WPAP

CR 234 NEW TRUCK PARKING FACILITY

Located in Jarrell, Texas

Water Pollution Abatement Plan

August 2025

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

Authorized Agent:
Trey Simpson, P.E.
Clark Associates, F-23184
215 North Main Street
Temple, TX 76501
254-899-0899

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER
8-4-2025

Project No. 252632.00

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: CR 234 New Truck Parking Facility						**2. Regulated Entity No.:**			
3. Customer Name: Malla Investments Group, LLC						**4. Customer No.:**			
5. Project Type: (Please circle/check one)	New		Modification			Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		Non-residential			**8. Site (acres):**		8.18	
9. Application Fee:	$5,000.00		**10. Permanent BMP(s):**			1 Wet Basin			
11. SCS (Linear Ft.):	-		**12. AST/UST (No. Tanks):**			-			
13. County:	Williamson		**14. Watershed:**			Salado 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.)	__	__	X
Region (1 req.)	__	__	X
County(ies)	__	__	X
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence __Georgetown X Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	__	__	__	__	__
Region (1 req.)	__	__	__	__	__
County(ies)	__	__	__	__	__
Groundwater Conservation District(s)	__ Edwards Aquifer Authority __Trinity-Glen Rose	__Edwards Aquifer Authority	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park __San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Trey Simpson
Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent — Date: 7/28/2025

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):	

Water Pollution Abatement Plan Checklist

- **Edwards Aquifer Application Cover Page (TCEQ-20705)**
- **General Information Form (TCEQ-0587)**

  Attachment A - Road Map
  Attachment B - USGS / Edwards Recharge Zone Map
  Attachment C - Project Description

- **Geologic Assessment Form (TCEQ-0585)**

  Attachment A - Geologic Assessment Table (TCEQ-0585-Table)
  Attachment B - Stratigraphic Column
  Attachment C - Site Geology
  Attachment D - Site Geologic Map(s)

- **Water Pollution Abatement Plan Application Form (TCEQ-0584)**

  Attachment A - Factors Affecting Surface Water Quality
  Attachment B - Volume and Character of Stormwater
  Attachment C - Suitability Letter from Authorized Agent (if OSSF is proposed)
  Attachment D - Exception to the Required Geologic Assessment (if requested)
  Site Plan

- **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 requested)
  Attachment F - Structural Practices
  Attachment G - Drainage Area Map
  Attachment H - Temporary Sediment Pond(s) Plans and Calculations
  Attachment I - Inspection and Maintenance for BMPs
  Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

- **Permanent Stormwater Section (TCEQ-0600)**

  Attachment A - 20% or Less Impervious Cover Waiver (if requested for multi-family, school, or small business site)
  Attachment B - BMPs for Upgradient Stormwater
  Attachment C - BMPs for On-site Stormwater
  Attachment D - BMPs for Surface Streams
  Attachment E - Request to Seal Features (if sealing a feature)
  Attachment F - Construction Plans
  Attachment G - Inspection, Maintenance, Repair and Retrofit Plan
  Attachment H - Pilot-Scale Field Testing Plan (if proposed)
  Attachment I -Measures for Minimizing Surface Stream Contamination

- **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)**

General Information Form

Texas Commission on Environmental Quality

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

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

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

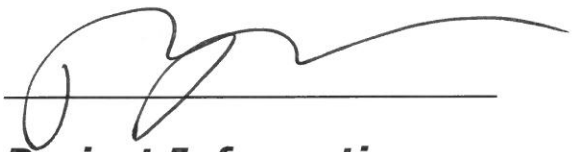
Signature

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

Print Name of Customer/Agent: Trey Simpson

Date: 7/28/2025

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: CR 234 New Truck Parking Facility
2. County: Williamson
3. Stream Basin: Solado Creek-Brazos River Basin(1248A)
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☒ WPAP
   ☐ SCS
   ☐ Modification
   ☐ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

   Contact Person: Major Singh
   Entity: Malla Investments Group, LLC.
   Mailing Address: 18416 Dry Brook Loop
   City, State: Pflugerville, TX Zip: 78660
   Telephone: 512-820-1697 FAX: _____
   Email Address: major100@gmail.com

8. Agent/Representative (If any):

   Contact Person: Trey Simpson
   Entity: Clark Associates
   Mailing Address: 215 N Main Street
   City, State: Temple, Texas Zip: 76501
   Telephone: 254-899-0899 FAX: _____
   Email Address: tsimpson@clark-assoc.com

9. Project Location:

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

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

    Property is located at 3390 CR 234, Georgetown, Texas 78633.

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

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

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

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

    ☐ Survey staking will be completed by this date: _____

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

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

15. Existing project site conditions are noted below:

- ☐ Existing commercial site
- ☐ Existing industrial site
- ☐ Existing residential site
- ☐ Existing paved and/or unpaved roads
- ☒ Undeveloped (Cleared)
- ☐ Undeveloped (Undisturbed/Uncleared)
- ☐ Other: _____

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

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

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

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

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

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

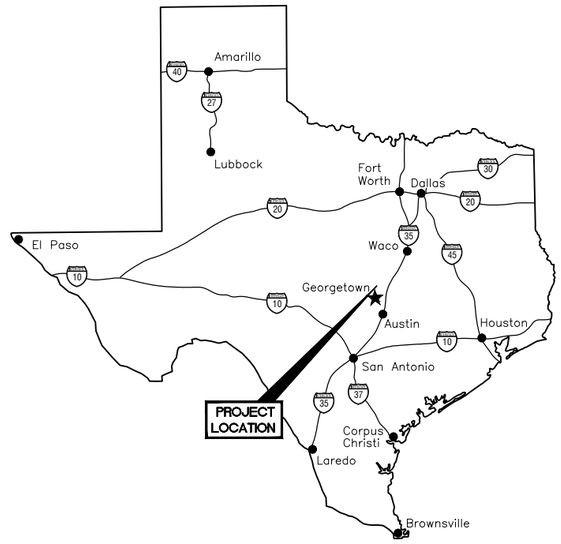
Attachment A – Road Map

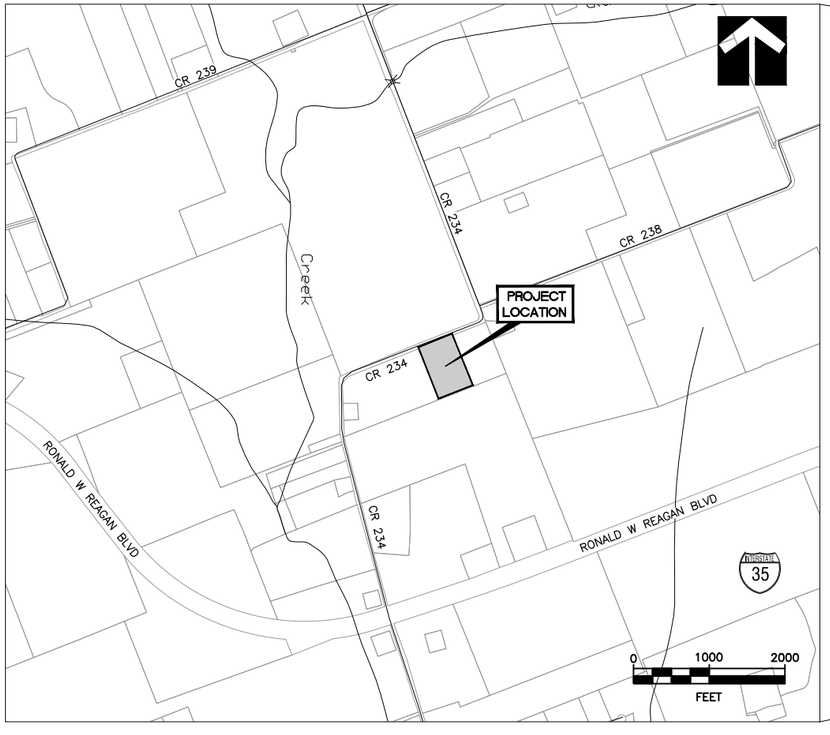
PROPOSED DEVELOPMENT FOR:

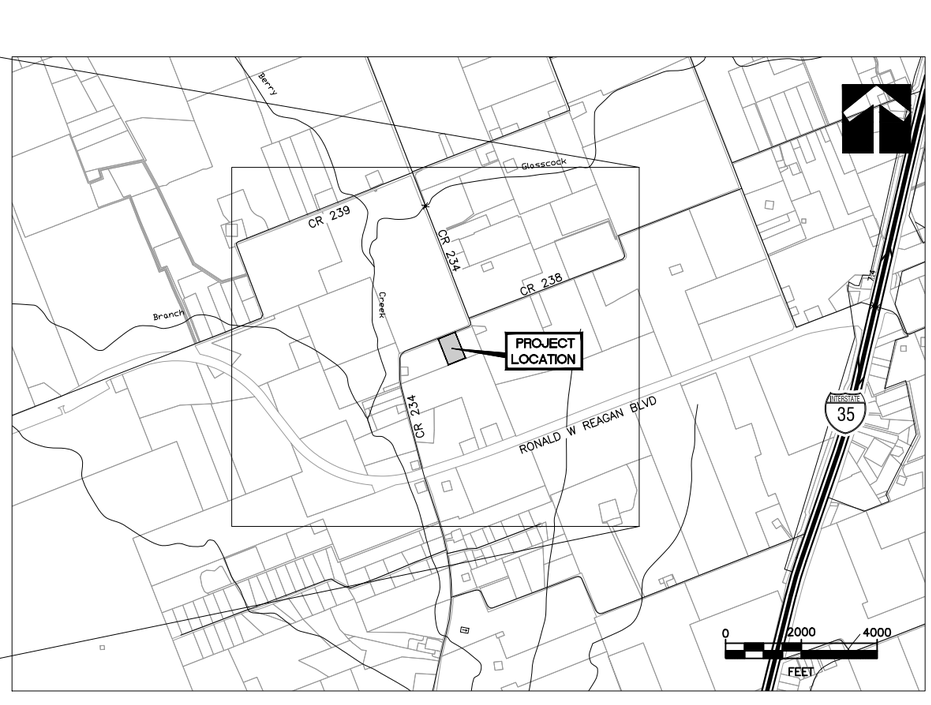
CR 234 New Truck Parking Facility

Jarrell, Texas

A. Road Map: See attached.







CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

SITE LOCATION MAP

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

☒ FOR REVIEW
THIS DOCUMENT IS RELEASED FOR THE PURPOSES OF INTERIM REVIEW ONLY AS PER DATE ON DRAWING. IT IS NOT TO BE USED FOR BIDDING OR CONSTRUCTION PURPOSES. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED COMPLETE.

☐ FOR CONSTRUCTION
FINAL DRAWINGS

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

A

Attachment B – USGS/Edwards Recharge Zone Map

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. USGS/Edwards Recharge Zone Map: See attached.

EDWARDS AQUIFER
RECHARGE ZONE

PROJECT
LOCATION

COBBS CAVERN
QUADRANGLE

JARRELL
QUADRANGLE

GEORGETOWN
QUADRANGLE

WEIR
QUADRANGLE

Pecan Branch Creek
Salado Cr.
Land
Dry Berry Springs Branch
Glasscock Creek
Branch
Shallow Branch
Willis Creek
Donahoe Creek
North Fork
Corn Hill

JARRELL
CORN HILL
NEW CORN HILL
THEON
Zion

NORTH STREET
FIFTH STREET
THIRD STREET
SECOND STREET
FIRST STREET
POST OFFICE
WESTRY JARRELL

INTERSTATE 35

CR 234
CR 238
CR 146
RONALD W REAGAN BLVD

FM 487
FM 2243
FM 1105
FM 971

10.0
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2.1
0.7

0 2000 4000
FEET

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

USGS SITE LOCATION MAP

DRAWING STATUS

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☐ FOR CONSTRUCTION
FINAL DRAWINGS

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

B

Attachment C - Project Description

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. **Site Location:** The subject property is located at 3390 CR 234, Georgetown, Texas 78633.

B. **Area of Site:** The subject property is 8.18 Acres. All the subject property will be developed at this time.

C. **Offsite Areas:** There is approximately 13.14 Acres of offsite drainage which discharges onto the site. See drainage sheets in attached construction plans

D. **Impervious Cover:** The existing site is currently undeveloped with no impervious cover. The proposed development will include a new truck parking facility with drive, and a new carport totaling approximately 5.50- acres of post-development impervious cover in all (approximately 67% of the subject property).

E. **Permanent BMP(s):** The Permanent BMP(s) for the CR 234 New Truck Parking Facility Project will be one wet basin which will treat stormwater runoff discharging from the site. The detention pond has also been designed to mitigate calculated increased storm runoff flows to the calculated pre-development values.

F. **Proposed Site Use:** The project will include the construction of a new truck parking lot with drive, a new building, and a detention/retention pond.

G. **Site History:** The Subject Property has no existing ponds throughout the property with no existing buildings.

H. **Previous Development:** The Subject Property has no previous development.

I. **Area(s) to be demolished:** No areas to be demolished.

Geologic Assessment
TCEQ-0585

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: Mr. Chad M. Copeland, P.G.

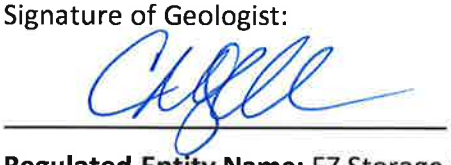
Telephone: (512) 335-1785 x 124

Fax: (512) 335-0527

Date: 1/24/2023

Representing: Ranger Environmental Services, LLC (State of Texas Geoscience Firm No. 50140)
(Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



1/24/2023

Regulated Entity Name: EZ Storage Services CR 234

Project Information

1. Date(s) Geologic Assessment was performed: 01/05/2023
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)

Soil Name	Group*	Thickness(feet)
DnB - Denton silty clay, 1 to 3 percent slopes	D	1.83 - 5.0
DoC - Doss silty clay, moist, 1 to 5 percent slopes	D	0.92 - 1.67

** Soil Group Definitions (Abbreviated)*

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

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

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

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

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

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

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

   Applicant's Site Plan Scale: 1" = 40'
   Site Geologic Map Scale: 1" = 40'
   Site Soils Map Scale (if more than 1 soil type): 1" = 150'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.

☐ Other method(s). Please describe method of data collection: _____

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

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

    ☒ There are 0 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

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

Administrative Information

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

ATTACHMENT A

Geological Assessment Table
TCEQ-0585 Table

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: EZ Storage Services CR 234

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	INCD	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
G-1	30.77237	-97.66248	MB	30	Kgt	3	13	4	-	-	-	-	F	5	35	x		x		Hillside
G-2	30.77214	-97.66315	MB	30	Kgt	3	14	5	-	-	-	-	F	5	35	x		x		Hillside
G-3	30.7718	-97.66312	MB	30	Kgt	3	15	5	-	-	-	-	F	5	35	x		x		Hillside
G-4	30.77188	-97.66275	MB	30	Kgt	3	13	5	-	-	-	-	F	5	35	x		x		Hillside
G-5	30.77191	-97.66245	MB	30	Kgt	3	12	-	-	-	-	-	F	5	35	x		x		Hillside

* DATUM WGS84

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

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

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 1/24/2023

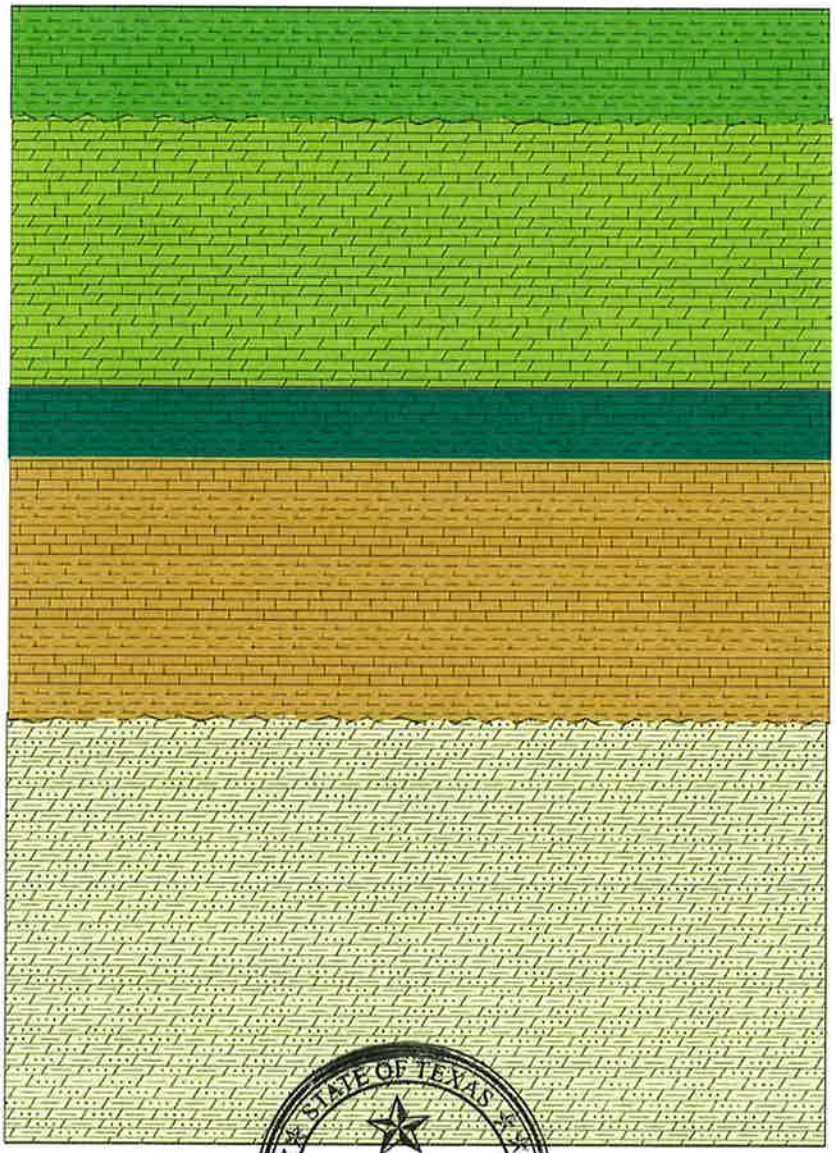
Sheet 1 of 1

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

1/24/2023

ATTACHMENT B

Stratigraphic Column



Georgetown Formation (Kgt)
Limestone and marl

Edwards Limestone (Ked)
Limestone and dolostone

Comanche Peak Formation (Kc)
Limestone and marl

Walnut Formation (Kwa)
Limestone and marl
(Includes Kkv, Kcp, Kbc)

Glen Rose Formation (Kgr)
Limestone, dolostone, and marl

Edwards Aquifer

STATE OF TEXAS
CHAD M. COPELAND
SOIL SCIENCE
12668
LICENSED
PROFESSIONAL GEOSCIENTIST
1/24/2023

Adapted from the Bureau of Economic Geology, 1990, Hydrogeology of the Northern Segment of the Edwards Aquifer, Austin Region, Report of Investigations No. 192, Figure 4

RANGER ENVIRONMENTAL SERVICES

Stratigraphic Column
EZ Storage Services CR 234
CR 234, Williamson County, TX 78633

Ranger Project No. 6672

COMMENTS: NOT FOR CONSTRUCTION

ATTACHMENT C

Site Geology

RANGER
ENVIRONMENTAL SERVICES, LLC

GEOLOGIC ASSESSMENT
EZ Storage Services CR 234
CR 234
Williamson County, Texas
January 2023

INTRODUCTION

Ranger Environmental Services, LLC (Ranger) was contracted to conduct a Geologic Assessment of the referenced property. This location lies within the designated Edwards Aquifer Recharge Zone. The site was previously used for agriculture and ranching. The property is undeveloped and vegetated with native grasses. Since the subject site is located over the Edwards Aquifer Recharge Zone, site development should adhere to the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program Rules in accordance with Title 30 of the Texas Administrative Code, Section 213 (30 TAC§ 213).

PROJECT DESCRIPTION

The subject site consists of one approximate 8.19-acre lot, more or less, located at CR 234, in Williamson County, Texas at approximately 30.771686° N and approximately 97.662004° W.

The site was previously used for agriculture and ranching. The property is undeveloped and vegetated with native grasses.

METHODOLOGY

This assessment follows general guidelines contained in Texas Commission on Environmental Quality (TCEQ) guidance "*Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones*" (TCEQ Guidance 0585). The site is located on an area of the recharge zone that may contain karst features within the outcropping limestone. Karst features may be expressed as surface features but more commonly tend to persist with depth.

A field geologic assessment was conducted by Mr. Chad M. Copeland, P.G. and Ms. Caroline G. Hamilton on January 4, 2023. During the assessment Ranger personnel observed that the site was an undeveloped natively vegetated parcel. According to county records it had been used previously for agricultural purposes. It was noted that no permanent structures existed on the property at the time of the inspection.

The walking geologic survey was conducted on 50-foot center transects, where possible. No intrusive testing was conducted. If present, features identified in the field were photographed and recorded with a hand held global positioning system (GPS). Features may include, but were not limited to, caves, solution cavities, solution-enlarged fractures, faults, manmade features in bedrock, swallow holes, sinkholes, non-karst closed depressions, and zone clustered or aligned features. The geologic assessment table, stratigraphic column, geologic, soils and topographic maps are included herein.

RESEARCH INFORMATION

Prior to conducting the geologic survey, Ranger conducted a review of existing geologic data and maps to prepare for the field survey. Reviewed references included, but are not limited to:

- Barnes, V.E. 1974. *Geologic Atlas of Texas, Austin Sheet.* The University of Texas at Austin, Bureau of Economic Geology.
- Senger, R.K., E.W. Collins and C.W. Kreitler. 1990. Hydrogeology of the Northern Segment of the Edwards Aquifer, Austin Region, Report of Investigations 192. The University of Texas at Austin, Bureau of Economic Geology.
- Texas Commission on Environmental Quality. 1999. Complying with the Edwards Aquifer Rules: Administrative Guidance.
- Texas Commission on Environmental Quality. Revised 2004. Instructions to Geologist for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones.
- Sellards, E.H., W.S. Adkins and F.B. Plummer. 1932. The University of Texas Bulletin No. 3232. The Geology of Texas. Volume 1, Stratigraphy.
- U.S. Department of Agriculture National Resources Conversation Services (www.nrcs.usda.gov).
- Texas Commission on Environmental Quality (www.tceq.state.tx.us).
- FEMA Flood Plain Maps.
- Center for Geospatial Technology, Texas Tech University, obtained from the Texas Geologic Atlas of Texas.
- USGS Topographic Maps – Terrain Navigator Pro 2015.
- ESRI

SITE GEOLOGY

Referencing the Geologic Atlas of Texas, Austin Sheet, and The University of Texas Bulletin No. 3232, The Geology of Texas, Volume 1, the local stratigraphic units that outcrop at the site are the Cretaceous age Georgetown Formation (Kgt). The Georgetown Formation consists primarily of nodular, moderately indurated limestones interbedded with marls. Georgetown limestones are typically fine grained, massive, and fossiliferous. Small vugs may be present within the formation but are not common. The formation is approximately 30 feet to 80 feet in thickness and thins southward. Megafossils of Kingena wacoensis and Gryphaea washitaensis are found in the Georgetown Formation.

The subject site is underlain by Cretaceous sedimentary strata. In general, the Cretaceous strata dip regionally one degree towards the southeast. The area lies within the Balcones Fault Zone, a geologic province characterized in this region by north-northeast trending en echelon normal faults with the downthrown side most commonly to the east of the fault planes.

Because the site was agriculturally developed, the land had been scraped, scarred, and eroded, so no native geologic outcropping was identified within the boundaries of the property. No vugs, caves, fractures, or solution cavities were observed during the site geologic inspection.

SITE SPECIFIC GEOLOGIC FEATURES

The following geologic features, as defined in Texas Commission on Environmental Quality (TCEQ) guidance "*Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones*" (TCEQ Guidance 0585), were observed at the site:

G-1 (MB) Man-made Feature in Bedrock, Test Hole

A manmade feature in bedrock was observed at approximately 30.77237° N, 97.66248° W. The dimensions of the feature were measured to be approximately 13 ft long by 3 ft wide by 4 ft deep. The feature was not observed to intersect with underlying bedrock layers. Therefore the probability of rapid infiltration is low, and the catchment area is less than 1.6 acres.

G-2 (MB) Man-made Feature in Bedrock, Test Hole

A manmade feature in bedrock was observed at approximately 30.77214° N, 97.66315° W. The dimensions of the feature were measured to be approximately 14 ft long by 3 ft wide by 5 ft deep. The feature was not observed to intersect with underlying bedrock layers. Therefore, the probability of rapid infiltration is low, and the catchment area is less than 1.6 acres.

G-3 (MB) Man-made Feature in Bedrock, Test Hole

A manmade feature in bedrock was observed at approximately 30.77180° N, 97.66312° W. The dimensions of the feature were measured to be approximately 15 ft long by 3 ft wide by 5 ft deep. The feature was not observed to intersect with underlying bedrock layers. Therefore, the probability of rapid infiltration is low, and the catchment area is less than 1.6 acres.

G-4 (MB) Man-made Feature in Bedrock, Test Hole

A manmade feature in bedrock was observed at approximately 30.77188° N, 97.66275° W. The dimensions of the feature were measured to be approximately 12.5 ft long by 3 ft wide by 5 ft deep. The feature was not observed to intersect with underlying bedrock layers. Therefore, the probability of rapid infiltration is low and the catchment area is less than 1.6 acres.

G-5 (MB) Man-made Feature in Bedrock, Assumed Test Hole

A manmade feature in bedrock was observed at approximately 30.77191° N, 97.66245° W. The dimensions of the feature were measured to be approximately 12 ft long by 3 ft wide by an unknown depth. The feature was backfilled with soil; therefore, the depth could not be observed. The probability of rapid infiltration was low, and the catchment area is less than 1.6 acres.

SOIL DESCRIPTION

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) *Web Soil Survey*, the soil at the subject site was noted to be Denton silty clay, 1 to 3 percent slopes (DnB) and Doss silty clay, moist, 1 to 5 percent slopes (DoC).

Please see the attached USDA NRCS Custom Soil Resource Report for reference.

TOPOGRAPHY AND DRAINAGE

The site was noted to be slopping approximately 0.3 feet per foot predominantly northwest toward an unnamed tributary of Dry Berry Creek.

CONCLUSIONS AND RECOMMENDATIONS

Ranger Environmental Services, LLC. conducted a Geologic Assessment of the site in accordance with 30 TAC§ 213. Ranger concludes that no sensitive features as defined by the TCEQ (30 TAC§ 213) were observed at the site.

This assessment does not address the possible presence of subsurface conditions that may be exposed during future construction and/or development. Should solution features or conditions be exposed during site construction activities that indicate a potential for hydraulic interconnectedness between the surface and the Edwards Aquifer, operations in the vicinity of the feature should be halted and the Texas Commission on Environmental Quality (TCEQ) Edwards Aquifer Protection Program should be contacted immediately in accordance with 30 TAC §213.5(f)(2).

LIMITATIONS

It should be noted that only areas readily accessible were inspected. There may be geologic features present that were not identified as part of this study. This non-intrusive visual field assessment cannot wholly eliminate the possibility of sensitive features at the site.

Prepared by:

1/24/2023

Mr. Chad M. Copeland, P.G.

Photograph 1:
Photograph documenting G-1, Test Hole.

Photograph 2:
Photograph documenting G-2, Test Hole.

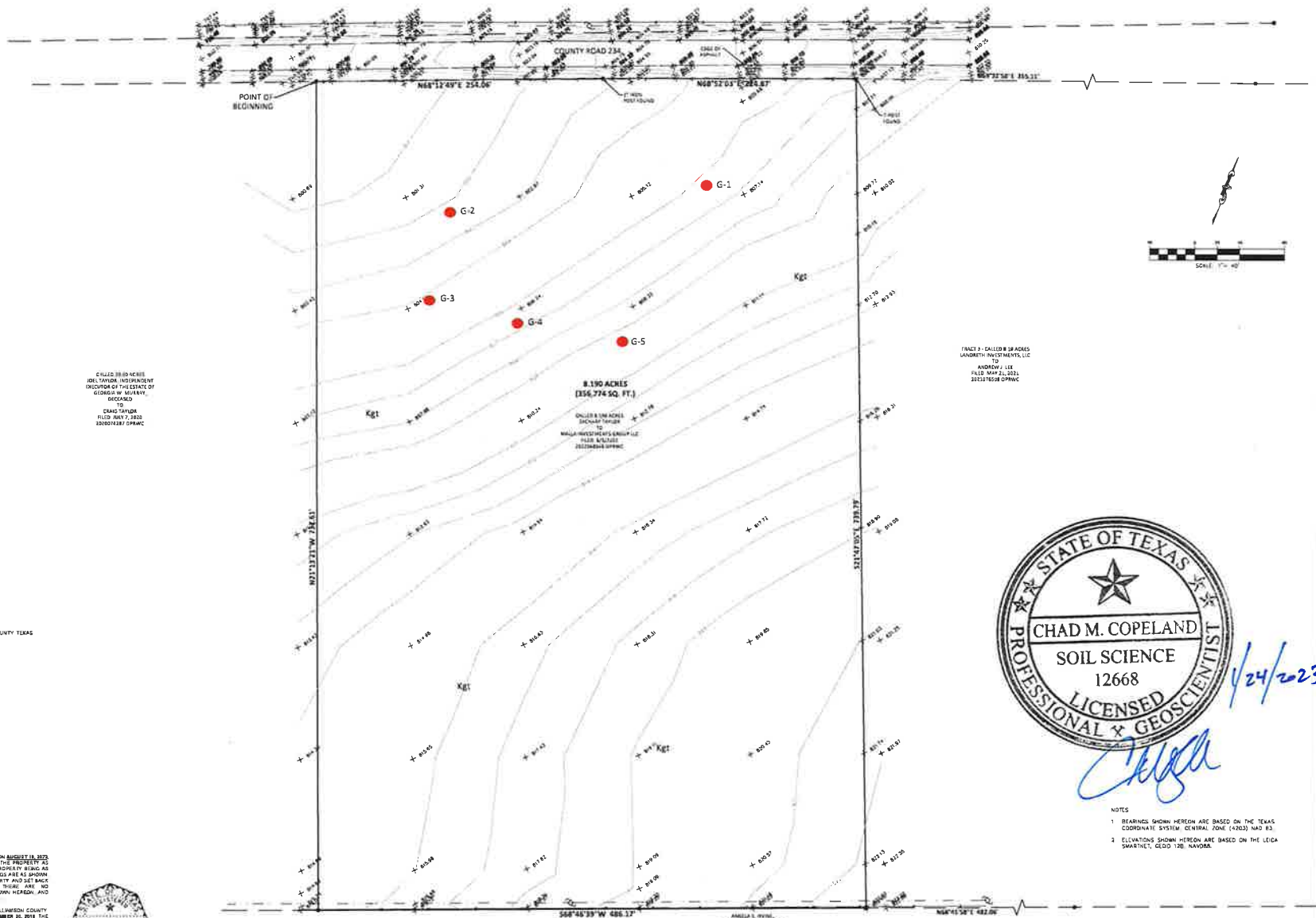
Photograph 3:
Photograph documenting G-3, Test Hole.

Photograph 4:
Photograph documenting G-4, Test Hole.

Photograph 5:
Photograph documenting G-5, Assumed Test Hole.

ATTACHMENT D

Site Geologic Map(s)



Map Adapted by Ranger Env. Svc., LLC

G X = Geologic Feature
Kgt = Georgetown Formation

LEGEND
● 1/2 INCH IRON ROD FOUND
POWER POLE
BARBED WIRE FENCE
OVERHEAD ELECTRIC

ABBREVIATIONS
OPRWC = OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS

TO: MAJOR ENGR

THE UNDERSIGNED HEREBY CERTIFIES
THIS SURVEY WAS MADE ON THE GROUND UNDER MY SUPERVISION ON AUGUST 18, 2022, AND IS A TRUE, CORRECT AND ACCURATE REPRESENTATION OF THE PROPERTY AS DETERMINED BY SURVEY. THE LINES AND DIMENSIONS OF SAID PROPERTY BEING AS INDICATED BY THE PLAT. THE SIZE, LOCATION AND TYPE OF BUILDINGS ARE AS SHOWN. ALL IMPROVEMENTS BEING WITHIN THE BOUNDARIES OF THE PROPERTY AND SET BACK FROM THE PROPERTY LINES THE DISTANCES INDICATED. THERE ARE NO ENCROACHMENTS, CONFLICTS OR PROTRUSIONS, EXCEPT AS SHOWN HEREON, AND SAID PROPERTY HAS ACCESS TO AND FROM A DEDICATED ROADWAY.

ACCORDING TO THE FLOOD INSURANCE RATE MAP (FIRM) FOR WILLIAMSON COUNTY, TEXAS, COMMUNITY PANEL NUMBER 48491C0135F, EFFECTIVE DECEMBER 20, 2019, THE SUBJECT TRACT IS LOCATED IN ZONE "X" WHICH IN THIS CASE IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA.

COREY HALL, RPLS
TEXAS REGISTRATION NO. 6362

COREY JOSEPH HALL
6362
REGISTERED
PROFESSIONAL
LAND SURVEYOR
STATE OF TEXAS

STATE OF TEXAS
CHAD M. COPELAND
SOIL SCIENCE
12668
LICENSED
PROFESSIONAL GEOSCIENTIST

4/24/2023

NOTES
1. BEARINGS SHOWN HEREON ARE BASED ON THE TEXAS COORDINATE SYSTEM, CENTRAL ZONE (4203), NAD 83.
2. ELEVATIONS SHOWN HEREON ARE BASED ON THE LEICA SMARTNET, GEOID 12B, NAVD88.

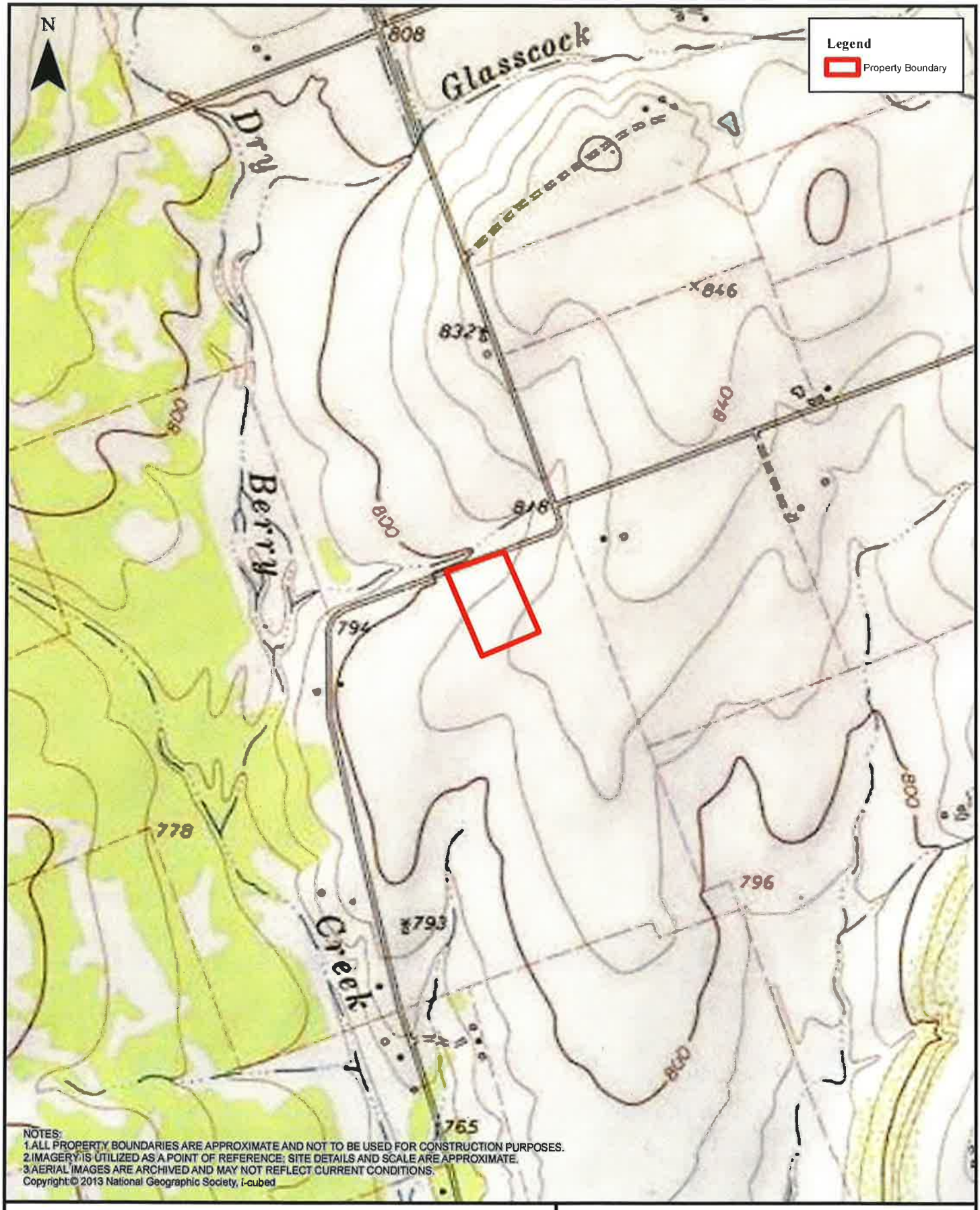
TOPOGRAPHIC SURVEY

BEING 8.190 ACRES (356,774 SQ. FT.) OUT OF THE J.S. WALTERS SURVEY, A-653 IN WILLIAMSON COUNTY, TEXAS, BEING A PORTION OF THAT CALLED 39.69 ACRES TRACT OF LAND CONVEYED TO CRAIG TAYLOR, INDEPENDENT EXECUTOR OF THE ESTATE OF GEORGIA W. MURRAY, DECEASED TO CRAIG TAYLOR BY DEED RECORDED IN DOCUMENT NO. 2020074287 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.

NO	DATE	REVISIONS	BY

DRAWN BY: BRC
CHECKED BY: CH
DATE: 8/18/2022
SCALE: 1" = 40'
JOB NO. 4065.002.00

KONTUR TECHNICAL, LLC
26 WOODLAND LANE, ROUND ROCK, TEXAS 78664
TEL (512) 388-0012 TBPELS REGISTRATION #10194691



NOTES:
1.ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2.IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAILS AND SCALE ARE APPROXIMATE.
3.AERIAL IMAGES ARE ARCHIVED AND MAY NOT REFLECT CURRENT CONDITIONS.
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RANGER ENVIRONMENTAL SERVICES, LLC

0 300 600 1,200 1,800 2,400 Feet

1:12,000

Topographic Map
(Cobbs Cavern Quadrangle)
CR 234, Williamson County, TX 78633
Ranger Project No. 6672

RANGER ENVIRONMENTAL SERVICES, LLC

0 50 100 200 300 400 Feet

1:2,000

Aerial Map

CR 234, Williamson County, TX 78633
Ranger Project No. 6672

NOTES:
1 ALL PROPERTY BOUNDARIES ARE APPROXIMATE AND NOT TO BE USED FOR CONSTRUCTION PURPOSES.
2 IMAGERY IS UTILIZED AS A POINT OF REFERENCE; SITE DETAILS AND SCALE ARE APPROXIMATE.
3 AERIAL IMAGES ARE ARCHIVED AND MAY NOT REFLECT CURRENT CONDITIONS.
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

RANGER ENVIRONMENTAL SERVICES, LLC

0 50 100 200 300 400 Feet

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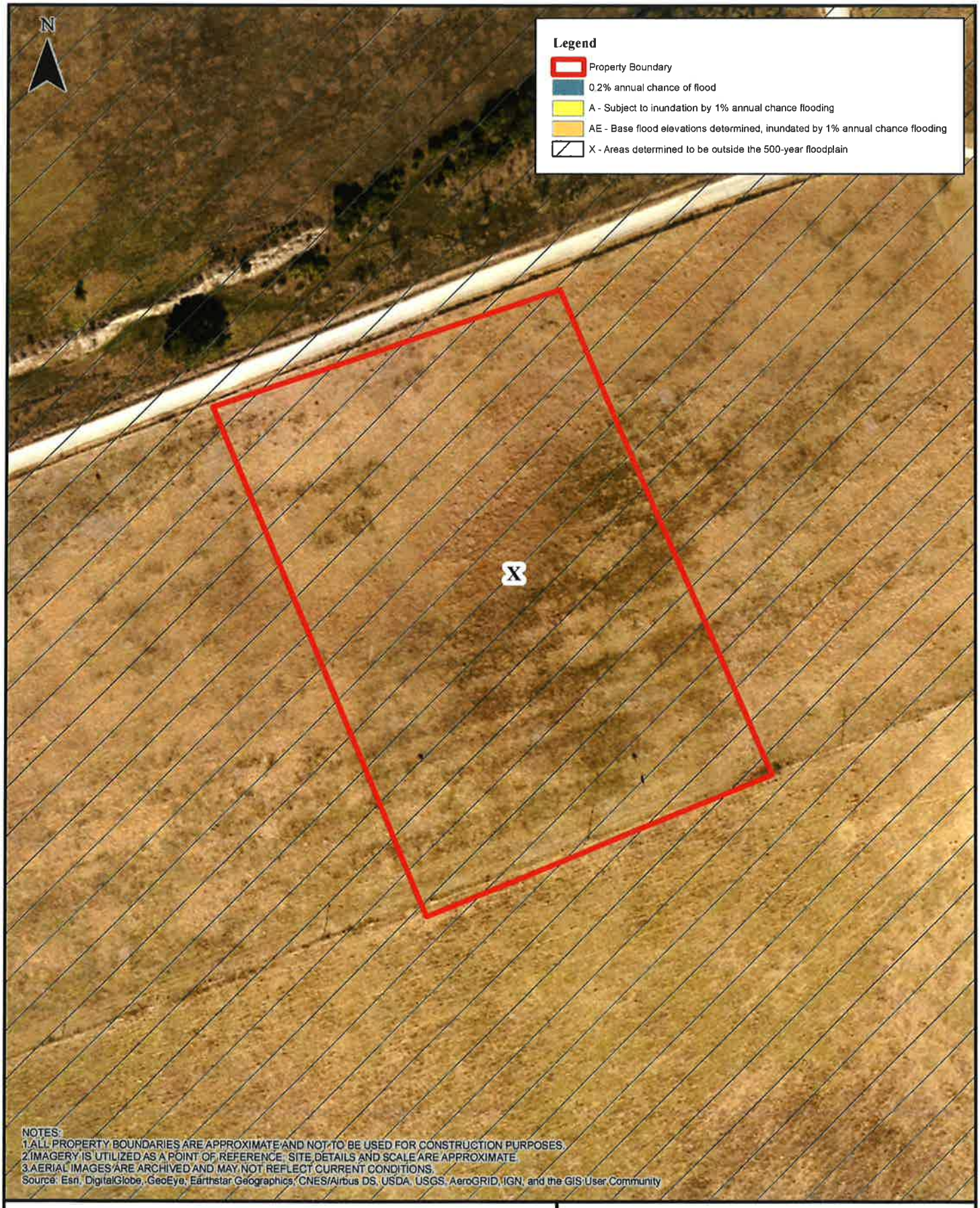
Edwards Aquifer Map

CR 234, Williamson County, TX 78633
Ranger Project No. 6672



RANGER ENVIRONMENTAL SERVICES LLC

0 50 100 200 300 400 Feet

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FEMA Flood Zone Map

CR 234, Williamson County, TX 78633
Ranger Project No. 6672

RANGER ENVIRONMENTAL SERVICES, LLC

0 50 100 200 300 400 Feet

1:2,000

Geologic Unit Map

CR 234, Williamson County, TX 78633
Ranger Project No. 6672

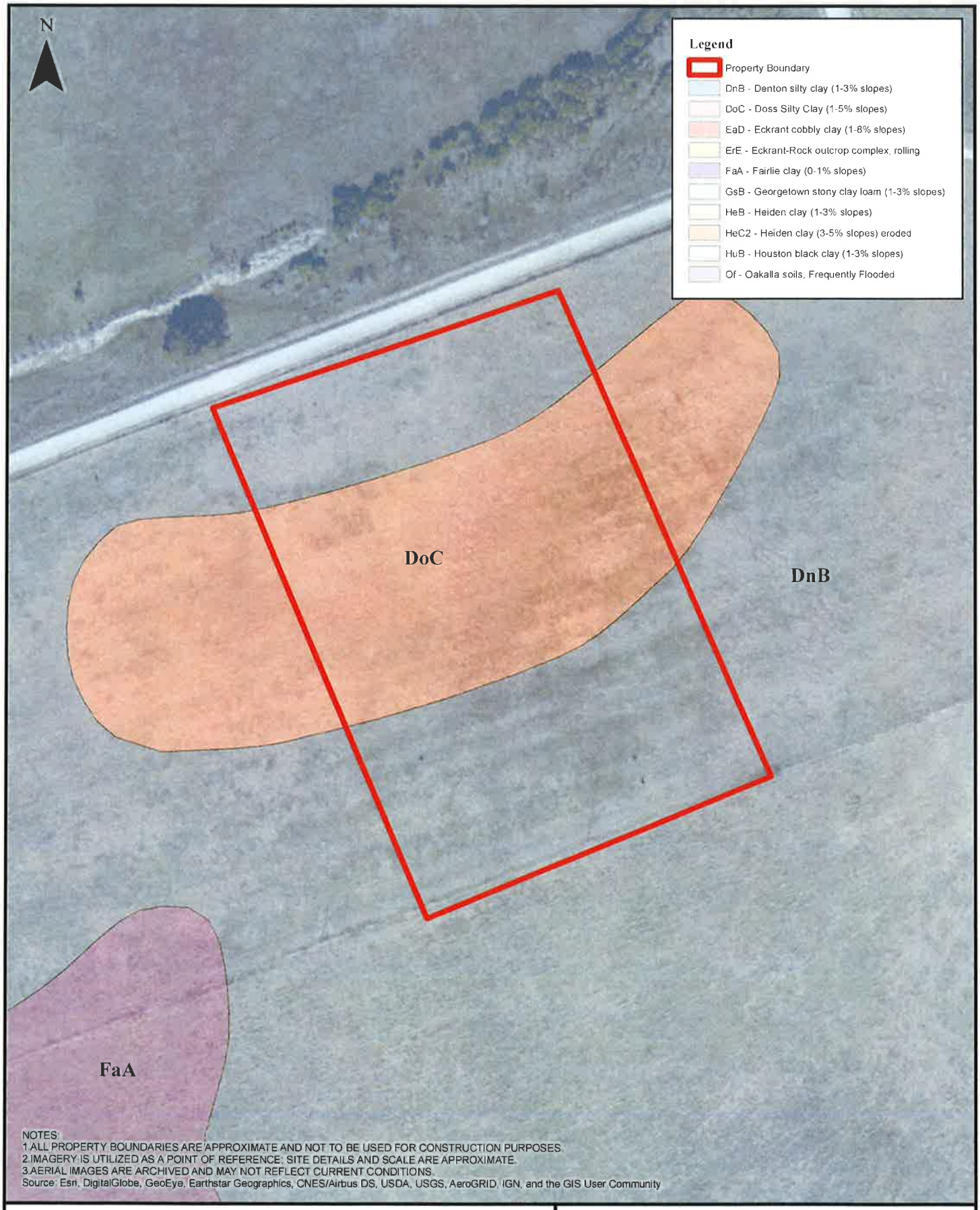
RANGER ENVIRONMENTAL SERVICES, LLC

0 50 100 200 300 400 Feet

1:2,000

National Wetland Inventory Map

CR 234, Williamson County, TX 78633
Ranger Project No. 6672



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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

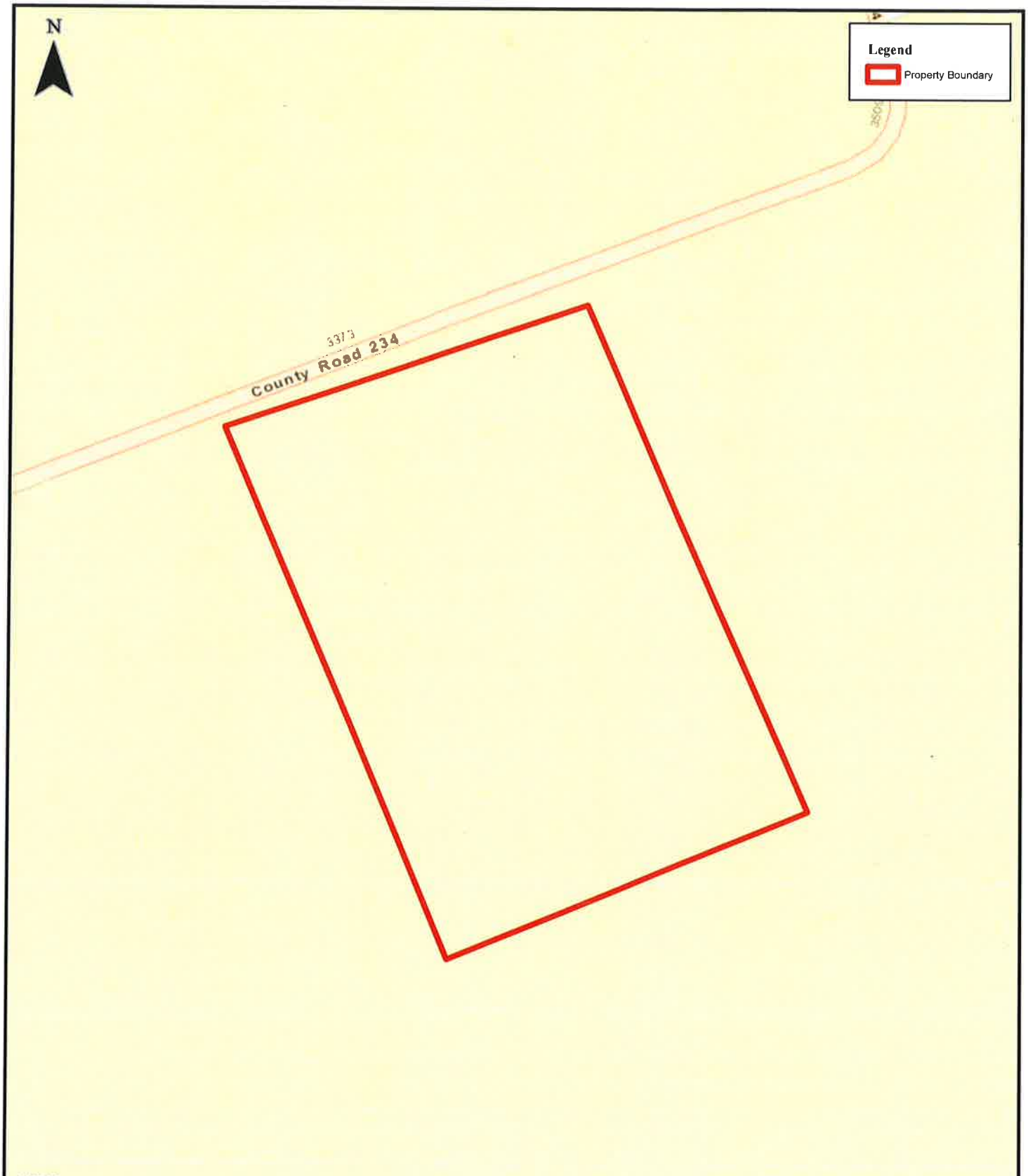
RANGER ENVIRONMENTAL SERVICES, LLC

0 50 100 200 300 400 Feet

1:2,000

Site Soil Map

CR 234, Williamson County, TX 78633
Ranger Project No. 6672



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3.AERIAL IMAGES ARE ARCHIVED AND MAY NOT REFLECT CURRENT CONDITIONS.
Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

RANGER ENVIRONMENTAL SERVICES, LLC

0 50 100 200 300 400 Feet

1:2,000

Site Street Map

CR 234, Williamson County, TX 78633
Ranger Project No. 6672

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Williamson County, Texas

January 4, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Williamson County, Texas 13
DnB—Denton silty clay, 1 to 3 percent slopes 13
DoC—Doss silty clay, moist, 1 to 5 percent slopes 14
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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map (CR 234, Georgetown, TX 78633)

Map Scale: 1:1,730 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 25 50 100 150

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Williamson County, Texas
Survey Area Data: Version 23, Aug 24, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 6, 2020—Apr 19, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend (CR 234, Georgetown, TX 78633)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
DnB	Denton silty clay, 1 to 3 percent slopes	4.9	59.5%
DoC	Doss silty clay, moist, 1 to 5 percent slopes	3.4	40.5%
Totals for Area of Interest		**8.3**	**100.0%**

Map Unit Descriptions (CR 234, Georgetown, TX 78633)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate

pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series.* Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases.* Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas.* Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Williamson County, Texas

DnB—Denton silty clay, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2t26l
Elevation: 570 to 1,870 feet
Mean annual precipitation: 31 to 36 inches
Mean annual air temperature: 65 to 68 degrees F
Frost-free period: 220 to 260 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Denton and similar soils: 88 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Denton

Setting

Landform: Hillslopes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Silty and clayey slope alluvium over residuum weathered from limestone

Typical profile

A - 0 to 14 inches: silty clay
Bw - 14 to 25 inches: silty clay
Bk - 25 to 33 inches: silty clay
Ck - 33 to 36 inches: gravelly silty clay
R - 36 to 80 inches: bedrock

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: 22 to 60 inches to lithic bedrock
Drainage class: Well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 80 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: D
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

Minor Components

Krum

Percent of map unit: 6 percent
Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

Doss

Percent of map unit: 4 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R081BY343TX - Shallow 23-31 PZ
Hydric soil rating: No

Anhalt

Percent of map unit: 2 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R081CY358TX - Deep Redland 29-35 PZ
Hydric soil rating: No

DoC—Doss silty clay, moist, 1 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2s0st
Elevation: 630 to 1,840 feet
Mean annual precipitation: 30 to 36 inches
Mean annual air temperature: 66 to 68 degrees F
Frost-free period: 210 to 240 days
Farmland classification: Not prime farmland

Map Unit Composition

Doss and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Doss

Setting

Landform: Hillslopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Residuum weathered from limestone

Typical profile

A - 0 to 9 inches: silty clay
Bk - 9 to 17 inches: silty clay
Cr - 17 to 80 inches: bedrock

Properties and qualities

Slope: 1 to 5 percent
Depth to restrictive feature: 11 to 20 inches to paralithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 70 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Very low (about 2.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: R081CY574TX - Shallow 29-35 PZ
Hydric soil rating: No

Minor Components

Brackett

Percent of map unit: 7 percent
Landform: Ridges
Landform position (two-dimensional): Backslope, footslope, shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R081CY362TX - Steep Adobe 29-35 PZ
Hydric soil rating: No

Bolar

Percent of map unit: 5 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R081CY357TX - Clay Loam 29-35 PZ

Hydric soil rating: No

Eckrant

Percent of map unit: 1 percent
Landform: Ridges
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Ecological site: R081CY360TX - Low Stony Hill 29-35 PZ
Hydric soil rating: No

Purves

Percent of map unit: 1 percent
Landform: Plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: R081CY574TX - Shallow 29-35 PZ
Hydric soil rating: No

Denton

Percent of map unit: 1 percent
Landform: Plains
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R081CY357TX - Clay Loam 29-35 PZ
Hydric soil rating: No

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Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

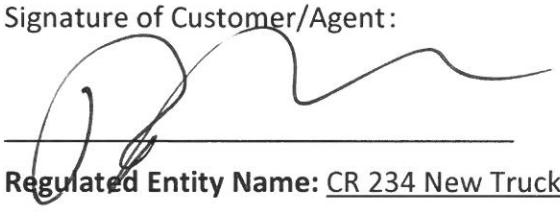
Signature

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

Print Name of Customer/Agent: Trey Simpson

Date: 7/28/2025

Signature of Customer/Agent:



Regulated Entity Name: CR 234 New Truck Parking Facility

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property):8.18

3. Estimated projected population:_____

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops		÷ 43,560 =	
Parking	239560	÷ 43,560 =	5.50
Other paved surfaces		÷ 43,560 =	
Total Impervious Cover	239560	÷ 43,560 =	5.50

Total Impervious Cover 5.50 **÷ Total Acreage** 8.18 **X 100 =** 67**% Impervious Cover**

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

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

For Road Projects Only

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

7. Type of project:

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

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

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

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

10. Length of pavement area: _____ feet.

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

_____% Domestic	_____Gallons/day
_____% Industrial	_____Gallons/day
_____% Commingled	_____Gallons/day
TOTAL gallons/day _____	

15. Wastewater will be disposed of by:

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

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

☐ Sewage Collection System (Sewer Lines):

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

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

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

☐ Existing.
☐ Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 40'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): _____

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

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

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

☒ There are 1 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

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

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

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

☒ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ **Attachment D - Exception to the Required Geologic Assessment**. A request and justification for an exception to a portion of the Geologic Assessment is attached.

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

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

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

25. ☒ Locations where soil stabilization practices are expected to occur.

26. ☒ Surface waters (including wetlands).

☐ N/A

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

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

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Attachment A - Factors Affecting Surface Water Quality

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. **Factors Affecting Surface Water Quality:** The quality of the stormwater will be affected ultimately by the construction of the truck parking lot, Parking Debris, and Commercial Site Debris. All construction activities will be typical for a commercial development project.

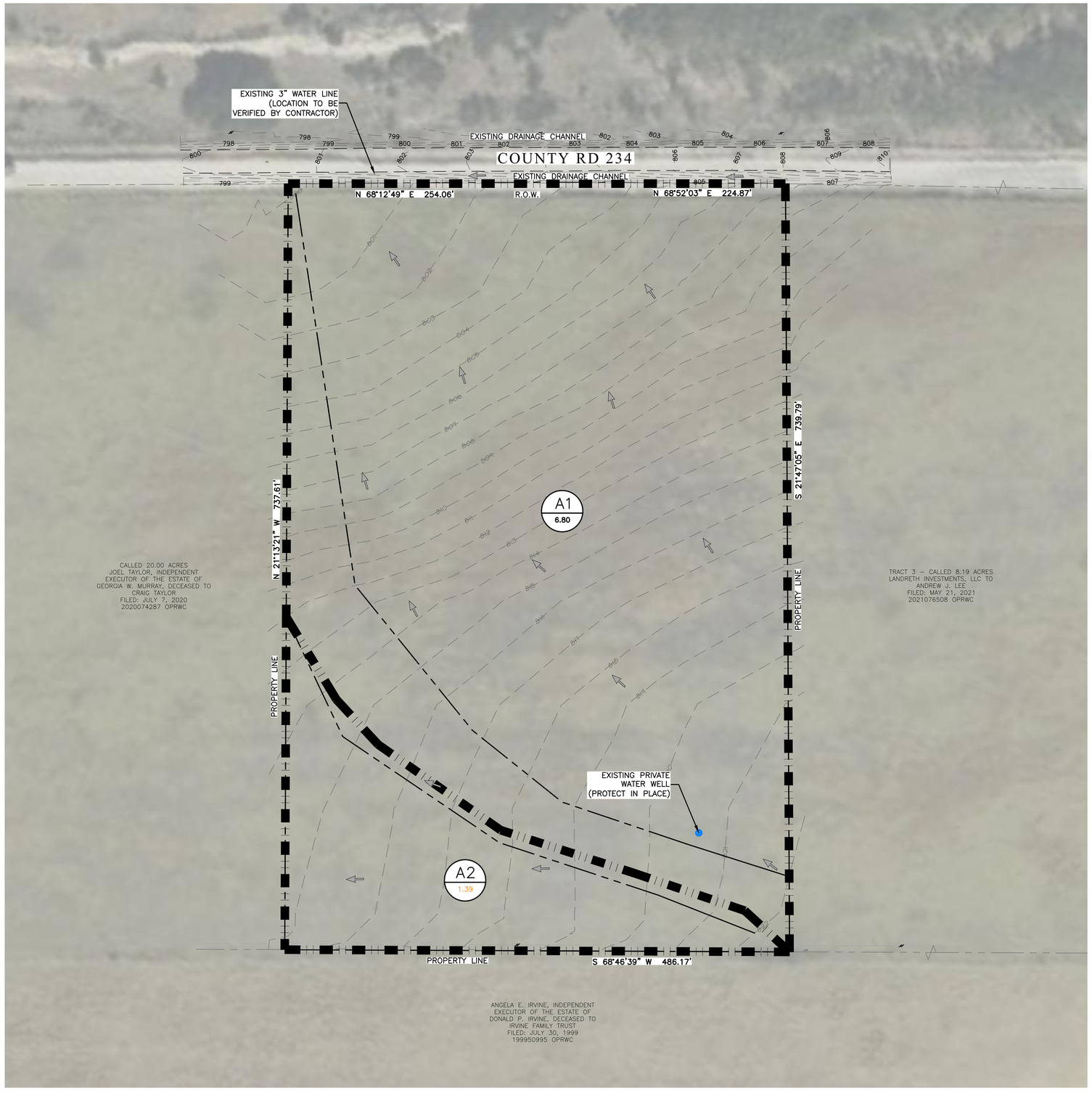
Attachment B – Volume and Character of Stormwater

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Volume and Character of Stormwater: See attached Drainage Plans.



