PEDERNALES ELECTRIC COOPERATIVE, INC.

WATER POLLUTION ABATEMENT PLAN (WPAP) APPLICATION

Buffalo Clover Substation Project

PROJECT NO. 178773

REVISION A

JANUARY 28, 2025

Water Pollution and Abatement Plan

Application Checklist

Document Title	Included
TCEQ-20705 Edwards Aquifer Application Cover Page Form	☒
TCEQ-0587 General Information Form	☒
Attachment A - Road Map	☒
Attachment B - USGS / Edwards Recharge Zone Map	☒
Attachment C - Project Description	☒
TCEQ-0585 Geologic Assessment Form	☒
Attachment A - Geologic Assessment Table (TCEQ-0585-Table)	☒
Attachment B - Stratigraphic Column	☒
Attachment C - Site Geology	☒
Attachment D - Site Geologic Map(s)	☒
TCEQ-0584 Water Pollution Abatement Plan Application Form	☒
Attachment A - Factors Affecting Surface Water Quality	☒
Attachment B - Volume and Character of Stormwater	☒
Attachment C - Suitability Letter from Authorized Agent (if OSSF is proposed)	☐
Attachment D - Exception to the Required Geologic Assessment (if requested)	☐
Site Plan	☒
TCEQ-0602 Temporary Stormwater Section Form	☒
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	☒
TCEQ-0600 Permanent Stormwater Section Form	☒
Attachment A - 20% or Less Impervious Cover Waiver (if requested for multi-family, school, or small business site)	☐
Attachment B - BMPs for Upgradient Stormwater	☐
Attachment C - BMPs for On-site Stormwater	☒
Attachment D - BMPs for Surface Streams	☐
Attachment E - Request to Seal Features (if sealing a feature)	☐
Attachment F - Construction Plans	☒
Attachment G - Inspection, Maintenance, Repair and Retrofit Plan	☒

Attachment H - Pilot-Scale Field Testing Plan (if proposed)	☐
Attachment I -Measures for Minimizing Surface Stream Contamination	☐
TCEQ-0599 Agent Authorization Form, if application submitted by agent	☒
Landowner Authorization	☒
TCEQ-0574 Application Fee Form	☒
Check Payable to the “Texas Commission on Environmental Quality”	☒
TCEQ-10400 Core Data Form	☒

FORM TCEQ – 20705

EDWARDS AQUIFER APPLICATION COVER PAGE

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

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

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

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Pedernales Electric Cooperative, Inc. Buffalo Clover Substation Project						**2. Regulated Entity No.:** TBD			
3. Customer Name: Pedernales Electric Cooperative, Inc.						**4. Customer No.:** CN601327927			
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):**			72.4
9. Application Fee:	$8,000		**10. Permanent BMP(s):**			Vegetated filter strips, rock riprap			
11. SCS (Linear Ft.):	0		**12. AST/UST (No. Tanks):**			0			
13. County:	Williamson		**14. Watershed:**			Berry Creek			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence __1__Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

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

Allison Quiroga

Print Name of Customer/Authorized Agent

Signed by: Allison Quiroga F02F2A10CE5B494...

1/28/2025

Signature of Customer/Authorized Agent Date

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

FORM TCEQ – 0587

GENERAL INFORMATION FORM

ATTACHMENT A – ROAD MAP
ATTACHMENT B – USGS/EDWARDS RECHARGE ZONE MAP
ATTACHMENT C – PROJECT DESCRIPTION

General Information Form

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Allison Quiroga

Date: 1/28/2025

Signature of Customer/Agent:

Signed by:
Allison Quiroga
F02E2A10CE5B494...

Project Information

1. Regulated Entity Name: Pedernales Electric Cooperative, Inc. Buffalo Clover Substation Project
2. County: Williamson
3. Stream Basin: Berry Creek
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☒ WPAP
   ☐ SCS
   ☐ Modification
   ☐ AST

☐ UST ☐ Exception Request

7. Customer (Applicant):

Contact Person: Ryan Morlino
Entity: Pedernales Electric Cooperative, Inc.
Mailing Address: 201 S. Avenue F.
City, State: Johnson City, Texas Zip: 78636
Telephone: 830-868-7155 FAX: _____
Email Address: ryan.morlino@peci.com

8. Agent/Representative (If any):

Contact Person: Allison Quiroga
Entity: Burns & McDonnell Engineering Company, Inc.
Mailing Address: 1700 West Loop South, Suite 1500
City, State: Houston, Texas Zip: 77027
Telephone: 346-415-6560 FAX: _____
Email Address: aquiroga@burnsmcd.com

9. Project Location:

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

10. ☒ The location of the project site is described below. The description provides sufficient detail and clarity so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

Take I-35N out of Austin. Continue along I-35N through Georgetown and take exit 268.Travel along frontage road for 2 miles until reaching FM 972, take a left. After proceeding under the overpass, FM 972 will terminate and only a left hand turn will be available . The parcel along this section of southbound frontage road is the Project Area.

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).
☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
☒ Drainage path from the project site to the boundary of the Recharge Zone.

13. ☐ **The TCEQ must be able to inspect the project site or the application will be returned**. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.

☒ Survey staking will be completed by this date: 3/14/25

14. ☒ **Attachment C – Project Description**. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

☒ Area of the site
☒ Offsite areas
☒ Impervious cover
☒ Permanent BMP(s)
☒ Proposed site use
☒ Site history
☒ Previous development
☒ Area(s) to be demolished

15. Existing project site conditions are noted below:

☐ Existing commercial site
☐ Existing industrial site
☐ Existing residential site
☐ Existing paved and/or unpaved roads
☒ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Uncleared)
☒ Other: Site is undeveloped but primarily used for livestock grazing with a majority of the land cleared with trees sporadically throughout..

Prohibited Activities

16. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

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

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

18. The fee for the plan(s) is based on:

☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
☐ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
☐ A request for an extension to a previously approved plan.

19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

☐ TCEQ cashier
☒ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

Attachment A – Road Map

Directions to the project site location and site boundaries are demonstrated on the attached road map.

Attachment A: Road Map

Water Pollution Abatement Plan, Pedernales Electric Cooperative - Williamson County, Texas

Limits of Construction

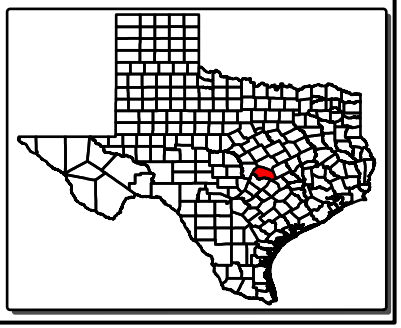
Parcel Boundary

NORTH

Scale: 1:24,000
Date: 12/18/2024
Data Sources: Burns & McDonnell, Pedernales Electric Cooperative, ESRI

2,000 1,000 0 2,000

Scale in Feet



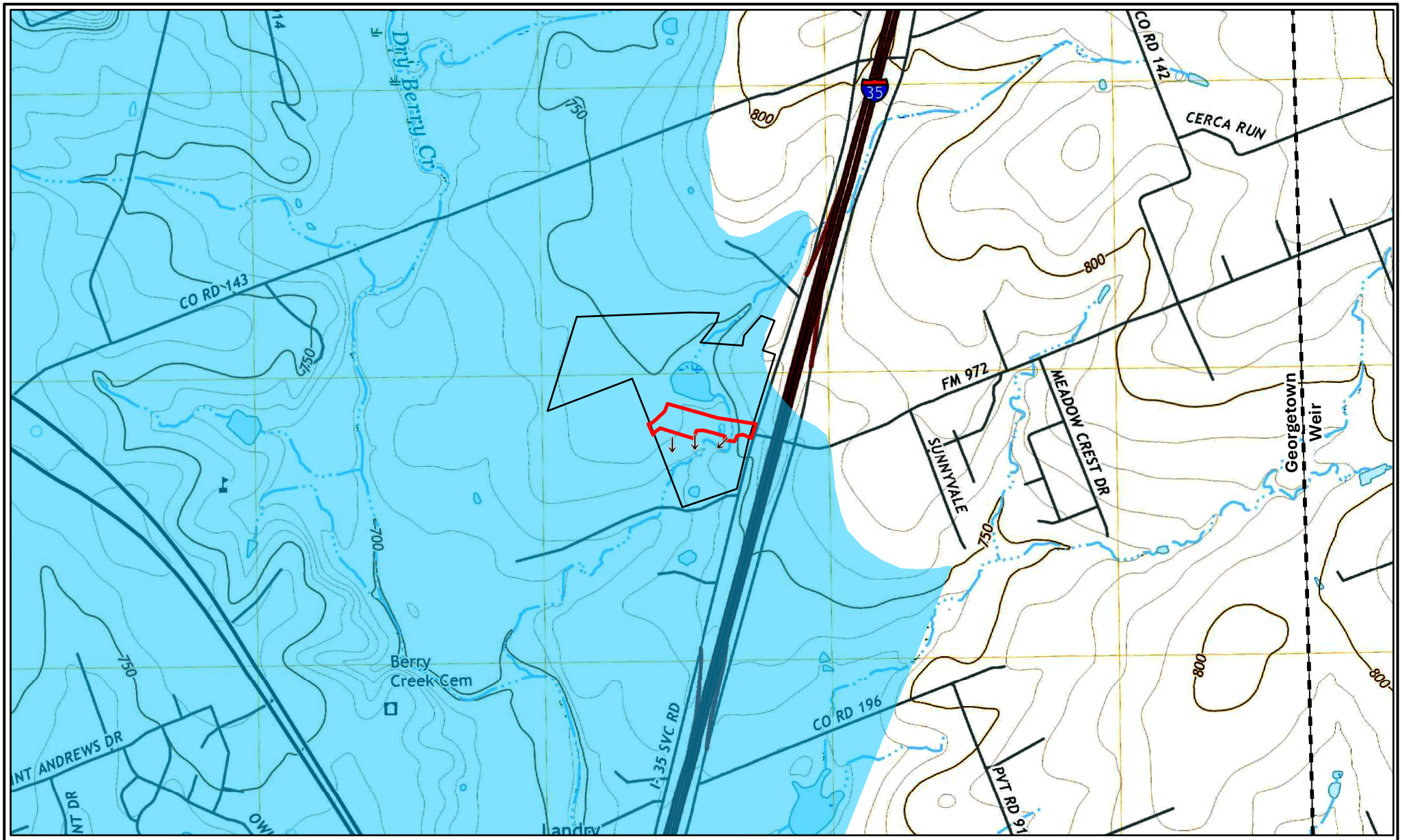
BURNS McDONNELL
www.burnsmcd.com

<LINK>C:\Users\cmwestmoreland\OneDrive</LINK> - Burns & McDonnell\Texas GIS\Fort Worth\Pedernales Electric CoOp\175773 - GT Feasibility Study\DataFiles\ArcPro\GT Feasibility_CW_20241217.aprx

Attachment B – United State Geological Survey (USGS)/Edwards Recharge Zone Map

A copy of the official 7 ½ minute USGS Quadrangle Map (Scale 1" = 2000') of the Edward Recharge Zone is attached. The survey clearly illustrates the following items:

- Project site boundaries.
- USGS Quadrangle Name(s).
- Boundaries of the Recharge Zone (and Transition Zone, if applicable).
- Drainage path from the project site to the boundary of the Recharge Zone.



Attachment B: USGS/Edwards Recharge Zone Map

Water Pollution Abatement Plan, Pedernales Electric Cooperative - Williamson County, Texas

- Limits of Construction
- Parcel Boundary
- Flow Direction
- 7.5-minute Quadrangle
- Edwards Aquifer Recharge Zone

NORTH

Scale: 1:18,000
Date: 12/18/2024
Data Sources: Burns & McDonnell, Pedernales Electric Cooperative, ESRI, USGS

1,500 750 0 1,500

Scale in Feet

BURNS McDONNELL
www.burnsmcd.com

Attachment C – Project Description

Pedernales Electric Cooperative, Inc. (PEC) is evaluating a new substation (Buffalo Clover Substation) and associated infrastructure (Project) at a location 7-miles north of Georgetown in Williamson County, Texas.

The proposed Buffalo Clover Temporary Substation is located within the city limits of Georgetown, Texas on a 72.4-acre parcel characterized by open pastureland and some forested areas (Site). Historically, the Site has been used for livestock grazing.

While Buffalo Clover Substation is in development with a target in-service date of mid-2027, a temporary substation is being considered on the same property with the objective of being in service by May 2025. *The installation of this temporary substation is time critical to meet the needs of the growing electrical demand in PECs service territory. Delays in the installation of the temporary substation will result in critical infrastructure lacking the appropriate electrical power to serve and provide essential services to the surrounding community.*

For the purposes of this application, the Project will consist of the temporary substation, access road, and drainage facilities to be constructed on approximately 5.6 acres located west of Interstate 35 (I-35) at the intersection with Farm-to-Market Road 972 (FM 972) located on a parcel with a total area of 72.4 acres. The proposed site is not located within a Federal Emergency Management Agency (FEMA) Special Flood Hazard Area (SFHA).

The Project will provide temporary electrification to meet regional load demands until the new Buffalo Clover Substation is constructed and energized. Once the permanent Buffalo Clover Substation is in service, the temporary substation will be decommissioned, and the site will be restored to pre-construction conditions.

Details of the impervious cover and offsite areas at the proposed development are outlined below.

- Temporary Substation Pad:
  - 20,254 sq ft aggregate
  - 20,254 sq ft flexible base
- Drive Aisle:
  - 44,700 sq ft aggregate
  - 44,700 sq ft flexible base
- Rock Riprap:
  - 6,600 sq ft rock rip rap at culverts

The project proposes the implementation of the following permanent Best Management Practices (BMPs) to ensure long-term protection of water quality.

- **Vegetative Filter Strips (Permanent Vegetation)**
  - The proposed substation and access road within the Edward Aquifer recharge zone requires runoff treatment to remove the Total Suspended Solids (TSS) by 85% as per the TCEQ requirements. Vegetative filter strip (VSF) is proposed along the proposed access road. The buffer of proposed VSF varies from 20- 25 ft.
  - Seeds of selected native grass species and other plants suitable for post-development conditions will be broadcasted evenly across exposed soil surfaces along the temporary sediment control fence. Establishment of permanent vegetation will support the filtration of water and stabilization of the soil once the temporary sediment control fence is removed.
- **Rock Riprap**
  - Layers of large stones (rock riprap) will be installed south of the culverts constructed at the existing ditch. Rock riprap protect from soil erosion in areas of high or concentrated flow. Reducing flow and stabilizing channel side slopes and bottoms to ensure protection of water quality.

Table 1-1: Project Area Location

Site Location:	Country	United States
	State/Territory	Texas
	County	Williamson County
	Township/City	City of Georgetown
	Address	5505 IH 35 N, Georgetown, TX 78633
	Coordinates	97.6704703°W, 30.6648733°N (Center Point)
	Map Link	https://maps.app.goo.gl

Table 1-2: Basic Project Details

Site Details:	Total Parcel Area	Total = 72.39 acres (County Records)
	Project Area	Total = Approximately 20 Acres
	Owner(s)	James C. Neimann
	Current Zoning	AG (Agricultural)
	Current Use	Vacant

FORM TCEQ – 0585

GEOLOGIC ASSESSMENT

ATTACHMENT A – GEOLOGIC ASSESSMENT TABLE
ATTACHMENT B – STRATIGRAPHIC COLUMN
ATTACHMENT C – SITE GEOLOGY
ATTACHMENT D – SITE GEOLOGIC MAPS

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), 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. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Roman C. Pineda, P.G.

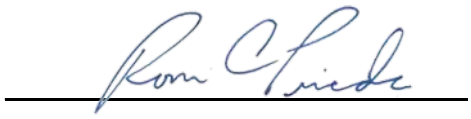
Telephone: (512) 705-5541

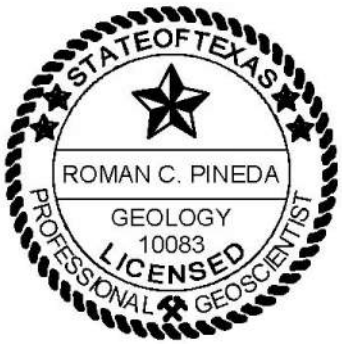
Fax: _____

Date: Janaury 13, 2025

Representing: Cambrian Environmental, TBPG Firm #50484 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:





Regulated Entity Name: PEC Georgetown Temporary Substation

Project Information

1. Date(s) Geologic Assessment was performed: December 12, 2024
2. Type of Project:

   ☒ WPAP ☐ AST
   ☐ SCS ☐ UST
3. Location of Project:

   ☒ Recharge Zone
   ☐ Transition Zone
   ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

5. ☒ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)

Soil Name	Group*	Thickness(feet)
Austin silty clay (AsB)	D	0-2
Denton silty clay (DnA, DnB)	C	0-4
Heiden clay (HeB, HesC)	D	0-4
Krum silty clay (KrB)	C	0-3

** Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

   Applicant's Site Plan Scale: 1" = 300'
   Site Geologic Map Scale: 1" = 300'
   Site Soils Map Scale (if more than 1 soil type): 1" = 1000'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.
   ☐ Other method(s). Please describe method of data collection: _____

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.
12. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☐ Geologic or manmade features were not discovered on the project site during the field investigation.
13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☒ There are <u>one</u> (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☒ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

    ☐ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

15. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

Attachment A – Geologic Assessment Table

A completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: PEC GEORGETOWN TEMPORARY SUBSTATION

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOD	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
F-1	30.725521°	97.647171°	CD	5	Qt/Kdr	427	571	12	N75°W	0			O,F	5	10	10			X	Drainage
F-2	30.724102°	97.646189°	CD	5	Kdr	70	130	4	N10°E	0			O,F	5	10	10			X	Drainage
F-3	30.722172°	97.645116°	CD	5	Kdr	135	135	6	-	0			O,F	5	10	10			X	Drainage
F-4	30.725956°	97.647279°	MB	30	Kef	0.7	0.7	>100	-	0			N,X	5	35	35		X		Hillside

* DATUM: NAD 83

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Signature

Date: January 13, 2025

Sheet __1__ of __1__

Attachment A

STATE OF TEXAS
ROMAN C. PINEDA
GEOLOGY
10083
LICENSED
PROFESSIONAL GEOSCIENTIST

TCEQ-0585-Table (Rev. 10-01-04)

Photo 1. View of feature F-1

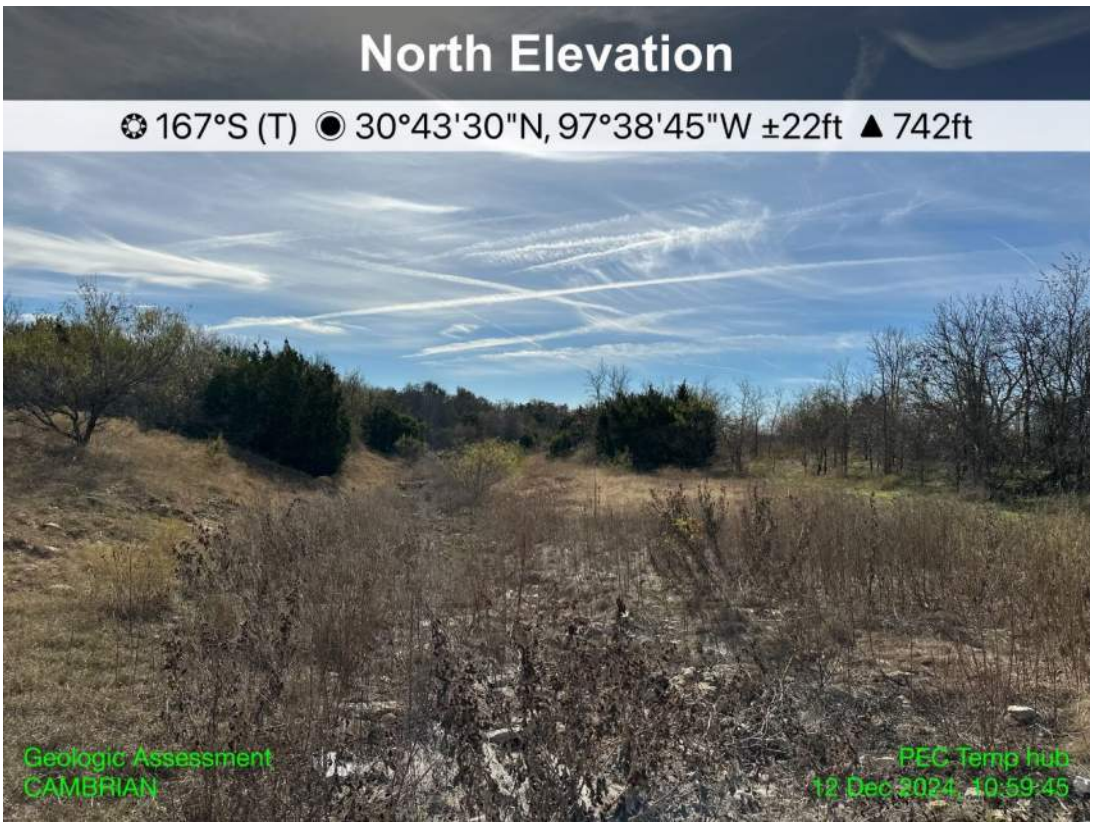


Photo 2. View of feature F-2

Attachment B – Stratigraphic Column

A stratigraphic column showing formations, members, and thickness is attached.

Stratigraphic Column

*Area shaded gray represents the lithology directly underlying the project site

Period	Group	Stratigraphic Unit	Hydrologic Unit	Maximum Thickness (Feet)
Quaternary to Tertiary		Stream and river alluvium (Qal)	Overlying Units	70
		Fluviatile terrace (Qt)		
		Older alluvium (QTa)		
Upper Cretaceous (Gulf Series)	Taylor	Taylor Clay (Ktl)	Confining Units	300
	Austin	Austin Chalk (Kau)		400
	Eagle Ford	Eagle Ford Shale (Kef)		60
	Washita	Buda Limestone (Kbu)		20
		Del Rio Clay (Kdr)		60
Lower Cretaceous (Comanche Series)	Fredericksburg	Georgetown Limestone (Kgt)	Edwards Aquifer	100
		Edwards Limestone (Ked)		120
		Comanche Peak Formation (Kc)		50
	Trinity	Walnut Formation (Kw)	Confining Unit	140
		Upper Glen Rose Limestone (Kgru)	Upper Trinity Aquifer	200

Attachment C – Site Geology

A narrative description of the Site-specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

Narrative Description of Site-Specific Geology for the PEC Georgetown Temporary Substation Located in Georgetown, Williamson County, Texas

Prepared for:

BURNS & MCDONNELL

Prepared by:

CAMBRIAN ENVIRONMENTAL

January 13, 2025

NARRATIVE DESCRIPTION OF SITE-SPECIFIC GEOLOGY FOR THE PEC GEORGETOWN TEMPORARY SUBSTATION LOCATED IN GEORGETOWN, WILLIAMSON COUNTY, TEXAS

Prepared for:

Burns & McDonnell
777 Main Street, Suite 2500
Fort Worth, Texas 76102

Prepared by:

Roman C. Pineda, P.G.
TX Geoscience License #10083

Cambrian Environmental
4422 Pack Saddle Pass
Suite 204
Austin, Texas 78745

TX Geoscience Firm Registration #50484

As a licensed professional geoscientist, I attest that the contents of this report are complete and accurate to the best of my knowledge.

NARRATIVE DESCRIPTION OF SITE-SPECIFIC GEOLOGY FOR THE PEC GEORGETOWN TEMPORARY SUBSTATION LOCATED IN GEORGETOWN, WILLIAMSON COUNTY, TEXAS

INTRODUCTION

This narrative Geologic Assessment accompanies the Texas Commission on Environmental Quality (TCEQ) Geologic Assessment Form TCEQ-0585 completed for the PEC Georgetown Temporary Substation in Georgetown, Williamson County, Texas (see Site Location Map). The project area is located along the west side of IH-35, near the IH-35 and FM 972 intersection, and is comprised of approximately 72.39-acres of vacant land.

METHODOLOGY

A Cambrian Environmental Registered Professional Geoscientist (Texas License #10083) and karst technician conducted a field survey for a TCEQ Geologic Assessment on December 12th 2024. The pedestrian survey was completed by walking parallel transects spaced approximately 50 feet apart as directed by the TCEQ in the Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (Rev. 10-01-04). Closer spacing was used where vegetation inhibited clear observation. The project site was thoroughly examined for the presence of potential features, including depressions, holes, and animal burrows. A number of techniques can be used for this effort, including probing with a digging implement to determine the thickness and consistency of fill material and feeling for the presence of air flow, which may indicate the presence of a sub-surface void space. Other techniques include making observations of any notable characteristics of the feature site such as the presence of various types of vegetation or a semi-circular burrow mound produced by the activities of small mammals.

RESULTS

Soils

Soils mapped within the project area consist of the Austin silty clay (AsB), Krum silty clay (KrB), Denton silty clay (DnA, DnB) and Heiden clay (HeB, HesC) series soils[1] (see Site Soils Map). The Austin silty clay and Heiden clay series soils are within the "D" classification of the hydrologic soil groups. Type "D" soils have a very slow infiltration rate (very high runoff potential) when thoroughly wet. Denton silty clay and Krum silty clay series soils are within the "C" classification of the hydrologic soil groups. Type "C" soils have a slow infiltration rate (high runoff potential) when thoroughly wet.

Geology

The mapped bedrock lithology underlying the majority of the project area consist of Quaternary fluviatile terrace deposits (Qt) with some Del Rio Clay (Kdr), Buda Limestone (Kbu) and Eagle Ford Shale (Kef) mapped along the eastern half of the property. No Edwards Limestone was observed on the property at the time of the site visit. The property is mapped as being within the Edwards Aquifer Recharge Zone (see Site Geologic Map). The geology of the property has been mapped most recently at a useful scale by Collins

[1] United States Department of Agriculture, Natural Resource Conservation Service. Online Web Soil Survey, Williamson County, Texas. http://websoilsurvey.sc.egov.usda.gov/

(2005) and we find his interpretation of the geology to be generally accurate.[2] Outcrops of Del Rio Clay and Buda Limestone were observed, while most of the property contained overgrown relatively thick soil cover. No faults are mapped within the project limits, and none were observed during the pedestrian survey.

Recharge into the aquifer primarily occurs in areas where the Edwards Group is exposed at the surface. Most recharge is from direct infiltration via precipitation and streamflow loss. Recharge occurs predominantly along secondary porosity features such as faults, fractures, and karst features (caves, solution cavities, sinkholes, etc.); and these types of karst features are commonly formed along joints, fractures, and bedding plane surfaces formed within the Edwards Group Limestone.

Site Hydrogeologic Assessment

Four features were identified during the pedestrian survey (features F-1, F-2 and F-3). The potential for recharge to occur on the property does not exist due to the presence of upper confining stratigraphy observed and mapped on the property. Should any geologic or karst features be discovered during the construction phase of the project, they should be reported to TCEQ to determine the appropriate mitigation measures.

Feature Descriptions

F-1, F-2 and F-3

Three features are identified as non-karst closed depressions. The features appear to be manmade stock ponds within the Del Rio Clay formation. The non-karst closed depressions do not appear to be karst in origin and no areas of enhanced infiltration greater than background infiltration was observed. Ponded water, loose organics and fine infilling were observed in the stock ponds. Therefore, the feature is ranked as "non-sensitive" and the probability for rapid infiltration is low.

F-4

Feature is a manmade feature identified as an observation well utilized by the Unites States Geologic Survey (USGS). The wellhead is completed above the natural ground surface, has a removable accessible cap and does not have a submersible pump. Therefore, the probability for rapid infiltration is low.

