
New Hope Drive:
From S Block House Dr to CR 180

City of Cedar Park, Texas

Williamson County, Texas

**EDWARDS AQUIFER
CONTRIBUTING ZONE PLAN**

Prepared for:

City of Cedar Park

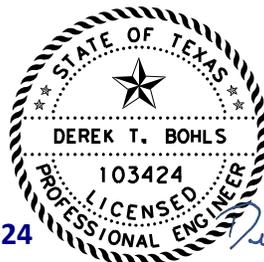
Prepared by:

 **LJA Engineering, Inc.**

LJA Engineering, Inc.

2700 La Frontera, Suite 200

Round Rock, Texas 78681



6/14/2024

Derek Bohls

Contributing Zone Plan Checklist

✓ Edwards Aquifer Application Cover Page (TCEQ-20705)

~~Contributing Zone Plan Application (TCEQ-10257)~~

~~Attachment A – Road Map~~

~~Attachment B – USGS Quadrangle Map~~

~~Attachment C – Project Narrative~~

~~Attachment D – Factors Affecting Surface Water Quality~~

~~Attachment E – Volume and Character of Stormwater~~

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

~~Attachment G – Alternative Secondary Containment Methods (if AST with an alternative method of secondary containment is proposed)~~

~~Attachment H – AST Containment Structure Drawings (if AST is proposed)~~

~~Attachment I – 20% or Less Impervious Cover Declaration (if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site)~~

~~Attachment J – BMPs for Upgradient Stormwater~~

~~Attachment K – BMPs for On-site Stormwater~~

~~Attachment L – BMPs for Surface Streams~~

~~Attachment M – Construction Plans~~

~~Attachment N – Inspection, Maintenance, Repair and Retrofit Plan~~

~~Attachment O – Pilot Scale Field Testing Plan, if BMPs not based on Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs~~

~~Attachment P – Measures for Minimizing Surface Stream Contamination~~

TCEQ-20872 PROVIDED IN LIEU OF TCEQ-10257
AS INSTRUCTED BY TCEQ

✓ Edwards Aquifer Protection Program Roadway Application (TCEQ-20872)

Attachment A - Road Map

Attachment B - USGS Quadrangle

Attachment C - Project Description

Attachment D - Factors Affecting Surface Water Quality

Attachment E - BMPs for Upgradient (Offsite) Stormwater

Attachment F - BMPs for On-site Stormwater

Attachment G - Construction Plans

Attachment H - Inspection, Maintenance, Repair and Retrofit Plan

Attachment I - Pilot-Scale Field Testing Plan

Attachment J - Measures for Minimizing Surface Stream Contamination

Attachment K - Volume and Character of Stormwater

— **Storm Water Pollution Prevention Plan (SWPPP)**

-OR-

— **Temporary Stormwater Section (TCEQ-0602)**

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 sealing a feature

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

✓ **Copy of Notice of Intent (NOI)**

✓ **Agent Authorization Form (TCEQ-0599), if application submitted by agent**

✓ **Application Fee Form (TCEQ-0574)**

— **Check Payable to the “Texas Commission on Environmental Quality”**

✓ **Core Data Form (TCEQ-10400)**

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: New Hope Drive from S Block House Dr to CR 180					2. Regulated Entity No.: 109729723				
3. Customer Name: City of Cedar Park					4. Customer No.: 600407951				
5. Project Type: (Please circle/check one)	<input checked="" type="radio"/> New	<input type="radio"/> Modification			<input type="radio"/> Extension		<input type="radio"/> Exception		
6. Plan Type: (Please circle/check one)	<input type="radio"/> WPAP	<input checked="" type="radio"/> CZP	<input type="radio"/> SCS	<input type="radio"/> UST	<input type="radio"/> AST	<input type="radio"/> EXP	<input type="radio"/> EXT	<input type="radio"/> Technical Clarification	<input type="radio"/> Optional Enhanced Measures
7. Land Use: (Please circle/check one)	<input type="radio"/> Residential		<input checked="" type="radio"/> Non-residential			8. Site (acres):		15.78	
9. Application Fee:	\$6500		10. Permanent BMP(s):			Proposed STUs, Existing Extended Detention			
11. SCS (Linear Ft.):			12. AST/UST (No. Tanks):						
13. County:	Williamson		14. Watershed:			Cottonwood Creek			

Application Distribution

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

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

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

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

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	—	—	—	—	—
Region (1 req.)	—	—	—	—	—
County(ies)	—	—	—	—	—
Groundwater Conservation District(s)	<u> </u> Edwards Aquifer Authority <u> </u> Trinity-Glen Rose	<u> </u> Edwards Aquifer Authority	<u> </u> Kinney	<u> </u> EAA <u> </u> Medina	<u> </u> EAA <u> </u> Uvalde
City(ies) Jurisdiction	<u> </u> Castle Hills <u> </u> Fair Oaks Ranch <u> </u> Helotes <u> </u> Hill Country Village <u> </u> Hollywood Park <u> </u> San Antonio (SAWS) <u> </u> Shavano Park	<u> </u> Bulverde <u> </u> Fair Oaks Ranch <u> </u> Garden Ridge <u> </u> New Braunfels <u> </u> Schertz	NA	<u> </u> 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.	
Derek Bohls	
Print Name of Customer/Authorized Agent	
Signature of Customer/Authorized Agent	Date

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

Edwards Aquifer Protection Program Roadway Application

Texas Commission on Environmental Quality

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

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

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer.

The application was prepared by:

Print Name of Customer/Agent: Derek Bohls

Date: 6/14/2024

Signature of Customer/Agent:



Project Information

1. Regulated Entity (Project) Name: New Hope Drive
2. County: Williamson
3. Stream Basin(s): Cottonwood Creek
4. Groundwater Conservation District (if applicable): None
5. Customer (Applicant):

Contact Person: Randall Leuders

Entity: City of Cedar Park

Mailing Address: 450 Cypress Creek Road, Building 1

City, State: Cedar Park, TX Zip: 78613

Telephone: 512-401-5354

Email Address: randall.lueders@cedarparktexas.gov

6. Agent (Representative):

Contact Person: Derek Bohls
Entity: LJA Engineering
Mailing Address: 2700 La Frontera, Suite 200
City, State: Round Rock, TX Zip: 78681
Telephone: 512-439-4744
Email Address: dbohls@lja.com

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

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

Contact Person: Randall Leuders
Entity: City of Cedar Park
Mailing Address: 450 Cypress Creek Road, Building 1
City, State: Cedar Park, TX Zip: 78613
Telephone: 512-401-5354
Email Address: randall.lueders@cedarparktexas.gov

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

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

Survey marking will be completed by this date:

ROW and facilities are existing and can be inspected without staking.

9. **Attachment A - Road Map.** A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.

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

- Project site boundaries
- USGS Quadrangle Name(s)
- All drainage paths from site to surface waters

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

- Recharge Zone (RZ)
- Contributing Zone (CZ)
- Transition Zone (TZ)
- Contributing Zone within Transition Zone (CZ/TZ)
- Zone not regulated by EAPP

12. **Attachment C - Project Description.** A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:

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

13. Existing project site conditions are noted below:

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

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

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

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

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

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

R.O.W. for project: 15.78 (ac.)

Length: 5810 ft.

Width: varies from 120 ft. to 227 ft.

Impervious cover (IC): 15.41 (ac.)

Total of Pavement area 15.41 (ac.) ÷ R.O.W. area 15.78 (ac.) x 100 = 97.7% IC.

- CAD program was used to determine areas.
- Number of travel lanes: proposed: 6, existing: 4
- Typical widths of lanes: 12 (ft.)
- Are intersections also being improved? (Y/N) Yes

Site Plan Requirements

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

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

Permanent Best Management Practices (BMPs)

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

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

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

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

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

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

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

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

31. **Attachment F - BMPs for On-site Stormwater.**

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

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

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

Major bridge cross-sections, and roadway plan and profiles

BMP plans and details

Design calculations

Erosion control

TCEQ Construction Notes

SW3P

EPIC, as necessary

33. **Attachment H - Inspection, Maintenance, Repair and Retrofit Plan.** A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all the following:
- Prepared and certified by the engineer designing the permanent BMPs and measures.
 - Signed by the owner or responsible party.
 - Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
 - Contains a discussion of recordkeeping procedures.

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

N/A

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

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

36. The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity.

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

Yes

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

Stormwater to be generated by the Proposed Project

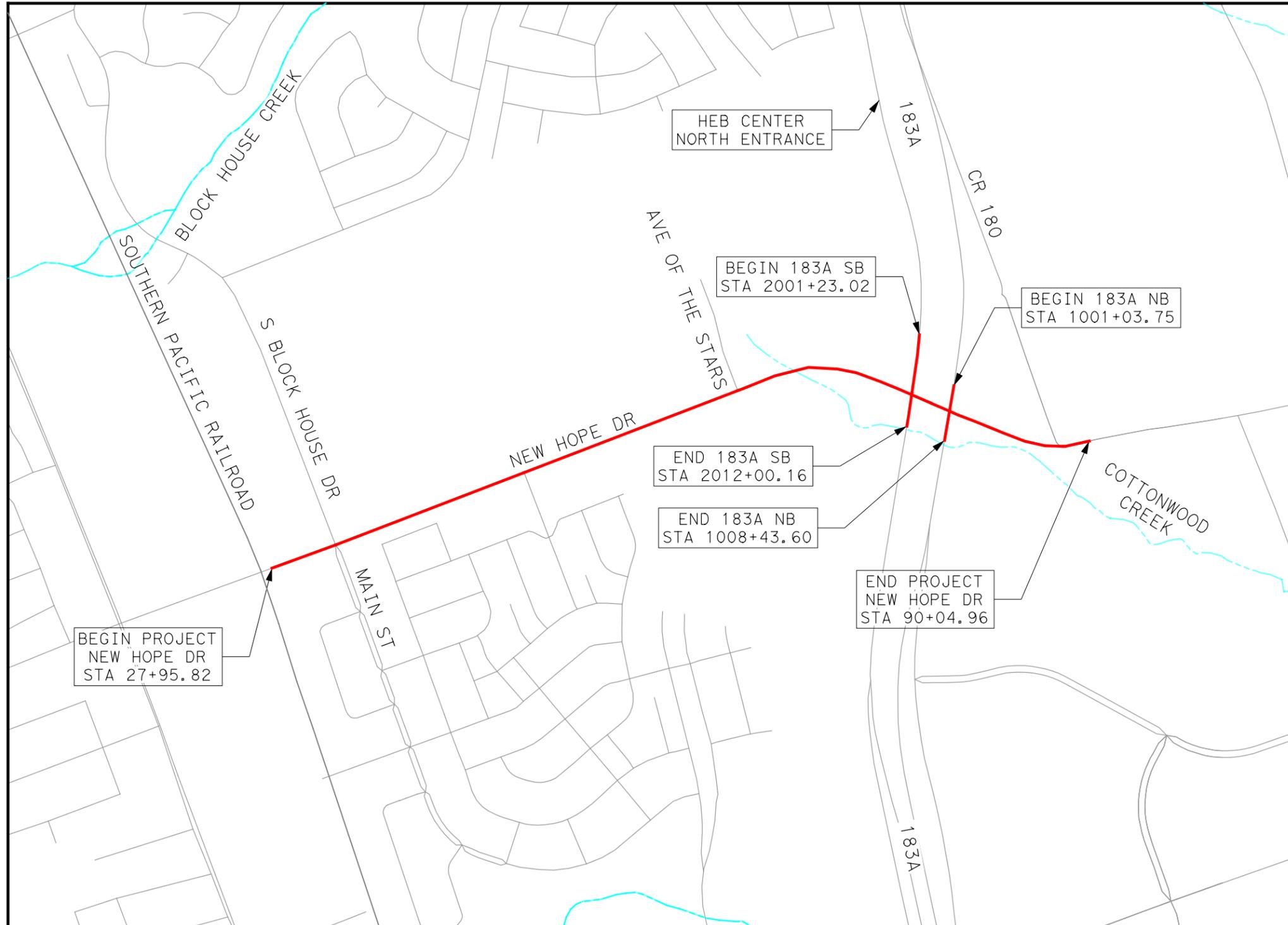
Description of practices and measures that will be used during construction.

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

Administrative Information

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

TCEQ-20872 ATTACHMENT A: ROAD MAP



SCALE: NTS



NEW HOPE DRIVE ATTACHMENT A ROAD MAP

DESIGN BY:
 DRAWN BY:
 CHECKED BY:
 APPROVED BY:
 PROJECT NO: 3217-2301
 DATE:

SCALE
 HORIZONTAL: NTS
 VERTICAL: NTS
 SHEET: 1 OF 1
 PAGE:

EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY APPLICATION

TCEQ-20872

ATTACHMENT C - PROJECT DESCRIPTION

Introduction

This project is a roadway expansion of New Hope Drive from just east of its crossing with the Southern Pacific Railroad to CR 180 including intersection improvements. A portion of the project falls within Central Texas Regional Mobility Authority (CTRMA) right of way; however, this contributing zone plan applies only to the section that falls within City of Cedar Park right of way. Separate documentation of this project will be submitted for the CTRMA section. The project limits are shown in Figure 1 below.

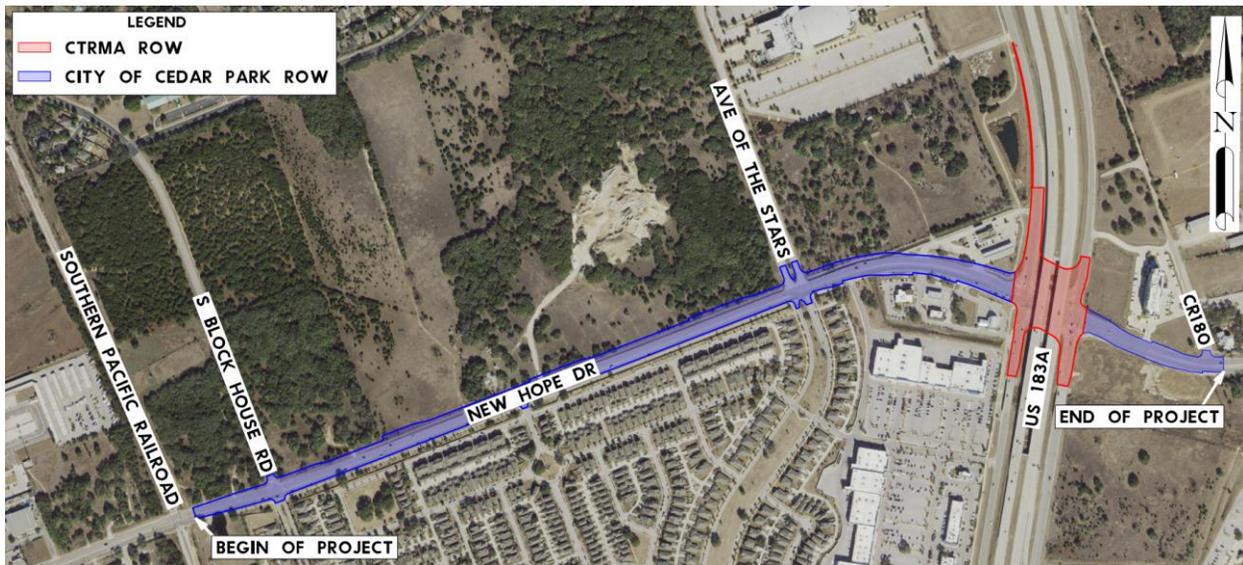


Figure 1: Project Location

New Hope Drive Project Description

The New Hope Drive project will improve the existing roadway infrastructure by widening from four lanes with one center turn lane to a six-lane facility with raised medians. Additionally, the project will reconfigure the intersection at US 183A, thus enhancing traffic mobility and access between New Hope Drive and US 183A in all directions.

The project would include pavement, retaining walls, culverts, storm sewer, illumination, traffic signal and management systems, utility adjustments, signs, sidewalks, and other roadway features. Proposed right of way will be obtained for the construction of this project. See Figure 2 for typical sections showing the general project concept.

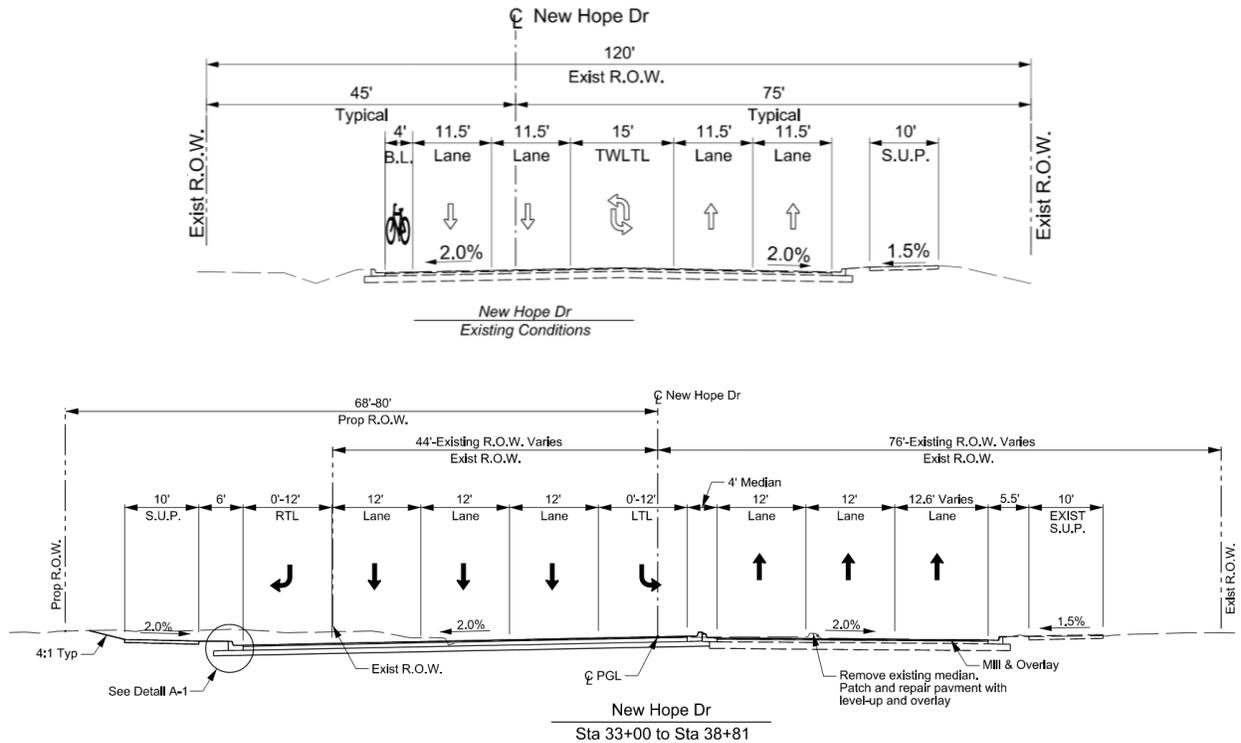


Figure 2: General Project Concept

New Hope Drive Impervious Cover and Permanent BMPs

The New Hope Drive Project is located within the Edwards Aquifer Contributing Zone. As stated on the TCEQ website, this situation requires a contributing zone plan outlining best management practices (BMPs) that will be implemented in order to protect water quality during construction. Therefore, the project design accounts for the new impervious cover and treats the runoff as required in the contributing zone.

New Hope Drive would add 6.42 acres of impervious cover (IC) within the project limits, thus increasing the IC from 8.99 acres to 15.41 acres. To account for this increase, the project is required to remove at least 5,589 lbs of total suspended solids (TSS) per year (i.e., $L_m = 5,589$ lbs).

There are no existing BMPs within the project limits. However, the existing 8.99 acres of impervious cover are treated in a regional wet pond constructed off site. See EAPP 11-06090101 for details on the Cottonwood Channel and Pond.

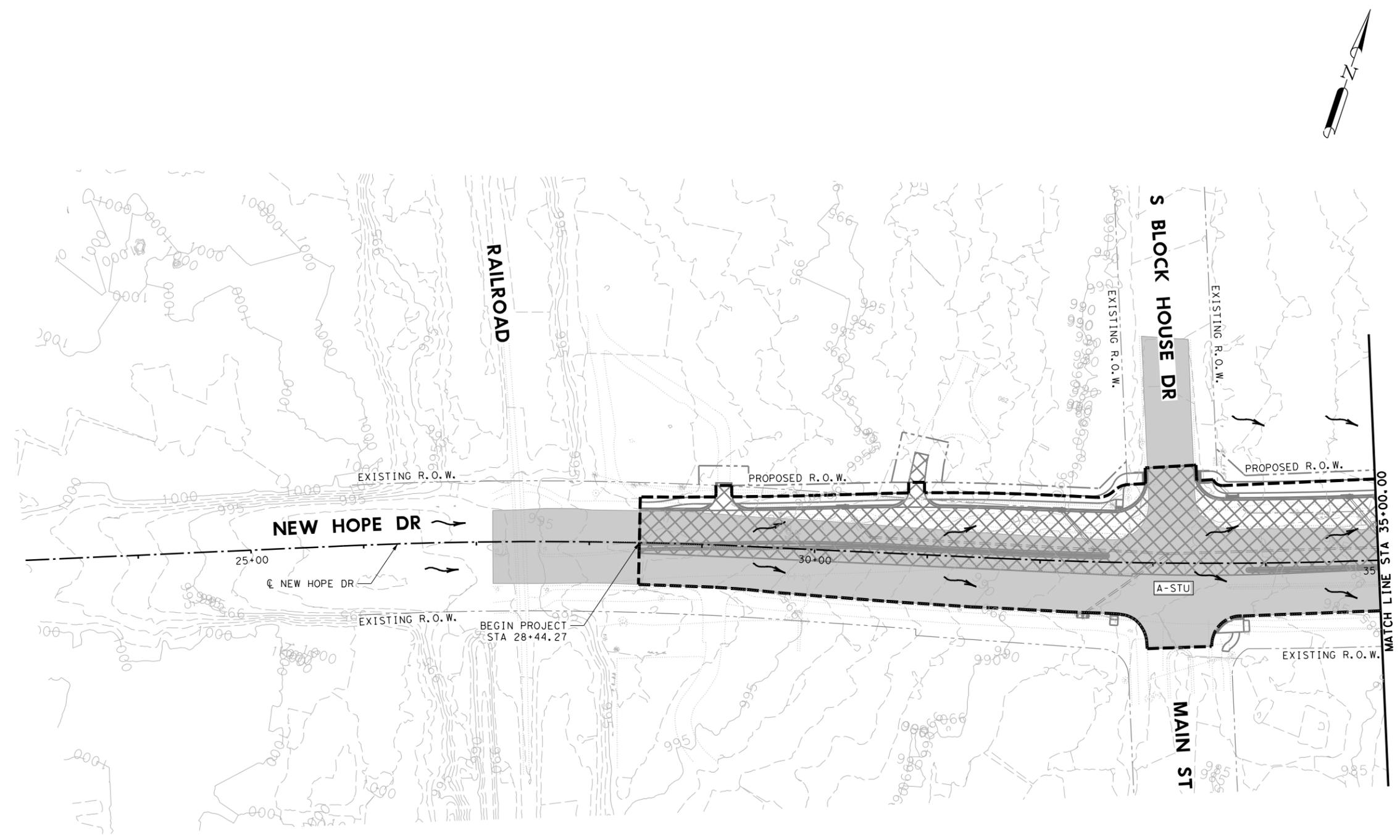
Previously approved CZPs within the project area are:

1. EAPP ID 11-06090101
2. EAPP ID 11-04071601D

The approved Cottonwood Pond Contributing Zone Plan (EAPP IS 11-06090101) provided water quality best management practices (BMP's) for a regional area servicing multiple parcels/landowners. The participant tracts contributing to the plan include the Cedar Park Regional Health Center (owner of pond and plan), City of Cedar Park (New Hope Drive), and local developers with mix uses of commercial and residential developments along with the roadway and hospital. All of these developments treat TSS removal with a single regional Wet Pond located on the Regional Health Center property. No improvements to the existing pond are proposed as part of New Hope Drive. The roadway expansion impervious cover addition for this improvement project above the existing 8.99 acres allocated in the previously approved Cottonwood Pond CZP will be treated by proposed Storm Water Treatment Units (STUs; specifically, JellyFish Filters) to remove TSS from runoff collected by storm sewer.

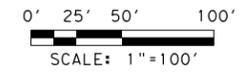
EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY APPLICATION
TCEQ-20872
SITE PLANS

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LEGEND

	EXISTING R.O.W.
	PROPOSED R.O.W.
	EXISTING DRAINAGE EASEMENT
	PROPOSED DRAINAGE EASEMENT
	EXISTING PLANIMETRICS
	PROPOSED PLANIMETRICS
	PROPOSED DRAINAGE
	EXISTING PAVEMENT
	PROPOSED PAVEMENT
	100-YR FEMA FLOODPLAIN



6/14/2024

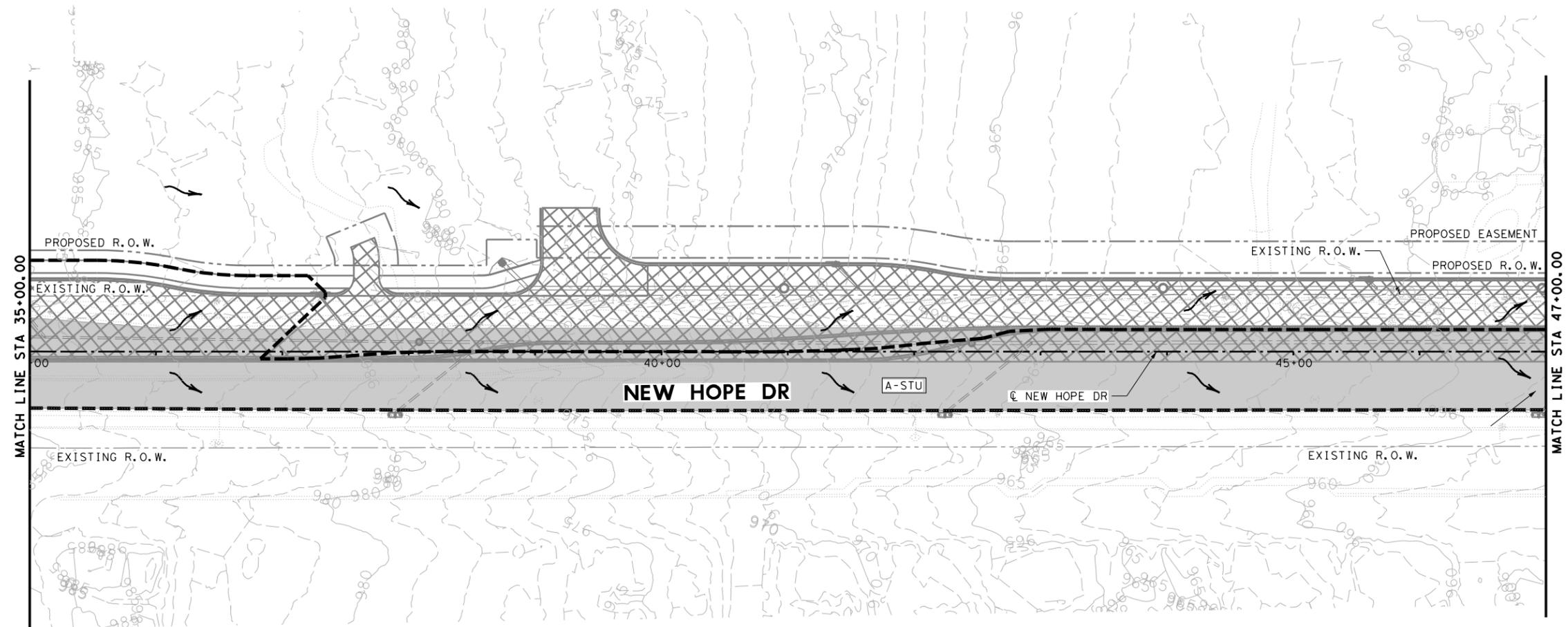
Derek Bohls

FRN - F-1386

**NEW HOPE DRIVE
SITE PLAN**

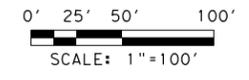
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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
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- - - PROPOSED DRAINAGE EASEMENT
- EXISTING PLANIMETRICS
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- █ 100-YR FEMA FLOODPLAIN



6/14/2024

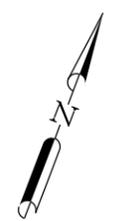


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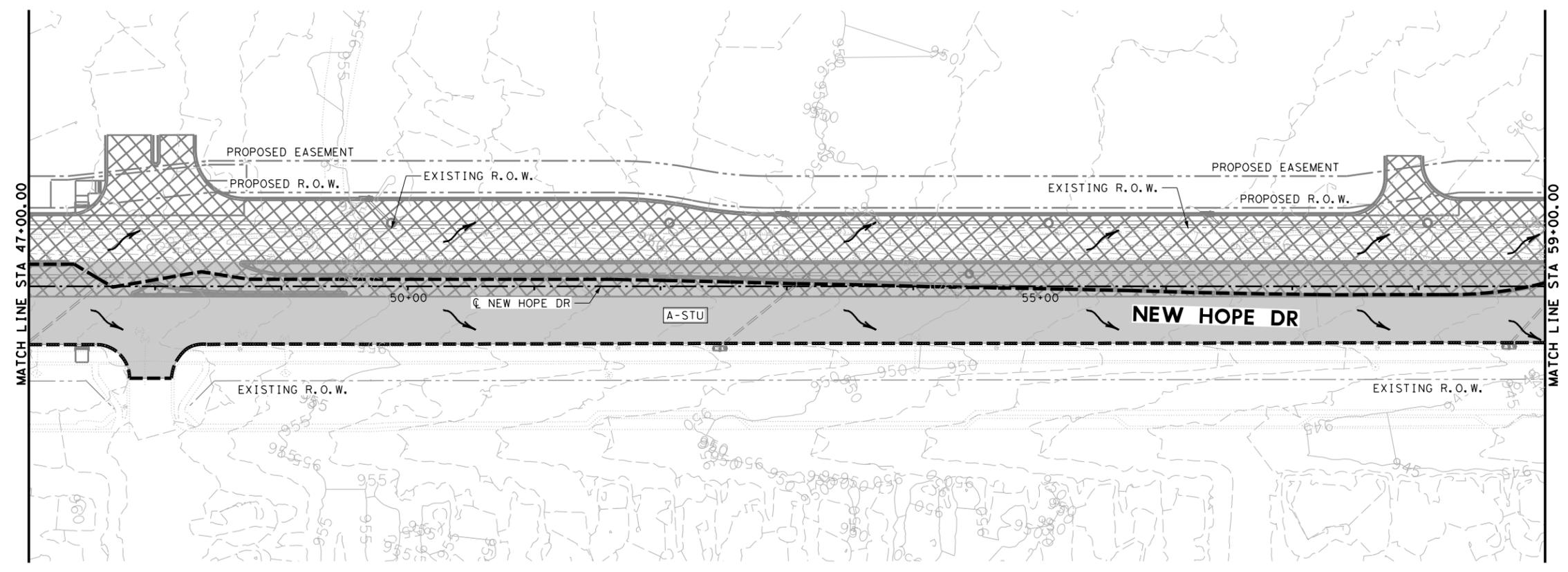
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LEGEND

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	PROPOSED R.O.W.
	EXISTING DRAINAGE EASEMENT
	PROPOSED DRAINAGE EASEMENT
	EXISTING PLANIMETRICS
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	PROPOSED PAVEMENT
	100-YR FEMA FLOODPLAIN



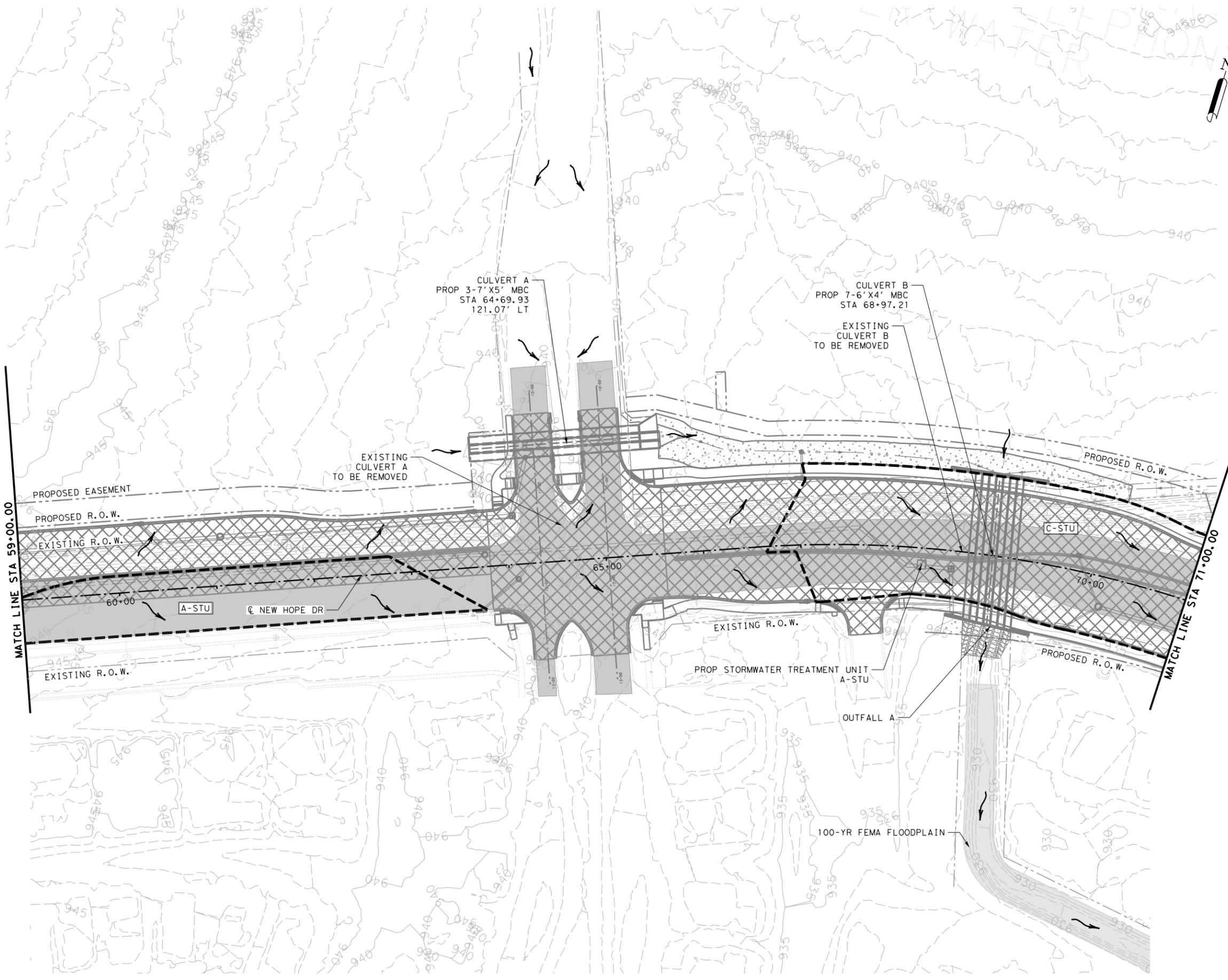
Professional Engineer Seal for Derek T. Bohls, State of Texas, License No. 103424. Includes a signature and the date 6/14/2024.



**NEW HOPE DRIVE
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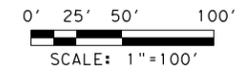
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- - - PROPOSED R.O.W.
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- ▨ 100-YR FEMA FLOODPLAIN



6/14/2024

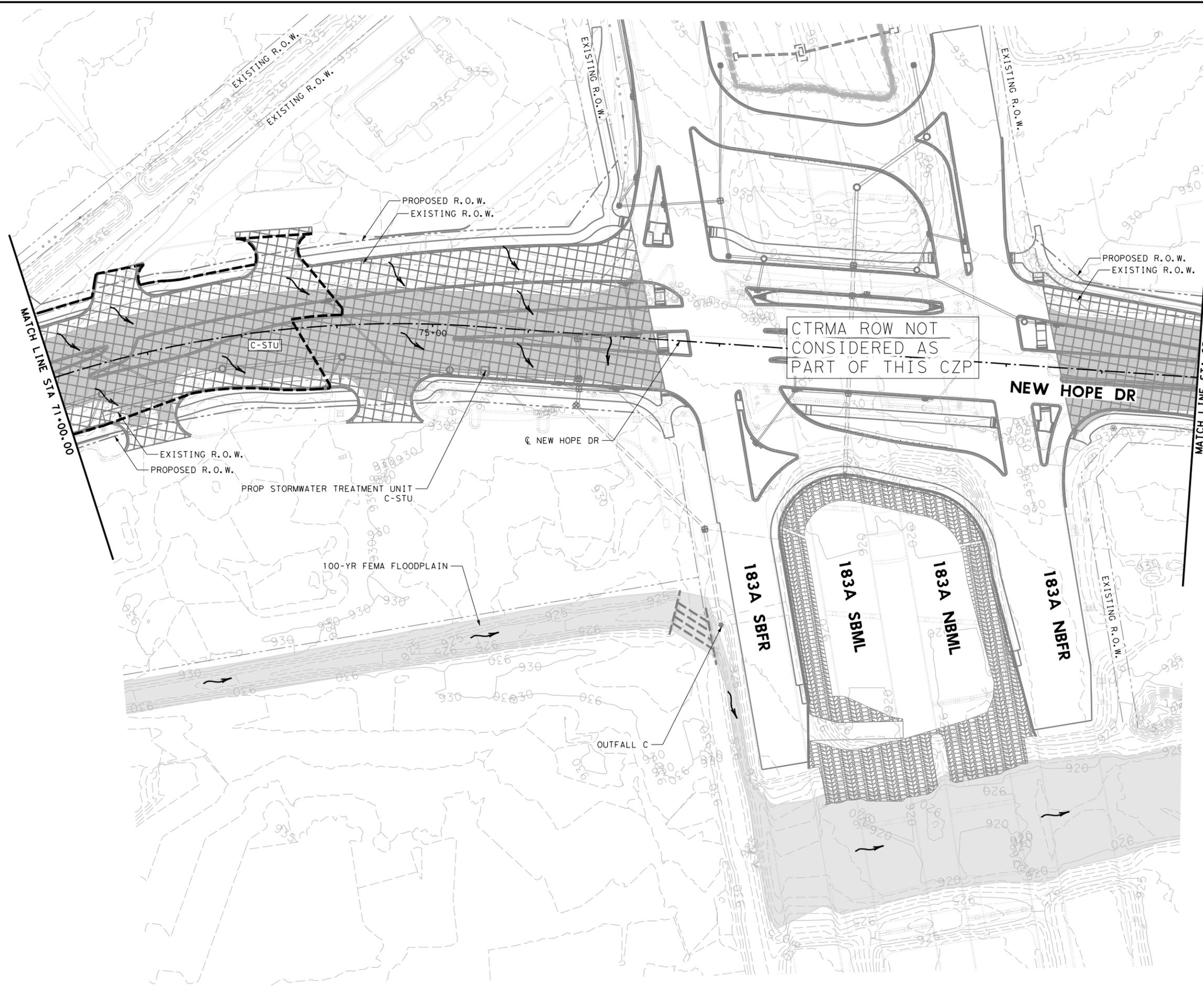


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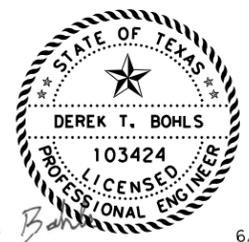
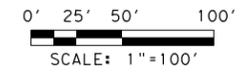
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LEGEND

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- ... PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE
- ▨ EXISTING PAVEMENT
- ▨ PROPOSED PAVEMENT
- ▨ 100-YR FEMA FLOODPLAIN



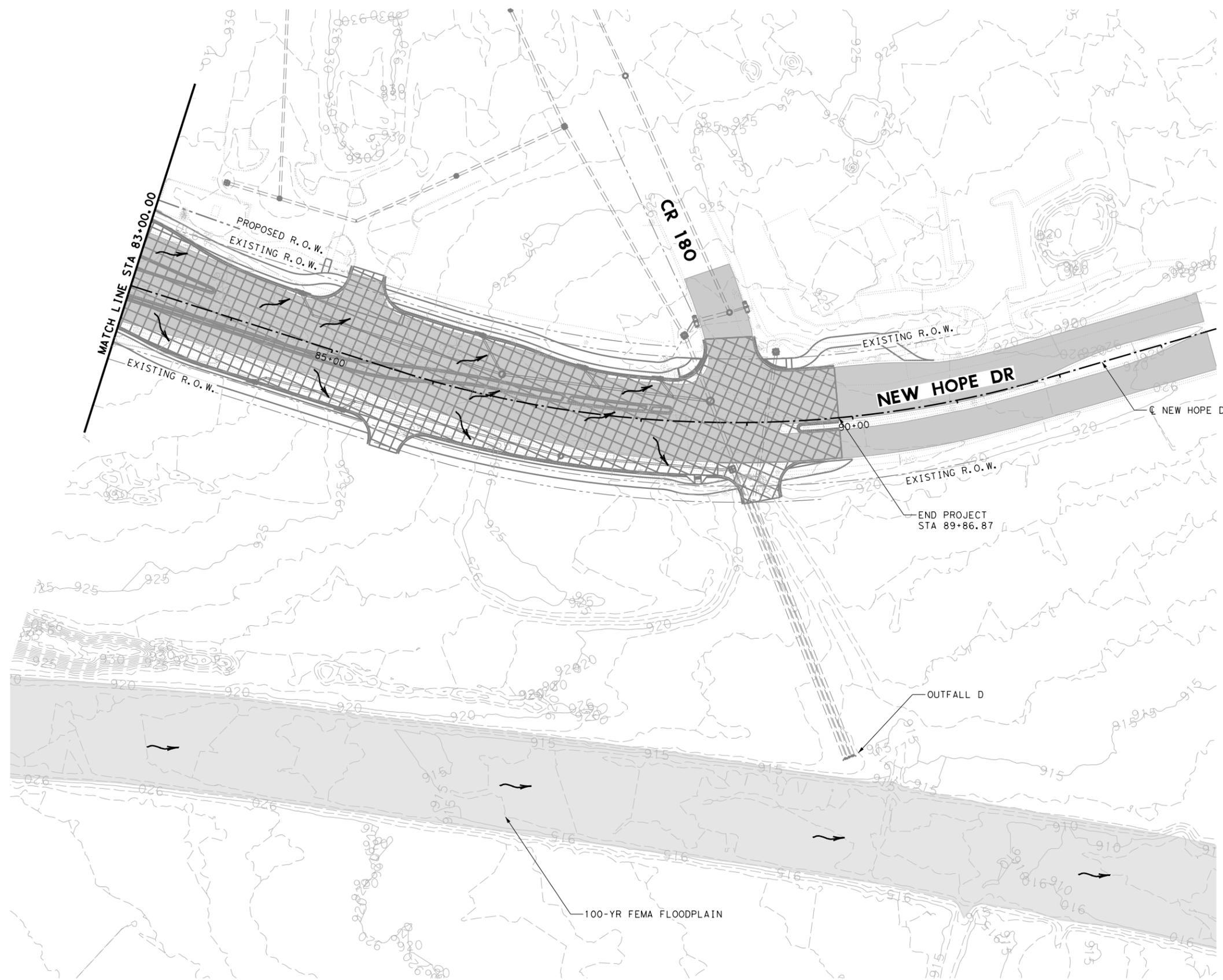
Derek Bohls 6/14/2024



**NEW HOPE DRIVE
SITE PLAN**

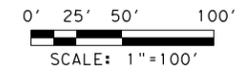
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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
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- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE
- █ EXISTING PAVEMENT
- ▨ PROPOSED PAVEMENT
- █ 100-YR FEMA FLOODPLAIN



6/14/2024



**NEW HOPE DRIVE
SITE PLAN**

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EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY APPLICATION

TCEQ-20872

ATTACHMENT E – BMPs FOR UPGRADIENT STORMWATER

Permanent Best Management Practices (BMPs) for upgradient stormwater are not needed for this project. All cross-drainage structures are to remain in place will be extended to accommodate proposed roadway modifications. Where necessary, culverts will be enlarged to accommodate increased flows. No offsite runoff will flow across the project site or the proposed roadway improvements. Runoff from the offsite areas will be collected by a combination of roadside ditches and storm sewers to be discharged to Cottonwood Creek Channel.

EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY APPLICATION
TCEQ-20872

ATTACHMENT F – BMPs FOR ON-SITE STORMWATER

The proposed site development is required to remove at least 80% of the increase in total suspended solids (TSS) caused by the net increase in impervious cover. To accomplish this, on-site stormwater will be treated by stormwater treatment units (STU) installed in multiple locations along storm sewers within the limits of the project. In the interest of space and cost efficiency, STUs were not installed in every outfall area; however, all three project outfalls drain to the same receiving stream, Cottonwood Creek. To achieve the required 80% removal of TSS project-wide, two outfall areas were overtreated to make up for the one area with no STUs. This area has minimal increase in TSS.

In-line stormwater treatment units are proposed along two of the three outfalls along the project. Project Runoff will enter the units directly from the storm sewer inlet pipe, be conveyed through the filtration system, and finally exit the STU. Treated runoff will travel through the remainder of the storm sewer system before discharge. The specific treatment units utilize the Jellyfish Filter System which is detailed in Section 3.2.22 of the Edwards Aquifer Technical Guidance Manual, July 2005.

There are no existing water quality structures in the City of Cedar Park ROW of this project and thus no compensatory treatment for the removal of existing BMPs.

Two in-line stormwater treatment units are included in the calculations for this CZP. The TSS removal provided by these BMPs was determined and adjusted according to their drainage areas considering the pre- and post-development impervious cover. Permanent BMPs have been sized according to the Edwards Aquifer TSS Removal Calculations spreadsheet. Total TSS load increase calculations are included below in this Attachment.

Table 1: Project TSS Removal Summary

PROJECT TSS REMOVAL SUMMARY					
OUTFALLS	TOTAL AREA	EXISTING IMPERVIOUS	PROPOSED IMPERVIOUS	REQUIRED TSS REMOVAL FOR ADDED PAVEMENT, Lm	ACTUALL TSS REMOVAL NY PROP BMP, Lr
	AC	AC	AC	LBS	LBS
A	10.07	5.72	9.89	3,630	4,000
C	4.013	2.11	3.87	1,533	1,900
D	1.697	1.16	1.65	426	0
TOTAL	15.78	8.99	15.41	5,589	5,900

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell. Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

Characters shown in red are data entry fields.

Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project:

Calculations from RG-348

Pages 3-27 to 3-30

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

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

Site Data: Determine Required Load Removal Based on the Entire Project
 County = **Williamson**
 Total project area included in plan = **15.78** acres
 Predevelopment impervious area within the limits of the plan = **8.99** acres
 Total post-development impervious area within the limits of the plan = **15.41** acres
 Total post-development impervious cover fraction = **0.98**
 P = **32** inches

$L_{M \text{ TOTAL PROJECT}} = 5589$ lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = **3**



6/14/2024

Derek Bohls

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

Drainage Basin/Outfall Area No. = **A**
 Total drainage basin/outfall area = **10.07** acres
 Predevelopment impervious area within drainage basin/outfall area = **5.72** acres
 Post-development impervious area within drainage basin/outfall area = **9.89** acres
 Post-development impervious fraction within drainage basin/outfall area = **0.98**
 $L_{M \text{ THIS BASIN}} = 3630$ lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Jellyfish In-line**
 Removal efficiency = **86** percent

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

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

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

$A_C = 5.27$ acres
 $A_i = 5.19$ acres
 $A_p = 0.08$ acres
 $L_R = 4945$ lbs

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

Desired $L_{M \text{ THIS BASIN}} = 4000$ lbs.
 $F = 0.81$

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348

Pages 3-34 to 3-36

Rainfall Intensity = **0.60** inches per hour
 Effective Area = **4.68** acres
 Cartridge Length = **54.00** inches

Peak Treatment Flow Required = **2.81** cubic feet per second

7. Jellyfish

Designed as Required in RG-348
 Section 3.2.22

<p>Flow Through Jellyfish Size Jellyfish Size for Flow-Based Configuration = JFPD0808-15-3 Jellyfish Treatment Flow Rate = 2.94 cfs</p>
--

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell. Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

Characters shown in red are data entry fields.

Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project:

Calculations from RG-348

Pages 3-27 to 3-30

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

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

Site Data: Determine Required Load Removal Based on the Entire Project
 County = **Williamson**
 Total project area included in plan * = **15.78** acres
 Predevelopment impervious area within the limits of the plan * = **8.99** acres
 Total post-development impervious area within the limits of the plan * = **15.41** acres
 Total post-development impervious cover fraction * = **0.98**
 P = **32** inches

$L_{M \text{ TOTAL PROJECT}} = 5589$ lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = **3**

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

Drainage Basin/Outfall Area No. = **C**
 Total drainage basin/outfall area = **4.01** acres
 Predevelopment impervious area within drainage basin/outfall area = **2.11** acres
 Post-development impervious area within drainage basin/outfall area = **3.87** acres
 Post-development impervious fraction within drainage basin/outfall area = **0.96**
 $L_{M \text{ THIS BASIN}} = 1533$ lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Jellyfish In-line**
 Removal efficiency = **86** percent

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

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

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

$A_C = 2.16$ acres
 $A_i = 2.12$ acres
 $A_p = 0.04$ acres
 $L_R = 2018$ lbs

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

Desired $L_{M \text{ THIS BASIN}} = 1900$ lbs.
 $F = 0.94$

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348

Pages 3-34 to 3-36

Rainfall Intensity = **1.45** inches per hour
 Effective Area = **1.91** acres
 Cartridge Length = **54.00** inches

Peak Treatment Flow Required = **2.77** cubic feet per second

7. Jellyfish

Designed as Required in RG-348
 Section 3.2.22

Flow Through Jellyfish Size
 Jellyfish Size for Flow-Based Configuration = **JFPD0808-15-3**
 Jellyfish Treatment Flow Rate = **2.94** cfs



6/14/2024

Derek Bohls

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell. Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.

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1. The Required Load Reduction for the total project:

Calculations from RG-348

Pages 3-27 to 3-30

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

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

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

County = **Williamson**
 Total project area included in plan = **15.78** acres
 Predevelopment impervious area within the limits of the plan = **8.99** acres
 Total post-development impervious area within the limits of the plan = **15.41** acres
 Total post-development impervious cover fraction = **0.98**
 P = **32** inches

$L_{M \text{ TOTAL PROJECT}} = 5589$ lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = **3**

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

Drainage Basin/Outfall Area No. = **D**
 Total drainage basin/outfall area = **1.70** acres
 Predevelopment impervious area within drainage basin/outfall area = **1.16** acres
 Post-development impervious area within drainage basin/outfall area = **1.65** acres
 Post-development impervious fraction within drainage basin/outfall area = **0.97**
 $L_{M \text{ THIS BASIN}} = 426$ lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =
 Removal efficiency = percent

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

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

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

$A_C =$ acres
 $A_i =$ acres
 $A_p =$ acres
 $L_R = 0$ lbs

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

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

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Calculations from RG-348

Pages 3-34 to 3-36

Rainfall Intensity = inches per hour
 Effective Area = **0.00** acres
 Cartridge Length = **54.00** inches

Peak Treatment Flow Required = cubic feet per second

7. Jellyfish

Designed as Required in RG-348
 Section 3.2.22

Flow Through Jellyfish Size

Jellyfish Size for Flow-Based Configuration = **FALSE**
 Jellyfish Treatment Flow Rate = cfs



6/14/2024

Derek Bohls

EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY APPLICATION
TCEQ-20872
ATTACHMENT G - CONSTRUCTION PLANS

PLANS OF NEW HOPE PUBLIC INFRASTRUCTURE PROJECTS

ROADWAY WIDENING, DRAINAGE, AND UTILITY IMPROVEMENTS OF E NEW HOPE DR FROM 500' WEST OF S BLOCK HOUSE DR TO 100' EAST OF CR 180. INTERSECTION IMPROVEMENTS AT 183A FRONTAGE ROADS AND E NEW HOPE DR.

NEW HOPE DRIVE LENGTH = 6209.2 FT, 1.176 MILES

183A SB LENGTH = 1022.3 FT, 0.194 MILES

183A NB LENGTH = 739.9 FT, 0.139 MILES

TOTAL ROADWAY LENGTH = 7971.4 FT, 1.510 MILES

CONSISTS OF GRADING, DRAINAGE, FLEXIBLE BASE, HMAC PAVEMENT, SIGNAGE, PAVEMENT MARKINGS, ILLUMINATION, EROSION CONTROL, ADA SIDEWALKS & RAMPS, WATERLINES, AND WASTEWATER IMPROVEMENT AND ADJUSTMENTS.

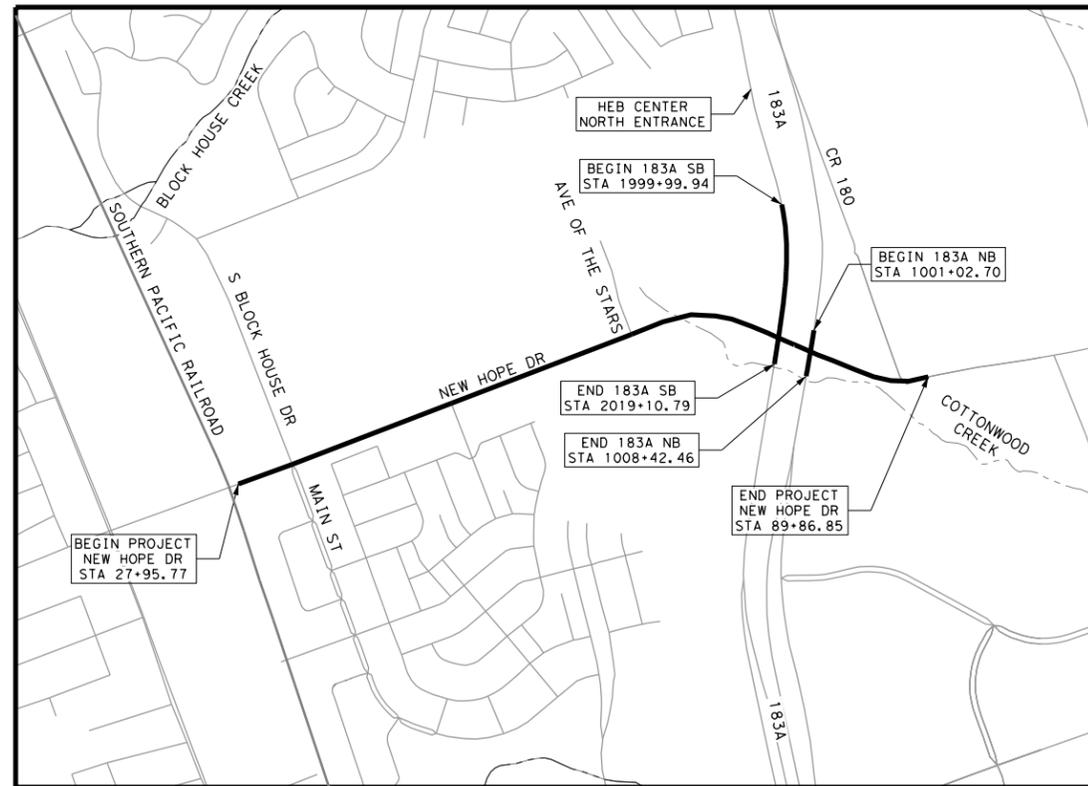
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2-3	SUPPLEMENTAL INDEX OF SHEETS

CITY COUNCIL

JIM PENNIMAN-MORIN	MAYOR
BOBBI HUTCHINSON	COUNCIL MEMBER PLACE 1
MEL KIRKLAND	COUNCIL MEMBER PLACE 2
ANNE DUFFY (MAYOR PRO TEM)	COUNCIL MEMBER PLACE 3
ERIC BOYCE	COUNCIL MEMBER PLACE 4
KEVIN HARRIS	COUNCIL MEMBER PLACE 5
HEATHER JEFTS	COUNCIL MEMBER PLACE 6

LOCATION MAP



NOTE:
TDLR INSPECTION REQUIRED

NOTE:
ALL BEARINGS AND COORDINATES SHOWN ARE BASED ON THE TEXAS COORDINATE SYSTEM, CENTRAL ZONE (4204), NORTH AMERICAN DATUM OF 1983 (NAD 83). ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). COORDINATES AND DISTANCES ARE U.S. SURVEY FEET, DISPLAYED IN SURFACE VALUES, AND MAY BE CONVERTED TO GRID VALUES BY DIVIDING BY A COMBINED ADJUSTMENT FACTOR OF 1.00012.

SUBMITTED FOR LETTING:

APPROVED FOR CONSTRUCTION:

SCALE: NTS
DESIGN SPEED = NEW HOPE DR 45 MPH
183A FRONTAGE ROADS 60 MPH
NO EQUATIONS
NO EXCEPTIONS

PROJECT MANAGER _____ DATE _____
DEREK T. BOHLS
LJA ENGINEERING, INC.

CITY OF CEDAR PARK _____ DATE _____
CITY'S PROJECT MANAGER



Derek Bohls 6/14/2024





FRN - F-1386

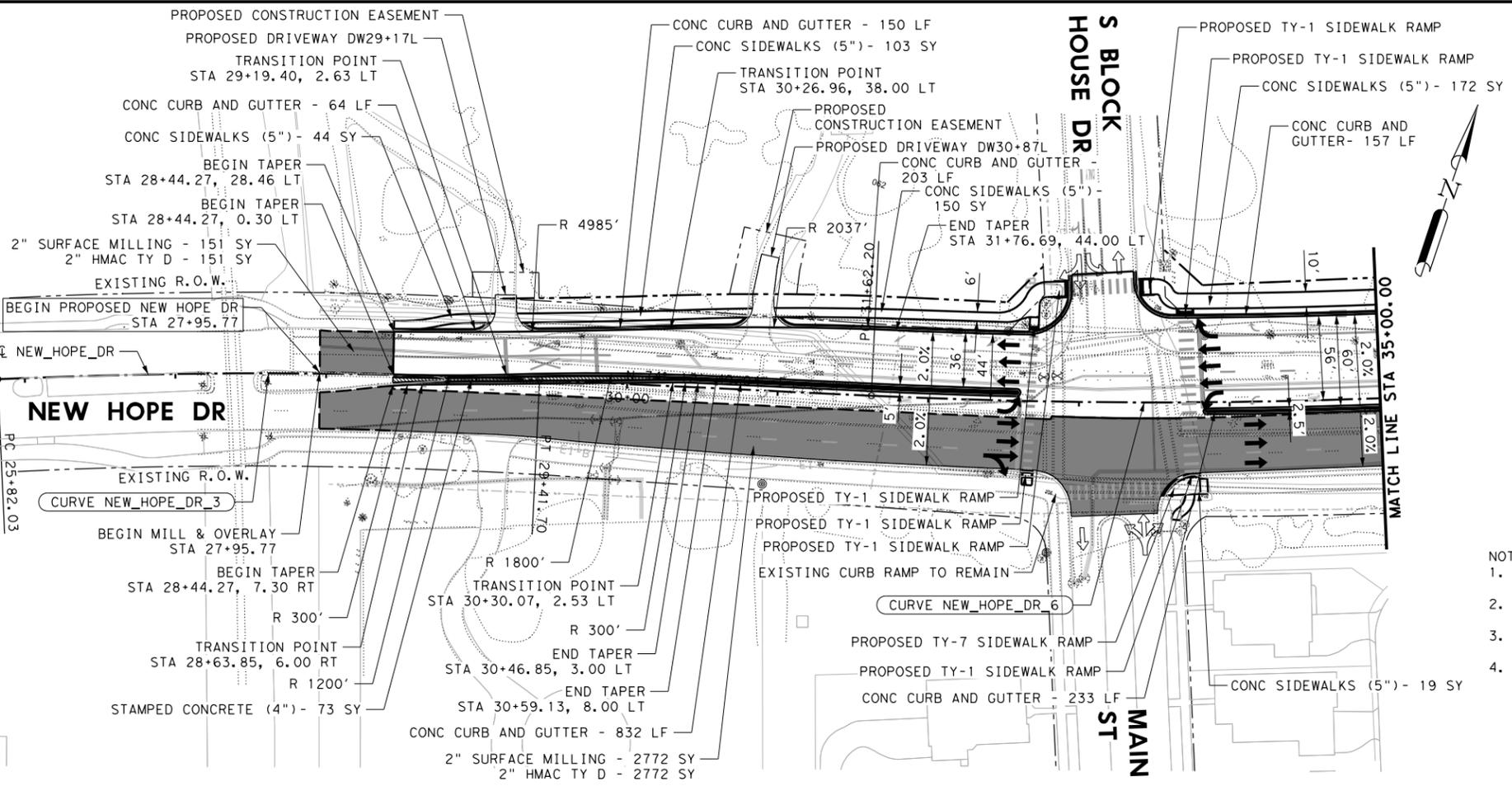
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TITLE SHEET**

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100% SUBMITTAL

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 Degree = 1° 28' 08.84"
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 Radius = 3,900.0000
 P.C. Station = 25+82.03 N
 P.T. Station = 29+41.70 N

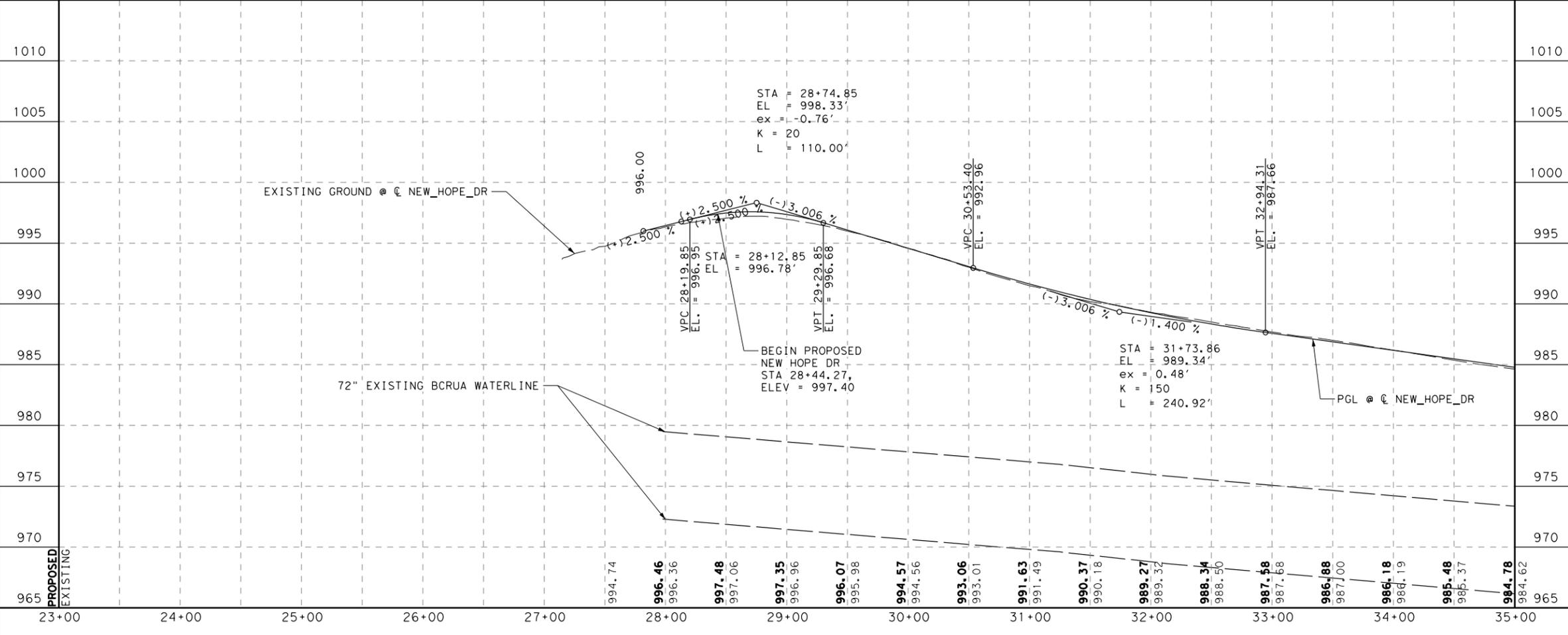
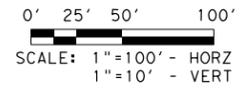
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 Degree = 1° 25' 56.62"
 Tangent = 181.2116
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 Radius = 4,000.0000
 P.C. Station = 31+62.20
 P.T. Station = 35+24.38



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - PROPOSED EASEMENT
- - - EXISTING UTILITY
- - - EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▩ PROPOSED MEDIAN STAMPED CONCRETE

- NOTES:**
- ALL DIMENSIONS ARE TO LIP OF GUTTER UNLESS OTHERWISE STATED.
 - SEE DRIVEWAY SUMMARY TABLE FOR MORE INFORMATION.
 - SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
 - SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)

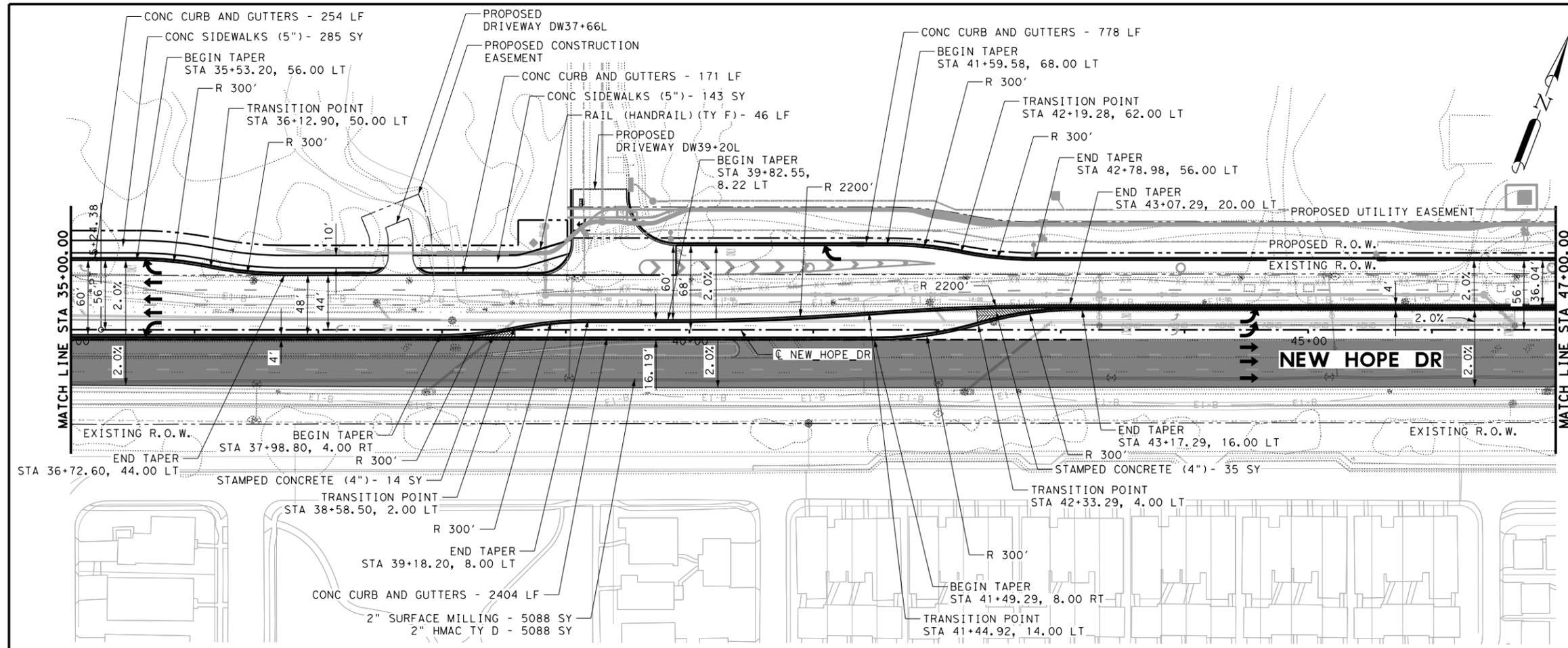


**NEW HOPE DRIVE
 ROADWAY PLAN & PROFILE
 SHEETS**
 BEGIN TO STA 35+00

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=100'
CHECKED BY: CM	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 1 OF 6
PROJECT NO: 3217-2301	PAGE: 183
DATE:	

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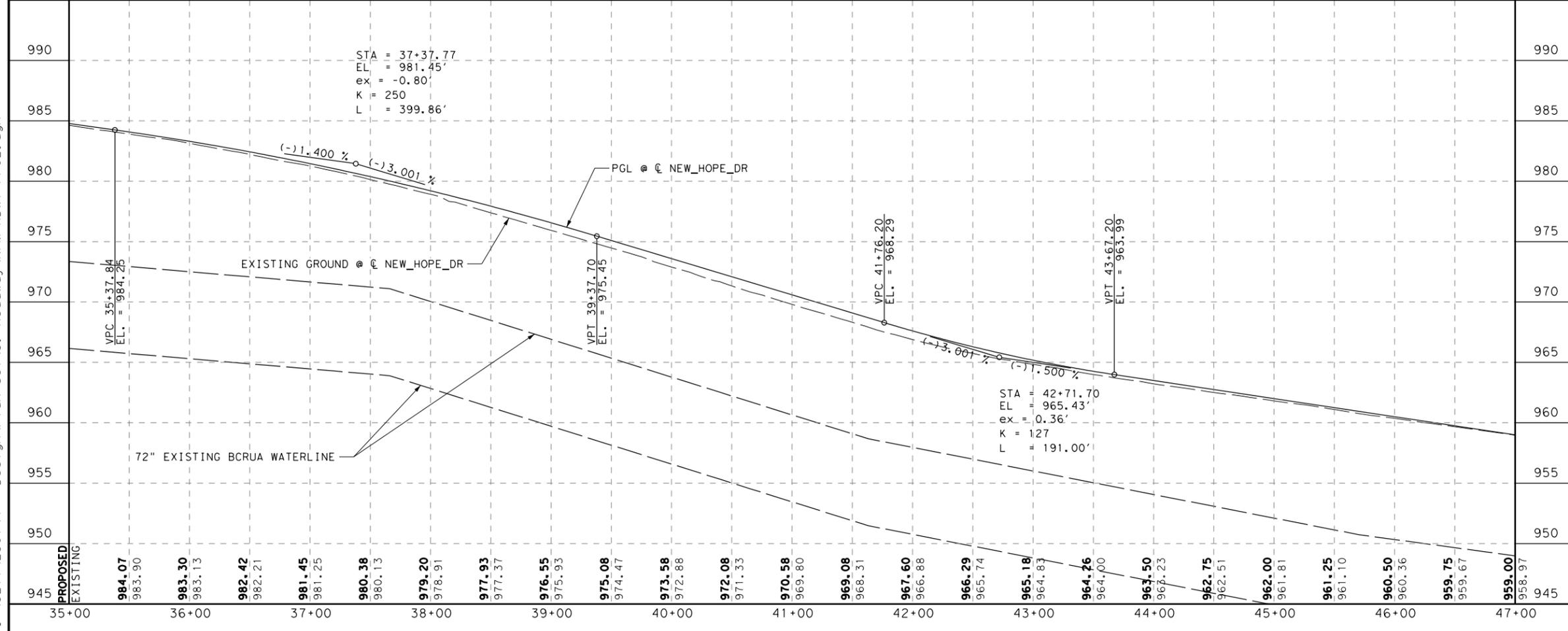
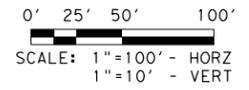
100% SUBMITTAL



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- - - PROPOSED UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇨ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▩ PROPOSED MEDIAN STAMPED CONCRETE

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 - SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)



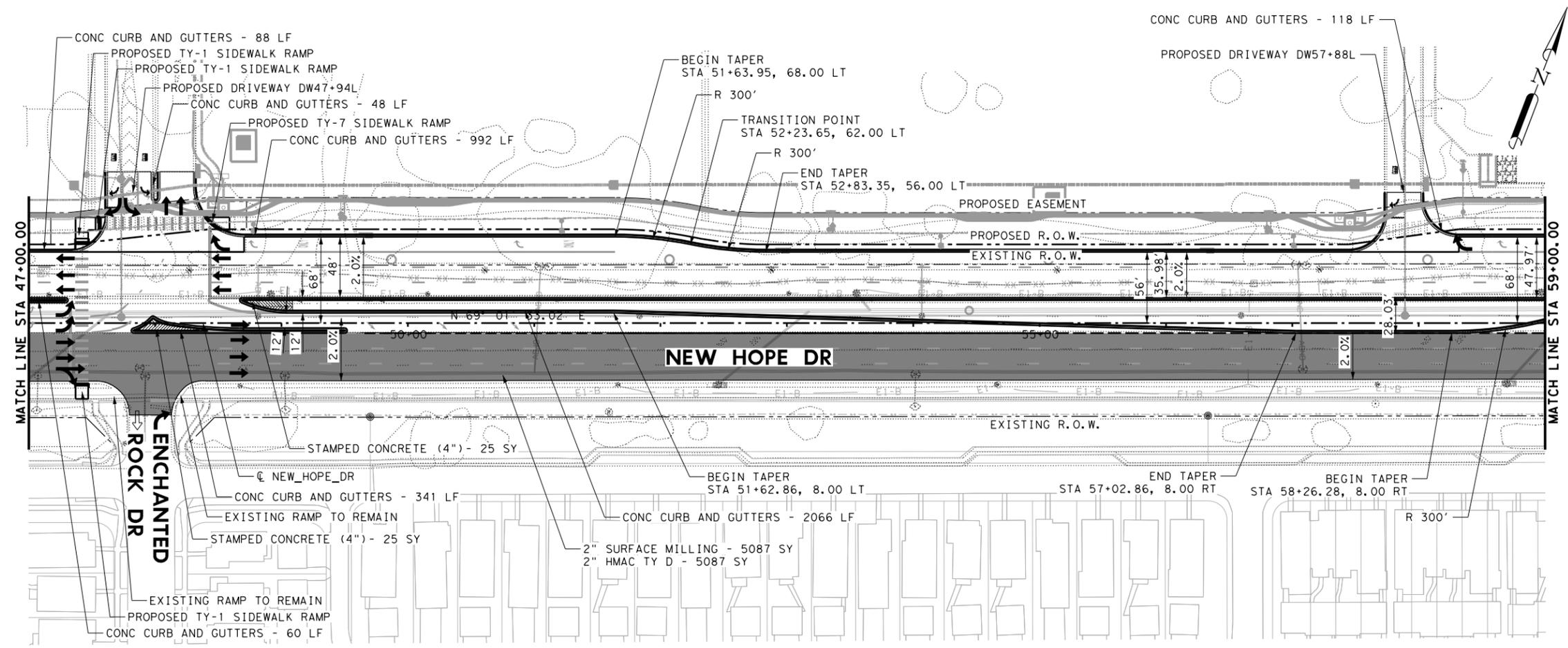
**NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

STA 35+00 TO STA 47+00

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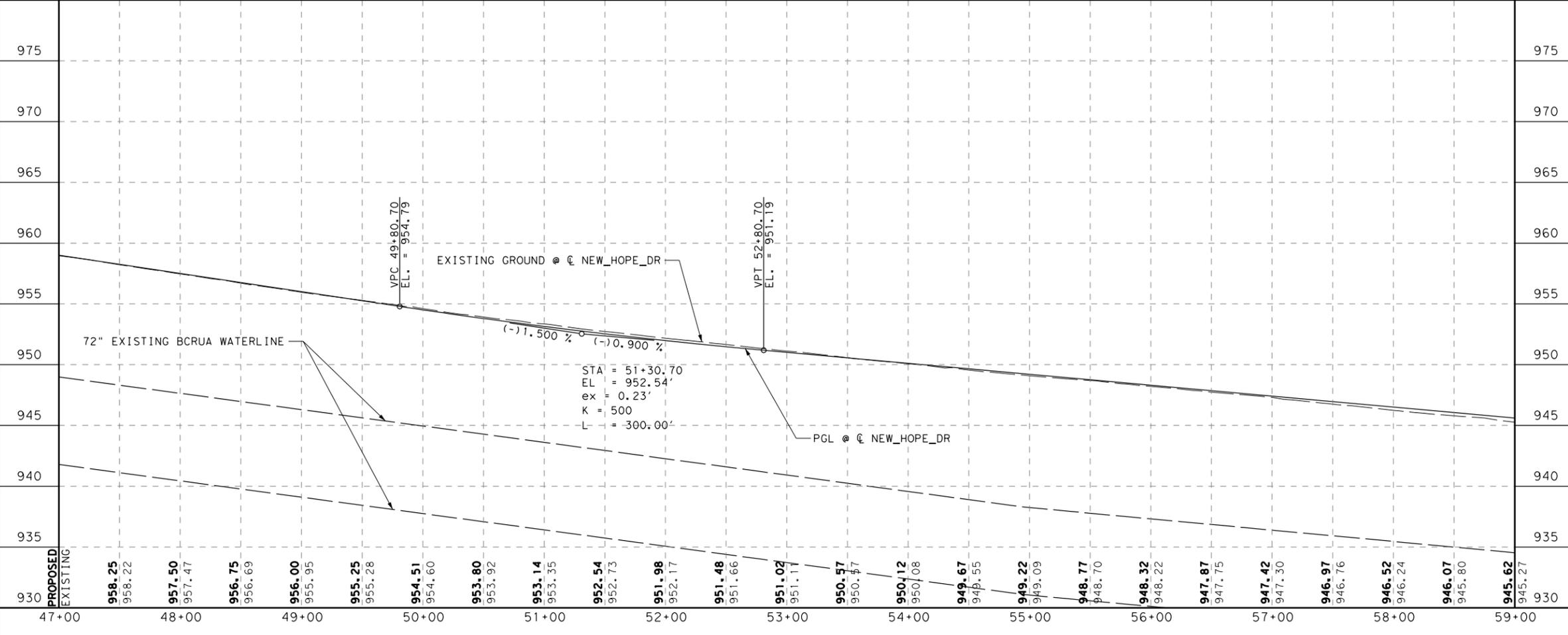
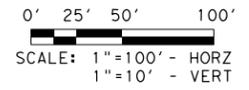
100% SUBMITTAL



LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- PROPOSED ROCK RIPRAP
- PROPOSED MEDIAN STAMPED CONCRETE

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 - SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
 - SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)