DRAINAGE CALCULATIONS

PRE DEVELOPMENT

AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
Area 1	6.80	15	80	2	3.94	16.40
Area 1	6.80	15	80	5	5.15	24.10
Area 1	6.80	15	80	10	6.30	30.90
Area 1	6.80	15	80	25	8.04	40.90
Area 1	6.80	15	80	50	9.53	48.80
Area 1	6.80	15	80	100	11.20	57.10
Area 2	1.39	13	80	2	3.94	3.60
Area 2	1.39	13	80	5	5.15	5.20
Area 2	1.39	13	80	10	6.30	6.70
Area 2	1.39	13	80	25	8.04	8.90
Area 2	1.39	13	80	50	9.53	10.60
Area 2	1.39	13	80	100	11.20	12.40

TIME OF CONCENTRATION CALCULATIONS

	A1–PRE	A2–PRE
SHEET FLOW	100'@1.50% 9.71 MIN.	100'@1.80% 9.03 MIN.
CONCENTRATED FLOW UNPAVED	802'@2.56% 5.18 MIN.	470'@1.75% 3.67 MIN.
UNPAVED	– –	– –
CHANNEL FLOW	– –	– –
TOTAL	14.89 MIN.	12.70 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

IMPERVIOUS COVER CALCULATIONS

SITE AREA: 8.18 ACRES
TOTAL IMPERVIOUS AREA: 0.00 ACRES

TOTAL IMPERVIOUS COVER = 0% OF TOTAL SITE

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

NOTES

1. NOAA ATLAT–14 DATA UTILIZED FROM WILLIAMSON COUNTRY SUBDIVISION REGULATIONS.
2. HEC–HMS VERSION 4.7.1 UTILIZED FOR DRAINAGE CALCULATIONS.

0 50 100
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

Q = (C) (I) (A)

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT DRAINAGE MAP

DRAWING STATUS

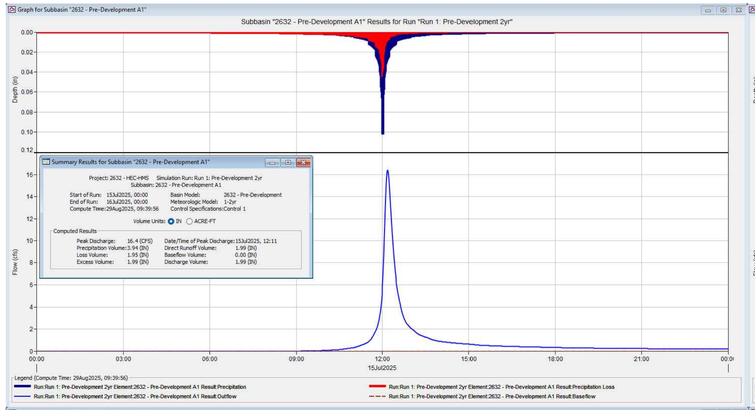
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F–23184.

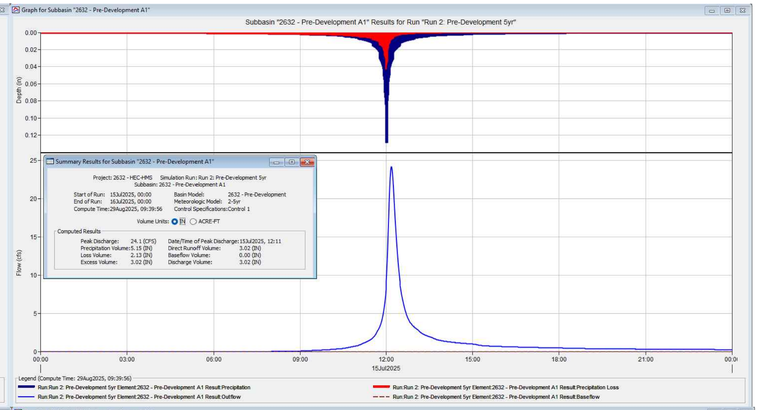
7–25–2025

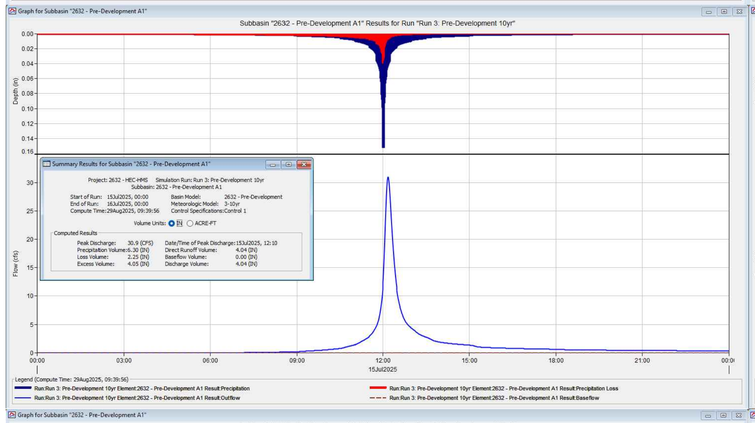
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

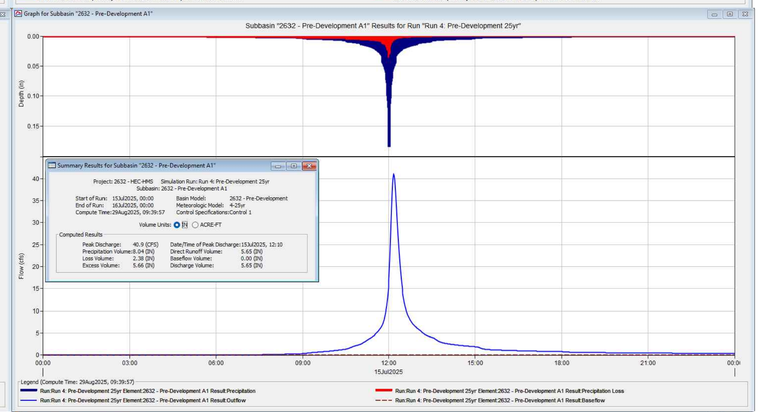
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7–25–2025

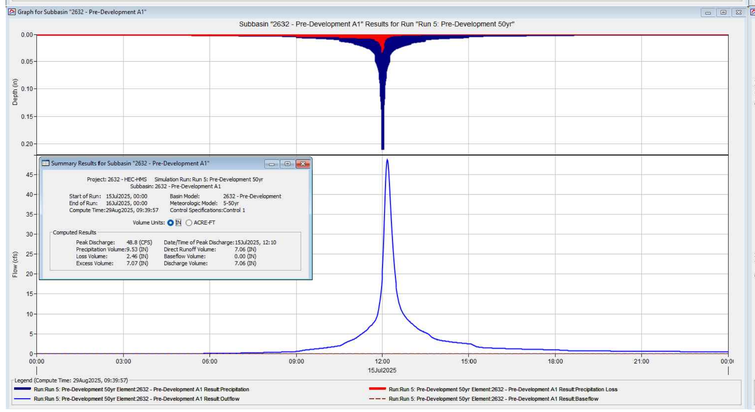
C4.1

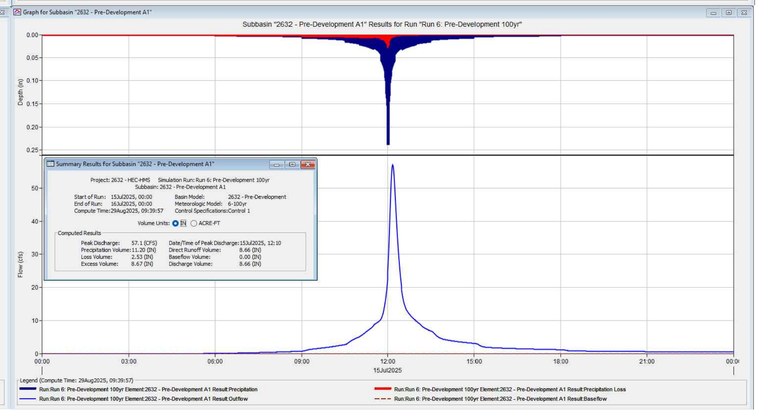












1 AREA 1 PRE-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT
DRAINAGE CALCULATIONS

DRAWING STATUS

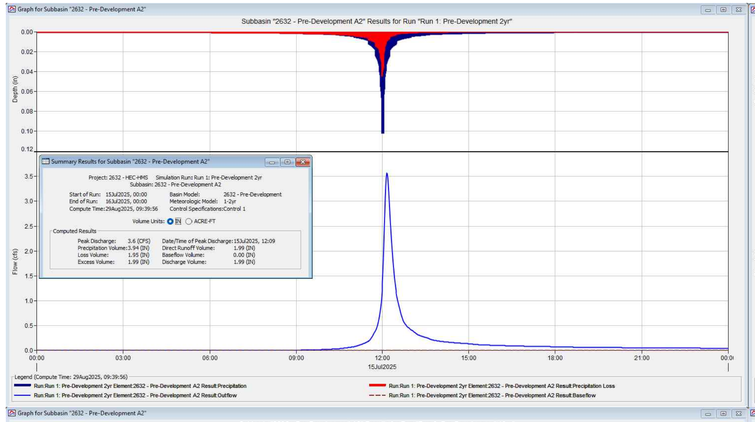
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

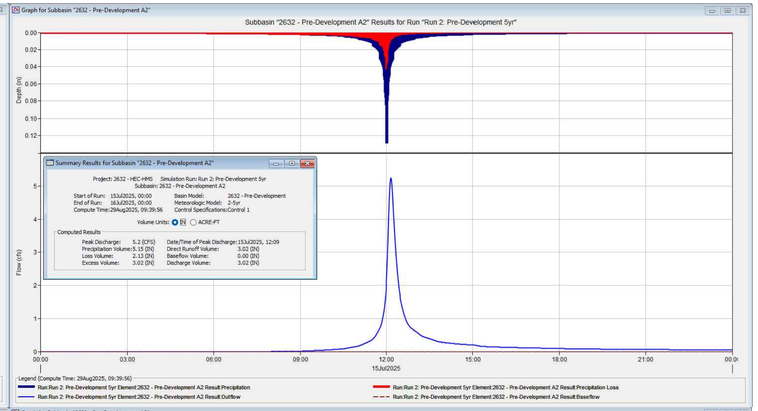
7-25-2025

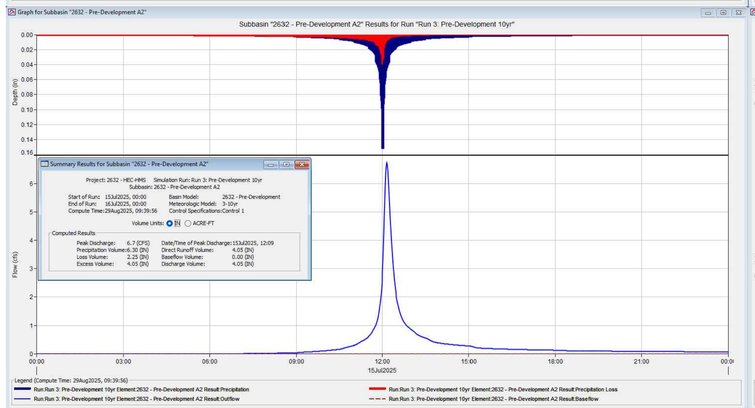
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

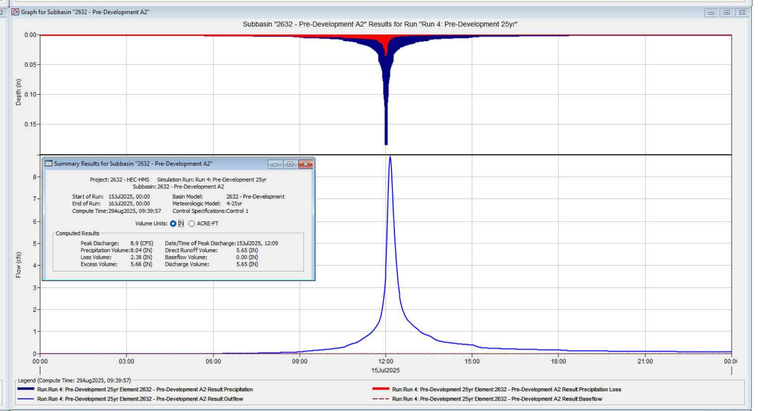
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

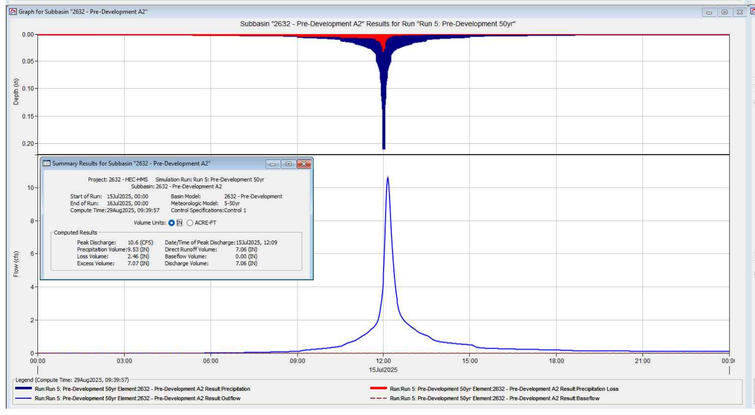
C4.2

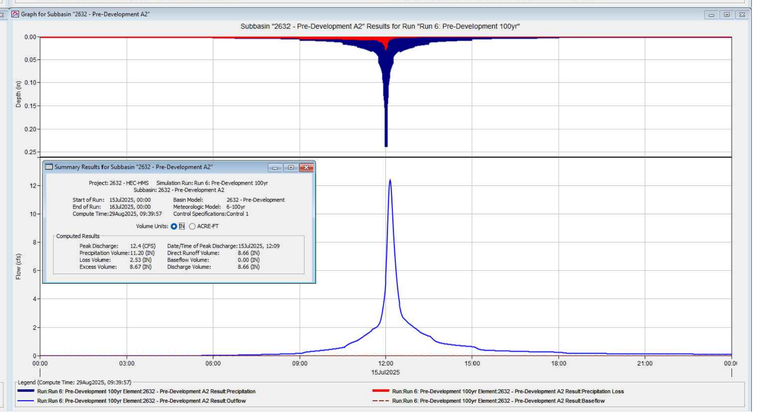












2 AREA 2 PRE–DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT
DRAINAGE CALCULATIONS

DRAWING STATUS

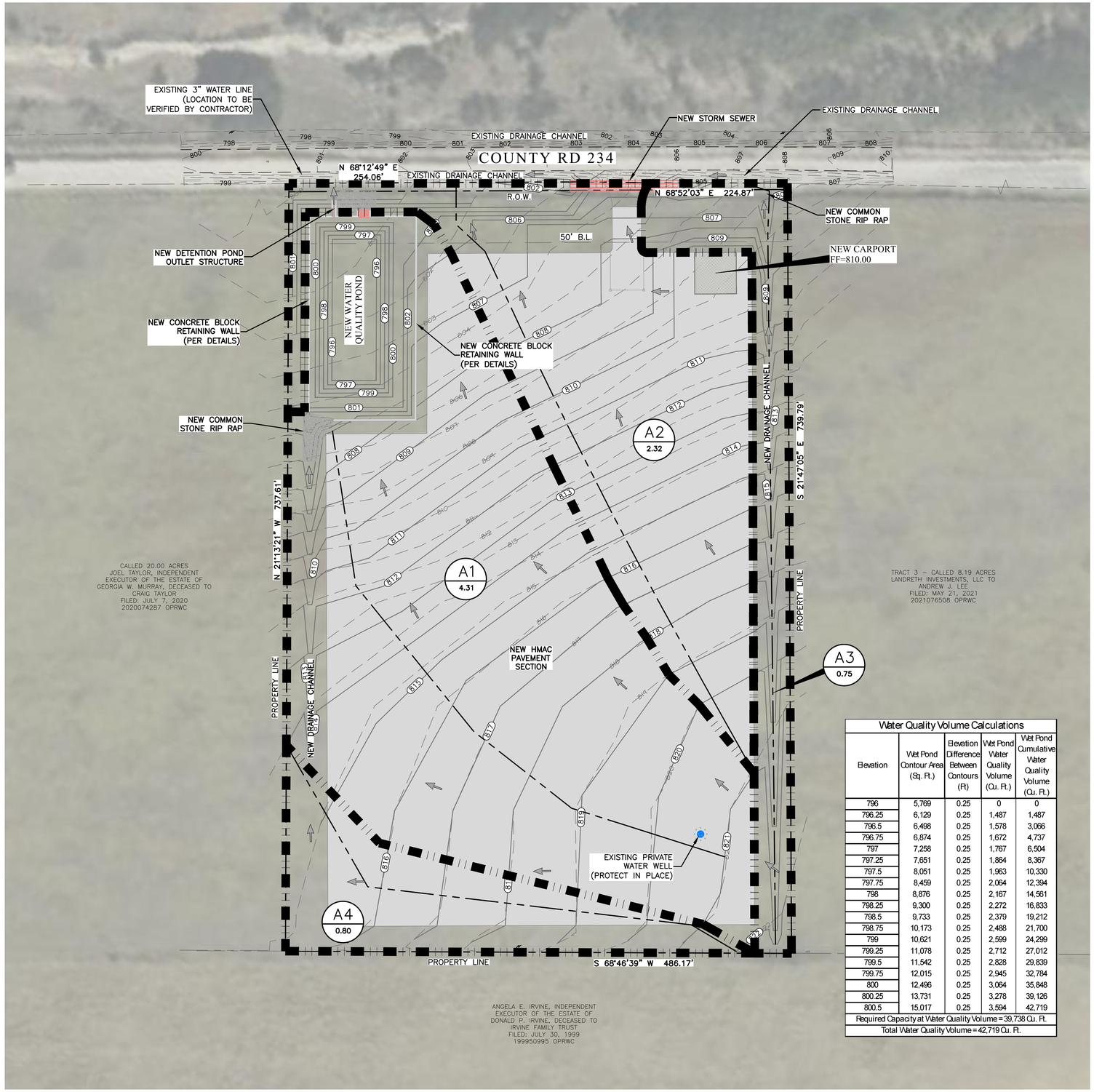
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER
LICENSED

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.3



Water Quality Volume Calculations

Elevation	Wet Pond Contour Area (Sq. Ft.)	Elevation Difference Between Contours (Ft)	Wet Pond Water Quality Volume (Cu. Ft.)	Wet Pond Cumulative Water Quality Volume (Cu. Ft.)
796	5,769	0.25	0	0
796.25	6,129	0.25	1,487	1,487
796.5	6,498	0.25	1,578	3,066
796.75	6,874	0.25	1,672	4,737
797	7,258	0.25	1,767	6,504
797.25	7,651	0.25	1,864	8,367
797.5	8,051	0.25	1,963	10,330
797.75	8,459	0.25	2,064	12,394
798	8,876	0.25	2,167	14,561
798.25	9,300	0.25	2,272	16,833
798.5	9,733	0.25	2,379	19,212
798.75	10,173	0.25	2,488	21,700
799	10,621	0.25	2,599	24,299
799.25	11,078	0.25	2,712	27,012
799.5	11,542	0.25	2,828	29,839
799.75	12,015	0.25	2,945	32,784
800	12,496	0.25	3,064	35,848
800.25	13,731	0.25	3,278	39,126
800.5	15,017	0.25	3,594	42,719
Required Capacity at Water Quality Volume = 39,738 Cu. Ft.				
Total Water Quality Volume = 42,719 Cu. Ft.				

DRAINAGE CALCULATIONS

POST DEVELOPMENT						
AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
Area 1	4.31	10	80	2	3.94	12.20
Area 1	4.31	10	80	5	5.15	17.90
Area 1	4.31	10	80	10	6.30	23.00
Area 1	4.31	10	80	25	8.04	30.30
Area 1	4.31	10	80	50	9.53	36.10
Area 1	4.31	10	80	100	11.20	42.20
Area 2	2.32	10	80	2	3.94	10.10
Area 2	2.32	10	80	5	5.15	13.00
Area 2	2.32	10	80	10	6.30	15.50
Area 2	2.32	10	80	25	8.04	19.10
Area 2	2.32	10	80	50	9.53	21.90
Area 2	2.32	10	80	100	11.20	24.90
Area 3	0.75	10	80	2	3.94	2.20
Area 3	0.75	10	80	5	5.15	3.20
Area 3	0.75	10	80	10	6.30	4.10
Area 3	0.75	10	80	25	8.04	5.40
Area 3	0.75	10	80	50	9.53	6.40
Area 3	0.75	10	80	100	11.20	7.50
Area 4	0.80	10	80	2	3.94	3.00
Area 4	0.80	10	80	5	5.15	4.10
Area 4	0.80	10	80	10	6.30	4.90
Area 4	0.80	10	80	25	8.04	6.20
Area 4	0.80	10	80	50	9.53	7.30
Area 4	0.80	10	80	100	11.20	8.30

TARGET POND SIZE = 26,790 CU. FT.

TIME OF CONCENTRATION CALCULATIONS

	A1–POST	A2–POST	A3–POST	A4–POST
SHEET FLOW	100'@1.40% 1.23 MIN.	100'@1.50% 1.37 MIN.	– =	50'@2.00% 4.97 MIN.
CONCENTRATED FLOW PAVED	504'@2.50% 2.61 MIN.	464'@2.80% 2.27 MIN.	– =	– =
UNPAVED	– =	77'@6.50% 0.31 MIN.	– =	468'@1.70% 2.94 MIN.
CHANNEL FLOW	– =	– =	750'@2.00% 2.37 MIN.	– =
TOTAL	3.84 MIN.	3.95 MIN.	2.37 MIN.	7.91 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

IMPERVIOUS COVER CALCULATIONS

SITE AREA: 8.18 ACRES
TOTAL IMPERVIOUS AREA: 5.50 ACRES

TOTAL IMPERVIOUS COVER = 67% OF TOTAL SITE

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

NOTES

1. NOAA ATLAT–14 DATA UTILIZED FROM WILLIAMSON COUNTRY SUBDIVISION REGULATIONS.
2. HEC–HMS VERSION 4.7.1 UTILIZED FOR DRAINAGE CALCULATIONS.

0 50 100
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

Q = (C) (I) (A)

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT DRAINAGE MAP

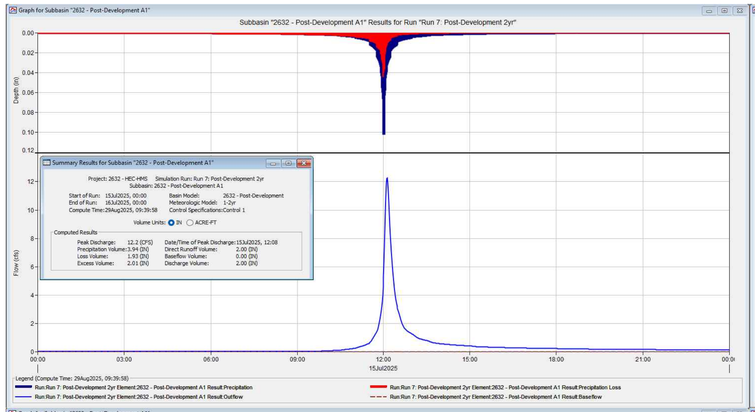
DRAWING STATUS

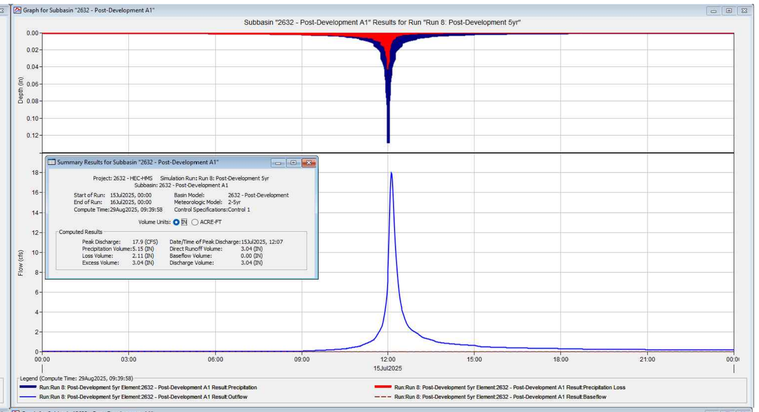
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F–23184.

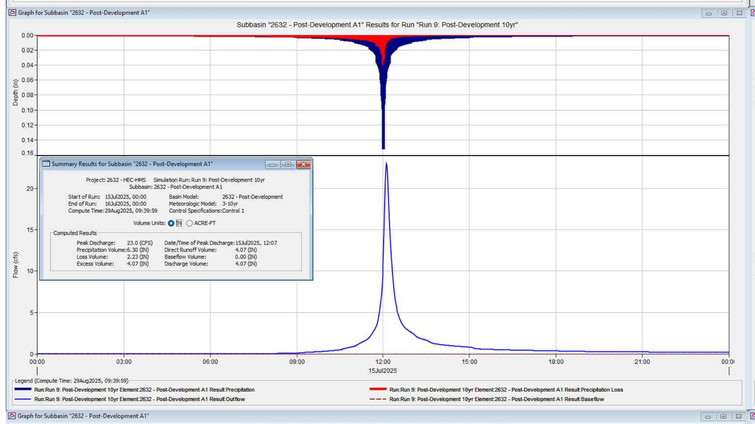
7–25–2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

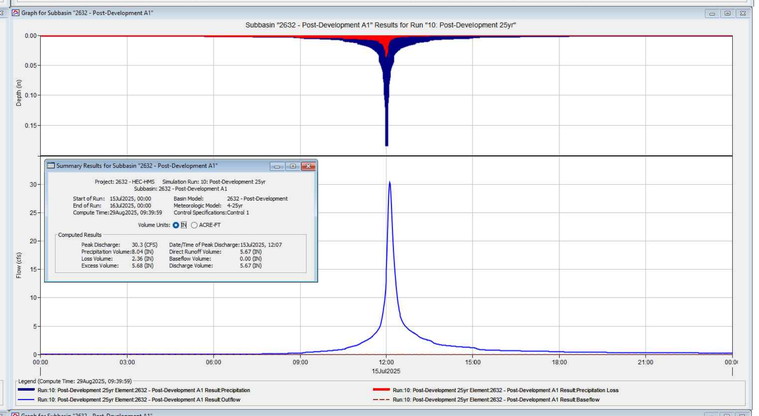
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7–25–2025

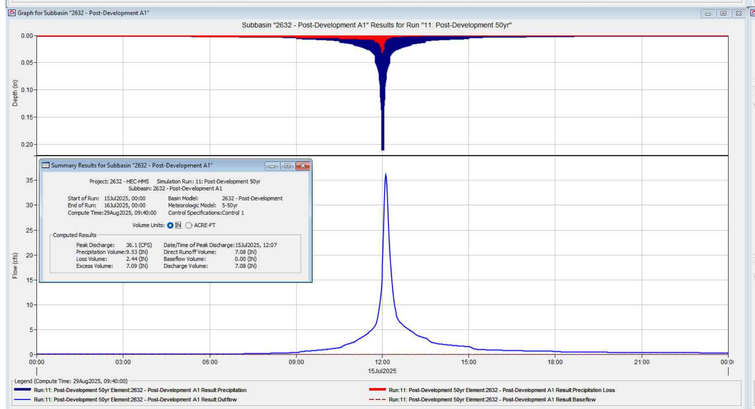
C4.4

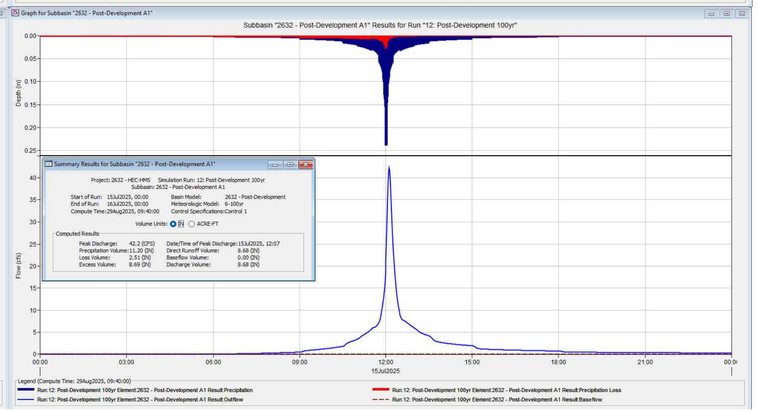












1 AREA 1 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 1

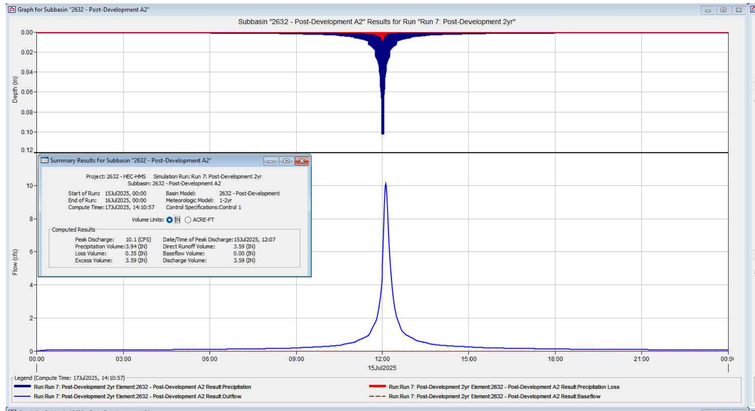
DRAWING STATUS

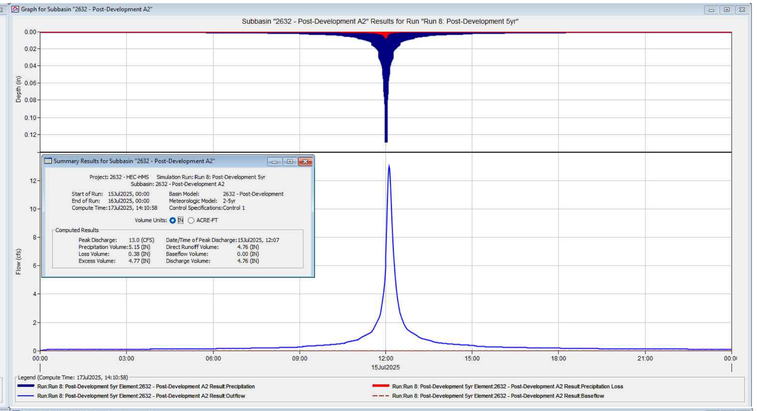
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

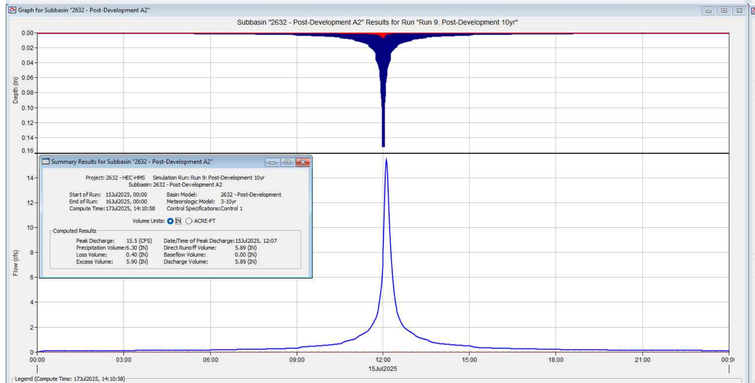
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

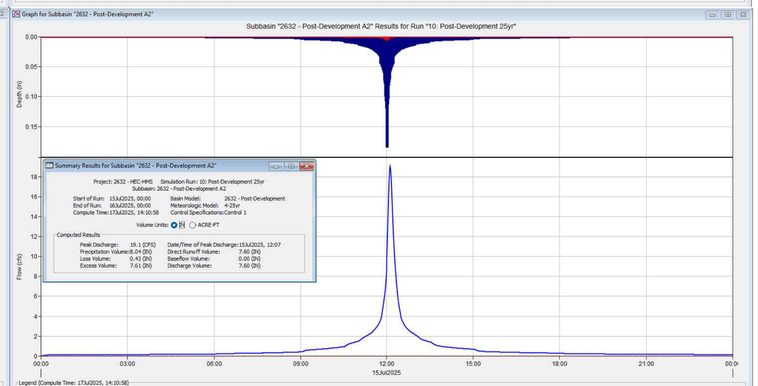
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

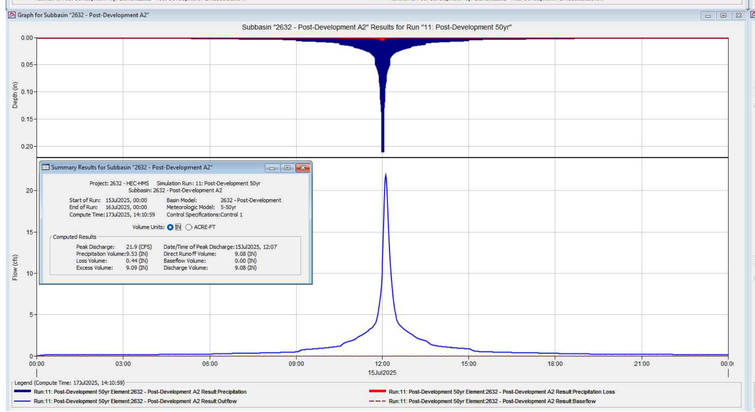
C4.5

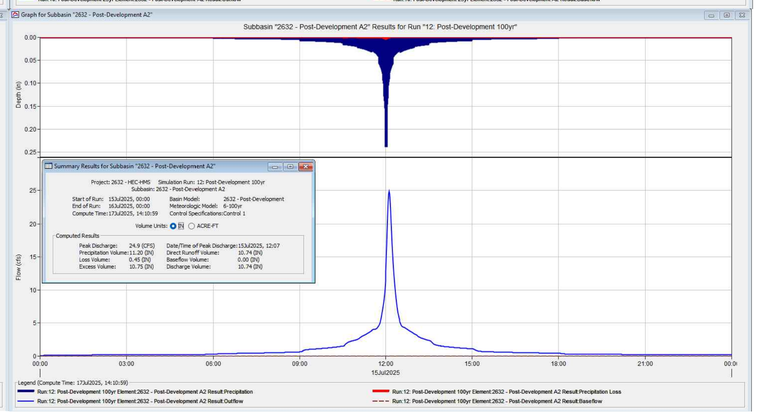












2 AREA 2 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT DRAINAGE CALCULATIONS SHEET 2

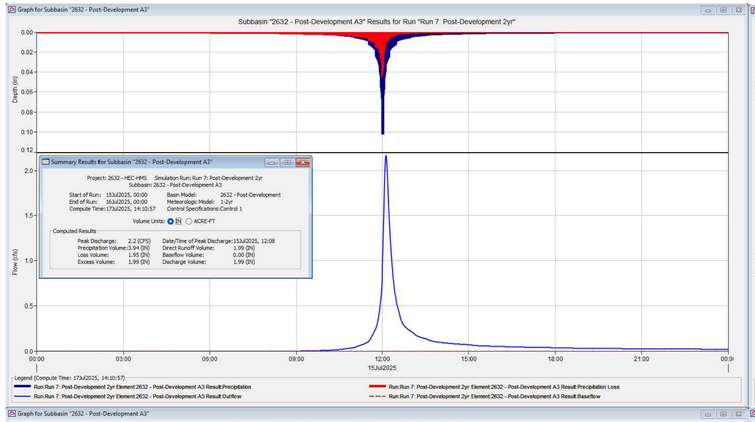
DRAWING STATUS

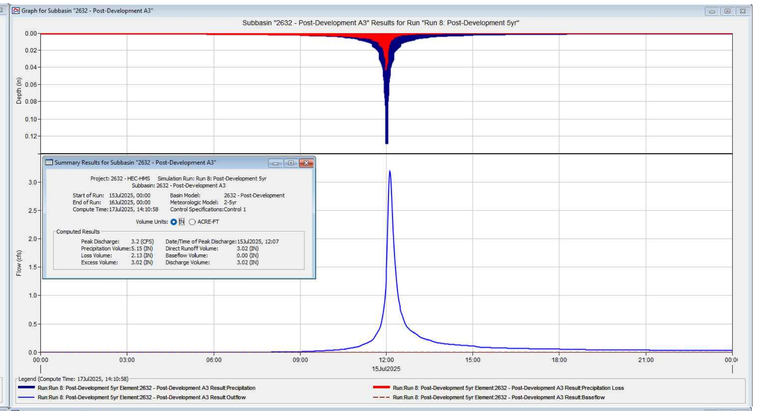
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

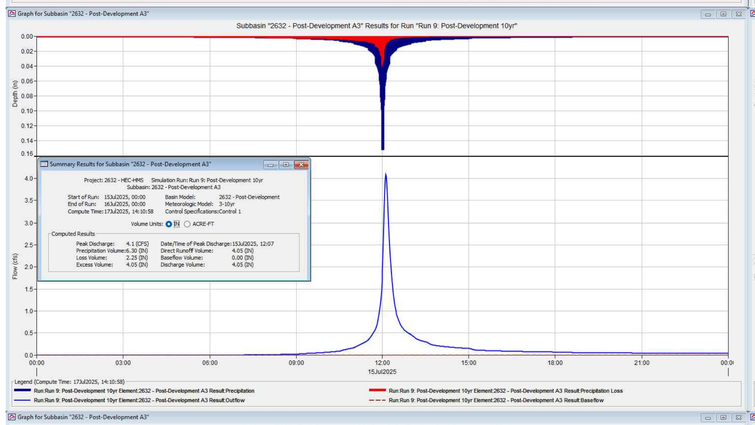
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER

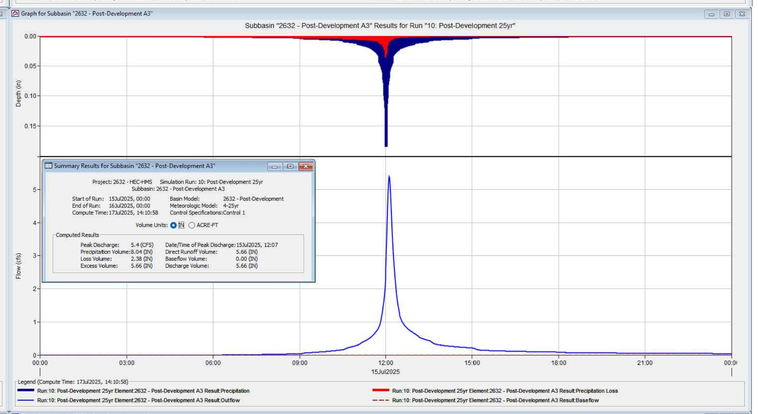
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

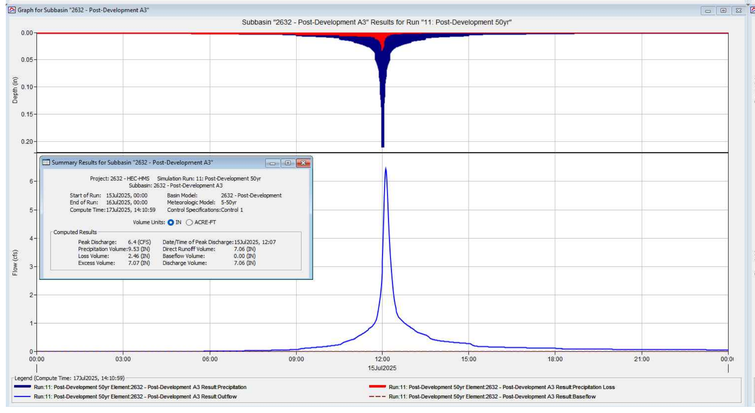
C4.6

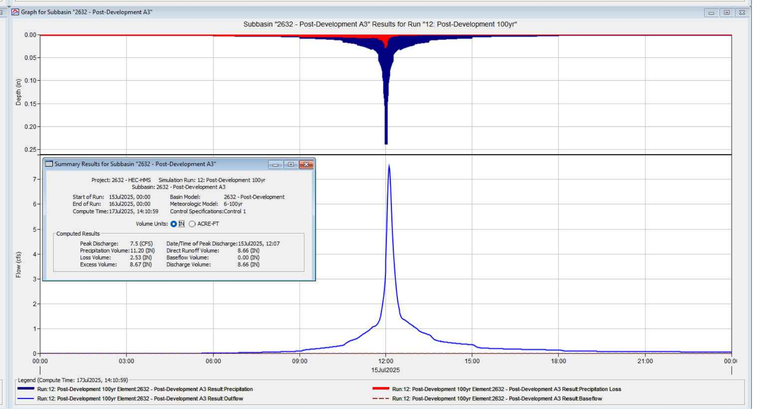












3 AREA 3 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 3

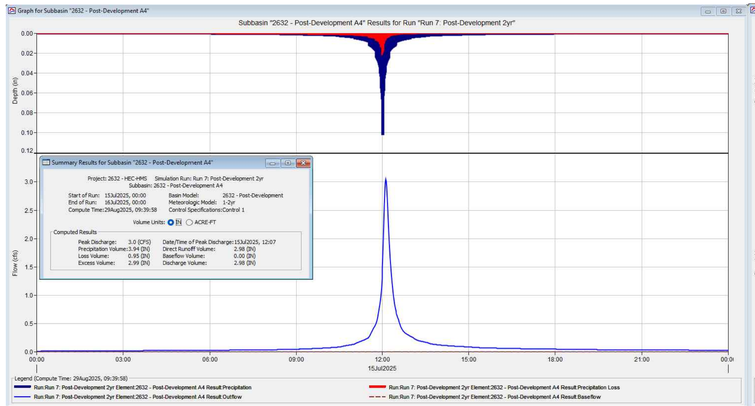
DRAWING STATUS

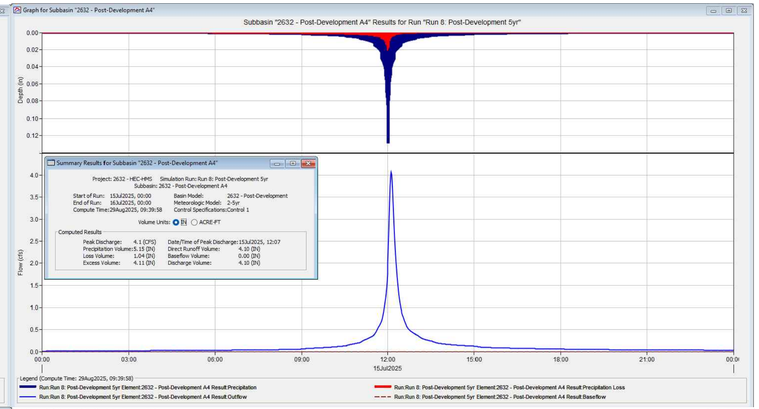
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

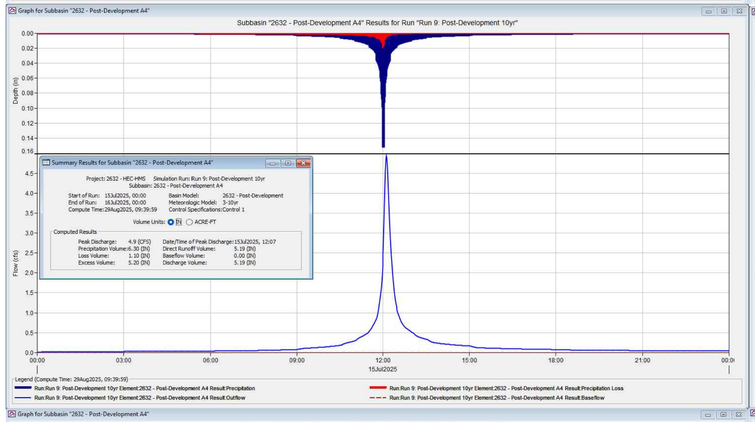
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

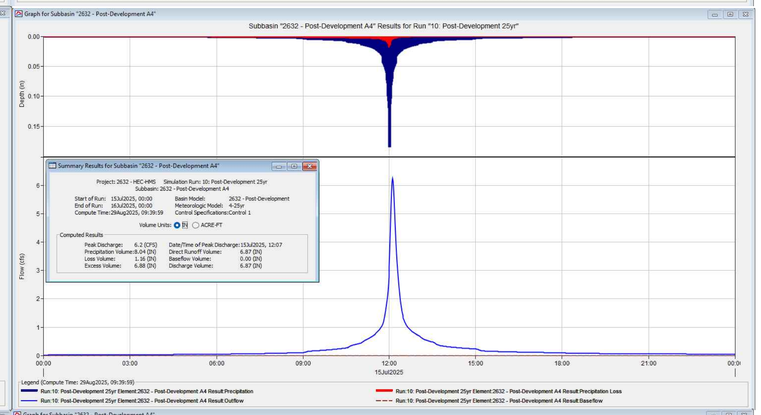
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

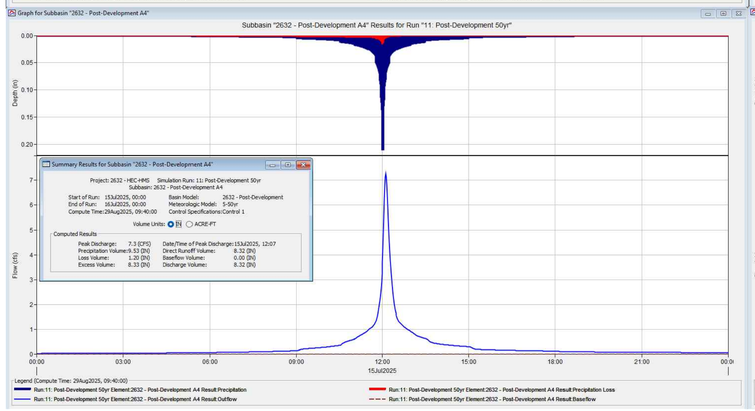
C4.7

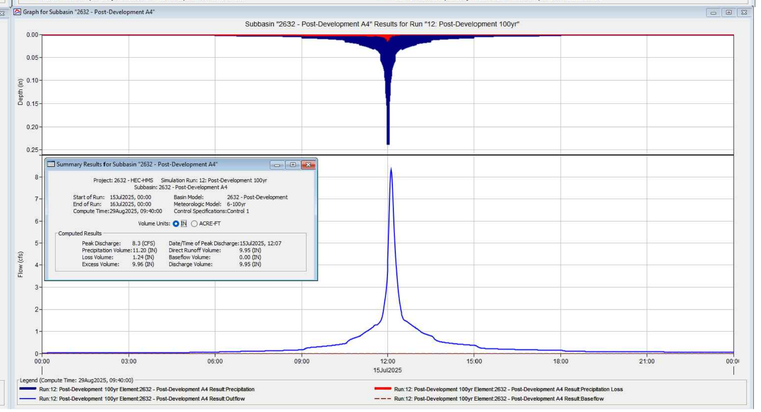












4 AREA 4 POST–DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 4

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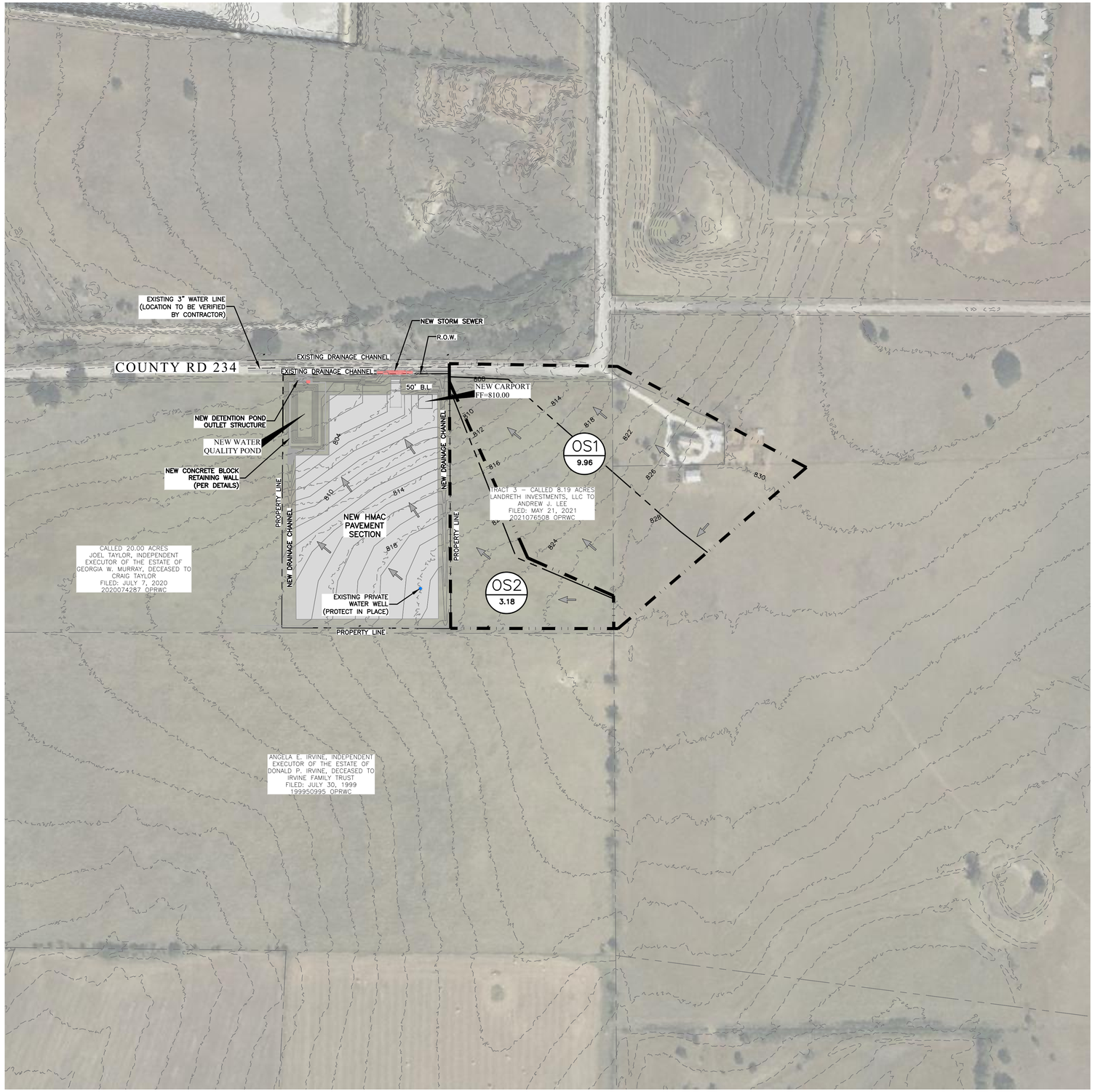
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.8



DRAINAGE CALCULATIONS

EXISTING OFFSITE DEVELOPMENT

AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
OS1	9.96	16	73	2	3.94	17.00
OS1	9.96	16	73	5	5.15	27.10
OS1	9.96	16	73	10	6.30	36.50
OS1	9.96	16	73	25	8.04	50.70
OS1	9.96	16	73	50	9.53	62.10
OS1	9.96	16	73	100	11.20	74.20
OS1	3.18	14	73	2	3.94	5.50
OS1	3.18	14	73	5	5.15	8.70
OS1	3.18	14	73	10	6.30	11.80
OS1	3.18	14	73	25	8.04	16.30
OS1	3.18	14	73	50	9.53	20.00
OS1	3.18	14	73	100	11.20	23.90

TIME OF CONCENTRATION CALCULATIONS

	OS1	OS2
SHEET FLOW	100'@1.00% 11.42 MIN.	100'@1.50% 9.71 MIN.
CONCENTRATED FLOW PAVED	– –	– –
UNPAVED	660'@2.88% 4.02 MIN.	705'@2.62% 4.50 MIN.
CHANNEL FLOW	165'@2.42% 0.27 MIN.	– –
TOTAL	15.71 MIN.	14.21 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80
BRUSH	73

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

0 150 300
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

$Q = (C)(I)(A)$

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE MAP

DRAWING STATUS

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7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

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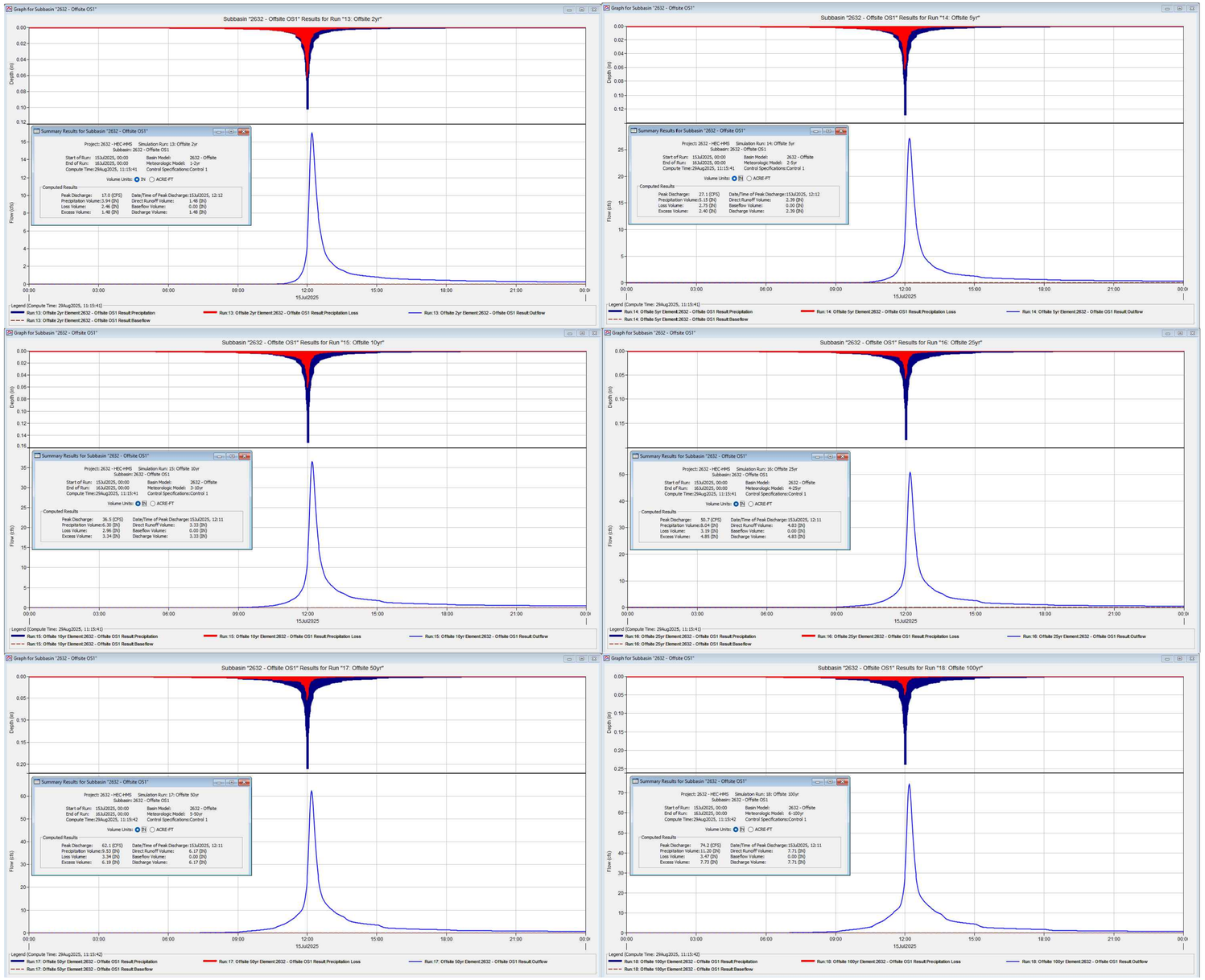
C4.9



1 OS1 OFFSITE DRAINAGE CALCULATIONS

Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Aug 29 2025

2632 Drive Culverts 25yr

Invert Elev Dn (ft)	= 801.80	**Calculations**	
Pipe Length (ft)	= 88.50	Qmin (cfs)	= 72.40
Slope (%)	= 0.50	Qmax (cfs)	= 72.40
Invert Elev Up (ft)	= 802.24	Tailwater Elev (ft)	= (dc+D)/2
Rise (in)	= 30.0		
Shape	= Circular	**Highlighted**	
Span (in)	= 30.0	Qtotal (cfs)	= 72.40
No. Barrels	= 3	Qpipe (cfs)	= 72.40
n-Value	= 0.012	Qovertop (cfs)	= 0.00
Culvert Type	= Circular Concrete	Veloc Dn (ft/s)	= 5.52
Culvert Entrance	= Square edge w/headwall (C)	Veloc Up (ft/s)	= 6.89
Coeff. K,M,c,Y,k	= 0.0098, 2, 0.0398, 0.67, 0.5	HGL Dn (ft)	= 803.89
		HGL Up (ft)	= 803.92
Embankment		Hw Elev (ft)	= 804.89
Top Elevation (ft)	= 805.80	Hw/D (ft)	= 1.06
Top Width (ft)	= 50.00	Flow Regime	= Inlet Control
Crest Width (ft)	= 50.00		

2 DRIVE CULVERTS 25YR FLOW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE CALCULATIONS

DRAWING STATUS

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7-25-2025
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PROFESSIONAL ENGINEER

