MIGL
ENGINEERING
AND CONSULTING

EDWARDS AQUIFER
CONTRIBUTING ZONE PLAN MODIFICATION
EAPP ID 11004360, REGULATED ENTITY RN112167259

LANDWEST RIM ROCK 1

11783 RIM ROCK TRAIL
AUSTIN, TEXAS 78737

SITE LOCATED IN EDWARD'S AQUIFER CONTRIBUTING ZONE

Prepared for
FGS Investments I, LLC
P.O. Box 340789
Austin, Texas 78734

On Behalf of
Landwest Design Group
11783 Rim Rock Trail
Austin, Texas 78737

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED
PROFESSIONAL ENGINEER
09/25/2025

Project No. 0193.001
September 23, 2025

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: LandWest RR1							**2. Regulated Entity No.:** RN112167259		
3. Customer Name: Fredrick Scheen III							**4. Customer No.:** CN606361723		
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):**		16.399 acres	
9. Application Fee:	$6500.00	**10. Permanent BMP(s):**				Batch Detention			
11. SCS (Linear Ft.):	0	**12. AST/UST (No. Tanks):**				0			
13. County:	Travis	**14. Watershed:**				Bear 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 ___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. Tammi Migl, PE
Print Name of Customer/Authorized Agent 9/23/2025
Signature of Customer/Authorized Agent Date

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

Modification of a Previously Approved Contributing Zone Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), 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 **Modification of a Previously Approved Contributing Zone Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Tammi Migl, P.E.

Date: 9/9/2025

Signature of Customer/Agent:

Project Information

1. Current Regulated Entity Name: LANDWEST RIM ROCK 1
   Original Regulated Entity Name: LANDWEST RIM ROCK 1
   Assigned Regulated Entity Number(s) (RN): RN112167259
   Edwards Aquifer Protection Program ID Number(s): 11004360
   ☒ The applicant has not changed and the Customer Number (CN) is: CN606361723
   ☐ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. ☒ **Attachment A: Original Approval Letter and Approved Modification Letters**. A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):

☒ Any physical or operational modification of any best management practices or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
☐ Any change in the nature or character of the regulated activity from that which was originally approved;
☐ A change that would significantly impact the ability to prevent pollution of the Edwards Aquifer and hydrologically connected surface water; or
☐ Any development of land previously identified in a contributing zone plan as undeveloped.

4. ☒ Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

CZP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	_____	_____
Type of Development	_____	_____
Number of Residential Lots	_____	_____
Impervious Cover (acres)	_____	_____
Impervious Cover (%)	_____	_____
Permanent BMPs	_____	_____
Other	RG348	RG348-A OEM

AST Modification Summary	***Approved Project***	***Proposed Modification***
Number of ASTs	_____	_____
Other	_____	_____

UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs	_____	_____
Other	_____	_____

5. ☒ **Attachment B: Narrative of Proposed Modification**. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved,

including previous modifications, and how this proposed modification will change the approved plan.

6. ☐ **Attachment C: Current Site Plan of the Approved Projec**t. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - ☒ The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

7. ☒ Acreage has not been added to or removed from the approved plan.
   ☐ Acreage has been added to or removed from the approved plan and is discussed in *Attachment B: Narrative of Proposed Modification*.

8. ☒ 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 – ORIGINAL APPROVAL LETTER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 11, 2025

Mr. Fredrick Scheen III
FGS Investments I, LLC
P.O. Box 340789
Austin, Texas 78734

Re: Approval of a Contributing Zone Plan (CZP)
Landwest Rim Rock 1; Located S of Rim Rock Trail and Seawall; Austin, Travis County, Texas
Edwards Aquifer Protection Program ID: 11004360, Regulated Entity No. RN112167259

Dear Mr. Scheen:

The Texas Commission on Environmental Quality (TCEQ) has completed its review on the application for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by Migl Engineering and Consulting on behalf of the applicant, FGS Investments I, LLC, on March 5, 2025. Final review of the application was completed after additional material was received on May 12, 2025, and July 7, 2025.

As presented to the TCEQ, the application was prepared in general compliance with the requirements of 30 Texas Administrative Codes (TAC) Chapter §213. The permanent best management practices (BMPs) and measures represented in the application were prepared by a Texas licensed professional engineer (PE). All construction plans and design information were sealed, signed, and dated by a Texas licensed PE. Therefore, the application for the construction of the proposed project and methods to protect the Edwards Aquifer are **approved,** subject to applicable state rules and the conditions in this letter.

This approval expires two years from the date of this letter*, unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been officially requested. This approval or extension will expire, and no extension will be granted if more than 50 percent of the project has not been completed within ten years from the date of this letter.*

The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this contributing zone plan or modification to a plan. A motion for reconsideration must be filed in accordance with 30 TAC §50.139.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 16.4 acres. The project will include the construction of an office building, two storage warehouses, associated parking, sidewalks, utilities and associated appurtenances. The impervious cover will be 3.09 acres (18.8 percent). According to a letter dated July 3, 2025, signed by Brandon Couch, with Travis County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a batch detention basin, designed using the TCEQ technical guidance, *RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices,* will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 2,690 pounds of TSS generated from the 3.09 acres of impervious cover. The approved permanent BMPs and measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The permanent BMPS shall be operational prior to occupancy or use of the proposed project. Inspection, maintenance, repair, and retrofit of the permanent BMPs shall be in accordance with the approved application.

STANDARD CONDITIONS

1. The plan holder (applicant) must comply with all provisions of 30 TAC Chapter §213 and all technical specifications in the approved plan. The plan holder should also acquire and comply with additional and separate approvals, permits, registrations or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, Dam Safety, Underground Injection Control) as required based on the specifics of the plan.
2. In addition to the rules of the Commission, the plan holder must also comply with state and local ordinances and regulations providing for the protection of water quality as applicable.

Prior to Commencement of Construction:

3. The plan holder of any approved contributing zone plan must notify the EAPP and obtain approval from the executive director prior to initiating any modification to the activities described in the referenced application following the date of the approval.
4. The plan holder must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the EAPP no later than 48 hours prior to commencement of the regulated activity. Notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person.
5. Temporary erosion and sedimentation (E&S) controls as described in the referenced application, must be installed prior to construction, and maintained during construction. Temporary E&S controls may be removed when vegetation is established, and the construction area is stabilized. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

6. The application must indicate the placement of permanent aboveground storage tanks facilities for static hydrocarbons and hazardous substances with cumulative storage capacity of 500 gallons or more. Subsequent permanent storage tanks on this project site require a modification to be submitted and approved prior to installation.
7. If sediment escapes the construction site, the 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). Sediment must be removed from sediment traps or sedimentation ponds no later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.

8. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge must be filtered through appropriately selected BMPs.
9. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

11. Owners of permanent BMPs and temporary measures must ensure that the BMPs and measures are constructed and function as designed. A Texas licensed PE **must certify** in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the EAPP within 30 days of site completion.

12. The applicant shall be 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 or the ownership of the property is transferred to the entity. A copy of the transfer of responsibility must be filed with the executive director through the EAPP within 30 days of the transfer. TCEQ form, Change in Responsibility for Maintenance on Permanent BMPs and Measures (TCEQ-10263), may be used.

The holder of the approved contributing zone plan is responsible for compliance with Chapter §213 subchapter B and any condition of the approved plan through all phases of plan implementation. Failure to comply with any condition within this approval letter is a violation of Chapter §213 subchapter B and is subject to administrative rule or orders and penalties as provided under §213.25 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. Upon legal transfer of this property, the new owner is required to comply with all terms of the approved contributing zone plan.

This action is taken as delegated by the executive director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Arturo Maldonado of the Edwards Aquifer Protection Program at 512-239-7087 or the regional office at 512-339-2929.

Sincerely,

Monica Reyes

Monica Reyes, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

MR / am

cc: Ms. Tammi Migl, P.E., Migl Engineering and Consulting

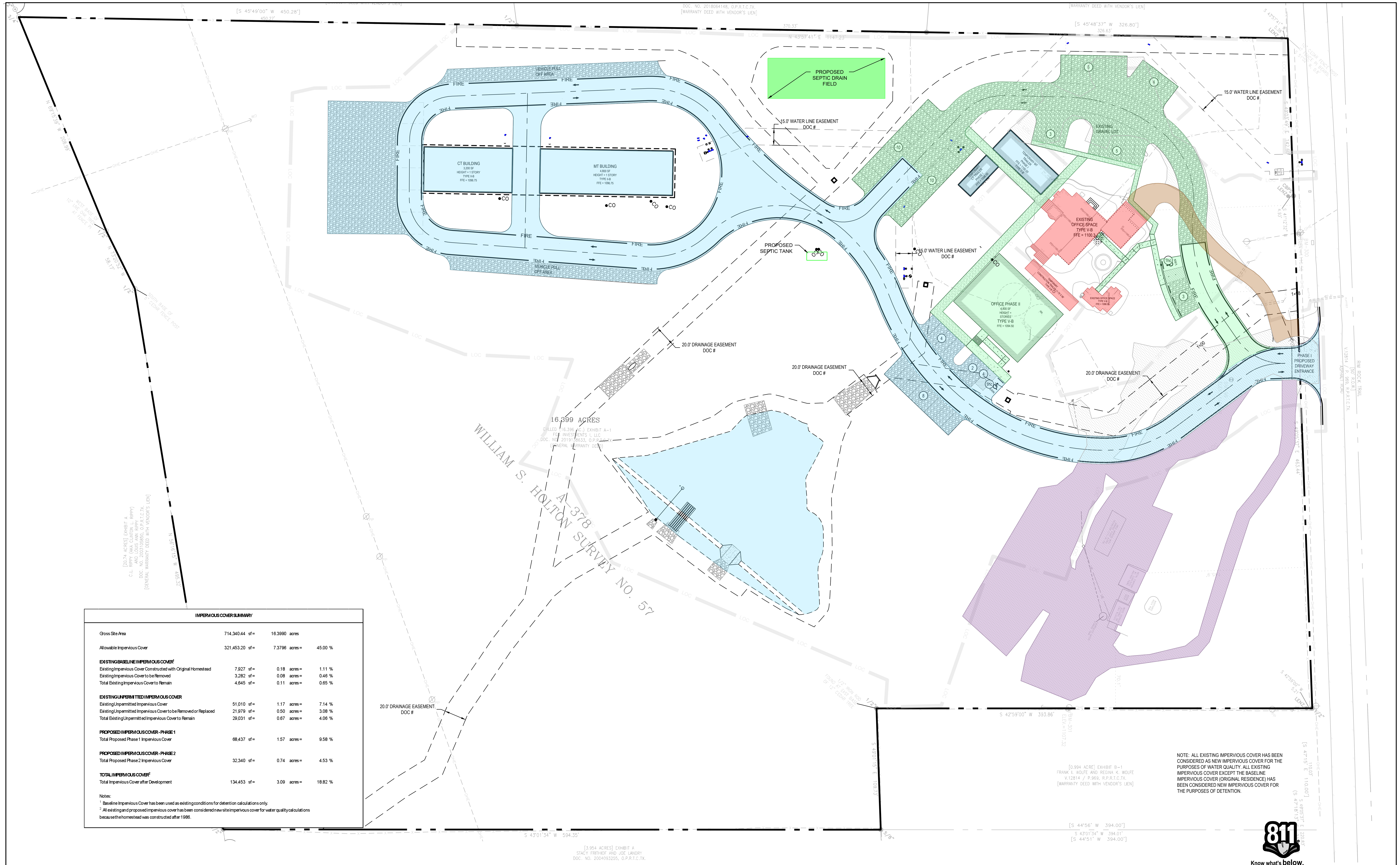
ATTACHMENT B – NARRATIVE OF PROPOSED MODIFICATION

The site is located within the jurisdiction of the West Travis County Public Utility Agency (WTCPUA). Accordingly, water quality protection must comply with the Texas Commission on Environmental Quality (TCEQ) *Optional Enhanced Measures for the Protection of Water Quality in the Edwards Aquifer* (RG-348A).

Implementation of these requirements has affected both the detention pond storage volume and the total required water quality volume for the batch basin integrated with the pond. Specifically, detention of 50% of the two-year event from the increase in runoff attributable to development must now be provided as additional storage within the pond. Updated calculations also increased the required water quality volume, necessitating modifications to the pond's size and geometry. The revised design satisfies all runoff detention and water quality treatment requirements with no adverse downstream impacts.

To comply with the TCEQ *Optional Enhanced Measures for the Protection of Water Quality in the Edwards Aquifer* (RG-348A), a stream buffer has been provided downgradient of the batch detention pond outfall. This measure is required due to the contributing drainage area being greater than 5 acres but less than 40 acres. The buffer extends 25 feet from the centerline of the drainageway on each side and will remain undeveloped with undisturbed native vegetation.