6/14/2024

FRN-F-1386

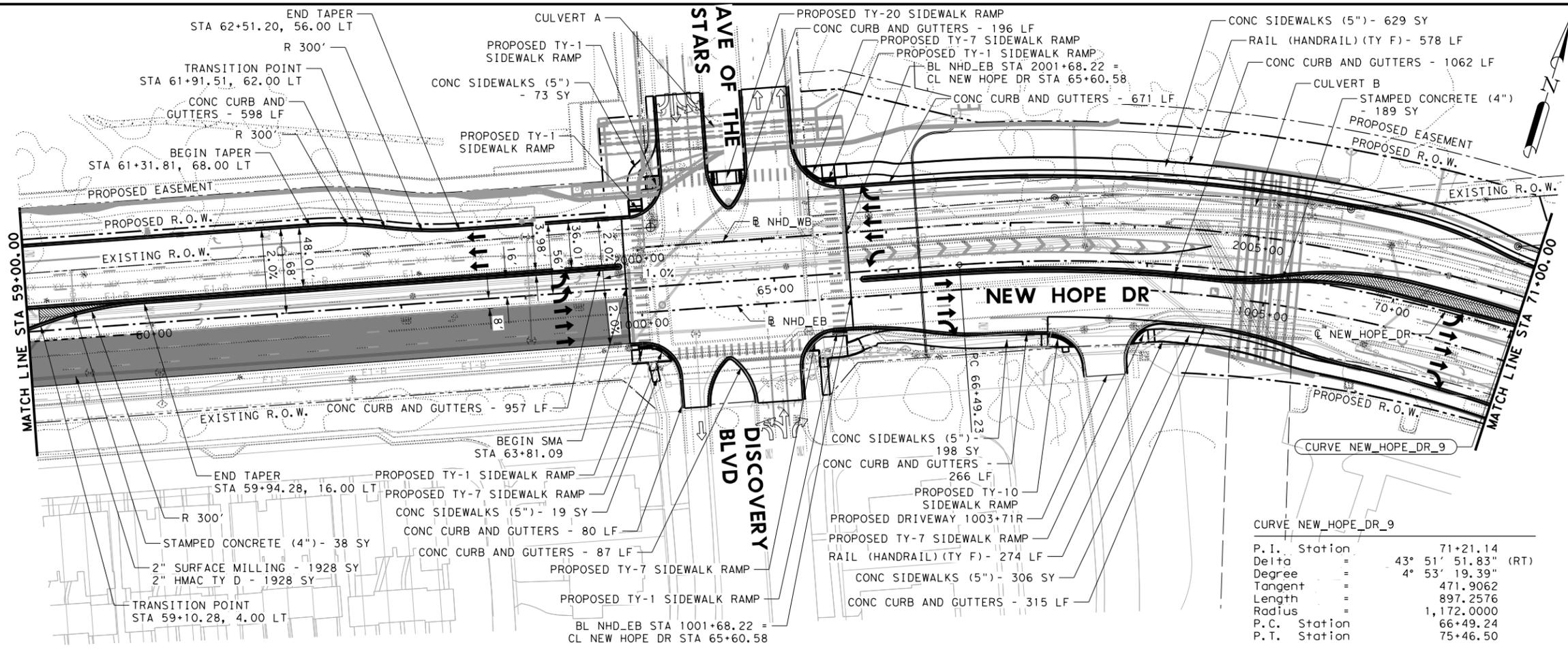
**NEW HOPE DRIVE
 ROADWAY PLAN & PROFILE
 SHEETS**

STA 47+00 TO STA 59+00

DESIGN BY: AM DRAWN BY: DW CHECKED BY: CM APPROVED BY: PROJECT NO: 3217-2301 DATE:	SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10' SHEET: 3 OF 6 PAGE: 185
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100% SUBMITTAL



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- ▨ PROPOSED MILL & OVERLAY
- ▩ PROPOSED ROCK RIPRAP
- ▧ PROPOSED MEDIAN STAMPED CONCRETE

NOTES:

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- SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
- SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)

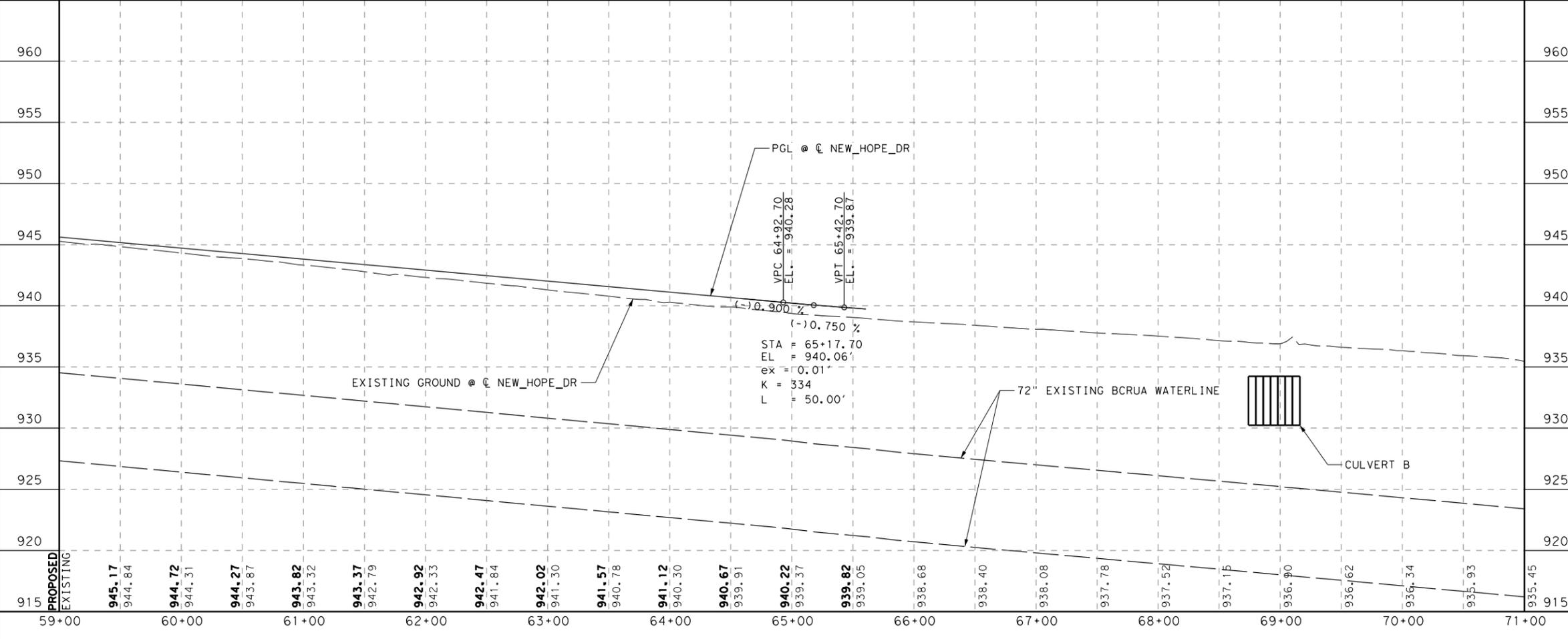
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SCALE: 1"=100' - HORZ
1"=10' - VERT

CURVE NEW_HOPE_DR_9

P.I. Station	=	71+21.14
Delta	=	43° 51' 51.83" (RT)
Degree	=	4° 53' 19.39"
Tangent	=	471.9062
Length	=	897.2576
Radius	=	1,172.0000
P.C. Station	=	66+49.24
P.T. Station	=	75+46.50

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6/14/2024

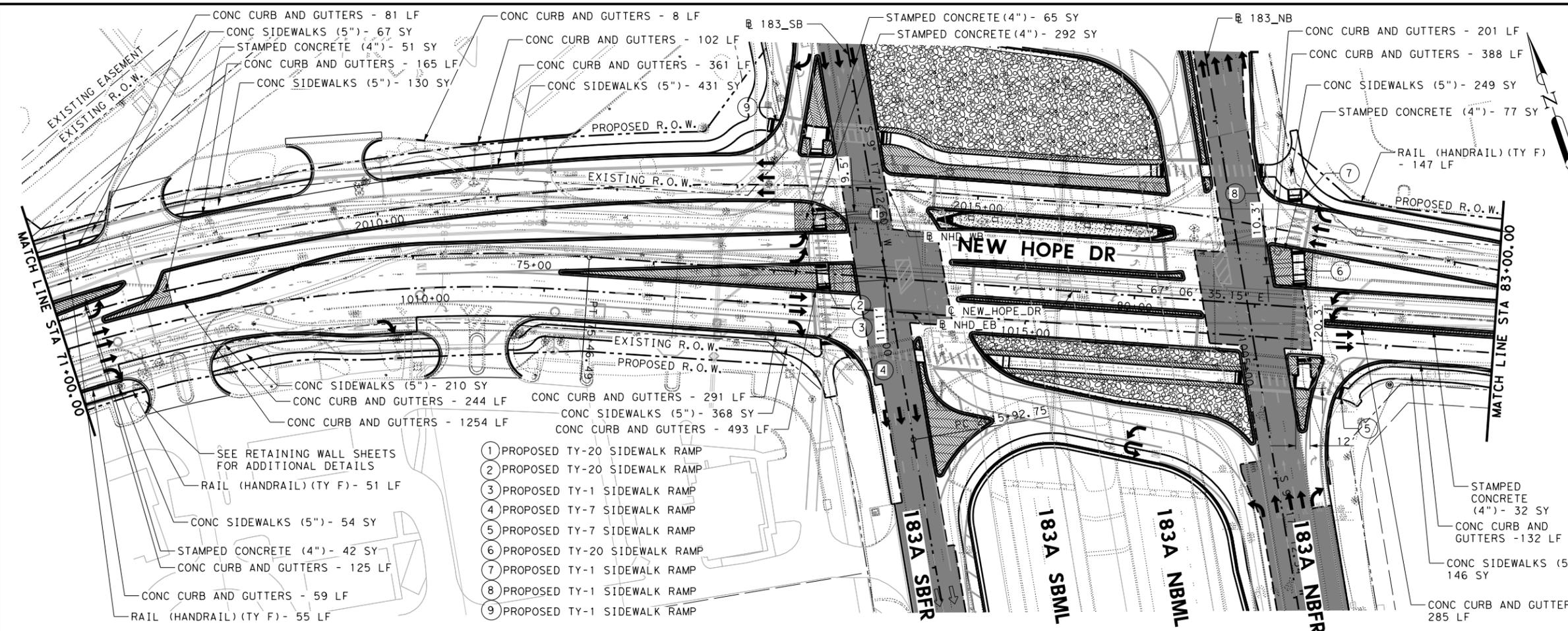
FRN-F-1386

**NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

STA 59+00 TO STA 71+00

DESIGN BY: AM	SCALE HORIZONTAL: 1"=100'
DRAWN BY: DW	VERTICAL: 1"=10'
CHECKED BY: CM	SHEET: 4 OF 6
APPROVED BY:	PAGE: 186
PROJECT NO: 3217-2301	
DATE:	

100% SUBMITTAL



LEGEND

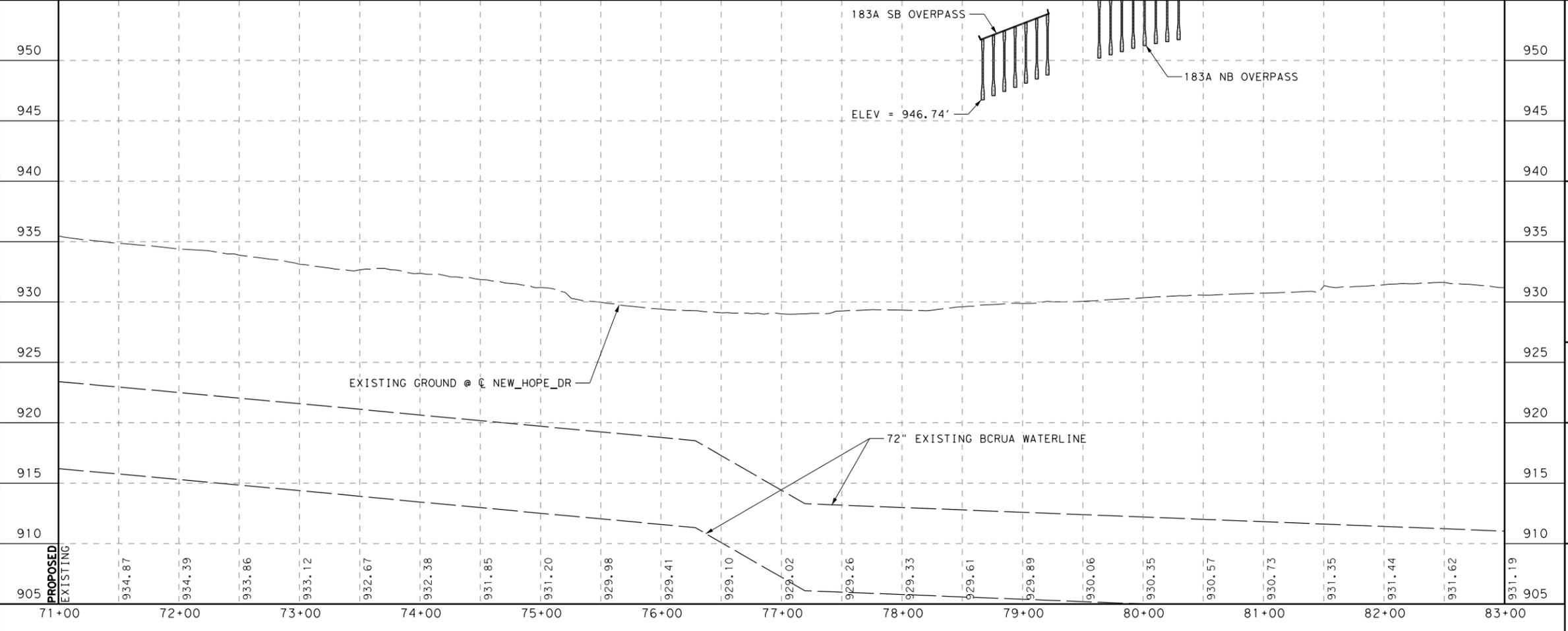
- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▨ PROPOSED MEDIAN STAMPED CONCRETE

- ① PROPOSED TY-20 SIDEWALK RAMP
- ② PROPOSED TY-20 SIDEWALK RAMP
- ③ PROPOSED TY-1 SIDEWALK RAMP
- ④ PROPOSED TY-7 SIDEWALK RAMP
- ⑤ PROPOSED TY-7 SIDEWALK RAMP
- ⑥ PROPOSED TY-20 SIDEWALK RAMP
- ⑦ PROPOSED TY-1 SIDEWALK RAMP
- ⑧ PROPOSED TY-1 SIDEWALK RAMP
- ⑨ PROPOSED TY-1 SIDEWALK RAMP

NOTES:

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- SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
- SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)

0' 25' 50' 100'
 SCALE: 1"=100' - HORZ
 1"=10' - VERT



STATE OF TEXAS
 CODY J. MOCZYGEMBA
 133448
 LICENSED PROFESSIONAL ENGINEER
 6/14/2024

CEDAR PARK

LJA ENGINEERING, INC
 FRN-F-1386

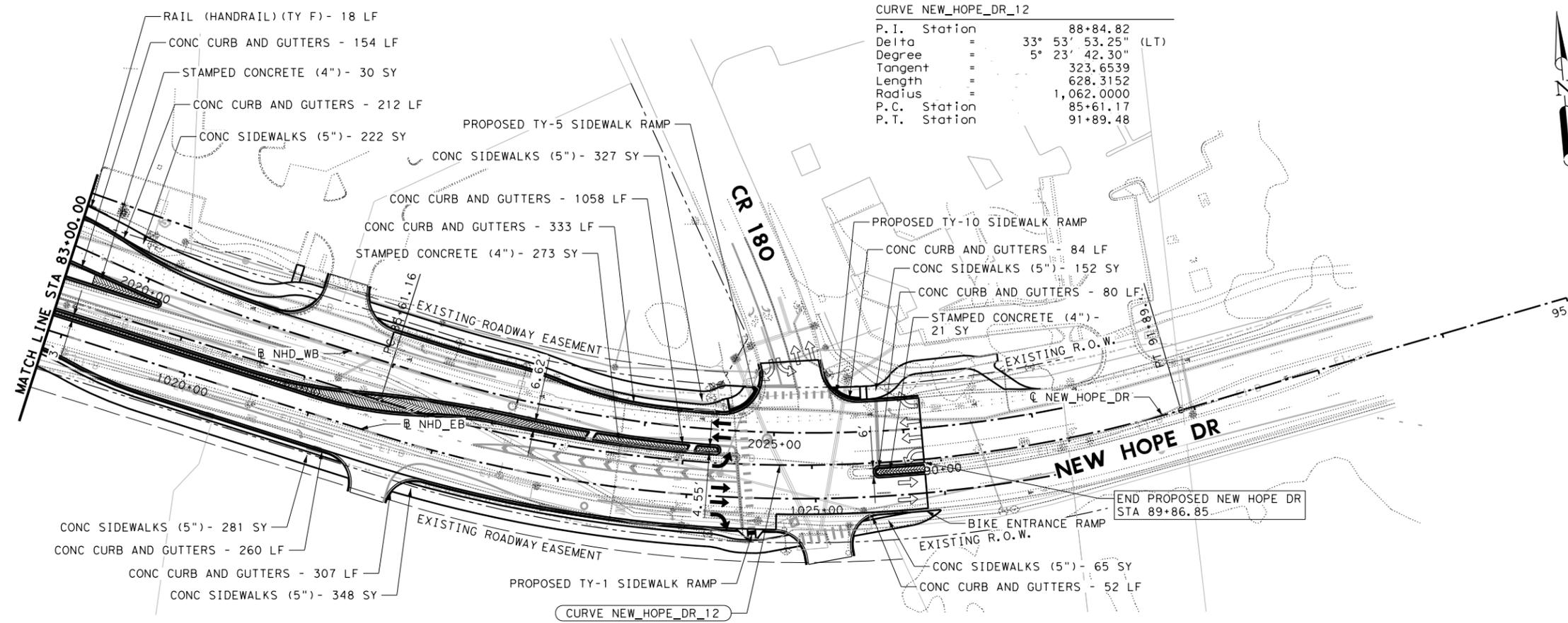
**NEW HOPE DRIVE
 ROADWAY PLAN & PROFILE
 SHEETS**
 STA 71+00 TO STA 83+00

DESIGN BY: AM
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 CHECKED BY: CM
 APPROVED BY:
 PROJECT NO: 3217-2301
 DATE:

SCALE
 HORIZONTAL: 1"=100'
 VERTICAL: 1"=10'
 SHEET: 5 OF 6
 PAGE: 187

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100% SUBMITTAL



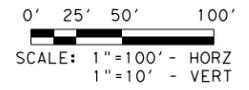
CURVE NEW_HOPE_DR_12

P.I. Station	88+84.82
Delta	33° 53' 53.25" (LT)
Degree	5° 23' 42.30"
Tangent	323.6539
Length	628.3152
Radius	1,062.0000
P.C. Station	85+61.17
P.T. Station	91+89.48

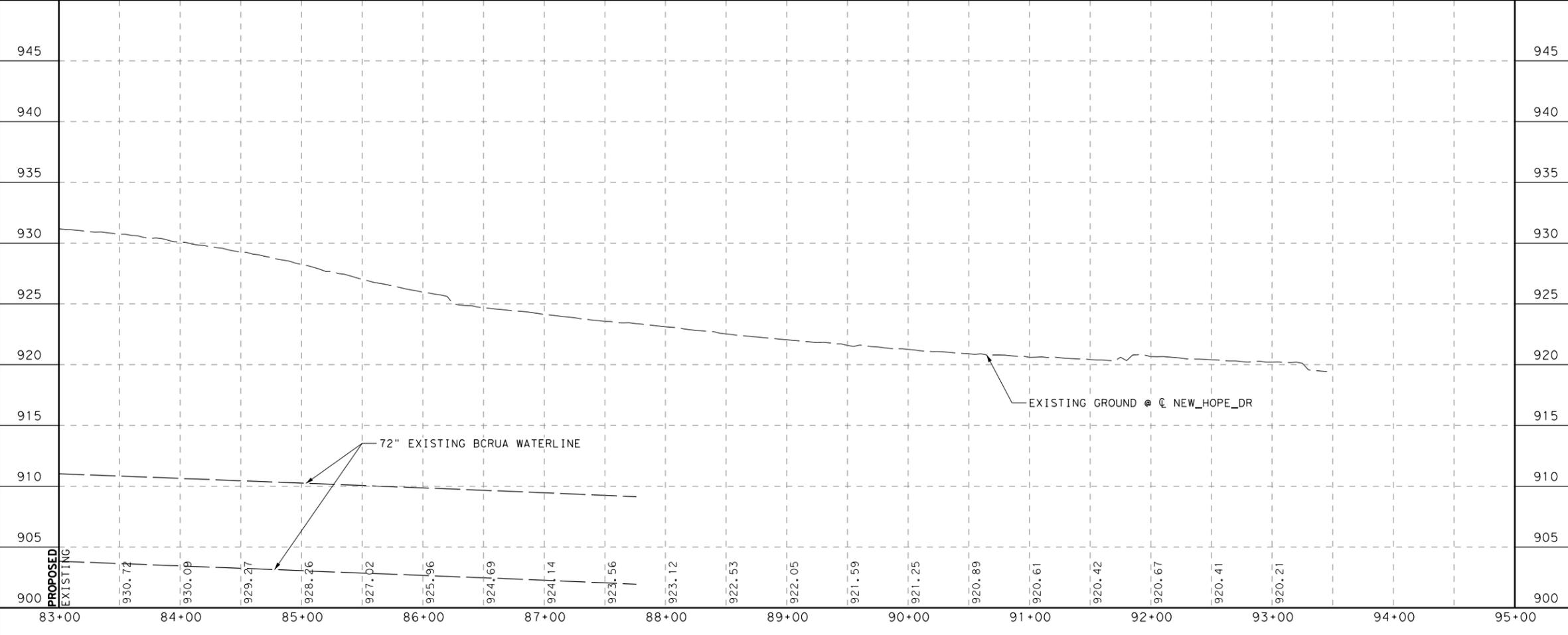
LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED TRAVEL DIRECTION
- ⇨ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▨ PROPOSED MEDIAN STAMPED CONCRETE

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 - SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)



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**NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

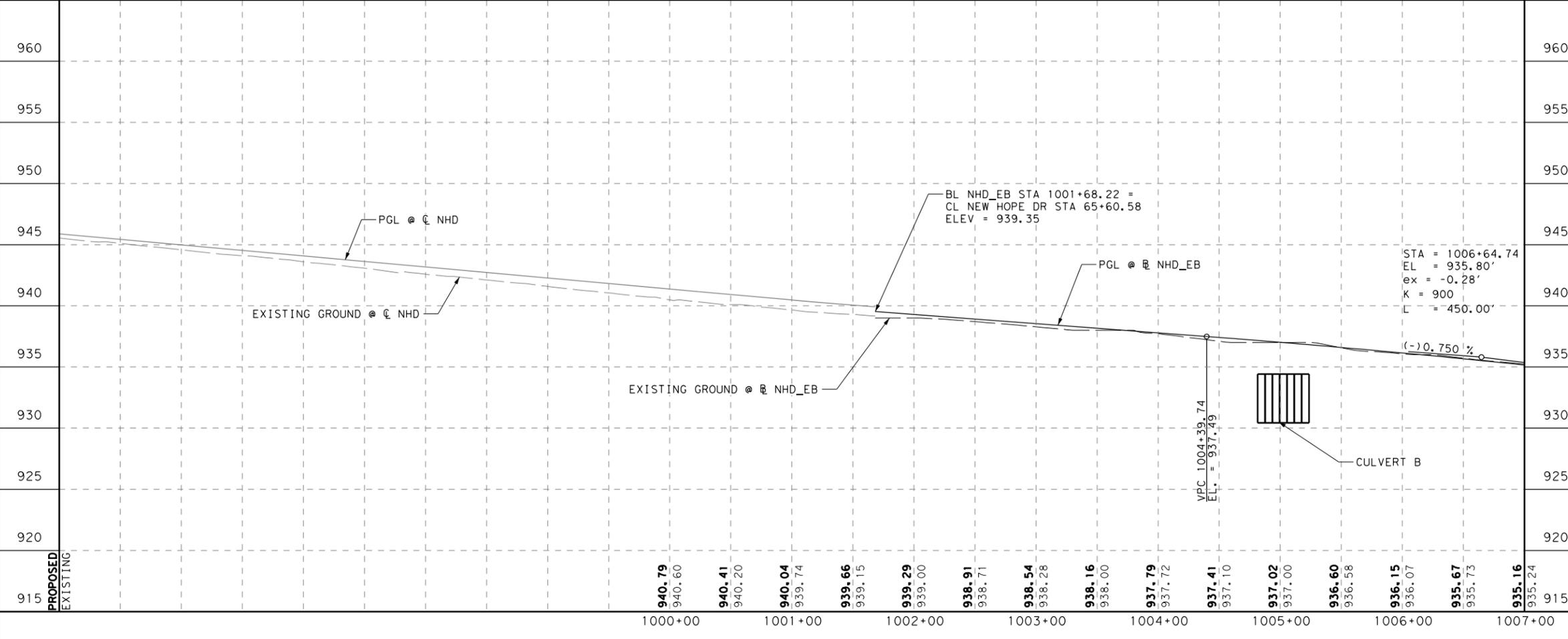
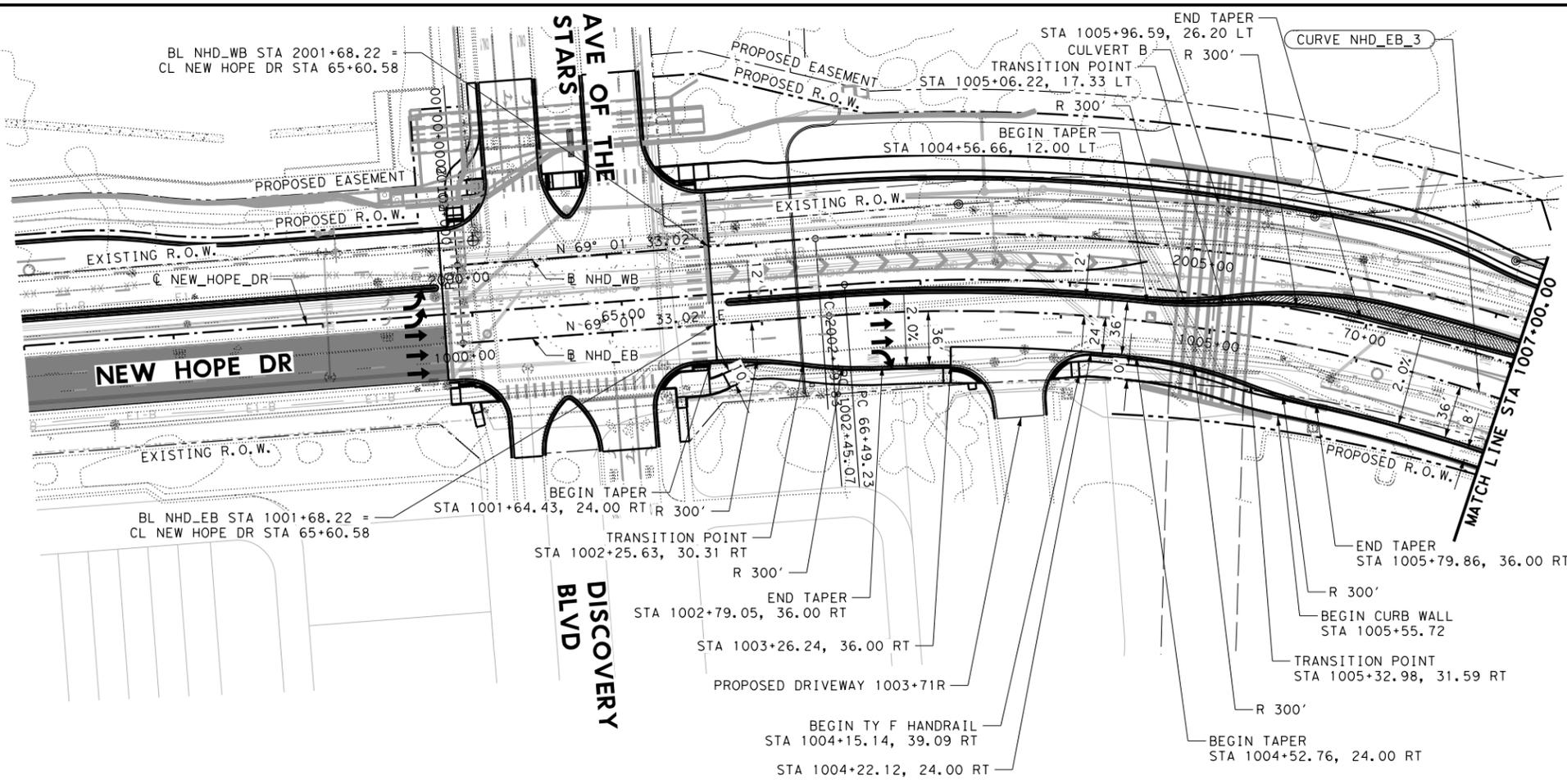
STA 83+00 TO END

DESIGN BY: AM DRAWN BY: DW CHECKED BY: CM APPROVED BY: PROJECT NO: 3217-2301 DATE:	SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10' SHEET: 6 OF 6 PAGE: 188
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100% SUBMITTAL

CURVE NHD_EB_3

P.I. Station	1007+07.26
Delta	43° 43' 17.85" (RT)
Degree	4° 58' 24.93"
Tangent	462.1860
Length	879.0754
Radius	1,152.0000
P.C. Station	1002+45.07
P.T. Station	1011+24.15



STATE OF TEXAS
CODY J. MOCZYGEMBA
133448
LICENSED PROFESSIONAL ENGINEER

6/14/2024

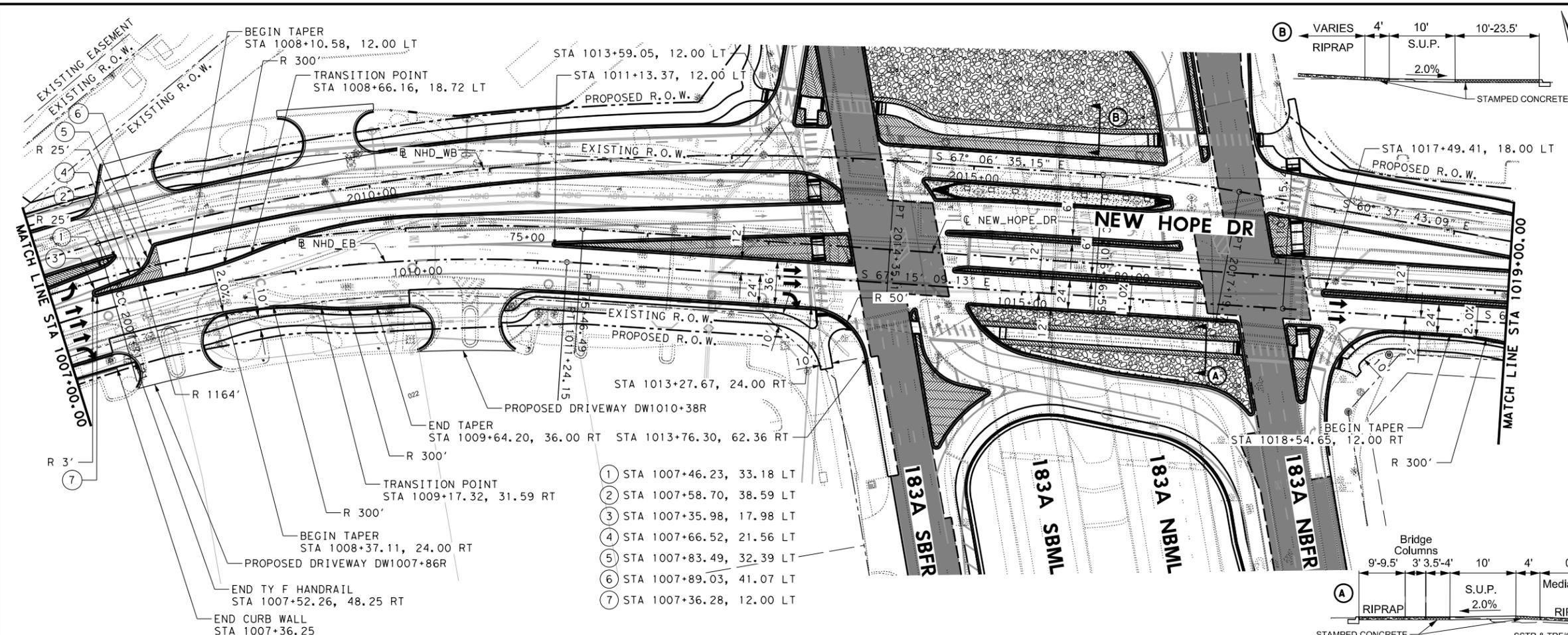
CEDAR PARK

LJA ENGINEERING, INC
FRN-F-1386

EB NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS
BEGIN TO STA 1007+00

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=100'
CHECKED BY: CM	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 1 OF 3
PROJECT NO: 3217-2301	PAGE: 189
DATE:	

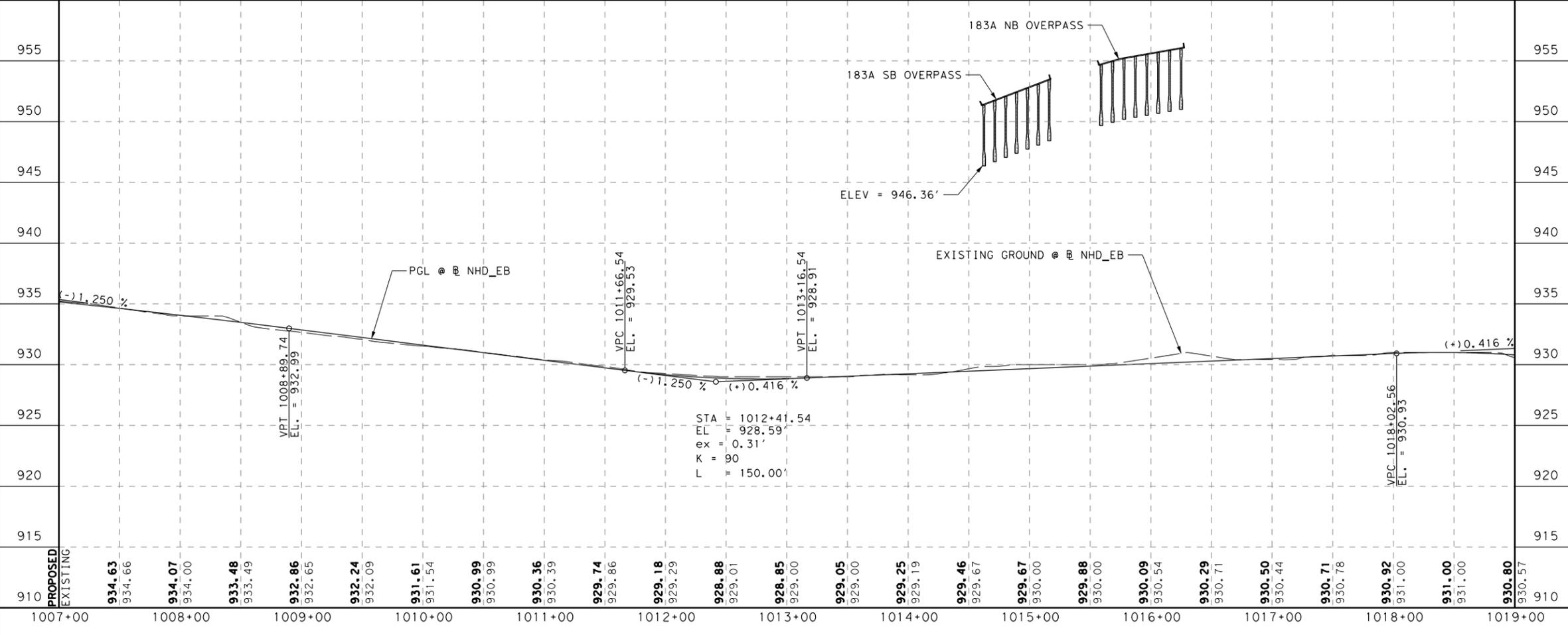
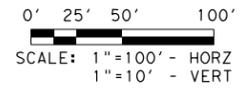
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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- ▒ PROPOSED MILL & OVERLAY
- ▒ PROPOSED ROCK RIPRAP
- ▒ PROPOSED MEDIAN STAMPED CONCRETE

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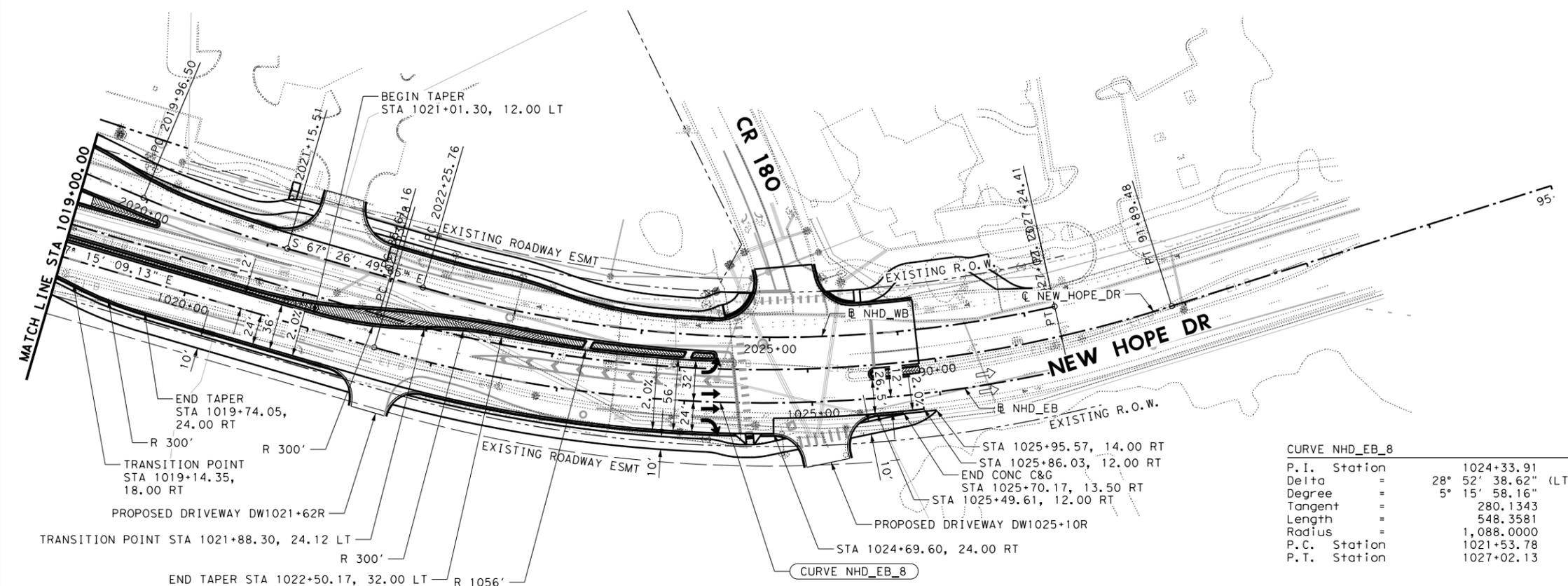
6/14/2024

FRN-F-1386

**EB NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

STA 1007+00 TO STA 1019+00

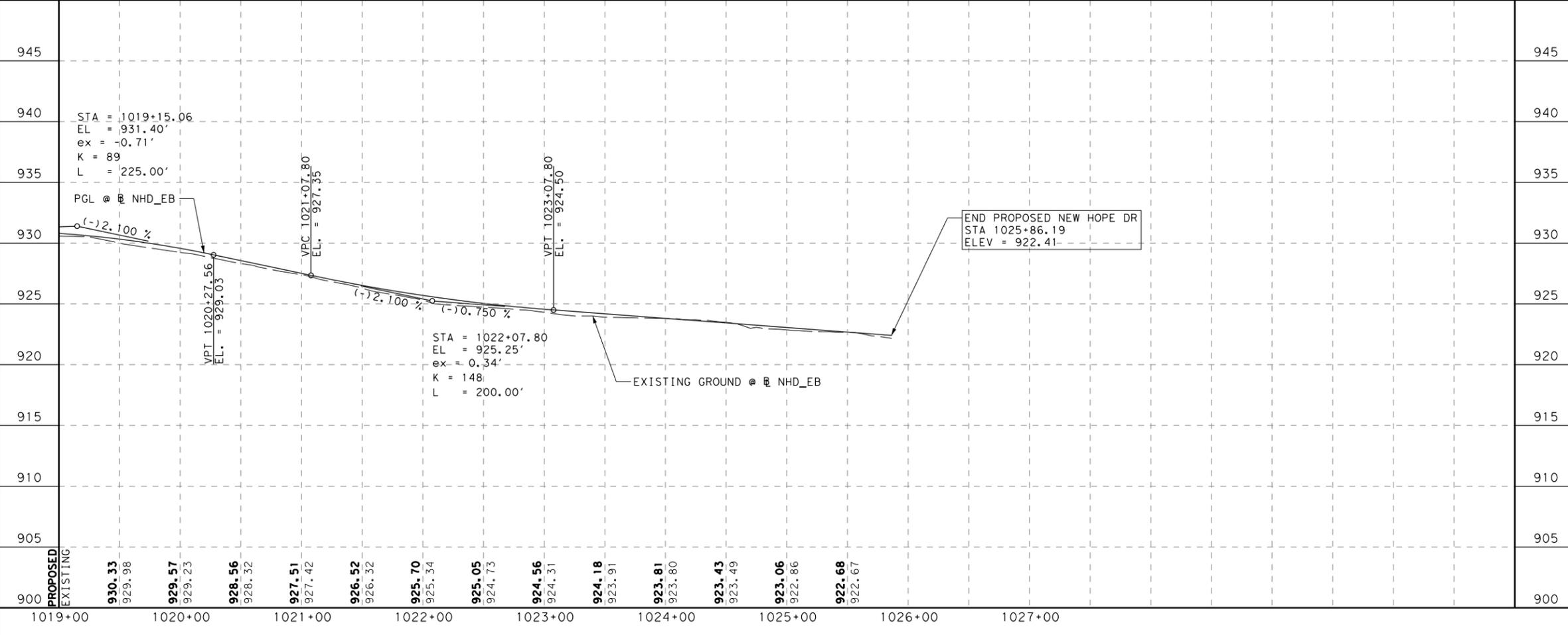
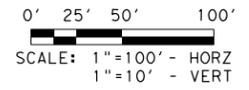
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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇨ EXISTING TRAVEL DIRECTION
- ▨ PROPOSED MILL & OVERLAY
- ▩ PROPOSED ROCK RIPRAP
- ▧ PROPOSED MEDIAN STAMPED CONCRETE

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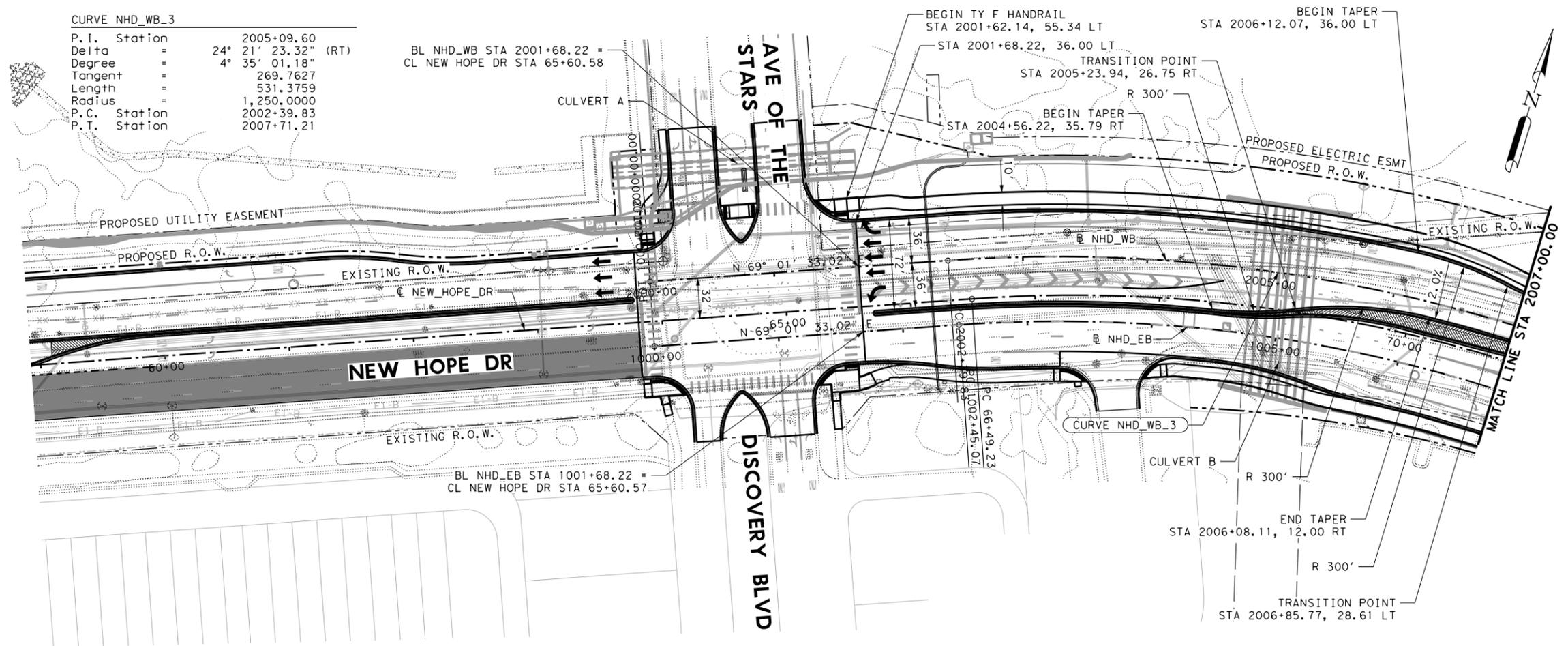

**EB NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**
STA 1019+00 TO END

DESIGN BY: AM	SCALE
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CHECKED BY: CM	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 3 OF 3
PROJECT NO: 3217-2301	PAGE: 191
DATE:	

100% SUBMITTAL

CURVE NHD_WB_3

P. I. Station	2005+09.60	BL NHD_WB STA 2001+68.22 =
Delta	24° 21' 23.32" (RT)	CL NEW HOPE DR STA 65+60.58
Degree	4° 35' 01.18"	
Tangent	269.7627	
Length	531.3759	
Radius	1,250.0000	
P. C. Station	2002+39.83	
P. T. Station	2007+71.21	



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- ➔ PROPOSED TRAVEL DIRECTION
- ➔ EXISTING TRAVEL DIRECTION
- ▒ PROPOSED MILL & OVERLAY
- ▒ PROPOSED ROCK RIPRAP
- ▒ PROPOSED MEDIAN STAMPED CONCRETE

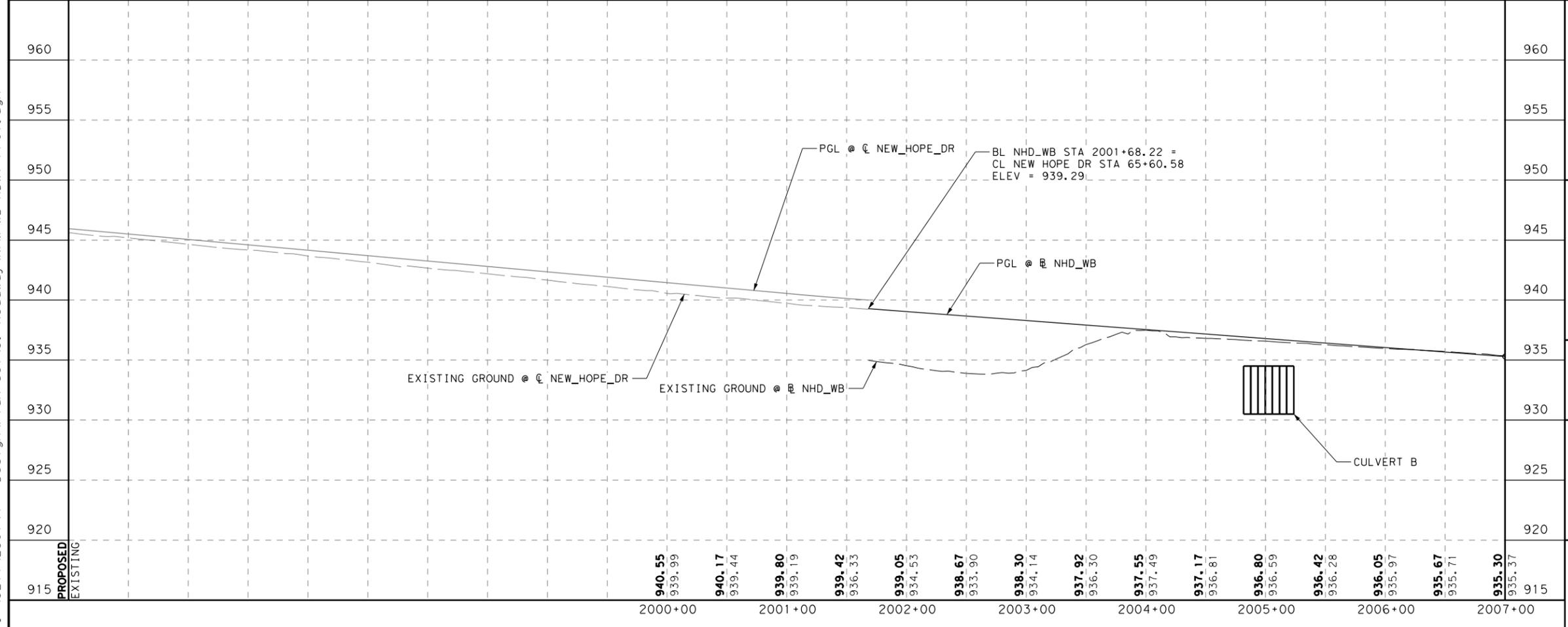
NOTES:

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- SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
- SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)

0' 25' 50' 100'

SCALE: 1"=100' - HORZ
1"=10' - VERT

6/14/2024 11:43:42 AM I:\3217\2301\4 - Design\Plan Set\3. Roadway\NFM\WB*RDWY*PP01.dgn



CODY J. MOCZYGEMBA
133448
LICENSED PROFESSIONAL ENGINEER

6/14/2024

CEDAR PARK

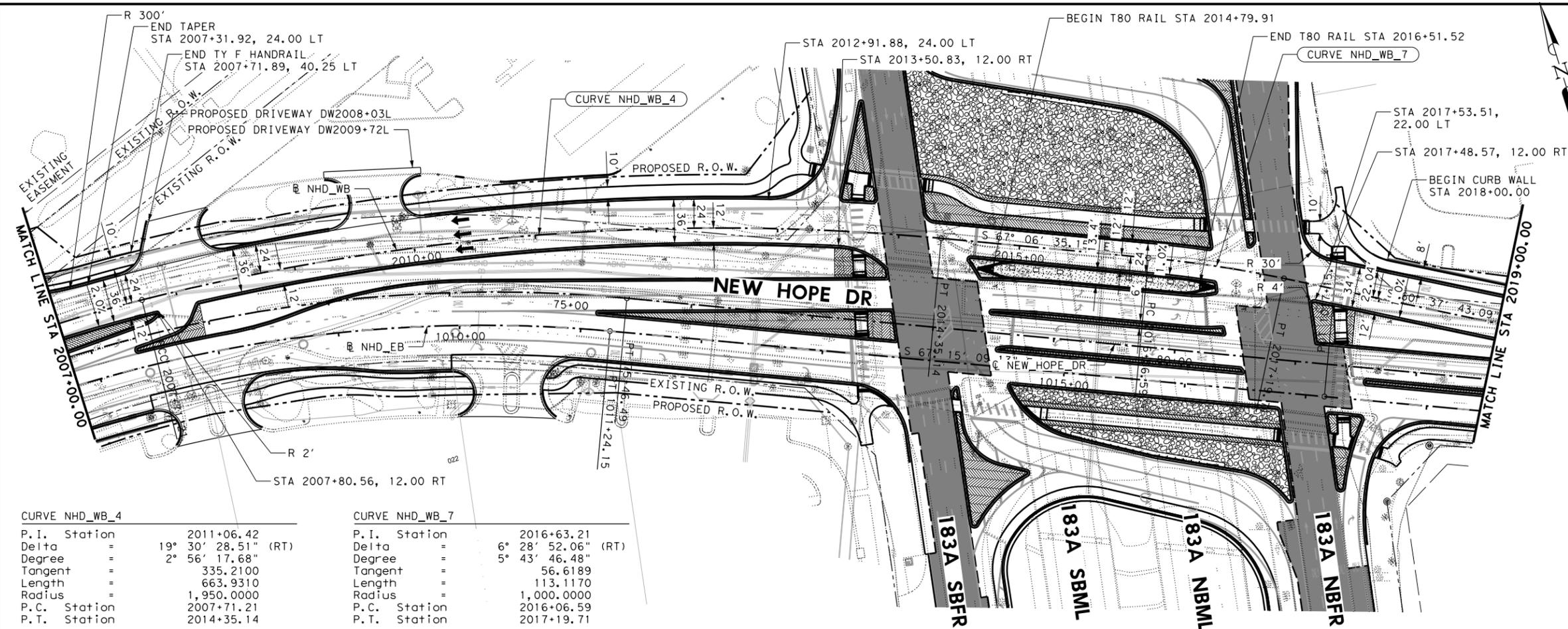
LJA ENGINEERING, INC
FRN-F-1386

**WB NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

BEGIN TO STA 2007+00

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=100'
CHECKED BY: CM	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 1 OF 3
PROJECT NO: 3217-2301	PAGE: 192
DATE:	

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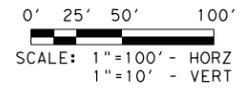


CURVE NHD_WB_4		CURVE NHD_WB_7	
P.I. Station	2011+06.42	P.I. Station	2016+63.21
Delta	19° 30' 28.51" (RT)	Delta	6° 28' 52.06" (RT)
Degree	2° 56' 17.68"	Degree	5° 43' 46.48"
Tangent	335.2100	Tangent	56.6189
Length	663.9310	Length	113.1170
Radius	1,950.0000	Radius	1,000.0000
P.C. Station	2007+71.21	P.C. Station	2016+06.59
P.T. Station	2014+35.14	P.T. Station	2017+19.71

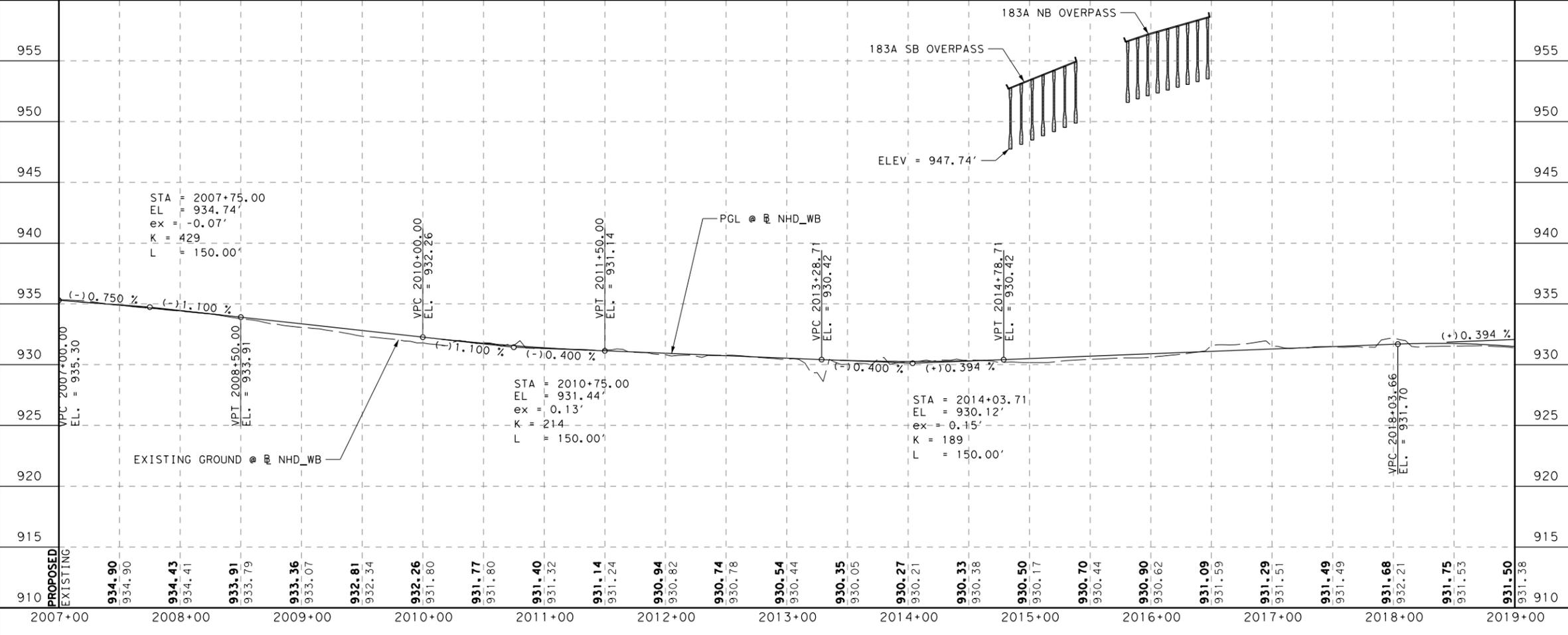
LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▨ PROPOSED MEDIAN STAMPED CONCRETE

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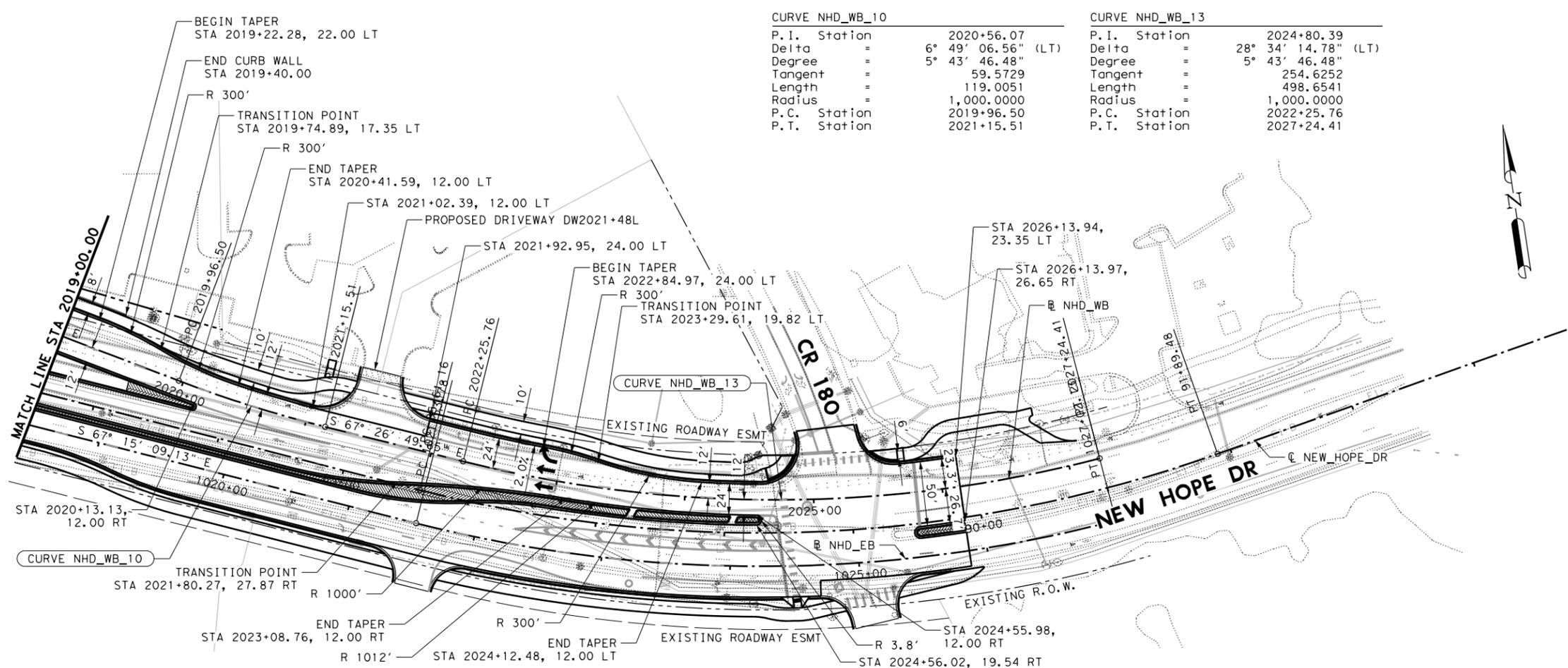
**WB NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

STA 2007+00 TO STA 2019+00

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=100'
CHECKED BY: CM	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 2 OF 3
PROJECT NO: 3217-2301	PAGE: 193
DATE:	

100% SUBMITTAL

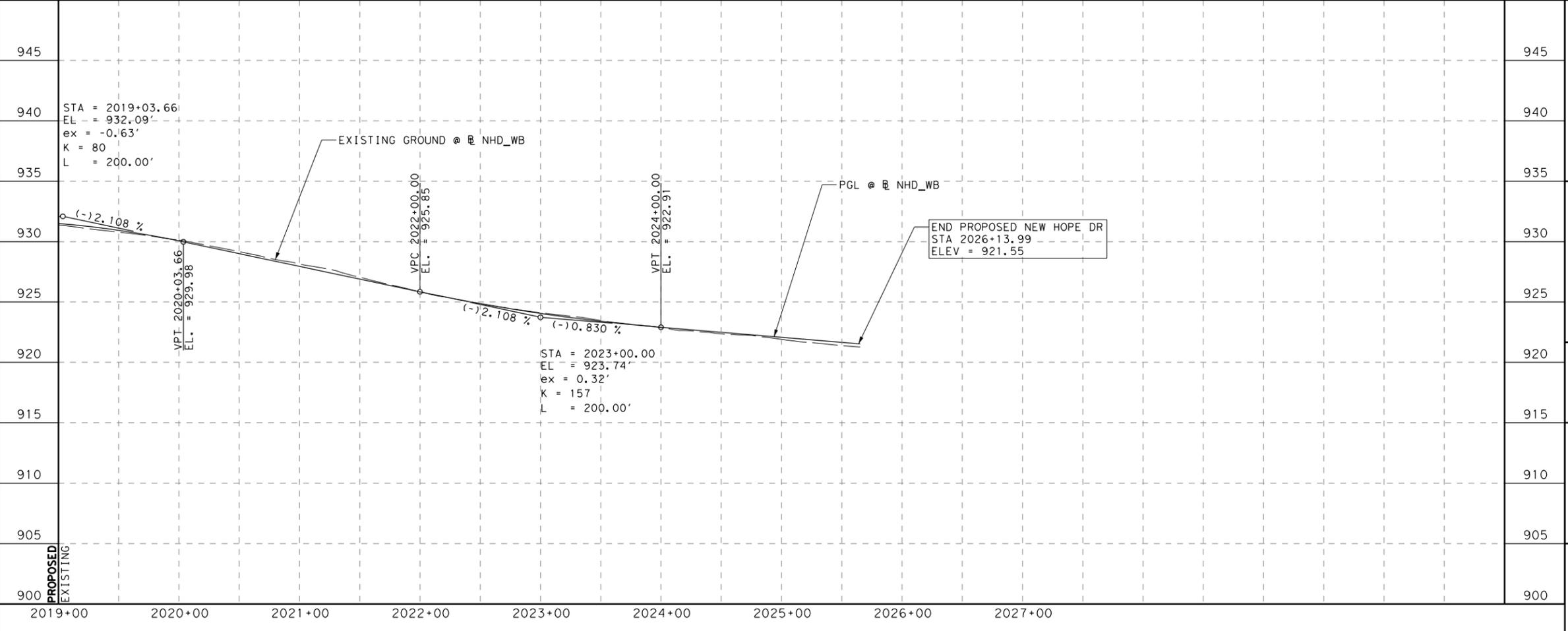
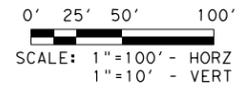
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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇨ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
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 - SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)



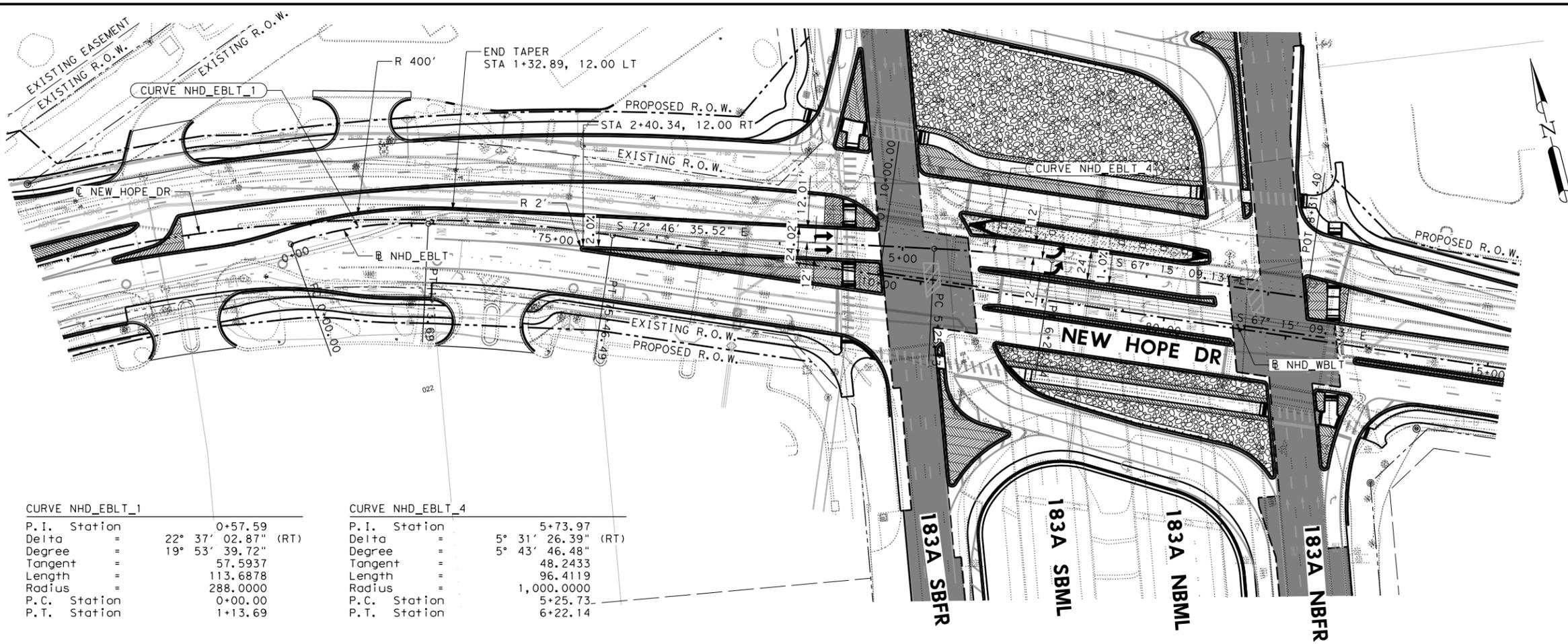
CEDAR PARK

LJA ENGINEERING, INC
FRN-F-1386

**WB NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**
STA 2019+00 TO END

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=100'
CHECKED BY: CM	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 3 OF 3
PROJECT NO: 3217-2301	PAGE: 194
DATE:	

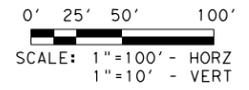
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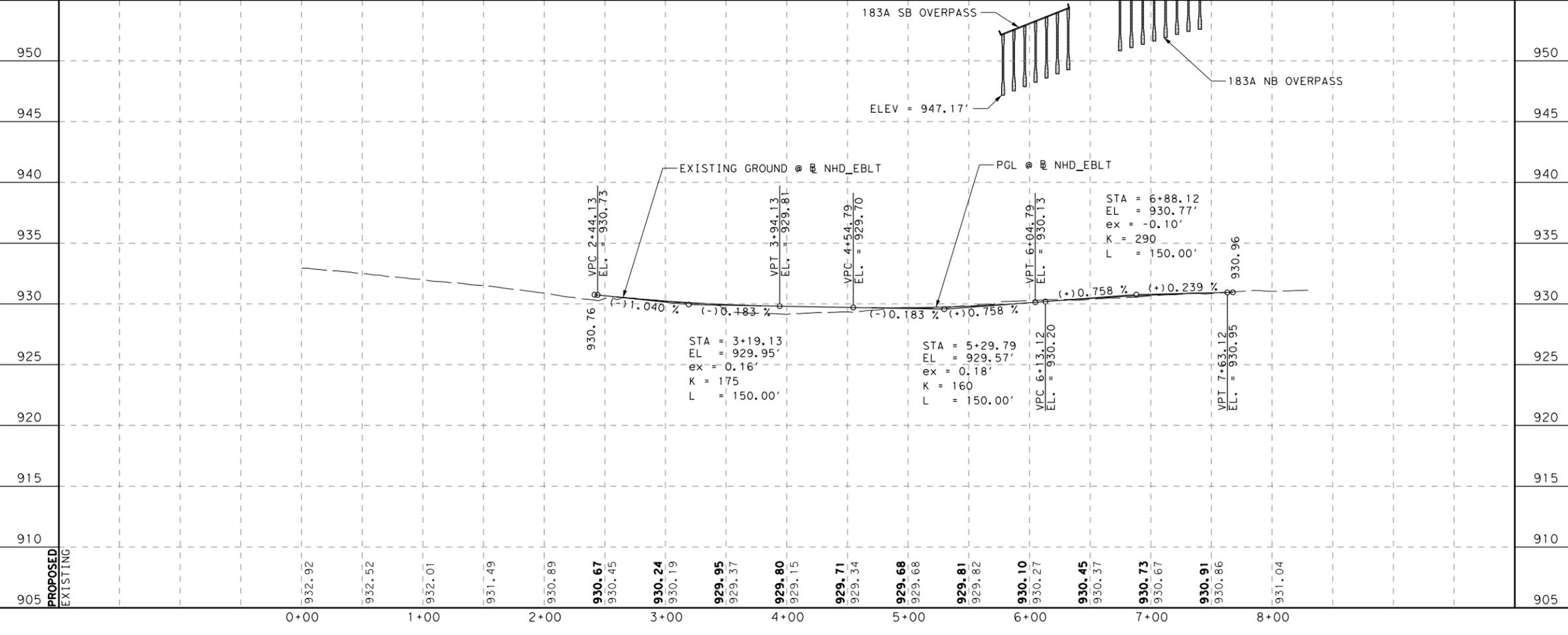
LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇨ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▨ PROPOSED MEDIAN STAMPED CONCRETE

- NOTES:**
- ALL DIMENSIONS ARE TO LIP OF GUTTER UNLESS OTHERWISE STATED.
 - SEE DRIVEWAY SUMMARY TABLE FOR MORE INFORMATION.
 - SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
 - SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)



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6/14/2024

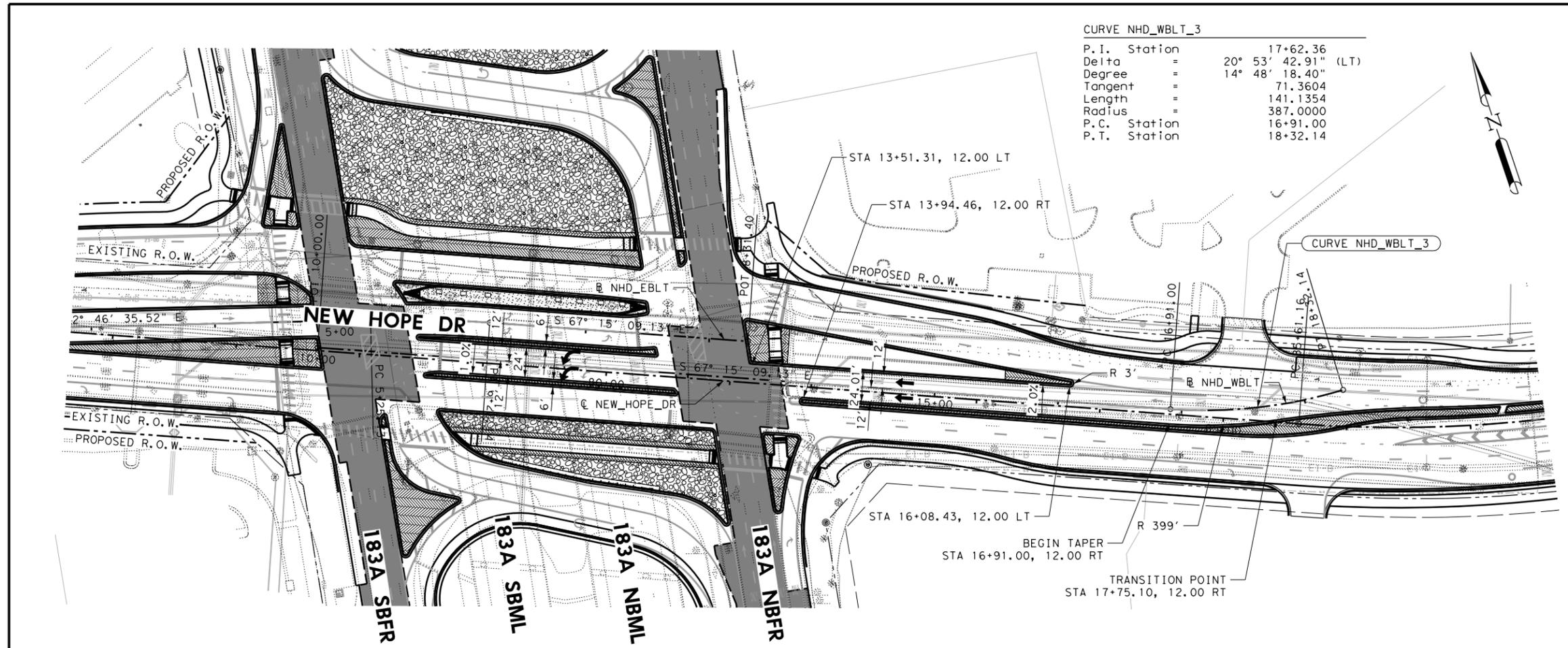
FRN-F-1386

**NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

NHD EBLT

DESIGN BY: AM	SCALE HORIZONTAL: 1"=100'
DRAWN BY: DW	VERTICAL: 1"=10'
CHECKED BY: CM	SHEET: 1 OF 1
APPROVED BY:	PAGE: 195
PROJECT NO: 3217-2301	
DATE:	

100% SUBMITTAL



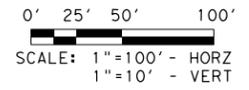
CURVE NHD_WBLT_3

P.I. Station	17+62.36
Delta	20° 53' 42.91" (LT)
Degree	14° 48' 18.40"
Tangent	71.3604
Length	141.1354
Radius	387.0000
P.C. Station	16+91.00
P.T. Station	18+32.14

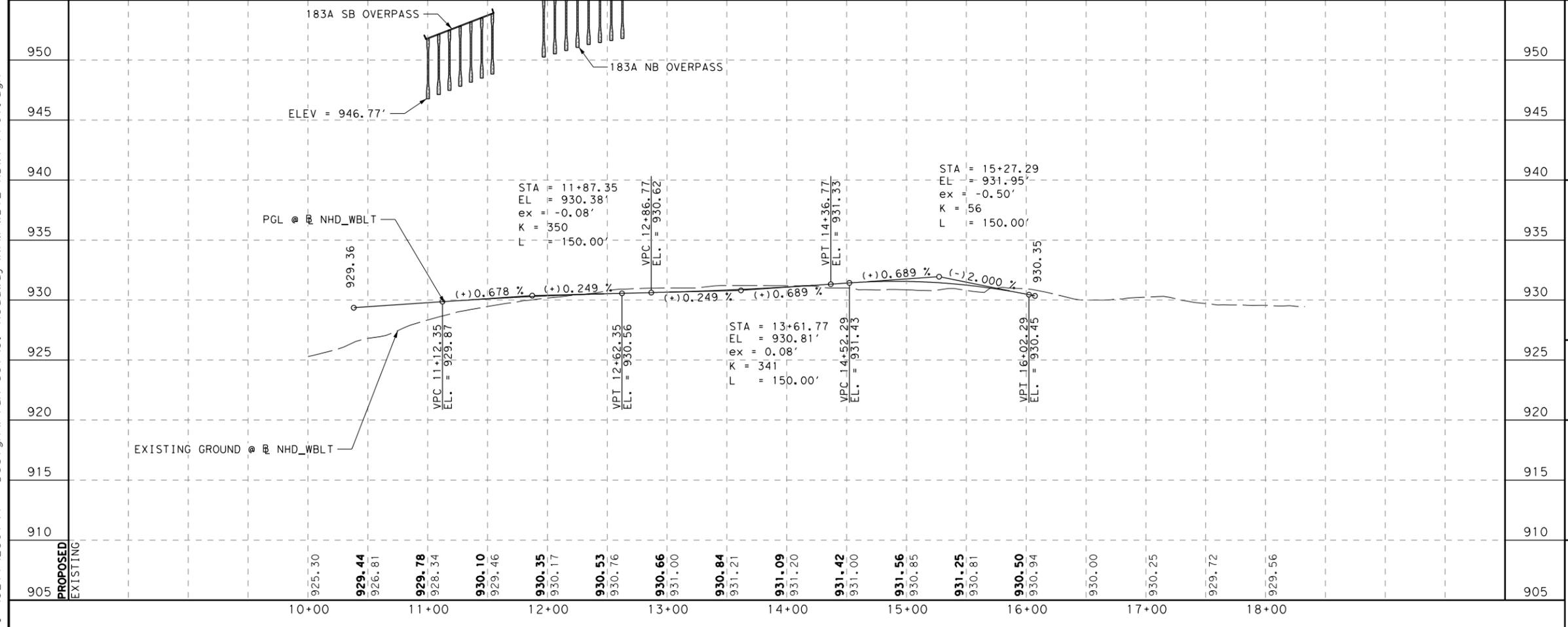
LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▨ PROPOSED MEDIAN STAMPED CONCRETE