[2] E.W. Collins, 2005, Geologic Map of the West Half of the Taylor Texas 30x60 Quadrangle: Central Texas Urban Corridor Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander, Bureau of Economic Geology, University of Texas at Austin. Scale 1:100,000

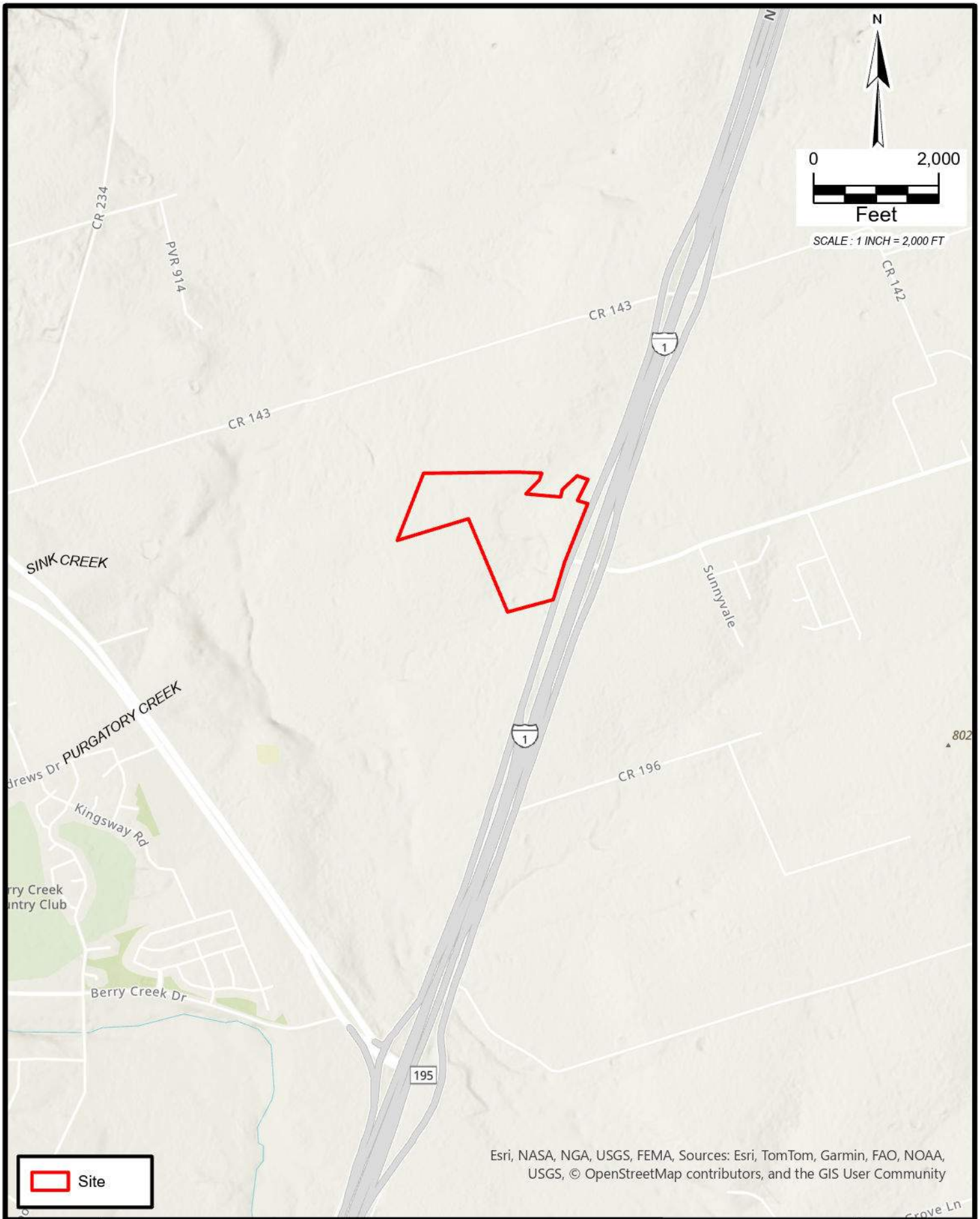
City of Georgetown Salamander Ordinance

No springs were identified within the interior of the property during the pedestrian survey, and therefore no occupied site protection, or spring buffer protection measures will be required for the property. An unnamed tributary is present on the property (generally flowing from north to south) and eventually culminates in Berry Creek approximately 2500-ft to the southwest, but it appears to only flow during heavy rain when there is high runoff potential. Two small manmade stock ponds were observed along the unnamed tributary which consists of a shallow and gently sloping drainage that did not have any standing or flowing water present. One large manmade stock pond was observed in the central area of the site along the unnamed tributary and did contain standing water at the time of the pedestrian survey. However, no flow was observed. The catchment area for this dry unnamed tributary is over the Edwards Aquifer Recharge Zone and is estimated at approximately 100 acres. Therefore, a stream protection buffer will be required.

Additionally, all regulated activities within the Recharge Zone must follow water quality best management practices, and development of the property will need to comply with the water quality protection measures as outlined in Section 8 of the Ordinance.

Attachment D – Site Geologic Maps

Three maps are provided to supplement this Geologic Assessment. Included is a Site Geologic Map that indicates the geologic and manmade features identified during the pedestrian survey. The scale of the Site Geologic Map is the same as the Site Plan, which is 1”=300’.

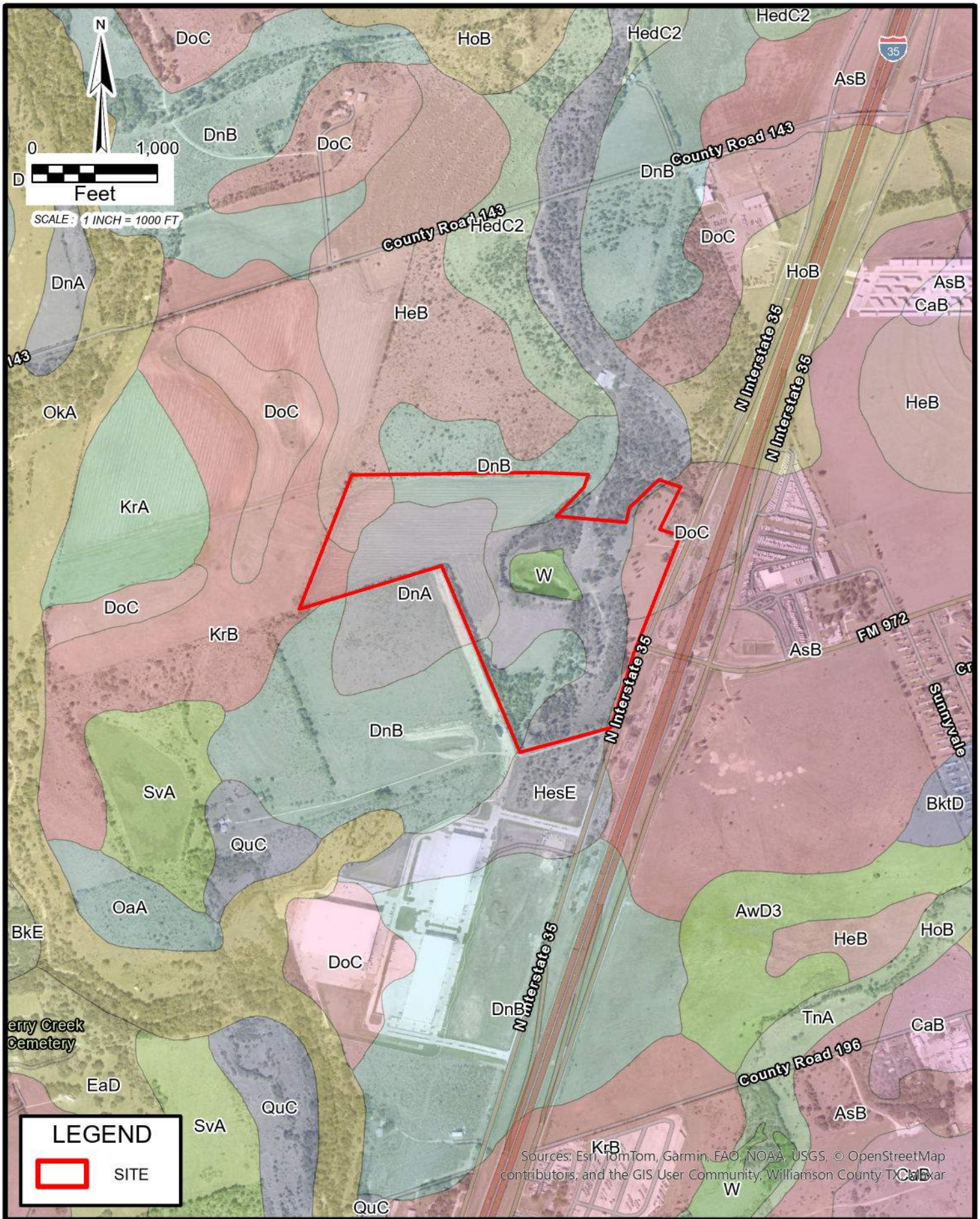


Cambrian

PEC GEORGETOWN TEMPORARY SUBSTATION
GEOLOGIC ASSESSMENT
SITE LOCATION MAP
GEORGETOWN, WILLIAMSON COUNTY, TEXAS

REVISIONS:	ISSUE DATE:
PROJECT NO.	
DATE: January 2025	DESIGNER:
DRAWN: RCP	CHECKED: KW

FIGURE 1



Cambrian

PEC GEORGETOWN TEMPORARY SUBSTATION
GEOLOGIC ASSESSMENT
SITE SOILS MAP
GEORGETOWN, WILLIAMSON COUNTY, TEXAS

REVISIONS:	ISSUE DATE:
PROJECT NO.	
DATE: January 2025	DESIGNER: RCP
DRAWN: RCP	CHECKED: KW

FIGURE 2

Cambrian

N

0 300 600
FEET
SCALE : 1" = 300'

720

Qt

Kdr

Qt

Kbu

Kef

F-4

F-1

Kef

N Interstate 35

N Interstate 35

35

Qt

F-2

Kbu

Kdr

Kdr

F-3

FM 972

N Interstate 35

N Interstate 35

N Interstate 35

N Interstate 35

35

Williamson County TX, Maxar, Microsoft, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap c

LEGEND

SITE	
Qt	Fluviatile terrace deposits
Kef	Eagle Ford
Kbu	Buda Limestone
Kdr	Del Rio Clay
F-#	Feature

ISSUE DATE

REVISIONS

STATE OF TEXAS
ROMAN C. PINEDA
GEOLOGY
0088
LICENSED
PROFESSIONAL GEOLOGIST

PEC GEORGETOWN TEMPORARY SUBSTATION

SITE GEOLOGIC MAP
GEOLOGIC ASSESSMENT
GEORGETOWN, WILLIAMSON COUNTY

PROJECT NO:
DATE: January 2025
DRAWN: RCP CHECKED: KW

FIGURE
3

FORM TCEQ – 0584

WATER POLLUTION ABATEMENT PLAN APPLICATION

ATTACHMENT A – FACTORS AFFECTING SURFACE WATER QUALITY
ATTACHMENT B – VOLUME AND CHARACTER OF STORMWATER
ATTACHMENT C – SUITABLITY LETTER FROM AUTHORIZED AGENT (IF OSSF IS PROPOSED)
ATTACHMENT D – EXCEPTION TO THE REQUIRED GEOLOGIC ASSESSMENT (IF REQUESTED)
SITE PLAN

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Allison Quiroga

Date: 1/28/2025

Signature of Customer/Agent:

Signed by:
Allison Quiroga
F02F2A10CE5B494...

Regulated Entity Name: Pedernales Electric Cooperative, Inc. Buffalo Clover Substation Project

Regulated Entity Information

1. The type of project is:

   ☐ Residential: Number of Lots:_____
   ☐ Residential: Number of Living Unit Equivalents:_____
   ☐ Commercial
   ☐ Industrial
   ☒ Other:_____

2. Total site acreage (size of property):72.4

3. Estimated projected population:0

4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	0	÷ 43,560 =	0
Parking	0	÷ 43,560 =	0
Other paved surfaces	71,554	÷ 43,560 =	1.64
Total Impervious Cover	71,554	÷ 43,560 =	1.64

Total Impervious Cover 1.64 **÷ Total Acreage** 72.4 **X 100 =** 0.02**% Impervious Cover**

5. ☒ **Attachment A - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.

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

For Road Projects Only

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

7. Type of project:

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

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.

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

10. Length of pavement area: _____ feet.

    Width of pavement area: _____ feet.
    L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.
    Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

11. ☐ A rest stop will be included in this project.

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

14. The character and volume of wastewater is shown below:

0% Domestic	0Gallons/day
0% Industrial	0Gallons/day
0% Commingled	0Gallons/day
TOTAL gallons/day 0	

15. Wastewater will be disposed of by:

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

- ☐ **Attachment C - Suitability Letter from Authorized Agent**. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.
- ☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☐ Sewage Collection System (Sewer Lines):

- ☐ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.
- ☐ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

- ☐ The SCS was previously submitted on_____.
- ☐ The SCS was submitted with this application.
- ☐ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

☐ The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

☐ Existing.
☐ Proposed.

16. ☐ All private service laterals will be inspected as required in 30 TAC §213.5.

Site Plan Requirements

Items 17 – 28 must be included on the Site Plan.

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

Site Plan Scale: 1" = 300'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA, Flood Insurance Rate Map for City of Georgetown, Texas, Panel Number 480668, Map Number 48491C0285F, effective December 20, 2019.

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

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

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):

☒ There are one (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☒ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

☐ There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:

☒ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.

☐ **Attachment D - Exception to the Required Geologic Assessment**. A request and justification for an exception to a portion of the Geologic Assessment is attached.

22. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.
23. ☒ Areas of soil disturbance and areas which will not be disturbed.
24. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. ☒ Locations where soil stabilization practices are expected to occur.
26. ☒ Surface waters (including wetlands).

    ☐ N/A

27. ☒ Locations where stormwater discharges to surface water or sensitive features are to occur.

    ☒ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

29. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Attachment A – Factors Affecting Surface Water Quality

Water quality may be affected by activities and practices implemented during and active construction. During construction, temporary controls will be put in place to minimize the effects associated with short duration of construction. Post-construction, permanent controls will be in place to reduce the installed impact of the proposed Buffalo Clover temporary substation.

Construction activities which may impact water quality include equipment and vehicle traffic throughout the Site, handling, transport, and laydown of materials and fuels, and sediment-disturbing construction activities such as grubbing and grading. Silt fence will be installed as perimeter control around the toe of slopes to minimize and prevent sediment pollution to adjacent areas; a stabilized construction entrance will be installed to prevent the tracking out of sediment potentially carried off Site from vehicle and equipment tires. Additional detail is provided in the Temporary Stormwater Section.

Factors to consider with respect to permanent water quality associated with this Project are primarily associated with runoff from the proposed on-site impervious cover and the eventual decommissioning of the Site. The proposed development is intended to be unmanned and function with minimal maintenance on an as-needed basis. Vegetated filter strips have been designed to meet the Total Suspended Solids loading anticipated by increases in impervious cover requirements of the Edwards Aquifer Protection Program Additional detail is provided in the Permanent Stormwater Section.

Attachment B – Volume and Character of Stormwater

The project is fully located within the Edward Aquifer Recharge Zone. The drainage calculation is done using the fully developed land use condition in HEC-HMS in accordance with City of Georgetown Drainage Criteria Manual using Natural Resources Conservation Service (NRCS) unit hydrograph Method. The drainage calculation includes on-site, and offsite runoff and result shows net increase in peak flow is less than 0.5 cfs leaving the property.

The character (Quality) of onsite runoff is considered typical for dirt roads, which considered as impervious cover. The impervious cover is less than 20% of the drainage area or parcel area. Interim Vegetative Filter Strip (VFS) is proposed for water quality treatment for the onsite runoff coming from impervious cover. The goal is to remove 80% of the increased runoff due to added impervious cover. The treated storm runoff will be conveyed through the grassy V-ditch along the dirt road before it discharges into swale. Drainage area maps and drainage calculations are attached.

Attachment C – Suitability Letter from Authorized Agent (if OSSF is proposed)

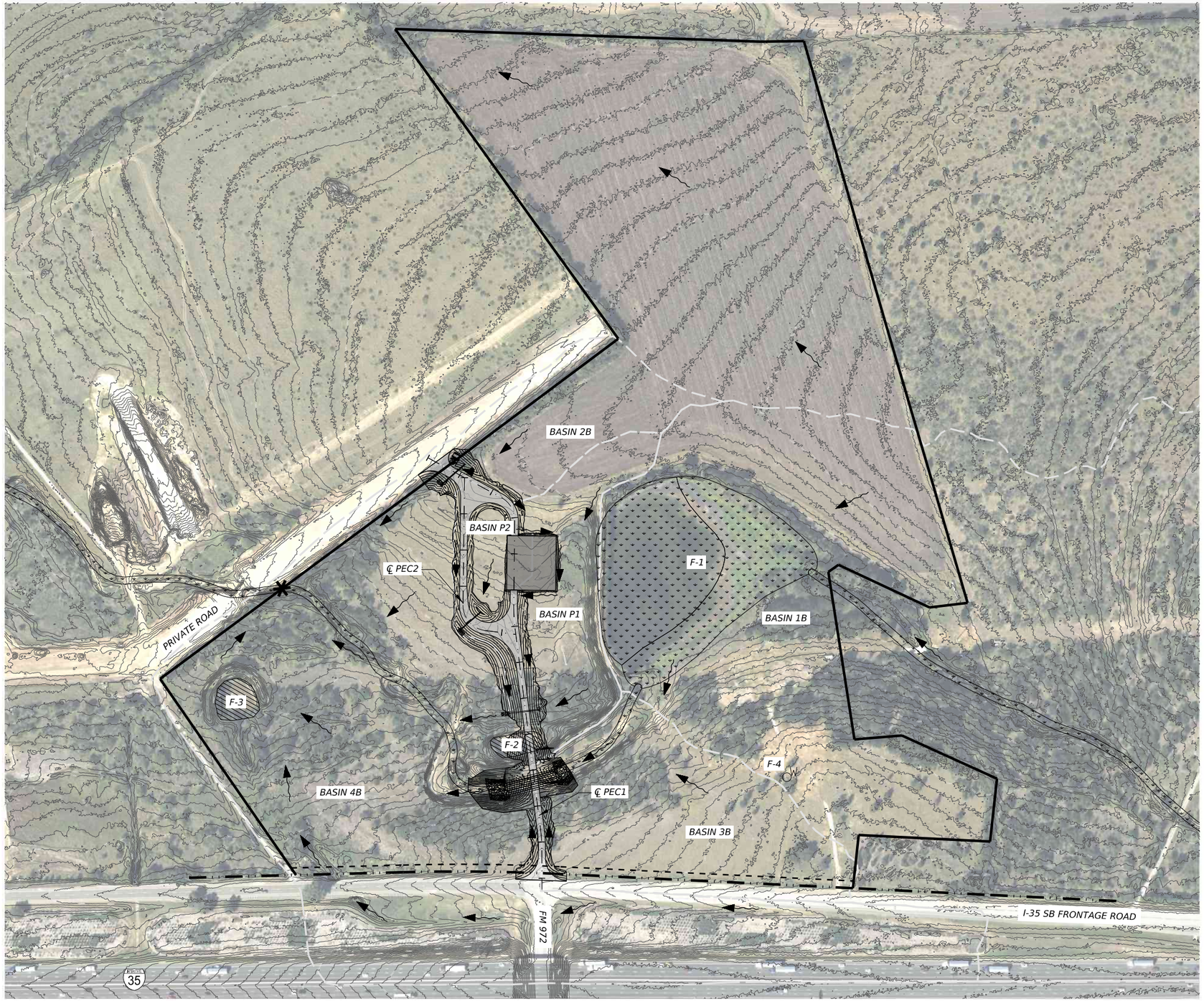
The Project does not propose an on-site sewage facility (OSSF), therefore, this section is not applicable.

Attachment D – Exception to the Required Geologic Assessment

A Geologic Assessment was conducted, and an exception is not requested, therefore, this section is not applicable. The assessment is attached with Form TCEQ – 0587.

Site Plan

The Site Plan is located on the following page.



HORZ: 0 150 300

SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- PARCEL LIMIT
- FLOW DIRECTION
- 5' PROPOSED CONTOUR LINES
- 1' PROPOSED CONTOUR LINES
- EXISTING CONTOUR LINES
- DRAINAGE AREA BOUNDARY
- ROCK RIPRAP
- PROPOSED CULVERT
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- WATERBODY
- WETLAND
- DISCHARGE POINT/ RUNOFF LEAVING THE PROPERTY
- EXISTING GROUNDWATER WELL

STATE OF TEXAS
KRISTEN M. KODIMAN
147286
LICENSED PROFESSIONAL ENGINEER
01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

BURNS McDONNELL
6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

SITE PLAN

SHEET 1 OF 1

DESIGNED:	SCALE:	DATE:	SHEET
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FORM TCEQ – 0602

TEMPORARY STORMWATER SECTION

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) PLAN AND CALCULATIONS
ATTACHMENT I – INSPECTION AND MAINTENANCE FOR BMPS
ATTACHMENT J – SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Allison Quiroga

Date: 1/28/2025

Signature of Customer/Agent:

Signed by:
Allison Quiroga
F02F2A10CE5B494...

Regulated Entity Name: Pedernales Electric Cooperative, Inc. Buffalo Clover Substation Project

Project Information

Potential Sources of Contamination

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

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

   ☒ The following fuels and/or hazardous substances will be stored on the site: Diesel fuel, motor oil, hydraulic fuel will be present in small quantities due to the operation of heavy equipment to conduct construction activities. These materials will not be stored in containers and staged on Site.

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

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

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

Attachment A – Spill Response Actions

In the unlikely event of a spill of hydrocarbons or hazardous substances, discovery, response and cleanup protocols are outlined below. The following measures will be implemented. The on-Site Contractor will be trained in spill response activities and also have contact information on hand for a specialized hazardous materials contractor to contact in the case of a larger spill.

Spill Prevention, Materials, and Response

- Visual walkaround observations of the Site and construction equipment will be made daily. Any faulty or loose-fitting hoses, fittings, etc. shall be corrected immediately before the equipment is operated to prevent malfunction which could lead to negative safety scenarios or spill events. If staining or fluid is observed from underneath parked equipment, that equipment will be repaired before being put back in service or replaced.
    - The spill will be isolated, removed with the proper spill materials described below, containerized, labelled, and stored until appropriate disposal can occur.
- Spill cleanup supplies will be located in a secured area on Site for the duration of construction. Post-construction, a spill kit will be located within the control enclosure. Supplies within the spill kit will contain the following items:
    - Absorbent materials
    - Broom
    - Shovel
    - Dustpan
    - Protective equipment for handling the spill
    - Salvage drum for waste disposal

Notification and Reporting

Notifications to the National Response Center, TCEQ, Williamson County Local Emergency Planning Committee will be made first by telephone and followed up with written report (where required) in the event of a hazardous spill in reportable quantities. The phone numbers for those agencies are listed below:

- National Response Center (NRC) at 1-800-424-8802
- TCEQ Spill Reporting Hotline, within 24-hours of the spill event: 1 (800) 832-8224.
- Williamson County Local Emergency Planning Committee (LEPC): email: lepc@wilco.org.

Other agencies which may need to be notified include, but are not limited to, the City of Georgetown Fire Department, City of Georgetown Police Department, Williamson County Fire Marshal, Williamson County Sheriff Office, etc.

Attachment B – Potential Sources of Contamination

The primary potential sources of contamination anticipated on Site is sediment disturbed during the short duration of construction activities. Sediment will be generated as a result of sediment-disturbing activities: grubbing, movement of tracked and non-tracked vehicles over disturbed soil, grading, access road compaction, installation of drainage conveyances, culverts, and to a minor degree the temporary best management practices. Other potential pollutants to stormwater exist and are described below:

Substance or Material	Pollutant	Location within Site
Lubricant	Hydrocarbon	Operating Equipment
Fuel	Hydrocarbons	Operating Equipment
Coolant	Organic compounds	Operating Equipment
Trash, refuse	Floatables, bacteria	Waste area
Portable toilets	Bacteria	Break area
Mineral oil	Hydrocarbon	Substation

- Stormwater runoff collected on the substation pad will be mitigated by erosion and sediment control best management practices (BMPs)and ultimately diverted to permanent underground drainage structures (corrugated metal pipe (CMP) culverts).
- Vehicle maintenance will be performed within the construction staging area.
- Construction vehicles and equipment shall be checked regularly for leaks and repaired immediately.
- Trash containers will be placed throughout the Site to encourage proper trash disposal during construction
- Construction debris will be monitored daily by the contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediately attention will be addressed on a case by case basis.
- Any unanticipated hazardous materials and/or petroleum contamination encountered during construction within the subject property will be handled according to applicable rules and regulations.

Attachment C – Sequence of Major Activities

Approximately 4.56 acres will be disturbed by the civil works associated with the Project. The following is a chronological timeline of the planned sequence of activities and implementation of temporary erosion and sediment controls for the Project.

Site Preparation

Preparation of Right-of-Way (ROW)		
Construction Activity	**Start**	**Duration**
Clearing and grubbing	Day 0	Approximately 14 calendar days
Temporary BMP Installation		

Construction will begin with Site preparation activities to allow access to the Site from the Interstate 35 (IH-35) frontage road.

- Clearing and grubbing activities will be initiated to remove trees and vegetation within the ROW.
- Temporary BMP Installation:
    a. A stabilized construction entrance/exit will be installed. Temporary matting will be installed where practicable to prevent impacts from equipment or vehicular traffic.
    b. In conjunction with temporary matting, temporary sediment control fence (silt fence) will be installed along the perimeter of the Project boundary. Sediment control fence will be used to divert and retain sediment carried by sheet flow from disturbed areas and to limit sediment runoff from leaving the Project Site. Sediment control fences may be utilized to minimize run-off to and from adjacent properties.

Access Road Construction – Drainage and Civil Works

Access Road Construction – Drainage		
Construction Activity	**Start Date**	**Duration**
Install culverts	Day 15	Approximately 18 calendar days
Install wingwalls		
Placement of rock riprap		

Drainage (Culverts)

Approximately 0.7-acre is to be disturbed by the preparation, construction, and installation of drainage features associated with the access roads.

- Clearing and grubbing activities will be initiated to remove trees and vegetation required to install culverts and rock riprap.

- Excavation grading work will be done to prepare the areas for the installation of drainage features.
    a. Prior to the placement of rock riprap, the area around the culverts and wing walls will be prepared with a geotextile fabric to prevent soil erosion and provide stability. The rock riprap material utilized with be large enough in diameter to stay in place during high-flow events. Rock riprap will be placed in a manner to form a stable, interlocker layer resistant to displacement by water.
    b. Temporary sediment control fence (silt fence) will be installed along the perimeter of the disturbance area. Sediment control fence will be used to divert and retain sediment carried by sheet flow from disturbed areas and to limit sediment runoff from leaving the Project Site.

Access Road Construction – Civil Works		
Construction Activity	**Start Date**	**Duration**
Grade roadway	Day 33	Approximately 36 calendar days
Place lime		
Remix lime		
Finish subgrade		
Install flex base		

1. Approximately 4.56 acres will be disturbed by the civil works associated with the Project.
2. Clearing and Grubbing
    a. Trees and vegetation present within the limits of disturbance for the access roads will be removed.
3. Excavation and Grading
    a. Civil grading activities will occur to bring the access road to grade; material from areas of cut will be placed in areas where fill is needed if the native material is suitable, when suitable.
    b. Compaction equipment (smooth drum roller or vibratory roller) will be utilized to pack subgrade and subsequent layers to prevent settling or shifting over time.
4. Application and remixing of lime
    a. The appropriate type of lime used during construction will be selected based on soil conditions and Project specifications to stabilize the subgrade, improve soil strength, provide moisture content and compaction elements.
    b. A spreader or other equivalent type of equipment will be utilized to apply lime; lime will be uniformly applied over the surface of the subgrade surface.
    c. The lime will be mixed into the subgrade, breaking up the soil to allow interaction between the lime and soil to achieve a uniform distribution. The lime and soil mixture will be re-mixed to improve the bond and enhance the strength and stability of the upgrade.

d. Compaction equipment will be utilized to pack subgrade and subsequent layers to prevent settling or shifting over time and ensure a solid foundation.

