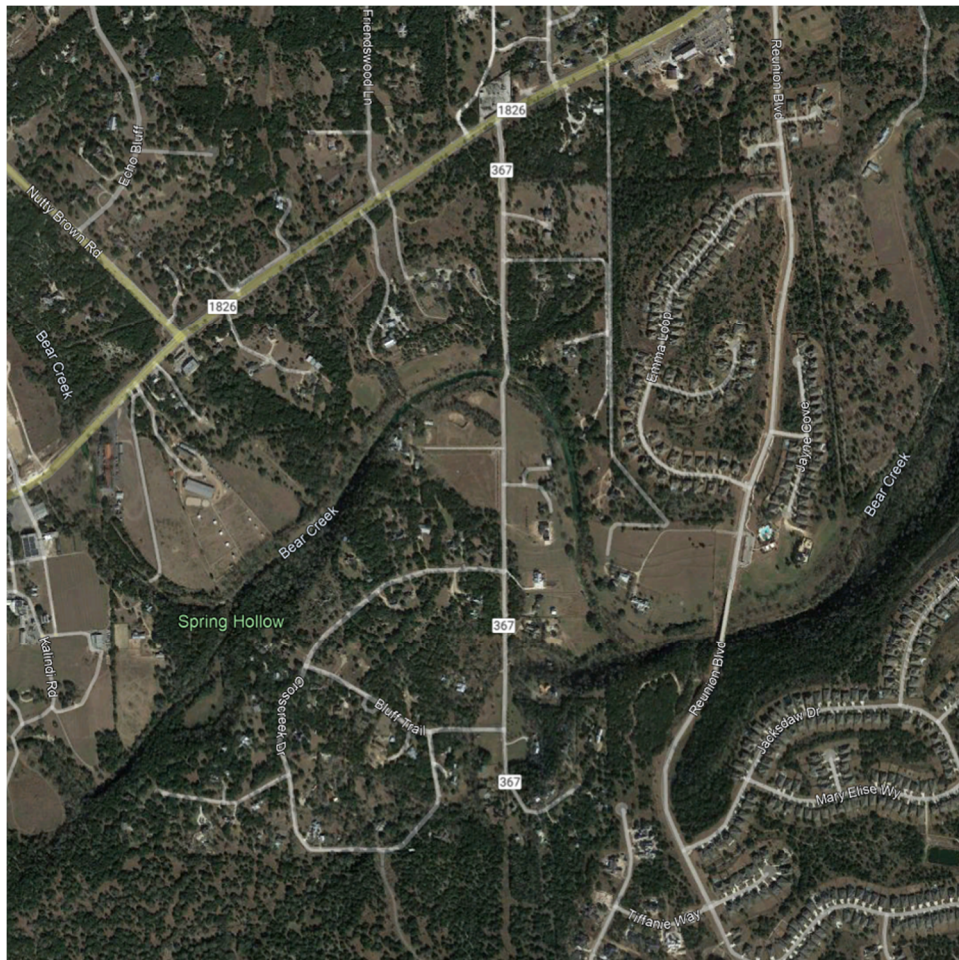


Edwards Aquifer Contributing Zone Plan

Bear Creek Pass at Bear Creek



September 2023

Prepared For:



Hays County
2171 Yarrington Rd
Kyle, TX 78640

Edwards Aquifer Protection Program Roadway Checklist

- **Edwards Aquifer Application Cover Page (TCEQ-20705)**
- **Edwards Aquifer Protection Program Roadway Application (TCEQ-20872)**
 - Attachment A - Road Map
 - Attachment B - USGS Quadrangle
 - Attachment C - Project Description
 - Attachment D - Factors Affecting Surface Water Quality
 - Attachment E - BMPs for Upgradient (Offsite) Stormwater
 - Attachment F - BMPs for On-site Stormwater
 - Attachment G - Construction Plans
 - Attachment H - Inspection, Maintenance, Repair and Retrofit Plan
 - Attachment I - Pilot-Scale Field Testing Plan **N/A**
 - Attachment J - Measures for Minimizing Surface Stream Contamination
 - Attachment K - Volume and Character of Stormwater
- **Geologic Assessment Form (TCEQ-0585) **N/A****
 - *Required for site over the Recharge zone*
 - Attachment A - Geologic Assessment Table (TCEQ-0585-Table)
 - Attachment B - Stratigraphic Column
 - Attachment C - Site Geology
 - Attachment D - Site Geologic Map(s)
- **Temporary Stormwater Section (TCEQ-0602) **N/A****
 - *Review Item 37 on Roadway Application for applicability*
 - Attachment A - Spill Response Actions
 - Attachment B - Potential Sources of Contamination
 - Attachment C - Sequence of Major Activities
 - Attachment D - Temporary Best Management Practices and Measures
 - Attachment E - Request to Temporarily Seal a Feature (if requested)
 - Attachment F - Structural Practices
 - Attachment G - Drainage Area Map
 - Attachment H - Temporary Sediment Pond(s) Plans and Calculations
 - Attachment I - Inspection and Maintenance for BMPs
 - Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices
- **Agent Authorization Form (TCEQ-0599)**
 - *Only if application is submitted by an authorized agent*
- **Application Fee Form (TCEQ-0574)**
 - *Do not submit for TxDOT roadways*
- **Core Data Form (TCEQ-10400)**

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: Bear Creek Low Water Crossing Improvements					2. Regulated Entity No.:				
3. Customer Name: Hays County					4. Customer No.: CN601098205				
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):			2.21
9. Application Fee:	\$4,000		10. Permanent BMP(s):				N/A		
11. SCS (Linear Ft.):	N/A		12. AST/UST (No. Tanks):				N/A		
13. County:	Hays		14. Watershed:				Onion Creek-Colorado River		

Application Distribution

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

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

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

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	—
Region (1 req.)	—	—	—
County(ies)	—	—	—
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input checked="" type="checkbox"/> Barton Springs/ Edwards Aquifer <input checked="" type="checkbox"/> Hays Trinity <input type="checkbox"/> Plum Creek	<input type="checkbox"/> Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	<input type="checkbox"/> Austin <input type="checkbox"/> Buda <input checked="" type="checkbox"/> Dripping Springs <input type="checkbox"/> Kyle <input type="checkbox"/> Mountain City <input type="checkbox"/> San Marcos <input type="checkbox"/> Wimberley <input type="checkbox"/> Woodcreek	<input type="checkbox"/> Austin <input type="checkbox"/> Bee Cave <input type="checkbox"/> Pflugerville <input type="checkbox"/> Rollingwood <input type="checkbox"/> Round Rock <input type="checkbox"/> Sunset Valley <input type="checkbox"/> West Lake Hills	<input type="checkbox"/> Austin <input type="checkbox"/> Cedar Park <input type="checkbox"/> Florence <input type="checkbox"/> Georgetown <input type="checkbox"/> Jerrell <input type="checkbox"/> Leander <input type="checkbox"/> Liberty Hill <input type="checkbox"/> Pflugerville <input type="checkbox"/> Round Rock

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

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

Wade Benton, PE

Print Name of Customer/Authorized Agent

Wade Benton

8/16/23

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):

Edwards Aquifer Protection Program Roadway Application

Texas Commission on Environmental Quality

This application is intended only for projects which a major roadway is designed for construction, such as State highways, County roads, and City thoroughfares.

Designed for Regulated Activities on the Contributing Zone to the Edwards Aquifer in relation to 30 TAC §213.24, Regulated Activities on the Edwards Aquifer Recharge Zone, in relation to 30 TAC §213.5(b), Effective June 1, 1999.

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

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

Signature

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.

The application was prepared by:

Print Name of Customer/Agent: Wade Benton, P.E.

Date: 8/16/23

Signature of Customer/Agent:



Project Information

1. Regulated Entity (Project) Name: Bear Creek Low Water Crossing Improvements
2. County: Hays
3. Stream Basin(s): Bear Creek
4. Groundwater Conservation District (if applicable): Barton Springs/Edwards Aquifer GCD & Hays Trinity GCD
5. Customer (Applicant):

Contact Person: Jerry Borcharding, P.E.

Entity: Hays County

Mailing Address: 2171 Yarrington Rd

City, State: Kyle, Texas Zip: 78640

Telephone: 512-393-7385

Email Address: jerr@co.hays.tx.us

6. Agent (Representative):

Contact Person: Wade Benton, P.E.

Entity: Garver, LLC

Mailing Address: 285 SE Inner Loop, Suite 100

City, State: Georgetown, TX Zip: 78626

Telephone: 512-539-1957

Email Address: jwbenton@garverusa.com

7. Landowner of R.O.W. (Right of Way)

Person or entity responsible for maintenance of water quality Best Management Practices (BMPs), if not applicant.

Contact Person: Jerry Borcharding, P.E.

Entity: Hays County

Mailing Address: 2171 Yarrington Rd.

City, State: Kyle, TX Zip: 78640

Telephone: 512-393-7385

Email Address: jerry@co.hays.tx.us

8. **The TCEQ must be able to inspect the project site or the application will be returned.**

Sufficient survey marking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of any regulated activities and the geologic or manmade features noted in the Geologic Assessment.

Survey marking will be completed by this date: November 2022

9. **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.

10. **Attachment B - USGS Quadrangle.** 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)

All drainage paths from site to surface waters

11. **This project extends into (Check all that apply):**

Recharge Zone (RZ)

Contributing Zone (CZ)

Transition Zone (TZ)

Contributing Zone within
Transition Zone (CZ/TZ)

Zone not regulated by EAPP

12. **Attachment C - Project Description.** 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:

- Complete site area [Acres]
- Offsite upgradient stormwater areas to be captured
- Impervious area [Acres]
- Permanent BMP(s)
- Proposed site use
- Existing roadway (paved and/or unpaved)
- Structures to be demolished [Include demo phase]
- Major interim phases

13. Existing project site conditions are noted below:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Existing paved and/or unpaved roads | <input type="checkbox"/> Existing commercial site |
| <input type="checkbox"/> Undeveloped (Cleared) | <input type="checkbox"/> Existing industrial site |
| <input type="checkbox"/> Undeveloped (Undisturbed/Not cleared) | <input type="checkbox"/> Existing residential site |
| | <input type="checkbox"/> Other: _____ |

14. **Attachment D - Factors Affecting Surface Water Quality.** A detailed description of all factors that could affect surface water quality is attached.

15. Only inert materials as defined by 30 TAC §330.3 will be used as fill material.

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

- Concrete
- Asphaltic concrete pavement
- Permeable Friction Course (PFC)
- Other: _____

17. Right of Way (R.O.W.) and Pavement Area:

R.O.W. for project: 2.21 (ac.)

Length: 1,159 ft.

Width: varies from 60 ft. to 120 ft.

Impervious cover (IC): 0.45 (ac.)

Total of Pavement area 0.33 (ac.) ÷ R.O.W. area 2.21 (ac.) x 100 = 14.93% IC.

- CAD program was used to determine areas.
- Number of travel lanes: proposed: 2, existing: 2
- Typical widths of lanes: 12 (ft.)
- Are intersections also being improved? (Y/N) N

Site Plan Requirements

Items 18 - 28 must be included on the Site Plan.

18. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 50'
19. 100-year floodplain boundaries:
- Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled. The 100-year floodplain boundaries are based on the following specific (including date of material) source(s): FEMA Panel 48209C0137F, effective 9/2/2005.
 - No part of the project site is located within the 100-year floodplain.
20. A layout of the development with existing and finished contours at appropriate, but not greater than ten-foot contour intervals is shown. Sensitive features, lots, wells, buildings, roads, culverts, etc. are shown on the site plan.
21. A figure (map) indicating all paths of drainage from the site to surface waters.
- Name all stream crossings: Bear Creek
 - Drainage patterns and approximate slopes.
 - There will be no discharge to surface waters.
22. Distinguish between areas of soil disturbance and areas which will not be disturbed.
23. Show locations of major structural and nonstructural controls. These are the temporary and permanent best management practices. Include the following:
- Show design and location of any hazardous materials traps.
 - Show design at outfalls of major control structures and conveyances.
 - A description of the BMPs and measures that prevent pollutants from entering surface streams.
24. Show locations of staging areas or project specific locations (PSL). Are they:
- Onsite, within project R.O.W.
 - Offsite.
 - Not yet determined. (Requires future authorization)
25. Show locations where soil stabilization practices are expected to occur.
26. Show surface waters (including wetlands).
27. Temporary aboveground storage tank facilities:
- Temporary aboveground storage tank facilities will be located on this site. Show on site plan.
 - Temporary aboveground storage tank facilities will not be located on this site.
28. Plan(s) also include:
- | | |
|--|--|
| <input type="checkbox"/> Sidewalks | <input type="checkbox"/> Shared-use paths |
| <input type="checkbox"/> Related turn lanes | <input type="checkbox"/> Off-site improvements and staging areas |
| <input checked="" type="checkbox"/> Demolition plans | <input type="checkbox"/> Utility relocations |

Other improved areas: Culvert Layouts

Permanent Best Management Practices (BMPs)

Description of practices and measures that will be used after construction is completed.

29. Permanent BMPs and measures have been designed, and will be constructed, operated, and maintained to ensure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance 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: _____

30. **Attachment E - BMPs for Upgradient (Offsite) 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.

31. **Attachment F - 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.

32. **Attachment G - 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 all proposed structural plans and specifications, and appropriate details.

Major bridge cross-sections, and roadway plan and profiles

BMP plans and details

Design calculations

Erosion control

TCEQ Construction Notes

SW3P

EPIC, as necessary

33. **Attachment H - 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 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 recordkeeping procedures.

34. **Attachment I - 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

35. **Attachment J - 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 effects caused by the regulated activity which increase erosion or may result in water quality degradation.

Include permanent spill measures used to contain hydrocarbons or hazardous substances by way of traps, or response contingencies.

36. 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.

If the applicant intends to transfer responsibility, check the box below.

Yes

A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days.

Stormwater to be generated by the Proposed Project

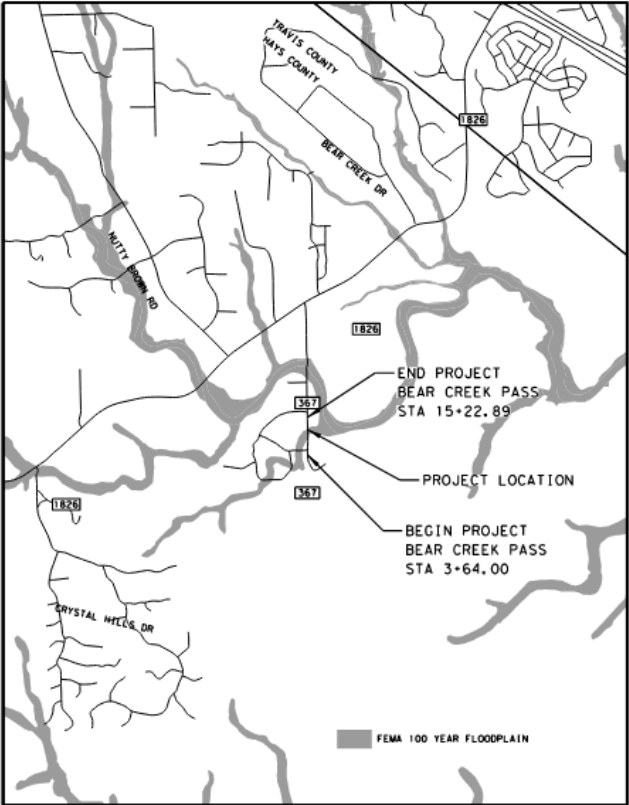
Description of practices and measures that will be used during construction.

37. The site description, controls, maintenance, and inspection requirements for the Storm Water Pollution Prevention Plan (SWPPP or SW3P) developed under the Texas Pollutant Discharge Elimination System (TPDES) general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) & §213.5(b) of the technical report.
- The Temporary Stormwater Section (TCEQ-0602) is included with the application.
 - The SWPPP (SW3P) will serve as the Temporary Stormwater Section (TCEQ-0602).
38. **Attachment K - Volume and Character of Stormwater.** A detailed description of the volume (quantity) and character (quality) of the stormwater runoff 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 pre-construction runoff coefficient.
 - Include the post-construction runoff coefficient.

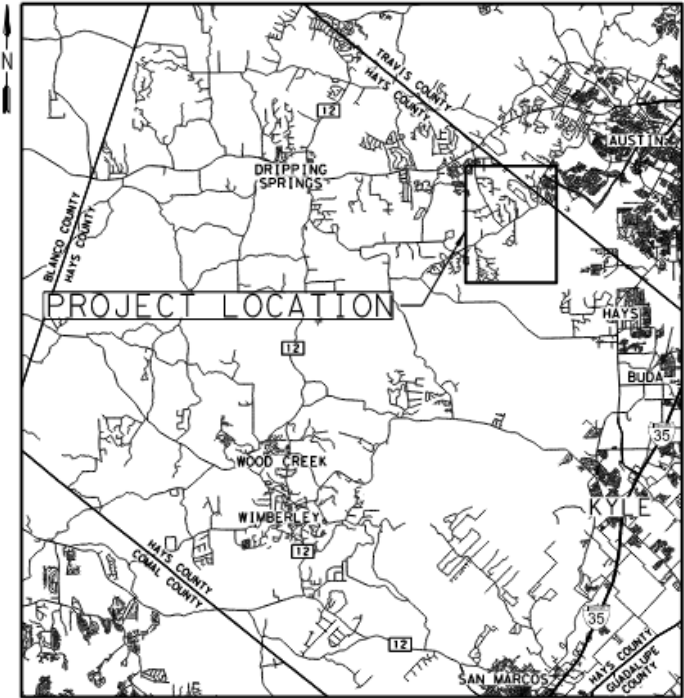
Administrative Information

39. Submit one (1) original and one (1) copy of the application, plus one electronic copy as needed, for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ is required to distribute the additional copies to these jurisdictions.
40. The fee for the plan(s) is based on:
- The total R.O.W. (as in Item 17).
 - TxDOT roadway project.

Attachment A – Road Map



BEAR CREEK PROJECT LAYOUT MAP
NOT TO SCALE



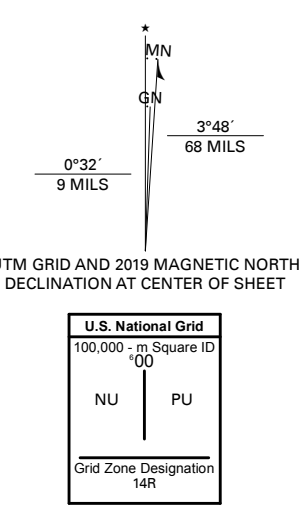
VICINITY MAP
NOT TO SCALE



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, October 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNIS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2002
Boundaries.....Multiple sources; see metadata file 2016 - 2017
Wetlands.....FWS National Wetlands Inventory 1982



1	2	3
4	5	6
7	8	

ADJOINING QUADRANGLES

ROAD CLASSIFICATION

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

SIGNAL HILL, TX
2019



Attachment C – Project Description

The project limits are from 0.34 miles south of FM 1826 at CR 367 (Bear Creek Pass) to 0.57 miles south of FM 1826 at CR 367 along Bear Creek Pass, approximately 0.4 miles south of FM 1826. The total length of construction limits of the project is approximately 0.23 miles long.

Hays County is proposing to replace the Bear Creek Pass low water culvert crossing over Bear Creek. The proposed improvements will include increasing the hydraulic capacity of the culverts and raising the existing profile grade to improve performance of the crossing during frequent storm events.

Hays County proposes to widen the existing roadway approximately 8-feet to add 2-foot shoulders and full 12-foot lanes across the low water crossing. The length of full widening is proposed to be 523 feet, with 78-feet of that length being pavement over multiple box culverts. To maintain open traffic access during construction, box culverts will be installed on the east side first, and then the existing crossing will be demolished, and the remaining length of culvert will be installed. The proposed roadway will transition back to existing pavement within 200 feet of the north limit and 300 feet of the south limit of the multiple box culverts. Additional grading work to tie existing ditches to proposed will account for approximately 995 linear feet of ditch rework, including installation of vegetative filter strip. All work will occur within the existing ROW or the newly purchased ROW, which now is within Hays County authority.

Existing impervious cover to be removed totals 11,442.91 square feet, with the proposed impervious cover being 19,420.67 square feet, totaling almost 70% increase in impervious cover over the 523 linear feet. This accounts for the lane widening, shoulders, and riprap (both concrete and rock) at the culverts. The total impervious cover increases approximately 8.28% (11.87% in existing, and 20.15% in proposed) when analyzing the total project area of 96,368.38 square feet (2.21 acres). There is a soil disturbance of 69,154.70 square feet, which equates to approximately 72% of the project area being disturbed in some way.

Bear Creek is classified as Zone AE with a regulatory floodway on the Flood Insurance Rate Map (FIRM) Panel 48209C0137F dated September 2, 2005. A Flood Insurance Study (FIS) is available for Hays County, Texas, dated September 2, 2005.

The permanent BMP shall be vegetative filter strip and shall be constructed and maintained by Hays County. The system is designed according to TCEQ Technical Guidance on Best Management Practices.

Attachment D – Factors Affecting Surface Water Quality

Pre-Construction

Prior to construction, the primary factors that have an impact on water quality are the exhaust fumes from the daily vehicular traffic and deposits and gas leaks from vehicles. As well as the potential for any other associated materials released from commercial traffic.

During Construction

Once construction commences, there is a possibility of heightened exhaust fumes resulting from increased traffic congestion and the usage of construction equipment. Additionally, there is potential for residuals from material used during the construction process such as sealants and paving materials that can adversely impact the project's surrounding area. Also, excavation during construction may lead to an increased movement of sediments, which increases the likelihood of solids carried downstream to local surface water bodies.

Post Construction

After construction is completed, water quality impacts will result from daily vehicle traffic and the increase of impervious cover. Bear Creek Low Water Crossing improvements will increase the runoff coefficient which will allow for the possibility of an increase of solids transporting to water bodies.

Attachment E – BMPs for Upgradient (Offsite) Stormwater

Upgradient flow will not flow across Bear Creek Pass pavement.

Upgradient flow either passes directly beneath the site via culverts or roadside ditches.

Proposed temporary BMP's include Sediment Control Fence, Rock Filter Dams, and Biodegradable erosion control logs. Permanent BMP's include Vegetative Filter Strips and stone riprap.

The following sheets labeled Attachment F - BMP's FOR ON-SITE STORMWATER; Bear Creek Low Water Crossing have been completed to meet the requirements of the TCEQ as stated in the "Complying with the Edwards Aquifer Rules: Technical Guidance of Best Management Practices" - July 2005.

Attachment F – BMPs for On-site Stormwater

On-site project utilizes permanent vegetative filter strips which are designed in compliance with TCEQ technical guidance and stone riprap. Design calculations are attached. Additionally, proposed temporary BMP's include Sediment Control Fence, Rock Filter Dams, and Biodegradable Erosion Control Logs.

Bear Creek Low Water Crossing has been completed to meet the requirements of the TCEQ as stated in the "Complying with the Edwards Aquifer Rules: Technical Guidance of Best Management Practices" - July 2005.

GOVERNING SPECIFICATIONS:

TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES ADOPTED ON NOVEMBER 1, 2014 AND ALL APPLICABLE SPECIAL PROVISIONS AND SPECIAL SPECIFICATIONS AS INDICATED IN THE BID DOCUMENTS SHALL GOVERN ON THIS PROJECT.

PROJECT INFORMATION:

CURRENT AVERAGE DAILY TRAFFIC: <750 ADT

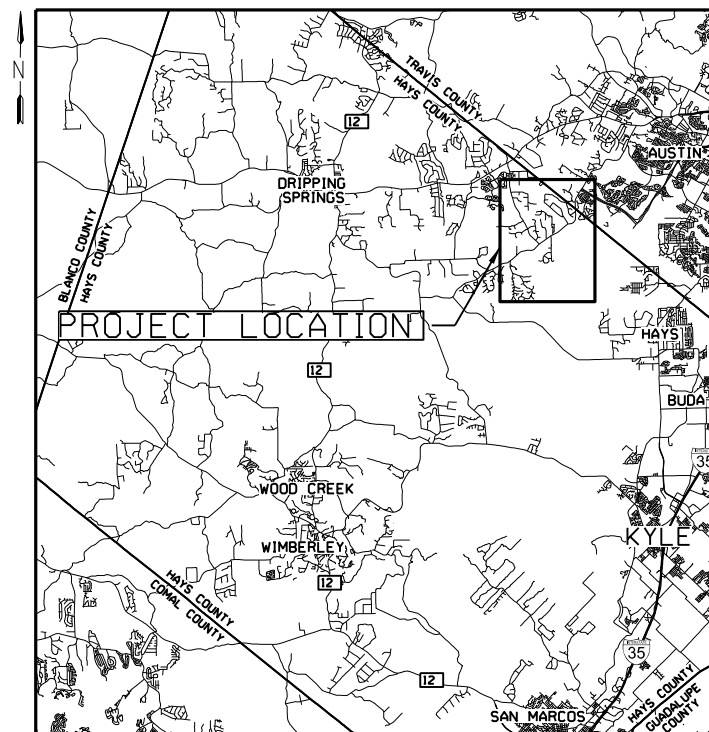
ROADWAY CLASSIFICATION: RURAL LOCAL

DESIGN SPEED: 20 MPH

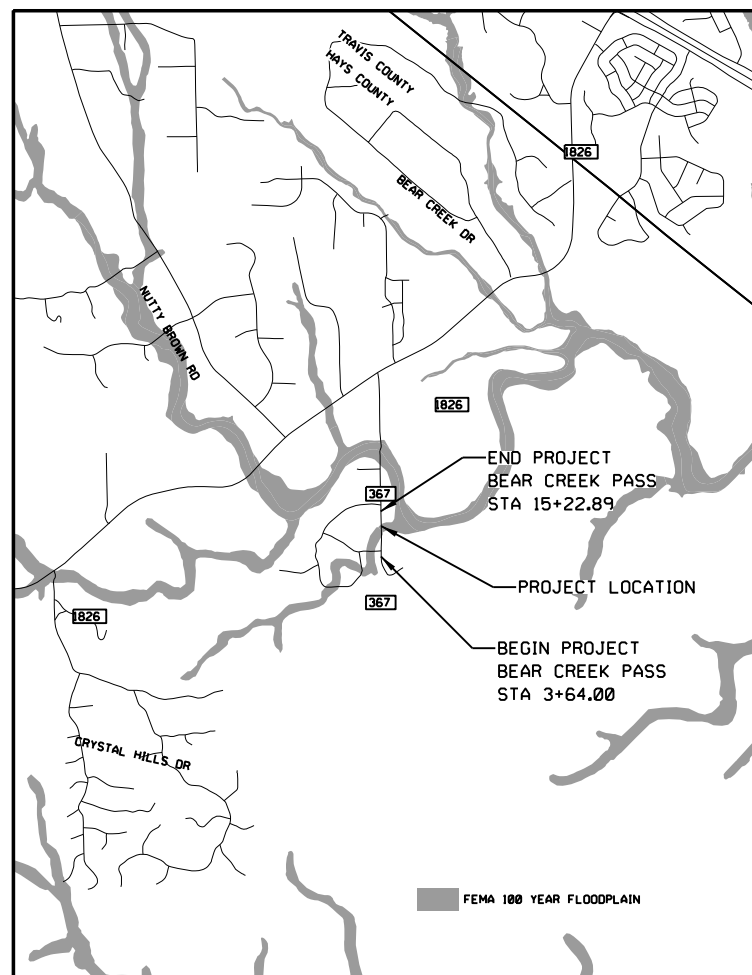
ATTACHMENT G CONSTRUCTION PLANS

FOR DRAINAGE AND LOW WATER CROSSING IMPROVEMENTS

GRADING, PAVING, AND DRAINAGE STRUCTURE REPLACEMENT OF BEAR CREEK PASS AUGUST 2023



VICINITY MAP
NOT TO SCALE



BEAR CREEK PROJECT LAYOUT MAP
NOT TO SCALE

COUNTY JUDGE
RUBEN BECERRA

COUNTY COMMISSIONERS
DEBBIE INGALSBIE - PRECINCT 1
MICHELLE COHEN - PRECINCT 2
LON SHELL - PRECINCT 3
WALT SMITH - PRECINCT 4

PREPARED FOR:



PREPARED BY:



J. Wade Benton
9/15/2023



TEXAS
REGISTRATION NO.
F-5713

285 SE INNER LOOP
Suite 110
GEORGETOWN, TX 78626
(512) 485-0020

Jerry Borcharding, P.E.
Transportation Director

DATE

Walt Smith
County Commissioner,
Precinct 4

DATE

DATE: 8/16/2023 3:28:02 PM
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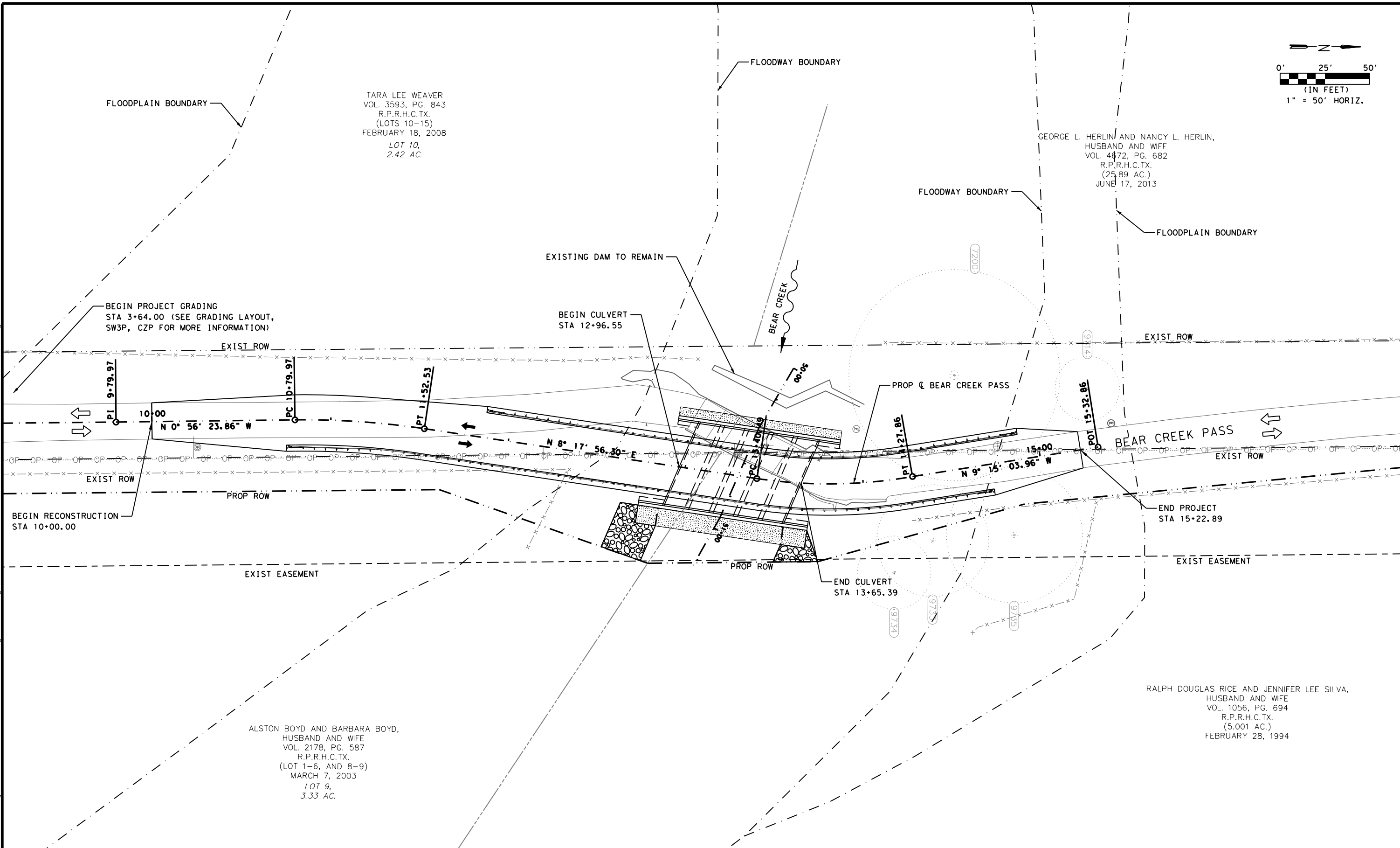
TARA LEE WEAVER
VOL. 3593, PG. 843
R.P.R.H.C.TX.
(LOTS 10-15)
FEBRUARY 18, 2008
LOT 10,
2.42 AC.