ATTACHMENT C – CURRENT SITE PLAN OF APPROVED PROJECT



IMPERVIOUS COVER SUMMARY

Gross Site Area	714,340.44	sf =	16.3990	acres		
Allowable Impervious Cover	321,453.20	sf =	7.3796	acres =	45.00	%
EXISTING BASELINE IMPERVIOUS COVER[1]						
Existing Impervious Cover Constructed with Original Homestead	7,927	sf =	0.18	acres =	1.11	%
Existing Impervious Cover to be Removed	3,282	sf =	0.08	acres =	0.46	%
Total Existing Impervious Cover to Remain	4,645	sf =	0.11	acres =	0.65	%
EXISTING UNPERMITTED IMPERVIOUS COVER						
Existing Unpermitted Impervious Cover	51,010	sf =	1.17	acres =	7.14	%
Existing Unpermitted Impervious Cover to be Removed or Replaced	21,979	sf =	0.50	acres =	3.08	%
Total Existing Unpermitted Impervious Cover to Remain	29,031	sf =	0.67	acres =	4.06	%
PROPOSED IMPERVIOUS COVER - PHASE 1						
Total Proposed Phase 1 Impervious Cover	68,437	sf =	1.57	acres =	9.58	%
PROPOSED IMPERVIOUS COVER - PHASE 2						
Total Proposed Phase 2 Impervious Cover	32,340	sf =	0.74	acres =	4.53	%
TOTAL IMPERVIOUS COVER[2]						
Total Impervious Cover after Development	134,453	sf =	3.09	acres =	18.82	%

Notes:

[1] Baseline Impervious Cover has been used as existing conditions for detention calculations only.

[2] All existing and proposed impervious cover has been considered new site imperivous cover for water quality calculations because the homestead was constructed after 1986.

NOTE: ALL EXISTING IMPERVIOUS COVER HAS BEEN CONSIDERED AS NEW IMPERVIOUS COVER FOR THE PURPOSES OF WATER QUALITY. ALL EXISTING IMPERVIOUS COVER EXCEPT THE BASELINE IMPERVIOUS COVER (ORIGINAL RESIDENCE) HAS BEEN CONSIDERED NEW IMPERVIOUS COVER FOR THE PURPOSES OF DETENTION.

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

STATE OF TEXAS — TAMMI R. MIGL — 92607 — LICENSED PROFESSIONAL ENGINEER
June 27, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: PROPOSED OVERALL SITE AND PHASING PLAN

PROJECT NO. 0193.001

SHEET NO. C7

Horizon™
Environmental Services

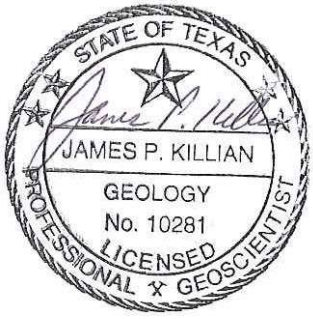
GEOLOGIC ASSESSMENT
APPROXIMATELY 16-ACRE RIM ROCK TRAIL TRACT
11783 RIM ROCK TRAIL
AUSTIN, TRAVIS COUNTY, TEXAS
HJN 25170.001GA

PREPARED FOR:

MIGL ENGINEERING AND CONSULTING, PLLC
AUSTIN, TEXAS

PREPARED BY:

HORIZON ENVIRONMENTAL SERVICES
A BRANCH OF LJA ENVIRONMENTAL SERVICES, LLC
TBPG FIRM REGISTRATION NO. 50679



SEPTEMBER 2025

115 Wild Basin Road, Suite 106 • Austin, Texas 78746• 512.328.2430 • www.horizon-esi.com
A Branch of LJA Environmental Services, LLC • TBPG Firm No. 50679

Horizon
Environmental Services

TABLE OF CONTENTS

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

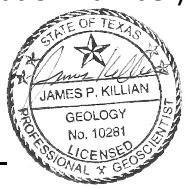
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Print Name of Geologist: James Killian Telephone: 512-328-2430

Date: 09/02/2025 Fax: 512-328-1804

Representing: Horizon Environmental Services and TBPG Form Registration No. 50679 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: 16-acre Rim Rock Trail Tract, 11783 Rim Rock Trail, Austin, Travis County, Texas

Project Information

1. Date(s) Geologic Assessment was performed: 09/02/2025
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)
Brackett-Rock Outcrop complex, 1 to 12% slopes (BID)	D	1.5

** 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" = 400'
   Site Geologic Map Scale: 1" = 400'
   Site Soils Map Scale (if more than 1 soil type): 1" = 400'

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 _____ (#) 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.

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ATTACHMENT A

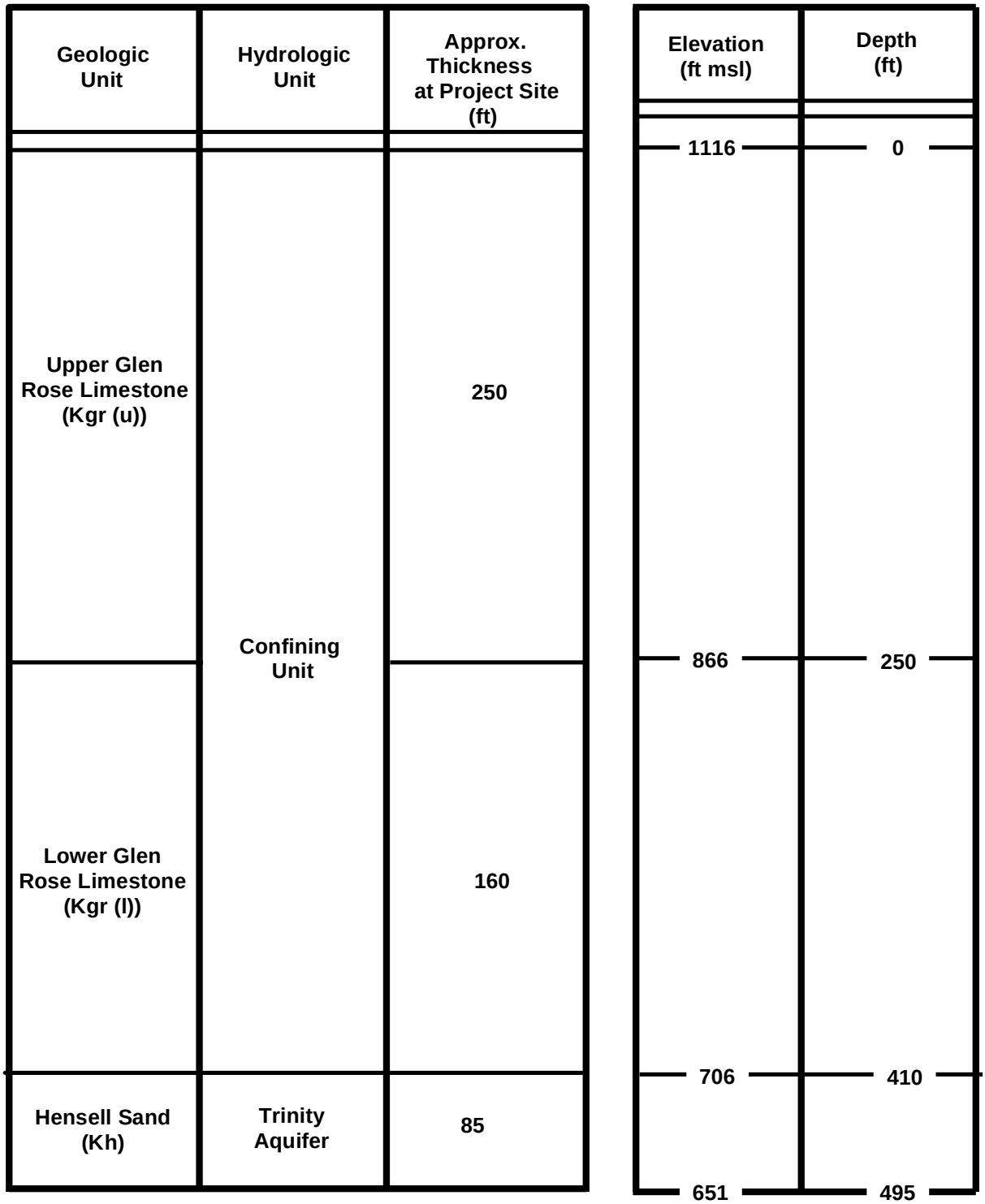
GEOLOGIC ASSESSMENT TABLE

Horizon observed no features on the subject site that meet the TCEQ definition of a potential recharge feature; as such, the TCEQ Geologic Assessment Table was not completed.

Horizon
Environmental Services

ATTACHMENT B

STRATIGRAPHIC COLUMN



Note: Unit elevation and thickness given with respect to a ground surface elevation of 1116 feet in the north portion of the subject site.

Horizon Environmental Services	Date: 8/28/2025 Drawn: MPD HJN NO: 25170.001GA	**Attachment F, Figure 4** Stratigraphic Column Rim Rock Trail Austin, Travis County, Texas	

25170--Rim_Rock_1\Graphics\25170-001GA_05A_STRAT.mxd

Horizon
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ATTACHMENT C

DESCRIPTION OF SITE GEOLOGY

Geologic information for the subject site obtained via literature review is provided in Attachment E, Supporting Information.

A geologic assessment of approximately 16 acres located at 11783 Rim Rock Trail in Austin, Travis County, Texas, was conducted pursuant to Texas rules for regulated activities in the Edwards Aquifer Recharge Zone (EARZ) (30 TAC 213). The subject site consists of cleared rangeland containing a single-family residence and commercial storage lot. Assessment findings were used to develop recommendations for site construction measures intended to be protective of water resources at the subject site and adjacent areas.

The entire subject site is located within the Edwards Aquifer Contributing Zone (EACZ), as defined by the Texas Commission on Environmental Quality (TCEQ). The EACZ is the area or watershed where runoff from precipitation flows downgradient to the Recharge Zone of the Edwards Aquifer.

The subject site is completely underlain by the Upper Glen Rose Formation (Kgru) (UT-BEG, 1995), which has an estimated maximum thickness of about 250 feet.

No geologic or man-made features were observed on the subject site. Photographs of the subject site are presented in Attachment G.

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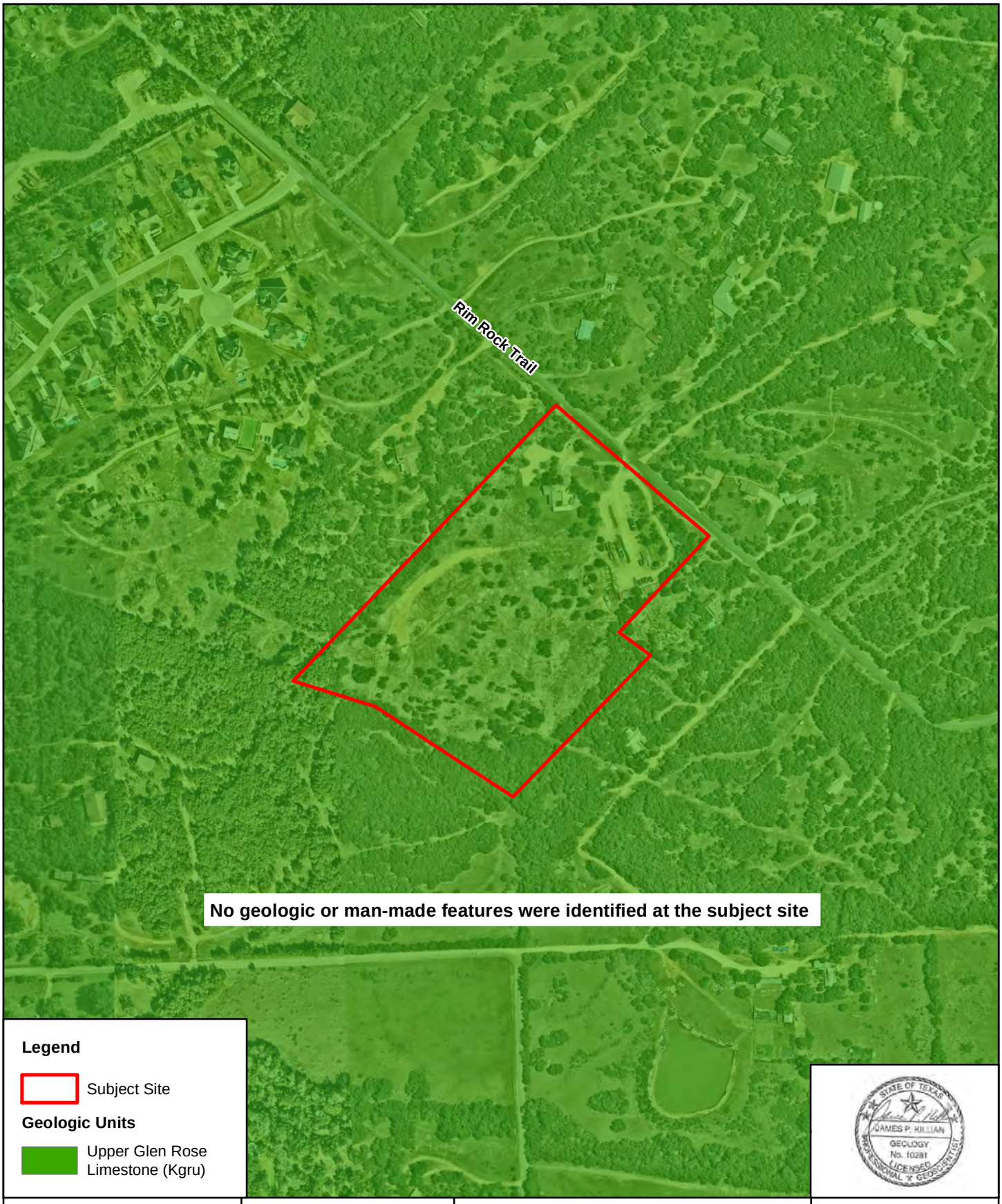
ATTACHMENT D

