention &					
Maintaining Equipment					
Tree Preservation Barrier					
Staging Area(s)					
Vehicle/Equipment Maintenance & Fueling					
Toilet Facilities					
Maintaining New Vegetated Areas					
Gravel Construction Entrances, Exits, &					
Concrete Washout Area(s)					

Site-Specific BMPs					
BMP	**BMP Installed? (yes, no, or N/A)**	**BMP Maintenance Required? (yes, no, or N/A)**	**Corrective Action Needed and Notes**	**Responsible Party for Corrective Action**	**Implementation Date of Corrective Action**
Phasing Land Clearing Activities					
Disposing of Trash & Debris					
Construction Waste Materials Containment					
Hazardous Waste Materials Containment					
Pavement/Curb & Gutter Sweeping					
Curb Inlet Filters Using Gutterbuddy, Sediment Logs, Etc.					
Wind Erosion & Dust Control					
Silt Fences					
Topsoil Stockpile and Placement					
Temporary Diversion Dikes					
Management of Excavation Spoil Materials					
Dewatering into BMP(s)					

Site-Specific BMPs					
BMP	**BMP Installed? (yes, no, or N/A)**	**BMP Maintenance Required? (yes, no, or N/A)**	**Corrective Action Needed and Notes**	**Responsible Party for Corrective Action**	**Implementation Date of Corrective Action**
Filter Sock					
Soil Roughening					
Temporary Seed & Mulch Disturbed Areas					
Storm Sewers					
Temporary Inlet Protection using silt fence					
Light Compaction of All Placed Topsoil					
Landscape Installation					
Permanent Seed & Mulch					
Grass Sod Placement					
Other: Underground Detention					
Pervious Pavement					

Site-Specific BMPs					
BMP	**BMP Installed? (yes, no, or N/A)**	**BMP Maintenance Required? (yes, no, or N/A)**	**Corrective Action Needed and Notes**	**Responsible Party for Corrective Action**	**Implementation Date of Corrective Action**
Bio Retention Basin					

General Site Issues

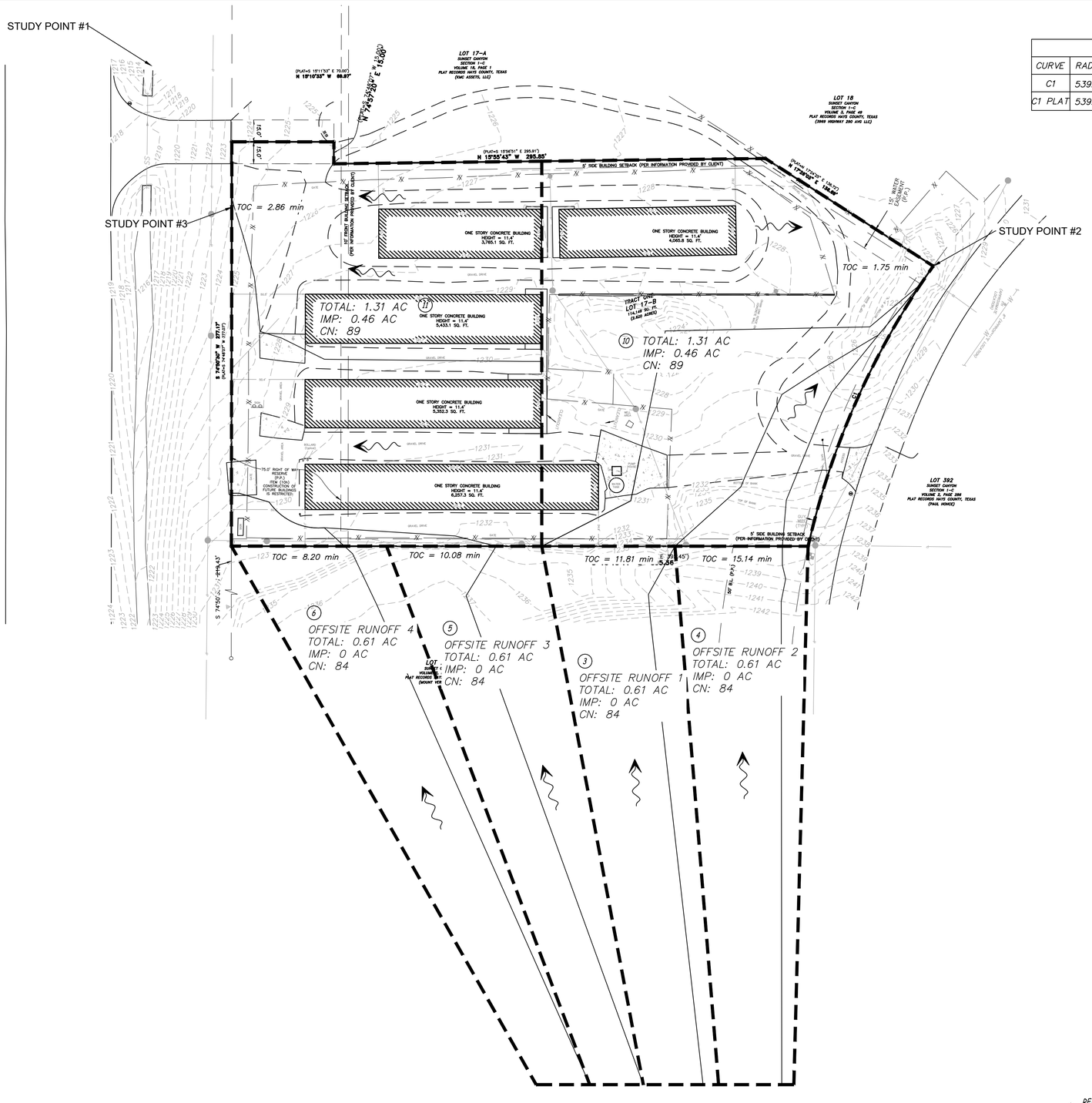
Below are some general site issues that should be assessed during inspections.

General Site Issues					
BMP/activity	**Implemented? (yes, no, or N/A)**	**Maintenance Required? (yes, no, or N/A)**	**Corrective Action Needed and Notes**	**Responsible Party Corrective Action**	**Implementation Date of Corrective Action**
Are all slopes and disturbed areas not actively being worked properly stabilized?					
Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMP's?					
Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?					
Are discharge points and receiving waters free of any sediment deposits?					
Are storm drain inlets properly protected?					

General Site Issues					
BMP/activity	**Implemented? (yes, no, or N/A)**	**Maintenance Required? (yes, no, or N/A)**	**Corrective Action Needed and Notes**	**Responsible Party Corrective Action**	**Implementation Date of Corrective Action**
Is the construction exit(s) preventing sediment from being tracked onto the street(s)?					
Are the surrounding streets clean and free of mud/dust/trash from the project?					
Is trash/litter from work areas collected and placed in covered dumpsters?					
Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?					
Has the on-site SWPPP been updated?					
Other:					

ATTACHMENT G

Drainage Area Map



Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

REVISION NOTES
1. ADDED FLOW INDICATORS

Engineering Surveys & Services
DELIVERING YOUR VISION ™
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N

0 1"
SCALE: 1" = 20'

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3976B E. US 290
DRIPPING SPRINGS, HAYS COUNTY, TEXAS

(3) 1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
LICENSED PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL
ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
SEPTEMBER 20, 2023

Revised
(2) DECEMBER 20, 2023
(3) JANUARY 11, 2024

Design: MAK Drawn: SK

35% IMPERVIOUS DRAINAGE AREA MAP

Sheet
C15.02

ES&S PROJECT NO. 15964

ATTACHMENT H

N/A

ATTACHMENT I

Inspection and Maintenance for BMPs

INSPECTION AND MAINTENANCE FOR BMPS

1. ROUTINE INSPECTIONS

Routine inspections are required at least once every seven (7) calendar days and within 24 hours following a rainfall event that produces runoff. Particular BMP inspection details are included in Sections 4 and 5 of this SWPPP. Written documentation in the form of inspection reports and redlined SWPPP maps must be kept on file with the SWPPP at the jobsite and made available to the Operator, Operator's engineer, USEPA, state and local agencies that have issued land disturbance permits, and any other agency with regulatory authority over stormwater. Inspection report forms are included in section 9. In addition, copies of the reports shall be provided by the Contractor to any of these persons, upon request, via mail, email, or facsimile transmission. Also included in section 9 is a Recommended Inspection Sequence for informational purposes only. Additional inspection requirements are given in the permits in Attachment D and F.

It is encouraged to take photos during inspections, print them out, and keep them on file with the corresponding inspection report with the onsite SWPPP.

2. NON ROUTINE/SPOT INSPECTIONS

High-use or high-maintenance BMPs (typically construction entrance/exit, street sweeping, trash dumpsters, etc.) should be inspected on a daily basis or as deemed necessary to verify they are functioning properly. Weather reports should be monitored and inspections should take place before large storm events to ensure all BMPs are fully operational before the storm event occurs. Inspect some BMPs during rain events to ensure they are keeping sediment onsite.

3. FINAL STABILIZATION

Inspection workload can be reduced by defining certain areas onsite as achieving final stabilization. Final stabilization is defined as when 70% permanent vegetation or permanent materials (buildings, pavement, etc) cover all disturbed areas within the defined area. Once final stabilization is achieved, these areas can me marked on the SWPPP map(s) and inspections can discontinue in these areas only.