GEORGE L. HERLIN AND NANCY L. HERLIN,
HUSBAND AND WIFE
VOL. 4672, PG. 682
R.P.R.H.C.TX.
(25.89 AC.)
JUNE 17, 2013

ALSTON BOYD AND BARBARA BOYD,
HUSBAND AND WIFE
VOL. 2178, PG. 587
R.P.R.H.C.TX.
(LOT 1-6, AND 8-9)
MARCH 7, 2003
LOT 9,
3.33 AC.

RALPH DOUGLAS RICE AND JENNIFER LEE SILVA,
HUSBAND AND WIFE
VOL. 1056, PG. 694
R.P.R.H.C.TX.
(5.001 AC.)
FEBRUARY 28, 1994

DATE: 7/13/2023 2:19:25 PM
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NO.	DATE	REVISION	APPROV.



TEXAS
REGISTRATION NO.
F-5713

3755 S. Capital of Texas Hwy
Suite 325
Austin, TX 78704
(512) 485-0009



Wade Benton
9/15/2023

PRJ NO.	20T47070
DESIGN CHECK	LMF
DRAWN CHECK	
DATE	7/13/2023
SCALE	AS SHOWN



BEAR CREEK PASS
AT BEAR CREEK

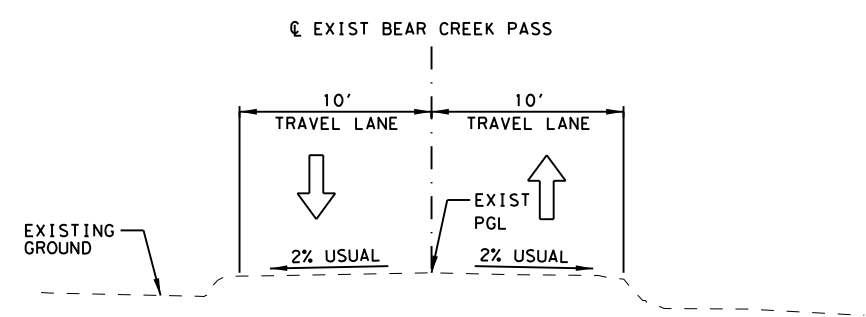
PROJECT LAYOUT

HAYS COUNTY, TEXAS

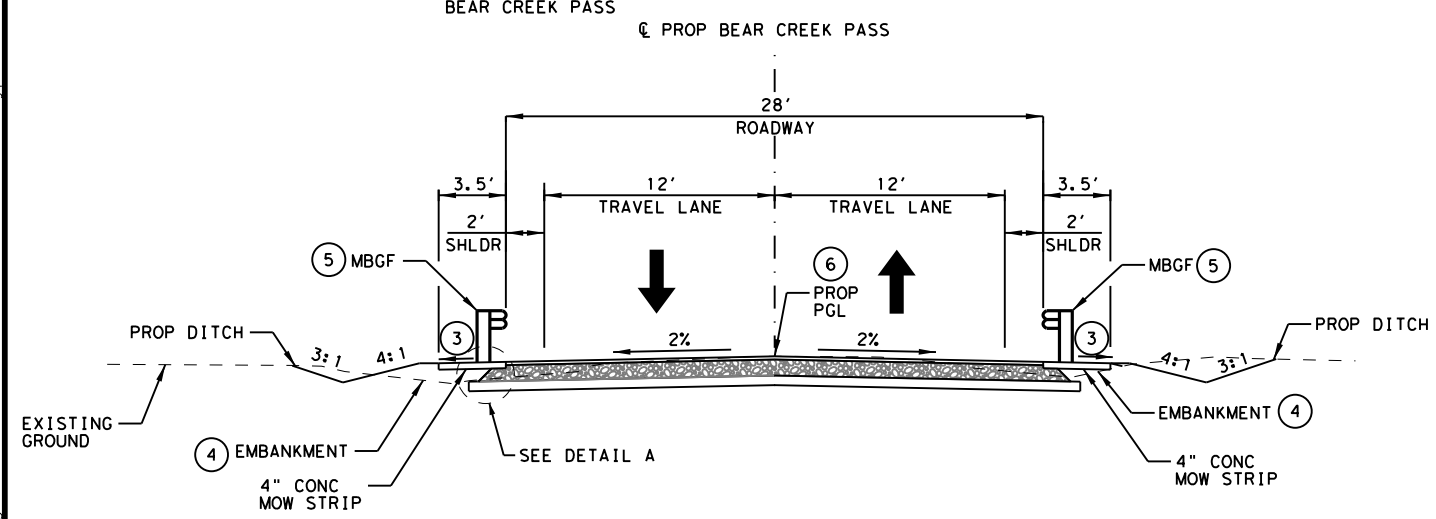
SHEET
1 OF 1

SHEET NO.
3

- ① SCARIFY THE EXISTING SOIL TO A MINIMUM DEPTH OF 8" AND USING ORDINARY COMPACTION.
- ② THE ASPHALTIC CONCRETE SURFACE COURSE SHALL BE PLANT MIXED, HOT LAID TYPE D (FINE GRADED SURFACE COURSE) MEETING THE SPECIFICATION REQUIREMENTS IN TXDOT ITEM 340. THE MIX SHALL BE DESIGNED FOR A STABILITY OF AT LEAST 35 IN ACCORDANCE WITH TEX-208-F AND SHALL BE COMPACTED TO BETWEEN 91% AND 96% OF MAXIMUM THEORETICAL DENSITY, WHEN TESTED IN ACCORDANCE WITH TEX-207-F AND TEX-227-F.
- ③ SLOPE TO DRAIN. 10:1 MAX.
- ④ EMBANKMENT MATERIAL SHALL HAVE A MAXIMUM LIQUID LIMIT(LL) NOT EXCEEDING 40, A PLASTICITY INDEX(PI) BETWEEN 7 AND 20, MAXIMUM PARTICLE SIZE OF 4 INCHES OR ONE-HALF THE LOOSE LIFT THICKNESS,WHICHEVER IS SMALLER. MATERIAL MUST CLASSIFY AS A SC OR CL MATERIAL. EMBANKMENT MATERIAL SHALL MEET THE REQUIREMENTS OF TXDOT ITEMS 132 AND SHALL BE PAID FOR UNDER ITEM 132, EMBANKMENT (FINAL) (ORD COMP) (TY B).
- ⑤ MTL W-BEAM GD FEN (LOW FILL CULVERT) IS NEEDED OVER PROPOSED CULVERT. REQUIRED MBGF POST LENGTH WILL VARY ALONG CULVERT.
- ⑥ REVOLVE SUPERELEVATION ABOUT THE PROFILE GRADE LINE.
- ⑦ REFER TO STD. DWG. CRCP(1)-20 FOR DETAILS. CRCP PAVEMENT TO BE USED OVER CULVERT STRUCTURES.
- ⑧ THE EXISTING GROUND WITHIN EMBANKMENT FOOTPRINT SHALL BE PREPARED PRIOR TO CONSTRUCTION. ALL TREES, STUMPS, ROOTS, BRUSH, AND SURFICIAL SOILS SHOULD BE GRUBBED AND REMOVED.
- ⑨ FLEX BASE MATERIAL SHALL BE COMPRISED OF CRUSHED LIMESTONE MEETING THE REQUIREMENTS OF TXDOT ITEM 247, GRADE 1. THE MATERIAL SHALL BE COMPACTED IN LIFTS NOT TO EXCEED 6 INCHES COMPACTED THICKNESS AT A MINIMUM 100% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY TEX-113E. THE MOISTURE CONTENT SHALL BE ADJUSTED TO WITHIN -3% TO +3% POINTS OF OPTIMUM. FLEX BASE SHALL HAVE A MINIMUM PLASTICITY INDEX (PI) OF 5.
- ⑩ 8" FLEX BASE SHALL HAVE A MINIMUM PLASTICITY INDEX (PI) OF 5

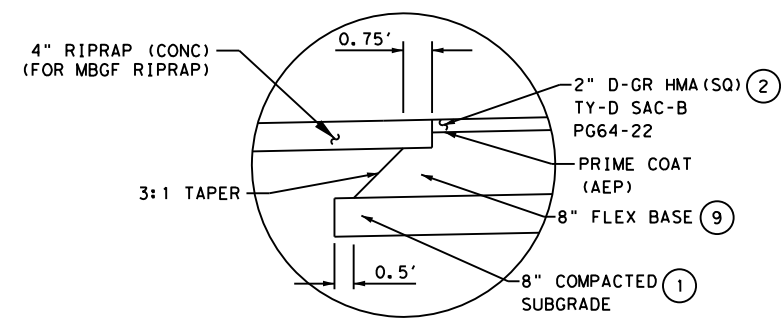


EXISTING TYPICAL SECTION

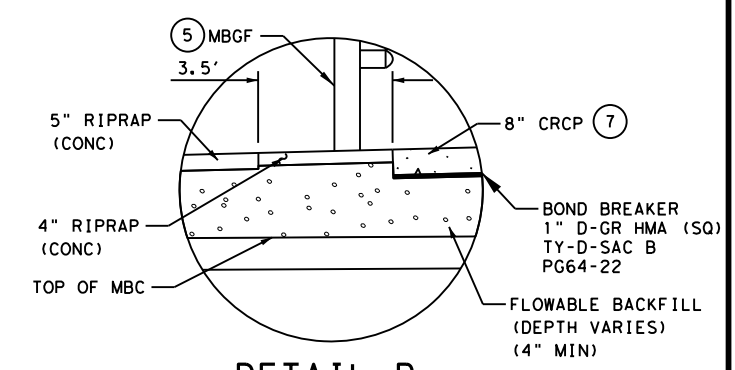


PROPOSED TYPICAL SECTION

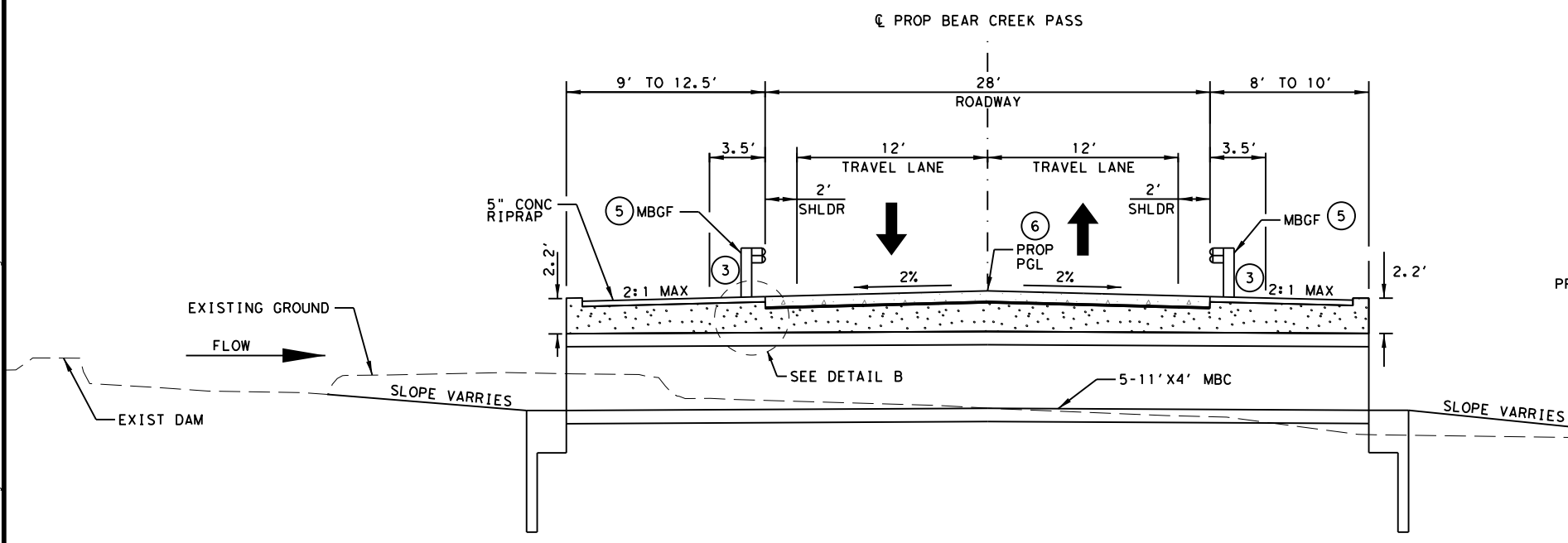
BEAR CREEK PASS:
 STA 10+00.00 TO 12+92.77
 STA 13+70.87 TO 15+22.89



DETAIL A
N. T. S.

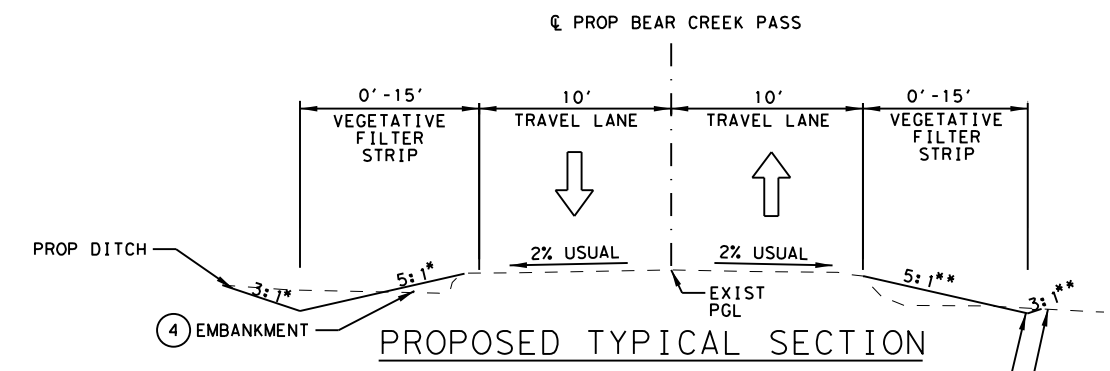


DETAIL B
N. T. S.



PROPOSED TYPICAL SECTION

BEAR CREEK PASS:
 STA 12+92.77 TO 13+70.87



PROPOSED TYPICAL SECTION

BEAR CREEK PASS:
 * STA 3+64.00 TO STA 10+00.00
 ** STA 6+21.70 TO STA 10+00.00

- NOTES:
1. PROPOSED GRADING IMPROVEMENTS ONLY AT BEAR CREEK PASS.
 2. PROPOSED PAVEMENT WILL BEGIN AT STA 10+00.00.

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NO.	DATE	REVISION	APPROV.

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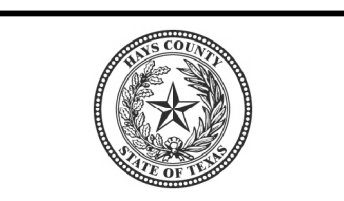
TEXAS
 REGISTRATION NO.
 F-5713

3755 S. Capital of Texas Hwy
 Suite 325
 Austin, TX 78704
 (512) 485-0009

STATE OF TEXAS
 J. WADE BENTON
 90083
 LICENSED PROFESSIONAL ENGINEER

Wade Benton
 9/15/2023

PRJ NO.	20147070
DESIGN CHECK	LMF
DRAWN CHECK	
DATE	7/13/2023
SCALE	AS SHOWN



BEAR CREEK PASS
 AT BEAR CREEK

TYPICAL SECTIONS

HAYS COUNTY, TEXAS

SHEET	1 OF 1
SHEET NO.	4

HAYS COUNTY ROAD DEPARTMENT

P.O. BOX 906 512/393-
San Marcos, TX 78667



7385

512/738-2555
FAX: 512/393-7393

TO ALL CONTRACTORS: GENERAL CONSTRUCTION NOTES FOR PLANS


THESE PLANS ARE NOT TO BE CONSIDERED FINAL FOR CONSTRUCTION UNTIL APPROVED BY HAYS COUNTY. CHANGES MAY BE REQUIRED PRIOR TO APPROVAL.

1. Seventy-Two (72) hours prior to the beginning of construction, the developer shall arrange a pre-construction conference with all pertinent parties.
2. All roadway and drainage improvements shall be designed and constructed in accordance with Hays County specifications. Contractor shall be responsible for obtaining any necessary permits from Hays County Road and Bridge Department prior to beginning any on-site construction. Contractor shall be responsible for scheduling the necessary inspections from the Hays County Road and Bridge Department. All repairs to improvements caused by contractor's failure to install improvements in accordance with Hays County specifications and these construction plans shall be the responsibility of the contractor. Hays County Transportation Department's acceptance of the improvements are contingent on repairs being made to Hays County's satisfaction. Delays caused by repairs are the responsibility of the contractor.
3. A minimum of two (2) Benchmarks shall be shown on the construction plans.
4. All bedding materials used within the ROW shall comply with COA Item 510.
5. **OMITTED**
6. The proposed fully developed stormwater runoff rate cannot exceed existing conditions runoff rate.
7. Dewatering operations must use SWPPP-specified methods only. If such methods are only general or not applicable, pump from the top of the pool (rather than the bottom) and discharge to a vegetated, upland area (away from waterbodies or drainages) or use another type of filtration prior to discharge. Refer to the EPA 2017 General Construction Permit, Section 2.4, as applicable.
8. The contractor shall supply qualified personnel to perform SWPPP inspections on project \geq 1 acre. Qualified personnel shall have CISEC, CESSWI, or equivalent certification approved by the MS4.

9. Contractor shall ensure that mud and debris tracked onto publicly maintained roadways from vehicles leaving the construction site will be cleaned up daily.
10. No **EXPLOSIVES** shall be used for this project without **TCEQ** approval.
11. All holes, trenches and other hazardous areas shall be adequately protected by barricades, fencing, lights and/or other protective devices in compliance with COA 509S and OSHA regulations at all times.
12. The contractor shall submit a Trench Safety Plan prepared and sealed by an engineer licensed by the State of Texas prior to the start of the project. The contractor shall assign a competent person that has been properly trained and is qualified to make inspections and supervise the installation, maintenance, and removal of the trench safety or excavation safety system.
13. **OMITTED**
14. Contractor shall comply with construction sequencing which may be specified somewhere in the construction plans unless approved by the engineer.
15. Permit is required for construction in 'Right of Way': Ordinance 7.10. No driveway, utility construction, mailboxes, landscaping or any other encroachment into right-of-way or easement shall be allowed without first obtaining a permit from the Hays County Road and Bridge Department.
16. Prior to the installation of any road building material the subgrade shall be inspected by Hays County. Prior to paving, base material shall be inspected by Hays County. The owner or his agent shall notify Hays County forty-eight (48) hours prior to the time when the inspection is needed :Ordinance 1.05; 2.06.
17. All outfalls constructed within Hays County must be submitted to Hays County with GPS coordinates at the end of each project. Coordinates will be submitted on the NAD 1983 State Plane South Central FIPS 4204 Feet Coordinate System. All coordinates will be submitted in grid units. The required file type for coordinate data submissions is *.txt format.
18. At the time a final inspection and release of performance security is requested; the design engineer shall provide a complete set of "As-Built" Record drawings in PDF format (300dpi) on a virus free disk and shall certify that all road and drainage construction has been completed in substantial accordance with previously approved plans and specifications, except as noted.
No performance security will be released without these exhibits.


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NO.	DATE	REVISION	APPROV.



TEXAS
REGISTRATION NO.
F-5713

3755 S. Capital of Texas Hwy
Suite 325
Austin, TX 78704
(512) 485-0009



J. WADE BENTON
90083
LICENSED PROFESSIONAL ENGINEER

Wade Benton
9/15/2023

PRJ NO.	20T47070
DESIGN CHECK	LMF
DRAWN CHECK	
DATE	7/13/2023
SCALE	AS SHOWN



BEAR CREEK PASS AT BEAR CREEK		SHEET 1 OF 9
GENERAL NOTES		SHEET NO.
HAYS COUNTY, TEXAS		7A

Project Number: 20T47070
 County: Hays
 Highway: Bear Creek Pass/ Sycamore Creek Dr

Sheet: 7
 Control: N/A

Project Number: 20T47070
 County: Hays
 Highway: Bear Creek Pass/ Sycamore Creek Dr

Sheet: 7
 Control: N/A

GENERAL NOTES: Version: July 20, 2021

Item	Description	**Rate
**204	Sprinkling (Dust) (Item 132) (Item 247)	30 GAL/CY 30 GAL/CY 30 GAL/CY
**210	Rolling (Flat Wheel) (Item 247) (Item 316)	1 HR/200 TON 1 HR/6000 SY
**210	Rolling (Tamping and Heavy Tamping)	1 HR/200 CY
**210	Rolling (Lt Pneumatic Tire) (Item 132) (Item 247) (Item 316 - Seal Coat) (Item 316 - Two Course)	1 HR/500 CY 1 HR/200 TON 1 HR/6000 SY 1 HR/3000 SY
247	Flexible Base (CMP IN PLC)	132 LB/CF
310	Prime Coat	0.20 GAL/SY
340/3078,341/3076, 344/3077	Dense-Graded Hot-Mix Asphalt and Superpave	110 LB/SY/IN

** For Informational Purposes Only

The following standard detail sheet or sheets have been modified:

Modified Standards

None

GENERAL

Contractor questions on this project are to be addressed to the following individual(s): Hays County Purchasing purchasing@co.hays.tx.us

Bid information, including plans, specifications and bidding documents, is available through the following websites:

City of San Marcos E-Procurement: <https://sanmarcostx.gov/bids.aspx>

BidNet Direct: <https://www.bidnetdirect.com/texas/hayscounty> Texas

Comptroller: <http://www.txsmartbuy.com/>

All contractor questions will be reviewed by the Engineer. Once a response is developed, it will be posted to websites above.

References to manufacturer's trade name or catalog numbers are for the purpose of identification only. Similar materials from other manufacturers are permitted if they are of equal quality, comply with the specifications for this project, and are approved.

If work is performed at Contractor's option, when inclement weather is impending, and the work is damaged by subsequent precipitation, the Contractor is responsible for all costs associated with replacing the work, if required.

The roadbed will be free of organic material prior to placing any section of the pavement structure.

Equip all construction equipment used in roadway work with highly visible omnidirectional flashing warning lights.

Provide a smooth, clean sawcut along the existing asphalt or concrete pavement structure, as directed. Consider subsidiary to the pertinent Items.

Use a self-contained vacuum broom to sweep the roadway and keep it free of sediment as directed. The contractor will be responsible for any sweeping above and beyond the normal maintenance required to keep fugitive sediment off the roadway as directed by the Engineer.

Damage to existing pipes and SET's due to Contractor operations will be repaired at Contractor's expense.

All locations used for storing construction equipment, materials, and stockpiles of any type, within the right of way, will be as directed. Use of right of way for these purposes will be restricted to those locations where driver sight distance to businesses and side street intersections is not obstructed and at other locations where an unsightly appearance will not exist. The Contractor will not have exclusive use of right of way but will cooperate in the use of the right of way with the city/county and various public utility companies as required.

ITEM 2 – INSTRUCTIONS TO BIDDERS

Please contact Keri Burchard-Juarez at KBJuarez@GarverUSA.com to submit pre bid questions and request for info only documents

ITEM 5 – CONTROL OF THE WORK

Place construction or silt fence 2 ft. inside TxDOT ROW along the Railroad ROW. If work is to be performed inside the Railroad ROW, then the Contractor will coordinate with the Railroad for a Railroad Flagger. This work is subsidiary.

Place construction stakes at intervals of no more than 100 ft. This work is subsidiary.

Utilities.

Contractor shall notify all utility companies prior to construction determine the location of existing utilities. Prior to commencing excavation activities, the contractor will contact Texas 811.

The existence and location of underground utilities indicated on the plans are taken from available records and are not guaranteed but shall be investigated and verified by the contractor before starting work. The contractor shall be held responsible for any damage to and for the maintenance and protection of the existing utilities even if they are not shown in the plans. Location and depth of existing utilities shown here are approximate only. Actual locations and depths must be verified by the contractor prior to construction, and the contractor shall be responsible for protection of utilities during construction.

General Notes

Sheet A

General Notes

Sheet B

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NO.	DATE	REVISION	APPROV.	GARVER		TEXAS REGISTRATION NO. F-5713	STATE OF TEXAS J. WADE BENTON 90083 LICENSED PROFESSIONAL ENGINEER	PRJ NO. 20T47070	DESIGN CHECK LMF	DRAWN CHECK	DATE 7/13/2023	SCALE AS SHOWN	BEAR CREEK PASS AT BEAR CREEK		SHEET 2 OF 9
						3755 S. Capital of Texas Hwy Suite 325 Austin, TX 78704 (512) 485-0009	Wade Benton 9/15/2023						GENERAL NOTES		SHEET NO. 7B
													HAYS COUNTY, TEXAS		

Project Number: 20T47070
County: Hays
Highway: Bear Creek Pass/ Sycamore Creek Dr

Sheet: 7
Control: N/A

ITEM 6 - CONTROL OF MATERIALS

Give a minimum of 1 business day notice for materials, which require inspection at the Plant.

ITEM 7 – LEGAL RELATIONS AND RESPONSIBILITIES

TxDOT will coordinate with TDLR regarding pedestrian elements and sidewalks. The contractor will procure and provide all permits, licenses, and inspections; pay all charges, fees, and taxes regarding TDLR rules governing industrialized housing and buildings.

No significant traffic generator events identified.

Refer to the Environmental Permits, Issues and Commitments (EPIC) plan sheets for additional requirements and permits.

When any abandoned well is encountered, cease construction operations in this area and notify the Engineer who will coordinate the proper plugging procedures. A water well driller licensed in the State of Texas must be used to plug a well.

Perform maintenance of vehicles or equipment at designated maintenance sites. Keep a spill kit on-site during fueling and maintenance. This work is subsidiary.

Maintain positive drainage for permanent and temporary work for the duration of the project. Be responsible for any items associated with the temporary or interim drainage and all related maintenance. This work is subsidiary.

Suspend all activities near any significant recharge features, such as sinkholes, caves, or any other subterranean openings that are discovered during construction or core sampling. Do not proceed until the designated Geologist or TCEQ representative is present to evaluate and approve remedial action.

Locate aboveground storage tanks kept on-site for construction purposes in a contained area as to not allow any exposure to soils. The containment will be sized to capture 150% of the total capacity of the storage tanks.

PSL in Edwards Aquifer Recharge and Contributing Zone.

Obtain written approval from the Engineer for all on or off right of way PSLs not specifically addressed in the plans. Provide a signed sketch of the location 30 business days prior to use of the PSL. Include a list of materials, equipment and portable facilities that will be stored at the PSL. TxDOT will coordinate with the necessary agencies. Approval of the PSL is not guaranteed. Un approved PSL is not a compensable impact.

Work within a USACE Jurisdictional Area.

Do not initiate activities within a U.S. Army Corps of Engineers (USACE) jurisdictional area that have not been previously evaluated by the USACE as part of the permit review of this project. Such activities include, but are not limited to, haul roads, equipment staging areas, borrow and disposal sites. Obtain written approval from the Engineer for activities not specifically addressed in the plans. Provide a signed sketch and description of the location 60 business days prior to

General Notes

Sheet C

Project Number: 20T47070
County: Hays
Highway: Bear Creek Pass/ Sycamore Creek Dr

Sheet: 7
Control: N/A

begin work at the location. Complete and return any forms provided by TxDOT. Approval of the work is not guaranteed. Un approved work is not a compensable impact.

Work over or near Bodies of Water (lakes, rivers, ponds, creeks, dry waterways, etc.).

Keep on site a universal spill kit adequate for the body of water and the work being performed. Debris is not allowed to fall into the ordinary high-water level (OHWL). Debris that falls into the OHWL must be removed at the end of each work day. Debris that falls into the floodway must be removed at the end of each work week or prior to a rain event. Install and maintain traffic control devices to maintain a navigable corridor for water traffic, except during bridge demo and beam placement. This work is subsidiary.

Obtain written approval from the Engineer for temporary fill or crossings not specifically addressed in the plans. Provide a signed sketch of the location 60 business days prior to begin work at the location. Complete and return any forms provided by TxDOT. Approval of the work is not guaranteed. Unapproved work is not a compensable impact.

Migratory Birds and Bats.

Migratory birds and bats may be nesting within the project limits and concentrated on roadway structures such as bridges and culverts. Remove all old and unoccupied migratory bird nests from any structures, trees, etc. between September 16 and February 28. Prevent migratory birds from re-nesting between March 1 and September 15. Prevention shall include all areas within 25 ft. of proposed work. All methods used for the removal of old nesting areas and the prevention of re-nesting must be submitted to TxDOT 30 business days prior to begin work. This work is subsidiary.

If active nests are encountered on-site during construction, all construction activity within 25 ft. of the nest must stop. Contact the Engineer to determine how to proceed.

Tree and Brush Trimming and Removal.

Work will be conducted September 16 thru February 28. Work conducted outside this timeframe will require a bird survey. Submit a survey request to TxDOT 30 business days prior to begin work.

No extension of time or compensation will be granted for a delay or suspension due to the above bird, bat and tree/brush requirements.

ITEM 8 – PROSECUTION AND PROGRESS

Working days will be charged in accordance with 8.3.1.4, “Standard Workweek.”

ITEM 100 - PREPARING RIGHT OF WAY

Prep ROW must not begin until accessible trees designated for preservation have been protected, items listed in the EPIC have been addressed, and SW3P controls installed in accessible areas.


Backfill material will be Type B Embankment using ordinary compaction.

General Notes

Sheet D

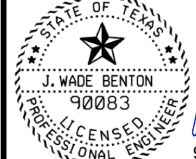
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NO.	DATE	REVISION	APPROV.



TEXAS
REGISTRATION NO.
F-5713

3755 S. Capital of Texas Hwy
Suite 325
Austin, TX 78704
(512) 485-0009



Wade Benton
9/15/2023

PRJ NO.	20T47070
DESIGN CHECK	LMF
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SCALE	AS SHOWN



BEAR CREEK PASS AT BEAR CREEK	SHEET 3 OF 9
GENERAL NOTES	SHEET NO. 7C
HAYS COUNTY, TEXAS	

Project Number: 20T47070
County: Hays
Highway: Bear Creek Pass/ Sycamore Creek Dr

Sheet: 7
Control: N/A

Follow Item 752.4 Work Methods and Item 752 general notes when removing or working on or near trees and brush.

ITEM 105 – REMOVING TREATED AND UNTREATED BASE AND ASPHALT PAVEMENT

Existing typical is based on information available. This typical may not account for all maintenance work such as overlays or pavement repairs. A change in material type or thickness does not warrant additional payment. Payment is full compensation for removing all material to the depth specified.

ITEM 110 – EXCAVATION

The Engineer will define unsuitable material.

ITEM 132 – ALL EMBANKMENT

At no time will the retaining wall backfill material exceed the adjacent embankment operation by more than one lift. At no time will the embankment adjacent to the retaining wall backfill exceed the wall backfill by any elevation. Embankment placed over the area of MSE backfill must meet the same backfill requirements for the type specified under Item 423.