SITE GEOLOGIC MAP



Legend

Subject Site

Geologic Units

Upper Glen Rose Limestone (Kgru)

STATE OF TEXAS
JAMES P. KILLIAN
GEOLOGY
No. 10281
LICENSED
PROFESSIONAL GEOSCIENTIST

Horizon™ Environmental Services

Date:	9/5/2025
Drawn:	MPD
HJN NO:	25170.001GA
Source:	Nearmap, 2025 UT-BEG, 1995

Attachment D

Site Geologic Map
Rim Rock Trail
Austin, Travis County, Texas

N

0 200 400
Feet

25170--Rim_Rock_1\Graphics\25170-001GA_06A_SGM.mxd

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ATTACHMENT E

SUPPORTING INFORMATION

1.0 INTRODUCTION AND METHODOLOGY

This report and any proposed abatement measures are intended to fulfill Texas Commission on Environmental Quality (TCEQ) reporting requirements (TCEQ, 2005). This geologic assessment includes a review of the subject site for potential aquifer recharge and documentation of general geologic characteristics for the subject site. Horizon Environmental Services (Horizon) conducted the necessary field and literature studies according to TCEQ *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones* (TCEQ, 2004).

In addition, this report complies with TCEQ's "Optional Enhanced Measures (OEM) for the Protection of Water Quality in the Edwards Aquifer (Revised)" (TCEQ, 2007) for new development in areas subject to the TCEQ Edwards Aquifer Rules (30 TAC Chapter 213). These measures provide a higher level of water quality protection and may be adopted by those who wish to implement additional measures for environmental protection or to satisfy requirements for agencies other than the TCEQ. For example, the implementation of these measures may satisfy requirements of the US Fish and Wildlife Service (USFWS) for the proposed development.

Horizon walked transects spaced 50 feet apart, mapped the locations of features using a handheld GPS, topographic maps, and aerial photographs. Horizon also searched the area around any potential recharge features encountered to look for additional features. When necessary, Horizon removed loose rocks and soil (by hand) to preliminarily assess each feature's subsurface extent while walking transects. However, labor-intensive excavation was not conducted during this assessment. Features that did not meet the TCEQ definition of a potential recharge feature (per TCEQ, 2004), such as surface weathering, karren, or animal burrows, were evaluated in the field and omitted from this report.

The results of this survey do not preclude the possibility of encountering subsurface voids or abandoned test or water wells during the clearing or construction phases of the proposed project. If a subsurface void is encountered during any phase of the project, work should be halted until the TCEQ (or appropriate agency) is contacted and a geologist can investigate the feature.

2.0 ENVIRONMENTAL SETTING

2.1 LOCATION AND GENERAL DESCRIPTION

The subject site consists of approximately 16 acres of cleared rangeland containing a single-family residence and commercial storage lot, located at 11783 Rim Rock Trail in Austin, Travis County, Texas (Appendix F, Figure 1).

2.2 LAND USE

The subject site is reportedly used for residential and commercial use. A single-family residence is located within the northern portion of the subject site. A commercial storage lot is

located on the northeastern portion of the subject site. Rim Rock Trail borders the site to the northeast. Surrounding lands are generally used for rural residences.

2.3 TOPOGRAPHY AND SURFACE WATER

The subject site is situated on gently sloping terrain within the Bear Creek watershed (Appendix F, Figures 2 and 3). Surface elevations on the subject site vary from a minimum of approximately 1062 feet above mean sea level (amsl) in the southern corner to a maximum of approximately 1116 feet amsl near the northern corner (COA, 2019). Drainage on the site occurs primarily by overland sheet flow to the south.

2.4 EDWARDS AQUIFER ZONE

The subject site is found within the Edwards Aquifer Contributing Zone (TCEQ, 2025) (Attachment F, Figure 2).

2.5 SURFACE SOILS

One soil unit is mapped within the subject site (NRCS, 2025) (Appendix F, Figure 4). Brackett-Rock Outcrop complex, 1 to 12% slopes (BID) consists of loamy and clayey soils and rock outcrop on uplands in the Edwards Plateau Land Resource Area. Brackett soil makes up 50% of the complex on average, Rock Outcrop makes up 20% on average, and minor components make up 12% on average. The surface layer of Brackett soil is grayish-brown clay loam about 6 inches thick, with pale brown, clay loam subsoil extending to a depth of 17 inches. The Rock Outcrop consists of exposures of limestone bedrock.

2.6 WATER WELLS

A review of TCEQ and Texas Water Development Board (TWDB) records revealed no water wells on the subject site and 18 wells within 0.5 miles of the subject site (TCEQ, 2025; TWDB, 2025). According to the TWDB records, all the off-site wells are reportedly completed within the Trinity Aquifer at total depths ranging from 460 to 1020 feet below surface. No water wells were observed on the subject site.

The results of this assessment do not preclude the existence of undocumented/abandoned wells on the site. If a water well or casing is encountered during construction, work should be halted near the feature until the TCEQ is contacted.

2.7 GEOLOGY

Literature Review

The subject site is underlain by the Upper Member of the Glen Rose Limestone formation (Kgru) (UT-BEG, 1995). The Glen Rose Limestone consists of limestone, dolomite, and marl subdivided into two units by a *Corbula* bed. Alternating resistant and recessive beds form stairstep topography. The limestone is aphanitic to fine grained, hard to soft and marly, and light

gray to yellowish gray in color. The dolomite is fine grained, porous, and yellowish brown. Marine megafossils include molluscan steinkerns, rudistids, oysters, and echinoids. The Upper Glen Rose Limestone is relatively thinner bedded, more dolomitic, and less fossiliferous than the lower part. Thickness is about 250 feet.

The site Stratigraphic Column is provided as Attachment B, and the Site Geologic Map is Attachment D.

The subject site is not located within the Balcones Fault Zone. Available geologic reports indicate the nearest mapped fault is located approximately 2.25 miles to the southeast, trending from southwest to northeast (TWSC, 2025).

Field Assessment

Horizon observed no geologic or man-made features on the subject site that meet the TCEQ definition of a potential recharge feature

3.0 CONCLUSIONS AND RECOMMENDATIONS

No geologic or man-made features were identified at the subject site that would require protection or mitigation pursuant to TCEQ rules for protection of the Edwards Aquifer (30 TAC 213).

The site generally appears well-suited to development prospectuses. It should be noted that soil and drainage erosion would increase with ground disturbance. Native grasses and the cobbly content of the soil aid to prevent erosion. Soil and sedimentation fencing should be placed in all appropriate areas prior to any site disturbing activities.

Because the subject site is located over the Edwards Aquifer Contributing Zone, it is possible that subsurface voids underlie the site. If any subsurface voids are encountered during site development, work should halt immediately so that a geologist may assess the potential for the void(s) to provide meaningful contribution to the Edwards Aquifer.

4.0 REFERENCES

(COA) City of Austin. Geographic Information Systems/Maps. *2017 2-foot Contours,* <http://austintexas.gov/department/gis-and-maps/gis-data>. Updated 15 August 2019.

_____. *Property Profile*. City of Austin Property Profile web map application. <http://www.austintexas.gov/gis/propertyprofile/>. Accessed 29 August 2025.

(EPA) US Environmental Protection Agency. Watershed Assessment, Tracking & Environmental Results System (WATERS) GeoViewer, <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=ada349b90c26496ea52aab66a092593b>. Accessed 29 August 2025.

(Nearmap) Nearmap US, Inc. Nearmap Vertical™ digital orthographic photograph, <https://go.nearmap.com>. Imagery date 9 June 2025.

(NRCS) US Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey, <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Soil map data layer updated 12 September 2019. Accessed 28 August 2025.

(OSM) OpenStreetMap contributors. OpenStreetMap, <http://www.openstreetmap.org>. Available under the Open Database License (www.opendatacommons.org/licenses/odbl). Accessed 28 August 2025.

(TCEQ) Texas Commission on Environmental Quality. Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones. Revised October 2004.

_____. RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices. Revised July 2005.

_____. Optional Enhanced Measures for the Protection of Water Quality in the Edwards Aquifer (Revised). Appendix A to RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices. September 2007.

_____. Edwards Aquifer Protection Program. Edwards Aquifer Viewer, <http://www.tceq.state.tx.us/field/eapp/viewer.html>. Accessed 28 August 2025.

(TWDB) Texas Water Development Board. Water Information Integration and Dissemination System. TWDB Groundwater Database, <https://www3.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer>. Accessed 28 August 2025.

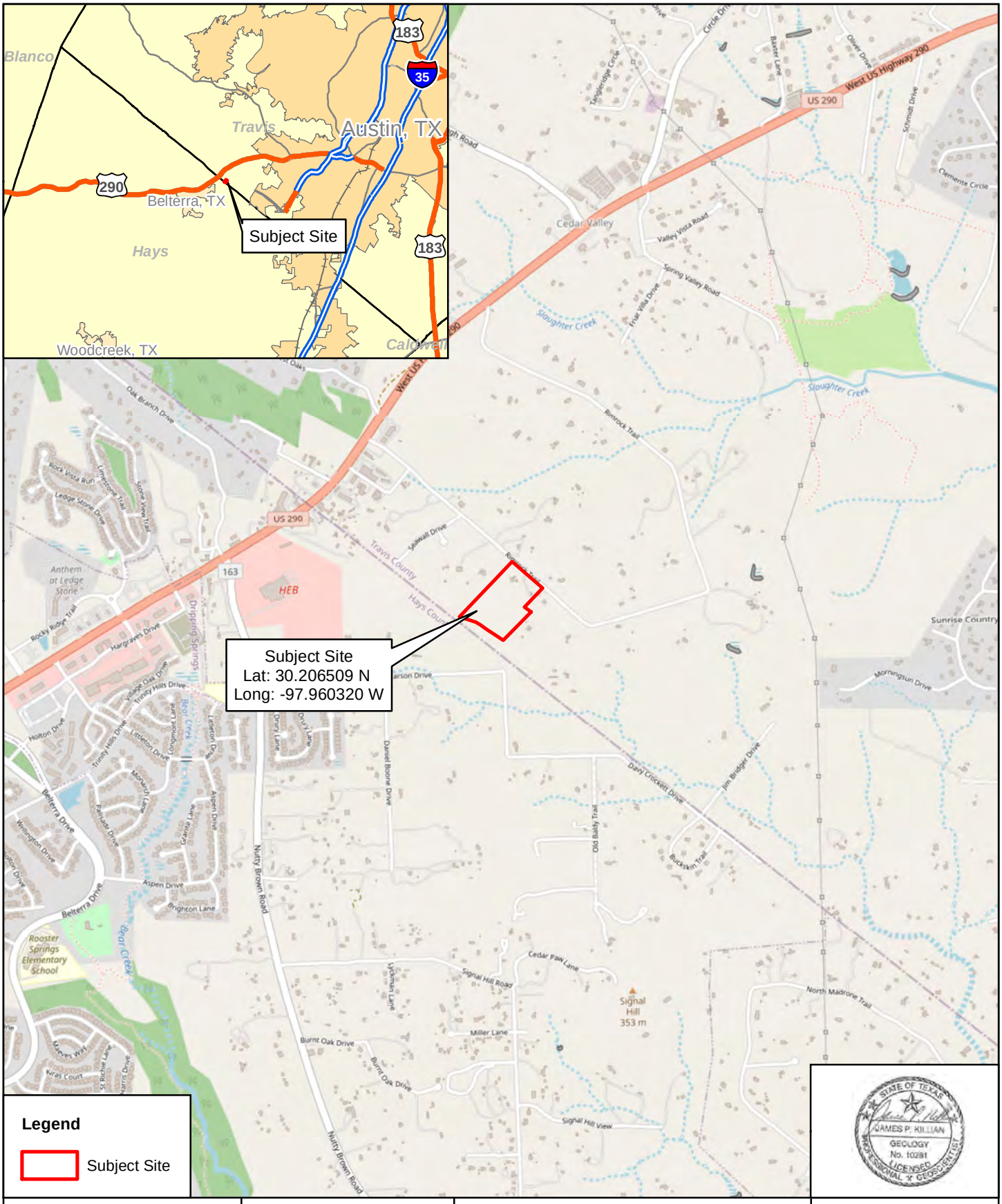
(TWSC) United States Geological Survey, Texas Water Science Center. Geologic Database of Texas, <https://txpub.usgs.gov/txgeology/>. Updated 1 February 2014; Accessed 28 August 2025.