5. Placing subgrade and planned/final flexible base
    a. A layer of flexible base material consisting of aggregate on top of the compacted and moisture-controlled lime-treated subgrade, providing strength and support for the roadway. The flexible base is the final layer of material placed on top of the subgrade layer.
    b. The flexible base material and underlying layers will be packed together to prevent settling or shifting over time.
    c. Fine-grading is scheduled to smooth and conform the flexible base to final civil specifications and profiles.
6. Temporary BMP Installation and General Timing
    a. Temporary sediment control fence (silt fence) will be installed along the limits of construction. Sediment control fence will be used to divert and retain sediment carried by sheet flow from disturbed areas and to limit sediment runoff from leaving the Project Site. Sediment control fences may be utilized to minimize run-off to and from adjacent properties.

Receiving Waters

The receiving waters of the proposed Project will remain consistent during pre- and post-construction conditions. The receiving waters at the Project Site ultimately flows into the existing ditch, flowing toward an unnamed creek, which eventually discharges into Dry Berry Creek. Appropriate temporary and permanent measures will be implemented to manage run-off and protect water quality during and after construction.

Attachment D – Temporary Best Management Practices and Measures

Erosion and sediment control BMPs will be implemented prior to the initiation of construction activities and will be maintained throughout the construction. No naturally occurring sensitive features, or surface streams were identified within the proposed limits of construction. However, to minimize impacts a variety of temporary and permanent control measures will be installed and maintained throughout the Project to limit the potential for sediment to impact surface waters. Temporary control measures will be implemented during construction activities to minimize and manage pollutant and are described below:

- **Stabilized Construction Entrance**
    - A construction entrance stabilized with rock will connect the proposed Buffalo Clover Temporary Substation to the I-35 southbound frontage road. The entrance will be constructed of rock to reduce sediment track out by causing vibration in the tires of on-Site vehicles and construction equipment, helping debris and sediment to fall off. Additionally, tracked-out soil and sediment will not be hosed or swept into any stormwater conveyance, storm drain inlet or surface water. Tracked-out soil and sediment will be removed from public roadways through street sweeping when present and before completion of the workday.

- **Sediment Control Fence**
    - Temporary sediment control fence, silt fence, will be installed along the perimeter of the Project boundary. Sediment control fence will be used to divert and retain sediment carried by sheet flow from disturbed areas and to limit sediment runoff from leaving the Project Site. Sediment control fence may be utilized to minimize run-off to and from adjacent properties.

The locations and types of temporary BMPs may be adjusted based on conditions at the time of construction. BMP modifications will be evaluated to ensure flow is maintained to naturally occurring sensitive features identified during TCEQ inspection, or during excavation, blasting or construction in order to protect water quality.

Attachment E – Request to Temporarily Seal a Feature

There were no karst features identified within the Site. None of the non-karst features identified during the Geologic Assessment are proposed to be sealed temporarily as a part of this Project, therefore, this section is not applicable.

Attachment F – Structural Practices

Structural practices designed and engineered for this Project intend to control and manage water flow, erosion, sedimentation and ultimately, protect water quality.

Pre-development conditions demonstrate the flow from the Project Site and the existing pond flow through the existing swale in the middle of the parcel. The existing swale also collects runoff from the east. No cross-drainage structure exists in the existing swale/ditch. Post-development conditions propose the construction of cross-drainage structures such as stormwater ditches and culverts. Structural practices are described in further detail below.

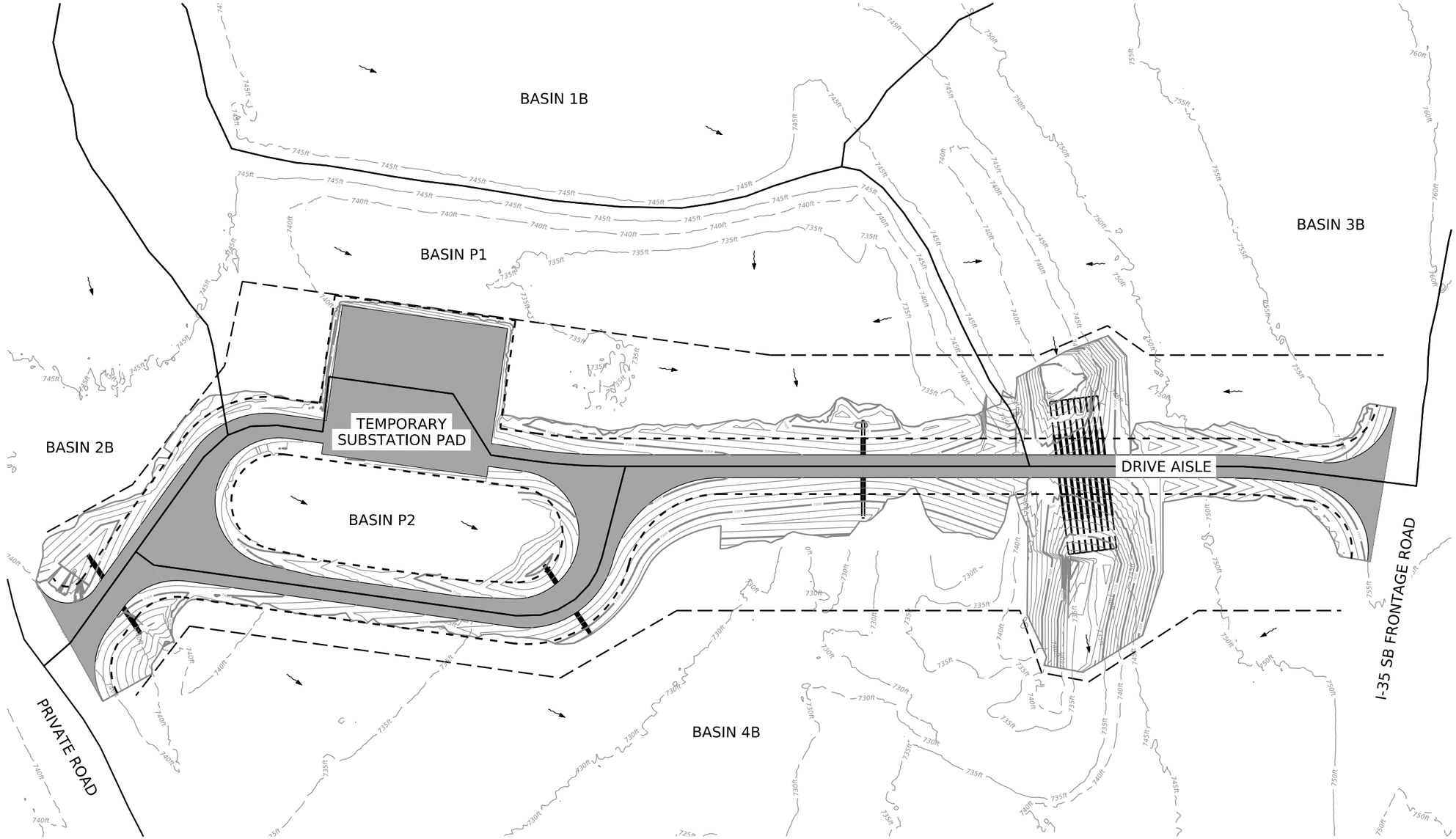
- **Stormwater Ditches and Culverts**
  - Post-development conditions propose to center crown the substation east to west, any runoff from this surface will be directed and collected at the proposed ditch along the proposed temporary substation pad.
  - Two additional smaller culverts are required to accommodate the native flows.
  - Culverts were sized at the crossing and low points, in a total of two locations of the access road and evaluated as per the Texas Department of Transportation (TxDOT) Hydraulic Design Manual (HDM) and City of Georgetown Drainage Criteria Manual (DCM).
- **Vegetative Filter Strips (permanent vegetation)**
  - The proposed substation and access road within the Edward Aquifer recharge zone requires runoff treatment to remove the Total Suspended Solids (TSS) by 85% to meet the requirements of both the TCEQ and City of Georgetown. Vegetative filter strip (VSF) is proposed along the proposed access road. The width of proposed VSF limits to minimum width or 50% of impervious cover as in accordance with TCEQ RG-248 section 3.4.6 Interim Filter Strips.
  - Seeds of selected native grass species and other plants suitable for post-development conditions will be broadcasted evenly across exposed soil surfaces along the temporary sediment control fence. Establishment of permanent vegetation will support the filtration of water and stabilization of the soil.
- **Rock Riprap**
  - Layers of large stones (rock riprap) will be installed south of the culverts constructed at the existing ditch. Rock ripraps protect from soil erosion in areas of high or concentrated flow. Reducing flow and stabilizing channel side slopes and bottoms to ensure protection of water quality.

Appendix G – Drainage Area Map

A drainage area map supporting the following requirements is attached: there are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment control other than sediment basins or sediment traps within each disturbed drainage area will be used.

Drainage Calculation

SN	Drainage Asset	Drainage Area (ac)	Time of Concentration (Min)	Curve Number (CN)	Existing		Proposed		Estimated Peak Flow (CFS)												Change in Flow (Pre-Post) (CFS)			
					Impervious Cover (Ac)	Impervious Cover (%)	Impervious Cover (Ac)	Impervious Cover (%)	Pre-Development				Pre-Development				Post-Development							
									2-YR	10-Yr	25-Yr	100-Yr	2-YR	10-Yr	25-Yr	100-Yr	2-YR	10-Yr	25-Yr	100-Yr	2-YR	10-Yr	25-Yr	100-Yr
1	1B	668.80	118	84.5	0	0%	0.00	0.00	–	–	–	–	518.6	985.0	1311.4	1874.4	518.6	985.0	1311.4	1874.4	0.0	0.0	0.0	0.0
2	2B	3.76	23	79	0	0%	0.07	1.78	–	–	–	–	6.0	11.9	16.1	23.0	6.1	12.1	16.3	23.1	0.2	0.2	0.2	0.1
3	3B	7.55	10	84	0	0%	0.09	1.23	–	–	–	–	20.7	37.6	48.4	66.0	21.0	37.9	48.6	66.2	0.3	0.3	0.2	0.2
4	4B	29.28	15	84.9	0	0%	0.38	1.31	–	–	–	–	70.3	128.0	166.4	227.3	70.3	128.0	166.4	227.3	0.0	0.0	0.0	0.0
5	P1	4.31	12	84	0	0%	0.38	8.78	–	–	–	–	11.4	20.8	26.9	36.8	11.9	21.2	27.3	37.1	0.5	0.5	0.4	0.3
6	P2	1.37	10	83.5	0	0%	0.57	41.76	–	–	–	–	5.2	9.5	12.2	16.7	6.3	10.4	13.0	17.3	1.1	1.0	0.8	0.6
7	Leaving Property	–	–	–	–	–	–	–	528.3	1006.6	1344.1	1928.4	528.3	1006.6	1344.1	1928.3	528.4	1006.7	1344.1	1928.4	0.1	0.1	0.0	0.1



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LEGEND

- PROPOSED DRAINAGE AREA
- PROPOSED ACCESS EASEMENT
- IMPERVIOUS COVER
- PROPOSED CULVERT
- FLOW ARROWS
- 5' CONTOUR LINES
- 1' CONTOUR LINES
- VEGETATIVE FILTER STRIP

NOTES:

1. PEAK FLOW IS MEAUSRED USING THE NRCS METHOD AS MENTIONED IN THE CITY OF GEORGETOWN DRAINAGE CRITERIA MANUAL (DCM) SECTION 3.0
2. TIME OF CONCENTRATION IS CALULATED USING DCM SECTION 3.4.3
3. CURVE NUMBERS WERE TAKEN FROM TABLES 3.4 AND 3.6 OF DCM
4. 15-FT. VEGETATIVE FILTER STRIPS (VFS) ARE PROPOSED FOR AN INTERIM PERMANANT BMP AS DESCRIBED IN 3.4.6 (PAGES 3-56) OF TCEQ RG-348
5. REFER DRAINAGE REPORT FOR DETAILED DRAINAGE CALCULATIONS

STATE OF TEXAS
GOVINDA KARKI
133932
LICENSED PROFESSIONAL ENGINEER
01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

BURNS McDONNELL
6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

PROPOSED INTERNAL DRAINAGE AREA AND CALCULATIONS

SHEET 1 OF 1

DESIGNED: GK	SCALE:= 1"=100'	DATE:	SHEET
DRAWN: CMW	H: 1" = 50'	1/24/2025	21
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Attachment H – Temporary Sediment Pond(s) Plans and Calculations

There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time; the entire acreage included within the limits of construction is less than 10 acres. This section is not applicable

Attachment I – Inspection and Maintenance for BMPs

Erosion and sediment control BMPs will be installed prior to the initiation of soil-disturbing activities and maintained throughout construction. Routine maintenance and inspection of BMPs are essential to controlling erosion and sedimentation on the Project Site and protecting the water quality of the receiving streams.

A Stormwater Pollution Prevention Plan (SWPPP) will be developed for the proposed construction activities in accordance with the Texas Pollutant Discharge Elimination System (TPDES) General Permit No. TXR15000. Inspection requirements will be outlined in the SWPPP but generally include to inspect and maintain all disturbed areas under active construction, areas used for storage of materials, areas where final stabilization measures are initiated, and locations where vehicles enter or exit the Site.

A designated, qualified person or persons will conduct on-site inspections once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (in accordance with the requirements of the General Permit).

During each inspection, the inspector must complete an Inspection and Maintenance Report Form documenting ineffective BMPs due to damage, inadequate performance, or installed improperly. BMPs are to be repaired and replaced as soon as practicable and prior to the next rain event, if feasible. Erosion and sediment control BMPs that have been intentionally disabled, run over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery. If unable to repair or replace prior to the next anticipated storm event, the reason and the anticipated maintenance schedule shall be documented in the Corrective Action Log.

If the inspection report does not document any incident of repairs or replacements, the report must include a certification that the temporary BMPs and the construction Site are operating effectively per Project specifications and applicable permits. A signature must be provided to certify the report.

Sediment must be removed from erosion and sediment control BMPs before it reaches 50 percent of the aboveground height of the BMP. If sediment escapes the Project Site, it must be removed at a frequency that minimizes offsite impacts and prior to the next rain event, if practicable. If the operator does not have access to an offsite location, the operator shall coordinate with the owner to gain access for the removal of sedimentation.

In accordance with the TPDES General Permit No. TXR15000, the dates of major grading activities, construction pauses (temporary and permanent), and initiation of stabilization measures will be recorded and kept on-Site. Additionally, stabilization practices will be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Form TCEQ-0602: Table of Summary of Important Deadlines

SWP3 Requirement	Deadline
Initiate Temporary/Final Stabilization Measures	14 days after construction has temporarily or permanently ceased
Site Inspection for Active Construction Areas	Once every 7 days regardless of rainfall events
Site Inspection for Stabilized Areas	Once every month until the appropriate coverage (at least 70%) is achieved
Temporary BMP Removal	Within 30 days after final stabilization
Maintenance Based on Inspection Results	Within 7 calendar days of inspection

The following areas will be routinely inspected:

- Areas that have been cleared, graded, or excavated and have not yet achieved final stabilization.
- Stormwater controls, including pollution prevention measures to confirm controls are installed property and functioning as intended.
- Areas where stormwater typically flows within the Project Site, including drainages designed to divert, convey, and/or treat stormwater.
- Stormwater discharge locations.
- Locations where stabilization measures have been implemented.
- Locations where vehicles enter or exit the Project Site for evidence of offsite sediment tracking.
- Locations where dewatering activities occur.
- Locations of dewatering pollution prevention measures.

A report summarizing each inspection will be completed within 24 hours following the inspection and will include:

- Inspection date and time
- Name and title of the person making the inspection.
- Location of dewatering activities
- Approximate times that dewatering began and ended
- Estimate of volume of water discharged during dewatering in gallons per day (gpd).
- Discharges of sediment or pollutants from the Project Site.
- BMPs that need maintenance or have failed to provide adequate erosion and sediment control.

- Locations that require additional BMPs
- Incidents of noncompliance with the Permit

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

In the event any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered or encountered during construction, all regulated activities near the feature will be immediately suspended. Construction personnel will immediately notify the appropriate TCEQ Regional Office. Regulated activities will not continue until the TCEQ has reviewed and approved the methods proposed to protect the Edwards Aquifer from any adverse impacts.

- **Stormwater Ditches and Culverts**
  - Installed as part of the drainage scope of work for the access road construction.
  - Post-development conditions propose to center crown the substation east to west, any runoff from this surface will be directed and collected at the proposed ditch along the proposed temporary substation pad.
  - Culverts are proposed at two locations due to the proposed access road crossing the existing ditch.
  - Two additional smaller culverts are required to accommodate the flow from the proposed Site.
  - Culverts were sized at the crossing and low points of the access road and evaluated as per the Texas Department of Transportation (TxDOT) Hydraulic Design Manual (HDM) and City of Georgetown Drainage Criteria Manual (DCM).
- **Vegetative Filter Strips (Permanent Vegetation)**
  - Implemented during the preparation of the ROW and Project Site, after the installation of temporary sediment control fence.
  - The proposed substation and access road within the Edward Aquifer recharge zone requires runoff treatment to remove the Total Suspended Solids (TSS) by 85% as per the TCEQ requirements. Vegetative filter strip (VSF) is proposed along the proposed access road. The width of proposed VSF is limited to minimum width or 50% of impervious cover in accordance with TCEQ RG-348.
  - Seeds of selected native grass species and other plants suitable for post-development conditions will be broadcasted evenly across exposed soil surfaces along the temporary sediment control fence. Establishment of permanent vegetation will support the filtration of water and stabilization of the soil once the temporary sediment control fence is removed.
- **Rock Riprap**
  - Constructed as part of the drainage scope of work for the access road construction. Installed following the completion of the stormwater ditches and culverts construction.

- Rock riprap protect from soil erosion in areas of high or concentrated flow. Reducing flow and stabilizing channel side slopes and bottoms to ensure protection of water quality.

- **Installation of Flexible Base**
  - Installed during the final phase of the access road construction.
  - The flexible base is the final layer of material placed on top of the subgrade layer.
  - Compaction equipment (vibratory rollers or static rollers) will be utilized to pack the flexible base material and subsequent layers to prevent settling or shifting over time and ensure a solid foundation.
  - Fine-grading equipment will be used to smooth and conform the flexible base to Project specifications and profiles.

Form TCEQ-0602: Table of Schedule of Interim and Permanent Soil Stabilization Practices

Soil Stabilization Practice	Start Date	Duration
Vegetative Filter Strips	May 16, 2025	6 days
Stormwater Ditches and Culverts	June 2, 2025	11 days
Rock Riprap	June 16, 2025	4 days
Final Flex Base	July 15, 2025	6 days

FORM TCEQ – 0600

PERMANENT STORMWATER SECTION

ATTACHMENT A – 20% OR LESS IMPERVIOUS COVER WAIVER (IF REQUESTED FOR MULTI-FAMILY, SCHOOL OR SMALL BUSINESS SITE)
ATTACHMENT B – BMPS FOR UPGRADIENT STORMWATER
ATTACHMENT C – BMPS FOR ON-SITE STORMWATER
ATTACHMENT D – BMPS FOR SURFACE STREAMS
ATTACHMENT E – REQUEST TO SEAL FEATURE(S)
ATTACHMENT F – CONSTRUCTION PLANS
ATTACHMENT G – INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN
ATTACHMENT H – PILOT-SCALE FIELD TESTING PLAN (IF PROPOSED)
ATTACHMENT I – MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Allison Quiroga

Date: 1/28/2025

Signature of Customer/Agent

Signed by:
Allison Quiroga
F02F2A10CE5B494...

Regulated Entity Name: Pedernales Electric Cooperative, Inc. Buffalo Clover Substation Project

Permanent Best Management Practices (BMPs)

Permanent best management practices and measures that will be used during and after construction is completed.

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

   ☐ N/A

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

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

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

☐ N/A

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

   ☐ N/A

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

   ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
   ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
   ☒ The site will not be used for low density single-family residential development.

5. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

   ☐ **Attachment A - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
   ☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
   ☒ The site will not be used for multi-family residential developments, schools, or small business sites.

6. ☒ **Attachment B - BMPs for Upgradient Stormwater**.

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

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

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

7. ☐ **Attachment C - 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.

8. ☐ **Attachment D - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

☒ N/A

9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

☒ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

☐ **Attachment E - Request to Seal Features**. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☒ **Attachment F - Construction Plans**. All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

☒ Design calculations (TSS removal calculations)
☒ TCEQ construction notes
☒ All geologic features
☒ All proposed structural BMP(s) plans and specifications

☐ N/A

11. ☒ **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan**. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

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

    ☐ N/A

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

    ☒ N/A

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

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

Responsibility for maintenance of best management practices and measures after construction is complete.

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

    ☐ N/A

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

    ☒ N/A

Attachment A – 20% or Less Impervious Cover Waiver

The proposed Project will not be used for multi-family residential development, school, or small business sites, therefore, this section is not applicable.

Attachment B – BMPs for Upgradient Stormwater

Stormwater generated upgradient of the site does not flow across any impervious surfaces created during construction; therefore, permanent BMPs for upgradient stormwater have not been designed and this section is not applicable. Upgradient stormwater will be collected through the proposed swale and directed through the proposed culvert.

Attachment C – BMPs for On-Site Stormwater

Structural practices designed and engineered for this project intend to control and manage water flow, erosion, sedimentation and ultimately, protect water quality. Pre-development conditions demonstrate the flow from the project site and the existing pond flows through the existing swale in the middle of the parcel. The existing swale also collects runoff from the east. No cross-drainage structure exists in the existing swale/ditch. Post-development conditions propose the construction of cross-drainage structures such as stormwater ditches and culverts. Structural practices installed to address stormwater run-off generated on-site are described in further detail below.

- **Stormwater Ditches and Culverts**
  - Post-development conditions propose to center crown the substation east to west, any runoff from this surface will be directed and collected at the proposed ditch along the proposed temporary substation pad.
  - Two additional smaller culverts are required to accommodate the native flows.
  - Culverts were sized at the crossing and low points, in a total of two locations, of the access road and evaluated as per the Texas Department of Transportation (TxDOT) Hydraulic Design Manual (HDM) and City of Georgetown Drainage Criteria Manual (DCM).
- **Vegetative Filter Strips (permanent vegetation)**
  - The proposed substation and access road within the Edward Aquifer recharge zone requires runoff treatment to remove the Total Suspended Solids (TSS) by 85% to meet the requirements of both the TCEQ and City of Georgetown. Vegetative filter strip (VSF) is proposed along the proposed access road. The buffer of proposed VSF varies from 20- 25 ft.
  - Seeds of selected native grass species and other plants suitable for post-development conditions will be broadcasted evenly across exposed soil surfaces along the temporary sediment control fence. Establishment of permanent vegetation will support the filtration of water and stabilization of the soil.
- **Rock Riprap**
  - Layers of large stones (rock riprap) will be installed south of the culverts constructed at the existing ditch. Rock ripraps protect from soil erosion in areas of high or concentrated flow. Reducing flow and stabilizing channel side slopes and bottoms to ensure protection of water quality.

Attachment D – BMPs for Surface Streams

Surface flow will continue to flow naturally through the site without being impacted by the proposed construction activities and not be diverted to or impact surface streams; therefore permanent BMPs for surface streams have not been designed and description within this section is not applicable.

Attachment E – Request to Seal Feature(s)

The permanent sealing of or diversion of flow from a naturally occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed. The three features identified during the pedestrian survey during the Geologic Assessment were not determined to accept recharge to the Edwards Aquifer; therefore, this section is not applicable.