The Engineer will define unsuitable material. Material which the Contractor might deem to be unsuitable due to moisture content will not be considered unsuitable material.

Prior to begin embankment of existing area, correct or replace unstable material to a depth of 6 in. below existing grade. Embankment areas will be inspected prior to beginning work.

Rock or broken concrete produced by the project is allowed in earth embankments. The size of the rock or broken concrete will not exceed the layer thickness requirements in Section 132.3.4., "Compaction Methods." The material will not be placed vertically within 5 ft. of the finished subgrade elevation.

Embankment placed vertically within 5 ft. of the finished subgrade elevation or within the edges of the subgrade and treated with lime, cement, or other calcium based additives must have a sulfate content less than 3000 ppm. Allow 5 business days for testing. Treatment of sulfate material 3000 ppm to 7000 ppm requires 7 days of mellowing and continuous water curing, in accordance TxDOT guidelines for Treatment of Sulfate-Rich Soils and Bases in Pavement Structures (9/2005). Material over 7000 ppm is not allowed.

ITEM 132 – EMBANKMENT TY C

The Department must approve all Type C embankment material before use on the project. Do not furnish shale clays. Furnish embankment with sulfate content less than 3000 ppm if treated with calcium-based chemicals or within 5 ft. of the finished subgrade elevation. Existing material from within the project limits that meets the Type C Substitute requirements may substituted for Type C but is not allowed to substitute for C1, C2, or density controlled material. Offsite material may be used to blend with onsite material to achieve the Type C requirements. The Type C substitute may also be existing material in accordance with 132 for rock embankment. The Type C substitute material may only be placed vertically beyond 5 ft. below the finished subgrade elevation or 5 ft. beyond the edge of the subgrade.

General Notes

Sheet E

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Sheet: 7
Control: N/A

Type C			
Percent Retained	LL	PI	PI
3"	Max	Max	Min
0	55	20	6
Type C Substitute			
Percent Retained		PI	
3"	#4	Max	
Max 10	10-90	25	

Description	Percent Retained					LL	PI	PI
	3"	1 3/4"	3/8"	#4	#40	Max	Max	Min
Embankment (Ordinary) (TY C1)	0	0-10	-	45-75	60-85	45	20	6
Embankment (Ordinary) (TY C2)	-	-	0	30-75	50-85	55	25	8

ITEM 134 - BACKFILLING PAVEMENT EDGES

For all backfill, compact using a light pneumatic roller, install at 3:1 slope to tie into existing terrain, and apply at rate of 0.12 GAL/SY a typical erosion control material per Item 300. If seal coat is final surface, install backfill prior to placing seal coat.

For TY A backfill, furnish flexible base meeting the requirement for any type or grade, except Grade 4, in accordance with Item 247. Compressive strengths and wet ball mill for flexible base are waived for this item. In lieu of flexible base, RAP may be supplied and must be 100% passing a 2.5 in. sieve in accordance to Tex-110-E.

ITEM 160 - TOPSOIL

Off-site topsoil will have a minimum PI of 25.

No Sandy Loam allowed.

Obtain approval of the actual depth of the topsoil sources for both on-site and off-site sources. Construct topsoil stockpiles of no more than five (5) feet in height.

It is permissible to use topsoil dikes for erosion control berms within the right of way, as directed. Seed or track slopes within 14 days of placement.

Salvage topsoil from sites of excavation and embankment. Maximum salvage depth is 6 inches.

Windrowing of topsoil obtained from the Right of Way (ROW) is not allowed.

ITEM 162 – SODDING FOR EROSION CONTROL

Provide common Bermuda. Provide St. Augustine if the adjacent grass is St. Augustine.

ITEM 168 – VEGETATIVE WATERING


Water all areas of project to be seeded or sodded.

General Notes

Sheet F


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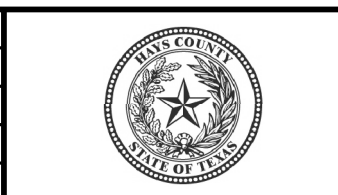
TEXAS
REGISTRATION NO.
F-5713

3755 S. Capital of Texas Hwy
Suite 325
Austin, TX 78704
(512) 485-0009



Wade Benton
9/15/2023

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BEAR CREEK PASS AT BEAR CREEK		SHEET 4 OF 9
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Sheet: 7
Control: N/A

Maintain the seedbed in a condition favorable for the growth of grass. Watering can be postponed immediately after a rainfall on the site of ½ inch or greater, but will be resumed before the soil dries out. Continue watering until final acceptance.

Vegetative watering rates and quantities are based on ¼ inch of watering per week over a 3-month watering cycle. The actual rates used and paid for will be as directed and will be based on prevailing weather conditions to maintain the seedbed.

Obtain water at a source that is metered (furnish a current certification of the meter being used) or furnish the manufacturer's specifications showing the tank capacity for each truck used. Notify the Engineer, each day that watering takes place, before watering, so that meter readings or truck counts can be verified.

ITEM 204 – SPRINKLING

Apply water for dust control as directed. When dust control is not being maintained, cease operations until dust control is maintained. Consider subsidiary to the pertinent Items.

ITEM 216 - PROOF ROLLING

Correct and perform "Proof Rolling" retest at the Contractor's expense, to the satisfaction of the Engineer, when initial "Proof Rolling" yields a failing result.

ITEM 247 - FLEXIBLE BASE

The layer thickness will be 4 in. to 6 in. unless shown on the plans. Placing in a single layer is allowed when total thickness of base is 8 in. or less. When placed in multiple layers, compact the bottom and middle layers to at least 95% and 98% of the maximum dry density, respectively. When placed in a single layer or the final layer, compact to at least 100%.

Correction of subgrade soft spots is subsidiary.

Complete per plans the subgrade, ditches, slopes, and drainage structures prior to the placement of base.

Do not use a vibratory roller to compact base placed directly on top of a drainage structure.

ITEM 260 thru 276 – SUBGRADE TREATMENTS AND BASE

Use ordinary compaction for subgrade treatment.

Three weeks prior to treatment, provide a sample of soil or flexible base to be treated.

ITEM 300s – SURFACE COURSES AND PAVEMENTS

Asphalt season is May 1 thru September 15. Emulsified Asphalt season is April 1 thru October 15. The latest work start date for asphalt season is August 1.

If an under seal is not provided, furnish a tack coat. Apply tack coat at 0.08 GAL/SY (residual). Apply non-tracking tack coat using manufacturer recommend rates.

General Notes

Sheet G

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Sheet: 7
Control: N/A

ITEM 302 – AGGREGATES FOR SURFACE TREATMENTS

Previously tested aggregates delivered to the project, which are found to contain excessive quantities of dust (more than 0.5 percent passing the no. 40 sieve) during pre-coating, stockpiling or hauling operations, will be rejected. Use test method Tex-200-F, Part II, for testing.

Table 3 Los Angeles Abrasion, % Max, is lowered from 35 to 30 and is applicable to all aggregates.

When TY E is allowed, furnish coarse fractionated recycled asphalt pavement (CF-RAP). CF-RAP aggregate stockpiles must be approved on a stockpile-by-stockpile basis, unless approved by the Engineer. Do not exceed stockpiles greater than 2000 tons. CF-RAP will meet the below gradation requirement (after ignition burn off of asphalt) or finer than Grade 4. CF-RAP will meet deleterious material and decantation requirements in accordance with Table 3.

CF-RAP Requirements				
Percent Retained				
5/8"	1/2"	3/8"	#4	#8
0	10-25	60-80	85-100	90-100

ITEM 310 – PRIME COAT

Apply blotter material to all driveways and intersections. This work is subsidiary.

When Multi Option is allowed, provide MC 30, EC 30 or AE-P. MC 30 is not allowed in Travis County.

Rolling to ensure penetration is required.

ITEM 320 - EQUIPMENT FOR ASPHALT CONCRETE PAVEMENT

Use of motor grader is allowed for placement of mixtures greater than 10 inches from the riding surface, when hot-mix is used in lieu of flexible base, or as allowed.

ITEM 340/3078 THRU 348/3082 - HOT-MIX ASPHALT PAVEMENT

Core holes may be filled with an Asphaltic patching material meeting the requirements of DMS-9203 or with SCM meeting requirements of DMS-9202.

Install transverse butt joints with 50 ft. H: 1 in. V transition from the new ACP to the existing surface. Install a butt joint with 24 in. H: 1 in. V transition from the new ACP to a driveway, pullout or intersection. Saw cut the existing pavement at the butt joints. This work is subsidiary.

Use a device to create a maximum 3H:1V notched wedge joint on all longitudinal joints of 2 in. or greater. This work is subsidiary.

Prior to milling, core the existing pavement to verify thickness. This work is subsidiary.

Ensure placement sequence to avoid excess distance of longitudinal joint lap back not to exceed one day's production rates.

Submit any proposed adjustments or changes to a JMF before production of the new JMF.

Tack every layer. Do not dilute tack coat. Apply it evenly through a distributor spray bar.

General Notes

Sheet H

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NO.	DATE	REVISION	APPROV.	GARVER		TEXAS REGISTRATION NO. F-5713	J. WADE BENTON 90083 LICENSED PROFESSIONAL ENGINEER	Wade Benton 9/15/2023	PRJ NO. 20T47070	DESIGN CHECK LMF	DRAWN CHECK	DATE 7/13/2023	SCALE AS SHOWN	BEAR CREEK PASS AT BEAR CREEK		SHEET 5 OF 9
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Sheet: 7
Control: N/A

Provide a minimum transition of 10' for intersections, 10' for commercial driveways, and 6' for residential driveways unless otherwise shown on the plans.

Irregularities will require the replacement of a full lane width using an asphalt paver. Replace the entire subplot if the irregularities are greater than 40% of the subplot area.

Lime or an approved anti-stripping agent must be used when crushed gravel is utilized to meet a SAC "A" requirement.

When using RAP or RAS, include the management methods of processing, stockpiling, and testing the material in the QCP submitted for the project. If RAP and RAS are used in the same mix, the QCP must document that both of these materials have dedicated feeder bins for each recycled material. Blending of RAP and RAS in one feeder bin or in a stockpile is not permitted.

Asphalt content and binder properties of RAP and RAS stockpiles must be documented when recycled asphalt content greater than 20% is utilized.

No RAS is allowed in surface courses.

Department approved warm-mix additives is required for all surface mix application when RAP is used. Dosage rates will be approved during JMF approval.

The Hamburg Wheel Test will have a minimum rut depth of 3mm.

ITEM 340/3078 & 341/3076 - DENSE-GRADED HOT-MIX ASPHALT

Use the SGC for design and production testing of all mixtures. Design all Dense-Graded Type D mixtures as a surface mix, maximum 15% RAP and no RAS.

When using substitute binders, mold specimens for mix design and production at the temperature required for the substitute binder used to produce the HMA.

The Hamburg Wheel minimum number of passes for PG 64 or lower is reduced to 7,000. The Engineer may accept Hamburg Wheel test results for production and placement if no more than 1 of the 5 most recent tests is below the specified number of passes and the failing test is no more than 2,000 passes below the specified number of passes.

ITEM 360 - CONCRETE PAVEMENT

Provide Class P concrete as necessary to follow work sequence, comply with closure restrictions, and meet requirements for opening to traffic. This work is subsidiary. Tining shall be longitudinal.

ITEM 400 - EXCAVATION AND BACKFILL FOR STRUCTURES

Unless shown on the plans, the following backfill will apply to cutting and restoring flexible pavement. Backfill with cement-stabilized backfill. The cement-stabilized backfill is subsidiary. Cap the backfill with Type B hot-mix to a depth equal to the adjacent hot-mix. At locations where

General Notes

Sheet I

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the backfill surface is final, place 1-1/2 in. Type D for the surface. The minimum hot-mix depth will be 4 in.

Saw-cut the pavement at the edge of the excavation. This work is subsidiary.

Backfill the bridge ends in accordance with the limits shown on TxDOT "CSAB" Standard. Use material in accordance with "CSAB" or Item 423, Type BS. The "CSAB" optional bond breaker materials are allowed. This work is subsidiary.

ITEM 416 - DRILLED SHAFT FOUNDATIONS

Stake all Foundations, for approval, before beginning drilling operations.

Calculate the vertical signal head clearance before placing any signal pole foundation.

For mast-arm signal and strain pole anchor bolts, set two in tension and two in compression.

Obtain approval of placement prior to placing concrete.

Remove spoils from a flood plain at the end of each work day.

ITEM 420, 425, 441, & 462 - STRUCTURES

Bridge Vertical Clearance and Traffic Handling.

Notify County project staff and the local bridge engineer 10 business days prior to the following: change in vertical clearance, placing beams/girders over traffic, opening or removing traffic from a bridge or portion of a bridge, and completion of bridge work. This requirement includes bridge class culverts. Provide vertical clearance for all structures (including signal mast arms, span wires, and overhead sign bridge structures) within the project limit

ITEM 420 - CONCRETE SUBSTRUCTURES

Perform work during good weather unless otherwise directed. If work is performed at Contractor's option, when inclement weather is impending, and the work is damaged by the weather, the Contractor is responsible for all costs associated with repairs/replacement.

Upon completion of the structure, stencil the National Bridge Inventory (NBI) number (structure number) using black paint and 4 in. tall numbers at 4 locations designated by TxDOT. This work is subsidiary.

Bonding agents are required at construction joints. Do not use membrane curing for structural concrete as defined in Item 421, Table 8.

Remove all loose Formwork and other Materials from the floodplain or drainage areas daily.

ITEM 427 - SURFACE FINISHES FOR CONCRETE

Provide a rub finish to Surface Area I.

Color coatings may be applied using concrete paint or opaque sealer.

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						3755 S. Capital of Texas Hwy Suite 325 Austin, TX 78704 (512) 485-0009	Wade Bent						GENERAL NOTES		SHEET NO.
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Control: N/A

ITEM 432 - RIPRAP

Mow strip riprap will be 4 in. and all other riprap will be 5 in. unless otherwise shown on the plans or in the pay items. Mow strip for cable barrier may be placed monolithically with the barrier foundations if using concrete in accordance with Item 543. Fiber reinforcement is not allowed except in mow strip for cable barrier if foundation and mow strip are placed monolithically.

Saw-cut existing riprap then epoxy 12 in. long No. 3 or No. 4 bars 6 in. deep at a maximum spacing of 18 in. in each direction to tie new riprap to existing riprap. This work is subsidiary.
 For cement-stabilized riprap, provide Type A Grade 5 flexible base. Compressive strengths for Item 247 are waived.

SGT approach taper, paid using mow strip item, shall be installed using concrete, flexible base coated with SS-1 at a rate of 0.12 GAL/SY, or HMA Type B/C/D. Placement shall be ordinary compaction and does not require placement using an asphalt paver.

ITEM 466 - HEADWALLS AND WINGWALLS

Remove all loose formwork and materials from the waterway at the end of each work week or prior to a rain event. Debris that falls into the waterway must be removed at the end of each work day. Upon completion of the structure, stencil the National Bridge Inventory (NBI) number (structure number) using black paint and 4 in. tall numbers at 4 locations designated by TxDOT. This work is subsidiary.

ITEM 496 - REMOVING STRUCTURES

Submit a demolition plan to the Engineer. Have the plan signed and sealed by a licensed professional engineer when the structure will continue to accommodate traffic after removal has begun and the removal impacts any part of the structure below the deck or riding surface. If applicable, the plan must detail requirements for meeting the U.S. Army Corps of Engineers' Section 404 Permit. The demolition plan must detail handling of roadway and waterway traffic. Waterway traffic must be maintained at all times unless a closure is approved by the Engineer.

No debris is allowed to fall into a body of water. Debris that falls into the water must be removed at the end of each work day. Debris that falls into the floodway must be removed at the end of each work week or prior to a rain event.

ITEM 502 - BARRICADES, SIGNS, AND TRAFFIC HANDLING

Submit an emailed request for a lane closure (LCN) to County Engineer. The email will be submitted in the format provided. Receive concurrence prior to implementation. Submit a cancellation of lane closures a minimum of 18 hours prior to implementation. Blanket requests for extended periods are not allowed. Max duration of a request is 2 weeks prior to requiring resubmittal.

Provide 2 hour notice prior to implementation and immediately upon removal of the closure.

For roadways not listed in Table 1: Submit the request a minimum of 48 hours prior to the closure and by the following deadline immediately prior to the closure: 11A on Tuesday or 11A on Friday.

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For all roadways: Submit request for traffic detours and full roadway closures 168 hours prior to implementation. Submit request for nighttime work 96 hours to implementation date.

Cancellations of accepted closures (not applicable to full closures or detours) due to weather will not require resubmission in accordance with the above restrictions if the work is completed during the next allowable closure time.

Closures that conflict with adjacent contractor will be prioritized according to critical path work per latest schedule. Conflicting critical path or non-critical work will be approved for first LCN submitted. Denial of a closure due to prioritization or other reasons will not be reason for time suspension, delay, overhead, etc.

Cover, relocate or remove existing signs that conflict with traffic control. Install all permanent signs, delineation, and object markers required for the operation of the roadway before opening to traffic. Use of temporary mounts is allowed or may be required until the permanent mounts are installed or not impacted by construction. Maintain the temporary mounts. This work is subsidiary.

Meet with the Engineer prior to lane closures to ensure that sufficient equipment, materials, devices, and workers will be used. Take immediate action to modify traffic control, if at any time the queue becomes greater than 20 minutes. Have a contingency plan of how modification will occur. Consider inclement weather prior to implementing the lane closures. Do not set up traffic control when the pavement is wet.

Place a 28-inch cone, meeting requirements of BC (10), on top of foundations that have protruding studs. This work is subsidiary.
 Edge condition treatment types must be in accordance with the TxDOT standard. Installation and removal of a safety slope is subsidiary.

To determine a speed limit or an advisory speed limit, submit a request to County Engineer 60 business days prior to manufacture of the sign.

The Contractor Force Account "Safety Contingency" that has been established for this project is intended to be utilized for work zone enhancements, to improve the effectiveness of the Traffic Control Plan, that could not be foreseen in the project planning and design stage. These enhancements will be mutually agreed upon by the Engineer and the Contractor's Responsible Person based on weekly or more frequent traffic management reviews on the project. The Engineer may choose to use existing bid items if it does not slow the implementation of enhancement.

ITEM 506 - TEMPORARY EROSION, SEDIMENTATION, AND ENV CONTROLS


If SW3P plan sheets are not provided, place the control measures as directed.

Install, maintain, remove control measures in areas of the right of way utilized by the Contractor that are outside the limits of disturbance required for construction. Permanently stabilize the area. This work is subsidiary.

General Notes

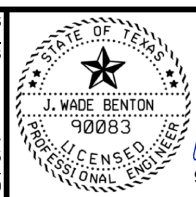
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Wade Benton
 9/15/2023

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Control: N/A

Erosion control measures must be initiated immediately in areas where construction activities have ceased and will not resume for a period exceeding 14 calendar days. Vertical track all exposed soil, stockpiles, and slopes. Re-track after each rain event or every 14 days, whichever occurs first. Sheep foot roller is allowed for vertical tracking. This work is subsidiary.

Unless a specific pay item is provided in the plans, the installation of the 6:1 or flatter for RFD side slopes in the safety zone will be subsidiary to pertinent bid items.

ITEM 508 – CONSTRUCTING DETOURS

Detour typical section must match the adjacent roadway section, unless shown on the plans.

Flexible base will be Type A Grade 5 placed using ordinary compaction. Base compressive strengths are waived for roadways not listed in Item 502, Table 1.

ITEM 512 – PORTABLE TRAFFIC BARRIER

Designated source barrier stockpile locations: SH 45 just west of US 183 South, or SH 130 @ Greg Manor Rd. Upon completion of the project, designated source PTB deemed unsalvageable by the Engineer will become the property of the contractor. If no hardware is available for designated source, the contractor will furnish all necessary hardware to install the PTB and reimbursed in accordance with Item 9 Force Account. Bundle and return all PTB connection hardware to the nearest Area Office.

In lieu of a crash cushion, place 25:1 Class C concrete transition where PTB terminates adjacent to existing concrete barrier. Installation and removal will be paid using Item 512.

Any increase in temporary barrier quantities that occur due to Contractor changes in the sequence of work or the traffic control plan will not be paid.

ITEM 540, 542, & 544 - METAL BEAM GUARD FENCE AND GUARDRAIL END TREATMENTS

Furnish round timber posts for guard fence. Steel posts for low fill culverts are subsidiary. Stake the locations for approval prior to installation. Adjust the limits of the fence to meet field conditions. Install delineators before opening the road to traffic.

Retain all materials. Contractor may reuse all existing materials that are structurally sound and dent free. All reused material shall be from this project and in compliance with current standards. Structurally sound rust spots with the largest dimension of 4 in. may be cleaned and repaired in accordance with 540.3.5. Contractor may punch or field drill holes in the metal rail element to accommodate post spacing. Additional holes for splice or connections are not allowed. The holes shall be spaced in accordance with the latest standard and shall not be closer than the minimum spacing shown on the current standard.

Remove, replace, and install mow strip block out material. Construct new block outs and backfill unused block outs with class B concrete. This work is subsidiary.

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Sheet M

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Repair of mow strip damage, not caused by contractor negligence, and installation of new mow strip will be paid with appropriate bid items. Backfill and shoulder up of area around fence and mow strip will be paid using embankment item.

ITEM 545 - CRASH CUSHION ATTENUATORS

Use a coring machine or saw cut to remove the mounting hardware/bolts from the existing pavement. Cutting the hardware flush with the surface is not allowed. Refill voids in accordance with the pavement specification. This work is subsidiary. Install and maintain three 42 in. cones, vertical panels, or plastic drums in advance of the attenuator. Place at spacing per channelizing devices on BC (9). This work is subsidiary.

ITEM 600s & 6000s – ITS, LIGHTING, SIGNING, MARKINGS, AND SIGNALS

Meet the requirements of the NEC, Texas MUTCD, TxDOT standards, and TxDOT Standard Specifications. Notify the Engineer if existing elements to remain do not meet code or specification.

Contractor shall provide all service, equipment and material required to provide a functional item and interface with existing equipment and software.

ITEM 644 – SMALL ROADSIDE SIGN ASSEMBLIES

Triangular slip base that use set screws to secure the post will require 1 of the set screws to penetrate the post by drilling a hole in the post at the location of the screw. All set screws shall be treated with anti-seize compound.

ITEM 658 – DELINEATOR AND OBJECT MARKER ASSEMBLIES

Installation and maintenance of portable CTB reflectors will be subsidiary to the barrier.

ITEM 662 - WORK ZONE PAVEMENT MARKINGS

Notify the Engineer at least 24 hours in advance of work for this item.

Maintain removable and short-term markings daily. Remove within 48 hours after permanent striping has been completed.

Item 668 is not allowed for use as Item 662.

ITEM 666 - RETROREFLECTORIZED PAVEMENT MARKINGS


Notify the Engineer at least 24 hr. before beginning work.

Place longitudinal markings nightly for IH 35 main lanes or roadways with AADT greater than 100,000. Use of temporary flexible reflective roadway marker tabs is subsidiary and at the Contractor's option. Replace missing or damaged tabs nightly. If using tabs, place longitudinal markings weekly by 5 AM Friday for all weekday work and by 5 AM Monday for all weekend work. Failure to maintain tabs or place longitudinal markings by deadline will require nightly placement of longitudinal markings.

General Notes

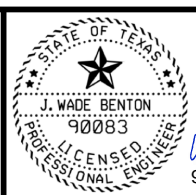
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Wade Benton
 9/15/2023

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Control: N/A

Place longitudinal markings no later than 7 calendar days after placement of the surface for roadways with AADT greater than 20,000.

When the raised portion of a profile marking is placed as a separate operation from the pavement marking, the raised portion must be placed first then covered with TY I.

When using black shadow to cover existing stripe apply a non-retroreflective angular abrasive bead drop. The marking color shall be adjusted to resemble the pavement color. If Item 677 is not used prior to placement of black shadow, scrape the top of the marking with a blade or large piece of equipment unless surface is a seal coat. The scraping of the marking is subsidiary.

ITEM 677 - ELIMINATING EXISTING PAVEMENT MARKINGS AND MARKERS

Dispose of removed materials and debris at locations off the right of way.

Elimination using a pavement marking will not be allowed in lieu of methods listed in specification.

Remove pavement markings on concrete surfaces by a blasting method. Flail milling will be allowed when total quantity of removal on concrete surfaces is less than 1000 ft.

Strip seal is only method allowed on seal coat surface unless project includes placement of a new surface. If total quantity of removal on a seal coat surface is less than 2000 ft., elimination using a pavement marking is allowed if a test section is approved by the Engineer. Test section shall demonstrate the thermo marking color matches the existing pavement color.

Remove pavement markings outside the limits of the new surface by a blasting method. Use a TRAIL or a non-retroreflective paint to cover stripe remnants that remain after elimination. The test requirements for these materials are waived. The paint color shall be adjusted to resemble the existing pavement color. Installation and maintenance is subsidiary.

ITEM 730 – ROADSIDE MOWING

Perform roadside mowing along the Roadway for the length of the project, as directed. Complete spot mowing, as directed.

ITEM 734 - LITTER REMOVAL

Complete Litter Removal Cycles along the Roadway for the length of the project, as directed.

Complete Litter Removal Cycles prior to any mowing cycles.

Remove all litter on the right of way, within project limits.

ITEM 738 – CLEANING AND SWEEPING HIGHWAYS

Complete cleaning and sweeping cycles at the intervals, as directed. Complete one cycle at the end of construction and prior to final acceptance by the Department.

General Notes

Sheet O

Project Number: 20T47070
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ITEM 752 – TREE AND BRUSH REMOVAL

Follow Item 752.4 Work Methods and Item 752 general notes when removing or working on or near trees and brush even if Item 752 is not included as a pay item.

Flailing equipment is not allowed. Burning brush is not allowed in urban areas or on ROW. Use hand methods or other means of removal if doing work by mechanical methods is impractical.

Prior to begin tree pruning, send email confirmation to the Engineer that training and demonstration of work methods has been provided to the employees. This work is subsidiary.

Shredded vegetation may be blended, at a rate not to exceed 15 percent by volume, with Item 160 if the maximum dimension is not greater than 2 in.

ITEM 6000s – ITS

Maintain the existing equipment and HUB buildings operational during construction. Network downtime is allowed from 12A to 4A. Downtime is restricted to one time per HUB or equipment.

Definitions of abbreviations used to designate ITS equipment, material, etc. can be provided by the Engineer.

ITEM 6001 – PORTABLE CHANGEABLE MESSAGE SIGN

Provide 1 PCMS. Provide a replacement within 12 hours. PCMS will be available for traffic control, event notices, roadway conditions, service announcements, etc.

Place PCMS 10 calendar days prior to begin work stating “Road Work Begin Soon, Contact 832-7000 For Info”.


Place PCMS at time of LCN request. Place the PCMS at the expected end of queue caused by the closure. When the closure is active, revise the message to reflect the actual condition during the closure, such as “RIGHT LN CLOSED XXX FT”.

General Notes

Sheet P

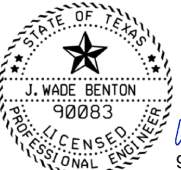
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NO.	DATE	REVISION	APPROV.



TEXAS
 REGISTRATION NO.
 F-5713

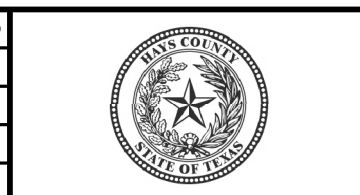
3755 S. Capital of Texas Hwy
 Suite 325
 Austin, TX 78704
 (512) 485-0009



J. WADE BENTON
 90083
 LICENSED PROFESSIONAL ENGINEER

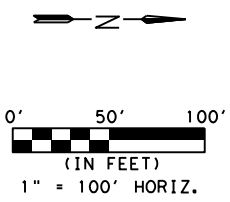
Wade Benton
 9/15/2023

PRJ NO.	20T47070
DESIGN CHECK	LMF
DRAWN CHECK	
DATE	7/13/2023
SCALE	AS SHOWN



BEAR CREEK PASS AT BEAR CREEK		SHEET 9 OF 9
GENERAL NOTES		SHEET NO. 71
HAYS COUNTY, TEXAS		

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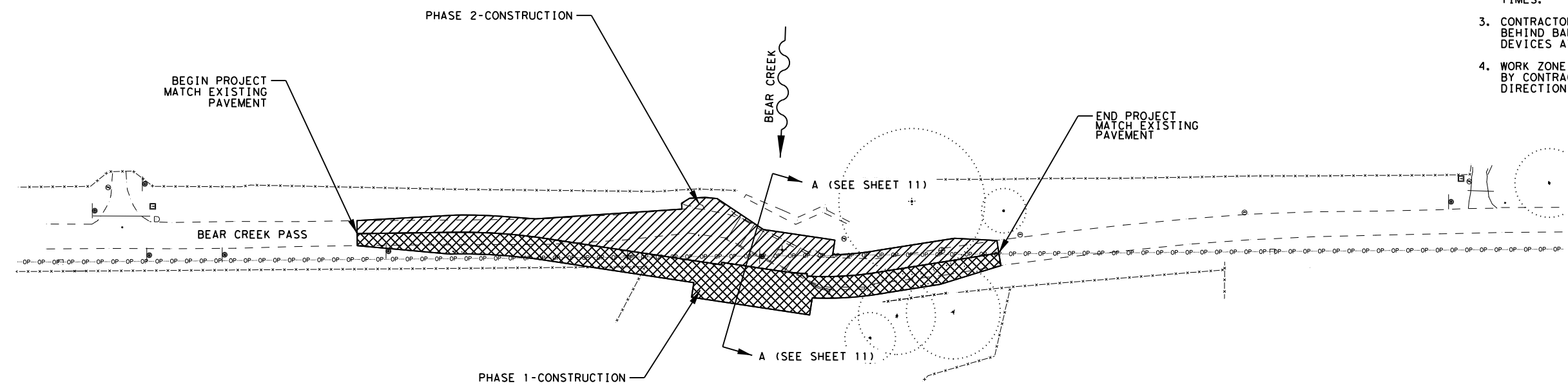


LEGEND

- PHASE 1 - CONSTRUCTION
- PHASE 2 - CONSTRUCTION

NOTES:

1. ROADWAY TO BE POSTED 10 MPH WITHIN PROJECT LIMITS.
2. CONTRACTOR TO MAINTAIN ONE LANE OPEN TO THROUGH TRAFFIC AT ALL TIMES.
3. CONTRACTOR TO PROTECT WORK ZONE BEHIND BARRICADES AND CHANNELIZING DEVICES AT ALL TIMES.
4. WORK ZONE WIDTHS TO BE OPTIMIZED BY CONTRACTOR WITH APPROVAL AND DIRECTION OF THE ENGINEER.



SEQUENCE OF CONSTRUCTION:

- PHASE 1**
1. SHIFT NORTHBOUND TRAFFIC TO EXISTING SOUTHBOUND LANE, UTILIZING TEMPORARY TRAFFIC SIGNALS FOR SINGLE LANE OPERATION.
 2. EXCAVATE EXISTING GROUND AS NEEDED.
 3. CONSTRUCT PORTION OF NORTHBOUND PROPOSED BEAR CREEK PASS AND EASTERN PORTION OF BRIDGE CULVERT.
 4. INSTALL ONE WAY TRAFFIC CONTROL PER TCP PHASE 1, UTILIZING TCP (2-8)-18.
 5. INSTALL PORTABLE CHANGEABLE MESSAGE SIGN NORTH AND SOUTH OF THE PROJECT.
- PHASE 2**
1. SHIFT TRAFFIC TO PROPOSED NORTHBOUND BEAR CREEK PASS, UTILIZING TEMPORARY TRAFFIC SIGNALS FOR SINGLE LANE OPERATION.
 2. EXCAVATE EXISTING GROUND AS NEEDED.
 3. CONSTRUCT SOUTHBOUND PROPOSED BEAR CREEK PASS AND WESTERN PORTION OF BRIDGE CULVERT.
 4. INSTALL ONE WAY TRAFFIC CONTROL PER TCP PHASE 2, UTILIZING TCP (2-8)-18.