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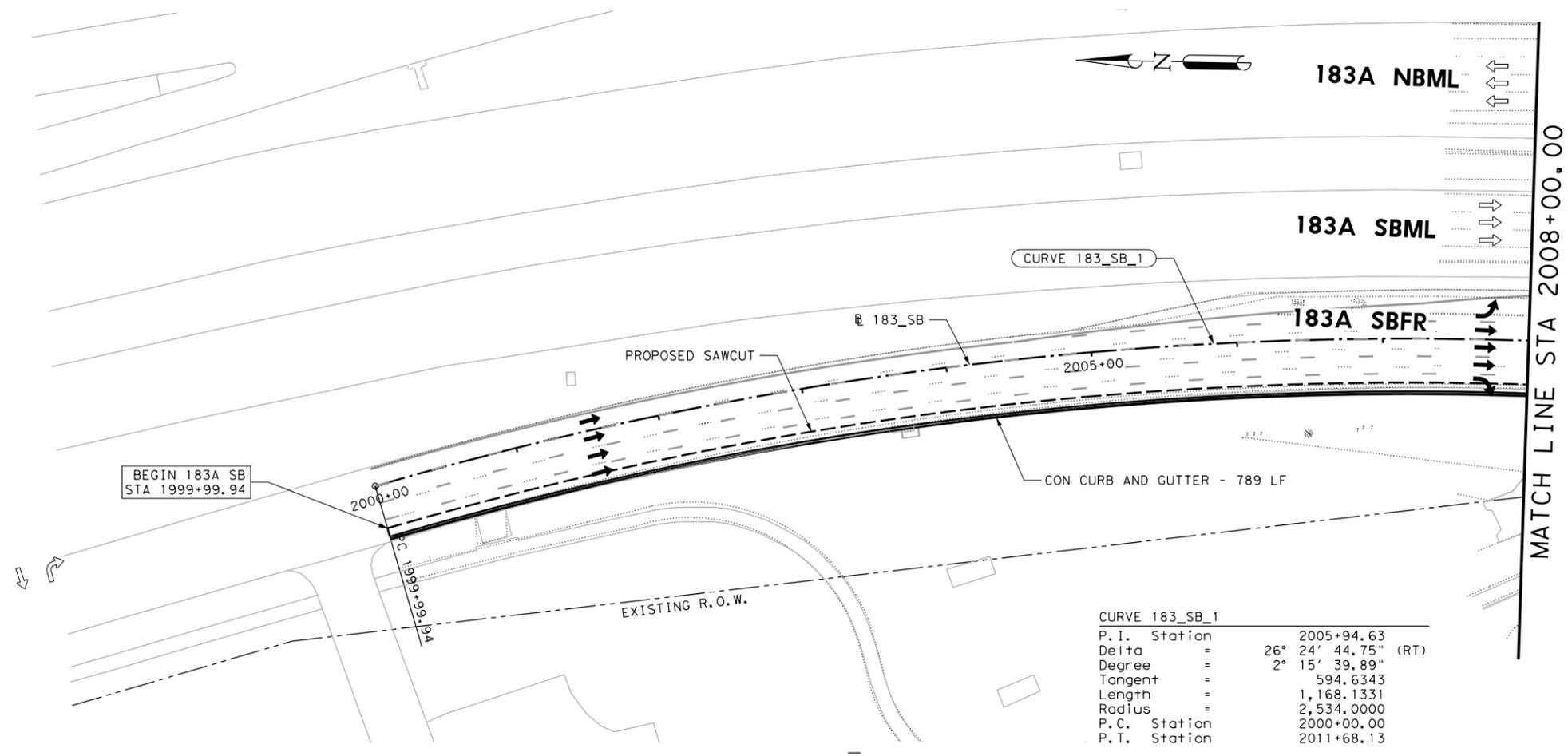
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950		950
945		945
940		940
935		935
930		930
925		925
920		920
915		915
910	<p>NEW HOPE DRIVE ROADWAY PLAN & PROFILE SHEETS NHD WBLT</p>	910
905		905
<p>DESIGN BY: AM DRAWN BY: DW CHECKED BY: CM APPROVED BY: PROJECT NO: 3217-2301 DATE:</p>		<p>SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10' SHEET: 1 OF 1 PAGE: 196</p>

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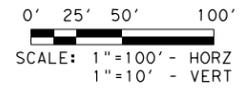
100% SUBMITTAL



LEGEND

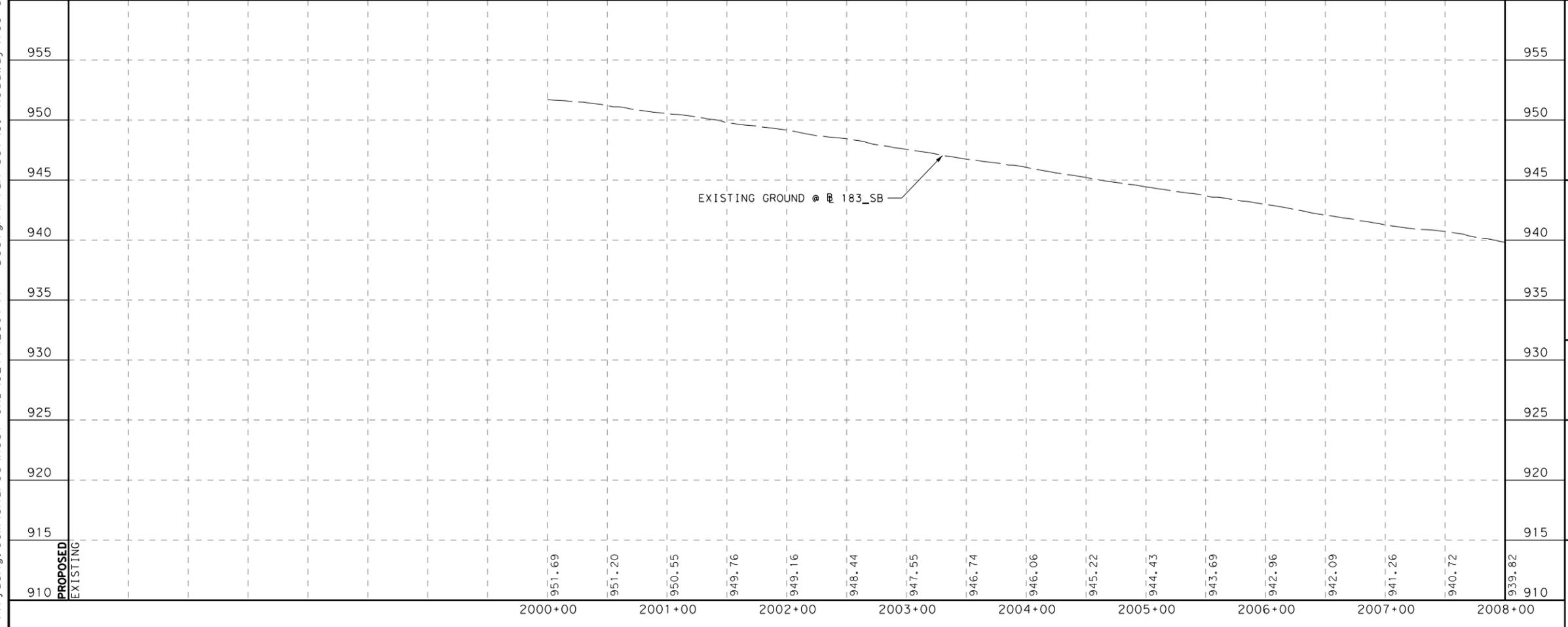
- EXISTING R.O.W.
- PROPOSED R.O.W.
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED TRAVEL DIRECTION
- EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- PROPOSED ROCK RIPRAP
- PROPOSED MEDIAN STAMPED CONCRETE

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 2. SEE DRIVEWAY SUMMARY TABLE FOR MORE INFORMATION.
 3. SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
 4. SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)



CURVE 183_SB_1

P.I. Station	=	2005+94.63
Delta	=	26° 24' 44.75" (RT)
Degree	=	2° 15' 39.89"
Tangent	=	594.6343
Length	=	1,168.1331
Radius	=	2,534.0000
P.C. Station	=	2000+00.00
P.T. Station	=	2011+68.13



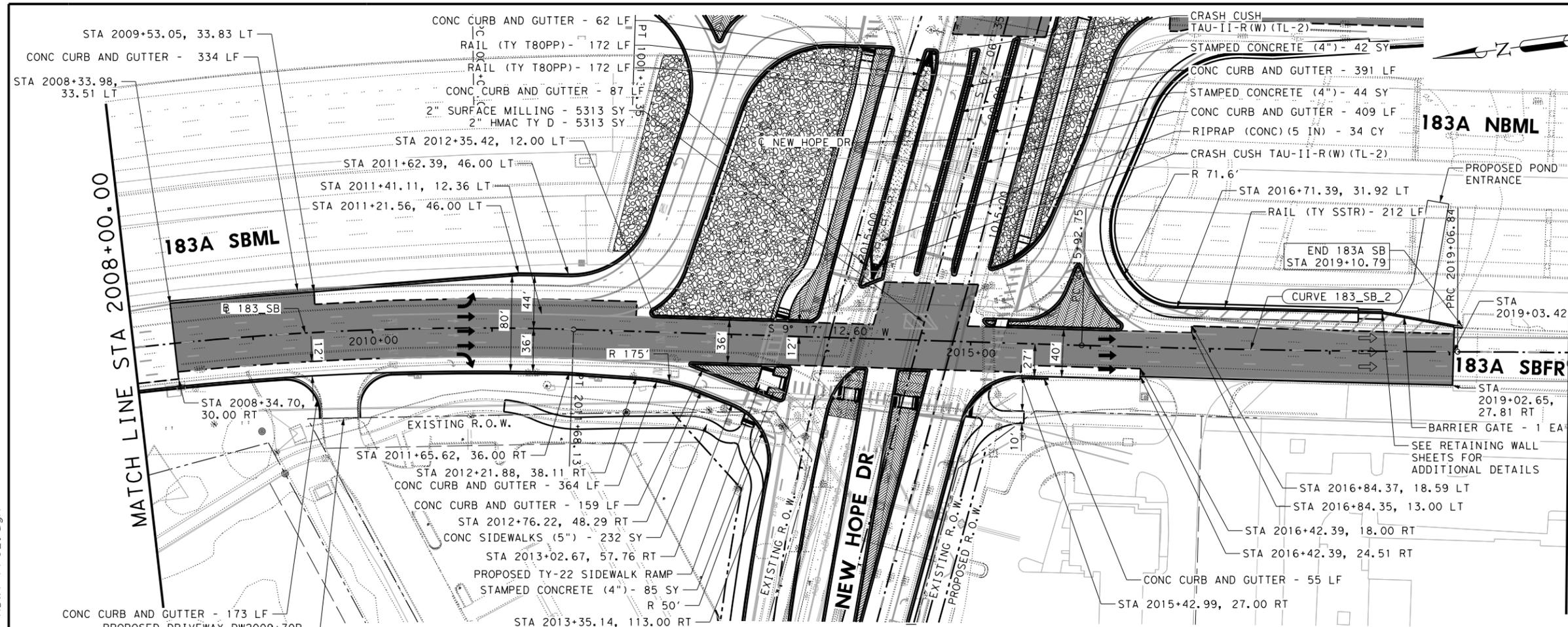
**NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**

183A SB

DESIGN BY: AM DRAWN BY: DW CHECKED BY: CM APPROVED BY: PROJECT NO: 3217-2301 DATE:	SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10' SHEET: 1 OF 3 PAGE: 197
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100% SUBMITTAL

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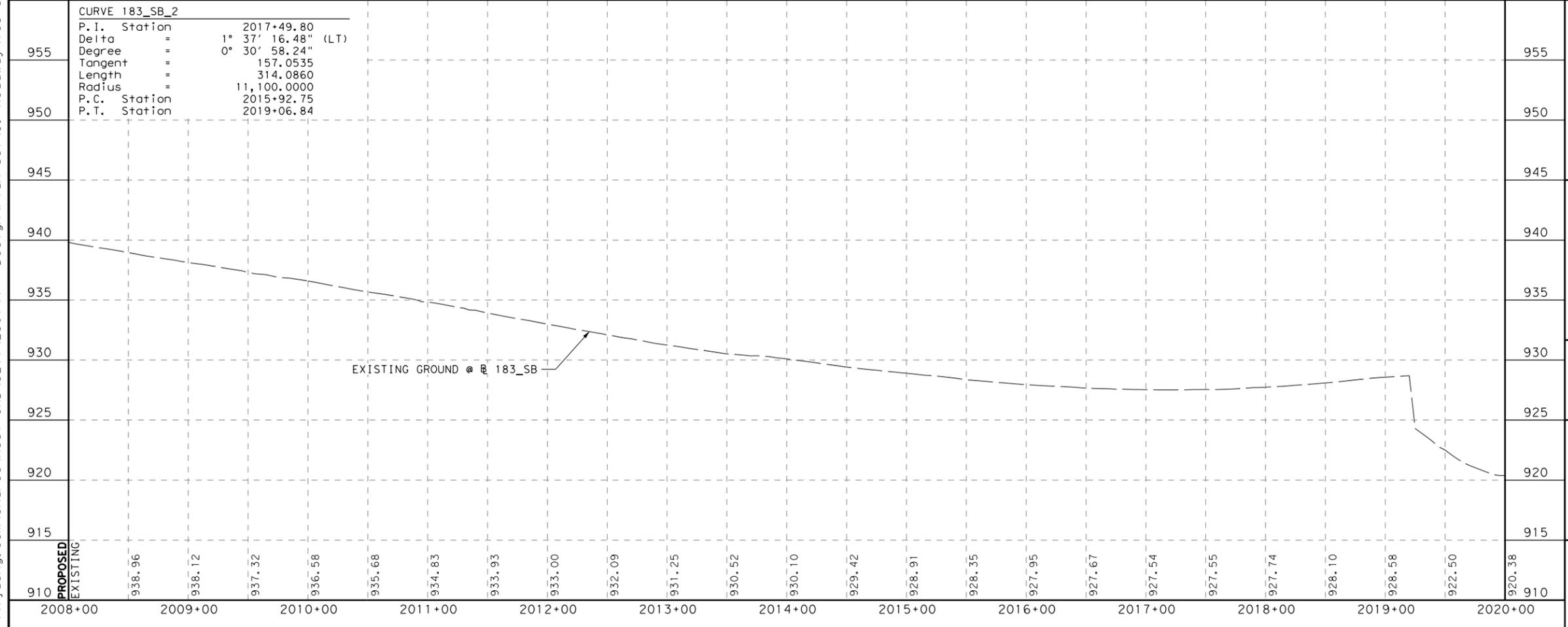
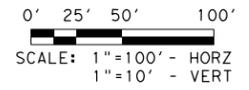


MATCH LINE STA 2020+00.00

LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - PROPOSED EASEMENT
- - - EXISTING UTILITY
- - - EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▩ PROPOSED MEDIAN STAMPED CONCRETE

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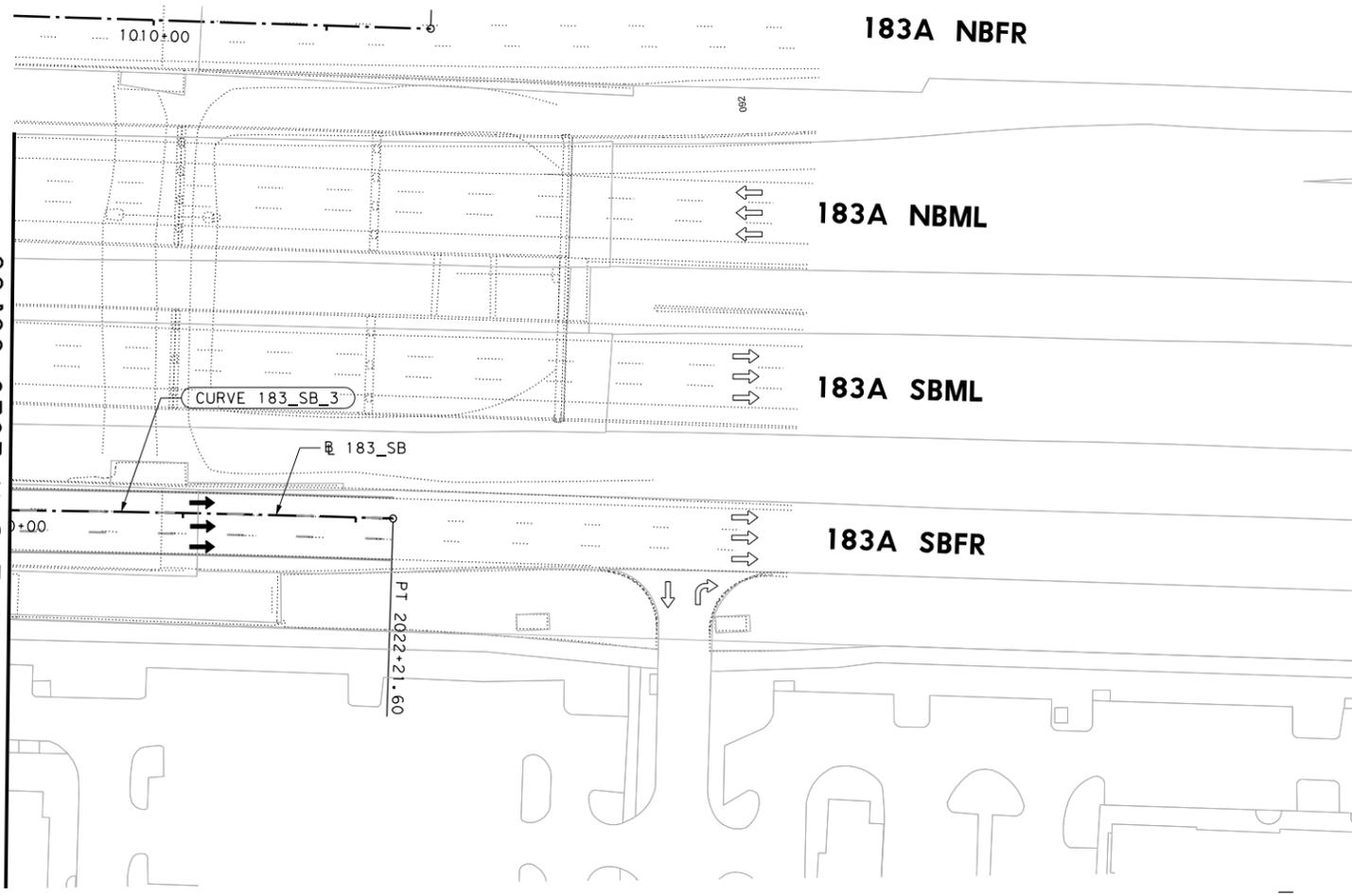


<p>Cody J. Moczygemba 6/14/2024</p>	
<p>FRN-F-1386</p>	
<p>NEW HOPE DRIVE ROADWAY PLAN & PROFILE SHEETS</p> <p>183A SB</p>	
<p>DESIGN BY: AM DRAWN BY: DW CHECKED BY: CM APPROVED BY: PROJECT NO: 3217-2301 DATE:</p>	<p>SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10' SHEET: 2 OF 3 PAGE: 198</p>

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100% SUBMITTAL

MATCH LINE STA 2020+00.00



CURVE 183_SB_3

P.I. Station	=	2020+64.23
Delta	=	1° 37' 16.48" (RT)
Degree	=	0° 30' 54.23"
Tangent	=	157.3930
Length	=	314.7651
Radius	=	11,124.0000
P.C. Station	=	2019+06.84
P.T. Station	=	2022+21.60

- LEGEND**
- EXISTING R.O.W.
 - - - PROPOSED R.O.W.
 - EXISTING EASEMENT
 - - - PROPOSED EASEMENT
 - EXISTING UTILITY
 - EXISTING PLANIMETRICS
 - CURVE DATA
 - PROPOSED TRAVEL DIRECTION
 - ⇄ EXISTING TRAVEL DIRECTION
 - PROPOSED MILL & OVERLAY
 - ▨ PROPOSED ROCK RIPRAP
 - ▨ PROPOSED MEDIAN STAMPED CONCRETE

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 - SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
 - SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)
- 0' 25' 50' 100'
 SCALE: 1"=100' - HORZ
 1"=10' - VERT



955		955
950		950
945		945
940		940
935		935
930		930
925		925
920		920
915		915
910		910

CEDAR PARK

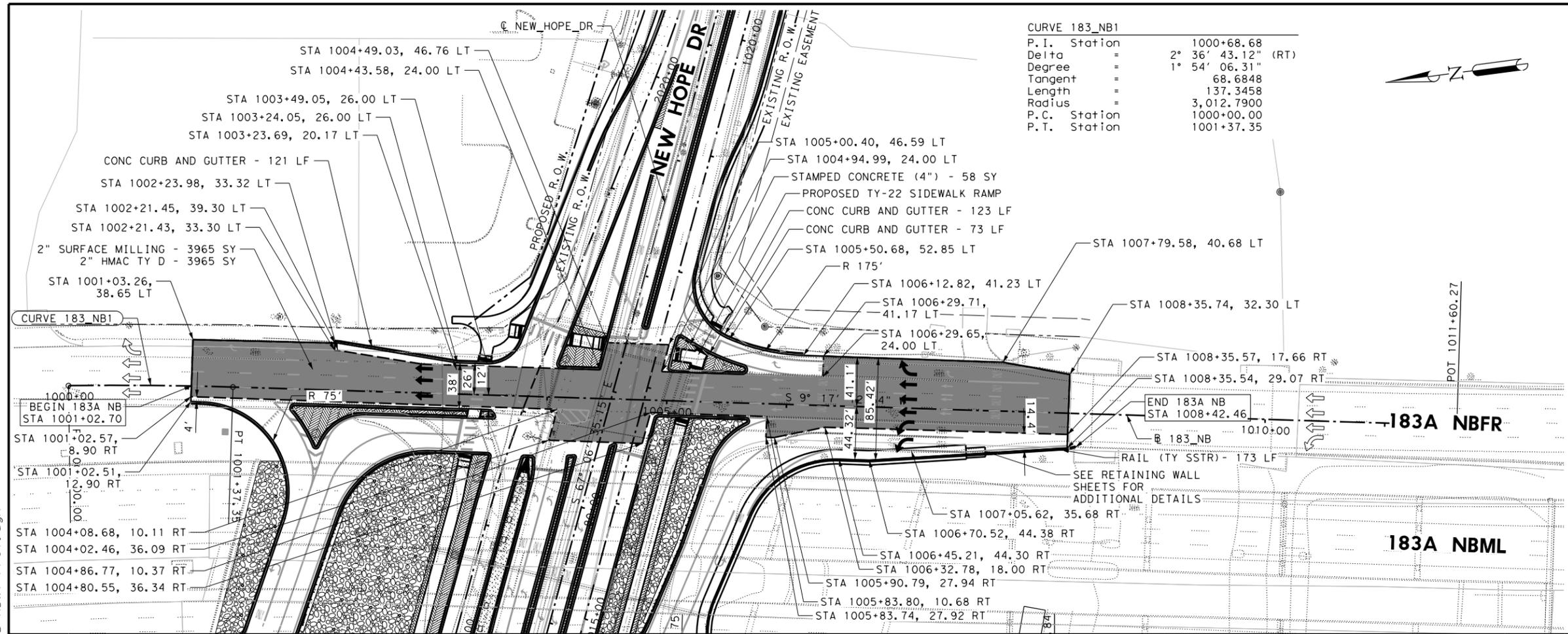
LJA ENGINEERING, INC
FRN-F-1386

**NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**
183A SB

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=100'
CHECKED BY: CM	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 3 OF 3
PROJECT NO: 3217-2301	PAGE: 199
DATE:	

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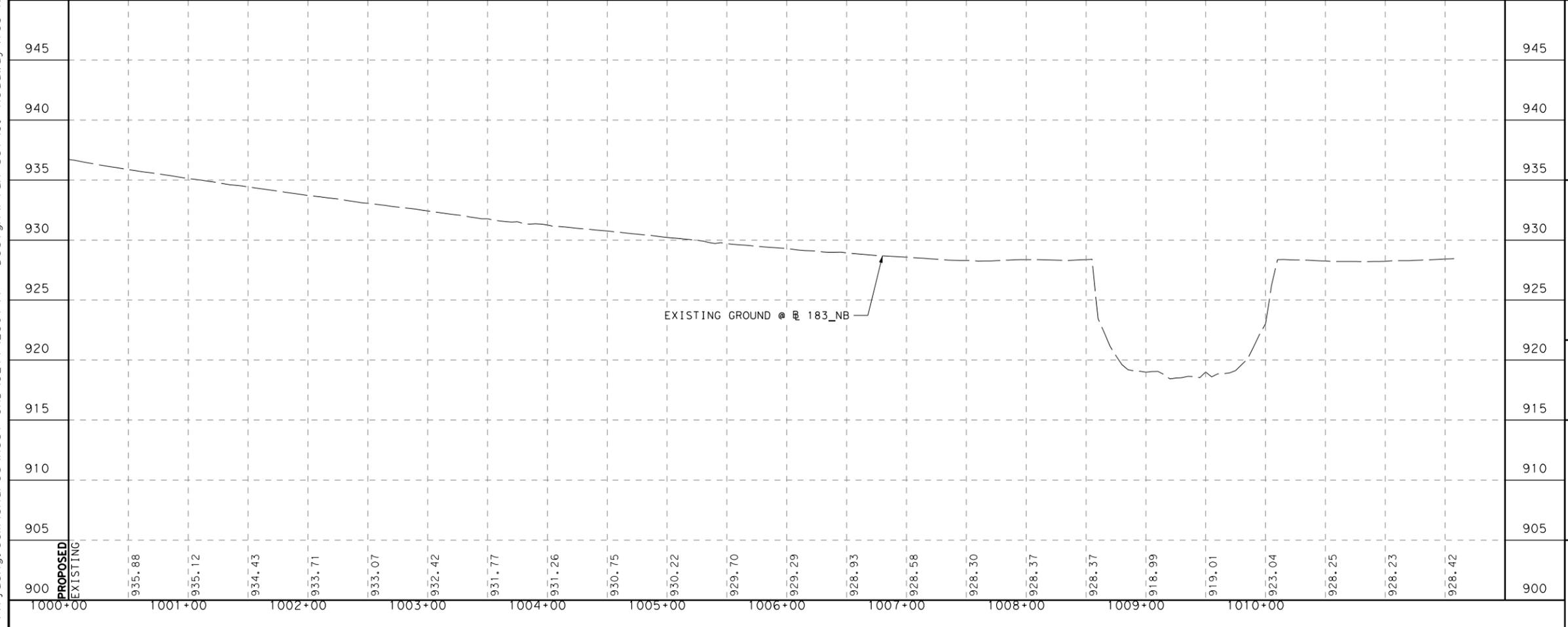
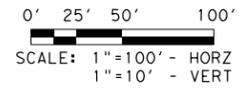
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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▩ PROPOSED MEDIAN STAMPED CONCRETE

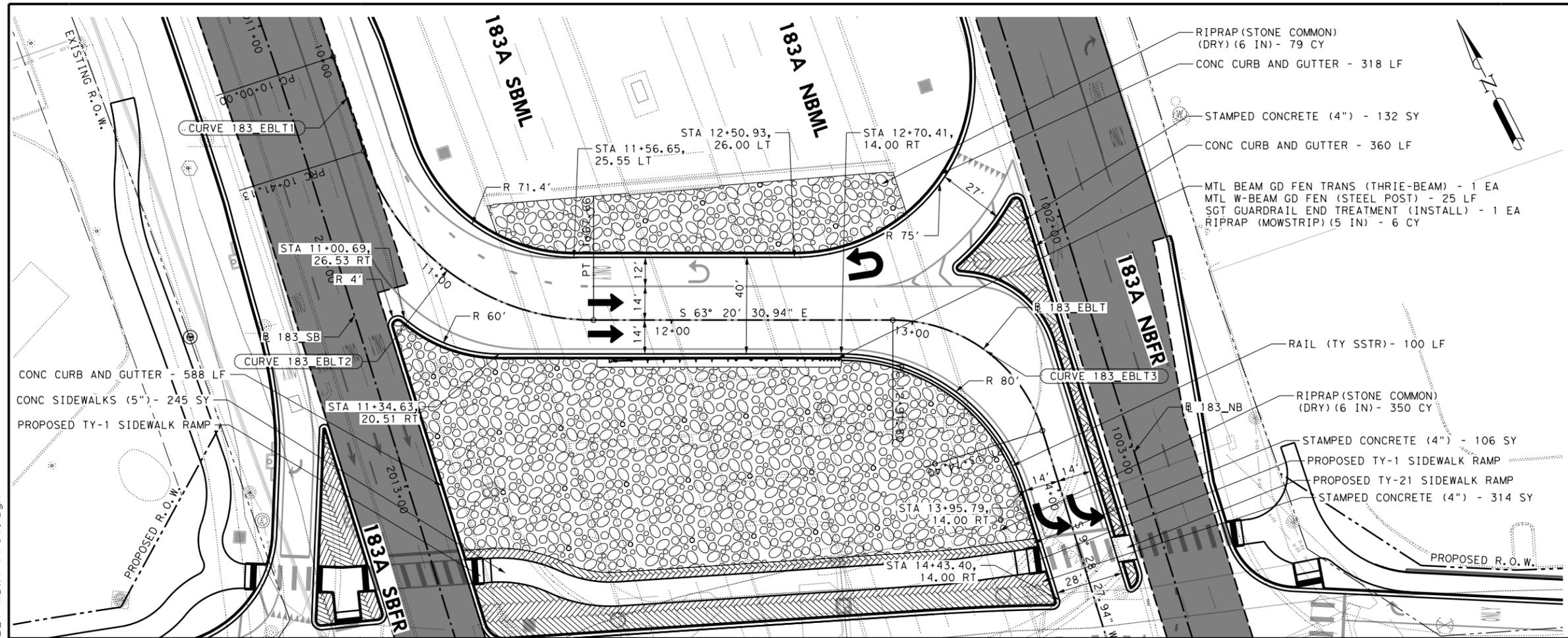
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945	<p>6/14/2024</p>	
940		
935		
930		
925		
920	<p>FRN-F-1386</p>	
915		
910	<p>NEW HOPE DRIVE ROADWAY PLAN & PROFILE SHEETS</p> <p>183A NB</p>	
905	<p>DESIGN BY: AM DRAWN BY: DW CHECKED BY: CM APPROVED BY: PROJECT NO: 3217-2301 DATE:</p>	<p>SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10' SHEET: 1 OF 1 PAGE: 200</p>
900		

100% SUBMITTAL

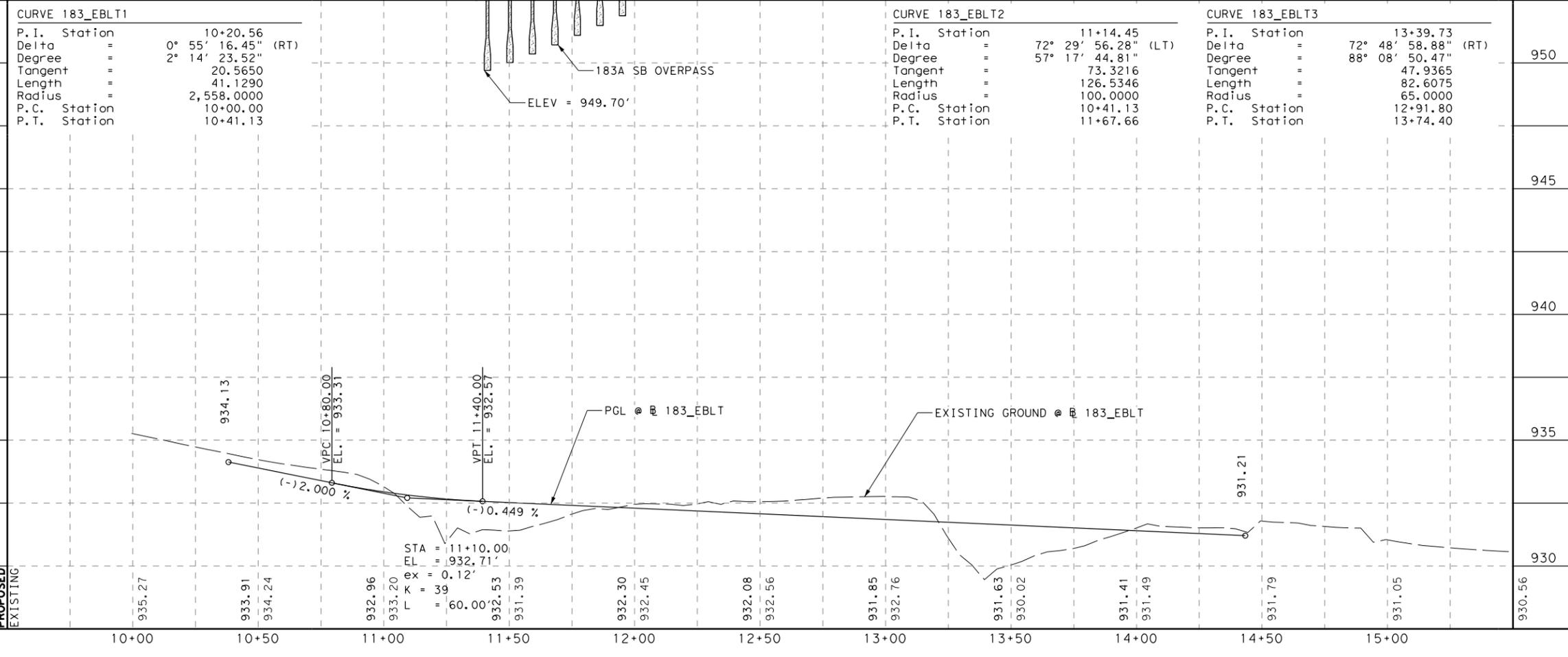
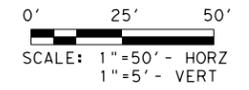
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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇄ EXISTING TRAVEL DIRECTION
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- ▨ PROPOSED MEDIAN STAMPED CONCRETE

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CURVE 183_EBLT1		CURVE 183_EBLT2		CURVE 183_EBLT3	
P.I. Station	10+20.56	P.I. Station	11+14.45	P.I. Station	13+39.73
Delta	0° 55' 16.45" (RT)	Delta	72° 29' 56.28" (LT)	Delta	72° 48' 58.88" (RT)
Degree	2° 14' 23.52"	Degree	57° 17' 44.81"	Degree	88° 08' 50.47"
Tangent	20.5650	Tangent	73.3216	Tangent	47.9365
Length	41.1290	Length	126.5346	Length	82.6075
Radius	2,558.0000	Radius	100.0000	Radius	65.0000
P.C. Station	10+00.00	P.C. Station	10+41.13	P.C. Station	12+91.80
P.T. Station	10+41.13	P.T. Station	11+67.66	P.T. Station	13+74.40

6/14/2024

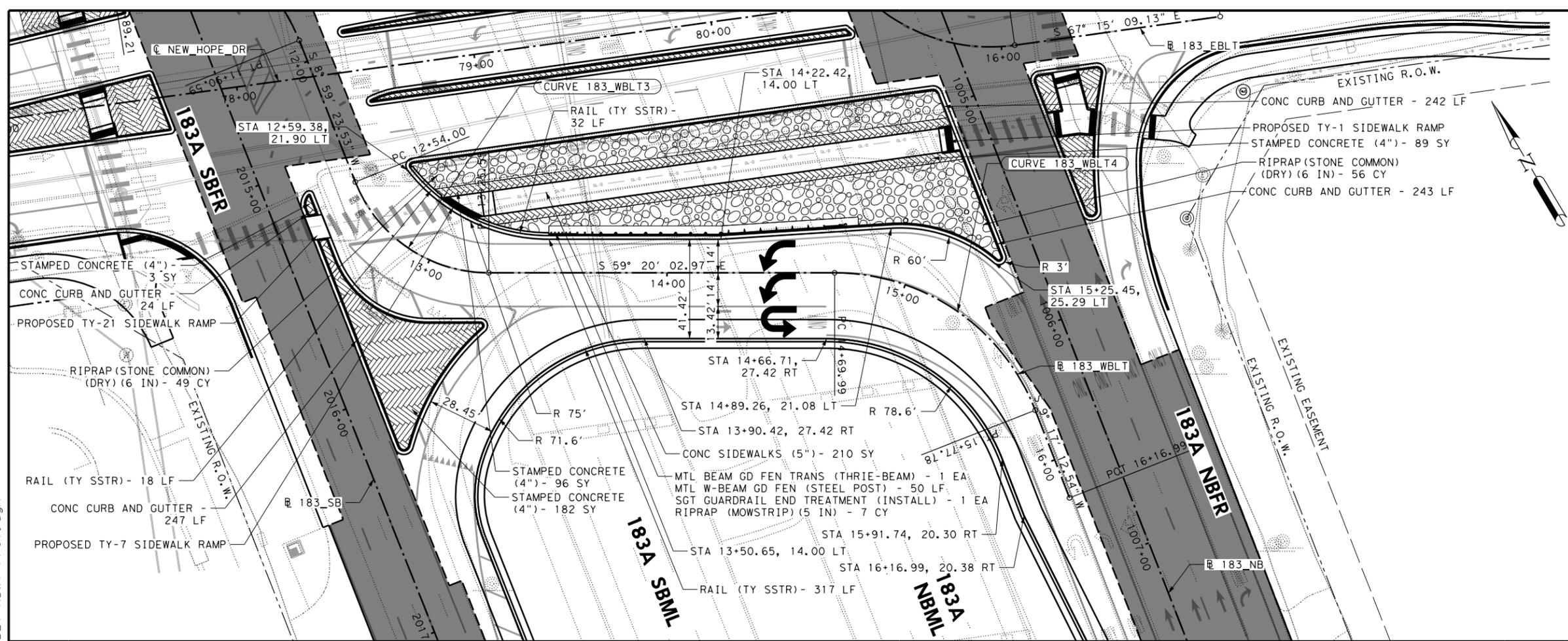
FRN-F-1386

**NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS**
183A EBLT

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=50'
CHECKED BY: CM	VERTICAL: 1"=5'
APPROVED BY:	SHEET: 1 OF 1
PROJECT NO: 3217-2301	PAGE: 201
DATE:	

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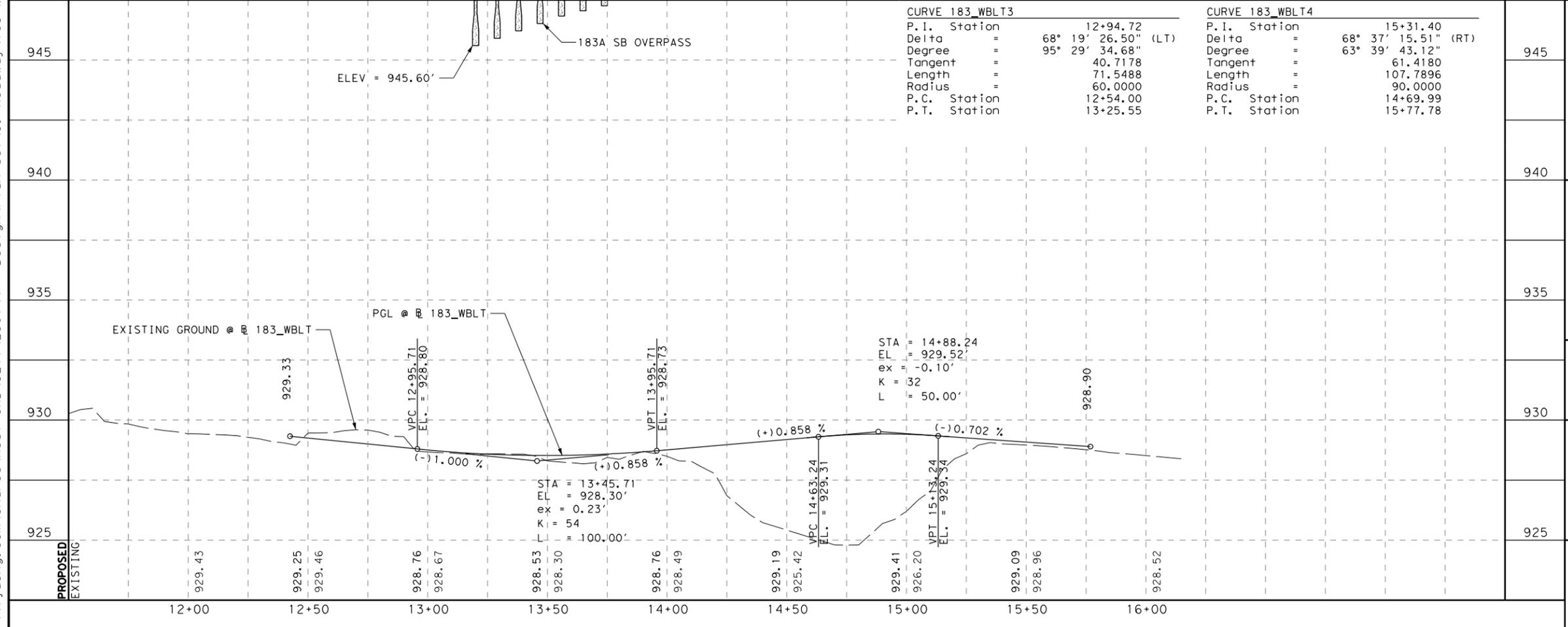
LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇨ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
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0' 25' 50'
SCALE: 1"=50' - HORZ
1"=5' - VERT



945
940
935
930
925

ELEV = 945.60'

183A SB OVERPASS

EXISTING GROUND @ 183_WBLT

PGL @ 183_WBLT

STA = 14+88.24
EL = 929.52'
ex = -0.10'
K = 32
L = 50.00'

928.90

928.52

928.76
928.49

929.19
925.42

929.41
926.20

929.09
928.96

928.52

12+00 12+50 13+00 13+50 14+00 14+50 15+00 15+50 16+00

PROPOSED
EXISTING

929.43 929.25 929.46 928.76 928.67 928.53 928.30 928.76 928.49 929.19 925.42 929.41 926.20 929.09 928.96 928.52

STATE OF TEXAS
CODY J. MOCZYGEMBA
133448
LICENSED PROFESSIONAL ENGINEER
6/14/2024

CEDAR PARK

LJA ENGINEERING, INC
FRN-F-1386

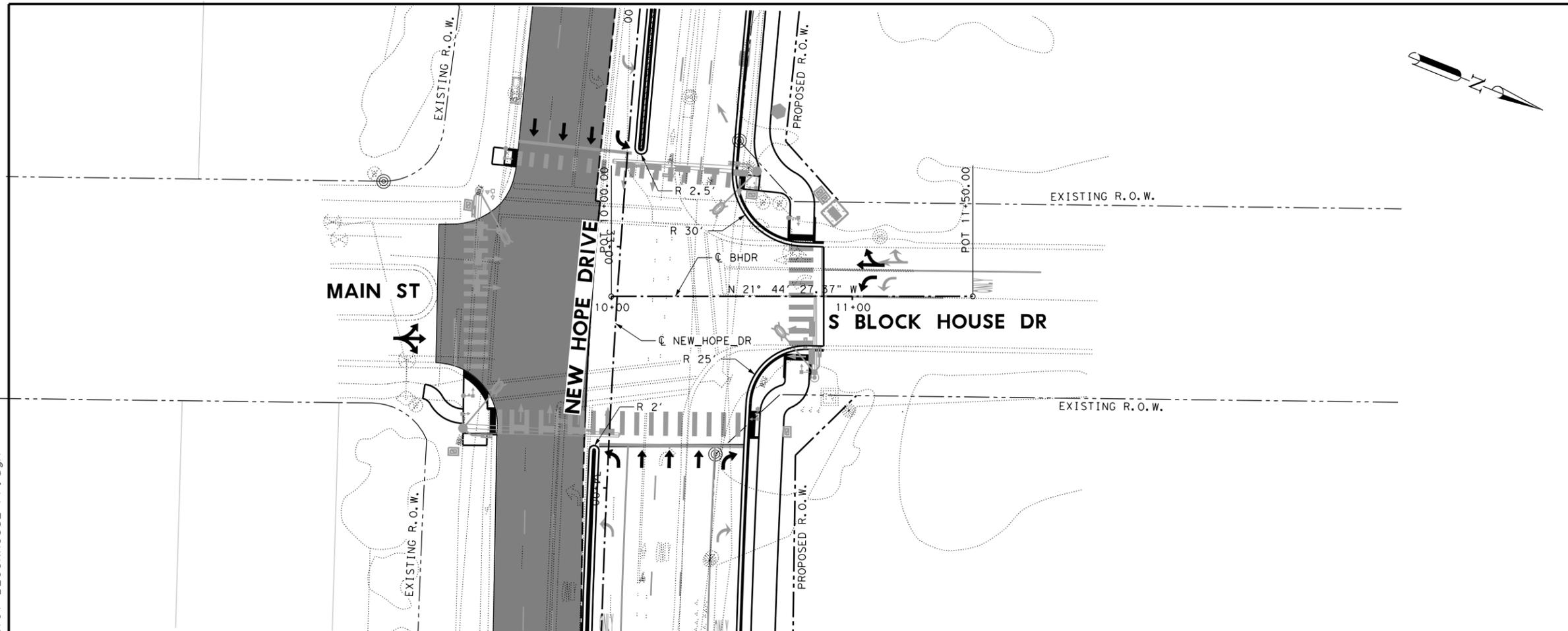
NEW HOPE DRIVE
ROADWAY PLAN & PROFILE
SHEETS
183A WBLT

DESIGN BY: AM
DRAWN BY: DW
CHECKED BY: CM
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'
SHEET: 1 OF 1
PAGE: 202

100% SUBMITTAL

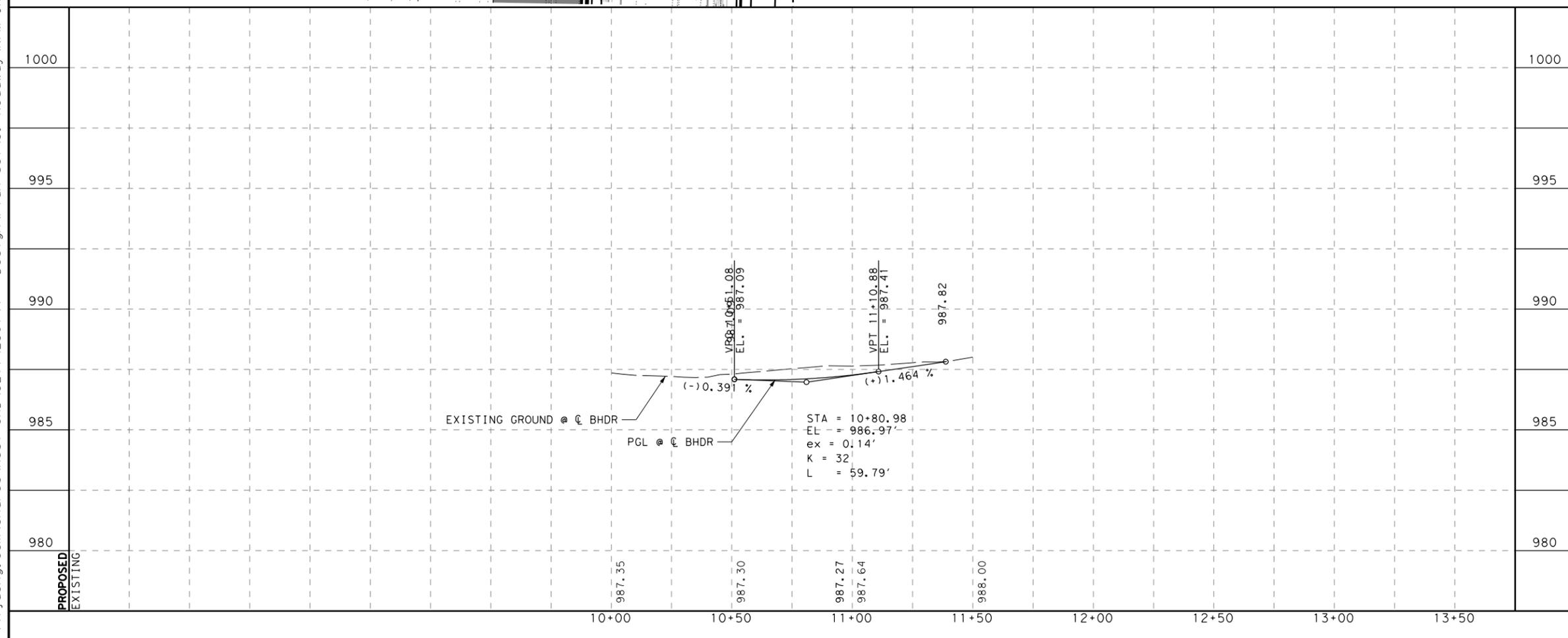
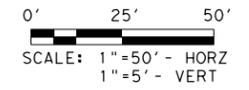
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LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- EXISTING EASEMENT
- PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- PROPOSED ROCK RIPRAP
- PROPOSED MEDIAN STAMPED CONCRETE

- NOTES:**
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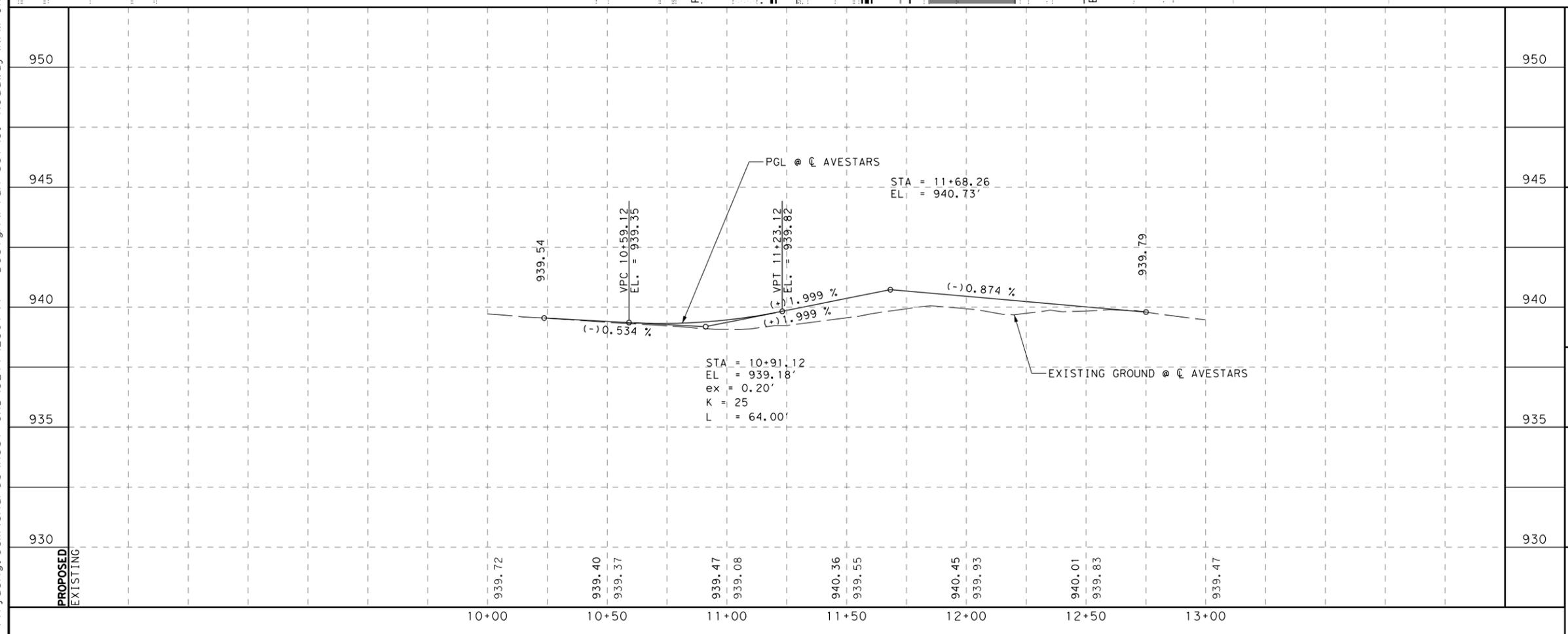
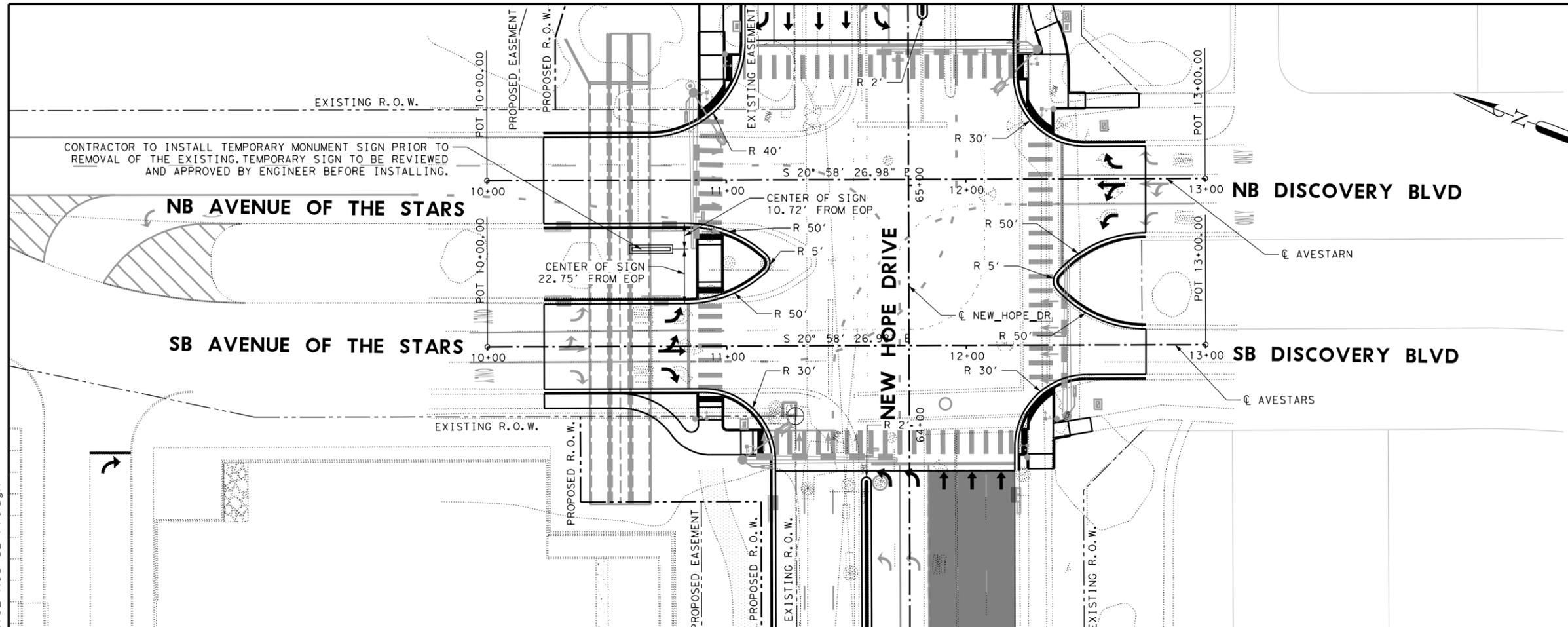

LJA ENGINEERING, INC
FRN-F-1386

**NEW HOPE DRIVE
INTERSECTION P&P
SHEETS**
BLOCK HOUSE DR

DESIGN BY: AM	SCALE
DRAWN BY: DW	HORIZONTAL: 1"=50'
CHECKED BY: CM	VERTICAL: 1"=5'
APPROVED BY:	SHEET: 1 OF 4
PROJECT NO: 3217-2301	PAGE: 203
DATE:	

100% SUBMITTAL

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950

945

940

935

930

PROPOSED
EXISTING

STATE OF TEXAS
CODY J. MOCZYGEMBA
133448
LICENSED PROFESSIONAL ENGINEER
6/14/2024

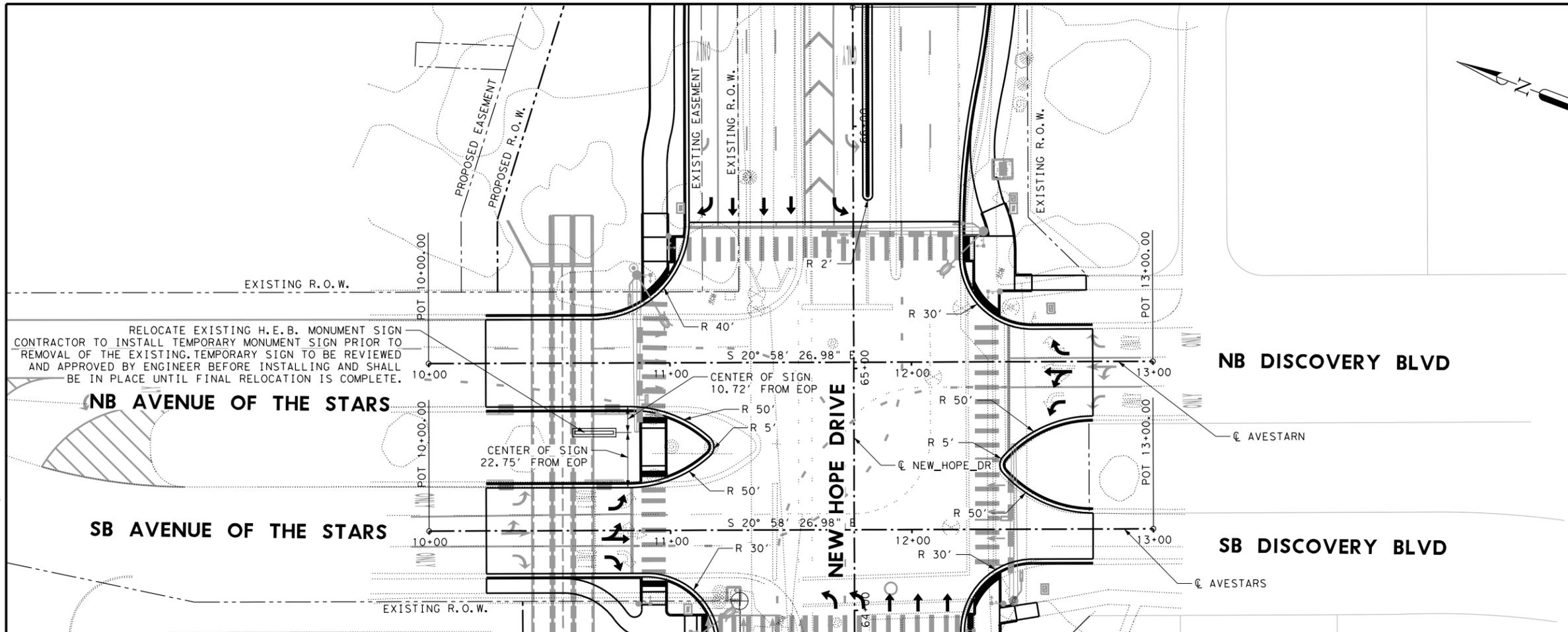
CEDAR PARK

LJA ENGINEERING, INC
FRN-F-1386

NEW HOPE DRIVE
INTERSECTION P&P
SHEETS
AVE OF STARS SB

DESIGN BY: AM
DRAWN BY: DW
CHECKED BY: CM
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'
SHEET: 2 OF 4
PAGE: 204



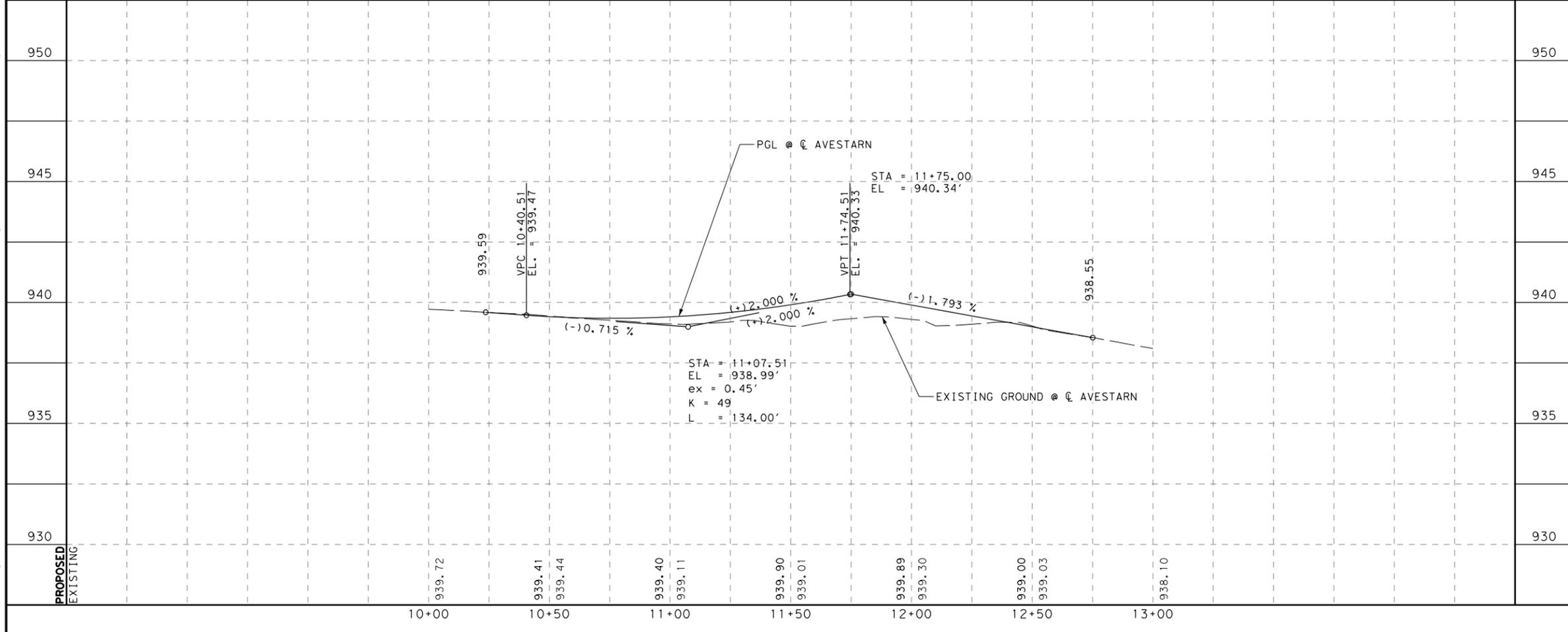
LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- EXISTING EASEMENT
- - - PROPOSED EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- CURVE DATA
- PROPOSED TRAVEL DIRECTION
- ⇨ EXISTING TRAVEL DIRECTION
- PROPOSED MILL & OVERLAY
- ▨ PROPOSED ROCK RIPRAP
- ▩ PROPOSED MEDIAN STAMPED CONCRETE

NOTES:

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3. SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
4. SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)

0' 25' 50'
SCALE: 1"=50' - HORZ
1"=5' - VERT



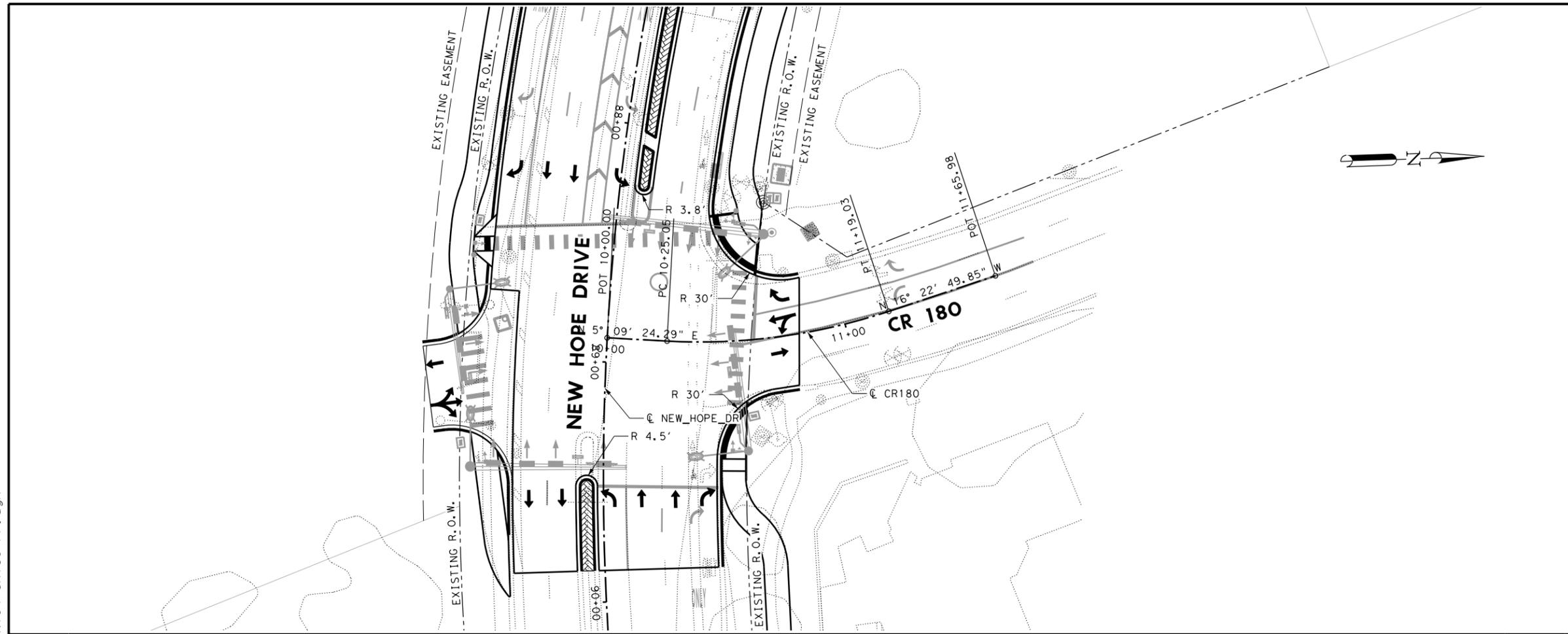
6/14/2024

FRN-F-1386

**NEW HOPE DRIVE
INTERSECTION P&P
SHEETS**

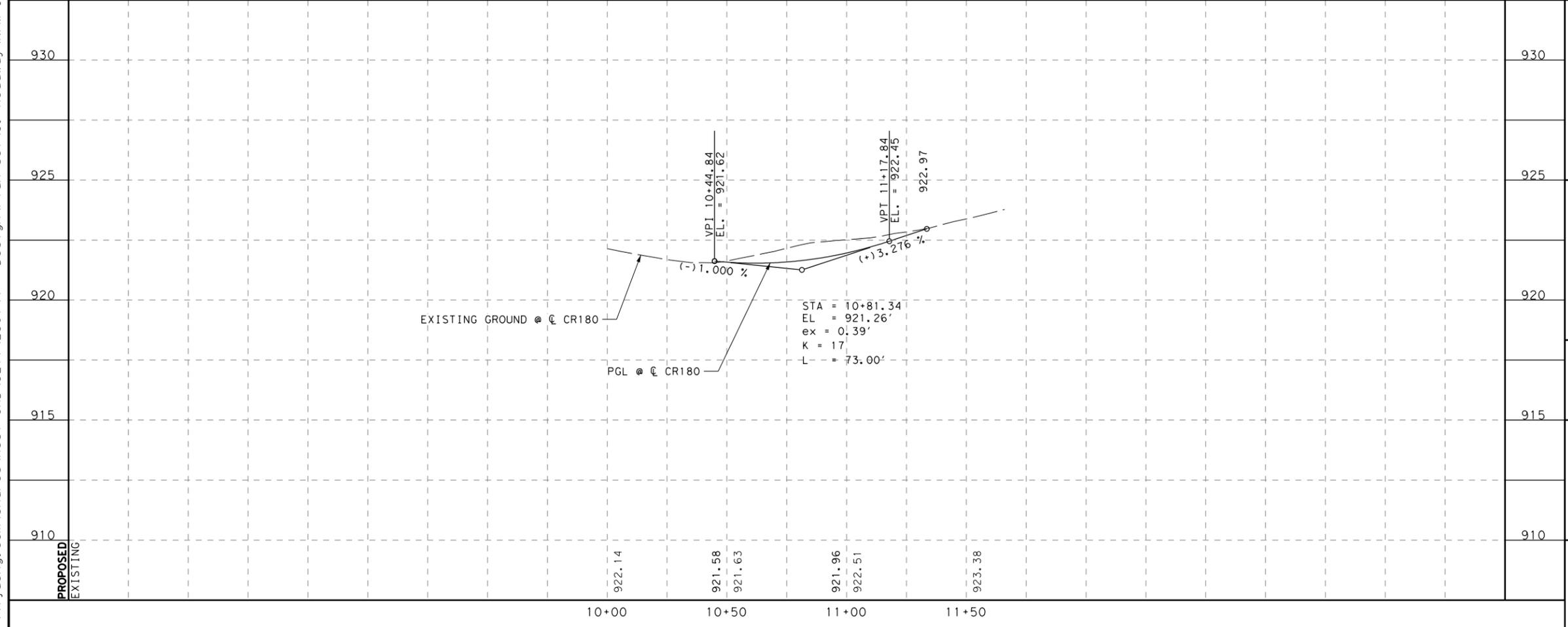
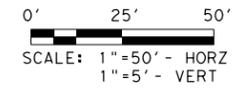
AVE OF STARS NB

DESIGN BY: AM DRAWN BY: DW CHECKED BY: CM APPROVED BY: PROJECT NO: 3217-2301 DATE:	SCALE HORIZONTAL: 1"=50' VERTICAL: 1"=5' SHEET: 3 OF 4 PAGE: 205
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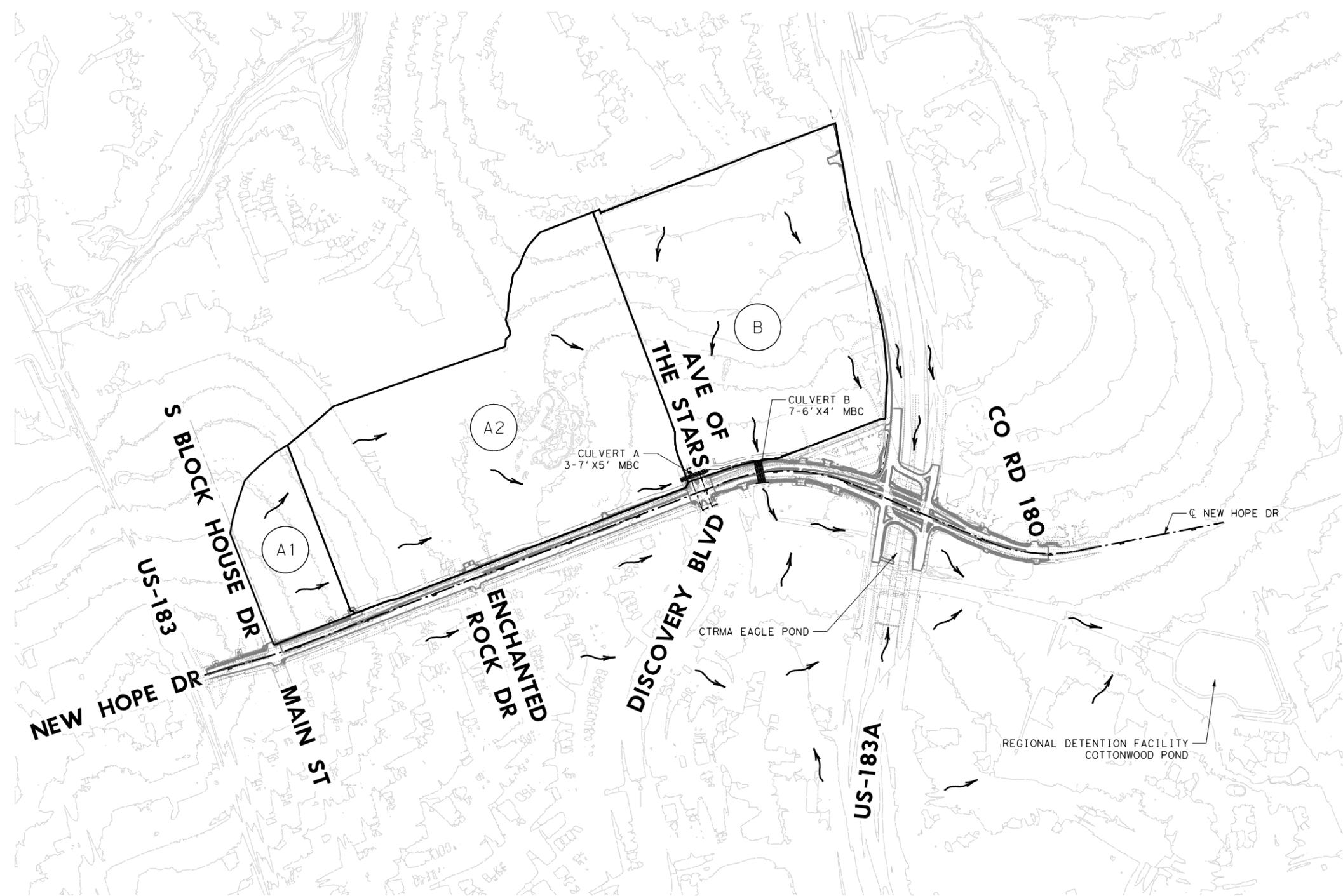


- LEGEND**
- EXISTING R.O.W.
 - PROPOSED R.O.W.
 - EXISTING EASEMENT
 - PROPOSED EASEMENT
 - EXISTING UTILITY
 - EXISTING PLANIMETRICS
 - CURVE DATA
 - PROPOSED TRAVEL DIRECTION
 - ⇨ EXISTING TRAVEL DIRECTION
 - PROPOSED MILL & OVERLAY
 - ▨ PROPOSED ROCK RIPRAP
 - ▨ PROPOSED MEDIAN STAMPED CONCRETE

- NOTES:**
1. ALL DIMENSIONS ARE TO LIP OF GUTTER UNLESS OTHERWISE STATED.
 2. SEE DRIVEWAY SUMMARY TABLE FOR MORE INFORMATION.
 3. SEE INTERSECTION GRADING DETAIL SHEETS FOR MORE INFORMATION.
 4. SEE RETAINING WALL SHEETS FOR MORE INFORMATION (TO BE PROVIDED AT 90%)

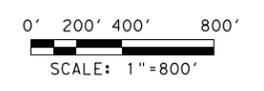


<p>Cody J. Moczygemba 6/14/2024</p>												
<p>FRN-F-1386</p>												
<p>NEW HOPE DRIVE INTERSECTION P&P SHEETS</p> <p>CR 180</p>												
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DESIGN BY: AM	SCALE HORIZONTAL: 1"=50'											
DRAWN BY: DW	VERTICAL: 1"=5'											
CHECKED BY: CM	SHEET: 4 OF 4											
APPROVED BY:	PAGE: 206											
PROJECT NO: 3217-2301												
DATE:												



LEGEND

- XX EXTERNAL DRAINAGE AREA ID
- EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW



CULVERT ID	METHOD USED	CONTRIBUTING DRAINAGE AREA (ID)	CONTRIBUTING DRAINAGE AREA (ACRES)	TOTAL AREA (ACRES)	LAG TIME	CURVE NUMBER	PEAK FLOW RATES (CFS)		
							2-YR	25-YR	100-YR
A	NRCS	A1	14.94	103.52	11.26	95	366.23	701.95	938.93
		A2	88.58						
B	NRCS	A	103.52	178.16	11.26	95	647.40	1241.09	1659.91
		B	74.64						

- NOTES:**
- HYDROLOGY FOR A AND B WAS PERFORMED IN HEC-HMS VERSION 4.5, BASED ON NRCS METHODOLOGY DESCRIBED IN THE CITY OF AUSTIN DRAINAGE CRITERIA MANUAL DATED 2022.
 - LOSS METHOD: SCS CURVE NUMBER, TRANSFORM: SCS UNIT HYDROGRAPH
 - METEOROLOGIC DATA WAS TAKEN FROM ATLAS-14 RAINFALL DEPTH MEMORANDUM TO CITY OF CEDAR PARK DATED FEBRUARY 28, 2020.
 - IMPERVIOUS COVER CALCULATIONS BASED ON A FULLY DEVELOPED WATERSHED BASED ON ZONING MAPS FROM THE CITY OF CEDAR PARK WHEN AVAILABLE.
 - 5FT CONTOURS SHOWN. CONTOUR DATA BASED ON LIDAR DEM 2021 AND 2023 PROJECT SURVEY.
 - PROJECT DATA IMPACTING FEMA ZONE AE OR A. SEE H&H REPORT FOR MORE INFORMATION.
 - DRAINAGE AREA A INCLUDES BOTH DRAINAGE AREAS A1 AND A2.
 - DRAINAGE AREA A1 WILL DRAIN TO PROPOSED STORM SEWER ONCE DEVELOPED.

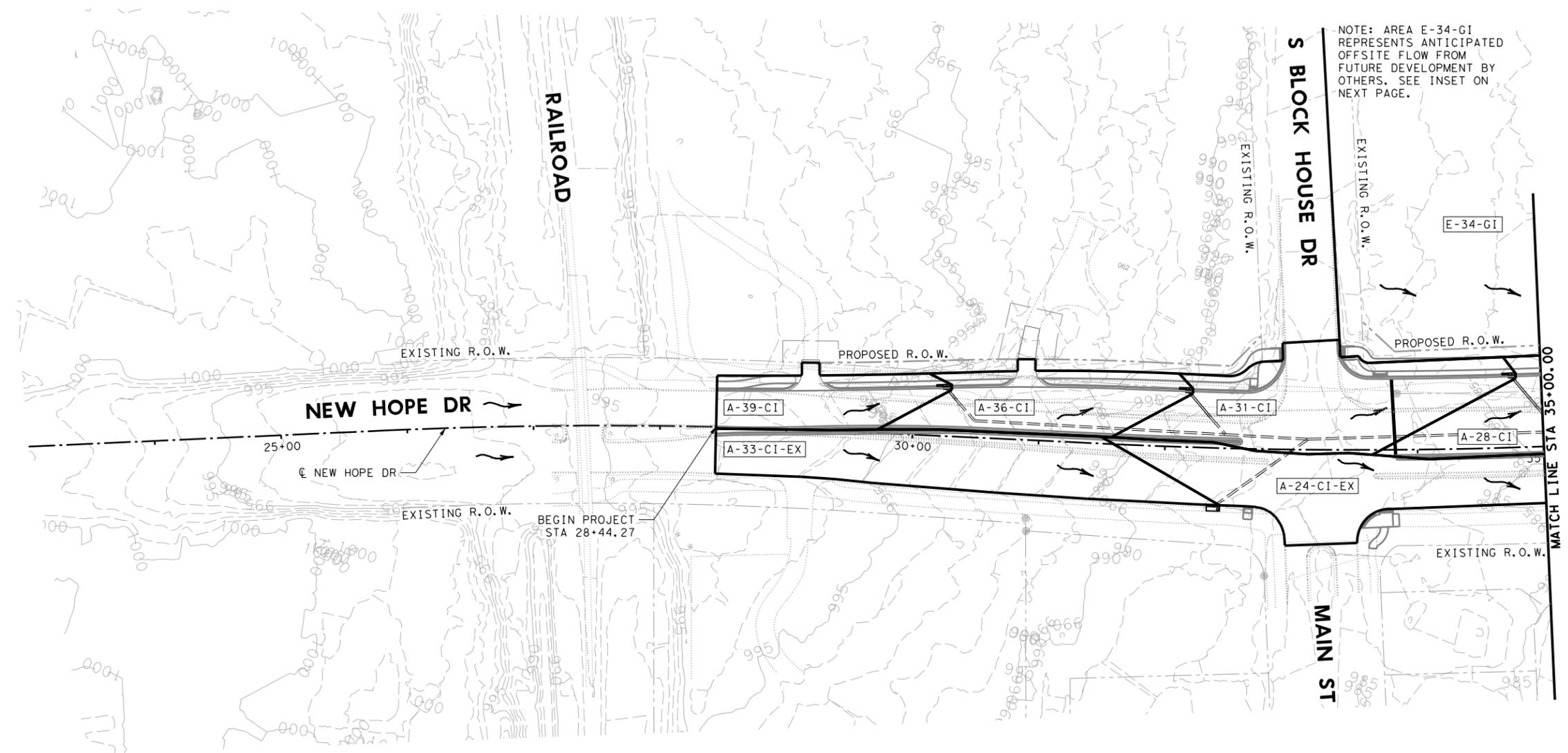
6/14/2024



LJA ENGINEERING, INC
FRN - F-1386

**NEW HOPE DRIVE
EXTERNAL DRAINAGE
AREA MAP**

DESIGN BY: MB	SCALE
DRAWN BY: MB	HORIZONTAL: 1"=800'
CHECKED BY: DB	VERTICAL:
APPROVED BY: DB	SHEET: 1 OF 1
PROJECT NO: 3217-2301	PAGE: 256
DATE:	

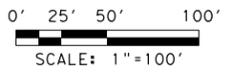


LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- Node symbol NODE TYPE
- Node symbol NODE NUMBER
- Node symbol SYSTEM ID
- EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW

NOTES:

1. AREA HYDROLOGY WAS CALCULATED IN GEOPAK DRAINAGE USING THE RATIONAL METHOD.
2. INTENSITIES WERE CALCULATED USING IDF CURVE PARAMETERS FIT TO ATLAS 14 DATA FOR CITY OF CEDAR PARK.
3. C VALUES BASED ON
 - 0.93 FOR PAVEMENT
 - 0.50 FOR RESIDENTIAL
 - 0.65 FOR COMMERCIAL
 - 0.80 FOR LIGHT INDUSTRY
 - 0.76 FOR APARTMENTS
 - 0.72 FOR MULTI-FAMILY
4. SEE HYDRAULIC DATA SHEETS FOR DRAINAGE AREA CALCULATIONS.
5. PROPOSED CONTOURS DISPLAYED.
6. DRAINAGE AREA NAME MATCHES THE DRAINAGE NODE WHERE FLOW IS APPLIED.