(UT-BEG) University of Texas Bureau of Economic Geology, C.V. Proctor, Jr., T.E. Brown, J.H. McGowen, N.B. Waechter, and V.E. Barnes. *Geologic Atlas of Texas*, Austin Sheet, Francis Luther Whitney Memorial Edition. 1974; revised 1995.

(USGS) US Geological Survey. 7.5-minute series topographic maps, Signal Hill, Texas, quadrangle. 1986.

ATTACHMENT F

ADDITIONAL SITE MAPS



STATE OF TEXAS
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GEOLOGY
No. 10281
LICENSED
PROFESSIONAL GEOSCIENTIST

Horizon Environmental Services

Date:	8/28/2025
Drawn:	MPD
HJN NO:	25170.001GA
Source:	OSM, 2025

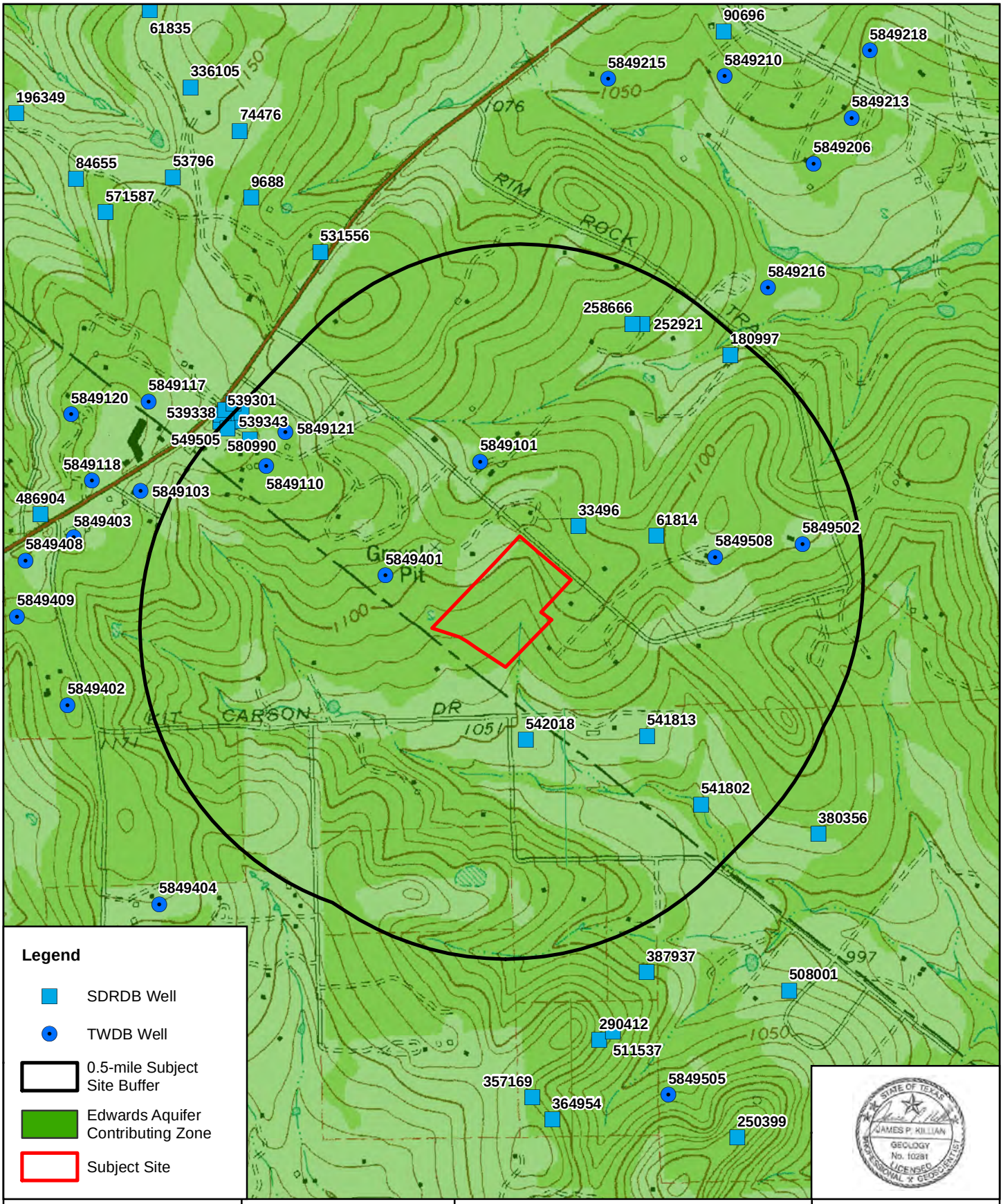
Attachment F, Figure 1

Vicinity Map
Rim Rock Trail
Austin, Travis County, Texas

N

0 1,000 2,000
Feet

25170--Rim_Rock_1\Graphics\25170-001GA_01A_Vic.mxd



Legend

- SDRDB Well
- TWDB Well
- 0.5-mile Subject Site Buffer
- Edwards Aquifer Contributing Zone
- Subject Site

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Date:	8/28/2025
Drawn:	MPD
HJN NO:	25170.001GA
Source:	TCEQ, 2025 TWDB, 2025 USGS, 1986

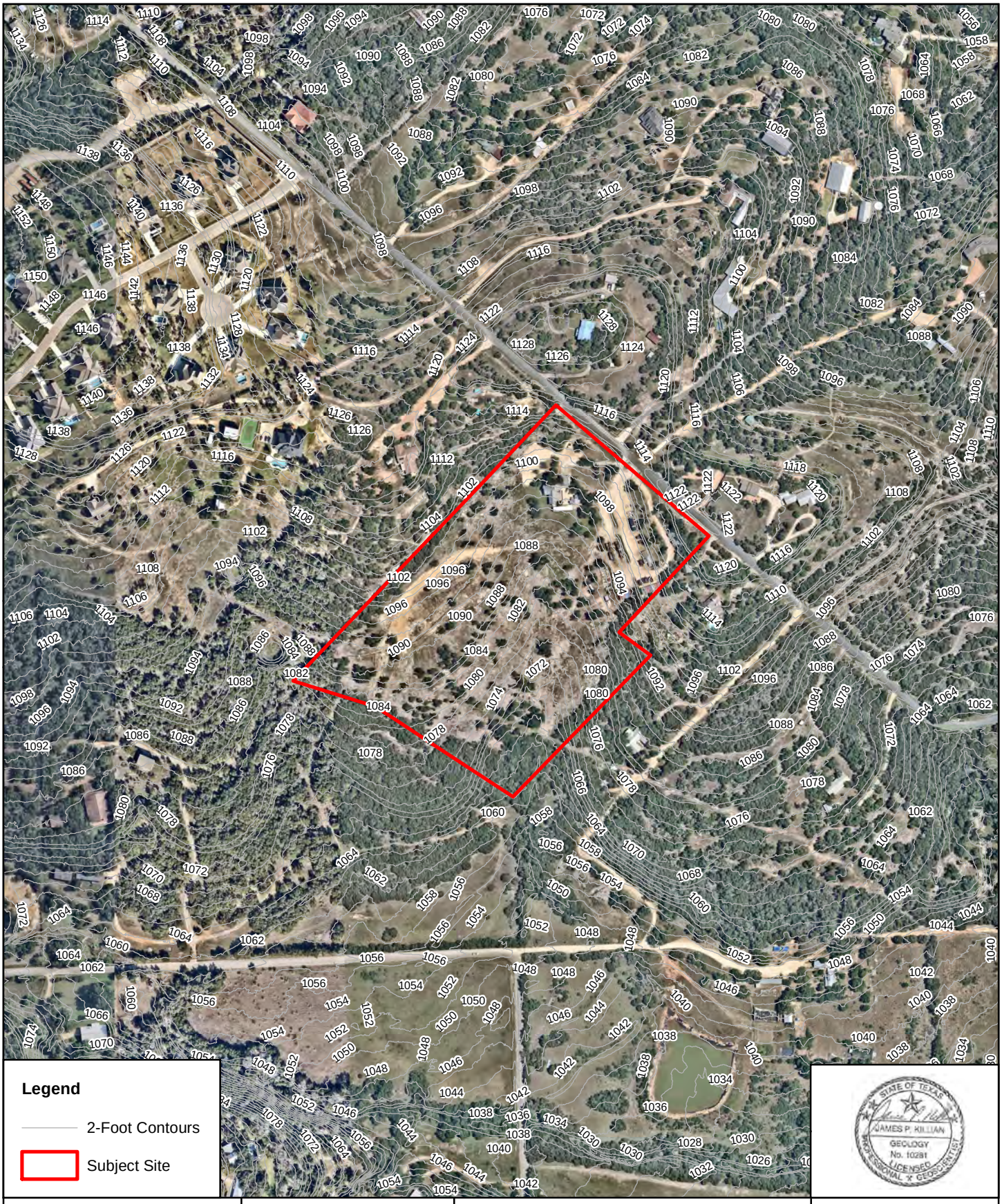
Attachment F, Figure 2

Topography and Hydrogeology Map
Rim Rock Trail
Austin, Travis County, Texas

N

0 600 1,200
Feet

25170--Rim_Rock_1\Graphics\25170-001GA_02A_TopoHydro.mxd



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Date:	8/28/2025
Drawn:	MPD
HJN NO:	25170.001GA
Source:	Nearmap, 2025 COA, 2019

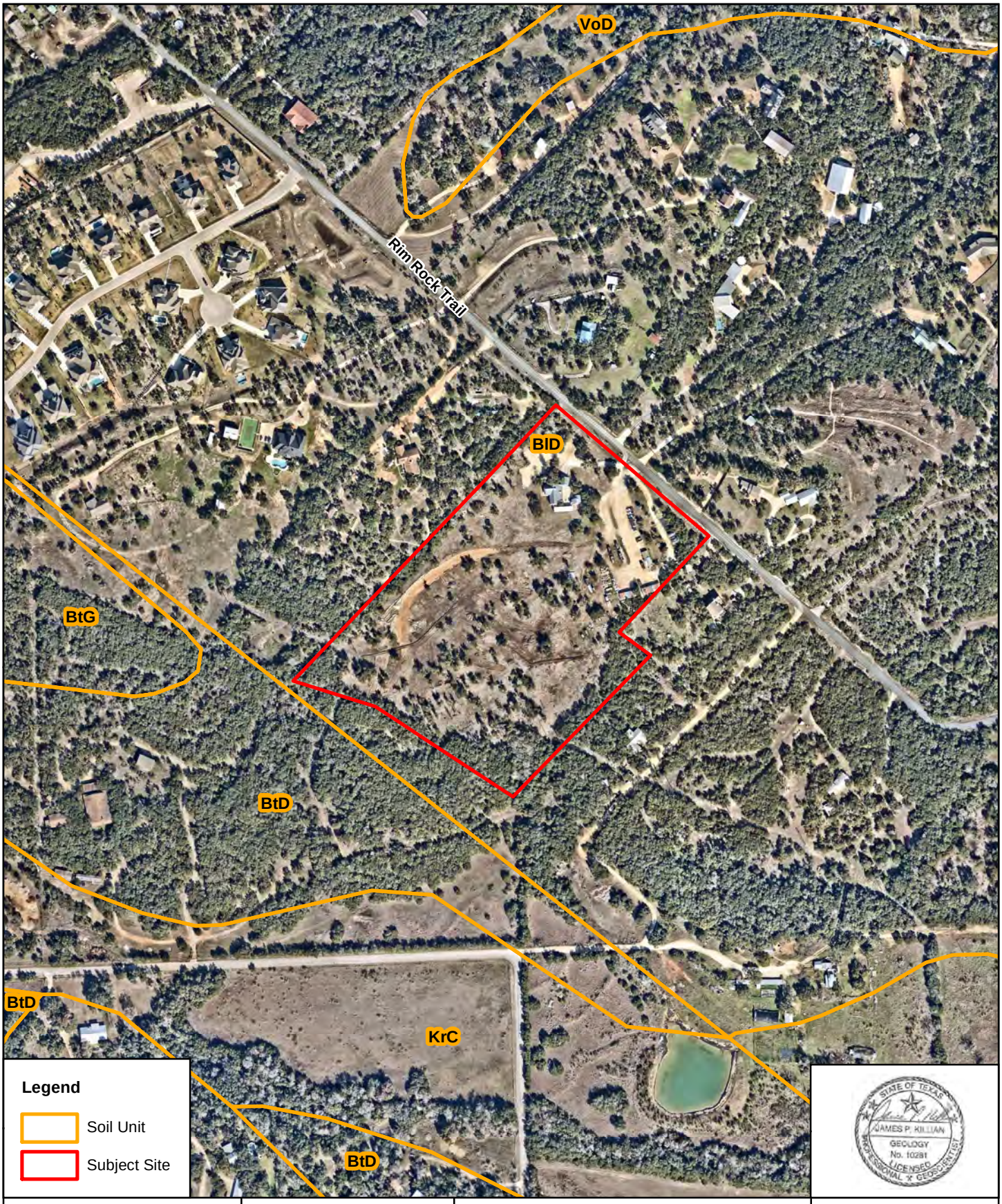
Attachment F, Figure 3

Site Topographic Map
Rim Rock Trail
Austin, Travis County, Texas

N

0 200 400
Feet

25170--Rim_Rock_1\Graphics\25170-001GA_03A_Topo.mxd



Legend

- Soil Unit
- Subject Site

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Date:	8/28/2025
Drawn:	MPD
HJN NO:	25170.001GA
Source:	Nearmap, 2025 NRCS, 2025