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J. WADE BENTON
 90083
 LICENSED PROFESSIONAL ENGINEER
Wade Benton
 9/15/2023

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DESIGN CHECK	LMF
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DATE	7/13/2023
SCALE	AS SHOWN



BEAR CREEK PASS
 AT BEAR CREEK

 CONSTRUCTION PHASING

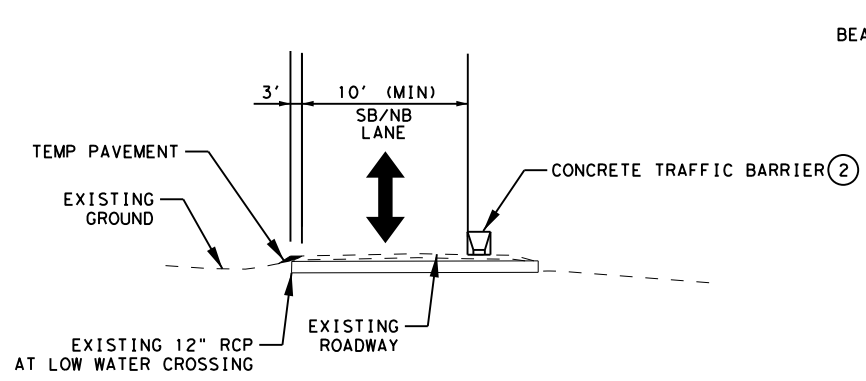
 HAYS COUNTY, TEXAS

SHEET
 1 OF 1

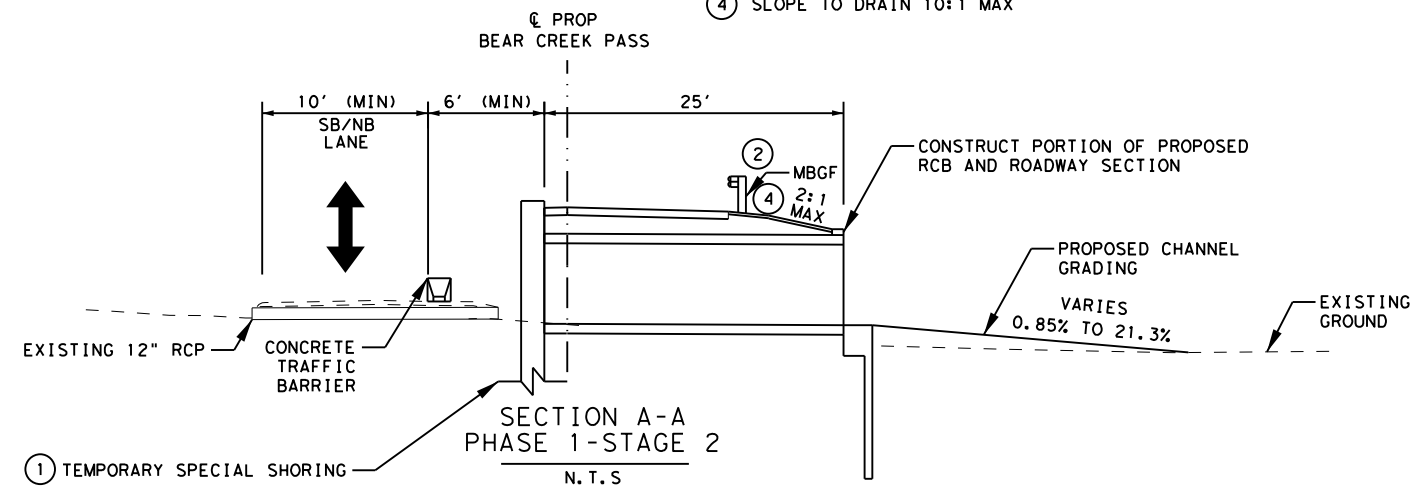
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8

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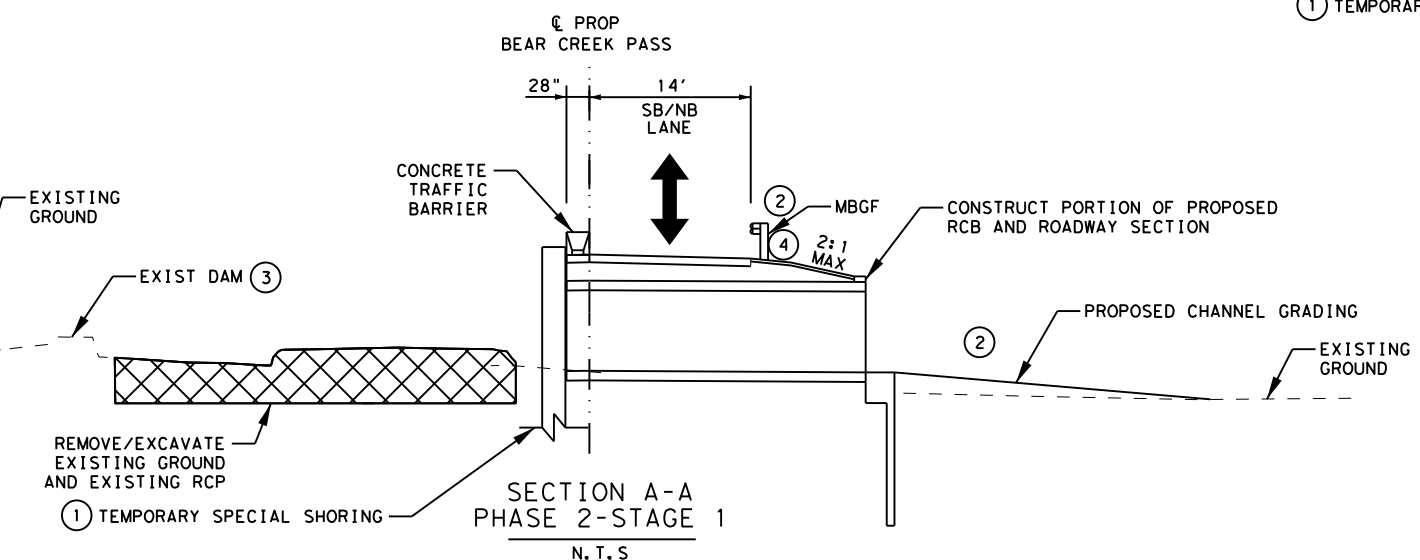
- ① TEMPORARY SPECIAL SHORING SHALL BE PROVIDED IN ACCORDANCE WITH TXDOT ITEM 403, "TEMPORARY SPECIAL SHORING" IN THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAYS, STREETS, AND BRIDGES (2014 EDITION).
- ② INSTALL PORTABLE CTB (LOW PROF) (TY 1).
- ③ CONTRACTOR TO PROTECT EXISTING DAM FROM DAMAGE DURING CONSTRUCTION.
- ④ SLOPE TO DRAIN 10:1 MAX



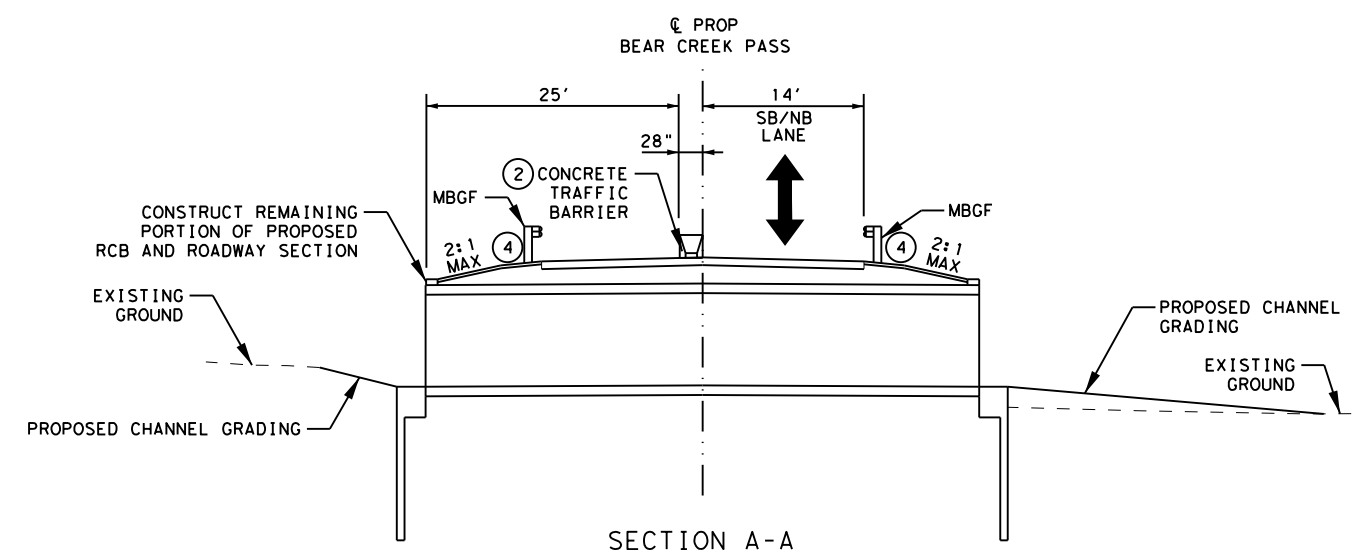
SECTION A-A
PHASE 1-STAGE 1
N. T. S



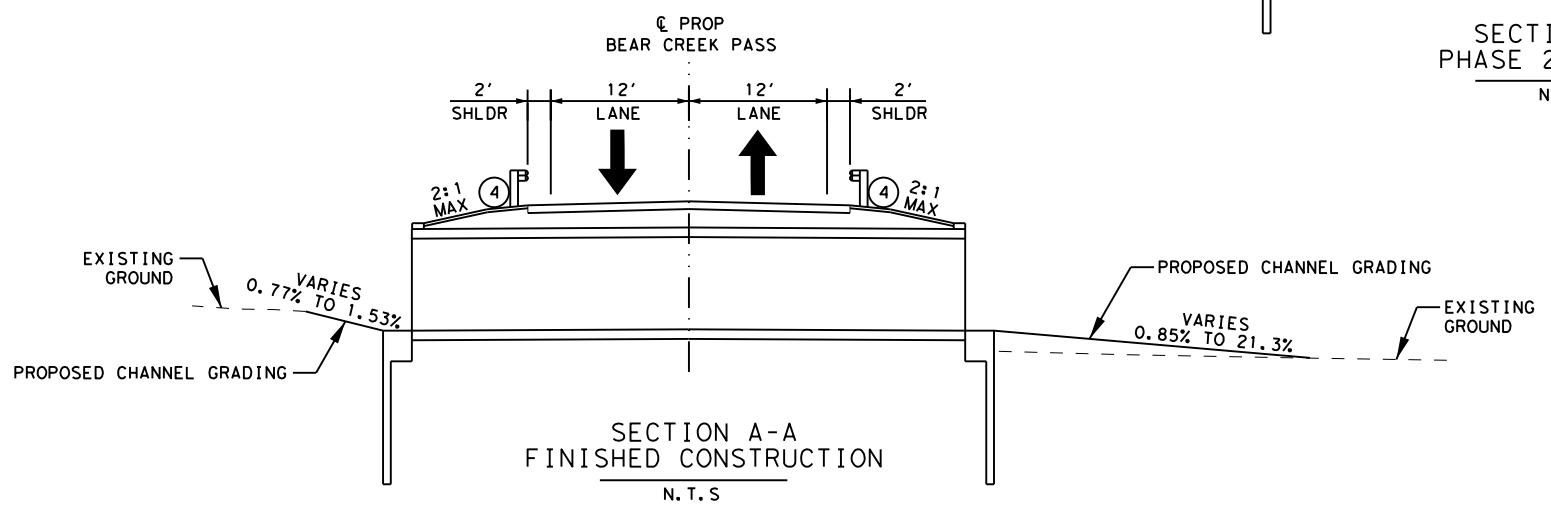
SECTION A-A
PHASE 1-STAGE 2
N. T. S



SECTION A-A
PHASE 2-STAGE 1
N. T. S



SECTION A-A
PHASE 2-STAGE 2
N. T. S



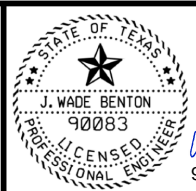
SECTION A-A
FINISHED CONSTRUCTION
N. T. S

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9/15/2023

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BEAR CREEK PASS
AT BEAR CREEK

TRAFFIC CONTROL PLAN
TYPICAL SECTIONS












HAYS COUNTY, TEXAS

SHEET
1 OF 1

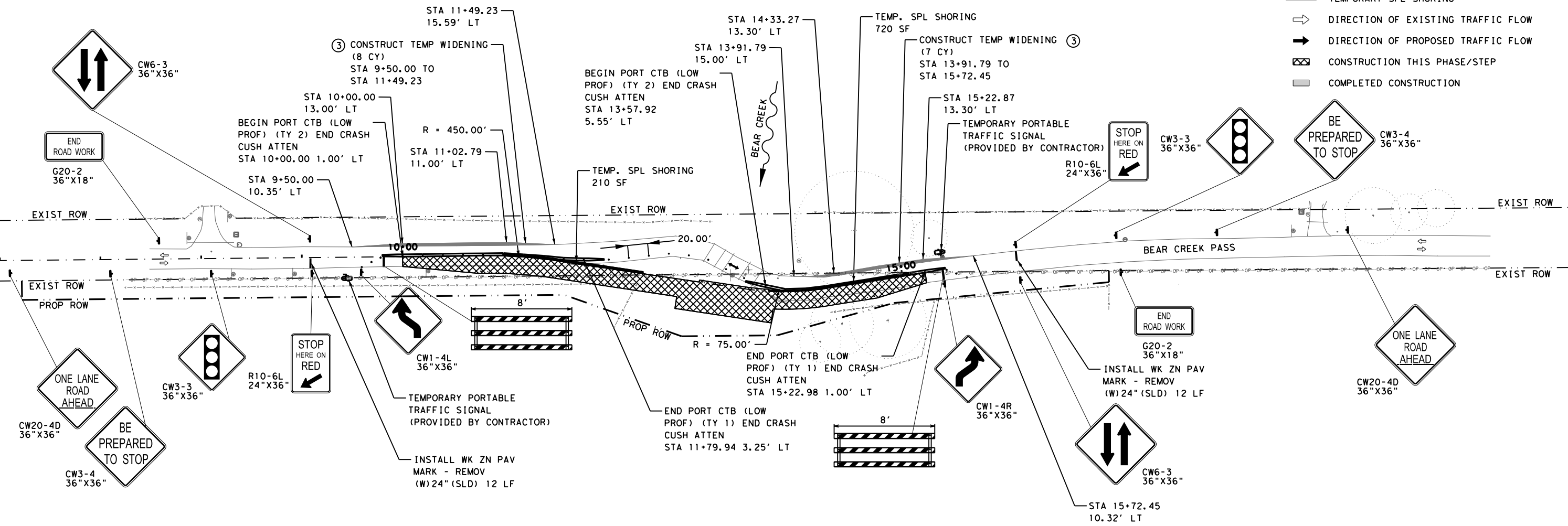
SHEET NO.
9



LEGEND

-  CONSTRUCTION SIGN
-  TYPE III BARRICADE
-  PLASTIC BARRELS
-  TEMPORARY OR PORTABLE TRAFFIC SIGNAL
-  PORTABLE CONCRETE TRAFFIC BARRIER
-  BARRIER END TREATMENT
-  TEMPORARY SPL SHORING
-  DIRECTION OF EXISTING TRAFFIC FLOW
-  DIRECTION OF PROPOSED TRAFFIC FLOW
-  CONSTRUCTION THIS PHASE/STEP
-  COMPLETED CONSTRUCTION

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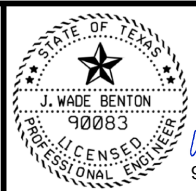
- NOTES:**
1. REFER TO CONSTRUCTION PHASING FOR SEQUENCE OF CONSTRUCTION.
 2. REFER TO THE TRAFFIC CONTROL TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
 3. CONTRACTOR TO PROVIDE BASE MATERIAL AND SURFACE COURSE AS QUANTIFIED TO BE PAID AS SUBSIDIARY TO BID ITEM 502 6001.

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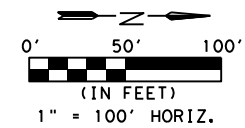
**BEAR CREEK PASS
AT BEAR CREEK**

TRAFFIC CONTROL PLAN PHASE 1

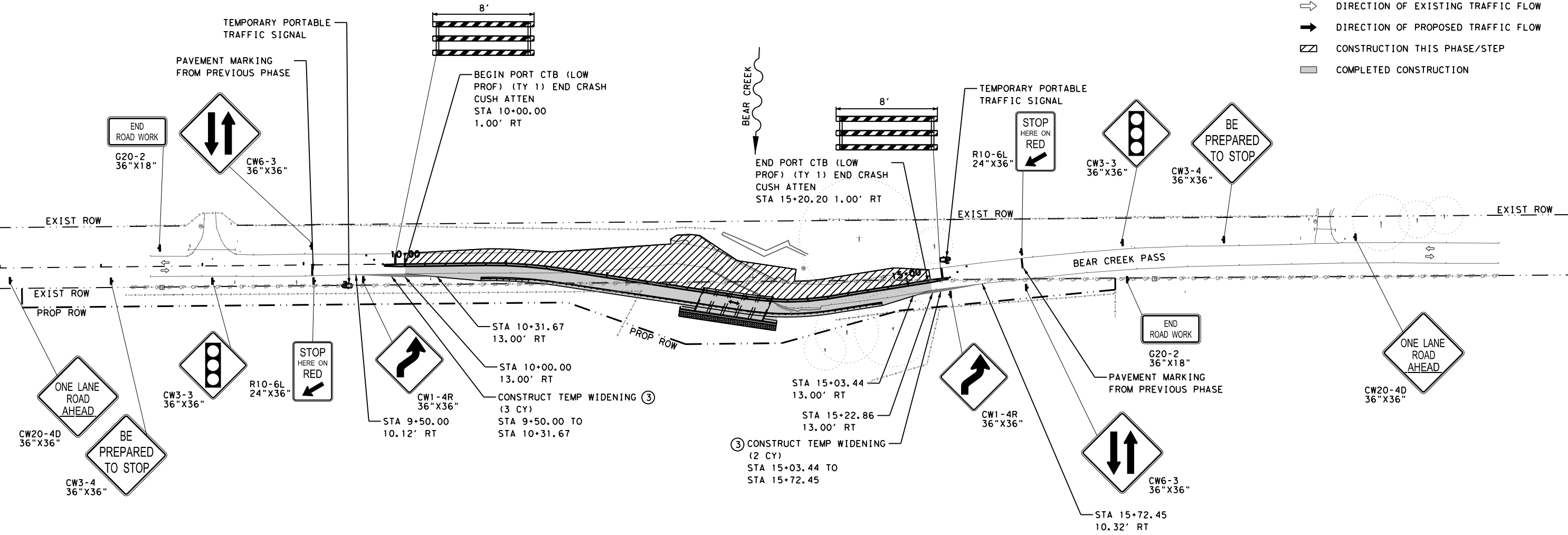
HAYS COUNTY, TEXAS

SHEET
1 OF 1

SHEET NO.
10



- LEGEND**
- CONSTRUCTION SIGN
 - TYPE III BARRICADE
 - PLASTIC BARRELS
 - TEMPORARY OR PORTABLE TRAFFIC SIGNAL
 - PORTABLE CONCRETE TRAFFIC BARRIER
 - BARRIER END TREATMENT
 - TEMPORARY SPL SHORING
 - DIRECTION OF EXISTING TRAFFIC FLOW
 - DIRECTION OF PROPOSED TRAFFIC FLOW
 - CONSTRUCTION THIS PHASE/STEP
 - COMPLETED CONSTRUCTION



- NOTES:**
1. REFER TO CONSTRUCTION PHASING FOR SEQUENCE OF CONSTRUCTION.
 2. REFER TO THE TRAFFIC CONTROL TYPICAL SECTIONS FOR ADDITIONAL INFORMATION.
 3. CONTRACTOR TO PROVIDE BASE MATERIAL AND SURFACE COURSE AS QUANTIFIED TO BE PAID AS SUBSIDIARY TO BID ITEM 502 6001.

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DATE	7/13/2023
SCALE	AS SHOWN



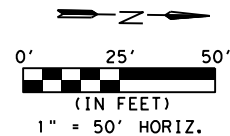
BEAR CREEK PASS
AT BEAR CREEK

TRAFFIC CONTROL PLAN PHASE 2










HAYS COUNTY, TEXAS

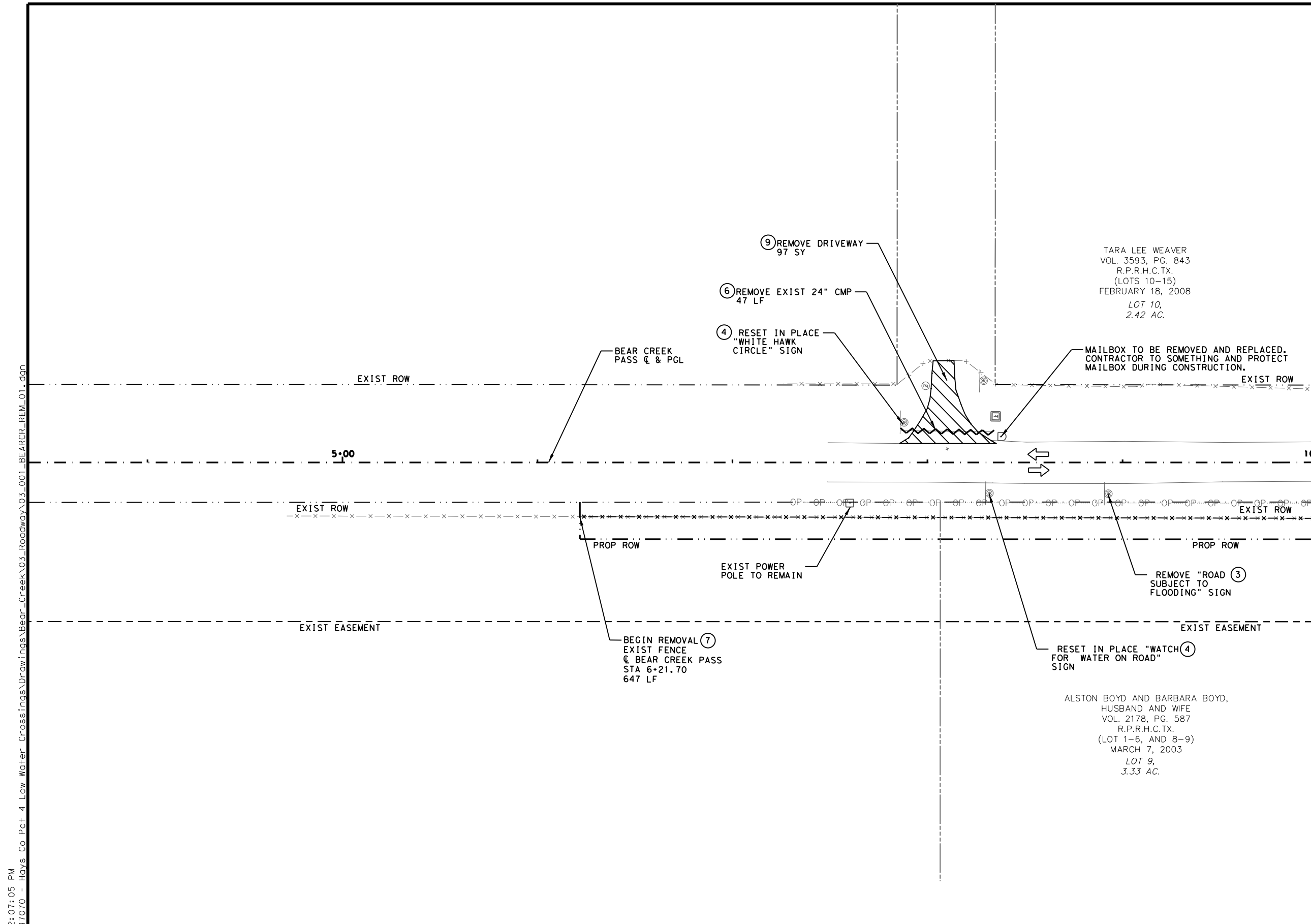
SHEET
1 OF 1

SHEET NO.
11



LEGEND

-  ① REMOVING STAB BASE & ASPH PAV (7"-10")
-  ② REMOVING CONC (RIPRAP)
-  ③ REMOVE SMALL SGN ASSNS
-  ④ RELOCATE SMALL SGN ASSNS
-  ⑤ REMOVE DELIN & OBJECT MARKER ASSMS
-  ⑥ REMOVE STR (PIPE)
-  ⑦ REMOVE STR (SMALL FENCE)
-  ⑧ TREE AND BRUSH REMOVAL
-  ⑨ DRIVEWAY REMOVAL



TARA LEE WEAVER
VOL. 3593, PG. 843
R.P.R.H.C.TX.
(LOTS 10-15)
FEBRUARY 18, 2008
LOT 10,
2.42 AC.

ALSTON BOYD AND BARBARA BOYD,
HUSBAND AND WIFE
VOL. 2178, PG. 587
R.P.R.H.C.TX.
(LOT 1-6, AND 8-9)
MARCH 7, 2003
LOT 9,
3.33 AC.

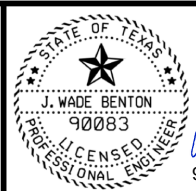
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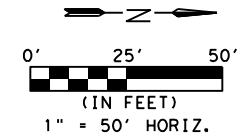


Wade Benton
9/15/2023









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DATE	9/1/2023
SCALE	AS SHOWN



BEAR CREEK PASS AT BEAR CREEK		SHEET 1 OF 2
REMOVAL LAYOUT		SHEET NO. 28
HAYS COUNTY, TEXAS		



LEGEND

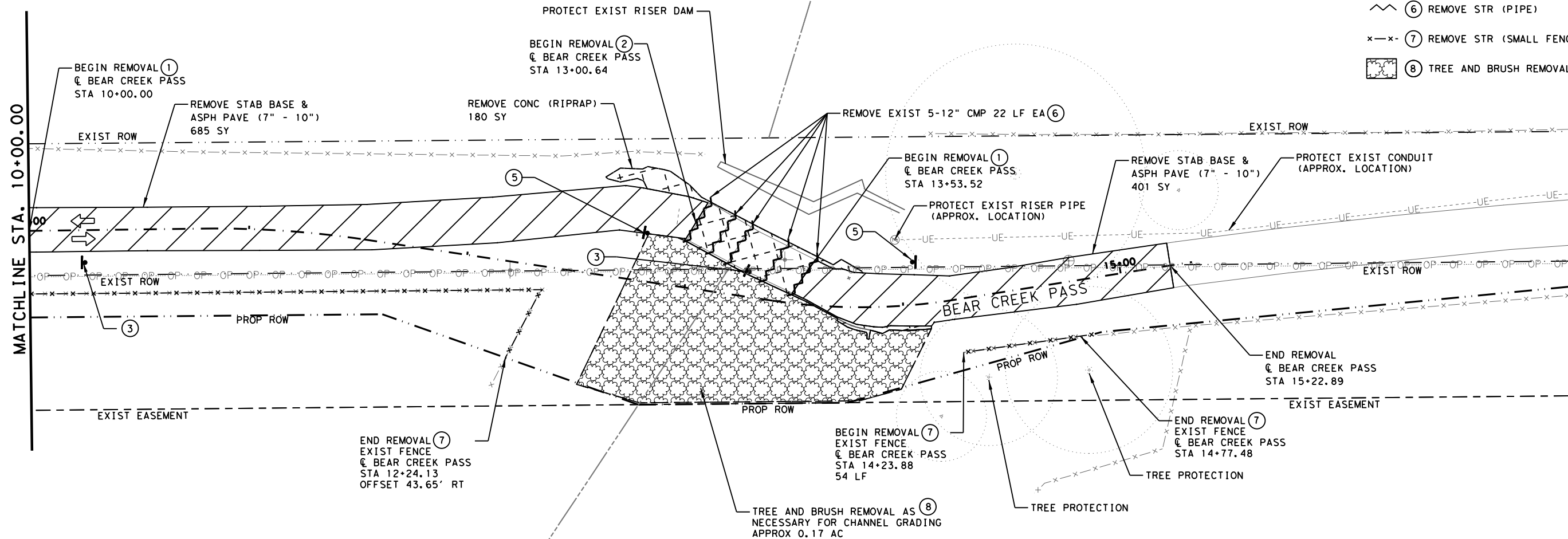
-  ① REMOVING STAB BASE & ASPH PAV (7"-10")
-  ② REMOVING CONC (RIPRAP)
-  ③ REMOVE SMALL SGN ASSNS
-  ④ RELOCATE SMALL SGN ASSNS
-  ⑤ REMOVE DELIN & OBJECT MARKER ASSMS
-  ⑥ REMOVE STR (PIPE)
-  ⑦ REMOVE STR (SMALL FENCE)
-  ⑧ TREE AND BRUSH REMOVAL

TARA LEE WEAVER
VOL. 3593, PG. 843
R.P.R.H.C.TX.
(LOTS 10-15)
FEBRUARY 18, 2008
LOT 10,
2.42 AC.

GEORGE L. HERLIN AND NANCY L. HERLIN,
HUSBAND AND WIFE
VOL. 4672, PG. 682
R.P.R.H.C.TX.
(25.89 AC.)
JUNE 17, 2013

ALSTON BOYD AND BARBARA BOYD,
HUSBAND AND WIFE
VOL. 2178, PG. 587
R.P.R.H.C.TX.
(LOT 1-6, AND 8-9)
MARCH 7, 2003
LOT 9,
3.33 AC.


RALPH DOUGLAS RICE AND JENNIFER LEE SILVA,
HUSBAND AND WIFE
VOL. 1056, PG. 694
R.P.R.H.C.TX.
(5.001 AC.)
FEBRUARY 28, 1994



NOTE: CONTRACTOR TO COORDINATE ENGINEER TO REVIEVE APPROVAL PRIOR TO REMOVAL OF ANY TREES


DATE: 9/1/2023 2:07:07 PM
FILE: \\garver\eng\local\gdata\Projects\2020\20147070 - Hays Co Pct 4 Low Water Crossings\Drawings\Bear-Creek\03-Roadway\03_001-BEARCR-REM-02.dgn

NO.	DATE	REVISION	APPROV.