6/14/2024

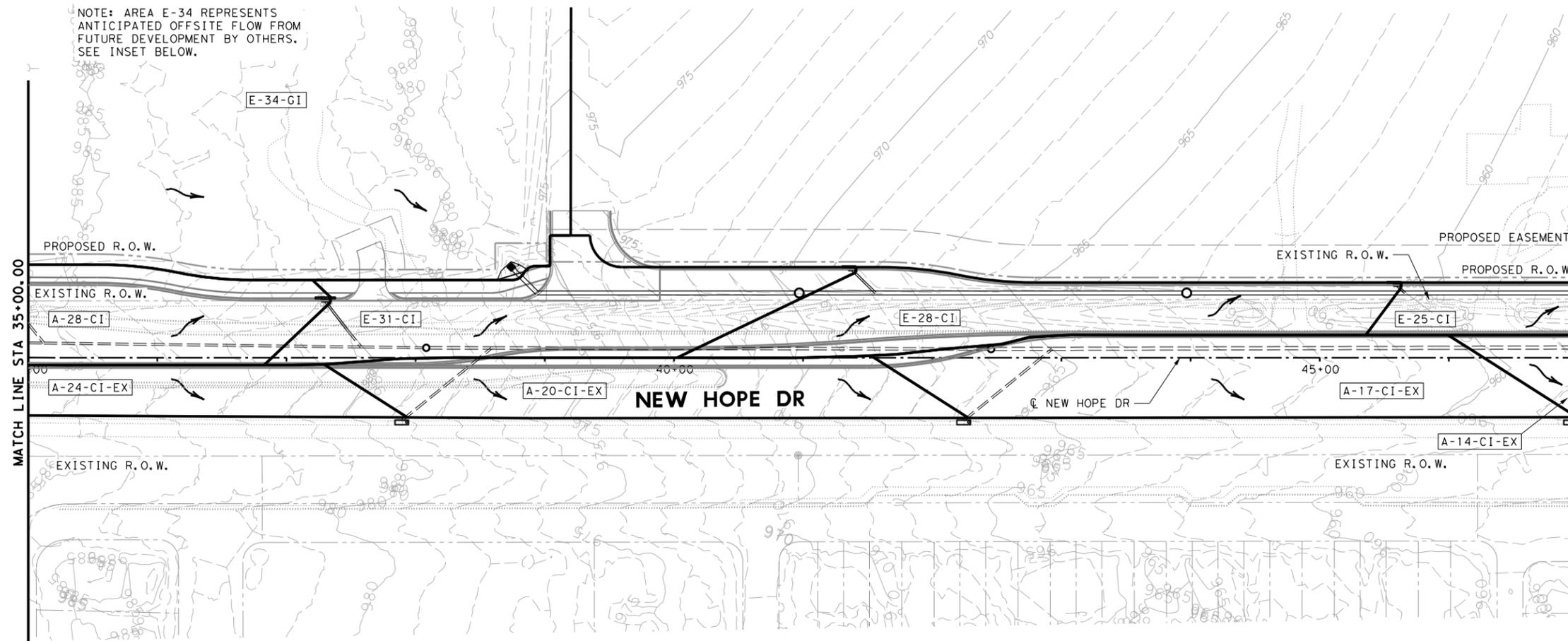


NEW HOPE DRIVE
INTERNAL DRAINAGE
AREA LAYOUT

DESIGN BY: MB
DRAWN BY: MB
CHECKED BY: DB
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL: 1"=100'
VERTICAL: 1"=10'
SHEET: 1 OF 8
PAGE: 257

NOTE: AREA E-34 REPRESENTS ANTICIPATED OFFSITE FLOW FROM FUTURE DEVELOPMENT BY OTHERS. SEE INSET BELOW.

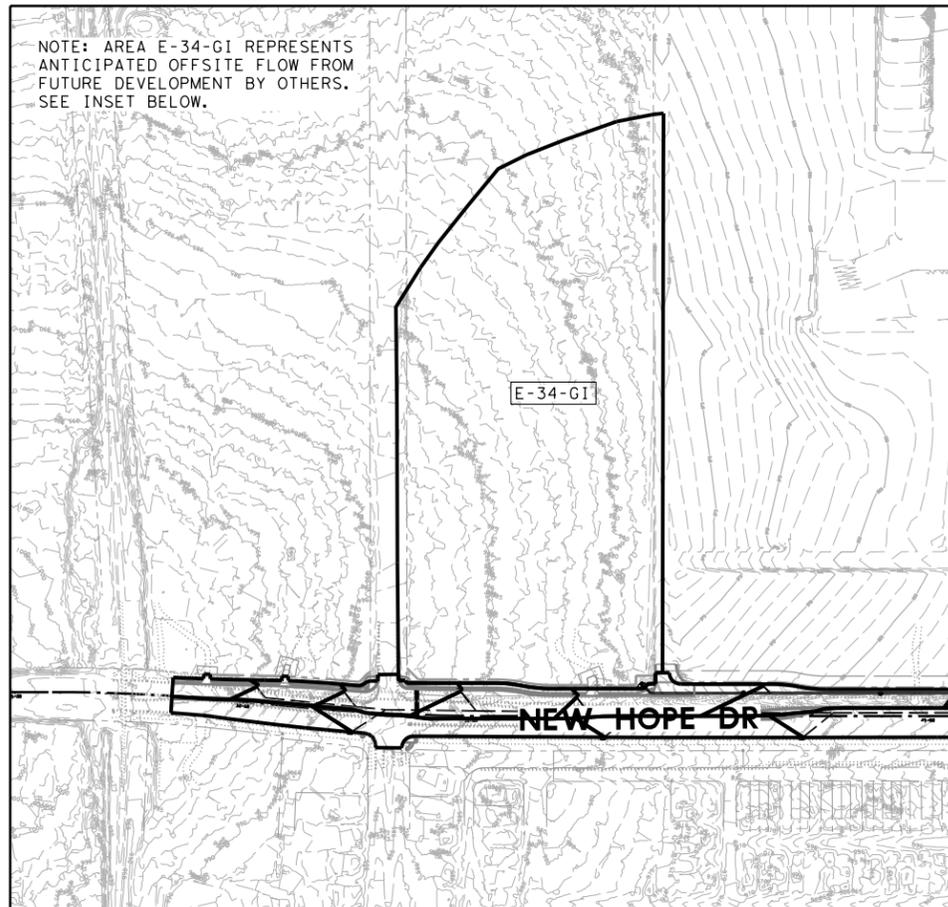
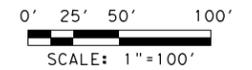


LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- Node Type
- Node Number
- System ID
- EXISTING ROW
- PROPOSED ROW
- EXISTING DRAINAGE EASEMENT
- PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW

NOTES:

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 - 0.72 FOR MULTI-FAMILY
4. SEE HYDRAULIC DATA SHEETS FOR DRAINAGE AREA CALCULATIONS.
5. PROPOSED CONTOURS DISPLAYED.
6. DRAINAGE AREA NAME MATCHES THE DRAINAGE NODE WHERE FLOW IS APPLIED.



NOTE: AREA E-34-GI REPRESENTS ANTICIPATED OFFSITE FLOW FROM FUTURE DEVELOPMENT BY OTHERS. SEE INSET BELOW.



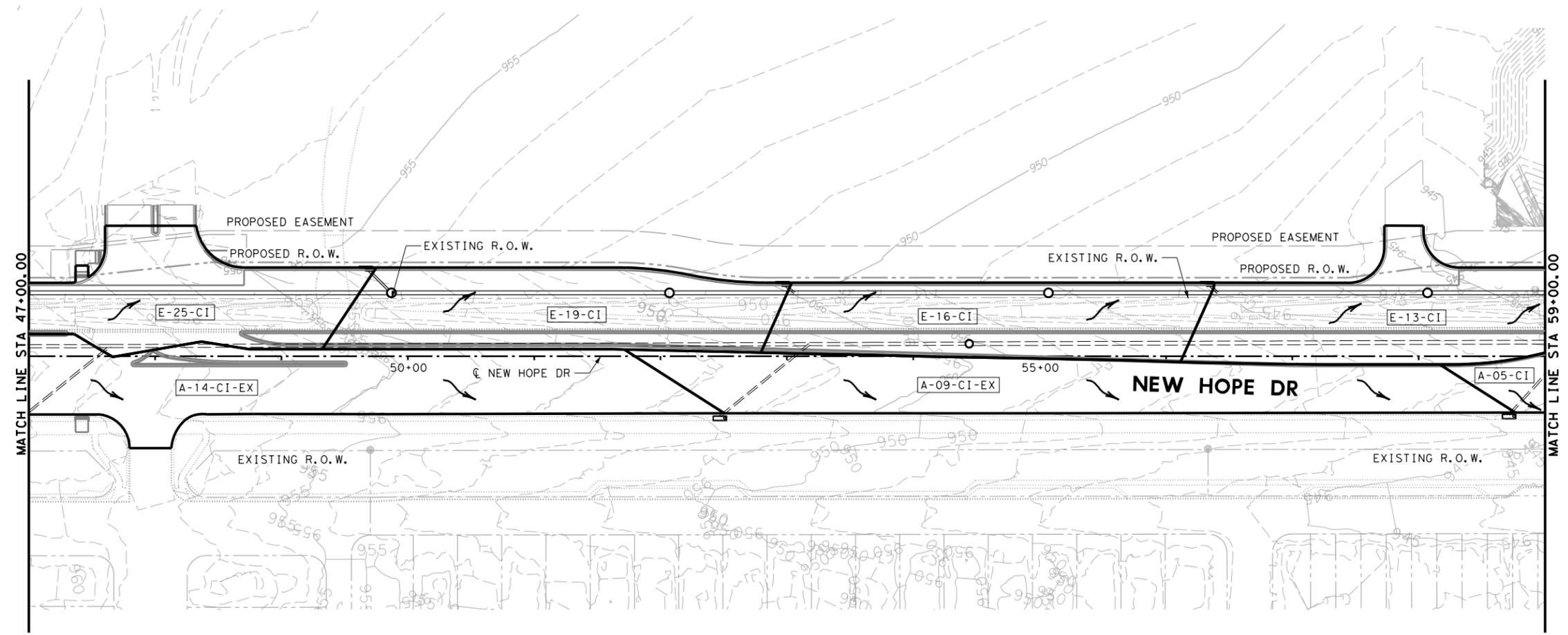
Derek Bohls 6/14/2024



NEW HOPE DRIVE INTERNAL DRAINAGE AREA LAYOUT

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 DRAWN BY: MB
 CHECKED BY: DB
 APPROVED BY:
 PROJECT NO: 3217-2301
 DATE:

SCALE
 HORIZONTAL: 1"=100'
 VERTICAL: 1"=10'
 SHEET: 2 OF 8
 PAGE: 258



LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- NODE TYPE
 NODE NUMBER
 SYSTEM ID
- EXISTING ROW

 PROPOSED ROW

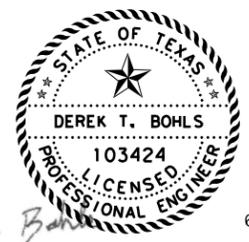
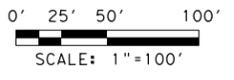
 EXISTING DRAINAGE EASEMENT

 PROPOSED DRAINAGE EASEMENT

 DRAINAGE AREA BOUNDARY

 FLOW DIRECTION ARROW

- NOTES:
1. AREA HYDROLOGY WAS CALCULATED IN GEOPAK DRAINAGE USING THE RATIONAL METHOD.
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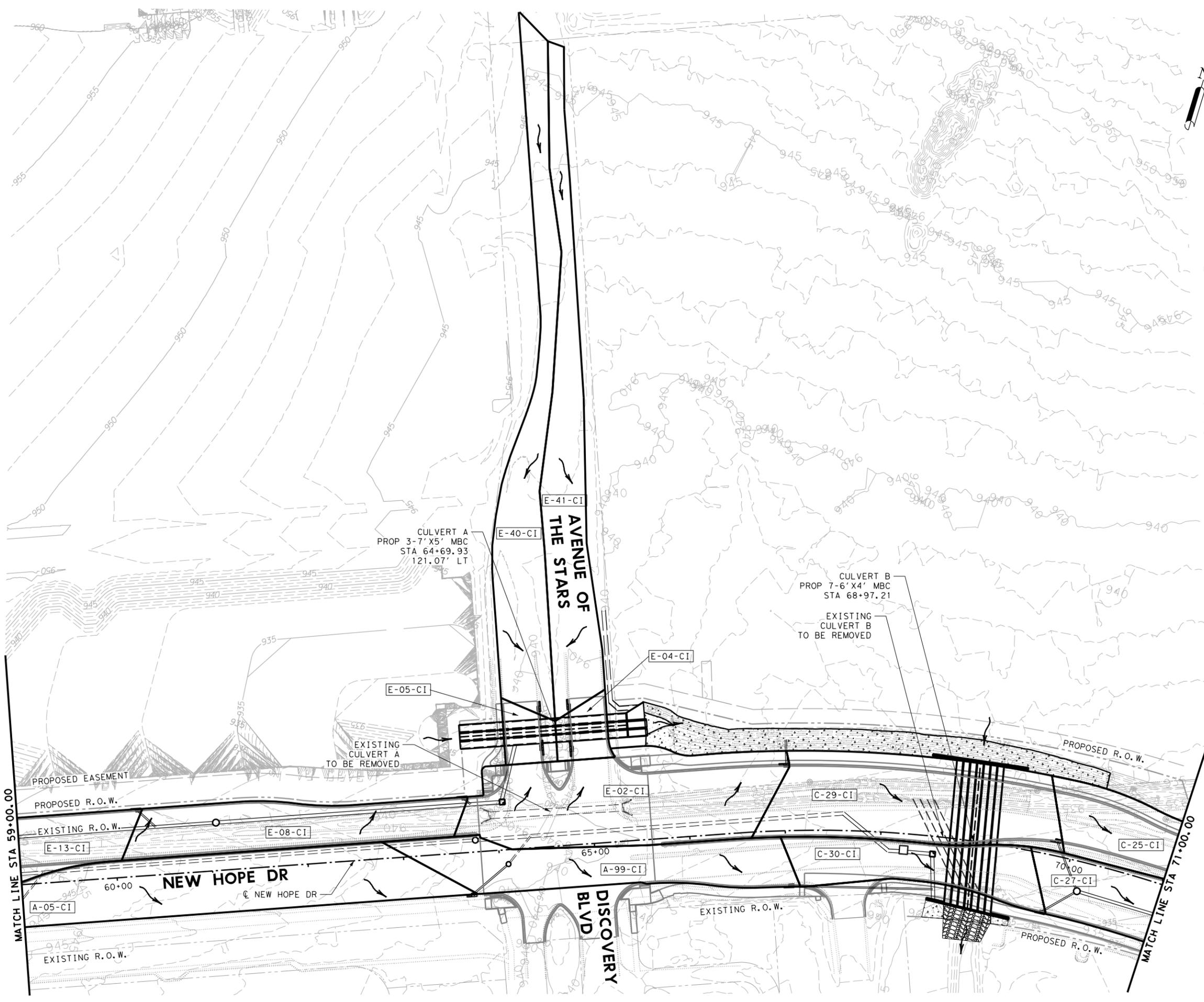


6/14/2024



NEW HOPE DRIVE
INTERNAL DRAINAGE
AREA LAYOUT

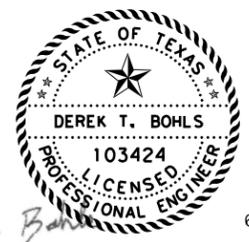
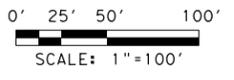
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DRAWN BY: MB	HORIZONTAL: 1"=100'
CHECKED BY: DB	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 3 OF 8
PROJECT NO: 3217-2301	PAGE: 259
DATE:	



LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- Node symbol NODE TYPE
- Node symbol NODE NUMBER
- Node symbol SYSTEM ID
- EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW

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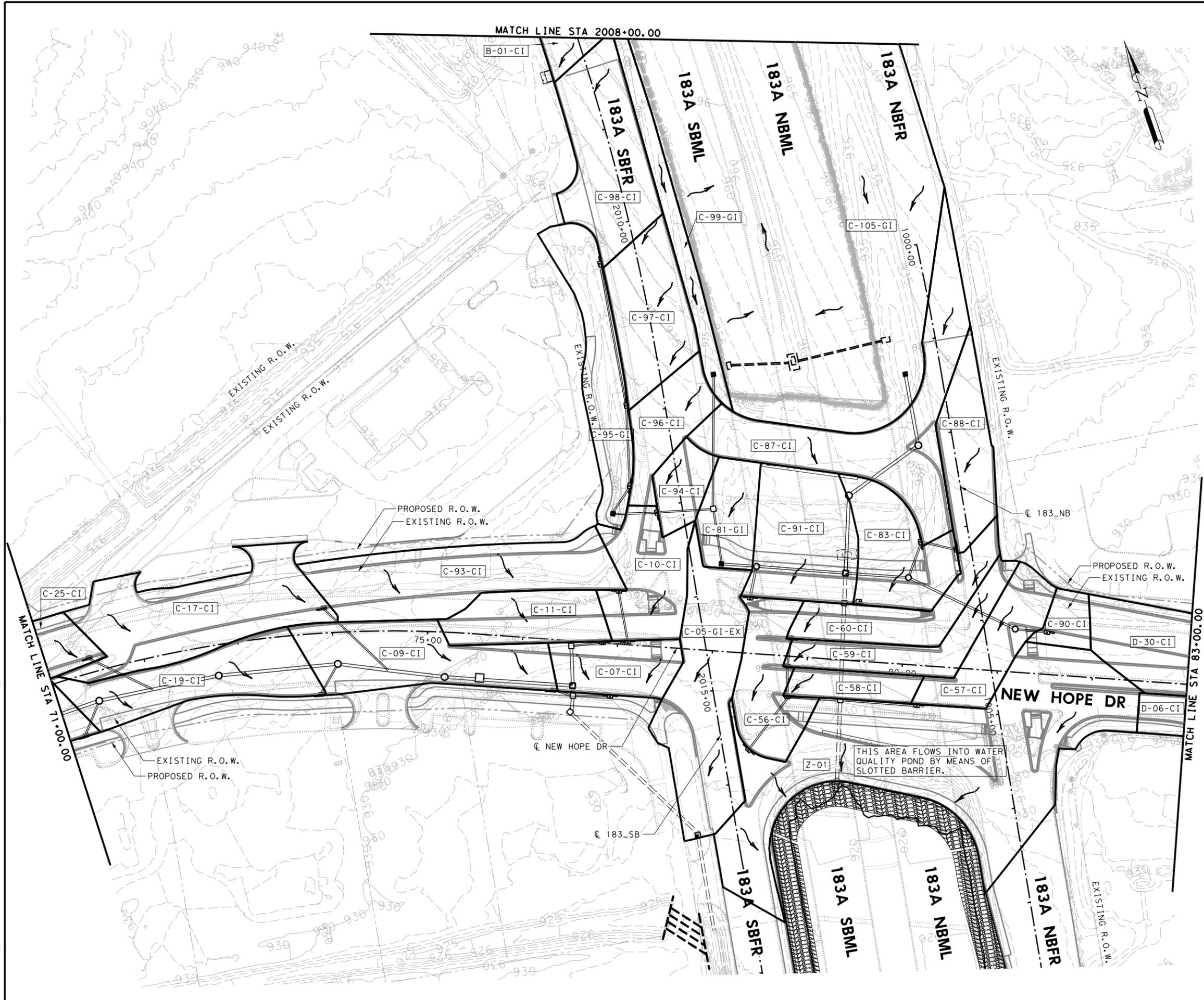
6/14/2024



NEW HOPE DRIVE
INTERNAL DRAINAGE
AREA LAYOUT

DESIGN BY: MB
 DRAWN BY: MB
 CHECKED BY: DB
 APPROVED BY:
 PROJECT NO: 3217-2301
 DATE:

SCALE
 HORIZONTAL: 1"=100'
 VERTICAL: 1"=10'
 SHEET: 4 OF 8
 PAGE: 260

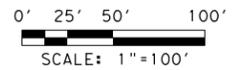


LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- Node Type, Node Number, System ID (represented by a node symbol)
- EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW

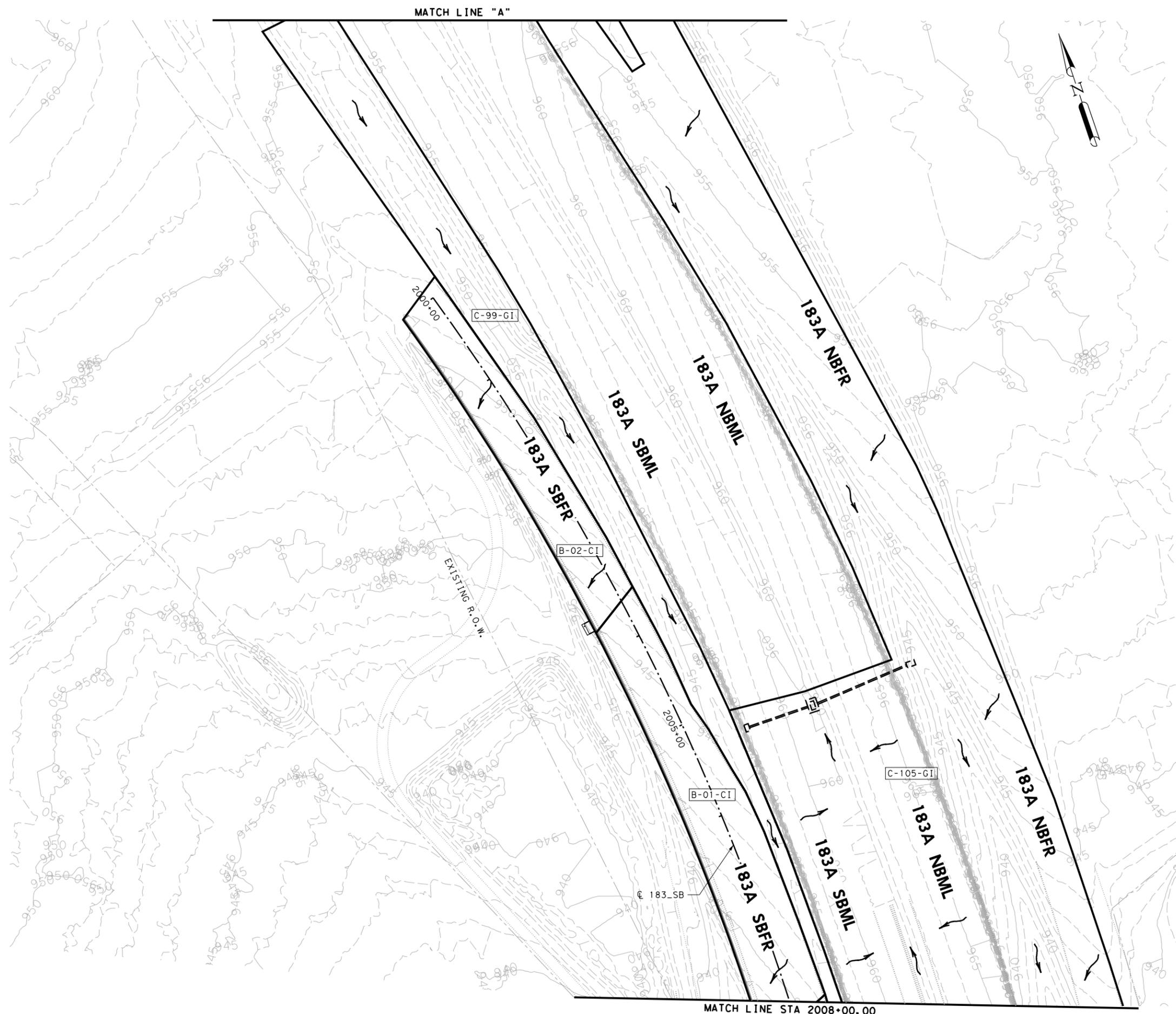
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6. DRAINAGE AREA NAME MATCHES THE DRAINAGE NODE WHERE FLOW IS APPLIED.



NEW HOPE DRIVE
INTERNAL DRAINAGE
AREA LAYOUT

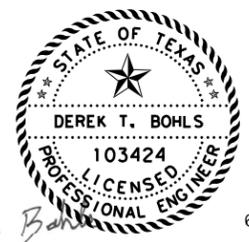
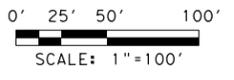
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CHECKED BY: DB	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 5 OF 8
PROJECT NO: 3217-2301	PAGE: 261
DATE:	



LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- Node symbol NODE TYPE
- Node symbol NODE NUMBER
- Node symbol SYSTEM ID
- EXISTING ROW
- PROPOSED ROW
- EXISTING DRAINAGE EASEMENT
- PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW

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 5. PROPOSED CONTOURS DISPLAYED.
 6. DRAINAGE AREA NAME MATCHES THE DRAINAGE NODE WHERE FLOW IS APPLIED.



Derek Bohls 6/14/2024



NEW HOPE DRIVE
INTERNAL DRAINAGE
AREA LAYOUT

DESIGN BY: MB
DRAWN BY: MB
CHECKED BY: DB
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

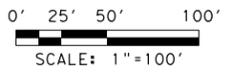
SCALE
HORIZONTAL: 1"=100'
VERTICAL: 1"=10'
SHEET: 6 OF 8
PAGE: 262



LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- Node Type
Node Number
System ID
- EXISTING ROW
- - - PROPOSED ROW
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY
- FLOW DIRECTION ARROW

- NOTES:**
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 4. SEE HYDRAULIC DATA SHEETS FOR DRAINAGE AREA CALCULATIONS.
 5. PROPOSED CONTOURS DISPLAYED.
 6. DRAINAGE AREA NAME MATCHES THE DRAINAGE NODE WHERE FLOW IS APPLIED.

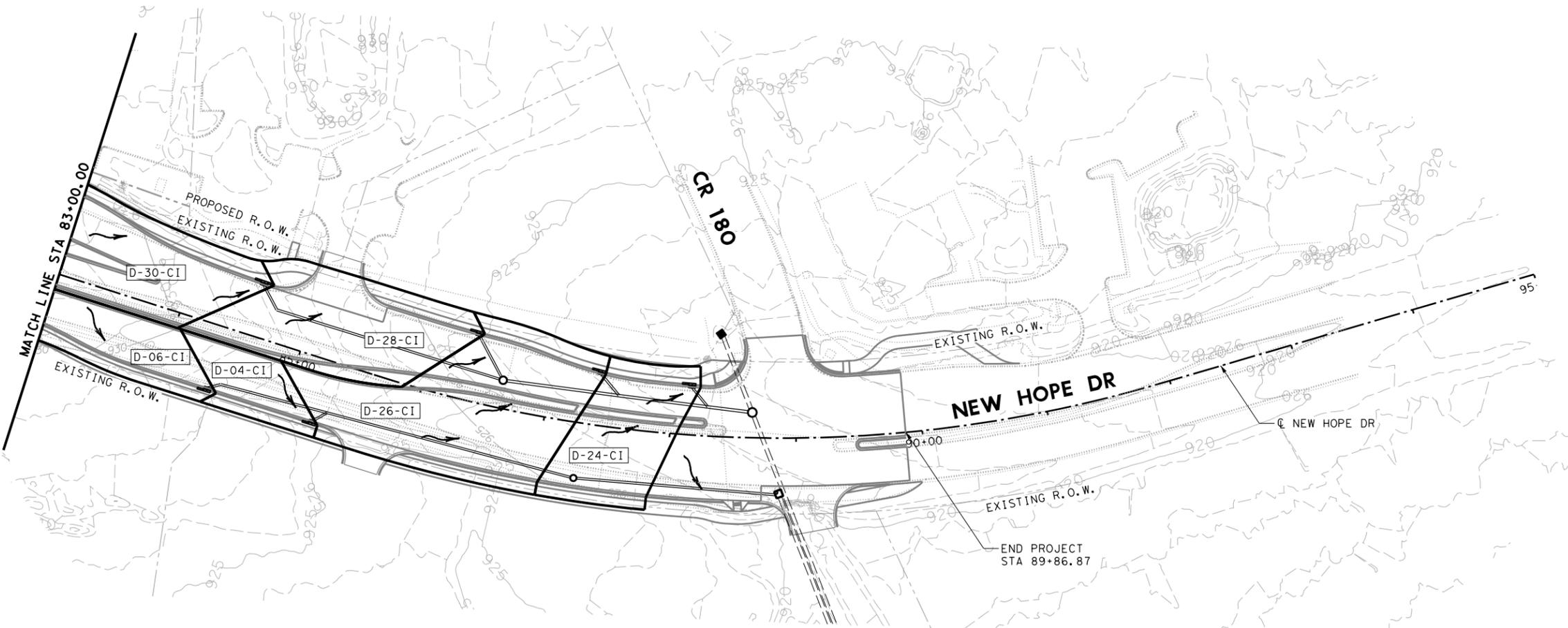


**NEW HOPE DRIVE
INTERNAL DRAINAGE
AREA LAYOUT**

DESIGN BY: MB
 DRAWN BY: MB
 CHECKED BY: DB
 APPROVED BY:
 PROJECT NO: 3217-2301
 DATE:

SCALE
 HORIZONTAL: 1"=100'
 VERTICAL: 1"=10'
 SHEET: 7 OF 8
 PAGE: 263

MATCH LINE "A"



LEGEND

- X-XX-XX INTERNAL DRAINAGE AREA ID
- NODE TYPE
 NODE NUMBER
 SYSTEM ID
- EXISTING ROW

 PROPOSED ROW
- EXISTING DRAINAGE EASEMENT

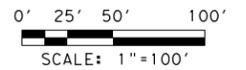
 PROPOSED DRAINAGE EASEMENT
- DRAINAGE AREA BOUNDARY

 FLOW DIRECTION ARROW



NOTES:

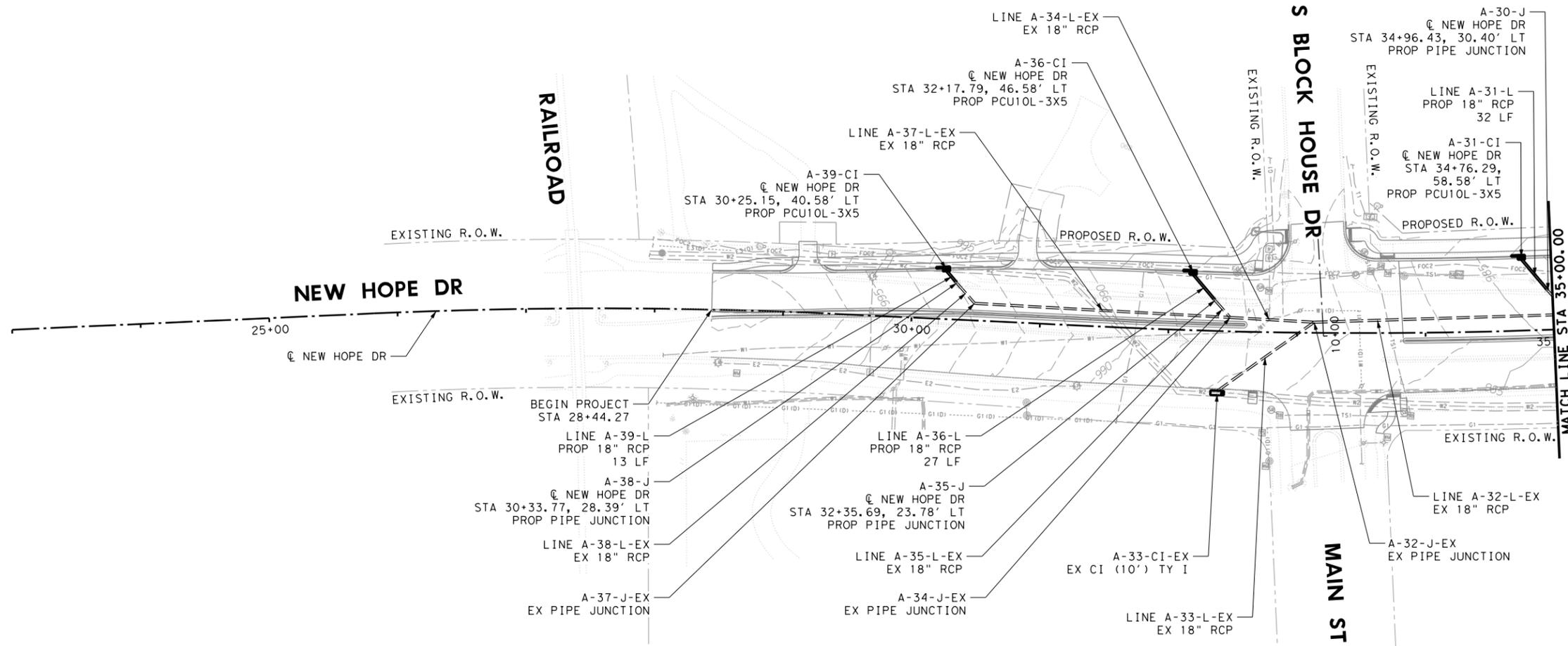
1. AREA HYDROLOGY WAS CALCULATED IN GEOPAK DRAINAGE USING THE RATIONAL METHOD.
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 - 0.76 FOR APARTMENTS
 - 0.72 FOR MULTI-FAMILY
4. SEE HYDRAULIC DATA SHEETS FOR DRAINAGE AREA CALCULATIONS.
5. PROPOSED CONTOURS DISPLAYED.
6. DRAINAGE AREA NAME MATCHES THE DRAINAGE NODE WHERE FLOW IS APPLIED.



NEW HOPE DRIVE
INTERNAL DRAINAGE
AREA LAYOUT

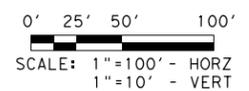
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SCALE
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 VERTICAL: 1"=10'
 SHEET: 8 OF 8
 PAGE: 264

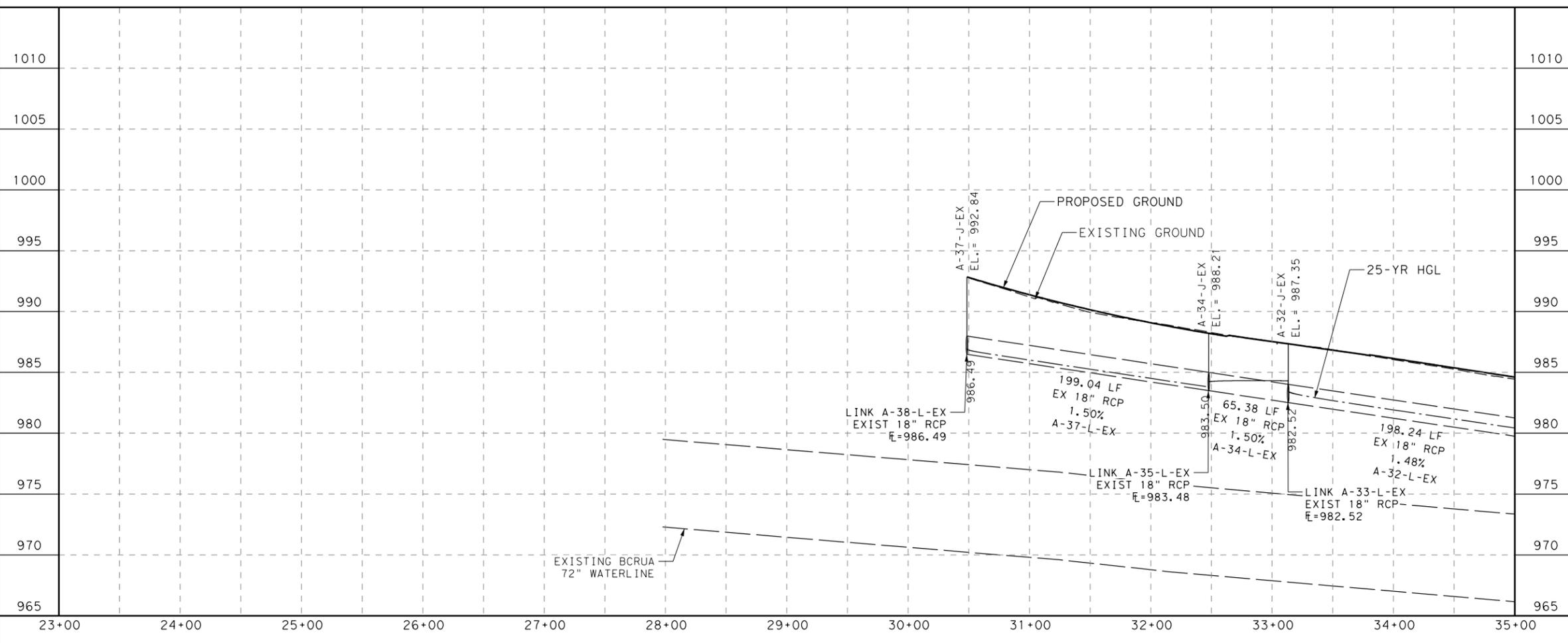


LEGEND

	EXISTING R.O.W.
	PROPOSED R.O.W.
	EXISTING DRAINAGE EASEMENT
	PROPOSED DRAINAGE EASEMENT
	EXISTING UTILITY
	EXISTING PLANIMETRICS
	PROPOSED PLANIMETRICS
	PROPOSED DRAINAGE

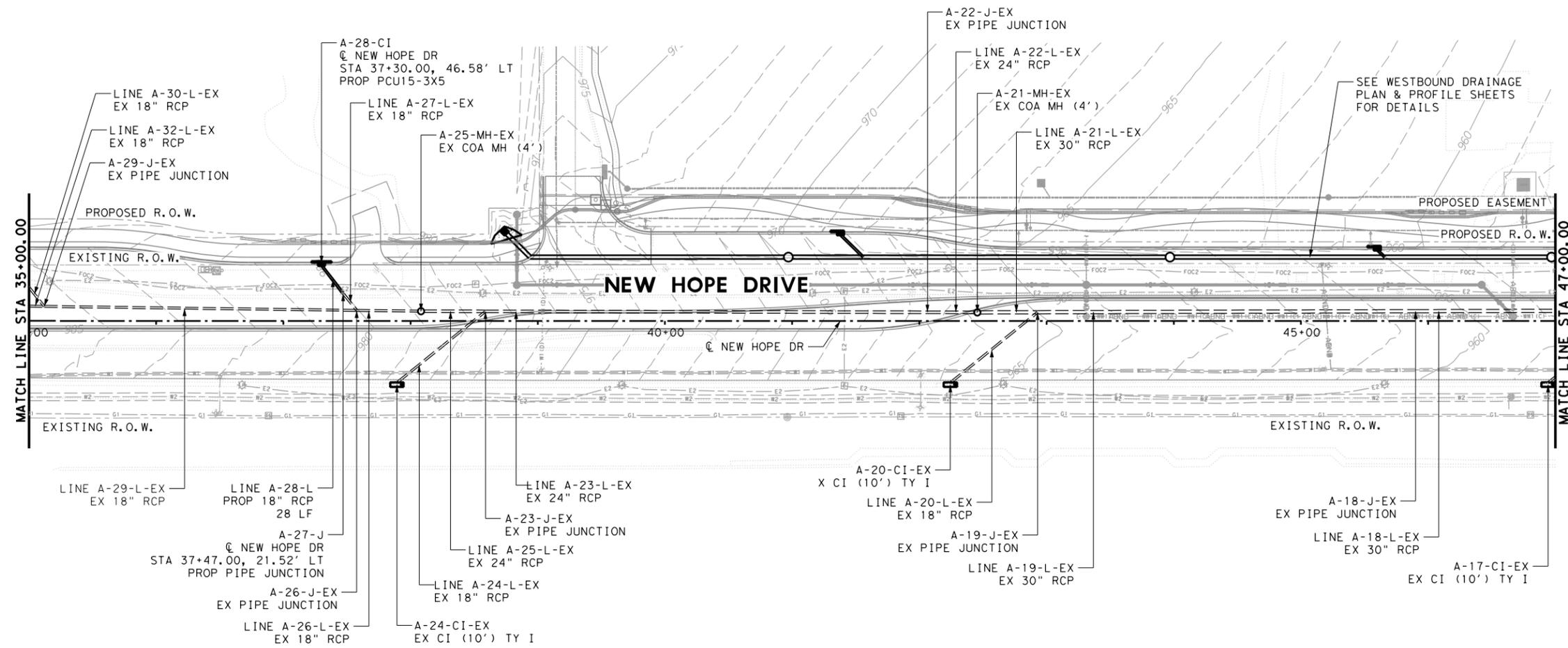


- NOTES:**
- REFER TO MISC DRAINAGE DETAILS SHEET FOR CONTROL POINTS OF ALL DRAINAGE STRUCTURES.
 - ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III UNLESS OTHERWISE NOTED.
 - REFER TO STORM SEWER LATERAL SHEETS FOR ADDITIONAL INFORMATION.
 - THE LOCATION AND ELEVATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
 - SEE MISCELLANEOUS DRAINAGE DETAILS FOR CONCRETE AND STONE RIPRAP DETAILS.



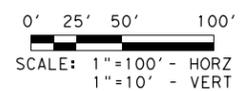

**NEW HOPE DRIVE
EB DRAINAGE PLAN &
PROFILE**
BEGIN TO STA 35+00.00

DESIGN BY: MB	SCALE
DRAWN BY: MB	HORIZONTAL: 1"=100'
CHECKED BY: DB	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 1 OF 6
PROJECT NO: 3217-2301	PAGE: 265
DATE:	

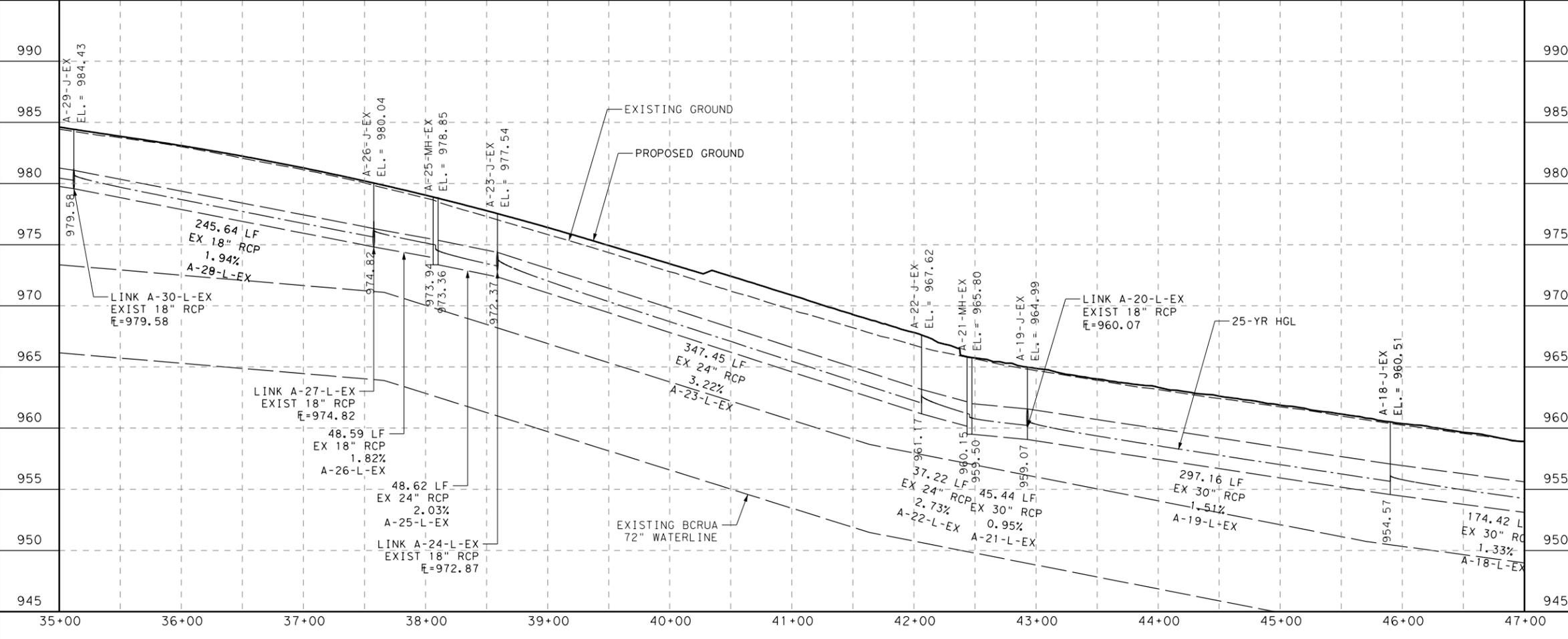


LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE



- NOTES:**
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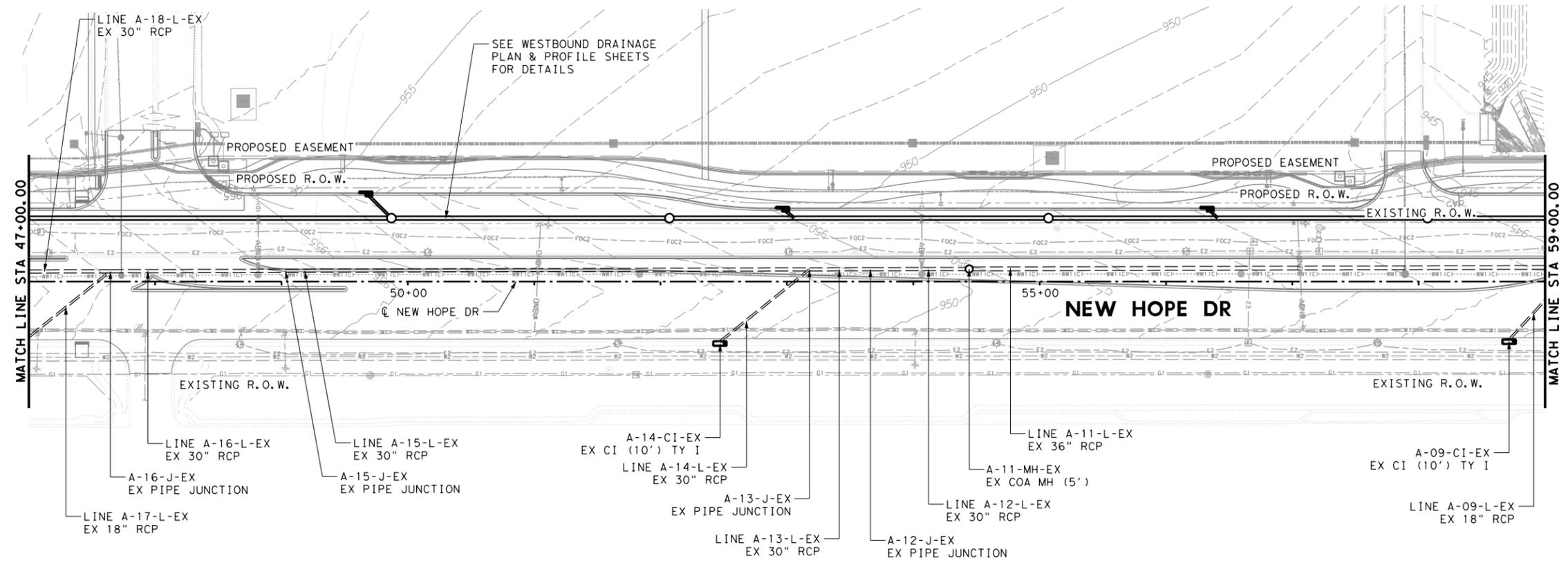



**NEW HOPE DRIVE
EB DRAINAGE PLAN &
PROFILE**
STA 35+00.00 TO STA 47+00.00

DESIGN BY: MB	SCALE
DRAWN BY: MB	HORIZONTAL: 1"=100'
CHECKED BY: DB	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 2 OF 6
PROJECT NO: 3217-2301	PAGE: 266
DATE:	

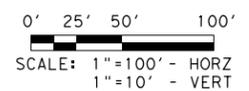
100% SUBMITTAL

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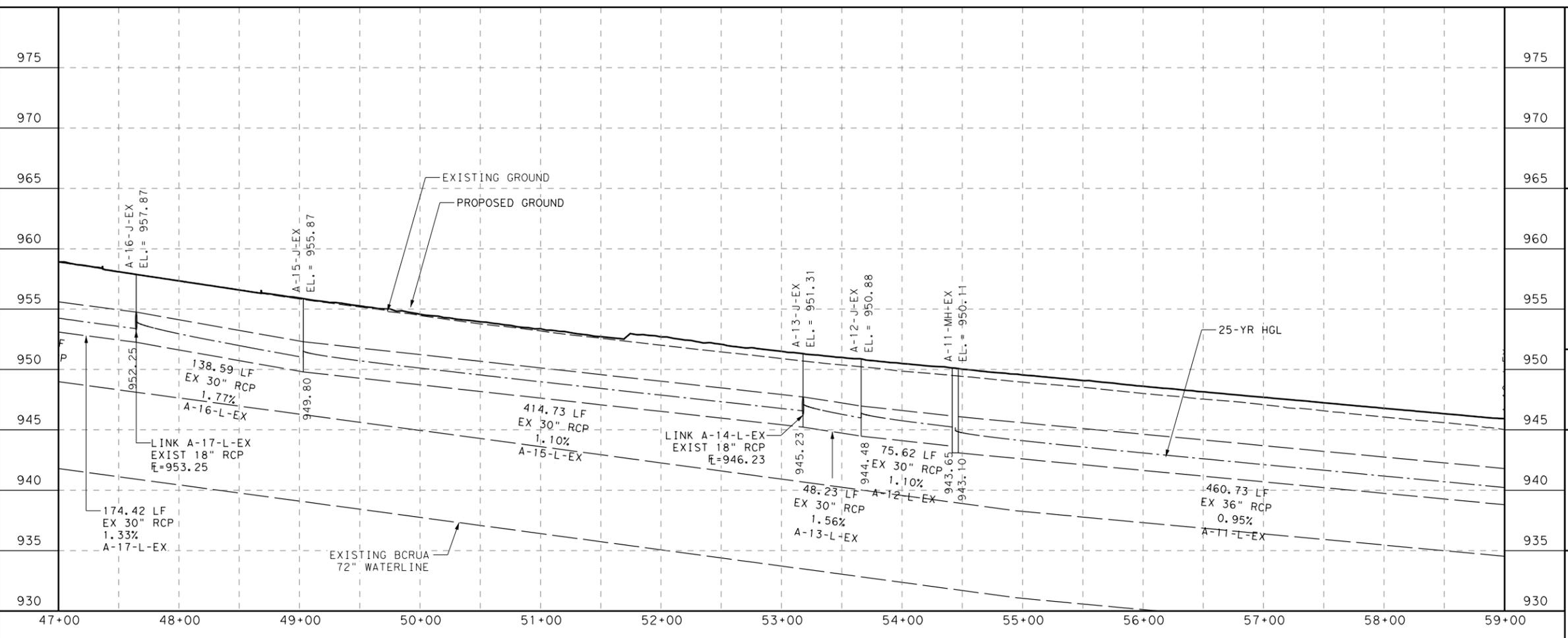


LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- EXISTING DRAINAGE EASEMENT
- PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE



- NOTES:**
- REFER TO MISC DRAINAGE DETAILS SHEET FOR CONTROL POINTS OF ALL DRAINAGE STRUCTURES.
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 - THE LOCATION AND ELEVATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
 - SEE MISCELLANEOUS DRAINAGE DETAILS FOR CONCRETE AND STONE RIPRAP DETAILS.

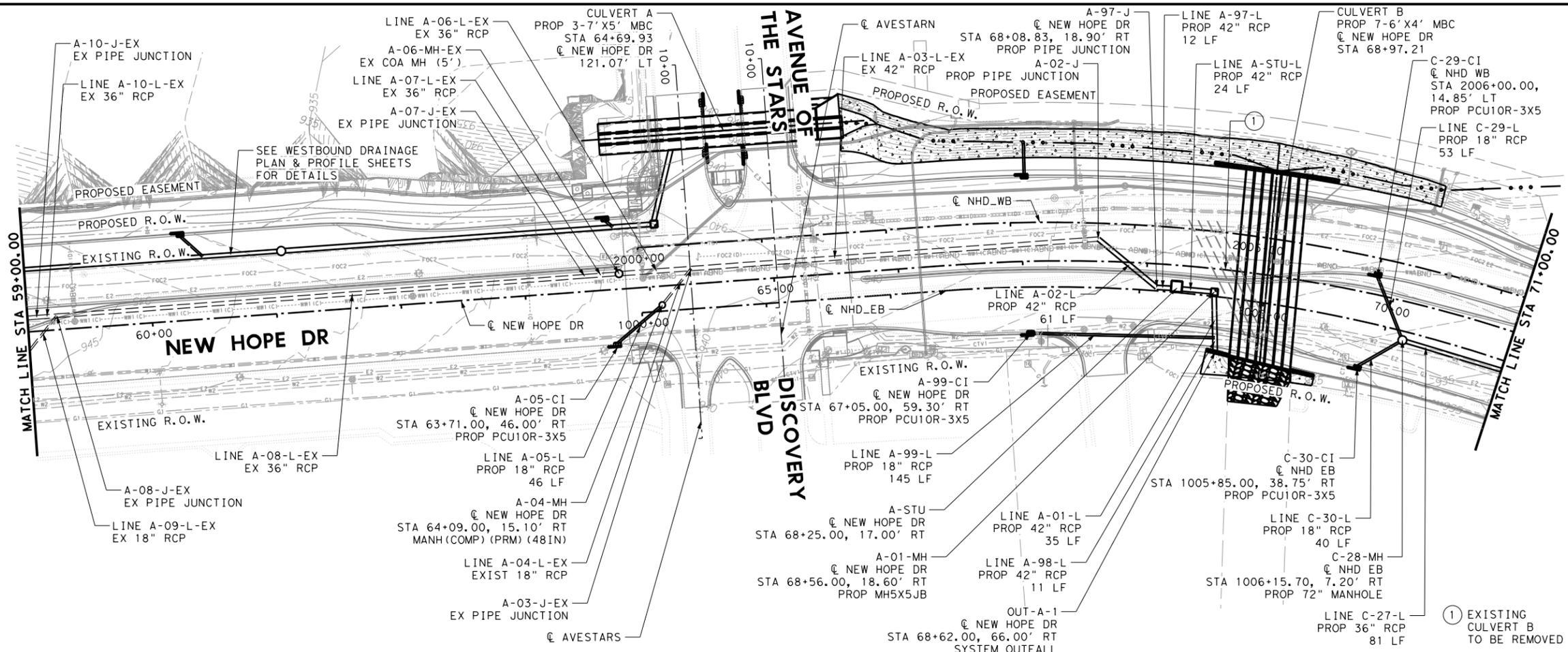



**NEW HOPE DRIVE
EB DRAINAGE PLAN &
PROFILE**
STA 47+00.00 TO STA 59+00.00

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DRAWN BY: MB	VERTICAL: 1"=10'
CHECKED BY: DB	SHEET: 3 OF 6
APPROVED BY:	PAGE: 267
PROJECT NO: 3217-2301	
DATE:	

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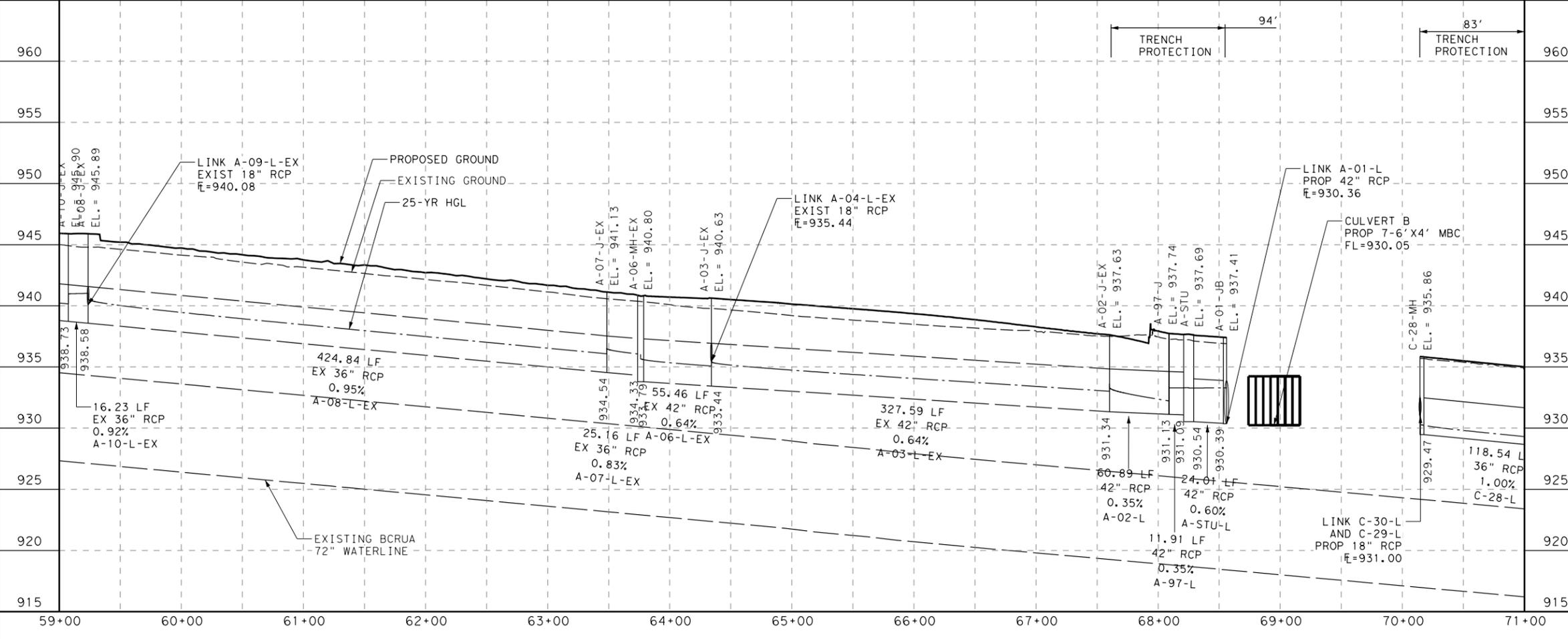
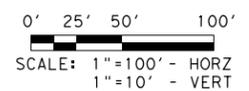
LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

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1 EXISTING CULVERT B TO BE REMOVED



STATE OF TEXAS
DEREK T. BOHLS
103424
LICENSED PROFESSIONAL ENGINEER
6/14/2024



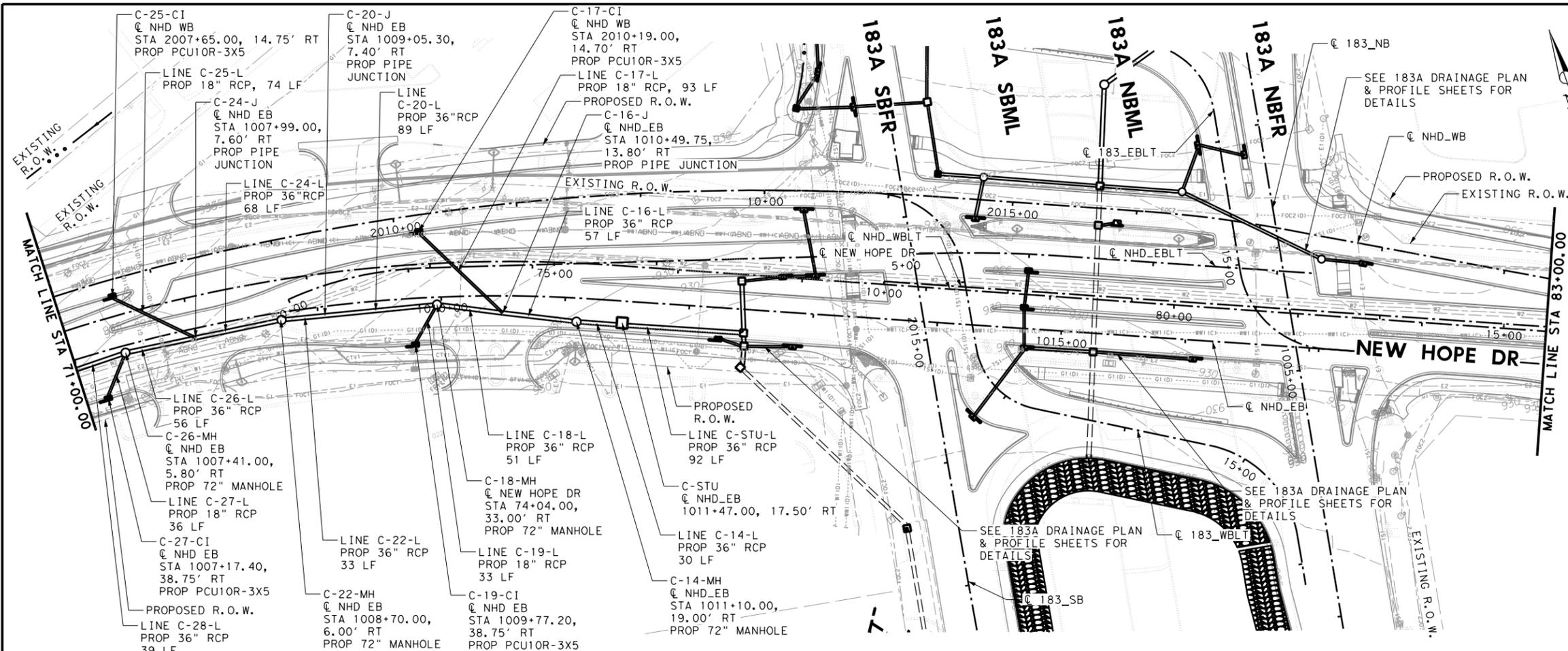
LJA ENGINEERING, INC
FRN-F-1386

**NEW HOPE DRIVE
EB DRAINAGE PLAN &
PROFILE**
STA 59+00.00 TO STA 71+00.00

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DRAWN BY: MB	VERTICAL: 1"=10'
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DATE:	

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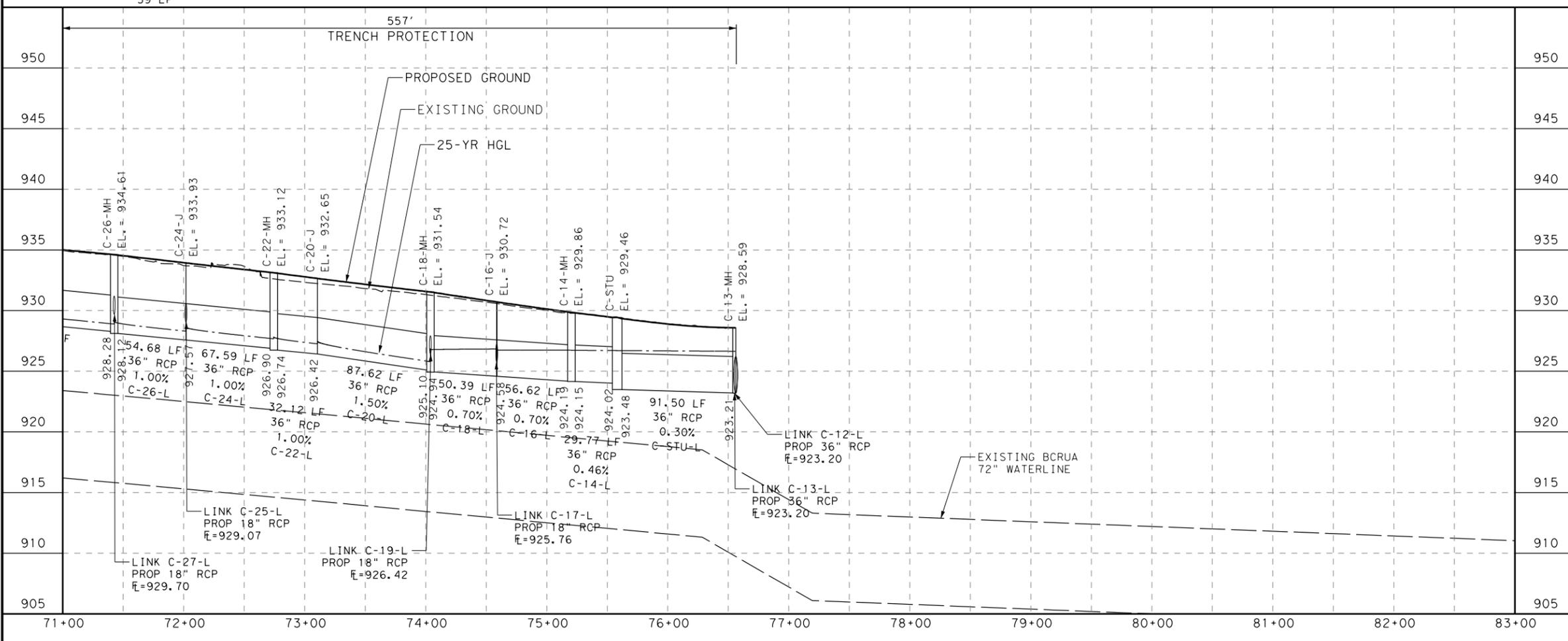


LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

0' 25' 50' 100'
SCALE: 1"=100' - HORZ
1"=10' - VERT

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DEREK T. BOHLS
103424
LICENSED PROFESSIONAL ENGINEER

Derek Bohls 6/14/2024

CEDAR PARK

LJA ENGINEERING, INC
FRN-F-1386

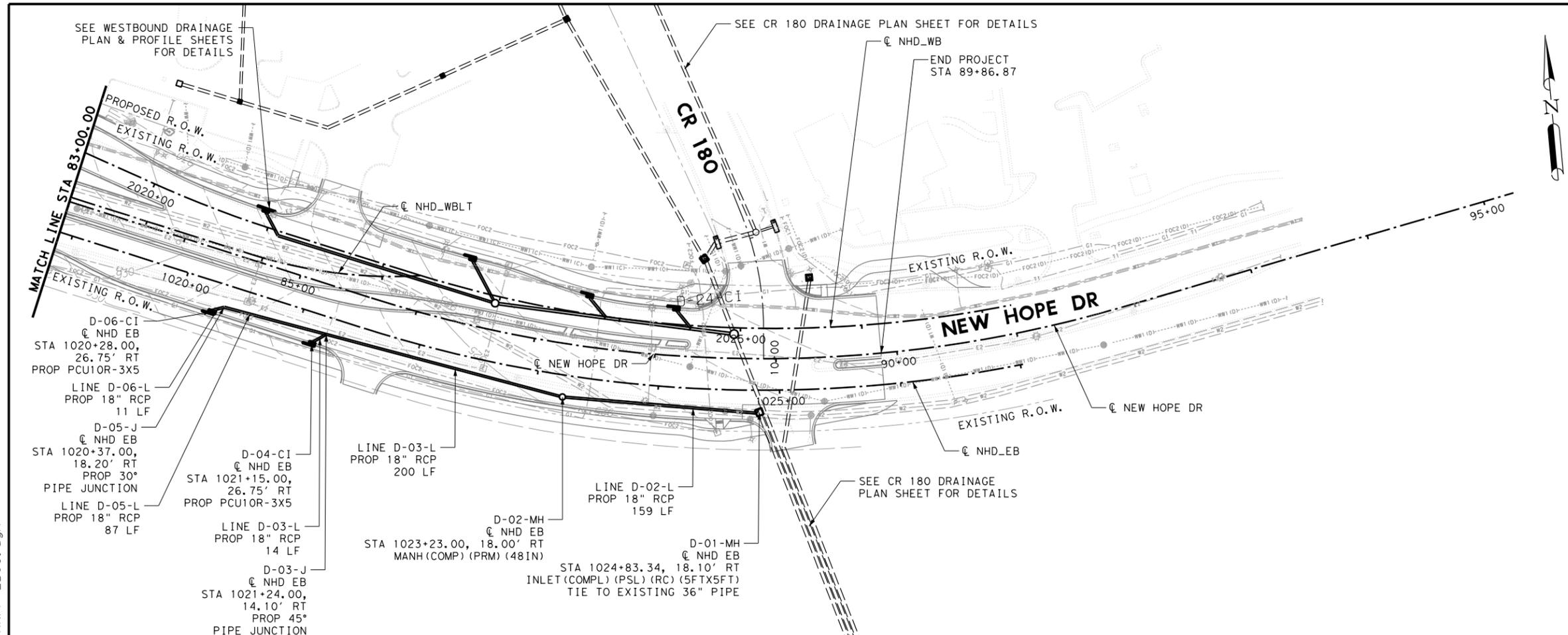
**NEW HOPE DRIVE
EB DRAINAGE PLAN &
PROFILE**

STA 71+00.00 TO STA 83+00.00

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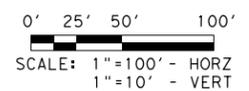
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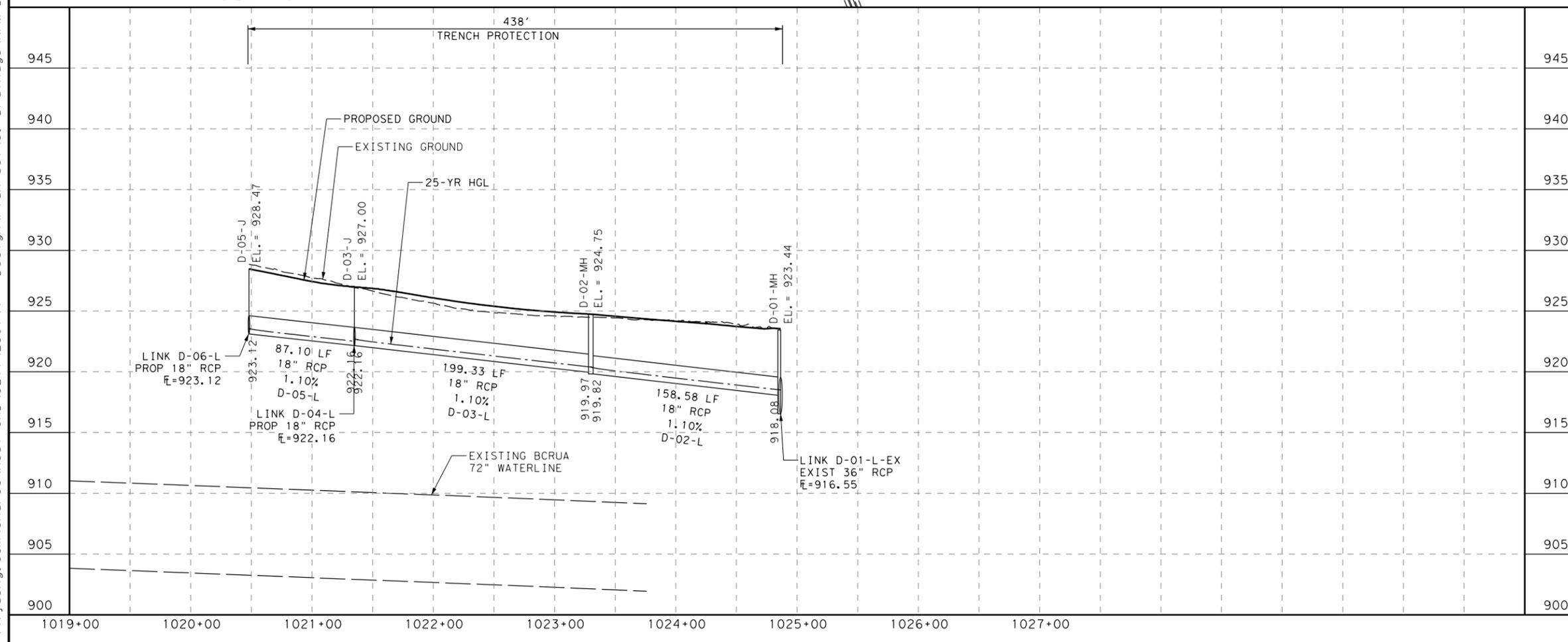


LEGEND

	EXISTING R.O.W.
	PROPOSED R.O.W.
	EXISTING DRAINAGE EASEMENT
	PROPOSED DRAINAGE EASEMENT
	EXISTING UTILITY
	EXISTING PLANIMETRICS
	PROPOSED PLANIMETRICS
	PROPOSED DRAINAGE

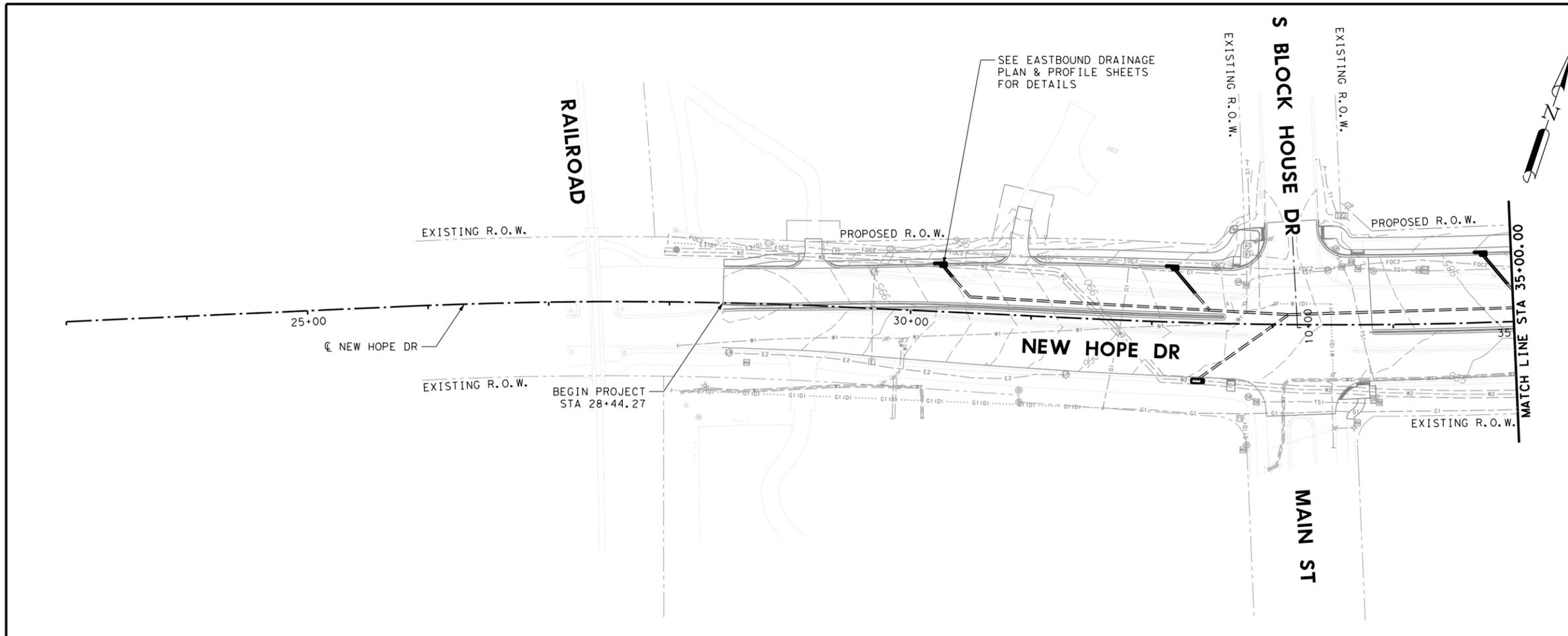


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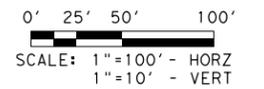

**NEW HOPE DRIVE
EB DRAINAGE PLAN &
PROFILE**
STA 83+00.00 TO END

DESIGN BY: MB	SCALE
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CHECKED BY: DB	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 6 OF 6
PROJECT NO: 3217-2301	PAGE: 270
DATE:	

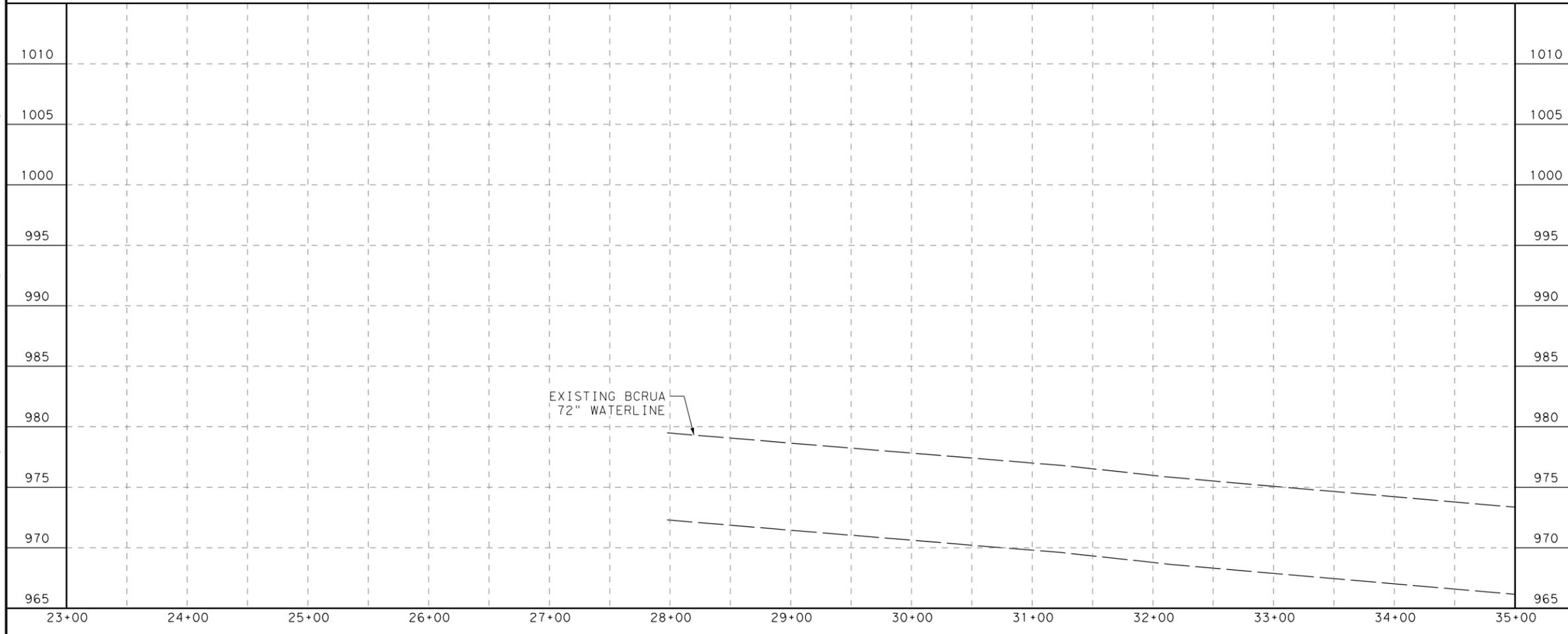


LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

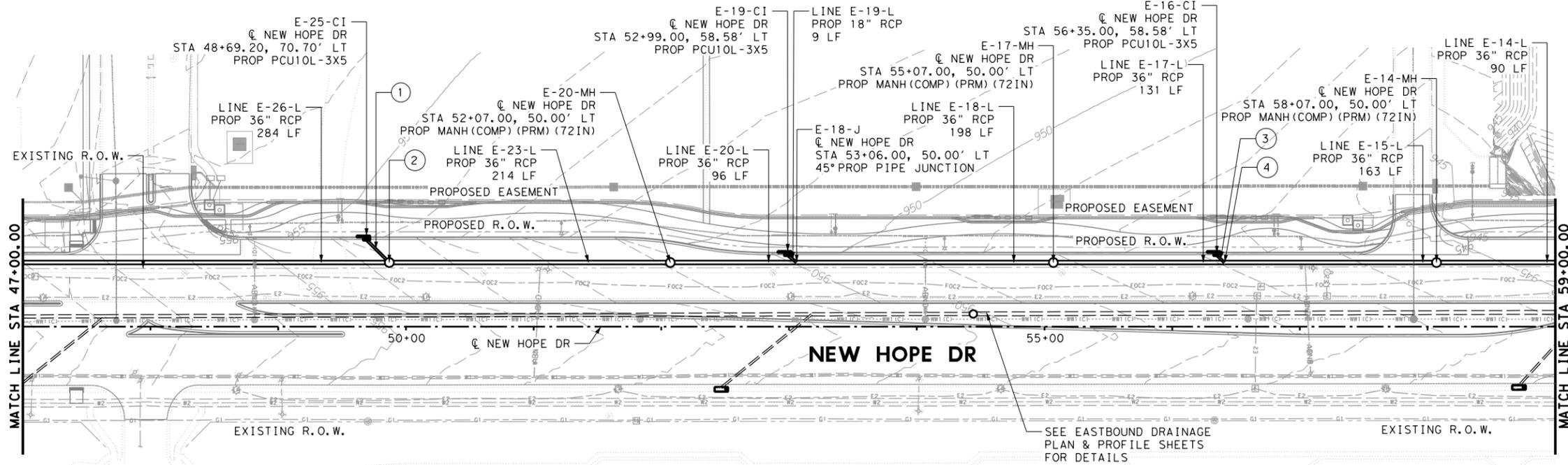


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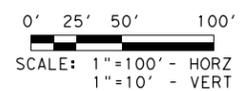
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NEW HOPE DRIVE WB DRAINAGE PLAN & PROFILE BEGIN TO STA 35+00.00		
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100% SUBMITTAL