4. BMP INSPECTORS

A BMP inspection is only as good as the inspector. Therefore, it is important that designated inspectors/responsible parties be qualified, trained personnel. Personnel selected to conduct inspections should be knowledgeable in the principles and practices of erosion and sediment controls, possess the technical skills to assess conditions at the construction site that could impact stormwater quality, and assess the effectiveness of any sediment and erosion control measures selected.

5. DESIGNATED INSPECTORS

(to be filled in by Contractor after award of contract, make copies of this form as necessary)

Name: _____ Position: _____

Company Name: _____

Company Address: _____

_____

Inspector Cell Phone: _____ Email: _____

Qualifications: _____

_____

_____

Name: _____ Position: _____

Company Name: _____

Company Address: _____

_____

Inspector Cell Phone: _____ Email: _____

Qualifications: _____

_____

_____

Name: _____ Position: _____

Company Name: _____

Company Address: _____

_____

Inspector Cell Phone: _____ Email: _____

Qualifications: _____

_____

_____

Name: _____ Position: _____

Company Name: _____

Company Address: _____

_____

Inspector Cell Phone: _____ Email: _____

Qualifications: _____

_____

_____

6. RECORDKEEPING

The following is a list of records you should keep at your project site bound with the SWPPP and available for inspectors to review:

1. Maintain Copies of Permits and Forms, including:
   - ☐ State Land Disturbance Permit
   - ☐ Local Land Disturbance Permit - if required
   - ☐ Site Notice

2. Certification Records, including:
   - ☐ Authorized Representative Designation
   - ☐ Authorized Representative Certification
   - ☐ Subcontractors Certification

3. Maintain Records of Construction Activities, including:
   - ☐ Implementation Schedule
   - ☐ Dates & locations when major grading activities occur
   - ☐ Dates when construction activities temporarily cease on a portion of the site
   - ☐ Dates when construction activities permanently cease on a portion of the site
   - ☐ Dates when stabilization measures are initiated on the site
   - ☐ SWPPP maps showing the location and dates of installation of structural and non-structural BMPs
   - ☐ SWPPP maps showing the location and dates of installation of good housekeeping BMPs
   - ☐ Dates of rainfall and the amount of rainfall
   - ☐ Records of reports filed with regulatory agencies if reportable quantities of hazardous materials spilled

4. Maintain Inspection & Maintenance Records, including:
   - ☐ Inspection Reports
   - ☐ SWPPP Amendment Report Form

- ☐ Overall SWPPP Amendment Log

5. General Required Records, including:
   - ☐ List of Subcontractors
   - ☐ Record Of Personnel Training Activities Form
   - ☐ TMDL Documentation
   - ☐ Endangered Species/Critical Habitat Documentation (*Not Used*)
   - ☐ Jurisdictional Wetlands and/or Surface Water Documentation (*Not Used*)

6. Termination Records, including:
   - ☐ Notice of Termination from state (if applicable)
   - ☐ Notice of Termination from Local Authority (if applicable)
   - ☐ Final Stabilization/Termination Checklist

7. Additional Required Records, including:
   - ☐ _____
   - ☐ _____
   - ☐ _____
   - ☐ _____

Date(s) & location(s) when major grading activities occur: _____

_____

_____

_____

_____

_____

Date(s), location(s), & reason(s) when construction activities temporarily cease on a portion of the site: _

_____

Date(s) & location(s) when construction activities permanently cease on a portion of the site: _____

Date(s) & area(s) when an area is either temporarily or permanently stabilized (indicate temporary or permanent): _____

Upon termination of the land disturbance permit, the Contractor shall turn over all SWPP documentation and maps to the Operator. Inspection and maintenance report forms are to be maintained by the Operator for three years following the final stabilization of the site.

7. LOG OF CHANGES TO THE SWPPP

The SWPPP is meant to be a dynamic working guide that is to be kept current, effective, and functional in meeting its objectives at all times. Unforeseen or unexpected circumstances can require modification and amendment to the SWPPP. The SWPPP shall be amended whenever there is a change in design, construction, operation, or maintenance at the construction site that has a significant effect on the discharge of pollutants to the waters of the United States that has not been previously addressed in the SWPPP, if inspections or investigations by site staff, local, state, or federal officials determine that discharges are causing water quality exceedances or the SWPPP is ineffective in eliminating or significantly minimizing pollutants in storm water discharges from the construction site, or based on the results of an inspection, or there is a 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, the SWPPP shall be modified to include additional or modified BMPs designed to correct identified problems. Revisions shall be completed within seven (7) calendar days following the inspection. Modifications that are the result of inspections shall be initiated within 24 hours and completed within 48 hours. The Contractor shall be responsible for SWPPP modifications/amendments whenever the following occurs:

a) Addition of new BMP(s) or replacement of failing or failed BMP(s).
b) Design, operation, inspection, or maintenance of BMP(s) is changed.
c) Design/scope/schedule of the construction project is changed that could affect the quality of storm water discharges.
d) Updates/revisions to site maps/plans.
e) Inspections indicate deficiencies in the SWPPP or any BMP.
f) Changes in Operator, contractor(s), subcontractor(s) or other personnel.
g) Federal, state, or local authorities notify the Operator/permittee/contractor in writing of deficiencies found onsite regarding stormwater control.
h) SWPPP is determined to be ineffective in significantly minimizing or controlling erosion and sedimentation (e.g., excessive site erosion or excessive sediment deposits downstream of any stormwater outfall, etc.).
i) If Total Settleable Solids (TSS) from a storm water outfall exceed the amount as defined in the operating permit.
j) Federal, state, or local authorities determine violations of Water Quality Standards may occur or have occurred.

Any such changes to the SWPPP must be made in writing and signed and dated by the Contractor's representative. A form has been provided in Section 10 for this purpose. Modifications of the SWPPP BMPs shall be indicated via redlines on the SWPPP maps. The SWPPP must also be amended to identify any new contractor and/or subcontractor that will be responsible for any aspect of the SWPPP. Notification of any modifications or amendments to the SWPPP must be made in writing to both the Operator and the Operator’s Engineer within 7 days of the date such modification or amendment is made.

An overall log of SWPPP amendments shall be kept and included with the onsite SWPPP. An amendment log is included in Section 10.

8. TRAINING

Onsite contractor(s), subcontractor(s), and staff might not be familiar with stormwater BMPs, and they might not understand their role in protecting local rivers, lakes, and coastal waters. Proper training of personnel can be one of the most effective BMPs implemented at a jobsite. The Contractor shall be responsible for basic training of all onsite staff. As with the other steps taken to prevent stormwater problems at the project site, all training conducted for staff, for those with specific stormwater responsibilities, and for subcontractors shall be documented. Training documentation forms are included

in and shall become an integral part of the onsite SWPPP. Training shall adhere to the following requirements:

Basic training shall educate the attendees on the topics of:

a) An awareness of the SWPPP, its purpose, and the basics of how the purpose is being achieved.
b) Spill prevention and cleanup measures, including prohibition of dumping any material into storm drains or waterways.
c) An understanding of the basic purpose of BMP's, including what BMP's are on site, what they should look like, and how to avoid damaging them.
d) Potential penalties associated with stormwater noncompliance.
e) Entities and subcontractor directly responsible for implementing the SWPPP shall receive comprehensive stormwater training including:

f) The location and type of BMP's being implemented
g) The installation requirements and water quality purpose for each BMP
h) Maintenance procedures for each of the BMP's being implemented
i) Spill prevention and cleanup measures
j) Inspection and maintenance record keeping requirements

Each person working on the site shall be informed of the following:

k) Only designated construction site entrances shall be used for entering and exiting the site
l) Equipment shall be kept away from silt fences, fiber rolls, and other sediment barriers
m) Know the locations of disposal areas, and know the proper practices for trash, concrete and paint washout, hazardous chemicals, etc.
n) Soil, materials, and liquids shall be kept away from paved areas and storm drain inlets. Material shall not be swept or washed into a storm drain
o) Know the location and understand the proper use of spill kits
p) Know the locations of the site's designated protection areas. Equipment shall be kept away from stream banks, valuable trees and shrubs, and steep slopes. Clearly mark these areas
q) Equipment shall be kept off mulched, seeded, or stabilized areas. Clearly mark these areas
r) Know who to contact when problems are identified

9. INSPECTION REPORT

General Information			
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications	See Section 6 of SWPPP.		
Describe present phase of construction			

Type of Inspection:

❑ Regular (7 calendar day) ❑ Pre-storm event ❑ During storm event ❑ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ❑Yes ❑No

If yes, provide:

Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?

❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds

❑ Other: Temperature:

Have any discharges occurred since the last inspection? ❑Yes ❑No

If yes, describe:

Is there any discharges at the time of inspection? ❑Yes ❑No

If yes, describe:

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."

Print name and title: _____

Inspector's Signature: _____ Date: _____

_____

Site-specific BMPs

Carry a copy of the SWPPP maps during inspections.