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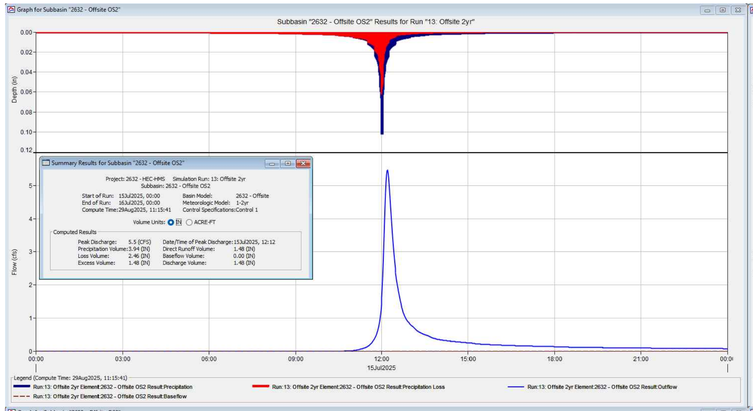
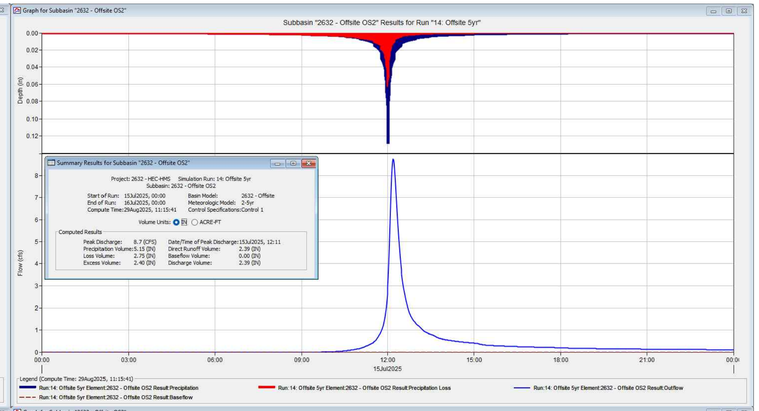
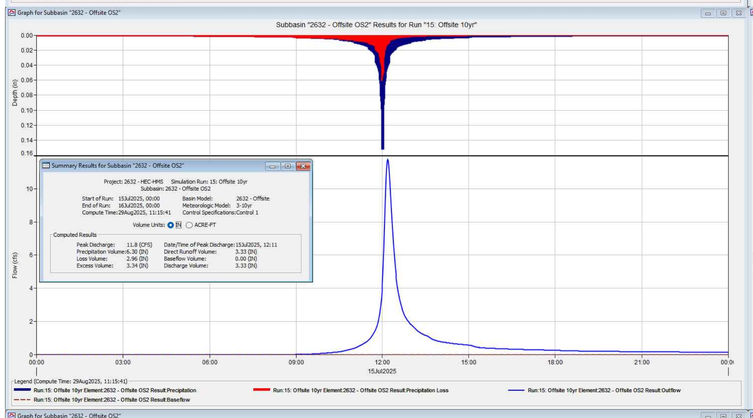
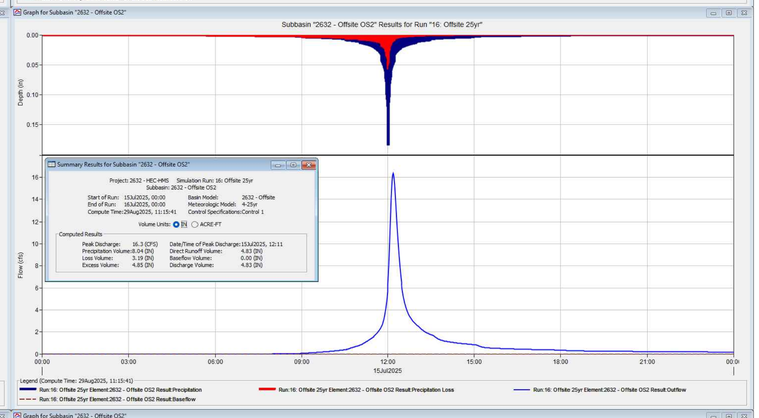
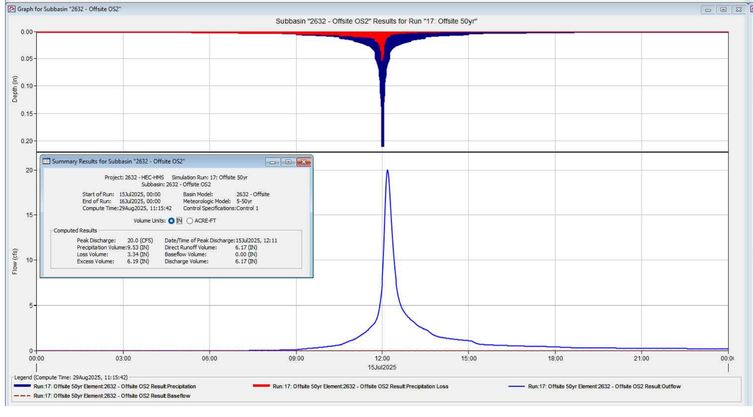
C4.10

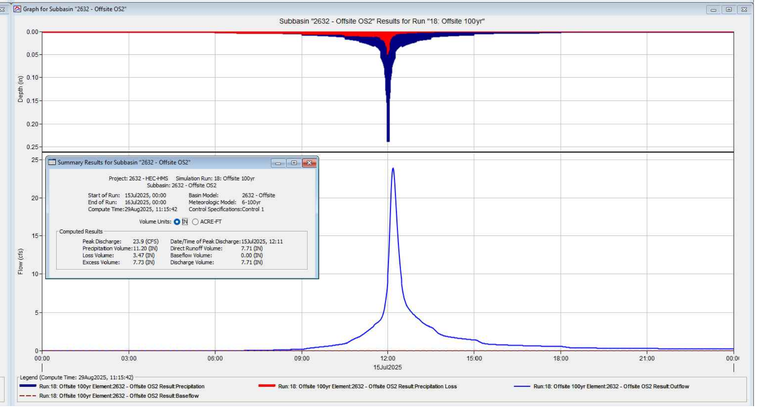












3 OS2 OFFSITE DRAINAGE CALCULATIONS

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Aug 29 2025

2632 Post A3+OS2 100yr Channel Flow

Trapezoidal

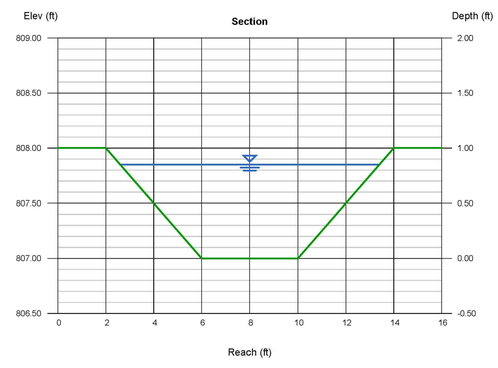
Bottom Width (ft)	= 4.00
Side Slopes (z:1)	= 4.00, 4.00
Total Depth (ft)	= 1.00
Invert Elev (ft)	= 807.00
Slope (%)	= 2.20
N-Value	= 0.030

Calculations

Compute by:	Known Q
Known Q (cfs)	= 31.40

Highlighted

Depth (ft)	= 0.85
Q (cfs)	= 31.40
Area (sqft)	= 6.29
Velocity (ft/s)	= 4.99
Wetted Perim (ft)	= 11.01
Crit Depth, Yc (ft)	= 0.92
Top Width (ft)	= 10.80
EGL (ft)	= 1.24



4 POST A3 + OS1 100YR CHANNEL FLOW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE CALCULATIONS

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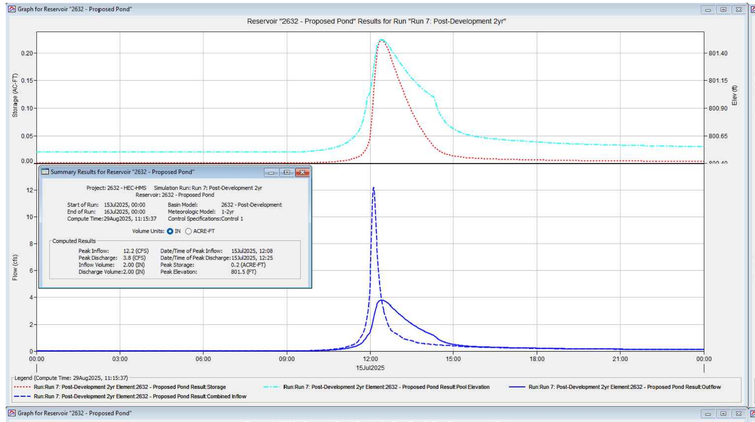
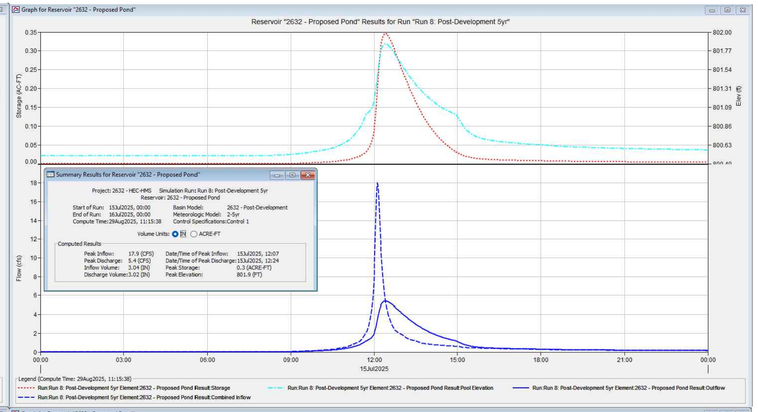
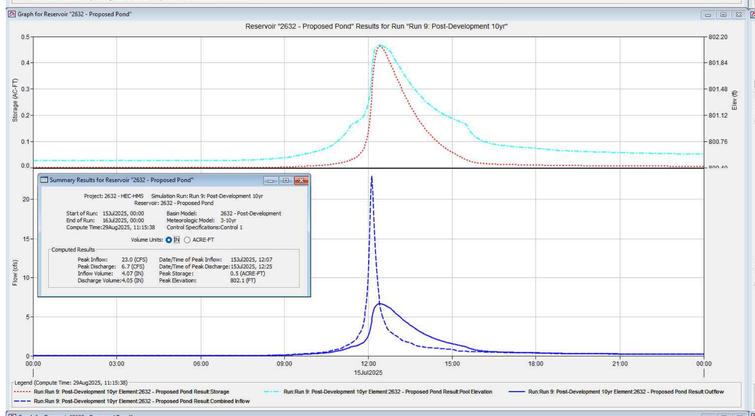
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

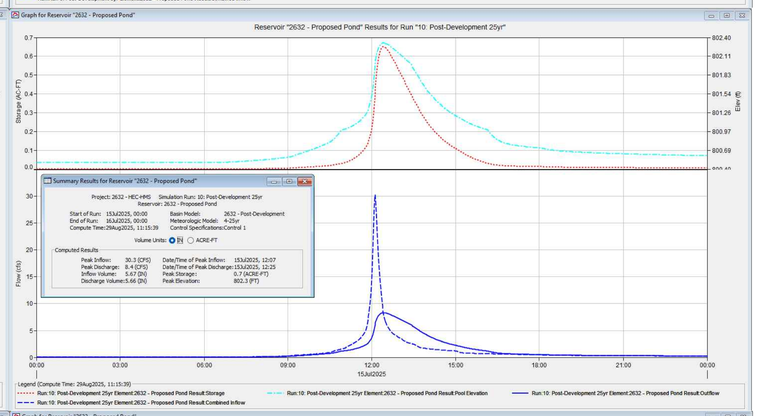
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

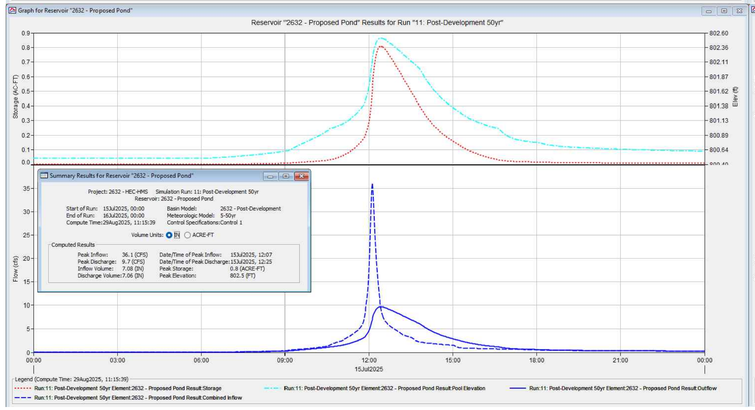
C4.11

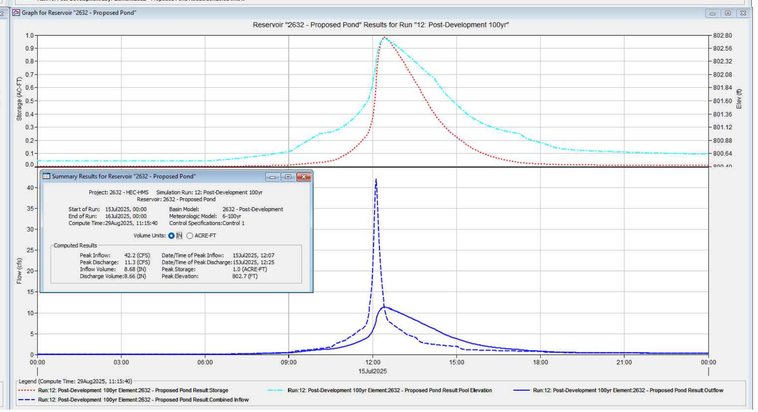












1 DETENTION POND DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

DETENTION POND
DRAINAGE CALCULATIONS

DRAWING STATUS

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7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.12

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Additional information is provided for cells with a red triangle in the upper right corn
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will r

1. The Required Load Reduction for the total project: Calculations from RG-348

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

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resul
A_N = Net increase in impervious a
P = Average annual precipitation

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

County =	Williamson	
Total project area included in plan * =	8.18	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	5.50	acres
Total post-development impervious cover fraction * =	0.67	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4787	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	8.18	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	5.50	acres
Post-development impervious fraction within drainage basin/outfall area =	0.67	
$L_{M\ THIS\ BASIN}$ =	4787	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Wet Basin
Removal efficiency = 93 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 = (BMP efficiency) x P x (A_I x 3

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

A_C =	8.18	acres
A_I =	5.50	acres
A_P =	2.68	acres
L_R =	5706	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 4787 lbs.

F = 0.84

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

Rainfall Depth =	1.26	inches
Post Development Runoff Coefficient =	0.48	
On-site Water Quality Volume =	17930	cubic feet

Calculations from RG-348

Off-site area draining to BMP =	2.66	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	243	cubic feet

Water Quality Volume Calculations

Elevation	Wet Pond Contour Area (Sq. Ft.)	Elevation Difference Between Contours (Ft)	Wet Pond Water Quality Volume (Cu. Ft.)	Wet Pond Cumulative Water Quality Volume (Cu. Ft.)
796	5,769	0.25	0	0
796.25	6,129	0.25	1,487	1,487
796.5	6,498	0.25	1,578	3,066
796.75	6,874	0.25	1,672	4,737
797	7,258	0.25	1,767	6,504
797.25	7,651	0.25	1,864	8,367
797.5	8,051	0.25	1,963	10,330
797.75	8,459	0.25	2,064	12,394
798	8,876	0.25	2,167	14,561
798.25	9,300	0.25	2,272	16,833
798.5	9,733	0.25	2,379	19,212
798.75	10,173	0.25	2,488	21,700
799	10,621	0.25	2,599	24,299
799.25	11,078	0.25	2,712	27,012
799.5	11,542	0.25	2,828	29,839
799.75	12,015	0.25	2,945	32,784
800	12,496	0.25	3,064	35,848
800.25	13,731	0.25	3,278	39,126
800.5	15,017	0.25	3,594	42,719
Required Capacity at Water Quality Volume = 39,738 Cu. Ft.				
Total Water Quality Volume = 42,719 Cu. Ft.				

Storage for Sediment = 3635
Total Capture Volume (required water quality volume(s) x 1.20) = 21808 cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG

Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr
Irrigation area =	NA	square feet
	NA	acres

8. Extended Detention Basin System Designed as Required in RG

Required Water Quality Volume for extended detention basin = NA cubic feet

9. Filter area for Sand Filters Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

10. Bioretention System Designed as Required in RG

Required Water Quality Volume for Bioretention Basin = NA cubic feet

11. Wet Basins Designed as Required in RG

Required capacity of Permanent Pool =	21808	cubic feet
Required capacity at WQV Elevation =	39738	cubic feet

WET BASIN

TSS REMOVED (lbs.) 5,706 lbs. = 5,706 lbs. TSS REMOVED PER DESIGN

REQUIRED TSS REMOVAL = 4,787 lbs. TSS

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CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

TSS REMOVAL CALCULATIONS

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7-25-2025
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LICENSED

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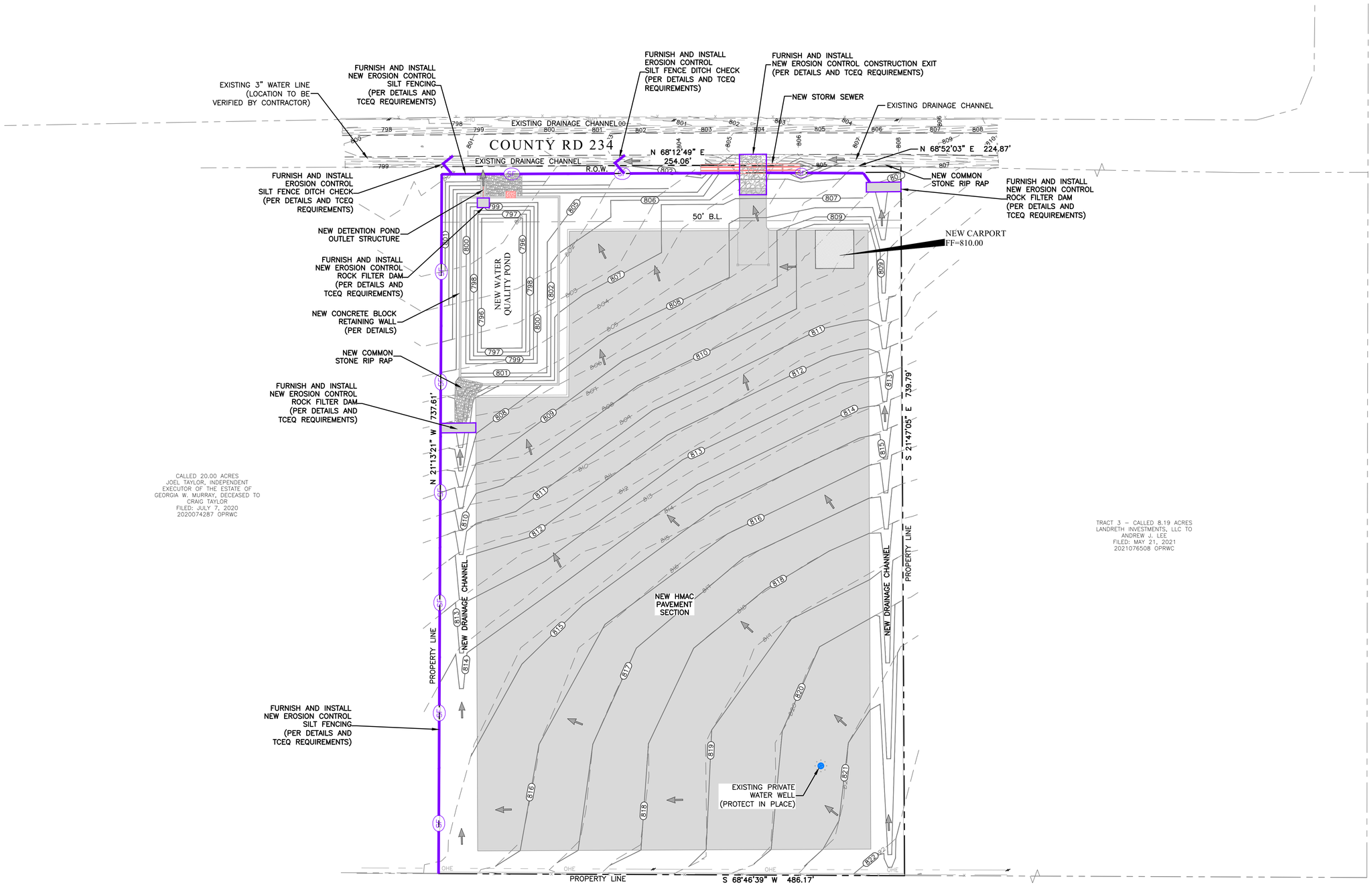
C4.13



0 50 100
FEET

LEGEND

DIRECTIONAL FLOW ARROW

NEW EROSION CONTROL SILT FENCING (PER DETAILS AND TCEQ REQUIREMENTS) (SF)

EROSION CONTROL CONSTRUCTION EXIT (PER DETAILS AND TCEQ REQUIREMENTS)

EROSION CONTROL ROCK FILTER DAM (PER DETAILS AND TCEQ REQUIREMENTS)

EROSION CONTROL SILT FENCE DITCH CHECK (PER DETAILS)

CLARK ASSOCIATES
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CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

SITE EROSION CONTROL PLAN

DRAWING STATUS

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7-25-2025

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LICENSED PROFESSIONAL ENGINEER

Designed	TDS
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Plot Date	7-25-2025

C4.14

Attachment D – Exception to the Required Geologic Assessment

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. **Exception to the Required Geologic Assessment:** Not Applicable. Refer to Geologic Assessment Form and Attachments.

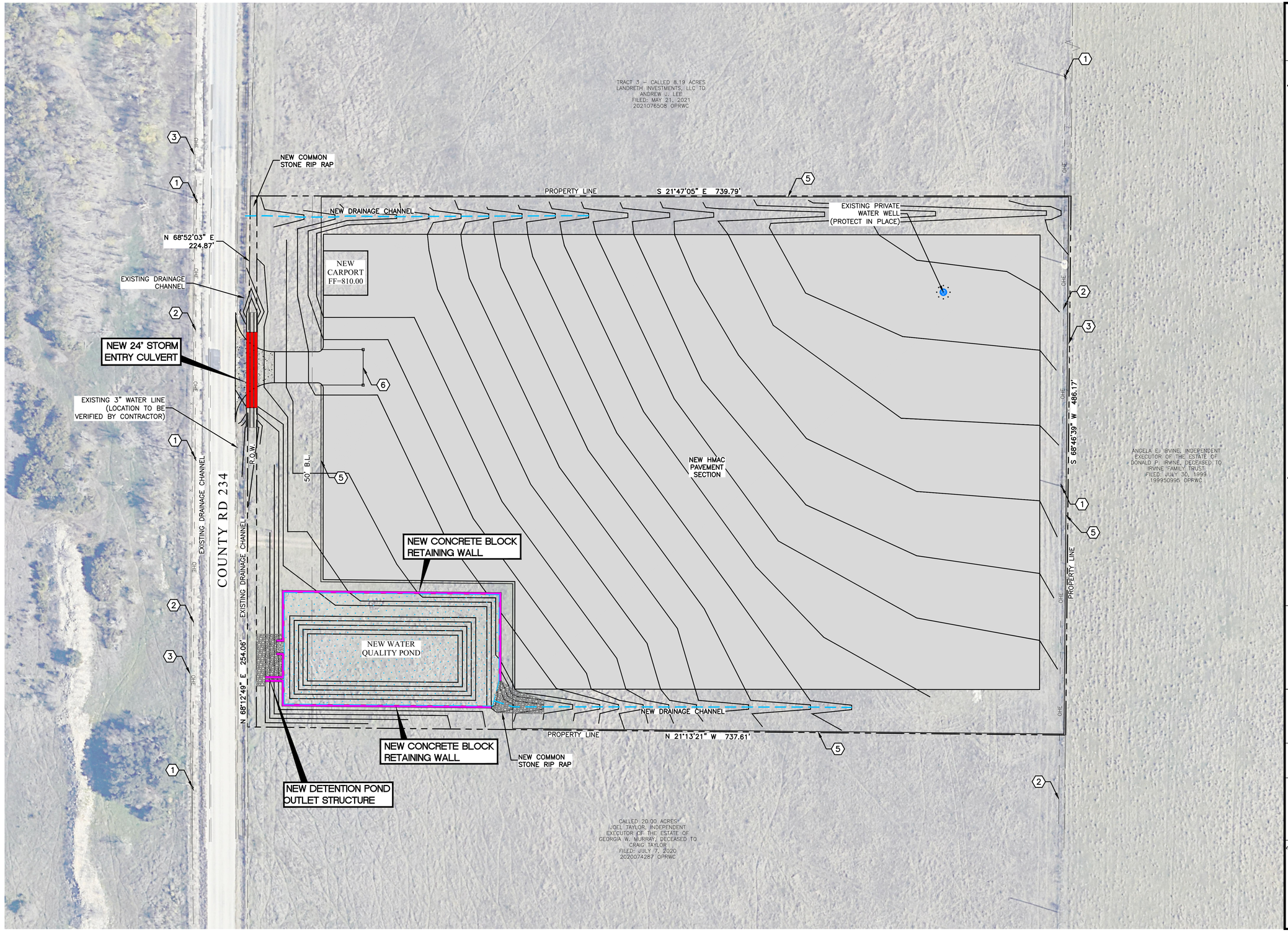
Site Plan

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. **Site Plan:** Site plan provided. See attachment.



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FEET

LEGEND

- NEW RETAINING WALL (PER PROJECT DETAILS)
- NEW HMAC PAVEMENT SECTION (PER DETAILS)
- NEW REINFORCED CONCRETE PAVEMENT SECTION (PER DETAILS)
- NEW WATER QUALITY POND
- NEW DRAINAGE CHANNEL
- NEW STORM SEWER
- EXISTING WATER WELL

KEYED NOTES

1. CAUTION!!! EXISTING POWER POLE/LIGHT POLE
2. CAUTION!!! OVERHEAD ELECTRIC
3. EXISTING FENCING
4. FURNISH AND INSTALL 1–NEW BOLLARD (PER DETAILS)
5. FURNISH AND INSTALL NEW FENCING (PER DETAILS)
6. FURNISH AND INSTALL 1–NEW FENCE GATE (PER DETAILS)

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

CIVIL SITE PLAN

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7–25–2025

C2.1

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Trey Simpson

Date: 7/28/2025

Signature of Customer/Agent:

Regulated Entity Name: CR 234 New Truck Parking Facility

Project Information

Potential Sources of Contamination

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

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

   ☐ The following fuels and/or hazardous substances will be stored on the site: _____

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Brazos River Basin (1248A)

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

Attachment A – Spill Response Actions

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. **Spill Response Actions:** See attached TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16.

1.4.16 Spill Prevention and Control

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or watercourses from leaks and spills by reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

(1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spill must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.

(2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).

(4) Establish a continuing education program to indoctrinate new employees.

(5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

(1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.

(2) Store hazardous materials and wastes in covered containers and protect from vandalism.

(3) Place a stockpile of spill cleanup materials where it will be readily accessible.

(4) Train employees in spill prevention and cleanup.

(5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.

(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

(12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.

(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.

(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

(2) Use absorbent materials on small spills rather than hosing down or burying the spill.

(3) Absorbent materials should be promptly removed and disposed of properly.

(4) Follow the practice below for a minor spill:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

(1) Contain spread of the spill.

(2) Notify the project foreman immediately.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.

(4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.

(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.

(3) Notification should first be made by telephone and followed up with a written report.

(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: https://www.tceq.texas.gov/response/spills/spill_rq.html

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Discourage "topping off" of fuel tanks.

(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Attachment B – Potential Sources of Contamination

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Site Plan:

Potential Sources of contamination include:

1. Fuel, oil, grease and fluids from construction equipment.
2. Human Wastes - Must be disposed of properly
3. Food Wastes - Must be disposed of in an appropriate trash receptacle and emptied on a regular basis.
4. Construction Debris - Must be disposed of properly.

Attachment C – Sequence of Major Activities

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. BMP Construction Phase: Duration: 2 Weeks from Start of Construction

Disturbed Area = 8.18 Acres

a. Maintain Existing Vegetation around the perimeter of the Disturbed Area.
b. Construct Erosion Control Silt Fencing
c. Construct Erosion Control Rock Berms
d. Construct Erosion Control Construction Exit

B. Construction Phase: Duration: 6 Months after completion of BMP Construction Phase

Disturbed Area = 8.18 Acres

a. Site Clearing and Grading
b. Foundation Excavation
c. Foundation Reinforcing & Placement
d. Underground Utility Installation
e. Building Slab Placement
f. Vertical Building Construction
g. Site Paving activities
h. Fine Site Grading
i. Landscape & Irrigation
j. Punchlist & Final Cleaning
k. Final Inspection & Project Closeout

C. BMPs During Construction: Duration: Ongoing during entire Construction

a. During construction sweep, clean and maintain site and BMPs as needed
b. Retain sediment on-site
c. Design and utilize controls to reduce offsite transport of sediment and other pollutants if it is necessary to pump or channel standing water from site.
d. Select, install, and maintain control measures according to the manufacturer or designers specifications.

e. Remove sediment accumulations if sediment escapes the site at a frequency to minimize further negative effects and, whenever feasible, prior to the next storm event.

f. Develop controls to limit offsite transport of litter, construction debris, and construction materials.

g. Provide on-going inspections and maintain records.

D. Final Stabilization: Duration: 2 Weeks after completion of Construction Phase

Disturbed Area = 8.18 Acres

a. At the end of construction provide grass seeding or grass sod on all areas disturbed by construction that did not receive new pavement or impervious cover.

b. Fertilizer to be applied simultaneously with hydromulch seeding, per manufacturer's specifications and recommendations.

Temporary Erosion Controls to remain in place until disturbed area has perennial vegetative cover with a density of at least 70% cover for the area has been established on all unpaved areas and areas not covered by permanent structures or equivalent permanent stabilization measures. (Such as the use of rip rap, gabions, or geotextiles)

Attachment E – Request to Temporarily Seal a Feature

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Request to Temporarily Seal a Feature: Not applicable.

Attachment F – Structural Practices

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Structural Practices:

1. Silt Fencing and Rock Berms will be placed on all down gradient portions of disturbed areas of the site to prevent contaminated storm water from leaving the site.
2. A Detention/Retention Pond will be used to reduce the storm water runoff to pre-development quantities.
3. A Wet Basin will be used to increase settling and increase TSS removal.
4. Erosion control blankets will be used to stabilize the side slopes of the detention/retention pond and the drainage channels.
5. A stabilized erosion control construction exit will be used to prevent erosion at the construction entry point of the subdivision.

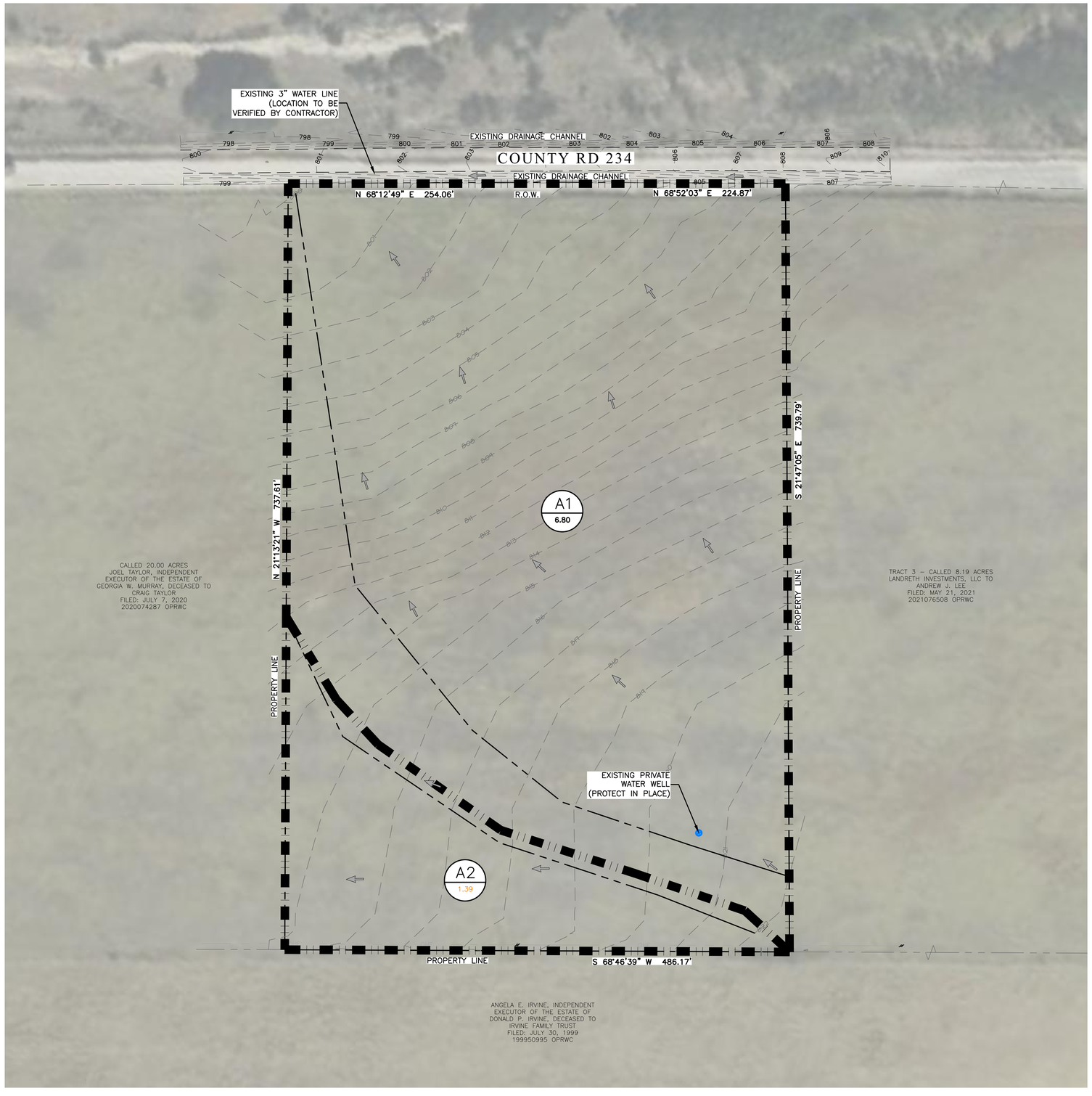
Attachment G – Drainage Area Map

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Drainage Area Map: Refer to the Drainage Sheets of the Attached Construction Plans.



DRAINAGE CALCULATIONS

PRE DEVELOPMENT

AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
Area 1	6.80	15	80	2	3.94	16.40
Area 1	6.80	15	80	5	5.15	24.10
Area 1	6.80	15	80	10	6.30	30.90
Area 1	6.80	15	80	25	8.04	40.90
Area 1	6.80	15	80	50	9.53	48.80
Area 1	6.80	15	80	100	11.20	57.10
Area 2	1.39	13	80	2	3.94	3.60
Area 2	1.39	13	80	5	5.15	5.20
Area 2	1.39	13	80	10	6.30	6.70
Area 2	1.39	13	80	25	8.04	8.90
Area 2	1.39	13	80	50	9.53	10.60
Area 2	1.39	13	80	100	11.20	12.40

TIME OF CONCENTRATION CALCULATIONS

	A1–PRE	A2–PRE
SHEET FLOW	100'@1.50% 9.71 MIN.	100'@1.80% 9.03 MIN.
CONCENTRATED FLOW UNPAVED	802'@2.56% 5.18 MIN.	470'@1.75% 3.67 MIN.
UNPAVED	– –	– –
CHANNEL FLOW	– –	– –
TOTAL	14.89 MIN.	12.70 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

IMPERVIOUS COVER CALCULATIONS

SITE AREA: 8.18 ACRES
TOTAL IMPERVIOUS AREA: 0.00 ACRES

TOTAL IMPERVIOUS COVER = 0% OF TOTAL SITE

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

NOTES

1. NOAA ATLAT–14 DATA UTILIZED FROM WILLIAMSON COUNTRY SUBDIVISION REGULATIONS.
2. HEC–HMS VERSION 4.7.1 UTILIZED FOR DRAINAGE CALCULATIONS.

0 50 100
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

Q = (C) (I) (A)

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT DRAINAGE MAP

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F–23184.

7–25–2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
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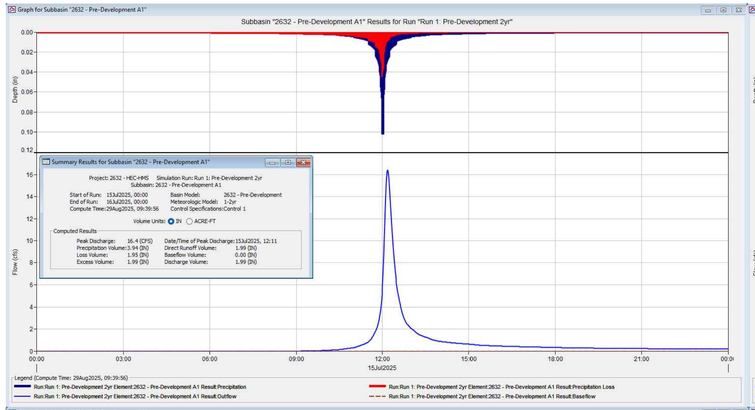

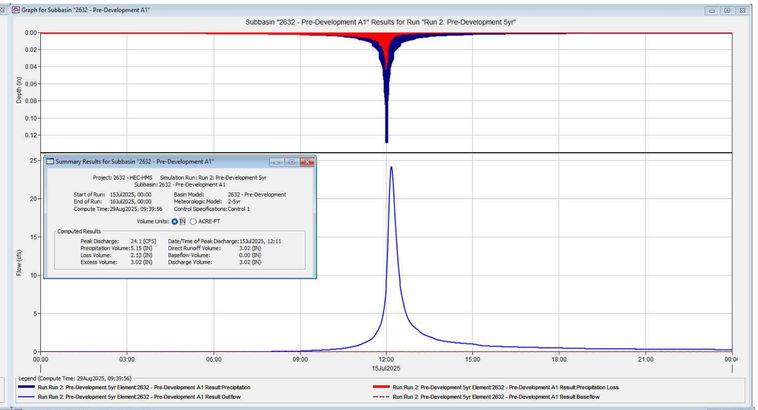

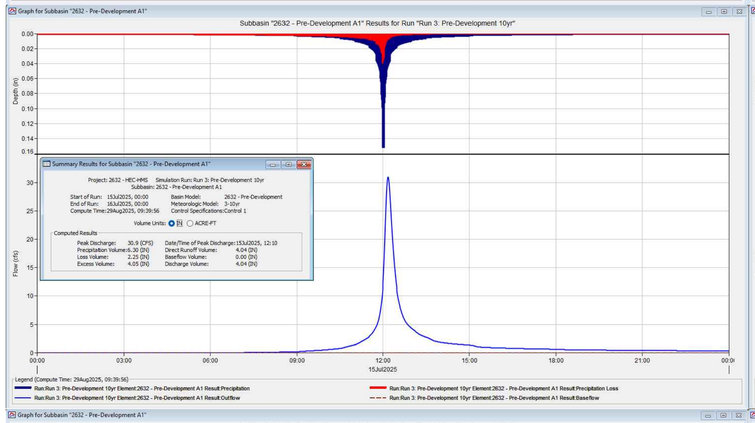

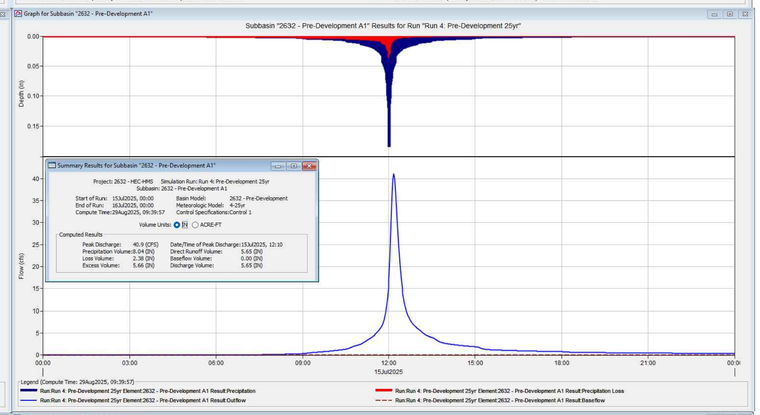

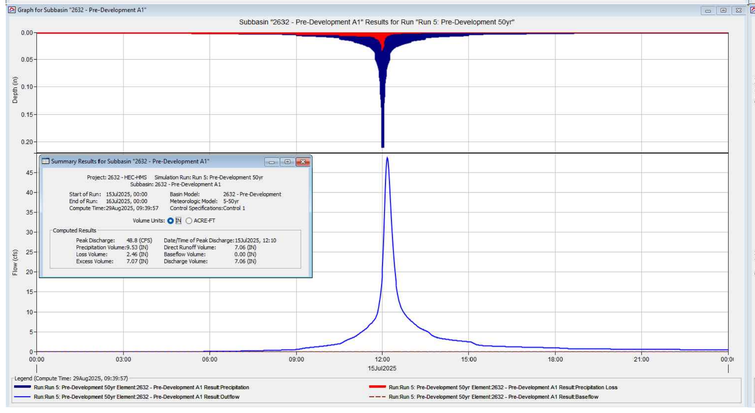

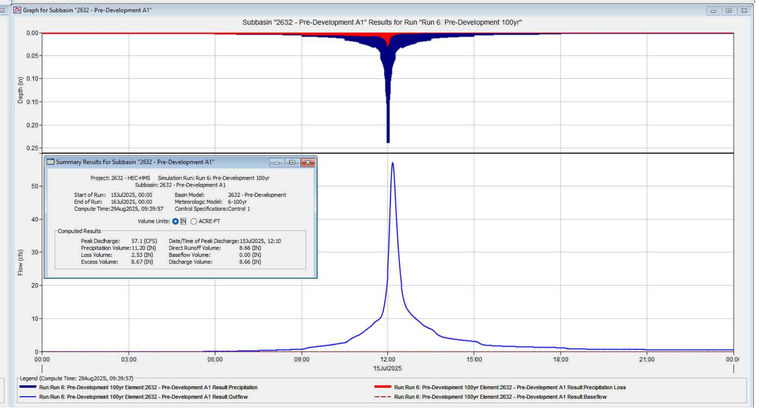

1 AREA 1 PRE-DEV DRAINAGE CALCULATIONS

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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT
DRAINAGE CALCULATIONS

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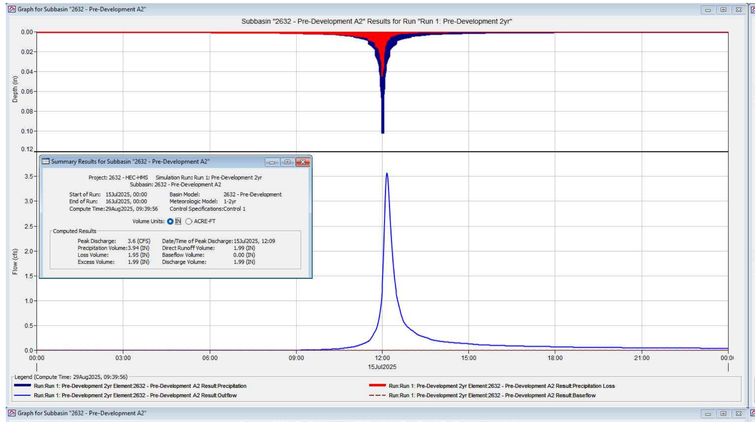
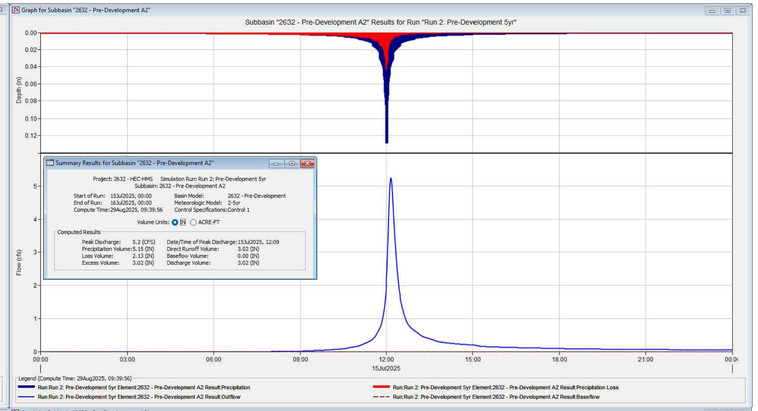
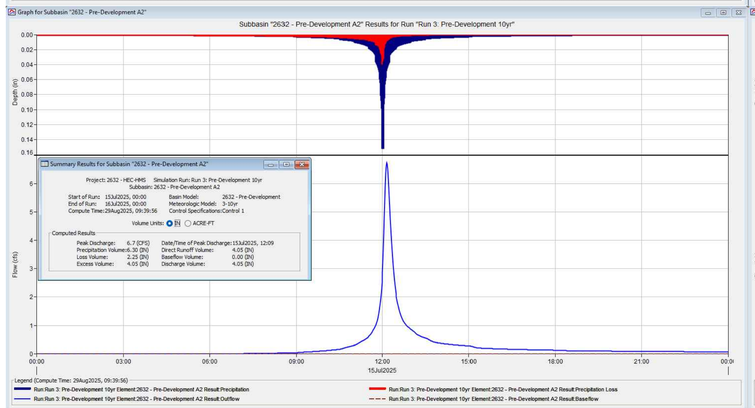
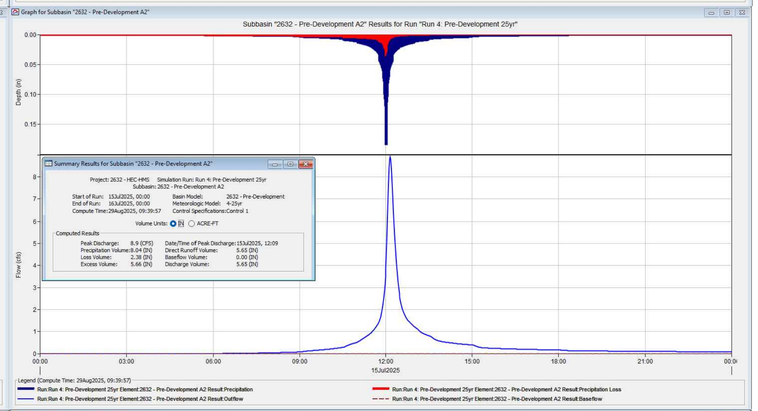
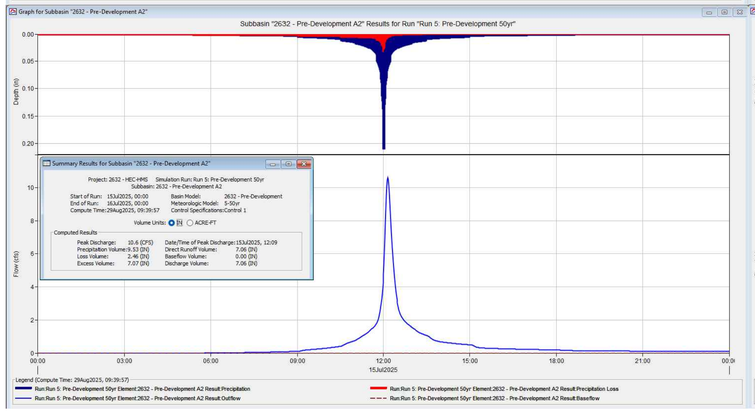
C4.2

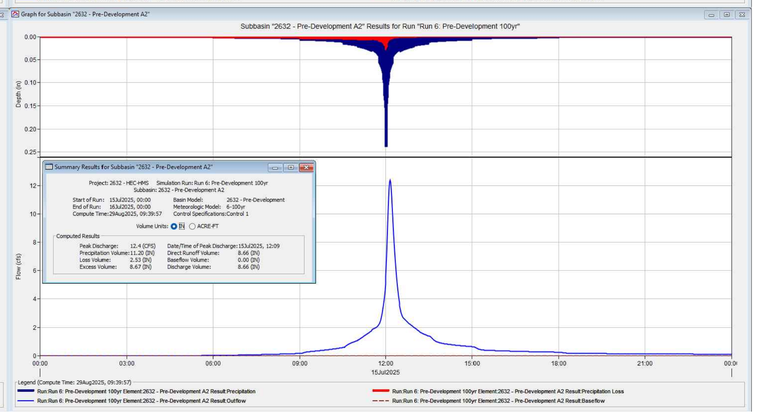












2 AREA 2 PRE–DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT
DRAINAGE CALCULATIONS

DRAWING STATUS

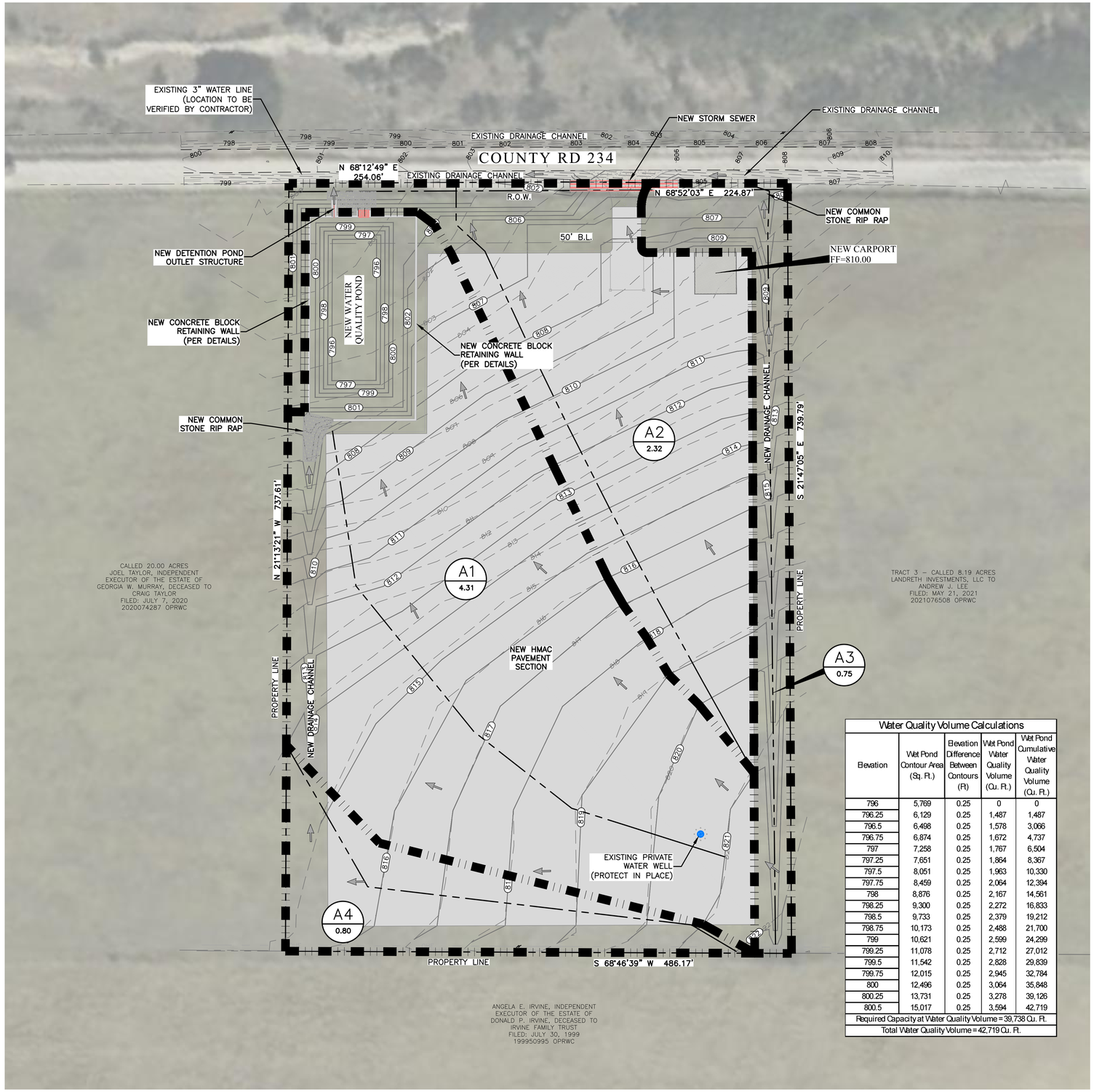
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER
LICENSED

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.3



Water Quality Volume Calculations

Elevation	Wet Pond Contour Area (Sq. Ft.)	Elevation Difference Between Contours (Ft)	Wet Pond Water Quality Volume (Cu. Ft.)	Wet Pond Cumulative Water Quality Volume (Cu. Ft.)
796	5,769	0.25	0	0
796.25	6,129	0.25	1,487	1,487
796.5	6,498	0.25	1,578	3,066
796.75	6,874	0.25	1,672	4,737
797	7,258	0.25	1,767	6,504
797.25	7,651	0.25	1,864	8,367
797.5	8,051	0.25	1,963	10,330
797.75	8,459	0.25	2,064	12,394
798	8,876	0.25	2,167	14,561
798.25	9,300	0.25	2,272	16,833
798.5	9,733	0.25	2,379	19,212
798.75	10,173	0.25	2,488	21,700
799	10,621	0.25	2,599	24,299
799.25	11,078	0.25	2,712	27,012
799.5	11,542	0.25	2,828	29,839
799.75	12,015	0.25	2,945	32,784
800	12,496	0.25	3,064	35,848
800.25	13,731	0.25	3,278	39,126
800.5	15,017	0.25	3,594	42,719
Required Capacity at Water Quality Volume = 39,738 Cu. Ft.				
Total Water Quality Volume = 42,719 Cu. Ft.				

DRAINAGE CALCULATIONS

POST DEVELOPMENT						
AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
Area 1	4.31	10	80	2	3.94	12.20
Area 1	4.31	10	80	5	5.15	17.90
Area 1	4.31	10	80	10	6.30	23.00
Area 1	4.31	10	80	25	8.04	30.30
Area 1	4.31	10	80	50	9.53	36.10
Area 1	4.31	10	80	100	11.20	42.20
Area 2	2.32	10	80	2	3.94	10.10
Area 2	2.32	10	80	5	5.15	13.00
Area 2	2.32	10	80	10	6.30	15.50
Area 2	2.32	10	80	25	8.04	19.10
Area 2	2.32	10	80	50	9.53	21.90
Area 2	2.32	10	80	100	11.20	24.90
Area 3	0.75	10	80	2	3.94	2.20
Area 3	0.75	10	80	5	5.15	3.20
Area 3	0.75	10	80	10	6.30	4.10
Area 3	0.75	10	80	25	8.04	5.40
Area 3	0.75	10	80	50	9.53	6.40
Area 3	0.75	10	80	100	11.20	7.50
Area 4	0.80	10	80	2	3.94	3.00
Area 4	0.80	10	80	5	5.15	4.10
Area 4	0.80	10	80	10	6.30	4.90
Area 4	0.80	10	80	25	8.04	6.20
Area 4	0.80	10	80	50	9.53	7.30
Area 4	0.80	10	80	100	11.20	8.30

TARGET POND SIZE = 26,790 CU. FT.

TIME OF CONCENTRATION CALCULATIONS

	A1–POST	A2–POST	A3–POST	A4–POST
SHEET FLOW	100'@1.40% 1.23 MIN.	100'@1.50% 1.37 MIN.	– =	50'@2.00% 4.97 MIN.
CONCENTRATED FLOW PAVED	504'@2.50% 2.61 MIN.	464'@2.80% 2.27 MIN.	– =	– =
UNPAVED	– =	77'@6.50% 0.31 MIN.	– =	468'@1.70% 2.94 MIN.
CHANNEL FLOW	– =	– =	750'@2.00% 2.37 MIN.	– =
TOTAL	3.84 MIN.	3.95 MIN.	2.37 MIN.	7.91 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

IMPERVIOUS COVER CALCULATIONS

SITE AREA: 8.18 ACRES
TOTAL IMPERVIOUS AREA: 5.50 ACRES

TOTAL IMPERVIOUS COVER = 67% OF TOTAL SITE

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

NOTES

1. NOAA ATLAT–14 DATA UTILIZED FROM WILLIAMSON COUNTRY SUBDIVISION REGULATIONS.
2. HEC–HMS VERSION 4.7.1 UTILIZED FOR DRAINAGE CALCULATIONS.

0 50 100
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

Q = (C) (I) (A)

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT DRAINAGE MAP

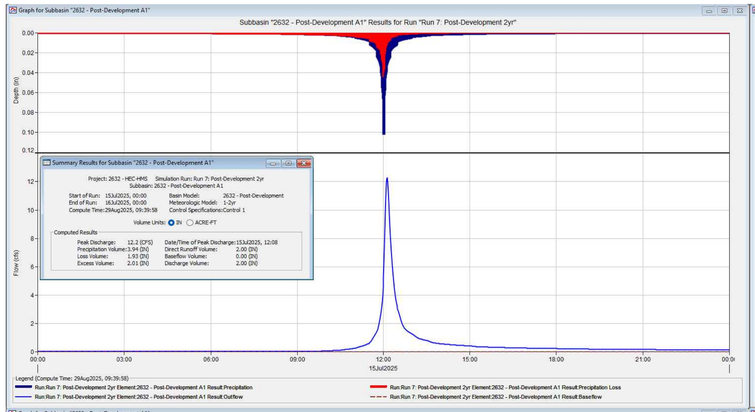
DRAWING STATUS

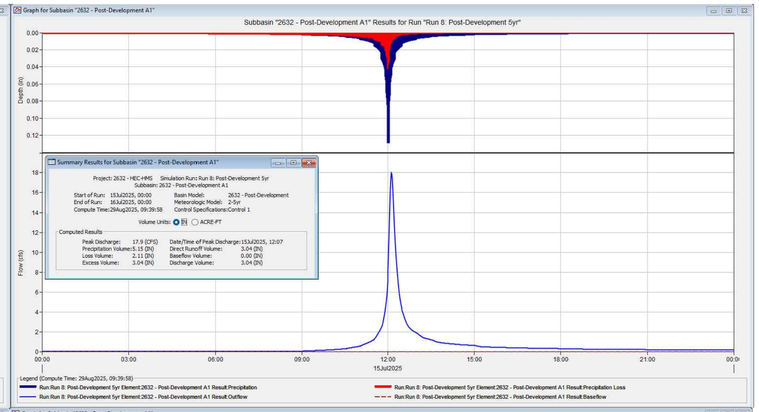
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F–23184.