Attachment F, Figure 4

NRCS Soils Map
Rim Rock Trail
Austin, Travis County, Texas

N

0 200 400
Feet

25170–Rim_Rock_1\Graphics\25170-001GA_04A_Soils.mxd

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ATTACHMENT G

SITE PHOTOGRAPHS

Horizon
Environmental Services

PHOTO 1
Typical vegetation in central portion

PHOTO 2
Typical vegetation in eastern portion

PHOTO 3
Typical vegetation in western portion

PHOTO 4
Typical vegetation in central portion

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Tammi Migl, PE

Date: 09/09/2025

Signature of Customer/Agent:

Regulated Entity Name: LandWest Rim Rock 1

Project Information

1. County: Travis
2. Stream Basin: Bear Creek Watershed
3. Groundwater Conservation District (if applicable): _____
4. Customer (Applicant):

   Contact Person: Fredrick Scheen III
   Entity: FGS Investments I, LLC
   Mailing Address: P.O. Box 340789
   City, State: Austin, TX Zip: 78734
   Telephone: (512) 263-3464 Fax: _____
   Email Address: jhall@landwest.com

5. Agent/Representative (If any):

Contact Person: Tammi Migl
Entity: Migl Engineering and Consulting
Mailing Address: 9600 Escarpment Boulevard Suite 745-174
City, State: Austin, TX Zip: 78749
Telephone: (512) 750-0440 Fax: _____
Email Address: tammi@miglengineering.com

6. Project Location:

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

7. ☒ The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

The project is located at 11783 Rim Rock Trail, Austin, TX 78737, approximately 1350 feet southeast of the intersection of Seawall & Rim Rock Trail.

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

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

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).

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

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

11. Existing project site conditions are noted below:

☒ Existing commercial site
☐ Existing industrial site

☐ Existing residential site
☐ Existing paved and/or unpaved roads
☐ Undeveloped (Cleared)
☐ Undeveloped (Undisturbed/Not cleared)
☐ Other: _____

12. The type of project is:

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

13. Total project area (size of site): 16.399 Acres

Total disturbed area: 7.70 Acres

14. Estimated projected population: 12

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

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	*Sq. Ft.*	*Sq. Ft./Acre*	*Acres*
Structures/Rooftops	14,926	÷ 43,560 =	0.34
Parking	55,000	÷ 43,560 =	1.26
Other paved surfaces	64,801	÷ 43,560 =	1.49
Total Impervious Cover	134,453	÷ 43,560 =	3.09

Total Impervious Cover 3.09 **÷ Total Acreage** 16.399 **X 100 =** 18.8**% Impervious Cover**

16. ☒ **Attachment D - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water quality is attached. If applicable, this includes the location and description of any discharge associated with industrial activity other than construction.

17. ☐ Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

For Road Projects Only

Complete questions 18 - 23 if this application is exclusively for a road project.

☐ N/A

18. Type of project:

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

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

- ☐ Concrete
- ☐ Asphaltic concrete pavement
- ☐ Other: _____

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

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

21. Pavement Area:

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

25. ☐ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☒ N/A

26. Wastewater will be disposed of by:

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

☒ **Attachment F - Suitability Letter from Authorized Agent**. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

☒ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☐ Sewage Collection System (Sewer Lines):

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

☐ Existing.
☐ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons.

☒N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1			
2			
3			
4			
5			

Total x 1.5 = _____ Gallons

28. ☐ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than

one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

☐ **Attachment G - Alternative Secondary Containment Methods**. Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are attached.

29. Inside dimensions and capacity of containment structure(s):

Table 3 - Secondary Containment

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*

Total: _____ Gallons

30. Piping:

☐ All piping, hoses, and dispensers will be located inside the containment structure.
☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
☐ The piping will be aboveground
☐ The piping will be underground

31. ☐ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of: _____.

32. ☐ **Attachment H - AST Containment Structure Drawings**. A scaled drawing of the containment structure is attached that shows the following:

☐ Interior dimensions (length, width, depth and wall and floor thickness).
☐ Internal drainage to a point convenient for the collection of any spillage.
☐ Tanks clearly labeled
☐ Piping clearly labeled
☐ Dispenser clearly labeled

33. ☐ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

☐ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

Site Plan Requirements

Items 34 - 46 must be included on the Site Plan.

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

    Site Plan Scale: 1" = 40'.

35. 100-year floodplain boundaries:

    ☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

    ☒ No part of the project site is located within the 100-year floodplain.

    The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): 48453C0555J dated 1/22/2020.

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

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

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

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

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

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

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

42. ☐ Surface waters (including wetlands).

    ☒ N/A

43. ☐ Locations where stormwater discharges to surface water.

    ☒ There will be no discharges to surface water.

44. ☐ Temporary aboveground storage tank facilities.

    ☒ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

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

☐ N/A

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

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

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

☐ N/A

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

☐ N/A

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

☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.

☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.

☒ The site will not be used for low density single-family residential development.

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

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

52. ☒ **Attachment J - BMPs for Upgradient Stormwater**.

    ☒ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
    ☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
    ☐ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

53. ☒ **Attachment K - BMPs for On-site Stormwater**.

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

54. ☒ **Attachment L - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

    ☐ N/A

55. ☒ **Attachment M - Construction Plans**. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are

attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☐ N/A

56. ☒ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

    ☒ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☐ Signed by the owner or responsible party
    ☒ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
    ☐ Contains a discussion of record keeping procedures

    ☐ N/A

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

    ☒ N/A

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

    ☐ N/A

Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

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

60. ☒ A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development,

or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

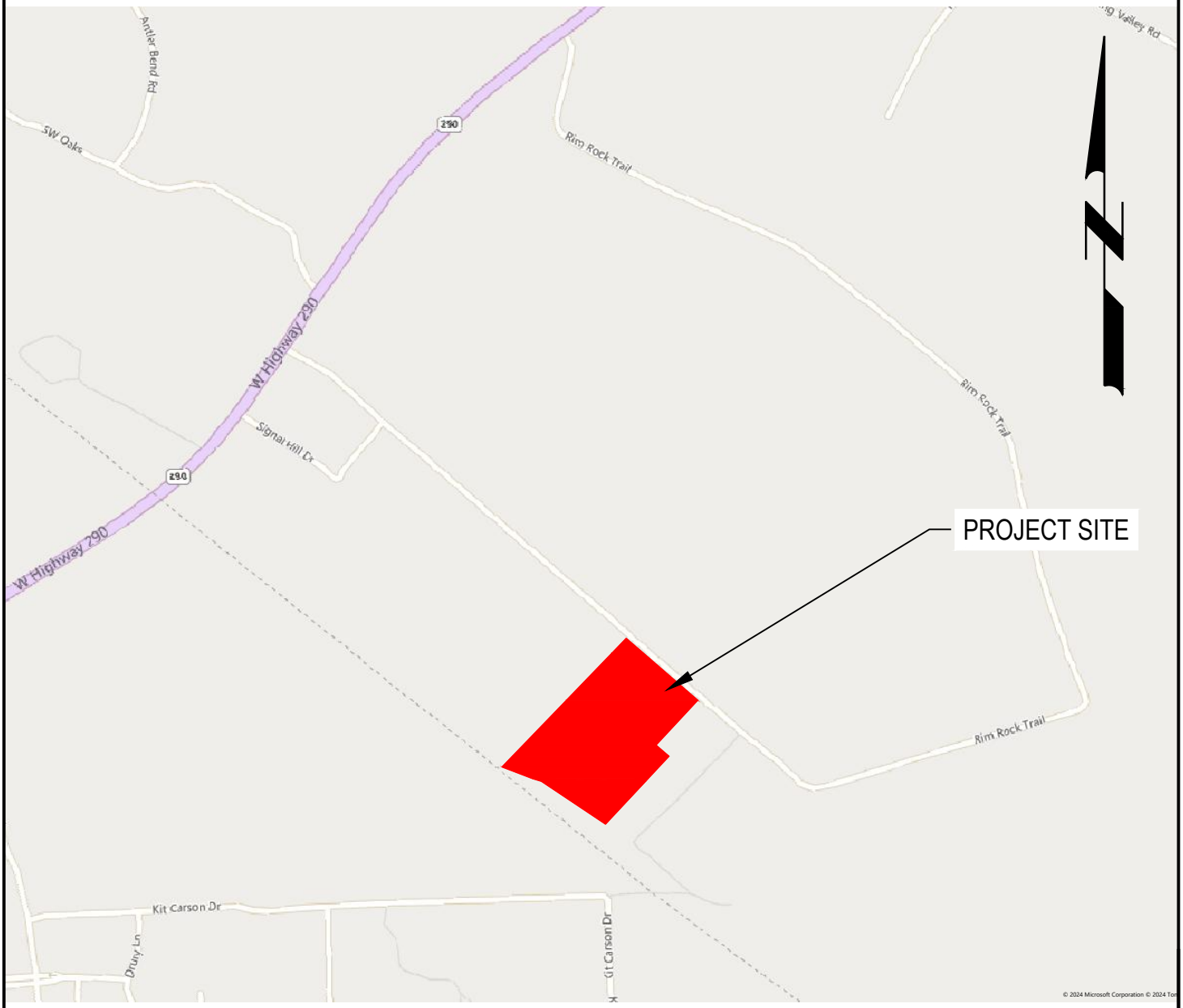
Administrative Information

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

62. ☒ Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

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

☐ The Temporary Stormwater Section (TCEQ-0602) is included with the application.



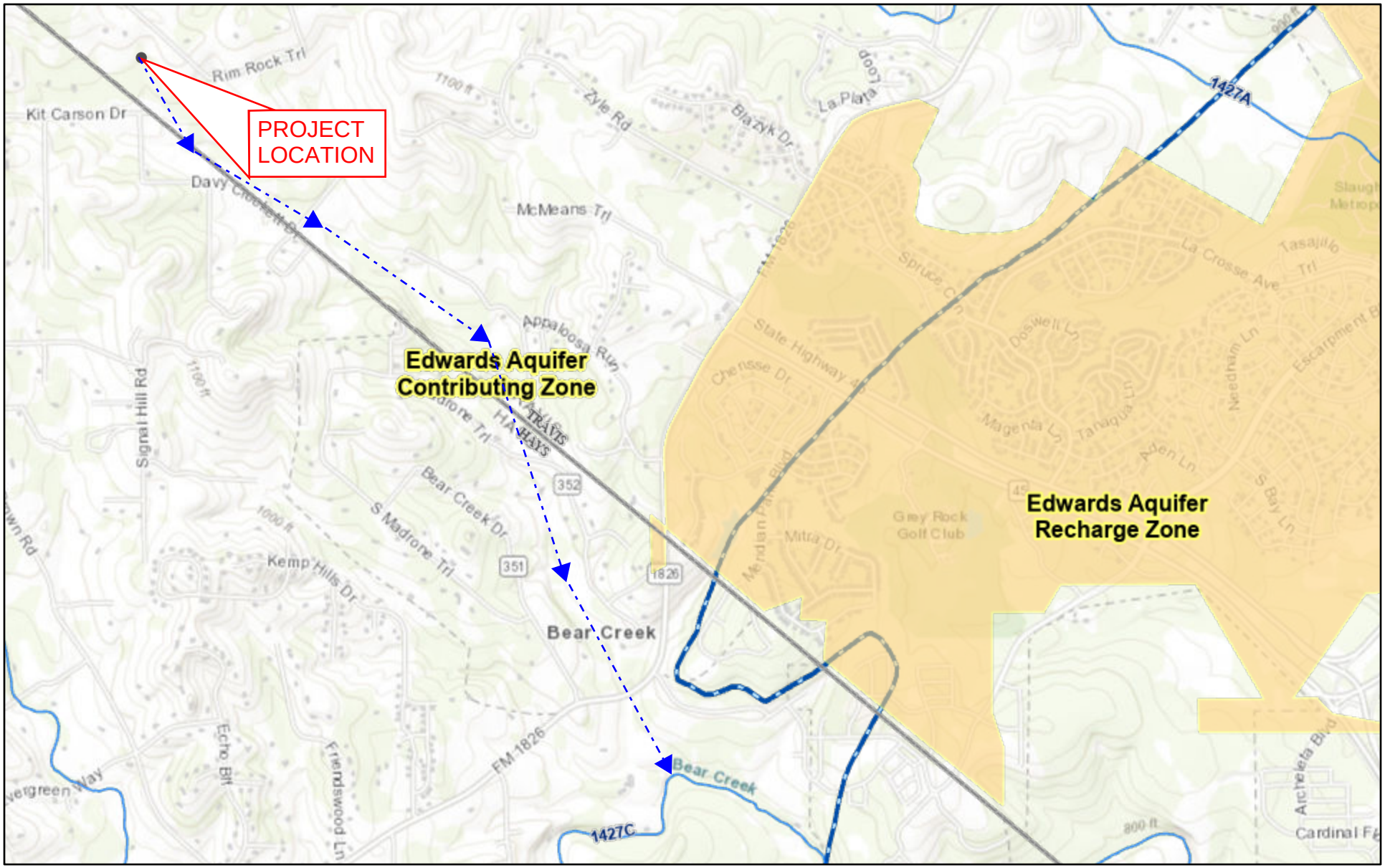
VICINITY MAP

N.T.S.