Attachment F – Construction Plans

All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and include the following items:

- Design Calculations (TSS removal calculations)
- TCEQ Construction Notes
- All Geologic Features
- All Proposed Structural BMP(s) Plans and Specifications

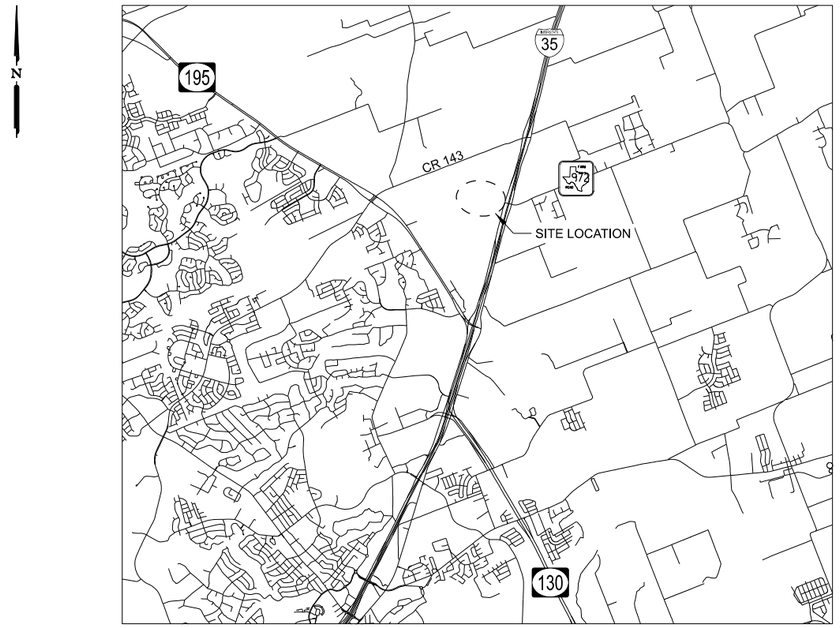
PEDERNALES ELECTRIC COOPERATIVE

BUFFALO CLOVER TEMPORARY SUBSTATION
DRIVE AISLE

WILLIAMSON COUNTY

INDEX OF SHEETS

FOR THE CONSTRUCTION OF DRIVE AISLE
CONSISTING OF GRADING, PAVING, DRAINAGE STRUCTURES AND SIGNING



VICINITY MAP
NOT TO SCALE

100%
SUBMITTAL

PERMIT SET

BURNS McDONNELL
6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PREPARED BY:

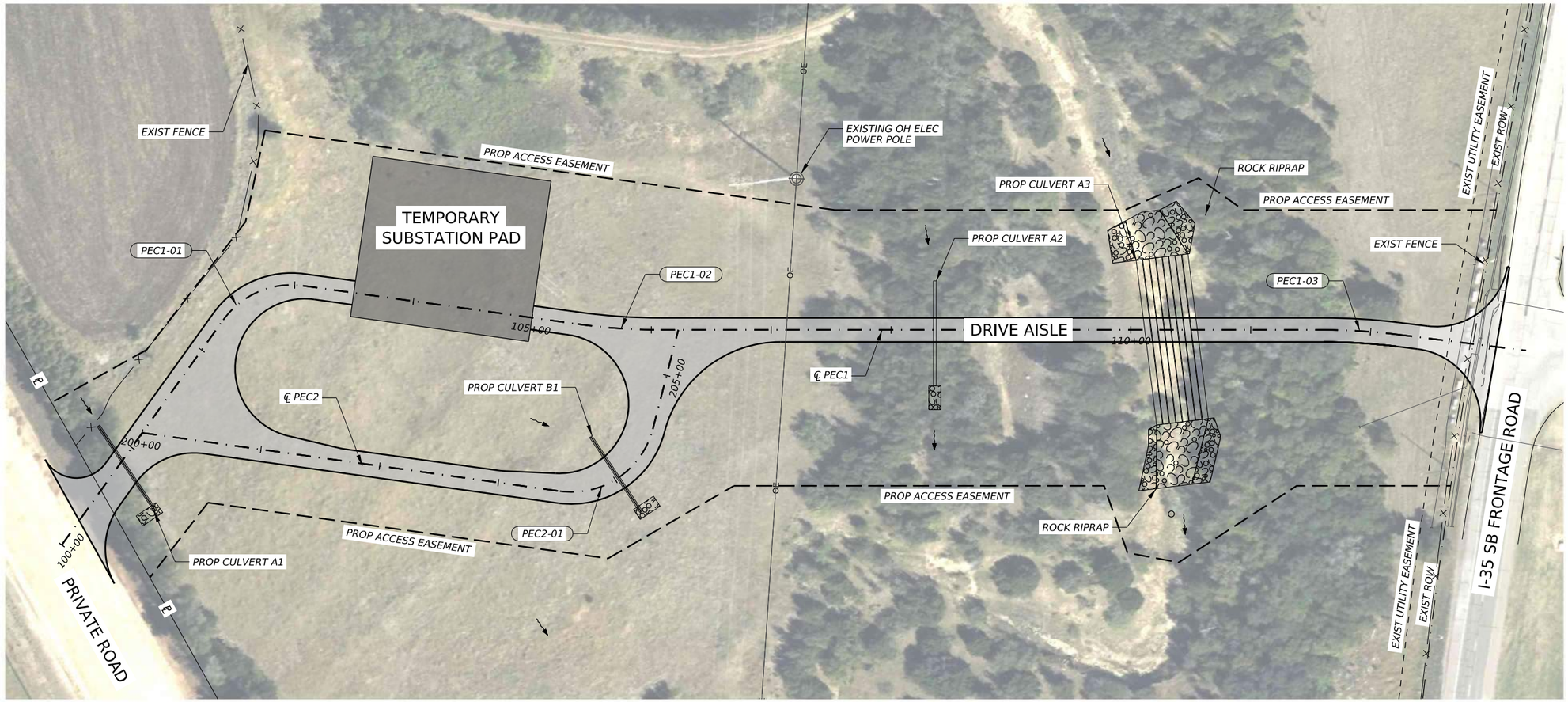
1/24/2025

KRISTEN M. KOOIMAN, P.E. 147286
PROJECT MANAGER

DATE

STATE OF TEXAS
KRISTEN M. KOOIMAN
147286
LICENSED
PROFESSIONAL ENGINEER

01/24/2025



HORZ: 0 50 100
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- APPROACH APRON
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING TRAFFIC DIRECTION
- FLOW DIRECTION
- EXISIT FENCE
- PEC1-01 HORIZONTAL ALIGNMENT CURVE NUMBER

NOTES:

1. SEE REMOVAL PLAN, HORIZONTAL ALIGNMENT DATA, AND DRIVE AISLE PLAN AND PROFILE SHEETS FOR ADDITIONAL INFORMATION.

STATE OF TEXAS
KRISTEN M. KOOIMAN
147286
LICENSED PROFESSIONAL ENGINEER
01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

BURNS McDONNELL
6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

PROJECT LAYOUT

SHEET 1 OF 1

DESIGNED: KMK DRAWN: TWW CHECKED: KMK	SCALE: SCALE = 1"=100'	DATE: 1/24/2025	SHEET 2

CK:
DW:
CK:
DW:

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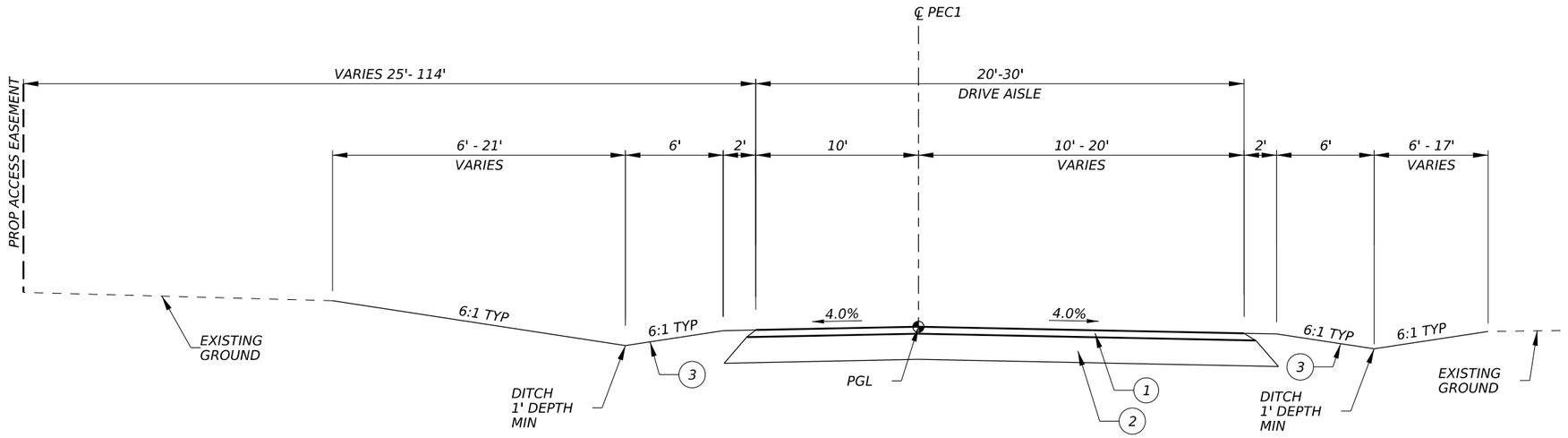
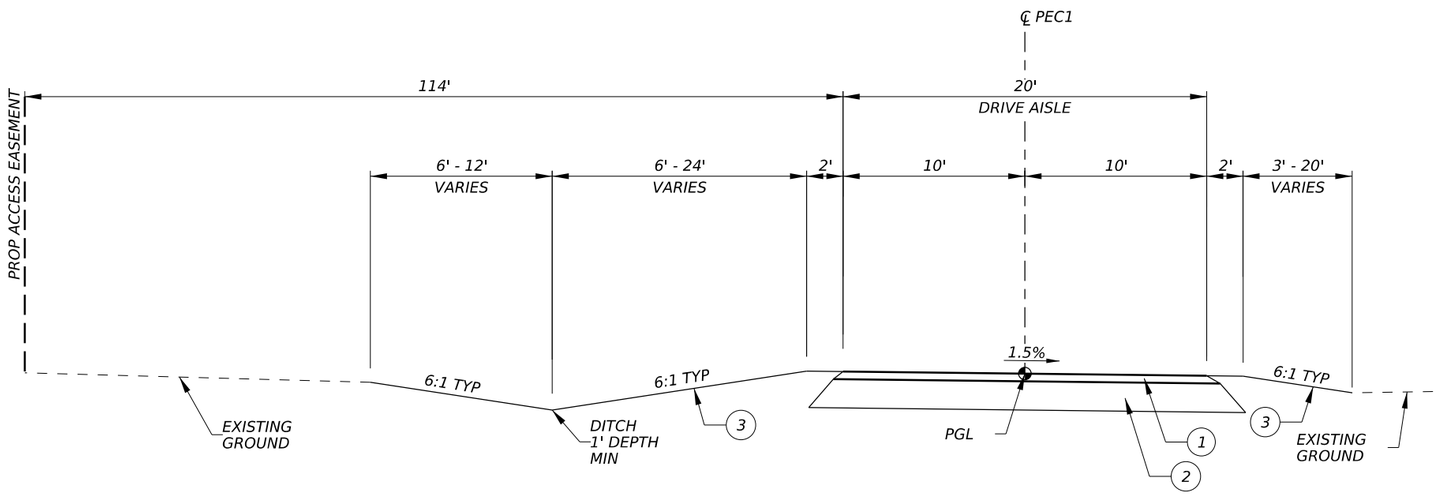


PROPOSED DRIVE AISLE 1

STA 100+00.00 TO STA 102+75.00



PROPOSED DRIVE AISLE 1

STA 102+75.00 TO STA 105+32.14

SEE SHEET 18 FOR SUBSTATION PAD DETAILS BETWEEN STATIONS 103+49.86 AND 104+99.82

LEGEND

1. 3" AGGREGATE*
2. 10" FLEXIBLE SUB BASE*
3. SEEDING
4. 6" CONCRETE PAVEMENT*
5. 3" FLEXIBLE SUB BASE*

*PRELIMINARY PENDING GEOTECH REPORT

NOTES:

1. SEE DRIVE AISLE PLAN AND PROFILE SHEETS FOR TRANSITIONS AND ADDITIONAL DETAILS.
2. TYPICAL SECTIONS ARE NOT TO SCALE.

STATE OF TEXAS
KRISTEN M. KOOIMAN
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01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

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6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP
BUFFALO CLOVER TEMPORARY SUBSTATION

TYPICAL SECTIONS
PROPOSED

SHEET 1 OF 2

DESIGNED: BMD DRAWN: BMD CHECKED: KMK	SCALE: SCALE = None	DATE: 1/24/2025	SHEET 3

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DW:
CK:
DN:

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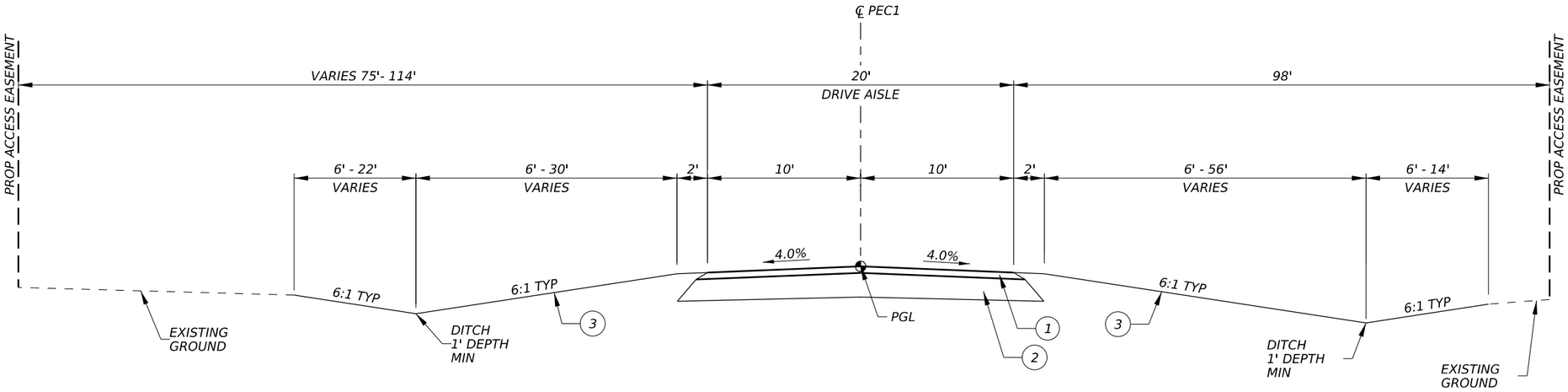
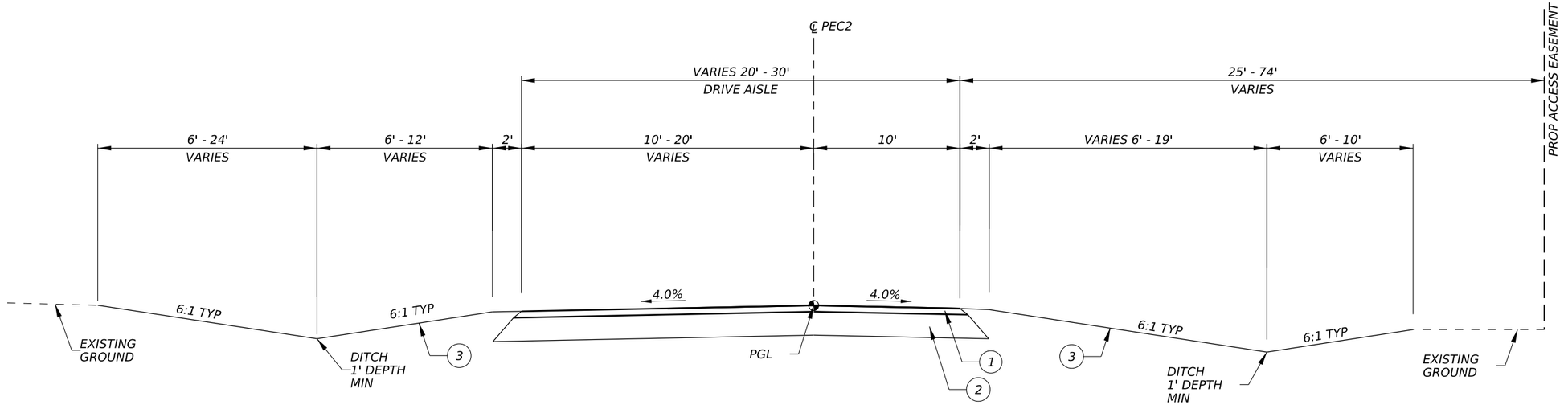


PROPOSED DRIVE AISLE 1

STA 105+32.14 TO STA 112+22.72



PROPOSED DRIVE AISLE 2

STA 200+00.00 TO STA 205+39.22

LEGEND

1. 3" AGGREGATE*
2. 10" FLEXIBLE SUB BASE*
3. SEEDING
4. 6" CONCRETE PAVEMENT*
5. 3" FLEXIBLE SUB BASE*

*PRELIMINARY PENDING GEOTECH REPORT

NOTES:

1. SEE DRIVE AISLE PLAN AND PROFILE SHEETS FOR TRANSITIONS AND ADDITIONAL DETAILS.
2. TYPICAL SECTIONS ARE NOT TO SCALE.

STATE OF TEXAS
KRISTEN M. KOOIMAN
147286
LICENSED PROFESSIONAL ENGINEER

01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

BURNS McDONNELL
6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

TYPICAL SECTIONS PROPOSED

SHEET 2 OF 3

DESIGNED: BMD DRAWN: BMD CHECKED: KMK	SCALE: SCALE = None	DATE: 1/24/2025	SHEET 4

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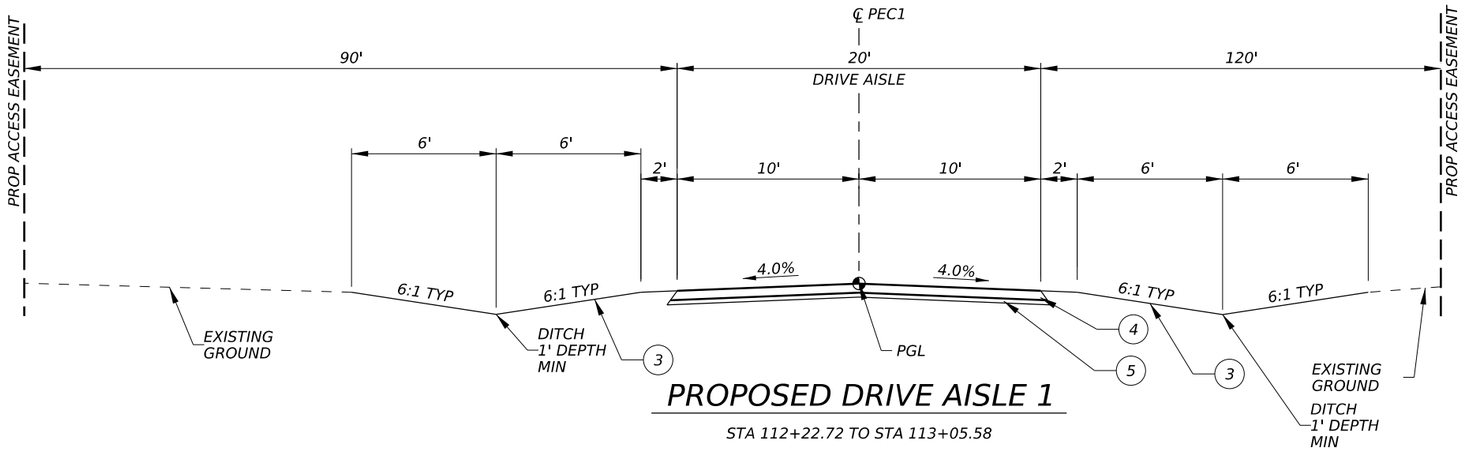


PROPOSED DRIVE AISLE 1

STA 112+22.72 TO STA 113+05.58

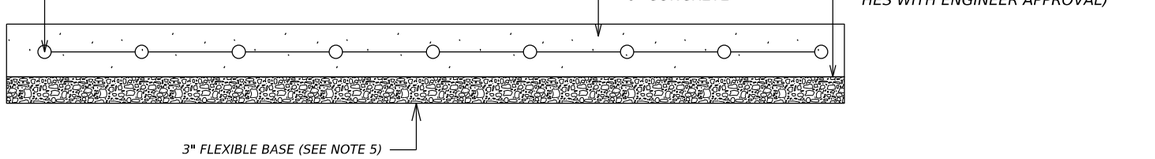
LEGEND

1. 3" AGGREGATE*
2. 10" FLEXIBLE SUB BASE*
3. SEEDING
4. 6" CONCRETE PAVEMENT*
5. 3" FLEXIBLE SUB BASE*

*PRELIMINARY PENDING GEOTECH REPORT

NOTES:

1. SEE DRIVE AISLE PLAN AND PROFILE SHEETS FOR TRANSITIONS AND ADDITIONAL DETAILS.
2. TYPICAL SECTIONS ARE NOT TO SCALE.



TYPICAL CONCRETE DRIVEWAY

NOTES:

1. USE CLASS A CONCRETE UNLESS OTHERWISE NOTED.
2. REFER TO PLAN SHEETS FOR GEOMETRIC DESIGN DETAILS.
3. FOR CONCRETE DRIVEWAYS, PROVIDE EXPANSION JOINT 20 FT C-C FOR WIDTH OR LENGTH OVER 25 FT.
4. FIBER REINFORCEMNT IS NOT ALLOWED.
5. FURNISH BASE MEETING THE REQUIREMENTS FOR ANY TYPE OF GRADE IN ACCORDANCE WITH ITEM 247. FLEXIBLE BASE COMPRESSIVE STRENGTHS ARE WAIVED. BASE IS SUBSIDIARY TO THE ITEM.
6. IF ROOTS ARE ENCOUNTERED VERIFY WITH THE ENGINEER PRIOR TO ACCOMODATING OR REMOVING 2 IN. DIAMETER OR LARGER ROOTS. ROOT REMOVAL MUST BE IN ACCORDANCE WITH ITEM 752.4.2. ROOTS MAY REMAIN IN THE BASE. FOR IMPROVEMENTS WITHIN 6 IN. OF A ROOT, THE CONCRETE THICKNESS MAY BE REDUCED BY 1 IN. AND THE BASE INCREASED BY 1 IN. TO MINIMIZE THE IMPACT TO THE ROOTS. ADJUST BASE AND SURFACE PROFILE TO PROVIDE A 1 IN. BASE CUSHION AROUND THE ROOTS. THE SURFACE PROFILE MAY BE ADJUSTED TO THE EXTENT ALLOWED BY ADA. THIS WORK IS SUBSIDIARY.
7. STEEL SHALL BE CENTERED VERTICALLY IN CONCRETE. PAID AS 'DRIVEWAYS CONC (HES)' OR 'DRIVEWAYS (CONC)'

STATE OF TEXAS
KRISTEN M. KOOIMAN
147286
LICENSED PROFESSIONAL ENGINEER

01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

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6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

TYPICAL SECTIONS
PROPOSED

SHEET 3 OF 3

DESIGNED: BMD	SCALE:	DATE:	SHEET
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CHECKED: KMK			

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DW:
CK:
DW:

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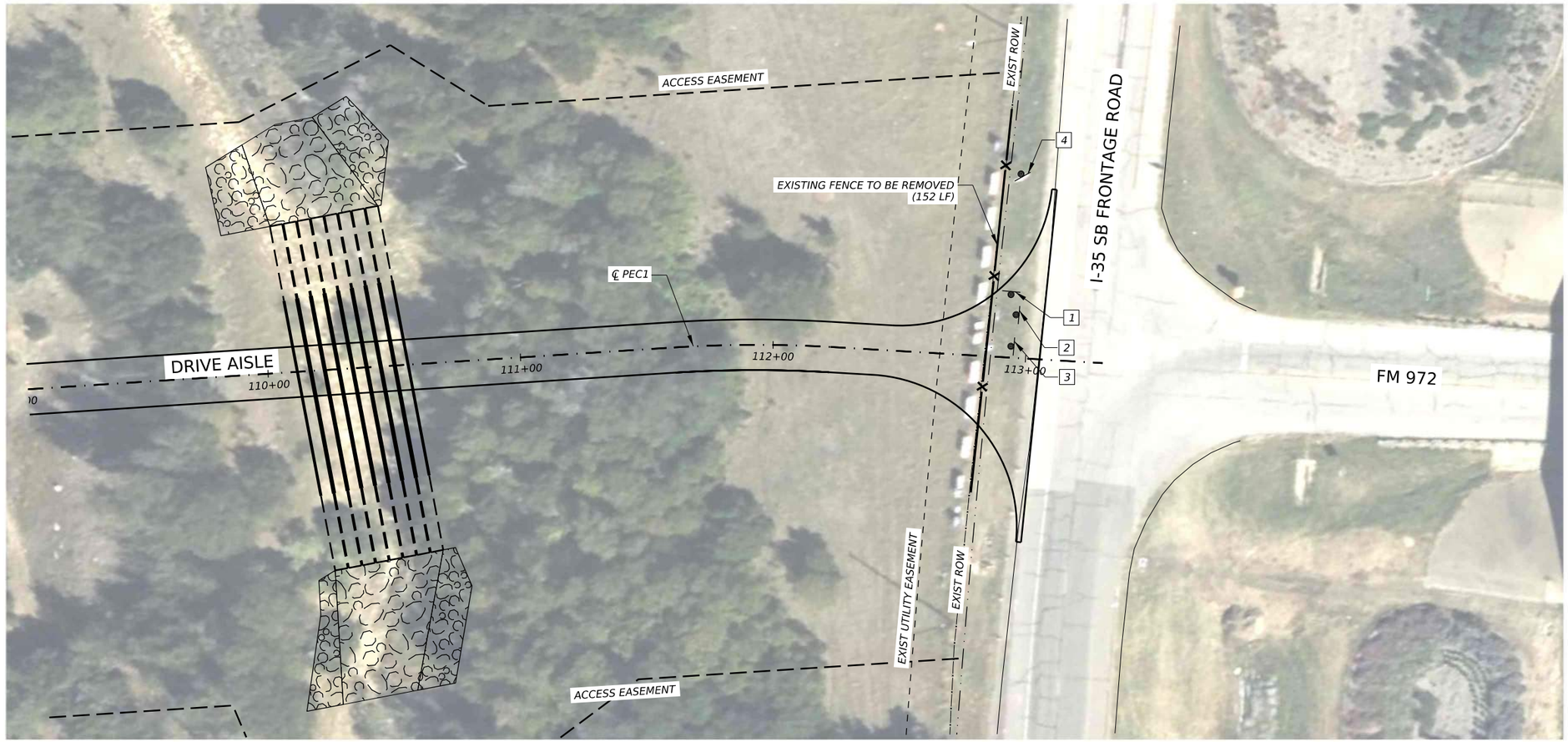

0 25 50

HORZ:

SCALE IN FEET

LEGEND

- FENCE REMOVAL
- EXISTING SIGN
- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT

NOTES

1. FOR CONTRACTORS INFORMATION ONLY.

1 EXIST SIGN TO BE RELOCATED

2 EXIST SIGN TO BE RELOCATED

3 EXIST SIGN TO BE RELOCATED

4 EXIST SIGN TO REMAIN

STATE OF TEXAS
KRISTEN M. KODIMAN
147286
LICENSED
PROFESSIONAL ENGINEER

01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

BURNS McDONNELL
6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

REMOVAL PLAN

SHEET 1 OF 1

DESIGNED: BMD DRAWN: BMD CHECKED: KMK	SCALE: SCALE = 1"=50'	DATE: 1/24/2025	SHEET 6

CK:
DW:
CK:
DW:

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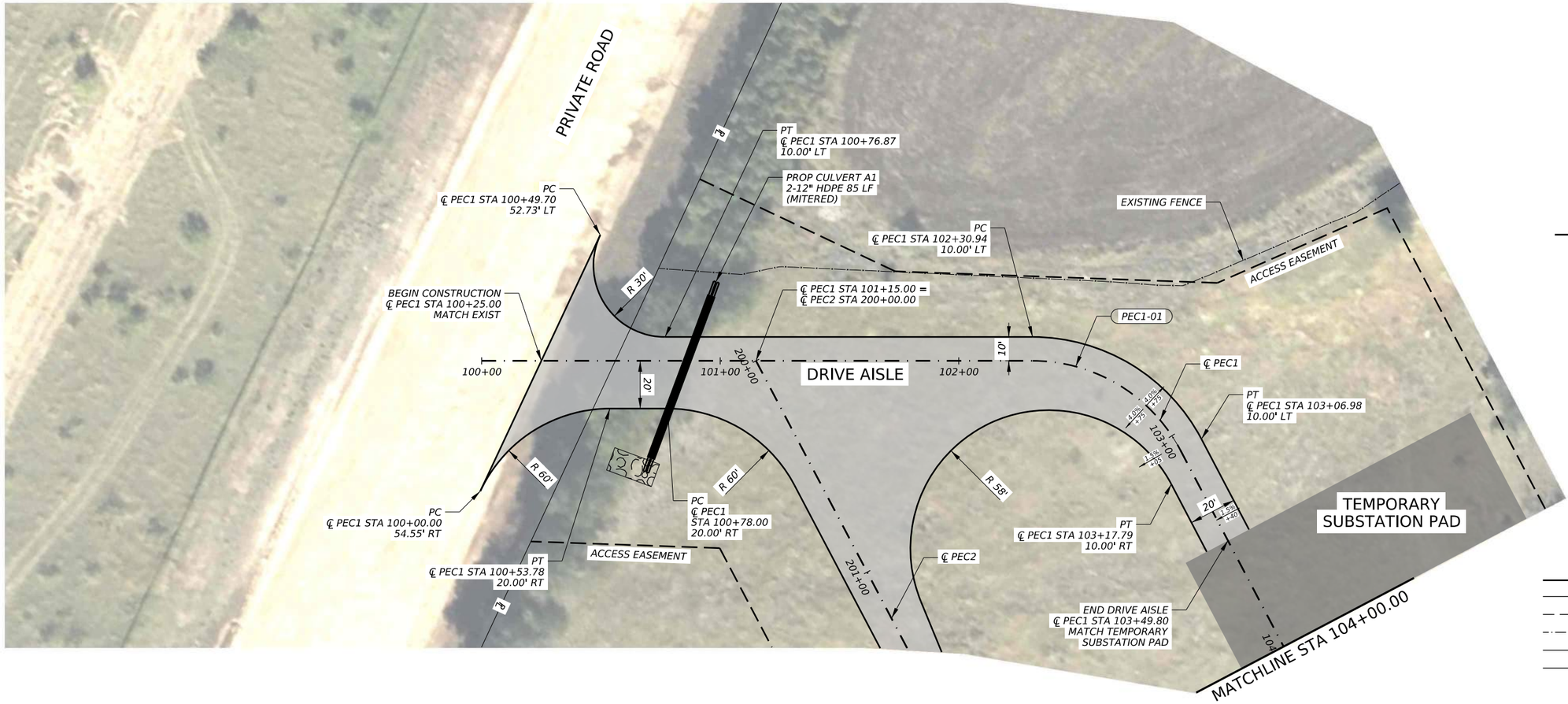