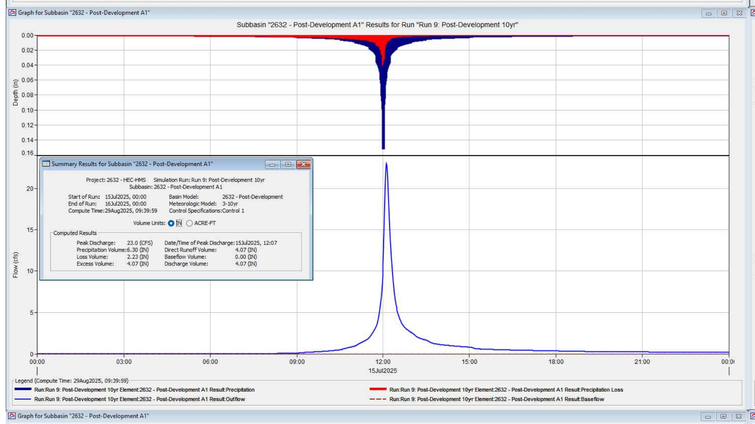
7–25–2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

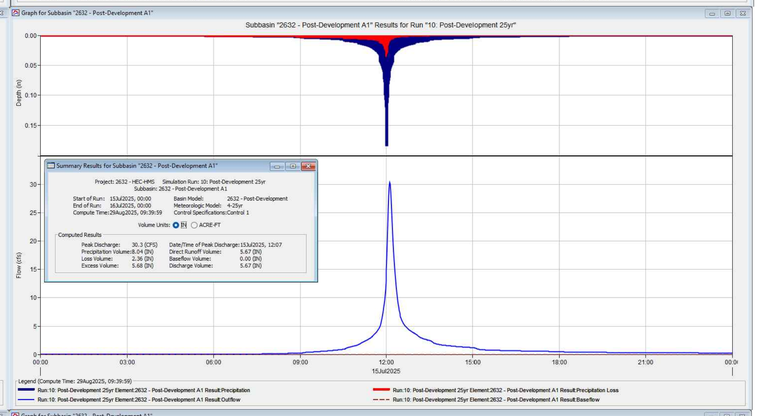
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7–25–2025

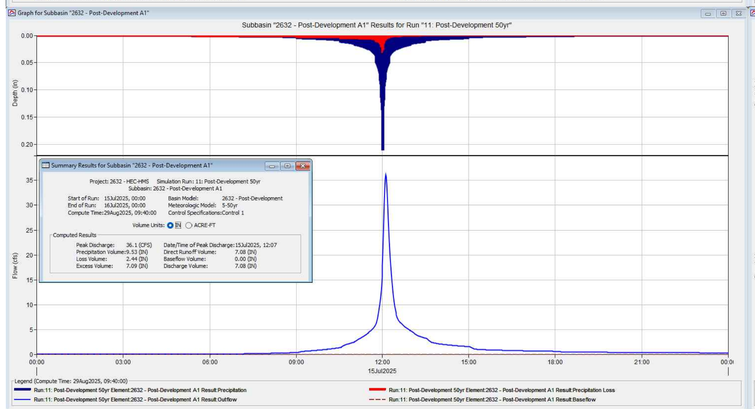
C4.4

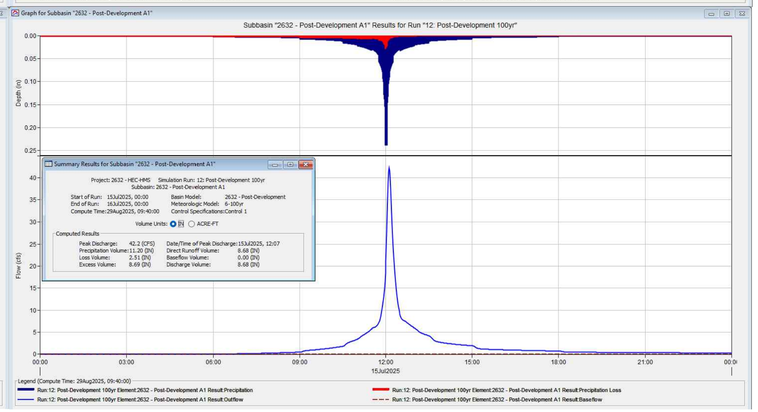












1 AREA 1 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 1

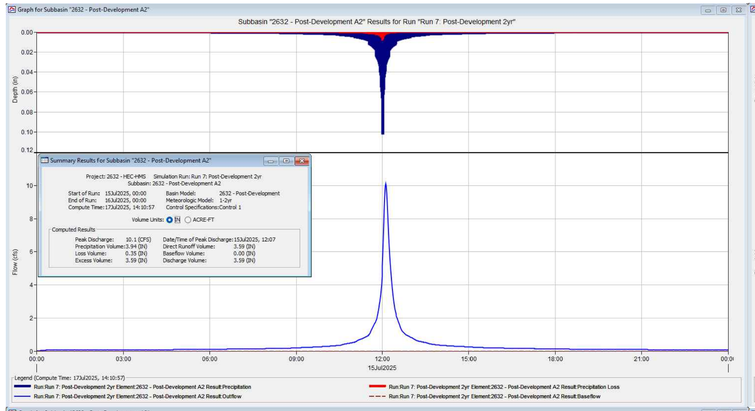
DRAWING STATUS

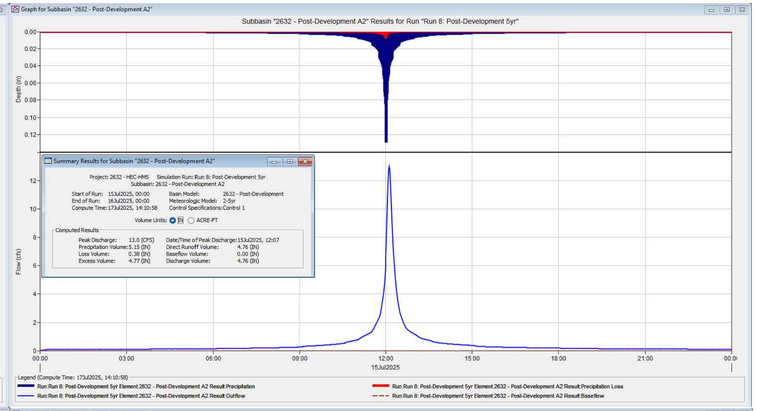
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

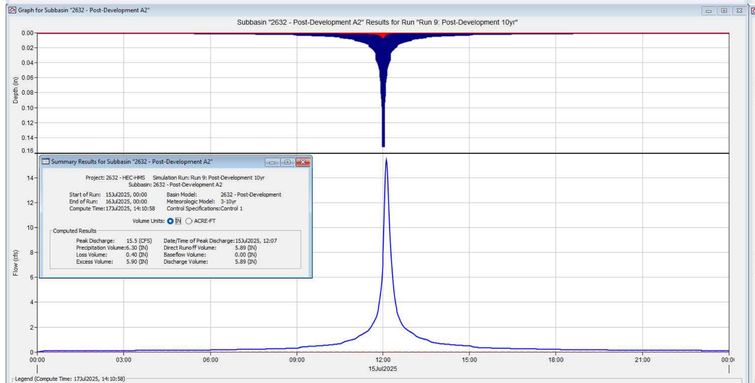
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

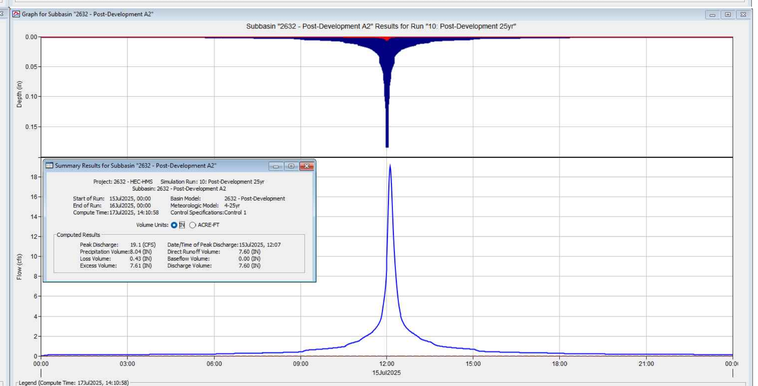
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

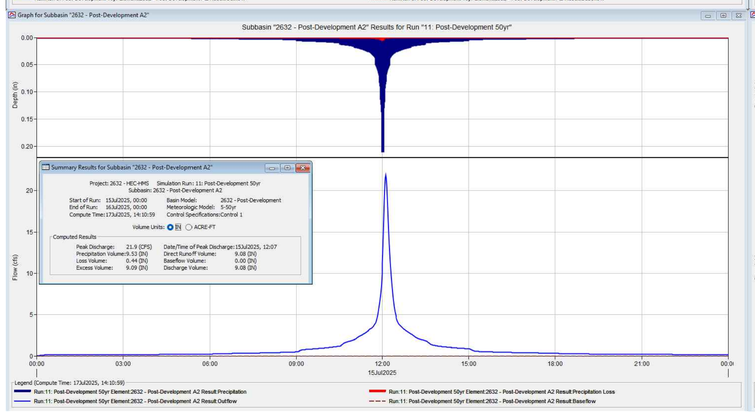
C4.5

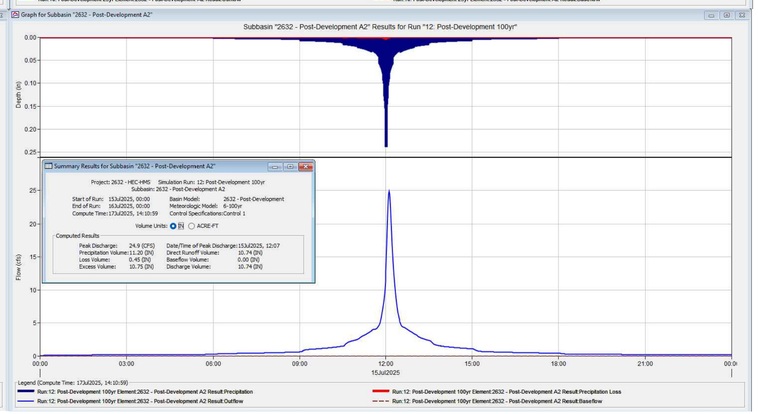












2 AREA 2 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT DRAINAGE CALCULATIONS SHEET 2

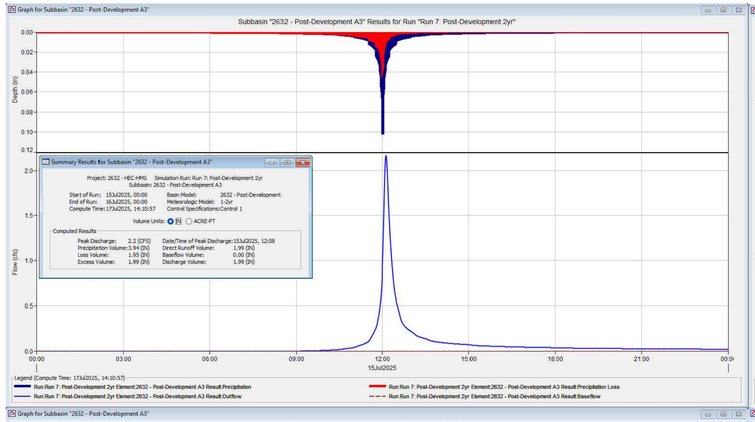
DRAWING STATUS

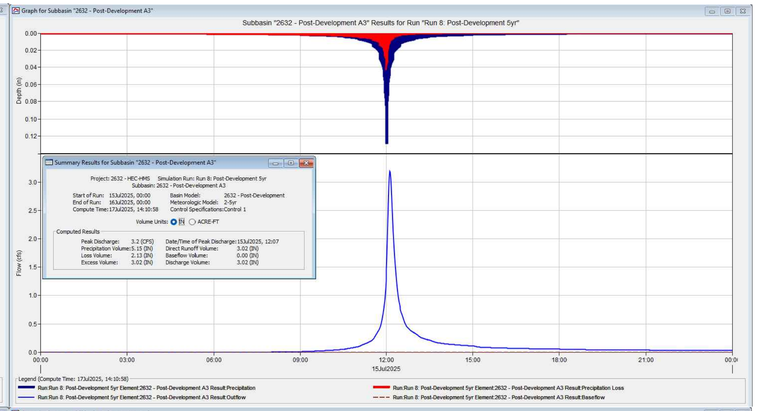
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

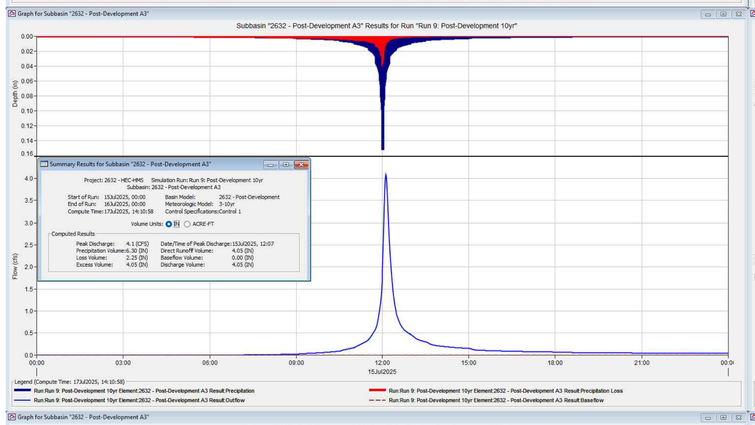
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER

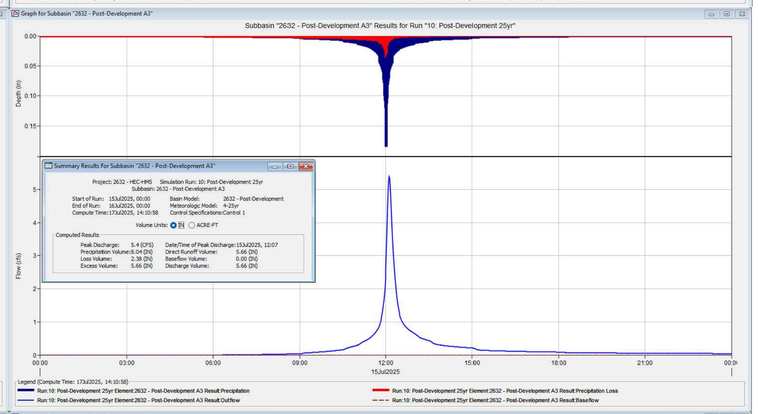
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

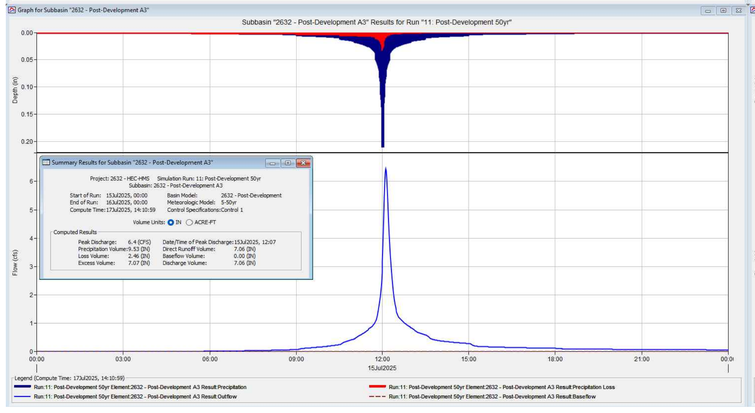
C4.6

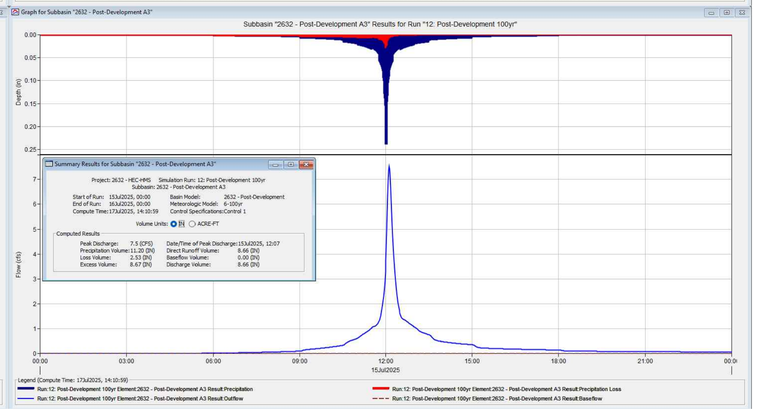












3 AREA 3 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 3

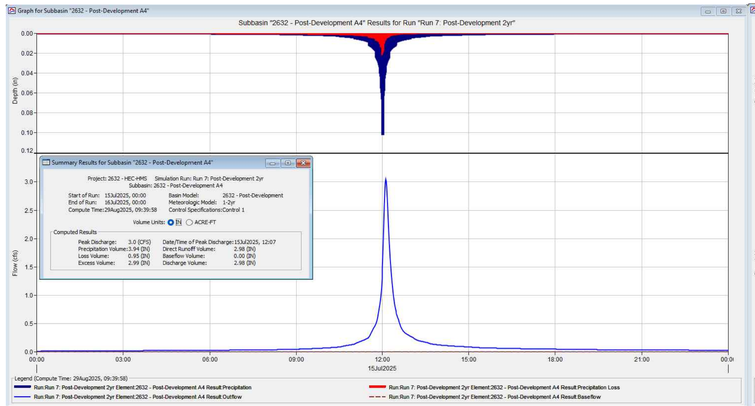
DRAWING STATUS

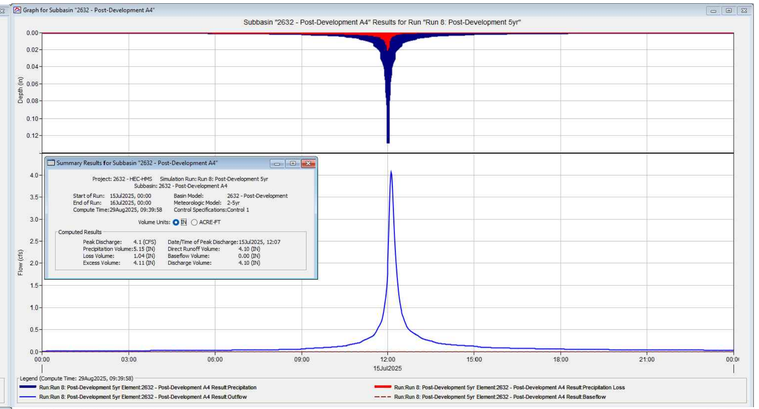
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

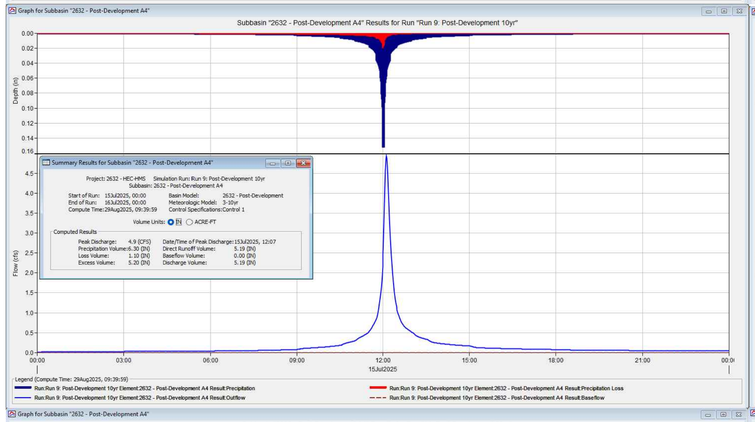
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

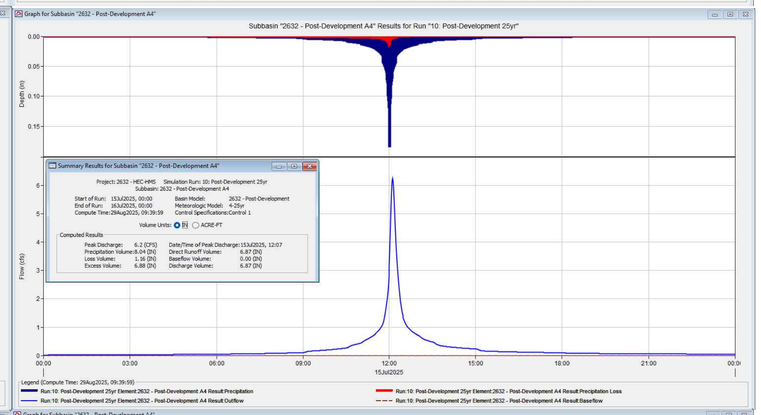
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

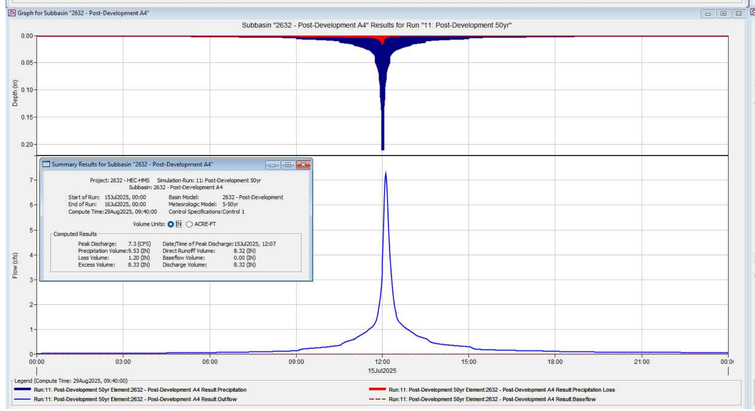
C4.7

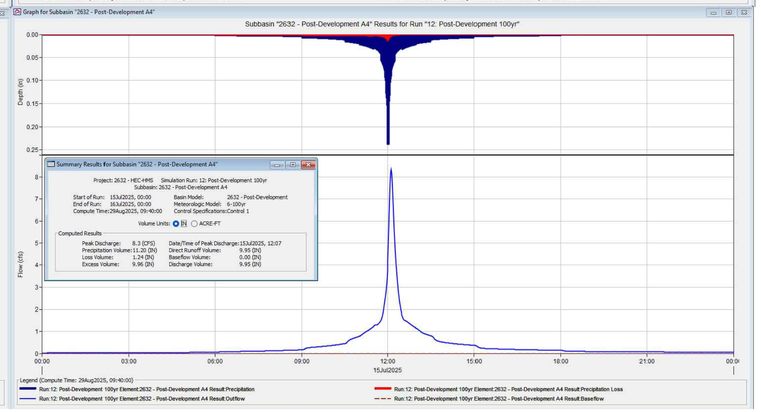












4 AREA 4 POST–DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 4

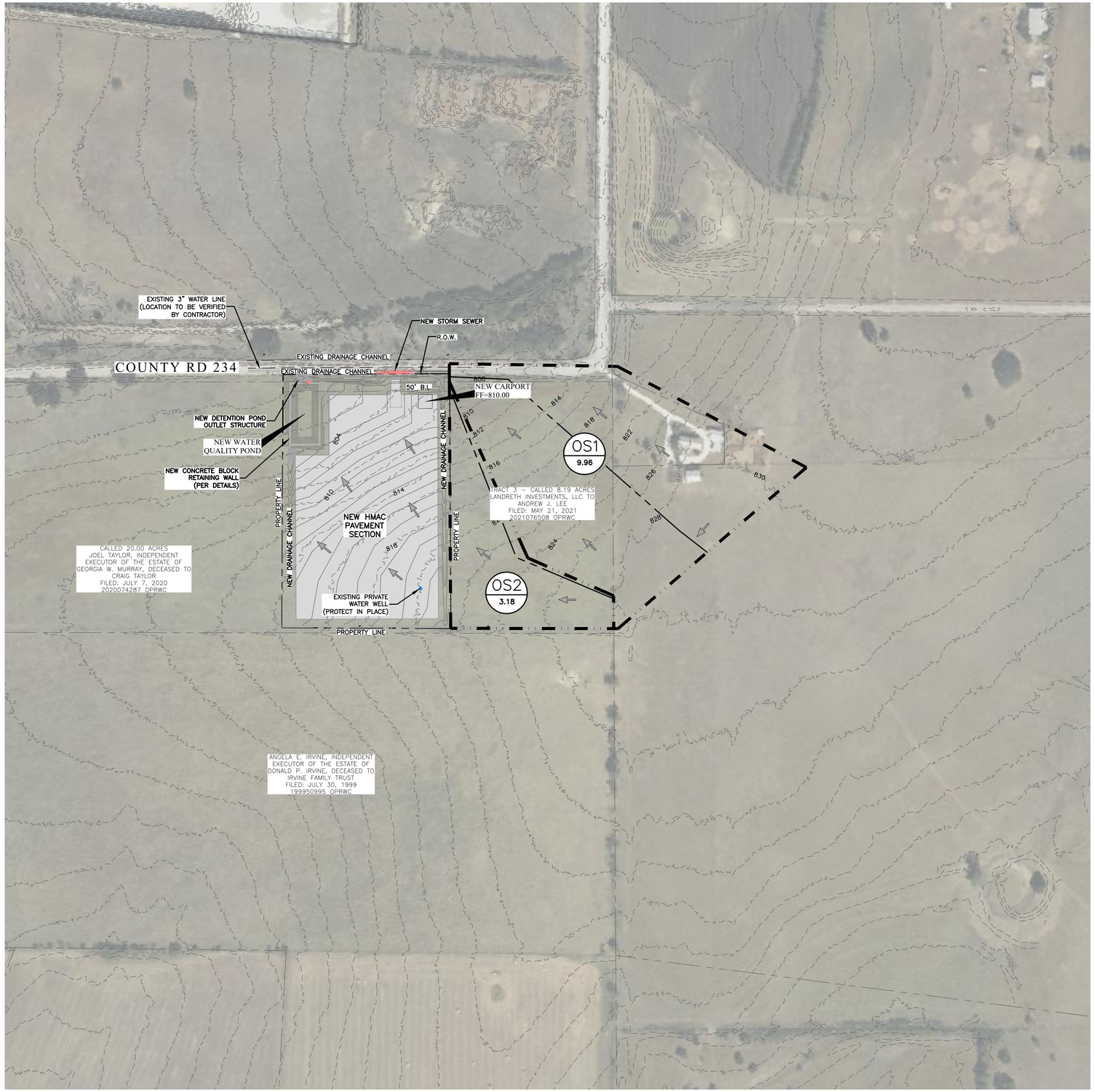
DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.8



DRAINAGE CALCULATIONS

EXISTING OFFSITE DEVELOPMENT

AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
OS1	9.96	16	73	2	3.94	17.00
OS1	9.96	16	73	5	5.15	27.10
OS1	9.96	16	73	10	6.30	36.50
OS1	9.96	16	73	25	8.04	50.70
OS1	9.96	16	73	50	9.53	62.10
OS1	9.96	16	73	100	11.20	74.20
OS1	3.18	14	73	2	3.94	5.50
OS1	3.18	14	73	5	5.15	8.70
OS1	3.18	14	73	10	6.30	11.80
OS1	3.18	14	73	25	8.04	16.30
OS1	3.18	14	73	50	9.53	20.00
OS1	3.18	14	73	100	11.20	23.90

TIME OF CONCENTRATION CALCULATIONS

	OS1	OS2
SHEET FLOW	100'@1.00% 11.42 MIN.	100'@1.50% 9.71 MIN.
CONCENTRATED FLOW PAVED	– –	– –
UNPAVED	660'@2.88% 4.02 MIN.	705'@2.62% 4.50 MIN.
CHANNEL FLOW	165'@2.42% 0.27 MIN.	– –
TOTAL	15.71 MIN.	14.21 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80
BRUSH	73

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

0 150 300
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

$Q = (C)(I)(A)$

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE MAP

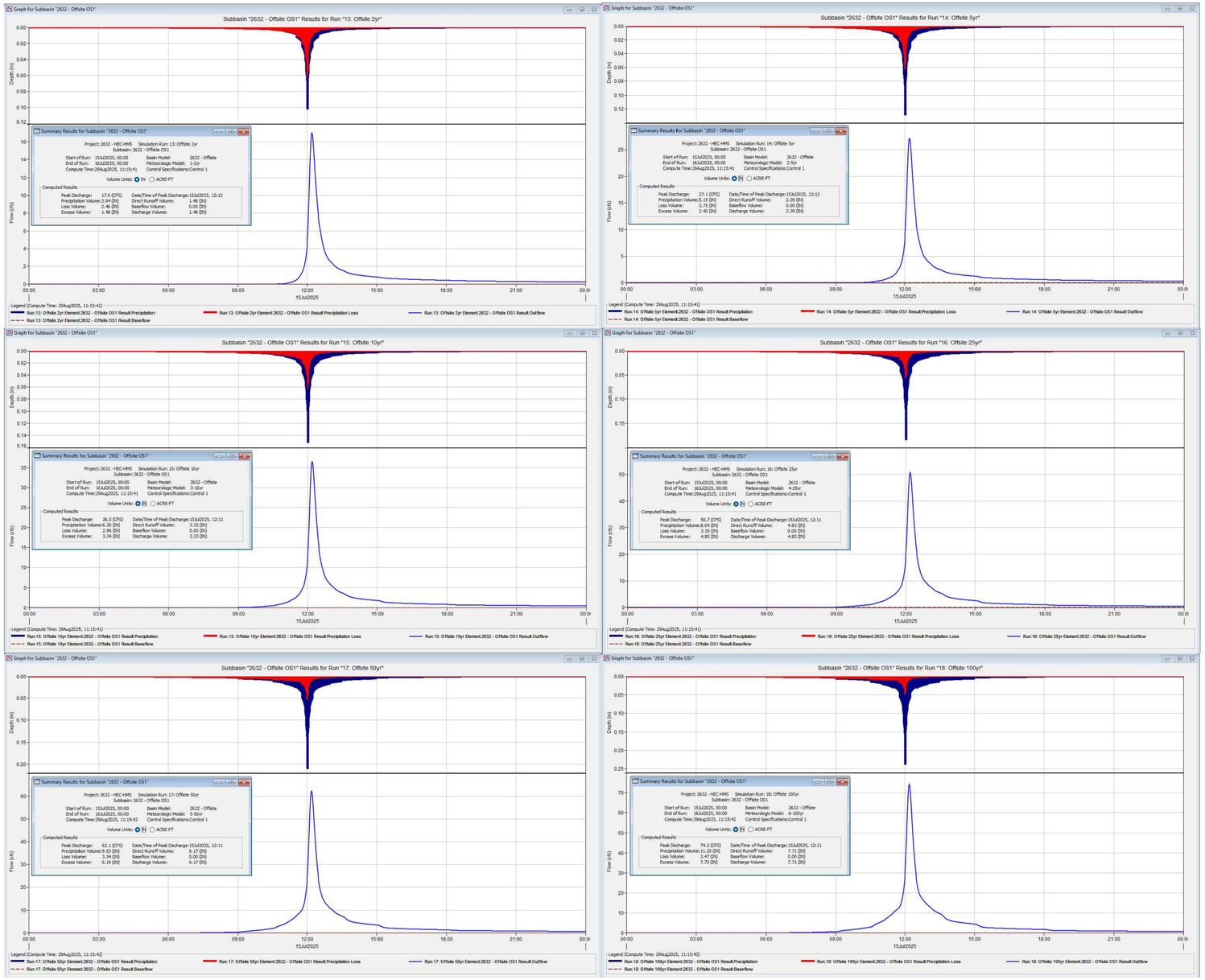
DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.9



1 OS1 OFFSITE DRAINAGE CALCULATIONS

Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Aug 29 2025

2632 Drive Culverts 25yr

Invert Elev Dn (ft)	= 801.80	**Calculations**	
Pipe Length (ft)	= 88.50	Qmin (cfs)	= 72.40
Slope (%)	= 0.50	Qmax (cfs)	= 72.40
Invert Elev Up (ft)	= 802.24	Tailwater Elev (ft)	= (dc+D)/2
Rise (in)	= 30.0		
Shape	= Circular	**Highlighted**	
Span (in)	= 30.0	Qtotal (cfs)	= 72.40
No. Barrels	= 3	Qpipe (cfs)	= 72.40
n-Value	= 0.012	Qovertop (cfs)	= 0.00
Culvert Type	= Circular Concrete	Veloc Dn (ft/s)	= 5.52
Culvert Entrance	= Square edge w/headwall (C)	Veloc Up (ft/s)	= 6.89
Coeff. K,M,c,Y,k	= 0.0098, 2, 0.0398, 0.67, 0.5	HGL Dn (ft)	= 803.89
		HGL Up (ft)	= 803.92
Embankment		Hw Elev (ft)	= 804.89
Top Elevation (ft)	= 805.80	Hw/D (ft)	= 1.06
Top Width (ft)	= 50.00	Flow Regime	= Inlet Control
Crest Width (ft)	= 50.00		

2 DRIVE CULVERTS 25YR FLOW

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CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE CALCULATIONS

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
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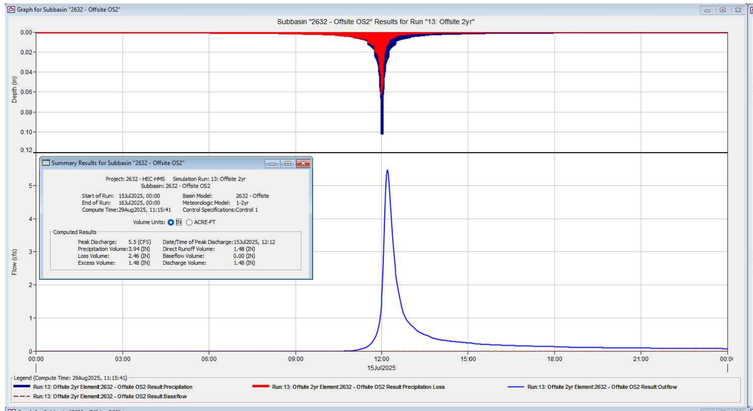
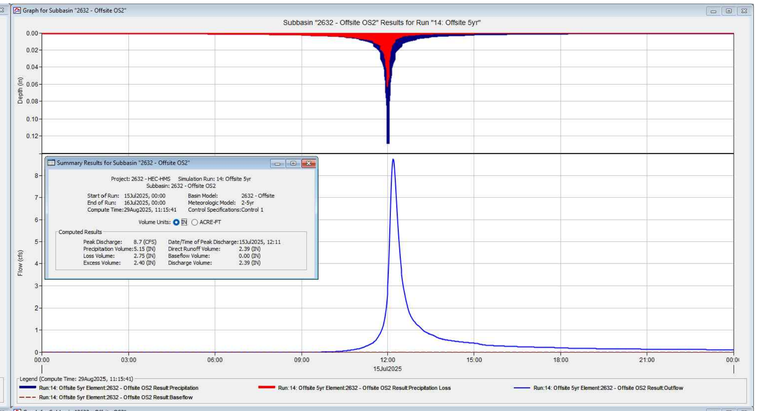
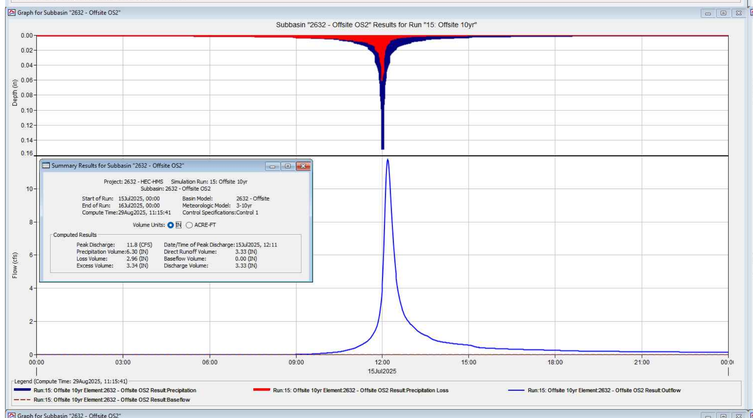
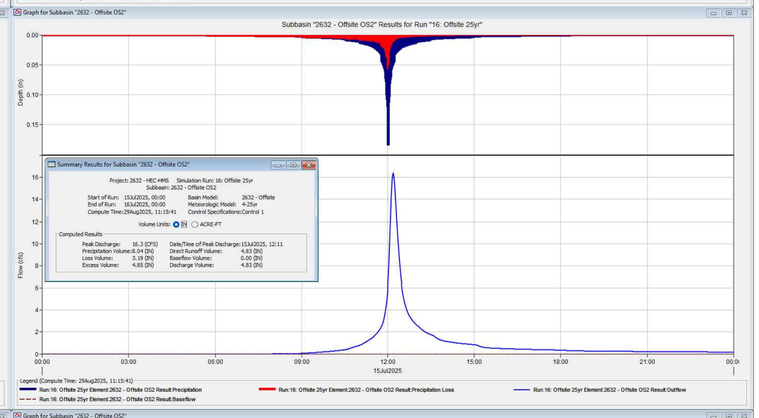
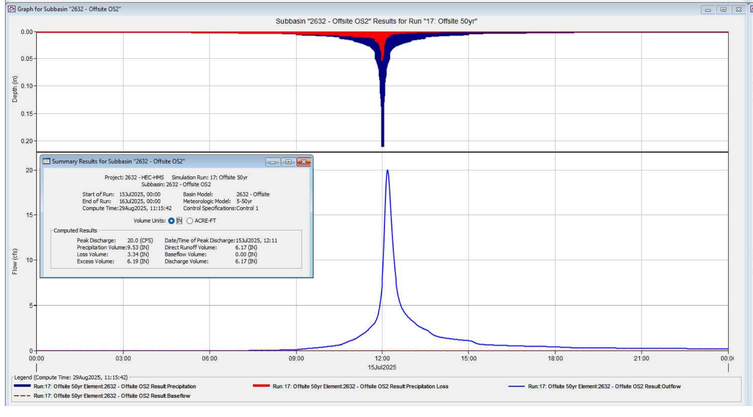
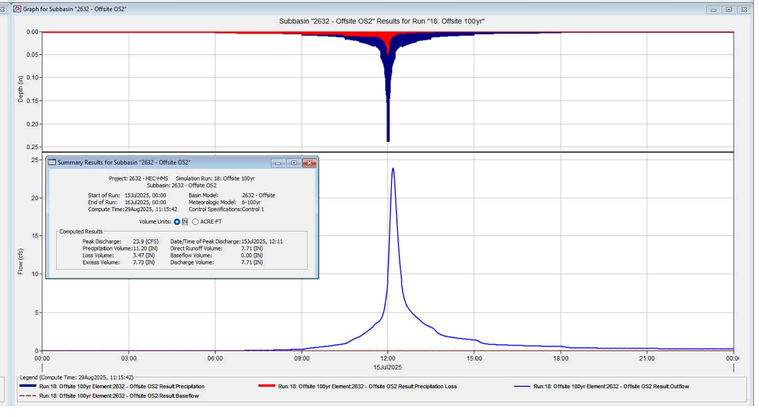












3 OS2 OFFSITE DRAINAGE CALCULATIONS

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Aug 29 2025

2632 Post A3+OS2 100yr Channel Flow

Trapezoidal

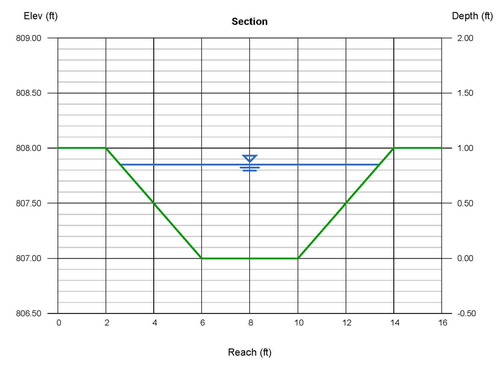
Bottom Width (ft)	= 4.00
Side Slopes (z:1)	= 4.00, 4.00
Total Depth (ft)	= 1.00
Invert Elev (ft)	= 807.00
Slope (%)	= 2.20
N-Value	= 0.030

Calculations

Compute by:	Known Q
Known Q (cfs)	= 31.40

Highlighted

Depth (ft)	= 0.85
Q (cfs)	= 31.40
Area (sqft)	= 6.29
Velocity (ft/s)	= 4.99
Wetted Perim (ft)	= 11.01
Crit Depth, Yc (ft)	= 0.92
Top Width (ft)	= 10.80
EGL (ft)	= 1.24



4 POST A3 + OS1 100YR CHANNEL FLOW

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NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE CALCULATIONS

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7-25-2025
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TREY D. SIMPSON
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LICENSED
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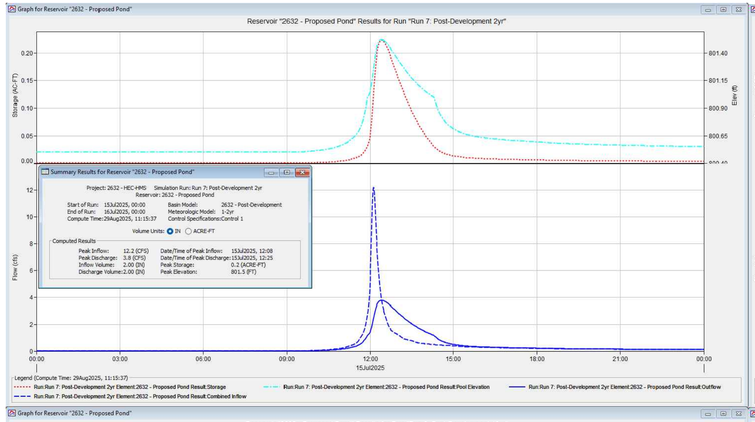
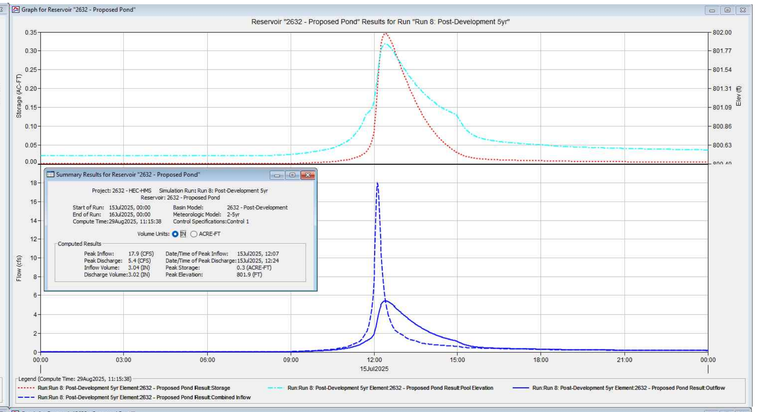
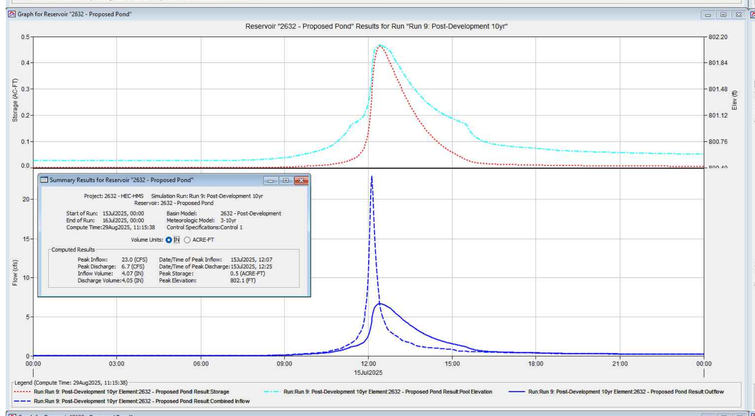
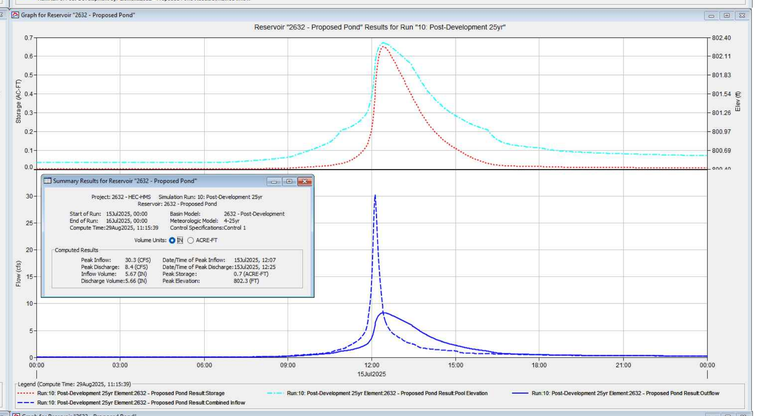
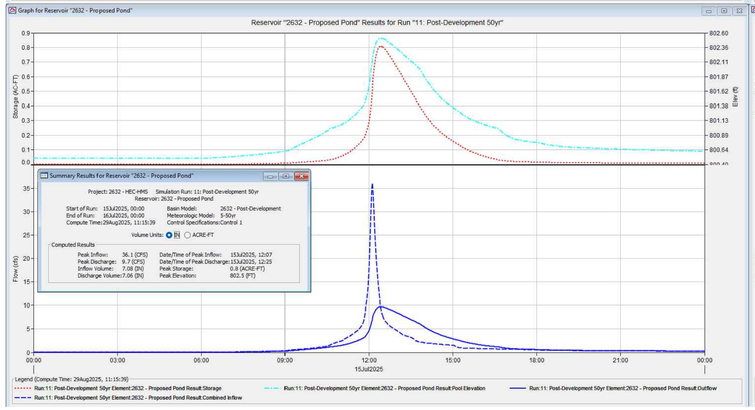
C4.11

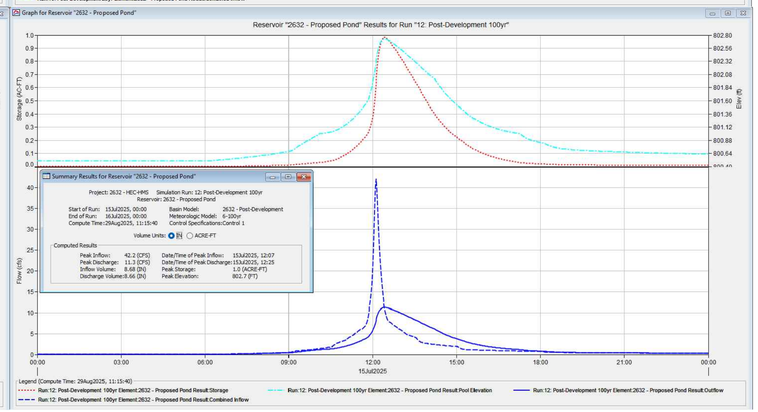












1 DETENTION POND DRAINAGE CALCULATIONS

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NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

DETENTION POND
DRAINAGE CALCULATIONS

DRAWING STATUS

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7-25-2025

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C4.12

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Additional information is provided for cells with a red triangle in the upper right corn
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will r

1. The Required Load Reduction for the total project: Calculations from RG-348

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

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resul
A_N = Net increase in impervious a
P = Average annual precipitation

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

County =	Williamson	
Total project area included in plan * =	8.18	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	5.50	acres
Total post-development impervious cover fraction * =	0.67	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4787	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	8.18	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	5.50	acres
Post-development impervious fraction within drainage basin/outfall area =	0.67	
$L_{M\ THIS\ BASIN}$ =	4787	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Wet Basin
Removal efficiency = 93 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 = (BMP efficiency) x P x (A_I x 3

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

A_C =	8.18	acres
A_I =	5.50	acres
A_P =	2.68	acres
L_R =	5706	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 4787 lbs.

F = 0.84

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

Rainfall Depth =	1.26	inches
Post Development Runoff Coefficient =	0.48	
On-site Water Quality Volume =	17930	cubic feet

Calculations from RG-348

Off-site area draining to BMP =	2.66	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	243	cubic feet

Water Quality Volume Calculations

Elevation	Wet Pond Contour Area (Sq. Ft.)	Elevation Difference Between Contours (Ft)	Wet Pond Water Quality Volume (Cu. Ft.)	Wet Pond Cumulative Water Quality Volume (Cu. Ft.)
796	5,769	0.25	0	0
796.25	6,129	0.25	1,487	1,487
796.5	6,498	0.25	1,578	3,066
796.75	6,874	0.25	1,672	4,737
797	7,258	0.25	1,767	6,504
797.25	7,651	0.25	1,864	8,367
797.5	8,051	0.25	1,963	10,330
797.75	8,459	0.25	2,064	12,394
798	8,876	0.25	2,167	14,561
798.25	9,300	0.25	2,272	16,833
798.5	9,733	0.25	2,379	19,212
798.75	10,173	0.25	2,488	21,700
799	10,621	0.25	2,599	24,299
799.25	11,078	0.25	2,712	27,012
799.5	11,542	0.25	2,828	29,839
799.75	12,015	0.25	2,945	32,784
800	12,496	0.25	3,064	35,848
800.25	13,731	0.25	3,278	39,126
800.5	15,017	0.25	3,594	42,719
Required Capacity at Water Quality Volume = 39,738 Cu. Ft.				
Total Water Quality Volume = 42,719 Cu. Ft.				

Storage for Sediment = 3635
Total Capture Volume (required water quality volume(s) x 1.20) = 21808 cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG

Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr
Irrigation area =	NA	square feet
	NA	acres

8. Extended Detention Basin System Designed as Required in RG

Required Water Quality Volume for extended detention basin = NA cubic feet

9. Filter area for Sand Filters Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

10. Bioretention System Designed as Required in RG

Required Water Quality Volume for Bioretention Basin = NA cubic feet

11. Wet Basins Designed as Required in RG

Required capacity of Permanent Pool =	21808	cubic feet
Required capacity at WQV Elevation =	39738	cubic feet

WET BASIN

TSS REMOVED (lbs.) 5,706 lbs. = 5,706 lbs. TSS REMOVED PER DESIGN

REQUIRED TSS REMOVAL = 4,787 lbs. TSS

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TSS REMOVAL CALCULATIONS

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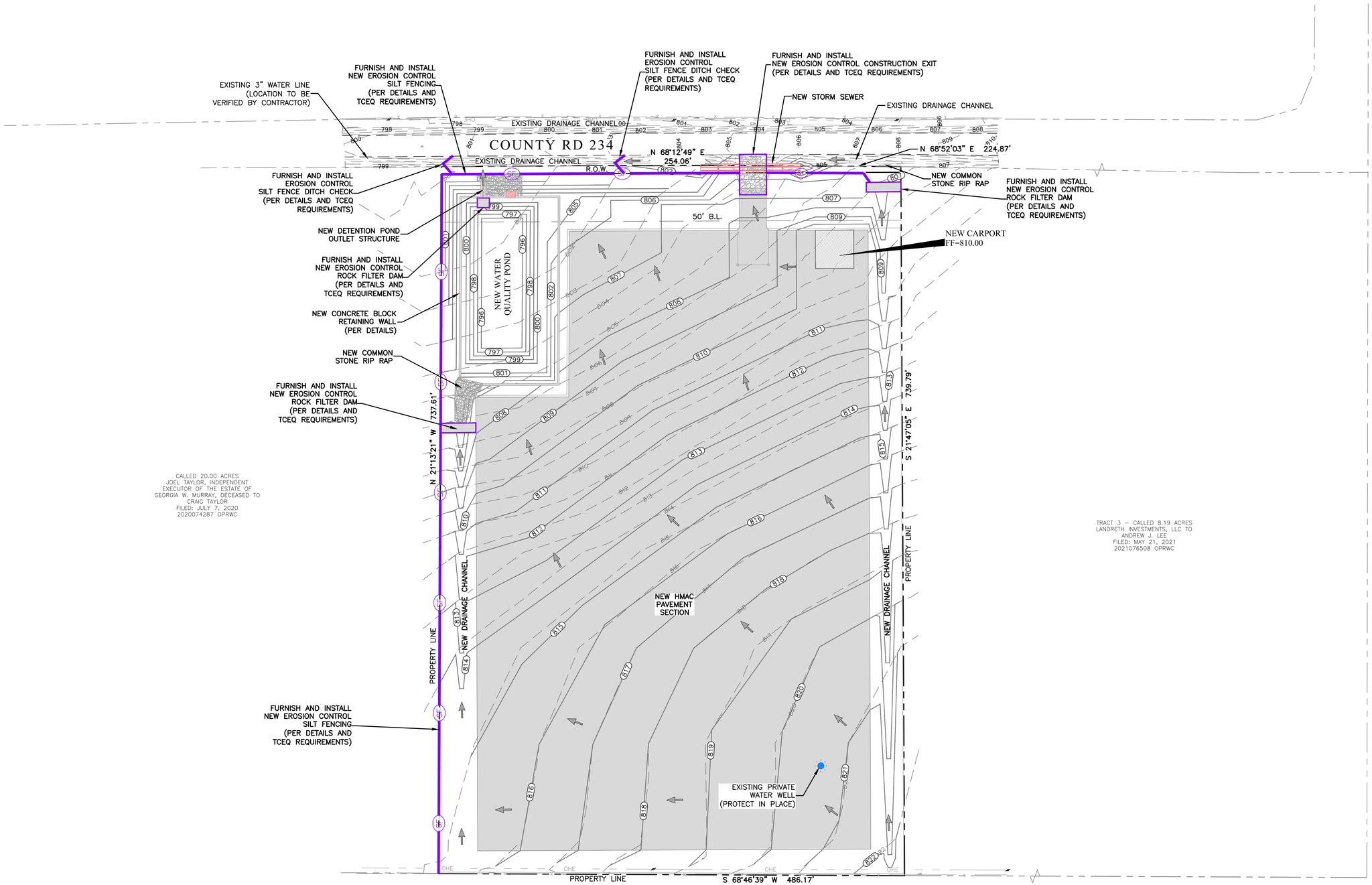

0 50 100
FEET

LEGEND

DIRECTIONAL FLOW ARROW

NEW EROSION CONTROL SILT FENCING (PER DETAILS AND TCEQ REQUIREMENTS) (SF)

EROSION CONTROL CONSTRUCTION EXIT (PER DETAILS AND TCEQ REQUIREMENTS)

EROSION CONTROL ROCK FILTER DAM (PER DETAILS AND TCEQ REQUIREMENTS)

EROSION CONTROL SILT FENCE DITCH CHECK (PER DETAILS)

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NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

SITE EROSION CONTROL PLAN

DRAWING STATUS

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7-25-2025

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C4.14

Attachment H – Temporary Sediment Pond(s) Plans and Calculations

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Temporary Sediment Pond(s) Plans and Calculations: There will be no Temporary Sediment Ponds for this project. For water quality and flow capacity calculations for the Wet Basin, refer to the Drainage Sheets of the attached Construction Plans.

Attachment I – Inspection and Maintenance for BMPs

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Inspection and Maintenance for BMPs:

Silt Fencing Inspection and Maintenance:

1. Inspect all fencing every 14 days or after 0.5 inch or greater rainfall event.
2. Remove sediment when buildup reaches 4 inches or install a second line of fencing parallel to the old fence.
3. Replace any torn fabric or install a second line of fencing parallel to the torn section.
4. Replace or repair any sections crushed or collapsed in the course of construction activities. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but not obstruct vehicles.

Rock Berm Inspection and Maintenance:

1. Inspect all berms every 14 days or after 0.5 inch or greater rainfall event.
2. Remove sediment and other debris when buildup reaches 4 inches and dispose of the accumulated silt in an approved manner.
3. Repair any loose wire sheathing.
4. The berm should be reshaped as needed during inspections.
5. The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
6. The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

Detention Pond Inspection and Maintenance:

1. Inspect pond every 14 days or after 0.5 inch or greater rainfall event.
2. Remove sediment and other debris when buildup reaches 4 inches and dispose of the accumulated silt in an approved manner.
3. Clear outlet from any sediment or debris build up.
4. The detention pond berm should be reshaped as needed during inspections.

Contractor is required to keep written documentation on the attached forms.

Stormwater Construction Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		**Location**	
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications	(Refer to Appendix B for Inspector Qualifications)		
Describe present phase of construction			

Type of Inspection:
❑ Regular ❑ Pre-storm event ❑ During storm event ❑ Post-storm event

Weather Information

Has there been a storm event since the last inspection? ❑Yes ❑No
If yes, provide:
Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):

Weather at time of this inspection?
❑ Clear ❑Cloudy ❑ Rain ❑ Sleet ❑ Fog ❑ Snowing ❑ High Winds
❑ Other: Temperature:

Have any discharges occurred since the last inspection? ❑Yes ❑No
If yes, describe:

Are there any discharges at the time of inspection? ❑Yes ❑No
If yes, describe:

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		❑Yes ❑No	❑Yes ❑No	
2		❑Yes ❑No	❑Yes ❑No	
3		❑Yes ❑No	❑Yes ❑No	
4		❑Yes ❑No	❑Yes ❑No	
5		❑Yes ❑No	❑Yes ❑No	
6		❑Yes ❑No	❑Yes ❑No	
7		❑Yes ❑No	❑Yes ❑No	
8		❑Yes ❑No	❑Yes ❑No	
9		❑Yes ❑No	❑Yes ❑No	
10		❑Yes ❑No	❑Yes ❑No	
11		❑Yes ❑No	❑Yes ❑No	
12		❑Yes ❑No	❑Yes ❑No	

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
13		❑Yes ❑No	❑Yes ❑No	
14		❑Yes ❑No	❑Yes ❑No	
15		❑Yes ❑No	❑Yes ❑No	
16		❑Yes ❑No	❑Yes ❑No	
17		❑Yes ❑No	❑Yes ❑No	
18		❑Yes ❑No	❑Yes ❑No	
19		❑Yes ❑No	❑Yes ❑No	
20		❑Yes ❑No	❑Yes ❑No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	❑Yes ❑No	❑Yes ❑No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	❑Yes ❑No	❑Yes ❑No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	❑Yes ❑No	❑Yes ❑No	
4	Are discharge points and receiving waters free of any sediment deposits?	❑Yes ❑No	❑Yes ❑No	
5	Are storm drain inlets properly protected?	❑Yes ❑No	❑Yes ❑No	
6	Is the construction exit preventing sediment from being tracked into the street?	❑Yes ❑No	❑Yes ❑No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	❑Yes ❑No	❑Yes ❑No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	❑Yes ❑No	❑Yes ❑No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	❑Yes ❑No	❑Yes ❑No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	❑Yes ❑No	❑Yes ❑No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	❑Yes ❑No	❑Yes ❑No	
12	(Other)	❑Yes ❑No	❑Yes ❑No	

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: _____

Signature:_____ **Date:**_____

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Schedule of Interim and Permanent Soil Stabilization Practices: Whenever construction has stopped, temporarily or permanently, for 14 days in any part of the site, the contractor must begin stabilizing any exposed soil in that area.

There are two exceptions to this requirement:

1. If drought prevents meeting this requirement, the contractor does not have to try to stabilize the soil. However, the contractor must begin to stabilize the soil as soon as the weather allows.
2. If excavation, grading, or any other earth-disturbing activity will resume in this area within another 7 days, a total of 21 days after construction stopped, the contactor does not have to stabilize the soil in the meantime.

Contractor shall utilize temporary vegetation to achieve temporary stabilization. Other methods are available in the TCEQ Technical Guidance manual.

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Trey Simpson

Date: 7/28/2025

Signature of Customer/Agent

Regulated Entity Name: CR 234 New Truck Parking Facility

Permanent Best Management Practices (BMPs)

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

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

   ☐ N/A

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

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

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

☐ N/A

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

   ☐ N/A

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

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

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

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

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

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

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

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

7. ☒ **Attachment C - BMPs for On-site Stormwater**.

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

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

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

☒ N/A

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

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

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

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

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

☐ N/A

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

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

    ☐ N/A

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

    ☒ N/A

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

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☐ N/A

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

    ☐ N/A

Attachment A – 20% or Less Impervious Cover Waiver

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. 20% or Less Impervious Cover Waiver: Not applicable. Impervious cover is over 20%.

Attachment B – BMPs for Upgradient Stormwater

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. BMPs for Upgradient Stormwater: The subject property receives upgradient stormwater from the adjacent property to the east. Refer to offsite area "OS1" on the attached drainage sheets. The offsite area runoff will be captured by a new drainage channel, and routed around the new wet basin.

Attachment C – BMPs for On-Site Stormwater

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. BMPs for On-Site Stormwater: A detention/retention pond has been designed to mitigate the calculated increased runoff due to the development. A Wet Basin was designed to reduce TSS pollutants per TCEQ requirements for the Recharge Zone of the Edwards Aquifer. Refer to attached Construction Plans for Detention/Retention Pond and Wet Basin Calculations and Water Quality Calculations.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Additional information is provided for cells with a red triangle in the upper right corn
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will r

1. The Required Load Reduction for the total project: Calculations from RG-348

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

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resul
A_N = Net increase in impervious a
P = Average annual precipitation

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

County =	Williamson	
Total project area included in plan * =	8.18	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	5.50	acres
Total post-development impervious cover fraction * =	0.67	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4787	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	8.18	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	5.50	acres
Post-development impervious fraction within drainage basin/outfall area =	0.67	
$L_{M\ THIS\ BASIN}$ =	4787	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Wet Basin
Removal efficiency = 93 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 = (BMP efficiency) x P x (A_I x 3

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

A_C =	8.18	acres
A_I =	5.50	acres
A_P =	2.68	acres
L_R =	5706	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 4787 lbs.

F = 0.84

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

Rainfall Depth =	1.26	inches
Post Development Runoff Coefficient =	0.48	
On-site Water Quality Volume =	17930	cubic feet

Calculations from RG-348

Off-site area draining to BMP =	2.66	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	243	cubic feet

Water Quality Volume Calculations

Elevation	Wet Pond Contour Area (Sq. Ft.)	Elevation Difference Between Contours (Ft)	Wet Pond Water Quality Volume (Cu. Ft.)	Wet Pond Cumulative Water Quality Volume (Cu. Ft.)
796	5,769	0.25	0	0
796.25	6,129	0.25	1,487	1,487
796.5	6,498	0.25	1,578	3,066
796.75	6,874	0.25	1,672	4,737
797	7,258	0.25	1,767	6,504
797.25	7,651	0.25	1,864	8,367
797.5	8,051	0.25	1,963	10,330
797.75	8,459	0.25	2,064	12,394
798	8,876	0.25	2,167	14,561
798.25	9,300	0.25	2,272	16,833
798.5	9,733	0.25	2,379	19,212
798.75	10,173	0.25	2,488	21,700
799	10,621	0.25	2,599	24,299
799.25	11,078	0.25	2,712	27,012
799.5	11,542	0.25	2,828	29,839
799.75	12,015	0.25	2,945	32,784
800	12,496	0.25	3,064	35,848
800.25	13,731	0.25	3,278	39,126
800.5	15,017	0.25	3,594	42,719
Required Capacity at Water Quality Volume = 39,738 Cu. Ft.				
Total Water Quality Volume = 42,719 Cu. Ft.				

Storage for Sediment = 3635
Total Capture Volume (required water quality volume(s) x 1.20) = 21808 cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG

Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr
Irrigation area =	NA	square feet
	NA	acres

8. Extended Detention Basin System Designed as Required in RG

Required Water Quality Volume for extended detention basin = NA cubic feet

9. Filter area for Sand Filters Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

10. Bioretention System Designed as Required in RG

Required Water Quality Volume for Bioretention Basin = NA cubic feet

11. Wet Basins Designed as Required in RG

Required capacity of Permanent Pool =	21808	cubic feet
Required capacity at WQV Elevation =	39738	cubic feet

WET BASIN

TSS REMOVED (lbs.) 5,706 lbs. = 5,706 lbs. TSS REMOVED PER DESIGN

REQUIRED TSS REMOVAL = 4,787 lbs. TSS

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CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

TSS REMOVAL CALCULATIONS

DRAWING STATUS
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER
LICENSED

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.13

Attachment D – BMPs for Surface Streams

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. BMPs for Surface Streams: Not applicable.