Site-Specific BMPs					
BMP	BMP Installed? (yes, no, or N/A)	BMP Maintenance Required? (yes, no, or N/A)	Corrective Action Needed and Notes	Responsible Party for Corrective Action	Implementation Date of Corrective Action
Site Staff Training on Erosion & Sediment Control					
Site Staff Training on Spill Prevention & Response Plan					
Maintaining Equipment					
Tree Preservation Barrier					
Staging Area(s)					
Vehicle/Equipment Maintenance & Fueling Area					
Toilet Facilities					
Maintaining New Vegetated Areas					
Gravel Construction Entrances, Exits, & Laydown					
Concrete Washout Area(s)					
Phasing Land Clearing Activities					
Disposing of Trash & Debris					

Site-Specific BMPs					
BMP	BMP Installed? (yes, no, or N/A)	BMP Maintenance Required? (yes, no, or N/A)	Corrective Action Needed and Notes	Responsible Party for Corrective Action	Implementation Date of Corrective Action
Construction Waste Materials Containment					
Hazardous Waste Materials Containment					
Pavement/Curb & Gutter Sweeping					
Curb Inlet Filters Using Gutterbuddy, Sediment Logs, Etc.					
Wind Erosion & Dust Control					
Silt Fences					
Topsoil Stockpile and Placement					
Temporary Diversion Dikes					
Management of Excavation Spoil Materials					
Dewatering into BMP(s)					
Filter Sock					
Soil Roughening					

Site-Specific BMPs					
BMP	BMP Installed? (yes, no, or N/A)	BMP Maintenance Required? (yes, no, or N/A)	Corrective Action Needed and Notes	Responsible Party for Corrective Action	Implementation Date of Corrective Action
Temporary Seed & Mulch Disturbed Areas					
Storm Sewers					
Temporary Inlet Protection using silt fence					
Light Compaction of All Placed Topsoil					
Landscape Installation					
Permanent Seed & Mulch					
Grass Sod Placement					
Other: Underground Detention					
Pervious Pavement					
Bio Retention Basin					

Site-Specific BMPs					
BMP	BMP Installed? (yes, no, or N/A)	BMP Maintenance Required? (yes, no, or N/A)	Corrective Action Needed and Notes	Responsible Party for Corrective Action	Implementation Date of Corrective Action

General Site Issues
Below are some general site issues that should be assessed during inspections.

General Site Issues					
BMP/activity	Implemented? (yes, no, or N/A)	Maintenance Required? (yes, no, or N/A)	Corrective Action Needed and Notes	Responsible Party Corrective Action	Implementation Date of Corrective Action
Are all slopes and disturbed areas not actively being worked properly stabilized?					
Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMP's?					
Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?					
Are discharge points and receiving waters free of any sediment deposits?					
Are storm drain inlets properly protected?					
Is the construction exit(s) preventing sediment from being tracked onto the street(s)?					
Are the surrounding streets clean and free of mud/dust/trash from the project?					

General Site Issues					
BMP/activity	Implemented? (yes, no, or N/A)	Maintenance Required? (yes, no, or N/A)	Corrective Action Needed and Notes	Responsible Party Corrective Action	Implementation Date of Corrective Action
Is trash/litter from work areas collected and placed in covered dumpsters?					
Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?					
Has the on-site SWPPP been updated?					
Other:					

10. AMENDMENT REPORT FORM

AMENDMENT NUMBER: _____

INSPECTOR: _____ DATE:_____

QUALIFICATIONS OF INSPECTOR:_____

_____

_____

CHANGES REQUIRED TO THE STORMWATER POLLUTION PREVENTION PLAN: _____

_____

_____

_____

_____

_____

REASONS FOR CHANGES: _____

_____

_____

_____

_____

_____

TO BE PERFORMED BY: _____

_____

ON OR BEFORE: _____

OVERALL SWPPP AMENDMENT LOG

Amendment #	Date	Description of Amendment	Amendment Prepared by (Name and title)

11. RECORD OF RAINFALL

Year 20___ Dripping Springs, Hays County, Texas All rainfall amounts are in inches.

Day	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec
1												
2												
3												
4												
5												
6												
7												
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30												
31												
Initials												

ATTACHMENT J

Schedule of Interim and Permanent Soil Stabilization Practices

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

1. Soil Stabilization Practices
    a. After demolition of the existing structures, construction areas will be stripped of all vegetation, concrete, asphalt, loose soils, topsoil, construction debris, and other unsuitable materials currently present at the site. Roots of trees to be removed within construction areas should be grubbed to full depths, including the dry soil around the roots. All remnants of existing foundations should be completely excavated and removed to at least 2 feet below finished grades. The soil will be proof rolled to determine if organics or debris is still present in the soil and will be removed. Exposed ground will be sloped away from the building at 5% or greater. Once construction is completed exposed ground will be sodded and seeded until soil is stabilized.

2. Final Stabilization/Termination Checklist

☐ All soil disturbing activities are complete.

☐ All construction debris and trash has been removed.

☐ All paved surfaces onsite and in the surrounding area have been cleaned of all onsite sediment, trash, debris, etc.

☐ All Subcontractors have completed and cleaned up their work involving land disturbance/erosion and sediment control. The general contractor has inspected and approved this work.

☐ All temporary BMP's (such as silt fence) have been removed, finish graded, and seed and mulched. Residual sediment has been removed as needed. BMP's that will completely decompose, including some fiber rolls and blankets, may be left in place as approved by Operator.

☐ All areas where erosion-control blankets/mats were installed have been inspected. All loose, exposed blanket has been restapled/staked. If less than 70% blanket area is covered by vegetation, coordinate with Operator to determine solution.

☐ The project is stabilized. (The project is considered stabilized when perennial vegetation, pavement, buildings, or structures using permanent materials cover all areas that have been disturbed. Perennial vegetative cover shall be at least 70% of fully established plant density over 100% of the disturbed area.)

☐ All signs of erosion and sediment deposition have been repaired and are permanently stabilized.

☐ All permanent BMP's are in place and operational. Written maintenance requirements for all permanent BMP's have been provided to the Operator.

☐ All drainage conveyances and inlets/outlets have been installed per plan; all trash/debris has been removed, and are functioning as intended. All Inlet/outlet areas have been inspected to ensure complete stabilization in the surrounding area.

☐ All rip-rap areas are stable and rip-rap that has become dislodged has been replaced.

CONTRACTOR'S CERTIFICATION:

"I certify under penalty of law that all storm water discharges associated with Construction Activity from the identified project that are authorized by the NPDES General Operating Permit, have been eliminated, and that all disturbed areas and soils at the construction site have achieved final stabilization and all temporary erosion and sediment control measures have been removed or will be removed at a scheduled time coordinated with and approved by the Operator."

Name (Print) & Title: _____ _____

Signature: _____ Date: _____

Company Name: _____

_____

Final Stabilization Date: _____

BMP:	**Permanent Seeding**
Responsible Staff:	
Location:	All disturbed areas except sodded areas, surfaced areas, solid rock, or areas consisting of primarily broken rock.
Installation Schedule:	Per the Sequence of Events on the civil construction plans Cover Sheet and/or as necessary.

Description:

Permanent seeding is the establishment of perennial vegetation for graded areas that will be undisturbed for longer than 6 months. Permanent seeding and planting shall be performed within 14 days after final grade is reached or within 7 days after final grade is reached if the slope of the area is greater than 3:1 (3 feet horizontal to 1 foot vertical) or if the slope is greater than 3% and greater than 150 feet in length, unless temporary stabilization is applied. Permanent seeding shall be completed per the project specifications or landscape plan. If no specification/plan is provided, the following methods can be applied:

Seedbed Preparation:

For broadcast seeding and drilling, loosen the soil via tilling to a depth of 4 inches. For no-till drilling, the soil does not need to be loosened unless the site has surface compaction. If compacted, till 4 inches deep.

Soil Amendments:

Obtain a minimum of three soil tests from various areas on the site and add fertilizer and lime according to the test results. Test soil to determine fertilizer requirements. Use a complete fertilizer containing Nitrogen (N), phosphoric acid (P), and potassium (k). 50% of the Nitrogen shall be slow release sulfer coated urea. Mix the soil amendments into the top 3 inches of soil.

Seed:

All seeding operations shall be performed by either “Drilling” or “Cultipacker” process or approved equivalent. Seed shall be covered by +1/4” topsoil. Any of the following three types of see may be used in their perspective planting timeframes:

Type	% Mix by Weight	Seeding Rate (lbs. PLS/acre)	Seeding Rate (lb/acre)
Green Spangletop	4	0.3	As Recommended by Manufacturer

Bermudagrass	30	2.4	
Sideoats Grama (South Texas)	46	3.6	
Buffalograss (Texoka)	20	1.6	

The percent mixture by weight is for pure live seed (PLS). Weed seed shall not exceed 1.0% by weight of the mix. A seed mix certification shall be approved by the Operator prior to seeding.

Mulch:

All mulch shall consist of clean, bright, plant residues and be free of weed seeds, mold, and rot. No more than 15% of the ground surface shall be visible after mulching. Install per manufacturer's recommendations. Straw mulch shall be applied at a minimum rate of 2,500 lbs/acre.

Planting Dates:

Apply permanent seed and mulch according to the following: February 1 – May 15. Seeding and mulching outside these dates shall be done according to temporary seeding requirements with reseeding at 50% the permanent seeding rates done during the next allowable permanent seeding planting dates.

Maintenance & Inspection:

All seeded areas shall be inspected during routine SWPPP inspections for erosion, germination, vigorous seedlings, uniform density with at least 70% ground cover, disease, drought stress, and seed wash out. Water 1 inch deep every 7 day stretch with less than ½ inch total rain accumulation until grass is 3 inches tall. Do not mow until grass is 4 inches tall, and then mow at a 3 inch height, minimum. All repairs/maintenance shall be done immediately. The contractor shall maintain the seeded areas including watering until a "stand of grass" is obtained. A "stand of grass" shall consist of 75% - 80% coverage, a minimum of one (1) inch in height. Re-seeding will be required in washed areas. Protect seeding areas from excessive water runoff and traffic prior to establishing vegetation. May require periodic mowing and weed control.