LEGEND

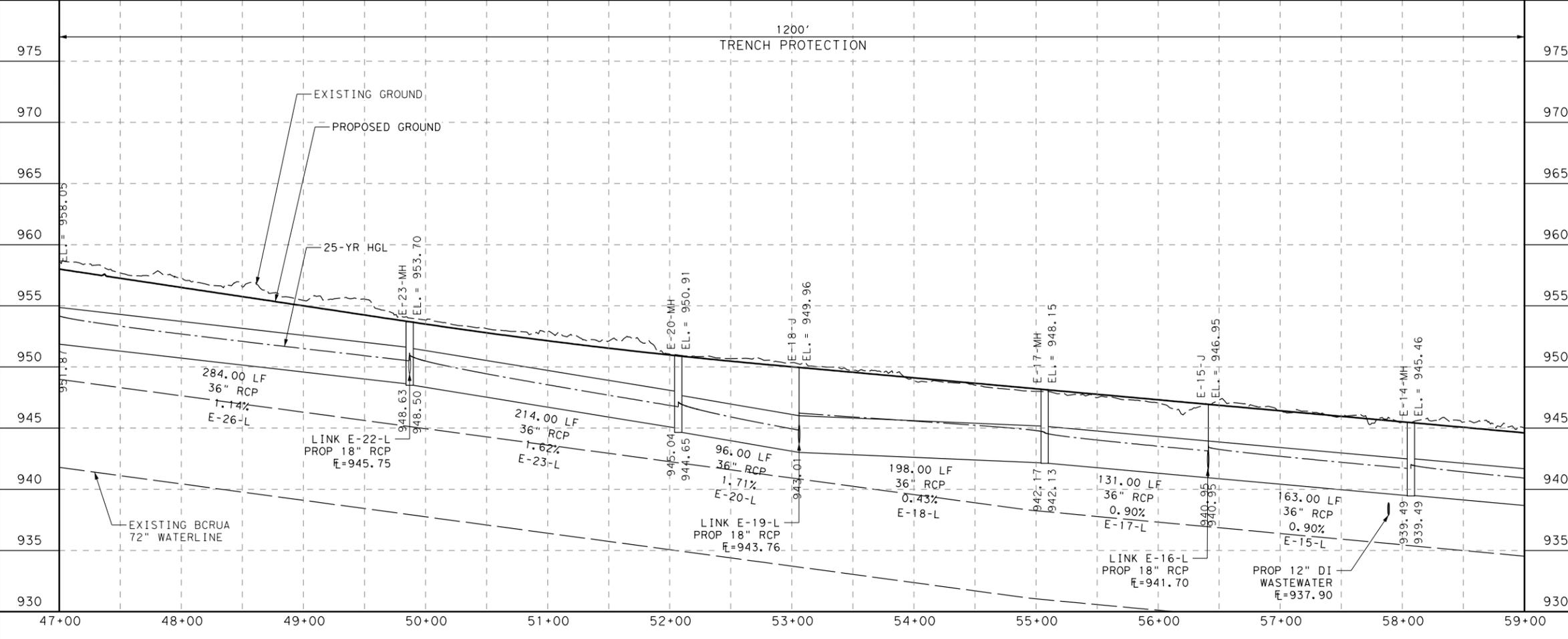
- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE



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- ① LINE E-25-L
PROP 18" RCP
22 LF
- ② E-23-MH
NEW HOPE DR
STA 49+87.00, 50.00' LT
PROP MANH (COMP) (PRM) (72IN)
- ③ LINE E-16-L
PROP 18" RCP
9 LF
- ④ E-15-J
NEW HOPE DR
STA 56+41.00, 50.00' LT
43° PROP PIPE JUNCTION

6/14/2024 3:09:49 PM I:\3217\2301\4 - Design\Plan Set\5. Drainage\FM*DRNP*WB03.dgn



STATE OF TEXAS
DEREK T. BOHLS
103424
LICENSED PROFESSIONAL ENGINEER
Derek Bohls
6/14/2024

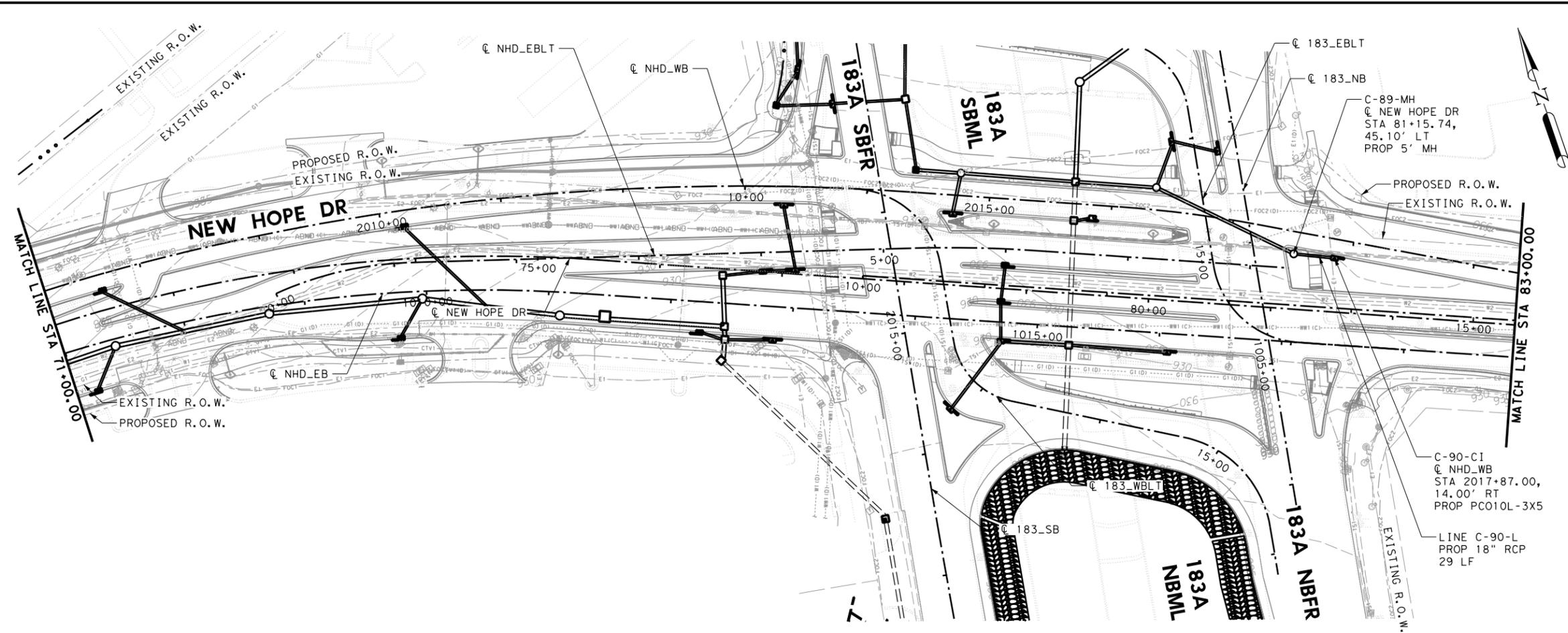


LJA ENGINEERING, INC
FRN-F-1386

**NEW HOPE DRIVE
WB DRAINAGE PLAN &
PROFILE**
STA 47+00.00 TO STA 59+00.00

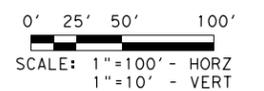
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CHECKED BY: DB	SHEET: 3 OF 6
APPROVED BY:	PAGE: 273
PROJECT NO: 3217-2301	
DATE:	

100% SUBMITTAL



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE



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950		950
945		945
940		940
935	NOTE: SEE 183A WB PROFILE SHEET	935
930		930
925		925
920		920
915		915
910		910
905		905
2008+00	2009+00	2010+00
2011+00	2012+00	2013+00
2014+00	2015+00	2016+00
2017+00	2018+00	2019+00

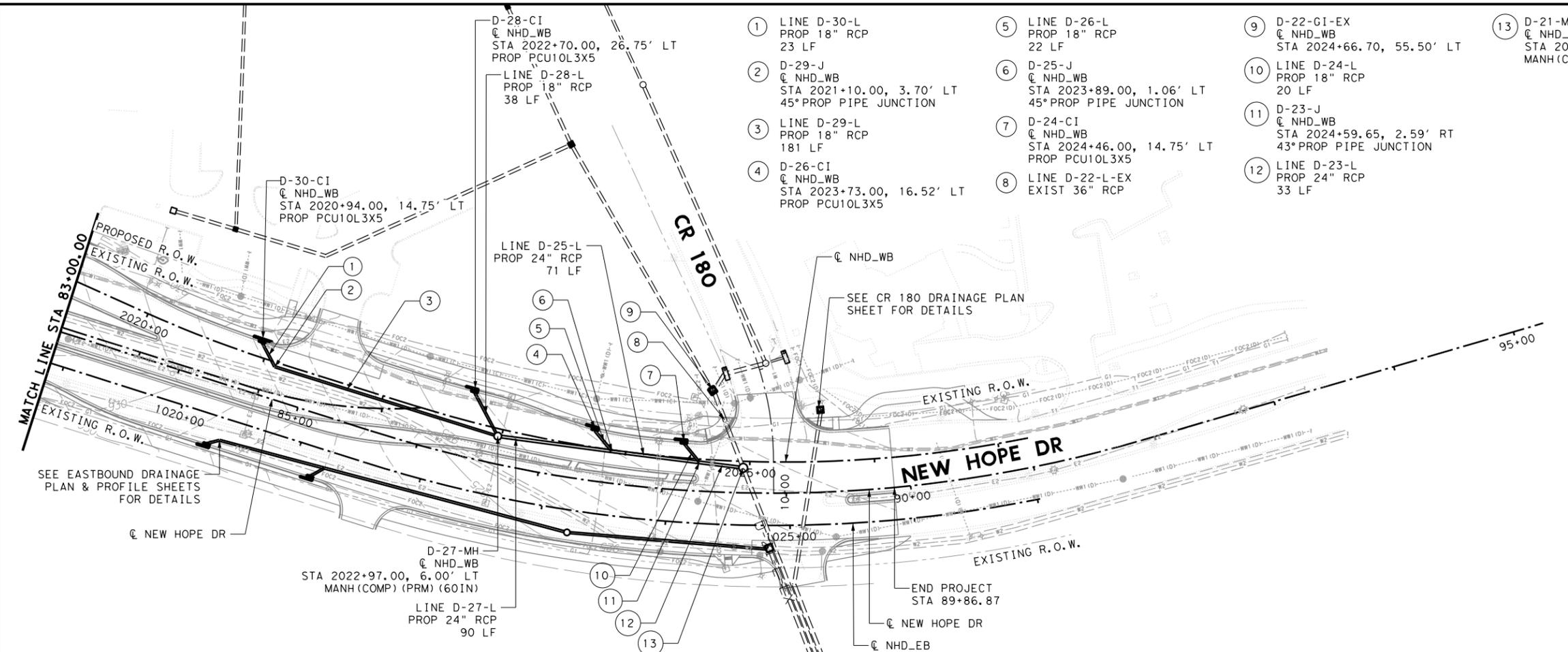
CEDAR PARK

LJA ENGINEERING, INC
FRN-F-1386

**NEW HOPE DRIVE
WB DRAINAGE PLAN &
PROFILE**
STA 71+00.00 TO STA 83+00.00

DESIGN BY: MB DRAWN BY: MB CHECKED BY: DB APPROVED BY: PROJECT NO: 3217-2301 DATE:	SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10' SHEET: 5 OF 6 PAGE: 275
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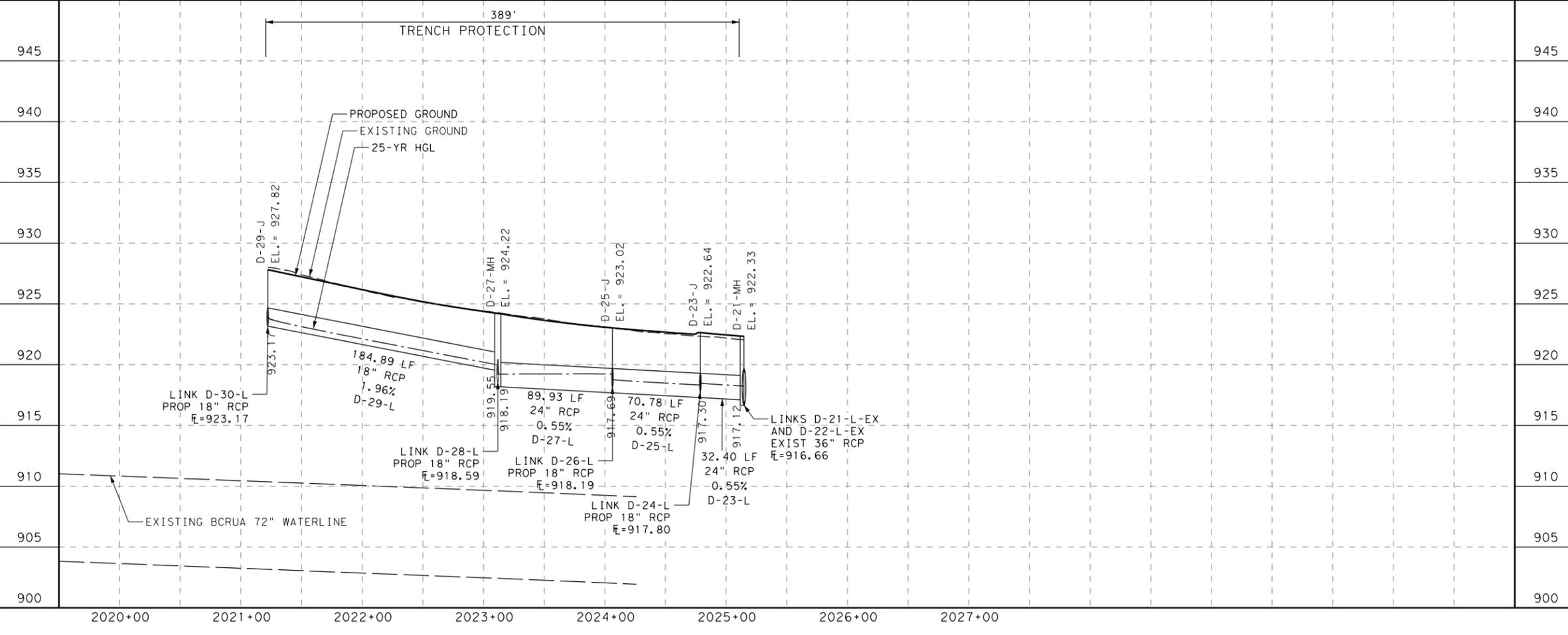
- ① LINE D-30-L
PROP 18" RCP
23 LF
- ② D-29-J
NHD_WB
STA 2021+10.00, 3.70' LT
45° PROP PIPE JUNCTION
- ③ LINE D-29-L
PROP 18" RCP
181 LF
- ④ D-26-CI
NHD_WB
STA 2023+73.00, 16.52' LT
PROP PCU10L3X5
- ⑤ LINE D-26-L
PROP 18" RCP
22 LF
- ⑥ D-25-J
NHD_WB
STA 2023+89.00, 1.06' LT
45° PROP PIPE JUNCTION
- ⑦ D-24-CI
NHD_WB
STA 2024+46.00, 14.75' LT
PROP PCU10L3X5
- ⑧ LINE D-22-L-EX
EXIST 36" RCP
- ⑨ D-22-GI-EX
NHD_WB
STA 2024+66.70, 55.50' LT
- ⑩ LINE D-24-L
PROP 18" RCP
20 LF
- ⑪ D-23-J
NHD_WB
STA 2024+59.65, 2.59' RT
43° PROP PIPE JUNCTION
- ⑫ LINE D-23-L
PROP 24" RCP
33 LF
- ⑬ D-21-MH
NHD_WB
STA 2024+94.90, 5.20' RT
MANH (COMP) (PRM) (72IN)

LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

0' 25' 50' 100'
SCALE: 1"=100' - HORZ
1"=10' - VERT

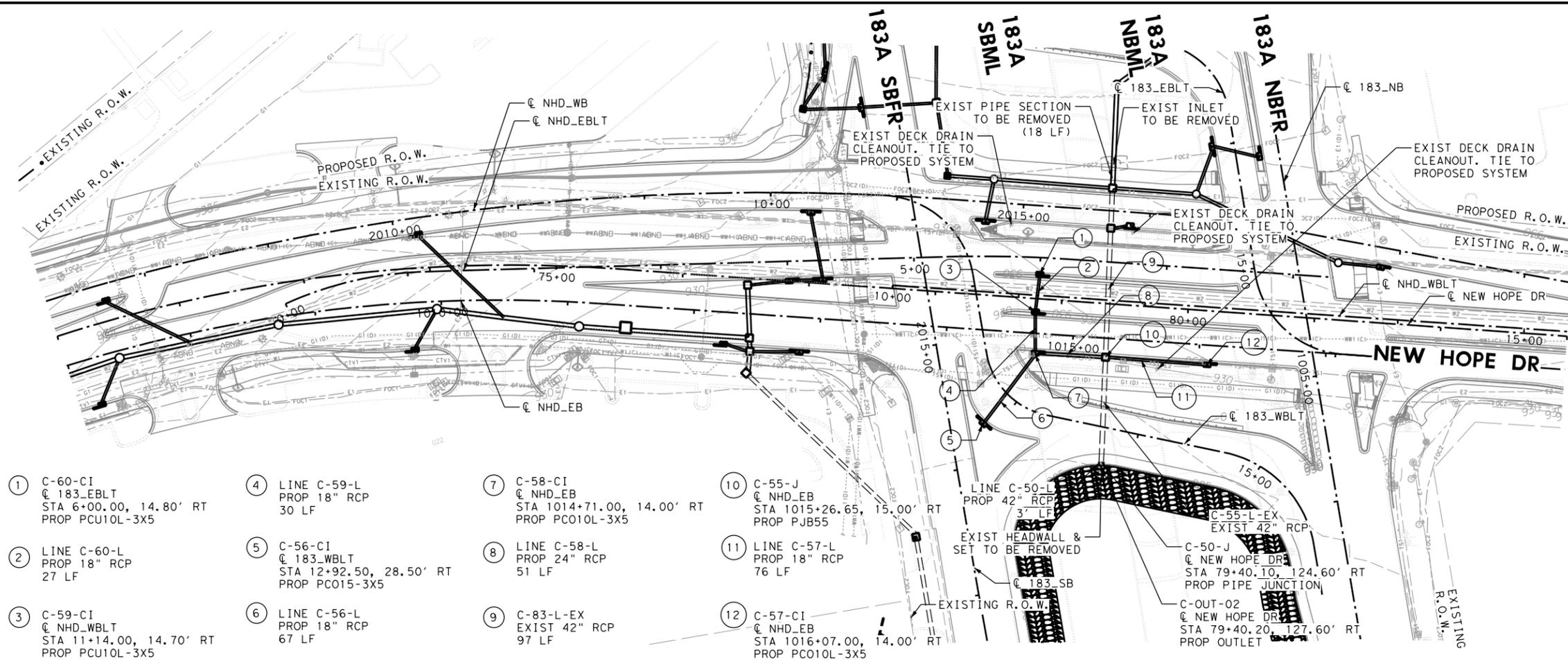
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**NEW HOPE DRIVE
WB DRAINAGE PLAN &
PROFILE**
STA 83+00.00 TO END

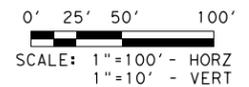
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PROJECT NO: 3217-2301	PAGE: 276
DATE:	

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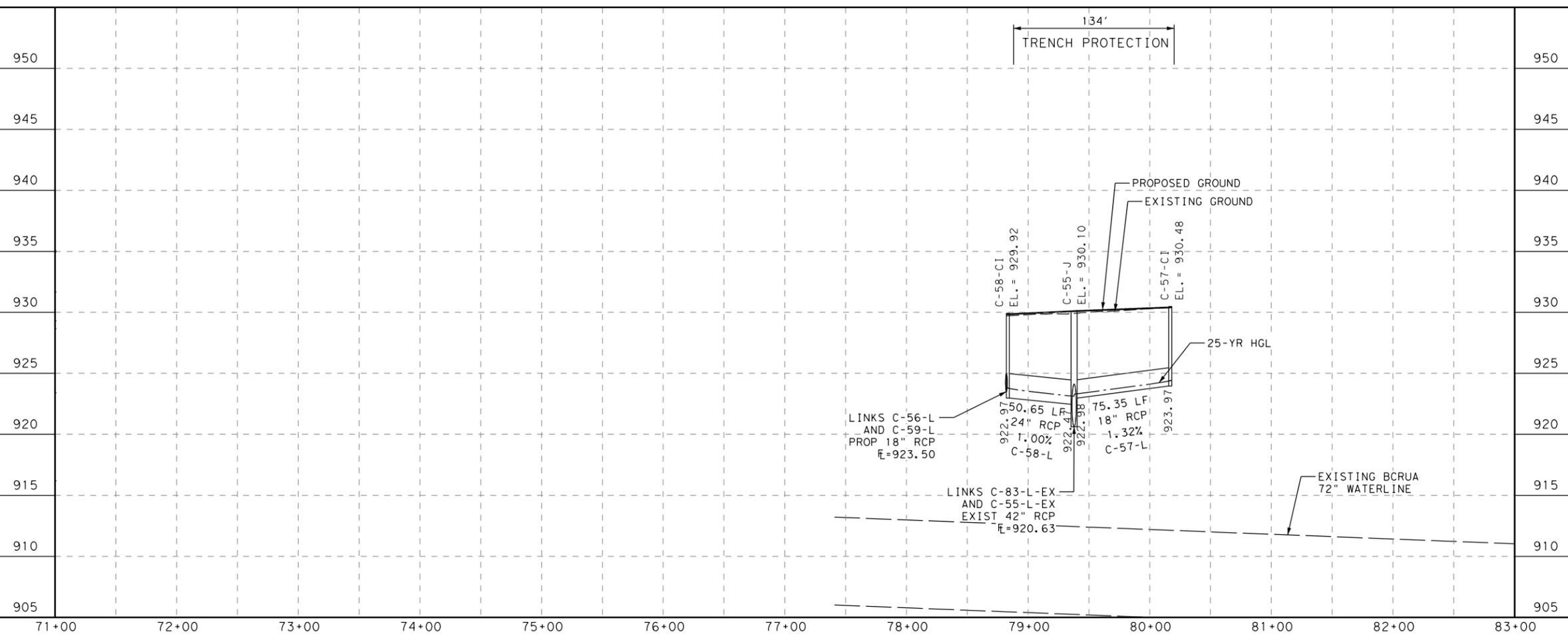
LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

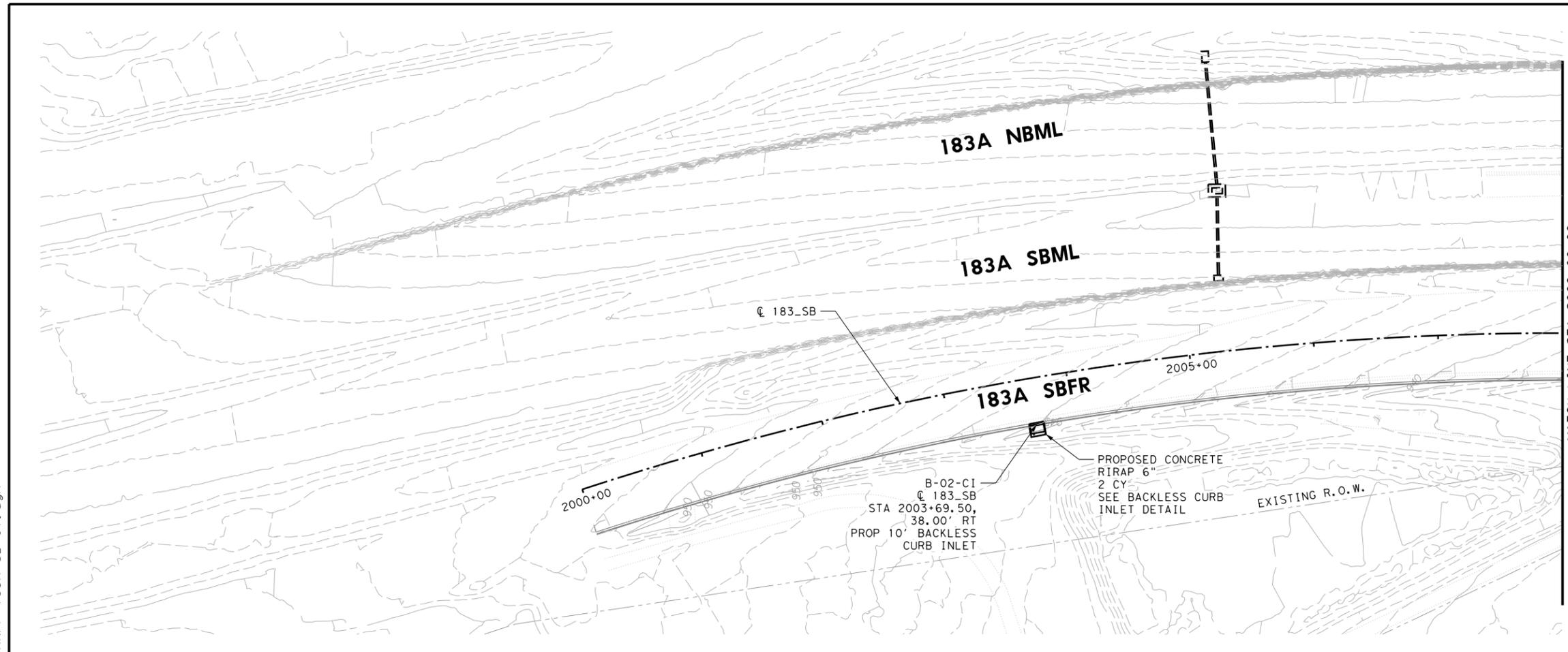


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- | | | | |
|--|---|--|--|
| ① C-60-CI
CL 183_EBLT
STA 6+00.00, 14.80' RT
PROP PCU10L-3X5 | ④ LINE C-59-L
PROP 18" RCP
30 LF | ⑦ C-58-CI
CL NHD_EB
STA 1014+71.00, 14.00' RT
PROP PC010L-3X5 | ⑩ C-55-J
CL NHD_EB
STA 1015+26.65, 15.00' RT
PROP PJB55 |
| ② LINE C-60-L
PROP 18" RCP
27 LF | ⑤ C-56-CI
CL 183_WBLT
STA 12+92.50, 28.50' RT
PROP PC015-3X5 | ⑧ LINE C-58-L
PROP 24" RCP
51 LF | ⑪ LINE C-57-L
PROP 18" RCP
76 LF |
| ③ C-59-CI
CL NHD_WBLT
STA 11+14.00, 14.70' RT
PROP PCU10L-3X5 | ⑥ LINE C-56-L
PROP 18" RCP
67 LF | ⑨ C-83-L-EX
EXIST 42" RCP
97 LF | ⑫ C-57-CI
CL NHD_EB
STA 1016+07.00, 14.00' RT
PROP PC010L-3X5 |

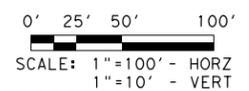


<p>NEW HOPE DRIVE 183A EB DRAINAGE PLAN & PROFILE</p>												
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DESIGN BY: MB	SCALE HORIZONTAL: 1"=100'											
DRAWN BY: MB	VERTICAL: 1"=10'											
CHECKED BY: DB	SHEET: 1 OF 4											
APPROVED BY:	PAGE: 277											
PROJECT NO: 3217-2301												
DATE:												



LEGEND

	EXISTING R.O.W.
	PROPOSED R.O.W.
	EXISTING DRAINAGE EASEMENT
	PROPOSED DRAINAGE EASEMENT
	EXISTING UTILITY
	EXISTING PLANIMETRICS
	PROPOSED PLANIMETRICS
	PROPOSED DRAINAGE



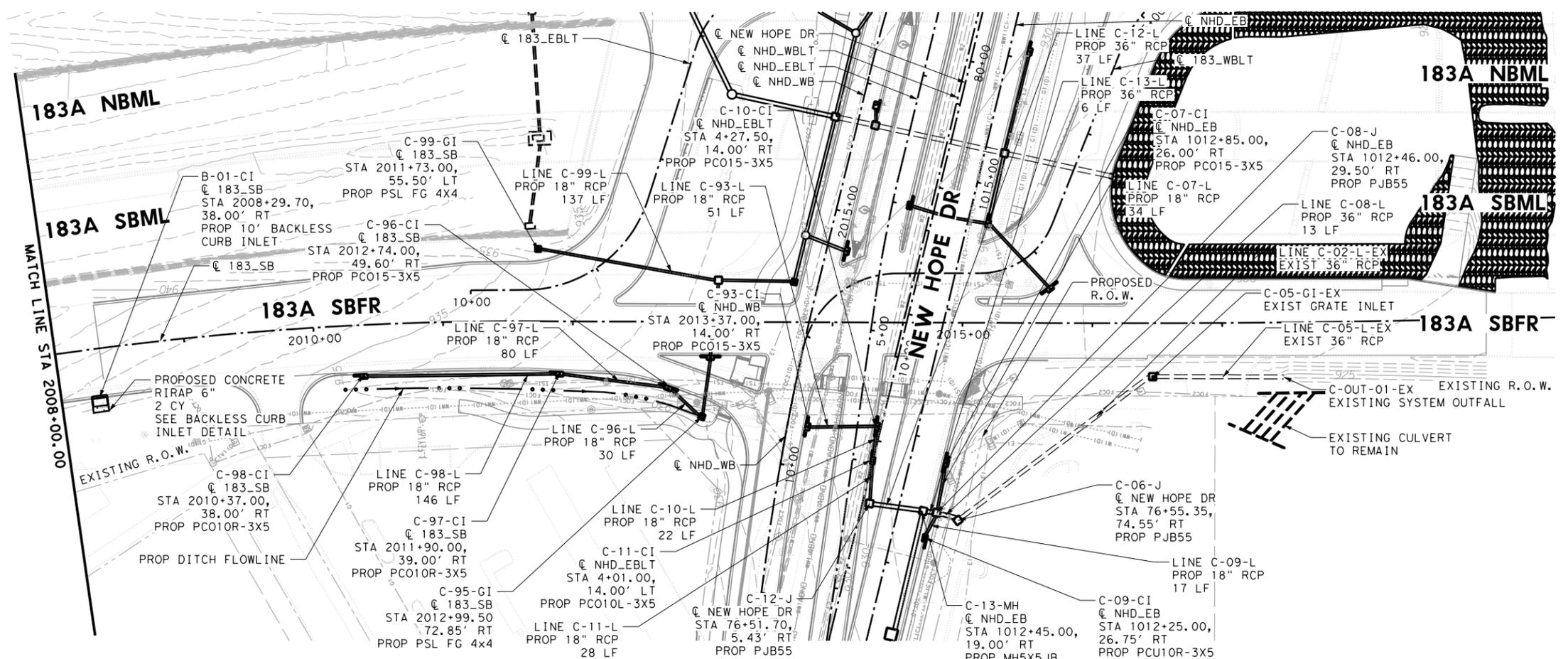
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950	<p>6/14/2024</p>													
945														
940														
935														
930														
925	<p>FRN-F-1386</p>													
920														
915	<p>NEW HOPE DRIVE 183A SB DRAINAGE PLAN & PROFILE</p>													
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APPROVED BY:	SHEET: 2 OF 4													
PROJECT NO: 3217-2301	PAGE: 278													
DATE:														
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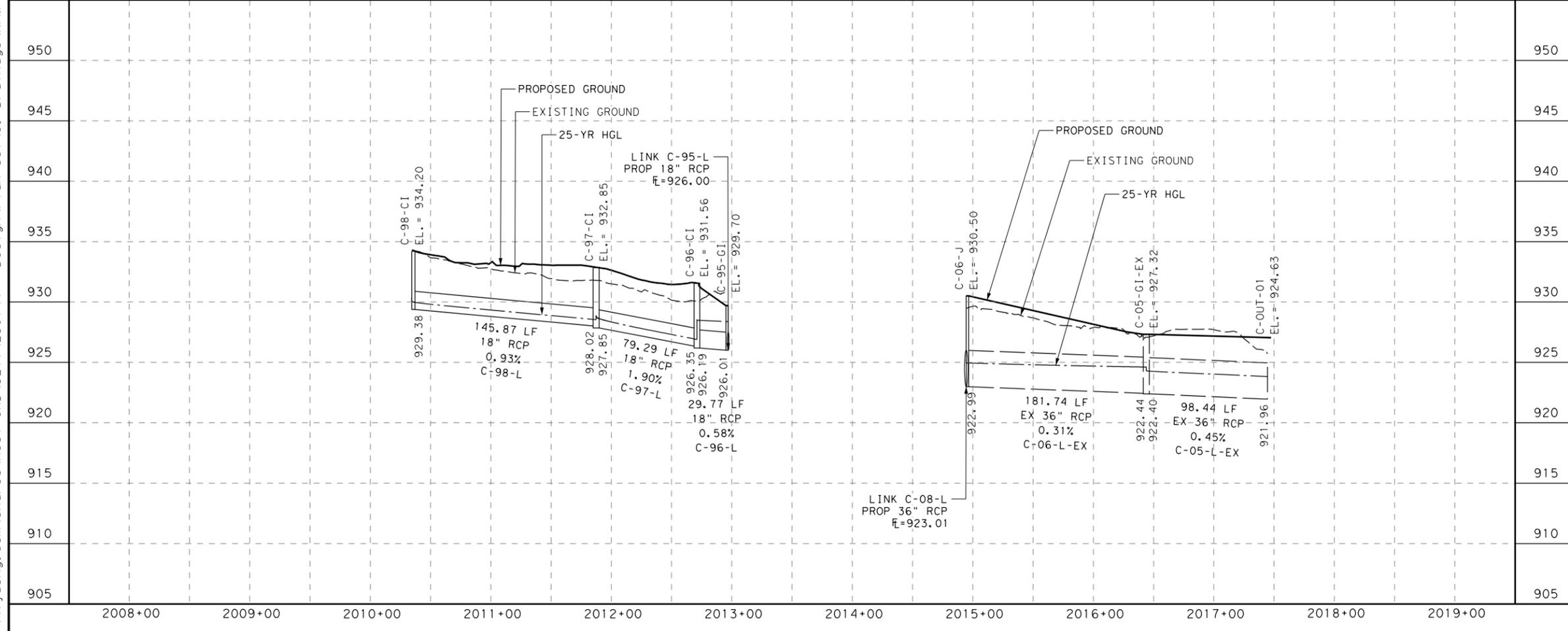


LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

0' 25' 50' 100'
 SCALE: 1"=100' - HORZ
 1"=10' - VERT

- NOTES:**
- REFER TO MISC DRAINAGE DETAILS SHEET FOR CONTROL POINTS OF ALL DRAINAGE STRUCTURES.
 - ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III UNLESS OTHERWISE NOTED.
 - REFER TO STORM SEWER LATERAL SHEETS FOR ADDITIONAL INFORMATION.
 - THE LOCATION AND ELEVATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
 - SEE MISCELLANEOUS DRAINAGE DETAILS FOR CONCRETE AND STONE RIPRAP DETAILS.



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Cody J. Moczygemba
 6/14/2024

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CEDAR PARK

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 FRN-F-1386

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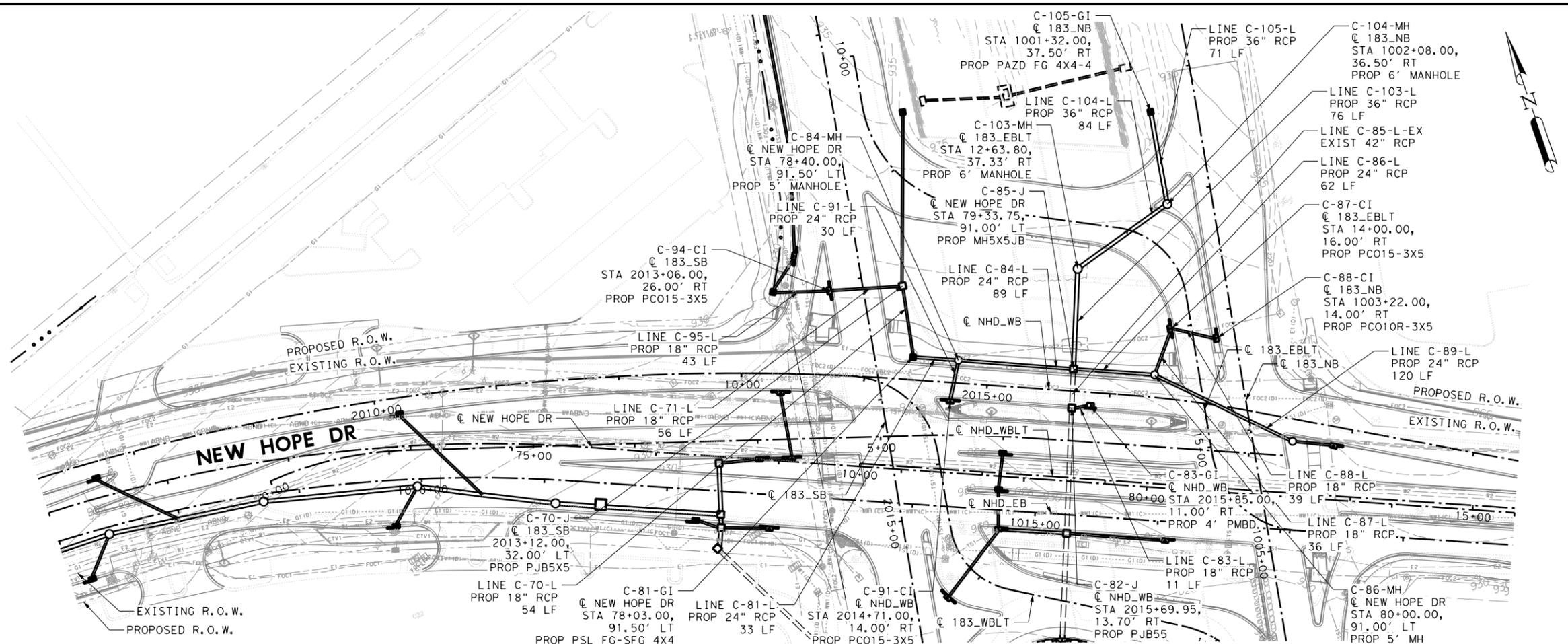
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**NEW HOPE DRIVE
 183A SB DRAINAGE PLAN &
 PROFILE**

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APPROVED BY:	SHEET: 3 OF 4
PROJECT NO: 3217-2301	PAGE: 279
DATE:	



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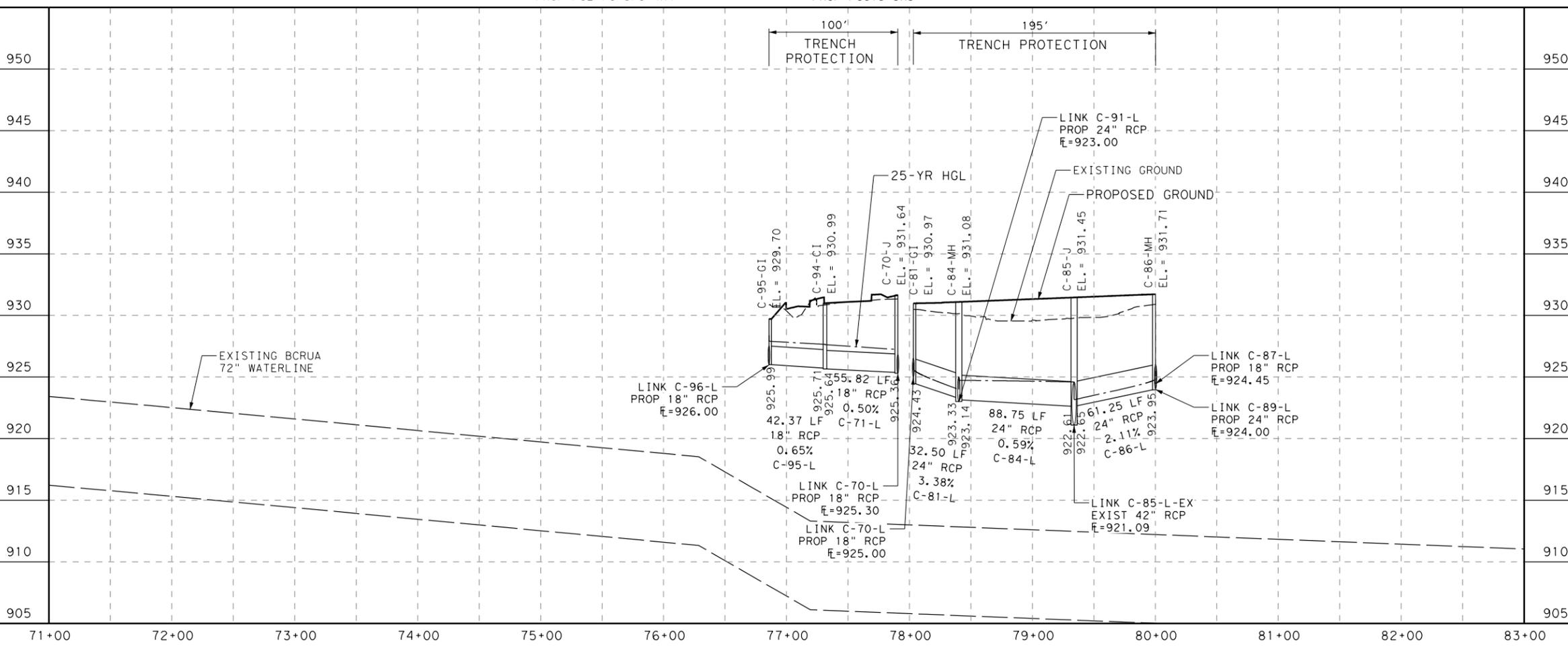
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- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

0' 25' 50' 100'

SCALE: 1"=100' - HORZ
1"=10' - VERT

NOTES:

- REFER TO MISC DRAINAGE DETAILS SHEET FOR CONTROL POINTS OF ALL DRAINAGE STRUCTURES.
- ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III UNLESS OTHERWISE NOTED.
- REFER TO STORM SEWER LATERAL SHEETS FOR ADDITIONAL INFORMATION.
- THE LOCATION AND ELEVATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
- SEE MISCELLANEOUS DRAINAGE DETAILS FOR CONCRETE AND STONE RIPRAP DETAILS.



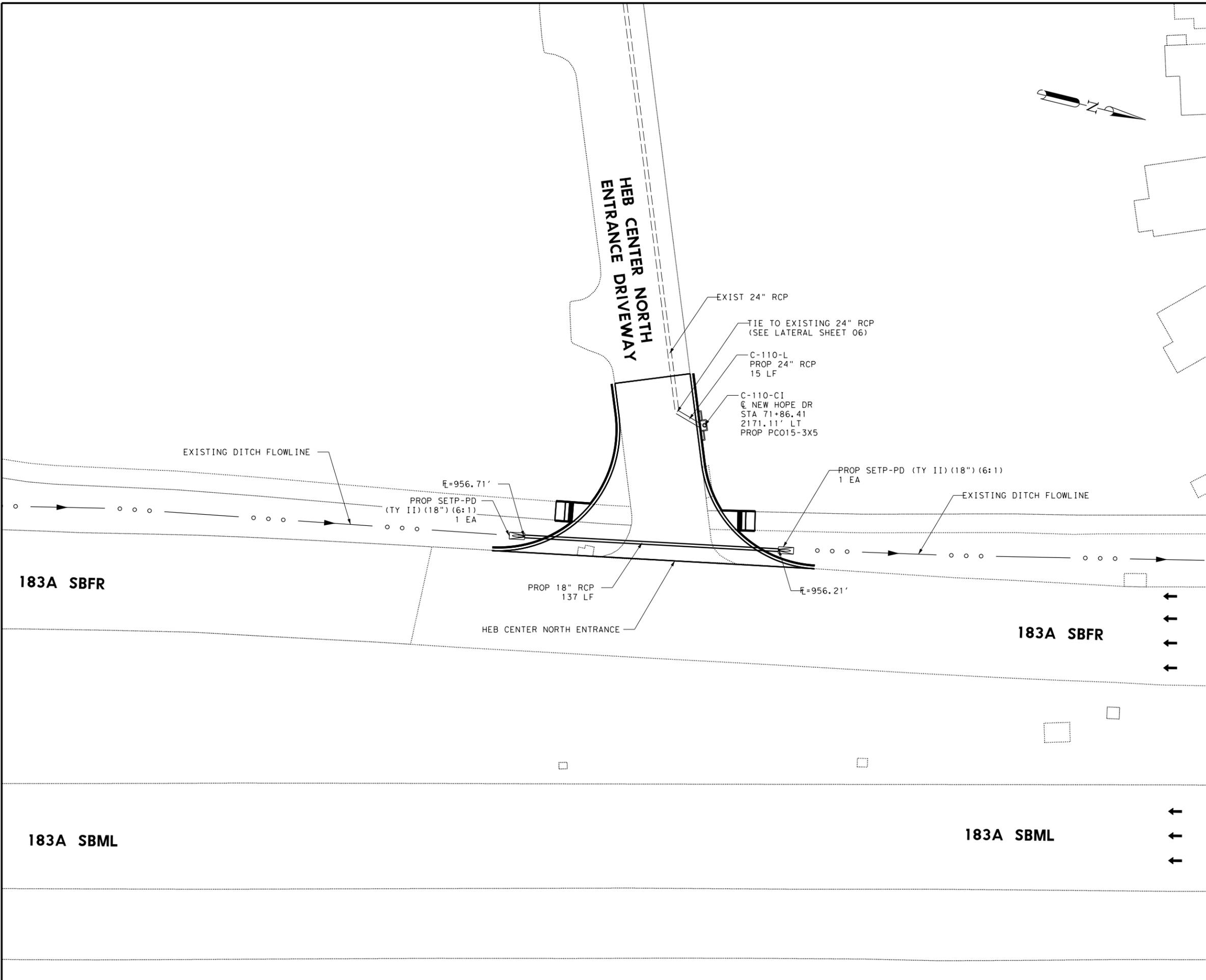
6/14/2024

CEDAR PARK

LJA ENGINEERING, INC
FRN-F-1386

**NEW HOPE DRIVE
183A WB DRAINAGE PLAN &
PROFILE**

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LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE



- NOTES:
- REFER TO MISC DRAINAGE DETAILS SHEET FOR CONTROL POINTS OF ALL DRAINAGE STRUCTURES.
 - ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III UNLESS OTHERWISE NOTED. REFER TO STORM SEWER LATERAL SHEETS FOR ADDITIONAL INFORMATION.
 - THE LOCATION AND ELEVATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
 - SEE MISCELLANEOUS DRAINAGE DETAILS FOR CONCRETE AND STONE RIPRAP DETAILS.
 - HEB CENTER NORTH ENTRANCE PROPOSED DRAINAGE INLET & DRIVEWAY CULVERT EXTENSIONS



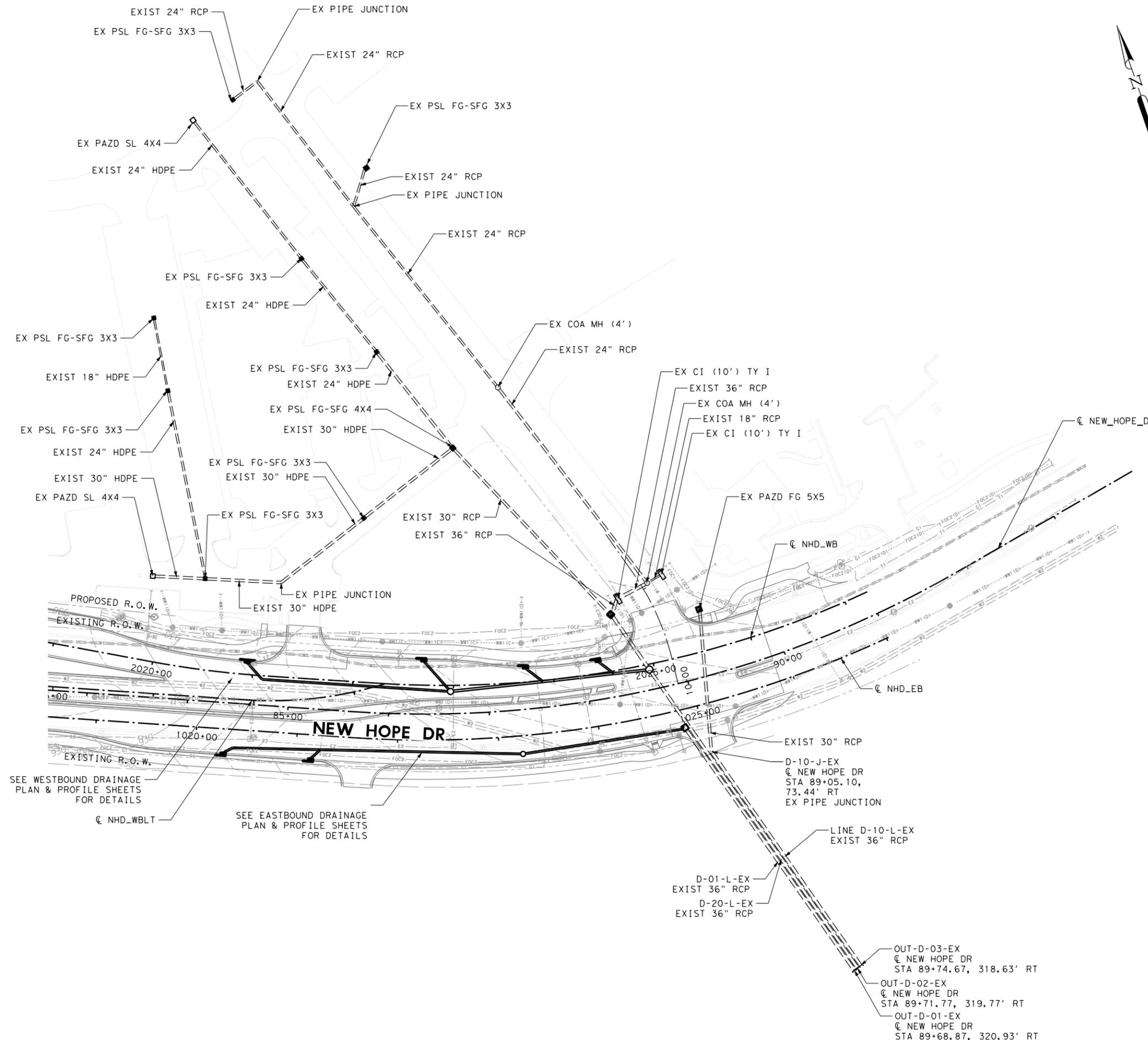
Cody Moczygemba
6/14/2024



NEW HOPE DRIVE DRIVEWAY DRAINAGE PLAN SHEET
HEB CENTER NORTH ENTRANCE

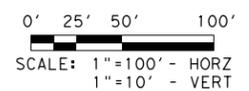
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PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL: 1"=50'
VERTICAL: N/A
SHEET: 1 OF 1
PAGE: 281



LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- EXISTING DRAINAGE EASEMENT
- PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE



- NOTES:
- REFER TO MISC DRAINAGE DETAILS SHEET FOR CONTROL POINTS OF ALL DRAINAGE STRUCTURES.
 - ALL REINFORCED CONCRETE PIPES ARE TO BE CLASS III UNLESS OTHERWISE NOTED.
 - REFER TO STORM SEWER LATERAL SHEETS FOR ADDITIONAL INFORMATION.
 - THE LOCATION AND ELEVATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR TO VERIFY AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
 - SEE MISCELLANEOUS DRAINAGE DETAILS FOR CONCRETE AND STONE RIPRAP DETAILS.

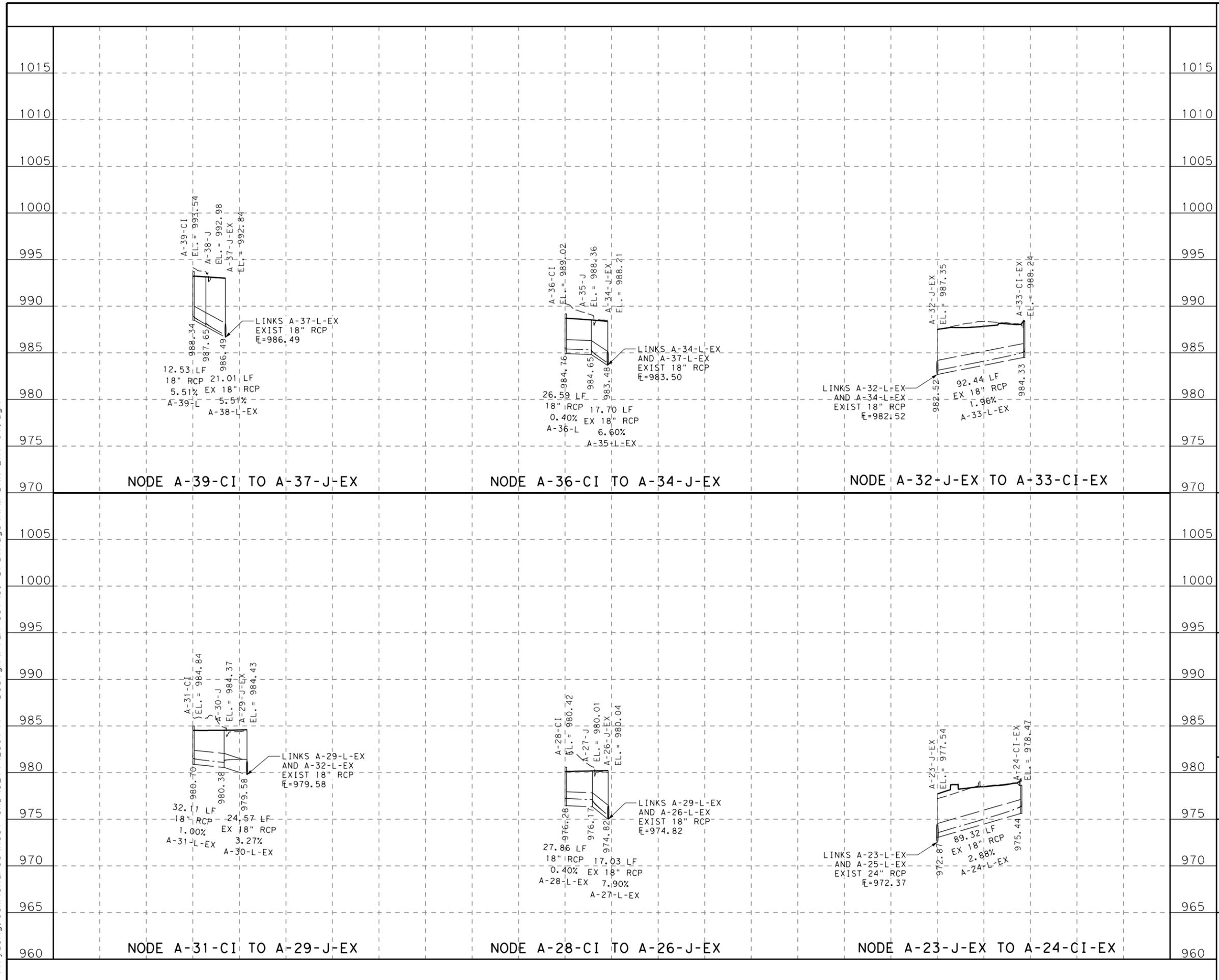


6/14/2024



NEW HOPE DRIVE
CO RD 180 DRAINAGE
PLAN & PROFILE

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CHECKED BY: DB	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 1 OF 1
PROJECT NO: 3217-2301	PAGE: 282
DATE:	



LEGEND

- EXISTING GROUND @ PROFILE PGL
- PROPOSED GROUND @ PROFILE PGL
- - - EXISTING DRAINAGE
- PROPOSED DRAINAGE
- - - PROPOSED 25-YR HGL

0' 25' 50' 100'
SCALE: 1"=100' - HORZ
1"=10' - VERT

STATE OF TEXAS
DEREK T. BOHLS
103424
LICENSED PROFESSIONAL ENGINEER
Derek Bohls 6/14/2024

CEDAR PARK

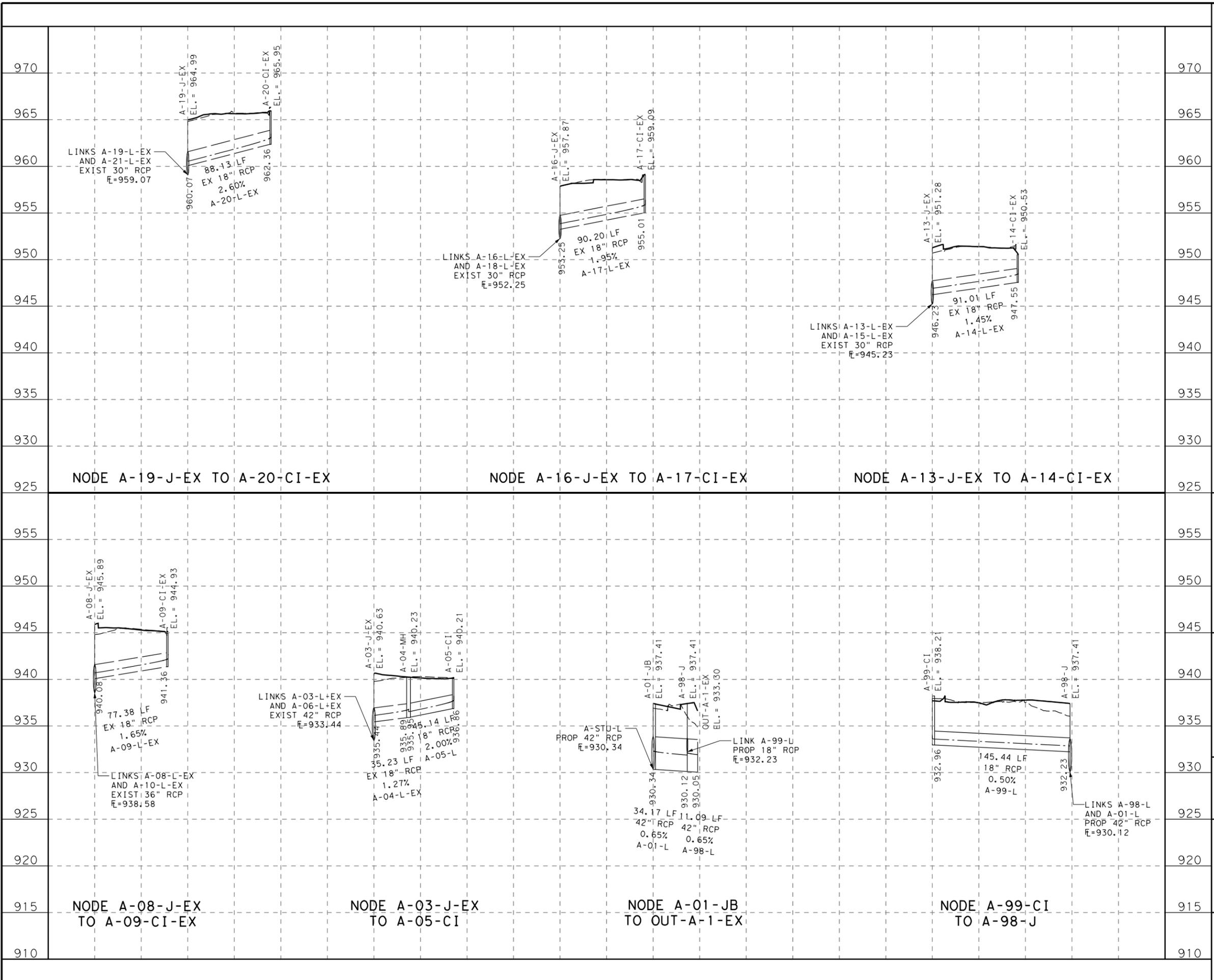
LJA ENGINEERING, INC
FRN - F-1386

NEW HOPE DRIVE DRAINAGE LATERAL PROFILES

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APPROVED BY:	SHEET: 1 OF 11
PROJECT NO: 3217-2301	PAGE: 283
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LEGEND

- EXISTING GROUND @ PROFILE PGL
- PROPOSED GROUND @ PROFILE PGL
- - - EXISTING DRAINAGE
- - - PROPOSED DRAINAGE
- - - PROPOSED 25-YR HGL

0' 25' 50' 100'

SCALE: 1"=100' - HORZ
1"=10' - VERT

Derek Bohls
6/14/2024

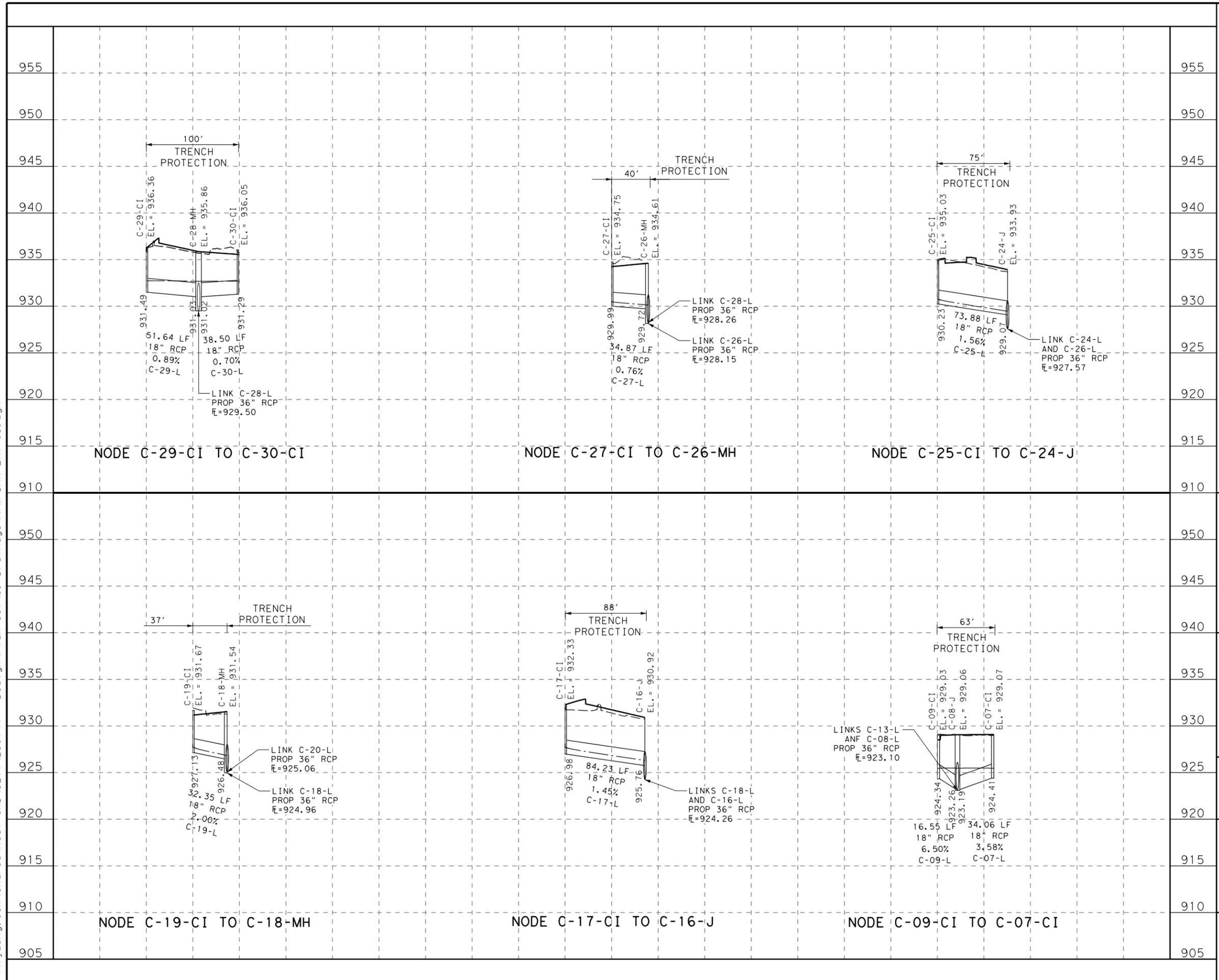
FRN-F-1386

**NEW HOPE DRIVE
DRAINAGE
LATERAL PROFILES**

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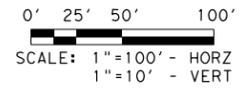
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LEGEND

- EXISTING GROUND @ PROFILE PGL
- PROPOSED GROUND @ PROFILE PGL
- - - EXISTING DRAINAGE
- PROPOSED DRAINAGE
- - - PROPOSED 25-YR HGL



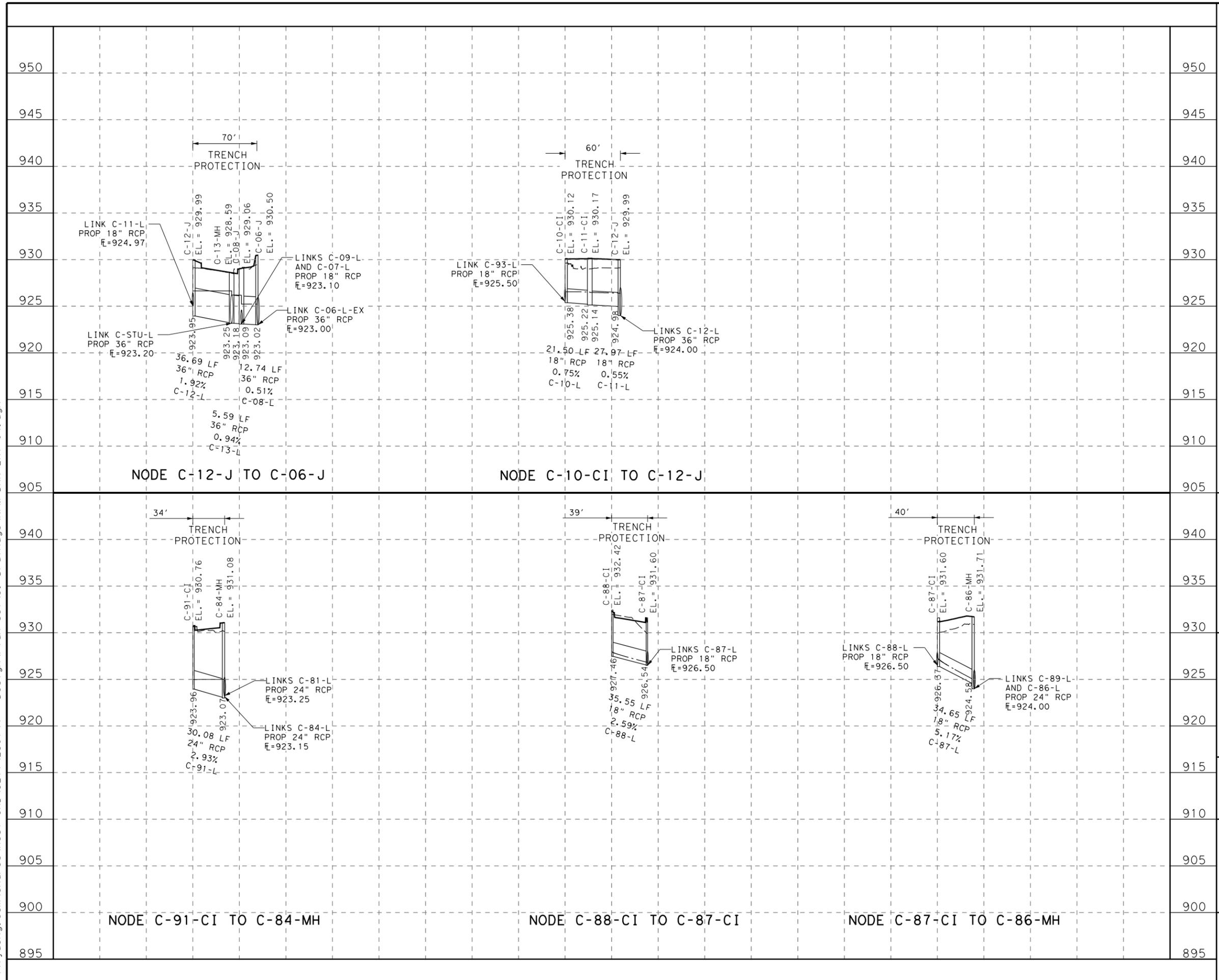
**NEW HOPE DRIVE
DRAINAGE
LATERAL PROFILES**

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 SHEET: 3 OF 11
 PAGE: 285

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LEGEND

- EXISTING GROUND @ PROFILE PGL
- PROPOSED GROUND @ PROFILE PGL
- - - EXISTING DRAINAGE
- - - PROPOSED DRAINAGE
- - - PROPOSED 25-YR HGL

0' 25' 50' 100'

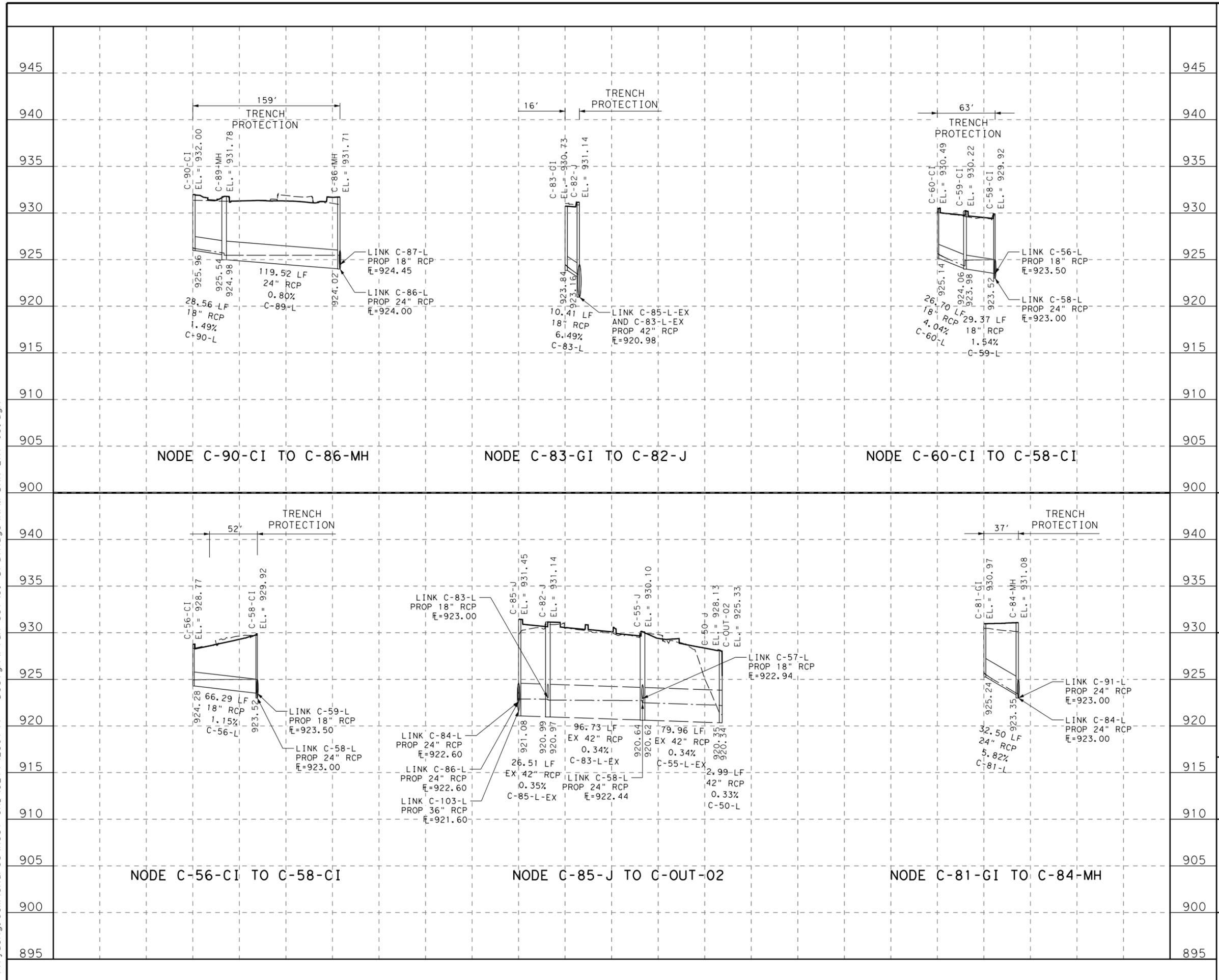
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1"=10' - VERT

**NEW HOPE DRIVE
DRAINAGE
LATERAL PROFILES**

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PROJECT NO: 3217-2301	PAGE: 286
DATE:	

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LEGEND

- EXISTING GROUND @ PROFILE PGL
- PROPOSED GROUND @ PROFILE PGL
- - - EXISTING DRAINAGE
- - - PROPOSED DRAINAGE
- - - PROPOSED 25-YR HGL

0' 25' 50' 100'

SCALE: 1"=100' - HORZ
1"=10' - VERT

Derek Bohls
6/14/2024

CEDAR PARK

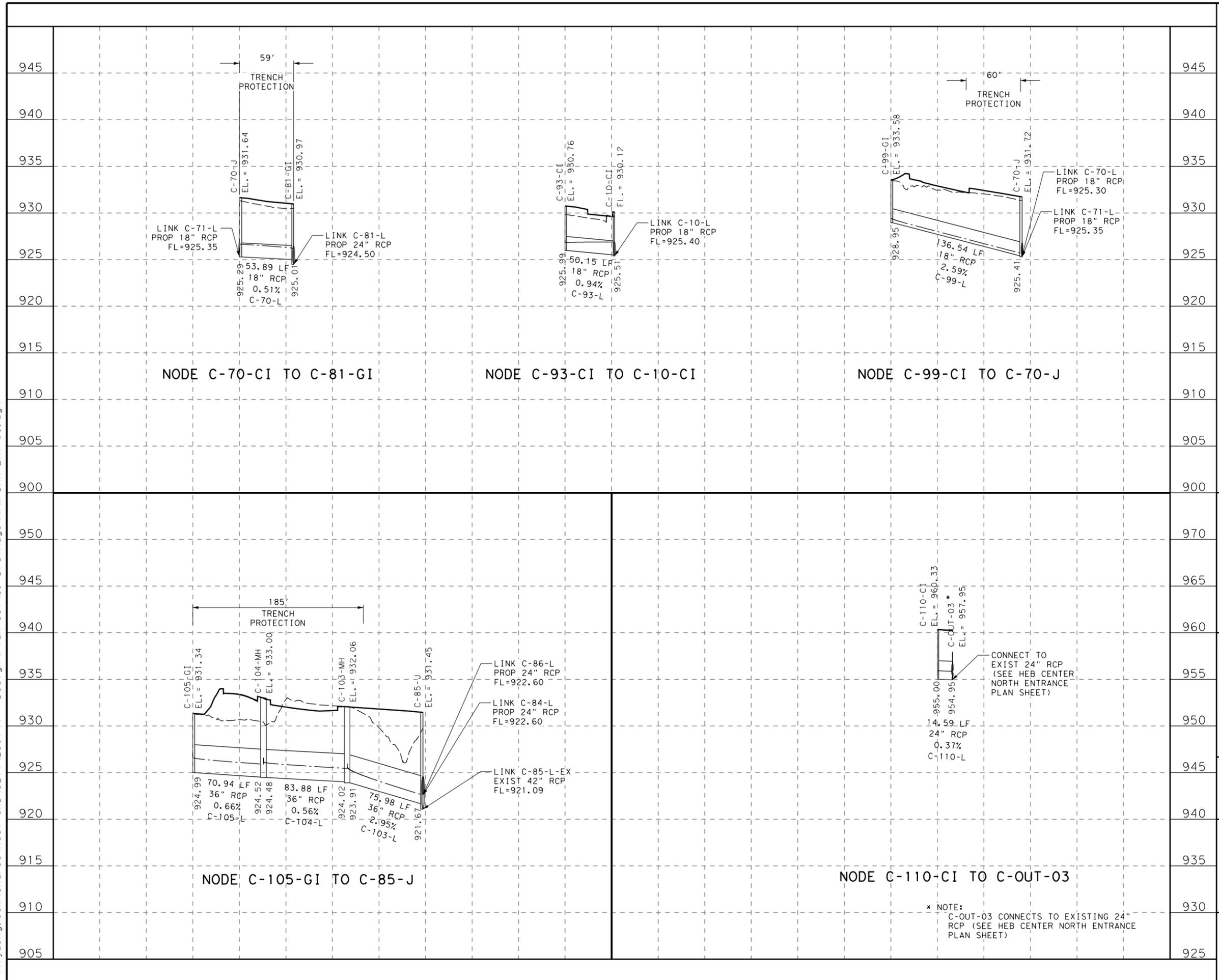
LJA ENGINEERING, INC
FRN-F-1386

**NEW HOPE DRIVE
DRAINAGE
LATERAL PROFILES**

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PROJECT NO: 3217-2301	PAGE: 287
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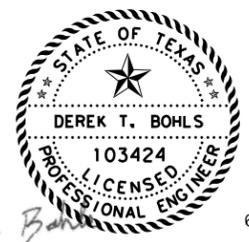
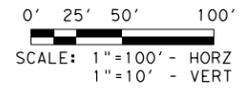
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LEGEND