Attachment E – Request to Seal Features

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Request to Seal Features: Not applicable.

Attachment F – Construction Plans

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Construction Plans: Construction Plans provided. See attached

CR 234

NEW TRUCK PARKING FACILITY

3390 CR 234, GEORGETOWN, TX 78633

Williamson County, Texas

CONTACT INFORMATION

DEVELOPER: MAJOR SINGH - MALLA INVESTMENT GROUPS, LLC
18416 DRY BROOK LOOP
PFLUGERVILLE, TX 78660
(512) 820-1697

ENGINEER: CLARK ASSOCIATES, PLLC
215 N. MAIN STREET
TEMPLE, TEXAS 76501
(254) 899-0899
F-23184

SURVEYOR: KONTUR TECHNICAL, LLC
26 WOODLAND LANE
ROUND ROCK, TEXAS 78664
(512) 360-0012

PROJECT DESCRIPTION

PROJECT CONSISTS OF NEW TRUCK PARKING LOT.

A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IS REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS REQUIRED TO APPLY FOR A "NOTICE OF INTENT" (NOI) WITH TCEQ. A COPY OF THE SITE CONSTRUCTION NOTICE AND NOI MUST BE POSTED AT THE SITE AND SUBMITTED TO WILLIAMSON COUNTY.

WILLIAMSON COUNTY PERMITS:

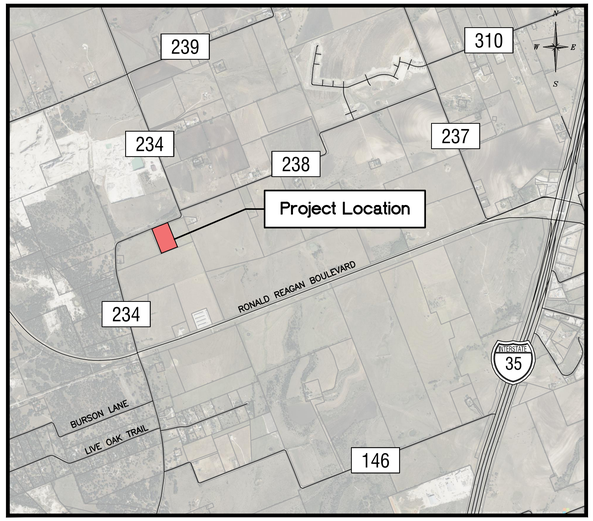
CERTIFICATE OF COMPLIANCE: #2025-798-COC

COMMERCIAL DRIVEWAY PERMIT: _____

THE CONTRACTOR SHALL OBTAIN A "NOTICE OF PROPOSED INSTALLATION OF UTILITY LINE" PERMIT FROM WILLIAMSON COUNTY FOR ANY WORK PERFORMED IN THE EXISTING COUNTY RIGHT-OF-WAY (DRIVEWAY APRON, WATER MAIN TIE-IN, ETC.) THIS PERMIT APPLICATION WILL REQUIRE A LIABILITY AGREEMENT, A CONSTRUCTION COST ESTIMATE FOR WORK WITHIN THE RIGHT-OF-WAY INCLUDING PAVEMENT REPAIR (IF NEEDED), A PERFORMANCE BOND, CONSTRUCTION PLANS AND, IF NECESSARY, A TRAFFIC CONTROL PLAN. AN INSPECTION FEE, AND A PRE-CONSTRUCTION MEETING MAY ALSO BE REQUIRED, DEPENDING ON THE SCOPE OF WORK. THE PERMIT WILL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER AND MUST ALSO BE APPROVED BY THE WILLIAMSON COUNTY COMMISSIONERS COURT IF ANY ROAD CLOSURE IS INVOLVED.

UTILITY CONTACTS

TEXAS EXCAVATION SAFETY SYSTEM	1-800-344-8377
ONCOR	1-800-368-1728
WILLIAMSON COUNTY	1-512-943-3330
JARRELL SCHWERTNER WSC	1-512-746-2114
SPECTRUM	1-833-694-9259
AT&T	1-800-252-1133
ATMOS	1-866-322-8667



LOCATION MAP
NOT TO SCALE

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SHEET INDEX

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C2.1	CIVIL SITE PLAN
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C2.3	PROJECT CONSTRUCTION NOTES SHEET 2
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C5.2	SITE GRADING/DIMENSION DETAIL SHEET 1
C5.3	SITE GRADING/DIMENSION DETAIL SHEET 2
C6.1	MISCELLANEOUS DETAILS - SHEET 1
C6.2	MISCELLANEOUS DETAILS - SHEET 2
C7.1	CITY OF ROUND ROCK STANDARD DETAILS
C8.1	TXDOT STANDARD DETAILS - SHEET 1
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PROJECT CERTIFICATIONS

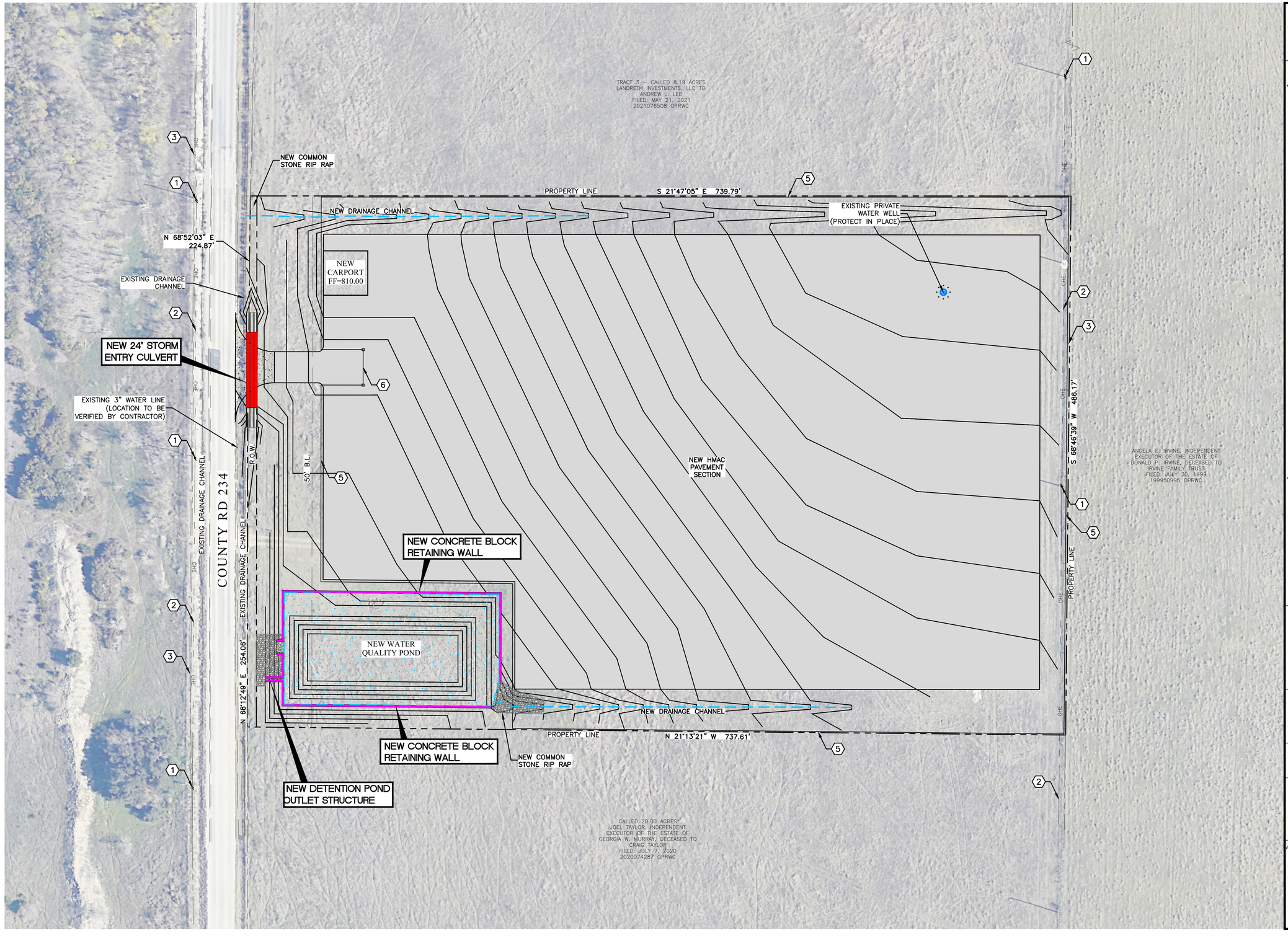
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

7-25-2025

REVIEWED FOR COMPLIANCE WITH COUNTY REQUIREMENTS

CITY OF WILLIAMSON COUNTY DATE:

F-23184



0 40 80
FEET

LEGEND

- NEW RETAINING WALL (PER PROJECT DETAILS)
- NEW HMAC PAVEMENT SECTION (PER DETAILS)
- NEW REINFORCED CONCRETE PAVEMENT SECTION (PER DETAILS)
- NEW WATER QUALITY POND
- NEW DRAINAGE CHANNEL
- NEW STORM SEWER
- EXISTING WATER WELL

KEYED NOTES

1. CAUTION!!! EXISTING POWER POLE/LIGHT POLE
2. CAUTION!!! OVERHEAD ELECTRIC
3. EXISTING FENCING
4. FURNISH AND INSTALL 1–NEW BOLLARD (PER DETAILS)
5. FURNISH AND INSTALL NEW FENCING (PER DETAILS)
6. FURNISH AND INSTALL 1–NEW FENCE GATE (PER DETAILS)

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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

CIVIL SITE PLAN

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7–25–2025

C2.1

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL MAKE AN EXAMINATION OF THE PROJECT SITE AND COMPLETELY FAMILIARIZE HIMSELF WITH THE NATURE AND EXTENT OF THE WORK TO BE ACCOMPLISHED. NO EXTRA COMPENSATION WILL BE ALLOWED FOR ANY WORK MADE NECESSARY BY UNUSUAL CONDITIONS OR OBSTACLES ENCOUNTERED DURING THE PROGRESS OF THE WORK, WHICH CONDITIONS OR OBSTACLES ARE READILY APPARENT UPON A VISIT TO THE SITE. IF THERE ARE ANY QUESTIONS IN THIS REGARD OR IF THERE ARE ANY DISCREPANCIES BETWEEN THE PLANS AND ACTUAL SITE CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO SUBMISSION OF BIDS.

2. THE CONTRACTOR SHALL CONTACT ALL LOCAL UTILITIES COMPANIES AND ANY OTHER UTILITY COMPANY THAT SERVES THE AREA AT LEAST 72 HOURS PRIOR TO CONSTRUCTION TO VERIFY LOCATIONS OF EXISTING UTILITY LINES. THE FOLLOWING ARE THE TELEPHONE NUMBERS OF THE ENTITIES MOST LIKELY TO BE AFFECTED.

TEXAS EXCAVATION SAFETY SYSTEM	1-800-344-8377
ONCOR	1-800-368-1728
WILLIAMSON COUNTY	1-512-943-3330
CITY OF JARRELL	1-512-746-4593
SPECTRUM	1-833-694-9259
AT&T	1-800-252-1133
ATMOS	1-866-322-8667

3. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, THE CONTRACTOR SHALL VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES LOCATED WITHIN THE VICINITY OF ANY WORK. IF THE EXISTING UTILITIES ARE IN ANY WAY DIFFERENT FROM WHAT IS SHOWN ON THE DRAWINGS, THEN IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO NOTIFY THE PROJECT REPRESENTATIVE AND THE PROJECT ENGINEER BEFORE PROCEEDING WITH ANY CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS TO FIX DAMAGES INCURRED TO EXISTING UTILITIES DURING CONSTRUCTION.

4. CONTRACTOR SHALL MAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING UTILITIES. IF ANY DAMAGE OCCURS, TO EXISTING UTILITIES, DAMAGE IS TO BE REPAIRED IMMEDIATELY TO AT LEAST PREEXISTING CONDITION AT NO ADDITIONAL COST.

5. THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. WHEN UNALLOCATED OR INCORRECTLY LOCATED UNDERGROUND PIPING OR A BREAK IN THE LINE OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED. CONTRACTOR TO COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICE IN OPERATION.

6. ALL EXISTING STRUCTURES, IMPROVEMENT AND UTILITIES DESIGNATED TO REMAIN SHALL BE ADEQUATELY PROTECT, AT THE EXPENSE OF THE CONTRACTOR, FROM DAMAGE THAT MIGHT OTHERWISE OCCUR DUE TO CONSTRUCTION OPERATIONS. WHERE CONSTRUCTION COMES IN CLOSE PROXIMITY TO EXISTING STRUCTURES, UTILITIES OR APPURTENANCES, OR IF IT BECOMES NECESSARY TO MOVE SERVICES, POLES, GUY WIRES, PIPE LINES OR OTHER OBSTRUCTIONS, THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNER OF THE UTILITY, STRUCTURE, OR APPURTENANCE. THE UTILITY LINES AND OTHER EXISTING STRUCTURES SHOWN ON THE PLANS ARE FOR INFORMATION ONLY AND ARE NOT GUARANTEED BY THE OWNER TO BE COMPLETE OR ACCURATE AS TO LOCATION AND/OR DEPTH. THE CONTRACTOR SHALL BE LIABLE FOR DAMAGE TO ANY UTILITIES RESULTING FROM THE CONTRACTOR'S OPERATIONS. DURING CONSTRUCTION, ALL FIRE HYDRANTS, VALVE BOXES, FIRE OR POLICE CALL BOXES AND OTHER EXISTING UTILITY CONTROLS SHALL BE LEFT INTACT, UNOBSTRUCTED AN ACCESSIBLE UNLESS NOTED ON THE PLANS.

7. ALL BARRICADES AND SIGNS SHALL CONFORM TO THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.

8. WHERE NEW CONSTRUCTION TIES TO EXISTING FACILITIES, THE PROPER SAW CUT AND CONNECTION SHALL BE MADE USING GOOD WORKMANSHIP AND PROPER TRANSITION TECHNIQUES TO BE APPROVED BY THE ENGINEER.

9. THIS PROJECT SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION NORTH CENTRAL TEXAS LATEST EDITION. THE TECHNICAL SPECIFICATIONS INCLUDED WITHIN THE PROJECT MANUAL SHALL SUPERSEDE ABOVE REFERENCED SPECIFICATIONS.

10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SUPPLY AND INSTALL ALL MATERIALS SO AS TO MEET OR EXCEED PROJECTS SPECIFICATIONS, STATE AND WILLIAMSON COUNTY, TEXAS CODES AND ORDINANCES.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PAYING AND OBTAINING PERMITS FROM THE CITY, STATE, OR OTHER REGULATORY AGENCIES TO PERFORM WORK.

12. ALL DEMOLITION AND EXCAVATED MATERIALS SHALL BE LEGALLY DISPOSED OF OFF THE SITE, UNLESS OTHERWISE INSTRUCTED BY THE OWNER, OR BY THE OWNERS REPRESENTATIVE.

13. THE CONTRACTOR SHALL CONTACT THE ENGINEER, THE CITY OF JARRELL, AND WILLIAMSON COUNTY 48 HOURS BEFORE COMMENCING CONSTRUCTION.

14. ALL CONSTRUCTION OPERATIONS TO BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). COPIES OF THE OSHA STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM OSHA, 903 SAN JACINTO, AUSTIN, TEXAS.

15. THE CONTRACTOR SHALL BE RESPONSIBLE AND LIABLE FOR ALL JOB SITE SAFETY, MANAGEMENT OF JOB SITE PERSONNEL, SUPERVISION OF THE USE OF JOB SITE EQUIPMENT AND DIRECTION OF ALL CONSTRUCTION PROCEDURES, METHODS AND ELEMENTS REQUIRED TO COMPLETE THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS.

16. CONTRACTOR TO MAINTAIN ACCESS TO PUBLIC AND PRIVATE FACILITIES DURING CONSTRUCTION. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE OWNER.

17. BLASTING IS NOT PERMITTED ON THIS PROJECT.

18. CONTRACTOR SHALL TRANSITION NEW UTILITY CONSTRUCTION, SO AS TO MINIMIZE DAMAGE TO EXISTING VEGETATION, PLANTER BEDS, UTILITIES, SIDEWALKS, AND ROADWAYS. TRANSITIONS SHALL BE APPROVED BY OWNER OR ENGINEER.

19. CONTRACTOR SHALL AVOID CUTTING AND/OR TRIMMING OF EXISTING TREES. EXISTING TREE TRIMMING SHALL BE IMPLEMENTED ONLY UNDER THE DIRECT SUPERVISION OF THE PROJECT INSPECTOR.

20. IT IS THE CONTRACTORS RESPONSIBILITY TO REESTABLISH AND RESTORE TO EXISTING CONDITIONS, EXISTING LAWNS, VEGETATION, AND LANDSCAPING DISTURBED BY CONSTRUCTION.

21. THE CONTRACTOR SHALL LOCATE AND MARK ALL EXISTING SANITARY SEWER SERVICES LOCATED WITH THE PROJECT LIMITS.

22. THE CONTRACTOR SHALL PROTECT ALL SANITARY SERVICES AND MAINTAIN SERVICE THROUGHOUT THE DURATION OF CONSTRUCTION. IN THE EVENT THAT A SERVICE IS DAMAGED DURING CONSTRUCTION THE CONTRACTOR SHALL REPAIR THE SERVICE AT NO ADDITIONAL COST TO THE OWNER.

23. THE CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL EXISTING UTILITY SERVICES PRIOR TO THE START OF CONSTRUCTION. THE OWNER SHALL NOT COMPENSATE ANY WORK PERFORMED TO REPAIR UTILITY SERVICES DAMAGED BY CONSTRUCTION.

24. ALL ADDITIONAL PIPING NEEDED TO PROVIDE/ENSURE TEMPORARY POTABLE WATER SERVICES SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.

25. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE EXCESS SPOILS AND MATERIAL DISTURBED BY CONSTRUCTION.

26. ANY EXISTING PAVEMENT, CURBS, AND/OR SIDEWALKS DAMAGED OR REMOVED BY THE CONTRACTOR THAT ARE NOT A PART OF THIS CONTRACT ARE TO BE REPAIRED BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION, AT HIS EXPENSE, BEFORE ACCEPTANCE OF THE WORK.

27. CONSTRUCTION SPOILS OR MATERIALS TO BE USED FOR PROPOSED CONSTRUCTION, SHALL NOT BE STOCKPILED OR STORED WITHIN 100 YEAR FLOOD PLAIN.

28. AT END OF WORK DAY, THE CONTRACTOR SHALL BACKFILL ALL OPEN TRENCHES TO FACILITATE NEIGHBORHOOD AND PEDESTRIAN TRAFFIC AND MINIMIZE POTENTIAL ACCIDENTS.

29. CONTRACTOR TO PROVIDE ADEQUATE TRENCH SHORING PER LATEST OSHA STANDARDS.

30. THE CONTRACTOR SHALL FURNISH AND INSTALL NEW BERMUDA GRASS VIA HYDROMULCH GRASS SEEDING AT ALL AREAS DISTURBED BY CONSTRUCTION WHICH DO NOT RECEIVE NEW PAVEMENT.

31. THE INSPECTION AND MAINTENANCE OF THE EROSION PREVENTION MEASURES SHALL BE CONTRACTOR'S RESPONSIBILITY THROUGHOUT ALL PHASES OF CONSTRUCTION. CONTRACTOR SHALL USE A SILT FENCE, OR OTHER METHOD APPROVED BY THE ENGINEER, TO CONTAIN SEDIMENT AND WASTE CONSTRUCTION MATERIAL ON-SITE. SILT FENCE SHALL BE MAINTAINED IN GOOD CONDITION FOR THE DURATION OF THE PROJECT.

32. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING STREETS ADJACENT TO THE PROJECT FREE OF MUD AND DEBRIS FROM CONSTRUCTION. THE OWNER'S REPRESENTATIVE MAY DIRECT THE CONTRACTOR TO REMOVE MUD AND DEBRIS FROM THE STREETS ASSOCIATED WITH THE PROJECT AT NO CHARGE TO THE OWNER.

WILLIAMSON COUNTY CONSTRUCTION NOTES:

GENERAL CONSTRUCTION

1. A PRECONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO THE START OF CONSTRUCTION. THE DESIGN ENGINEER, OWNER, CONTRACTOR, SUBCONTRACTORS, AND COUNTY ENGINEER SHALL ATTEND THIS MEETING. ALL ROADS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AS APPROVED BY THE COUNTY ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS FOUND IN THE CURRENT VERSION OF THE "TEXAS DEPARTMENT OF TRANSPORTATION MANUAL STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES" UNLESS OTHERWISE STATED ON THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER.

2. ALL MATERIALS SHALL BE SAMPLED AND TESTED BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER. THE OWNER SHALL PAY FOR ALL TESTING SERVICES AND SHALL FURNISH THE COUNTY ENGINEER WITH CERTIFIED COPIES OF THESE TEST RESULTS. THE COUNTY ENGINEER MUST APPROVE THE TEST RESULTS PRIOR TO CONSTRUCTING THE NEXT COURSE OF THE ROADWAY STRUCTURE. ANY MATERIAL WHICH DOES NOT MEET THE MINIMUM REQUIRED TEST SPECIFICATIONS SHALL BE REMOVED AND RECOMPACTED OR REPLACED UNLESS ALTERNATIVE REMEDIAL ACTION IS APPROVED IN WRITING FROM THE COUNTY ENGINEER.

3. EXCEPT FOR ELECTRICAL LINES, ALL UNDERGROUND NONFERROUS UTILITIES WITHIN A RIGHT-OF-WAY OR EASEMENT MUST BE ACCOMPANIED BY FERROUS METAL LINES TO AID IN TRACING THE LOCATION OF SAID UTILITIES THROUGH THE USE OF A METAL DETECTOR.

4. ALL PAVEMENTS ARE TO BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. THE DESIGN SHALL BE BASED ON A 20-YEAR DESIGN LIFE AND IN CONJUNCTION WITH RECOMMENDATIONS BASED UPON A SOILS REPORT OF SAMPLES TAKEN ALONG THE PROPOSED ROADWAYS. TEST BORINGS SHALL BE PLACED AT A MAXIMUM SPACING OF 500 FEET OR OTHER SAMPLING FREQUENCY APPROVED BY THE COUNTY ENGINEER BASED ON RECOMMENDATIONS PROVIDED BY THE GEOTECHNICAL ENGINEER. THE SOILS REPORT AND PAVEMENT DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR REVIEW. THE PAVEMENT DESIGN MUST BE APPROVED BY THE COUNTY ENGINEER PRIOR TO OR CONCURRENTLY WITH THE REVIEW AND APPROVAL OF THE CONSTRUCTION PLANS. IN ADDITION TO THE BASIS OF THE PAVEMENT DESIGN, THE SOILS REPORT SHALL CONTAIN THE RESULTS OF SAMPLED AND TESTED SUBGRADE FOR PLASTICITY INDEX, PH, SULFATE CONTENT, AND MAXIMUM DENSITY.

SUBGRADE

1. THE PREPARATION OF THE SUBGRADE SHALL FOLLOW GOOD ENGINEERING PRACTICES AS DIRECTED BY THE COUNTY ENGINEER IN CONJUNCTION WITH RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT. WHEN THE PLASTICITY INDEX (PI) IS GREATER THAN 20, A SUFFICIENT AMOUNT OF LIME SHALL BE ADDED AS DESCRIBED IN ITEM 260 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNTIL THE PI IS LESS THAN 20. IF THE ADDITION OF LIME AS DESCRIBED IN ITEM 260 IS NOT FEASIBLE, AN ALTERNATE STABILIZING DESIGN SHALL BE PROPOSED AND SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL. THE SUBGRADE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A DRY DENSITY PER TXDOT ITEM 132. IN ADDITION, PROOF ROLLING MAY BE REQUIRED BY THE COUNTY ENGINEER.

2. THE SUBGRADE SHALL BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF ALL INSPECTION REPORTS FURNISHED TO THE COUNTY ENGINEER, WHO MUST APPROVE THE REPORT PRIOR TO APPLICATION OF THE BASE MATERIAL. ALL DENSITY TEST REPORTS SHALL INCLUDE A COPY OF THE WORK SHEET SHOWING THE PERCENTAGE OF THE MAXIMUM DRY (PROCTOR) DENSITY. THE NUMBER AND LOCATION OF ALL SUBGRADE TESTS SHALL BE DETERMINED BY THE COUNTY ENGINEER.

BASE MATERIAL

1. BASE MATERIAL SHALL CONFORM TO ITEM 247 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, "FLEXIBLE BASE". THE BASE MATERIAL SHALL BE TYPE A GRADE 1, TYPE A GRADE 2, OR AS APPROVED BY THE COUNTY ENGINEER.

2. EACH LAYER OF BASE COURSE SHALL BE TESTED FOR IN-PLACE DRY DENSITY AND MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF ALL BASE TEST SAMPLES SHALL BE DETERMINED BY THE COUNTY ENGINEER.

3. THE BASE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A MINIMUM OF 100% OF THE MAXIMUM (PROCTOR) DRY DENSITY OR AS APPROVED BY THE COUNTY ENGINEER UPON RECOMMENDATION BY THE TESTING LABORATORY. THE MAXIMUM LIFT SHALL NOT EXCEED SIX INCHES. THE BASE MUST BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF THE TEST RESULTS FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL. PRIOR TO THE PLACEMENT OF THE FIRST LIFT OF BASE, THE STOCKPILE SHALL BE TESTED FOR THE SPECIFICATIONS FOUND IN ITEM 247 TABLE 1 AND THE RESULT FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL.

BITUMINOUS PAVEMENT

1. URBAN ROADS REQUIRE A MINIMUM 2 INCH WEARING SURFACE OF HMAC TYPE D. THE MIX SHALL BE FROM A TXDOT CERTIFIED PLANT. THE MIX DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL. CONTRACTOR'S QUALITY CONTROL (CQC) TEST REPORTS SHALL BE SUBMITTED TO THE COUNTY ENGINEER ON A DAILY BASIS. AS A MINIMUM, DAILY CQC TESTING ON THE PRODUCED MIX SHALL INCLUDE: SIEVE ANALYSIS TEX-200-F, ASPHALT CONTENT TEX-210-F, HVEEM STABILITY TEX-208-F, LABORATORY COMPACTED DENSITY TEX-207-F, AND MAXIMUM SPECIFIC GRAVITY TEX-227-F. THE NUMBER AND LOCATION OF ALL HMAC TESTS SHALL BE DETERMINED BY THE COUNTY ENGINEER WITH A MINIMUM OF THREE, 6-INCH DIAMETER FIELD CORES SECURED AND TESTED BY THE CONTRACTOR FROM EACH DAY'S PAVING. EACH HMAC COURSE SHALL BE TESTED FOR IN-PLACE DENSITY, BITUMINOUS CONTENT AND AGGREGATE GRADATION, AND SHALL BE MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF ALL HMAC TEST SAMPLES SHALL BE DETERMINED BY THE COUNTY ENGINEER.

2. RURAL ROADS MAY USE EITHER THE SPECIFICATIONS FOUND IN SECTION B7.1 OR A TWO-COURSE SURFACE IN ACCORDANCE WITH ITEM 316, TREATMENT WEARING SURFACE, OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE TYPE AND RATE OF ASPHALT AND AGGREGATE SHALL BE INDICATED ON THE PLANS AS A BASIS OF ESTIMATE AND SHALL BE DETERMINED AT THE PRECONSTRUCTION CONFERENCE. AGGREGATE USED IN THE MIX SHALL BE ON THE TXDOT QUALITY MONITORING SCHEDULE. AGGREGATE SHALL BE TYPE B GRADE 4. GRADATION TESTS SHALL BE REQUIRED FOR EACH 300 CUBIC YARDS OF MATERIAL PLACED WITH A MINIMUM OF TWO TESTS PER EACH GRADE PER EACH PROJECT. TEST RESULTS SHALL BE REVIEWED BY THE COUNTY ENGINEER PRIOR TO APPLICATION OF THE MATERIAL.

CONCRETE PAVEMENT

1. IN LIEU OF BITUMINOUS PAVEMENT, PORTLAND CEMENT CONCRETE PAVEMENT MAY BE USED. IN SUCH CASES, THE PAVEMENT THICKNESS SHALL BE A MINIMUM OF 9 INCHES OF CONCRETE, AND SHALL BE JOINTED AND REINFORCED IN ACCORDANCE WITH THE DETAIL INCLUDED IN APPENDIX J. THE MIX SHALL BE FROM A TXDOT CERTIFIED PLANT. THE MIX DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.

CONCRETE PAVEMENT

1. UNLESS OTHERWISE SPECIFIED, CONCRETE SHALL BE IN ACCORDANCE WITH ITEM 421 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND BE PLACED IN ACCORDANCE WITH THE APPLICABLE ITEM.

2. ALL CONCRETE SHALL BE TESTED FOR COMPRESSIVE STRENGTH. ONE SET OF THREE CONCRETE TEST CYLINDERS SHALL BE MOLDED FOR EVERY 50 CUBIC YARDS OF CONCRETE PLACED FOR EACH CLASS OF CONCRETE PER DAY, OR AT ANY OTHER INTERVAL AS DETERMINED BY THE COUNTY ENGINEER. A SLUMP TEST SHALL BE REQUIRED WITH EACH SET OF TEST CYLINDERS. ONE CYLINDER SHALL BE TESTED FOR COMPRESSIVE STRENGTH AT AN AGE OF SEVEN DAYS AND THE REMAINING TWO CYLINDERS SHALL BE TESTED AT 28 DAYS OF AGE.

GENERAL SURVEY NOTES:

1. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO RECHECK THE EXISTING TOPOGRAPHIC INFORMATION FOR THE ENTIRE PROJECT AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING OF CONSTRUCTION.

2. THE CONTRACTOR SHALL LOCATE, PROTECT AND MAINTAIN BENCHMARKS, MONUMENTS AND CONTROL POINTS. RE-ESTABLISHMENT OF DISTURBED OR DESTROYED ITEMS SHALL BE ACCOMPLISHED BY A TEXAS REGISTERED PROFESSIONAL LAND SURVEYOR AT NO COST TO THE OWNER.

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CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PROJECT CONSTRUCTION NOTES - SHEET 1

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C2.2

GENERAL GRADING AND DRAINAGE NOTES:

1. EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION SUPPLIED BY VARIOUS OWNERS OF THE FACILITIES. THE ENGINEER DOES NOT ACCEPT RESPONSIBILITY FOR THE UTILITY LOCATIONS SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION. TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGES BY THE CONTRACTOR TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

2. NEW FINISHED CONTOURS SHOWN ARE TOP OF PAVING IN AREAS TO RECEIVE PAVEMENT AND TOP OF TOPSOIL IN AREAS TO BE SEEDED.

4. ROUGH GRADING ELEVATIONS SHALL BE PER PROJECT GEOTECHICAL REPORT.

5. GRADING CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING, OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH THE ALTERATION OF OR RELOCATION OF THE FACILITIES. CONTRACTOR SHALL RAISE OR LOWER TOPS OF EXISTING MANHOLES AS REQUIRED TO MATCH FINISHED GRADES IN CONFORMANCE WITH CITY STANDARDS.

6. GRADING CONTRACTOR SHALL COOPERATE AND WORK WITH ALL OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER AND TIMELY COMPLETION OF THIS PROJECT.

7. FOR THE WORK ON THE STATE OR CITY RIGHT–OF–WAY, THE GRADING CONTRACTOR SHALL:

   A. NOT STORE MATERIAL, EXCESS DIRT OR EQUIPMENT ON THE SHOULDERS OF PAVEMENT, IN CASE OF MULTI LANE HIGHWAYS, IN THE MEDIAN STRIPS. THE PAVEMENT SHALL BE KEPT FREE FROM ANY MUD OR EXCAVATION WASTE FROM TRUCKS OR OTHER EQUIPMENT. ON COMPLETION OF THE WORK, ALL EXCESS MATERIAL SHALL BE REMOVED FROM THE RIGHT OF WAY.

   B. SHALL PROVIDE ALL NECESSARY AND ADEQUATE SAFETY PRECAUTIONS SUCH AS SIGNS, FLAGS, LIGHTS, BARRICADES AND FLAGMEN AS REQUIRED BY THE LOCAL AUTHORITIES AND IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE GRADING CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND HOLD HARMLESS THE TEXAS DEPARTMENT OF TRANSPORTATION, THE CITY, AND THE OWNER FROM ANY CLAIMS FOR DAMAGE DONE TO EXISTING PRIVATE PROPERTY, PUBLIC UTILITIES OR TO THE TRAVELING PUBLIC.

   C. SHALL COMPLETE THE WORK TO THE SATISFACTION OF THE CITY PUBLIC WORKS DEPARTMENT.

8. GRADING CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR SHALL CONTROL DUST BY SPRINKLING, BY APPLYING CALCIUM CHLORIDE OR BY OTHER METHODS AS DIRECTED BY ENGINEER AND/OR OWNERS REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.

9. REFER TO PAVING DETAILS FOR TYPE OF PAVING AND BASE TO BE USED.

10. GRADING CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY EXISTING STRUCTURES, FENCES, DEBRIS, OR TREES REMAINING IN THE SITE, UNLESS NOTED OTHERWISE ON PLANS AND SHALL COORDINATE WITH GENERAL CONTRACTOR.

11. GRADING CONTRACTOR TO COMPLY WITH ALL STATE, COUNTY, AND LOCAL SEDIMENT CONTROL AND AIR POLLUTION CONTROL.

12. A QUALIFIED SOILS LABORATORY SHALL DETERMINE THE SUITABILITY OF THE EXISTING SUBGRADE AND EXISTING ON–SITE MATERIAL PRIOR TO BEGINNING ANY FILLING OPERATIONS.

13. UNSUITABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF–SITE BY GRADING CONTRACTOR.

14. ALL AREAS NOT COVERED BY THE BUILDING, PAVING OR PLANNED LANDSCAPING, SHALL BE GRASSED.

15. TEMPORARY EROSION CONTROL DEVICES TO BE INSTALLED PRIOR TO BEGINNING OF GRADING. CONTRACTOR SHALL MAINTAIN ALL TEMPORARY EROSION CONTROL DEVICES AND SHALL REMOVE SILT FROM BERM DITCHES SILT DAMS AND SILT FENCES AS NEEDED.

16. ALL DISTURBED AREAS SHALL BE HYDROMULCHED SEEDED UNLESS OTHERWISE NOTED.

17. THE CONTRACTOR SHALL PREVENT SOIL STABILIZATION TREATMENT FROM LEAVING THE SITE BY WAY OF STORM WATER RUNOFF WHICH MAY DAMAGE DOWNSTREAM WATER COURSES, LAKES OR PONDS. ANY DAMAGE TO WILDLIFE OR FISH KILLS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS EXPENSE.

18. ALL SITE GRADING AND EARTHWORK CONSTRUCTION SHALL COMPLY TO THE GEOTECHNICAL REPORT RECOMMENDATIONS.

19. WHEN THE PLASTICITY INDEX (PI) OF THE SUBGRADE IS GREATER THAN 20, A SUFFICIENT AMOUNT OF LIME SHALL BE ADDED AS DESCRIBED IN ITEM 260 (TXDOT SPECS) UNTIL THE PI IS LESS THAN 20. IF THE ADDITION OF LIME IS NOT CONSIDERED FEASIBLE, AN ALTERNATE STABILIZING METHOD MAY BE PROPOSED AND SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL.

GENERAL PAVING NOTES:

1. ALL CONCRETE FOR PAVEMENT SHALL BE TXDOT CLASS P AND HAVE A MINIMUM 3500 PSI COMPRESSIVE STRENGTH AT 28 DAYS WITH 4 TO 6 PERCENT AIR ENTRAINMENT AND SHALL CONFORM TO THE 2004 TXDOT STANDARD SPECIFICATIONS, ITEM 421 FOR CONSTRUCTION AND MAINTENANCE OF HIGHWAY, STREETS, AND BRIDGES. SLIP FORMED CONCRETE SHALL HAVE A MAXIMUM SLUMP OF THREE INCHES. HAND–PLACED CONCRETE SHALL HAVE A MAXIMUM SIX AND A HALF–INCH SLUMP.

2. THE JOINT SHALL CONFORM TO THE LOCATIONS AND DETAILS SHOWN ON THESE PLANS. SPECIFIED SAWED CONTRACTION OR CONSTRUCTION JOINT LOCATIONS ARE NOT SHOWN. JOINTS AND REINFORCEMENT SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS, ACI REPORT 330, LATEST EDITION. THE CONTRACTOR SHALL SUBMIT A LAYOUT INDICATING THE SAWED JOINT LOCATIONS TO BE REVIEWED AND APPROVED BY THE ENGINEER. ISOLATIONS JOINTS SHALL BE PROVIDED AT ALL MANHOLE RIMS, LIGHT STANDARDS AND OTHER SIMILAR INSTALLATIONS.

3. ALL REINFORCING SHALL BE FABRICATED, INSTALLED AND SUPPORTED IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE" OF THE CONCRETE REINFORCING STEEL INSTITUTE. ALL REINFORCEMENT BARS SHALL CONFORM TO ASTM SPECIFICATION DESIGNATION A615, GRADE 60. SUPPORT FOR REINFORCING SHALL BE PROVIDED BY PROTECTED METAL SPACERS, CHAIRS, BOLSTERS AND/OR TIES.

4. DO NOT PLACE SAND OR SELECT FILL BENEATH CONCRETE PAVEMENT, SIDEWALKS, DRIVE APPROACHES OR HANDICAP RAMPS FOR LEVEL UP COURSE. UTILIZE COMPACTED NATIVE MATERIALS.

5. BACKFILL ALL CURBS TO EDGE OF SUBGRADE WITH ON–SITE CLAY SOILS. COMPACT TO 95% TO 100% OF STANDARD PROCTOR DENSITY AT OR ABOVE OPTIMUM MOISTURE CONTENT.

6. CONTRACTOR SHALL SAW–CUT TIE–INS AT EXISTING CURBS AS NECESSARY TO INSURE SMOOTH TRANSITIONS. CONTRACTOR SHALL SAW–CUT AND TRANSITION TO MEET EXISTING PAVEMENT AS NECESSARY TO INSURE POSITIVE DRAINAGE. (TYP. ALL INTERSECTIONS)

7. ALL EXPANSION, CONTRACTION AND CONSTRUCTION JOINTS IN PAVED AREAS SHALL BE SEALED IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE JOINT SEALING MANUFACTURES RECOMMENDATIONS.

8. CLEAN ALL JOINTS PRIOR TO PLACEMENT OF JOINT SEALING MATERIAL IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS,

9. PROVIDE BACKER RODS FOR JOINTS WITHOUT PRE–MOLDED JOINT MATERIALS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

10. EXPANSION AND ISOLATIONS JOINT MATERIAL TO BE PRE–MOLDED EXPANSION JOINT MATERIAL AS RECOMMENDED BY JOINT SEALING MANUFACTURER WITH JOINT CAP TO PROTECT SEALANT RESERVOIR.

11. TYPICALLY, JOINT SEALING MATERIAL IS PLACED BELOW SURFACE OF CONCRETE TO NEAL FULL LEVEL. CERTAIN PRODUCTS SUCH AS SOFT SEAL ARE RECOMMENDED TO BE PLACED TO FULL LEVEL. REFER TO MANUFACTURERS RECOMMENDATIONS.

12. THE CONTRACTOR SHALL CONSTRUCT ALL DRIVEWAY APPROACHES IN CONFORMANCE WITH APPLICABLE CITY STANDARD ORDINANCES AND REQUIREMENTS. CONTRACTOR SHALL CONFIRM APPLICABLE DRIVEWAY OR ACCESS PERMITS HAVE BEEN OBTAINED PRIOR TO CONSTRUCTION.

13. NEW PAVEMENT SECTIONS, REINFORCEMENT, MATERIALS, ADMIXTURES, JOINTS, ETC. SHALL BE CONSTRUCTED PER THE PROJECT GEOTECHNICAL REPORT. IF ANY DISCREPANCIES OCCUR BETWEEN THESE PLANS AND THE GEOTECHNICAL REPORT, THE GEOTECHNICAL REPORT SHALL GOVERN.

14. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

TRAFFIC CONTROL NOTES:

1. ALL TRAFFIC CONTROL DEVICES, BARRICADES, SIGNAGE, ETC., SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION. THE SIGNS SHOWN UPON THIS PLAN ARE NOT ALL INCLUSIVE AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ADEQUATE SIGNAGE AND SITE SECURITY.

2. FLAGGERS SHALL USE RADIOS OR OTHER SUITABLE MEANS OF COMMUNICATIONS WITH OTHER FLAGGERS.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND MAINTAINING TRASH PICKUP AND MAIL DELIVERY WITH OWNERS REPRESENTATIVE.

4. ALL CONSTRUCTION ACTIVITIES AND ROAD CLOSURES SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND ALSO WITH LOCAL POLICE AND FIRE CHIEF. THE CONTRACTOR SHALL NOTIFY THE PROJECT INSPECTOR 72 HOURS PRIOR TO CLOSING OF ROADS OR ALLEYS.

5. MATERIALS STORED ABOUT THE WORK SITE SHALL BE SO PLACED, AND THE WORK SHALL AT ALL TIMES BE SO CONDUCTED, AS TO CAUSE NO GREATER OBSTRUCTION TO THE TRAVELING PUBLIC THAN IS CONSIDERED NECESSARY BY THE OWNER.

6. THE CONTRACTOR SHALL MAKE PROVISIONS BY BRIDGES OR OTHERWISE AT ALL CROSS STREETS, HIGHWAYS, SIDEWALKS AND PRIVATE DRIVEWAYS FOR THE FREE PASSAGE OF PEDESTRIANS AND VEHICLES PROVIDED THAT WHERE BRIDGING IS IMPRACTICABLE OR UNNECESSARY, IN THE OPINION OF THE OWNER, THE CONTRACTOR MAY MAKE ARRANGEMENTS SATISFACTORY TO THE OWNER FOR THE DIVERSION OF TRAFFIC AND SHALL, AT ITS OWN EXPENSE, PROVIDE ALL MATERIAL AND PERFORM ALL WORK NECESSARY FOR THE CONSTRUCTION MAINTENANCE OF ROADWAYS AND BRIDGES FOR THE DIVERSION OF TRAFFIC.

7. SIDEWALKS MUST NOT BE OBSTRUCTED EXCEPT BY SPECIAL PERMISSION OF THE OWNER.

8. THE MATERIALS EXCAVATED, AND THE CONSTRUCTION MATERIALS OR PLANT USED IN THE CONSTRUCTION OF THE WORK, SHALL BE PLACED SO AS NOT TO ENDANGER THE WORK OR PREVENT FREE ACCESS TO ALL FIRE HYDRANTS, WATER VALVES, GAS VALVES, MANHOLES FOR THE TELEPHONE, TELEGRAPH SIGNAL OR ELECTRIC CONDUITS, SANITARY SEWERS AND FIRE ALARM OR POLICE CALL BOXES IN THE VICINITY.

9. DURING PERFORMANCE AND UP TO DATE OF FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE UNDER THE ABSOLUTE OBLIGATION TO PROTECT THE FINISHED WORK AGAINST ANY DAMAGE, LOSS OR INJURY. IN THE EVENT OF SUCH DAMAGE, LOSS OR INJURY, THE CONTRACTOR SHALL PROMPTLY REPLACE OR REPAIR SUCH WORK, WHICHEVER THE OWNER SHALL DETERMINE TO BE PREFERABLE.

10. ALL RISK OF LOSS OR DAMAGE TO THE WORK SHALL BE BORNE SOLELY BY THE CONTRACTOR UNTIL FINAL COMPLETION AND ACCEPTANCE OF ALL WORK BY THE OWNER, AS EVIDENCE BY THE OWNER'S ISSUANCE OF A CERTIFICATE OF ACCEPTANCE.

11. THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE AND MAINTAIN ALL WARNING DEVICES AND TAKE ALL PRECAUTIONARY MEASURES REQUIRED BY LAW OR OTHERWISE TO PROTECT PERSONS AND PROPERTY WHILE SAID PERSONS OR PROPERTY ARE APPROACHING, LEAVING OR WITHIN THE WORK SITE OR ANY AREA ADJACENT TO SAID WORK SITE.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OR MAINTENANCE OF ANY WARNING DEVICES, BARRICADES, LIGHTS, SIGNS OR ANY OTHER PRECAUTIONARY MEASURES REQUIRED BY LAW OR OTHERWISE FOR THE PROTECTION OF PERSONS OR PROPERTY.

13. WHERE THE WORK IS CARRIED ON, IN OR ADJACENT TO ANY STREET, ALLEY, SIDEWALK, PUBLIC RIGHT–OF–WAY OR PUBLIC PLACE, THE CONTRACTOR SHALL AT ITS OWN COST AND EXPENSE PROVIDE SUCH FLAGMEN AND WATCHMEN IN ADDITION TO ITS RESPONSIBILITY TO FURNISH, ERECT AND MAINTAIN SUCH WARNING DEVICES, BARRICADES, LIGHTS, SIGNS, AND OTHER PRECAUTIONARY MEASURES FOR THE PROTECTION OF PERSONS OR PROPERTY AS ARE REQUIRED BY LAW.

14. THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING AND MAINTAINING FLAGMEN, WATCHMEN, WARNING DEVICES, BARRICADES, SIGNS, AND LIGHTS, AND OTHER PRECAUTIONARY MEASURES SHALL NOT CEASE UNTIL DIRECTED IN WRITING BY THE OWNER OR UNTIL FINAL PAYMENT, WHICHEVER OCCURS FIRS. IF THE OWNER DISCOVERS THAT THE CONTRACTOR HAS FAILED TO COMPLY WITH THE APPLICABLE FEDERAL AND STATE LAW BY FAILING TO FURNISH THE NECESSARY FLAGMEN, WARNING DEVICES, BARRICADES, SIGNS, AND LIGHTS, OR OTHER PRECAUTIONARY MEASURES FOR THE PROTECTION OF PERSONS OR PROPERTY, THE OWNER MAY ORDER SUCH ADDITIONAL PRECAUTIONARY MEASURES AS REQUIRED BY LAW TO BE TAKEN TO PROTECT PERSONS AND PROPERTY.

15. THE CONTRACTOR SHALL REIMBURSE THE OWNER FOR ANY EXPENSE INCURRED BY THE OWNER IN TAKING ANY ADDITIONAL PRECAUTIONARY MEASURES AS A RESULT OF THE CONTRACTOR'S FAILURE TO DO SO.

16. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE WORK AND OTHER PUBLIC OR PRIVATE PROPERTY DUE TO THE FAILURE OF WARNING DEVICES, BARRICADES, SIGNS, LIGHTS, OR OTHER PRECAUTIONARY MEASURES IN PROTECT SAID PROPERTY, AND WHENEVER EVIDENCE IS FOUND OF SUCH DAMAGE, THE ENGINEER MAY ORDER THE DAMAGED PORTION IMMEDIATELY REMOVE AND REPLACE BY AND AT THE COST AND EXPENSE OF THE CONTRACTOR.

17. MINIMUM STANDARDS FOR SAFEGUARDING PEDESTRIAN AND VEHICULAR TRAFFIC ARE CONTAINED IN THE CURRENT TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, AS AMENDED, TEXAS DEPARTMENT OF TRANSPORTATION.

18. SIGNAGE, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES FOR DETOURING AND MAINTENANCE OF TRAFFIC SHALL BE AS PROVIDED IN ABOVE SAID MANUAL AND AS DIRECTED BY THE ENGINEER.

19. COSTS ASSOCIATED WITH THE ACQUISITION AND REMOVAL OF REQUIRED TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK.

20. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE DELIVERY ROUTES AND PROJECT GATES AND ACCESS POINTS WITH OWNER'S REPRESENTATIVE.

SWPPP NOTES:

1. A STORM WATER POLLUTION PLAN IS REQUIRED FOR THIS PROJECT. THE CONTRACTOR SHALL PROVIDE AN STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AS REQUIRED BY TCEQ AND THE CITY OF JARRELL. THE EROSION CONTROL PLAN PROVIDED IN THE PLAN SET SHALL BE CONSIDERED THE MINIMUM EROSION CONTROL MEASURES FOR THE PROJECT.

2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY "TO DEVELOP AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN IN ACCORDANCE WITH TCEQ GENERAL PERMIT TXR150000 PRIOR TO THE BEGINNING OF CONSTRUCTION ACTIVITY", AS DESCRIBED IN SECTION 1.10: STORM WATER POLLUTION PREVENTION IN THE CITY OF TEMPLE'S STANDARD SPECIFICATIONS FOR CONSTRUCTION. IF NEEDED, THE CONTRACTOR IS RESPONSIBLE FOR MONITORING THE PLAN AS THE WORK PROGRESSES AND SUBMITTING MODIFICATIONS FOR REVIEW AS NEEDED. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ENSURING THE INSPECTOR IS PROVIDED A COPY OF THE APPROVED AND SIGNED PLAN PRIOR TO BEGINNING WORK.

3. SILT FENCING AND EROSION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL THE SITE HAS BEEN COMPLETELY STABILIZED.

4. CONTRACTOR SHALL PROVIDE NEW SILT FENCING, PER TCEQ AND EPA SPECIFICATIONS AND PROJECT DETAILS, AT ALL SIDE SLOPE AND DOWN SLOPE BOUNDARIES.

5. THE CONTRACTOR SHALL RESEED, VIA HYDROMULCH GRASS SEEDING, ALL AREAS DISTURBED BY CONSTRUCTION WHICH ARE NOT TO BE LANDSCAPED OR PAVED.

SUBMITTALS:

1. THE CONTRACTOR SHALL PROVIDE MATERIAL SUBMITTALS FOR OWNERS AND ENGINEERS REVIEW. ELECTRONIC FILES (PDF) ARE ACCEPTABLE.

2. THE CONTRACTOR SHALL PROVIDE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR OWNERS AND ENGINEERS REVIEW. ELECTRONIC FILES (PDF) ARE ACCEPTABLE.

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CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PROJECT CONSTRUCTION NOTES - SHEET 2

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F–23184.

7–25–2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7–25–2025

C2.3

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BARRICADE AND CONSTRUCTION (BC) STANDARD SHEETS GENERAL NOTES:

1. The Barricade and Construction Standard Sheets (BC sheets) are intended to show typical examples for placement of temporary traffic control devices, construction pavement markings, and typical work zone signs. The information contained in these sheets meet or exceed the requirements shown in the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD).
2. The development and design of the Traffic Control Plan (TCP)is the responsibility of the Engineer.
3. The Contractor may propose changes to the TCP that are signed and sealed by a licensed professional engineer for approval. The Engineer may develop, sign and seal Contractor proposed changes.
4. The Contractor is responsible for installing and maintaining the traffic control devices as shown in the plans. The Contractor may not move or change the approximate location of any device without the approval of the Engineer.
5. Geometric design of lane shifts and detours should, when possible, meet the applicable design criteria contained in manuals such as the American Association of State Highway and Transportation Officials (AASHTO), "A Policy on Geometric Design of Highways and Streets," the TxDOT "Roadway Design Manual" or engineering judgment.
6. When projects abut, the Engineer(s) may omit the END ROAD WORK, TRAFFIC FINES DOUBLE, and other advance warning signs if the signing would be redundant and the work areas appear continuous to the motorists. If the adjacent project is completed first, the Contractor shall erect the necessary warning signs as shown on these sheets, the TCP sheets or as directed by the Engineer. The BEGIN ROAD WORK NEXT X MILES sign shall be revised to show appropriate work zone distance.
7. The Engineer may require duplicate warning signs on the median side of divided highways where median width will permit and traffic volumes justify the signing.
8. All signs shall be constructed in accordance with the details found in the "Standard Highway Sign Designs for Texas," latest edition. Sign details not shown in this manual shall be shown in the plans or the Engineer shall provide a detail to the Contractor before the sign is manufactured.
9. The temporary traffic control devices shown in the illustrations of the BC sheets are examples. As necessary, the Engineer will determine the most appropriate traffic control devices to be used.
10. Where highway construction or maintenance work is being undertaken, other than mobile operations as defined by the Texas Manual on Uniform Traffic Control Devices, CSJ limit signs are required. CSJ limit signs are shown on BC(2). The OBEY WARNING SIGNS STATE LAW sign, STAY ALERT TALK OR TEXT LATER and the WORK ZONE TRAFFIC FINES DOUBLE sign with plaque shall be erected in advance of the CSJ limits. The BEGIN ROAD WORK NEXT X MILES, CONTRACTOR and END ROAD WORK signs shall be erected at or near the CSJ limits. For mobile operations, CSJ limit signs are not required.
11. Traffic control devices should be in place only while work is actually in progress or a definite need exists.
12. The Engineer has the final decision on the location of all traffic control devices.
13. Inactive equipment and work vehicles, including workers' private vehicles must be parked away from travel lanes. They should be as close to the right-of-way line as possible, or located behind a barrier or guardrail, or as approved by the Engineer.

WORKER SAFETY NOTES:

1. Workers on foot who are exposed to traffic or to construction equipment within the right-of-way shall wear high-visibility safety apparel meeting the requirements of ISEA "American National Standard for High-Visibility Apparel," or equivalent revisions, and labeled as ANSI 107-2004 standard performance for Class 2 or 3 risk exposure. Class 3 garments should be considered for high traffic volume work areas or night time work.
2. Except in emergency situations, flagger stations shall be illuminated when flagging is used at night.

COMPLIANT WORKZONE TRAFFIC CONTROL DEVICES

1. Only pre-qualified products shall be used. The "Compliant Work Zone Traffic Control Devices List" (CWZTCD) describes pre-qualified products and their sources.
2. Work zone traffic control devices shall be compliant with the Manual for Assessing safety Hardware (MASH).

THE DOCUMENTS BELOW CAN BE FOUND ON-LINE AT http://www.txdot.gov
COMPLIANT WORK ZONE TRAFFIC CONTROL DEVICES LIST (CWZTCD)
DEPARTMENTAL MATERIAL SPECIFICATIONS (DMS)
MATERIAL PRODUCER LIST (MPL)
ROADWAY DESIGN MANUAL - SEE "MANUALS (ONLINE MANUALS)"
STANDARD HIGHWAY SIGN DESIGNS FOR TEXAS (SHSD)
TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD)
TRAFFIC ENGINEERING STANDARD SHEETS

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION GENERAL NOTES AND REQUIREMENTS

BC(1)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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4-03 7-13	DIST	COUNTY		SHEET NO.
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CR 234
NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

TXDOT TRAFFIC CONTROL DETAILS - SHEET 1

DRAWING STATUS
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C3.1

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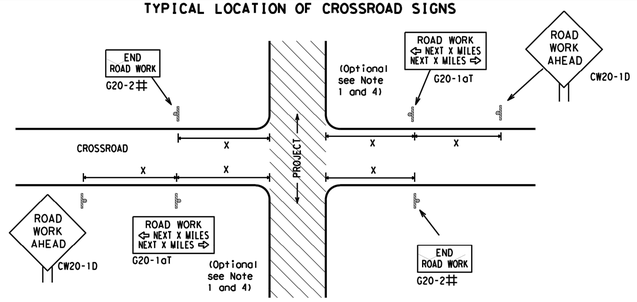
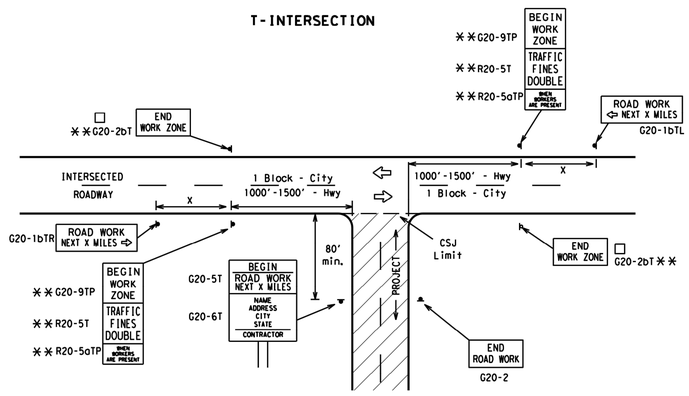
TYPICAL LOCATION OF CROSSROAD SIGNS



May be mounted on back of "ROAD WORK AHEAD"(CW20-1D) sign with approval of Engineer. (See note 2 below)

1. The typical minimum signing on a crossroad approach should be a "ROAD WORK AHEAD" (CW20-1D)sign and a (G20-2) "END ROAD WORK" sign, unless noted otherwise in plans.
2. The Engineer may use the reduced size 36" x 36" ROAD WORK AHEAD (CW20-1D) sign mounted back to back with the reduced size 36" x 18" "END ROAD WORK"(G20-2) sign on low volume crossroads (see Note 4 under "Typical Construction Warning Sign Size and Spacing"). See the "Standard Highway Sign Designs for Texas" manual for sign details. The Engineer may omit the advance warning signs on low volume crossroads. The Engineer will determine whether a road is low volume as per TMUTCD Part 5. This information shall be shown in the plans.
3. Based on existing field conditions, the Engineer/Inspector may require additional signs such as FLAGGER AHEAD, LOOSE GRAVEL, or other appropriate signs. When additional signs are required, these signs will be considered part of the minimum requirements. The Engineer/Inspector will determine the proper location and spacing of any sign not shown on the BC sheets, Traffic Control Plan sheets or the Work Zone Standard Sheets.
4. The "ROAD WORK NEXT X MILES"(G20-1aT)sign shall be required at high volume crossroads to advise motorists of the length of construction in either direction from the intersection. The Engineer will determine whether a roadway is considered high volume.
5. Additional traffic control devices may be shown elsewhere in the plans for higher volume crossroads.
6. When work occurs in the intersection area, appropriate traffic control devices, as shown elsewhere in the plans or as determined by the Engineer/Inspector, shall be in place.

T-INTERSECTION



CSJ LIMITS AT T-INTERSECTION

1. The Engineer will determine the types and location of any additional traffic control devices, such as a flagger and accompanying signs, or other signs, that should be used when work is being performed at or near an intersection.
2. If construction closes the road at a T-intersection, the Contractor shall place the "CONTRACTOR NAME"(G20-6T) sign behind the Type 3 Barricades for the road closure (see BC(10) also). The "ROAD WORK NEXT X MILES" left arrow(G20-1bTL) and "ROAD WORK NEXT X MILES" right arrow (G20-1bTR)" signs shall be replaced by the detour signing called for in the plans.

TYPICAL CONSTRUCTION WARNING SIGN SIZE AND SPACING[1,5,6]

SIZE

Sign Number or Series	Conventional Road	Expressway/ Freeway
CW20[4] CW21 CW22 CW23 CW25	48" x 48"	48" x 48"
CW1, CW2, CW7, CW8, CW9, CW11, CW14	36" x 36"	48" x 48"
CW3, CW4, CW5, CW6, CW8-3, CW10, CW12	48" x 48"	48" x 48"

SPACING

Posted Speed	Sign △ Spacing "X"
MPH	Feet (Apprx.)
30	120
35	160
40	240
45	320
50	400
55	500[2]
60	600[2]
65	700[2]
70	800[2]
75	900[2]
80	1000[2]
✻	✻[3]

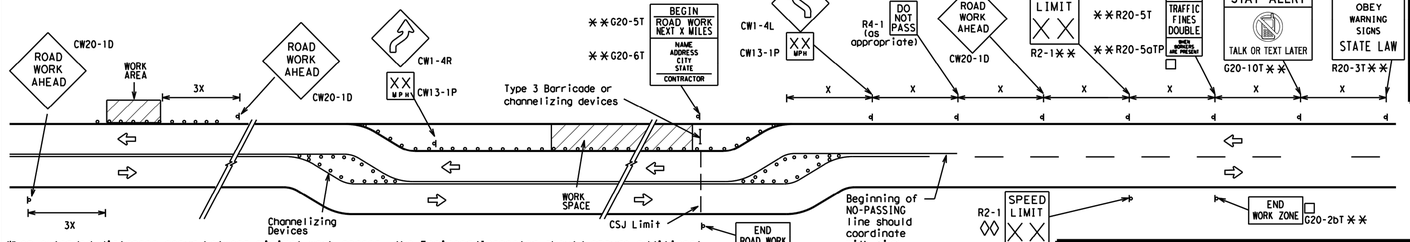
✻ For typical sign spacings on divided highways, expressways and freeways, see Part 6 of the "Texas Manual on Uniform Traffic Control Devices" (TMUTCD) typical application diagrams or TCP Standard Sheets.