HORZ: 0 25 50
SCALE IN FEET

VERT: 0 5 10
SCALE IN FEET

LEGEND

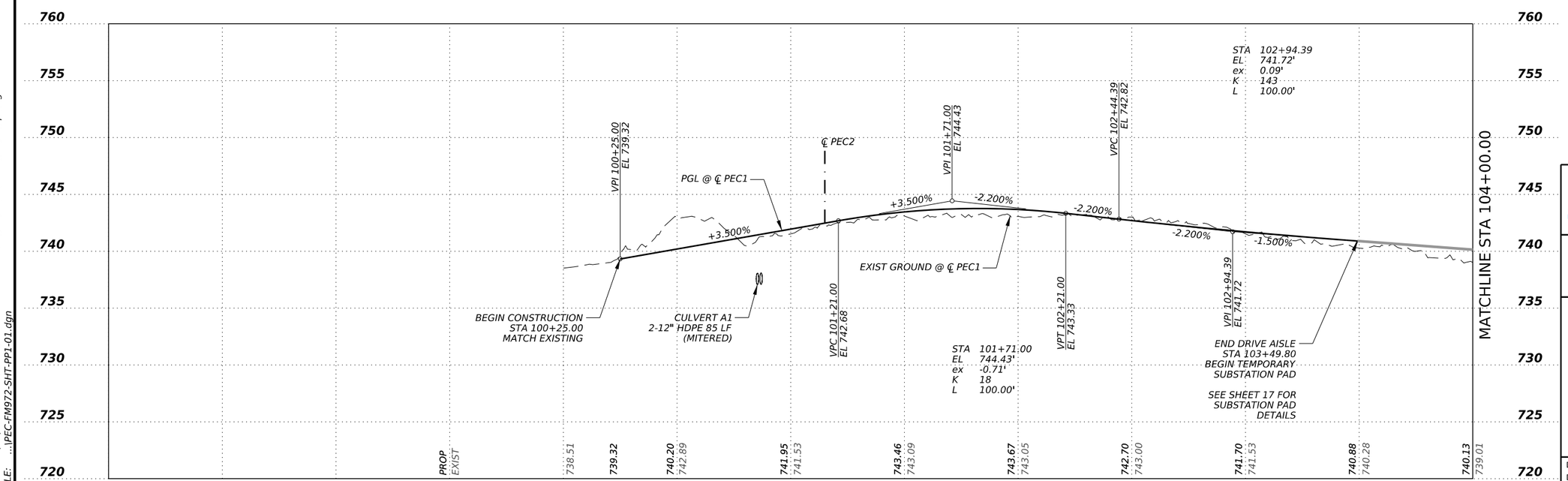
- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- APPROACH APRON
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING TRAFFIC DIRECTION
- 2.0% / +00 SUPERELEVATION
- (PEC1-01) HORIZONTAL ALIGNMENT CURVE NUMBER

NOTES:

1. SEE HORIZONTAL ALIGNMENT DATA SHEET FOR MORE INFORMATION.

UTILITY LEGEND

- OE — EXISTING OVERHEAD ELECTRIC
- UE — EXISTING UG ELECTRIC
- T1 — EXISTING UG TELECOM
- FOC — EXISTING UG FIBER OPTIC
- WL — EXISTING 12" WATER LINE (CITY OF GEORGETOWN)



STATE OF TEXAS
KRISTEN M. KOOIMAN
147286
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01/24/2025

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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

DRIVE AISLE PLAN & PROFILE
PEC ALIGNMENT 1
STA 100+00 TO STA 104+00

SHEET 1 OF 3

DESIGNED: CMW	SCALE:	DATE:	SHEET
DRAWN: EAZ	H: 1" = 50'	1/24/2025	14
CHECKED: BMD	V: 1" = 10'		

CK:
DW:
CK:
DW:

PENTABLE: PEC BW Pentable.tbl
PLOT DRIVER: PEC-PDF-C.pltcfg

USER: eazalewski
DATE: 1/24/2025 5:02:10 PM
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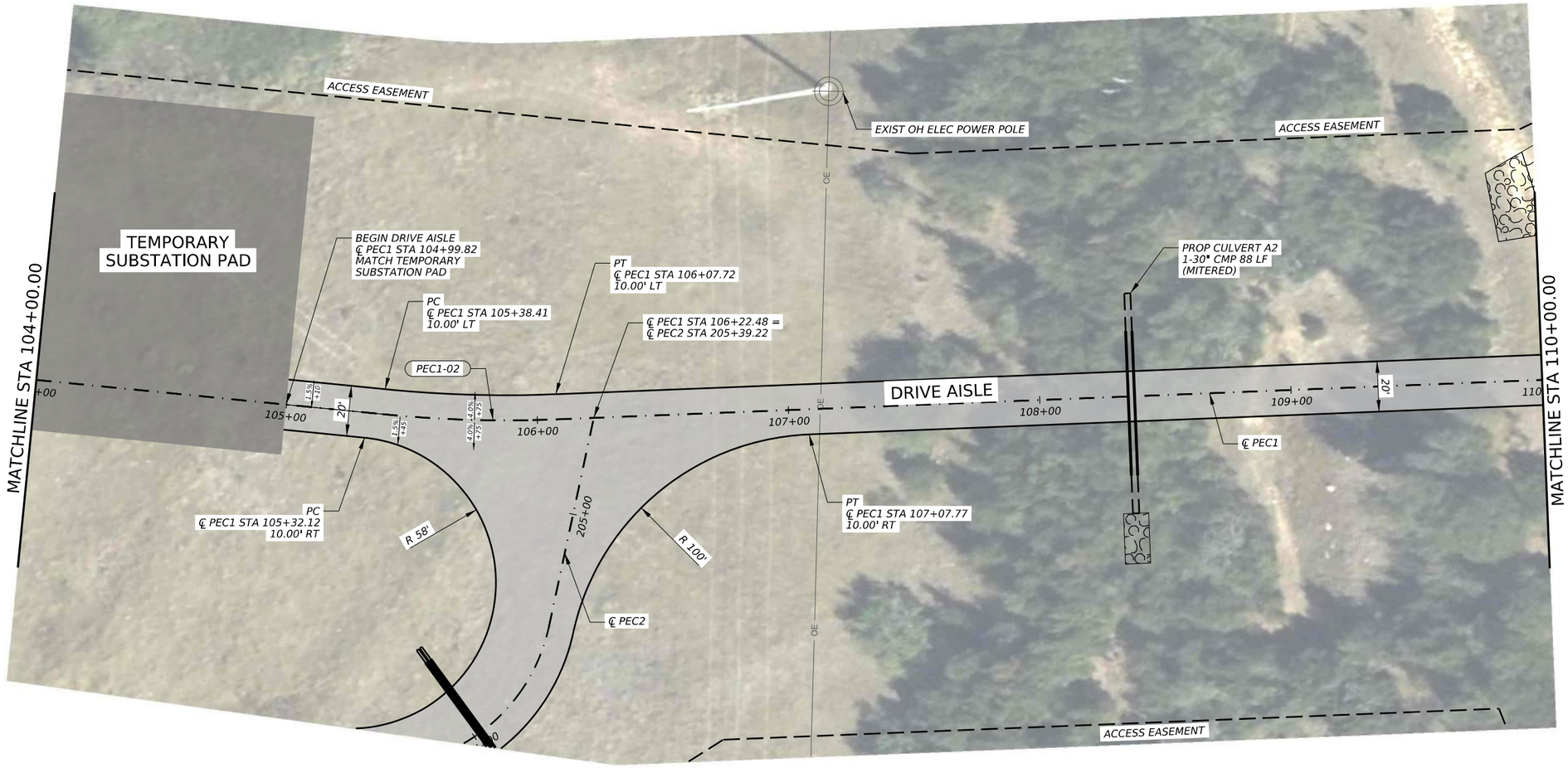

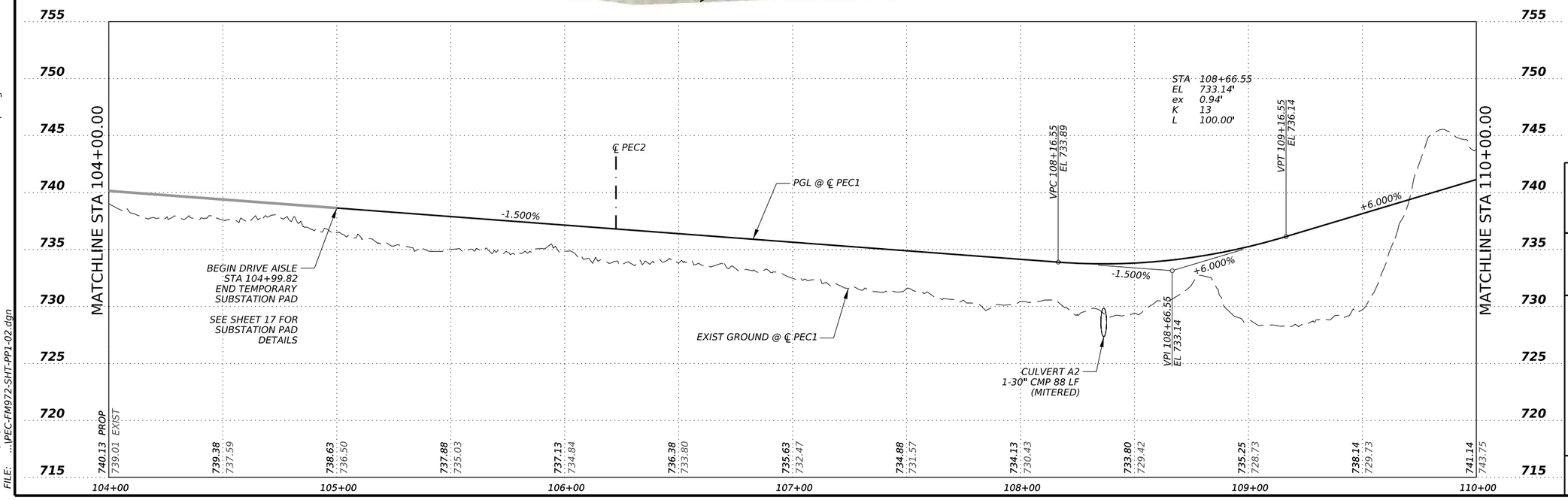

HORZ: 0 25 50
SCALE IN FEET

VERT: 0 5 10
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- APPROACH APRON
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING TRAFFIC DIRECTION
- 2.0% +00 SUPERELEVATION
- PEC1-01 HORIZONTAL ALIGNMENT CURVE NUMBER

NOTES:

1. SEE HORIZONTAL ALIGNMENT DATA SHEET FOR MORE INFORMATION.

UTILITY LEGEND

- OE EXISTING OVERHEAD ELECTRIC
- UE EXISTING UG ELECTRIC
- T1 EXISTING UG TELECOM
- FOC EXISTING UG FIBER OPTIC
- WL EXISTING 12" WATER LINE (CITY OF GEORGETOWN)

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SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

DRIVE AISLE PLAN & PROFILE
PEC ALIGNMENT 1
STA 104+00 TO STA 110+00

DESIGNED: CMW	SCALE: H: 1" = 50' V: 1" = 10'	DATE: 1/24/2025	SHEET 15
DRAWN: EAZ			
CHECKED: BMD			

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PLOT DRIVER: PEC-PDF-C.pltcfg
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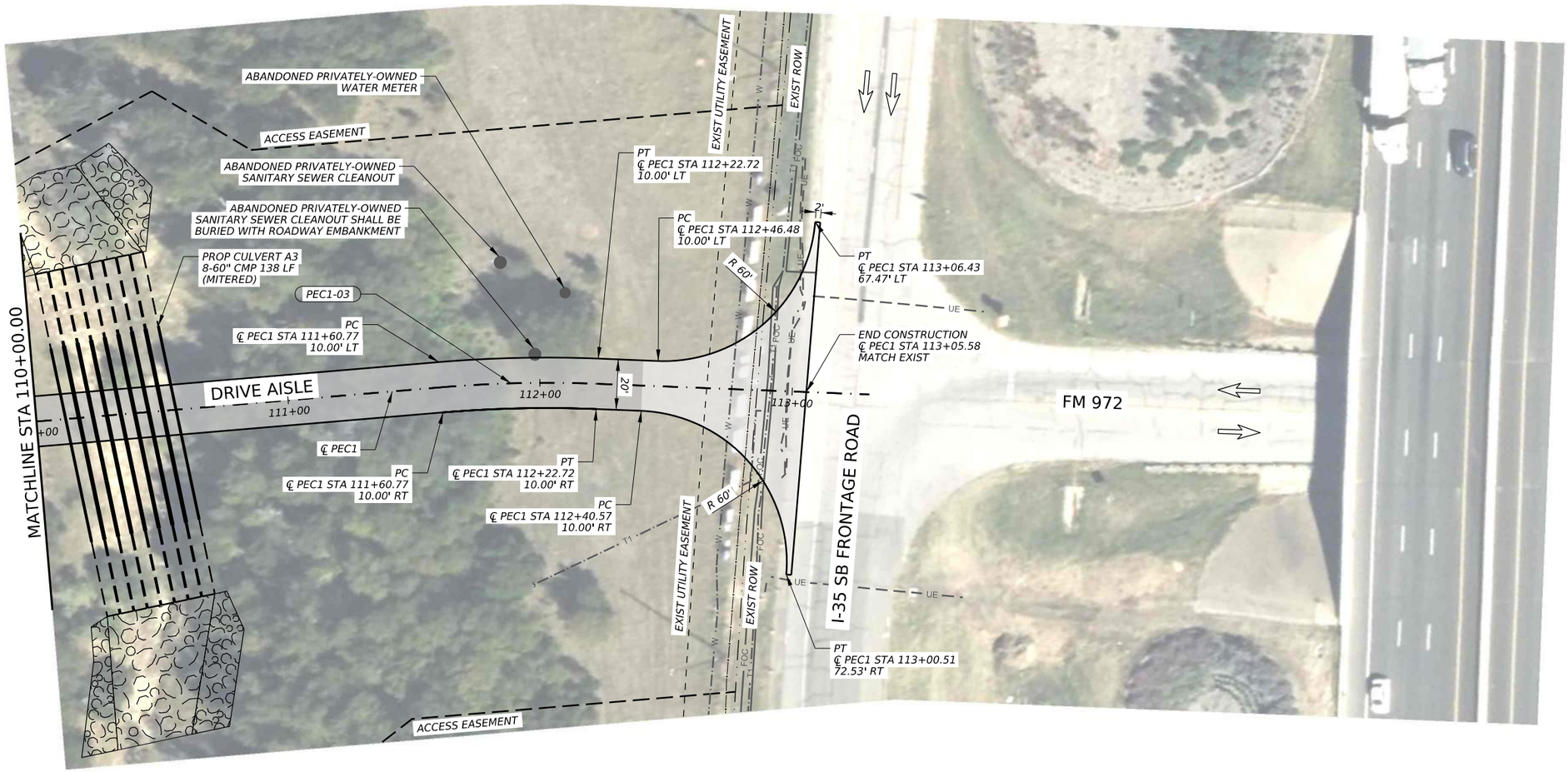

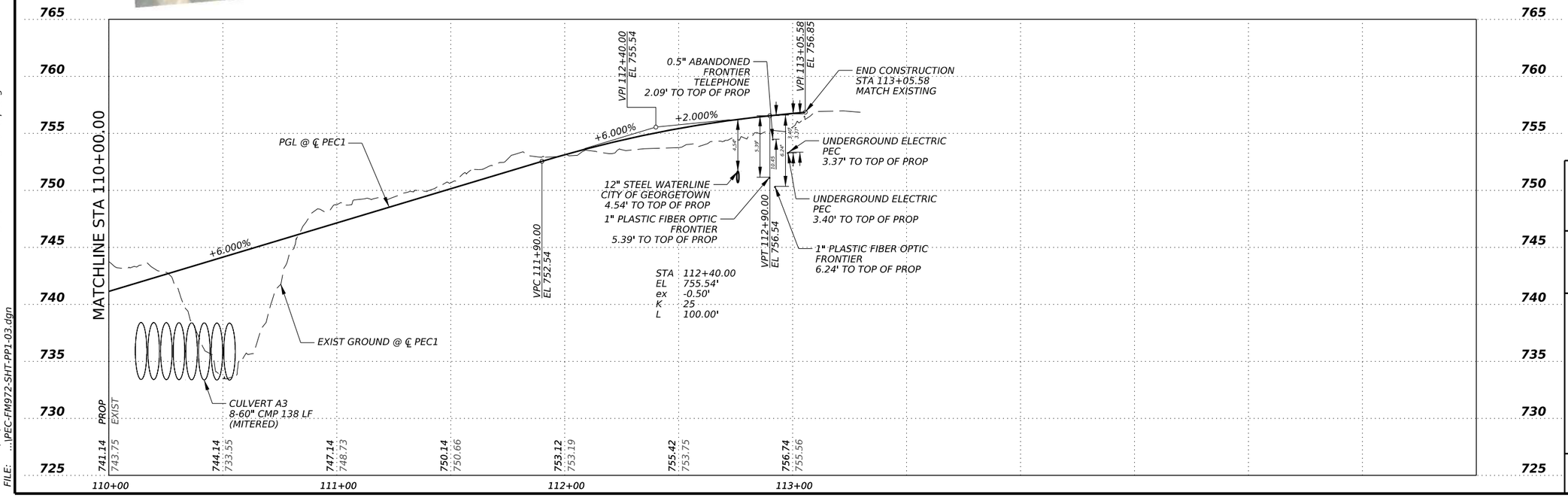

HORZ: 0 25 50 SCALE IN FEET

VERT: 0 5 10 SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- APPROACH APRON
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING TRAFFIC DIRECTION
- 2.0% +00 SUPERELEVATION
- PEC1-01 HORIZONTAL ALIGNMENT CURVE NUMBER

NOTES:

1. SEE HORIZONTAL ALIGNMENT DATA SHEET FOR MORE INFORMATION.

UTILITY LEGEND

- OE — EXISTING OVERHEAD ELECTRIC
- UE — EXISTING UG ELECTRIC
- T1 — EXISTING UG TELECOM
- FOC — EXISTING UG FIBER OPTIC
- WL — EXISTING 12" WATER LINE (CITY OF GEORGETOWN)

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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

DRIVE AISLE PLAN & PROFILE
PEC ALIGNMENT 1
STA 110+00 TO END

SHEET 3 OF 3

DESIGNED: CMW	SCALE:	DATE:	SHEET
DRAWN: EAZ	H: 1" = 50'	1/24/2025	16
CHECKED: BMD	V: 1" = 10'		

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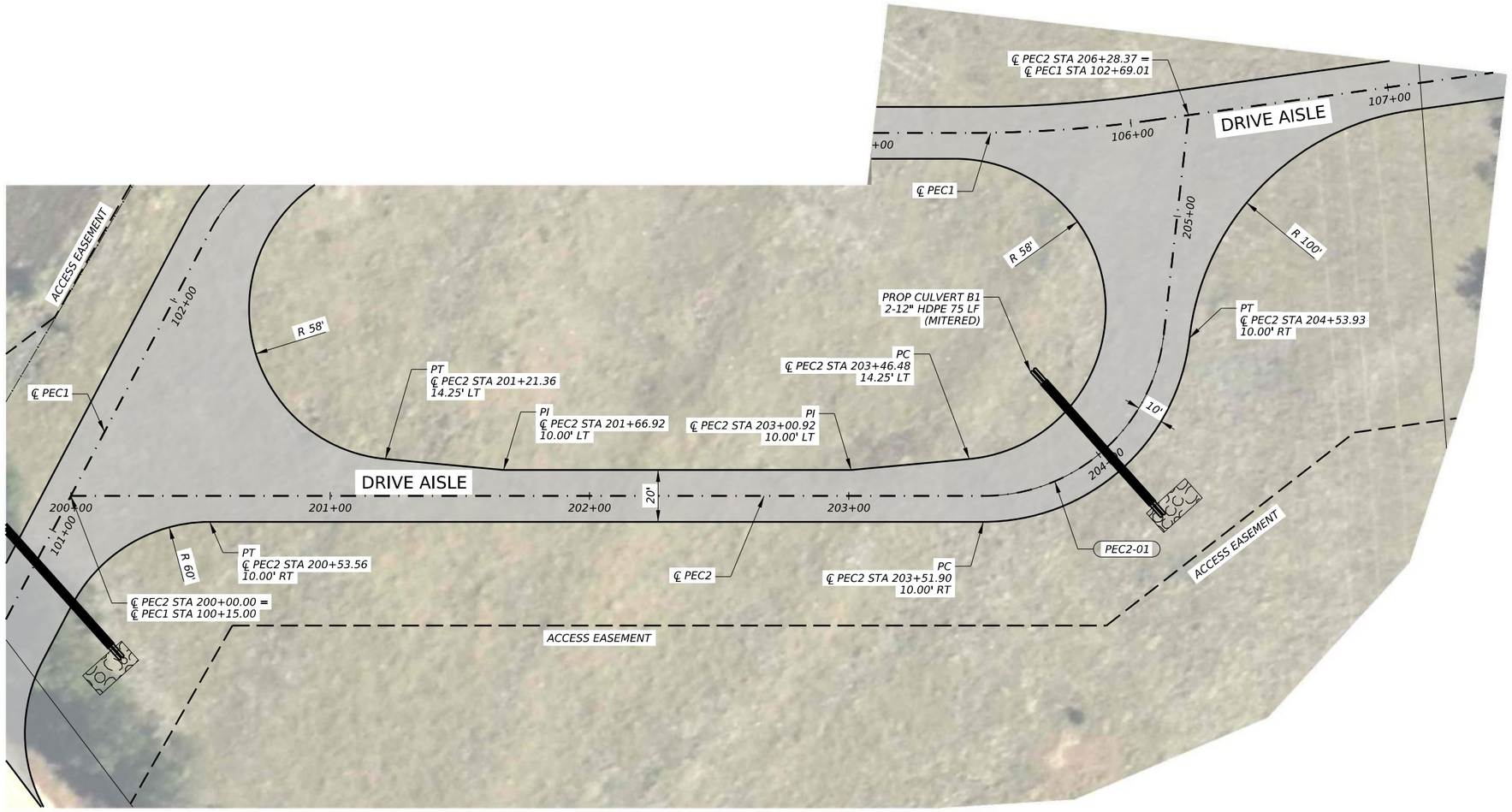

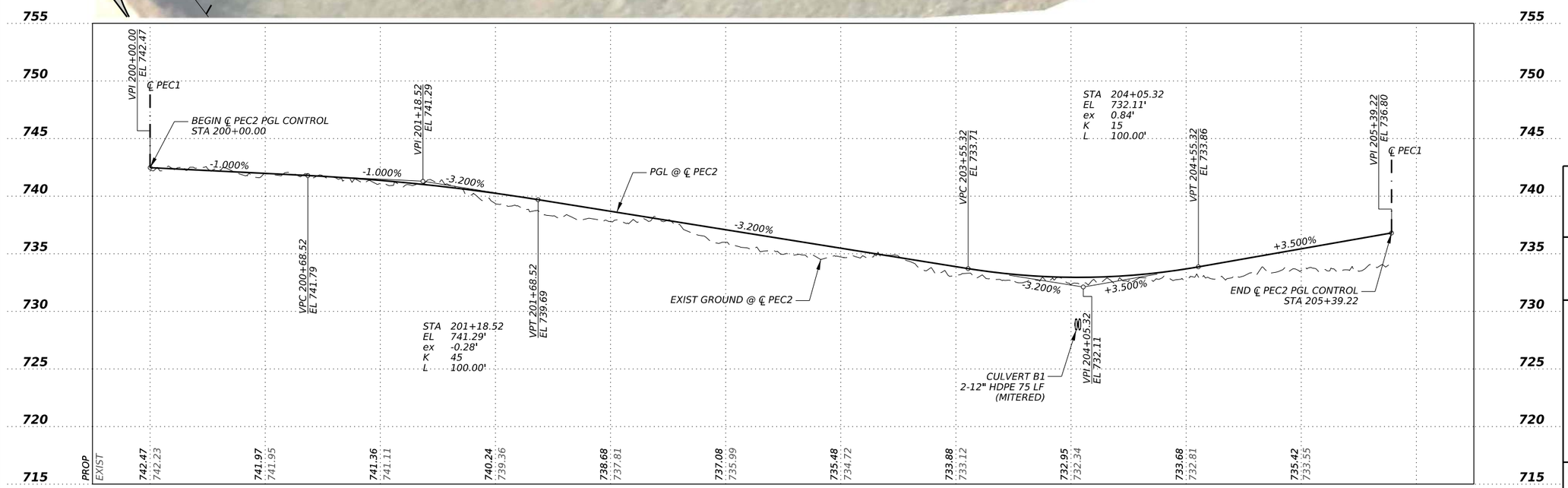

HORZ: 0 25 50
SCALE IN FEET

VERT: 0 5 10
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- APPROACH APRON
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING TRAFFIC DIRECTION
- 2.0% / +00 — SUPERELEVATION
- PEC1-01 — HORIZONTAL ALIGNMENT CURVE NUMBER

NOTES:

1. SEE HORIZONTAL ALIGNMENT DATA SHEET FOR MORE INFORMATION.

UTILITY LEGEND

- OE — EXISTING OVERHEAD ELECTRIC
- UE — EXISTING UG ELECTRIC
- T1 — EXISTING UG TELECOM
- FOC — EXISTING UG FIBER OPTIC
- WL — EXISTING 12" WATER LINE (CITY OF GEORGETOWN)

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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

DRIVE AISLE PLAN & PROFILE
PEC ALIGNMENT 2
STA 200+00 TO END

SHEET 1 OF 1

DESIGNED: CMW	SCALE:	DATE:	SHEET
DRAWN: EAZ	H: 1" = 50'	1/24/2025	17
CHECKED: BMD	V: 1" = 10'		

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DW:
CK:
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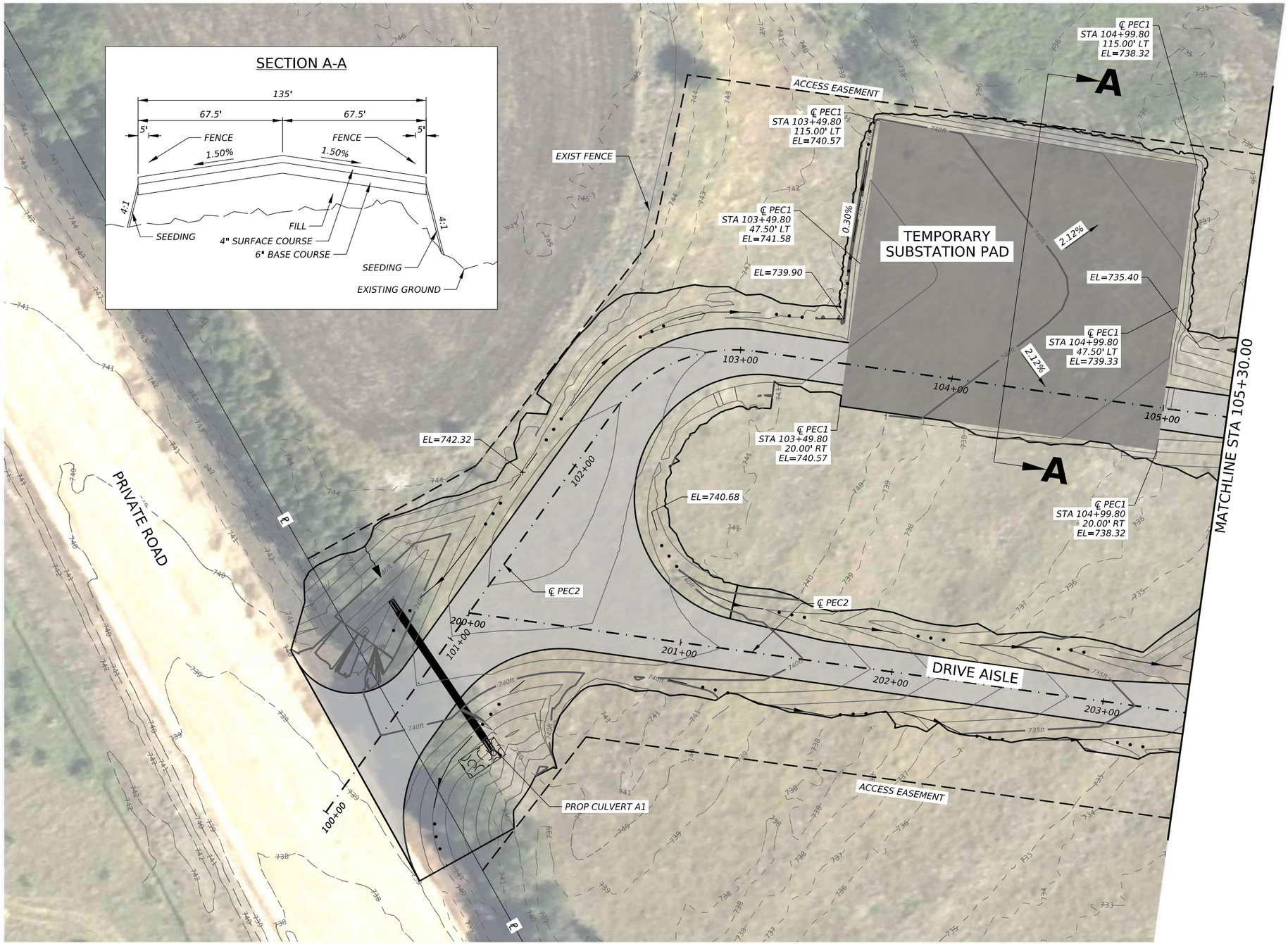