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F-5713

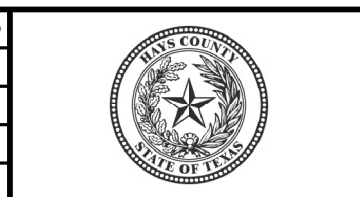
3755 S. Capital of Texas Hwy
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Austin, TX 78704
(512) 485-0009



J. WADE BENTON
90083
LICENSED PROFESSIONAL ENGINEER

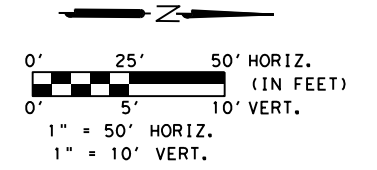
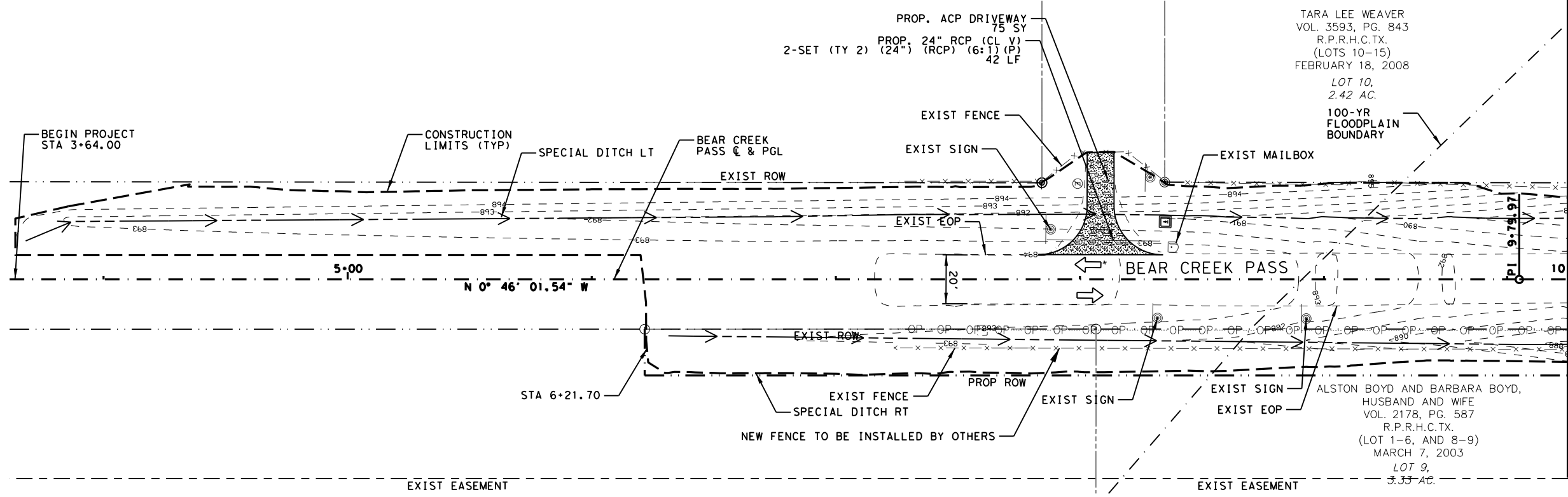
Wade Benton
9/15/2023

PRJ NO.	20147070
DESIGN CHECK	LMF
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DATE	9/1/2023
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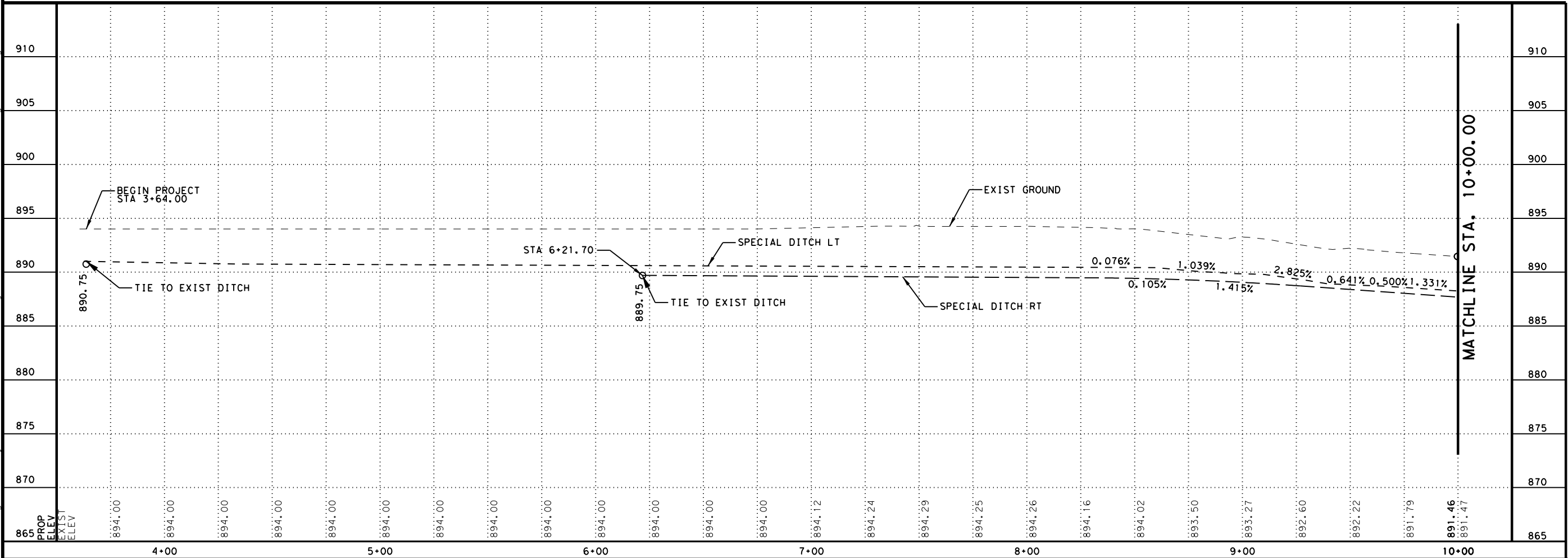
BEAR CREEK PASS AT BEAR CREEK		SHEET 2 OF 2
REMOVAL LAYOUT		SHEET NO. 29
HAYS COUNTY, TEXAS		

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LEGEND

- RIPRAP (STONE COMMON) (DRY) (18IN)
- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIPRAP (MOW STRIP)
- PROPOSED RIPRAP (CONC)
- PROPOSED ASPHALT DRIVEWAY
- EXISTING ROW
- PROPOSED ROW
- CONSTRUCTION LIMITS
- OVERHEAD ELECTRIC
- FLOODPLAIN BOUNDARY
- SPECIAL DITCH
- TRAFFIC FLOW DIRECTION



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90083
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Wade Benton
9/15/2023

PRJ NO. 20147070

DESIGN CHECK	LMF
DRAWN CHECK	
DATE	9/1/2023
SCALE	AS SHOWN

HAYS COUNTY
STATE OF TEXAS

BEAR CREEK PASS
AT BEAR CREEK

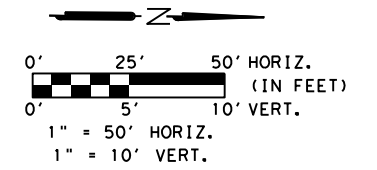
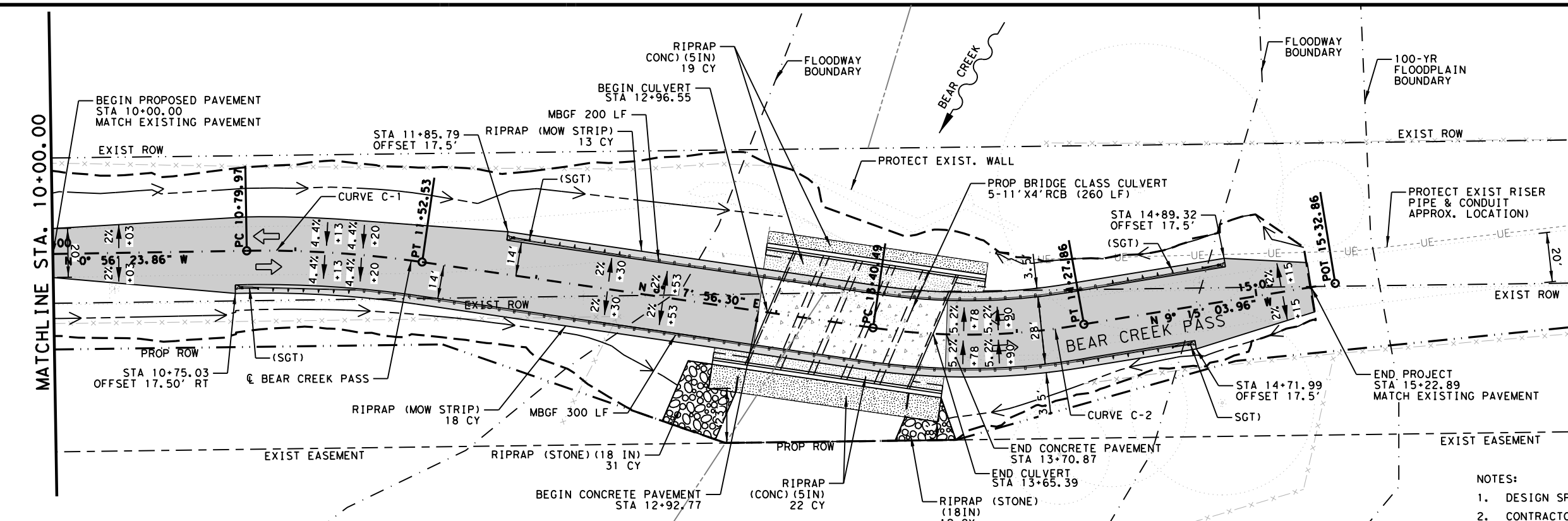
PLAN AND PROFILE

HAYS COUNTY, TEXAS

SHEET
1 OF 2

SHEET NO.
30

DATE: 9/1/2023 2:07:09 PM
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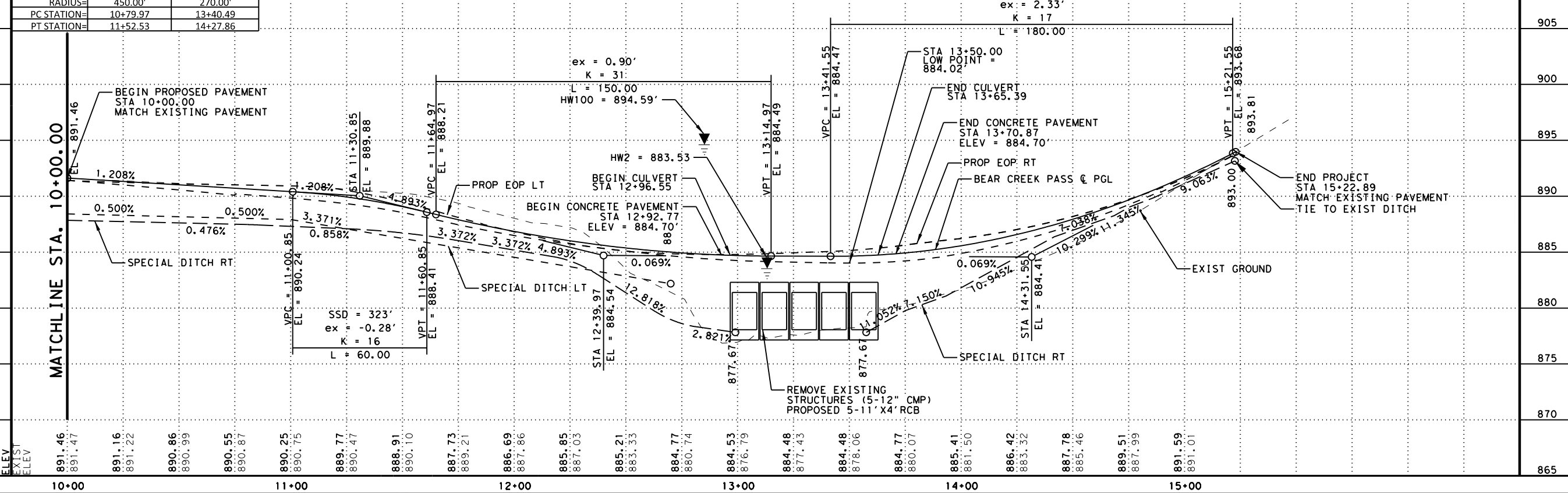


LEGEND

- RIPRAP (STONE COMMON) (DRY) (18IN)
- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED RIPRAP (MOW STRIP)
- PROPOSED RIPRAP (CONC)
- PROPOSED ASPHALT DRIVEWAY
- EXISTING ROW
- PROPOSED ROW
- CONSTRUCTION LIMITS
- OVERHEAD ELECTRIC
- FLOODPLAIN BOUNDARY
- SPECIAL DITCH
- TRAFFIC FLOW DIRECTION

- NOTES:**
- DESIGN SPEED 20 MPH
 - CONTRACTOR TO PROTECT CONDUIT AND RISER PIPE

HORIZONTAL CURVE DATA				SUPER ELEVATION DATA									
CURVE NUMBER	C1	C2	CURVE NO.	PC/PT	STA	R	ROTATION	WIDTH	NORMAL SLOPE	FULL SUPER	TRANSITION LENGTH	START TRANSITION	END TRANSITION
PI STATION=	11+16.36	13+84.59	C1	PC	10+79.97	450	14		-2.00%	4.40%	110	10+03.00	11+13.00
DELTA=	9' 14" 20.15" (RT)	18' 32" 27.16" (LT)		PT	11+52.53	450	14		-2.00%	4.40%	110	11+20.00	12+30.00
TANGENT=	36.36'	44.07'	C2	PC	13+40.49	270	14		-2.00%	5.20%	125	12+53.00	13+78.00
LENGTH=	72.56'	87.37'		PT	14+27.86	270	14		-2.00%	5.20%	125	13+90.00	15+15.00
RADIUS=	450.00'	270.00'											
PC STATION=	10+79.97	13+40.49											
PT STATION=	11+52.53	14+27.86											

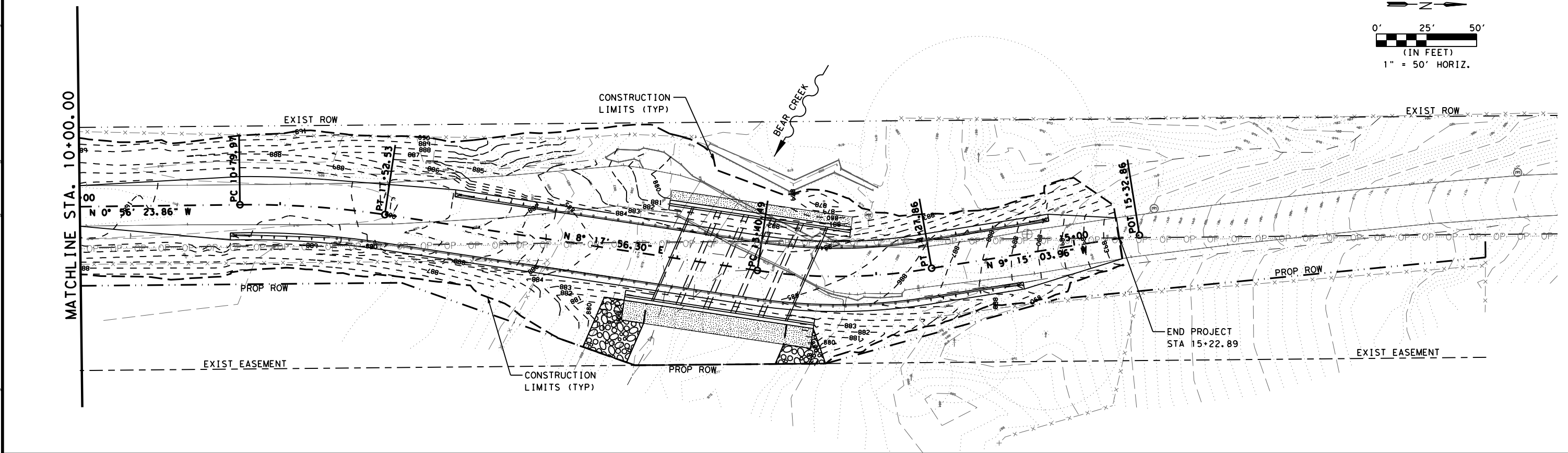
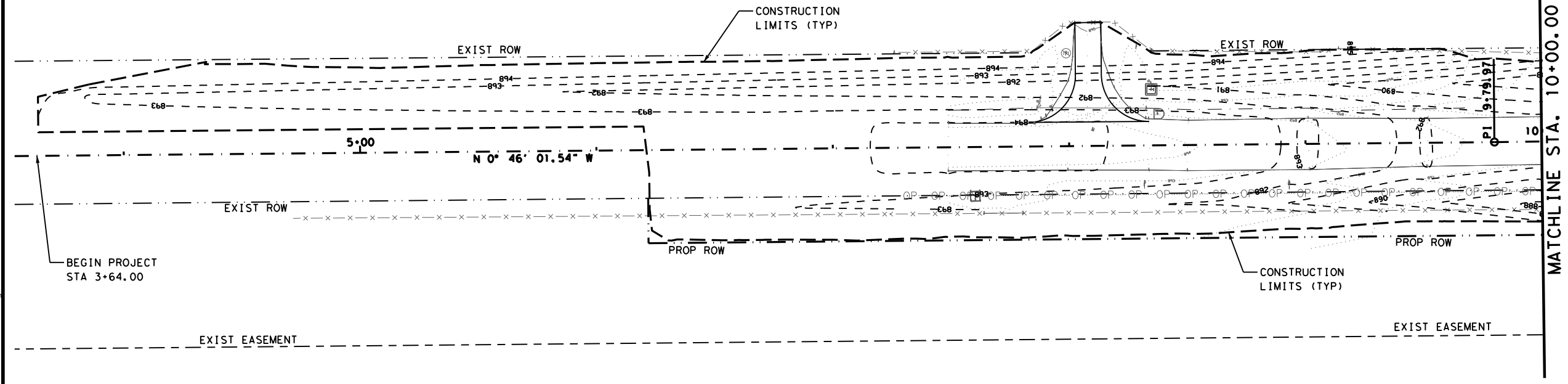


NO.	DATE	REVISION	APPROV.	 TEXAS REGISTRATION NO. F-5713 J. WADE BENTON 90083 LICENSED PROFESSIONAL ENGINEER <i>Wade Benton</i> 9/15/2023	PRJ. NO. 20147070		BEAR CREEK PASS AT BEAR CREEK PLAN AND PROFILE HAYS COUNTY, TEXAS	SHEET 2 OF 2 SHEET NO. 31
					DESIGN CHECK DRAWN CHECK DATE 9/1/2023 SCALE AS SHOWN			

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- LEGEND**
- RIPRAP (STONE COMMON) (DRY) (18IN)
 - PROPOSED RIPRAP (CONC)
 - EXISTING ROW
 - PROPOSED ROW
 - CONSTRUCTION LIMITS
 - PROPOSED MAJOR CONTOUR
 - PROPOSED MINOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - EXISTING MINOR CONTOUR
 - FLOW ARROW



NO.	DATE	REVISION	APPROV.

GARVER

TEXAS
 REGISTRATION NO.
 F-5713

3755 S. Capital of Texas Hwy
 Suite 325
 Austin, TX 78704
 (512) 485-0009

STATE OF TEXAS
 J. WADE BENTON
 90083
 LICENSED PROFESSIONAL ENGINEER

Wade Benton
 9/15/2023

PRJ NO.	20147070
DESIGN CHECK	LMF
DRAWN CHECK	
DATE	9/1/2023
SCALE	AS SHOWN



BEAR CREEK PASS
 AT BEAR CREEK

GRADING LAYOUT

HAYS COUNTY, TEXAS

SHEET
 1 OF 1

SHEET NO.
32

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

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I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

TPDES TXR 150000: Stormwater Discharge Permit or Construction General Permit required for projects with 1 or more acres disturbed soil. Projects with any disturbed soil must protect for erosion and sedimentation in accordance with Item 506.

List MS4 Operator(s) that may receive discharges from this project. They may need to be notified prior to construction activities.

-
- No Action Required Required Action

Action No.

1. Prevent stormwater pollution by controlling erosion and sedimentation in accordance with TPDES Permit TXR 150000
2. Comply with the SW3P and revise when necessary to control pollution or required by the Engineer.
3. Post Construction Site Notice (CSN) with SW3P information on or near the site, accessible to the public and TCEQ, EPA or other inspectors.
4. When Contractor project specific locations (PSL's) increase disturbed soil area to 5 acres or more, submit NOI to TCEQ and the Engineer.

II. WORK IN OR NEAR STREAMS, WATERBODIES AND WETLANDS CLEAN WATER ACT SECTIONS 401 AND 404

USACE Permit required for filling, dredging, excavating or other work in any water bodies, rivers, creeks, streams, wetlands or wet areas.

The Contractor must adhere to all of the terms and conditions associated with the following permit(s):

- No Permit Required
- Nationwide Permit 14 - PCN not Required (less than 1/10th acre waters or wetlands affected)
- Nationwide Permit 14 - PCN Required (1/10 to <1/2 acre, 1/3 in tidal waters)
- Individual 404 Permit Required
- Other Nationwide Permit Required: NWP# _____

Required Actions: List waters of the US permit applies to, location in project and check Best Management Practices planned to control erosion, sedimentation and post-project TSS.

-
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-

The elevation of the ordinary high water marks of any areas requiring work to be performed in the waters of the US requiring the use of a nationwide permit can be found on the Bridge Layouts.

Best Management Practices:

Erosion	Sedimentation	Post-Construction TSS
<input checked="" type="checkbox"/> Temporary Vegetation	<input checked="" type="checkbox"/> Silt Fence	<input checked="" type="checkbox"/> Vegetative Filter Strips
<input checked="" type="checkbox"/> Blankets/Matting	<input checked="" type="checkbox"/> Rock Berm	<input type="checkbox"/> Retention/Irrigation Systems
<input type="checkbox"/> Mulch	<input type="checkbox"/> Triangular Filter Dike	<input type="checkbox"/> Extended Detention Basin
<input type="checkbox"/> Sodding	<input type="checkbox"/> Sand Bag Berm	<input type="checkbox"/> Constructed Wetlands
<input type="checkbox"/> Interceptor Swale	<input type="checkbox"/> Straw Bale Dike	<input type="checkbox"/> Wet Basin
<input type="checkbox"/> Diversion Dike	<input type="checkbox"/> Brush Berms	<input type="checkbox"/> Erosion Control Compost
<input type="checkbox"/> Erosion Control Compost	<input type="checkbox"/> Erosion Control Compost	<input type="checkbox"/> Mulch Filter Berm and Socks
<input type="checkbox"/> Mulch Filter Berm and Socks	<input type="checkbox"/> Mulch Filter Berm and Socks	<input type="checkbox"/> Compost Filter Berm and Socks
<input type="checkbox"/> Compost Filter Berm and Socks	<input type="checkbox"/> Compost Filter Berm and Socks	<input type="checkbox"/> Vegetation Lined Ditches
	<input type="checkbox"/> Stone Outlet Sediment Traps	<input type="checkbox"/> Sand Filter Systems
	<input type="checkbox"/> Sediment Basins	<input type="checkbox"/> Grassy Swales

III. CULTURAL RESOURCES

Refer to TxDOT Standard Specifications in the event historical issues or archeological artifacts are found during construction. Upon discovery of archeological artifacts (bones, burnt rock, flint, pottery, etc.) cease work in the immediate area and contact the Engineer immediately.

- No Action Required Required Action

Action No.

-
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-

IV. VEGETATION RESOURCES

Preserve native vegetation to the extent practical. Contractor must adhere to Construction Specification Requirements Specs 162, 164, 192, 193, 506, 730, 751, 752 in order to comply with requirements for invasive species, beneficial landscaping, and tree/brush removal commitments.

- No Action Required Required Action

Action No.

1. UPON COMPLETION OF THE PROJECT, THE SOIL WILL BE STABILIZED WITH NATIVE GRASS SEEDING.
-
-
-

V. FEDERAL LISTED, PROPOSED THREATENED, ENDANGERED SPECIES, CRITICAL HABITAT, STATE LISTED SPECIES, CANDIDATE SPECIES AND MIGRATORY BIRDS.

- No Action Required Required Action

Action No.

1. **MIGRATORY BIRD NESTS:** Schedule construction activities as needed to meet the following requirements:
 - A. Do not remove or destroy any active migratory bird nests (nests containing eggs and/or flightless birds) at any time of year. If there are any active nests, they shall not be removed until the nests become inactive.
 - B. On/in structures, if there are any active nests, they shall not be removed until all nests become inactive. After inactive nests are removed and/or before nest activity begins, deterrent materials may be applied to the structures to prevent future nest building.
2. See Item 7 in General Notes.
3. If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediate area, and contact the Engineer immediately.

If any of the listed species are observed, cease work in the immediate area, do not disturb species or habitat and contact the Engineer immediately. The work may not remove active nests from bridges and other structures during nesting season of the birds associated with the nests. If caves or sinkholes are discovered, cease work in the immediate area, and contact the Engineer immediately.

LIST OF ABBREVIATIONS

BMP: Best Management Practice	SPCC: Spill Prevention Control and Countermeasure
CGP: Construction General Permit	SW3P: Storm Water Pollution Prevention Plan
DSHS: Texas Department of State Health Services	PCN: Pre-Construction Notification
FHWA: Federal Highway Administration	PSL: Project Specific Location
MOA: Memorandum of Agreement	TCEQ: Texas Commission on Environmental Quality
MOU: Memorandum of Understanding	TPDES: Texas Pollutant Discharge Elimination System
MS4: Municipal Separate Stormwater Sewer System	TPWD: Texas Parks and Wildlife Department
MTA: Migratory Bird Treaty Act	TxDOT: Texas Department of Transportation
NOT: Notice of Termination	T&E: Threatened and Endangered Species
NWP: Nationwide Permit	USACE: U. S. Army Corps of Engineers
NOI: Notice of Intent	USFWS: U. S. Fish and Wildlife Service

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used.

Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labeling as required by the Act.

Maintain an adequate supply of on-site spill response materials, as indicated in the MSDS. In the event of a spill, take actions to mitigate the spill as indicated in the MSDS, in accordance with safe work practices, and contact the District Spill Coordinator immediately. The Contractor shall be responsible for the proper containment and cleanup of all product spills.

Contact the Engineer if any of the following are detected:

- Dead or distressed vegetation (not identified as normal)
- Trash piles, drums, canister, barrels, etc.
- Undesirable smells or odors
- Evidence of leaching or seepage of substances

Does the project involve any bridge class structure rehabilitation or replacements (bridge class structures not including box culverts)?

- Yes No

If "No", then no further action is required.

If "Yes", then TxDOT is responsible for completing asbestos assessment/inspection.

Are the results of the asbestos inspection positive (is asbestos present)?

- Yes No

If "Yes", then TxDOT must retain a DSHS licensed asbestos consultant to assist with the notification, develop abatement/mitigation procedures, and perform management activities as necessary. The notification form to DSHS must be postmarked at least 15 working days prior to scheduled demolition.

If "No", then TxDOT is still required to notify DSHS 15 working days prior to any scheduled demolition.

In either case, the Contractor is responsible for providing the date(s) for abatement activities and/or demolition with careful coordination between the Engineer and asbestos consultant in order to minimize construction delays and subsequent claims.

Any other evidence indicating possible hazardous materials or contamination discovered on site. Hazardous Materials or Contamination Issues Specific to this Project:

- No Action Required Required Action

Action No.

-
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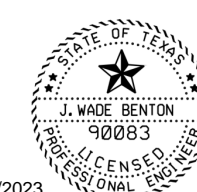
VII. OTHER ENVIRONMENTAL ISSUES

(includes regional issues such as Edwards Aquifer District, etc.)

- No Action Required Required Action

Action No.

1. Project is located on the TCEQ Edwards Aquifer. See notes 1-6 in the Contributing Zone Plan for Bear Creek.
-
-



Wade Benton

BEAR CREEK AT BEAR CREEK PASS

		Design Division Standard			
ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS EPIC					
FILE: epic.dgn	DN: TxDOT	CK: RG	DW: VP	CK: AR	
© TxDOT - February 2015		CONT	SECT	JOB	HIGHWAY
12-12-2011 (DS)		REVISIONS			
05-07-14 ADDED NOTE SECTION IV.					
01-23-2015 SECTION I CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.		DIST		COUNTY	SHEET NO.
		HAYS		64	

DATE: 9/1/2023 2:07:51 PM
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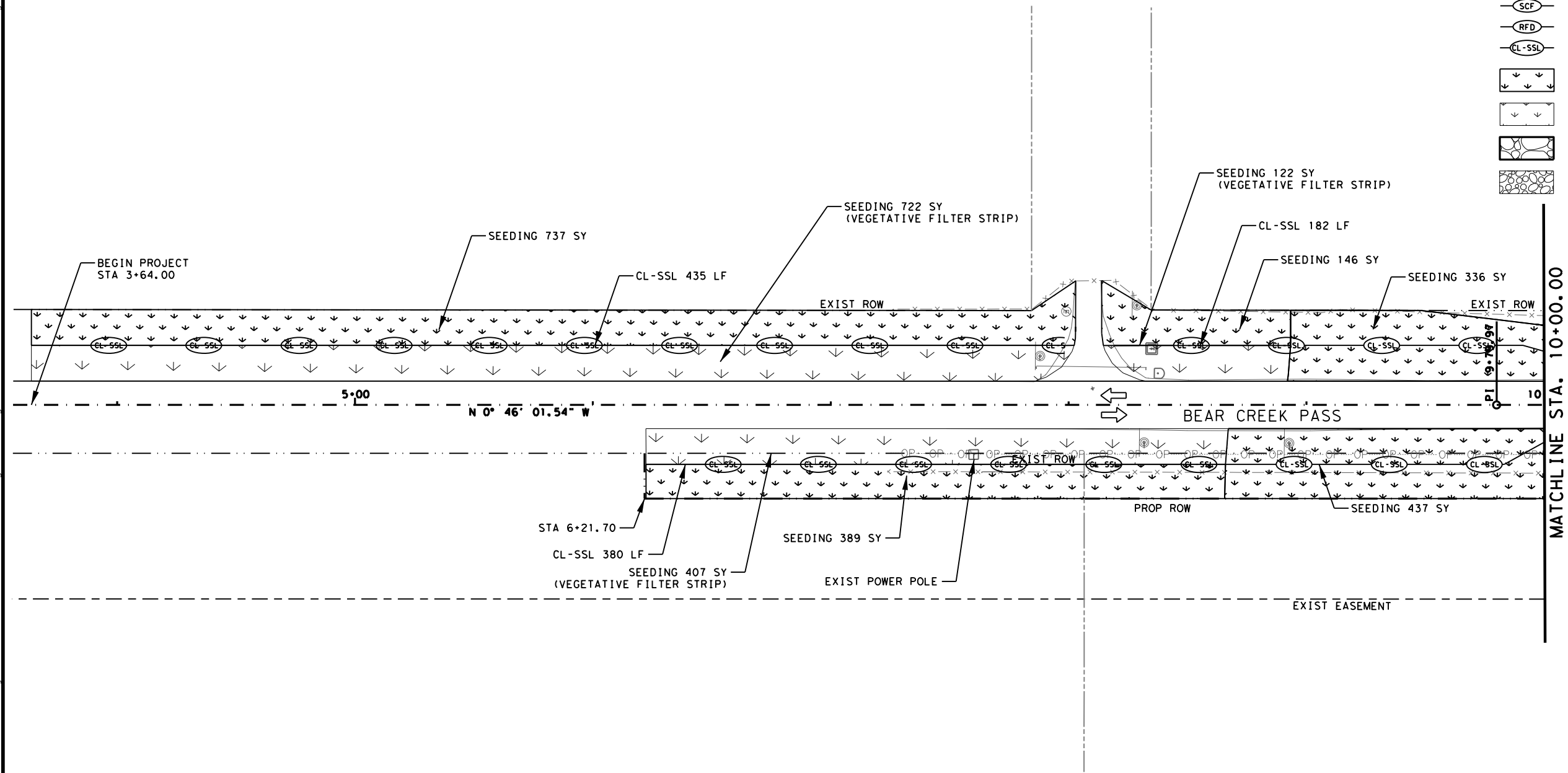
NOTES:

1. TREES WITHIN PROPOSED ROW TO BE REMOVED UNLESS OTHERWISE INDICATED



LEGEND

- TEMPORARY SEDIMENT CONTROL FENCE
- ROCK FILTER DAM
- BIODEGRADABLE EROSION CONTROL LOG (STAKE AND LASHING ANCHORING)
- TEMPORARY SEEDING AND SOIL RETENTION BLANKET
- VEGETATIVE FILTER STRIPS
- RIPRAP (STONE PROTECTION)
- STABILIZED CONSTRUCTION EXIT



NO.	DATE	REVISION	APPROV.