△ Minimum distance from work area to first Advance Warning sign nearest the work area and/or distance between each additional sign.

GENERAL NOTES

1. Special or larger size signs may be used as necessary.
2. Distance between signs should be increased as required to have 1500 feet advance warning.
3. Distance between signs should be increased as required to have 1/2 mile or more advance warning.
4. 36" x 36" "ROAD WORK AHEAD" (CW20-1D)signs may be used on low volume crossroads at the discretion of the Engineer as per TMUTCD Part 5. See Note 2 under "Typical Location of Crossroad Signs".
5. Only diamond shaped warning sign sizes are indicated.
6. See sign size listing in "TMUTCD", Sign Appendix or the "Standard Highway Sign Designs for Texas" manual for complete list of available sign design sizes.

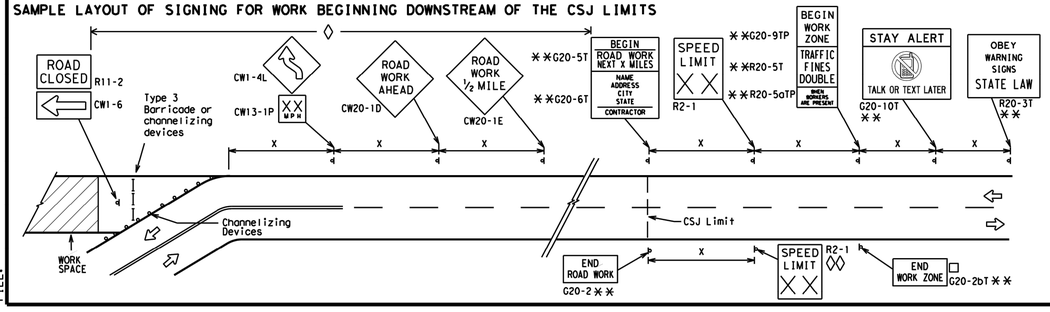
WORK AREAS IN MULTIPLE LOCATIONS WITHIN CSJ LIMITS



When extended distances occur between minimal work spaces, the Engineer/Inspector should ensure additional "ROAD WORK AHEAD"(CW20-1D)signs are placed in advance of these work areas to remind drivers they are still within the project limits. See the applicable TCP sheets for exact location and spacing of signs and channelizing devices.

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING AT THE CSJ LIMITS

SAMPLE LAYOUT OF SIGNING FOR WORK BEGINNING DOWNSTREAM OF THE CSJ LIMITS



NOTES

The Contractor shall determine the appropriate distance to be placed on the G20-1 series signs and "BEGIN ROAD WORK NEXT X MILES"(G20-5T)sign for each specific project. This distance shall replace the "X" and shall be rounded to the nearest whole mile with the approval of the Engineer. No decimals shall be used.

□ The "BEGIN WORK ZONE"(G20-9TP) and "END WORK ZONE" (G20-2bT) shall be used as shown on the sample layout when advance signs are required outside the CSJ Limits. They inform the motorist of entering or leaving a part of the work zone lying outside the CSJ Limits where traffic fines may double if workers are present.

✻✻ CSJ limit signing is required for highway construction and maintenance work, with the exception of mobile operations.

◊ Area for placement of "ROAD WORK AHEAD" (CW20-1D)sign and other signs or devices as called for on the Traffic Control Plan.

◊◊ Contractor will install a regulatory speed limit sign at the end of the work zone.

LEGEND

⊢⊣	Type 3 Barricade
○ ○ ○	Channelizing Devices
▬	Sign
X	See Typical Construction Warning Sign Size and Spacing chart or the TMUTCD for sign spacing requirements.

SHEET 2 OF 12

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION PROJECT LIMIT

BC(2)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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WILLIAMSON COUNTY, TEXAS

TXDOT TRAFFIC CONTROL DETAILS - SHEET 2

DRAWING STATUS
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7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

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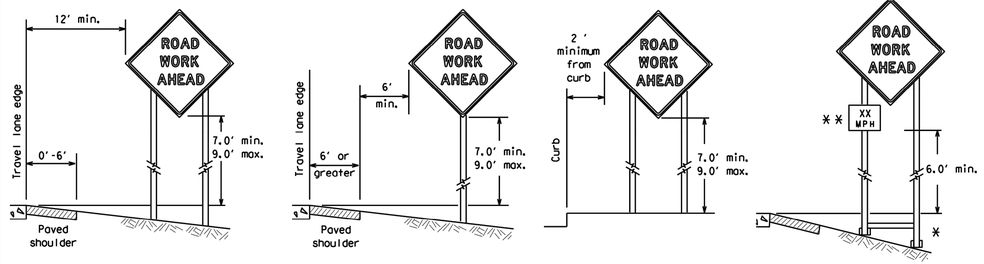
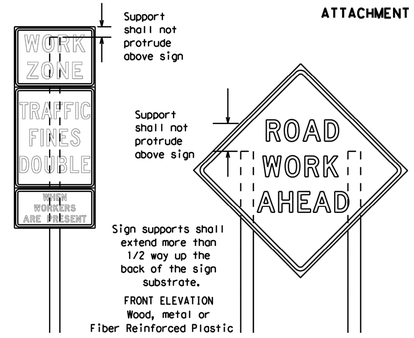
TYPICAL MINIMUM CLEARANCES FOR LONG TERM AND INTERMEDIATE TERM SIGNS



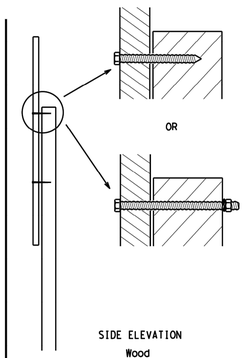
* When placing skid supports on unlevel ground, the leg post lengths must be adjusted so the sign appears straight and plumb. Objects shall NOT be placed under skids as a means of leveling.

** When plaques are placed on dual-leg supports, they should be attached to the upright nearest the travel lane. Supplemental plaques (advisory or distance) should not cover the surface of the parent sign.

ATTACHMENT FOR SIGN SUPPORTS



Splicing embedded perforated square metal tubing in order to extend post height will only be allowed when the splice is made using four bolts, two above and two below the spice point. Splice must be located entirely behind the sign substrate, not near the base of the support. Splice insert lengths should be at least 5 times nominal post size, centered on the splice and of at least the same gauge material.

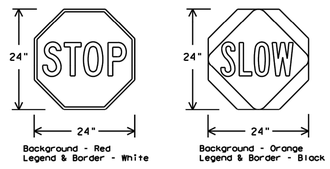


Attachment to wooden supports will be by bolts and nuts or screws. Use TxDOT's or manufacturer's recommended procedures for attaching sign substrates to other types of sign supports

Nails shall NOT be allowed. Each sign shall be attached directly to the sign support. Multiple signs shall not be joined or spliced by any means. Wood supports shall not be extended or repaired by splicing or other means.

STOP/SLOW PADDLES

1. STOP/SLOW paddles are the primary method to control traffic by flaggers. The STOP/SLOW paddle size should be 24" x 24".
2. STOP/SLOW paddles shall be retroreflectorized when used at night.
3. STOP/SLOW paddles may be attached to a staff with a minimum length of 6' to the bottom of the sign.
4. Any lights incorporated into the STOP or SLOW paddle faces shall only be as specifically described in Section 6E.03 Hand Signaling Devices in the TMUTCD.



SHEETING REQUIREMENTS (WHEN USED AT NIGHT)		
USAGE	COLOR	SIGN FACE MATERIAL
BACKGROUND	RED	TYPE B OR C SHEETING
BACKGROUND	ORANGE	TYPE B_{FL} OR C_{FL} SHEETING
LEGEND & BORDER	WHITE	TYPE B OR C SHEETING
LEGEND & BORDER	BLACK	ACRYLIC NON-REFLECTIVE FILM

CONTRACTOR REQUIREMENTS FOR MAINTAINING PERMANENT SIGNS WITHIN THE PROJECT LIMITS

1. Permanent signs are used to give notice of traffic laws or regulations, call attention to conditions that are potentially hazardous to traffic operations, show route designations, destinations, directions, distances, services, points of interest, and other geographical, recreational, specific service (LOGO), or cultural information. Drivers proceeding through a work zone need the same, if not better route guidance as normally installed on a roadway without construction.
2. When permanent regulatory or warning signs conflict with work zone conditions, remove or cover the permanent signs until the permanent sign message matches the roadway condition. For details for covering large guide signs see the TS-CD standard.
3. When existing permanent signs are moved and relocated due to construction purposes, they shall be visible to motorists at all times.
4. If existing signs are to be relocated on their original supports, they shall be installed on crashworthy bases as shown on the SMD Standard sheets. The signs shall meet the required mounting heights shown on the BC Sheets or the SMD Standards. This work should be paid for under the appropriate pay item for relocating existing signs.
5. If permanent signs are to be removed and relocated using temporary supports, the Contractor shall use crashworthy supports as shown on the BC standard sheets, TLRS standard sheets or the CWZTCD list. The signs shall meet the required mounting heights shown on the BC, or the SMD standard sheets during construction. This work should be paid for under the appropriate pay item for relocating existing signs.
6. Any sign or traffic control device that is struck or damaged by the Contractor or his/her construction equipment shall be replaced as soon as possible by the Contractor to ensure proper guidance for the motorists. This will be subsidiary to Item 502.

GENERAL NOTES FOR WORK ZONE SIGNS

1. Contractor shall install and maintain signs in a straight and plumb condition and/or as directed by the Engineer.
2. Wooden sign posts shall be painted white.
3. Barricades shall NOT be used as sign supports.
4. All signs shall be installed in accordance with the plans or as directed by the Engineer. Signs shall be used to regulate, warn, and guide the traveling public safely through the work zone.
5. The Contractor may furnish either the sign design shown in the plans or in the "Standard Highway Sign Designs for Texas" (SHSD). The Engineer/Inspector may require the Contractor to furnish other work zone signs that are shown in the TMUTCD but may have been omitted from the plans. Any variation in the plans shall be documented by written agreement between the Engineer and the Contractor's Responsible Person. All changes must be documented in writing before being implemented. This can include documenting the changes in the Inspector's TxDOT diary and having both the Inspector and Contractor initial and date the agreed upon changes.
6. The Contractor shall furnish sign supports listed in the "Compliant Work Zone Traffic Control Device List" (CWZTCD) for small roadside signs. Supports for temporary large roadside signs shall meet the requirements detailed on the Temporary Large Roadside Signs (TLRS) standard sheets. The Contractor shall install the sign support in accordance with the manufacturer's recommendations. If there is a question regarding installation procedures, the Contractor shall furnish the Engineer a copy of the manufacturer's installation recommendations so the Engineer can verify the correct procedures are being followed.
7. The Contractor is responsible for installing signs on approved supports and replacing signs with damaged or cracked substrates and/or damaged or marred reflective sheeting as directed by the Engineer/Inspector.
8. Identification markings may be shown only on the back of the sign substrate. The maximum height of letters and/or company logos used for identification shall be 1 inch.
9. The Contractor shall replace damaged wood posts. New or damaged wood sign posts shall not be spliced.

DURATION OF WORK (as defined by the "Texas Manual on Uniform Traffic Control Devices" Part 6)

1. The types of sign supports, sign mounting height, the size of signs, and the type of sign substrates can vary based on the type of work being performed. The Engineer is responsible for selecting the appropriate size sign for the type of work being performed. The Contractor is responsible for ensuring the sign support, sign mounting height and substrate meets manufacturer's recommendations in regard to crashworthiness and duration of work requirements.
   a. Long-term stationary - work that occupies a location more than 3 days.
   b. Intermediate-term stationary - work that occupies a location more than one daylight period up to 3 days, or nighttime work lasting more than one hour.
   c. Short-term stationary - daytime work that occupies a location for more than 1 hour in a single daylight period.
   d. Short, duration - work that occupies a location up to 1 hour.
   e. Mobile - work that moves continuously or intermittently (stopping for up to approximately 15 minutes.)

SIGN MOUNTING HEIGHT

1. The bottom of Long-term/Intermediate-term signs shall be at least 7 feet, but not more than 9 feet, above the paved surface, except as shown for supplemental plaques mounted below other signs.
2. The bottom of Short-term/Short Duration signs shall be a minimum of 1 foot above the pavement surface but no more than 2 feet above the ground.
3. Long-term/Intermediate-term Signs may be used in lieu of Short-term/Short Duration signing.
4. Short-term/Short Duration signs shall be used only during daylight and shall be removed at the end of the workday or raised to appropriate Long-term/Intermediate sign height.
5. Regulatory signs shall be mounted at least 7 feet, but not more than 9 feet, above the paved surface regardless of work duration.

SIZE OF SIGNS

1. The Contractor shall furnish the sign sizes shown on BC (2) unless otherwise shown in the plans or as directed by the Engineer.

SIGN SUBSTRATES

1. The Contractor shall ensure the sign substrate is installed in accordance with the manufacturer's recommendations for the type of sign support that is being used. The CWZTCD lists each substrate that can be used on the different types and models of sign supports.
2. "Mesh" type materials are NOT an approved sign substrate, regardless of the tightness of the weave.
3. All wooden individual sign panels fabricated from 2 or more pieces shall have one or more plywood cleat, 1/2" thick by 6" wide, fastened to the back of the sign and extending fully across the sign. The cleat shall be attached to the back of the sign using wood screws that do not penetrate the face of the sign panel. The screws shall be placed on both sides of the splice and spaced at 6" centers. The Engineer may approve other methods of splicing the sign face.

REFLECTIVE SHEETING

1. All signs shall be retroreflective and constructed of sheeting meeting the color and retro-reflectivity requirements of DMS-8300 for rigid signs or DMS-8310 for roll-up signs. The web address for DMS specifications is shown on BC(1).
2. White sheeting, meeting the requirements of DMS-8300 Type A, shall be used for signs with a white background.
3. Orange sheeting, meeting the requirements of DMS-8300 Type B_{FL} or Type C_{FL}, shall be used for rigid signs with orange backgrounds.

SIGN LETTERS

1. All sign letters and numbers shall be clear, and open rounded type uppercase alphabet letters as approved by the Federal Highway Administration (FHWA) and as published in the "Standard Highway Sign Design for Texas" manual. Signs, letters and numbers shall be of first class workmanship in accordance with Department Standards and Specifications.

REMOVING OR COVERING

1. When sign messages may be confusing or do not apply, the signs shall be removed or completely covered.
2. Long-term stationary or intermediate stationary signs installed on square metal tubing may be turned away from traffic 90 degrees when the sign message is not applicable. This technique may not be used for signs installed in the median of divided highways or near any intersections where the sign may be seen from approaching traffic.
3. Signs installed on wooden skids shall not be turned at 90 degree angles to the roadway. These signs should be removed or completely covered when not required.
4. When signs are covered, the material used shall be opaque, such as heavy mil black plastic, or other materials which will cover the entire sign face and maintain their opaque properties under automobile headlights at night, without damaging the sign sheeting.
5. Burlap shall NOT be used to cover signs.
6. Duct tape or other adhesive material shall NOT be affixed to a sign face.
7. Signs and anchor stubs shall be removed and holes backfilled upon completion of work.

SIGN SUPPORT WEIGHTS

1. Where sign supports require the use of weights to keep from turning over, the use of sandbags with dry, cohesionless sand should be used.
2. The sandbags will be tied shut to keep the sand from spilling and to maintain a constant weight.
3. Rock, concrete, iron, steel or other solid objects shall not be permitted for use as sign support weights.
4. Sandbags should weigh a minimum of 35 lbs and a maximum of 50 lbs.
5. Sandbags shall be made of a durable material that tears upon vehicular impact. Rubber (such as tire inner tubes) shall NOT be used.
6. Rubber ballasts designed for channelizing devices should not be used for ballast on portable sign supports. Sign supports designed and manufactured with rubber bases may be used when shown on the CWZTCD list.
7. Sandbags shall only be placed along or laid over the base supports of the traffic control device and shall not be suspended above ground level or hung with rope, wire, chains or other fasteners. Sandbags shall be placed along the length of the skids to weigh down the sign support.
8. Sandbags shall NOT be placed under the skid and shall not be used to level sign supports placed on slopes.

FLAGS ON SIGNS

1. Flags may be used to draw attention to warning signs. When used, the flag shall be 16 inches square or larger and shall be orange or fluorescent red-orange in color. Flags shall not be allowed to cover any portion of the sign face.

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TEMPORARY SIGN NOTES

BC(4)-21

FILE: bc-21.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
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NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

TXDOT TRAFFIC CONTROL DETAILS - SHEET 3

DRAWING STATUS
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C3.3

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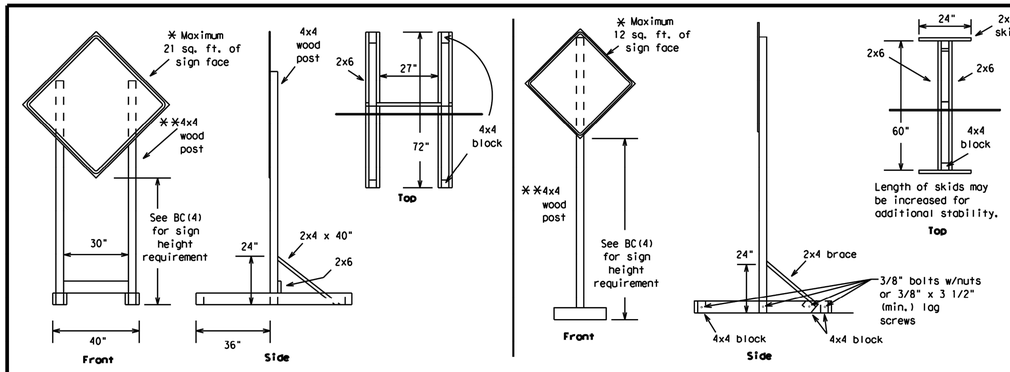
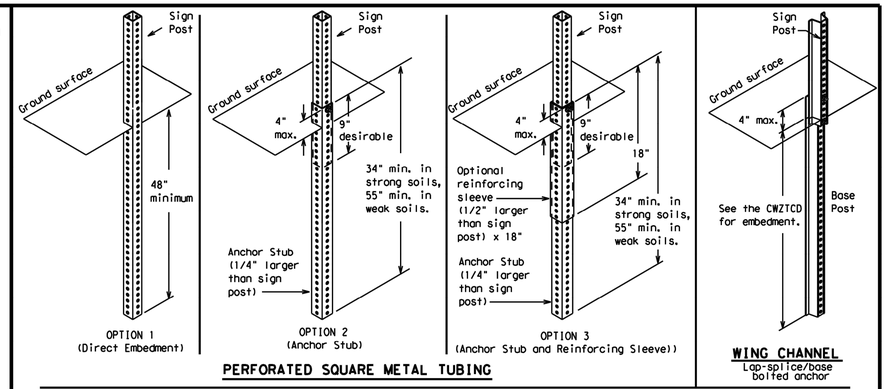


SKID MOUNTED WOOD SIGN SUPPORTS

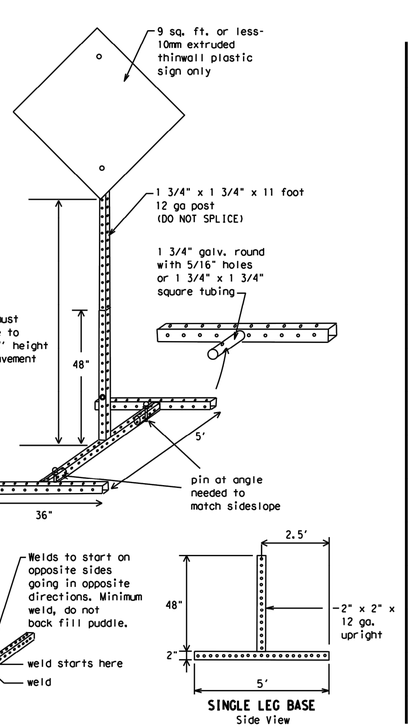
* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

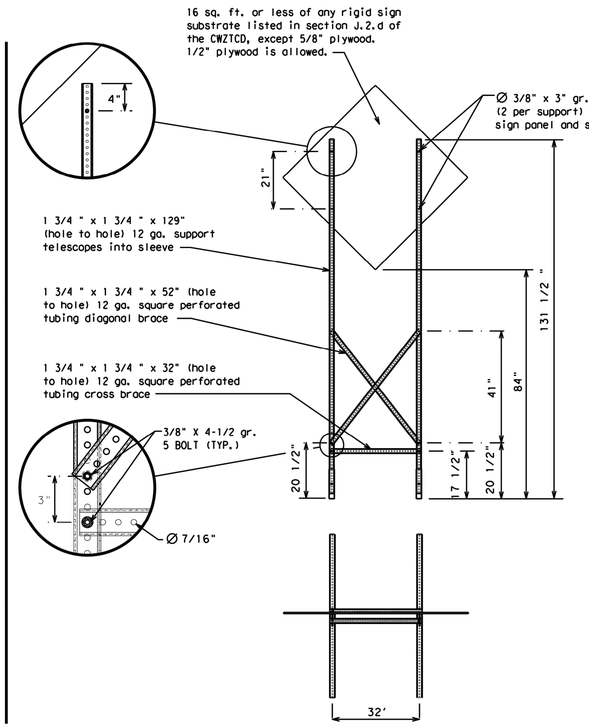


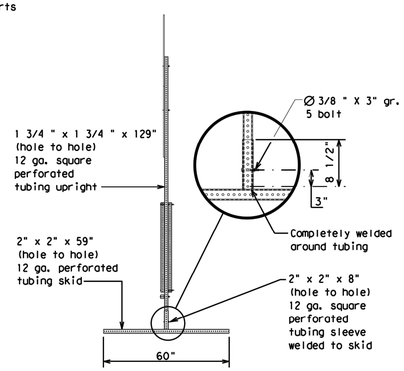
PERFORATED SQUARE METAL TUBING

GROUND MOUNTED SIGN SUPPORTS

Refer to the CWZTCD and the manufacturer's installation procedure for each type sign support.
The maximum sign square footage shall adhere to the manufacturer's recommendation.
Two post installations can be used for larger signs.







SKID MOUNTED PERFORATED SQUARE STEEL TUBING SIGN SUPPORTS

* LONG/INTERMEDIATE TERM STATIONARY - PORTABLE SKID MOUNTED SIGN SUPPORTS

DATE:
FILE:

WEDGE ANCHORS

Both steel and plastic Wedge Anchor Systems as shown on the SMD Standard Sheets may be used as temporary sign supports for signs up to 10 square feet of sign face. They may be set in concrete or in sturdy soils if approved by the Engineer. (See web address for "Traffic Engineering Standard Sheets" on BC(1)).

OTHER DESIGNS

MORE DETAILS OF APPROVED LONG/INTERMEDIATE AND SHORT TERM SUPPORTS CAN BE FOUND ON THE CWZTCD LIST. SEE BC(1) FOR WEBSITE LOCATION.

GENERAL NOTES

1. Nails may be used in the assembly of wooden sign supports, but 3/8" bolts with nuts or 3/8" x 3 1/2" lag screws must be used on every joint for final connection.
2. No more than 2 sign posts shall be placed within a 7 ft. circle, except for specific materials noted on the CWZTCD List.
3. When project is completed, all sign supports and foundations shall be removed from the project site. This will be considered subsidiary to Item 502.

* See BC(4) for definition of "Work Duration."

** Wood sign posts MUST be one piece. Splicing will NOT be allowed. Posts shall be painted white.

☐ See the CWZTCD for the type of sign substrate that can be used for each approved sign support.

SHEET 5 OF 12

Texas Department of Transportation — Traffic Safety Division Standard

BARRICADE AND CONSTRUCTION TYPICAL SIGN SUPPORT

BC(5)-21

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NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

TXDOT TRAFFIC CONTROL DETAILS - SHEET 4

DRAWING STATUS
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

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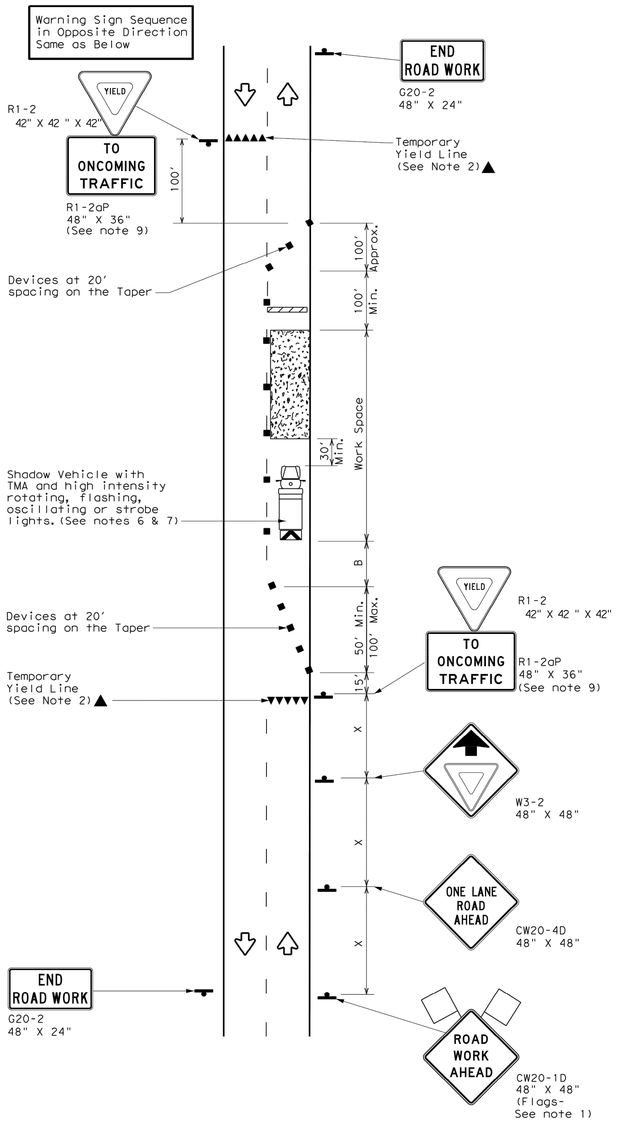
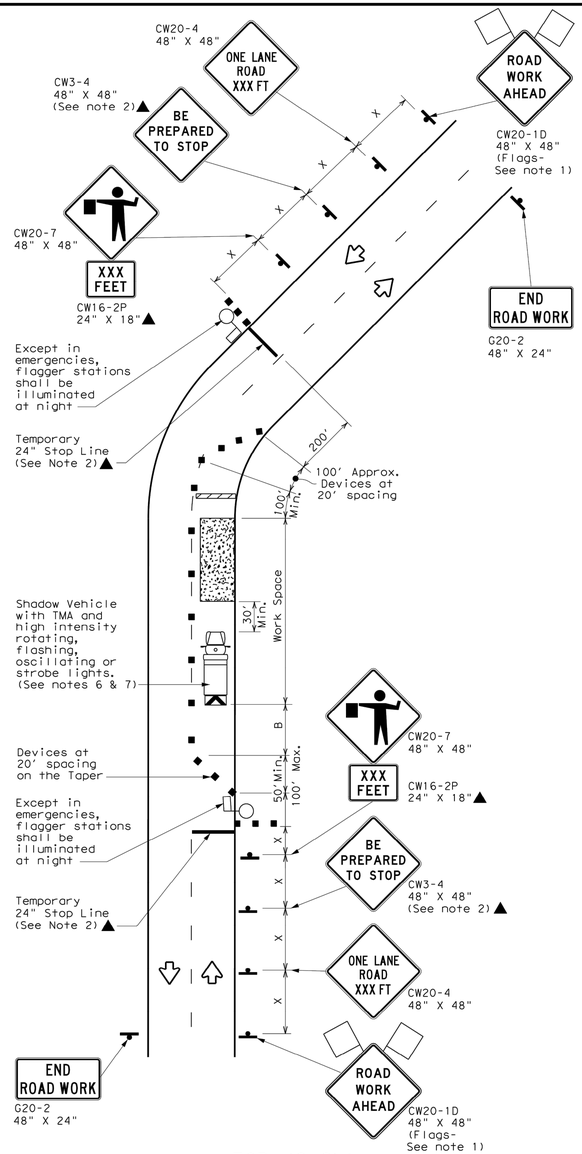


TCP (2-2a)
2-LANE ROADWAY WITHOUT PAVED SHOULDERS
ONE LANE TWO-WAY
CONTROL WITH YIELD SIGNS
(Less than 2000 ADT - See Note 9)



TCP (2-2b)
2-LANE ROADWAY WITHOUT PAVED SHOULDERS
ONE LANE TWO-WAY
CONTROL WITH FLAGGERS

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"	Stopping Sight Distance
30	$L=\frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'	200'
35		205'	225'	245'	35'	70'	160'	120'	250'
40		265'	295'	320'	40'	80'	240'	155'	305'
45	L=WS	450'	495'	540'	45'	90'	320'	195'	360'
50		500'	550'	600'	50'	100'	400'	240'	425'
55		550'	605'	660'	55'	110'	500'	295'	495'
60		600'	660'	720'	60'	120'	600'	350'	570'
65		650'	715'	780'	65'	130'	700'	410'	645'
70		700'	770'	840'	70'	140'	800'	475'	730'
75		750'	825'	900'	75'	150'	900'	540'	820'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓	✓	

GENERAL NOTES

1. Flags attached to signs where shown, are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The CW3-4 "BE PREPARED TO STOP" sign may be installed after the CW20-4 "ONE LANE ROAD XXX FT" sign, but proper sign spacing shall be maintained.
4. Flaggers should use two-way radios or other methods of communication to control traffic.
5. Length of work space should be based on the ability of flaggers to communicate.
6. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
7. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect a wider work space.

TCP (2-2a)

8. The R1-2 "YIELD" sign traffic control may be used on projects with approaches that have adequate sight distance. For projects in urban areas, work space should be no longer than one half city block. In rural areas, roadways with less than 2000 ADT, work space should be no longer than 400 feet.
9. The R1-2aP "YIELD TO ONCOMING TRAFFIC" sign shall be placed on a support at a 7 foot minimum mounting height.

TCP (2-2b)

10. Channelizing devices on the center line may be omitted when a pilot car is leading traffic and approved by the Engineer.
11. If the work space is located near a horizontal or vertical curve, the buffer distances should be increased in order to maintain stopping sight distance to the flagger and a queue of stopped vehicles. (See table above).
12. Flaggers should use 24" STOP/SLOW paddles to control traffic. Flags should be limited to emergency situtations.

Texas Department of Transportation — Traffic Operations Division Standard

TRAFFIC CONTROL PLAN ONE-LANE TWO-WAY TRAFFIC CONTROL

TCP(2-2)-18

FILE: tcp2-18.dgn	DN:	CK:	DW:	CK:
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NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

TXDOT TRAFFIC CONTROL DETAILS - SHEET 5

DRAWING STATUS
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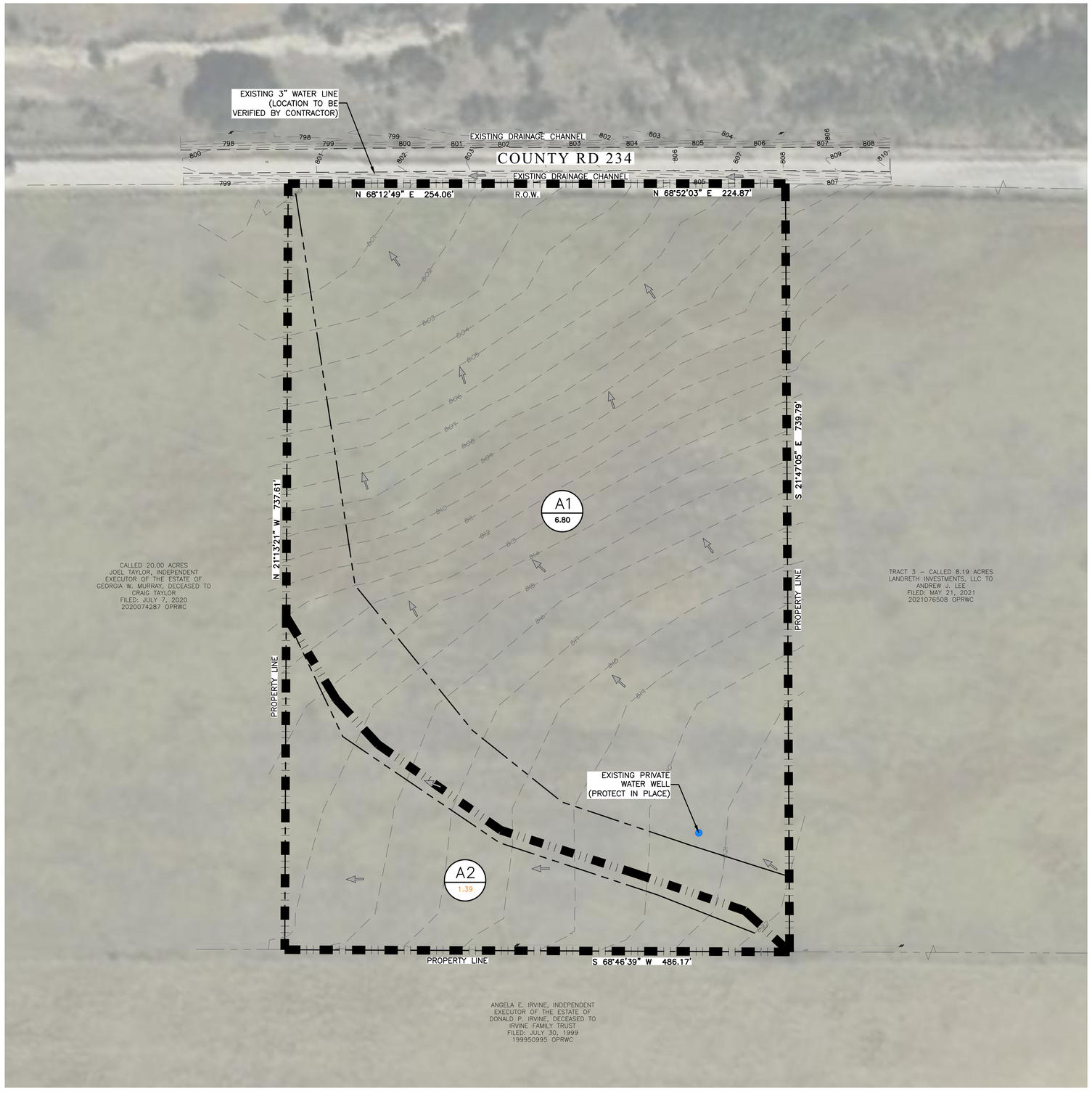
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C3.5



DRAINAGE CALCULATIONS

PRE DEVELOPMENT

AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
Area 1	6.80	15	80	2	3.94	16.40
Area 1	6.80	15	80	5	5.15	24.10
Area 1	6.80	15	80	10	6.30	30.90
Area 1	6.80	15	80	25	8.04	40.90
Area 1	6.80	15	80	50	9.53	48.80
Area 1	6.80	15	80	100	11.20	57.10
Area 2	1.39	13	80	2	3.94	3.60
Area 2	1.39	13	80	5	5.15	5.20
Area 2	1.39	13	80	10	6.30	6.70
Area 2	1.39	13	80	25	8.04	8.90
Area 2	1.39	13	80	50	9.53	10.60
Area 2	1.39	13	80	100	11.20	12.40

TIME OF CONCENTRATION CALCULATIONS

	A1–PRE	A2–PRE
SHEET FLOW	100'@1.50% 9.71 MIN.	100'@1.80% 9.03 MIN.
CONCENTRATED FLOW UNPAVED	802'@2.56% 5.18 MIN.	470'@1.75% 3.67 MIN.
UNPAVED	– –	– –
CHANNEL FLOW	– –	– –
TOTAL	14.89 MIN.	12.70 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

IMPERVIOUS COVER CALCULATIONS

SITE AREA: 8.18 ACRES
TOTAL IMPERVIOUS AREA: 0.00 ACRES

TOTAL IMPERVIOUS COVER = 0% OF TOTAL SITE

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

NOTES

1. NOAA ATLAT–14 DATA UTILIZED FROM WILLIAMSON COUNTRY SUBDIVISION REGULATIONS.
2. HEC–HMS VERSION 4.7.1 UTILIZED FOR DRAINAGE CALCULATIONS.

0 50 100
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

Q = (C) (I) (A)

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

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NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT DRAINAGE MAP

DRAWING STATUS

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7–25–2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

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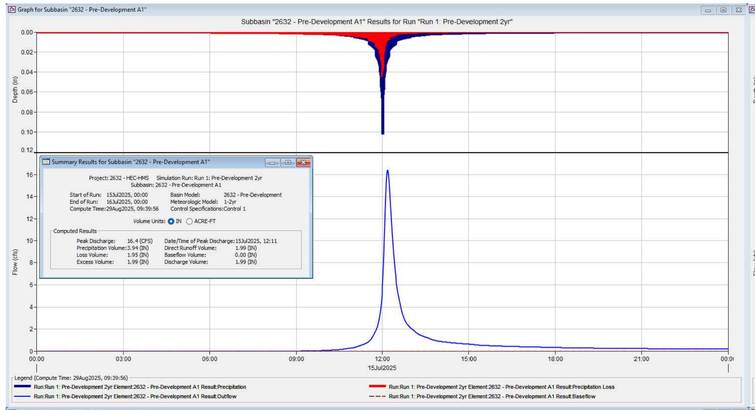
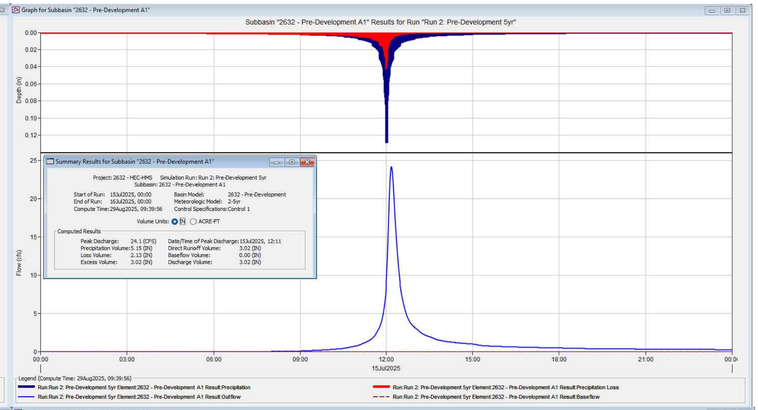
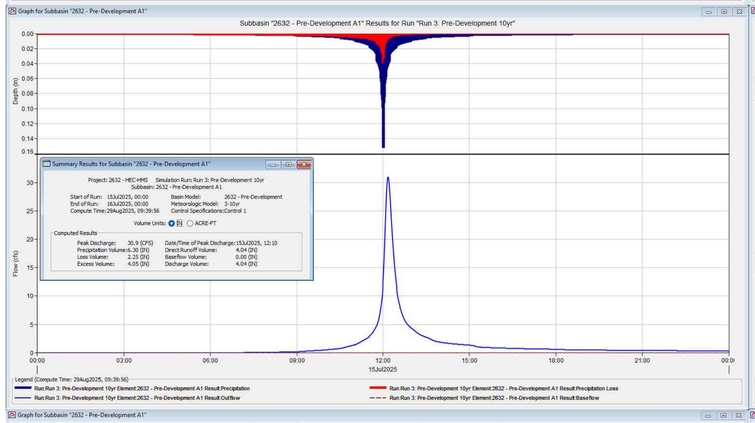
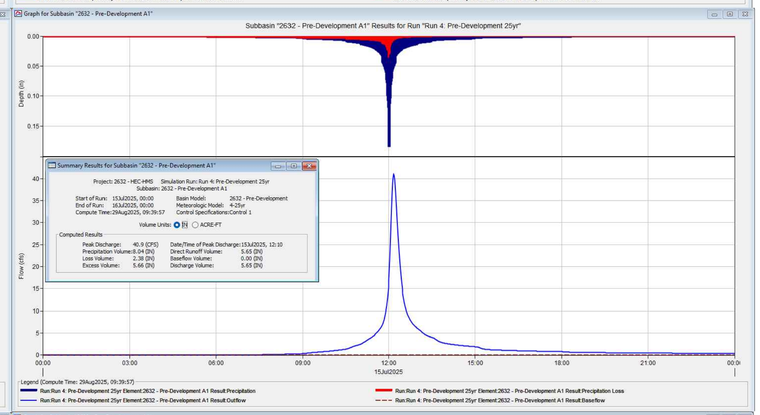
Plot Date	7–25–2025

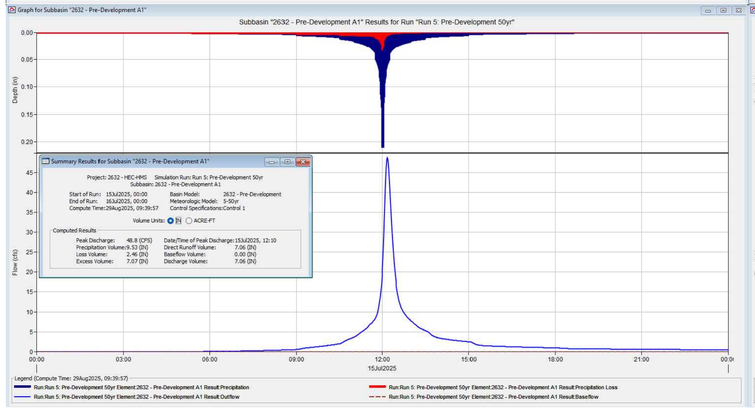
C4.1

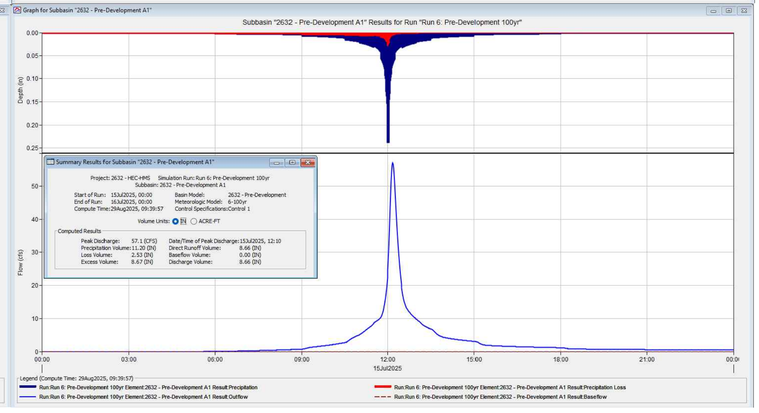












1 AREA 1 PRE-DEV DRAINAGE CALCULATIONS

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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT
DRAINAGE CALCULATIONS

DRAWING STATUS

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7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

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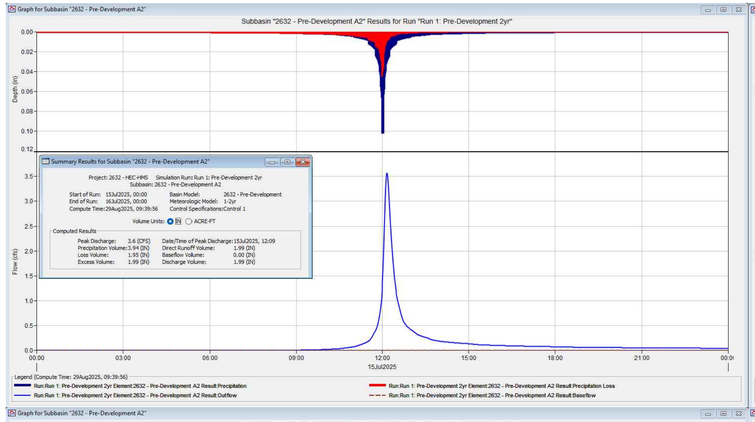
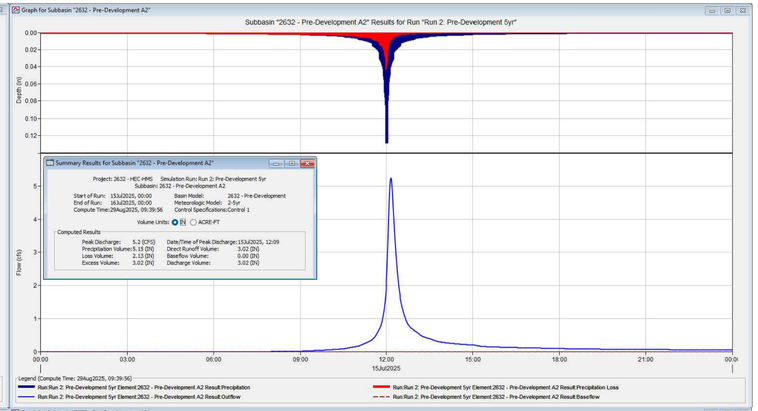
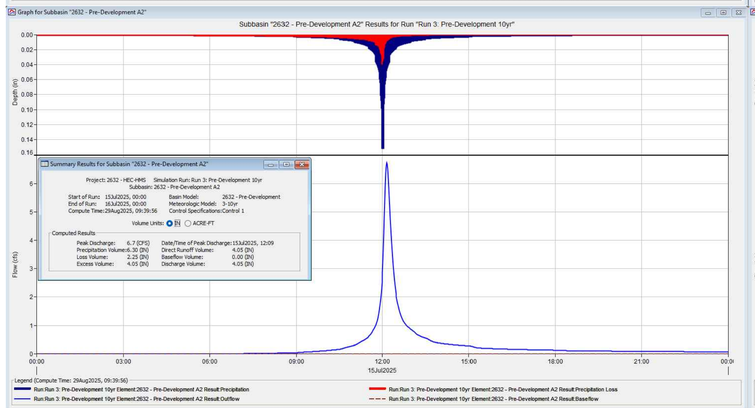
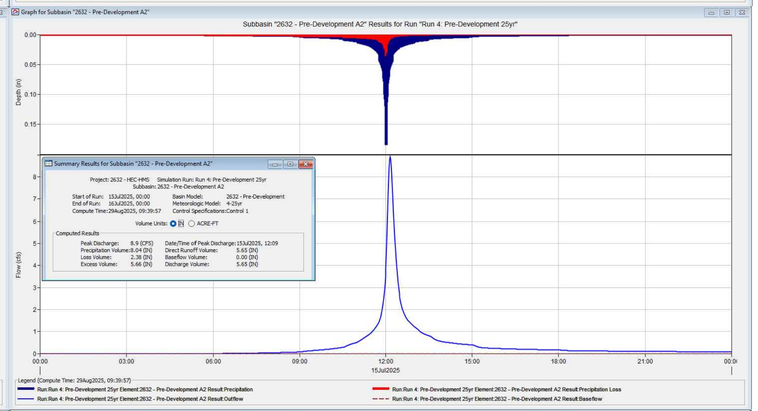
Plot Date	7-25-2025

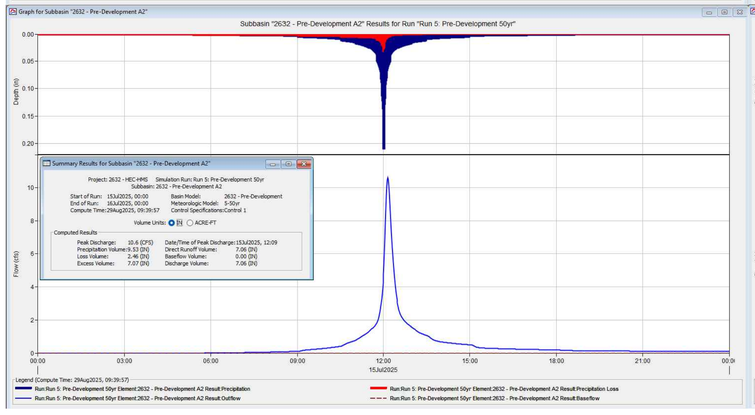
C4.2

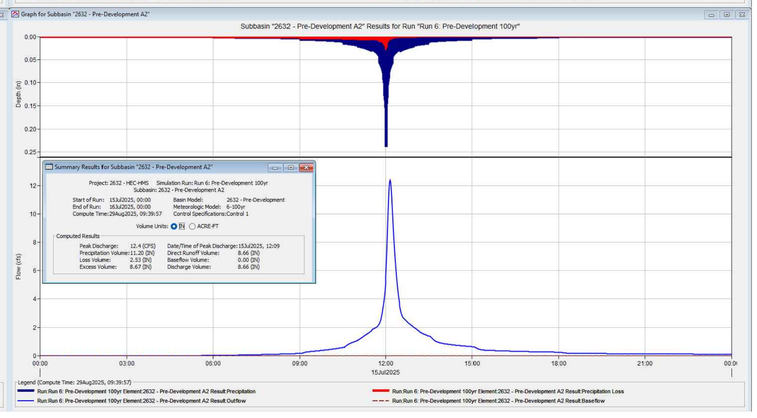












2 AREA 2 PRE–DEV DRAINAGE CALCULATIONS

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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

PRE-DEVELOPMENT
DRAINAGE CALCULATIONS

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
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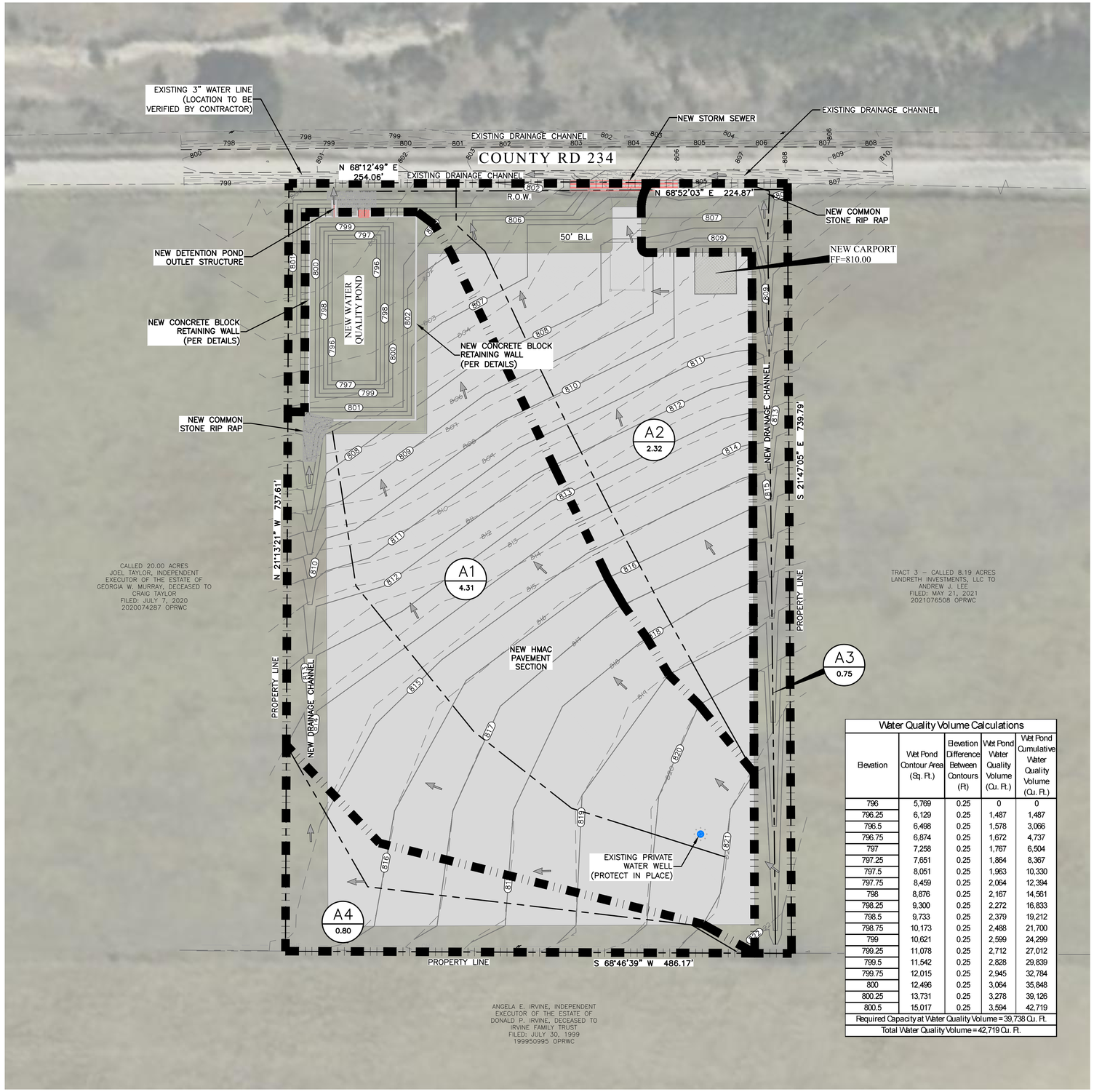
PROFESSIONAL ENGINEER
LICENSED

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.3



Water Quality Volume Calculations

Elevation	Wet Pond Contour Area (Sq. Ft.)	Elevation Difference Between Contours (Ft)	Wet Pond Water Quality Volume (Cu. Ft.)	Wet Pond Cumulative Water Quality Volume (Cu. Ft.)
796	5,769	0.25	0	0
796.25	6,129	0.25	1,487	1,487
796.5	6,498	0.25	1,578	3,066
796.75	6,874	0.25	1,672	4,737
797	7,258	0.25	1,767	6,504
797.25	7,651	0.25	1,864	8,367
797.5	8,051	0.25	1,963	10,330
797.75	8,459	0.25	2,064	12,394
798	8,876	0.25	2,167	14,561
798.25	9,300	0.25	2,272	16,833
798.5	9,733	0.25	2,379	19,212
798.75	10,173	0.25	2,488	21,700
799	10,621	0.25	2,599	24,299
799.25	11,078	0.25	2,712	27,012
799.5	11,542	0.25	2,828	29,839
799.75	12,015	0.25	2,945	32,784
800	12,496	0.25	3,064	35,848
800.25	13,731	0.25	3,278	39,126
800.5	15,017	0.25	3,594	42,719
Required Capacity at Water Quality Volume = 39,738 Cu. Ft.				
Total Water Quality Volume = 42,719 Cu. Ft.				

DRAINAGE CALCULATIONS

POST DEVELOPMENT						
AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
Area 1	4.31	10	80	2	3.94	12.20
Area 1	4.31	10	80	5	5.15	17.90
Area 1	4.31	10	80	10	6.30	23.00
Area 1	4.31	10	80	25	8.04	30.30
Area 1	4.31	10	80	50	9.53	36.10
Area 1	4.31	10	80	100	11.20	42.20
Area 2	2.32	10	80	2	3.94	10.10
Area 2	2.32	10	80	5	5.15	13.00
Area 2	2.32	10	80	10	6.30	15.50
Area 2	2.32	10	80	25	8.04	19.10
Area 2	2.32	10	80	50	9.53	21.90
Area 2	2.32	10	80	100	11.20	24.90
Area 3	0.75	10	80	2	3.94	2.20
Area 3	0.75	10	80	5	5.15	3.20
Area 3	0.75	10	80	10	6.30	4.10
Area 3	0.75	10	80	25	8.04	5.40
Area 3	0.75	10	80	50	9.53	6.40
Area 3	0.75	10	80	100	11.20	7.50
Area 4	0.80	10	80	2	3.94	3.00
Area 4	0.80	10	80	5	5.15	4.10
Area 4	0.80	10	80	10	6.30	4.90
Area 4	0.80	10	80	25	8.04	6.20
Area 4	0.80	10	80	50	9.53	7.30
Area 4	0.80	10	80	100	11.20	8.30

TARGET POND SIZE = 26,790 CU. FT.

TIME OF CONCENTRATION CALCULATIONS

	A1–POST	A2–POST	A3–POST	A4–POST
SHEET FLOW	100'@1.40% 1.23 MIN.	100'@1.50% 1.37 MIN.	– =	50'@2.00% 4.97 MIN.
CONCENTRATED FLOW PAVED	504'@2.50% 2.61 MIN.	464'@2.80% 2.27 MIN.	– =	– =
UNPAVED	– =	77'@6.50% 0.31 MIN.	– =	468'@1.70% 2.94 MIN.
CHANNEL FLOW	– =	– =	750'@2.00% 2.37 MIN.	– =
TOTAL	3.84 MIN.	3.95 MIN.	2.37 MIN.	7.91 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

IMPERVIOUS COVER CALCULATIONS

SITE AREA: 8.18 ACRES
TOTAL IMPERVIOUS AREA: 5.50 ACRES

TOTAL IMPERVIOUS COVER = 67% OF TOTAL SITE

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

NOTES

1. NOAA ATLAT–14 DATA UTILIZED FROM WILLIAMSON COUNTRY SUBDIVISION REGULATIONS.
2. HEC–HMS VERSION 4.7.1 UTILIZED FOR DRAINAGE CALCULATIONS.

0 50 100
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

Q = (C) (I) (A)

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT DRAINAGE MAP

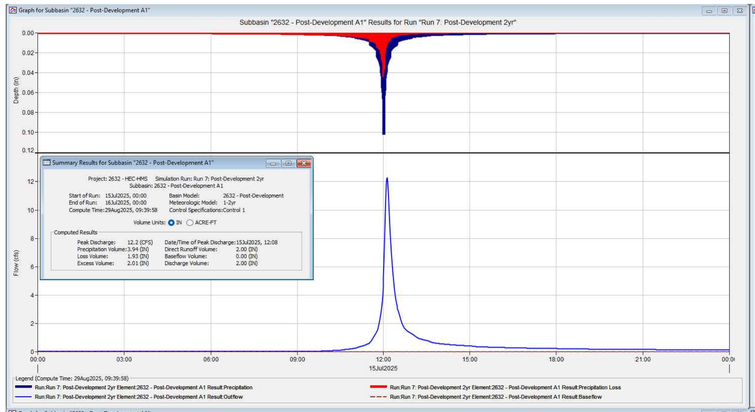
DRAWING STATUS

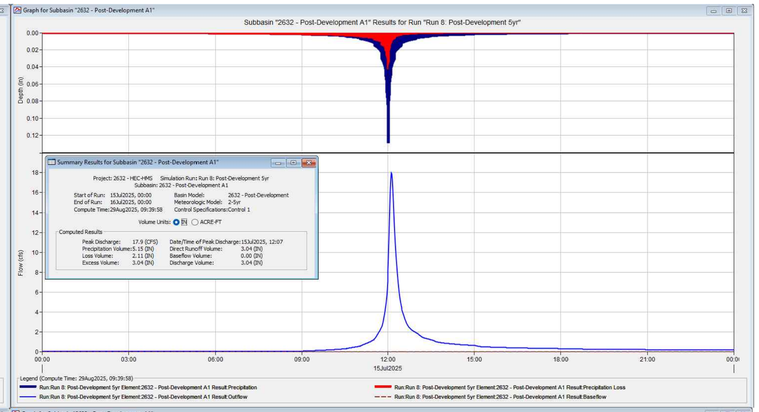
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F–23184.