HORZ: 0 25 50
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- FLOW DIRECTION
- 5' PROPOSED CONTOUR LINES
- 1' PROPOSED CONTOUR LINES
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING CONTOUR LINES

STATE OF TEXAS
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01/24/2025

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AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

GRADING PLAN
BEGIN TO STA 105+30.00

SHEET 1 OF 3

DESIGNED: BMD DRAWN: TWW CHECKED: KMK	SCALE: SCALE = 1"=50'	DATE: 1/24/2025	SHEET 18

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CK:
DW:
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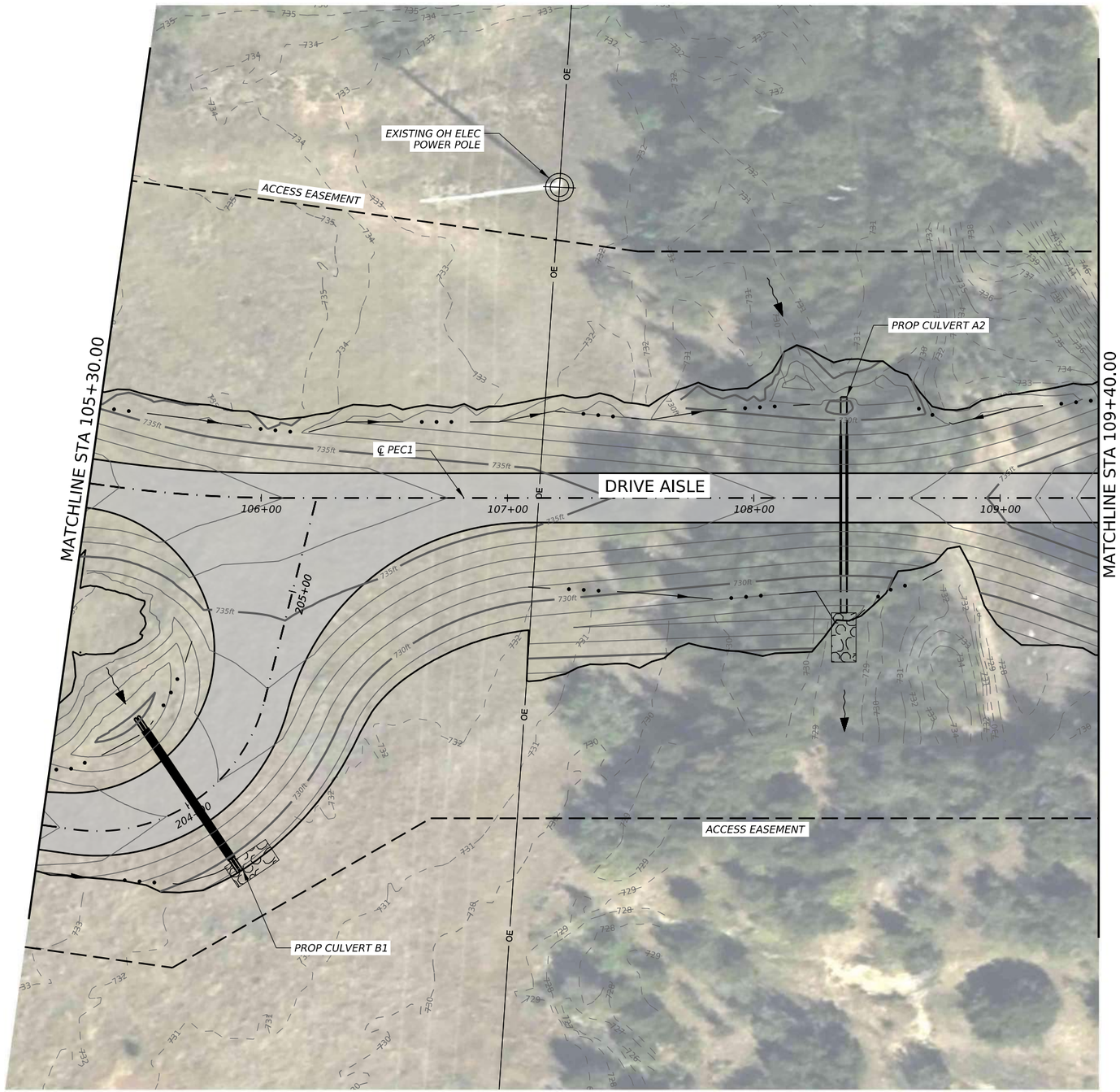

HORZ: 0 25 50
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- FLOW DIRECTION
- 5' PROPOSED CONTOUR LINES
- 1' PROPOSED CONTOUR LINES
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING CONTOUR LINES

STATE OF TEXAS
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147286
LICENSED PROFESSIONAL ENGINEER
01/24/2025

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SUITE 400
AUSTIN, TX, 78730
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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

GRADING PLAN
STA 105+30.00 TO STA 109+40.00

SHEET 2 OF 3

DESIGNED: BMD DRAWN: TWW CHECKED: KMK	SCALE: SCALE = 1"=50'	DATE: 1/24/2025	SHEET 19

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CK:
DW:

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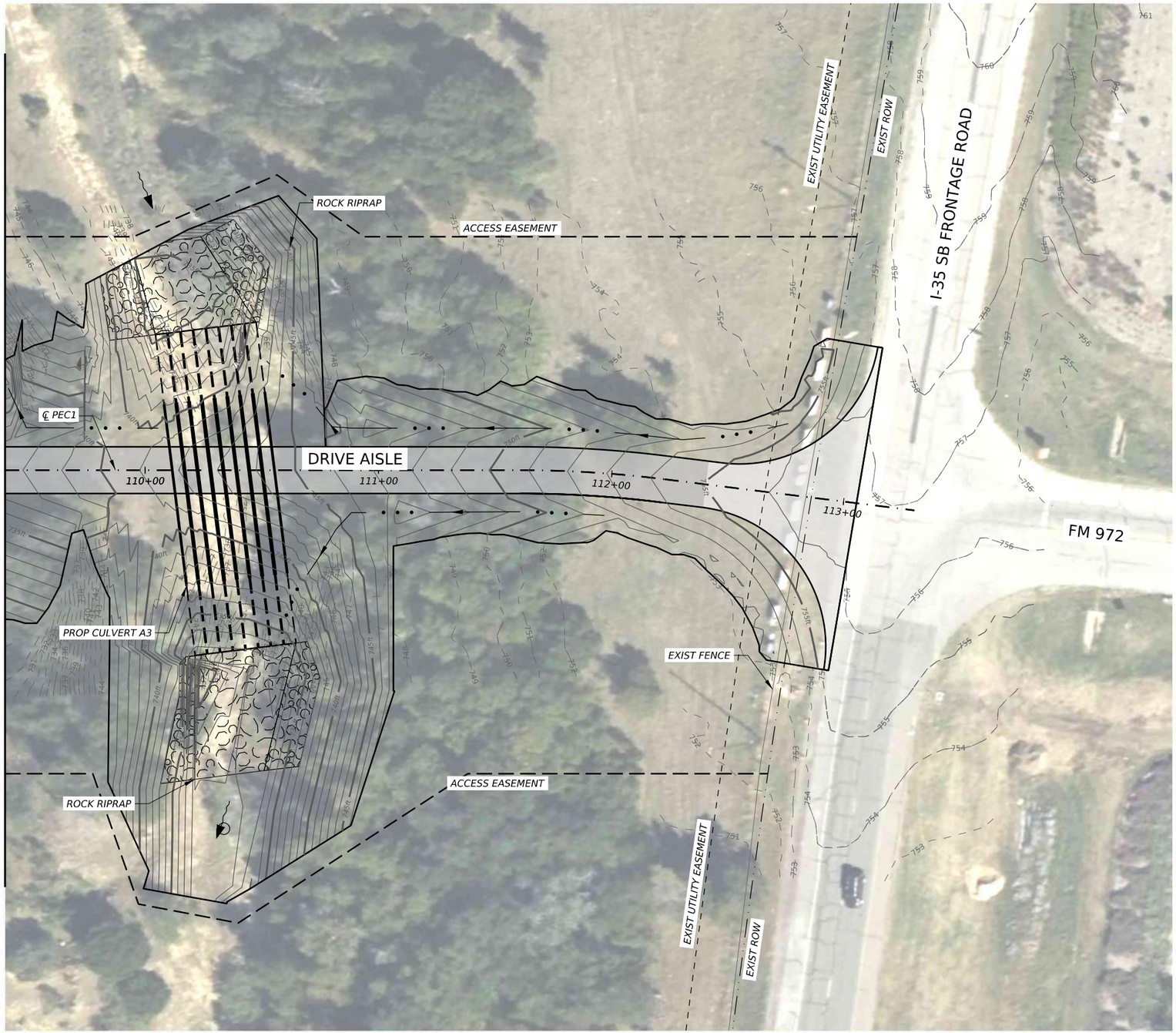

HORZ: 0 1000 2000
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- FLOW DIRECTION
- 5' PROPOSED CONTOUR LINES
- 1' PROPOSED CONTOUR LINES
- ROCK RIPRAP
- PROPOSED CULVERT
- EXISTING CONTOUR LINES

STATE OF TEXAS
KRISTEN M. KOOTMAN
147286
LICENSED PROFESSIONAL ENGINEER

01/24/2025

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SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

GRADING PLAN
STA 109+40.00 TO END

SHEET 3 OF 3

DESIGNED: BMD	SCALE:	DATE:	SHEET
DRAWN: TWW	SCALE = 1"=50'	1/24/2025	20
CHECKED: KMK			

CK:
DW:
CK:
DW:

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PLOT DRIVER: PEC-PDF-C.pltcfg

USER: eazalewski
DATE: 1/24/2025 5:02:51 PM
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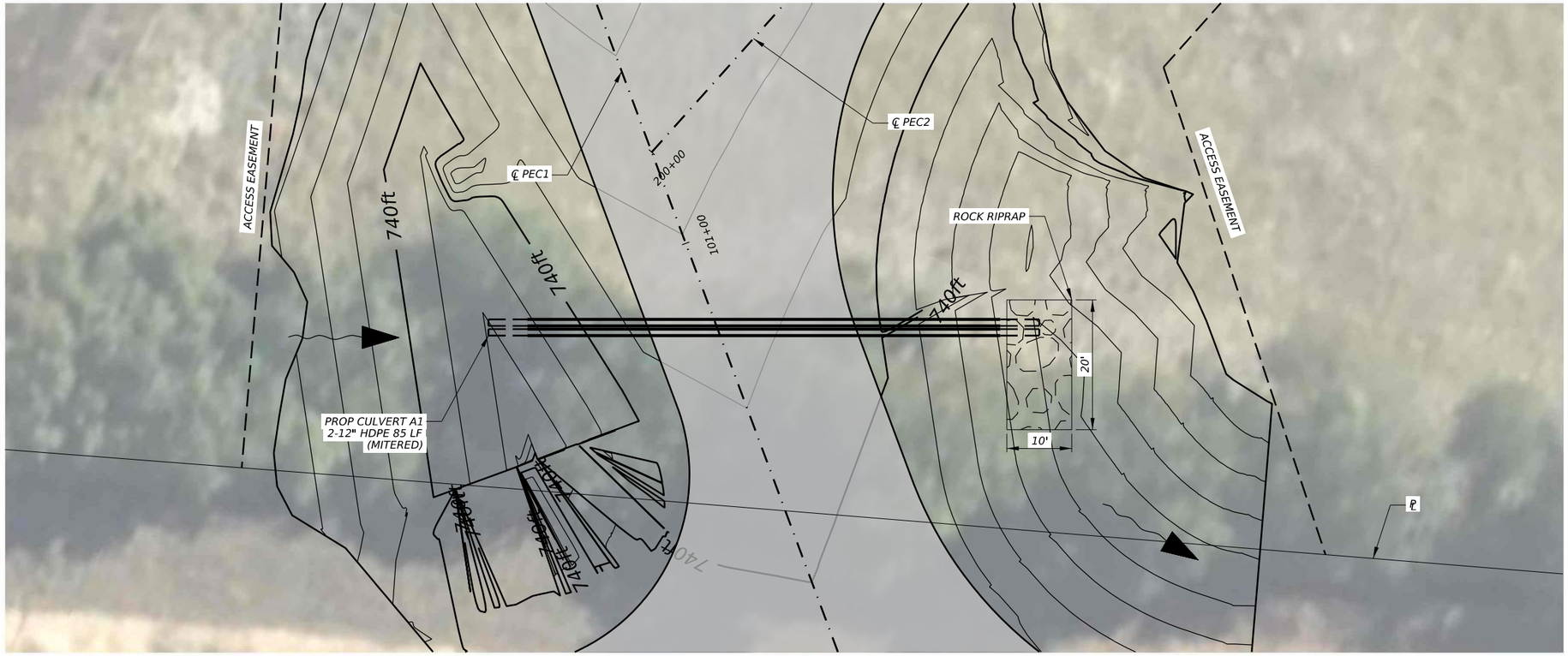

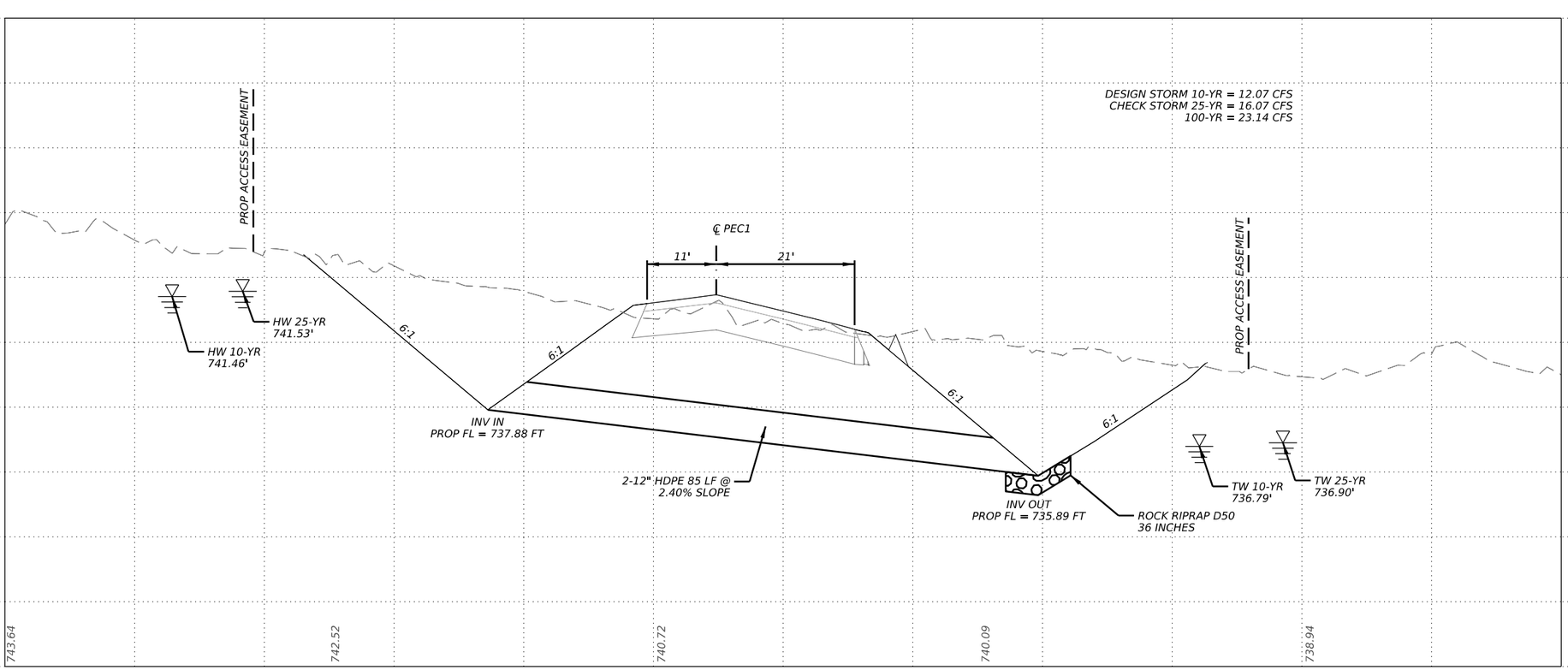

HORZ: 0 10 20
SCALE IN FEET

VERT: 0 2 4
SCALE IN FEET

LEGEND

- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- ROCK RIPRAP
- PROPOSED CULVERT
- FLOW DIRECTION

STATE OF TEXAS
GOVINDA KARKI
133932
LICENSED PROFESSIONAL ENGINEER

01/24/2025

POWER OF COMMUNITY
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SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

CULVERT LAYOUT
CULVERT A1

SHEET 1 OF 4

DESIGNED: GK	SCALE: H: 1" = 20' V: 1" = 4'	DATE: 1/24/2025	SHEET 22
DRAWN: JAG			
CHECKED: BMD			

CK:
DW:
CK:
DW:

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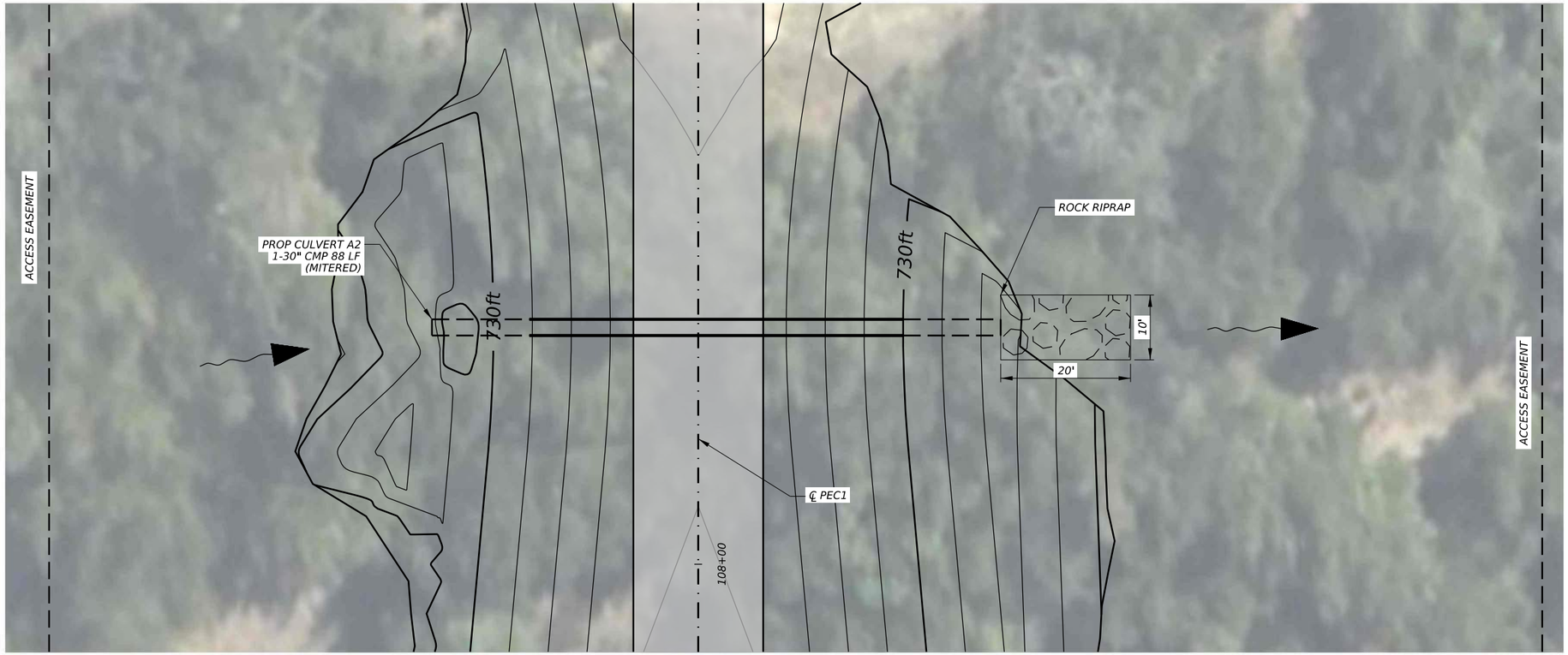
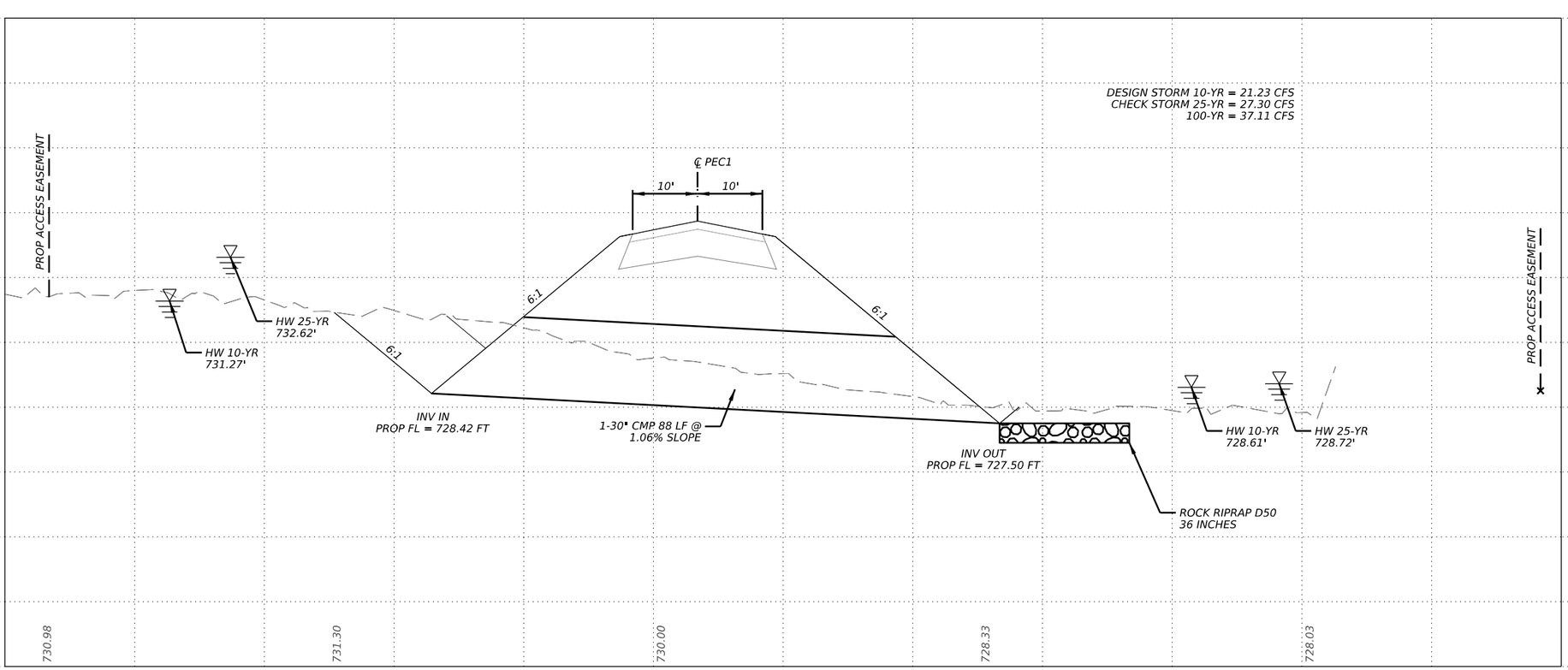
PLOT DRIVER: PEC-PDF-C.pltcfg

USER: eazalewski
DATE: 1/24/2025 5:04:16 PM
FILE: ...\PEC-FM972-SHT-CULV-A1.dgn





HORZ: 0 10 20
SCALE IN FEET

VERT: 0 2 4
SCALE IN FEET

LEGEND

- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- ROCK RIPRAP
- PROPOSED CULVERT
- FLOW DIRECTION

STATE OF TEXAS
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130932
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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

CULVERT LAYOUT
CULVERT A2

SHEET 2 OF 4

DESIGNED: GK	SCALE: H: 1" = 20' V: 1" = 4'	DATE: 1/24/2025	SHEET 23
DRAWN: JAG			
CHECKED: BMD			

CK:
DW:
CK:
DW:

PENTABLE: PEC BW Pentable.tbl
PLOT DRIVER: PEC-PDF-C.pltcfg

USER: eazalewski
DATE: 1/24/2025 5:04:26 PM
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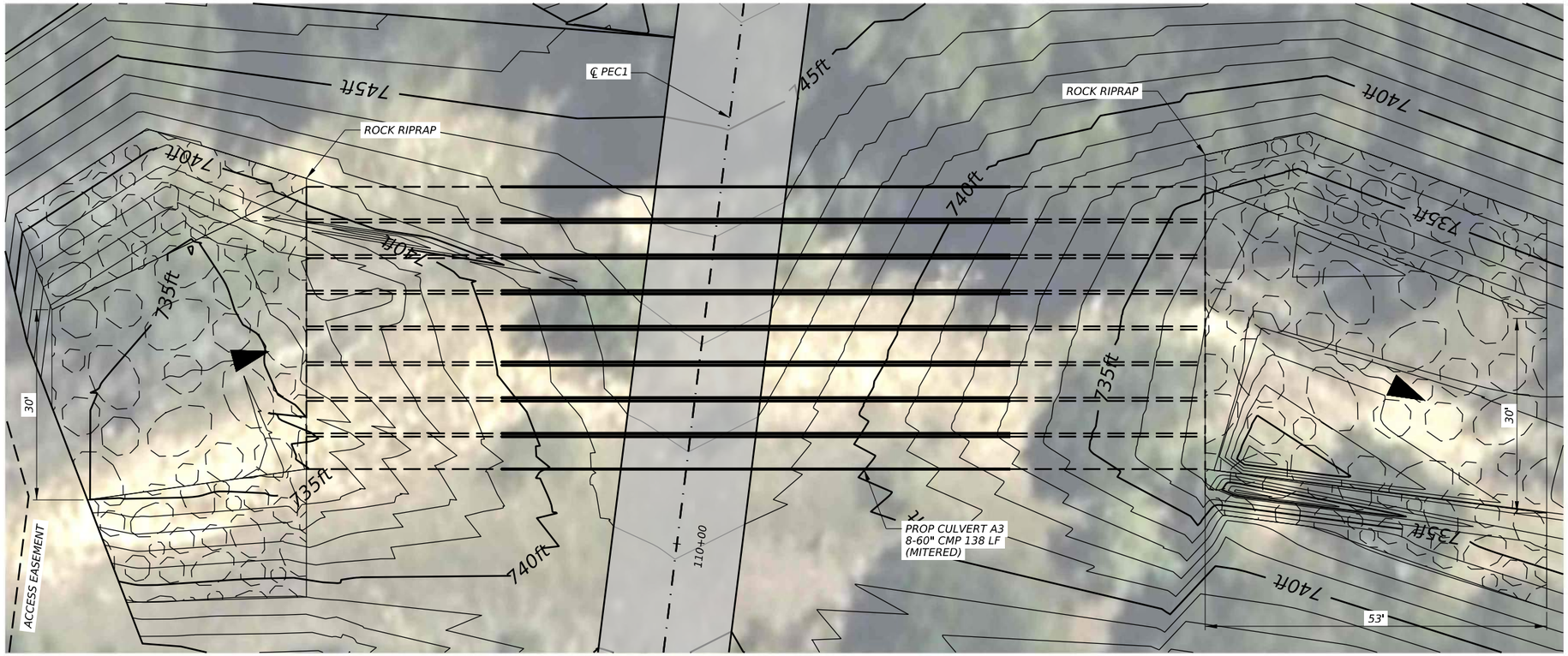