BMP:	**Temporary Seeding**
Responsible Staff:	
Location:	Where indicated on the civil construction plans and/or where necessary during the construction process.

Installation Schedule:	As required or necessary.

Description:

Temporary seeding is the establishment of fast-growing annual vegetation on disturbed areas to provide erosion control for up to 6 months. This BMP applies where short-lived vegetation needs to be established before final grading or in a season not suitable for permanent seeding. If an area is expected to be undisturbed for longer than 6 months, permanent perennial vegetation shall be used. Temporary seeding and planting shall be performed within 14 days after grading operations cease or within 7 days after final grade is reached if the slope of the area is greater than 3:1 (3 feet horizontal to 1 foot vertical) or if the slope is greater than 3% and greater than 150 feet in length. Temporary seeding shall be completed per the project specifications or landscape plan. If no specification/plan is provided, the following methods can be applied:

Seedbed Preparation:

Loosen the soil via tilling to a depth of 3 inches.

Soil Amendments:

Obtain a minimum of three soil tests from various areas on the site and add fertilizer and lime according to the test results. If soil tests are not available, spread lime evenly at a rate of 69 pounds per 1,000 square feet of area. Spread evenly a 5.5-16-16 fertilizer at a rate of 6 pounds per 1,000 square feet of area. Mix the soil amendments into the top 3 inches of soil.

Seed:

Plant small grains no more than 1 ½ inches deep. Plant grasses and legumes ¼ to ½ inch deep or rake in after application. Apply mulch and water immediately after seed application. Water to a depth of 2 inches without causing erosion. Seed mixture can be any combination of the following:

Species	Seeding Rate	
	lbs. per Acre	lbs./1,000 square feet
Bermuda (Common)	20	Bermuda (Common)
Buffalo Grass	15	Buffalo Grass
St. Augustine	22	St. Augustine
Zoysia	50	Zoysia

Mulch:

	All mulch shall consist of clean, bright, plant residues and be free of weed seeds, mold, and rot. No more than 15% of the ground surface shall be visible after mulching. Install per manufacturer's recommendations. Straw mulch shall be applied at a minimum rate of 3,000 lbs/acre.
	Planting Dates:
	Apply temporary seed and mulch any time of the year, but do not apply on frozen, ice or snow covered ground.
	Apply temporary seed and mulch any time of the year, but do not apply on frozen, ice or snow covered ground.
Maintenance & Inspection:	
All seeded areas shall be inspected during routine SWPPP inspections for erosion, germination, vigorous seedlings, uniform density with at least 70% ground cover, disease, drought stress, and seed wash out. Reseed and mulch as necessary. Water when dry. Do not mow or only mow after 6 inches tall and then mow at a 4 inch height, minimum. All repairs/maintenance shall be done immediately.	

FORM 4

STORM WATER POLUTION PREVENTION PLAN (SWPPP)

Stormwater Pollution Prevention Plan (SWP3) for the Construction General Permit

Site Name 10 Federal

Address 3975 US 290, Dripping Springs, Texas 78620

RN

Contact Name Doyle Reed

Contact Information 919-695-1110

Prepared by
Program Support and Environmental Assistance Division

RG-639
May 2023

2/5/24

Contents

Definitions

TXR150000 Part I. Definitions

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 site runoff, spills or leaks, sludge or 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.

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.

a. **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. This 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.

b. **Large Construction Activity:** Construction activities that result in land disturbance of equal to or greater than five (5) acres of land. 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.

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.

Control Measure: Any BMP, including structural and non-structural controls, or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to water in the state.

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.

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 (e.g., ponds and materials stockpiles), structures, or appurtenances used at a construction site or industrial site.

Final Stabilization: A construction site status where 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.

Infeasible: not technologically possible, or not 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.

Operator: The person(s) associated with a large or small construction activity that is either a primary or secondary operator as defined below –

Primary Operator: The person(s) associated with construction activity that meets either of the following two criteria:

a. The person(s) has on-site operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

b. The person(s) has 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 (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 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 permit TXR150000, 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.

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 (Title 40, Code of Federal Regulations, Section 122.2).[5]

Pollutant: (from Texas Water Code Section 26.001(13)[6]) Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions,

5. www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-122/subpart-A/section-122.2
6. https://statutes.capitol.texas.gov/Docs/WA/htm/WA.26.htm

chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any water in the state. This term 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 permit TXR150000, the term “pollutant” includes sediment.

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.

Shared SWP3 Certification Signature Page

TXR150000 Part III

Operators of small and large construction activities must independently obtain TXR150000 authorizations but may work together with other regulated operators to prepare and implement a single, comprehensive shared SWP3. This SWP3 should clearly show which operator is responsible for completing each shared requirement of stormwater duties.

Review Primary and Secondary Operators under the Construction General Permit for Stormwater Discharges (TXR150000)[7] (RG-468) for more information on the different responsibilities between primary vs. secondary operators.

If this SWP3 is shared by more than one entity, all operators need to be named below:

Signature: _____ Date: _____

Print Name: _____

Job Title: _____ TPDES#: _____

Signature: _____ Date: _____

Print Name: _____

Job Title: _____ TPDES#: _____

Signature: _____ Date: _____

Print Name: _____

Job Title: _____ TPDES#: _____

Primary Operator(s):

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

Secondary Operator(s):

7. www.tceq.texas.gov/assets/public/comm_exec/pubs/rg/rg-468.pdf

General Site Information: Worksheet

Construction Start Date: 2/1/24

Provide a general description of the construction activity:

The project consists of demolition of 5 existing 1 story storage facilities. After demolition construction of one, four-story storage facility, associated parking lots, sewer and utility systems, and stormwater detention system shall be built in one phase. Soil disturbing activities will include: clearing and grubbing, installing erosion and sediment controls, grading, installation of underground utilities, building foundations, parking lot construction, and preparation for final seeding, mulching, and landscaping in coordination with complying with Edwards Aquifer Rules and Regulations.

Provide a general description of construction materials and wastes stored on-site:

All paints, solvents, petroleum products and petroleum waste products (except fuels) and storage containers (such as drums, cans or cartons) shall be stored such that these materials are not exposed to storm water. Sufficient practices of spill prevention, control and/or management shall be provided to prevent any spills of these pollutants from entering a water of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The jobsite superintendent shall be responsible for ensuring that these procedures are followed.

Potential Pollutants	Source
Concrete/Additives/Wastes Cleaning solvents	Paving Operations
Detergents	Contaminated spills
Paints/Solvents	Structure construction/painting/cleaning
Acids	Concrete washout & waste
Solids and construction wastes	Demolition
Soil stabilization additives	Grading & Site Excavation
Cleaning solvents	Contaminated spills
Petroleum based products	Paving Operations
Pesticides	Sanitary/septic waste
Fertilizers	Sanitary/septic waste

Stormwater Discharge Location	Name of Receiving Water	Is the water impaired for any pollutants?
South of site	Garlin Creek-Onion Creek	No

Schedule or Sequence of Major Grading Activities: Worksheet

Construction Phase Number:	
Projected Start Date: 2/1/24	**Projected End Date:** 2/1/25
Acreage Disturbed: 2.57	**Location:** North of US 290
Responsible Party:	

Description of activity disturbing the soil:

Soil disturbing activities will include: clearing and grubbing, installing erosion and sediment controls, grading, installation of underground utilities, building foundations, parking lot construction, and preparation for final seeding, mulching, and landscaping in coordination with complying with Edwards Aquifer Rules and Regulations.

Construction Phase Number:	
Projected Start Date:	**Projected End Date:**
Acreage Disturbed:	**Location:**
Responsible Party:	

Description of activity disturbing the soil:

Hydrologic Soil Group—Comal and Hays Counties, Texas

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

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

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

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

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BtD	Brackett-Rock outcrop-Comfort complex, 1 to 8 percent slopes	D	1.3	51.9%
BtG	Brackett-Rock outcrop-Real complex, 8 to 30 percent slopes	D	1.2	48.1%
Totals for Area of Interest			**2.6**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Acreage and Soil Type: Worksheet

Total Acreage of Project Property: 2.62 - AC

Total Acreage of Disturbed Soil: 2.57 - AC

Provide a description of soil type at the project site:

Soil type(s): The current soil type include a variety of different soils in the manmade fill. This includes sandy lean clay, clayey gravel, fat clays, and lean clay. Natural soils include sandy gravel and lean clay.

Slopes: Pre project the site consisted of manmade fill for the existing development. The slopes on the Northern section were relatively flat with 1-5% while the slopes falling towards the roads were steeper between 5-30%. Post construction the top of the site will remain relatively flat with slopes between 1-2% while the site will continue to fall away with slopes 3:1 daylight slopes.

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

LOT 18
SUNSET CANYON
SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

S 74°50'33" W 219.43'

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

MAIL BOX

GRAVEL DRIVE

CONCRETE PAVEMENT (1)

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

WALL WITH FENCE (SEE DETAIL)

10' FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

FIRE LANE

PERVIOUS PAVEMENT

STANDARD DUTY ASPHALT

STANDARD DUTY ASPHALT WITH CONCRETE CURB & GUTTER

END CURB & GUTTER

BOLLARDS

1" CRUSHED STONE SURFACE

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

8' CONCRETE SIDEWALK (1)

6' CONCRETE SIDEWALK (2)

HD CONCRETE OVERHEAD DOOR

WHEEL STOP (TYP) (1)

BIORETENTION & DETENTION BASIN

15' WATER EASEMENT (P.P.)