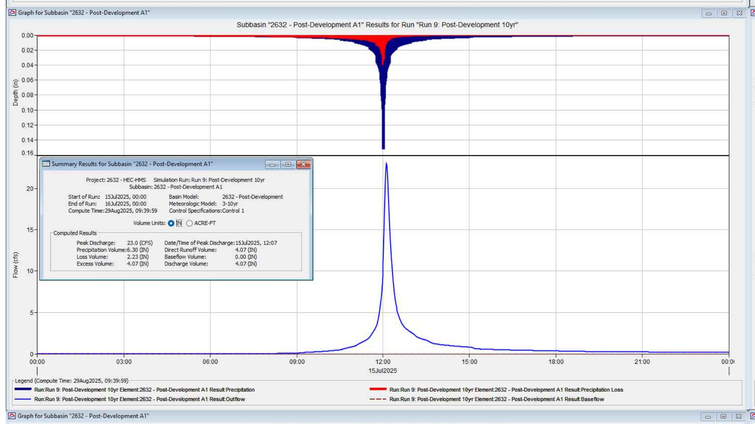
7–25–2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

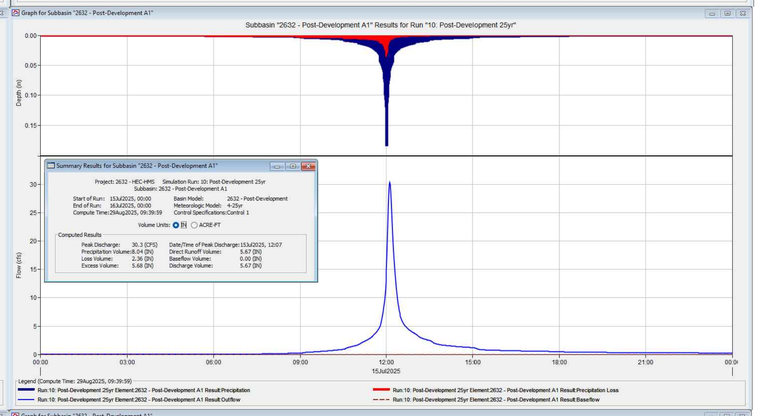
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7–25–2025

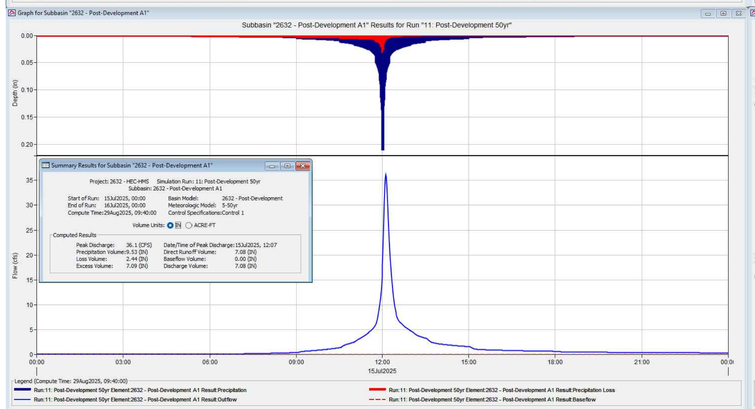
C4.4

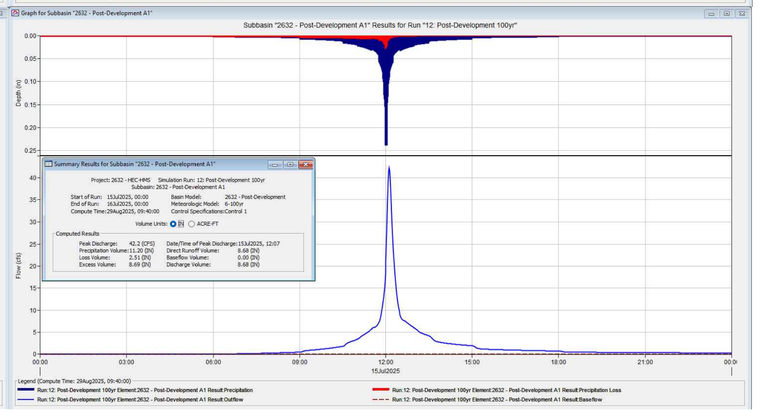












1 AREA 1 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 1

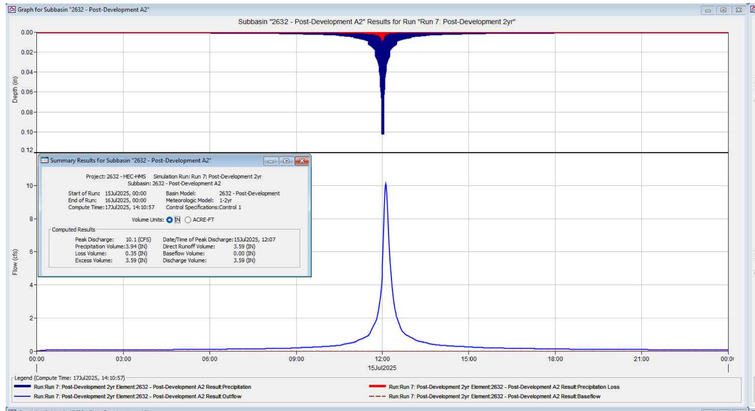
DRAWING STATUS

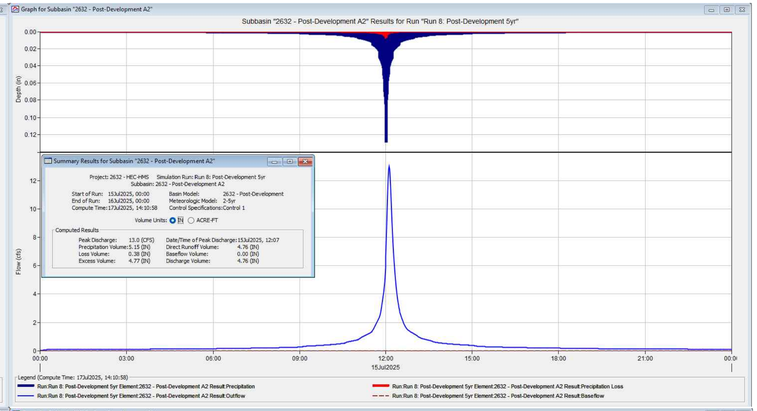
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

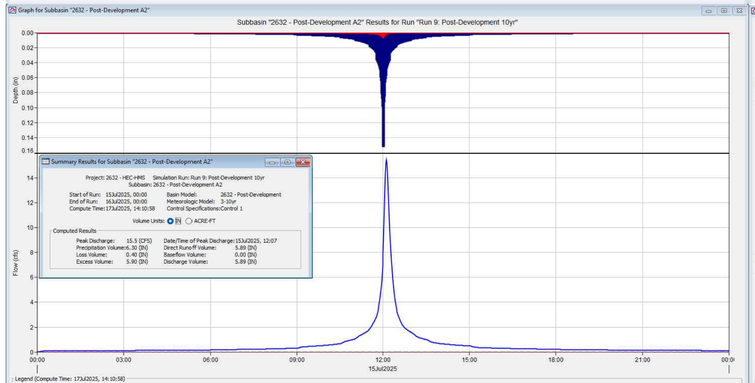
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

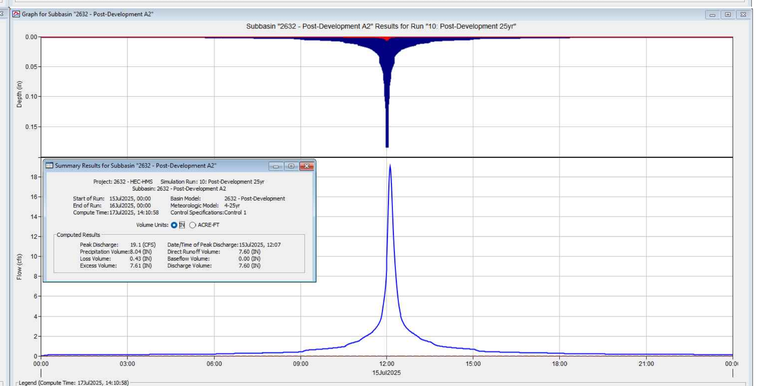
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

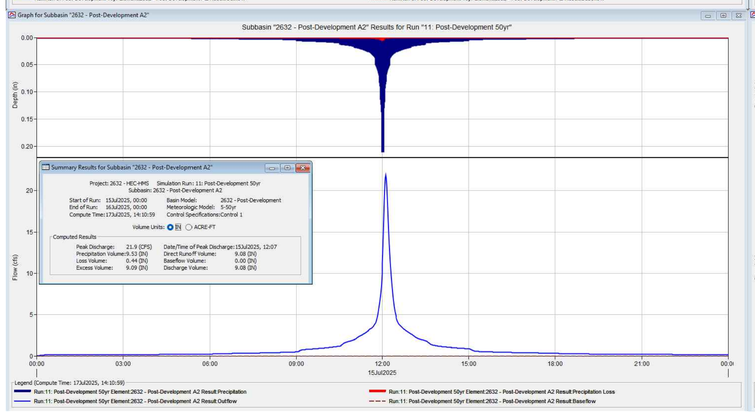
C4.5

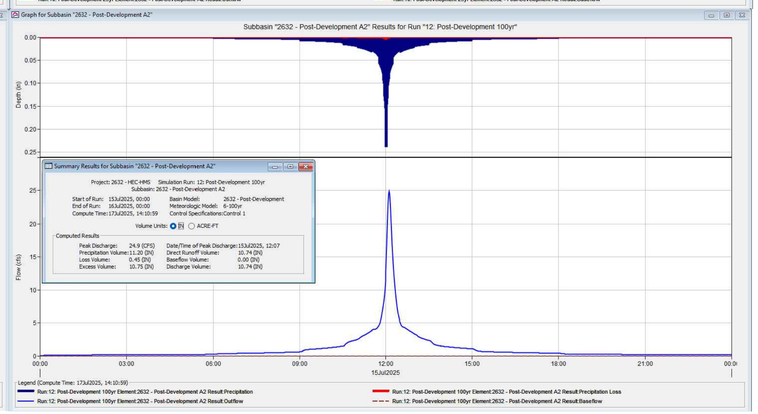












2 AREA 2 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT DRAINAGE CALCULATIONS SHEET 2

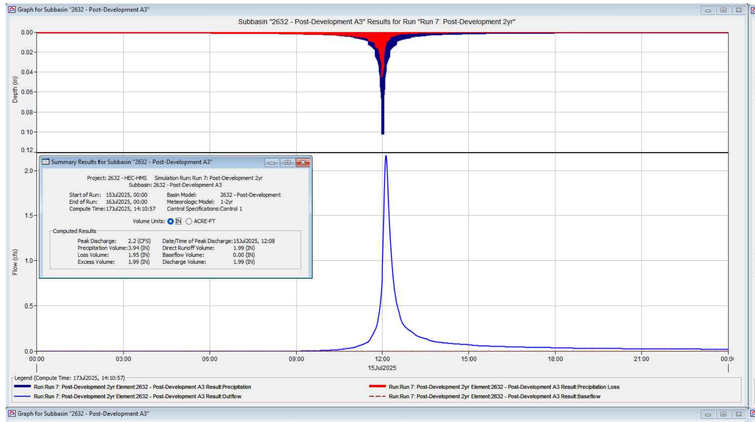
DRAWING STATUS

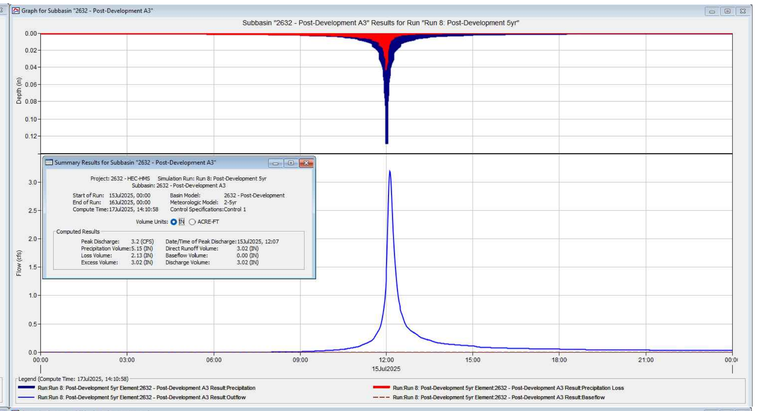
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

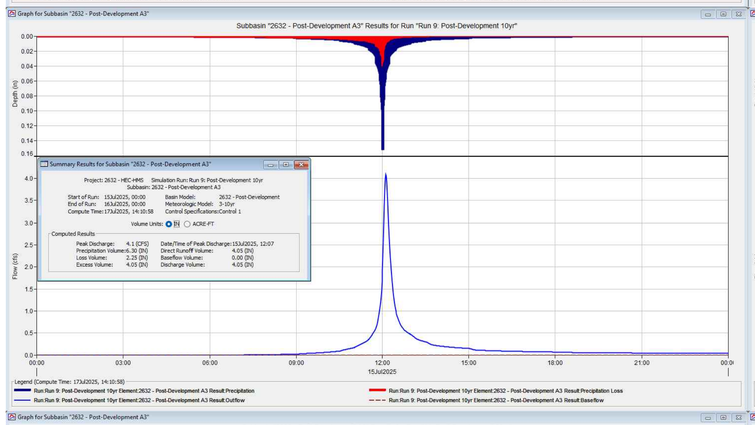
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER

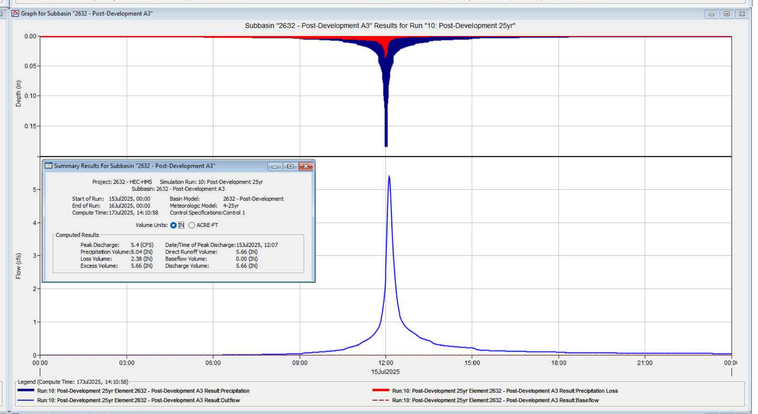
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

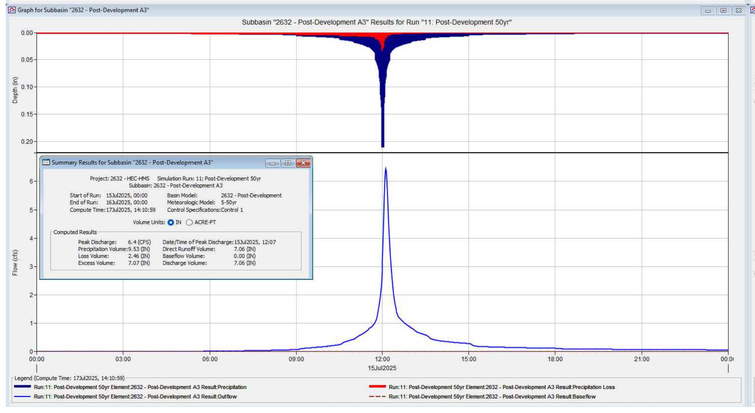
C4.6

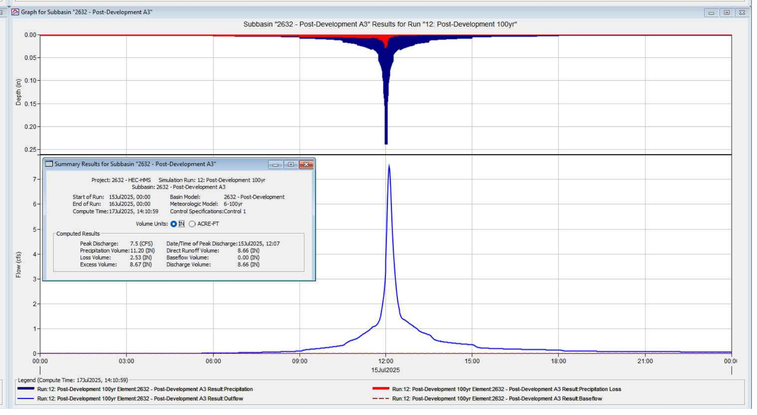












3 AREA 3 POST-DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 3

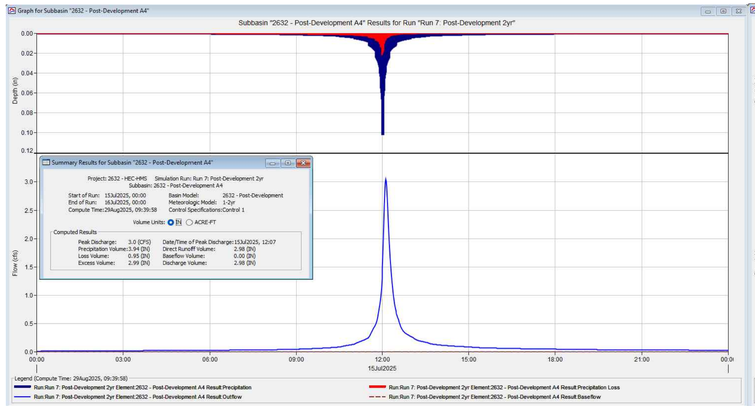
DRAWING STATUS

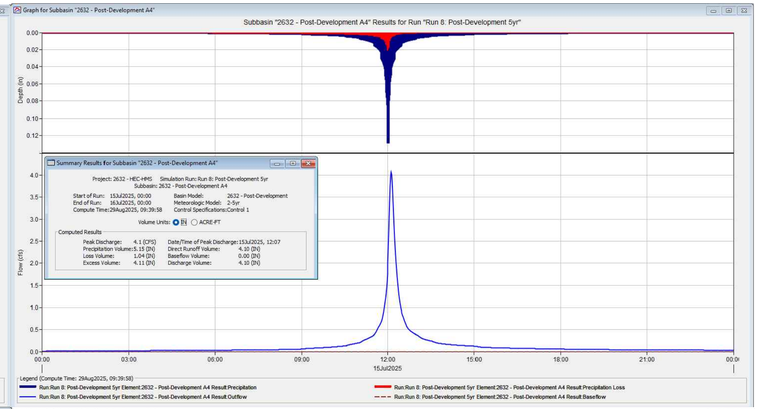
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

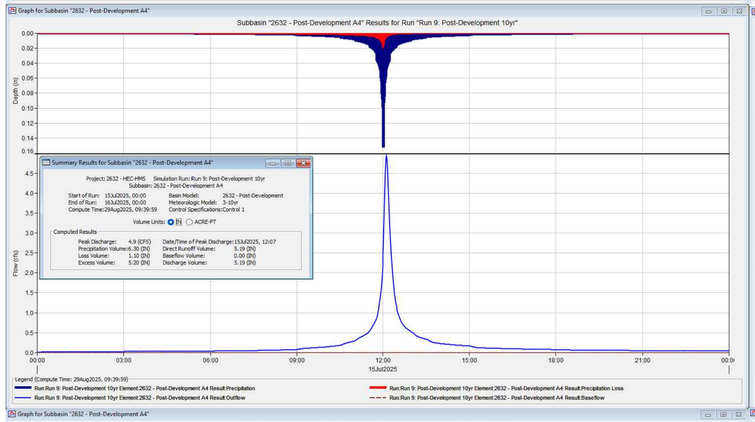
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

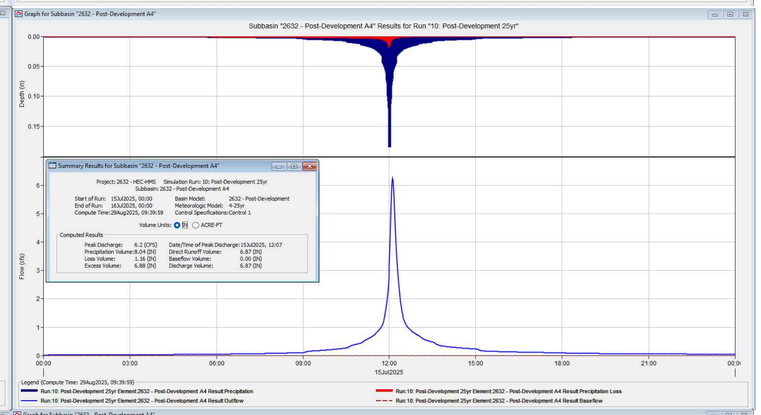
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

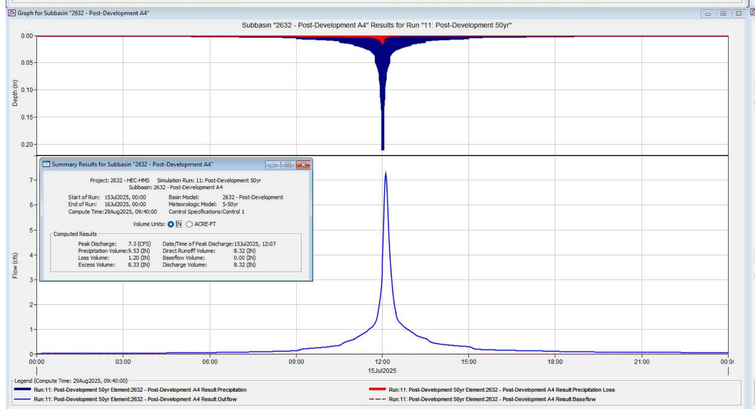
C4.7

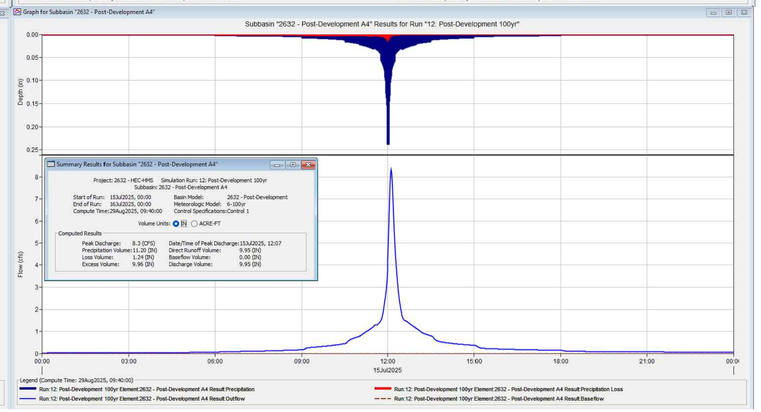












4 AREA 4 POST–DEV DRAINAGE CALCULATIONS

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

POST-DEVELOPMENT
DRAINAGE CALCULATIONS
SHEET 4

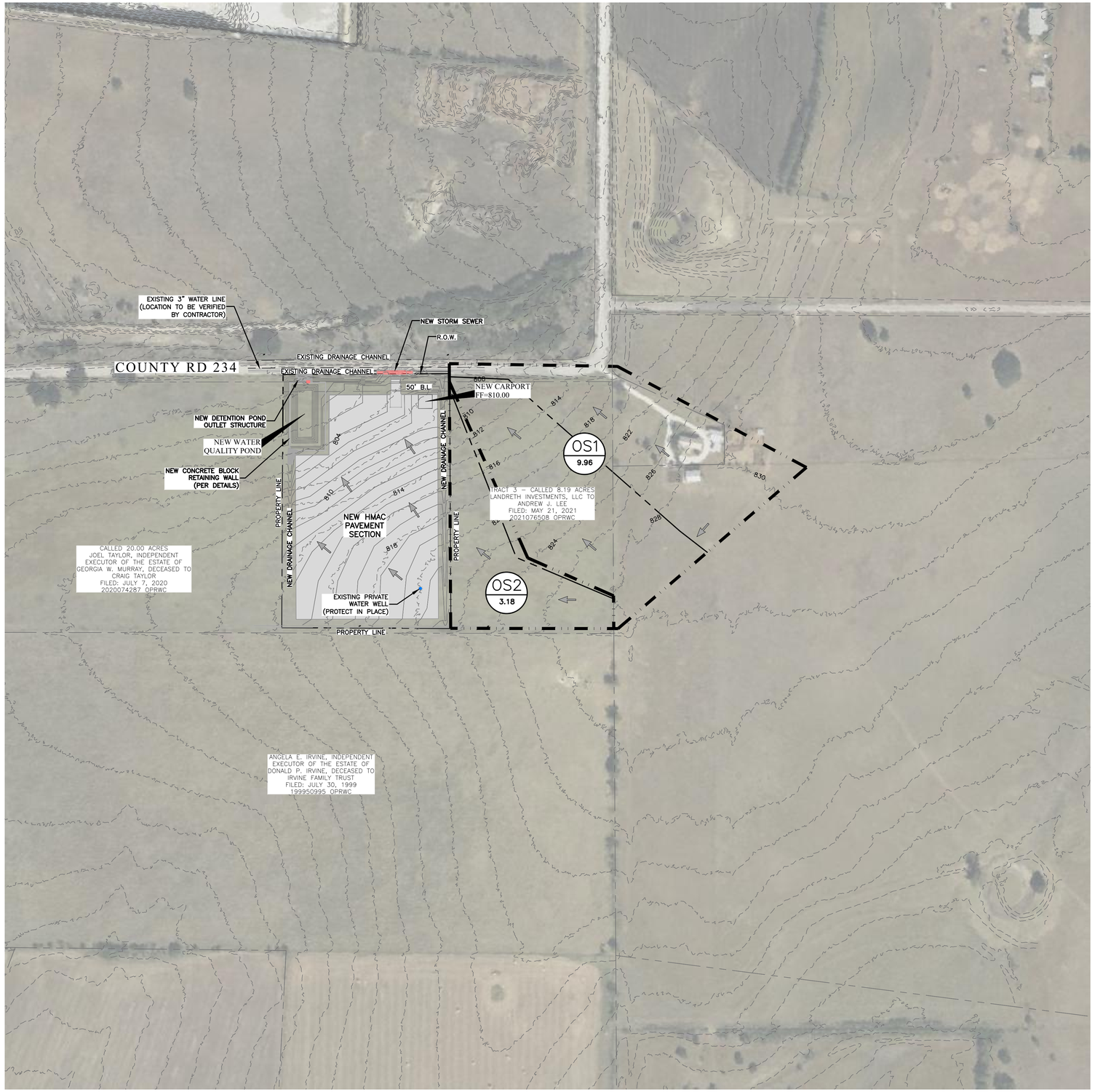
DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.8



DRAINAGE CALCULATIONS

EXISTING OFFSITE DEVELOPMENT

AREA DESIGNATION	AREA (acres)	Tc (min.)	CURVE NUMBER	FREQ.	TOTAL PRECIP. (in.)	DISCHARGE (cfs)
OS1	9.96	16	73	2	3.94	17.00
OS1	9.96	16	73	5	5.15	27.10
OS1	9.96	16	73	10	6.30	36.50
OS1	9.96	16	73	25	8.04	50.70
OS1	9.96	16	73	50	9.53	62.10
OS1	9.96	16	73	100	11.20	74.20
OS1	3.18	14	73	2	3.94	5.50
OS1	3.18	14	73	5	5.15	8.70
OS1	3.18	14	73	10	6.30	11.80
OS1	3.18	14	73	25	8.04	16.30
OS1	3.18	14	73	50	9.53	20.00
OS1	3.18	14	73	100	11.20	23.90

TIME OF CONCENTRATION CALCULATIONS

	OS1	OS2
SHEET FLOW	100'@1.00% 11.42 MIN.	100'@1.50% 9.71 MIN.
CONCENTRATED FLOW PAVED	– –	– –
UNPAVED	660'@2.88% 4.02 MIN.	705'@2.62% 4.50 MIN.
CHANNEL FLOW	165'@2.42% 0.27 MIN.	– –
TOTAL	15.71 MIN.	14.21 MIN.

PER WILLIAMSON COUNTY SUBDIVISION REGULATIONS (PAGE 99) THE MINIMUM TIME OF CONCENTRATION IS 10 MINUTES.

CURVE NUMBERS	
PARKING LOTS, ROOFS, DRIVEWAYS	98
POOR CONDITION GRASS COVER	89
GOOD CONDITION GRASS COVER	80
BRUSH	73

CURVE NUMBERS FROM THE CITY OF AUSTIN'S DRAINAGE CRITERIA MANUAL

0 150 300
FEET

LEGEND

DRAINAGE DESIGN CRITERIA

XX – DRAINAGE AREA DESIGNATION
AREA – DRAINAGE AREA IN ACRES

RATIONAL METHOD EQUATION

$Q = (C)(I)(A)$

DRAINAGE BASIN AREA DIVIDE

DIRECTIONAL FLOW ARROW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE MAP

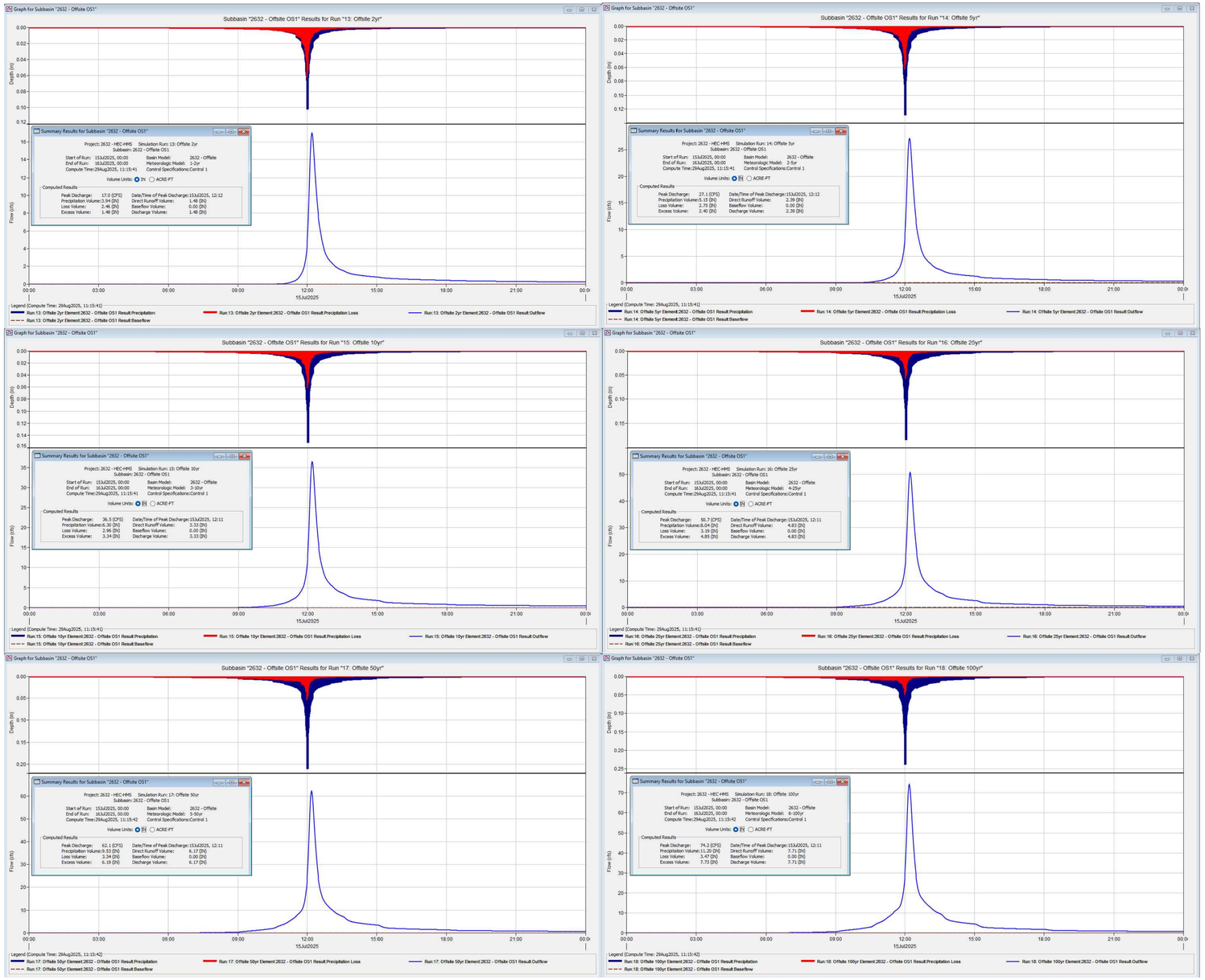
DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.9



1 OS1 OFFSITE DRAINAGE CALCULATIONS

Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Aug 29 2025

2632 Drive Culverts 25yr

Invert Elev Dn (ft)	= 801.80	**Calculations**	
Pipe Length (ft)	= 88.50	Qmin (cfs)	= 72.40
Slope (%)	= 0.50	Qmax (cfs)	= 72.40
Invert Elev Up (ft)	= 802.24	Tailwater Elev (ft)	= (dc+D)/2
Rise (in)	= 30.0		
Shape	= Circular	**Highlighted**	
Span (in)	= 30.0	Qtotal (cfs)	= 72.40
No. Barrels	= 3	Qpipe (cfs)	= 72.40
n-Value	= 0.012	Qovertop (cfs)	= 0.00
Culvert Type	= Circular Concrete	Veloc Dn (ft/s)	= 5.52
Culvert Entrance	= Square edge w/headwall (C)	Veloc Up (ft/s)	= 6.89
Coeff. K,M,c,Y,k	= 0.0098, 2, 0.0398, 0.67, 0.5	HGL Dn (ft)	= 803.89
		HGL Up (ft)	= 803.92
Embankment		Hw Elev (ft)	= 804.89
Top Elevation (ft)	= 805.80	Hw/D (ft)	= 1.06
Top Width (ft)	= 50.00	Flow Regime	= Inlet Control
Crest Width (ft)	= 50.00		

2 DRIVE CULVERTS 25YR FLOW

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

OFFSITE DRAINAGE CALCULATIONS

DRAWING STATUS

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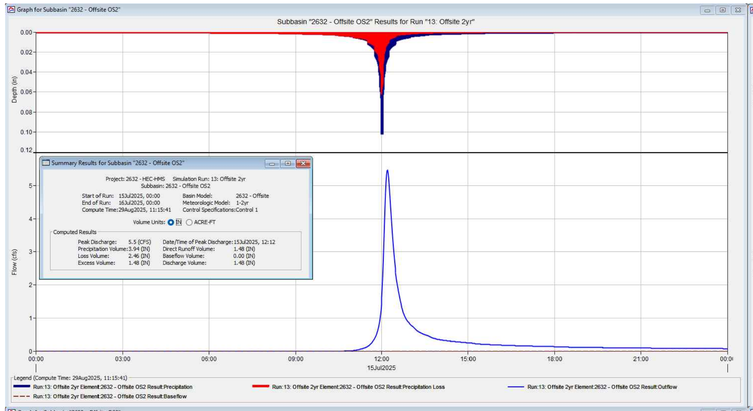
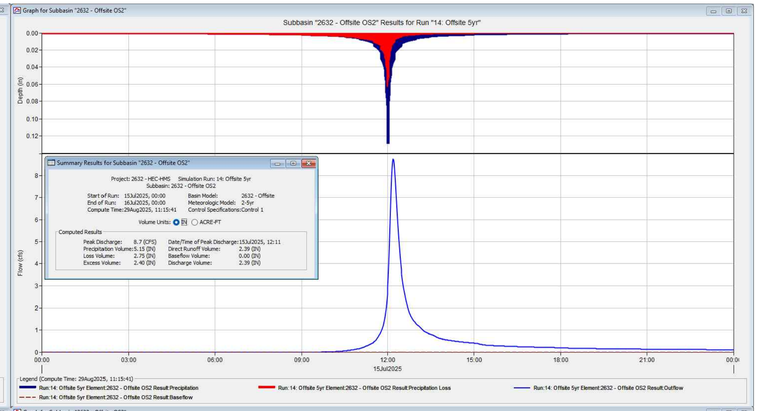
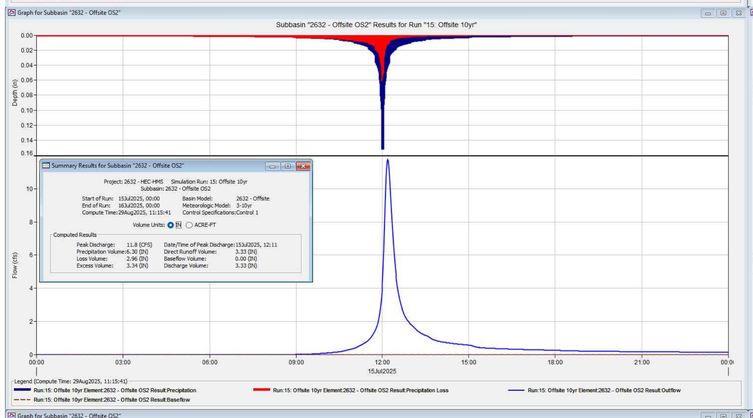
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

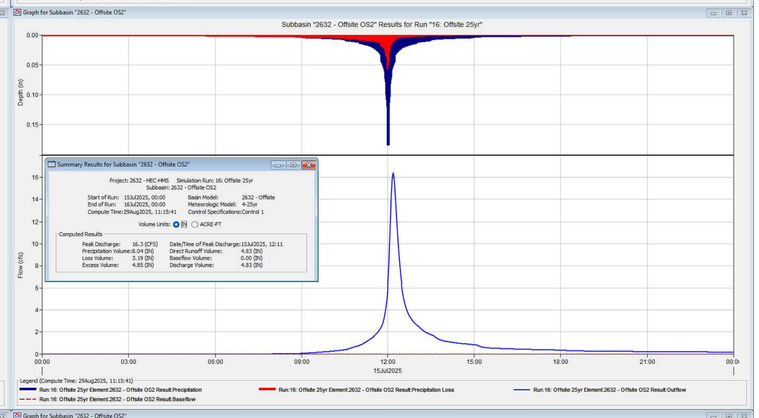
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

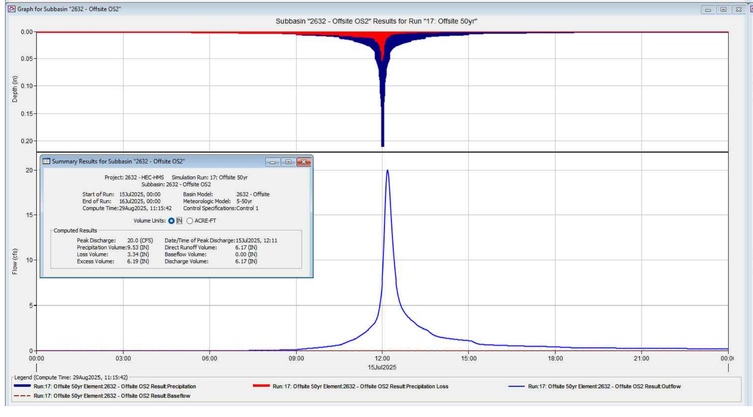
C4.10

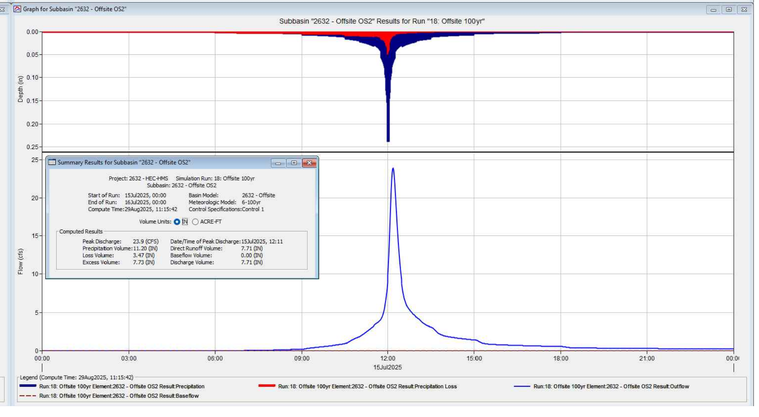












3 OS2 OFFSITE DRAINAGE CALCULATIONS

Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Friday, Aug 29 2025

2632 Post A3+OS2 100yr Channel Flow

Trapezoidal

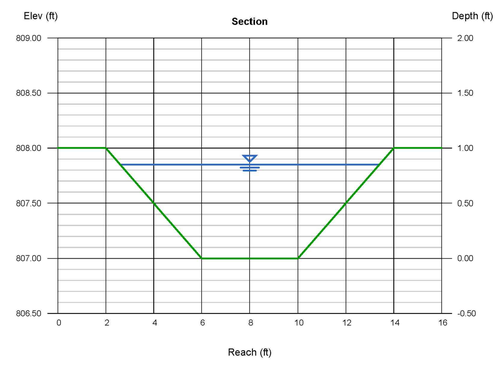
Bottom Width (ft)	= 4.00
Side Slopes (z:1)	= 4.00, 4.00
Total Depth (ft)	= 1.00
Invert Elev (ft)	= 807.00
Slope (%)	= 2.20
N-Value	= 0.030

Calculations

Compute by:	Known Q
Known Q (cfs)	= 31.40

Highlighted

Depth (ft)	= 0.85
Q (cfs)	= 31.40
Area (sqft)	= 6.29
Velocity (ft/s)	= 4.99
Wetted Perim (ft)	= 11.01
Crit Depth, Yc (ft)	= 0.92
Top Width (ft)	= 10.80
EGL (ft)	= 1.24



4 POST A3 + OS1 100YR CHANNEL FLOW

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CR 234
NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

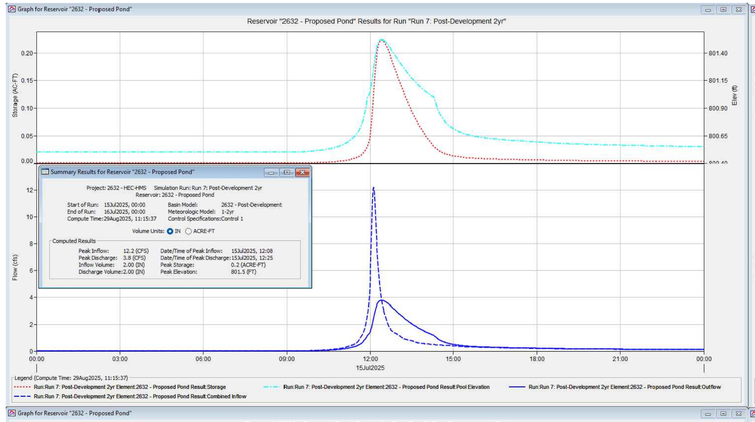
OFFSITE DRAINAGE CALCULATIONS

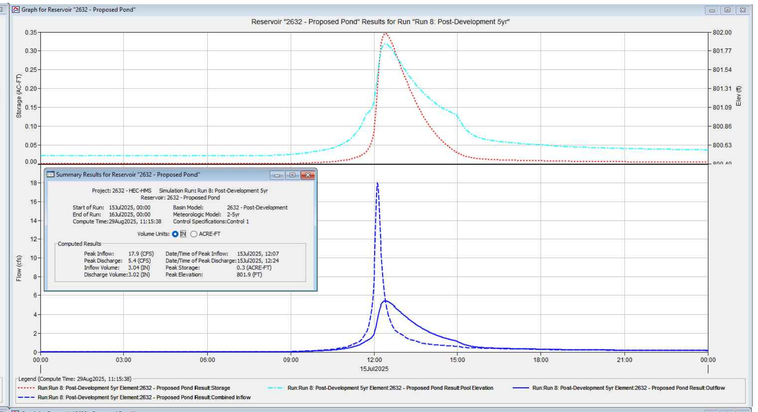
DRAWING STATUS
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

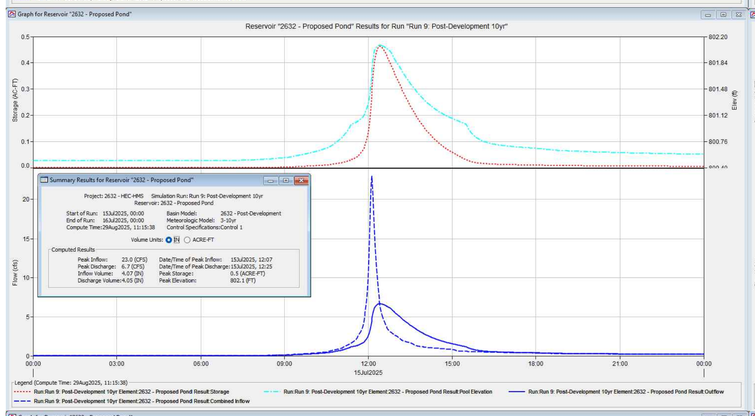
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

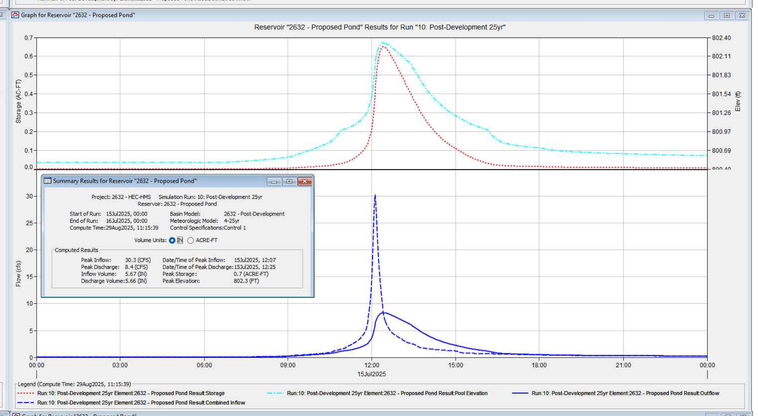
Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

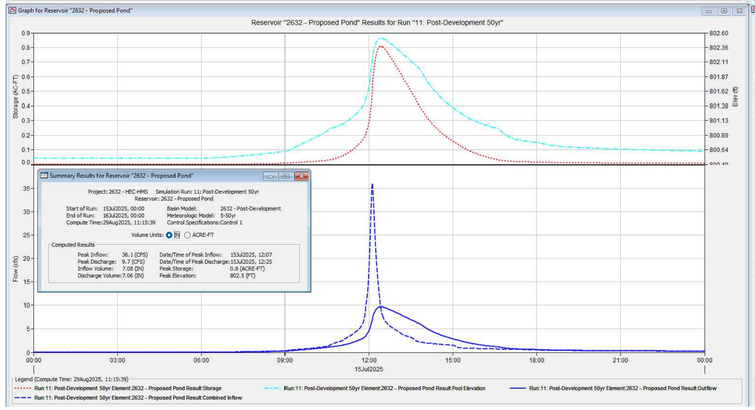
C4.11

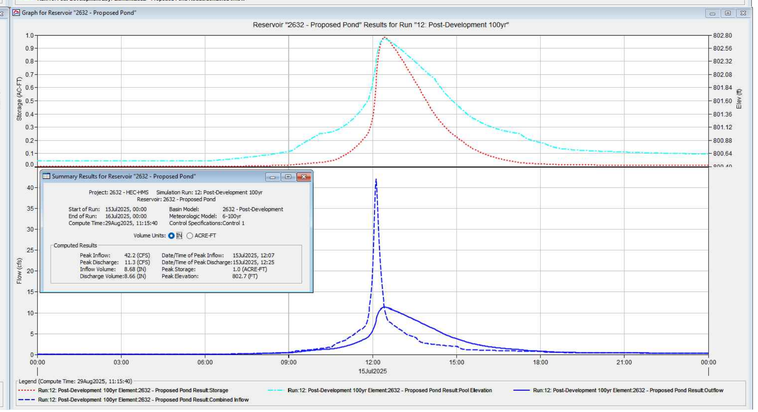












1 DETENTION POND DRAINAGE CALCULATIONS

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NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

DETENTION POND
DRAINAGE CALCULATIONS

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.12

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Additional information is provided for cells with a red triangle in the upper right corn
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will r

1. The Required Load Reduction for the total project: Calculations from RG-348

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

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resul
A_N = Net increase in impervious a
P = Average annual precipitation

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

County =	Williamson	
Total project area included in plan * =	8.18	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	5.50	acres
Total post-development impervious cover fraction * =	0.67	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	4787	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	8.18	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	5.50	acres
Post-development impervious fraction within drainage basin/outfall area =	0.67	
$L_{M\ THIS\ BASIN}$ =	4787	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Wet Basin
Removal efficiency = 93 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 = (BMP efficiency) x P x (A_I x 3

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

A_C =	8.18	acres
A_I =	5.50	acres
A_P =	2.68	acres
L_R =	5706	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 4787 lbs.

F = 0.84

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

Rainfall Depth =	1.26	inches
Post Development Runoff Coefficient =	0.48	
On-site Water Quality Volume =	17930	cubic feet

Calculations from RG-348

Off-site area draining to BMP =	2.66	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	243	cubic feet

Water Quality Volume Calculations

Elevation	Wet Pond Contour Area (Sq. Ft.)	Elevation Difference Between Contours (Ft)	Wet Pond Water Quality Volume (Cu. Ft.)	Wet Pond Cumulative Water Quality Volume (Cu. Ft.)
796	5,769	0.25	0	0
796.25	6,129	0.25	1,487	1,487
796.5	6,498	0.25	1,578	3,066
796.75	6,874	0.25	1,672	4,737
797	7,258	0.25	1,767	6,504
797.25	7,651	0.25	1,864	8,367
797.5	8,051	0.25	1,963	10,330
797.75	8,459	0.25	2,064	12,394
798	8,876	0.25	2,167	14,561
798.25	9,300	0.25	2,272	16,833
798.5	9,733	0.25	2,379	19,212
798.75	10,173	0.25	2,488	21,700
799	10,621	0.25	2,599	24,299
799.25	11,078	0.25	2,712	27,012
799.5	11,542	0.25	2,828	29,839
799.75	12,015	0.25	2,945	32,784
800	12,496	0.25	3,064	35,848
800.25	13,731	0.25	3,278	39,126
800.5	15,017	0.25	3,594	42,719
Required Capacity at Water Quality Volume = 39,738 Cu. Ft.				
Total Water Quality Volume = 42,719 Cu. Ft.				

Storage for Sediment = 3635
Total Capture Volume (required water quality volume(s) x 1.20) = 21808 cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG

Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr
Irrigation area =	NA	square feet
	NA	acres

8. Extended Detention Basin System Designed as Required in RG

Required Water Quality Volume for extended detention basin = NA cubic feet

9. Filter area for Sand Filters Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = NA cubic feet

Minimum filter basin area = NA square feet

Maximum sedimentation basin area = NA square feet
Minimum sedimentation basin area = NA square feet

10. Bioretention System Designed as Required in RG

Required Water Quality Volume for Bioretention Basin = NA cubic feet

11. Wet Basins Designed as Required in RG

Required capacity of Permanent Pool =	21808	cubic feet
Required capacity at WQV Elevation =	39738	cubic feet

WET BASIN

TSS REMOVED (lbs.) 5,706 lbs. = 5,706 lbs. TSS REMOVED PER DESIGN

REQUIRED TSS REMOVAL = 4,787 lbs. TSS

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NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

TSS REMOVAL CALCULATIONS

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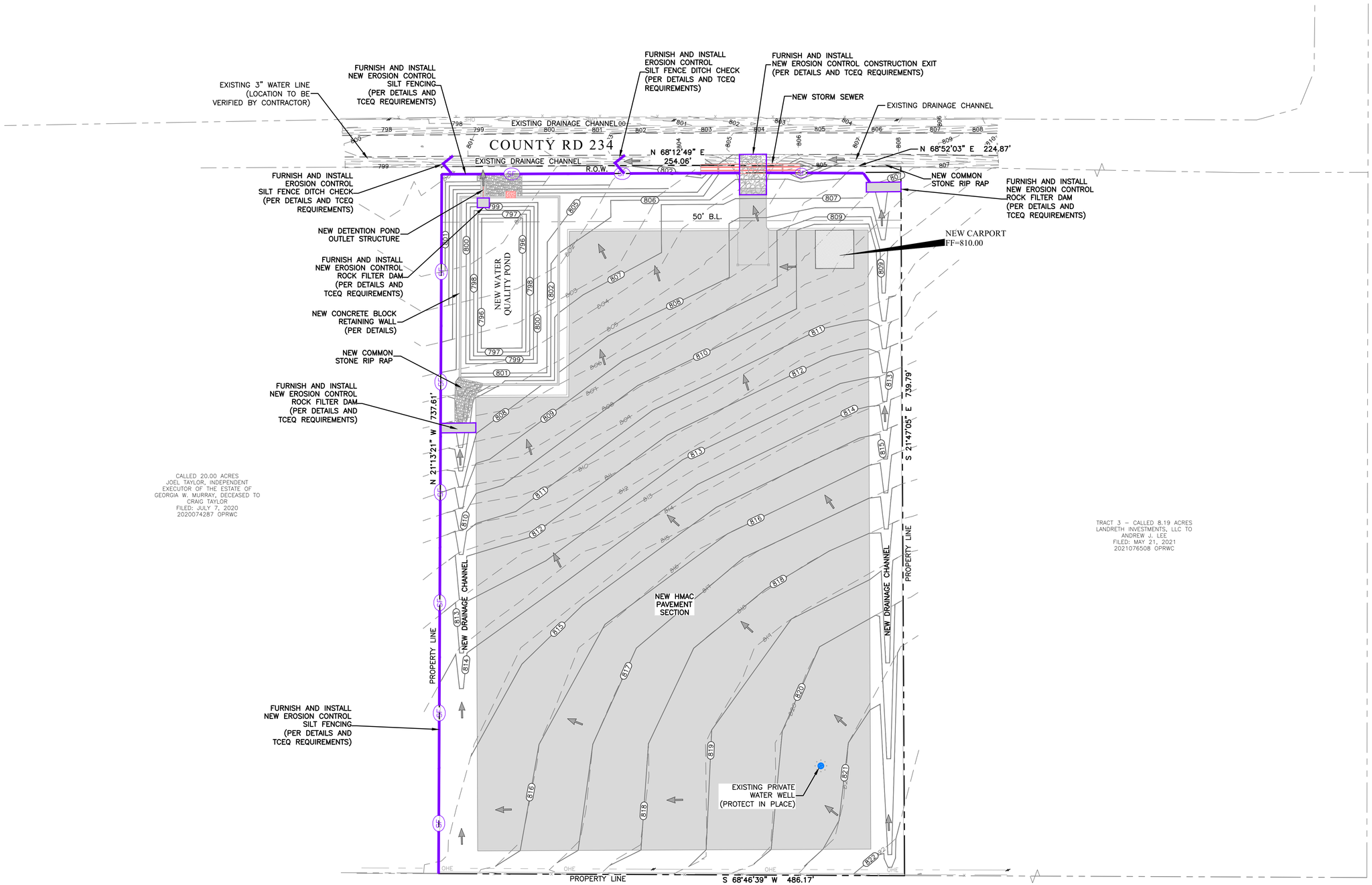
7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL ENGINEER
LICENSED

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.13



0 50 100
FEET

LEGEND

DIRECTIONAL FLOW ARROW

NEW EROSION CONTROL SILT FENCING (PER DETAILS AND TCEQ REQUIREMENTS) (SF)

EROSION CONTROL CONSTRUCTION EXIT (PER DETAILS AND TCEQ REQUIREMENTS)

EROSION CONTROL ROCK FILTER DAM (PER DETAILS AND TCEQ REQUIREMENTS)

EROSION CONTROL SILT FENCE DITCH CHECK (PER DETAILS)

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NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

SITE EROSION CONTROL PLAN

DRAWING STATUS

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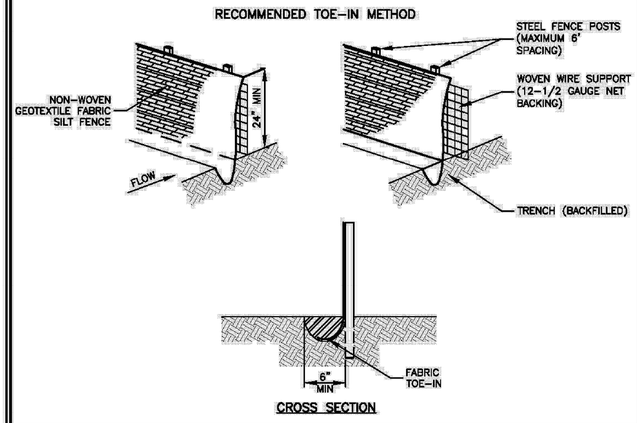
7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

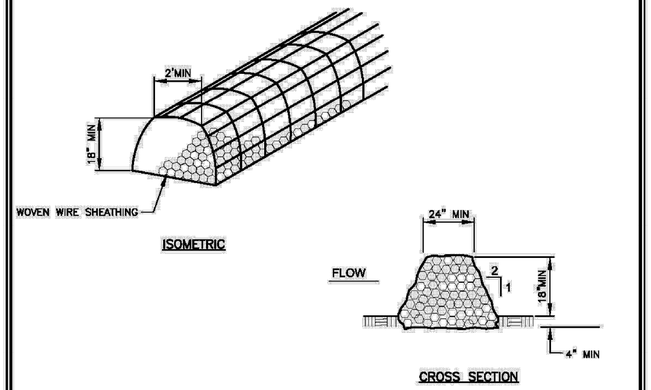
C4.14



NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MIN. OF ONE (1') FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G. PAVEMENT) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHALL BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IN TURN IS SECURELY FASTENED TO THE STEEL FENCE POSTS.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
8. SILT FENCE SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED

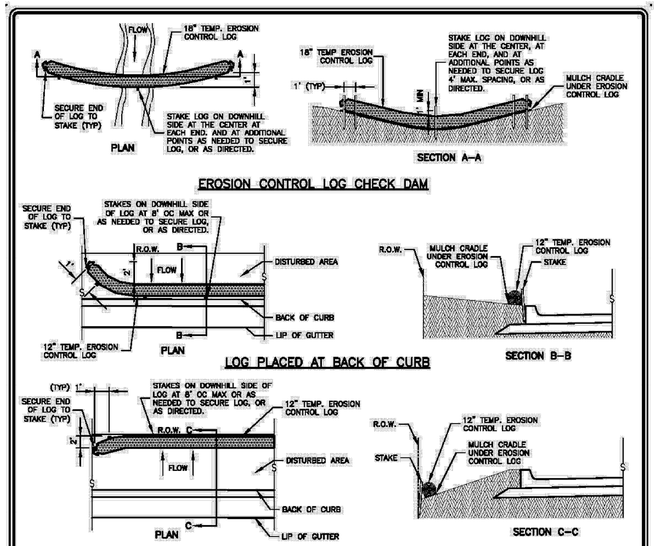
RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC-10
APPROVED 03-25-11 DATE	SILT FENCE DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

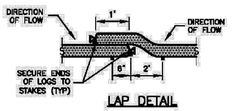


NOTES:

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

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC-12
APPROVED 03-25-11 DATE	ROCK BERM DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		





NOTES:

1. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 6".
2. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF LOGS DURING RAINFALL EVENT FOR PROPER PERFORMANCE.
3. LOGS SHALL CONSIST OF 100% BIODEGRADABLE, PHOTODEGRADABLE OR RECYCLABLE CONTAINMENT MESH STUFFED WITH FILTER MATERIAL.
4. STUFF LOGS WITH SUFFICIENT FILTER MATERIAL TO ACHIEVE DENSITY THAT WILL HOLD SHAPE WITHOUT EXCESSIVE DEFORMATION. FILTER MATERIAL SHALL CONSIST OF MULCH, ASPEN EXCELSIOR WOOD FIBERS, CHIPPED SITE VEGETATION, COCONUT FIBERS,100% RECYCLABLE FIBERS, OR ANY OTHER ACCEPTABLE MATERIAL, EXCLUDING STRAW AND HAY.
5. STAKES SHALL BE 2" X 2" WOOD, 4' LONG, EMBEDDED SUCH THAT 2" PROTRUDES ABOVE LOG, OR AS DIRECTED.