	EXISTING GROUND @ PROFILE PGL
	PROPOSED GROUND @ PROFILE PGL
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	PROPOSED 25-YR HGL



Derek Bohls 6/14/2024



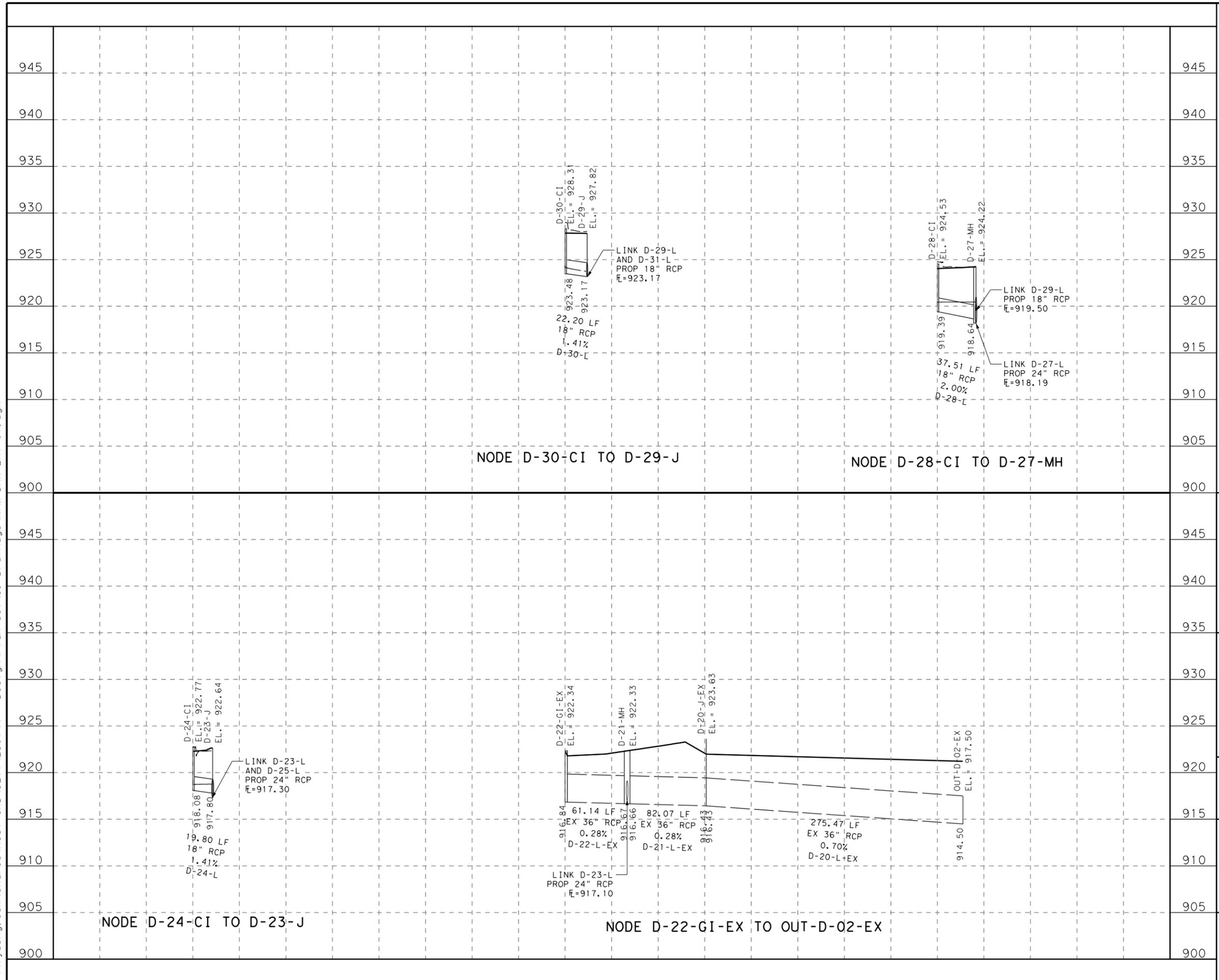
NEW HOPE DRIVE
DRAINAGE
LATERAL PROFILES

* NOTE:
C-OUT-03 CONNECTS TO EXISTING 24" RCP (SEE HEB CENTER NORTH ENTRANCE PLAN SHEET)

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PROJECT NO: 3217-2301	PAGE: 288
DATE:	

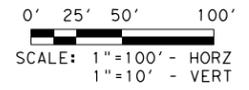
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LEGEND

	EXISTING GROUND @ PROFILE PGL
	PROPOSED GROUND @ PROFILE PGL
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	PROPOSED 25-YR HGL



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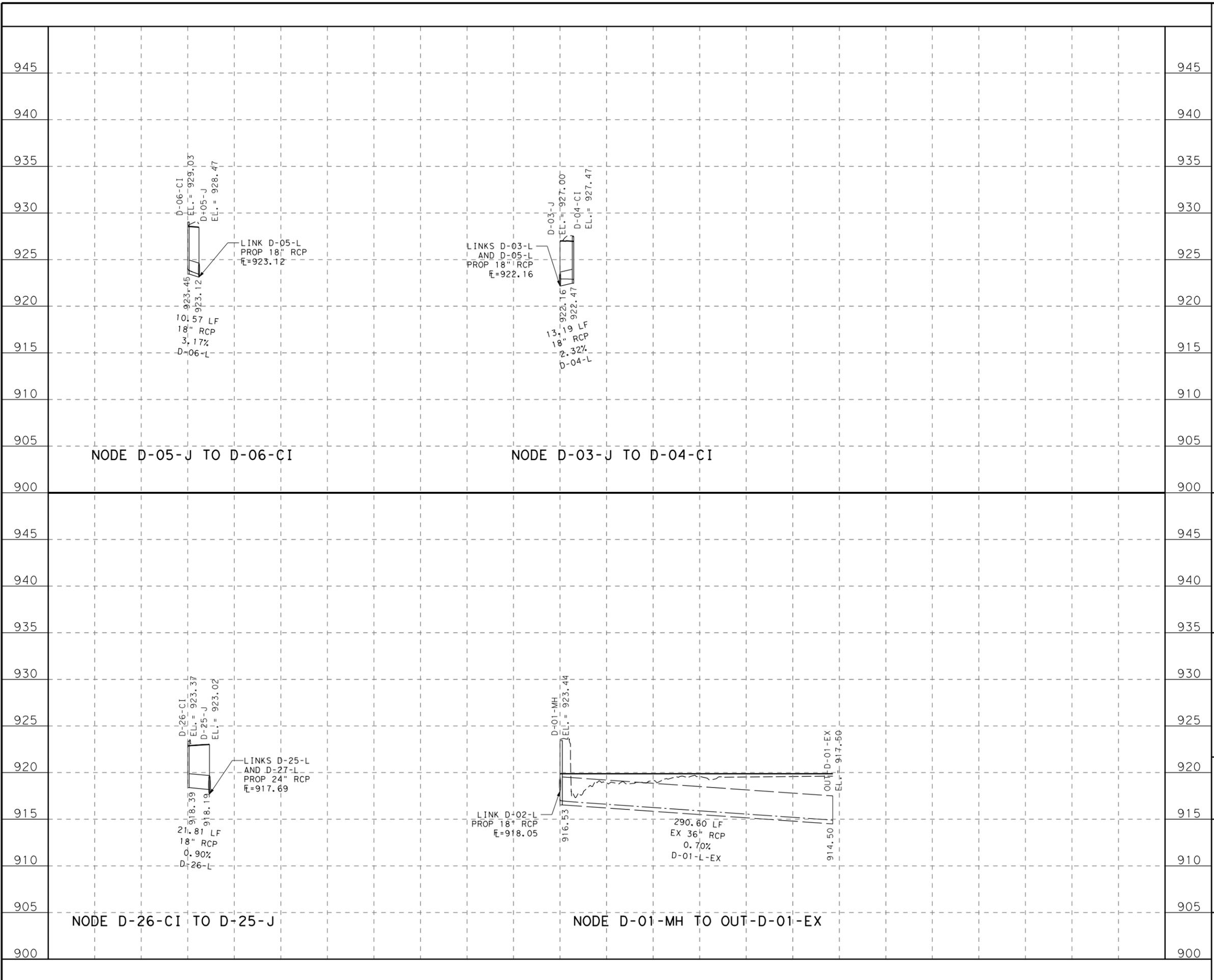
**NEW HOPE DRIVE
DRAINAGE
LATERAL PROFILES**

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 PAGE: 289

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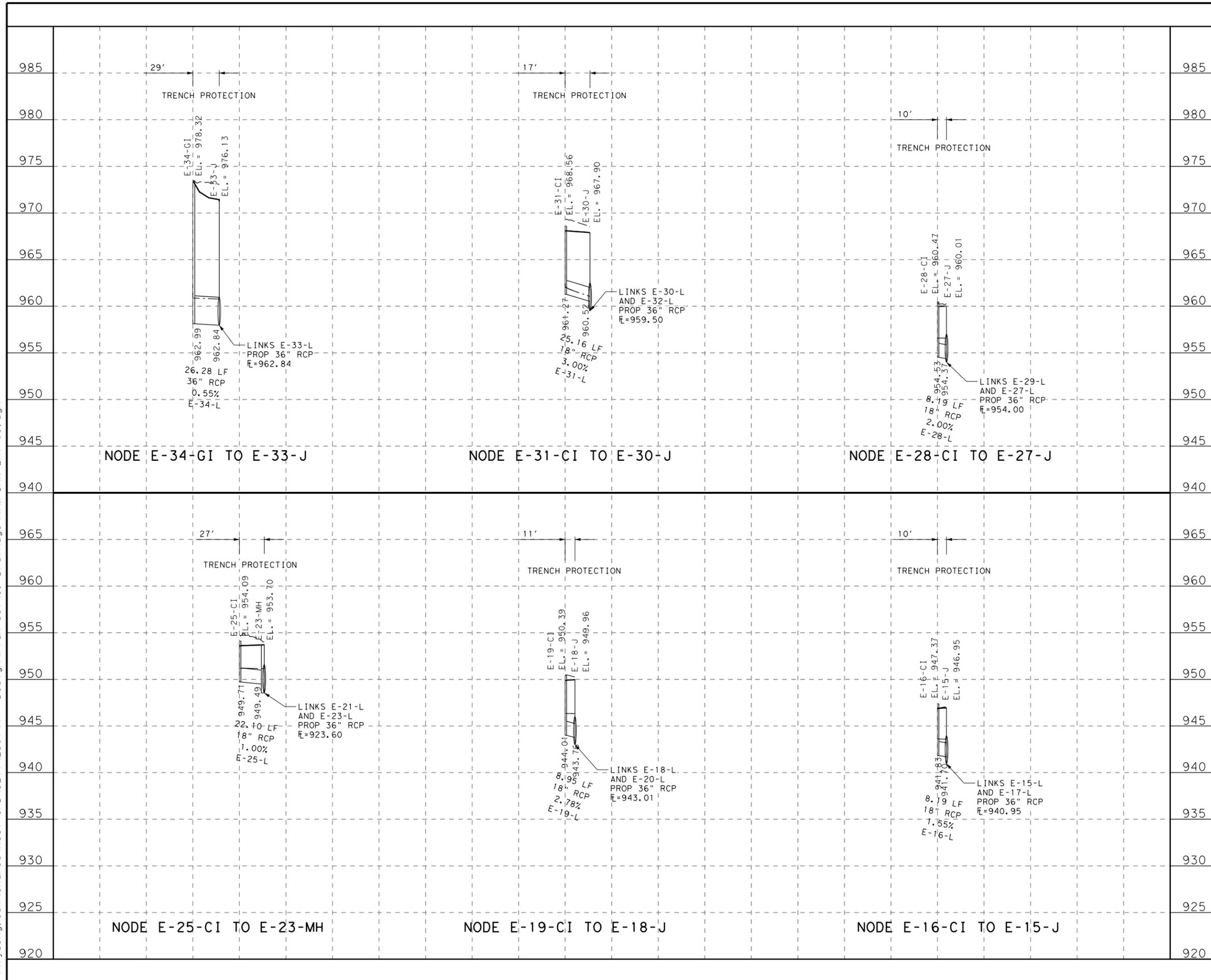
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<p>LEGEND</p> <ul style="list-style-type: none"> — — — — — EXISTING GROUND @ PROFILE PGL — — — — — PROPOSED GROUND @ PROFILE PGL — — — — — EXISTING DRAINAGE — — — — — PROPOSED DRAINAGE — — — — — PROPOSED 25-YR HGL 	<p>0' 25' 50' 100'</p> <p>SCALE: 1"=100' - HORZ 1"=10' - VERT</p>
<p>NEW HOPE DRIVE DRAINAGE LATERAL PROFILES</p>	
<p>DESIGN BY: MB DRAWN BY: MB CHECKED BY: DB APPROVED BY: PROJECT NO: 3217-2301 DATE:</p>	<p>SCALE HORIZONTAL: 1"=100' VERTICAL: 1"=10'</p> <p>SHEET: 8 OF 11 PAGE: 290</p>

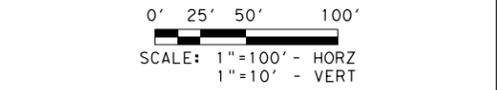
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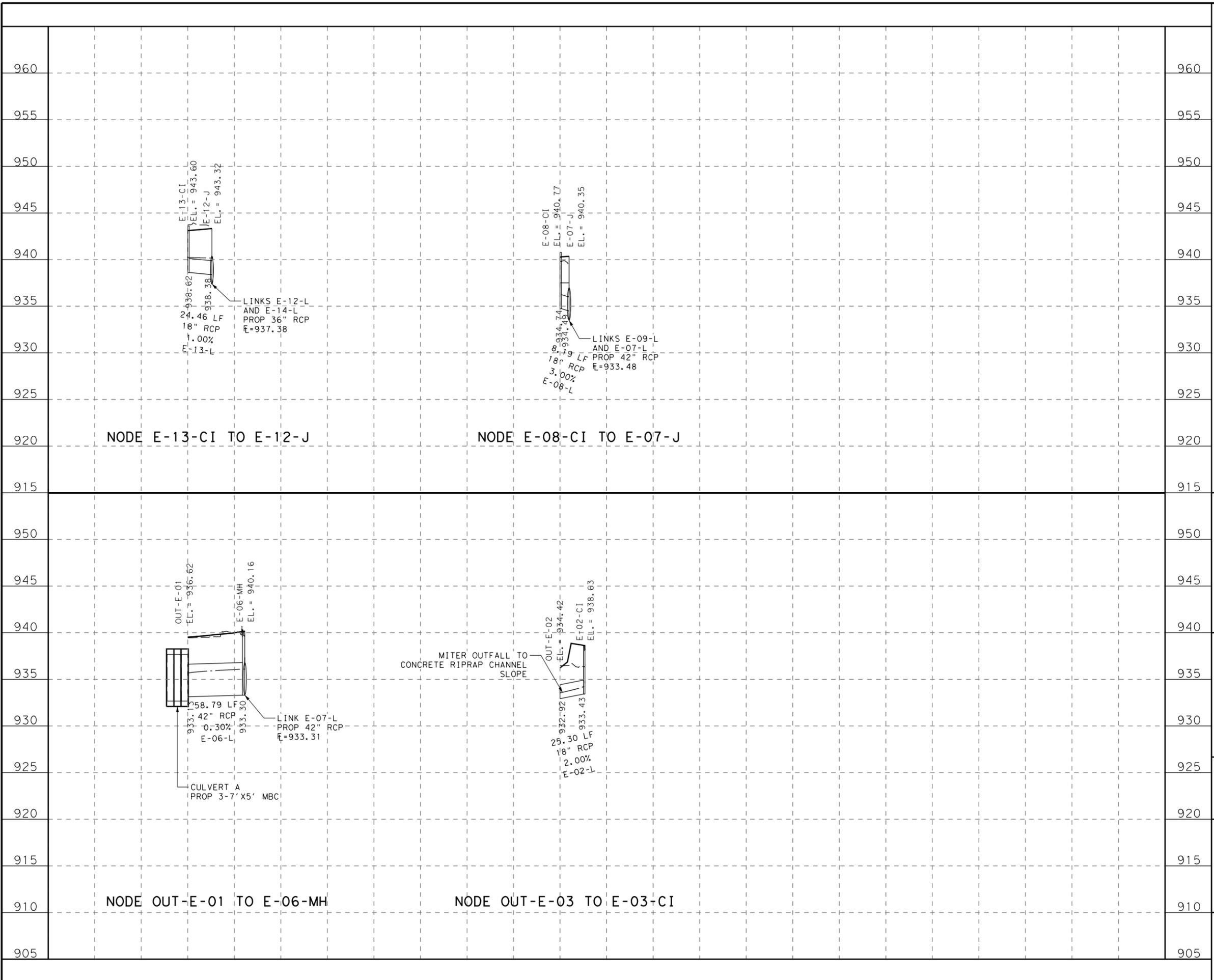
LEGEND

	EXISTING GROUND @ PROFILE PGL
	PROPOSED GROUND @ PROFILE PGL
	EXISTING DRAINAGE
	PROPOSED DRAINAGE
	PROPOSED 25-YR HGL




NEW HOPE DRIVE DRAINAGE LATERAL PROFILES

DESIGN BY: MB	SCALE
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CHECKED BY: DB	VERTICAL: 1"=10'
APPROVED BY:	SHEET: 9 OF 11
PROJECT NO: 3217-2301	PAGE: 291
DATE:	



LEGEND

- EXISTING GROUND @ PROFILE PGL
- PROPOSED GROUND @ PROFILE PGL
- - - EXISTING DRAINAGE
- PROPOSED DRAINAGE
- - - PROPOSED 25-YR HGL

0' 25' 50' 100'
 SCALE: 1"=100' - HORZ
 1"=10' - VERT





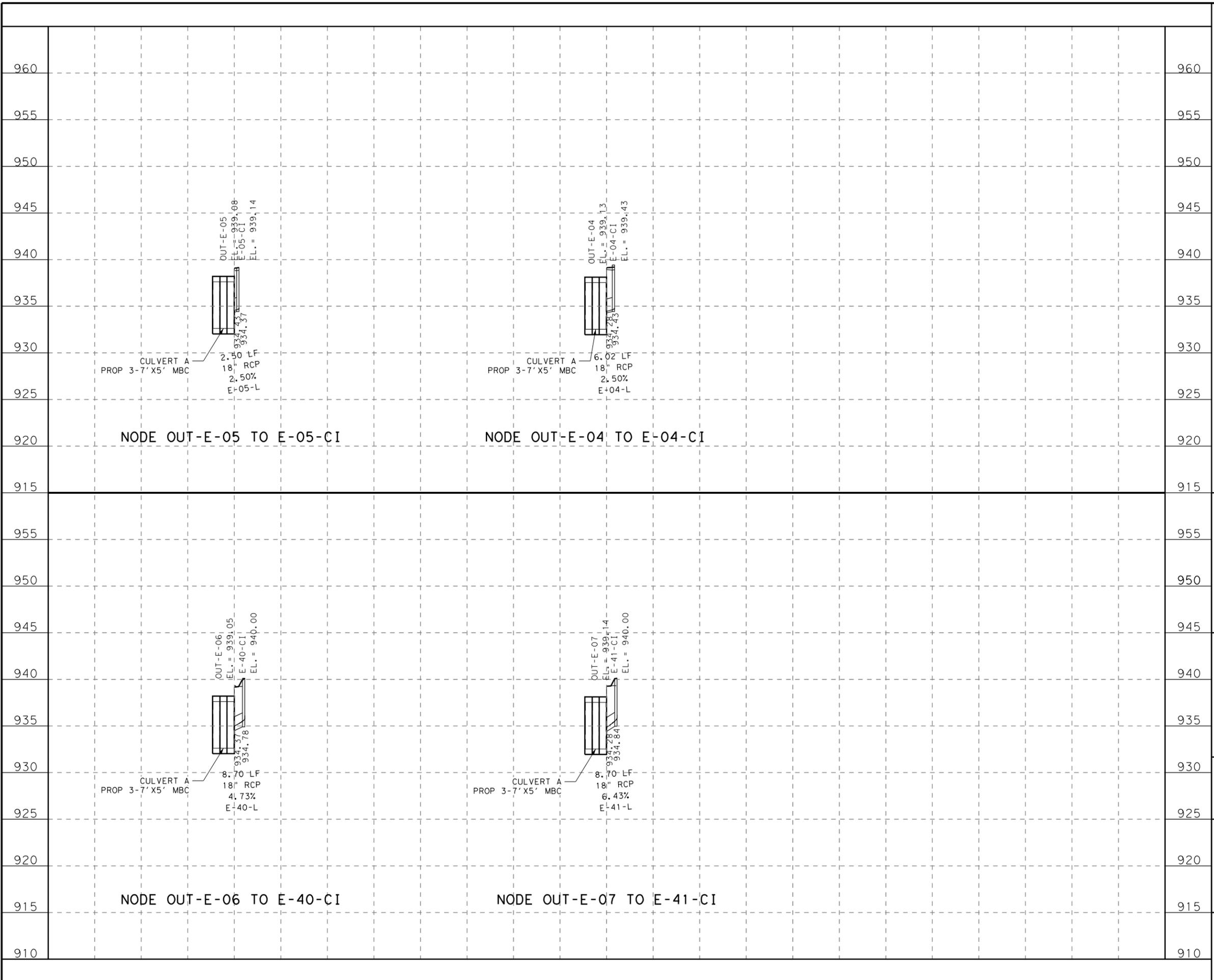
 FRN-F-1386

NEW HOPE DRIVE DRAINAGE LATERAL PROFILES

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PROJECT NO: 3217-2301	PAGE: 292
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LEGEND

- EXISTING GROUND @ PROFILE PGL
- PROPOSED GROUND @ PROFILE PGL
- EXISTING DRAINAGE
- PROPOSED DRAINAGE
- PROPOSED 25-YR HGL

0' 25' 50' 100'
 SCALE: 1"=100' - HORZ
 1"=10' - VERT

STATE OF TEXAS
 DEREK T. BOHLS
 103424
 LICENSED PROFESSIONAL ENGINEER
Derek Bohls 6/14/2024

CEDAR PARK

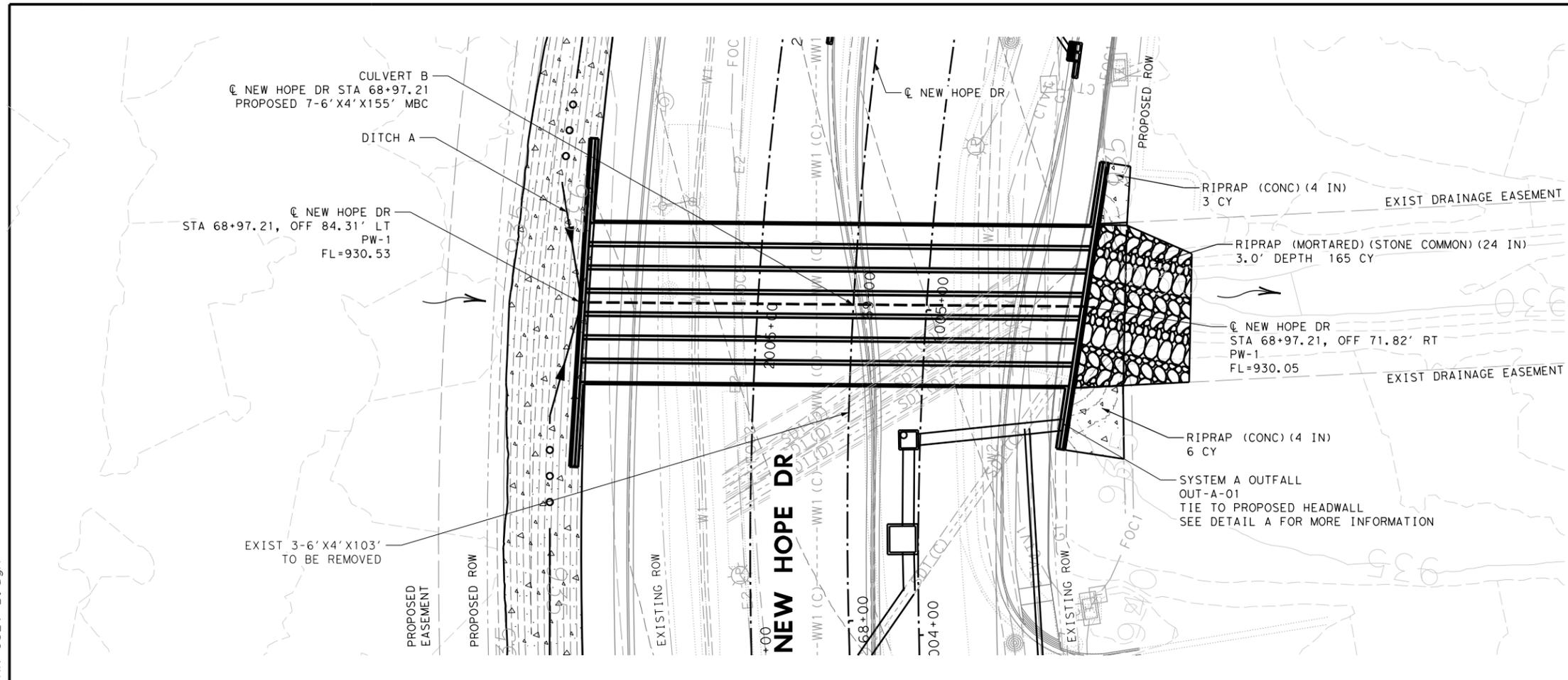
LJA ENGINEERING, INC
 FRN-F-1386

NEW HOPE DRIVE DRAINAGE LATERAL PROFILES

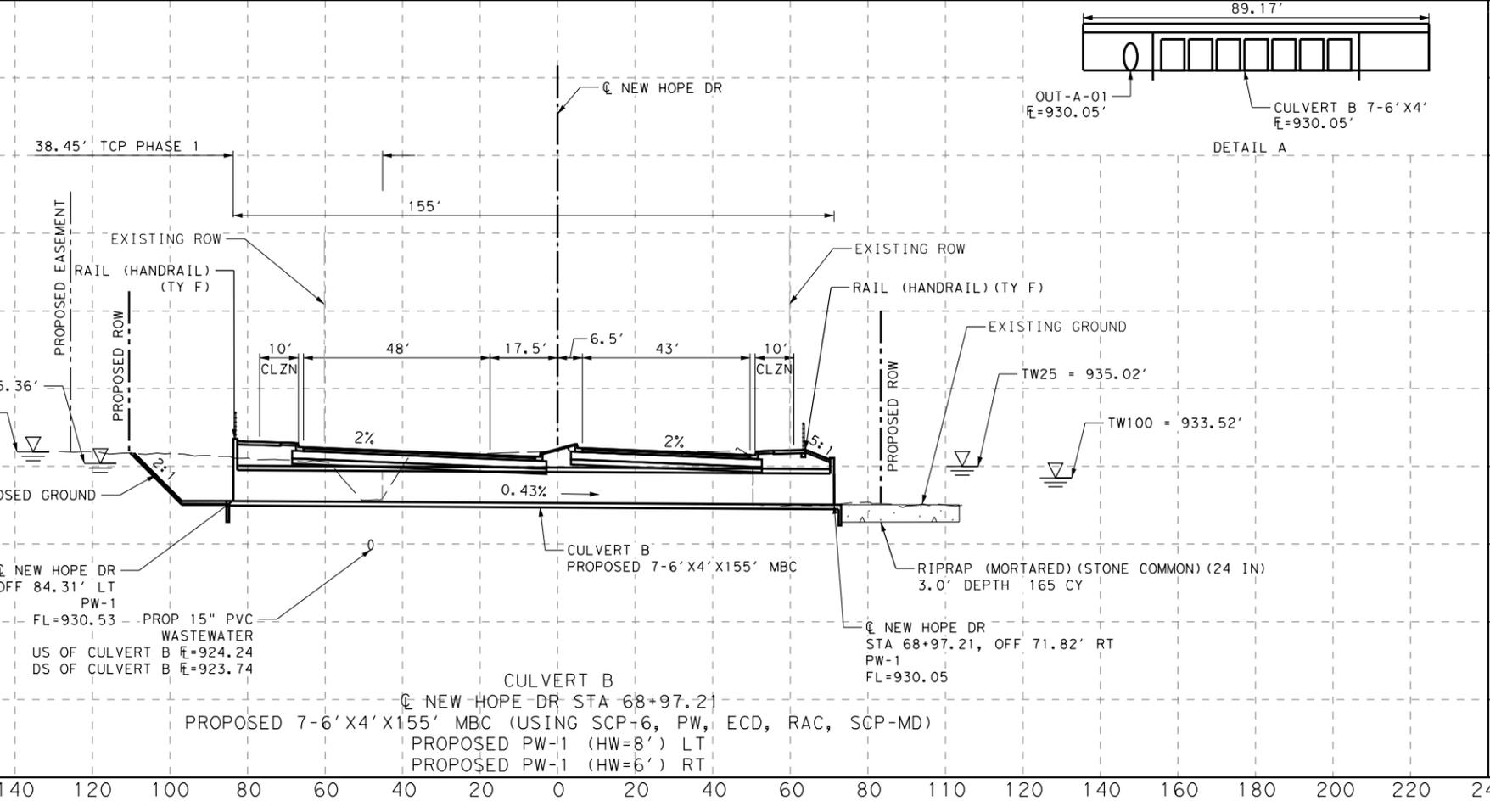
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HYDRAULIC DATA			
CULVERT B			
	EX	PROP	
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Q ₁₀₀ (CFS)	1659.91	1659.91	
V ₂₅ (FT/S)	7.18	7.39	
V ₁₀₀ (FT/S)	7.74	10.83	
HW ₂₅ (FT)	937.04	935.36	
HW ₁₀₀ (FT)	937.31	936.87	
TW ₂₅ (FT)	935.41	935.02	
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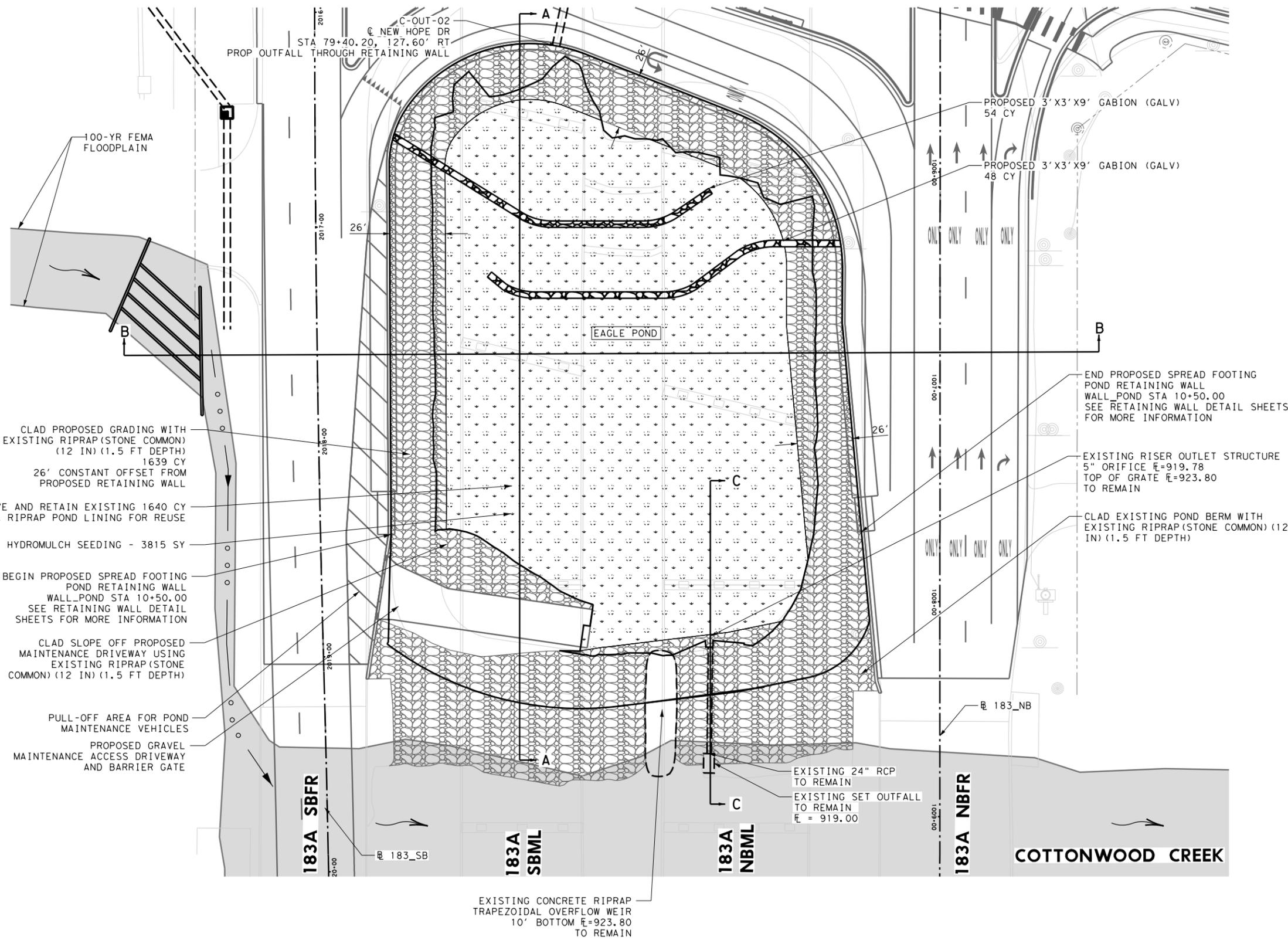


STATE OF TEXAS
 DEREK T. BOHLS
 103424
 LICENSED PROFESSIONAL ENGINEER
 6/14/2024



NEW HOPE DRIVE
 DRAINAGE CULVERT
 PLAN & PROFILE
 CULVERT B

DESIGN BY: MB	SCALE
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CHECKED BY: DB	VERTICAL: 1"=20'
APPROVED BY:	SHEET: 2 OF 2
PROJECT NO: 3217-2301	PAGE: 295
DATE:	



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

NOTES:

1. EXISTING EXTENDED DETENTION CTRMA EAGLE POND DUE TO PROPOSED TURN LANE. PROPOSED DETENTION VOLUME MEETS OR EXCEEDS REQUIRED WATER QUALITY VOLUME.
2. THE REVISED EXISTING CONDITION WAS CALCULATED BASED ON THE EXISTING IMPERVIOUS COVER APPARENT IN SURVEY AND AERIAL IMAGERY.
3. THE PROPOSED CONDITION WAS CALCULATED BASED ON THE PROPOSED IMPERVIOUS COVER AS SHOWN IN THE ROADWAY DESIGN FILES.



6/14/2024



**NEW HOPE DRIVE
DRAINAGE
WATER QUALITY DETAILS**
EAGLE POND - DETAILS

NOTE: SEE WATER QUALITY DETAILS SHEET 2 OF 3 FOR POND ELEVATIONS AND CONTOURS.

NOTE: SEE WATER QUALITY DETAILS SHEET 3 OF 3 FOR WATER QUALITY CALCULATIONS AND SECTIONS A-A, B-B, AND C-C.

DESIGN BY: AS
DRAWN BY: AS
CHECKED BY: DB
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL:
VERTICAL:
SHEET: 1 OF 5
PAGE: 316



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING DRAINAGE EASEMENT
- - - PROPOSED DRAINAGE EASEMENT
- EXISTING UTILITY
- EXISTING PLANIMETRICS
- PROPOSED PLANIMETRICS
- PROPOSED DRAINAGE

NOTES:

1. EXISTING EXTENDED DETENTION CTRMA EAGLE POND DUE TO PROPOSED TURN LANE. PROPOSED DETENTION VOLUME MEETS OR EXCEEDS REQUIRED WATER QUALITY VOLUME.
2. THE REVISED EXISTING CONDITION WAS CALCULATED BASED ON THE EXISTING IMPERVIOUS COVER APPARENT IN SURVEY AND AERIAL IMAGERY.
3. THE PROPOSED CONDITION WAS CALCULATED BASED ON THE PROPOSED IMPERVIOUS COVER AS SHOWN IN THE ROADWAY DESIGN FILES.



BEGIN PROPOSED SPREAD FOOTING POND RETAINING WALL WALL_POND STA 10+50.00 SEE RETAINING WALL DETAIL SHEETS FOR MORE INFORMATION

END PROPOSED SPREAD FOOTING POND RETAINING WALL WALL_POND STA 10+50.00 SEE RETAINING WALL DETAIL SHEETS FOR MORE INFORMATION

POINT	X	Y	DESCRIPTION
13	3089157.34	10169031.84	GABION
14	3089355.92	10168948.96	GABION
15	3089224.29	10168979.58	GABION
16	3089266.25	10168972.72	GABION
17	3089281.70	10168974.27	GABION
18	3089300.57	10168983.00	GABION
19	3089190.78	10168961.62	GABION
20	3089196.87	10168954.70	GABION
21	3089211.05	10168948.30	GABION
22	3089270.43	10168938.60	GABION
23	3089285.88	10168940.14	GABION
24	3089309.11	10168952.12	GABION
25	3089326.12	10168953.84	GABION
26	3089343.47	10168949.16	GABION

NOTE: SEE WATER QUALITY DETAILS SHEET 3 OF 3 FOR WATER QUALITY CALCULATIONS AND SECTIONS A-A, B-B, AND C-C.

POINT	X	Y	Z	DESCRIPTION
1	3089219.01	10168754.67	925.16	TOP OF EXISTING BERM
2	3089116.60	10168801.11	928.10	POND SLOPE TIE TO EOP
3	3089127.13	10168850.60	927.56	TOP OF WALL
4	3089153.98	10169020.31	927.38	TOP OF WALL
5	3089252.44	10169056.74	928.16	TOP OF WALL
6	3089318.07	10169017.82	928.81	TOP OF WALL
7	3089354.90	10168938.57	928.77	TOP OF WALL
8	3089350.73	10168913.55	928.58	TOP OF WALL
9	3089214.89	10168803.09	919.25	MAINTENANCE DRIVEWAY TIE TO EXISTING
10	3089208.95	10168783.93	919.44	MAINTENANCE DRIVEWAY TIE TO EXISTING
11	3089344.69	10168788.60	927.74	POND SLOPE TIE TO EOP
12	3089308.49	10168753.58	925.63	TOP OF EXISTING BERM



6/14/2024



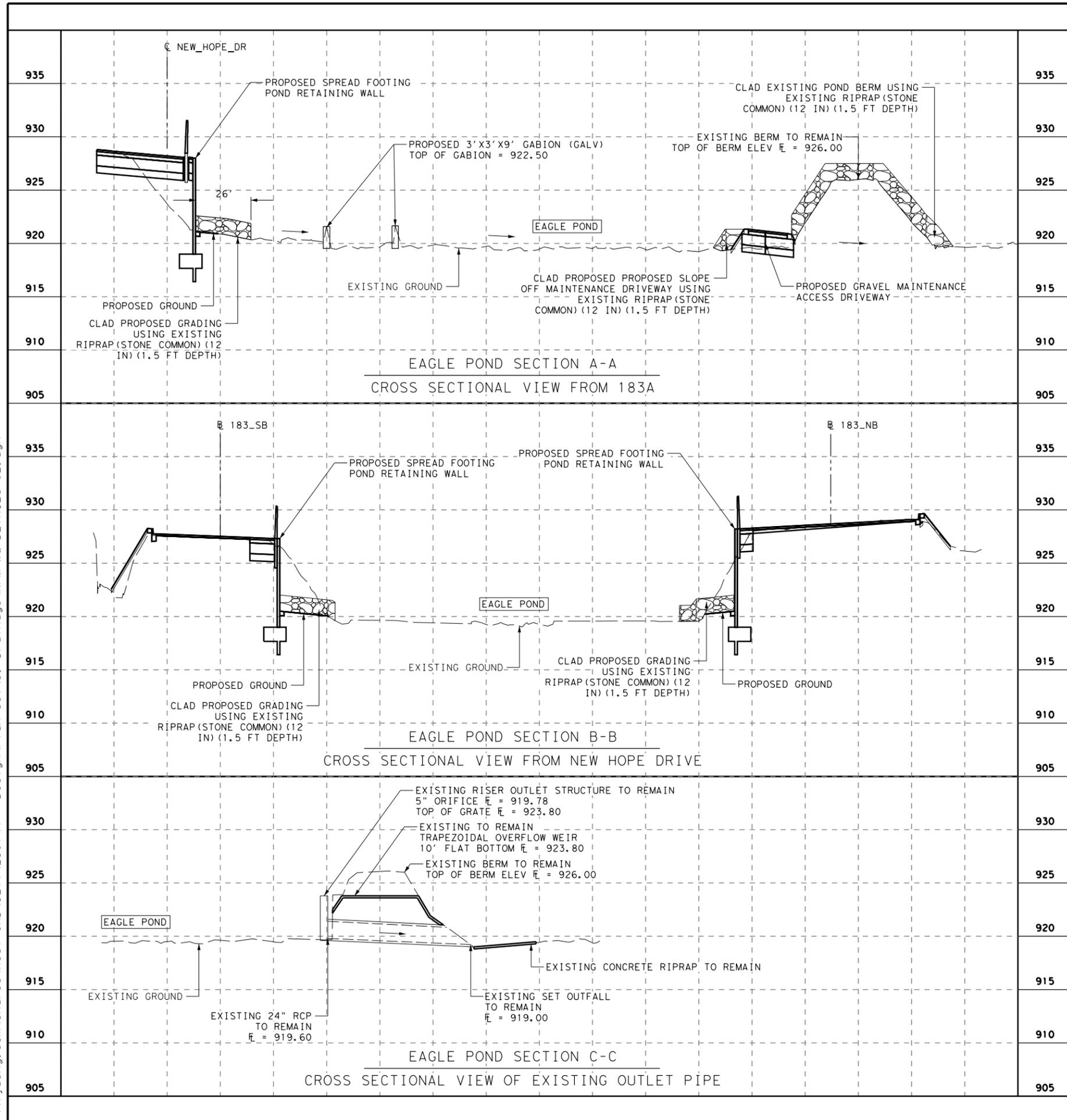
NEW HOPE DRIVE DRAINAGE WATER QUALITY DETAILS
EAGLE POND - GRADING

DESIGN BY: AS
DRAWN BY: AS
CHECKED BY: DB
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL:
VERTICAL:
SHEET: 2 OF 5
PAGE: 317

100% SUBMITTAL

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WATER QUALITY CALCULATIONS SUMMARY		
	EXISTING	PROPOSED
DRAINAGE AREA (AC)	16.65	16.78
IMPERVIOUS COVER (%)	70.39%	72.86%
IMPERVIOUS COVER (AC)	11.72	12.22
REQUIRED WQV (CU. FT.)	164465	172974
PROVIDED WQV (CU. FT.)	194930	206184
TOP OF POND ELEVATION	923.80	923.80

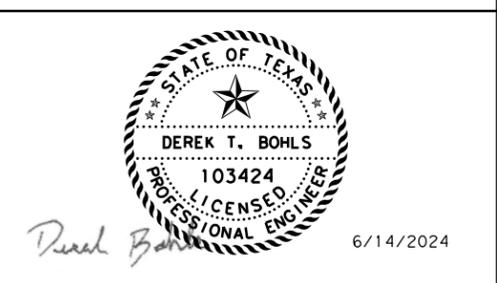
POND AREA/STORAGE SUMMARY				
ELEVATION (FT)	AREA (SF)	AREA (AC)	VOLUME (CF)	CUMULATIVE VOLUME (CF)
920.00	39907	0.92	16652	16812
921.00	50197	1.15	44446	61258
922.00	51343	1.18	50459	111717
923.00	52590	1.21	51965	163682
923.18				172974
923.80				206184
924.00	53980	1.24	10771	216955
925.00	55888	1.28	54805	271760
926.00	59196	1.36	56659	328419

WQ ELEVATION
WQ ELEVATION PROVIDED

EXISTING OVERFLOW WEIR	
TOTAL FLOW TO POND	
Q ²⁵ GEOPAK =	73.02 CFS
Q WEIR PASS =	28.08 CFS
FREEBOARD =	1.24 FT
TOP OF BERM/WALL =	926.00 FT
WEIR ELEVATION =	923.80 FT
WEIR DEPTH =	0.96 FT
WEIR BOTTOM LENGTH	10.00 FT
WEIR C =	3.00

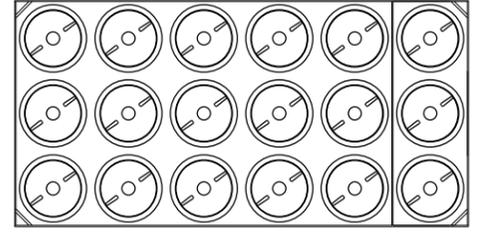
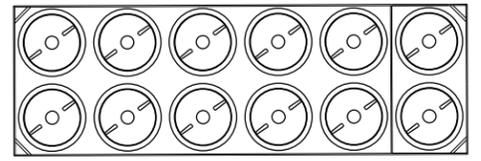
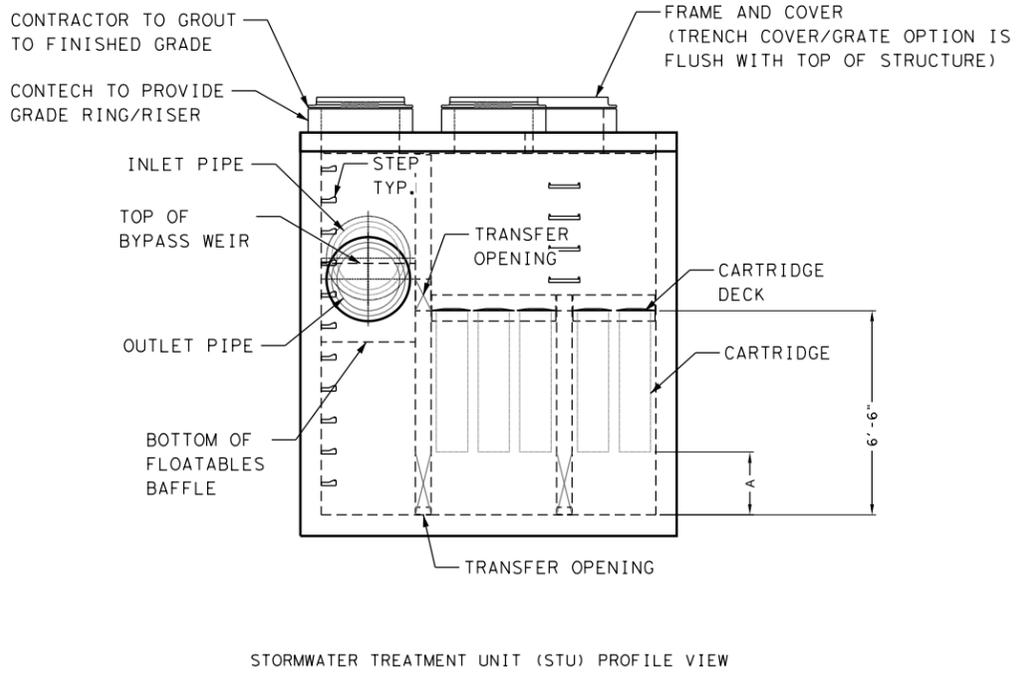
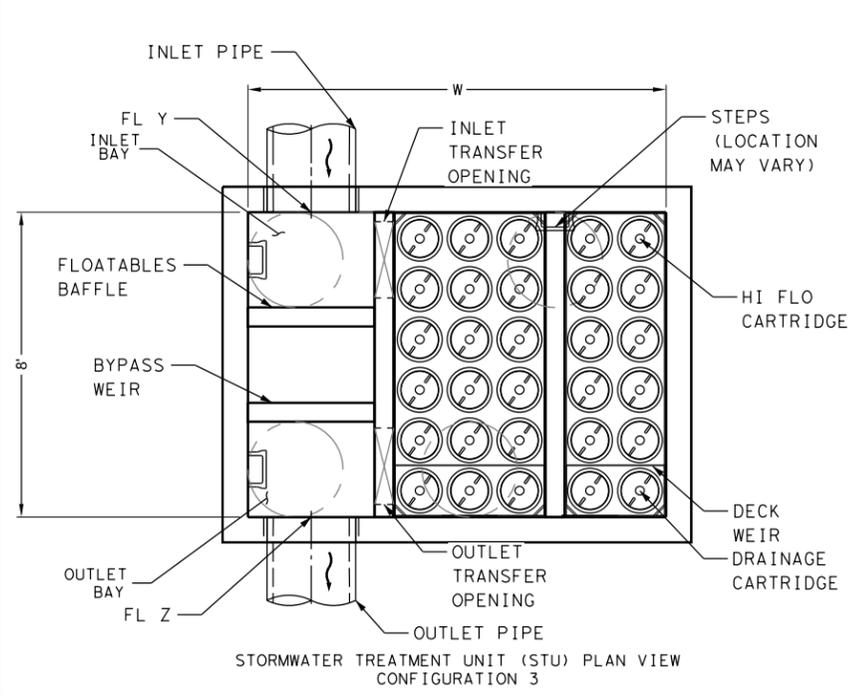
EXISTING RISER OVERFLOW	
TOTAL FLOW TO POND	
Q ²⁵ GEOPAK =	73.02 CFS
Q WEIR PASS =	44.94 CFS
FREEBOARD =	1.24 FT
TOP OF BERM/WALL =	926.00 FT
WEIR ELEVATION =	923.80 FT
WEIR DEPTH =	0.96 FT
WEIR BOTTOM LENGTH	16.00 FT
WEIR C =	3.00

- NOTES:
- EXISTING EXTENDED DETENTION CTRMA EAGLE POND DUE TO PROPOSED TURN LANE. PROPOSED DETENTION VOLUME MEETS OR EXCEEDS REQUIRED WATER QUALITY VOLUME.
 - THE REVISED EXISTING CONDITION WAS CALCULATED BASED ON THE EXISTING IMPERVIOUS COVER APPARENT IN SURVEY AND AERIAL IMAGERY.
 - THE PROPOSED CONDITION WAS CALCULATED BASED ON THE PROPOSED IMPERVIOUS COVER AS SHOWN IN THE ROADWAY DESIGN FILES.



NEW HOPE DRIVE
DRAINAGE
WATER QUALITY DETAILS
EAGLE POND - SECTIONS

DESIGN BY: AS	SCALE
DRAWN BY: AS	HORIZONTAL:
CHECKED BY: DB	VERTICAL:
APPROVED BY:	SHEET: 3 OF 5
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DATE:	



2 ROW (2R)

3 ROW (3R)

BRIDGE DECK (BD)

BMP	A	C
REQUIRED TREATMENT FLOW RATE (CFS)	2.81	2.77
PROVIDED TREATMENT FLOW RATE (CFS)	2.94	2.94
DRAINAGE AREA (AC)	5.27	2.16
IMPERVIOUS COVER (AC)	5.19	2.12
STU WIDTH: W (FT)	8	8
STU LENGTH: L (FT)	8	8
# OF HI-FLOW CARTRIDGES	15	15
# OF DRAINDOWN CARTRIDGES	3	3
BD 2R (EA)	1	1
BD 3R (EA)	1	1
CARTRIDGE LENGTH (IN)	54	54
INLET PIPE DIMENSIONS	42" RCP	36" RCP
OUTLET PIPE DIMENSIONS	42" RCP	36" RCP
FL Y	931.09	924.02
FL Z	930.54	923.48
CONFIGURATION	IN-LINE	IN-LINE
STU RIM EL	937.67	929.43
STU INVERT EL	925.54	918.48

ITEM	CODE	DESCRIPTION	UNIT	QTY
7202	6035	STRMWTR TREAT UNIT (8'X8') (18 CART)	EA	2



Derek Bohls 6/14/2024

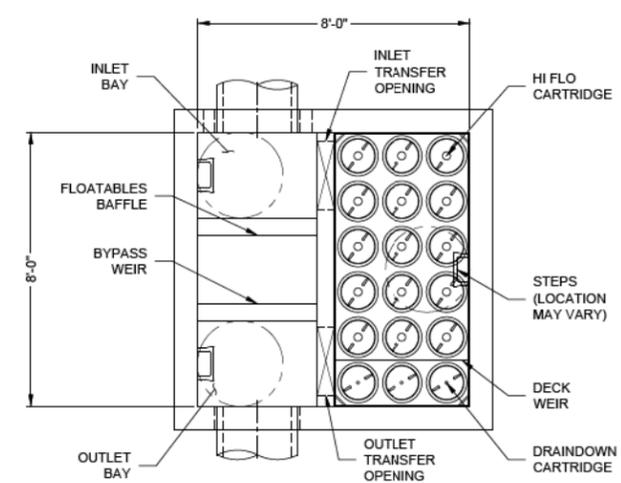


NEW HOPE DRIVE
DRAINAGE
WATER QUALITY DETAILS
STU SUMMARY

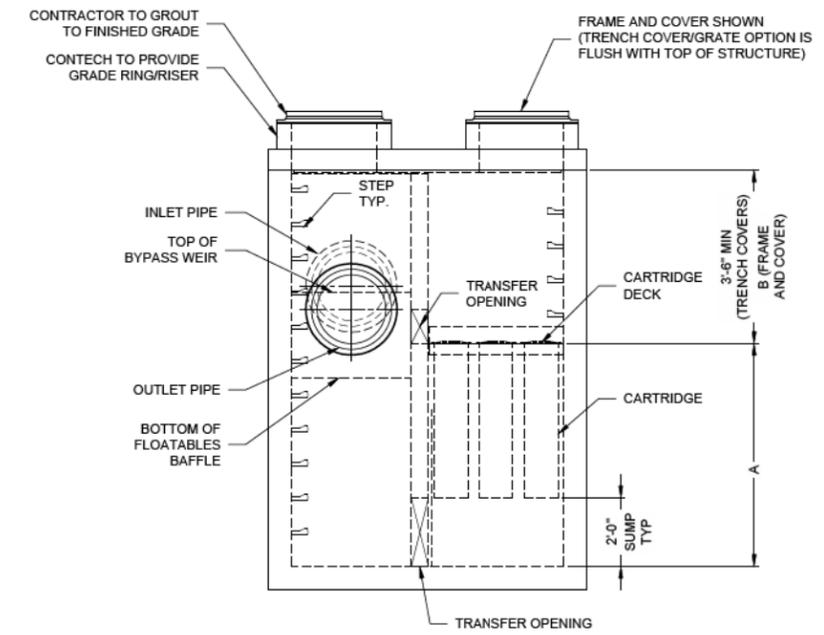
DESIGN BY: AS
DRAWN BY: AS
CHECKED BY: DB
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL:
VERTICAL:
SHEET: 4 OF 5
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I:\COMMON\CAD\TREATMENT\13 JELLYFISH FILTER\40 STANDARD DRAWINGS\FPD0808-DTL NEW.DWG 1/29/2018 10:50 AM

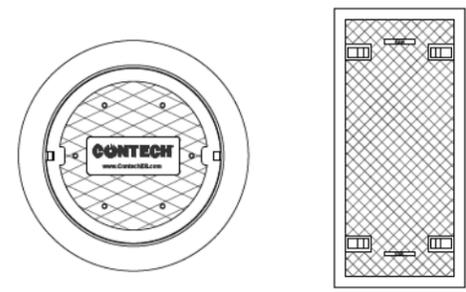


PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW

JELLYFISH DESIGN NOTES				
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD				
CARTRIDGE SELECTION				
CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	2.94	2.21	1.47	0.81
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

24" TRENCH COVER
(LENGTH VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS					
STRUCTURE ID	*				
WATER QUALITY FLOW RATE (cfs)	*				
PEAK FLOW RATE (cfs)	*				
RETURN PERIOD OF PEAK FLOW (yrs)	*				
# OF CARTRIDGES REQUIRED (HF / DD)	*				
CARTRIDGE LENGTH	*				
PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*
SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.					
RIM ELEVATION	*				
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT			
	*	*			
NOTES/SPECIAL REQUIREMENTS:					
* PER ENGINEER OF RECORD					

- GENERAL NOTES:**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
 - JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 10', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
 - STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
 - OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
 - THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
 - NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

- INSTALLATION NOTES**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
 - CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
 - CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.



CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-845-7000 513-845-7993 FAX

JELLYFISH JFPD0808
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION

Derek Bohls
6/14/2024

LJA ENGINEERING, INC
FRN - F-1386

NEW HOPE DRIVE
DRAINAGE
WATER QUALITY DETAILS
JFPD0808

DESIGN BY: AS	SCALE
DRAWN BY: AS	HORIZONTAL:
CHECKED BY: DB	VERTICAL:
APPROVED BY:	SHEET: 5 OF 5
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**EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY
APPLICATION - TCEQ-20872
ATTACHMENT H – INSPECTION, MAINTENANCE, REPAIR AND
RETROFIT**

PROJECT NAME: New Hope Drive
CITY, STATE, ZIP: Cedar Park, Texas, 78641

BMP maintenance operations should be performed on a regular basis as outlined below and as required to ensure that the BMPs and measures are constructed and functioning as designed. Operations must also be performed as required to maintain site aesthetics, vegetation, BMP access, and debris removal. After a Texas licensed professional engineer has certified that the permanent BMPs and measures were constructed as designed and submitted certification to the TCEQ regional office, the maintenance schedule as outlined below will commence.

General:

1. Records and diaries will be kept for maintenance activities listed and performed by the City of Cedar Park and contractors. All records must be retained for a period of not less than five (5) years.
2. Maintenance and contracted personnel may oversee minor repairs. Major repairs or retrofits must be overseen by the City of Cedar Park.
3. Roadways and roadsides will be reviewed regularly, by maintenance forces. BMPs will be inspected after rainfall events greater than four inches to ensure no damage to grass cover, accumulation of litter, or erosion has occurred. Areas of concern will be noted, and any necessary maintenance scheduled.
4. Right-of-way areas will be mowed by contract. Cutting height is a minimum of five inches. Mowing will be delayed during times when preferred vegetation is seeding to allow for natural propagation to continue.

Jellyfish Storm Treatment Units:

1. Filter cartridges will be inspected for wear or damage and cleaned bi-annually.
2. Cartridges will be removed, rinsed, and replaced.
3. Vacuum extraction of captured pollutants in the sump will be performed.
4. Cartridges will be fully replaced every 2-5 years.

Responsible Party for Maintenance: City of Cedar Park
Department of Engineering
450 Cypress Creek Road
Cedar Park, Texas 78613

Signature of Responsible Party:
Randall Lueders, PE



EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY APPLICATION

TCEQ-20872

**ATTACHMENT J MEASURES FOR MINIMIZING SURFACE STREAM
CONTAMINATION**

During construction, temporary BMPs outlined in the Storm Water Pollution Prevention Plan (SWPPP), located after the Edwards Aquifer Protection Program Roadway Application and its attachments, will be utilized to treat any on-site runoff prior to entering any surface streams. After construction, the proposed stormwater treatment units will be in place to meet the 80% TSS removal requirements for the New Hope Drive project.

EDWARDS AQUIFER PROTECTION PROGRAM ROADWAY APPLICATION
TCEQ-20872

ATTACHMENT K - VOLUME AND CHARACTER OF STORMWATER

The post construction peak project runoff for the New Hope Drive project will be increased, when compared to the pre-construction peak runoff. The post-construction composite runoff C factor will increase from 0.64 to .89 due to the proposed pavement increasing the impervious area within the project right of way. The runoff C factors were calculated using the existing and proposed condition impervious cover areas within the City of Cedar Park right of way for the length of the New Hope Drive project. Stormwater runoff calculations for exterior and interior drainage areas were calculated using NRCS and Rational Method depending on the size of the area. The values obtained are shown in Attachment G Construction Plans. Water quality area delineations are shown in the Site Plan and are listed in Table 1 below.

Table 1: Impervious Cover Comparison

IMPERVIOUS COVER COMPARISON			
OUTFALLS	TOTAL AREA	EXISTING IMPERVIOUS	PROPOSED IMPERVIOUS
	AC	AC	AC
A	10.07	5.72	9.89
C	4.013	2.11	3.87
D	1.697	1.16	1.65
TOTAL	15.78	8.99	15.41

The character of stormwater is expected to change from pre- to post-construction, as the area surrounding and including the project is still developing. Potential sources of contamination will be from sediment, debris, and chemicals generated on site by activities related to grading, paving, storm sewer and culvert construction and utility relocations. These potential contaminants are explained in more detail in Attachment D above. Runoff from the proposed project will be conveyed through storm sewer and/or roadside ditches to culverts leaving the site. Permanent BMP stormwater treatment units will ensure the required TSS load removal is achieved. All disturbed areas will be re-vegetated or stabilized at the completion of the project; therefore, no significant degradation of stormwater quality is anticipated because of the project.

**NEW HOPE DRIVE PROJECT -
STORM WATER POLLUTION PLAN (SWPPP)**

STORMWATER POLLUTION PREVENTION PLAN (SWP3):

This SWP3 has been developed in accordance with the TPDES Construction General Permit TXR150000 (CGP). The Texas Department of Transportation (TxDOT) ensures that project specifications include adequate best management practices (BMPs) for this project.

This SWP3 is consistent with requirements specified in applicable stormwater plans and the projects environmental permits, issues, and commitments (EPICs). A copy of the CGP is included in Attachment 2.12 of the SWP3 binder.

1.0 SITE/PROJECT DESCRIPTION

1.1 PROJECT CONTROL SECTION JOB (CSJ):
N/A

1.2 PROJECT LIMITS:

From: 500' WEST OF S BLOCK HOUSE DR

To: 100' EAST OF CR 180

1.3 PROJECT COORDINATES:

BEGIN: 30°32'2.3"N, 97°49'53.8"W

END: 30°32'9.3"N, 97°48'47.3"W

1.4 TOTAL PROJECT AREA (Acres): 23.1 Ac

1.5 TOTAL AREA TO BE DISTURBED (Acres): 23.1 Ac

1.6 NATURE OF CONSTRUCTION ACTIVITY:

ROADWAY WIDENING, DRAINAGE, AND UTILITY IMPROVEMENTS OF E NEW HOPE DR.

1.7 MAJOR SOIL TYPES:

Soil Type	Description
CH w/ gravel	Stiff to very stiff dark brown fat clay (CH) with gravel. Plasticity from 34 to 39. SPT N-values from 10 to 20 blows/ft.

1.8 PROJECT SPECIFIC LOCATIONS (PSLs):

PSLs must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. PSLs may be identified during preconstruction meetings or during the construction process. Please choose from the options below:

- PSLs determined during preconstruction meeting
- PSLs determined during construction
- No PSLs planned for construction

Type	Sheet #s

All off-ROW PSLs required by the Contractor are the Contractor's responsibility. The Contractor shall secure all permits required by local, state, federal laws for off-ROW PSLs. The contractor shall provide diagrams, areas of disturbance, acreage, and BMPs for all off-ROW PSLs within one mile of the project.

1.9 CONSTRUCTION ACTIVITIES:

(Use the following list as a starting point when developing the Construction Activity Schedule and Ceasing Record in Attachment 2.5.)

- Mobilization
- Install sediment and erosion controls
- Blade existing topsoil into windrows, prep ROW, clear and grub
- Remove existing pavement
- Grading operations, excavation, and embankment
- Excavate and prepare subgrade for proposed pavement widening
- Remove existing culverts, safety end treatments (SETs)
- Remove existing metal beam guard fence (MBGF), bridge rail
- Install proposed pavement per plans
- Install culverts, culvert extensions, SETs
- Install mow strip, MBGF, bridge rail
- Place flex base
- Rework slopes, grade ditches
- Blade windrowed material back across slopes
- Revegetation of unpaved areas
- Achieve site stabilization and remove sediment and erosion control measures

- Other: _____
- Other: _____
- Other: _____

1.10 POTENTIAL POLLUTANTS AND SOURCES:

- Sediment laden stormwater from stormwater conveyance over disturbed area
- Fuels, oils, and lubricants from construction vehicles, equipment, and storage
- Solvents, paints, adhesives, etc. from various construction activities
- Transported soils from offsite vehicle tracking
- Construction debris and waste from various construction activities
- Contaminated water from excavation or dewatering pump-out water
- Sanitary waste from onsite restroom facilities
- Trash from various construction activities/receptacles
- Long-term stockpiles of material and waste
- X

- Other: _____
- Other: _____
- Other: _____

1.11 RECEIVING WATERS:

Receiving waters must be depicted on the Environmental Layout Sheets in Attachment 1.2 of this SWP3. Include Segment # for receiving waters.

Tributaries	Classified Waterbody

* Add (*) for impaired waterbodies with pollutant in ().

1.12 ROLES AND RESPONSIBILITIES: TxDOT

- Development of plans and specifications
- Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- Post Construction Site Notice
- Submit NOI/CSN to local MS4
- Perform SWP3 inspections
- Maintain SWP3 records and update to reflect daily operations
- Complete and submit Notice of Termination to TCEQ
- Maintain SWP3 records for 3 years

- Other: _____
- Other: _____
- Other: _____

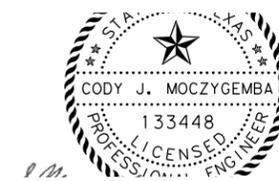
1.13 ROLES AND RESPONSIBILITIES: CONTRACTOR

- Day To Day Operational Control
- Submit Notice of Intent (NOI) to TCEQ (≥5 acres)
- Post Construction Site Notice
- Submit NOI/CSN to local MS4
- Maintain schedule of major construction activities
- Install, maintain and modify BMPs
- Complete and submit Notice of Termination to TCEQ
- Maintain SWP3 records for 3 years

- Other: _____
- Other: _____
- Other: _____

1.14 LOCAL MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) OPERATOR COORDINATION:

MS4 Entity
City of Cedar Park Public Works



STORMWATER POLLUTION PREVENTION PLAN (SWP3)

© 2023 July 2023 Sheet 1 of 2
Texas Department of Transportation

FED. RD. DIST. NO.	PROJECT NO.		SHEET NO.
	3217-2301		512
STATE	STATE DIST.	COUNTY	
TEXAS	AUS	WILLIAMSON	
CONT.	SECT.	JOB	HIGHWAY NO.
-	-	-	NHD

STORMWATER POLLUTION PREVENTION PLAN (SWP3):

2.0 BEST MANAGEMENT PRACTICES (BMPs) AND CONTROLS, INSPECTION, AND MAINTENANCE

The Contractor shall be the responsible party for implementing the BMPs described herein and for complying with the SWP3 for control of erosion and sedimentation during day-to-day operations. The Contractor shall implement changes to this SWP3 approved by TxDOT within the times specified in this SWP3 or the CGP.

2.1 EROSION CONTROL AND SOIL STABILIZATION BMPs:

T / P

- Protection of Existing Vegetation
- Vegetated Buffer Zones
- Soil Retention Blankets
- Geotextiles
- Mulching/ Hydromulching
- Soil Surface Treatments
- Temporary Seeding
- Permanent Planting, Sodding or Seeding
- Biodegradable Erosion Control Logs
- Rock Filter Dams/ Rock Check Dams

- Vertical Tracking
- Interceptor Swale
- Riprap
- Diversion Dike
- Temporary Pipe Slope Drain
- Embankment for Erosion Control
- Paved Flumes
- Other: _____
- Other: _____
- Other: _____
- Other: _____

2.2 SEDIMENT CONTROL BMPs:

T / P

- Biodegradable Erosion Control Logs
- Dewatering Controls
- Inlet Protection
- Rock Filter Dams/ Rock Check Dams
- Sandbag Berms
- Sediment Control Fence
- Stabilized Construction Exit
- Floating Turbidity Barrier
- Vegetated Buffer Zones
- Vegetated Filter Strips
- Other: _____
- Other: _____
- Other: _____
- Other: _____

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

Sediment control BMPs requiring design capacity calculations (See SWP3 Attachment 1.3.):

T / P

- Sediment Trap
 - Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
 - 3,600 cubic feet of storage per acre drained
- Sedimentation Basin
 - Not required (<10 acres disturbed)
 - Required (>10 acres) and implemented.
 - Calculated volume runoff from 2-year, 24-hour storm for each acre of disturbed area
 - 3,600 cubic feet of storage per acre drained
 - Required (>10 acres), but not feasible due to:
 - Available area/Site geometry
 - Site slope/Drainage patterns
 - Site soils/Geotechnical factors
 - Public safety
 - Other: EXISTING WATER QUALITY POND TO BE UTILIZED IN PERMANENT

2.3 PERMANENT CONTROLS:

(Coordinate post-construction BMPs with appropriate TxDOT maintenance sections.)

BMPs To Be Left In Place Post Construction:

Type	Stationing	
	From	To
Permanent Seeding	NEW HOPE DR STA 28+44	NEW HOPE DR STA 89+96
Riprap	NEW HOPE DR STA 65+57	NEW HOPE DR STA 70+23

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.4 OFFSITE VEHICLE TRACKING CONTROLS:

- Excess dirt/mud on road removed daily
- Haul roads dampened for dust control
- Loaded haul trucks to be covered with tarpaulin
- Stabilized construction exit
- Daily street sweeping
- Other: _____
- Other: _____
- Other: _____
- Other: _____

2.5 POLLUTION PREVENTION MEASURES:

- Chemical Management
- Concrete and Materials Waste Management
- Debris and Trash Management
- Dust Control
- Sanitary Facilities
- Other: _____
- Other: _____
- Other: _____
- Other: _____

2.6 VEGETATED BUFFER ZONES:

Natural vegetated buffers shall be maintained as feasible to protect adjacent surface waters. If vegetated natural buffer zones are not feasible due to site geometry, the appropriate additional sediment control measures have been incorporated into this SWP3.

Type	Stationing	
	From	To

Refer to the Environmental Layout Sheets/ SWP3 Layout Sheets located in Attachment 1.2 of this SWP3

2.7 ALLOWABLE NON-STORMWATER DISCHARGES:

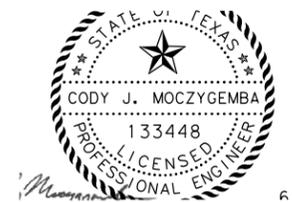
- Fire hydrant flushings
- Irrigation drainage
- Pavement washwater (where spills or leaks have not occurred, and detergents are not used)
- Potable water sources
- Springs
- Uncontaminated groundwater
- Water used to wash vehicles or control dust
- Other allowable non-stormwater discharges as allowed by TPDES GP TXR150000.

2.8 DEWATERING:

2.9 INSPECTIONS:

2.10 MAINTENANCE:

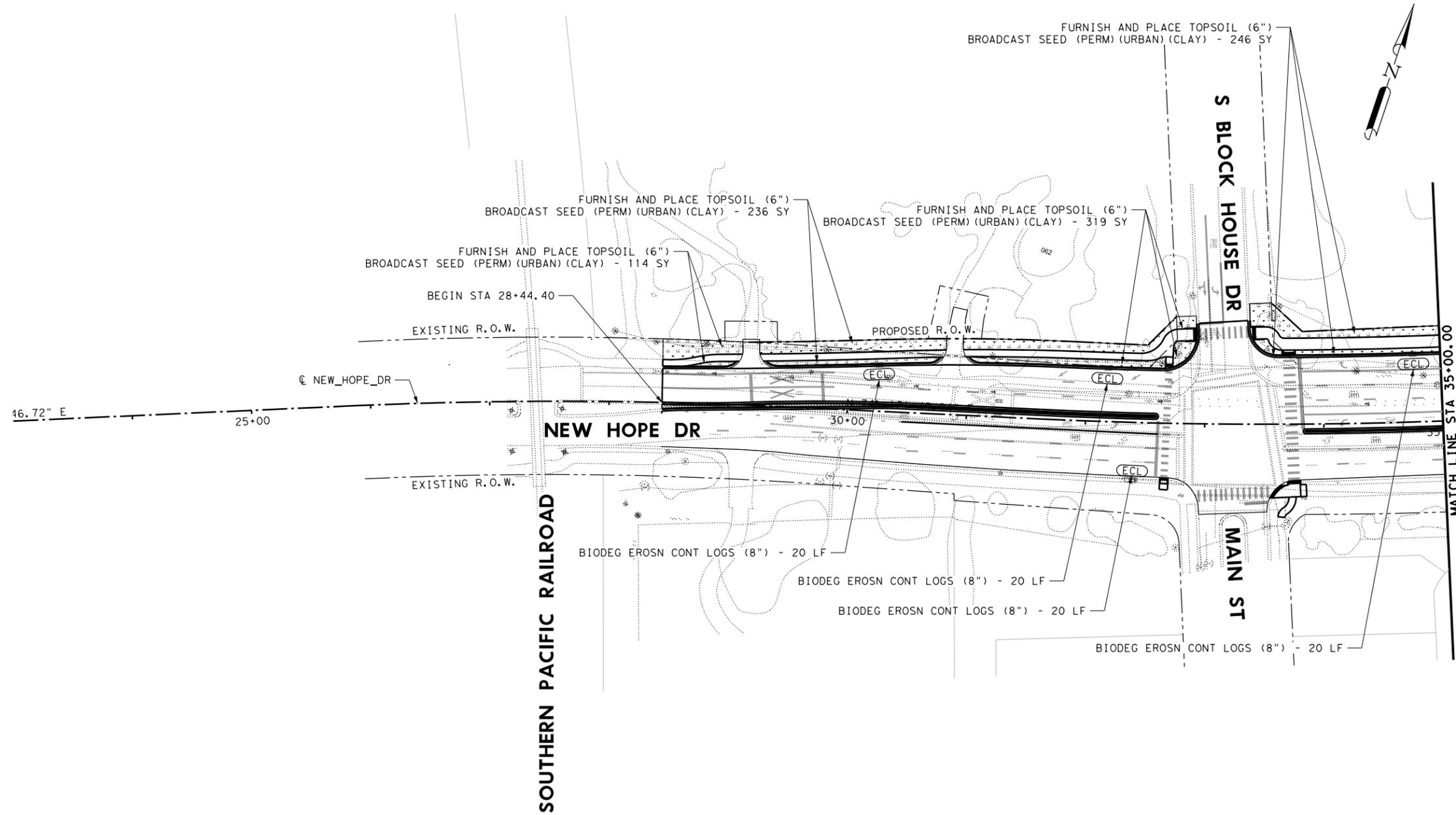
Control measures shall be properly installed according to specifications. If it is determined that a BMP or control measure is not operating effectively, maintenance must be accomplished as soon as possible and before the next anticipated rain event, but in no case later than 7 calendar days after being able to access the site. Maintenance shall be performed by the Contractor as indicated on the Field Inspection and Maintenance Report Form 2118 and retained in Attachment 2.5 of this SWP3.