3' CURB CUT (SEE DETAIL)

CONCRETE DRIVEWAY

5' CONCRETE SIDEWALK (1)

HIDDEN HILLS DRIVE
(60' RIGHT-OF-WAY PER PLAT)
ASPHALT PAVEMENT

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

(1) LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

(1) LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

FOUND 1/2" IRON ROD (MRD)

FOUND 1/2" IRON ROD NO CAP

50' B.L. (P.P.)

TOP OF BANK

BOTTOM OF BANK

EDGE OF PAVEMENT

Engineering Surveys & Services
DELIVERING YOUR VISION ™
1113 Fay Street, Columbia, MO 65201
573 - 449 - 2646
www.ess-inc.com
Texas Registered Engineering Firm #17700

N

0 1"
SCALE: 1" = 20'

(3) KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
DRIPPING SPRINGS PROPERTY
3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

Revised
(1) SEPTEMBER 20, 2023
CITY COMMENTS
(3) JANUARY 11, 2024

Design: MAK Drawn: SK

SITE PLAN

Sheet
(1)C3.01

ES&S PROJECT NO. 15964

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-10FED-DRIPPINGSPRINGS\CAD\15964_SITE PLAN.DWG 1/12/2024

Site Description of Support Activities: Log Sheet

Activity	Description	Location
Asphalt Plant	Permitted Facility	Offsite - Dripping Springs
Concrete Batch Plant	Permitted Facility	Offsite - Austin
Lumber Yard	Permitted Facility	Offsite - Dripping Springs
General Bldg Materials	Permitted Facility	Offsite - Dripping Springs

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

(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.)

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

c) What is the contact information for the Operator (Responsible Authority)?

Prefix (Mr. Ms. Miss): **MR.**

First and Last Name: **Bruce Orr** Suffix: Click here to enter text

Title: Manager Credentials: Click here to enter text

Phone Number: **919-695-1110** Fax Number: Click here to enter text

E-mail: dreed@10federal.com

Mailing Address: **3301 Atlantic Ave.**

City, State, and Zip Code: Raleigh, NC 27604

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	☐ Federal Government
☐ Limited Partnership	☐ County Government
☐ General Partnership	☐ State Government
☐ Trust	☐ City Government
☐ Sole Proprietorship (D.B.A.)	☐ Other Government
☒ Corporation	☐ Other: Click here to enter text
☐ Estate	

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: 32085039025

Federal Tax ID: 88-2935020

Texas Secretary of State Charter (filing) Number: 804612970

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): Mr.

First and Last Name: **Matthew Kriete** Suffix: Click here to enter text.

Title: Assistant Vice President Credential: P.E.

Organization Name: Engineering Surveys & Services

Phone Number: 573-449-2646 Ex.227 Fax Number: Click here to enter text.

E-mail: mkreite@ess-inc.com

Mailing Address: 1113 Fay Street

Internal Routing (Mail Code, Etc.): Click here to enter text.

City, State, and Zip Code: Columbia, MO 65201

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): 10 Federal

c) In your own words, briefly describe the type of construction occurring at the regulated site (residential, industrial, commercial, or other): Commercial

d) County or Counties (if located in more than one): Hays

e) Latitude: 30.196483° Longitude: -98.026623°

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: 3975 US HWY 290 E

City, State, and Zip Code: Dripping Springs, Tx 78620

Section B:

Location Description:

City (or city nearest to) where the site is located:

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? 2.57 A.C.

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? 2/1/24

h) What is the estimated end date of the project? 2/1/25

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? Gatlin Creek-Onion Creek

k) What is the segment number(s) of the classified water body(ies) that the discharge will eventually reach: 1

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: 2/5/24

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

BMP: List Sheet

BMP: Construction Entrance	
Location	**Date Implemented**
South of Site	2/24
North of Site	2/24

BMP: Silt Fence/Sediment Log	
Location	**Date Implemented**
South of Site	2/24
West of Site	2/24
North of Site	2/24

BMP: Diversion Dike	
Location	**Date Implemented**
North of Site	3/24

BMP: Concrete washout	
Location	**Date Implemented**
South of Site	6/24

BMP: Rock Berm	
Location	**Date Implemented**
North of Site	4/24

BMP: Retrofit Basin	
Location	**Date Implemented**
North of Site	3/24
North of Site	5/24

BMP: Sediment Basin List Sheet

Is your site larger than 10 acres?

☐ **Yes** ☑ **No**

Are there sedimentation basins or traps on-site?

☐ **Yes** ☑ **No**

**If yes, include calculations to show the sedimentation basin will provide sufficient storage to contain runoff from a 2-year, 24-hour storm from each disturbed acre drained within this section.*

**If no, move forward to the next section of the SWP3.*

Approximate Installation Date	
Sedimentation Basin Description *(volume and dimensions)*	
Outlet Structure	

Are sedimentation basins or traps infeasible on-site?

☑ **Yes** ☐ **No**

**If yes, explain why:*

The site does not have enough room to fit a sediment basin/ basin trap. Site will utilize two retrofit Basin in order to control sediment from discharging.

Allowable Non-Stormwater Discharges: List Sheet

Discharge	Pollution Prevention Measure(s)	Implementation Date
Discharges from firefighting activities		2/1/25
Fire hydrant flushing	The Contractor shall neutralize any super-chlorinated water from water distribution pipes before releasing it into the environment. Neutralization techniques are available from the Operator's Engineer.	2/1/25
Waters used to wash vehicles where detergents are not used		2/1/25
Waters used to control dust. Water used in fashion shall only be applied so there is no site runoff.		2/1/25
Potable water sources such as waterline flushing, landscape irrigation, routine exterior building wash down that does not use detergent	The Contractor shall neutralize any super-chlorinated water from water distribution pipes before releasing it into the environment. Neutralization techniques are available from the Operator's Engineer.	2/1/25
Pavement wash waters where spills or leaks of hazardous materials have not occurred or detergents have not been used		2/1/25
Air conditioning condensate		2/1/25
Springs and other uncontaminated groundwater, including dewatering ground water infiltration		2/1/25
Foundation or footing drains where no contamination with process materials such as solvents is present		2/1/25

Dewatering Observation and Evaluation: Worksheets

Date of Observation and Evaluation:	**Personnel Name:**
Rate of Discharge Estimate: *Gallons per Day (GPD)*	**Personnel Title:**
Approximate Start: *Date and time*	**Approximate End:** *Date and time*

Observation and Evaluation Questions

Did you see any indications of pollutant discharge?

☐ **Yes (describe below)** ☐ **No**

Did you see any erosion?

☐ **Yes (describe below)** ☐ **No**

Did you see any instances of non-compliance?

☐ **Yes (describe below)** ☐ **No**

Are existing BMPs properly and completely implemented?

☐ **Yes** ☐ **No (describe below)**

Do you recommend any corrective actions or additional control measures?

☐ **Yes (describe below)** ☐ **No**

List any other observations:

Certification Statement:

30 TAC 305.128 “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 fines and imprisonment for knowing violations.

Signature: _____ Date: _____

Printed Name: _____

Inspection Plans and Procedures: Worksheet

Inspection Information:	Reason for Inspection:
Inspector Name:	☐ **14-day inspection**
Inspector Title:	☐ **Weekly inspection**
Inspection Date:	☐ **0.5 inch or greater rainfall event**
	☐ **Monthly inspection**

Inspection Questions:

Did you see any indications of pollutant discharge?

☐ **Yes (describe below)** ☐ **No**

Did you see any erosion?

☐ **Yes (describe below)** ☐ **No**

Did you see any instances of non-compliance?

☐ **Yes (describe below)** ☐ **No**

Are existing BMPs properly and completely implemented?

☐ **Yes** ☐ **No (describe below)**

Do you recommend any corrective actions or additional control measures?

☐ **Yes** ☐ **No (describe below)**

List any other observations:

Certification Statement:

30 TAC 305.128 "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 fines and imprisonment for knowing violations."

Signature: _____ Date: _____

Printed Name: _____

Adverse Conditions: Log Sheet

Date:
Time:
Witness Name:

Description of adverse conditions:

Attachment A

General Site

GENERAL SITE

1. NATURE AND SEQUENCE OF CONSTRUCTION ACTIVITY

The general scope of the work for the project is as follows:

The project consists of demolition of 5 existing 1 story storage facilities. After demolition construction of one, four-story storage facility, associated parking lots, sewer and utility systems, and stormwater detention system shall be built in one phase. Soil disturbing activities will include: clearing and grubbing, installing erosion and sediment controls, grading, installation of underground utilities, building foundations, parking lot construction, and preparation for final seeding, mulching, and landscaping in coordination with complying with Edwards Aquifer Rules and Regulations.

What is the function of the construction activity?