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

CLIENT/PROJECT	PROJECT NO.
LANDWEST RIM ROCK 1 11783 RIM ROCK TRAIL, AUSTIN TX 78737	0193.001
SHEET TITLE	SHEET NO.
VICINITY MAP	EX 1 1 OF 1

LandWest RR1



8/20/2024, 4:12:37 PM

1:36,112

0 0.28 0.55 1.1 mi

0 0.42 0.85 1.7 km

City/Place

TX Counties

Segments (Streets)

Edwards Aquifer Label

Edwards Aquifer Boundary

Edwards Aquifer Boundary central line

7.5 Minute Quad Grid

TCEQ_EDWARDS_OFFICIAL_MAPS

TCEQ, City of Austin, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA

Web AppBuilder for ArcGIS

City of Austin, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA | TCEQ |

ATTACHMENT C – PROJECT DESCRIPTION

1.0 GENERAL PROJECT INFORMATION

This application consists of the Site Development Plans for a proposed office, two equipment and material storage warehouses, and associated parking, sidewalk, water services, water quality, and stormwater detention improvements for LandWest Rim Rock 1 located at 11783 Rim Rock Trail, Austin, Texas. Approximately 8.268 acres of the 16.399 of land will be utilized for the new development.

2.0 SITE BACKGROUND

The site is currently developed with a residential home converted into an office, gravel parking lots, and native grasses with coverage from many trees of varying species. The existing impervious cover totals 0.18 acres or 1.11%; however, since the improvements were constructed after implementation of TCEQ rules, all impervious cover has been included in the TSS removal calculations.

3.0 SITE IMPROVEMENTS

The proposed improvements to the subject tract consist of a 4,800 sf office, a 3,600 sf material storage warehouse, a 4,800 sf equipment storage warehouse, associated parking, fire lanes, drive aisles, water quality controls, detention pond, on-site septic field, and new municipal water services. The increase in impervious cover will be 125,526 square feet for a site total of 134,453 square feet (3.09 acres). The proposed batch detention pond is designed to handle an ultimate condition of 3.09 acres, or 18.8%, of impervious cover.

ATTACHMENT D – FACTORS AFFECTING SURFACE WATER QUALITY

Factors affecting the quality of surface water and groundwater are the parking and use of motor vehicles on the site. This includes the emission of certain hydrocarbon-based substances, as well as the tracking of silt. Run-off will include oils, grease, and other substances typically associated with roadways and vehicle use areas. Also, the maintenance of lawn areas could affect the quality of surface water and ground water through runoff of chemical fertilizers and pesticides. Proposed improvements will be treated by a batch detention basin.

ATTACHMENT E – VOLUME AND CHARACTER OF STORMWATER

DRAINAGE AND RUNOFF

The site slopes southwest towards the south property line with drainage patterns remaining relatively unchanged by the site improvements. Stormwater that originates upgradient of the subject tract as shown in the existing and proposed drainage area maps will be conveyed across the site. The onsite proposed parking, drive aisles, and roof runoff is directed to two grassy swales and a batch detention basin designed to meet TCEQ water quality requirements. The property is predominantly of a Type D soil resulting in a CN of 80. During construction, the principal pollutant in stormwater will be sediment caused by the disturbance of construction. Temporary BMPs will control sediment and other pollutants during construction.

WATER QUALITY

After construction, there will be runoff from building surfaces, paved areas, and managed lawn/landscaped areas. This project includes BMPs to treat runoff from all impervious cover on site. Impervious cover in place on the 16.399-acre parcel associated with the original residence totaled 7,927 square feet; new impervious cover on this project proposes to add 126,526 square feet for a total of 134,453 square feet of impervious cover. Since the

residence was constructed after implementation of the TCEQ Edwards Aquifer rules, all impervious cover has been considered as new impervious cover in the TSS removal calculations. The BMP selected to treat all impervious cover is a batch detention basin.

8.71 acres contribute directly to the batch detention basin, sized for a total TSS removal per TCEQ RG-348 Appendix A (OEM) of 80% of proposed conditions. A total of 2,739 pounds of TSS removal is required while a removal of 2,739 pounds is provided. The contributing area to the water quality control consists of the caliche parking areas, asphalt drive aisles, and all the buildings' roof runoff.

ATTACHMENT F – SUITABILITY LETTER FROM AUTHORIZED AGENT

No municipal wastewater service is available to the site and a new OSSF is currently being permitted through Travis County. Attached is the Soil Suitability Letter from Travis County.

TRANSPORTATION AND NATURAL RESOURCES
CYNTHIA C. McDONALD, COUNTY EXECUTIVE

700 Lavaca Street, 5th Floor
P.O. Box 1748
Austin, TX 78767
Phone: (512) 854-9383
Fax: (512) 854-4697

July 3, 2025

FGS Investments I, LLC. - Rick Scheen
jhall@landwest.com

Re: On-Site Wastewater (Non-Residential); 11783 Rim Rock Trl., Austin TX 78737,

Onsite-Sewage Facility Suitability Letter

This property referenced above is suitable for the use of on-site sewage facilities (OSSFs) in accordance with 30 TAC Chapter 285 and Travis County Code Chapter 448 per materials submitted to this department prior to the date of this letter.

This letter is not an approval of any specific plan to modify or develop the site requires approval by Travis County and permit prior to installation.

Sincerely,

Brandon Couch

Digitally signed by: Brandon Couch
DN: CN = Brandon Couch email = brandon.couch@traviscountytx.gov C = US O = Travis Co. TNR OU = On-Site Wastewater
Date: 2025.07.03 09:04:05 -05'00'

ATTACHMENT G – ALTERNATIVE SECONDARY CONTAINMENT METHODS

NOT APPLICABLE

ATTACHMENT H – AST CONTAINMENT STRUCTURE DRAWINGS

NOT APPLICABLE

ATTACHMENT I – 20% OR LESS IMPERVIOUS COVER WAIVER

NOT APPLICABLE

ATTACHMENT J – BMPs FOR UPGRADIENT STORMWATER

The proposed development is located within the Bear Creek Watershed. Approximately 6.78 acres of stormwater runoff originates upgradient of the site from rural residential lots and the adjacent county roadway, as shown on the Existing and Proposed Drainage Area Maps. To manage this offsite runoff, drainage structures are proposed to divert the majority of flows around the limits of development and away from the permanent water quality and detention BMPs. These flows currently cross the property line in an unconcentrated, sheet flow pattern.

An exception is Offsite Drainage Area 3, which encompasses the Rim Rock Trail Basin. Runoff from this subarea will be intercepted by a swale as conveyance and treated by the proposed batch detention basin located on-site.

During construction, silt fences will be installed along the upslope perimeter to prevent offsite flows from entering active work areas and to minimize sediment transport.

ATTACHMENT K – BMPs FOR ON-SITE STORMWATER

The 16.399-acre tract was previously developed as a residential homestead. The property was sold to a company who converted the existing home into an office with a laydown yard for landscape equipment. The proposed expansion project includes BMPs for all impervious cover on site. Impervious cover in place on the 16.399-acre parcel as part of the original homestead totals 7,927 square feet; however, this was constructed after implementation of TCEQ Edwards Aquifer rules and therefore, has been considered as new impervious cover in

the TSS removal calculations. This project proposes adding 126,526 square feet for an ultimate buildout of 134,453 square feet (3.09 acres) of impervious cover. The BMPs selected to treat all of the impervious cover on-site is a Batch Detention Basin.

8.71 acres contribute directly to the batch detention basin, sized for a total TSS removal of 80% from proposed to existing conditions. A total of 2,739 pounds of TSS removal is required per TCEQ RG-348 Appendix A for the development while a removal of 2,739 pounds is provided. The contributing area to the water quality control consists of the caliche parking areas, asphalt drive aisles, and all of the buildings' roof runoff.

Appendix A of RG-348 requires that sites with proposed impervious cover exceeding 15% limit the peak runoff rate for the 2-year storm event to 50% of the undeveloped rate. Since Basin B1 is the only developed area, the undeveloped runoff rate was calculated as 26.28 cfs. A 50% reduction yields a design target of 13.14 cfs, corresponding to a pond release rate of less than 57.63 cfs. The final proposed pond release rate is 57.49 cfs.

ATTACHMENT L – BMPs FOR SURFACE STREAMS

Bear Creek is protected by the proposed BMPs. There are areas of concentrated runoff for which the design has accounted for both during and after construction. The proposed BMP discharges to a natural drainageway that carries the shallow concentrated flow south.

ATTACHMENT M – CONSTRUCTION PLANS

The construction plans have been attached as part of this submittal.

ATTACHMENT N – INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

1.0 BATCH DETENTION

The maintenance activities are identical to those of extended detention basins with the addition of maintenance and inspections of the automatic controller and the valve at the outlet.

1.1. Inspections:

Inspections should take place for a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlets. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of the batch detention pond should be identified and repaired/revegetated immediately.

1.2. Mowing:

The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

1.3. Litter and Debris Removal:

Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

1.4. Erosion control:

The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be

necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

1.5. Nuisance Control:

Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

1.6. Structural Repairs and Replacement:

With each inspection, any damage to structural elements of the basin (pipes, drainage structures, berms, etc.) should be identified and repaired immediately. An example of this type of repair can include berm erosion control, sealing of voids, removal of vegetation from joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

1.7. Sediment Removal:

A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

1.8. Logic Controller:

The Logic Controller should be inspected as part of the twice-yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

2.0 GRASSY SWALES

Maintenance for grassy swales is minimal and is largely aimed at keeping the grass cover dense and vigorous. Maintenance practices and schedules should be developed and included as part of the original plans to alleviate maintenance problems in the future. Recommended practices include (modified from Young et al., 1996):

2.1 Pest Management:

An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

2.2 Seasonal Mowing and Lawn Care

Lawn mowing should be performed routinely, as needed, throughout the growing season. Grass height should not exceed 18 inches. Grass cuttings should be collected and disposed of offsite, or a mulching mower can be used. Regular mowing should also include weed control practices; however, herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients.

2.3 Inspection:

Inspect swales at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The swale should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections should be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

2.4 Debris and Litter Removal:

Trash tends to accumulate in swale areas, particularly along highways. Any swale structures (i.e. check dams) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection but should be performed no less than two times per year (Urbonas et al., 1992).

2.5 Sediment Removal:

Sediment accumulating near culverts and in channels needs to be removed when they build up to 3 inches at any spot or cover vegetation. Excess sediment should be removed by hand or with flat-bottomed shovels. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level with the bottom of the swale. Sediment removal should be performed periodically, as determined through inspection.

2.6 Grass Reseeding and Mulching:

A healthy dense grass should be maintained in the channel and side slopes. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during swale establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established.

Maintain a field logbook to record any relevant information noted during inspections. At a minimum, the field notebook should include the date and time, field staff names, weather conditions, uniformity of grass cover, presence of debris and/or litter, and areas of sediment accumulation as well as any corrective actions taken and date they were completed. Records shall be maintained for a minimum of 3 years and shall be made available to TCEQ upon request.

RECORD KEEPING OF INSPECTIONS, MAINTENANCE AND REPAIRS SHALL BE MAINTAINED BY THE RESPONSIBLE PARTY.

Engineer's Certification

I certify that the BMPs described by this Maintenance Plan has been designed in compliance with the regulations of Title 30 Texas Administrative Code Chapter 213.

By: _____
Tammi Migl, P.E.

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED
PROFESSIONAL ENGINEER

RESPONSIBLE PARTY FOR MAINTENANCE:

FGS Investments I, LLC
P.O. Box 340789
Austin, Texas 78734

SIGNATURE OF RESPONSIBLE PARTY: _____

PRINTED NAME OF RESPONSIBLE PARTY: Fredrick Scheen III

ATTACHMENT O – PILOT SCALE FIELD TESTING

NOT APPLICABLE

ATTACHMENT P – MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

All flows generated by the existing and proposed improvements will be conveyed through the water quality or detention pond which will minimize surface stream contamination and post-construction stream flashing.