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BEAR CREEK PASS
 AT BEAR CREEK

SW3P LAYOUT

HAYS COUNTY, TEXAS

SHEET
 1 OF 2

SHEET NO.
65

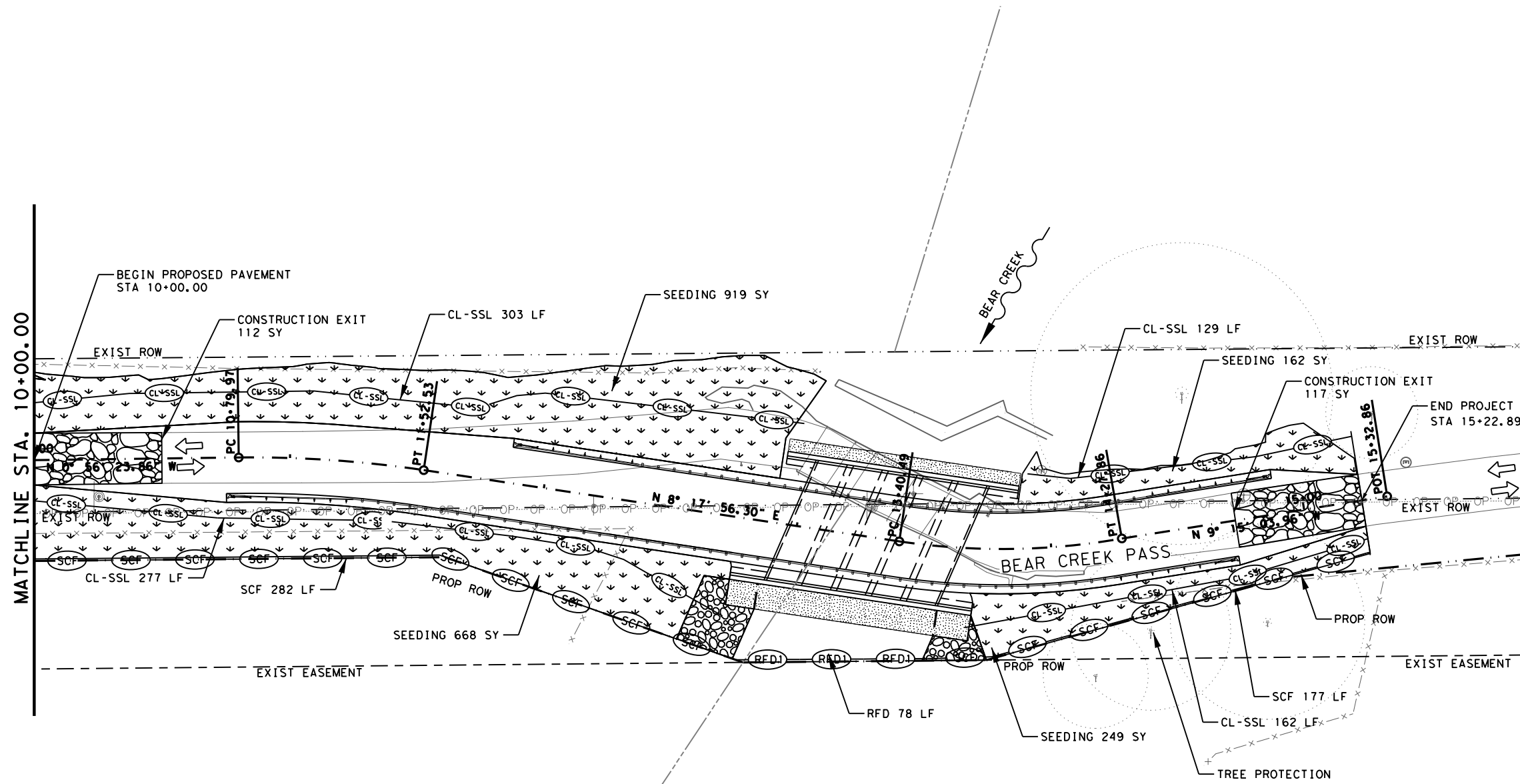


LEGEND

- TEMPORARY SEDIMENT CONTROL FENCE
- ROCK FILTER DAM
- BIODEGRADABLE EROSION CONTROL LOG (STAKE AND LASHING ANCHORING)
- TEMPORARY SEEDING AND SOIL RETENTION BLANKET
- VEGETATIVE FILTER STRIPS
- RIPRAP (STONE PROTECTION)
- STABILIZED CONSTRUCTION EXIT

NOTES:

1. TREES WITHIN PROPOSED ROW TO BE REMOVED UNLESS OTHERWISE INDICATED



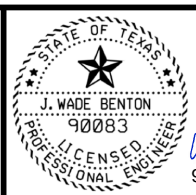
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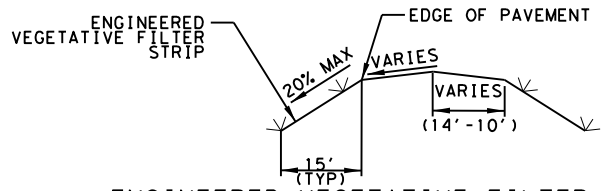
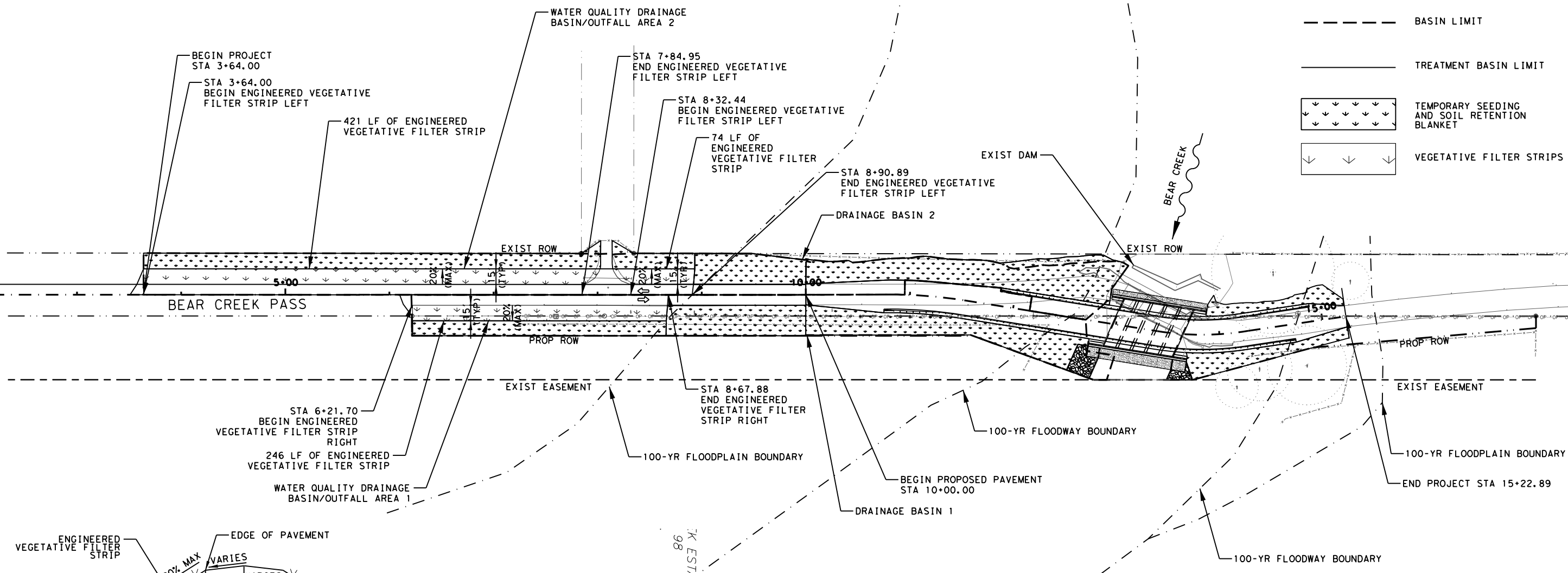


BEAR CREEK PASS AT BEAR CREEK	SHEET 2 OF 2
SW3P LAYOUT	SHEET NO. 66
HAYS COUNTY, TEXAS	



LEGEND

- FLOODPLAIN
- BASIN LIMIT
- TREATMENT BASIN LIMIT
- Temporary Seeding and Soil Retention Blanket (represented by a grid of arrows)
- Vegetative Filter Strips (represented by a row of arrows)



ENGINEERED VEGETATIVE FILTER STRIP TYPICAL SECTION NTS

SUMMARY OF ON-SITE TCEQ WATER QUALITY CALCULATIONS	
County =	Hays
Total project area included in plan =	2.07 acres
Predevelopment impervious area within the limits of the plan =	0.51 acres
Total post-development impervious area within the limits of the plan =	0.69 acres
Total post-development impervious cover fraction =	0.33
LR TOTAL PROJECT =	162 lbs.
LR BASIN 1 =	58 lbs.
LR BASIN 2 =	122 lbs.
LR TOTAL =	180 lbs.

NOTES:

- PROJECT IS LOCATED ON THE TCEQ EDWARDS AQUIFER. THE CONTRACTOR SHALL COMPLY WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) APPROVED CONTRIBUTING ZONE PLAN (CZP) AND CONDITIONS IN THE TCEQ AUTHORIZATION LETTER FOR THIS PROJECT. A COPY OF THE PROJECT CZP AND TCEQ APPROVAL LETTERS SHALL BE MAINTAINED ON SITE. NO REGULATED ACTIVITIES SHALL BEGIN UNTIL APPROVAL OF THE CZP HAS BEEN RECEIVED FROM THE TCEQ.
 - * STATE EMERGENCY RESPONSE CENTER 800-832-8224
 - * TCEQ REGIONAL OFFICE 512-339-2929
 - * NATIONAL RESPONSE CENTER AT 800-424-8802
 - * HAYS TRINITY GCD 512-858-9253
 - * EDWARDS AQUIFER AUTHORITY AT 210-222-2204.
- HAZARDOUS SUBSTANCES (E.G., FUEL, OIL, ASPHALT EMULSION, CONCRETE CURING COMPOUNDS) SHALL NOT BE STORED ON THE STATE ROW OR EASEMENTS.
- INTENTIONAL DISCHARGES OF SEDIMENT LADEN STORM WATER DURING CONSTRUCTION ARE NOT ALLOWED.
- IF ANY SENSITIVE FEATURE (E.G., CAVE, SINKHOLE, WELL) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY AND NOTIFY THE ENGINEER. CONSTRUCTION NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE FEATURE HAS BEEN EVALUATED AND APPROVAL TO CONTINUE CONSTRUCTION HAS BEEN RECEIVED.
- TEMPORARY BEST MANAGEMENT PRACTICES (BMP'S) WILL BE INSTALLED AS NECESSARY TO MANAGE DISCHARGES DUE TO DEWATERING OF DRILL SHAFTS. THE TYPE AND LOCATION OF THE BMP'S WILL BE AT THE DISCRETION OF THE ENGINEER.
- SLOPE OF ENGINEERED VEGETATIVE FILTER STRIP SHALL NOT EXCEED 20%.
- ENGINEERED VEGETATIVE FILTER STRIP MUST BE A MINIMUM OF 15' WIDE.
- ALL TOPSOIL SHALL COMPLY WITH TXDOT STANDARD SPECIFICATION ITEM 160 TOPSOIL
- ALL SEEDING SHALL COMPLY WITH TXDOT STANDARD SPECIFICATION ITEM 164 SEEDING FOR EROSION CONTROL
- TOPSOIL AND GRASS TO BE INSTALLED LEVEL WITH OR BELOW THE EDGE OF PAVEMENT ELEVATION TO ENSURE SHEET FLOW CONDITIONS ACROSS VEGETATIVE FILTER STRIP

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3755 S. Capital of Texas Hwy
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Austin, TX 78704
(512) 485-0009

TEXAS REGISTRATION NO. F-5713

J. WADE BENTON
90083
PROFESSIONAL ENGINEER
Wade Benton
9/15/2023

PRJ NO.	20T47070
DESIGN CHECK	LMF
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DATE	9/1/2023
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BEAR CREEK PASS AT BEAR CREEK

CONTRIBUTING ZONE PLAN

HAYS COUNTY, TEXAS

SHEET 1 OF 1
SHEET NO. 67

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

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

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

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

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

County =	Hays	
Total project area included in plan =	2.03	acres
Predevelopment impervious area within the limits of the plan =	0.51	acres
Total post-development impervious area within the limits of the plan =	0.69	acres
Total post-development impervious cover fraction =	0.34	
P =	33	inches

$L_{M \text{ TOTAL PROJECT}} = 162$ lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 2

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

Drainage Basin/Outfall Area No. =	2	
Total drainage basin/outfall area =	0.74	acres
Predevelopment impervious area within drainage basin/outfall area =	0.20	acres
Post-development impervious area within drainage basin/outfall area =	0.20	acres
Post-development impervious fraction within drainage basin/outfall area =	0.27	
$L_{M \text{ THIS BASIN}}$ =	0	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 percent

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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

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

A_C =	0.31	acres
A_i =	0.12	acres
A_p =	0.18	acres
L_R =	122	lbs

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

Desired $L_{M \text{ THIS BASIN}}$ = 119 lbs.

$F = 0.97$

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

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

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

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

County =	Hays	
Total project area included in plan =	2.07	acres
Predevelopment impervious area within the limits of the plan =	0.51	acres
Total post-development impervious area within the limits of the plan =	0.69	acres
Total post-development impervious cover fraction =	0.33	
P =	33	inches

$L_{M \text{ TOTAL PROJECT}} = 162$ lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 2

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

Drainage Basin/Outfall Area No. =	1	
Total drainage basin/outfall area =	0.69	acres
Predevelopment impervious area within drainage basin/outfall area =	0.15	acres
Post-development impervious area within drainage basin/outfall area =	0.24	acres
Post-development impervious fraction within drainage basin/outfall area =	0.35	
$L_{M \text{ THIS BASIN}}$ =	81	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 percent

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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$

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

A_C =	0.14	acres
A_i =	0.06	acres
A_p =	0.09	acres
L_R =	58	lbs

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


Desired $L_{M \text{ THIS BASIN}}$ = 69 lbs.

$F = 1.19$

SUMMARY OF ON-SITE TCEQ WATER QUALITY CALCULATIONS	
County =	Hays
Total project area included in plan =	2.07 acres
Predevelopment impervious area within the limit of the plan =	0.51 acres
Total post-development impervious area within the limits of the plan =	0.69 acres
Total post-development impervious cover fraction =	0.33
$L_{M \text{ TOTAL PROJECT}}$ =	162 lbs.
$L_R \text{ BASIN 1}$ =	58 lbs
$L_R \text{ BASIN 2}$ =	122
$L_R \text{ TOTAL}$ =	180 lbs

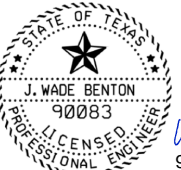
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90083
LICENSED PROFESSIONAL ENGINEER
Wade Benton
9/15/2023

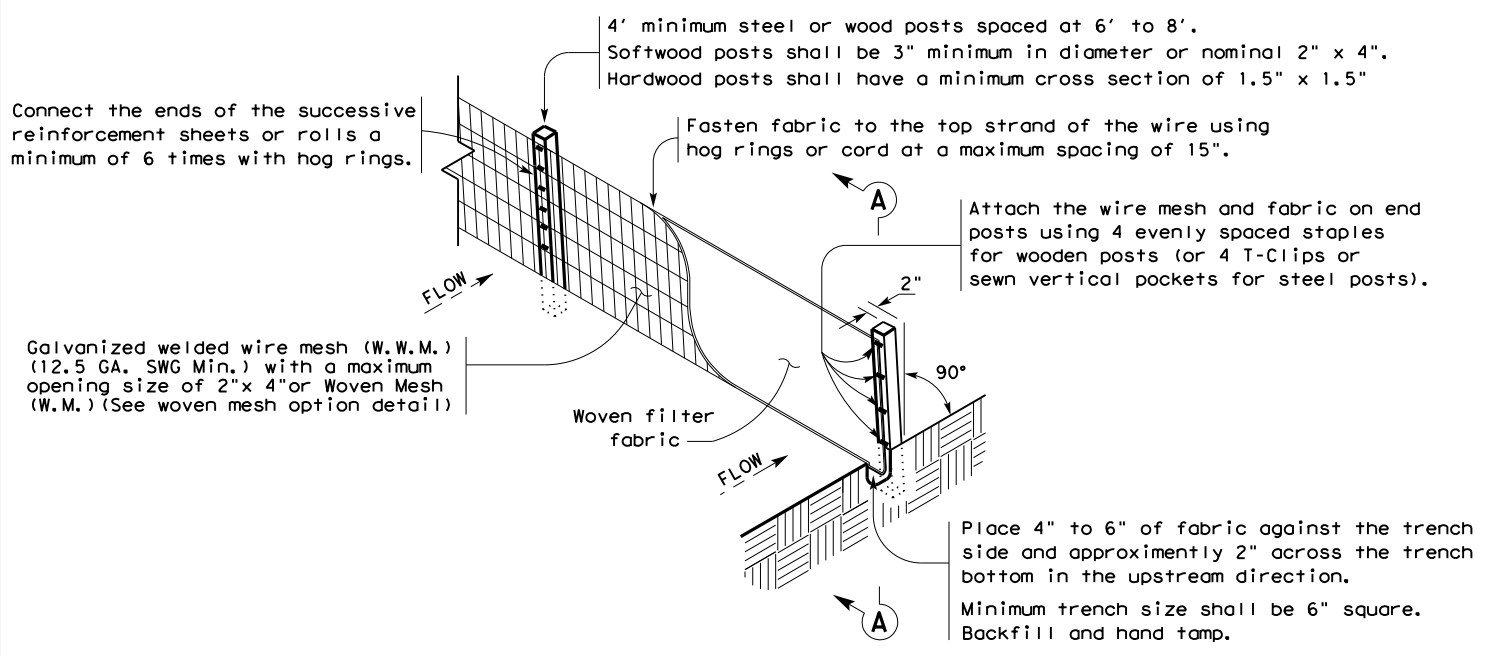
PRJ NO. 20T47070
DESIGN CHECK LMF
DRAWN CHECK
DATE 8/16/2023
SCALE AS SHOWN



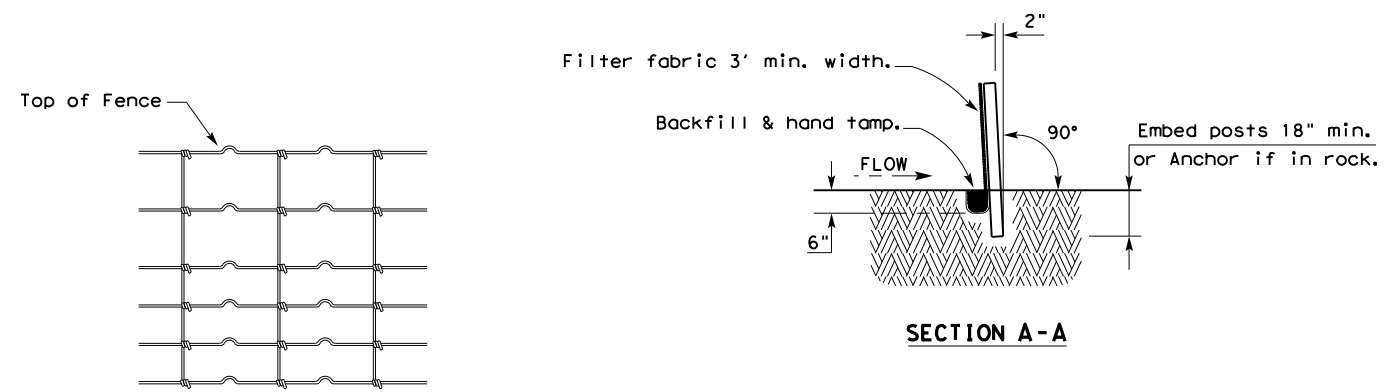
BEAR CREEK PASS AT BEAR CREEK
CONTRIBUTING ZONE PLAN CALCULATIONS
HAYS COUNTY, TEXAS

SHEET 1 OF 1
SHEET NO. 68

7/13/2023
 L:\2020\20147070 - Hays Co Pct 4 Low Water Crossings\Drawings\Bearing_Creek\07_Environmental\Standards\ec116.dgn
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TEMPORARY SEDIMENT CONTROL FENCE



HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

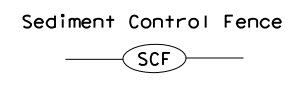
Galvanized hinge joint knot woven mesh (12.5 GA. SWG Min.) requires a minimum of five horizontal wires spaced at a maximum of 12 inches apart and all vertical wires spaced at a maximum of 12 inches apart.

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

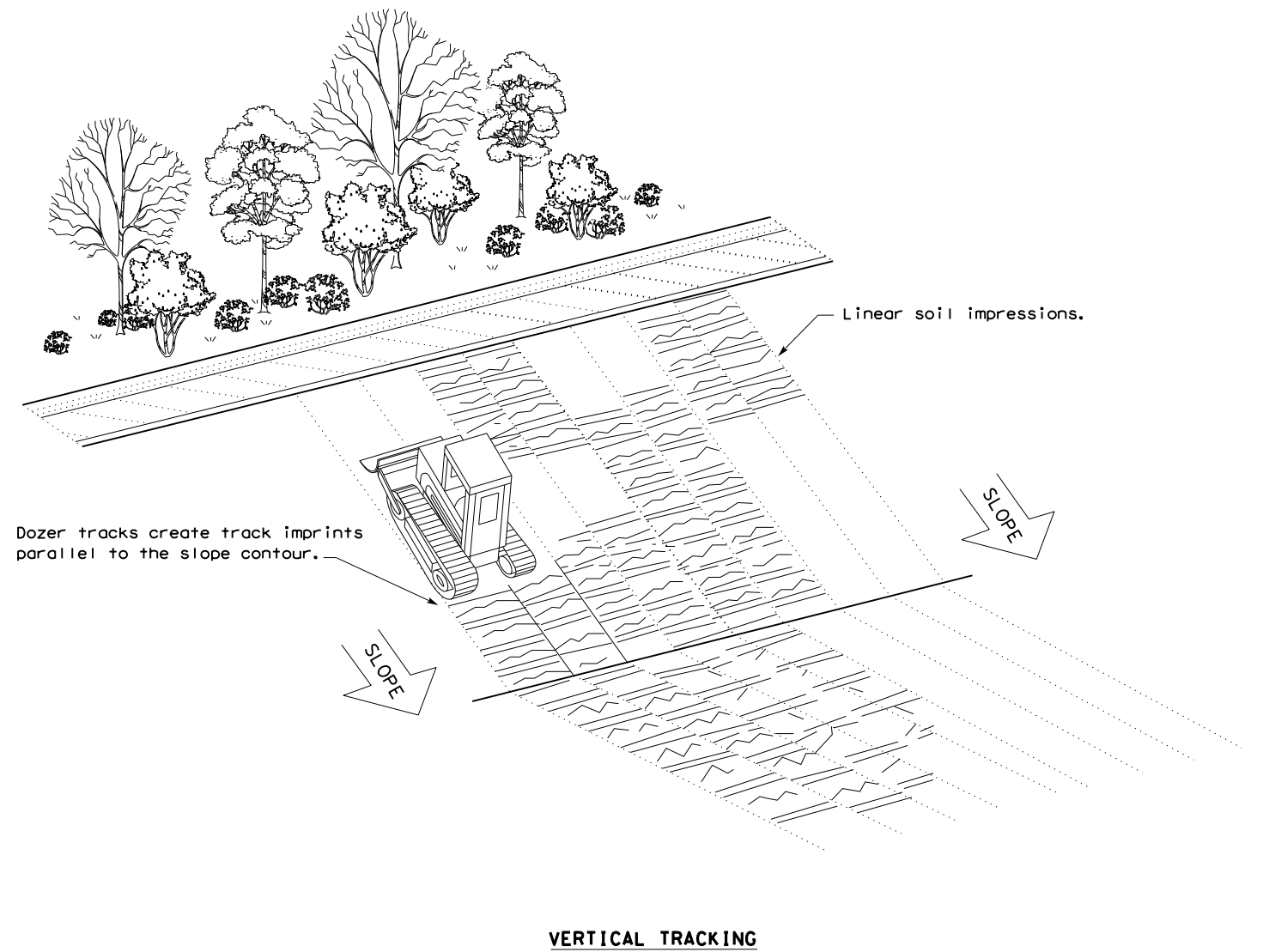
Sediment control fence should be sized to filter a maximum flow through rate of 100 GPM/FT². Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

LEGEND



GENERAL NOTES

1. Vertical tracking is required on projects where soil distributing activities have occurred unless otherwise approved.
2. Perform vertical tracking on slopes to temporarily stabilize soil.
3. Provide equipment with a track undercarriage capable of producing linear soil impressions measuring a minimum of 12" in length by 2" to 4" in width by 1/2" to 2" in depth.
4. Do not exceed 12" between track impressions.
5. Install continuous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.

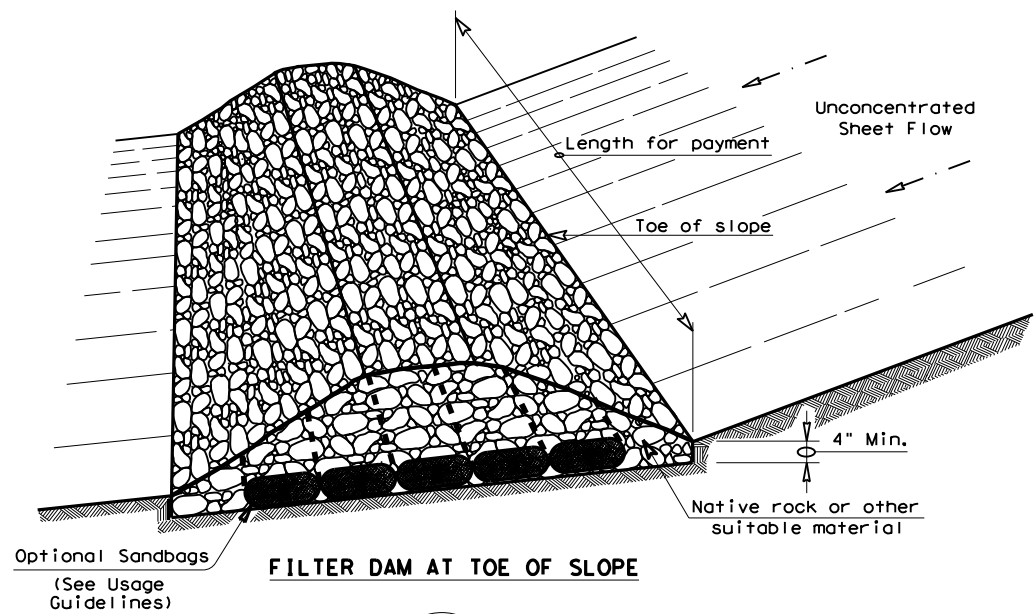


**TEMPORARY EROSION,
 SEDIMENT AND WATER
 POLLUTION CONTROL MEASURES
 FENCE & VERTICAL TRACKING
 EC(1) - 16**

FILE: ec116	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS				
DIST	COUNTY			SHEET NO.
	HAYS			75

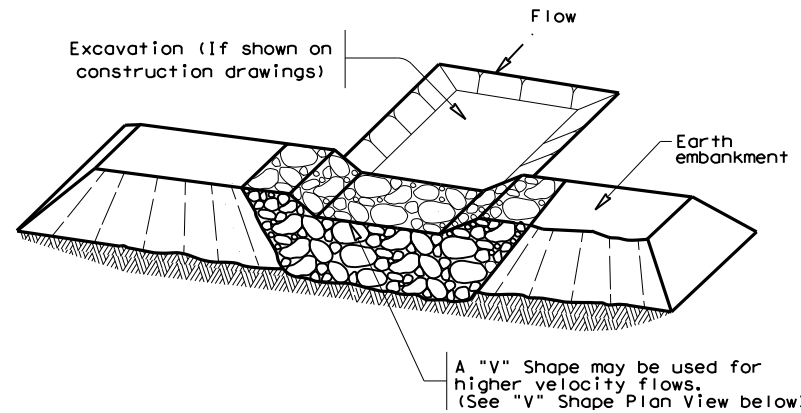
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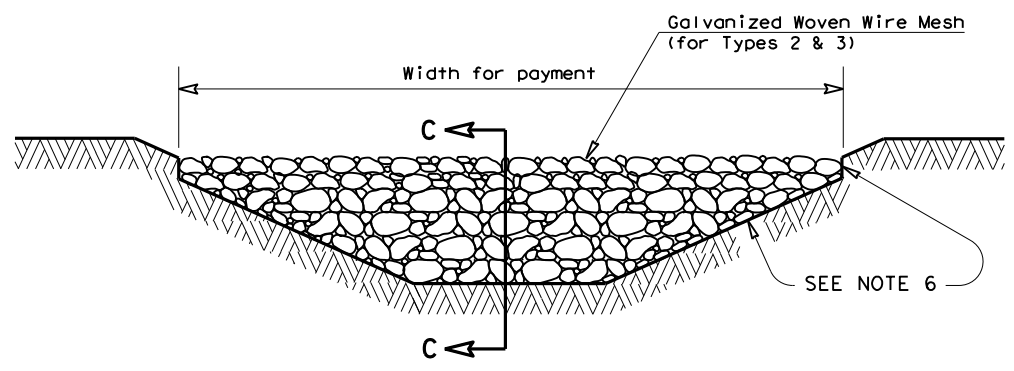
FILTER DAM AT TOE OF SLOPE

(RFD1)



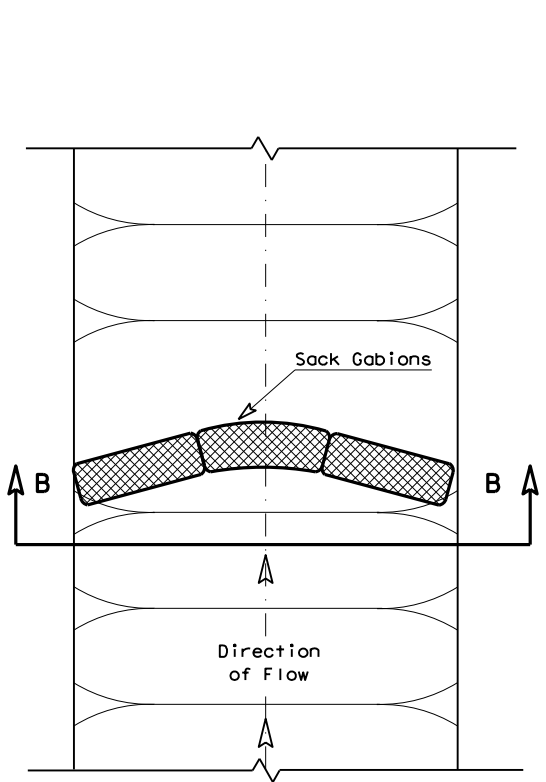
FILTER DAM AT SEDIMENT TRAP

(RFD1) OR (RFD2)

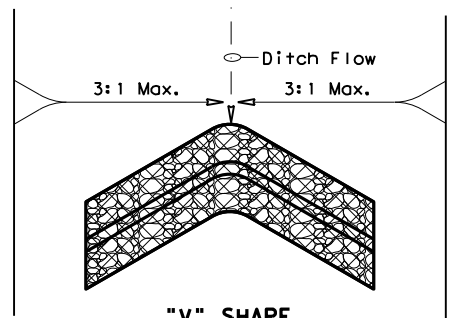


FILTER DAM AT CHANNEL SECTIONS

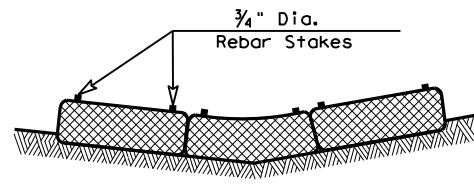
(RFD1) OR (RFD2) OR (RFD3)



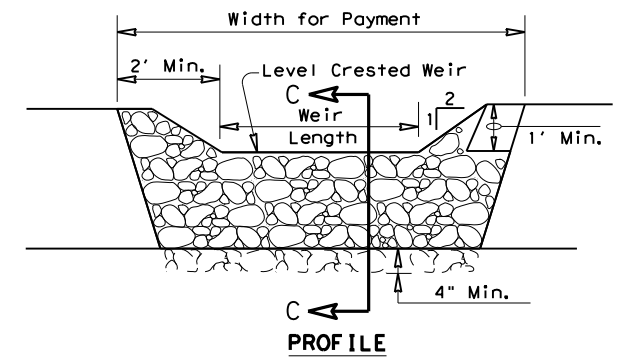
PLAN VIEW



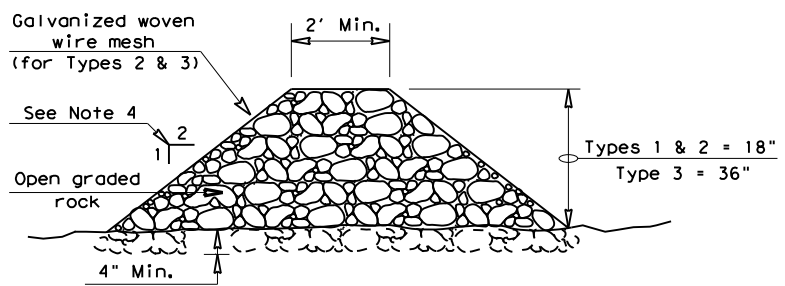
"V" SHAPE PLAN VIEW



SECTION B-B



PROFILE



SECTION C-C

ROCK FILTER DAM USAGE GUIDELINES

Rock Filter Dams should be constructed downstream from disturbed areas to intercept sediment from overland runoff and/or concentrated flow. The dams should be sized to filter a maximum flow through rate of 60 GPM/FT² of cross sectional area. A 2 year storm frequency may be used to calculate the flow rate.