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: EC-17
APPROVED 03-25-11 DATE	EROSION CONTROL LOG DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

EROSION CONTROL DETAILS SHEET 1

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7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.15

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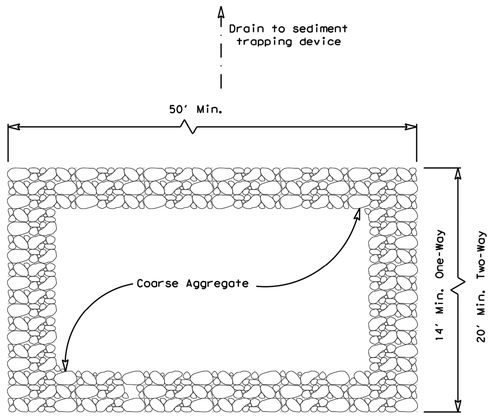
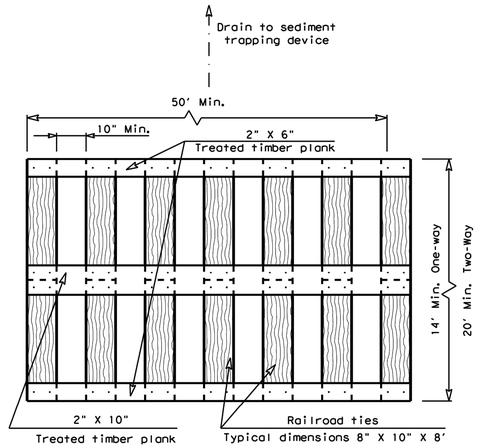
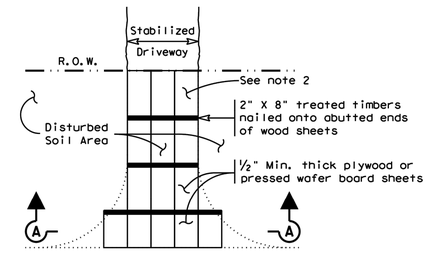


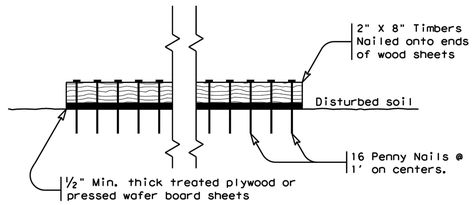
PLAN VIEW



PLAN VIEW



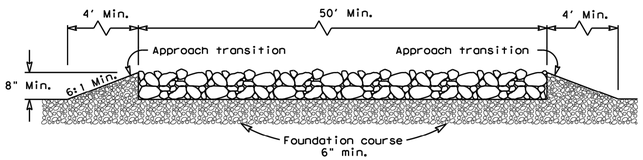
PLAN VIEW



SECTION A-A

CONSTRUCTION EXIT (TYPE 3)

SHORT TERM



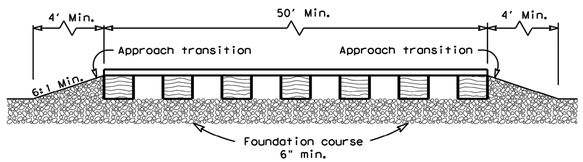
ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 1)

ROCK CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 1)

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



ELEVATION VIEW

CONSTRUCTION EXIT (TYPE 2)

TIMBER CONSTRUCTION (LONG TERM)

GENERAL NOTES (TYPE 2)

1. The length of the type 2 construction exit shall be as indicated on the plans, but not less than 50'.
2. The treated timber planks shall be attached to the railroad ties with ½"x 6" min. lag bolts. Other fasteners may be used as approved by the Engineer.
3. The treated timber planks shall be #2 grade min., and should be free from large and loose knots.
4. The approach transitions shall be no steeper than 6:1 and constructed as directed by the Engineer.
5. The construction exit foundation course shall be flexible base, bituminous concrete, portland cement concrete or other material as approved by the Engineer.
6. The construction exit should be graded to allow drainage to a sediment trapping device.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.
8. Construct exits with a width of at least 14 ft. for one-way and 20 ft. for two-way traffic for the full width of the exit, or as directed by the engineer.

GENERAL NOTES (TYPE 3)

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

Texas Department of Transportation | Design Division Standard

TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES

CONSTRUCTION EXITS

EC(3)-16

FILE: ec316	DN: TxDOT	CK: KM	DW: VP		DN/CK: LS
©TxDOT: JULY 2016	CONT	SECT	JOB	HIGHWAY	
REVISIONS	C	S	J	HWY	
	DIST	COUNTY		SHEET NO.	
	DST	CTY	$EC(3A-16$		

DATE: $DATE$
FILE: $FILE$

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234
NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

EROSION CONTROL DETAILS
SHEET 2

DRAWING STATUS
THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C4.16

REFER TO ENTRY GRADING/DIMENSION DETAIL (SHEET C5.2)

FURNISH AND INSTALL 93 S.Y. NEW COMMON STONE RIP RAP (AVG. DIA.=12" – PER DETAILS)

TRACT 3 – CALLED 8.19 ACRES
LANDRETH INVESTMENTS, LLC TO ANDREW J. LEE
FILED: MAY 21, 2021
2021076508 OPRWC

PROPERTY LINE

S 21°47'05" E 739.79'

NEW DRAINAGE CHANNEL

606'

FG=818.13

FG=821.85

EXISTING PRIVATE WATER WELL (PROTECT IN PLACE)

NEW HMAC PAVEMENT SECTION

FG=818.50

S 68°46'39" W 486.17'

410'

172.5'

50' B.L.

EXISTING 3" WATER LINE (LOCATION TO BE VERIFIED BY CONTRACTOR)

COUNTY RD 234

EXISTING DRAINAGE CHANNEL R.O.W.

EXISTING DRAINAGE CHANNEL

PROPERTY LINE

FG=813.56

473'

FG=815.50

NEW DRAINAGE CHANNEL

PROPERTY LINE

N 21°13'21" W 737.61'

REFER TO NEW WATER QUALITY POND GRADING/DIMENSION DETAIL (SHEET C5.3)

CALLED 20.00 ACRES
JOEL TAYLOR, INDEPENDENT EXECUTOR OF THE ESTATE OF GEORGIA W. MURRAY, DECEASED TO CRAIG TAYLOR
FILED: JULY 7, 2020
2020074287 OPRWC

ANGELA E. IRVINE, INDEPENDENT EXECUTOR OF THE ESTATE OF DONALD R. IRVINE, DECEASED TO IRVINE FAMILY TRUST
FILED: JULY 30, 1999
1999063093 OPRWC

IMPERVIOUS COVER CALCULATIONS

SITE AREA: 8.18 ACRES
TOTAL IMPERVIOUS AREA: 5.50 ACRES

TOTAL IMPERVIOUS COVER = 67% OF TOTAL SITE

0 30 60
FEET

LEGEND

- SPOT GRADE (FINAL GRADE AFTER LANDSCAPING)
- SPOT GRADE LOCATION
- FF FINISHED FLOOR
- FG FINISHED GRADE
- FL FLOW LINE
- TW TOP OF WALL
- DIRECTIONAL FLOW ARROWS
- 400 PROPOSED CONTOUR
- 400 EXISTING CONTOUR (SEE NOTES)
- NEW RETAINING WALL (PER PROJECT DETAILS)
- NEW HMAC PAVEMENT SECTION (PER GEOTECH REPORT)
- NEW REINFORCED CONCRETE PAVEMENT SECTION (PER GEOTECH REPORT)
- W EXISTING WATER WELL
- REFER TO SHEET C6.1 FOR CHANNEL SECTION

KEYED NOTES

1. CAUTION!!! EXISTING POWER POLE/LIGHT POLE
2. CAUTION!!! OVERHEAD ELECTRIC
3. EXISTING FENCING
4. FURNISH AND INSTALL 1–NEW BOLLARD (PER DETAILS)
5. FURNISH AND INSTALL NEW FENCING (PER DETAILS)
6. FURNISH AND INSTALL 1–NEW FENCE GATE (PER DETAILS)

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

SITE GRADING/ DIMENSION PLAN

DRAWING STATUS

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7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
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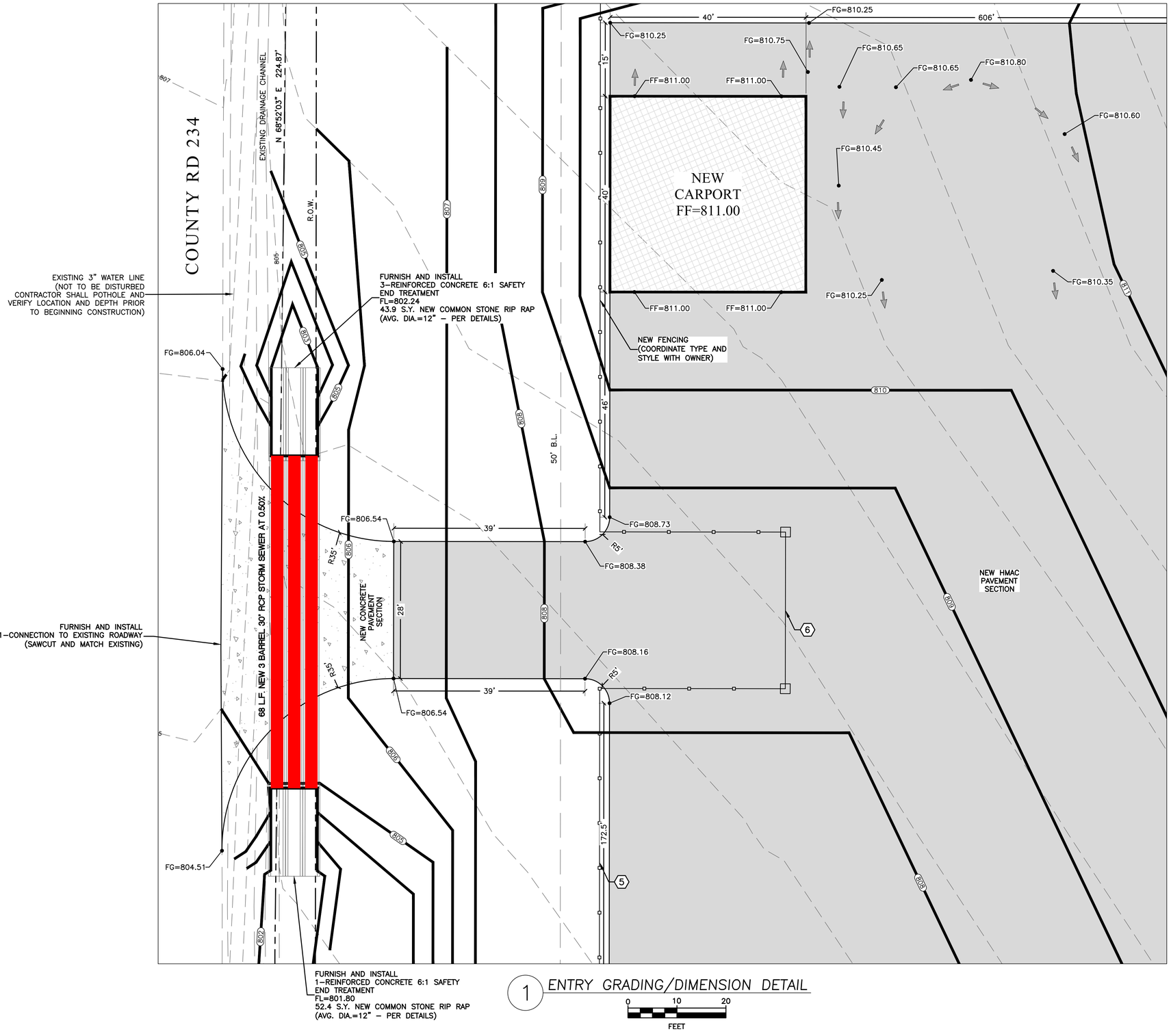
Plot Date	7-25-2025

C5.1



1 ENTRY GRADING/DIMENSION DETAIL

0 10 20
FEET

LEGEND

- SPOT GRADE (FINAL GRADE AFTER LANDSCAPING)
- SPOT GRADE LOCATION
- FF FINISHED FLOOR
- FG FINISHED GRADE
- FL FLOW LINE
- TW TOP OF WALL
- DIRECTIONAL FLOW ARROWS
- 400 PROPOSED CONTOUR
- 400 EXISTING CONTOUR (SEE NOTES)
- NEW RETAINING WALL (PER PROJECT DETAILS)
- NEW HMAC PAVEMENT SECTION (PER GEOTECH REPORT)
- NEW REINFORCED CONCRETE PAVEMENT SECTION (PER GEOTECH REPORT)
- W EXISTING WATER WELL

KEYED NOTES (1)

1. CAUTION!!! EXISTING POWER POLE/LIGHT POLE
2. CAUTION!!! OVERHEAD ELECTRIC
3. EXISTING FENCING
4. FURNISH AND INSTALL 1-NEW BOLLARD (PER DETAILS)
5. FURNISH AND INSTALL NEW FENCING (PER DETAILS)
6. FURNISH AND INSTALL 1-NEW FENCE GATE (PER DETAILS)

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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

SITE GRADING/DIMENSION DETAIL - SHEET 1

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PROFESSIONAL ENGINEER

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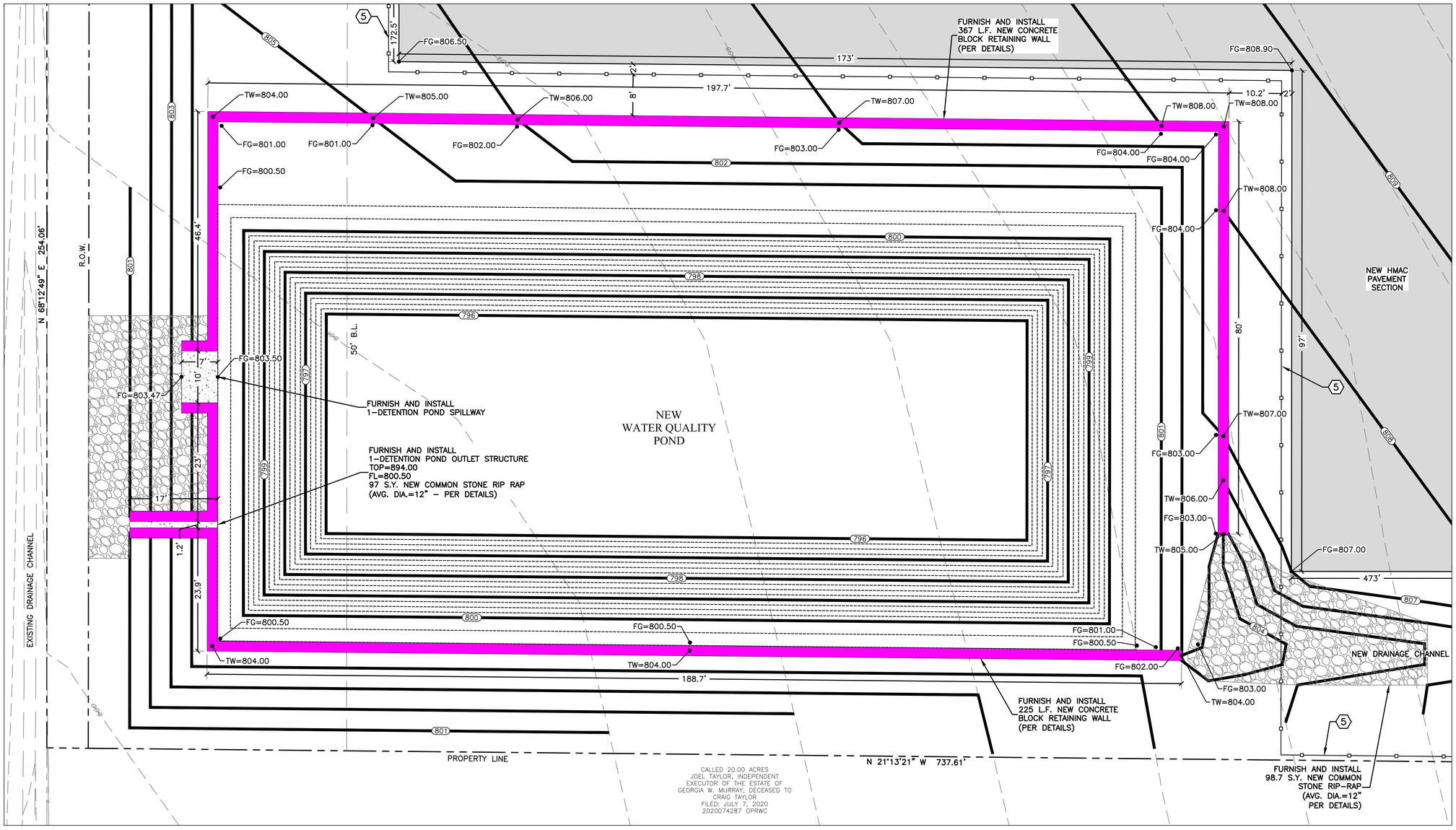
Project No	252632.00
Plot Date	7-25-2025

C5.2



2 NEW WATER QUALITY POND GRADING/DIMENSION DETAIL

0 10 20
FEET

LEGEND

- SPOT GRADE (FINAL GRADE AFTER LANDSCAPING)
- SPOT GRADE LOCATION
- FF FINISHED FLOOR
- FG FINISHED GRADE
- FL FLOW LINE
- TW TOP OF WALL
- DIRECTIONAL FLOW ARROWS
- 400 PROPOSED CONTOUR
- 400 EXISTING CONTOUR (SEE NOTES)
- NEW RETAINING WALL (PER PROJECT DETAILS)
- NEW HMAC PAVEMENT SECTION (PER GEOTECH REPORT)
- NEW REINFORCED CONCRETE PAVEMENT SECTION (PER GEOTECH REPORT)
- W EXISTING WATER WELL

KEYED NOTES (1)

1. CAUTION!!! EXISTING POWER POLE/LIGHT POLE
2. CAUTION!!! OVERHEAD ELECTRIC
3. EXISTING FENCING
4. FURNISH AND INSTALL 1-NEW BOLLARD (PER DETAILS)
5. FURNISH AND INSTALL NEW FENCING (PER DETAILS)
6. FURNISH AND INSTALL 1-NEW FENCE GATE (PER DETAILS)

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CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

SITE GRADING/DIMENSION DETAIL - SHEET 2

DRAWING STATUS

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7-25-2025
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LICENSED PROFESSIONAL ENGINEER

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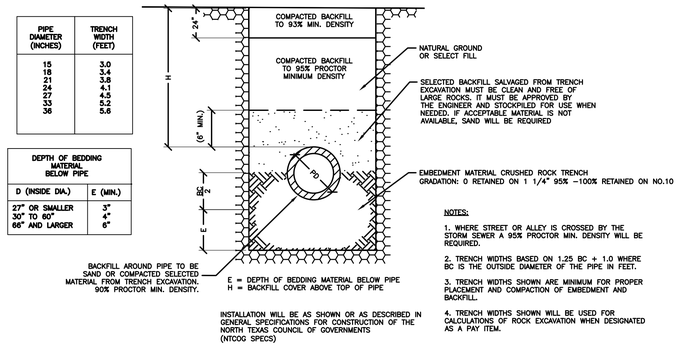
Plot Date	7-25-2025

C5.3

PIPE DIAMETER (INCHES)	TRENCH WIDTH (FEET)
15	3.0
18	3.4
21	3.8
24	4.1
27	4.5
33	5.2
36	5.6

DEPTH OF BEDDING MATERIAL BELOW PIPE	
D (INSIDE DIA.)	E (MIN.)
27" OR SMALLER	3"
30" TO 60"	4"
66" AND LARGER	6"

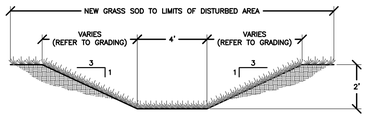


NOTES:

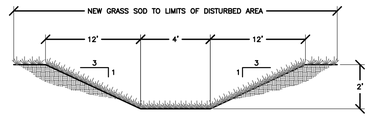
1. WHERE STREET OR ALLEY IS CROSSED BY THE STORM SEWER A 95% PROCTOR MIN. DENSITY WILL BE REQUIRED.
2. TRENCH WIDTHS BASED ON 1.25 BC + 1.0 WHERE BC IS THE OUTSIDE DIAMETER OF THE PIPE IN FEET.
3. TRENCH WIDTHS SHOWN ARE MINIMUM FOR PROPER PLACEMENT AND COMPACTION OF EMBEDMENT AND BACKFILL.
4. TRENCH WIDTHS SHOWN WILL BE USED FOR CALCULATIONS OF ROCK EXCAVATION WHEN DESIGNATED AS A PAY ITEM.

INSTALLATION WILL BE AS SHOWN OR AS DESCRIBED IN GENERAL SPECIFICATIONS FOR CONSTRUCTION OF THE NORTH TEXAS COUNCIL OF GOVERNMENTS (NTCOG SPECS)

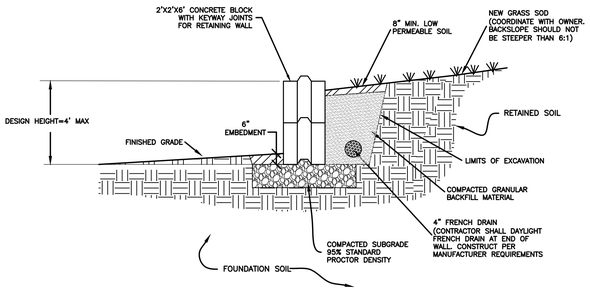
1 *REINFORCED CONCRETE PIPE INSTALLATION*
SCALE: N.T.S.



2 *EARTHEN CHANNEL: SECTION A–A*
SCALE: N.T.S.



3 *EARTHEN CHANNEL: SECTION B–B*
SCALE: N.T.S.



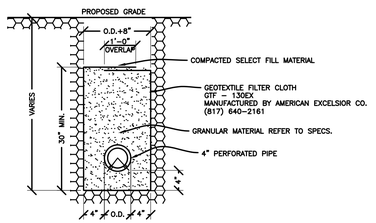
CONCRETE BLOCK DIMENSIONS:

LENGTH = 6'
WIDTH = 2'
HEIGHT = 2'
WEIGHT = 3500 LBS

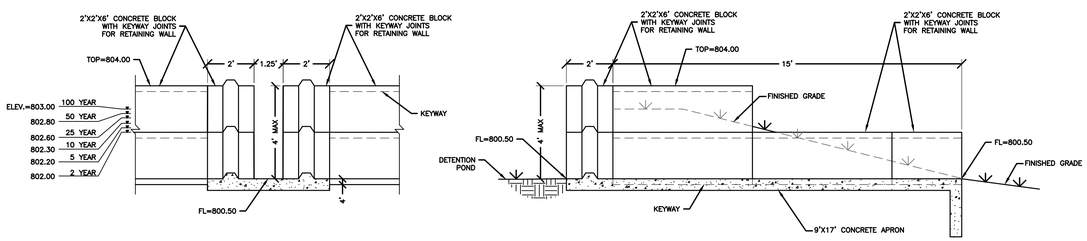
NOTES:

1. HEIGHT OF WALL SHALL NOT EXCEED 4'.
2. CONTRACTOR SHALL ENSURE FRENCH DRAIN IS NOT CLOGGED AND OUTFLOWS FREELY WITH ADEQUATE DOWNSTREAM DRAINAGE CONVEYANCE.

4 *CONCRETE BLOCK UNIT GRAVITY RETAINING WALL DETAIL*
SCALE: N.T.S.



5 *FRENCH DRAIN SECTION*
SCALE: N.T.S.



WEIR PROFILE

WEIR SECTION

TOE WALL SECTION

NOTES:

1. DESIGNED ACCORDING TO AASHTO LRFD SPECIFICATIONS. ALL REINFORCED STEEL SHALL BE GRADE 60.
2. ALL CONCRETE SHALL BE CLASS "C" AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3600 PSI.
3. ALL REFORCED BARS SHALL BE TO PROVIDE A MINIMM OF 2" CLEAR COVER.
4. WHEN STRUCTURE IS FOUNDED ON SOLID ROCK, DEPTH OF TOEWALL MAY BE REDUCED OR ELIMINATED AS DIRECTED BY THE ENGINEER.

6 *DETENTION POND OUTLET STRUCTURE*
SCALE: N.T.S.

CLARK ASSOCIATES
CIVIL ENGINEERING • DESIGN • PLANNING

CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

MISCELLANEOUS DETAILS SHEET 1

DRAWING STATUS

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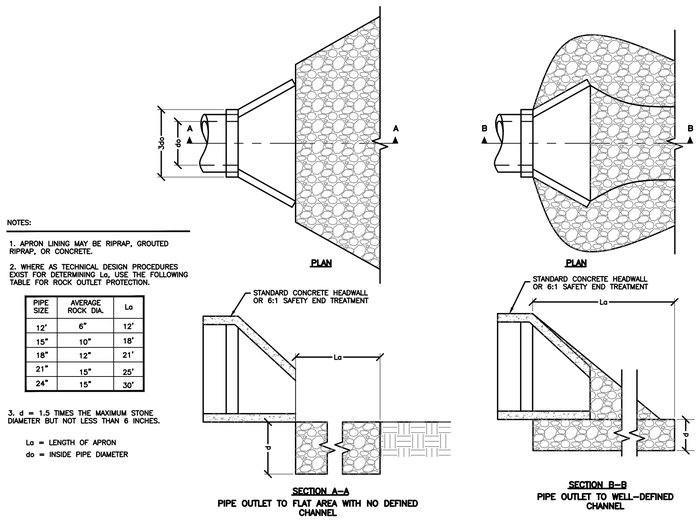
7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
PROFESSIONAL LICENSED ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C6.1



NOTES:

1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, OR CONCRETE.

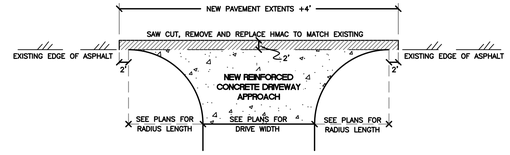
2. WHERE AS TECHNICAL DESIGN PROCEDURES EXIST FOR DETERMINING La, USE THE FOLLOWING TABLE FOR ROCK OUTLET PROTECTION.

PIPE SIZE	AVERAGE ROCK DIA.	La
12"	6"	12'
15"	10"	18'
18"	12"	21'
21"	15"	25'
24"	15"	30'

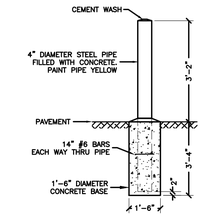
3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6 INCHES.

La = LENGTH OF APRON
do = INSIDE PIPE DIAMETER

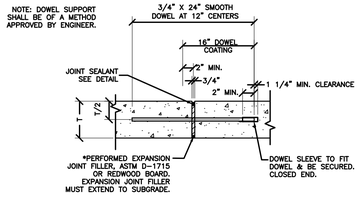
1 ROCK OUTLET PROTECTION
SCALE: N.T.S.



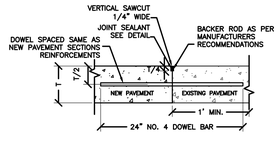
2 CONNECTION TO EXISTING ROADWAY
SCALE: N.T.S.



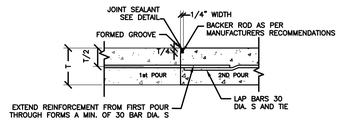
3 BOLLARD DETAIL
SCALE: N.T.S.



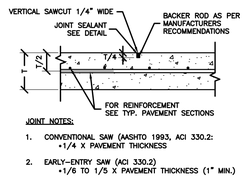
4 TYPICAL EXPANSION JOINT
SCALE: N.T.S.



5 TYPICAL BUTT JOINT
SCALE: N.T.S.



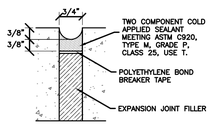
6 TYPICAL CONSTRUCTION JOINT
SCALE: N.T.S.



JOINT NOTES:

1. CONVENTIONAL SAW (AASHTO 1993, ACI 330.2: •1/4 X PAVEMENT THICKNESS
2. EARLY-ENTRY SAW (ACI 330.2) •1/6 TO 1/5 X PAVEMENT THICKNESS (1" MIN.)

7 TYPICAL SAWED JOINT
SCALE: N.T.S.



8 JOINT SEALANT DETAIL FOR EXPANSION JOINT
SCALE: N.T.S.

JOINT NOTES:

T = PAVEMENT THICKNESS

1. CONTRACTOR MAY ELECT TO USE DOWELED CURB OR MONOLITHIC CURB

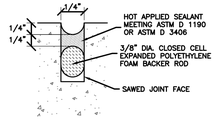
2. DOWEL BARS PLACED INTO EXISTING PAVEMENT SHALL BE DRILLED INTO PAVEMENT HORIZONTALLY BY USE OF A MECHANICAL RIG. DRILLING BY HAND IS TO ACCEPTABLE. SECURE DOWEL BARS IN EXISTING PAVING WITH EPOXY GROUT.

3. POLYETHYLENE FOAM BACKER ROD DOES NOT SIT ON BOTTOM OF SAW-CUT JOINT. PLACE AT DEPTH INDICATED IN DETAIL.

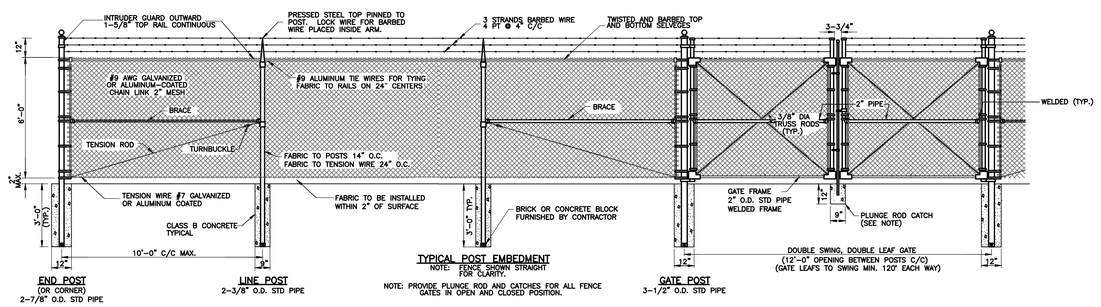
4. IF SEALANT PROTRUDES ABOVE SURFACE OF THE PAVEMENT IT MUST BE REMOVED AND REPLACED.

5. SUBMIT MANUFACTURER'S LITERATURE FOR SEALANT, DOCUMENTING PRODUCT COMPLIES WITH ASTM SPECIFICATIONS AND PROVIDING MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION. FOLLOW MANUFACTURER'S RECOMMENDATIONS ON USE OF THE PRODUCT.

6. THE CONSTRUCTION JOINT IS TO BE USED BETWEEN SEPARATE POURS OF NEW PAVEMENT. NOTE THAT IT REQUIRES THE REINFORCEMENT TO BE EXTENDED THROUGH THE FORM TO TIE TO NEXT POUR. THE BUTT JOINT IS TO BE USED BETWEEN EXISTING CONCRETE PAVEMENT (STREET OR DRIVEWAY) AND PROPOSED PAVEMENT, UNLESS AN EXPANSION JOINT IS CALLED FOR.



9 JOINT SEALANT DETAIL FOR BUTT, SAWED, AND CONSTRUCTION JOINT
SCALE: N.T.S.



END POST (OR CORNER) 2-7/8" O.D. STD PIPE

LINE POST 2-3/8" O.D. STD PIPE

TYPICAL POST EMBEDMENT
NOTE: FENCE SHOWN STRAIGHT FOR CLARITY.
NOTE: PROVIDE PLUNGE ROD AND CATCHES FOR ALL FENCE GATES IN OPEN AND CLOSED POSITION.

GATE POST 3-1/2" O.D. STD PIPE

10 INTRUDER RESISTANT FENCE DETAIL
SCALE: N.T.S.

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CR 234
NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

MISCELLANEOUS DETAILS SHEET 2

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7-25-2025
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LICENSED PROFESSIONAL ENGINEER

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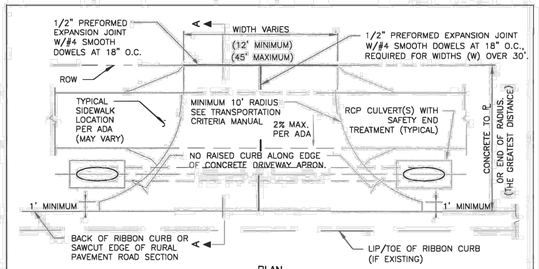
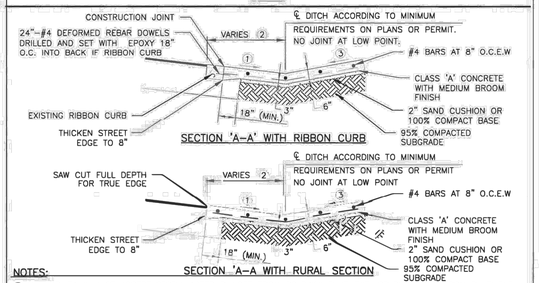
C6.2



PLAN



NOTES:

① NEW DRIVEWAY MUST ACCEPT STORM WATER RUNOFF FROM ROADWAY PAVEMENT, GRADING AWAY FROM PAVEMENT, AT A MINIMUM −2%, MAXIMUM −12%.

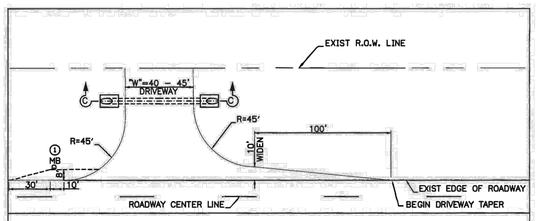
② GRADE BACK DISTANCES MUST BE AT A MINIMUM OF 12' OR ℄ OF BAR DITCH IF GREATER THAN 12' OR TO THE DISTANCE REQUIRED IN THE PERMIT. (SHORTER OR LONGER)

③ GRADE OF DRIVEWAY PAST THE 12' POINT MAY CHANGE MULTIPLE TIMES AND BE POSITIVE OR NEGATIVE TO THE BACK SIDE OF THE APRON, BUT CAN BE NO GREATER THAN 2% IN THE AREA WHERE THE SIDEWALK IS TO CROSS.

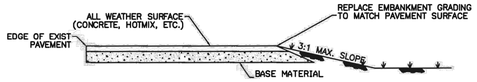
④ PROPER CHAIRS SHALL BE USED TO SUPPORT THE STEEL REINFORCEMENT.

SCALE: NTS

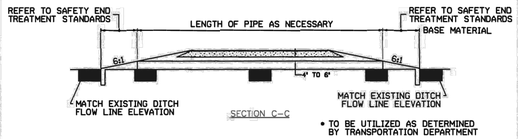
RECORD SIGNED COPY ON FILE APPROVED 01-28-21 DATE THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.	CITY OF ROUND ROCK CONCRETE DRIVEWAY DETAIL (RIBBON CURB OR RURAL SECTION)	DRAWING NO: ST-04.1 SHEET 1 of 1 ROUND ROCK TEXAS



① MAILBOX PAD IS ONLY REQUIRED IF MAIL IS TO BE DELIVERED AT THIS LOCATION.



TYPICAL URBAN DRIVEWAY SECTION



SECTION C-C

• TO BE UTILIZED AS DETERMINED BY TRANSPORTATION DEPARTMENT

SCALE: NTS

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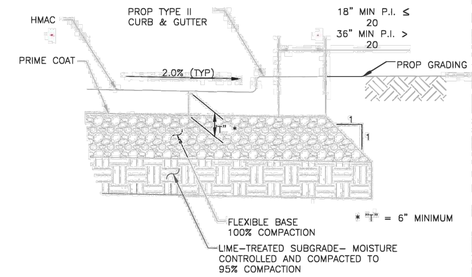

NOTES:

1. REFER TO TYPICAL SECTIONS FOR FURTHER DETAILS.
2. ALL UNPAVED AREAS WITHIN LIMITS OF CONSTRUCTION SHALL BE SODDED OR SEEDED AS SHOWN ON THE PLANS.
3. SLOPES OF STREET PAVEMENT SHALL BE PER TRANSPORTATION CRITERIA MANUAL.
4. ALL PAVEMENT LAYER THICKNESSES SHALL BE BASED ON PROJECT PAVEMENT DESIGN REPORT. REFER TO THE TRANSPORTATION CRITERIA MANUAL.

SCALE: NTS

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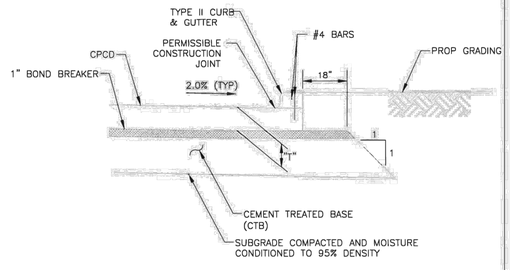

NOTES:

1. REFER TO TYPICAL SECTIONS FOR FURTHER DETAILS.
2. CPCD TO BE CONSTRUCTED IN ACCORDANCE WITH TXDOT STANDARD "CONCRETE PAVEMENT DETAILS CONTRACTION DESIGN T = 6 TO 12 INCHES" (CPCD).
3. ALL PAVEMENT LAYER THICKNESSES SHALL BE BASED ON PROJECT PAVEMENT DESIGN REPORT. REFER TO THE TRANSPORTATION CRITERIA MANUAL.

SCALE: NTS

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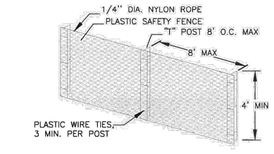
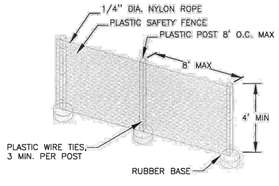


TEMPORARY SAFETY FENCE



PORTABLE SAFETY FENCE

NOTES:

1. SAFETY FENCE SHALL BE USED TO PROTECT ALL EXCAVATIONS IN THE RIGHT-OF-WAY.
2. SAFETY FENCES SHALL BE USED TO SEPARATE CONSTRUCTION ACTIVITIES FROM PEDESTRIANS.
3. ALL SAFETY FENCING SHALL BE PLASTIC, 48" MINIMUM HEIGHT AND ORANGE IN COLOR.
4. SAFETY FENCE USED WITHIN THE ROADWAY SHALL BE REFLECTORIZED WITH A MINIMUM OF TWO (2) STRIPS OF RETROREFLECTIVE MATERIAL, A MINIMUM OF 1' WIDE, THE LENGTH OF THE FENCE OR DELINEATED BY CHANNELIZING DEVICES.
5. SAFETY FENCE USED TO SEPARATE SIDEWALKS FROM CONSTRUCTION ACTIVITIES SHALL HAVE MINIMUM ENCROACHMENT TO THE SIDEWALK.
6. AS A MINIMUM, SAFETY FENCING IS REQUIRED IN AREAS ADJACENT TO EXCAVATIONS GREATER THAN OR EQUAL TO 6".
7. SAFETY FENCING SHALL BE PAID FOR UNDER ITEM 502, "BARRICADES, SIGNS AND TRAFFIC HANDLING".
8. PORTABLE SAFETY FENCE MOUNTS SHALL BE APPROVED BY THE TRANSPORTATION DEPARTMENT PRIOR TO CONSTRUCTION.

SCALE: NTS

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CR 234

NEW TRUCK PARKING FACILITY

WILLIAMSON COUNTY, TEXAS

CITY OF ROUND ROCK STANDARD DETAILS

DRAWING STATUS

THESE DRAWINGS WERE PREPARED UNDER THE AUTHORITY OF TREY D. SIMPSON P.E. 141427, CLARK ASSOCIATES FIRM NO: F-23184.

7-25-2025

STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C7.1

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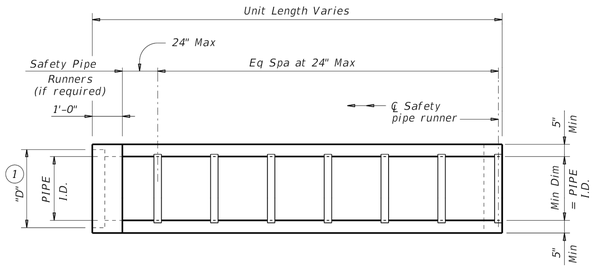
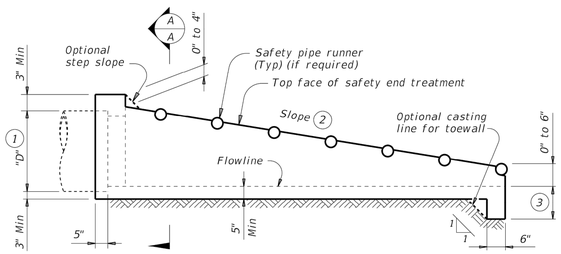


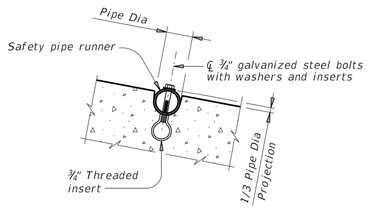
PLAN

(Showing bell end connection)



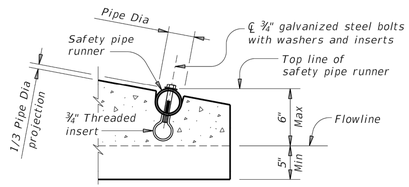
LONGITUDINAL ELEVATION

(Showing bell end connection)

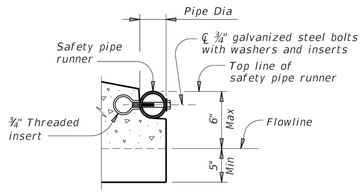


INSTALLATION DETAIL FOR SAFETY PIPE RUNNERS

(If required)



OPTION A



OPTION B

END DETAILS FOR INSTALLATION OF SAFETY PIPE RUNNERS

(If required)

PIPE I.D.	RCP WALL "B" THICKNESS	TP WALL THICKNESS (7)	"D" (1)	MAXIMUM SLOPE	MINIMUM LENGTH OF UNIT	PIPE RUNNERS REQUIRED		REQUIRED PIPE RUNNER SIZES		
						SINGLE PIPE	MULTIPLE PIPE	NOMINAL DIA.	O.D.	I.D.
12"	2"	1.15"	17"	6:1	4'-9"	No	Yes, for >2 pipes	3" STD	3.500"	3.068"
15"	2.25"	1.30"	20.50"	6:1	6'-5"	No	Yes, for >2 pipes	3" STD	3.500"	3.068"
18"	2.50"	1.60"	24"	6:1	8'-0"	No	Yes, for >2 pipes	3" STD	3.500"	3.068"
24"	3"	1.95"	31"	6:1	11'-3"	No	Yes, for >2 pipes	3" STD	3.500"	3.068"
30"	3.50"	2.65"	38.50"	6:1	14'-8"	No	Yes	4" STD	4.500"	4.026"
36"	4"	2.75"	45.50"	6:1	17'-11"	Yes	Yes	4" STD	4.500"	4.026"
42"	4.50"	N/A	52.50"	6:1	21'-2"	Yes	Yes	4" STD	4.500"	4.026"

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

(2) Slope as shown elsewhere in the plans. Slope of 6:1 or flatter is required for vehicle safety.

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

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

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

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

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

GENERAL NOTES:

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

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

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

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

A. Provide minimum reinforcing of #4 at 6" (Grade 40) or #4 at 9" (Grade 60) each way or 6"x6" - D12 x D12 or 5"x5" - D10 x D10 welded wire reinforcement (WWR).

B. For precast (steel formed) sections, provide Class "C" concrete (f'c = 3,600 psi).

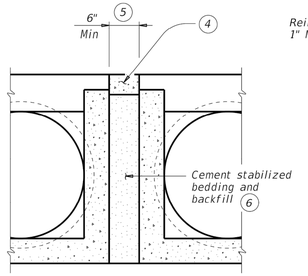
At the option and expense of the Contractor the next larger size of safety end treatment may be furnished; as long as the "D" dimension cast is that of the required size of pipe.

Pipe runners are designed for a traversing load of 10,000 Lbs at yield as recommended by Research Report 280-2F, "Safety Treatment of Roadside Parallel-Drainage Structures", Texas Transportation Institute, March 1981.

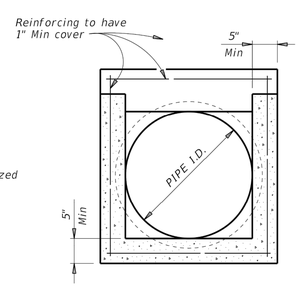
Provide pipe runners meeting the requirements of ASTM A53 (Type E or S, Grade B), ASTM A500 (Grade B), or API 5LX52.

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

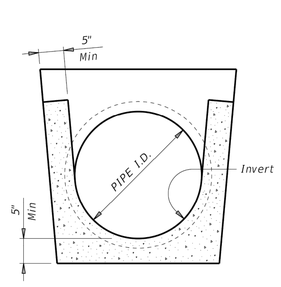
Connect RCP using the Optional Joint for RCP detail shown or in accordance with Item 464 "Reinforced Concrete Pipe". Connect TP by grouting. See PBGC standard for grouted connections with TP and precast safety end treatment.



MULTIPLE PIPE INSTALLATION

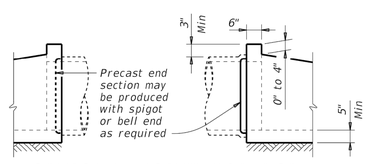


OPTION WITH SQUARE BOTTOM



OPTION WITH INVERT BOTTOM

SECTION A-A



OPTIONAL JOINT FOR RCP

(Showing joint between RCP and precast safety end treatment)

Texas Department of Transportation — Bridge Division Standard

PRECAST SAFETY END TREATMENT

TYPE II ~ PARALLEL DRAINAGE

PSET-SP

FILE: psetspss-18.dgn	DN: RLW	CK: KLR	DW: JTR	CK: GAF
©TxDOT February 2010	CONT	SECT	JOB	HIGHWAY
REVISIONS				
11-10: Add note for synthetic fibers.	DIST	COUNTY		SHEET NO.
09-18: Added Thermoplastic Pipe in table.				

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CR 234
NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

TXDOT STANDARD DETAILS - SHEET 1

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7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

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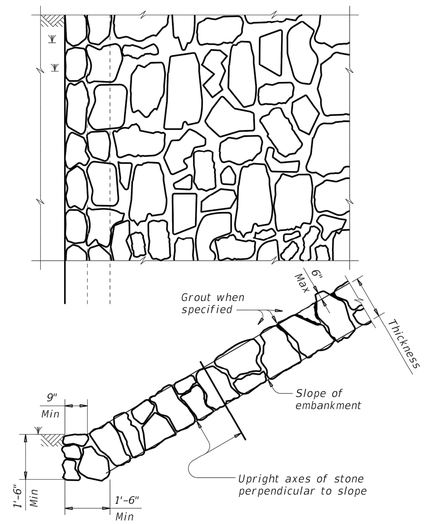

FIGURE 1 ~ TYPE R STONE RIPRAP

dry or grouted

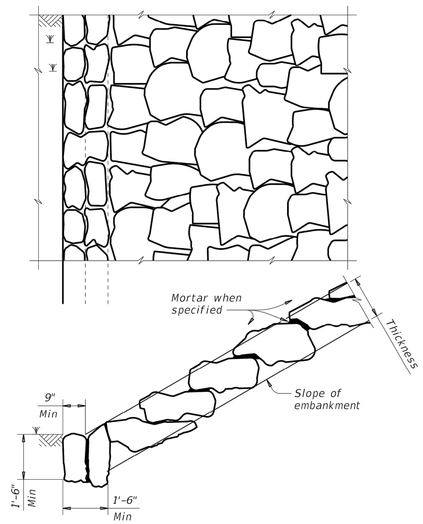

FIGURE 2 ~ TYPE F STONE RIPRAP

dry or mortared

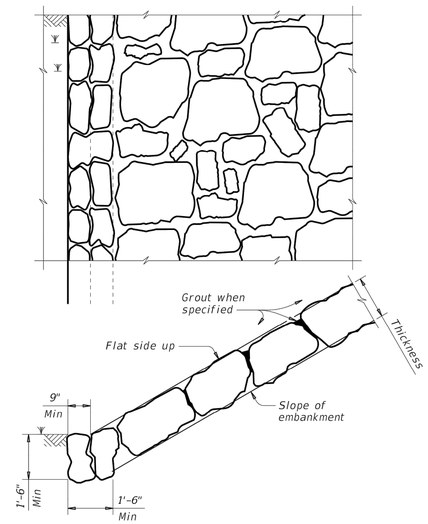

FIGURE 3 ~ TYPE F STONE RIPRAP

grouted

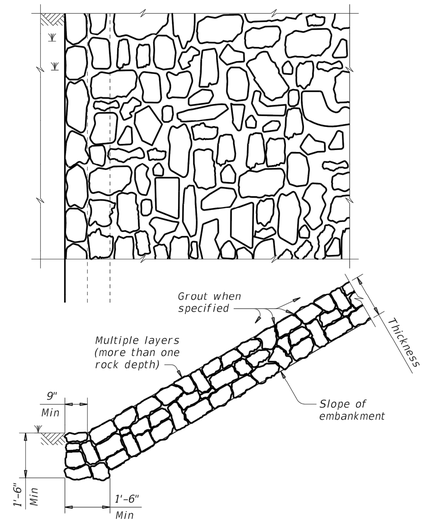

FIGURE 4 ~ COMMON STONE RIPRAP

dry or grouted

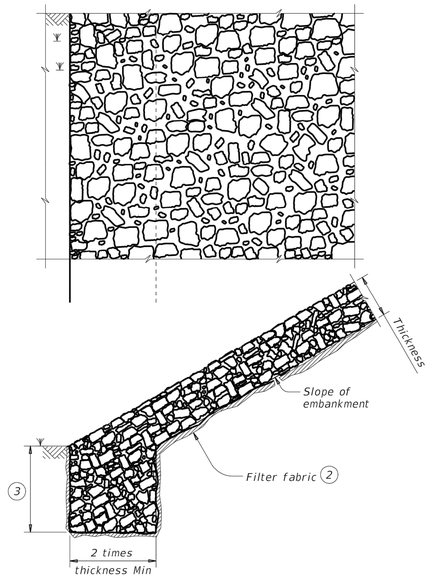

FIGURE 5 ~ PROTECTION STONE RIPRAP

(2) Provide bedding material instead of filter fabric if shown elsewhere in plans. See Layout for thickness of bedding material.

(3) Minimum toe depth is the larger of the maximum scour depth or 2 times the riprap thickness.

SHEET 2 OF 2

Texas Department of Transportation | Bridge Division Standard

STONE RIPRAP

SRR

FILE: srrstde1.dgn	DN: AES	CK: JGD	DW: BWH	CK: AES
©TxDOT January 2015	CONT	SECT	JOB	HIGHWAY
REVISIONS	DIST	COUNTY		SHEET NO.

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NEW TRUCK PARKING FACILITY
WILLIAMSON COUNTY, TEXAS

TXDOT STANDARD
DETAILS - SHEET 2

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7-25-2025
STATE OF TEXAS
TREY D. SIMPSON
141427
LICENSED
PROFESSIONAL ENGINEER

Designed	TDS
Drafted	ACP
Project No	252632.00
Plot Date	7-25-2025

C8.2

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Inspection, Maintenance, Repair and Retrofit Plan:

Wet Basins: Wet Basins shall be inspected at least twice annually or after major storm events. When possible, inspections should be conducted during wet weather to determine if the basin is functioning properly. There are many functions and characteristics of this BMP that should be inspected. The embankment should be checked for erosion, leakage and cracking. The outlet should be inspected for clogging. The stability of side slopes should be checked. Modifications to the basin structure and contributing to the watershed should be evaluated. The most frequent maintenance activity for wet basins will be mowing. Grass height should not exceed 6 inches and grass cuttings should be collected and disposed of offsite or mulched. Any bare spots in the grass cover should be replanted and restored immediately upon inspection. Chemicals including herbicide and pesticide should be kept to a minimum and used in accordance with manufacturer's specifications. Debris and litter should be removed from the surface of the basin.

Inspection and Maintenance of the Wet Basin will be the responsibility of Major Singh in accordance with this WPAP and TCEQ requirements and specifications. All records of inspection, maintenance, and repairs shall be kept and maintained by him until such time as responsibility is transferred to another entity.

Major Singh

Edwards Aquifer Rules: Technical Guidance for BMPs

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Edwards Aquifer Rules: Technical Guidance for BMPs: Refer to the following TCEQ guidelines for construction and maintenance for permanent BMPs in the Edwards Aquifer.

3.2.7 Wet Basins

The wet basin (pond) is a facility that removes sediment, organic nutrients, and trace metals from stormwater runoff. This is accomplished by detaining stormwater using an in-line permanent pool or pond resulting in settling of pollutants. The wet basin is similar to an extended detention basin, except that a permanent volume of water is incorporated into the design (Figure 3-6). Biological processes occurring in the permanent pool aid in reducing the amount of soluble nutrients present in the water (Schueler, 1987). Wet basins also offer flood-control benefits. Because they are designed with permanent pools, wet basins can also have recreational and aesthetic benefits (Young et al., 1996).

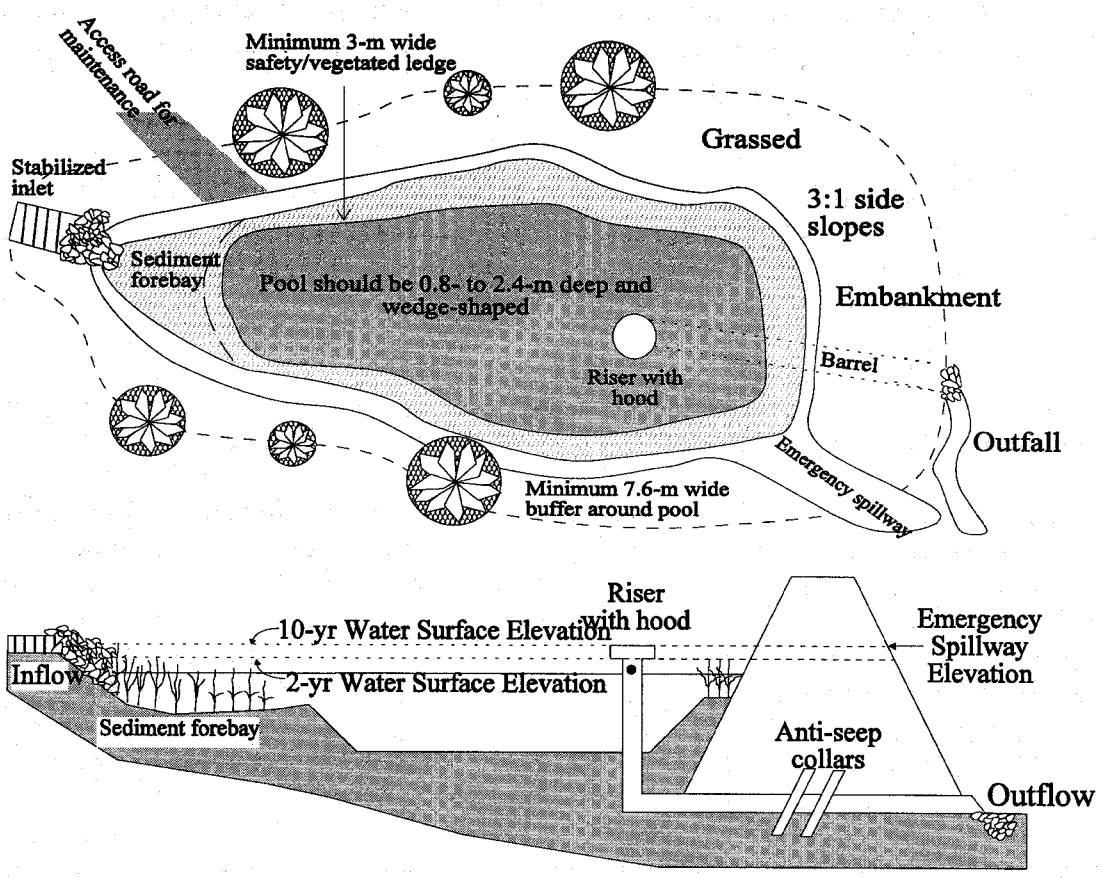

Figure 3-6 Schematic of a Wet Basin (Young et al., 1996)

Wet basins may be feasible for watershed areas greater than 10 acres and possessing a dependable water source. A drainage area of one square mile is usually the maximum drainage area where a wet pond can be installed (Schueler et al., 1992). It is most cost effective to use retention ponds in larger and more densely developed areas. An adequate source of water must be available to ensure a permanent pool throughout the entire year. If the wet pond is not properly maintained or the pond becomes stagnant, floating debris,

scum, algal blooms, unpleasant odors, and insects may appear. Sediment removal from the main portion of the pond is usually necessary after the pond has been functional for about 20 years.

Soil conditions are important for the proper functioning of the wet pond. The pond is a permanent pool, and thus must be constructed such that the water must not be allowed to exfiltrate from the permanent portion of the pool. A geomembrane or clay liner will be necessary to prevent contamination of groundwater.

Selection Criteria (NCTCOG, 1993)

- Desire to achieve high level of particulate and some dissolved contaminant removal
- Ideal for large, regional tributary areas
- Multiple benefits of passive recreation (e.g., bird watching, wildlife habitat)
- Site area greater than 10 acres

Limitations (NCTCOG, 1993)

- There is concern about mosquitoes; however, stocking the pond with gambusia may eliminate this problem
- Cannot be placed on steep slopes
- Not normally used in arid regions where evapotranspiration greatly exceeds precipitation (which is most of the Edwards region)
- May be infeasible to site or retrofit in dense urban areas

Cost Considerations

Aquatic weed control (especially algae) is often required and the cost can be substantial to maintain aesthetic qualities when baseflow is low. The land requirements to achieve the necessary storage volume can also be significant. Wet basin costs are 25% to 40% greater than those reported for conventional stormwater detention. The cost of periodic sediment removal can be higher, since much of the wetland vegetation may be destroyed in the process and should be replaced.

Attachment H – Pilot-Scale Field Testing Plan

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. Pilot-Scale Field Testing Plan: Not applicable.

Attachment I – Measures for Minimizing Surface Stream Contamination

PROPOSED DEVELOPMENT FOR:

CR 234 New Truck Parking Facility

Jarrell, Texas

A. **Measures for Minimizing Surface Stream Contamination:** One Wet Basin will be constructed to treat the increase of TSS per TCE requirements. A detention/retention pond will be constructed to mitigate storm water runoff to pre-development runoff rates. Furthermore, erosion control silt fencing and rock berms will be used during construction and will remain in place until vegetation has been established.

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

I Major Singh,
Print Name

Owner/Manager,
Title - Owner/President/Other

of Malla Investments Group, LLC,
Corporation/Partnership/Entity Name

have authorized Trey Simpson P.E.
Print Name of Agent/Engineer

of Clark Associates Engineering
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

7/30/2025
Date

THE STATE OF Texas §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared Major Singh 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 30 day of July, 2025.

NOTARY PUBLIC

Lisa Ellisor
NOTARY PUBLIC - STATE OF TEXAS
ID# 12561482-4
COMM. EXP. 03-11-2026

Lisa Ellisor
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 3-11-2026

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: CR 234 New Truck Parking Facility
Regulated Entity Location: 18416 Dry Brook Loop, Pflugerville, TX 78660
Name of Customer: Major Singh
Contact Person: Major Singh
Phone: 512-820-1697
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____
Austin Regional Office (3373)

- ☐ Hays
- ☐ Travis
- ☒ Williamson

San Antonio Regional Office (3362)

- ☐ Bexar
- ☐ Comal
- ☐ Medina
- ☐ Kinney
- ☐ Uvalde

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
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone
☐ Contributing Zone
☐ Transition Zone

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	8.18 Acres	$ 5,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature:

Date: 7/28/2025

Application Fee Schedule

Texas Commission on Environmental Quality

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee
Exception Request	$500

Extension of Time Requests

Project	Fee
Extension of Time Request	$150

TCEQ Core Data Form

TCEQ Use Only

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.)*

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

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

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

SECTION II: Customer Information

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

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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

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

Malla Investments Group, LLC.

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0804402487	32082857452		

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other: LLC

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

13. Independently Owned and Operated?
☒ Yes ☐ No

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

☒ Owner ☐ Operator ☐ Owner & Operator

☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: ____

15. Mailing Address: 18416 Dry Brook Loop

City	Pflugerville	State	TX	ZIP	78660	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) 820-1697		( ) -

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)*

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

The Regulated Entity Name submitted may be updated in order to meet TCEQ 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.)*

CR 234 New Truck Parking Facility

23. Street Address of

the Regulated Entity: *(No PO Boxes)*								
	City		State		ZIP		ZIP + 4	
24. County								

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	The subject property is located at 3350 CR 234, Georgetown, Texas 78633

26. Nearest City	State	Nearest ZIP Code
Jarrell	TX	78633

27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	46	19	-97	39	47

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)
4226		493190	

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

Commercial

34. Mailing Address:								
	City		State		ZIP		ZIP + 4	
35. E-Mail Address:								

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
( ) -		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	Trey Simpson	41. Title:	Professional Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(254) 899-0899		( ) -	tsimpson@clark-assoc.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:	Malla Investment Groups, LLC.	Job Title:	Owner/Manager
Name *(In Print)* :	Major Singh	Phone:	(512) 820-1697
Signature:		Date:	7/30/2025