STORMWATER POLLUTION PREVENTION PLAN (SWP3)

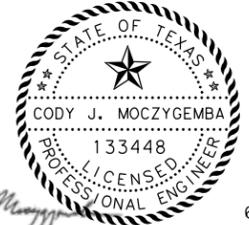
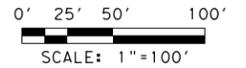
© 2023 July 2023 Sheet 2 of 2
Texas Department of Transportation

FED. RD. DIV. NO.	PROJECT NO.		SHEET NO.
	3217-2301		513
STATE	STATE DIST.	COUNTY	
TEXAS	AUS	WILLIAMSON	
CONT.	SECT.	JOB	HIGHWAY NO.
-	-	-	NHD



LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- ... EXISTING PLANIMETRICS
- DITCH FLOWLINE
- PROPOSED DRAINAGE
- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONT LOG
- (SCF) PROPOSED SILT CONT FENCE
- [Stippled Pattern] PROPOSED TOPSOIL & SEEDING
- [Rock Pattern] PROPOSED ROCK RIPRAP
- [Hatched Pattern] PROPOSED MEDIAN STAMPED CONCRETE



6/14/2024

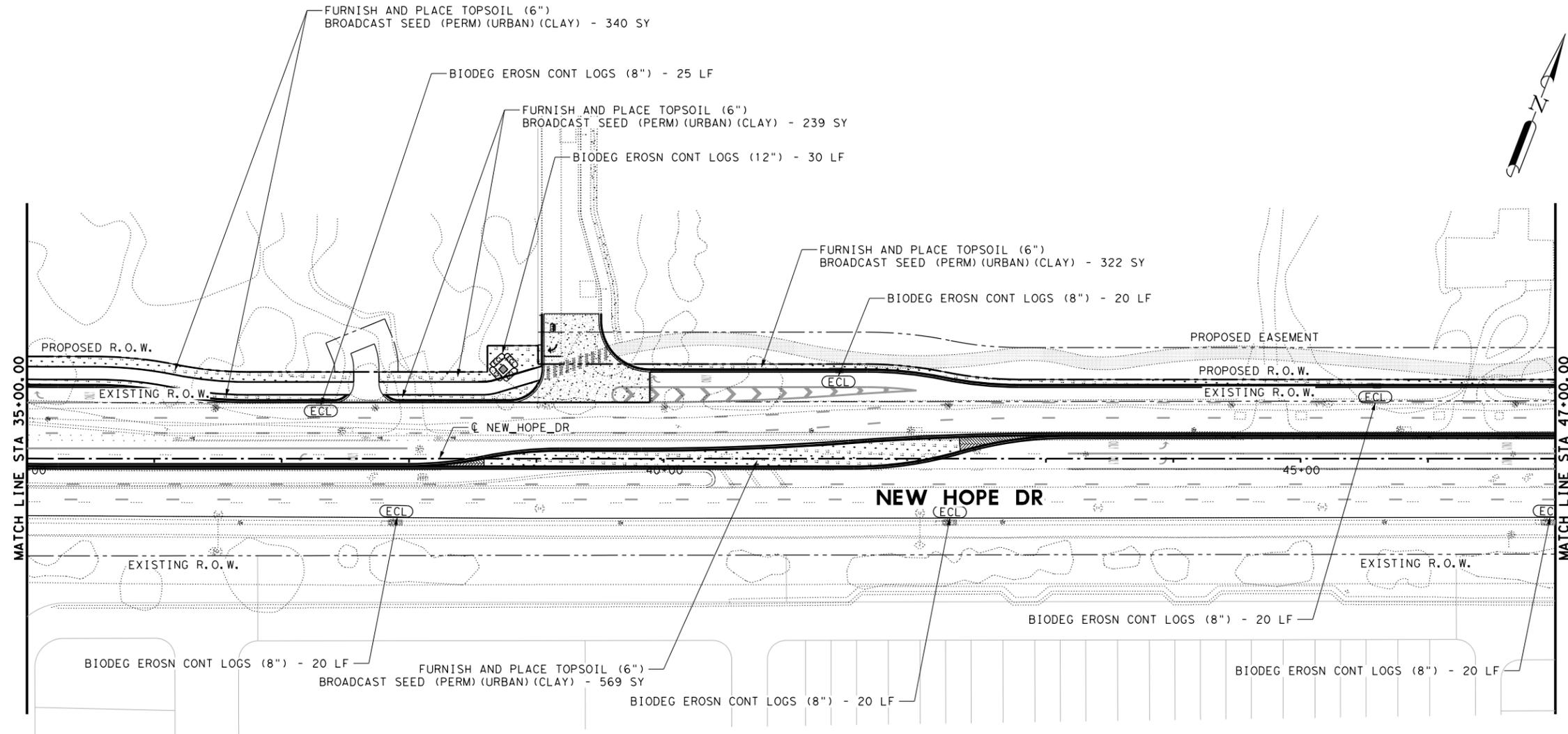


NEW HOPE DRIVE
EROSION CONTROL
LAYOUT

BEGIN TO STA 35+00

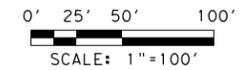
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CHECKED BY: CM
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
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VERTICAL: N/A
SHEET: 1 OF 8
PAGE: 514



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- EXISTING PLANIMETRICS
- DITCH FLOWLINE
- PROPOSED DRAINAGE
- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONT LOG
- (SCF) PROPOSED SILT CONT FENCE
- [Pattern] PROPOSED TOPSOIL & SEEDING
- [Pattern] PROPOSED ROCK RIPRAP
- [Pattern] PROPOSED MEDIAN STAMPED CONCRETE



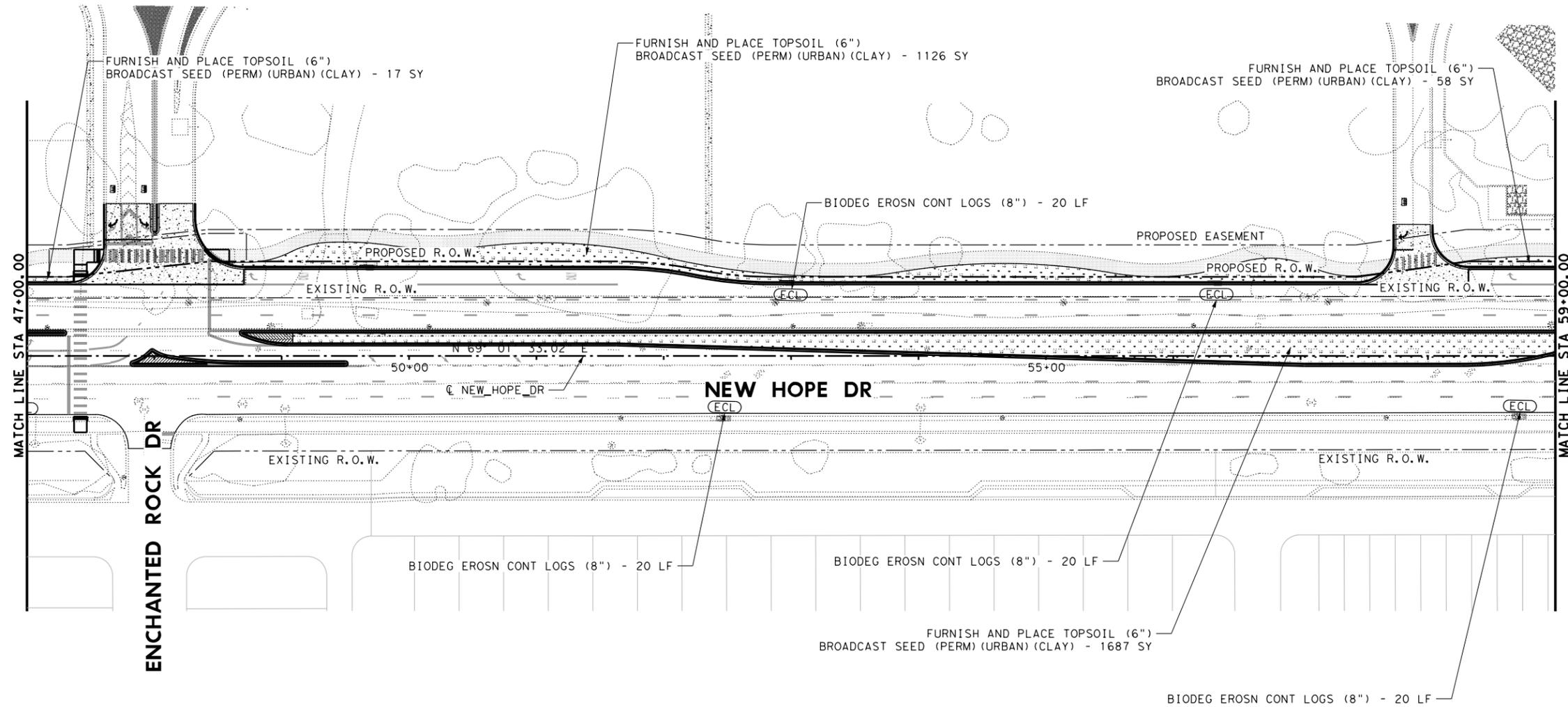
6/14/2024



NEW HOPE DRIVE
EROSION CONTROL
LAYOUT
STA 35+00 TO STA 47+00

DESIGN BY: DW
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CHECKED BY: CM
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL: 1"=100'
VERTICAL: N/A
SHEET: 2 OF 8
PAGE: 515



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- ... EXISTING PLANIMETRICS
- DITCH FLOWLINE
- PROPOSED DRAINAGE
- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONT LOG
- (SCF) PROPOSED SILT CONT FENCE
- [Pattern] PROPOSED TOPSOIL & SEEDING
- [Pattern] PROPOSED ROCK RIPRAP
- [Pattern] PROPOSED MEDIAN STAMPED CONCRETE

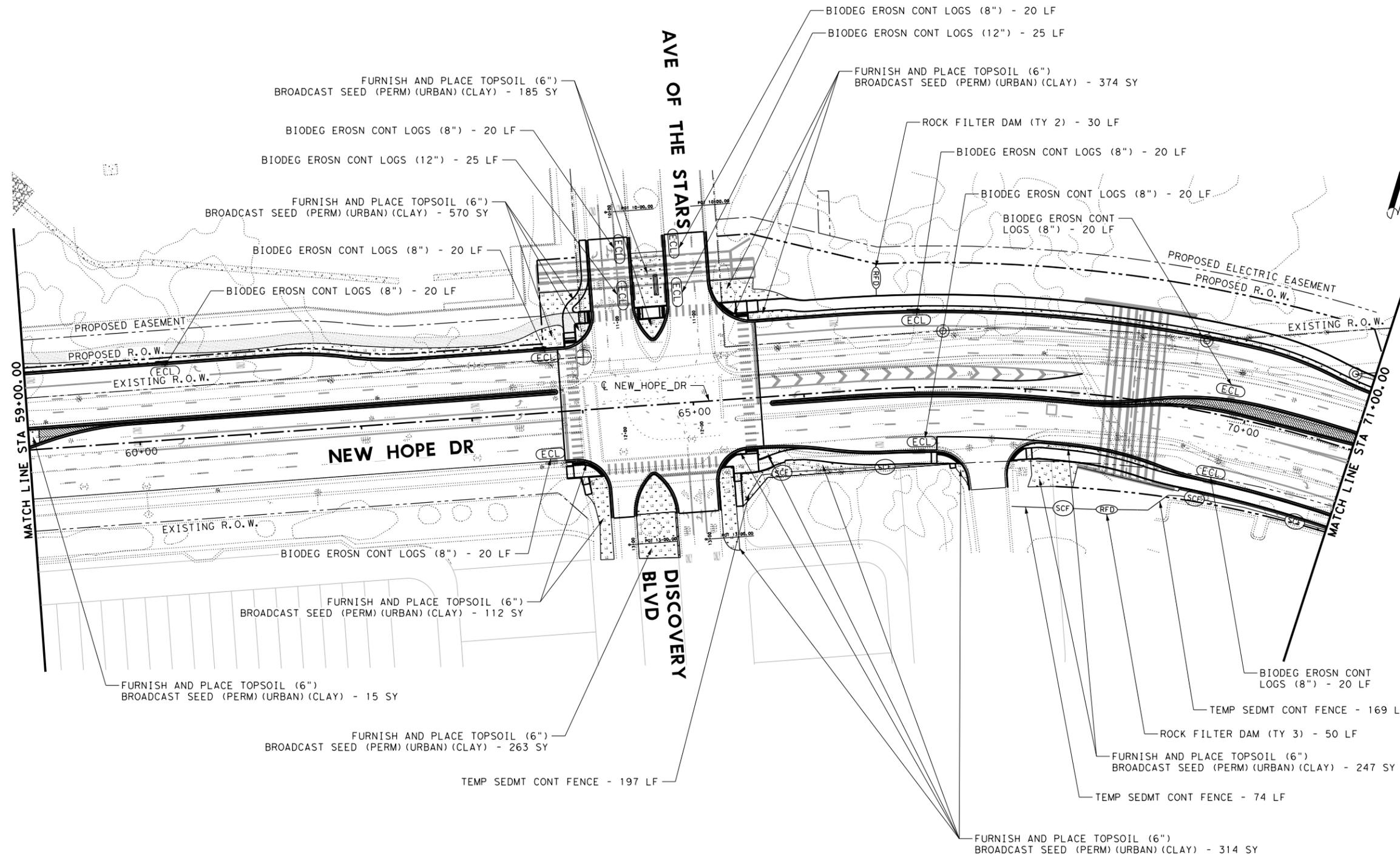
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**NEW HOPE DRIVE
EROSION CONTROL
LAYOUT**
STA 47+00 TO STA 59+00

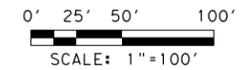
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PROJECT NO: 3217-2301
DATE:

SCALE
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VERTICAL: N/A
SHEET: 3 OF 8
PAGE: 516



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- EXISTING PLANIMETRICS
- DITCH FLOWLINE
- PROPOSED DRAINAGE
- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONTROL LOG
- (SCF) PROPOSED SILT CONTROL FENCE
- [Pattern] PROPOSED TOPSOIL & SEEDING
- [Pattern] PROPOSED ROCK RIPRAP
- [Pattern] PROPOSED MEDIAN STAMPED CONCRETE



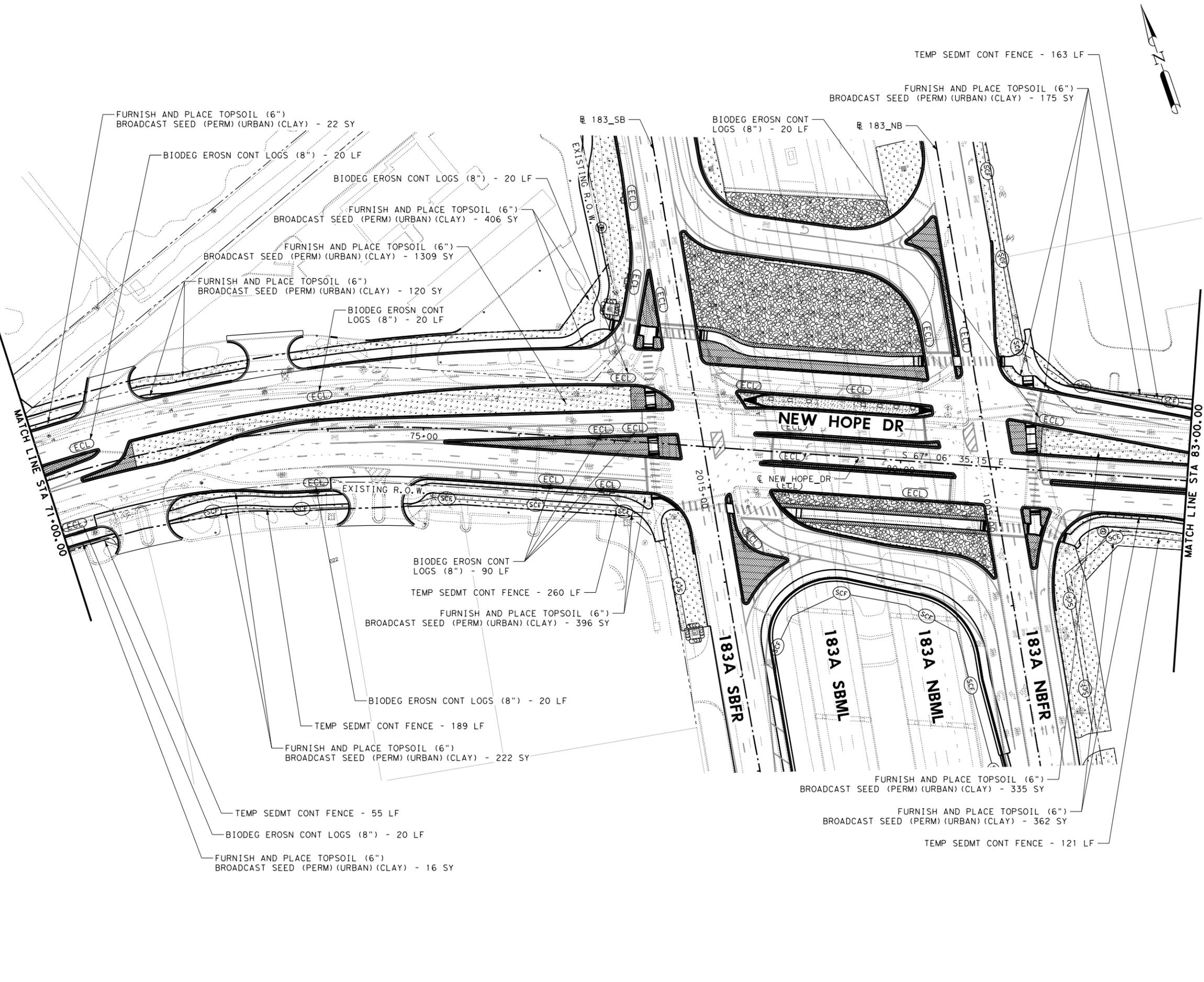
6/14/2024



**NEW HOPE DRIVE
EROSION CONTROL
LAYOUT**
STA 59+00 TO STA 71+00

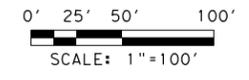
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 APPROVED BY:
 PROJECT NO: 3217-2301
 DATE:

SCALE
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 VERTICAL: N/A
 SHEET: 4 OF 8
 PAGE: 517



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- - - EXISTING PLANIMETRICS
- - - DITCH FLOWLINE
- - - PROPOSED DRAINAGE
- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONTROL LOG
- (SCF) PROPOSED SILT CONTROL FENCE
- [Pattern] PROPOSED TOPSOIL & SEEDING
- [Pattern] PROPOSED ROCK RIPRAP
- [Pattern] PROPOSED MEDIAN STAMPED CONCRETE



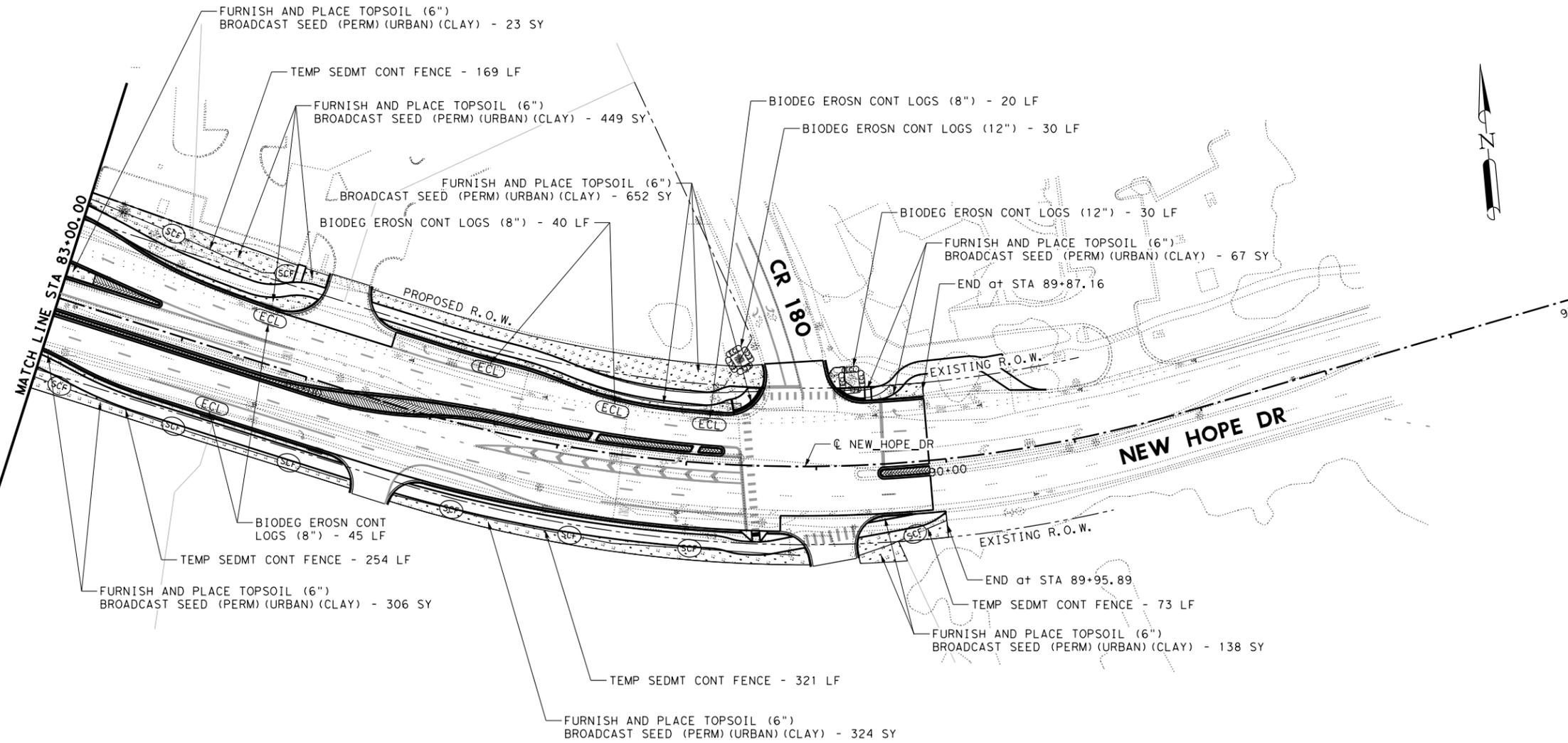
6/14/2024



NEW HOPE DRIVE
EROSION CONTROL
LAYOUT
STA 71+00 TO STA 83+00

DESIGN BY: DW
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CHECKED BY: CM
APPROVED BY:
PROJECT NO: 3217-2301
DATE:

SCALE
HORIZONTAL: 1"=100'
VERTICAL: N/A
SHEET: 5 OF 8
PAGE: 518



LEGEND

- EXISTING R.O.W.
- PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- - - EXISTING PLANIMETRICS
- DITCH FLOWLINE
- PROPOSED DRAINAGE
- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONT LOG
- (SCF) PROPOSED SILT CONT FENCE
- [Stippled Box] PROPOSED TOPSOIL & SEEDING
- [Hatched Box] PROPOSED ROCK RIPRAP
- [Hatched Box] PROPOSED MEDIAN STAMPED CONCRETE



0' 25' 50' 100'
SCALE: 1"=100'



6/14/2024



NEW HOPE DRIVE
EROSION CONTROL
LAYOUT
STA 83+00 TO END

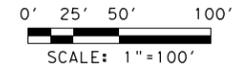
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PROJECT NO: 3217-2301
DATE:

SCALE
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VERTICAL: N/A
SHEET: 6 OF 8
PAGE: 519



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- EXISTING PLANIMETRICS
- DITCH FLOWLINE
- PROPOSED DRAINAGE
- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONT LOG
- (SCF) PROPOSED SILT CONT FENCE
- [Stippled Pattern] PROPOSED TOPSOIL & SEEDING
- [Rock Pattern] PROPOSED ROCK RIPRAP
- [Hatched Pattern] PROPOSED MEDIAN STAMPED CONCRETE



Cody Moczygemba

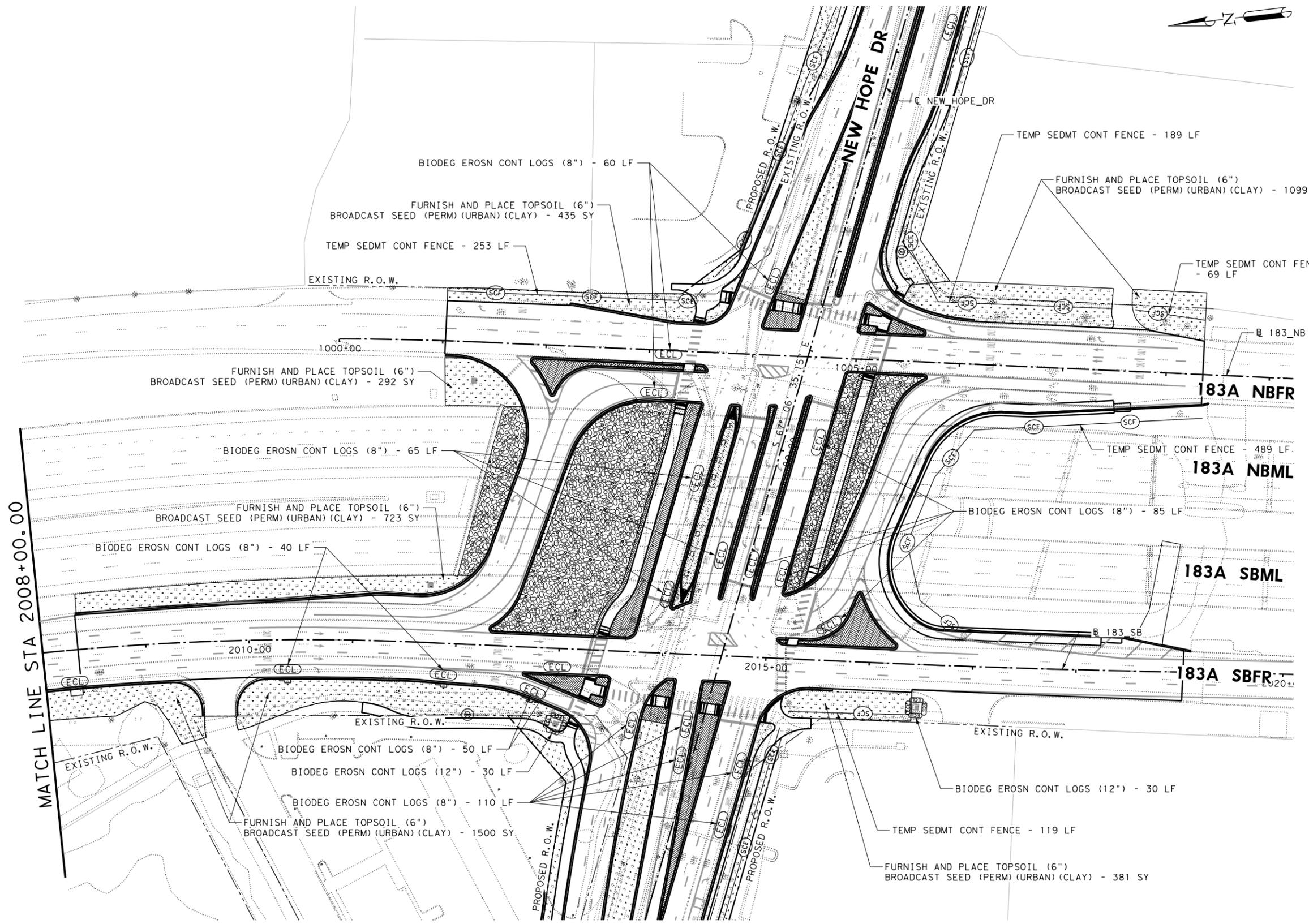
6/14/2024



**NEW HOPE DRIVE
EROSION CONTROL
LAYOUT**
183A

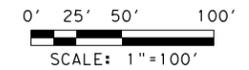
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PROJECT NO: 3217-2301
DATE:

SCALE
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VERTICAL: N/A
SHEET: 7 OF 8
PAGE: 520



LEGEND

- EXISTING R.O.W.
- - - PROPOSED R.O.W.
- - - EXISTING EASEMENT
- - - EXISTING UTILITY
- - - EXISTING PLANIMETRICS
- - - DITCH FLOWLINE
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- (RFD) PROPOSED ROCK FILTER DAM
- (ECL) PROPOSED EROSION CONTROL LOG
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- [Pattern] PROPOSED TOPSOIL & SEEDING
- [Pattern] PROPOSED ROCK RIPRAP
- [Pattern] PROPOSED MEDIAN STAMPED CONCRETE



6/14/2024



NEW HOPE DRIVE
EROSION CONTROL
LAYOUT
183A

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CHECKED BY: CM	VERTICAL: N/A
APPROVED BY:	SHEET: 8 OF 8
PROJECT NO: 3217-2301	PAGE: 521
DATE:	

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DATE: FILE:

I. STORMWATER POLLUTION PREVENTION-CLEAN WATER ACT SECTION 402

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

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

1.
2.
 No Action Required Required Action

Action No.

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

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

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

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

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

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

1.
2.
3.
4.

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

Best Management Practices:

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

III. CULTURAL RESOURCES

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

- No Action Required Required Action

Action No.

1. CONTACT ENGINEER ON PROJECT

IV. VEGETATION RESOURCES

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

- No Action Required Required Action

Action No.

- Use regionally native plants for landscaping.
- Promote construction practices that minimize adverse effects on natural habitat.
- Prevent pollution by reducing fertilizer and pesticide use.
- Implement water-efficient and runoff reduction practices, and create demonstration projects employing these practices.

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

- No Action Required Required Action

Action No.

- 4.

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

LIST OF ABBREVIATIONS

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

VI. HAZARDOUS MATERIALS OR CONTAMINATION ISSUES

General (applies to all projects):

Comply with the Hazard Communication Act (the Act) for personnel who will be working with hazardous materials by conducting safety meetings prior to beginning construction and making workers aware of potential hazards in the workplace. Ensure that all workers are provided with personal protective equipment appropriate for any hazardous materials used. Obtain and keep on-site Material Safety Data Sheets (MSDS) for all hazardous products used on the project, which may include, but are not limited to the following categories: Paints, acids, solvents, asphalt products, chemical additives, fuels and concrete curing compounds or additives. Provide protected storage, off bare ground and covered, for products which may be hazardous. Maintain product labelling as required by the Act.

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

Contact the Engineer if any of the following are detected:

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

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

- Yes No

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

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

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

- Yes No

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

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

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

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

- No Action Required Required Action

Action No.

1.
2.
3.

VII. OTHER ENVIRONMENTAL ISSUES

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

- No Action Required Required Action

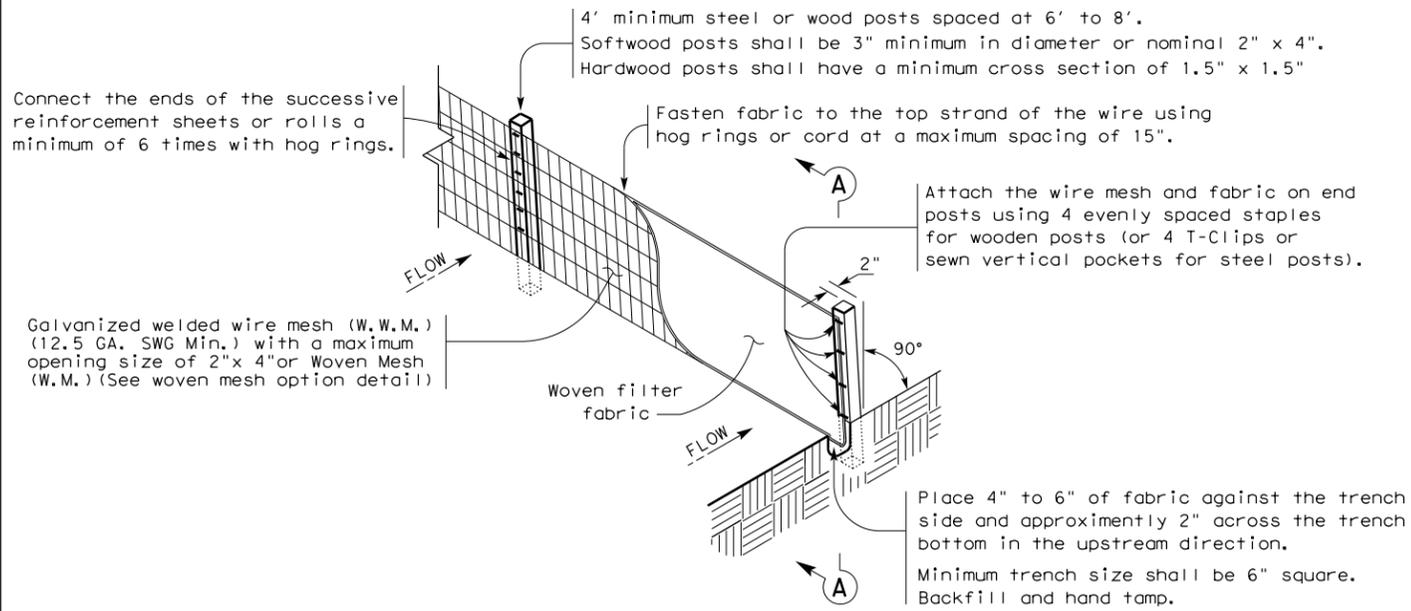
Action No.

- Work shall comply with the TCEQ-Approved Water Pollution Abatement Plan (WPAP) and any other applicable Edwards Aquifer Protection Plan and any other conditions in the TCEQ authorization letter for this project.

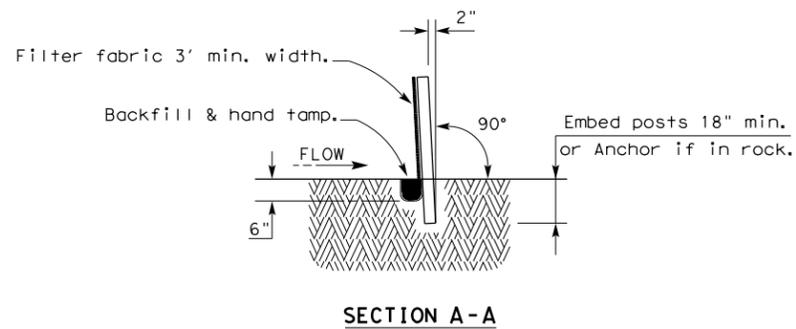
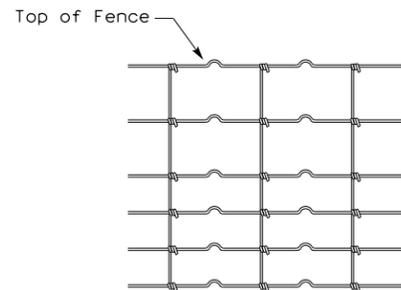
 Texas Department of Transportation		Design Division Standard	
ENVIRONMENTAL PERMITS, ISSUES AND COMMITMENTS EPIC			
FILE: epic.dgn	DN: TxDOT	CK: RG	DN: VP
© TxDOT: February 2015	CONT	SECT	JOB
12-12-2011 (DS) REVISIONS	-	-	NHD
05-07-14 ADDED NOTE SECTION IV, 01-23-2015 SECTION I (CHANGED ITEM 1122 TO ITEM 506, ADDED GRASSY SWALES.	DIST	COUNTY	SHEET NO.
AUS	WILLIAMSON		522

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DATE
FILE



TEMPORARY SEDIMENT CONTROL FENCE



HINGE JOINT KNOT WOVEN MESH (OPTION) DETAIL

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

SEDIMENT CONTROL FENCE USAGE GUIDELINES

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

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

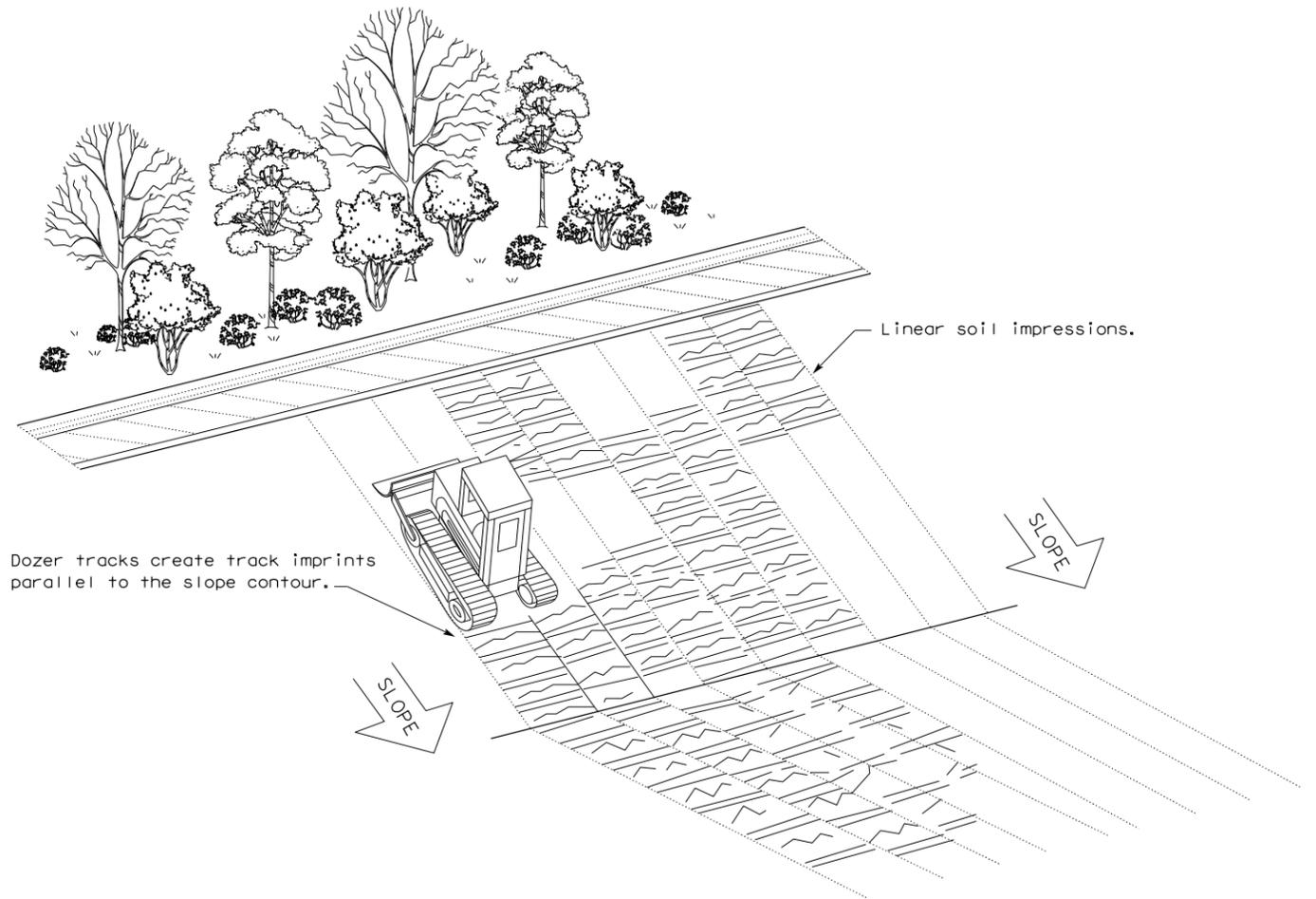
LEGEND

Sediment Control Fence



GENERAL NOTES

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

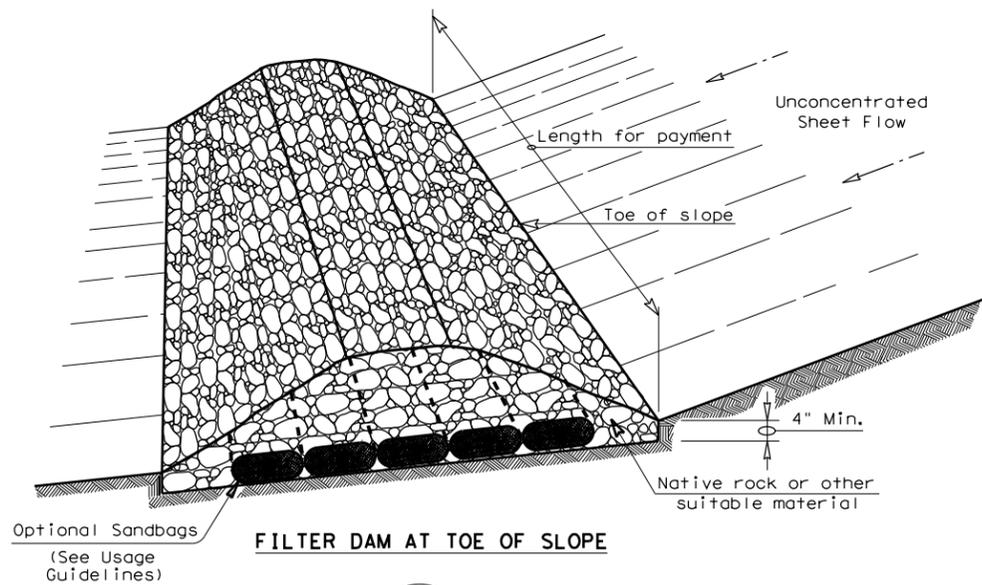


VERTICAL TRACKING

				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	-	-	-	NHD
	DIST	COUNTY		SHEET NO.
	AUS	WILLIAMSON		523

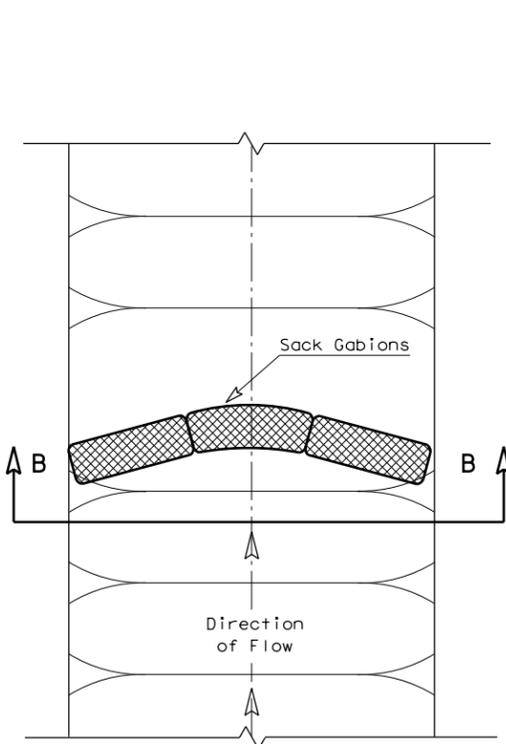
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DATE: FILE:

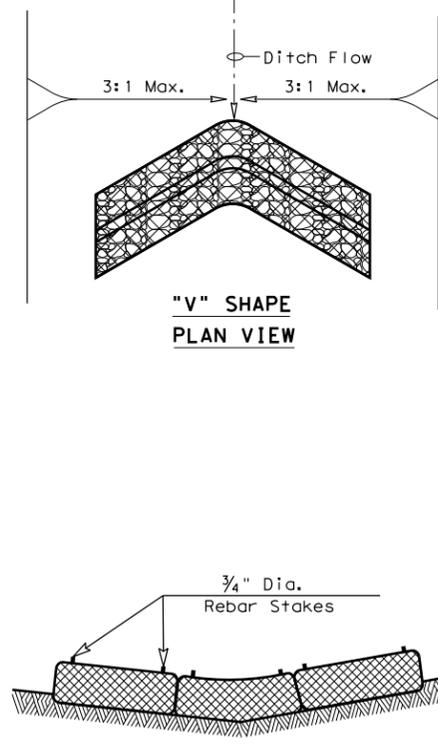


FILTER DAM AT TOE OF SLOPE

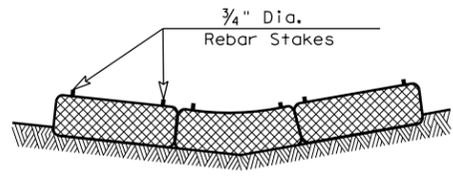
RFD1



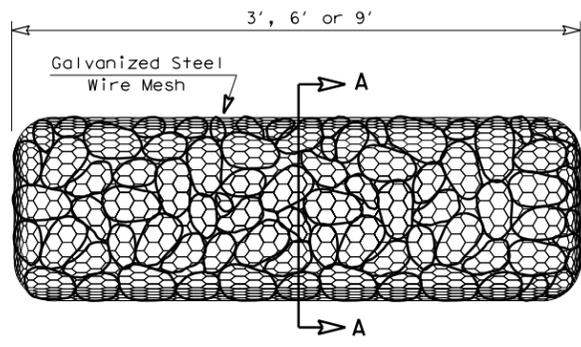
PLAN VIEW



"V" SHAPE PLAN VIEW

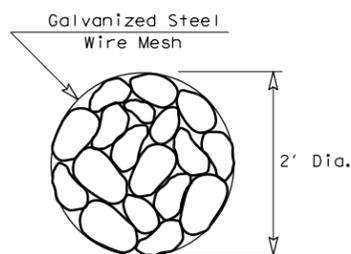


SECTION B-B

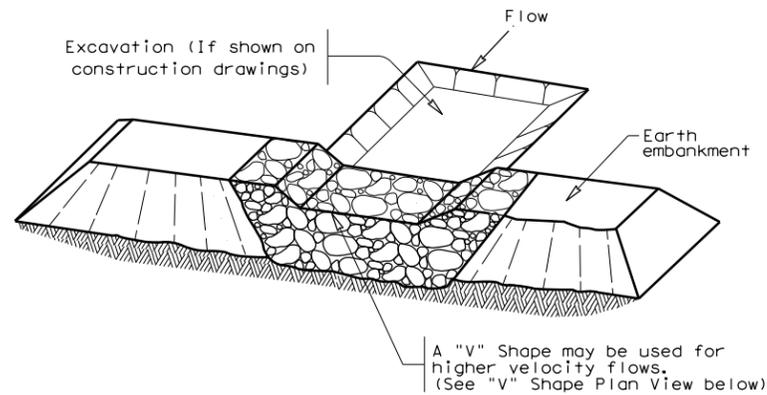


TYPE 4 (SACK GABIONS)

RFD4

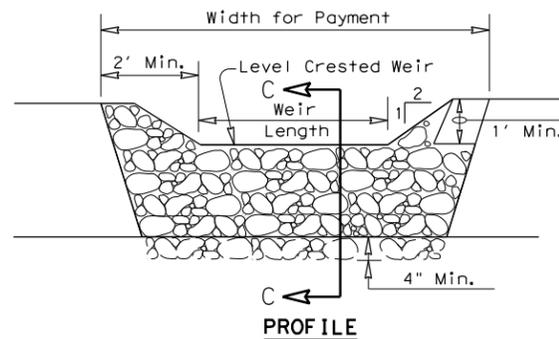


SECTION A-A

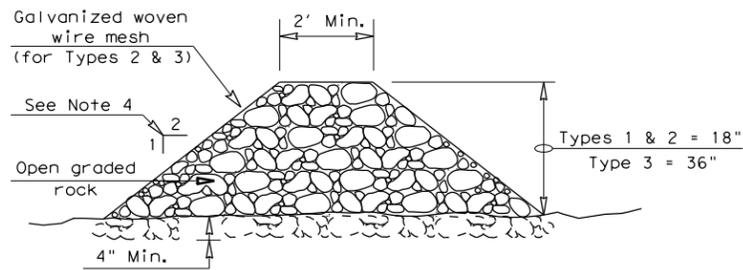


FILTER DAM AT SEDIMENT TRAP

RFD1 OR RFD2



PROFILE



SECTION C-C

ROCK FILTER DAM USAGE GUIDELINES

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

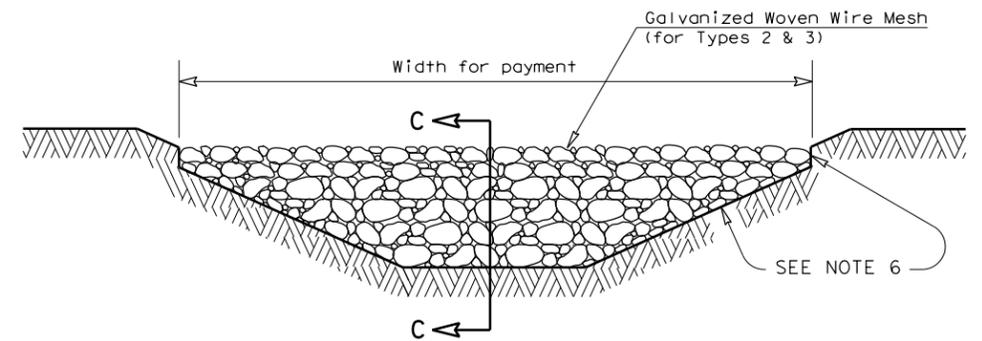
Type 1 (18" high with no wire mesh) (3" to 6" aggregate): Type 1 may be used at the toe of slopes, around inlets, in small ditches, and at dike or swale outlets. This type of dam is recommended to control erosion from a drainage area of 5 acres or less. Type 1 may not be used in concentrated high velocity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

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

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

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

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



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 3/4" dia. rebar stakes, and have a double-twisted hexagonal weave with a nominal mesh opening of 2 1/2" x 3 1/4".
10. Flow outlet should be onto a stabilized area (vegetation, rock, etc.).
11. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

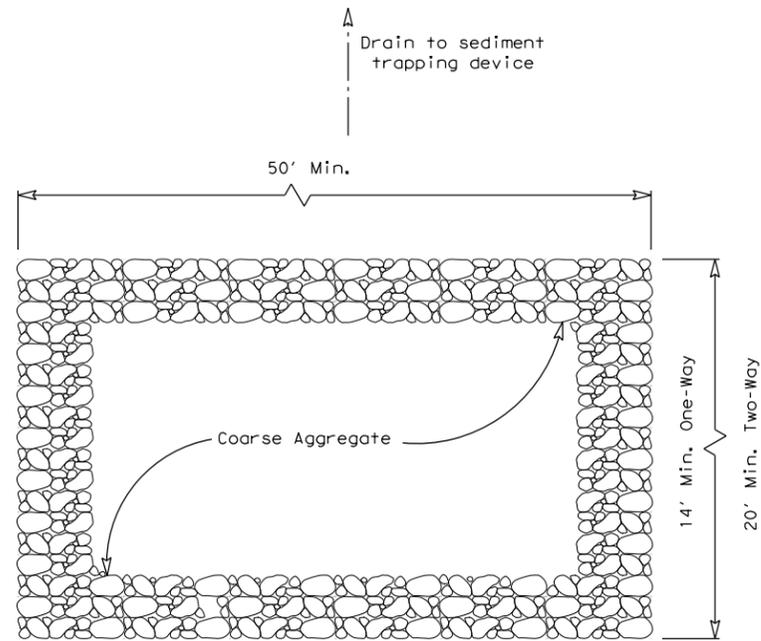
PLAN SHEET LEGEND

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

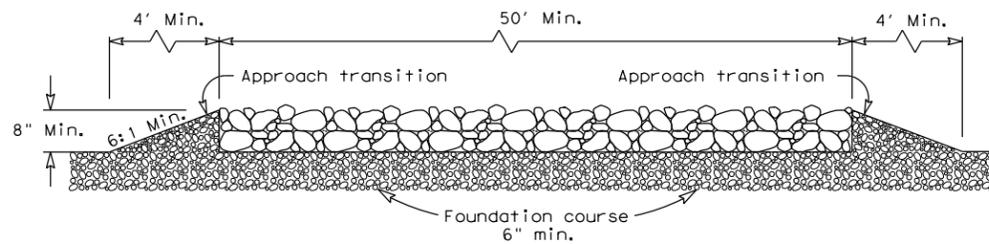
		Design Division Standard	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES ROCK FILTER DAMS EC (2) - 16			
FILE: ec216	DN: TxDOT	CK: KM	DW: VP
© TxDOT: JULY 2016	CONT	SECT	JOB
REVISIONS	-	-	-
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 FILE: \$FILE\$



PLAN VIEW

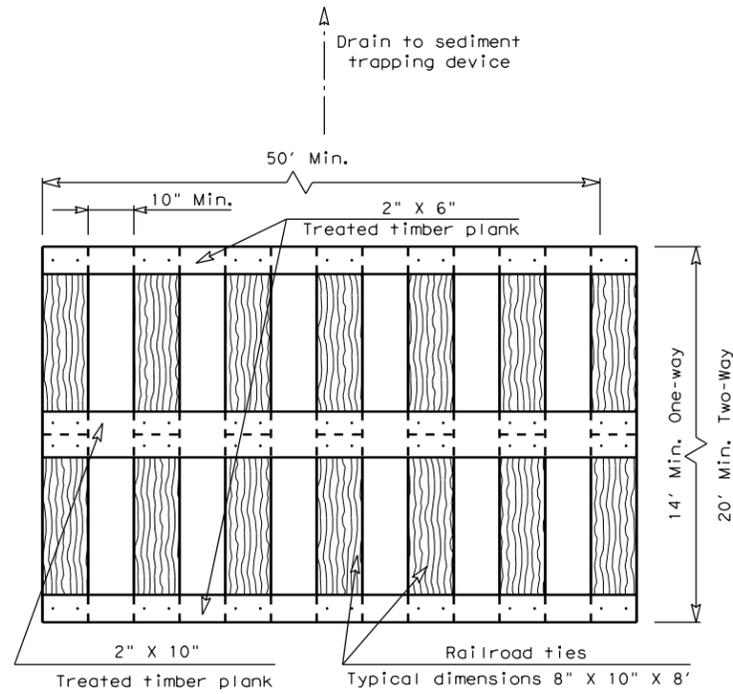


ELEVATION VIEW

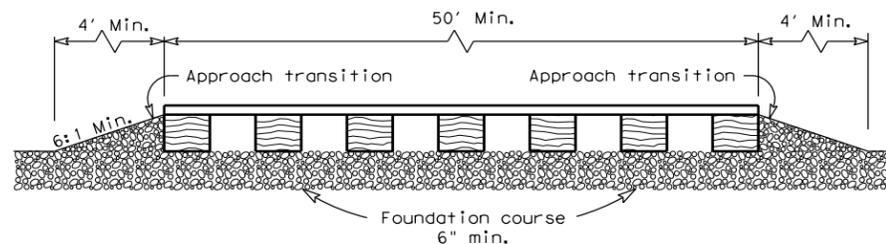
**CONSTRUCTION EXIT (TYPE 1)
ROCK CONSTRUCTION (LONG TERM)**

GENERAL NOTES (TYPE 1)

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



PLAN VIEW

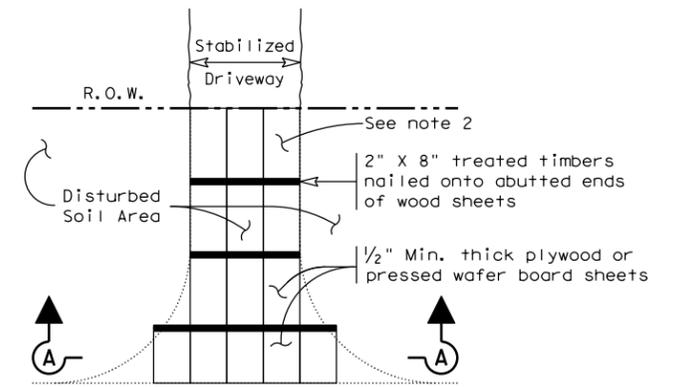


ELEVATION VIEW

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

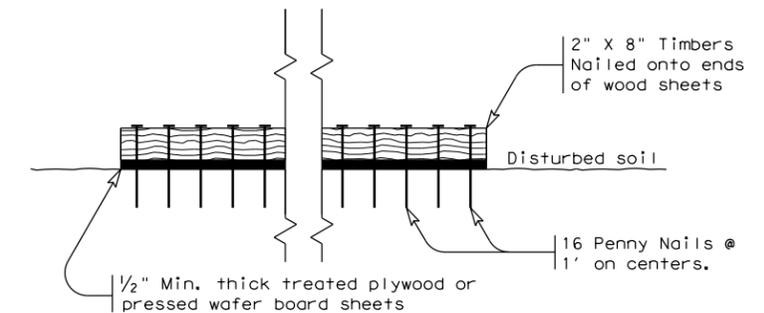
GENERAL NOTES (TYPE 2)

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



Paved Roadway

PLAN VIEW



SECTION A-A

**CONSTRUCTION EXIT (TYPE 3)
SHORT TERM**

GENERAL NOTES (TYPE 3)

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

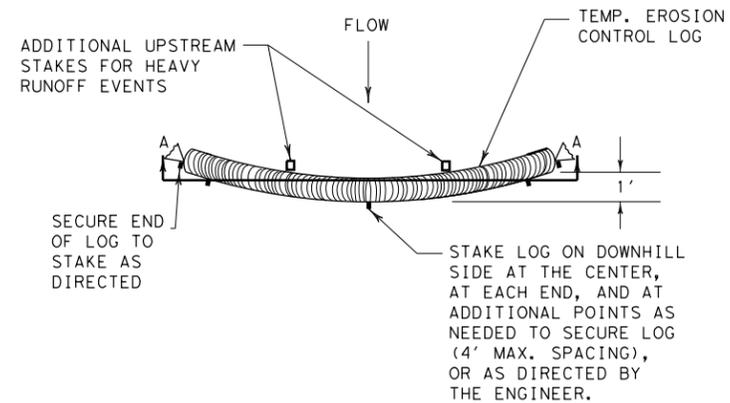


**TEMPORARY EROSION,
SEDIMENT AND WATER
POLLUTION CONTROL MEASURES
CONSTRUCTION EXITS
EC(3)-16**

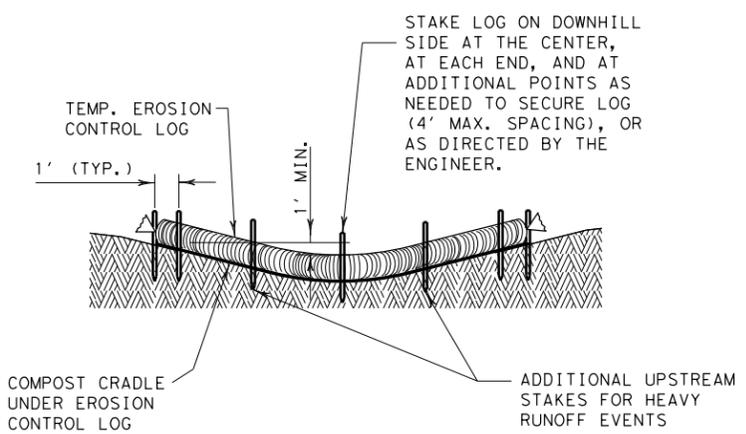
FILE: ec316	DN: TxDOT	CK: KM	DW: VP	DN/CK: LS
© TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY
REVISIONS	-	-	-	NHD
DIST	COUNTY		SHEET NO.	
AUS	WILLIAMSON		525	

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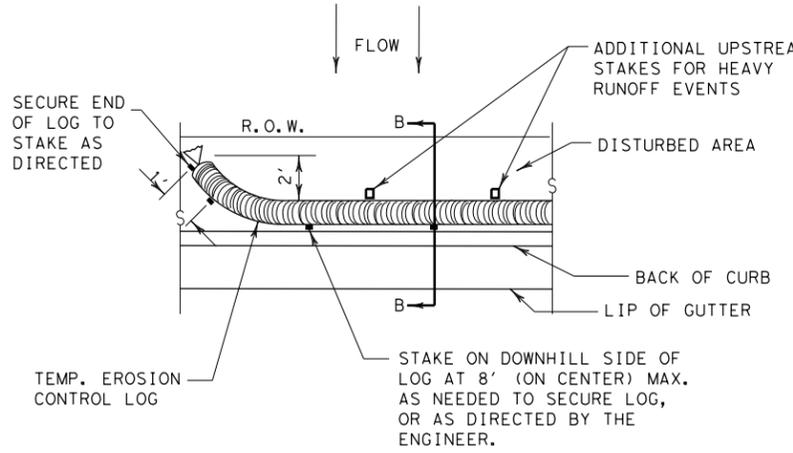
PLAN VIEW



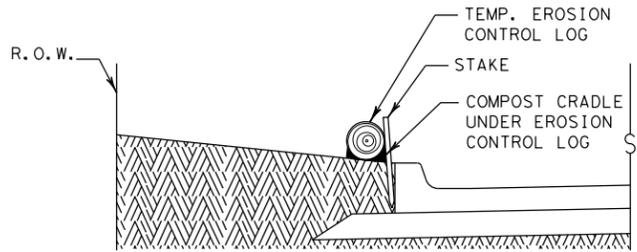
SECTION A-A

EROSION CONTROL LOG DAM

CL-D



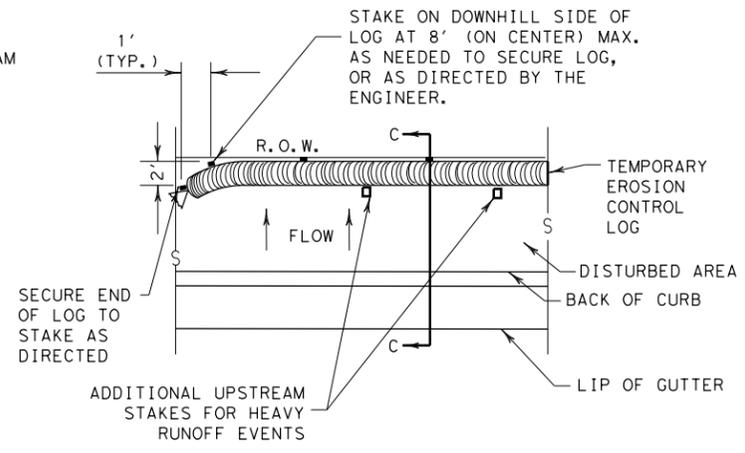
PLAN VIEW



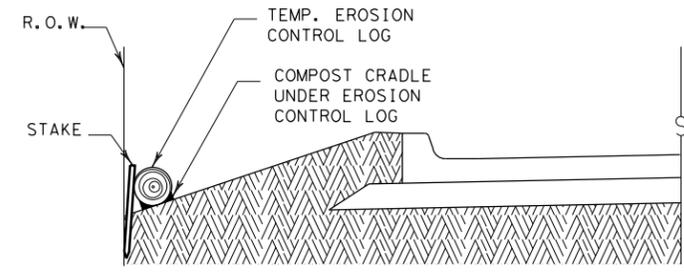
SECTION B-B

EROSION CONTROL LOG AT BACK OF CURB

CL-BOC



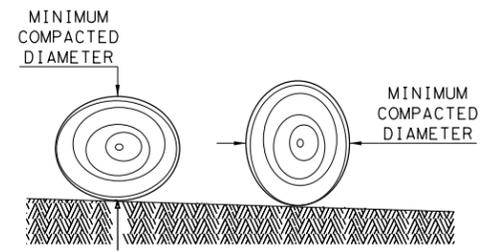
PLAN VIEW



SECTION C-C

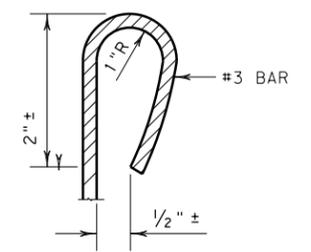
EROSION CONTROL LOG AT EDGE OF RIGHT-OF-WAY

CL-ROW



DIAMETER MEASUREMENTS OF EROSION CONTROL LOGS SPECIFIED IN PLANS

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



REBAR STAKE DETAIL

SEDIMENT BASIN & TRAP USAGE GUIDELINES

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

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

Control logs should be placed in the following locations:

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

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

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

GENERAL NOTES:

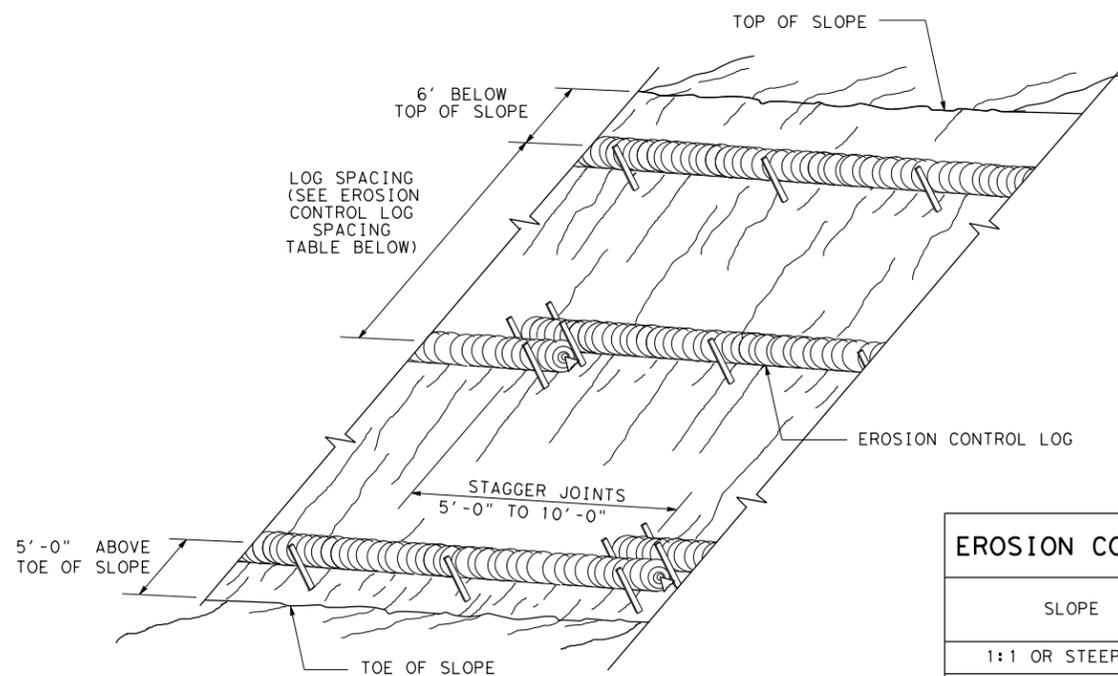
1. EROSION CONTROL LOGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, OR AS DIRECTED BY THE ENGINEER.
2. LENGTHS OF EROSION CONTROL LOGS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND AS REQUIRED FOR THE PURPOSE INTENDED.
3. UNLESS OTHERWISE DIRECTED, USE BIODEGRADABLE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

SHEET 1 OF 3

		Design Division Standard	
TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES			
EROSION CONTROL LOG			
EC (9) - 16			
FILE: ec916	DN: TxDOT	CK: KM	DW: LS/PT
© TxDOT: JULY 2016	CONT	SECT	JOB
REVISIONS	-	-	HIGHWAY
			NHD
	DIST	COUNTY	SHEET NO.
	AUS	WILLIAMSON	526

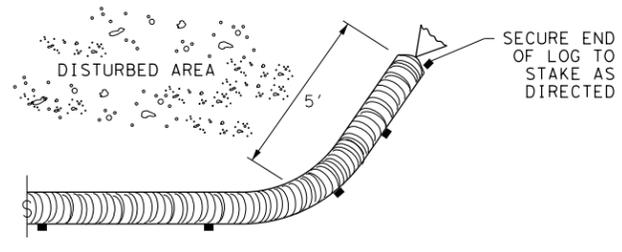
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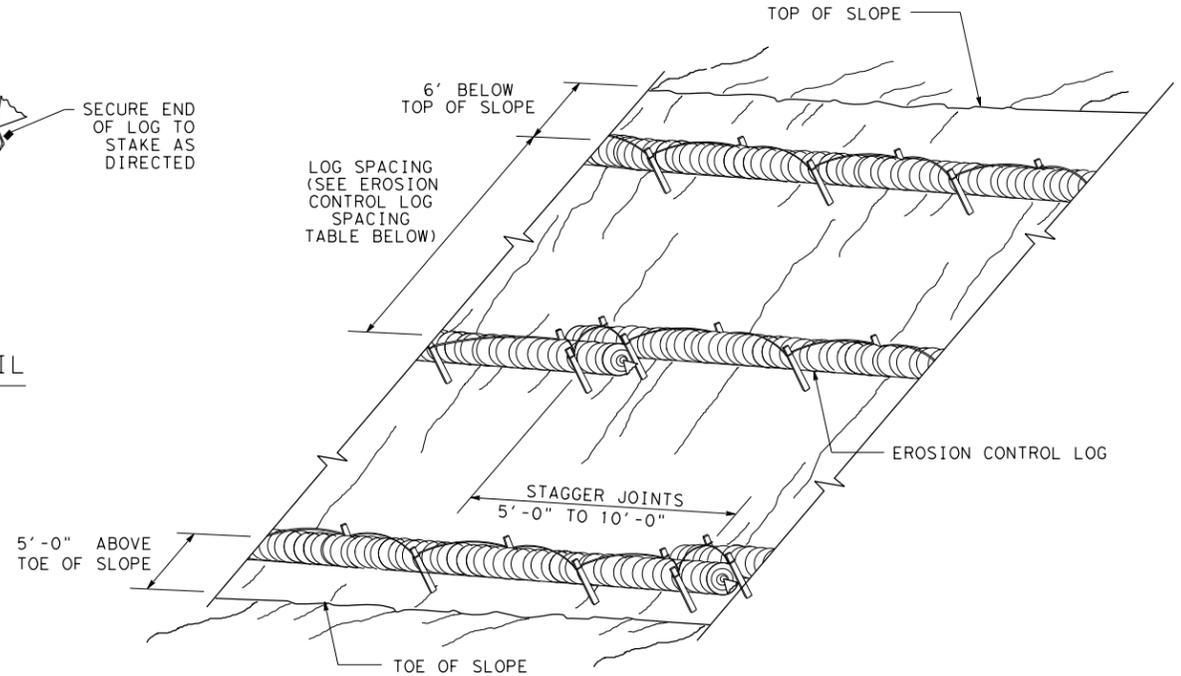


**EROSION CONTROL LOGS ON SLOPES
STAKE AND TRENCHING ANCHORING**

CL-SST



END SECTION RAP DETAIL

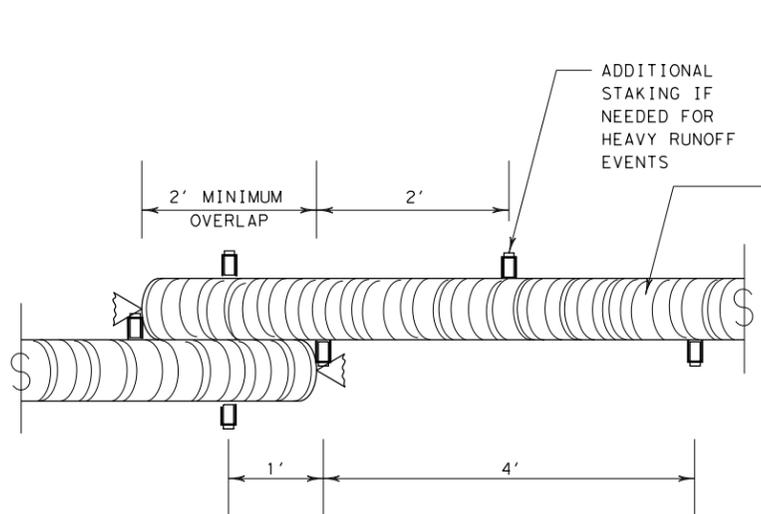


**EROSION CONTROL LOGS ON SLOPES
STAKE AND LASHING ANCHORING**

CL-SSL

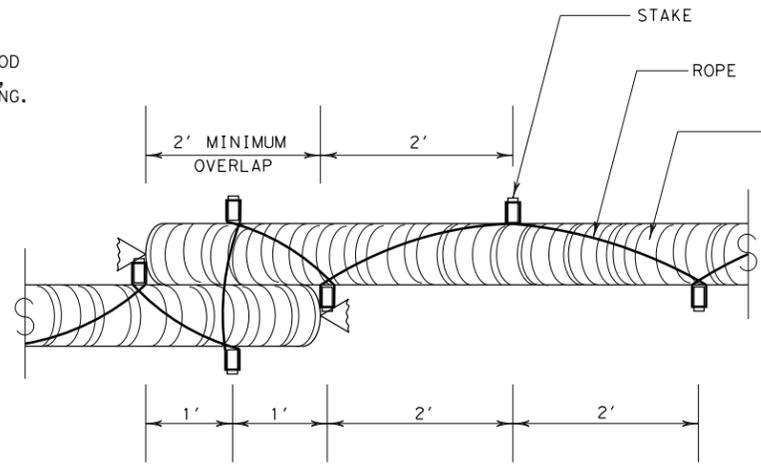
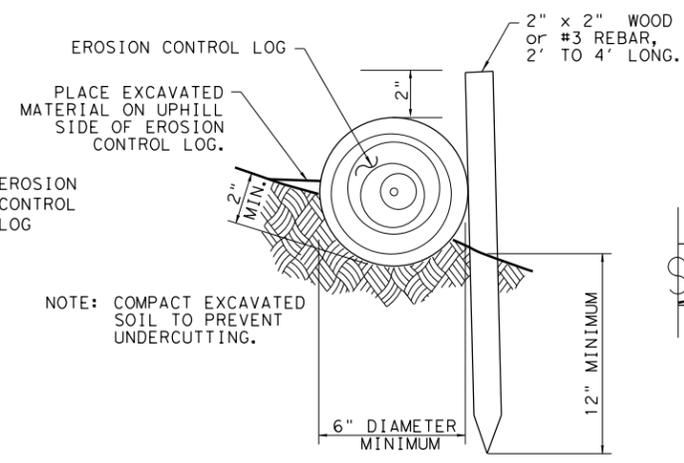
SLOPE	LOG DIAMETER			
	6"	8"	12"	18"
1:1 OR STEEPER	5'	10'	15'	20'
2:1	10'	20'	30'	40'
3:1	15'	30'	45'	60'
4:1 OR FLATTER	20'	40'	60'	80'

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



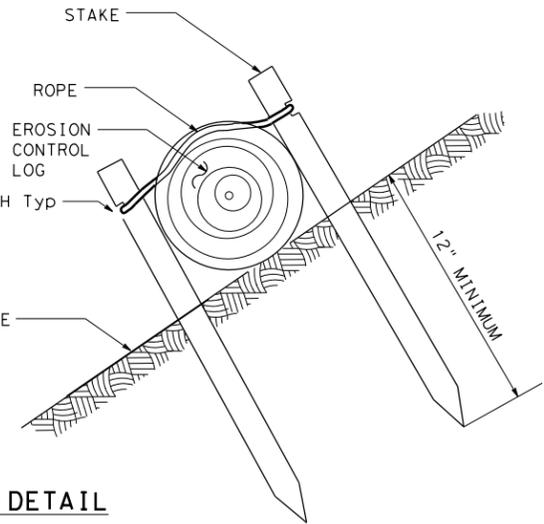
STAKE AND TRENCHING ANCHORING DETAIL

CL-SST

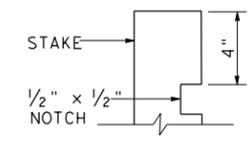


STAKE AND LASHING ANCHORING DETAIL

CL-SSL



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

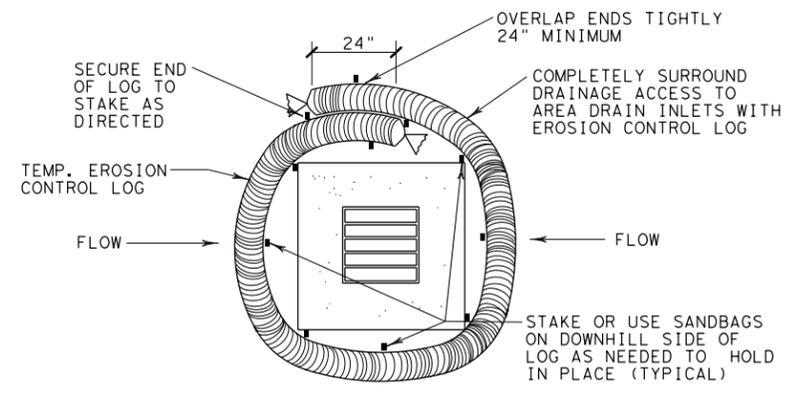


STAKE NOTCH DETAIL

SHEET 2 OF 3

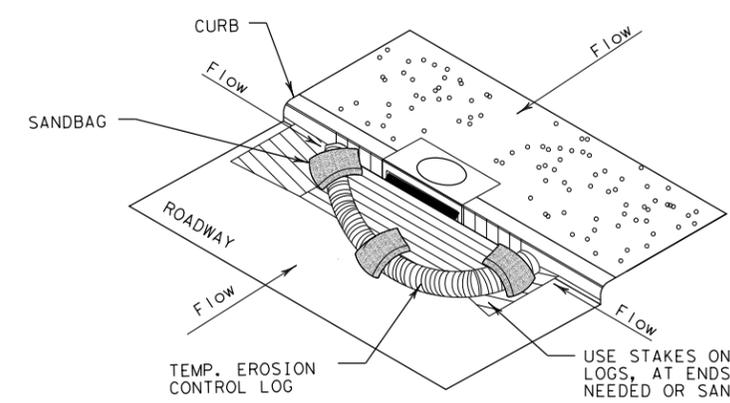
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TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES EROSION CONTROL LOG EC (9) - 16			
FILE: ec116	DN: TxDOT	CK: KM	DW: LS/PT
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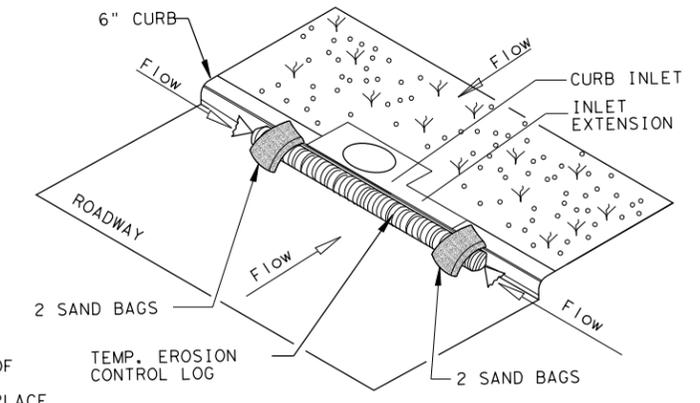
EROSION CONTROL LOG AT DROP INLET

CL-DI



EROSION CONTROL LOG AT CURB INLET

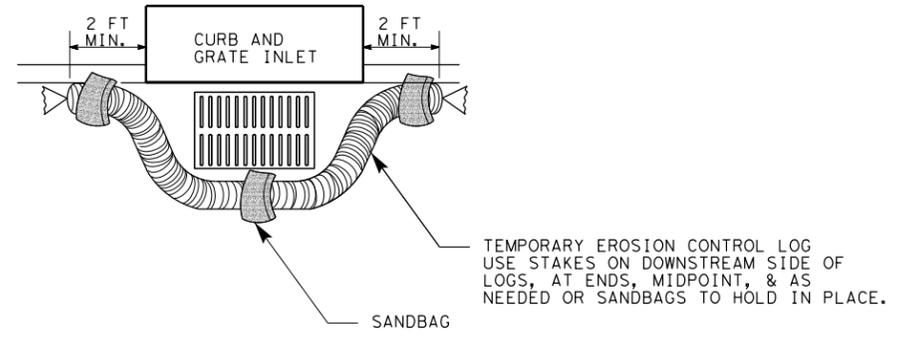
CL-CI



EROSION CONTROL LOG AT CURB INLET

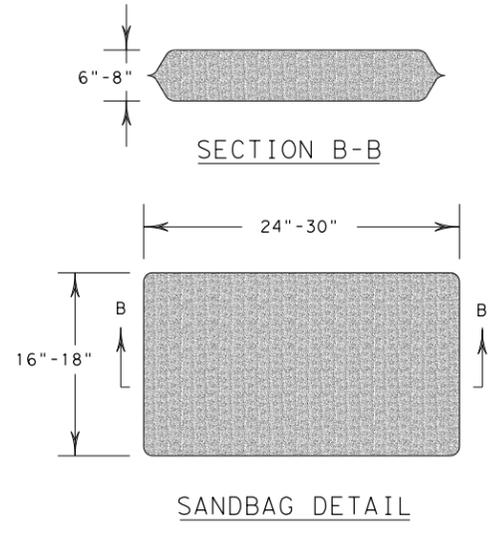
CL-CI

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



EROSION CONTROL LOG AT CURB & GRADE INLET

CL-GI



SANDBAG DETAIL

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES
EROSION CONTROL LOG
EC (9) - 16

FILE: ec916	DN: TxDOT	CK: KM	DW: LS/PT	CK: LS
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DIST	COUNTY		SHEET NO.	
AUS	WILLIAMSON		528	

DATE:
FILE:

VOIDS DEFINITION

- VOID GREATER THAN SIX INCHES ACROSS IN ANY DIRECTION AND/OR
- VOID IS GREATER THAN ONE SQUARE FOOT ALONG ANY PLANE AND/OR
- VOID BLOWS AIR AND/OR
- VOID CONTINUALLY RECEIVES WATER DURING A RAIN EVENT AND/OR
- VOID HAS WATER FLOWING THROUGH OR OUT OF IT AND/OR

GENERAL NOTES

1. USING EXPLOSIVES IS NOT ALLOWED.
2. THE PROJECT AREA IS A KNOWN KARST AREA. FRACTURED MATERIAL, BOULDERS, UNDERGROUND VOIDS, GROUNDWATER, UNSTABLE MATERIAL, AND DRASTICALLY VARYING STRATA CAN BE EXPECTED. THE CONTRACTOR SHALL WORK WITH TXDOT AND TXDOT'S PARTNERS TO ALLOW ACCESS AND ON-SITE MONITORING OF EXCAVATION.
3. THE VOID MITIGATION DETAILS ARE EXAMPLES. IMPLEMENTATION OF THE APPROVED MITIGATION PLAN SHOULD USE THE REFERENCED BID ITEMS.
4. CONCRETE USED FOR VOID MITIGATION SHALL BE 3,000 PSI IN ACCORDANCE WITH ITEM 420 CLASS A CONC (MISC). QUANTITIES UNDER 4 CY MAY BE HAND MIXED ON SITE USING 5,000 PSI RATED BAG MIX CONCRETE.
5. 3 IN. x 5 IN. ROCK SHALL BE IN ACCORDANCE WITH ITEM 506. LARGE ROCK > 1 FT. SHALL BE IN ACCORDANCE WITH 12 IN. ROCK PER ITEM 432.
6. FILTER FABRIC AND EROSION LOGS WILL BE IN ACCORDANCE WITH ITEM 506.
7. IMPERMEABLE LINER WILL BE IN ACCORDANCE WITH ITEM 5056. THE EDGE OF THE LINER SHALL BE ANCHORED IN A 6 IN. WIDE BY 18 IN. DEEP TRENCH.
8. STEEL CASING, USED FOR DRILL SHAFT CONSTRUCTION, SHALL BE IN ACCORDANCE WITH ITEM 416.
9. AGGREGATE OR OTHER BACKFILL WILL BE PAID FOR BY OVERRUN OF EXISTING EMBANKMENT ITEM. FILTER FABRIC OVER THE AGGREGATE IS SUBSIDIARY. SANDBAGS SHALL BE PAID USING SANDBAGS FOR EROSION CONTROL. THE SANDBAGS SHALL BE POLYPROPYLENE AND FILLED WITH PEA GRAVEL. CONNECTOR PIPE SHALL BE PAID USING PIPE (PVC) (SCH 80) (6 IN).
10. IF A SINGLE VOID IMPACT CAUSES DELAYS BY MORE THAN 20 WORKING DAYS, DELAY WILL BE CONSIDERED FOR THE IMPACT BEYOND THE INITIAL 20 DAYS. IF THE ACCUMULATION OF VOID IMPACTS CAUSE DELAYS BY MORE 40 WORKING DAYS, DELAY WILL BE CONSIDERED FOR THE IMPACT BEYOND THE 40 DAYS. OVERHEAD, BARRICADES AND DELAYS WILL BE EVALUATED AND PAID IN ACCORDANCE WITH THE CONTRACT. IMPACTS WILL NOT BE CONSIDERED IMPACT AFTER A RESPONSE PROCEDURE IS PROVIDED. ALL DELAYS CAUSED BY A VOID AND THE DURATION FOR IMPLEMENTATION OF A RESPONSE ARE NON-COMPENSABLE FOR LABOR, EQUIPMENT, STANDBY, MOBILIZATIONS, AND COST ESCALATIONS.