SITE DEVELOPMENT PLANS FOR
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737
TRAVIS COUNTY

OWNER:	FGS INVESTMENTS I LLC PO BOX 340789 AUSTIN, TEXAS 78734 512-263-3464 RICK SCHEEN RSCHEEN@LANDWEST.COM
PREPARED FOR:	LANDWEST DESIGN GROUP 11783 RIM ROCK TRAIL AUSTIN, TEXAS 78737 512-263-3464 JOHN HALL JHALL@LANDWEST.COM
CIVIL ENGINEER:	TAMMI R MIGL P.E. MIGL ENGINEERING AND CONSULTING 9600 ESCARPMENT BOULEVARD, SUITE 745-174 AUSTIN, TEXAS 78749 512-750-0440
LANDSCAPE ARCHITECT:	LANDWEST DESIGN GROUP 11783 RIM ROCK TRAIL AUSTIN, TEXAS 78737
SUBMITTAL DATE:	AUGUST 15, 2024
LEGAL DESCRIPTION:	BEING A CALLED 16.396 ACRE TRACT OF LAND, IN THE WILLIAM S. HOLTON SURVEY NO. 57, ABSTRACT NO. 378
ADDRESS:	11783 RIM ROCK TRAIL, AUSTIN TEXAS 78737
TAX PARCEL NUMBER(S):	338662
EDWARDS AQUIFER:	THIS PROJECT IS LOCATED OVER THE EDWARDS AQUIFER CONTRIBUTING ZONE PER TCEQ MAPS
JURISDICTION:	TRAVIS COUNTY, TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATERSHED STATUS:	THIS PROJECT IS LOCATED IN THE BEAR CREEK WATERSHED
FLOODPLAIN INFORMATION:	THIS SITE IS NOT LOCATED WITHIN THE BOUNDARIES OF THE 100 YEAR FLOODPLAIN ACCORDING TO DATA FROM THE FEDERAL INSURANCE ADMINISTRATION FIRM PANEL 48453C0555J, DATED JANUARY 22, 2020 FOR TRAVIS COUNTY, TEXAS.
PROPOSED USE:	COMMERCIAL LANDSCAPING OFFICE AND MATERIAL STORAGE
RELATED CASES:	TC S-25-306; TCFMO 2024-1579; WTCPUA PW-2024-52 SER, 290-24-023; TCEQ EAPP 11004360

PHASE I LIMITS OF CONSTRUCTION:	7.70 AC
PHASE II LIMITS OF CONSTRUCTION:	2.48 AC
EXISTING IMPERVIOUS COVER (BASELINE):	0.11 AC (INCLUDED IN WQ CALCS)
EXISTING IMPERVIOUS COVER (UNPERMITTED):	0.67 AC (INCLUDED IN WQ AND DETENTION CALCS)
PROPOSED PHASE I IMPERVIOUS COVER:	1.57 AC
PROPOSED PHASE II IMPERVIOUS COVER:	0.74 AC
TOTAL IMPERVIOUS COVER:	3.09 AC (18.82%)
AREA OF DISTURBANCE:	7.70 AC

VICINITY MAP
N.T.S.
MAPSCO MAP # 639R

NOTES TO CONTRACTOR

1. BY THE ACT OF SUBMITTING A BID FOR THE PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, ALL SUBCONTRACTORS, AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS AND SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS AND MATERIAL SUPPLIERS KNOWLEDGE, ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.
2. THE LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS OF UTILITIES MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE UTILITY SERVICE LINES AS REQUIRED FOR CONSTRUCTION AND NOTIFY THE ENGINEER ON ANY CONFLICTS IMMEDIATELY. ANY DAMAGE BY THE CONTRACTOR TO THE EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR, AT HIS EXPENSE.
3. THE INTENT OF THIS SITE DESIGN IS TO MEET LOCAL, STATE AND FEDERAL DEVELOPMENT CODES AND REGULATIONS. A CONCURRENCE LETTER IS REQUIRED FROM MIGL ENGINEERING AND CONSULTING UPON COMPLETION OF THE CONSTRUCTION AS PERMITTED. ANY CHANGES MADE DURING CONSTRUCTION MUST BE SHOWN ON THE DRAWINGS IN THE FORM OF A REVISION OR CORRECTION BY THE CITY PRIOR TO THE ISSUANCE OF THE CONCURRENCE LETTER.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMMEDIATELY NOTIFYING THE DESIGNER OR ENGINEER OF ANY APPARENT DISCREPANCY OR DESIGN CONFLICTS, AND RESOLVE SUCH SITUATIONS PRIOR TO PROCEEDING WITH CONSTRUCTION.
5. SHOULD THERE BE ANY CONFLICT IN SPECIFICATIONS OR REQUIREMENTS FOR MATERIALS OR INSTALLATION THE MOST STRINGENT WILL APPLY. IF THE DECISION IS NOT CLEAR, DIRECT YOUR QUESTIONS TO THE DESIGNER OR ENGINEER.
6. THE CITY APPROVED, SIGNED AND SEALED PLAN SET SHALL TAKE PRECEDENCE OVER ANY CAD FILES PROVIDED TO THE CONTRACTOR.
7. EXCAVATION IS UNCLASSIFIED, WHICH INCLUDES ANY NECESSARY METHODS REQUIRED TO DEWATER OR DRY OUT EXCAVATIONS AND FOR THE IMPORTING OF BASE OR NATIVE MATERIALS NECESSARY TO FACILITATE CONSTRUCTION OF EMBANKMENTS, STRUCTURES, OR PAVEMENT.
8. THE LATEST APPROVED, SIGNED AND SEALED LANDSCAPE ARCHITECTURAL PLANS SHOULD BE CONSULTED FOR THE ACTUAL SIZE, CONFIGURATION AND LOCATION OF EACH SHADE STRUCTURE, FENCE, AND SITE FURNISHINGS.
9. APPROVAL OF SITE PLAN DOES NOT ALLOW FOR ANY WORK IN THE RIGHT OF WAY TO BE CONDUCTED WITHOUT TEMPORARY USE OF RIGHT OF WAY PERMIT.
   - 9.1. EXCAVATION FOR UTILITY WORK WILL REQUIRE AN EXCAVATION PERMIT
   - 9.2. ALL DRIVEWAYS AND CONCRETE WORK WILL REQUIRE A DRIVEWAY/ SIDEWALK PERMIT
   - 9.3. ALL TRAFFIC CONTROL AND PEDESTRIAN PROTECTION WILL REQUIRE A TEMPORARY USE OF ROW PERMIT
   - 9.4. ALL OTHER PERMITS SUCH AS THE BUILDING PERMIT MUST BE APPROVED BEFORE USE OF THE ROW WILL BE ALLOWED.
10. THE DISTURBED AREAS WITHIN THIS PROJECT SHALL BE REVEGETATED AND ALL PERMANENT EROSION/SEDIMENTATION CONTROLS COMPLETED PRIOR TO THE RELEASE OF FISCAL SURETY FOR THAT PHASE. TEMPORARY EROSION/SEDIMENTATION CONTROLS SHALL BE ADJUSTED AS NEEDED PRIOR TO THIS RELEASE TO ENSURE THAT SUBSEQUENT PHASE DISTURBED AREAS ARE ADEQUATELY COVERED. ANY AREA WITHIN THE LIMIT OF DISTURBANCE OF THE PROJECT WHICH IS NOT ADEQUATELY REVEGETATED SHALL BE BROUGHT INTO COMPLIANCE PRIOR TO THE RELEASE OF THE FINAL PHASE.
11. IF AT ANY TIME DURING CONSTRUCTION OF THIS PROJECT AN UNDERGROUND STORAGE TANK (UST) IS FOUND, CONSTRUCTION IN THAT AREA MUST STOP. ANY UST REMOVAL WORK MUST BE CONDUCTED BY A UST CONTRACTOR THAT IS REGISTERED WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ).
12. PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING ENSURE THAT ALL REQUIRED NOTICES AND PERMITS ARE POSTED AND THE CERTIFIED INSPECTOR FOR YOU SITE HAS UPLOADED A SWP3 INSPECTION REPORT TO YOUR ACCOUNT THAT CONFIRMS THAT THE FIRST PHASE OF TEMPORARY ESC HAVE BEEN INSTALLED PER PLANS AND SPECIFICATIONS.
   FAILURE TO FOLLOW THE PRE-CONSTRUCTION MEETING REQUIREMENTS MAY RESULT IN WORK STOPAGE AND ADDITIONAL PERMIT FEES.
   SPECIAL PRE-CON NOTES:
   - 12.1. PROVIDE 48 HR. MINIMUM NOTICE TO SCHEDULE THE PRE-CON MEETING.
   - 12.2. PROVIDE A 1/2 SIZE SET OF PLANS FOR THE INSPECTOR AT THE PRE-CON.
   - 12.3. PROVIDE AN ANTICIPATED CONSTRUCTION SCHEDULE AT THE PRE-CON.
   - 12.4. BRING YOUR SWP3 FOR COMPLETENESS CHECK AT THE PRE-CON.
13. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE PLANS APPROVED BY TRAVIS COUNTY.
14. SCHEDULE YOUR PROJECTS PRE-CONSTRUCTION MEETING THROUGH THE HTTPS://WWW.MGOCONNECT.ORG/CP/PORTAL AFTER THE INITIAL 3RD PARTY SWP3 INSPECTION REPORT HAS BEEN UPLOADED AND ALL PERMITS AND NOTICES HAVE BEEN POSTED, THEN FOLLOW UP WITH EMAILS TO THE ENVIRONMENTAL INSPECTOR AT ENV-INSPECTION@TRAVISCOUNTYTX.GOV AND THE ENGINEERING INSPECTOR, JOHNNY ANGLIN, AT JOHNNY.ANGLIN@TRAVISCOUNTYTX.GOV
15. ALL PONDS WILL BE PRIVATELY MAINTAINED.
16. NO PONDS ARE GREATER THAN OR EQUAL TO 6 FEET IN DEPTH.
17. THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND THE SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE-OUT PROCESS.
18. ALL STRUCTURAL FIELD CHANGES REQUIRE A PLAN REVISION APPROVAL IN WRITING BEFORE COMMENCEMENT OF THE WORK.
19. THE APPLICANT/OWNER MUST COORDINATE WITH UTILITY COMPANIES PRIOR TO CONSTRUCTION.
20. CONTRACTOR SHALL COORDINATE CONTINUOUSLY AND AS NECESSARY WITH PROPERTY/BUSINESS OWNERS TO MAINTAIN CONTINUATION OF TRAFFIC CONTROL AND ACCESS.
21. CONTRACTOR SHALL COORDINATE WITH EACH PROPERTY OWNERS PRIOR TO ENTERING PRIVATE PROPERTY TO INSTALL UTILITY LINES.
22. BE INFORMED THAT THE CONTRACTOR MUST OBTAIN A SEPARATE PERMIT TO WORK WITHIN THE COUNTY ROW.
23. AS THE PROJECT WILL UTILIZE AN OSSF, THE ONSITE WASTEWATER COLLECTION AND CONVEYANCE SYSTEM IS REQUIRED TO BE DESIGNED AND CONSTRUCTED TO MEET 30 TAC CHAPTER 285 REQUIREMENTS.
24. ALL WORK BENEATH AND WITHIN THE FLOODPLAIN MUST BE RETURNED TO EXISTING SURFACE CONDITIONS.
25. NO PORTION OF THIS SITE LIES WITH THE 100 YR FLOOD PLAN AS RECORDED PER FEMA FIRM MAP 48453C0555J, EFFECTIVE DATE JANUARY 22, 2020.
26. BE INFORMED THAT THE CONTRACTOR MUST OBTAIN A SEPARATE PERMIT TO WORK WITHIN THE COUNTY ROW.
27. TRENCHES MUST BE LIMITED TO 300 FEET OF OPEN TRENCH AT A TIME, WHERE ANY PROPOSED UTILITIES WILL BE TRENCHED.

NOT FOR CONSTRUCTION-UNTIL APPROVED

THESE DOCUMENTS ARE NOT APPROVED FOR CONSTRUCTION, AND SHALL NOT BE USED FOR CONSTRUCTION UNTIL APPROVED BY THE TRAVIS COUNTY, UNTIL A DEVELOPMENT PERMIT IS ISSUED BY TRAVIS COUNTY, AND UNTIL ALL REQUIRED OTHER COUNTY, AND STATE PERMITS ARE OBTAINED.

APPROVAL OF THESE PLANS BY THE TRAVIS COUNTY INDICATES COMPLIANCE WITH APPLICABLE TRAVIS COUNTY REGULATIONS ONLY. APPROVAL BY OTHER GOVERNMENTAL ENTITIES MAY BE REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR DETERMINING WHAT ADDITIONAL APPROVALS MAY BE NECESSARY.