☐ Residential ☒ Commercial ☐ Industrial ☐ Road Construction ☐ Linear Utility
☐ Other (please specify):

Estimated Project Start Date: **2 / 1 / 2024**
Estimated Project Completion Date: **2 / 1 / 2025**

2. POTENTIAL SOURCES OF POLLUTION

Potential Construction Site Pollutants										
Possible Source	Pollutants									Location
	Sediment	Nutrients	Heavy Metals	pH (acids & bases)	Pesticides & herbicides	Oil & grease	Bacteria & viruses	Trash, debris, solids	Other toxic chemicals	
Clearing & Grubbing	X							X		Within clearing limits
Grading & site excavation	X									Within grading limits
Vehicle Tracking	X					X				Construction roads onsite and/or nearest public roadway(s) providing site access
Topsoil stripping & stockpiling	X									Within grading limits
Paving Operations	X							X		Paving areas
Concrete washout & waste			X	X				X		Designated concrete wash-out area(s)

Structure construction/painting/ cleaning		X		X				X	X	Structure location(s) & designated wash out area(s)
Demolition and debris disposal	X							X		Demo areas
Dewatering operations	X	X								Where necessary. Typically, footing and trenching locations.
Drilling and blasting operations	X			X				X		Where necessary in cut areas.
Material delivery and storage	X	X	X	X	X	X		X	X	Designated staging area(s)
Material use during building process		X	X	X	X	X		X	X	Building construction area(s)
Solid waste (trash and debris)								X	X	Designated trash receptacle(s)
Hazardous waste			X	X	X	X			X	Designated staging area(s) and building construction area(s)
Contaminated spills		X	X	X	X	X			X	Designated staging areas and building construction area(s)
Sanitary/septic waste		X		X			X		X	Designated port-a-potty area(s)
Vehicle/equipment use and storage						X			X	Designated vehicle storage and refuel area(s)
Landscaping operations	X	X						X		Landscaping area(s)

3. MATERIAL HANDLING AND WASTE MANAGEMENT

Substances regulated by federal law under the Resource Conservation and Recovery Act (RCRA) or the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) which are transported, stored or used for maintenance, cleaning or repairs shall be managed according to the provisions of RCRA and CERCLA.

The following materials or substances with known hazardous properties are expected to be present onsite during construction:

Concrete/Additives/Wastes
Detergents
Paints/Solvents
Acids
Solids and construction wastes
Soil stabilization additives
Cleaning solvents
Petroleum based products
Pesticides
Fertilizers
Sanitary wastes

All paints, solvents, petroleum products and petroleum waste products (except fuels) and storage containers (such as drums, cans or cartons) shall be stored such that these materials are not exposed to storm water. Sufficient practices of spill prevention, control and/or management shall be provided to prevent any spills of these pollutants from entering a water of the state. Any containment system used to implement this requirement shall be constructed of materials compatible with the substances contained and shall also prevent the contamination of groundwater. The following are the material management practices that shall be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The jobsite superintendent shall be responsible for ensuring that these procedures are followed.

a) Good Housekeeping

The following good housekeeping practices shall be followed onsite during the construction project.

(i) An effort shall be made to store only enough products required to do the job.
(ii) All materials stored onsite shall be stored in a neat, orderly manner and, if possible, under a roof or in a containment area. At a minimum, all containers shall be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.
(iii) Products shall be kept in their original containers with the original manufacturer's label in legible condition.
(iv) Substances shall not be mixed with one another unless recommended by the manufacturer.
(v) Whenever possible, all of a product shall be used up before disposing of the container.
(vi) Manufacturer's recommendations for proper use and disposal shall be followed.
(vii) The job site superintendent shall be responsible for daily inspections to ensure proper use and disposal of materials.
(viii) Fertilizers shall be applied in the minimum amounts recommended by the manufacturer.
(ix) All paint containers shall be tightly sealed and stored when not required for use. Excess paint shall not be dumped into the storm sewer system but shall be properly disposed of according to manufacturer’s instructions and State regulations.

b) Hazardous Products

These practices shall be used to reduce the risks associated with hazardous materials. Material Safety Data Sheets (MSDS's) for each substance with hazardous properties that is used on the job site shall be obtained and used for the proper management of potential wastes that may result from these products. An MSDS shall be posted in the immediate area where such product is stored and/or used and another copy of each MSDS shall be maintained in the SWPPP file at the job site construction trailer office. Each employee who must handle a substance with hazardous properties shall be instructed on the use of MSDS sheets and the specific information in the applicable MSDS for the product he/she is using, particularly regarding spill control techniques.

(i) Products shall be kept in original containers with the original labels in legible condition.
(ii) Original labels and material safety data sheets (MSDS's) shall be procured and used for each material.
(iii) If surplus product must be disposed of, manufacturer's or local/state/federal recommended methods for proper disposal shall be followed.

c) Hazardous Waste

All hazardous waste materials shall be disposed of by the Contractor in the manner specified by local, state, and/or federal regulations and by the manufacturer of such products. Site personnel shall be instructed in these practices by the job superintendent, who shall be responsible for seeing that these practices are followed.

d) Product Specific Practices

The following product specific practices shall be followed on the job site.

(i) Petroleum Products

All onsite vehicles shall be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers that are clearly labeled. Any petroleum storage tanks used onsite shall have an impervious dike or berm containment structure constructed around it to contain any spills which may occur. Drip pans shall be provided for all dispensers. Any asphalt substances used onsite shall be applied according to the manufacturer's recommendations. The location of any fuel tanks and/or equipment storage areas shall be identified on the SWPPP maps by the Contractor once the locations have been determined.

(ii) Fertilizers

Fertilizers shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked in the soil to limit exposure to stormwater. Storage shall be in a covered shed. The contents of any partially used bags of fertilizer shall be transferred to a sealable plastic bin to avoid spills.

(iii) Paints, Paint Solvents, and Cleaning Solvents

All containers shall be tightly sealed and stored when not in use. Excess paint and solvents shall not be discharged to the storm sewer system but shall be properly disposed of according to manufacturer's instructions or state and federal regulations.

4. ESTABLISH PROPER EQUIPMENT/VEHICLE FUELING AND MAINTENANCE PRACTICES

BMP:		**Vehicle/Equipment Fueling and Maintenance**
Responsible Staff:		
Location:		
Installation Schedule:		

	Description:
	Only minor equipment maintenance shall occur onsite. All major equipment/vehicle maintenance shall be performed off-site. Vehicle/equipment maintenance and fueling area(s) shall be clearly marked and be kept clean and dry. A spill kit shall be kept nearby. Drip pans, drip clothes, or absorbent pads shall be used when replacing spent fluids. Spent fluids shall be collected and stored in appropriate labeled containers in the proper storage areas. Recycle fluids whenever possible. Dispose of fuels, oils, lubricants, solvents, and other hazardous materials offsite per federal, state and local requirements. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. No fueling, servicing, maintenance, or repair of equipment or machinery shall be done within 50 feet of a stormwater drainage way, or within 100 feet of a classified stream, lake/pond, losing stream, or sinkhole.
	Maintenance & Inspection:
	All equipment/vehicle fueling and maintenance facilities shall be inspected during routine SWPPP inspections for proper functioning, usage, and general condition. Vehicles and equipment shall be inspected on each day of use. Leaks shall be repaired immediately. Any problem vehicle(s) or equipment shall

		be removed from the project site. Inspect to verify there is an ample supply of spill-cleanup materials onsite.
Removal Requirements:		Remove when the need for construction vehicles onsite is no longer necessary.

5. CONTROL EQUIPMENT/VEHICLE WASHING

All equipment/vehicle washing not related to dirt/mud removal at the construction entrance/exit BMP shall be done offsite.

Attachment B

Schedule or Sequence of Major Grading Activities

SCHEDULE OR SEQUENCE OF MAJOR GRADING ACTIVITIES

1. SOILS, SLOPES, VEGETATION, AND CURRENT DRAINAGE PATTERNS

Soil type(s): The current soil type include a variety of different soils in the manmade fill. This includes sandy lean clay, clayey gravel, fat clays, and lean clay. Natural soils include sandy gravel and lean clay.

Slopes: Pre project the site consisted of manmade fill for the existing development. The slopes on the Northern section were relatively flat with 1-5% while the slopes falling towards the roads were steeper between 5-30%. Post construction the top of the site will remain relatively flat with slopes between 1-2% while the site will continue to fall away with slopes 3:1 daylight slopes.

Drainage Patterns (describe current drainage patterns and note any changes due to grading or fill activities): The site drains in two different directions off the site. Pre project each out these two study points combines to drain to the south where it enters the culvert to pass under US 290 and eventually goes into Onion Creek. Post project the site will drain in a similar fashion with flow continuing to go into each of the three study points.