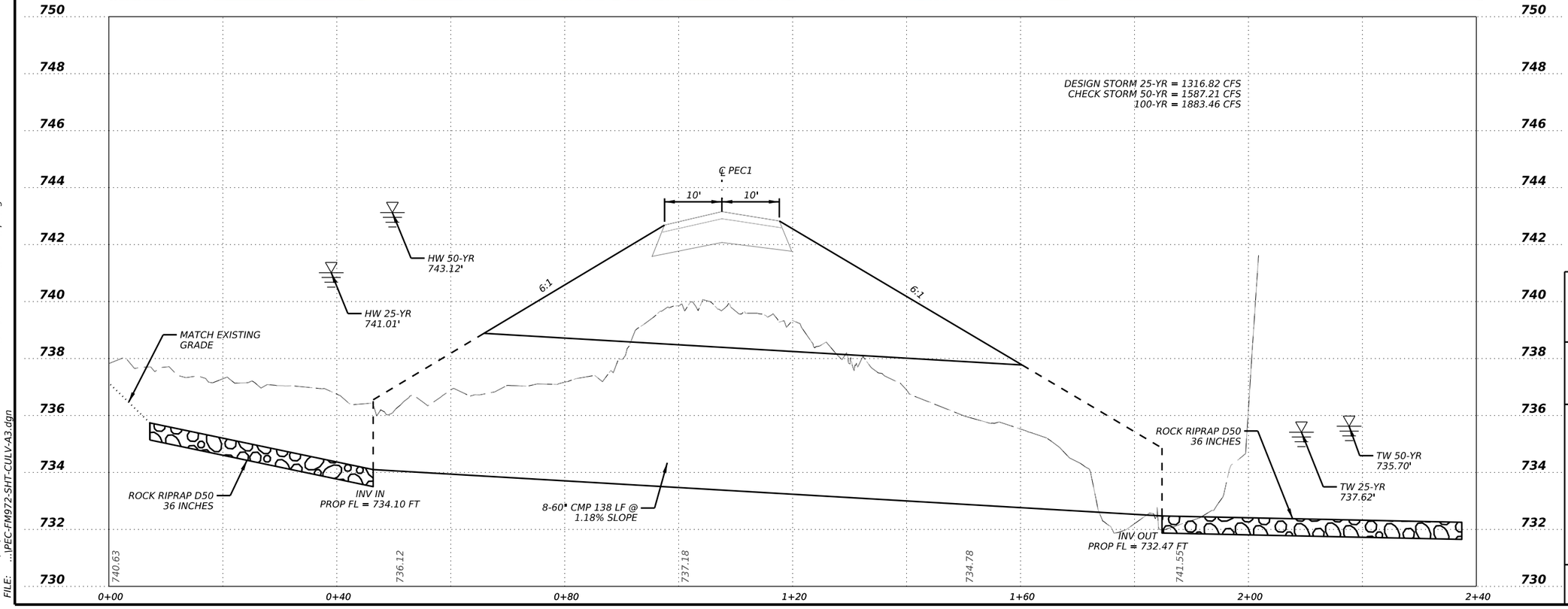

HORZ: 0 10 20
SCALE IN FEET

VERT: 0 2 4
SCALE IN FEET

LEGEND

- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- ROCK RIPRAP
- PROPOSED CULVERT
- FLOW DIRECTION

STATE OF TEXAS
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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

CULVERT LAYOUT
CULVERT A3

SHEET 3 OF 4

DESIGNED: GK	SCALE: H: 1" = 20' V: 1" = 4'	DATE: 1/24/2025	SHEET 24
DRAWN: JAG			
CHECKED: BMD			

CK:
DW:
CK:
DW:

PENTABLE: PEC BW Pentable.tbl
PLOT DRIVER: PEC-PDF-C.pltcfg

USER: eazalewski
DATE: 1/24/2025 5:04:36 PM
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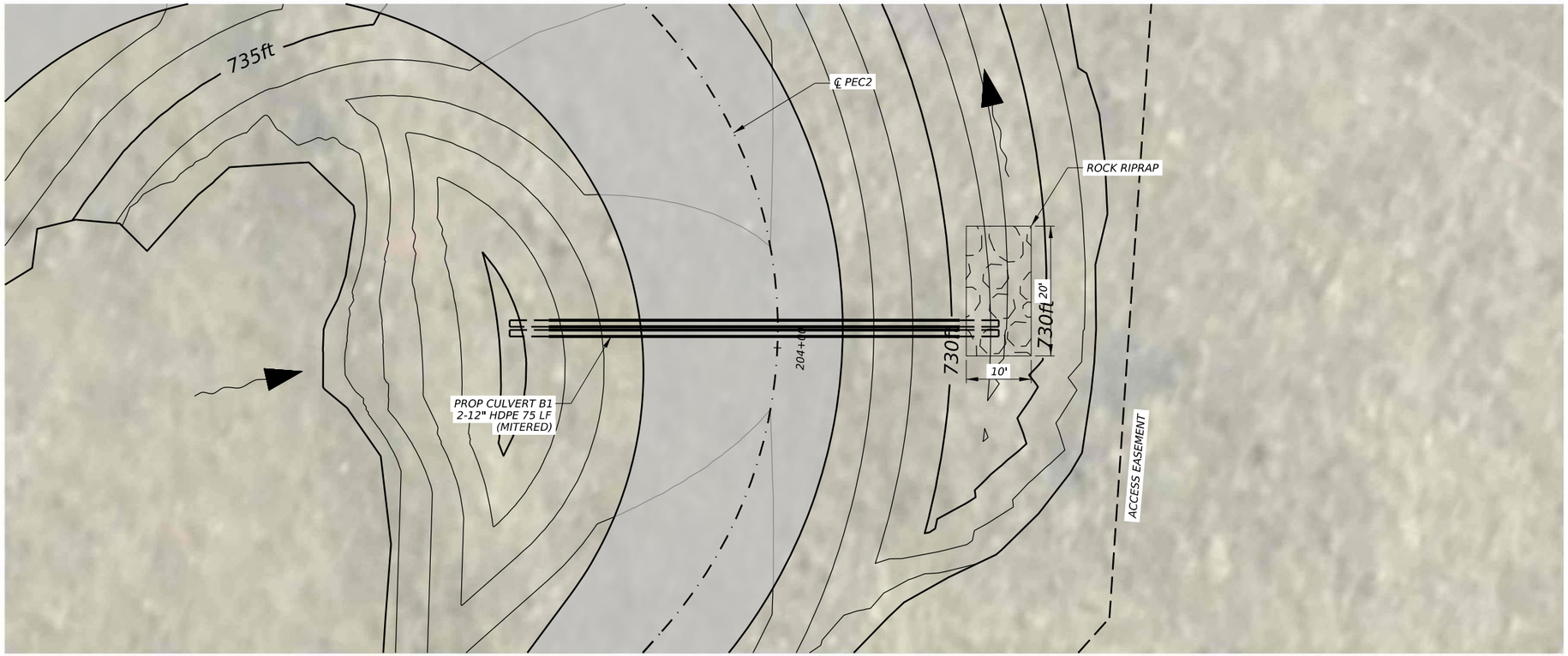
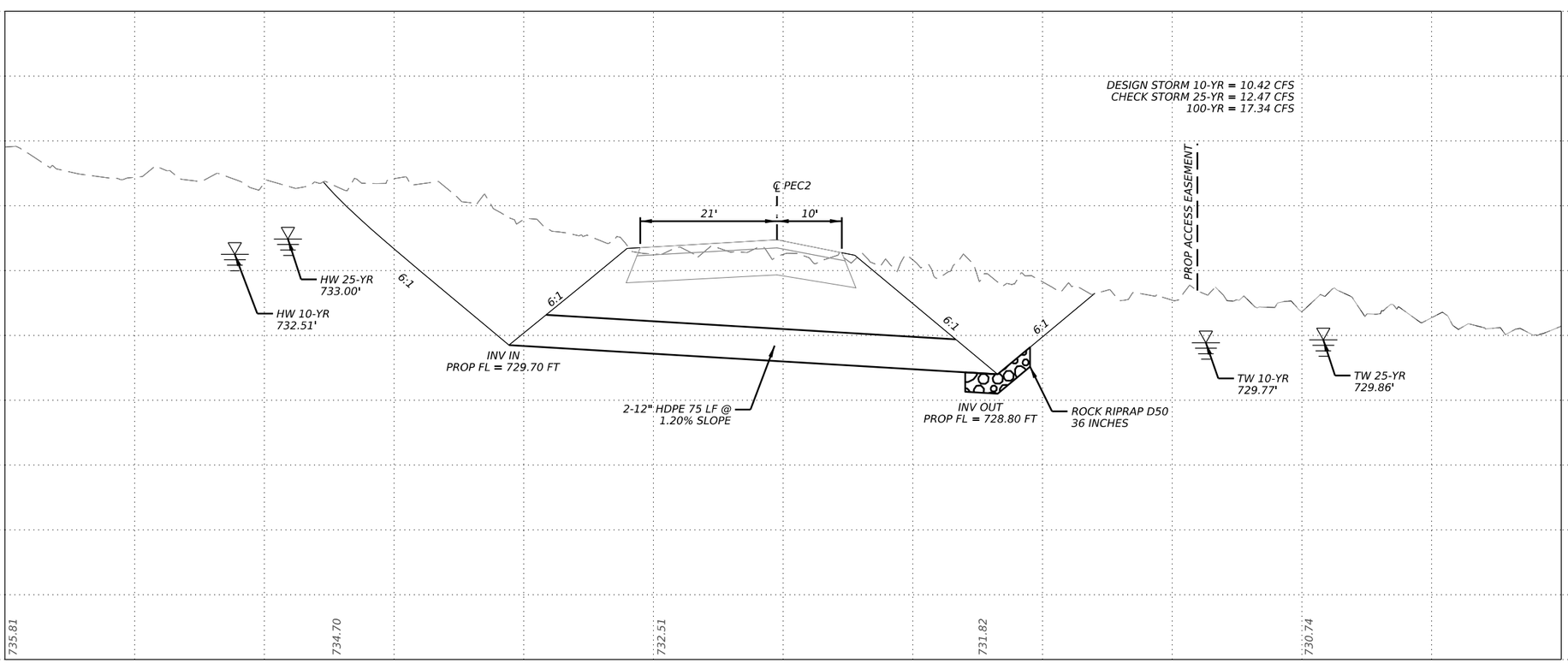


HORZ: 0 10 20
SCALE IN FEET

VERT: 0 2 4
SCALE IN FEET

LEGEND

- PROPOSED ACCESS EASEMENT
- DRIVE AISLE
- ROCK RIPRAP
- PROPOSED CULVERT
- FLOW DIRECTION



STATE OF TEXAS
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POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

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AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

CULVERT LAYOUT
CULVERT B1

SHEET 4 OF 4

DESIGNED: GK	SCALE: H: 1" = 20' V: 1" = 4'	DATE: 1/24/2025	SHEET 25
DRAWN: JAG			
CHECKED: BMD			

PENTABLE: PEC BW Pentable.tbl
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HORZ: 0 25 50

SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- VEGETATIVE FILTER STRIP
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- PERM SEEDING AND TOPSOIL
- ROCK RIPRAP

NOTES:

1. PERMANENT SEEDING AND TOPSOIL INCLUDES THE VEGETATED FILTER STRIP.
2. SEED WITH DROUGHT RESISTANT SPECIES.

STATE OF TEXAS
KRISTEN M. KOOIMAN
147286
LICENSED PROFESSIONAL ENGINEER
01/24/2025

POWER OF COMMUNITY
PEDERNALES ELECTRIC COOPERATIVE

BURNS McDONNELL
6200 BRIDGE POINT PKWY
SUITE 400
AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

LANDSCAPING PLAN

SHEET 1 OF 2

DESIGNED:	SCALE:	DATE:	SHEET
DRAWN:	SCALE = 1"=50'	1/24/2025	27
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CK
DW
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DW

MATCHLINE STA 107+30.00

ACCESS EASEMENT

EXIST UTILITY EASEMENT

EXIST ROW

108+00 109+00 110+00 111+00 112+00 113+00

FM 972

I-35 SB FRONTAGE ROAD

ACCESS EASEMENT

EXIST UTILITY EASEMENT

EXIST ROW

0 25 50

HORZ:

SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- VEGETATIVE FILTER STRIP
- DRIVE AISLE
- TEMPORARY SUBSTATION PAD
- PERM SEEDING AND TOPSOIL
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01/24/2025

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AUSTIN, TX, 78730
ENGINEERING FIRM F-845

PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

LANDSCAPING PLAN

SHEET 2 OF 2

DESIGNED:	SCALE:	DATE:	SHEET
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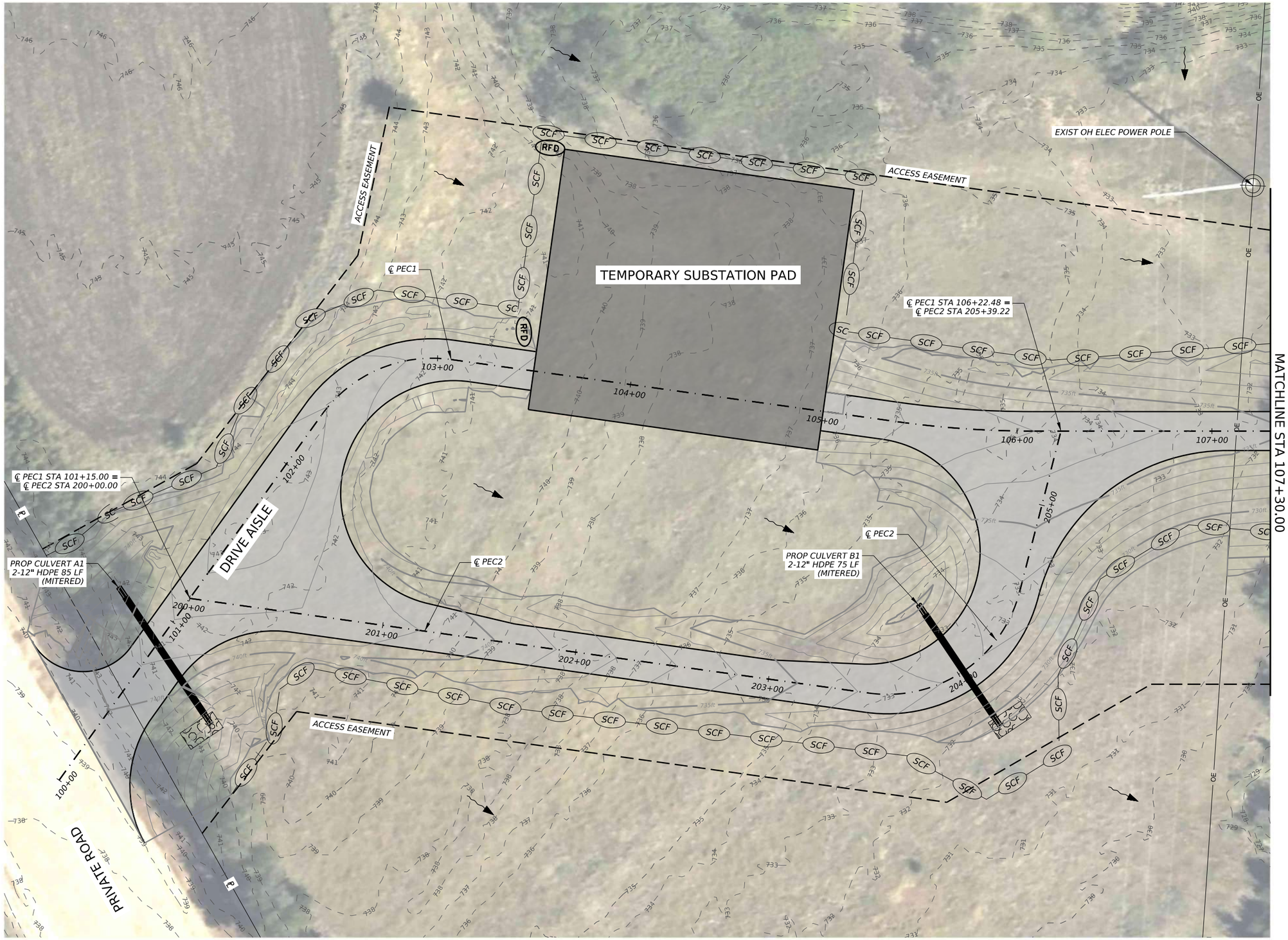

HORZ: 0 25 50
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- SCF — SEDIMENT CONTROL FENCE
- FLOW DIRECTION
- CONSTRUCTION EXIT (SEE NOTE 4)
- ROCK RIPRAP
- RFD — ROCK BERM/ ROCK FILTER DAM

NOTES:

1. ALL EROSION CONTROL ELEMENTS SHALL BE IN PLACE PRIOR TO COMMENCING ANY SOIL DISTURBING ACTIVITIES.
2. ALL EROSION CONTROL ELEMENTS TO BE PLACED AS SHOWN ON THE PLANS AND IN THE STANDARD DRAWINGS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
3. ALL PERIMETER SEDIMENT CONTROL FENCE TO REMAIN UNTIL END OF CONSTRUCTION.
4. CONSTRUCTION EXIT TO BE DETERMINED IN THE FIELD AND APPROVED BY THE ENGINEER.
5. EROSION CONTROL QUANTITIES ARE FOR ESTIMATING PURPOSES AND MAY VARY TO MEET FIELD CONDITIONS.

STATE OF TEXAS
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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

EROSION CONTROL PLAN STA 100+00 TO STA 104+20

SHEET 1 OF 2

DESIGNED: BMD DRAWN: BMD CHECKED: KMK	SCALE: SCALE = 1"=50'	DATE: 1/24/2025	SHEET 29

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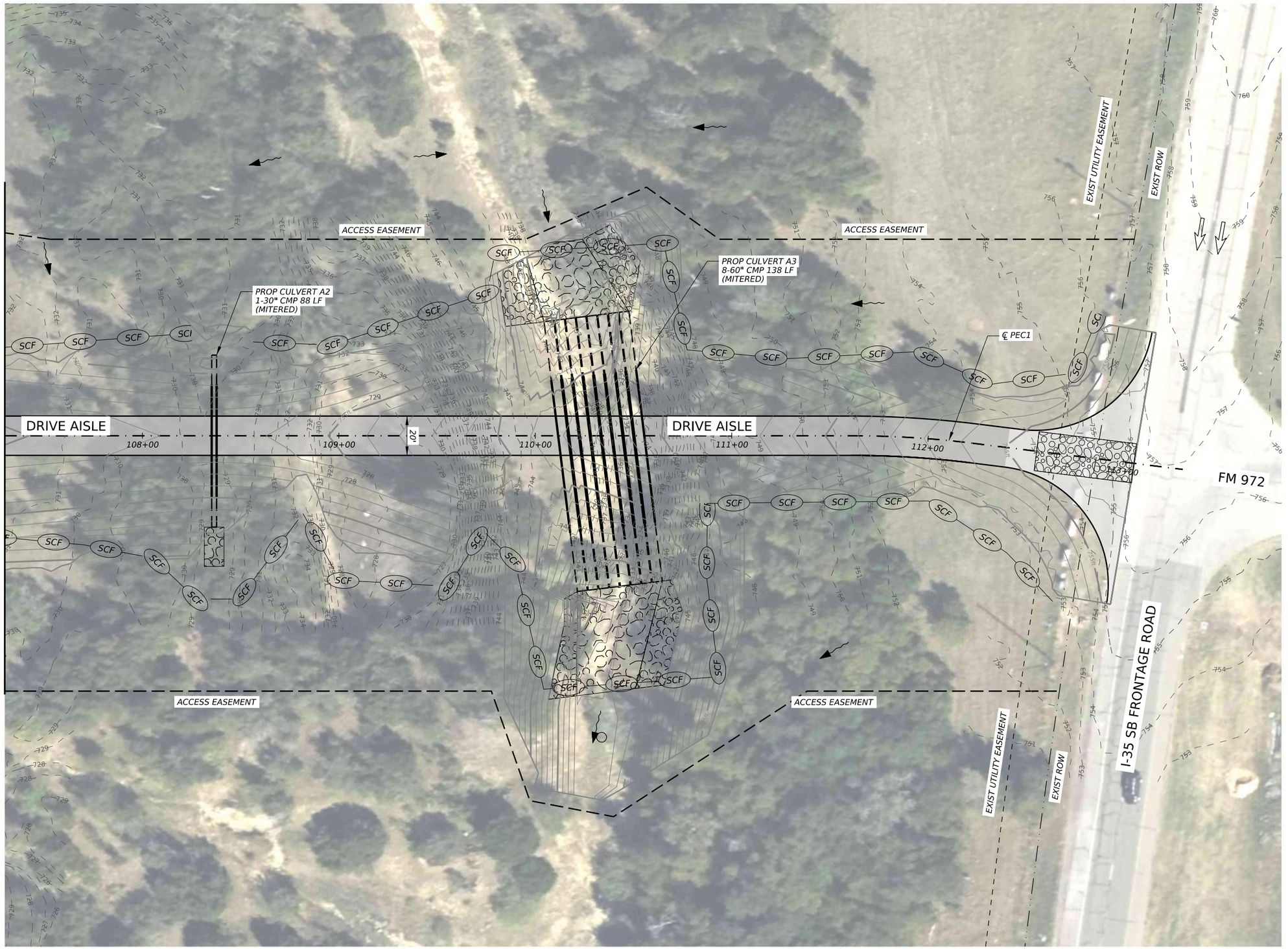

HORZ: 0 25 50
SCALE IN FEET

LEGEND

- EXISTING RIGHT OF WAY
- EXISTING UTILITY EASEMENT
- PROPOSED ACCESS EASEMENT
- SCF — SEDIMENT CONTROL FENCE
- FLOW DIRECTION
- CONSTRUCTION EXIT (SEE NOTE 4)
- ROCK RIPRAP
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PEDERNALES ELECTRIC CO-OP BUFFALO CLOVER TEMPORARY SUBSTATION

EROSION CONTROL PLAN STA 104+20 TO STA 109+60

SHEET 2 OF 2

DESIGNED: BMD DRAWN: BMD CHECKED: KMK	SCALE: SCALE = 1"=50'	DATE: 1/24/2025	SHEET 30

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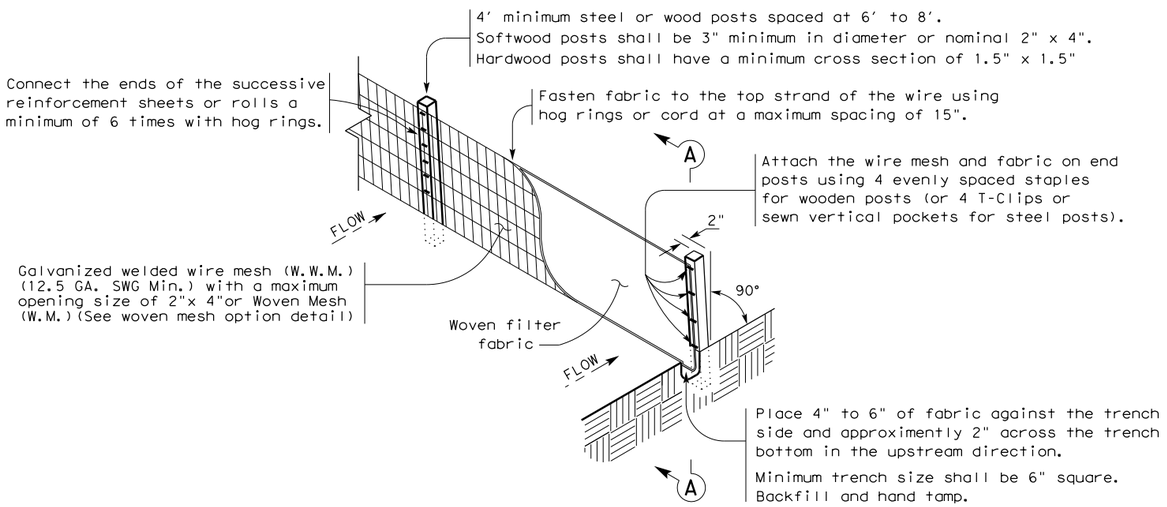
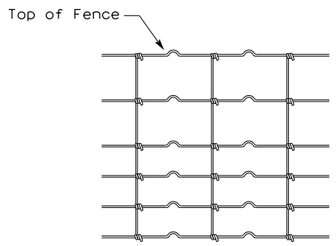
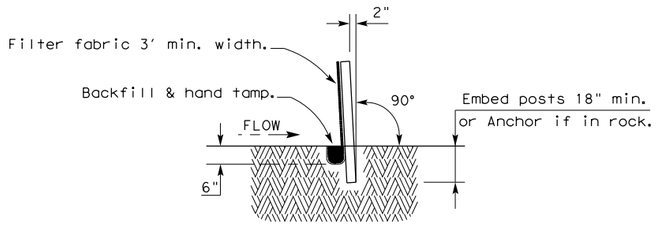


TEMPORARY SEDIMENT CONTROL FENCE

SCF





SECTION A-A

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/FT^2. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

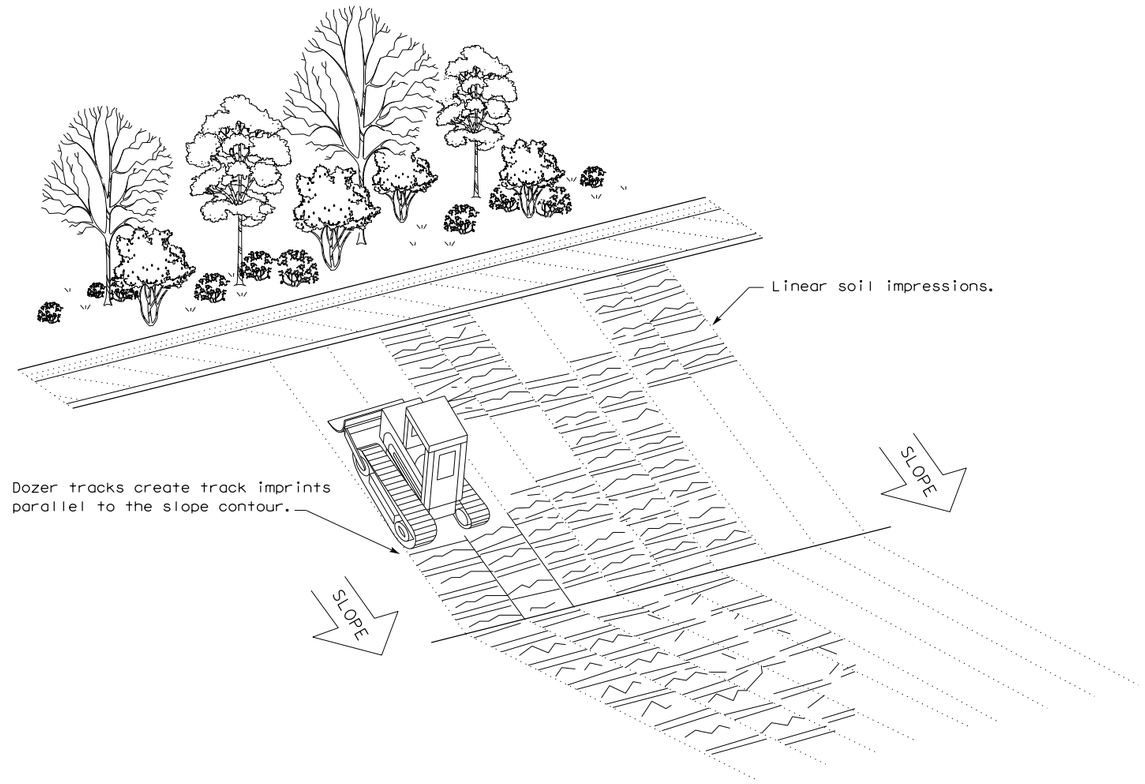
LEGEND

Sediment Control Fence

SCF

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 continous linear track impressions where the minimum 12" length impressions are perpendicular to the slope or direction of water flow.