Type 1 (18" high with no wire mesh) (3" to 6" aggregate): Type 1 may be used at the toe of slopes, around inlets, in small ditches, and at dike or swale outlets. This type of dam is recommended to control erosion from a drainage area of 5 acres or less. Type 1 may not be used in concentrated high velocity flows (approximately 8 Ft/Sec or more) in which aggregate wash out may occur. Sandbags may be used at the embedded foundation (4" deep min.) for better filtering efficiency of low flows if called for on the plans or directed by the Engineer.

Type 2 (18" high with wire mesh) (3" to 6" aggregate): Type 2 may be used in ditches and at dike or swale outlets.

Type 3 (36" high with wire mesh) (4" to 8" aggregate): Type 3 may be used in stream flow and should be secured to the stream bed.

Type 4 (Sack gabions) (3" to 6" aggregate): Type 4 May be used in ditches and smaller channels to form an erosion control dam.

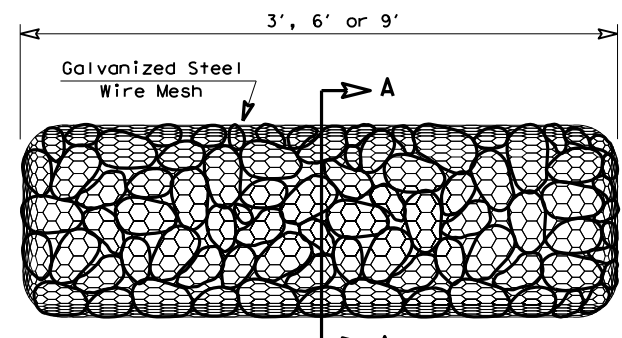
Type 5: Provide rock filter dams as shown on plans.

GENERAL NOTES

1. If shown on the plans or directed by the Engineer, filter dams should be placed near the toe of slopes where erosion is anticipated, upstream and/or downstream at drainage structures, and in roadway ditches and channels to collect sediment.
2. Materials (aggregate, wire mesh, sandbags, etc.) shall be as indicated by the specification for "Rock Filter Dams for Erosion and Sedimentation Control".
3. The rock filter dam dimensions shall be as indicated on the SW3P plans.
4. Side slopes should be 2:1 or flatter. Dams within the safety zone shall have sideslopes of 6:1 or flatter.
5. Maintain a minimum of 1' between top of rock filter dam weir and top of embankment for filter dams at sediment traps.
6. Filter dams should be embedded a minimum of 4" into existing ground.
7. The sediment trap for ponding of sediment laden runoff shall be of the dimensions shown on the plans.
8. Rock filter dam types 2 & 3 shall be secured with 20 gauge galvanized woven wire mesh with 1" diameter hexagonal openings. The aggregate shall be placed on the mesh to the height & slopes specified. The mesh shall be folded at the upstream side over the aggregate and tightly secured to itself on the downstream side using wire ties or hog rings. For in stream use, the mesh should be secured or staked to the stream bed prior to aggregate placement.
9. Sack Gabions should be staked down with 3/4" dia. rebar stakes, and have a double-twisted hexagonal weave with a nominal mesh opening of 2 1/2" x 3 1/4"
10. Flow outlet should be onto a stabilized area (vegetation, rock, etc.).
11. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

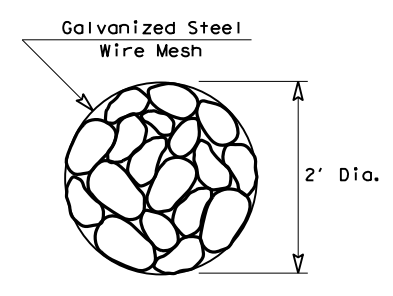
PLAN SHEET LEGEND

- Type 1 Rock Filter Dam (RFD1)
- Type 2 Rock Filter Dam (RFD2)
- Type 3 Rock Filter Dam (RFD3)
- Type 4 Rock Filter Dam (RFD4)



TYPE 4 (SACK GABIONS)

(RFD4)

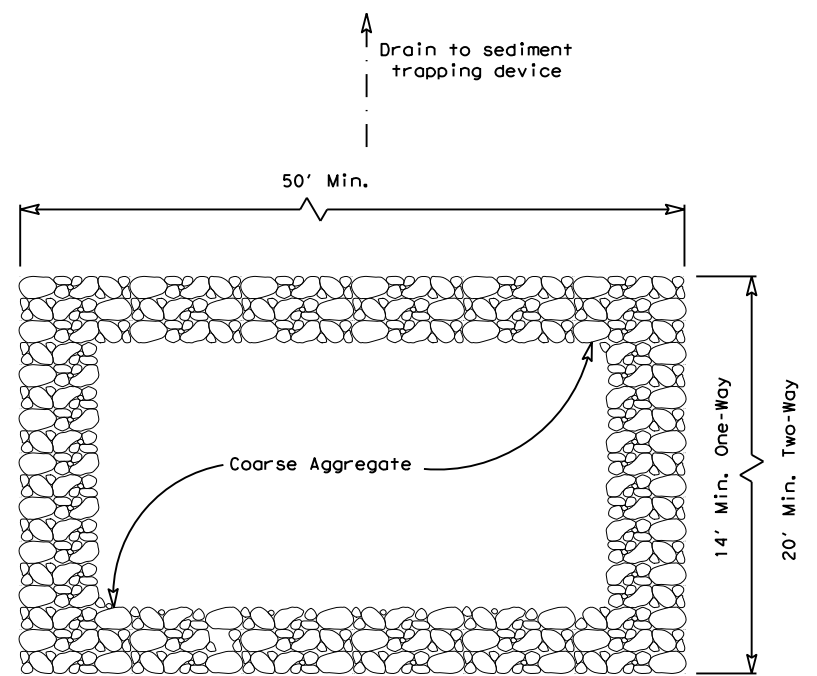


SECTION A-A

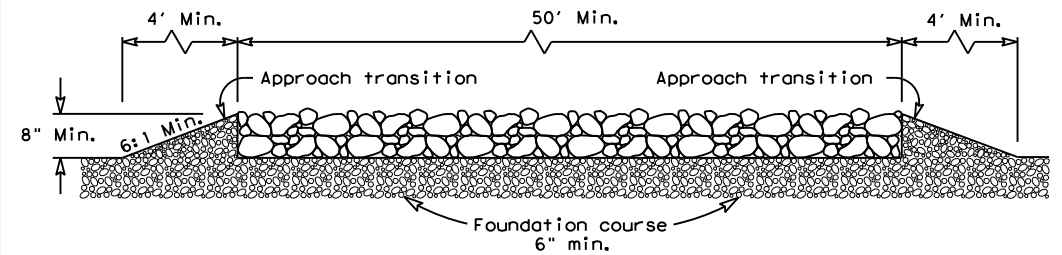
		Design Division Standard	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES			
ROCK FILTER DAMS			
EC(2) - 16			
FILE: ec216	DN: TxDOT	CK: KM	DW: VP
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REVISIONS		HIGHWAY	
DIST	COUNTY	SHEET NO.	
	HAYS	76	

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PLAN VIEW

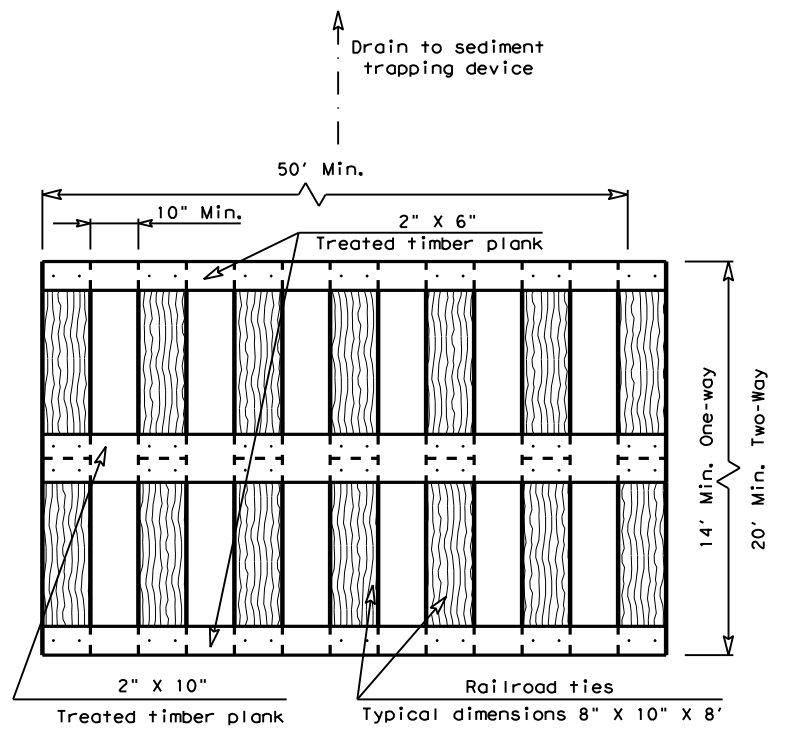


ELEVATION VIEW

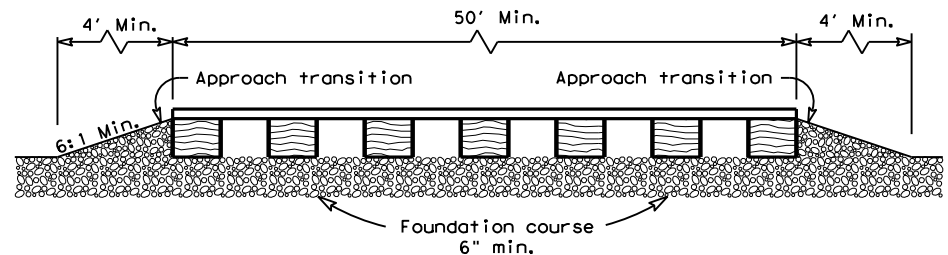
**CONSTRUCTION EXIT (TYPE 1)
ROCK CONSTRUCTION (LONG TERM)**

GENERAL NOTES (TYPE 1)

- The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50'.
- The coarse aggregate should be open graded with a size of 4" to 8".
- The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
- The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other materials approved by the Engineer.
- The construction exit shall be graded to allow drainage to a sediment trapping device.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.
- Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.



PLAN VIEW

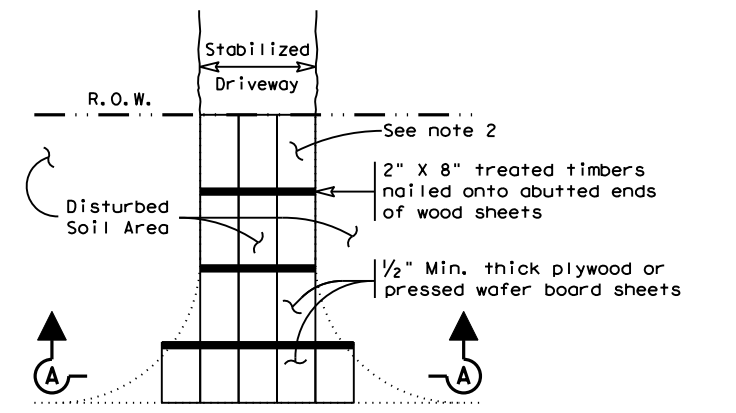


ELEVATION VIEW

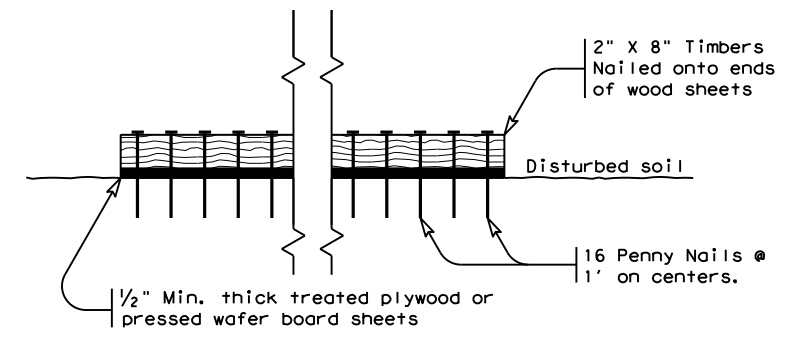
**CONSTRUCTION EXIT (TYPE 2)
TIMBER CONSTRUCTION (LONG TERM)**

GENERAL NOTES (TYPE 2)

- The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
- The treated timber planks shall be attached to the railroad ties with 1/2" x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
- The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
- The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
- The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
- The construction exit should be graded to allow drainage to a sediment trapping device.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.
- Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.



PLAN VIEW



**SECTION A-A
CONSTRUCTION EXIT (TYPE 3)
SHORT TERM**

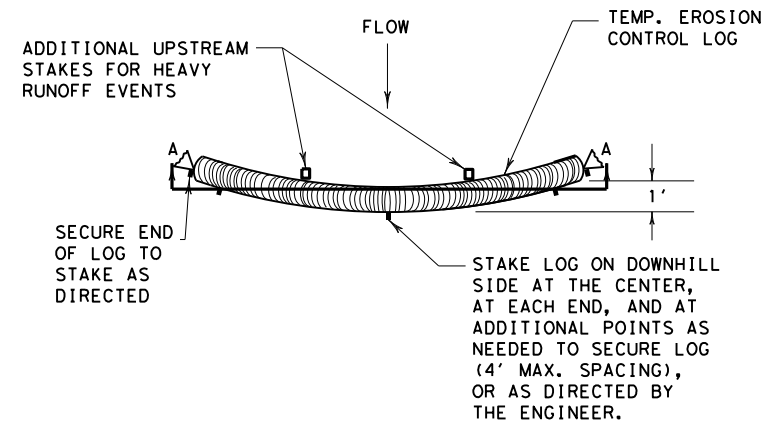
GENERAL NOTES (TYPE 3)

- The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
- The type 3 construction exit may be constructed from open graded crushed stone with a size of two to four inches spread a min. of 4" thick to the limits shown on the plans.
- The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

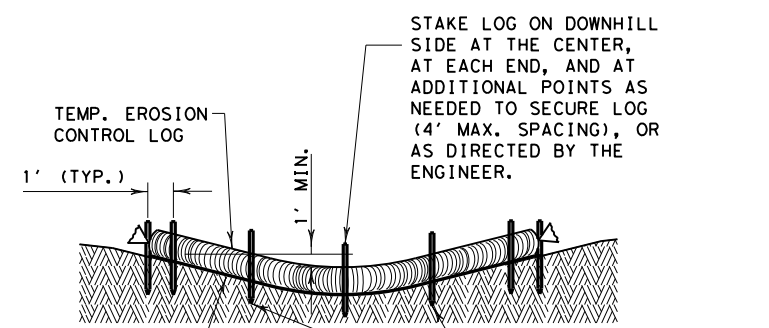
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TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES CONSTRUCTION EXITS EC(3)-16			
FILE: ec316	DN: TxDOT	CK: KM	DW: VP
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DIST	COUNTY	SHEET NO.	
	HAYS	77	

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PLAN VIEW

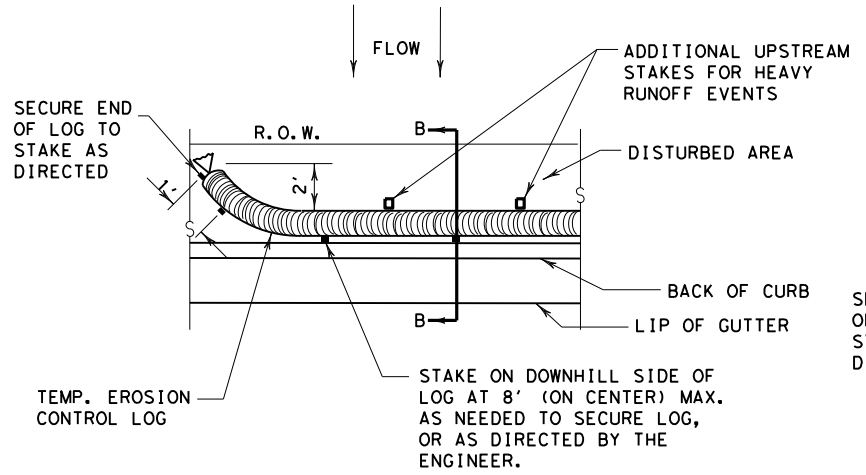


SECTION A-A
EROSION CONTROL LOG DAM

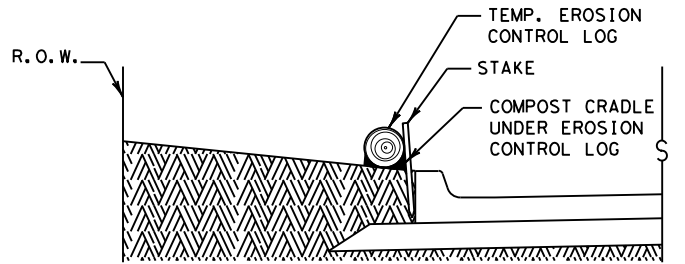
CL-D

LEGEND

- CL-D EROSION CONTROL LOG DAM
- CL-BOC EROSION CONTROL LOG AT BACK OF CURB
- CL-ROW EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY
- CL-SST EROSION CONTROL LOGS ON SLOPES STAKE AND TRENCHING ANCHORING
- CL-SSL EROSION CONTROL LOGS ON SLOPES STAKE AND LASHING ANCHORING
- CL-DI EROSION CONTROL LOG AT DROP INLET
- CL-CI EROSION CONTROL LOG AT CURB INLET
- CL-GI EROSION CONTROL LOG AT CURB & GRATE INLET

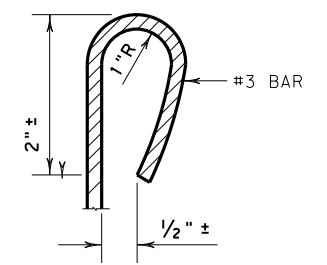


PLAN VIEW

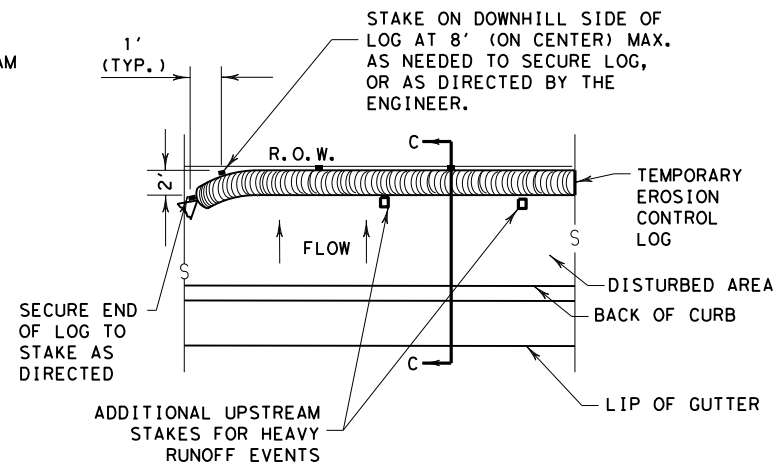


SECTION B-B
EROSION CONTROL LOG AT BACK OF CURB

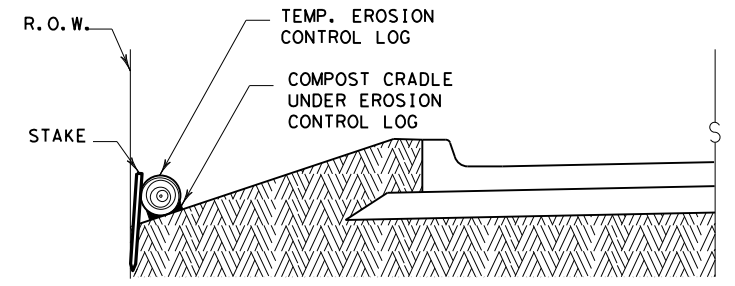
CL-BOC



REBAR STAKE DETAIL



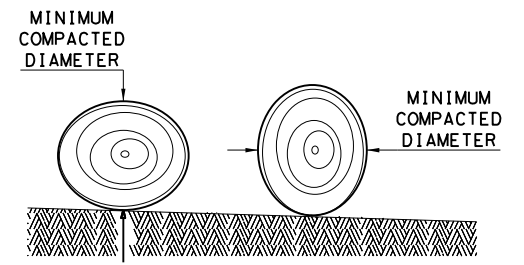
PLAN VIEW



SECTION C-C

EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY

CL-ROW



DIAMETER MEASUREMENTS OF EROSION CONTROL LOGS SPECIFIED IN PLANS

SEDIMENT BASIN & TRAP USAGE GUIDELINES

An erosion control log sediment trap may be used to filter sediment out of runoff draining from an unstabilized area.

Log Traps: The drainage area for a sediment trap should not exceed 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).

Control logs should be placed in the following locations:

1. Within drainage ditches spaced as needed or min. 500' on center
2. Immediately preceding ditch inlets or drain inlets
3. Just before the drainage enters a water course
4. Just before the drainage leaves the right of way
5. Just before the drainage leaves the construction limits where drainage flows away from the project.

The logs should be cleaned when the sediment has accumulated to a depth of 1/2 the log diameter.

Cleaning and removal of accumulated sediment deposits is incidental and will not be paid for separately.

GENERAL NOTES:

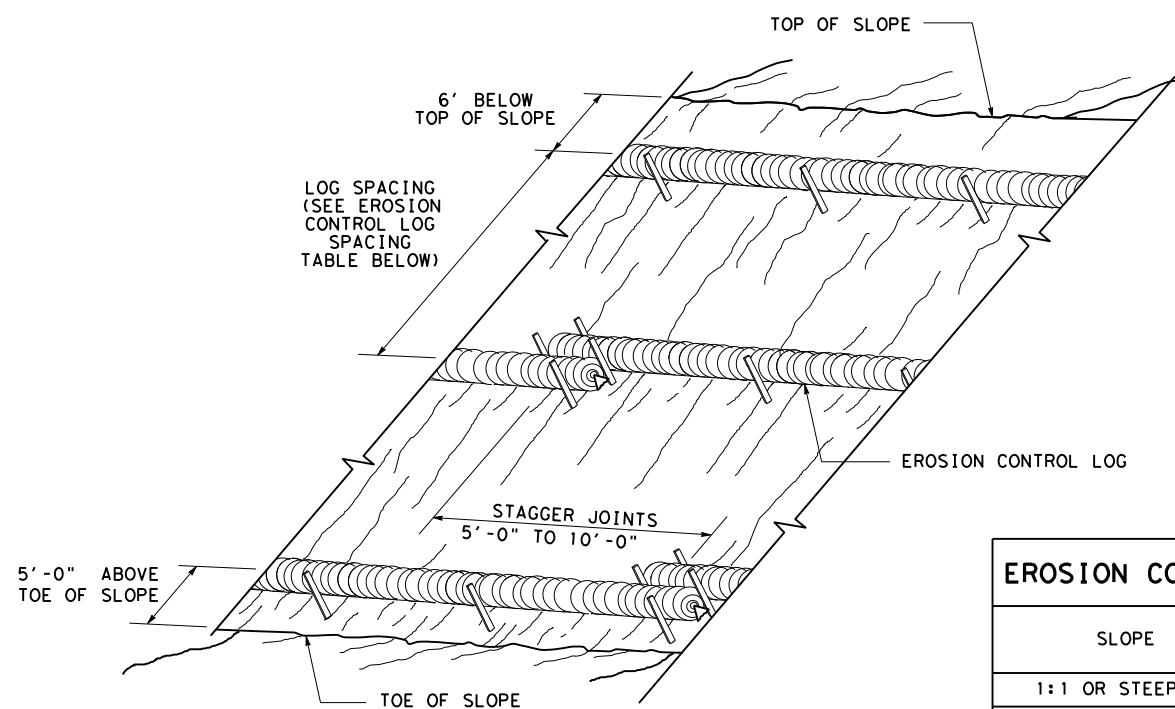
1. EROSION CONTROL LOGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER.
2. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED.
3. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE OR PHOTODEGRADABLE CONTAINMENT MESH ONLY WHERE LOG WILL REMAIN IN PLACE AS PART OF A VEGETATIVE SYSTEM. FOR TEMPORARY INSTALLATIONS, USE RECYCLABLE CONTAINMENT MESH.
4. FILL LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE THE MINIMUM COMPACTED DIAMETER SPECIFIED IN THE PLANS WITHOUT EXCESSIVE DEFORMATION.
5. STAKES SHALL BE 2" X 2" WOOD OR #3 REBAR, 2'-4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG, OR AS DIRECTED BY THE ENGINEER.
6. DO NOT PLACE STAKES THROUGH CONTAINMENT MESH.
7. COMPOST CRADLE MATERIAL IS INCIDENTAL & WILL NOT BE PAID FOR SEPARATELY.
8. SANDBAGS USED AS ANCHORS SHALL BE PLACED ON TOP OF LOGS & SHALL BE OF SUFFICIENT SIZE TO HOLD LOGS IN PLACE.
9. TURN THE ENDS OF EACH ROW OF LOGS UPSLOPE TO PREVENT RUNOFF FROM FLOWING AROUND THE LOG.
10. FOR HEAVY RUNOFF EVENTS, ADDITIONAL UPSTREAM STAKES MAY BE NECESSARY TO KEEP LOG FROM FOLDING IN ON ITSELF.