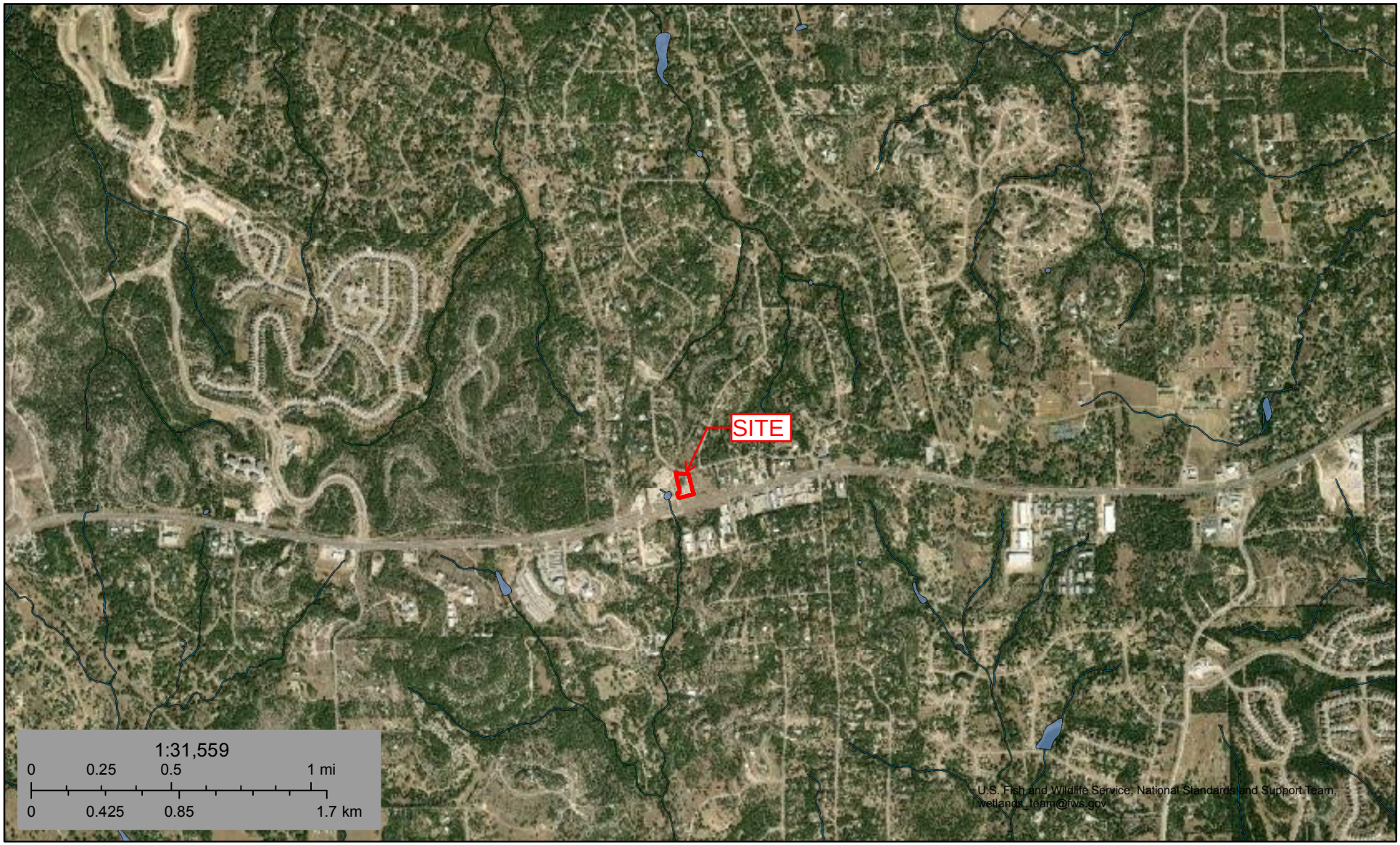
Vegetation: Pre project the site consists of grass, weeds, brush, and trees. few trees exist along the property boundaries. Post project the site will consist of impervious areas and zeroscape/turf green space areas.

Attachment C

General Construction Location and Detailed Site Maps

U.S. Fish and Wildlife Service
National Wetlands Inventory

Dripping Springs



June 7, 2023

Wetlands_Alaska

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.O.B. ITEM (10h) (TRACT TWO EASEMENT ESTATE)

15.0'
15.0'
68.8'

20'x50' TEMPORARY CONSTRUCTION ENTRANCE

CONCRETE WASHOUT

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

SILT FENCE / SEDIMENT LOG

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

10' FRONT BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

LOT 18
SUNSET CANYON
SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

15' WATER EASEMENT (P.P.)

TEMPORARY SEDIMENT TRAP
FILTER RING (DCS 2)

FES 1

4 ROCK BERM

24" RCP
FL=1223.48

24" CMP
FL=1223.73

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

DIVERSION DIKE

C1

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

TOPSOIL STOCKPILE

SILT FENCE

5' SIDE BUILDING SETBACK
(PER INFORMATION PROVIDED BY CLIENT)

LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

S 74°50'30" W 277.17'
(PLAT=S 74°48'07" W 277.07')

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

S 74°50'33" W 277.43'

FOUND 1/2" IRON ROD (MRD)

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

50' R.L. (P.P.)

FOUND 1/2" IRON ROD

MITERED END SECTION 24" RCP INV.= 1213.3

MITERED END SECTION 24" RCP INV.= 1214.6

MAIL BOX

GRAVEL DRIVE

ASPHALT PAVEMENT

EDGE OF PAVEMENT

BOTTOM OF BANK

TOP OF BANK

SILT FENCE / SEDIMENT LOG

\\192.168.0.99\PROJECTS\GENERAL PROJECTS\15964-10FD-DRIPPINGSPRINGS\CAD\15964 SITE PLAN.DWG 1/12/2024

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573 - 449 - 2646
www.ess-inc.com
Texas Registered Engineering Firm #17700

N

0 1"
SCALE: 1" = 20'

3 KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

DRIPPING SPRINGS PROPERTY

3975 E. US 290
HAYS COUNTY, TEXAS

1/11/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

Revised
1 SEPTEMBER 20, 2023
CITY COMMENTS
2 JANUARY 11, 2024

Design: MAK Drawn: SK

INITIAL EROSION CONTROL PLAN

Sheet
1 C8.01

ES&S PROJECT NO. 15964

Curve Table					
CURVE	RADIUS	CHORD BEARING	DELTA	CHORD	LENGTH
C1	539.29'	S 81°08'49" E	22°29'08"	210.29'	211.64'
C1 PLAT	539.29'	S 81°10'46" E	22°29'33"	210.35'	211.71'

LOT 17-A
SUNSET CANYON
SECTION 1-C
VOLUME 18, PAGE 1
PLAT RECORDS HAYS COUNTY, TEXAS
(KMC ASSETS, LLC)

LOT 18
SUNSET CANYON
SECTION 1-C
VOLUME 3, PAGE 49
PLAT RECORDS HAYS COUNTY, TEXAS
(3969 HIGHWAY 290 AVG LLC)

TRACT ONE
LOT 17-B
114,149 SQ. FT.
(2.620 ACRES)

PROPOSED STORAGE
UNIT FACILITY
4-STORY
36,100 SQ. FT.
FF=1232.0

DRIVE AISLE (1ST FLOOR)

LOT 296
SUNSET CANYON
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(MOUNT VERNON, LLC)

LOT 392
SUNSET CANYON
SECTION 1-C
VOLUME 2, PAGE 286
PLAT RECORDS HAYS COUNTY, TEXAS
(PAUL HOHCE)

(PLAT=S 15°11'53" E 70.00')
N 15°10'33" W 69.97'

(PLAT=S 74°48'07" W 15.00')
N 74°57'20" E 15.00'

(PLAT=S 15°56'51" E 295.91')
N 15°55'43" W 295.85'

(PLAT=N 17°24'25" E 136.72')
N 17°26'03" E 136.69'

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(PLAT=S 74°48'07" W 277.07')

S 74°50'33" W 2[illegible].43'

(PLAT=S 15°13'01" E 395.45')
S 15°13'11" E 395.36'

FOUND 1/2" IRON ROD CAP NOT LEGIBLE

30' X 70' JOINT USE ACCESS EASEMENT (P.P.) ITEM (10h) (TRACT TWO EASEMENT ESTATE)

15.0'

SILT FENCE / SEDIMENT LOG

5' SIDE BUILDING SETBACK (PER INFORMATION PROVIDED BY CLIENT)

INLET PROTECTION

FES 20

CB 20A

OCS 21

CB 16

CI 23

CI 24

CI 10

FES 1

FES 2

FES 9

FES 3'

OCS 2

FILTER RING

STRAW WATTLE

BSM & UNDERDRAIN SHALL NOT BE INSTALLED UNTIL MIN. 80% OF UPSTREAM AREA IS STABILIZED

15' WATER EASEMENT (P.P.)

24" RCP FES=1223.48

4' ROCK BERM

BAGGED GRAVEL INLET FILTER

75.0' RIGHT OF WAY RESERVE (P.P.) ITEM (10h) CONSTRUCTION OF FUTURE BUILDINGS IS RESTRICTED

TP1

TP2

TOPSOIL STOCKPILE

SEDIMENT LOG (TYP)

SILT FENCE

HIDDEN HILLS DRIVE
(60' RIGHT OF WAY PER PLAT)
ASPHALT PAVEMENT

50' BLL (P.P.)

FOUND 1/2" IRON ROD (MRD)

BOTTOM OF BANK

TOP OF BANK

EDGE OF PAVEMENT

MITERED END SECTION 24" RCP INV= 1213.3

MITERED END SECTION 24" RCP INV= 1214.4

MAIL BOX

GRAVEL DRIVE

UTILITY POLE (TYP)

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www.ess-inc.com
Texas Registered Engineering Firm #17700

N

0 1"
SCALE: 1" = 20'

3 KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

DRIPPING SPRINGS PROPERTY

3975 E. US 290
HAYS COUNTY, TEXAS

1/19/2024

STATE OF TEXAS
MATTHEW A. KRIETE
126148
PROFESSIONAL ENGINEER

MATTHEW A. KRIETE
LICENSED PROFESSIONAL
ENGINEER 126148

IF ORIGINAL SIGNATURE OR DIGITAL AUTHENTICATION IS NOT PRESENT THIS MEDIA SHOULD NOT BE CONSIDERED A CERTIFIED DOCUMENT.