VERTICAL TRACKING

Texas Department of Transportation

Design Division Standard

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				PEC	
	DIST	COUNTY		SHEET NO.	
	-	WILLIAMSON		31	

10/24/2025
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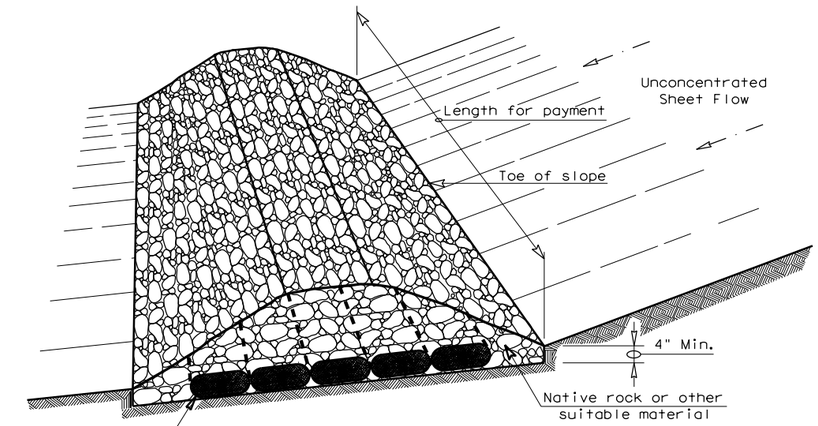
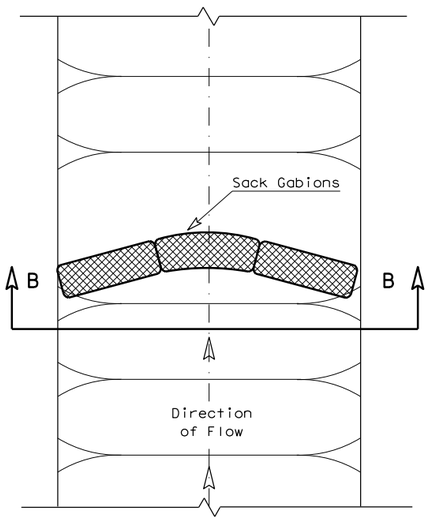
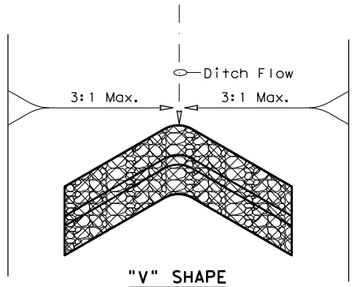


FILTER DAM AT TOE OF SLOPE

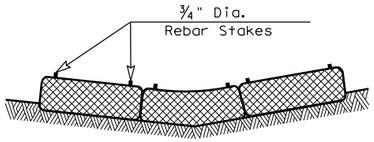
RFD1



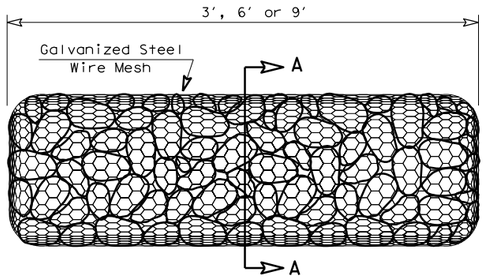
PLAN VIEW



"V" SHAPE PLAN VIEW

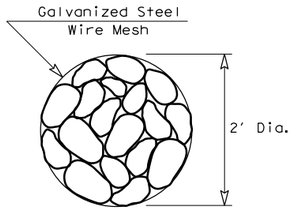


SECTION B-B

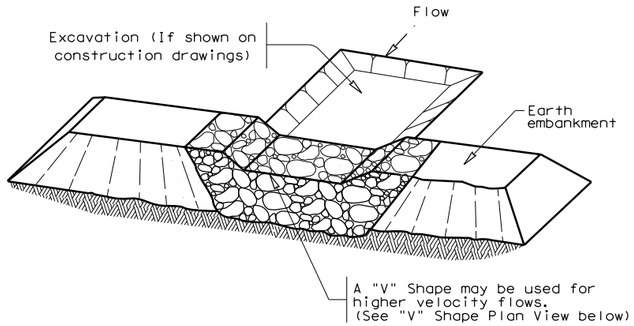


TYPE 4 (SACK GABIONS)

RFD4

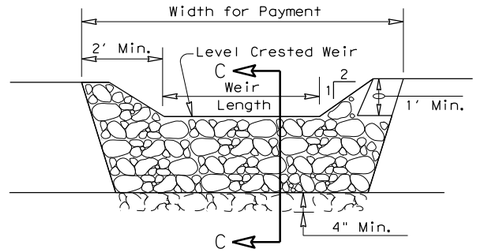


SECTION A-A



FILTER DAM AT SEDIMENT TRAP

RFD1 OR RFD2



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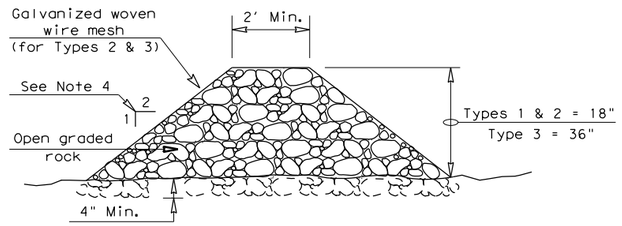


SECTION C-C

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/FT^2 of cross sectional area. A 2 year storm frequency may be used to calculate the flow rate.

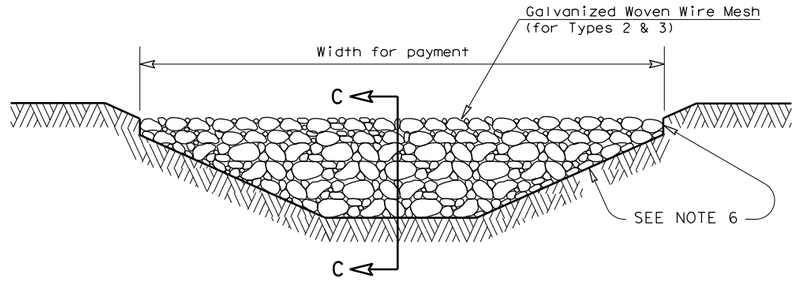
Type 1 (18" high with no wire mesh) (3" to 6" aggregate): Type 1 may be used at the toe of slopes, around inlets, in small ditches, and at dike or swale outlets. This type of dam is recommended to control erosion from a drainage area of 5 acres or less. Type 1 may not be used in concentrated high velocity flows (approximently 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.



FILTER DAM AT CHANNEL SECTIONS

RFD1 OR RFD2 OR RFD3

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 ¾" dia. rebar stakes, and have a double-twisted hexagonal weave with a nominal mesh opening of 2 ½" x 3 ¼"
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

Texas Department of Transportation

Design Division Standard

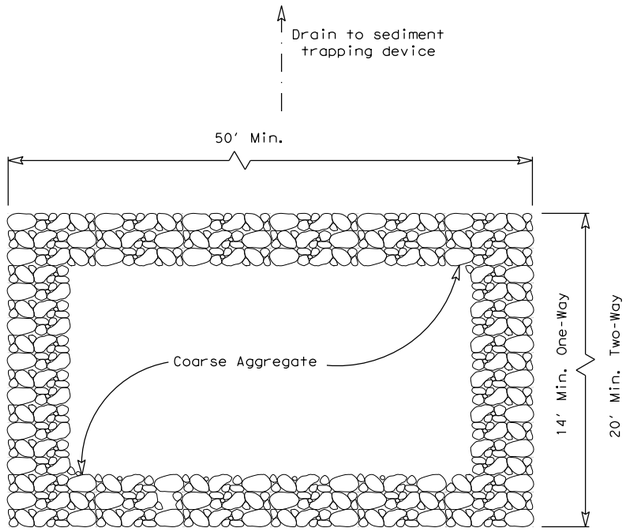
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

ROCK FILTER DAMS

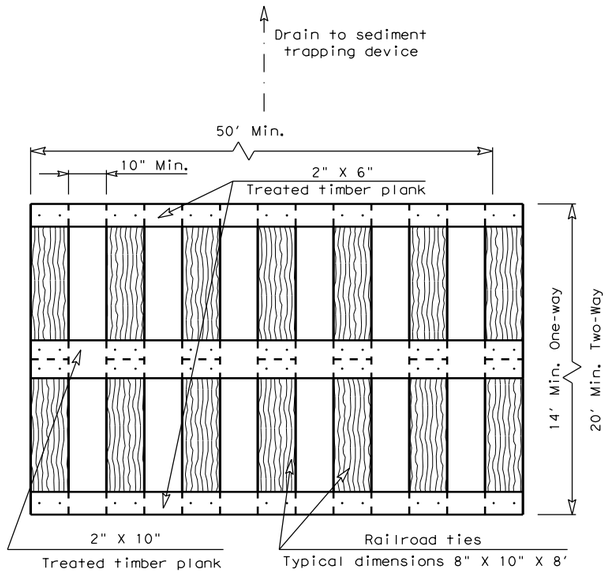
EC(2)-16

FILE: ec216	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS		
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY		
REVISIONS				PEC		
	DIST	COUNTY		SHEET NO.		
	-	WILLIAMSON		32		

DATE: 1/24/2025
FILE: $FILE$



PLAN VIEW



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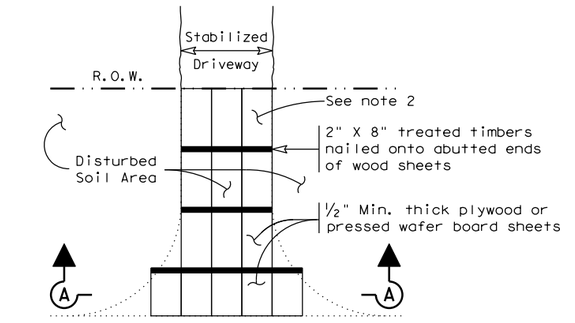

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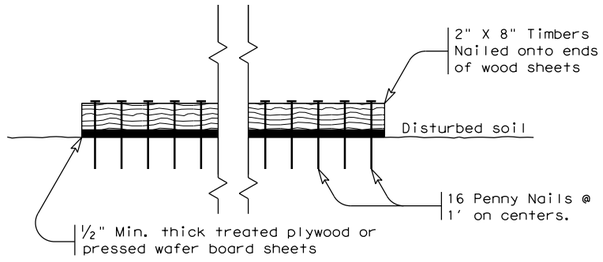
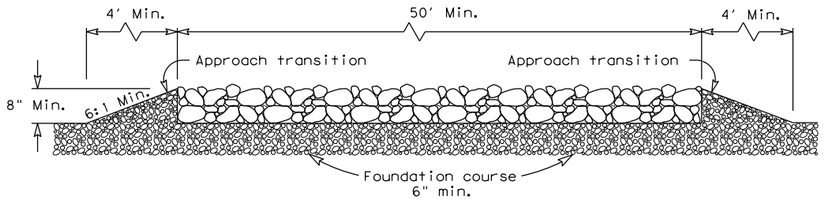


SECTION A-A

CONSTRUCTION EXIT (TYPE 3)

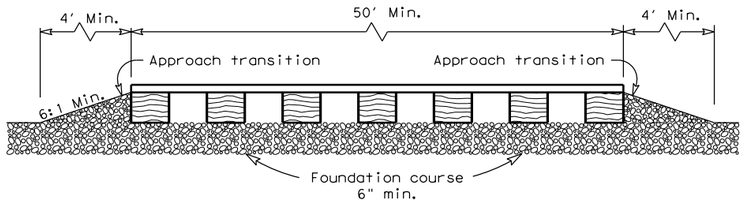
SHORT TERM



ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 1)

ROCK CONSTRUCTION (LONG TERM)



ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 2)

TIMBER CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 1)

1. The length of the type 1 construction exit shall be as indicated on the plans, but not less than 50′.
2. The coarse aggregate should be open graded with a size of 4" to 8".
3. The approach transitions should be no steeper than 6:1 and constructed as directed by the Engineer.
4. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other materialas approved by the Engineer.
5. The construction exit shall be graded to allow drainage to a sediment trapping device.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
7. 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.

GENERAL NOTES (TYPE 2)

1. The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50′.
2. The treated timber planks shall be attached to the railroad ties with ½"x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
5. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
6. The construction exit should be graded to allow drainage to a sediment trapping device.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
8. 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.

GENERAL NOTES (TYPE 3)

1. The length of the type 3 construction exit shall be as shown on the plans, or as directed by the Engineer.
2. 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.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

Texas Department of Transportation

Design Division Standard

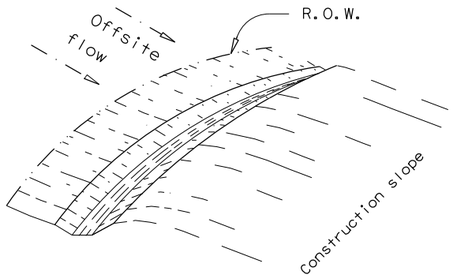
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

CONSTRUCTION EXITS

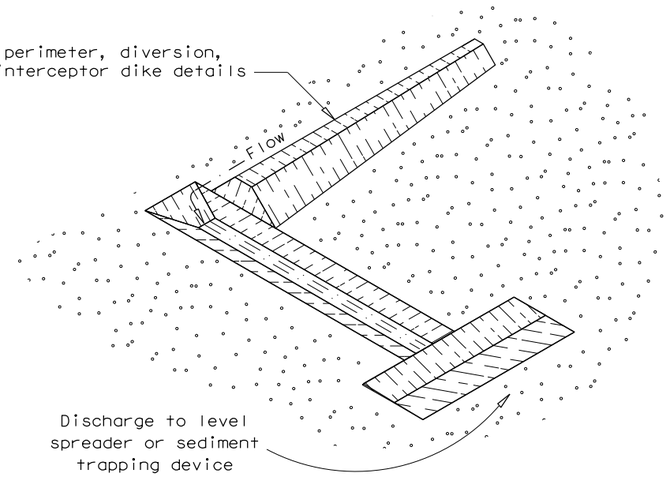
EC(3)-16

FILE: ec316	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS
©TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS				PEC
	DIST	COUNTY		SHEET NO.
	-	WILLIAMSON		33

DATE: 1/24/2025
FILE: $FILE$



PERIMETER SWALE



DIVERSION SWALE

GENERAL NOTE

1. Dimensions of swale may be modified with prior approval of the Engineer.
2. Side slopes within the safety clear zone of a roadway shall be 6:1 or flatter.
3. Grading shall be shown elsewhere on the plans or as directed by the Engineer.
4. The Engineer reserves the right to modify the dimensions shown for the swale dependent on runoff volume characteristics.
5. Swales that are in place for more than 14 calender days should be stabilized through seeding or other measures to control sediment runoff.
6. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
7. Remove sediment and debris when accumulation affects the performance of the devices, after a rain and when directed by the Engineer.

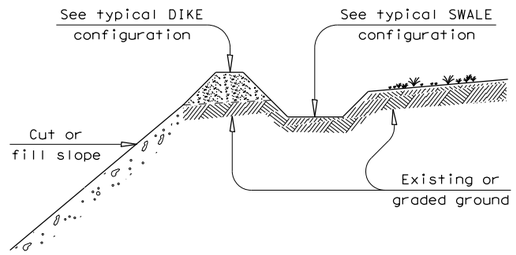
SWALE AND DIKE/SWALE USAGE GUIDELINES

A swale or dike/swale may be used to intercept runoff and divert it around unstabilized areas or to divert sediment laden runoff to an erosion control device (sediment basin or trap, rock filter dam, etc.).

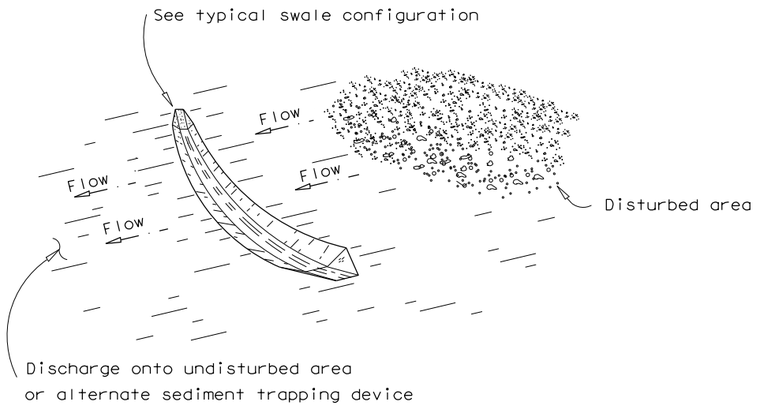
The drainage area contributing runoff to a swale or dike/swale should not exceed 5 acres. The spacing of swales and dike/swales should be as follows:

Slope of disturbed areas above dike	greater than 10%	5 - 10%	less than 5%
Maximum distance between dikes	100′	200′	300′

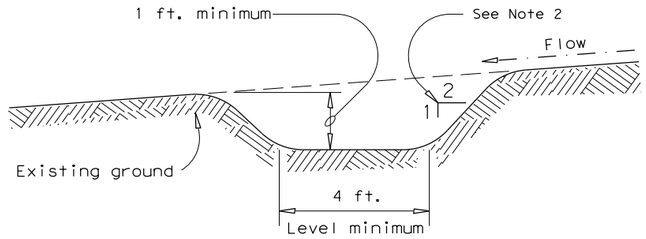
Intercepted runoff flowing in a swale or dike/swale should outlet to a stabilized area (vegetation, rock, etc.).



DIVERSION DIKE WITH SWALE



INTERCEPTOR SWALE



TYPICAL SWALE CONFIGURATION

PLAN SHEET LEGEND

SWALE (S)

DIKE (D)

Texas Department of Transportation

Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES
SWALES
(EARTHWORK FOR EROSION CONTROL)

EC(5)-16

FILE: ec516	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS				PEC
	DIST	COUNTY		SHEET NO.
	-	WILLIAMSON		34

DATE: 1/24/2025
FILE: $FILE$

Attachment G – Inspection, Maintenance, Repair and Retrofit Plan

Below is a description of the maintenance, inspection, repair, and retrofit measures proposed for the Project, which shall be in operation for approximately 2.5 years. No herbicides or pesticides are proposed. Bi-annual inspections will occur to observe the permanent BMPs and identify any maintenance or repairs that are required for full functionality. Records of the inspections, and associated repairs or corrective actions, will be kept as a part of Project records.

Inspections

The vegetated filter strips will be inspected at least twice annually to observe and correct areas of erosion or damage to the BMP. Generally, the strip will be assessed for uniformity of grass cover, debris and litter, and areas of sediment accumulation. Inspections may occur more frequently should periods of heavily rainfall and runoff occur following completion of construction and before 95% stabilization has been achieved. Bare spots and/or areas of erosion observed during the bi-annual inspections will be repaired to meet specifications. Sediment build-up will be removed and areas where soil was voided will be re-soiled.

Riprap will be inspected to observe for any instance of debris build up or clogging and evidence of erosion.

Debris and Litter Removal

Any trash or debris that accumulates on the strips or rip rap will be removed. If trash or debris is present, any time routine or periodic maintenance is performed on the temporary substation, no less than four times per year.

Mowing

A native seed mix has been proposed for use. Mowing will occur to limit grass height to 18”, at least bi-annually. Grass clippings and other vegetative debris generated from mowing will be removed and not left to accumulate on the strip.

An amended copy of this document will be provided to the TCEQ within 30 days of any changes in the following information:

Signatures provided on next page.

Engineer responsible for preparation of this Plan: Govinda Karki, P.E

Signature: 

Party Responsible for Maintenance: Pedernales Electric Co-Op, Inc.
Mailing Address: 201 S. Avenue F, Johnson City, Texas 78636
Telephone: (830) 868-7155

Signature:

Attachment H – Pilot-Scale Field Test Plan

The proposed Project does not intend to utilize BMPs not recognized by the Executive director, therefore this section is not applicable.

Attachment I – Measures for Minimizing Surface Stream Contamination

Surface water will continue to flow naturally through the site without being impacted by the construction activities, therefore this section is not applicable.

FORM TCEQ – 0599

AGENT AUTHORIZATION FORM

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

I Ryan Morlino,
Print Name

Electrical Engineering Manager,
Title - Owner/President/Other

of Pedernales Electric Cooperative, Inc.,
Corporation/Partnership/Entity Name

have authorized Allison Quiroga
Print Name of Agent/Engineer

of Burns & McDonnell Engineering Company, Inc.
Print Name of Firm

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

I also understand that:

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

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

1/22/25
Date

THE STATE OF Texas §

County of Blanco §

BEFORE ME, the undersigned authority, on this day personally appeared Ryan Marlin 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 22 day of January, 2025.

Christina Gonzales
NOTARY PUBLIC

CHRISTINA GONZALES
Notary Public, State of Texas
Notary ID# 13339029-4
My Commission Expires
OCTOBER 22, 2025

Christina Gonzales
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: October 22, 2025

Landowner Authorization

Mr. James C. Niemann is the landowner of the parcel the Project is located on. Mr. Niemann has provided his consent and authorization for Allison Quiroga, employed by Burns & McDonnell Engineering Company Inc., to submit this Water Pollution Abatement Plan for the proposed regulated activities described herein. Ms. Quiroga, as provided in the previous pages, is acting as Pedernales Electric Cooperative's agent with respect to this Application.

Mr. Neimann's authorization is provided on the following page.

Owner Authorization Form

Edwards Aquifer Protection Program

Instructions

Complete the following form by adding the requested information in the fields below. The form must be notarized for it to be considered complete. Attach it to other programmatic submittals required by 30 Texas Administrative Code (30 TAC), Chapter 213, and provide it to TCEQ's Edwards Aquifer Protection Program (EAPP) as part of your application.

If you have questions on how to fill out this form or about EAPP, please contact us by phone at 512-339-2929 or by e-mail at eapp@tceq.texas.gov.

Landowner Authorization

I, James C. Niemann

am the current owner of the property located at:

AW0524 Roberts, Wm. Survey 72.39 acres, with the address of

5505 IH 35 N, Georgetown TX 78633

and am duly authorized in accordance with 30 TAC 213.4(c)(2) and 213.4(d)(1), or 30 TAC 213.23(c)(2) and 213.23(d), relating to the right to submit an application, signatory authority, and proof of authorized signatory.

I do hereby authorize Pedernales Electric Cooperative, Inc.
To conduct, upon execution of a lease agreement between the landowner of the property described and Pedernales Electric Cooperative Inc. (PEC), the construction activities required on a portion of Landowner's property for the temporary Buffalo Clover substation and access roads
At 5505 IH 35 N, GEORGETOWN, TX 78633

Landowner Acknowledgement

If and only if a lease agreement is executed between the landowner of the property described and the PEC, then I understand that the landowner

Is ultimately responsible for the compliance with the approved or conditionally approved Edwards Aquifer protection plan and any special conditions of the approved plan through all phases of plan implementation even if the responsibility for compliance and the right to possess and control the property referenced in the application has been contractually assumed by another legal entity. I further understand that any failure to comply with any condition of the executive director's approval is a violation and subject to administrative rule or orders and penalties as provided under 30 TAC 213.10, relating to enforcement. Such violations may also be subject to civil penalties.

Landowner Signature

James Niemann

Landowner Signature

3/11/25

Date

THE STATE § OF Texas

County § of Dallas

BEFORE ME, the undersigned authority, on this day personally appeared

James C. Niemann

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 11th day of March, 2025.

Felicia Craighead

NOTARY PUBLIC

Notary Name: Felicia Craighead

MY COMMISSION EXPIRES: 2/22/27

Felicia Craighead
NOTARY PUBLIC - STATE OF TEXAS
ID# 134213732
COMM. EXP. 02-22-2027

FORM TCEQ – 0574

APPLICATION FEE FORM

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Pedernales Electric Cooperative, Inc. Buffalo Clover Substation Project

Regulated Entity Location: Georgetown, Texas

Name of Customer: Pedernales Electric Cooperative, Inc.

Contact Person: Ryan Morlino Phone: 830-868-7155

Customer Reference Number (if issued):CN 601327927

Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde

☐ Comal ☐ Kinney

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

☒ Austin Regional Office

☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ San Antonio Regional Office

☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	72.4 Acres	$ 8,000
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: Signed by: Allison Quiroga F02F2A10CE5B494...

Date: 1/28/2025

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*

Project	***Fee***
Extension of Time Request	$150

BURNS McDONNELL

FORM TCEQ – 10400

CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.*)

☐ Renewal (*Core Data Form should be submitted with the renewal form*) ☐ Other

2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 601327927		RN

SECTION II: Customer Information

4. General Customer Information **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (*If an individual, print last name first: eg: Doe, John*) *If new Customer, enter previous Customer below:*

Pedernales Electric Cooperative, Inc.

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID	10. DUNS Number (if applicable)
0007336401	17408284127	74-0828412	007924111

11. Type of Customer: ☒ Texas Electric Cooperative Corporation ☐ Individual Partnership: ☐ General ☐ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☒ 501 and higher

13. Independently Owned and Operated?
☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following*

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

Pedernales Electric Cooperative, Inc.
201 S. Avenue F

City	Johnson City	State	TX	ZIP	78636	ZIP + 4	

16. Country Mailing Information (*if outside USA*)
N/A

17. E-Mail Address (*if applicable*)
Enter email address here: ryan.morlino@peci.com

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)

(830) 868-7155		( ) - Enter fax no. here N/A

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Pedernales Electric Cooperative, Inc. Buffalo Clover Substation Project

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	TBD							
	FM 972							
	City	Georgetown	**State**	TX	**ZIP**	78626	**ZIP + 4**	
24. County	Williamson County							

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

25. Description to Physical Location:	From intersection of FM195 and US I35, take N IH 35 Service Road approximately 1.58 miles to FM972 turning west to S IH 35 Service Road to project site.

26. Nearest City	**State**	**Nearest ZIP Code**
Georgetown	TX	78626

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	30.724027		**28. Longitude (W) In Decimal:**	-97.647836	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	43	26.4966	-97	38	52.209

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)
4911		221122	221119

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Electric Cooperative

34. Mailing Address:	**Pedernales Electric Cooperative, Inc.**							
	201 S. Avenue F							
	City	**Johnson City**	**State**	**TX**	**ZIP**	**78636**	**ZIP + 4**	

35. E-Mail Address:	Enter email address here: ryan.morlino@peci.com

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(830) 868-7155		( ) - Enter fax no. here N/A

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

☐ Dam Safety	☐ Districts	☐ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☒ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Wastewater	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Allison Quiroga	41. Title:	Assistant Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(346) 415-6560		( ) -	aquiroga@burnsmcd.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:	Pedernales Electric Cooperative, Inc.	Job Title:	Electrical Engineering Manager
Name *(In Print)*:	Ryan Morlino	Phone:	(830)220-1454
Signature:		Date:	1/13/2025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