VOID MITIGATION AND PROTECTION MEASURES

REFER TO VOID MITIGATION DETAILS FOR ADDITIONAL INFORMATION. VOID MITIGATION DETAILS ARE TO BE APPROVED BY GEOSCIENTIST AND THE TCEQ (IF APPLICABLE) PRIOR TO IMPLEMENTATION.

1. IN THE EVENT THAT UNKNOWN KARST VOIDS ARE ENCOUNTERED, WORK AT THAT LOCATION WILL BE HALTED IMMEDIATELY AND THE FEATURE WILL BE INSPECTED PROMPTLY BY TXDOT.
2. WHEN REQUIRED, TXDOT WILL INSPECT ALL VOIDS TO DETERMINE THE POTENTIAL OF THE FEATURES TO PROVIDE SUITABLE HABITAT FOR ENDANGERED KARST INVERTEBRATES. WORK AT THAT LOCATION WILL NOT RESUME UNTIL AUTHORIZATION TO DISTURB THE FEATURE HAS BEEN OBTAINED. REFER TO THE EPIC SHEET FOR ADDITIONAL INFORMATION FOR THREATENED OR ENDANGERED SPECIES.

TXDOT WILL INSPECT ALL VOIDS TO DETERMINE THE APPROPRIATE VOID MITIGATION PLAN.
3. ADDITIONAL EXCAVATION OF THE VOID MAY BE REQUIRED BY TXDOT OR THE GEOSCIENTIST TO FULLY EVALUATE THE VOID AND/OR MITIGATION PLAN PREPERATION. TXDOT APPROVAL IS REQUIRED PRIOR THE EXCAVATION. THIS WORK IS SUBSIDIARY.

VOID DISCOVERY PROTOCOL

IF A VOID IS DISCOVERED, THE FOLLOWING PROTOCOL WILL BE FOLLOWED:

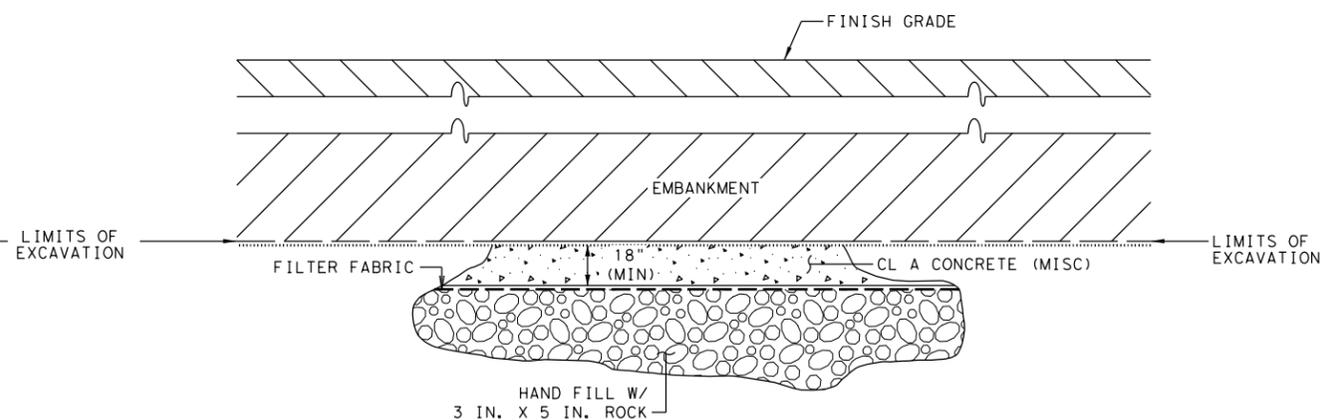
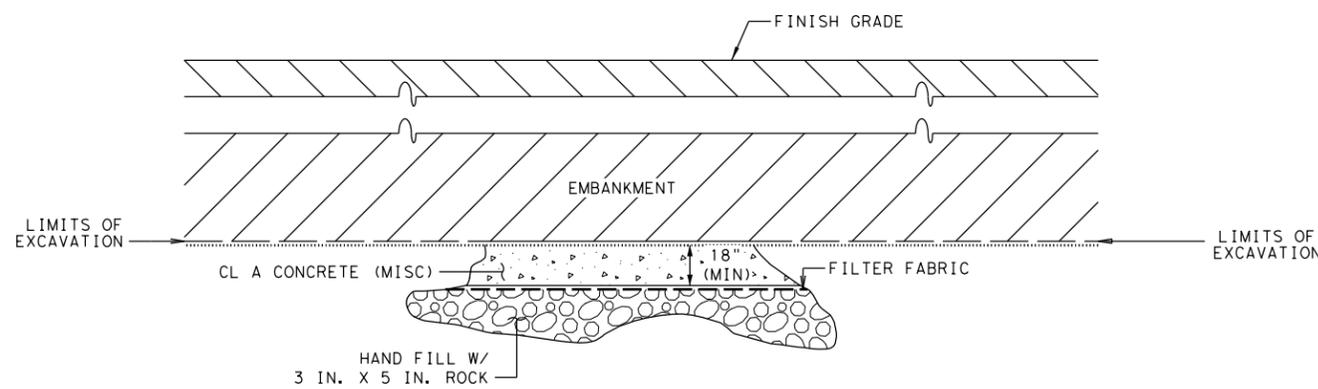
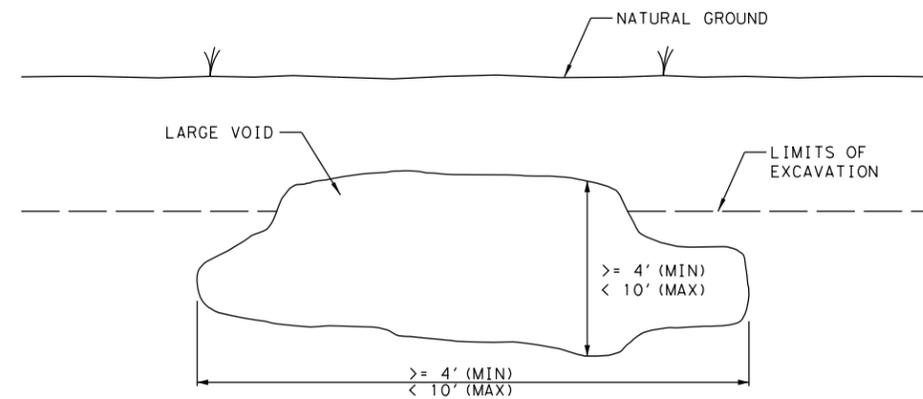
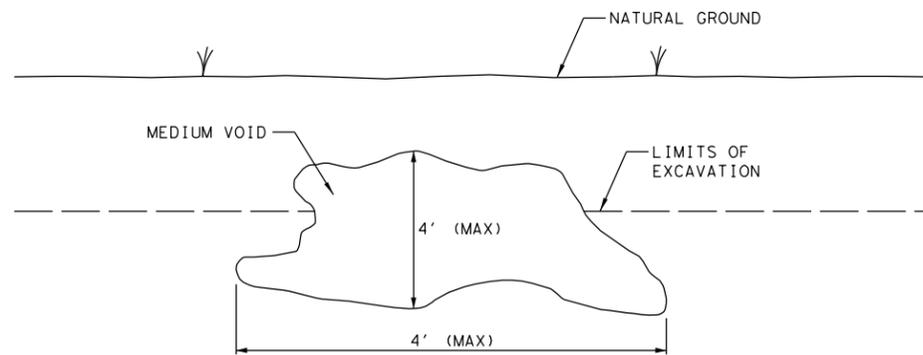
1. ALL VOIDS REQUIRE AN EMAIL NOTIFICATION TO TXDOT DESIGNATED REPRESENTATIVE WITHIN 2 HOURS OF DISCOVERY. THE EMAIL WILL REQUIRE LOCATION INFORMATION (STATION, LATITUDE & LONGITUDE), DATES OF DISCOVERY, VIDEO/PICTURE DOCUMENTATION, SIZE, ETC. CONTRACTOR SHALL SUPPLY A CAMERA AND DIGITAL PICTURE/VIDEO DOCUMENTATION OF ALL VOIDS AND PROVIDE A MEASUREMENT OF THE SIZE OF THE VOID. FOR VOIDS THAT CANNOT BE SAFELY EXPLORED, ANOTHER DEVICE SHALL BE PROVIDED TO DOCUMENT THE VOID. CONTACT THE DISTRICT CONSTRUCTION OFFICE FOR AN EXAMPLE EMAIL THAT SHALL BE FOLLOWED. THIS WORK IS SUBSIDIARY.
2. ALL ACTIVITY WITHIN A 50-FOOT RADIUS OF THE VOID SHALL STOP. BLOCK TRAFFIC FROM DRIVING NEAR THE VOID AND PREVENT CONSTRUCTION EQUIPMENT FROM OPERATING IN THE VICINITY OF THE VOID USING BARRELS, ORANGE CONSTRUCTION FENCE OR OTHER APPROVED HIGHLY VISIBLE BARRIER.
3. A DRY VOID THAT IS LESS THAN 1 CF IN VOLUME OR LESS THAN 6 IN. IN ALL DIRECTIONS WILL NOT REQUIRE ACTION BEYOND NOTIFICATION. TXDOT SHALL BE NOTIFIED IMMEDIATELY VIA EMAIL AND PHONE WHEN A VOID IS FOUND THAT REQUIRES ACTION. TXDOT WILL RESPOND WITHIN 6 BUSINESS DAYS FROM TIME OF EMAIL NOTIFICATION TO PROVIDE GUIDANCE TO THE CONTRACTOR.
4. COVER THE VOID TO PREVENT CONTAMINATION AND CHANGES IN AMBIENT CONDITIONS (TARPS AND PLYWOOD, OR SIMILAR MATERIALS ARE APPROPRIATE AS AVAILABLE). WHERE COVERING THE VOID IS NOT FEASIBLE, CONTRACTOR SHALL OBTAIN APPROVAL FROM TXDOT OF ALTERNATE TEMPORARY PROTECTION MEASURES. BIODEGRADABLE EROSION CONTROL LOG (BECL) SHOULD WRAP THE SURFACE PERIMETER OF THE VOID. TEMPORARY PROTECTIONS SHOULD REMAIN IN PLACE UNTIL FINAL MITIGATION AND PROTECTION MEASURES ARE APPROVED AND IN PLACE. AN EARTHEN BERM WILL BE MAINTAINED ON THE UP-GRADIENT SIDE OF VOID TO PREVENT ANY CONSTRUCTION RUNOFF FROM ENTERING ANY PART OF THE FEATURE WHICH MAY REMAIN. THIS WORK IS SUBSIDIARY.
5. WHEN REQUIRED TXDOT SHALL IMMEDIATELY NOTIFY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) AUSTIN REGIONAL OFFICE.
6. TXDOT WILL PROVIDE FOR THE EVALUATION OF THE VOID A QUALIFIED GEOSCIENTIST LICENSED BY THE TEXAS BOARD OF PROFESSIONAL GEOSCIENTISTS OR BY A PROFESSIONAL ENGINEER WHO QUALIFIES TO PRACTICE GEOSCIENCE ACCORDING TO THE TEXAS BOARD OF PROFESSIONAL GEOSCIENTISTS.
7. WHEN REQUIRED TXDOT WILL SUBMIT AND OBTAIN APPROVAL OF AN ENCOUNTERED FEATURE MITIGATION PLAN TO THE TCEQ AUSTIN REGION OFFICE.
8. WORK SHOULD CEASE IN THE AREA UNTIL ASSESSMENT OF THE VOID CAN BE COMPLETED, TCEQ APPROVES THE ENCOUNTERED FEATURE MITIGATION PLAN AND MITIGATION IS COMPLETED. WHEN THE VOID IS OUTSIDE TCEQ JURISDICTION, TXDOT WILL APPROVE THE ENCOUNTERED FEATURE MITIGATION PLAN.

VOIDS RELATED TO DRILLED SHAFTS, SOIL NAILS, ROCK NAILS AND OTHER SIMILAR FUNCTIONS

1. SUBMIT INSTALLATION PLAN FOR REVIEW NO LATER THAN 2 MONTHS BEFORE CONSTRUCTION.
2. THE USE OF DRILLING FLUIDS, UNDERWATER PLACEMENT, OR SLURRY METHOD WILL NOT BE ALLOWED IF A VOID IS EXPOSED DURING DRILLING OF SHAFTS OR NAILS. THE CONTRACTOR SHALL USE APPROPRIATE INDUSTRY APPROVED METHODS TO PROVIDE A PRODUCT IN COMPLIANCE WITH THE SPECIFICATIONS. ADDITIONAL TIME OR COMPENSATION WILL NOT BE ALLOWED FOR USE OF ALTERNATE METHODS OR CASING INSTALLATION.
3. DURING NON-WORK HOURS OPEN HOLES SHALL BE PROTECTED FOR SAFETY AND COVERED. SHAFTS SHALL BE SURROUNDED BY EROSION CONTROL LOGS AT AN OFFSET OF 10' FROM THE EDGE OF THE OPENING. THIS WORK IS SUBSIDIARY
4. VIDEO DOCUMENTATION SHALL BE CONDUCTED OF A DRILL SHAFT ONCE EXCAVATION IS COMPLETE AND PRIOR TO PLACING REINFORCEMENT. SUFFICIENT LIGHTING SHALL ACCOMPANY THE VIDEO CAMERA TO ENSURE THE SHAFT AND VOIDS ARE VISIBLE. THIS WORK IS SUBSIDIARY.
5. CONCRETE USED TO FILL THE VOIDS WILL BE PAID USING CLASS A CONC (MISC) ITEM BUT WILL USE THE CLASS OF CONCRETE AS REQUIRED BY THE SPECIFICATION. QUANTITY OF CONCRETE WILL BE BASED ON VISUAL INSPECTION PROVIDED BY THE CONTRACTOR. IF VISUAL INSPECTION IS UNABLE TO DETERMINE THE SIZE OF THE VOID THE CONCRETE FOR PAYMENT WILL BE MEASURED AS THE ADDITIONAL CONCRETE BEYOND THE AMOUNT REQUIRED TO PLACE A CLEAN SHAFT PLUS 10 PERCENT WASTE.
6. THE USE OF PERMANENT CASING SHALL BE IN ACCORDANCE WITH ITEM 416. MATERIAL COST FOR CASING THAT REMAINS WILL BE PAID BY INVOICE FROM SUPPLIER WITH MARK UP IN ACCORDANCE WITH MATERIAL FOR ITEM 9.7. ADDITIONAL LABOR, EQUIPMENT, TIME, ETC. FOR INSTALLATION OF THE CASING WILL NOT BE COMPENSABLE.
7. ADDITIONAL NAIL LENGTH WILL BE PAID BY OVERRUN OF EXISTING BID ITEM. ALTERNATE NAIL TYPE COST WILL BE PAID BY INVOICE FROM SUPPLIER WITH MARK UP IN ACCORDANCE WITH MATERIAL FOR ITEM 9.7. LABOR, EQUIPMENT, ADDITIONAL TIME, ETC. WILL NOT BE COMPENSABLE.
8. CORE HOLES ARE REQUIRED FOR ALL DRILLED SHAFTS.

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			Austin District Standard	
<h2 style="margin: 0;">VOID MITIGATION NOTES</h2> <h3 style="margin: 0;">VMD-18 (AUS)</h3>				
SHEET 1 OF 7				
©TXDOT*YEAR*	CONT	SECT	JOB	HIGHWAY
	-	-	-	NHD
	DIST	COUNTY		SHEET NO.
	AUS	WILLIAMSON		529



ROADWAY/S.U.P. GRADING OPERATIONS
 MEDIUM (DRY VOID)
 (<4' IN ANY DIRECTION)
 (1 CF < 64 CF)

ROADWAY/S.U.P. GRADING OPERATIONS
 LARGE (DRY VOID)
 (>=4' <10' ANY DIRECTION)
 (64 CF < 1000 CF)

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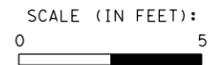


**VOID MITIGATION
 DETAILS**

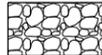
VMD-18 (AUS)

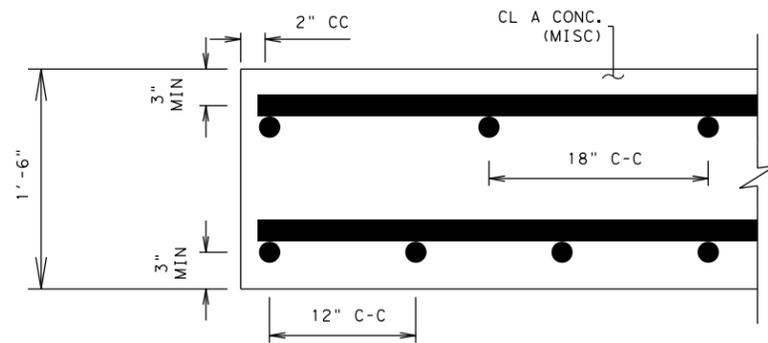
SHEET 2 OF 7

CONT	SECT	JOB	HIGHWAY
-	-	-	NHD
DIST	COUNTY	SHEET NO.	
AUS	WILLIAMSON	530	

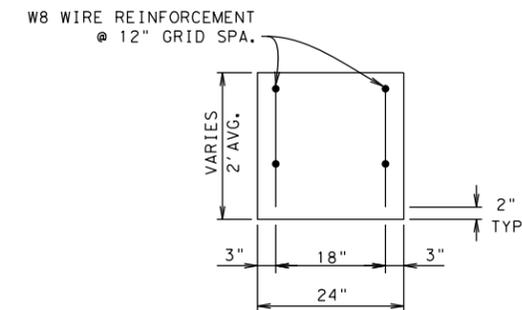


LEGEND

-  CLASS A CONC. (MISC)
-  3 IN. x 5 IN. ROCK
-  LARGE ROCK (≥ 1 FT)
-  SHOTCRETE



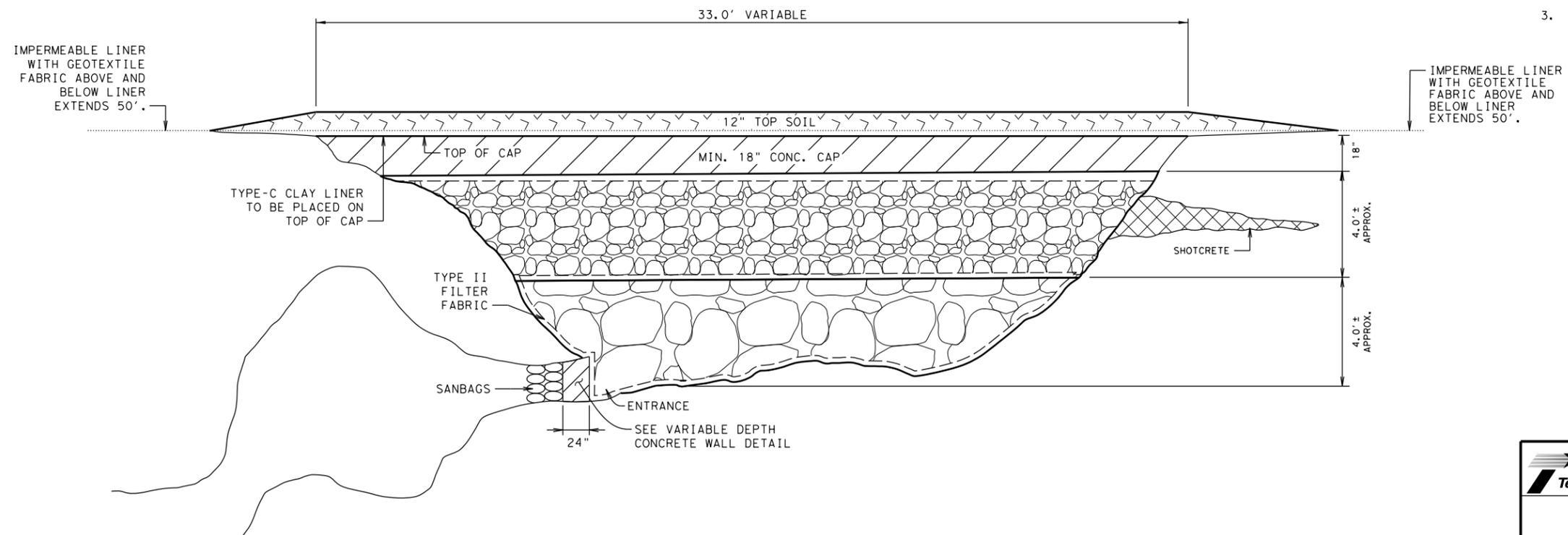
REINFORCING DETAIL



VARIABLE DEPTH CONCRETE WALL

NOTE:

1. CONCRETE WALL AND CONCRETE CAP SHALL BE PAID USING CLASS A CONC. (MISC).
2. SHOTCRETE WILL BE PAID USING CLASS A CONC. (MISC).
3. THE 12 IN. TOPSOIL AND LINER MAY NOT BE APPLICABLE IF THE VOID IS NOT IN A POND.



ELEVATION OF VOID IN A POND

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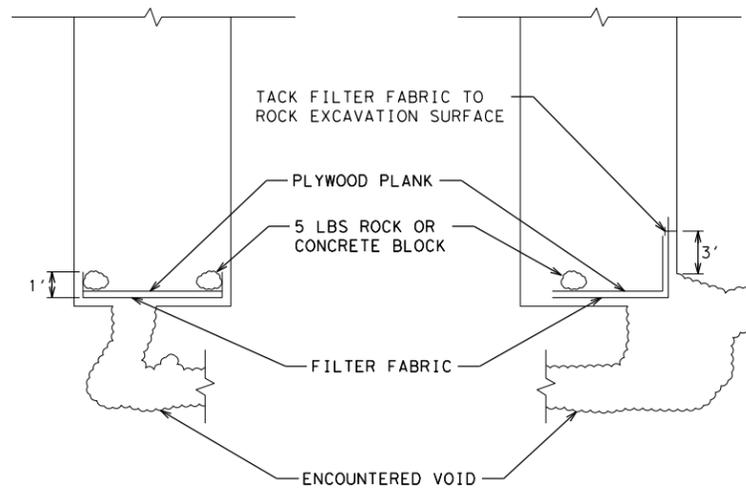


**VOID MITIGATION
DETAILS**

VMD-18 (AUS)

SHEET 3 OF 7

©TXDOT*YEAR*	CONT	SECT	JOB	HIGHWAY
	-	-	-	NHD
DIST	COUNTY		SHEET NO.	
AUS	WILLIAMSON		531	



**TEMPORARY PROTECTION
VOID AT BOTTOM OF TRENCH**

NOTES:

1. PLACE TEMPORARY PROTECTION WITHIN TRENCH TO COVER VOID AS INDICATED. FABRIC SHALL EXTEND A MINIMUM OF 3 IN. BEYOND EDGE OF VOID. PLACE A PLYWOOD PLANK (MINIMUM 0.75 IN. THICK) OVER FABRIC. PLANK AND FABRIC SHALL BE WEIGHTED AS REQUIRED BY 5 LBS ROCK OR CONCRETE BLOCK TO SECURE FILTER FABRIC.
2. TEMPORARY PROTECTION SHALL BE IN PLACE AT ALL TIMES THAT CONSTRUCTION OPERATIONS ARE NOT IN ACTUAL PROGRESS.
3. CONSTRUCTION OPERATIONS WITHIN 50' SHALL NOT PROGRESS DURING OCCURRENCE OF RAIN TO ALLOW FOR PROTECTION OF VOID DURING A RAIN EVENT.
4. LOCALIZED EROSION MEASURES (SILT FENCE, EROSION CONTROL LOG OR TRIANGULAR FILTER DIKES) SHALL BE INSTALLED ALONG THE TRENCH TO ENSURE THAT LOOSE SPOILS OR RUNOFF DO NOT ENTER THE TRENCH OR AFFECT PERFORMANCE OF TEMPORARY PROTECTION. USE EARTHEN BERN TO DIVERT WATER AWAY FROM THE TRENCH.
5. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT EROSION CONTROL MEASURES REQUIRED ALONG THE TRENCH ARE MAINTAINED, CLEANED AND FULLY FUNCTIONAL.
6. FILTER FABRIC AND ROCK OR CONCRETE BLOCKS AND PLYWOOD PLANK SHALL BE REMOVED FROM THE TRENCH WHEN PERMANENT VOID MITIGATION MEASURES ARE INSTALLED.

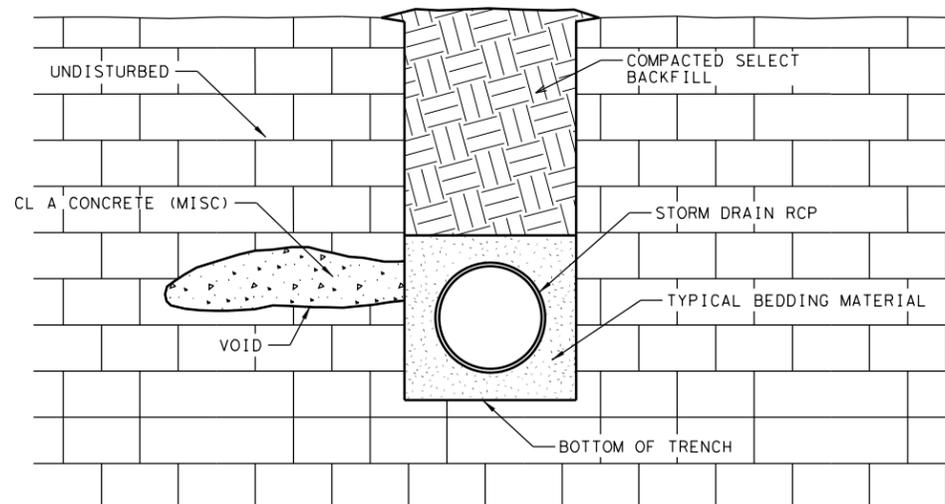
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**VOID MITIGATION
DETAILS**

VMD-18 (AUS)

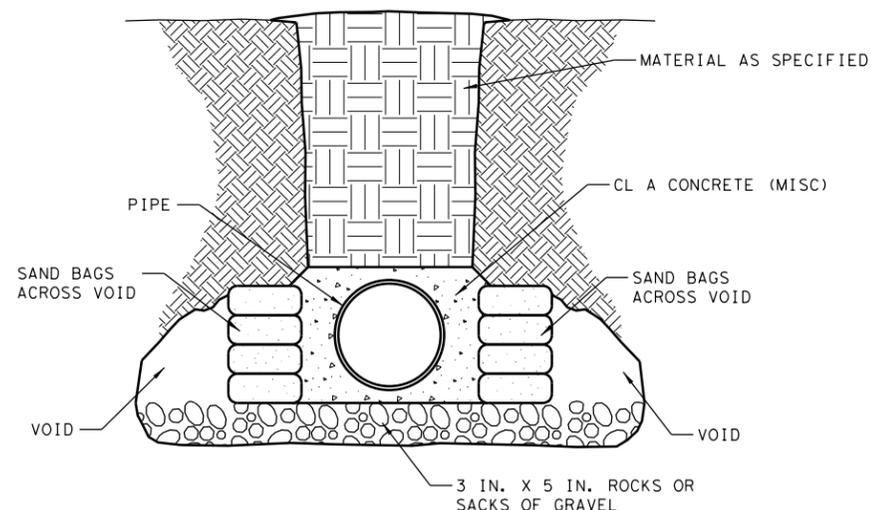
SHEET 4 OF 7

CONT	SECT	JOB	HIGHWAY
-	-	-	NHD
DIST	COUNTY	SHEET NO.	
AUS	WILLIAMSON	532	



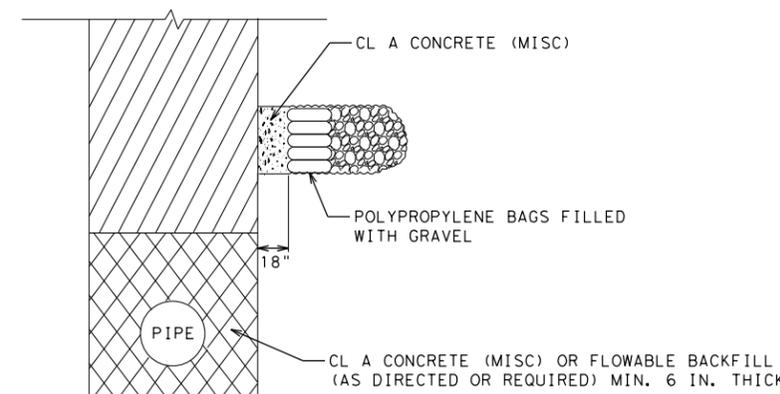
**TRENCHING OPERATIONS
SMALL/MEDIUM (DRY VOID)
(< 64 CF)**

VOID IS EITHER LARGER THAN SIX (6) INCHES IN AT LEAST ONE DIRECTION OR IS LOCATED WITHIN THE LEVEL OF THE PIPE EMBEDMENT. ALL ROCK WITHIN AND SURROUNDING THE VOID IS SOUND.



**TRENCHING OPERATIONS
LARGE (DRY VOID)
(64 CF < 1,000 CF)**

VOID INTERSECTS THE PLANE OF THE TRENCH FLOOR AND ANY OPENING IN TRENCH FLOOR IS GREATER THAN FOUR (4) FEET IN ANY DIRECTION, OR THE TRENCH FLOOR IS UNSTABLE.

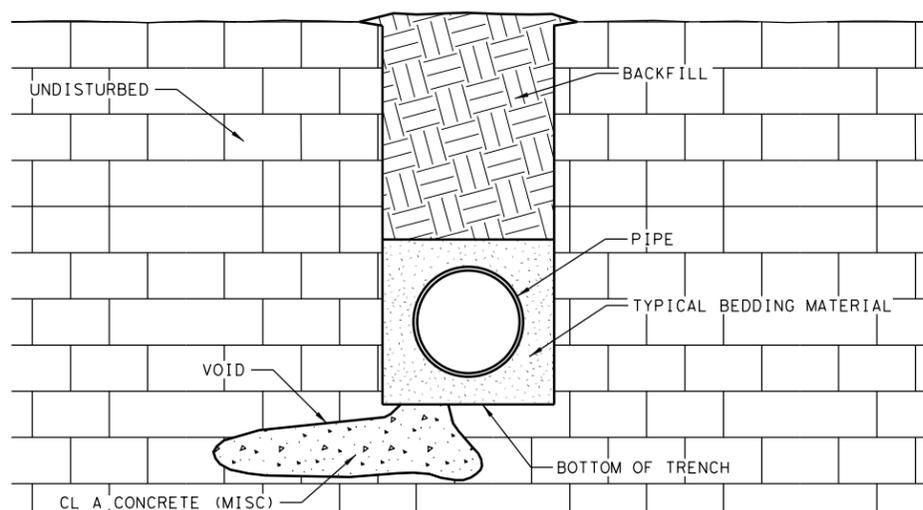


**TRENCHING OPERATIONS
LARGE (DRY VOID)
(64 CF < 1,000 CF)**

VOID IS ABOVE THE PLANE OF THE TRENCH FLOOR

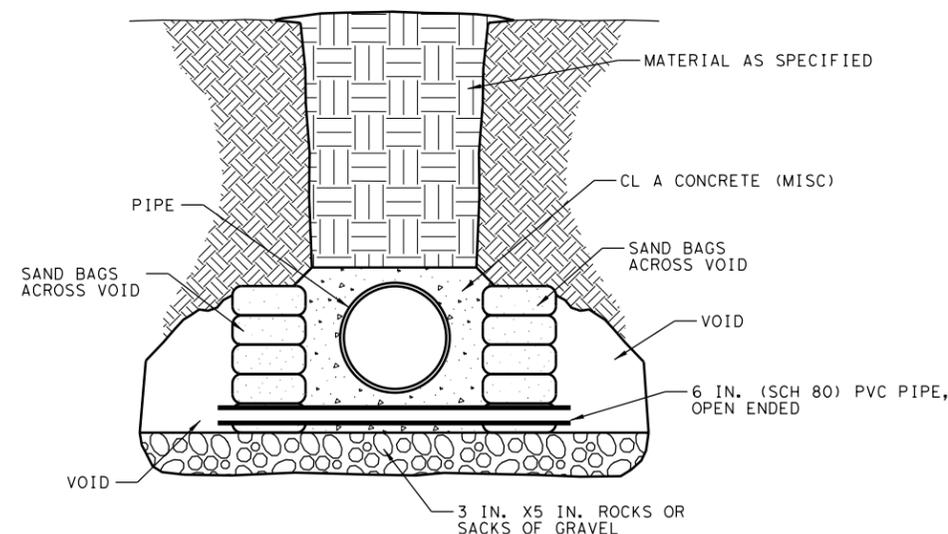
GENERAL NOTE:

1. ALL PIPES SHALL BE ENCASED WITH CLASS A CONCRETE THAT EXTENDS 5' BEYOND THE EDGE OF THE VOID IN ALL DIRECTIONS. THE CONCRETE SHALL PROVIDE 6 IN. COVER AROUND THE PIPE.



**TRENCHING OPERATIONS
SMALL/MEDIUM (DRY VOID)
(< 64 CF)**

VOID INTERSECTS THE PLANE OF THE TRENCH FLOOR AND IS LESS THAN FOUR (4) FEET IN ANY DIRECTION. ALL ROCK WITHIN AND SURROUNDING THE VOID IS SOUND.



**TRENCHING OPERATIONS
LARGE (WET VOID)
(64 CF < 1,000 CF)**

VOID INTERSECTS THE PLANE OF THE TRENCH FLOOR AND ANY OPENING IN TRENCH FLOOR IS GREATER THAN FOUR (4) FEET IN ANY DIRECTION, OR THE TRENCH FLOOR IS UNSTABLE.

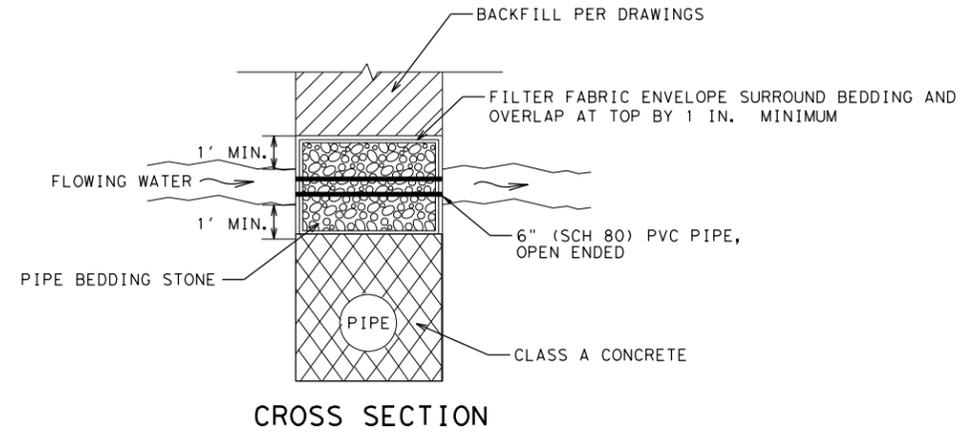
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**VOID MITIGATION
DETAILS**

VMD-18 (AUS)

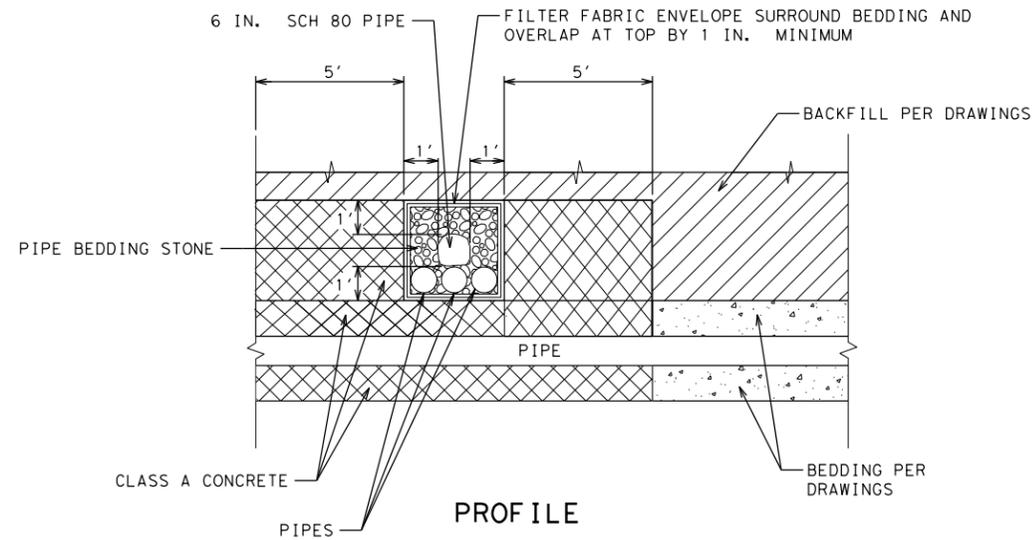
SHEET 5 OF 7

CONT	SECT	JOB	HIGHWAY
-	-	-	NHD
DIST	COUNTY	SHEET NO.	
AUS	WILLIAMSON	533	



GENERAL NOTE:

1. ALL PIPES SHALL BE ENCASED WITH CLASS A CONCRETE THAT EXTENDS 5' BEYOND THE EDGE OF THE VOID IN ALL DIRECTIONS. THE CONCRETE SHALL PROVIDE 6 IN. COVER AROUND THE PIPE.



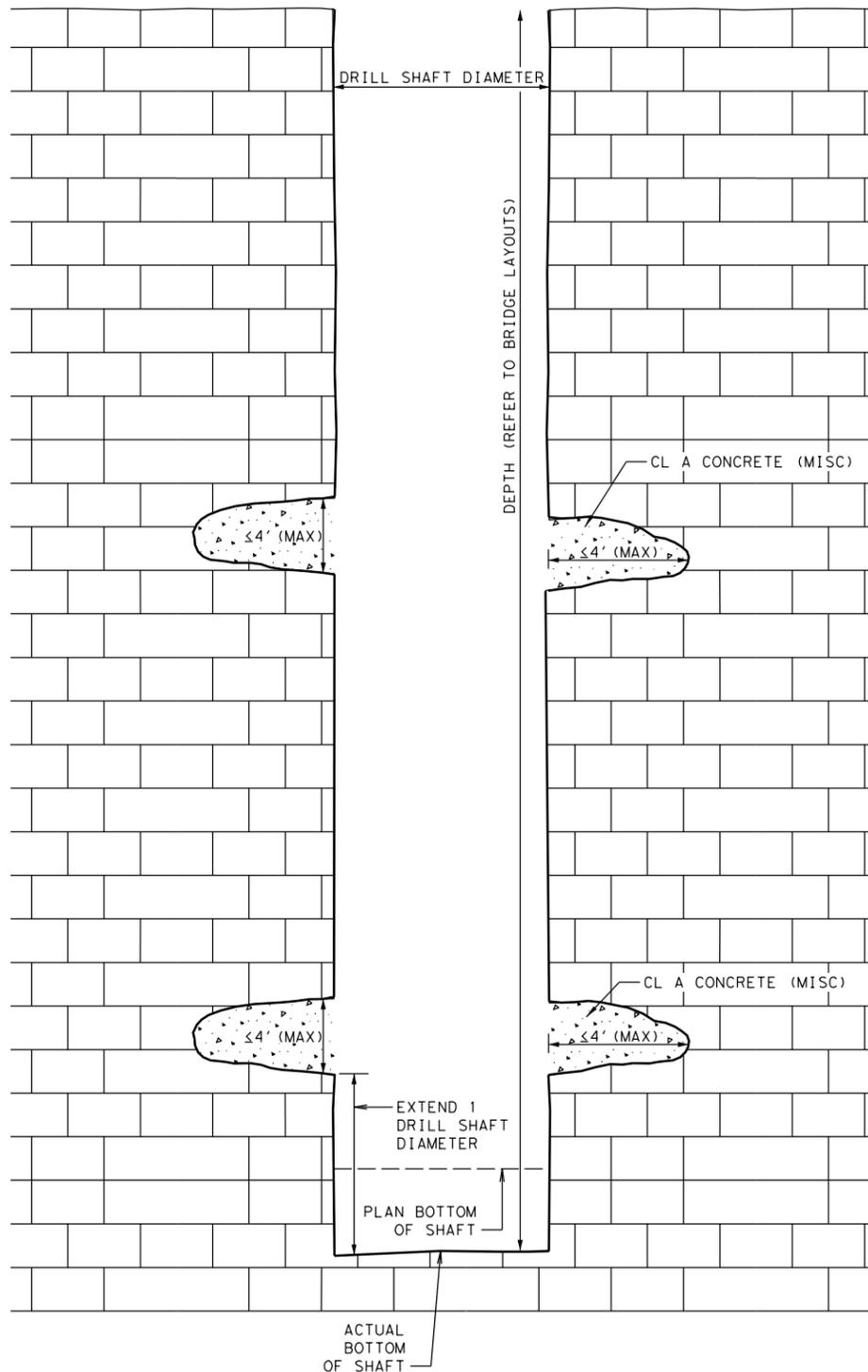
TRENCHING OPERATIONS
GROUNDWATER ABOVE
BEDDING MATERIAL

**VOID MITIGATION
DETAILS**

VMD-18 (AUS)

SHEET 6 OF 7

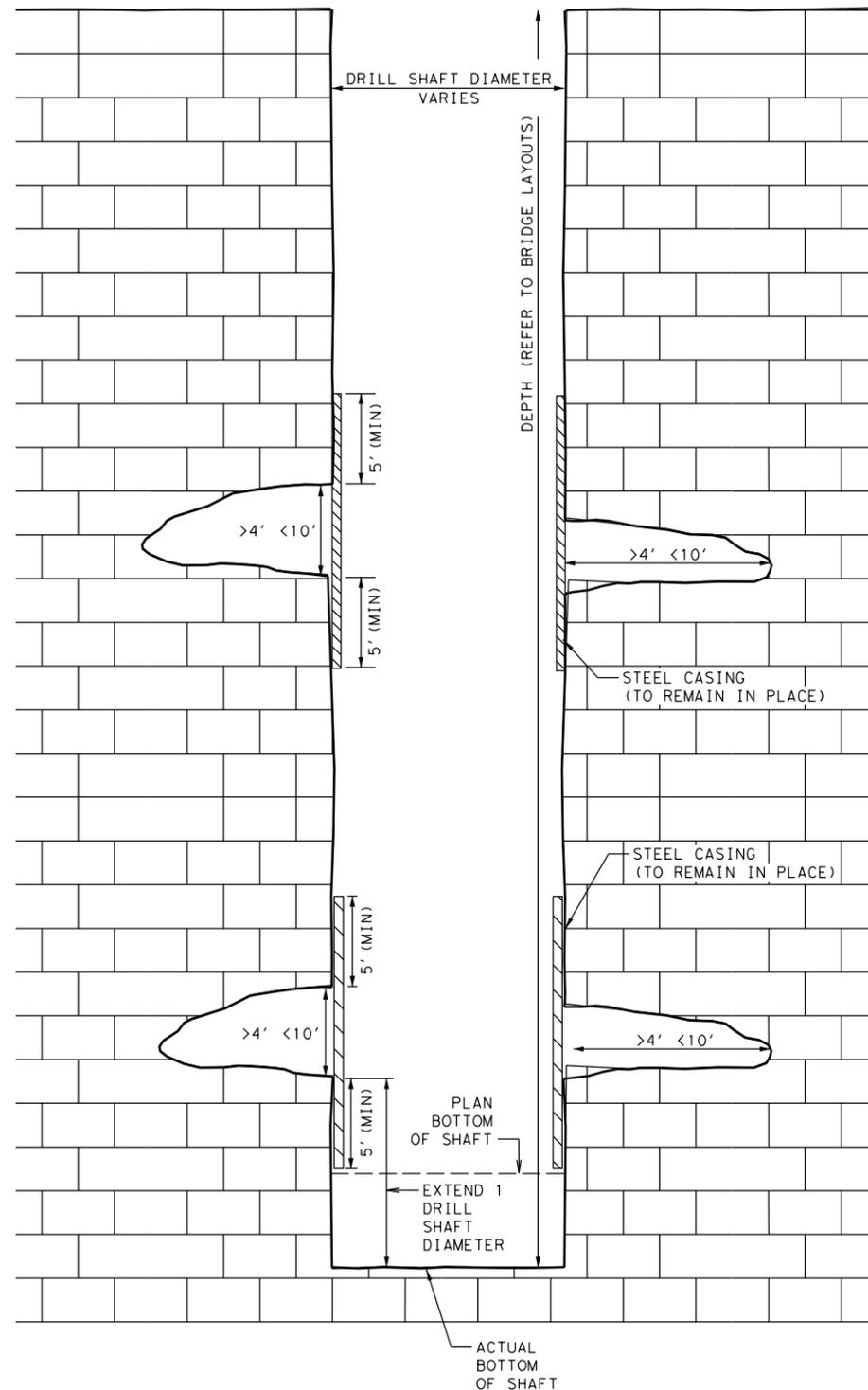
©TXDOT*YEAR*	CONT	SECT	JOB	HIGHWAY
-	-	-	-	NHD
DIST	COUNTY		SHEET NO.	
AUS	WILLIAMSON		534	



**DRILL SHAFT OPERATIONS
SMALL/MEDIUM (DRY VOID)
($\leq 4'$ IN ANY DIRECTION)**

CONCRETE FOR THE VOID SHALL BE PLACED CONTINUOUSLY WITH THE SHAFT

WHERE VOIDS ARE ENCOUNTERED, DRILL SHAFT LENGTHS MAY NEED TO BE INCREASED. APPROVAL FROM THE ENGINEER OF RECORD IS REQUIRED TO COMPLETE CONSTRUCTION OF THE DRILLED SHAFT.



**DRILL SHAFT OPERATIONS
LARGE (DRY VOID)
($>4'$ $<10'$ IN ANY DIRECTION)**

WHERE VOIDS ARE ENCOUNTERED, DRILL SHAFT LENGTHS MAY NEED TO BE INCREASED. APPROVAL FROM THE ENGINEER OF RECORD IS REQUIRED TO COMPLETE CONSTRUCTION OF THE DRILL SHAFT.

NOTES:

1. STEEL CASING WILL BE USED FOR DRILL SHAFT CONSTRUCTION THAT ENCOUNTERS LARGE VOIDS, SO AS TO ALLOW A MINIMUM AMOUNT OF CONCRETE TO ENTER THE VOID.
2. STEEL CASING SHOULD EXTEND A MINIMUM OF FIVE FEET FROM THE EDGE OF THE VOID.
3. AS PART OF THE DRILL SHAFT INSTALLATION PLAN, CONTRACTOR SHALL PROVIDE MEANS AND METHODS FOR ANCHORING THE CASING.
4. REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION.
5. STEEL CASING MAYBE EXTENDED TO THE TOP OF THE SHAFT. THE ENTIRE LENGTH OF CASING INSTALLED IN A SHAFT WILL BE COMPENSATED IN ACCORDANCE WITH THE VOID MITIGATION NOTES.

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**VOID MITIGATION
DETAILS**

VMD-18 (AUS)

SHEET 7 OF 7

CONT	SECT	JOB	HIGHWAY
-	-	-	NHD
DIST	COUNTY	SHEET NO.	
AUS	WILLIAMSON	535	



TCEQ Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

IMPORTANT:

- Use the [INSTRUCTIONS](#) to fill out each question in this form.
- Use the [CHECKLIST](#) to make certain you filled out all required information. Incomplete applications **WILL** delay approval or result in denial.
- Once processed your permit can be viewed at: <http://www.tceq.texas.gov/goto/wq-dpa>

ePERMITS: Sign up now for online NOI: <https://www3.tceq.texas.gov/steers/>
 Pay a \$225 reduced application fee by using ePermits.

APPLICATION FEE:

- You must pay the **\$325** Application Fee to TCEQ for the paper application to be complete.
- Payment and NOI must be mailed to separate addresses.
- Did you know you can pay on line?
 - Go to <http://www.tceq.texas.gov/goto/epay>
 - Select Fee Type: GENERAL PERMIT CONSTRUCTION STORM WATER DISCHARGE NOI APPLICATION

• **Provide your payment information below, for verification of payment:**

Mailed Check/Money Order Number: _____
 Name Printed on Check: _____
 Copy of check enclosed? Yes

EPAY Voucher Number: _____
 Is the Payment Voucher copy attached? Yes

RENEWAL: Is this NOI a Renewal of an existing General Permit Authorization? (Note: A permit cannot be renewed after June 3, 2013.)

Yes The Permit number is: TXR15_____

(If a permit number is not provided, a new number will be assigned.)

No

1) OPERATOR (Applicant)

a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? You may search for your CN at:
<http://www.tceq.texas.gov/goto/cr-customer>

CN_____

b) What is the Legal Name of the entity (applicant) applying for this permit?

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)

c) What is the contact information for the Operator (Responsible Authority)? The mailing address must be recognized by the US Postal Service (USPS). You may verify the address at: <https://tools.usps.com/go/ZipLookupAction!input.action>

Prefix (Mr. Ms. Miss): _____
First/Last Name: _____ Suffix: _____
Title: _____ Credential: _____
Phone Number: _____ Ext: _____ Fax Number: _____
E-mail: _____
Mailing Address: _____
Internal Routing (Mail Code, Etc.): _____
City: _____ State: _____ ZIP Code: _____
If outside USA:
Territory: _____ Country Code: _____ Postal Code: _____

d) Indicate the type of Customer (The instructions will help determine your customer type):

Individual	Limited Partnership	Sole Proprietorship-DBA
Joint Venture	General Partnership	Corporation
Trust	Estate	Federal Government
State Government	County Government	City Government
Other Government		

e) Independent Operator? (If governmental entity, subsidiary, or part of a larger corporation, check "No".)

Yes No

f) Number of Employees:

0-20; 21-100; 101-250; 251-500; or 501 or higher

g) Customer Business Tax and Filing Numbers:

(REQUIRED for Corporations and Limited Partnerships. Not Required for Individuals, Government, or Sole Proprietors)

State Franchise Tax ID Number: _____

Federal Tax ID: _____

Texas Secretary of State Charter (filing) Number: _____

DUNS Number (if known): _____

2) APPLICATION CONTACT

If TCEQ needs additional information regarding this application, who should be contacted?

Is the application contact the same as the applicant identified above?

Yes, go to Section 3).

No, complete section below

Prefix (Mr. Ms. Miss): _____
 First/Last Name: _____ Suffix: _____
 Title: _____ Credential: _____
 Organization Name: _____
 Phone Number: _____ Ext: _____ Fax Number: _____
 E-mail: _____
 Mailing Address: _____
 Internal Routing (Mail Code, Etc.): _____
 City: _____ State: _____ ZIP Code: _____
 Mailing Information if outside USA:
 Territory: _____ Country Code: _____ Postal Code: _____

3) REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

If the site of your business is part of a larger business site or if other businesses were located at this site before yours, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at:

<http://www.tceq.texas.gov/goto/cr-searchrn>

If the site is found, provide the assigned Regulated Entity Reference Number and provide the information for the site to be authorized through this application below. The site information for this authorization may vary from the larger site information.

a) TCEQ issued RE Reference Number (RN): RN _____

b) Name of project or site (the name known by the community where located):

c) In your own words, briefly describe the primary business of the Regulated Entity: (Do not repeat the SIC and NAICS code):

d) County (or counties if > 1)

e) Latitude: _____ Longitude: _____

f) Does the site have a physical address?

Yes, complete Section A for a physical address.

No, complete section B for site location information.

Section A: Enter the physical address for the site.

Verify the address with USPS. If the address is not recognized as a delivery address, provide the address as identified for overnight mail delivery, 911 emergency or other online map tools to confirm an address.

Physical Address of Project or Site:

Street Number: _____ Street Name: _____

City: _____ State: _____ ZIP Code: _____

Section B: Enter the site location information.

If no physical address (Street Number & Street Name), provide a written location access description to the site. (Example: located 2 miles west from intersection of Hwy 290 & IH35 accessible on Hwy 290 South)

City where the site is located or, if not in a city, what is the nearest city:

State: _____ ZIP Code where the site is located: _____

4) GENERAL CHARACTERISTICS

a) Is the project/site located on Indian Country Lands?

Yes - If the answer is Yes, you must obtain authorization through EPA, Region 6.

No

b) Is your construction activity associated with a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources?

Yes - If the answer is Yes, you may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization through EPA, Region 6.

No

c) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site?

Primary SIC Code: _____

d) If applicable, what is the Secondary SIC Code(s): _____

e) What is the total number of acres disturbed? _____

f) Is the project site part of a larger common plan of development or sale?

Yes - If the answer is Yes, the total number of acres disturbed can be less than 5 acres.

No - If the answer is No, the total number of acres disturbed must be 5 or more. If the total number of acres disturbed is less than 5 then the project site does not qualify for coverage through this Notice of Intent. Coverage will be denied. See the requirements in the general permit for small construction sites.

g) What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site?

h) What is the segment number(s) of the classified water body(s) that the discharge will eventually reach?

i) Is the discharge into an MS4?

Yes - If the answer is Yes, provide the name of the MS4 operator below.

Note: The general permit requires you to send a copy of the NOI to the MS4 operator.

No

j) Are any of the surface water bodies receiving discharges from the construction site on the latest EPA-approved CWA 303(d) List of impaired waters?

Yes - If the answer is Yes, provide the name(s) of the impaired water body(s) below.

No

k) Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer as defined in 30 TAC Chapter 213?

Yes - If the answer is Yes, complete certification below by checking "Yes."

No

I certify that a copy of the TCEQ approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) is either included or referenced in the Stormwater Pollution Prevention Plan.

Yes

NOTICE OF INTENT CHECKLIST (TXR150000)

- Did you complete everything? Use this checklist to be sure!
- Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

This checklist is for use by the operator to ensure a complete application. Missing information may result in denial of coverage under the general permit. (See NOI process description in the Instructions)

Application Fee:

If paying by Check:

Check was mailed **separately** to the TCEQs Cashier's Office. (See Instructions for Cashier's address and Application address.)

Check number and name on check is provided in this application.

If using ePay:

The voucher number is provided in this application or a copy of the voucher is attached.

PERMIT NUMBER:

Permit number provided – if this application is for renewal of an existing authorization.

OPERATOR INFORMATION - Confirm each item is complete:

Customer Number (CN) issued by TCEQ Central Registry

Legal name as filed to do business in Texas (Call TX SOS 512/463-5555)

Name and title of responsible authority signing the application

Mailing address is complete & verifiable with USPS. www.usps.com

Phone numbers/e-mail address

Type of operator (entity type)

Independent operator

Number of employees

For corporations or limited partnerships – Tax ID and SOS filing numbers

Application contact and address is complete & verifiable with USPS. <http://www.usps.com>

REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE - Confirm each item is complete:

Regulated Entity Reference Number (RN) (if site is already regulated by TCEQ)

Site/project name/regulated entity

Latitude and longitude <http://www.tceq.texas.gov/gis/sqmaview.html>

County

Site/project physical address. Do not use a rural route or post office box.

Business description

GENERAL CHARACTERISTICS - Confirm each item is complete:

Indian Country Lands –the facility is not on Indian Country Lands

Construction activity related to facility associated to oil, gas, or geothermal resources

Standard Industrial Classification (SIC) Code www.osha.gov/oshstats/sicsr.html

Acres disturbed is provided and qualifies for coverage through a NOI

Common plan of development or sale

Receiving water body(s)

Segment number(s)

Impaired water body(s)

MS4 operator

Edwards Aquifer rule

CERTIFICATION

Certification statements have been checked indicating “Yes”

Signature meets 30 Texas Administrative Code (TAC) 305.44 and is original.

Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

General Information and Instructions

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact List:

Application – status and form questions:	512/239-3700, swpermit@tceq.texas.gov
Technical questions:	512/239-4671, swgp@tceq.texas.gov
Environmental Law Division:	512/239-0600
Records Management - obtain copies of forms:	512/239-0900
Reports from databases (as available):	512/239-DATA (3282)
Cashier's office:	512/239-0357 or 512/239-0187

Notice of Intent Process:

When your NOI is received by the program, the form will be processed as follows:

- 1) **Administrative Review:** Each item on the form will be reviewed for a complete response. In addition, the operator's legal name must be verified with Texas Secretary of State as valid and active (if applicable). The address(s) on the form must be verified with the US Postal service as receiving regular mail delivery. Never give an overnight/express mailing address.
- 2) **Notice of Deficiency:** If an item is incomplete or not verifiable as indicated above, a notice of deficiency (NOD) will be mailed to the operator. The operator will have 30 days to respond to the NOD. The response will be reviewed for completeness.
- 3) **Acknowledgment of Coverage:** An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.
-OR-
Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

For NOIs submitted **electronically** through ePermits, provisional coverage under the general permit begins immediately following confirmation of receipt of the NOI form by the TCEQ.

For **paper** NOIs, provisional coverage under the general permit begins **7 days after a completed NOI is postmarked for delivery** to the TCEQ.

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site <http://www.tceq.texas.gov>. Search using key word TXR150000.

General Permit Forms

The Notice of Intent (NOI), Notice of Termination (NOT), and Notice of Change (NOC) (including instructions) are available in Adobe Acrobat PDF format on the TCEQ web site <http://www.tceq.texas.gov>.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted no later than 10 days prior to the change in Operator status.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. After final acknowledgment of coverage under the general permit, the program will assign a Customer Number and Regulated Entity Number.

You can find the information on the Central Registry web site at <http://www15.tceq.texas.gov/crpub/>. You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled "Program ID". Capitalize all letters in the permit number.

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all authorizations as changes occur. For General Permits, a Notice of Change form must be submitted to the program area.

Fees associated with a General Permit

Payment of the fee may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

Application Fee: This fee is required to be paid at the time the NOI is submitted. Failure to submit payment at the time the application is filed will cause delays in acknowledgment or denial of coverage under the general permit.

Mailed Payments:

Payment must be mailed under separate cover at one of the addresses below using the attached Application Fee submittal form. (DO NOT SEND A COPY OF THE NOI WITH THE APPLICATION FEE SUBMITTAL FORM)

BY REGULAR U.S. MAIL
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, Texas 78711-3088

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

ePAY Electronic Payment: <http://www.tceq.texas.gov/epay>

When making the payment you must select Water Quality, and then select the fee category "General Permit Construction Storm Water Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

INSTRUCTIONS FOR FILLING OUT THE NOI FORM

Renewal of General Permit. Dischargers holding active authorizations under the expired General Permit are required to submit a NOI to continue coverage. The existing permit number is required. If the permit number is not provided or has been terminated, expired, or denied a new permit number will be issued.

1. Operator (Applicant)

a) Enter assigned Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. **This is not a permit number, registration number, or license number.** If this customer has not been assigned a CN, leave the space for the CN blank. If this customer has already been assigned this number, enter the permittee's CN.

b) Legal Name

Provide the current legal name of the permittee, as authorized to do business in Texas. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at 512/463-5555, for more information related to filing in Texas. If filed in the county where doing business, provide a copy of the legal documents showing the legal name.

c) Operator Contact's (Responsible Authority) Contact Information and Mailing Address

Provide the first and last name, and the title of the person signing the Certification section of the application. This person must be an individual having signatory authority in accordance with 30 TAC Chapter §305.44. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. The address must be verifiable with the US Postal Service at <https://tools.usps.com/go/ZipLookupAction!input.action> for regular mail delivery (not overnight express mail). If you find that the address is not verifiable using the USPS web search, please indicate the address is used by the USPS for regular mail delivery.

The area code and phone number should provide contact to the operator. Leave Extension blank if not applicable.

The fax number and e-mail address are optional and should correspond to the operator.

d) Type of Customer (Entity Type)

Check only one box that identifies the type of entity. Use the descriptions below to identify the appropriate entity type. Note that the selected entity type also indicates the name that must be provided as an applicant for a permit, registration or authorization.

Sole Proprietorship – DBA

A sole proprietorship is a customer that is owned by only one person and has not been incorporated. This business may:

- be under the person's name
- have its own name (doing business as or d.b.a.)
- have any number of employees

If the customer is a Sole Proprietorship or DBA, the 'legal name' of the individual business 'owner' must be provided. The DBA name is not recognized as the 'legal name' of the entity. The DBA name may be used for the site name (regulated entity).

Individual

An individual is a customer who has not established a business, but conducts an activity that needs to be regulated by the TCEQ.

Partnership

- A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). A Limited Partnership or Limited Liability Partnership (Partnership) is required to file with the Texas Secretary of State. A General Partnership or Joint Venture is not required to register with the state.
- **Partnership (Limited Partnership or Limited Liability Partnership):** A limited partnership is defined in the Act as a partnership formed by two or more persons under the provisions of Section 3 of the Uniform Limited Partnership Act (Art. 6132a, Revised Civil Statutes of Texas) and having as members one or more general partners and one or more limited partners. The limited partners as such are not bound by the obligations of the partnership. Limited partners may not take part in the day-to-day operations of the business. A Limited Partnership must file with the Texas Secretary of State. A registered limited liability partnership is a general or limited partnership that is registered with the Texas Secretary of State. The partnership's name must contain the words "Registered Limited Liability Partnership" or the abbreviation "L.L.P." as the last words or letters of its name.
- **General Partnership:** A general partner may or may not invest, participates in running the partnership and is liable for all acts and debts of the partnership and any member of it. A General Partnership does not have limited partners. For a General Partnership, there is no registration with the state or even written agreement necessary for a general partnership to be formed. The legal definition of a partnership is generally stated as "an association of two or more persons to carry on as co-owners a business for profit" (Revised Uniform Partnership Act § 101 [1994]).
- **Joint Venture:** A joint venture is but another name for a special partnership. It might be distinguished from a general partnership in that the latter is formed for the transaction of a general business, while a joint venture is usually limited to a single transaction. That is, a joint venture is a special combination of persons in the nature of a partnership engaged in the joint prosecution of a particular transaction for mutual benefit or profit.

Corporation

A customer meets all of these conditions:

- is a legally incorporated entity under the laws of any state or country
- is recognized as a corporation by the Texas Secretary of State
- has proper operating authority to operate in Texas.
- The corporation's 'legal name' as filed with the Texas Secretary of State must be provided as applicant. An 'assumed' name of a corporation is not recognized as the 'legal name' of the entity.

Government

Federal, state, county, or city government (as appropriate)

The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the

applicant. A department name or other description of the organization should not be included as a part of the 'legal name' as applicant.

Trust or Estate

A trust and an estate are fiduciary relationships governing the trustee/executor with respect to the trust/estate property.

Other Government

A utility district, water district, tribal government, college district, council of governments, or river authority. Write in the specific type of government.

e) Independent Entity

Check No if this customer is a subsidiary, part of a larger company, or is a governmental entity. Otherwise, check Yes.

f) Number of Employees

Check one box to show the number of employees for this customer's entire company, at all locations. This is not necessarily the number of employees at the site named in the application.

g) Customer Business Tax and Filing Numbers

These are required for Corporations and Limited Partnerships. These are not required for Individuals, Government, and Sole Proprietors.

State Franchise Tax ID Number

Corporations and limited liability companies that operate in Texas are issued a franchise tax identification number. If this customer is a corporation or limited liability company, enter this number here.

Federal Tax ID

All businesses, except for some small sole proprietors, individuals, or general partnerships should have a federal taxpayer identification number (TIN). Enter this number here. Use no prefixes, dashes, or hyphens. Sole proprietors, individuals, or general partnerships do not need to provide a federal tax ID.

TX SOS Charter (filing) Number

Corporations and Limited Partnerships required to register with the Texas Secretary of State are issued a charter or filing number. You may obtain further information by calling SOS at 512/463-5555.

DUNS Number

Most businesses have a DUNS (Data Universal Numbering System) number issued by Dun and Bradstreet Corp. If this customer has one, enter it here.

2. APPLICATION CONTACT

Provide the name, title and communication information of the person that TCEQ can contact for additional information regarding this application.

3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) Regulated Entity Reference Number (RN)

A number issued by TCEQ's Central Registry to sites (a location where a regulated activity occurs) regulated by TCEQ. This is not a permit number, registration number, or license number. If this regulated entity has not been assigned an RN, leave this space blank.

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: <http://www.tceq.texas.gov/goto/cr-searchrn>

If the site is found, provide the assigned Regulated Entity Reference Number (RN) and provide the information for the site to be authorized through this application. The site information for this authorization may vary from the larger site information.

An example is a chemical plant where a unit is owned or operated by a separate corporation that is accessible by the same physical address of your unit or facility. Other examples include industrial parks identified by one common address but different corporations have control of defined areas within the site. In both cases, an RN would be assigned for the physical address location and the permitted sites would be identified separately under the same RN.

b) Site/Project Name/Regulated Entity

Provide the name of the site as known by the public in the area where the site is located. The name you provide on this application will be used in the TCEQ Central Registry as the Regulated Entity name.

c) Description of Activity Regulated

In your own words, briefly describe the primary business that you are doing that requires this authorization. Do not repeat the SIC Code description.

d) County

Identify the county or counties in which the regulated entity is located.

e) Latitude and Longitude

Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to: <http://www.tceq.texas.gov/gis/sqmvview.html> or <http://nationalmap.gov/ustopo>

f) Site/Project (RE) Physical Address/Location Information

Enter the complete address for the site in Section A if the address can be validated through the US Postal Service. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

If a site does not have an address that includes a street (or house) number and street name, enter NO ADDRESS for the street name in Section A. In Section B provide a complete written location description. For example: "The site is located 2 miles west from intersection of Hwy 290 & IH35, located on the southwest corner of the Hwy 290 South bound lane." Provide the city (or nearest city) and zip code of the facility location.

4. GENERAL CHARACTERISTICS

a) Indian Country Lands

If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA, Region 6, Dallas. Do not submit this form to TCEQ.

b) Construction activity associated with facility associated with exploration, development, or production of oil, gas, or geothermal resources

If your activity is associated with oil and gas exploration, development, or production, you may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization from EPA Region 6. For more information, see:

[http://texreg.sos.state.tx.us/public/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=30](http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=30)

Construction activities associated with a facility related to oil, gas or geothermal resources may include the construction of a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel.

Where required by federal law, discharges of stormwater associated with construction activities under the Railroad Commission's jurisdiction must be authorized by the EPA and the Railroad Commission of Texas, as applicable. Activities under Railroad Commission of Texas jurisdiction include construction of a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources, such as a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility under the jurisdiction of the Railroad Commission of Texas; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel. The Railroad Commission of Texas also has jurisdiction over stormwater from land disturbance associated with a site survey that is conducted prior to construction of a facility that would be regulated by the Railroad Commission of Texas. Under 33 U.S.C. §1342(l)(2) and §1362(24), EPA cannot require a permit for discharges of stormwater from "field activities or operations associated with {oil and gas} exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities" unless the discharge is contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the facility. Under §3.8 of this title (relating to Water Protection), the Railroad Commission of Texas prohibits operators from causing or allowing pollution of surface or subsurface water. Operators are encouraged to implement and maintain best management practices (BMPs) to minimize discharges of pollutants, including sediment, in stormwater during construction activities to help ensure protection of surface water quality during storm events.

c) Primary Standard Industrial Classification (SIC) Code

Provide the SIC Code that best describes the construction activity being conducted at this site.

Common SIC Codes related to construction activities include:

- 1521 - Construction of Single Family Homes
- 1522 - Construction of Residential Bldgs. Other than Single Family Homes
- 1541 - Construction of Industrial Bldgs. and Warehouses

- 1542 - Construction of Non-residential Bldgs, other than Industrial Bldgs. and Warehouses
- 1611 - Highway and Street Construction, except Highway Construction
- 1622 - Bridge, Tunnel, and Elevated Highway Construction
- 1623 - Water, Sewer, Pipeline and Communications, and Power Line Construction

For help with SIC Codes, go to:

<http://www.osha.gov/pls/imis/sicsearch.html>

d) Secondary SIC Code

Secondary SIC Code(s) may be provided. Leave blank if not applicable. For help with SIC Codes, go to: <http://www.osha.gov/pls/imis/sicsearch.html>

e) Total Number of Acres Disturbed

Provide the approximate number of acres that the construction site will disturb. Construction activities that disturb less than one acre, unless they are part of a larger common plan that disturbs more than one acre, do not require permit coverage. Construction activities that disturb between one and five acres, unless they are part of a common plan that disturbs more than five acres, do not require submission of an NOI. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

If you have any questions about this item, please contact the stormwater technical staff by phone at (512)239-4671 or by email at swgp@tceq.texas.gov.

f) Common Plan of Development

Construction activities that disturb less than five acres do not require submission of an NOI unless they are part of a common plan of development or for sale where the area disturbed is five or more acres. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

For more information on "What is a common plan of development?" go to:

www.tceq.texas.gov/permitting/stormwater/common_plan_of_development_steps.html

For further information, go to the TCEQ stormwater construction webpage at:

www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If you have any further questions about this item, please call the stormwater technical staff at (512)239-4671.

g) Identify the water body(s) receiving stormwater runoff

The stormwater may be discharged directly to a receiving stream or through a MS4 from your site. It eventually reaches a receiving water body such as a local stream or lake, possibly via a drainage ditch. You must provide the name of the water body that receives the discharge from the site (a local stream or lake).

If your site has more than one outfall you need to include the name of the first water body for each outfall, if they are different.

h) Identify the segment number(s) of the classified water body(s)

Identify the classified segment number(s) receiving a discharge directly or indirectly. Go to the following link to find the segment number of the classified water body where stormwater will flow from the site: www.tceq.texas.gov/waterquality/monitoring/viewer.html

You may also find the segment number in TCEQ publication GI-316:

www.tceq.texas.gov/publications/gi/gi-316

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:

- 0100 (Canadian River Basin)
- 0200 (Red River Basin)
- 0300 (Sulfur River Basin)
- 0400 (Cypress Creek Basin)
- 0500 (Sabine River Basin)

Call the Water Quality Assessments section at (512)239-4671 for further assistance.

i) Discharge into MS4 – Identify the MS4 Operator

The discharge may initially be into a municipal separate storm sewer system (MS4). If the stormwater discharge is into an MS4, provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, county, or utility district, but possibly can be another form of government. Please note that the Construction General Permit requires the Operator to supply the MS4 with a copy of the NOI submitted to TCEQ. For assistance, you may call the technical staff at (512)239-4671.

j) Surface Water bodies on list of impaired waters – Identify the impaired water body(s)

Indicate Yes or No if any surface water bodies receiving discharges from the construction site are on the latest EPA-approved CWA 303(d) List of impaired waters. Provide the name(s) of surface water bodies receiving discharges or potential discharges from the construction site that are on the latest EPA-approved CWA 303(d) List of impaired waters. The EPA-approved CWA 303(d) List of impaired waters in Texas can be found at:

www.tceq.texas.gov/waterquality/assessment/305_303.html

NOTE: Do not use any "draft" documents.

k) Discharges to the Edwards Aquifer Recharge Zone and Certification

See maps on the TCEQ website to determine if the site is located within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer at: www.tceq.texas.gov/field/eapp/viewer.html

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required before construction can begin. The certification must be answered "Yes" for coverage under the Construction General Permit. The TCEQ approved plan must be readily available for TCEQ staff to review at the time that the NOI is submitted.

The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

For questions regarding the Edwards Aquifer Protection Program, contact the appropriate TCEQ Regional Office. For projects in Hays, Travis and Williamson Counties: Austin Regional Office, 12100 Park 35 Circle, Austin, TX 78753, 512-339-2929. For Projects in Bexar, Comal, Kinney, Medina and Uvalde Counties: TCEQ San Antonio Regional Office, 14250 Judson Rd., San Antonio, TX 78233-4480, 210-490-3096.

5. CERTIFICATIONS

Failure to indicate **Yes** to ALL of the certification items may result in denial of coverage under the general permit.

a) Certification of Understanding the Terms and Conditions of Construction General Permit (TXR150000)

Provisional coverage under the Construction General Permit (TXR150000) begins 7 days after the completed paper NOI is postmarked for delivery to the TCEQ. (Electronic applications submitted through ePermits have immediate provisional coverage). You must obtain a copy and read the Construction General Permit before submitting your application. You may view and print the Construction General Permit for which you are seeking coverage at the TCEQ web site: www.tceq.texas.gov/goto/construction

b) Certification of Legal Name

The full legal name of the applicant as authorized to do business in Texas is required. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at (512)463 5555, for more information related to filing in Texas.

c) Understanding of Notice of Termination

A permittee shall terminate coverage under this Construction General Permit through the submittal of a NOT when the operator of the facility changes, final stabilization has been reached, the discharge becomes authorized under an individual permit, or the construction activity never began at this site.

d) Certification of Stormwater Pollution Prevention Plan

The SWP3 identifies the areas and activities that could produce contaminated runoff at your site and then tells how you will ensure that this contamination is mitigated. For example, in describing your mitigation measures, your site's plan might identify the devices that collect and filter stormwater, tell how those devices are to be maintained, and tell how frequently that maintenance is to be carried out. You must develop this plan in accordance with the TCEQ general permit requirements. This plan must be developed and implemented before you complete this NOI. The SWP3 must be available for a TCEQ investigator to review on request.

Operator Certification:

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

IF YOU ARE A CORPORATION:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at (512)239-0600.

30 Texas Administrative Code

§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

Texas Commission on Environmental Quality General Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

- Complete items 1 through 5 below:
- Staple your check in the space provided at the bottom of this document.
- Do not mail this form with your NOI form.
- Do not mail this form to the same address as your NOI.

Mail this form and your check to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, TX 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

Fee Code: GPA

General Permit:

TXR150000

1. Check / Money Order Number: _____
2. Amount of Check/Money Order: _____
3. Date of Check or Money Order: _____
4. Name on Check or Money Order: _____
5. NOI INFORMATION

If the check is for more than one NOI, list each Project/Site (RE) Name and Physical Address exactly as provided on the NOI. DO NOT SUBMIT A COPY OF THE NOI WITH THIS FORM AS IT COULD CAUSE DUPLICATE PERMIT ENTRIES.

See Attached List of Sites (If more space is needed, you may attach a list.)

Project/Site (RE) Name: _____

Project/Site (RE) Physical Address:

Staple Check in This Space

Print this voucher for your records. If you are sending the TCEQ hardcopy documents related to this payment, include a copy of this voucher.

Transaction Information

Voucher Number: 709551
Trace Number: 582EA000614188
Date: 06/14/2024 11:33 AM
Payment Method: CC - Authorization 0000014660
Voucher Amount: \$325.00
Fee Type: GENERAL PERMIT CONSTRUCTION STORM WATER DISCHARGE NOI APPLICATION
ePay Actor: DEREK BOHLS
Actor Email: dbohls@lja.com
IP: 170.55.94.226

Payment Contact Information

Name: DEREK BOHLS
Company: LJA ENGINEERING
Address: 2700 LA FRONTERA BLVD, ROUND ROCK, TX 78681
Phone: 512-439-4744

Site Information

Site Name: NEW HOPE DRIVE BLOCKHOUSE TO CR 180
Site Location: CEDAR PARK TX

Customer Information

Customer Name: CITY OF CEDAR PARK
Customer Address: 450 CYPRESS CREEK ROAD, CEDAR PARK, TX 78613

Close

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

I Randall Lueders
Print Name

Director of Engineering and Capital Projects
Title - Owner/President/Other

of City of Cedar Park
Corporation/Partnership/Entity Name

have authorized Derek Bohls, PE
Print Name of Agent/Engineer

of LJA Engineering, 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:

Randy Lueders
Applicant's Signature

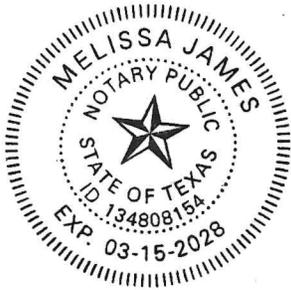
5-1-24
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Bandy Lueders 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 1st day of May, 2024.



Melissa James
NOTARY PUBLIC

Melissa James
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 3/15/2028

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: New Hope Dr from S Block House Dr to CR 180

Regulated Entity Location: Cedar Park, TX

Name of Customer: City of Cedar Park

Contact Person: Randall Leuders

Phone: 512-401-5354

Customer Reference Number (if issued): CN 600407951

Regulated Entity Reference Number (if issued): RN _____

Austin Regional Office (3373)

Hays

Travis

Williamson

San Antonio Regional Office (3362)

Bexar

Medina

Uvalde

Comal

Kinney

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

Austin Regional Office

San Antonio Regional Office

Mailed to: TCEQ - Cashier

Overnight Delivery to: TCEQ - Cashier

Revenues Section

Mail Code 214

P.O. Box 13088

Austin, TX 78711-3088

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

<i>Type of Plan</i>	<i>Size</i>	<i>Fee Due</i>
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	15.78 Acres	\$ 6500
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: 6/14/2024

Application Fee Schedule

Texas Commission on Environmental Quality

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

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

Extension of Time Requests

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



TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> Other	
2. Customer Reference Number (if issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN 600407951		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		
<input type="checkbox"/> New Customer		<input type="checkbox"/> Update to Customer Information		<input type="checkbox"/> Change in Regulated Entity Ownership
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)				
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)			<i>If new Customer, enter previous Customer below:</i>	
City of Cedar Park				
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)	
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited	
Government: <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other:	
12. Number of Employees		13. Independently Owned and Operated?		
<input type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input checked="" type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following				
<input type="checkbox"/> Owner		<input type="checkbox"/> Operator		<input checked="" type="checkbox"/> Owner & Operator
<input type="checkbox"/> Occupational Licensee		<input type="checkbox"/> Responsible Party		<input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:
15. Mailing Address:	450 Cypress Creek			
	City	Cedar Park	State	TX
	ZIP	78613	ZIP + 4	
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)
(512) 401-5354				() -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected below this form should be accompanied by a permit application)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency 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.)	
New Hope Dr from S Block House Dr to CR 180	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>							
	City		State		ZIP		ZIP + 4
24. County							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	New Hope Dr from S Block House Dr to CR 180						
26. Nearest City	Cedar Park			State	TX	Nearest ZIP Code	78613
27. Latitude (N) In Decimal:	30.536877		28. Longitude (W) In Decimal:	-97.816259			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
30	32	12.7572 N	97	48	58.5324 W		
29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)		32. Secondary NAICS Code (5 or 6 digits)			
1611		237310					
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
34. Mailing Address:							
	City		State		ZIP		ZIP + 4
35. E-Mail Address:							
36. Telephone Number		37. Extension or Code			38. Fax Number <i>(if applicable)</i>		
() -					() -		

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

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

SECTION IV: Preparer Information

40. Name:	Derek Bohls	41. Title:	Vice President
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 439-4744		() -	dbohls@lja.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:	LJA Engineering	Job Title:	Vice President
Name <i>(In Print)</i> :	Derek Bohls, PE	Phone:	(512) 439- 4744
Signature:		Date:	6/14/2024