Date
JUNE 9, 2023

Revised

1	SEPTEMBER 20, 2023
	CITY COMMENTS
3	JANUARY 11, 2024
4	JANUARY 19, 2024

Design: MAK Drawn: SK

FINAL EROSION CONTROL PLAN

Sheet
1 C8.02

ES&S PROJECT NO. 15964

\\192.168.0.90\PROJECTS\GENERAL PROJECTS\15964-10ED - DRIPPINGSPRINGS\CAD\15964 SITE PLAN.DWG 1/19/2024

Attachment D

Best Management Practices and Sediment Control

BEST MANAGEMENT PRACTICES AND SEDIMENT CONTROLS

BMP:	**Construction Waste Materials Containment**
Responsible Staff:	
Location:	
Installation Schedule:	

Description:

All non-hazardous waste materials shall be collected and stored in an appropriately covered container and/or securely lidded metal dumpster rented from a local waste management company which must be a solid waste management company licensed to do business in the project area. The dumpster shall comply with all local and state solid waste management regulations.

All trash and construction debris from the site shall be deposited in the dumpster. The dumpster shall be emptied a minimum of twice per week or more often if necessary, and the trash shall be hauled to a landfill approved by the state for legal disposal offsite. No construction waste or trash materials of any kind shall be buried on site. All personnel shall be instructed regarding the correct procedures for waste disposal.

All waste dumpsters and roll-off containers shall be located in an area where the likelihood of the containers contributing to storm water discharges is negligible. If required, additional BMPs shall be implemented, such as sandbags around the base, to prevent wastes from contributing to storm water discharges. The location of waste dumpsters and roll-off containers shall be identified on the SWPPP maps by the Contractor once the locations have been determined.

Maintenance & Inspection:

All dumpsters and/or other waste storage areas shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Dumpsters shall be emptied before trash accumulation prevents complete closure of the lid(s). If trash and construction debris are exceeding the dumpster capacity more dumpsters shall be provided or they shall be emptied more often.

Removal Requirements:	Remove when all waste contributing construction is complete.

BMP:	**Sanitary Facilities**
Responsible Staff:	

Location:	
Installation Schedule:	
Description:	
Temporary sanitary facilities (portable toilets) shall be provided by a licensed portable facility provider in complete compliance with local and state regulation. Facilities shall be sized to accommodate the maximum anticipated work force on any given day. Facilities shall be property anchored to prevent tip over or other uncontrolled movement. All sanitary facilities shall be located in an area where the likelihood of the unit contributing to storm water discharges is negligible. The location of sanitary facilities shall be identified on the SWPPP maps by the Contractor once the locations have been determined.	
Maintenance & Inspection:	
All sanitary facilities shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. Sanitary facilities shall be regularly emptied, serviced and repaired. Sanitary waste shall be disposed per all applicable state and local requirements.	
Removal Requirements:	Remove when construction is complete and all construction staff has left the site or when other onsite sanitary facilities are available and permission for their use by construction staff is approved by the Operator.

BMP:	**Hazardous Waste Containment**
Responsible Staff:	
Location:	
Installation Schedule:	
Description:	
All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids shall be stored in structurally sound and sealed containers in a designated hazardous materials storage area and segregated	

from other non-waste materials. Additionally, all hazardous material will be disposed of in accordance with federal, state, and local regulations. Hazardous waste materials shall not be disposed of into on-site dumpsters.	
Maintenance & Inspection:	
All hazardous storage areas shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. The storage areas shall be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material safety data sheets, material inventory, and emergency contact numbers shall be maintained in the office trailer or other clearly designated area.	
Removal Requirements:	Remove when all hazardous waste contributing construction is complete.

1. ESTABLISH PROPER BUILDING MATERIAL STAGING AREAS

BMP:	**Staging Area**
Responsible Staff:	
Location:	
Installation Schedule:	
Description:	
Construction equipment and materials shall be stored at a designed staging area. The staging area is typically located in a proposed parking area and shall consist of an all-weather granular surface that will also be the granular base for the parking lot pavement. The location of all staging areas shall be redlined on the SWPPP maps. Storm water shall be directed away from the staging area.	
Maintenance & Inspection:	
All staging areas shall be inspected during routine SWPPP inspections for proper functioning, stability, and general condition. The staging area(s) shall be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners shall be repaired or replaced as needed to maintain proper function. The granular surface shall be kept clean and inspected for signs of settlement or rutting. All repairs shall be made immediately.	
Removal Requirements:	Remove when all construction materials have been removed and the storage of construction equipment is no longer necessary.

2. DESIGNATE WASHOUT AREAS

BMP:	**Concrete Washout Area**
Responsible Staff:	
Location:	Where indicated on the civil construction plans & where necessary to contain all concrete waste and wash water.

Installation Schedule:	After grading and before any infrastructure in constructed.

Description:

Concrete trucks shall only be allowed to wash out or discharge surplus concrete and wash water in specifically designated areas which have been prepared to prevent contact between the concrete, wash water, and stormwater runoff from the site. The washout may be constructed by creating an aboveground storage area a minimum 10' x 10' x 2' deep from straw bales or sandbags double lined with a10 mil minimum polyethylene sheeting. Washout areas may also be prefabricated units brought to the site to be emptied when full by the company providing the unit. They may also be constructed either by digging a minimum 10' x 10' pit 1' deep and surrounding it with an earthen dike a minimum 1' tall to give it a total depth of 2' and lining it with minimum 10 mil polyethylene sheeting. The washout shall be constructed so all stormwater is directed away from the washout area. Size according to anticipated concrete waste produced. The project may require the use of multiple concrete washout areas. All concrete washout areas shall be located a minimum 50' from any stormwater conveyance like a storm sewer or swale and a minimum 100' from any natural water body like a stream, pond, or lake.

Temporary weatherproof signage that says "CONCRETE WASHOUT" in a manner clearly visible by construction truck drivers while driving onsite shall be placed next to each washout. The contractor shall be responsible for coordinating and enforcing proper use of the washout by all construction personnel.

The hardened material from the washout(s) shall be hauled offsite and disposed of in the same manner as other non-hazardous construction waste materials or may be broken up and used on site as deemed appropriate by the Contractor and approved by the Operator. Disposal shall be per all applicable solid waste regulations.

Maintenance & Inspection:

All washouts shall be inspected daily to ensure all concrete washing is being discharged into the washout(s), no tears or leaks are present, and to identify when concrete waste needs to be removed. Inspect all signage to ensure it is in good condition and is still legible by all drivers. Remove all concrete waste when it has reached 75% of the storage capacity of the washout. The plastic lining shall be replaced if it is damaged during concrete waste removal. Inspect to verify that no storm water runoff is capable of draining into the washout. All repairs shall be made immediately.

Removal Requirements:	Remove when all concrete construction is complete.

FORM 5

Application Fee

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: 10 Federal
Regulated Entity Location: Dripping Springs
Name of Customer: KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC
Contact Person: Doyle Reed Phone: 919-695-1110
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	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	2.62 Acres	$ 4,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 2/5/24

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 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

FORM 6

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)

☒ 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:*

KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
804612970	32085039025	88-2935020	

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:	3301 Atlantic Ave.						
	City	Raleigh	**State**	NC	**ZIP**	27604	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	dreed@10Federal.com

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(916) 695-1110		( ) -

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.)*

10 Federal

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	3975 E US 290							
	City	DRIPPING SPRINGS	**State**	TX	**ZIP**	78620	**ZIP + 4**	
24. County	HAYS							

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

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

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:	30.196483°		**28. Longitude (W) In Decimal:**	-98.026623°	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30°	11'	47.34"N	98°	1'	35.84"W

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)
4225		531130	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Self Storage Facility

34. Mailing Address:	**3301 Atlantic Ave.**							
	City	**Raleigh**	**State**	**NC**	**ZIP**	**27604**	**ZIP + 4**	
35. E-Mail Address:	**dreed@10Federal.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(916) 695-1110		( ) -

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:

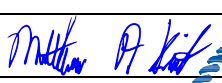
SECTION IV: Preparer Information

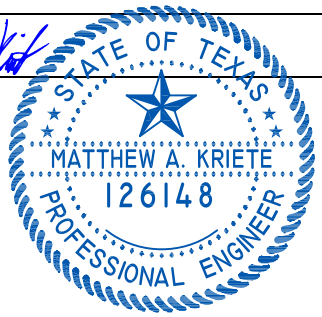
40. Name:	Matthew A. Kriete	**41. Title:**	Assistant Vice President

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(573 **)** 449-2646	227	**( )** -	mkriete@ess-inc.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:	Engineering Survey and Services	**Job Title:**	Assistant Vice President Of Engineering
Name *(In Print):*	Matthew Kriete	**Phone:**	**(** 573 **)** 449- **2646**
Signature:		**Date:**	2/5/24



FORM 7

Agent Authorization

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

I Bruce Orr,
Print Name

Manager,
Title - Owner/President/Other

of KGE MT 3975 US 290 DRIPPING SPRINGS TX LLC,
Corporation/Partnership/Entity Name

have authorized Matthew A. Kriete
Print Name of Agent/Engineer

of Engineering Surveys and Services
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

Date 1/12/24

THE STATE OF FL §

County of DUVAL §

BEFORE ME, the undersigned authority, on this day personally appeared Bruce Orr 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 12th day of January, 2024.

NOTARY PUBLIC

Kathryn S. Bourgon

Typed or Printed Name of Notary

KATHRYN SILCOX BOURGON
Notary Public - State of Florida
Commission # HH 433853
My Comm. Expires Aug 16, 2027
Bonded through National Notary Assn.

MY COMMISSION EXPIRES: 8/16/2027