SHEET 1 OF 3

		<i>Design Division Standard</i>	
<p>TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES</p> <p>EROSION CONTROL LOG</p> <p>EC (9) - 16</p>			
FILE: ec916	DN: TxDOT	CK: KM	DW: LS/PT
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		78	

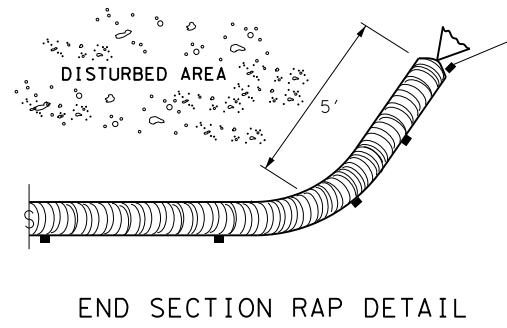
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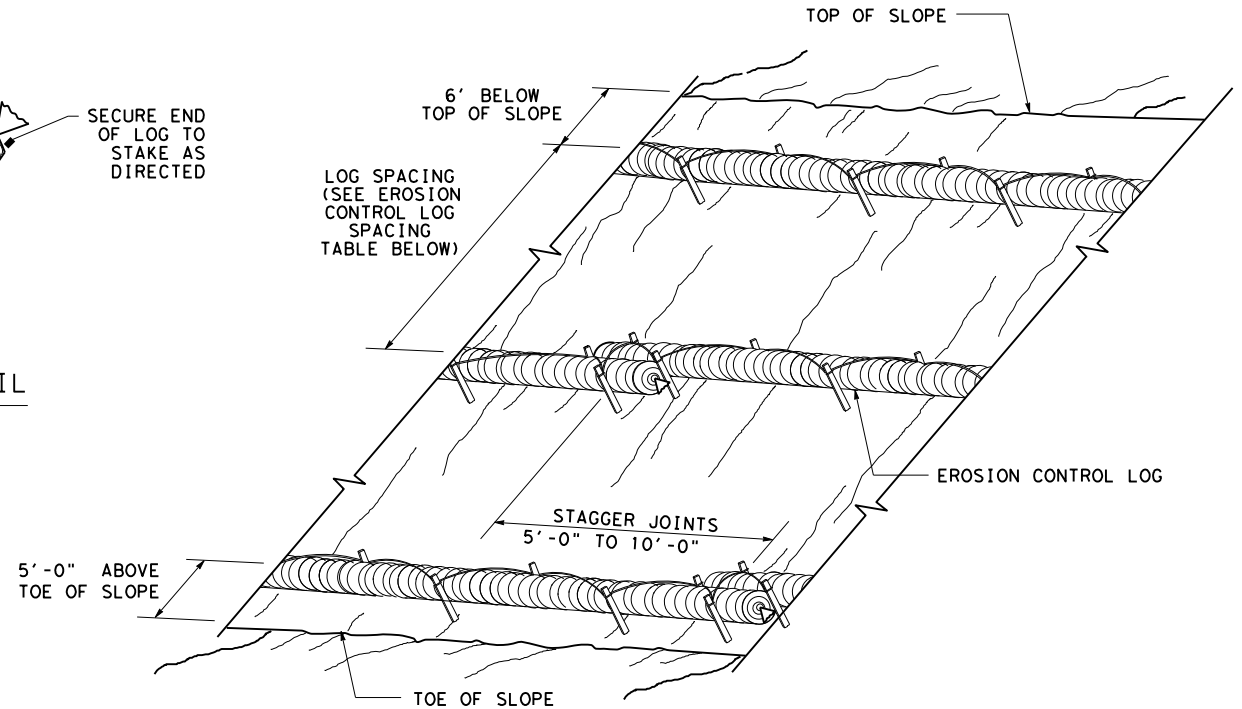
**EROSION CONTROL LOGS ON SLOPES
STAKE AND TRENCHING ANCHORING**

CL-SST



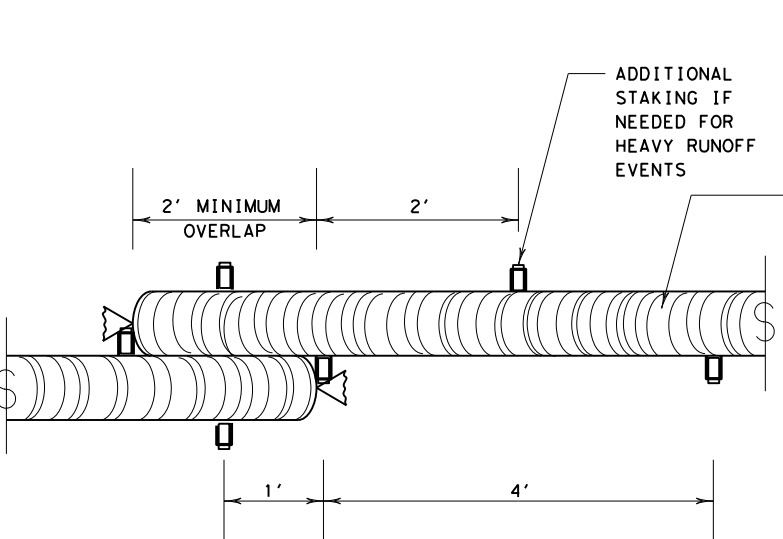
SLOPE	LOG DIAMETER			
	6"	8"	12"	18"
1:1 OR STEEPER	5'	10'	15'	20'
2:1	10'	20'	30'	40'
3:1	15'	30'	45'	60'
4:1 OR FLATTER	20'	40'	60'	80'

* ADJUSTMENTS CAN BE MADE FOR SOIL TYPE:
 SOFT, LOAMY SOILS-ADJUST ROWS CLOSER TOGETHER;
 HARD, ROCKY SOILS- ADJUST ROWS FARTHER APART



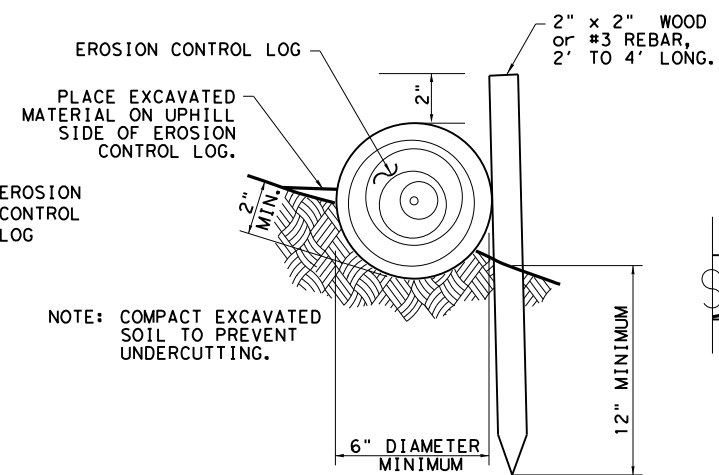
**EROSION CONTROL LOGS ON SLOPES
STAKE AND LASHING ANCHORING**

CL-SSL



STAKE AND TRENCHING ANCHORING DETAIL

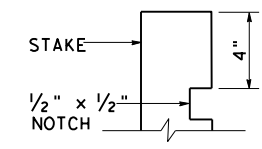
CL-SST



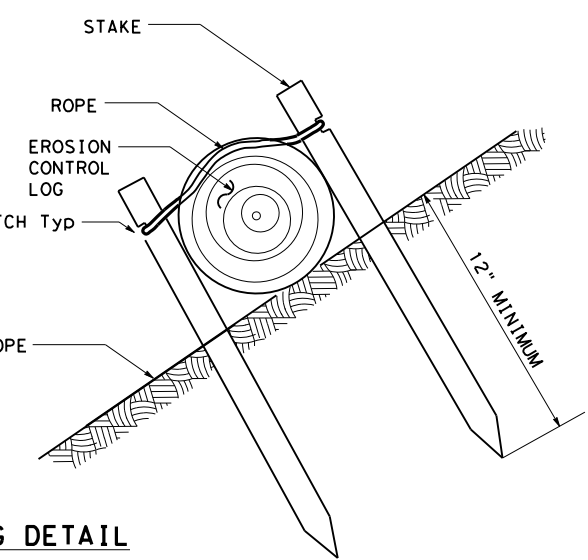
STAKE AND LASHING ANCHORING DETAIL

CL-SSL

LOG DIAMETER	DEPTH
6"	2"
8"	3"
12"	4"
18"	5"



STAKE NOTCH DETAIL

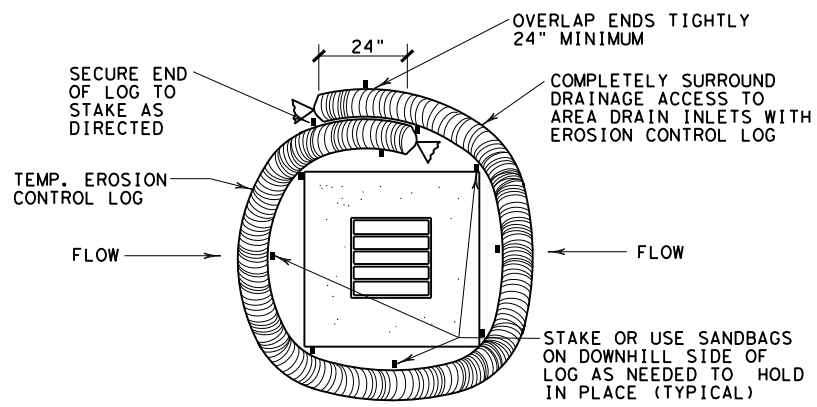


SHEET 2 OF 3

		Design Division Standard	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES EROSION CONTROL LOG EC (9) - 16			
FILE: ec116	DN: TxDOT	CK: KM	DW: LS/PT
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REVISIONS		HIGHWAY	
DIST		COUNTY	SHEET NO.
		HAYS	79

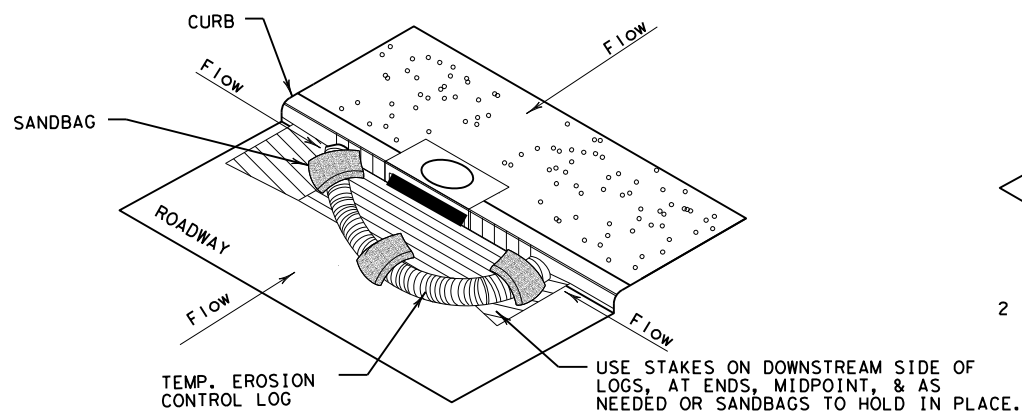
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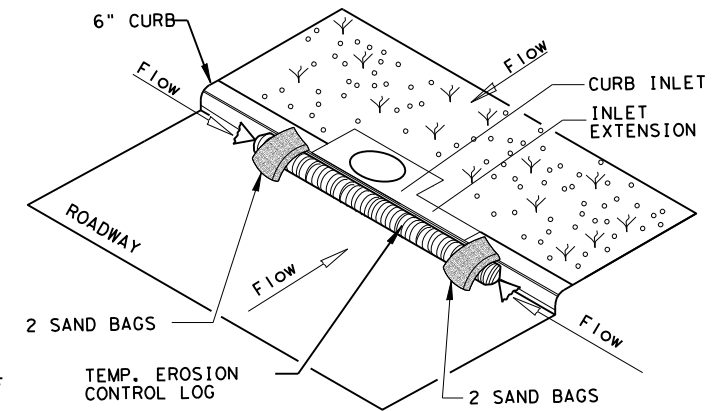
EROSION CONTROL LOG AT DROP INLET

CL-DI



EROSION CONTROL LOG AT CURB INLET

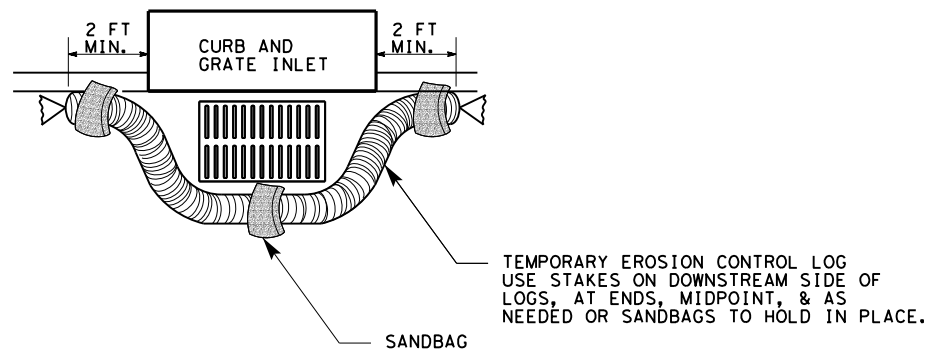
CL-CI



EROSION CONTROL LOG AT CURB INLET

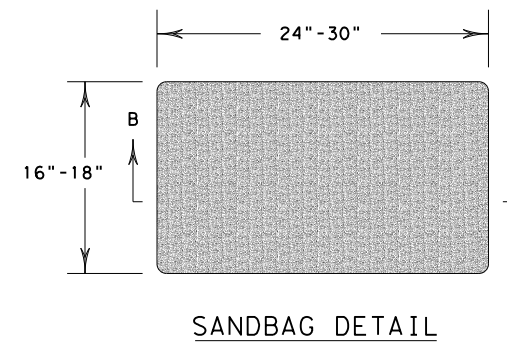
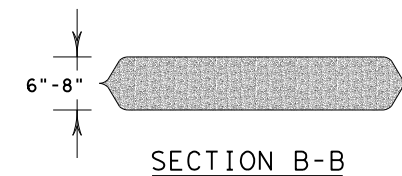
CL-CI

NOTE:
 EROSION CONTROL LOGS USED AT CURB INLETS SHOULD ONLY BE USED IF THEY WILL NOT IMPEDE TRAFFIC OR FLOOD THE ROADWAY OR WHEN THE STORM SEWER SYSTEM IS NOT FULLY FUNCTIONAL.



EROSION CONTROL LOG AT CURB & GRADE INLET

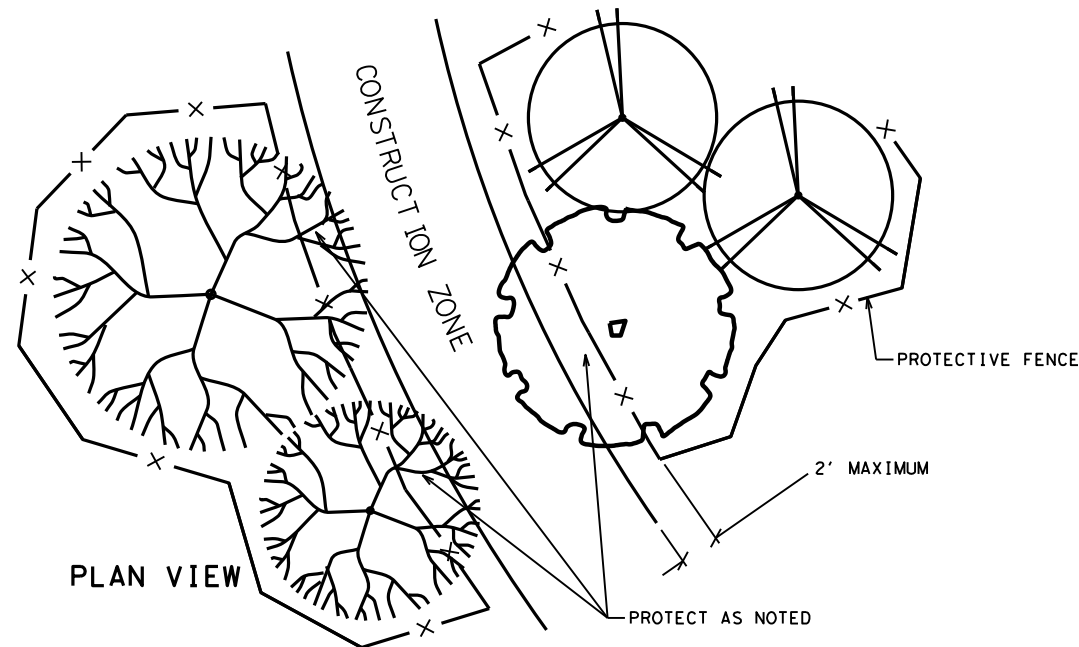
CL-GI



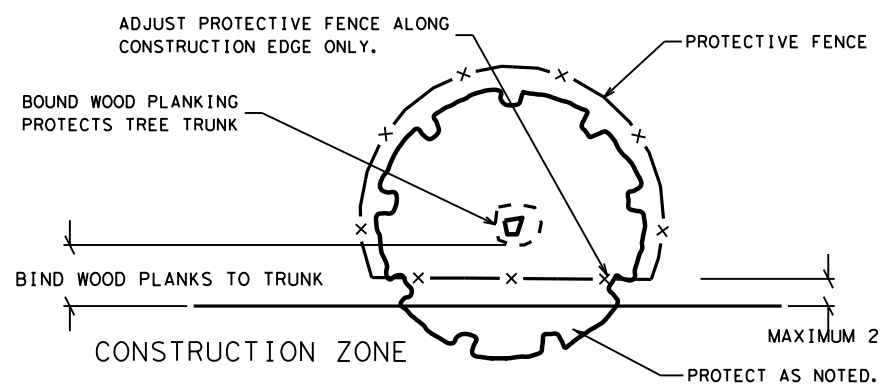
SHEET 3 OF 3

		<i>Design Division Standard</i>	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES EROSION CONTROL LOG EC (9) - 16			
FILE: ec916	DN: TxDOT	CK: KM	DW: LS/PT
© TxDOT: JULY 2016	CONT	SECT	JOB
REVISIONS		HIGHWAY	
		DIST	SHEET NO.
		HAYS	80

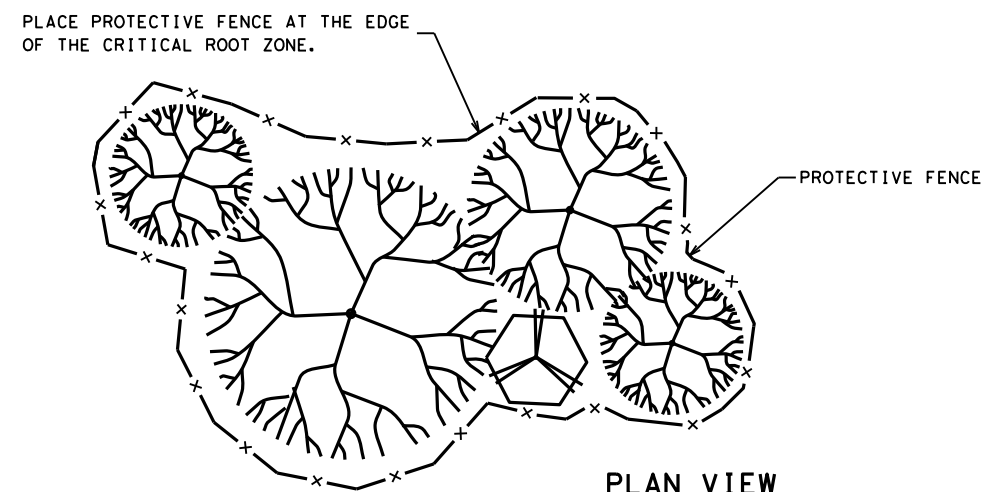
DATE: 7/13/2023 2:22:28 PM
 FILE: L:\2020\20147070 - Hays Co. Pct 4 Low Water Crossings\Drawings\Bear_Creek\07_EnvironmentalStandards\tpd-19.dgn



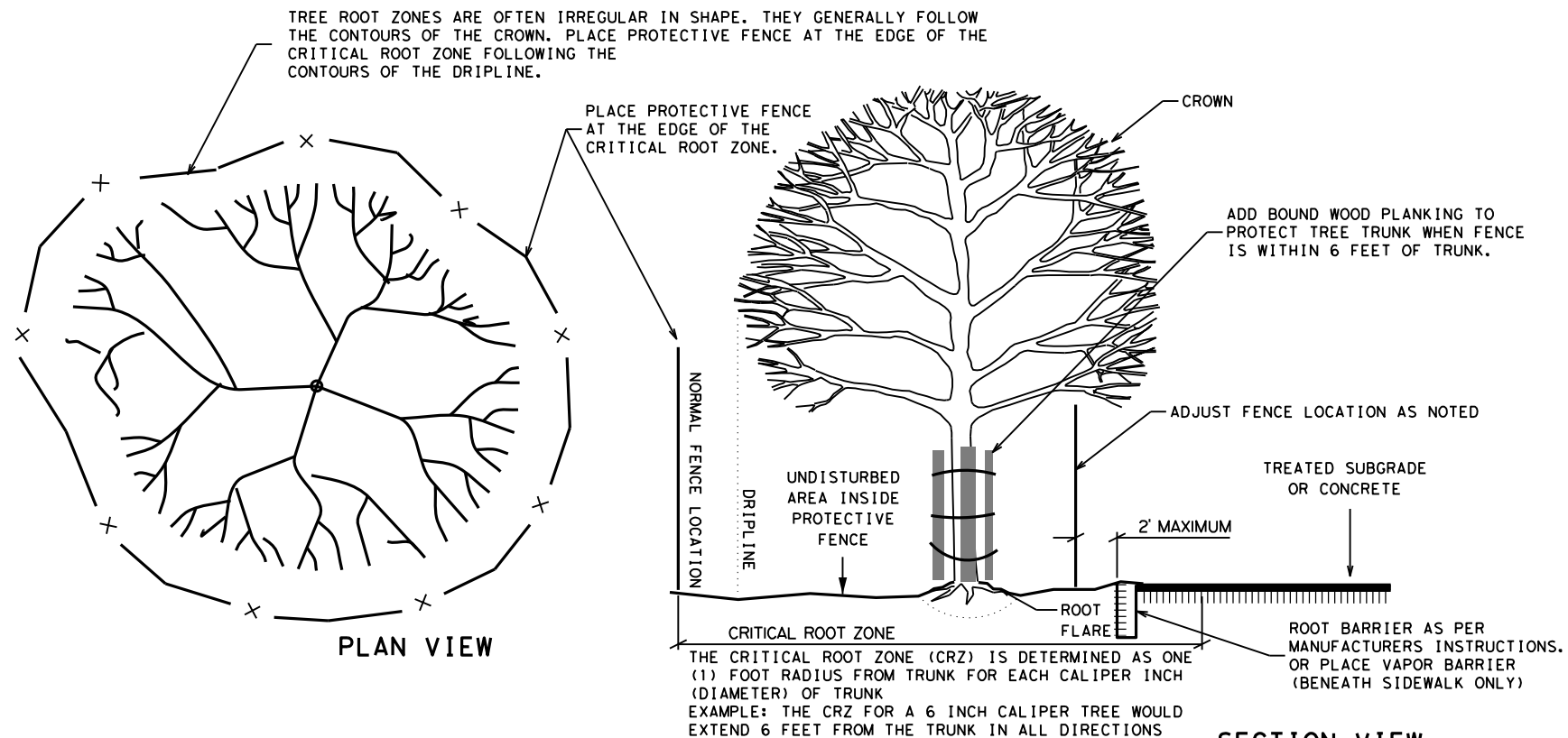
LINEAR CONSTRUCTION THROUGH STAND OF TREES



PLAN VIEW PAVING UNDER TREES



TYPICAL TREE GROUPING PROTECTION



TYPICAL TREE PROTECTION

NOTES:

- CRITICAL ROOT ZONE IS 1 FT. AWAY FROM TREE TRUNK FOR EVERY 1 IN. OF TREE DIAMETER MEASURED AT 4 FT. HEIGHT.
- WATER TREES EVERY 2 WEEKS WITH A MINIMUM OF 100 GALLONS PER TREE.
- SPRAY TREE WITH WATER TO REMOVE CONSTRUCTION DUST WHEN DIRECTED.
- CONSTRUCTION FENCE SHALL BE 4 FT. TALL.
- DO NOT PERFORM WORK OR STORE EQUIPMENT WITHIN PROTECTED AREA.
- COVER THE CRITICAL ROOT ZONE BETWEEN THE PROTECTED AREA AND THE CONSTRUCTION ZONE WITH 4 IN. OF MULCH
- PERFORM TREE TRIMMING AND WOUND REPAIR PER STANDARD SPECIFICATIONS.
- DAMAGED AND EXPOSED ROOTS SHALL BE TRIMMED AND TREATED PER STANDARD SPECIFICATIONS. BACKFILL EXPOSED ROOTS WITH TOPSOIL WITHIN 24 HOURS OF EXPOSURE.
- PLACE PLASTIC UNDER CONCRETE PLACED IN THE CRITICAL ROOT ZONE.
- PLACE A ROOT BARRIER IN THE CRITICAL ROOT ZONE AT THE EDGE OF TREATED SUBGRADE TO THE DEPTH OF THE SUBGRADE.
- ALL WORK IS SUBSIDIARY TO BID ITEM.

		Austin District Standard	
<h2>TREE PROTECTION DETAILS</h2>			
<h3>TPD-19 (AUS)</h3>			
©TxDOT 2021 REVISIONS 06/16: SHEET CREATED 04/19: APPROVED	CONT	SECT	JOB
DIST	COUNTY	SHEET NO.	81

The following TCEQ requirements (Form TCEQ-0592A, Rev. 7/15/15) are applicable to all work that disturbs 5 or more acres in the contributing zone of the Edwards Aquifer in Hays, Travis and/or Williamson Counties and must be adhered to by the Contractor and all Subcontractors:

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, soilstabilization 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.

TCEQ REGIONAL OFFICE

Austin Regional Office
 12100 Park 35 Circle
 Bldg A, Room 179
 Austin, Texas 78753
 Phone: (512) 339-2929
 Fax: (512) 339-3795



**TCEQ REQUIREMENTS FOR
 THE CONTRIBUTING ZONE
 OF THE
 EDWARDS AQUIFER
 (DISTURBING 5 OR MORE ACRES)**

TCEQ-CZ-19(AUS)

©TxDOT 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS				
01/10/14: REQUIREMENTS AND ADDRESS UPDATED				
01/21/16: REQUIREMENTS UPDATED	DIST		COUNTY	SHEET NO.
09/24/19: UPDATED RELEASE YEAR			HAYS	82

Attachment H – Inspection, Maintenance, Repair and Retrofit Plan

These maintenance guidelines were prepared at the request of the Texas Commission of Environmental Quality (TCEQ) regarding their approval of an Edwards Aquifer Protection Plan for the above referenced project. These guidelines apply to the permanent storm water controls constructed for this project.

Pest management: Any vegetated areas that have noxious vegetation, insects, or other pests will be remedied with the minimum amount of selective pesticide necessary to control the pest. All chemicals are EPA labeled, registered, and approved. Personnel licensed and/or trained according to Texas Department of Agriculture (TDA) laws and regulations will apply pesticides. Records are kept for each application in accordance with TDA laws and regulations.

Seasonal mowing and vegetation management: Right-of-Way areas, which includes the vegetative filter strip BMP for this project, will be mowed by contract. The cutting height is usually 5-7 inches for all areas.

Inspection cycles: Maintenance forces will review roadways and roadsides at least twice per year. Any problem areas are noted particularly if there is an absence of vegetation, any accumulation of brush, debris or litter, and/or any areas of significant erosion. These items will then be scheduled for repair on priority basis.

Debris and litter removal: Litter, debris and brush accumulation is assessed not only for aesthetic reasons but also for the tendency to clog drainage paths or impede the intended flow of a structure's hydraulic design. Areas are cleaned periodically by state forces or by outside contractor. Areas documented as trouble spots are scheduled on a priority basis.

Sediment removal: During inspections if sediment has accumulated to a depth that hinders original design characteristics it will be removed. Excessive sedimentation, or a significant load of silt, does not normally occur in filter strip areas, grassy swale areas, or in permanent pond structures after project completion, but it may occur from other drainage areas or construction underway beyond State right-of-way.

Maintenance Contact

The contact for questions or concerns pertaining to maintenance of the facility is listed below.

Mr. Jerry Borcharding

Hays County

2171 Yarrington Rd., Kyle, Texas 78640

Tel: 512.393.7385

Signature

Attachment J – Measures for Minimizing Surface Stream Contamination

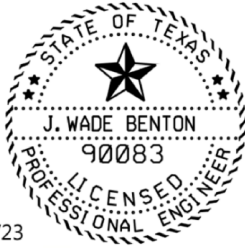
The project will install vegetative filter strips to treat the runoff from the impervious surfaces. From these filter strips the run-off travels to grass lined ditches. The treated runoff ultimately discharges into the Bear Creek discharges.

The project will be constructed pursuant to TCEQ's Construction General Permit No. 150000, and these concerns are addressed by the projects SW3P which is included in this application. Disturbed areas will be re-vegetated as soon as practical. The project is not substantially changing the way in which waters enter streams.

Attachment K – Volume and Character of Stormwater

The quality of storm water is affected by the quantity and type of traffic using this road. However, this project will not affect the quantity or type of traffic using the road, therefore there should not be any substantive change in pollutant loading. The roadway improvements are intended to increase vehicular safety, and this may result in reduced pollutants being accidentally discharged to the road surface. The runoff coefficient for the site before and after construction is 0.39 and 0.46, respectively. See table below for the calculation of the total runoff coefficients for proposed and existing.

Project Runoff Coefficient				
		Area	Runoff Coefficient	Weighted Runoff Coefficient
	Total area (sq. ft)	96,368.38		
Exist	Impervious Exist (sq.ft.)	24,928.10	0.95	0.39
	Pervious Exist (sq.ft.)	71,440.28	0.2	
Proposed	Impervious Proposed (sq.ft.)	32,905.86	0.95	0.46
	Pervious Proposed (sq.ft.)	63,462.51	0.2	



08/16/23

Wade Benton



TCEQ Small Construction Site Notice

Small construction sites disturb at least one but less than five acres or are part of a larger common plan of development or sale that disturbs between one and five acres. Operators of small construction sites will fill out this notice. Operators will then post this notice at the construction site in a location where it is safely and readily available for viewing by the general public and local, state, and federal authorities. Additional information about the TCEQ Construction Stormwater General Permit may be found on TCEQ's webpage on [Assistance Tools for Construction Stormwater General Permits](#).

Note: You must also develop a Stormwater Pollution Prevention Plan prior to the commencement of construction.

Operator Name: Hays County

Contact Name and Phone Number: Wade Benton (512)-539-1957

Project Description: Bear Creek Pass at Bear Creek
Physical Location/Description _____

Estimated Start Date January 2024

Projected End Date or Date Disturbed Soils Will Be Stabilized September 2024

Location of Stormwater Pollution Prevention Plan (SWP3): Transportation Department 2171 Yarrington Rd. Kyle, TX 78640

For Small Construction Activities Authorized Under Part II.E.2. (Obtaining Authorization to Discharge) the following certification must be completed:

I Wade Benton (Typed or Printed Name Person Completing This Certification) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.2. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A stormwater pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the Municipal Separate Storm Sewer Systems (MS4) if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title _____ Date _____

Name of MS4 Operator notified: Hays County and Date notified (per Part II.F.3.): _____

Date Site Notice Removed _____

SIGNATURE PAGE:

Jerry H. Borchering
Applicant's Signature

6/28/23
Date

THE STATE OF Texas §

County of Hays §

BEFORE ME, the undersigned authority, on this day personally appeared Jerry H. Borchering 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.

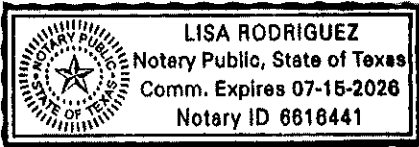
GIVEN under my hand and seal of office on this 28 day of June, 2023.

[Signature]

NOTARY PUBLIC

Lisa Rodriguez

Typed or Printed Name of Notary



MY COMMISSION EXPIRES: 7/15/2026

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Bear Creek Low Water Crossing Improvements

Regulated Entity Location: Hays County

Name of Customer: Hays County

Contact Person: Wade Benton, PE.

Phone: 512-539-1957

Customer Reference Number (if issued): CN 601098205

Regulated Entity Reference Number (if issued): RN _____

Austin Regional Office (3373)

Hays

Travis

Williamson

San Antonio Regional Office (3362)

Bexar

Medina

Uvalde

Comal

Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment.** This payment is being submitted to:

Austin Regional Office

San Antonio Regional Office

Mailed to: TCEQ - Cashier

Overnight Delivery to: TCEQ - Cashier

Revenues Section

12100 Park 35 Circle

Mail Code 214

Building A, 3rd Floor

P.O. Box 13088

Austin, TX 78753

Austin, TX 78711-3088

(512)239-0357

Site Location (Check All That Apply):

Recharge Zone

Contributing Zone

Transition Zone

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 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: Wade Benton

Date: 8/16/23

Application Fee Schedule

Texas Commission on Environmental Quality

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

<i>Project</i>	<i>Fee</i>
Exception Request	\$500

Extension of Time Requests

<i>Project</i>	<i>Fee</i>
Extension of Time Request	\$150



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
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 601098205		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		
<input type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)				
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>				
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)			<i>If new Customer, enter previous Customer below:</i>	
Hays County				
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
11. Type of Customer:		<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
12. Number of Employees			13. Independently Owned and Operated?	
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input checked="" type="checkbox"/> 501 and higher			<input type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following				
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other: <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant				
15. Mailing Address:		2171 Yarrington Rd. Suite 300		
City	Kyle	State	TX	ZIP 78640 ZIP + 4 6657
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)	
			jerry@co.hays.tx.us	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)

SECTION III: Regulated Entity Information

21. General Regulated Entity Information <i>(If 'New Regulated Entity' is selected, a new permit application is also required.)</i>							
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information							
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>							
22. Regulated Entity Name <i>(Enter name of the site where the regulated action is taking place.)</i>							
Bear Creek Low Water Crossing Improvements							
23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>							
		City		State		ZIP	
						ZIP + 4	
24. County							

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

25. Description to Physical Location:		Bear Creek Pass at Bear Creek					
26. Nearest City				State		Nearest ZIP Code	
Dripping Springs				TX		78737	
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>							
27. Latitude (N) In Decimal:		30.160831		28. Longitude (W) In Decimal:		-97.945034	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
30	9	38.9916	97	56	42.1224		
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)	
1611				237310			
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
Grading, Paving, & Drainage Improvements							
34. Mailing Address:		Hays County					
		2171 Yarrington Rd.					
		City	Kyle	State	TX	ZIP	78640
						ZIP + 4	6657
35. E-Mail Address:		jerry@co.hays.tx.us					
36. Telephone Number			37. Extension or Code			38. Fax Number <i>(if applicable)</i>	
(512) 393-7385						() -	

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Wade Benton, PE	41. Title:	Sr. Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 539-1957-		() -	jwbenton@garverusa.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:	Garver, LLC	Job Title:	Sr. Project Manager
Name (In Print):	Wade Benton, PE	Phone:	(512) 539- 1957
Signature:	<i>Wade Benton</i>	Date:	8/16/23