WTCPUA NOTES

1. WTCPUA IS THE RETAIL WATER PROVIDER.
2. 4 LUEs (DOMESTIC WATER). PUA WATER IS NOT APPROVED FOR LANDSCAPE IRRIGATION
3. THERE ARE 3 METER'S ONSITE, WAREHOUSE CT (3200 SF); 1 - 5/8" METER (1 LUE), MT BUILDING (4800 SF); 1 - 5/8" METER (1 LUE), PHASE 2 OFFICE (4800 SF); 1 - 1" METER (2 LUEs)
4. WASTEWATER SHALL BE PROVIDED BY A PRIVATE OSSF.
5. WTCPUA 290 WATER SYSTEM GRID AM16, PRESSURE PLANE - 1340 HGL.

RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION." (OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 EAST 6TH STREET,

REVISIONS/CORRECTIONS

No.	Description	Revise (R) Add (A) Void (V) Sheet No.'s	Total # Sheets in Plan Set	Net Change Imp. Cover (sq. ft.)	Total Site Imp. Cover (sq. ft.) (%)	Travis Co. Approval/Date

THE ENGINEER WHO PREPARED THESE PLANS IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF THE PLANS. IN APPROVING THESE PLANS, TRAVIS COUNTY, TRAVIS COUNTY FIRE MARSHAL, TCEQ, AND WTCPUA MUST RELY UPON THE ACCURACY AND ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

811 Know what's below. Call before you dig.

SHEET LIST TABLE

	SHEET #	DWG #	SHEET TITLE
	C1	1	COVER
	C2	2	GENERAL NOTES
	C3	3	TCEQ NOTES
(NOT INCLUDED FOR TCEQ REVIEW)	C4	4	WTCPUA UTILITY NOTES
(NOT INCLUDED FOR TCEQ REVIEW)	C5	5	TREE LIST & TREE PROTECTION DETAILS
(NOT INCLUDED FOR TCEQ REVIEW)	C6	6	LAND SURVEY
	C7	7	EXISTING SITE AND DEMOLITION PLAN
	C8	8	PROPOSED OVERALL SITE AND PHASING PLAN
	C9	9	EROSION AND SEDIMENTATION CONTROL PLAN PHASE I
	C10	10	EROSION AND SEDIMENTATION CONTROL PLAN PHASE II
	C11	11	EROSION AND SEDIMENTATION CONTROL NOTES AND DETAILS
	C12	12	PROPOSED SITE PLAN PHASE I
	C13	13	PROPOSED SITE PLAN PHASE II
	C14	14	PROPOSED DIMENSIONAL CONTROL PLAN PHASE I (1 OF 2)
	C15	15	PROPOSED DIMENSIONAL CONTROL PLAN PHASE I (2 OF 2)
	C16	16	PROPOSED DIMENSIONAL CONTROL PLAN PHASE II
(NOT INCLUDED FOR TCEQ REVIEW)	C17	17	SIGHT DISTANCE EXHIBIT
	C18	18	OVERALL GRADING PLAN
	C19	19	PROPOSED GRADING AND DRAINAGE PLAN PHASE I (1 of 2)
	C20	20	PROPOSED GRADING AND DRAINAGE PLAN PHASE I (2 of 2)
	C21	21	SWALE GRADING PLANS
	C22	22	PROPOSED GRADING AND DRAINAGE PLAN PHASE II
	C23	23	PROPOSED STORM SEWER PROFILES A, A-1 & B
	C24	24	PROPOSED STORM SEWER LINE C
	C25	25	CUT-FILL MAP PHASE I AND II
	C26	26	EXISTING DRAINAGE AREA MAP
	C27	27	PROPOSED DRAINAGE AREA MAP
	C28	28	PROPOSED WATER QUALITY AND DETENTION POND PLAN
	C29	29	PROPOSED POND DETAILS
	C30	30	BATCH DETENTION DETAILS
	C31	31	BATCH DETENTION VALVE NOTES
	C32	32	TTS BATCH DETENTION REMOVAL CALCULATIONS
(NOT INCLUDED FOR TCEQ REVIEW)	C33	33	PROPOSED UTILITY PLAN PH I (1 OF 2)
(NOT INCLUDED FOR TCEQ REVIEW)	C34	34	PROPOSED UTILITY PLAN PH I (2 OF 2)
(NOT INCLUDED FOR TCEQ REVIEW)	C35	35	WATER LINE A PROFILE STA. 1+00 TO END
(NOT INCLUDED FOR TCEQ REVIEW)	C36	36	WATER LINE A-1 PROFILE STA. 1+00 TO END
	C37	37	SITE AND UTILITY DETAILS (1 OF 3)
(NOT INCLUDED FOR TCEQ REVIEW)	C38	38	UTILITY DETAILS (2 OF 3)
(NOT INCLUDED FOR TCEQ REVIEW)	C39	39	UTILITY DETAILS (3 OF 3)
	C40	40	STABILIZATION AND RESTORATION PLAN
(NOT INCLUDED FOR TCEQ REVIEW)	C41	41	TRAFFIC CONTROL PLANS AND DETAILS 1 OF 2
(NOT INCLUDED FOR TCEQ REVIEW)	C42	42	TRAFFIC CONTROL PLANS 2 OF 2

WTCPUA JOB NUMBER: 290-24-023, PW-2024-52

PUBLIC WATER LINE AND STRUCTURES QUANTITES		
WATER LINE		
SIZE	**CLASS**	**LENGTH**
12" RESTRAINED	AWWA C-900	40 LF
8" UNRESTRAINED	AWWA C-900	815.29 LF
8" RESTRIANED	AWWA C-900	281.4 LF
6" RESTRAINED	AWWA C-900	12 LF
STRUCTURES		
SIZE	**CLASS**	**QUANTITY**
12"x8" TEE	MJ	1 EA
12" GATE VALVE	MJ	2 EA
8" GATE VALVE	MJ	6 EA
8" 45 DEG. BEND	MJ	5 EA
8" 22 DEG. BEND	MJ	1 EA
8"x8" TEE	MJ	1 EA
8" CAP	MJ	2 EA
8'x8"x6" TEE	MJ	2 EA
8"x8"x3" TEE	MJ	3 EA
6" FIRE HYDRANT		2 EA
6" GATE VALVE		2 EA
3"x1" REDUCER		1 EA
3"x5/8" REDUCER		2 EA
1" GATE VALVE		1 EA
1" WATER METER		1 EA
5/8" GATE VALVE		2 EA
5/8" WATER METER		2 EA

TCFMO PERMIT NUMBER: 2024-1579

APPROVED BY:
TRAVIS COUNTY FIRE MARSHAL'S OFFICE — DATE

TCTNR PERMIT NUMBER: 24-48369

REVIEWED BY:
TRAVIS COUNTY TRANSPORTATION AND NATURAL RESOURCES — DATE

WTCPUA PERMIT NUMBER: PW-2024-52-SER
DEVELOPMENT PERMIT NUMBER

APPROVED BY:
WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY — DATE

FIRE DEPARTMENT

Design Standards	2021 IFC with COA Local Amendments
Fire Flow Demand @ 20 psi	1,750 gpm
Intended Use	Office
Construction Classification	Type II-B & V-B
Building Fire Area	17,480 sf
Automatic Sprinkler System	N/A
Fire flow provided @ 20 psi	3,956 gpm

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: COVER

PROJECT NO. 0193.001

SHEET NO. C1

1 OF 42

TRAVIS COUNTY STANDARD CONSTRUCTION NOTES FOR SITE DEVELOPMENT

1. EACH DRIVEWAY MUST BE CONSTRUCTED IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.302(G), AND EACH DRAINAGE STRUCTURE OR SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN DRAINAGE CRITERIA MANUAL, UNLESS OTHER DESIGN CRITERIA ARE APPROVED BY TRAVIS COUNTY.
2. BEFORE BEGINNING ANY CONSTRUCTION, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND POST THE DEVELOPMENT PERMIT, THE TCEQ SITE NOTICE, AND ANY OTHER REQUIRED PERMITS AT THE JOB SITE.
3. CONSTRUCTION MAY NOT TAKE PLACE WITHIN TRAVIS COUNTY RIGHT-OF-WAY UNTIL AFTER THE OWNER HAS SUBMITTED A TRAFFIC CONTROL PLAN TO TRAVIS COUNTY AND OBTAINED WRITTEN APPROVAL OF THE TRAFFIC CONTROL PLAN FROM TRAVIS COUNTY.
4. THE CONTRACTOR AND PRIMARY OPERATOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION AND THE SWP3 IN THESE APPROVED PLANS. THE CONTRACTOR AND PRIMARY OPERATOR SHALL REQUEST TRAVIS COUNTY INSPECTION AT SPECIFIC MILESTONES IN THE SEQUENCE OF THE CONSTRUCTION OF THE SITE DEVELOPMENT CORRESPONDING TO THE PRIORITY INSPECTIONS SPECIFIED IN CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS. DEVELOPMENT OUTSIDE THE LIMITS OF CONSTRUCTION SPECIFIED IN THE APPROVED PERMIT AND CONSTRUCTION PLANS IS PROHIBITED.
5. BEFORE BEGINNING ANY CONSTRUCTION, ALL STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS SHALL BE MET, AND THE FIRST PHASE OF THE TEMPORARY EROSION CONTROL (ESC) PLAN INSTALLED WITH A SWP3 INSPECTION REPORT UPLOADED TO MYPERMITNOW.ORG. ALL SWP3 AND ESC PLAN MEASURES AND PRIMARY OPERATOR SWP3 INSPECTIONS MUST BE PERFORMED BY THE PRIMARY OPERATOR IN ACCORDANCE WITH THE APPROVED PLANS AND SWP3 AND ESC PLAN NOTES THROUGHOUT THE CONSTRUCTION PROCESS.
6. BEFORE STARTING CONSTRUCTION, THE OWNER OR CONTRACTOR OR THEIR DESIGNATED REPRESENTATIVES SHALL SUBMIT A REQUEST VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY TO REQUEST AND SCHEDULE A MANDATORY PRECONSTRUCTION CONFERENCE AND ESC INSPECTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF OR TNR STORM WATER MANAGEMENT PROGRAM STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383.
7. THE CONTRACTOR SHALL KEEP TRAVIS COUNTY TNR ASSIGNED INSPECTION STAFF CURRENT ON THE STATUS OF SITE DEVELOPMENT AND UTILITY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY TRAVIS COUNTY AND REQUEST PRIORITY INSPECTIONS THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY IN ACCORDANCE WITH THE SPECIFIC MILESTONES IN THE CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS.
8. CONTOUR DATA SOURCE: TREE AND TOPOGRAPHIC SURVEY PERFORMED BY 4WARD LAND SURVEYING IN JULY 2016.
9. FILL MATERIAL MUST BE MANAGED AND DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS SPECIFIED IN THE APPROVED PLANS, SWP3, AND THE TRAVIS COUNTY CODE. THE CONTRACTOR SHALL STOCKPILE FILL AND CONSTRUCTION MATERIALS ONLY IN THE AREAS DESIGNATED ON THE APPROVED PLANS AND NOT WITHIN THE 100-YEAR FLOOD PLAIN, WATERWAY SETBACK, CRITICAL ENVIRONMENTAL FEATURE SETBACK, OR OUTSIDE THE LIMITS OF CONSTRUCTION. DISPOSAL OF SOLID WASTE MATERIALS, AS DEFINED BY STATE LAW (E.G., LITTER, TIRES, DECOMPOSABLE WASTES, ETC.) IS PROHIBITED IN PERMANENT FILL SITES.
10. BEFORE DISPOSING ANY EXCESS FILL MATERIAL OFF-SITE, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR DOCUMENTATION THAT DEMONSTRATES THAT ALL REQUIRED PERMITS FOR THE PROPOSED DISPOSAL SITE LOCATION, INCLUDING TRAVIS COUNTY, TCEQ NOTICE, AND OTHER APPLICABLE DEVELOPMENT PERMITS, HAVE BEEN OBTAINED. THE OWNER OR PRIMARY OPERATOR MUST REVISE THE SWP3 AND ESC PLAN IF HANDLING OR PLACEMENT OF EXCESS FILL ON THE CONSTRUCTION SITE IS REVISED FROM THE EXISTING SWP3. IF THE FILL DISPOSAL LOCATION IS OUTSIDE TRAVIS COUNTY OR DOES NOT REQUIRE A DEVELOPMENT PERMIT, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR THE SITE ADDRESS, CONTACT INFORMATION FOR THE PROPERTY OWNER OF THE FILL.
11. THE DESIGN ENGINEER IS RESPONSIBLE FOR THE ADEQUACY OF THE CONSTRUCTION PLANS. IN REVIEWING THE CONSTRUCTION PLANS, TRAVIS COUNTY WILL RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
12. IN THE EVENT OF ANY CONFLICTS BETWEEN THE CONTENT IN THE SWP3 SITE NOTEBOOK AND THE CONTENT IN THE CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY, THE CONSTRUCTION PLANS SHALL TAKE PRECEDENCE.
13. A MINIMUM OF TWO SURVEY BENCHMARKS SHALL BE SET, INCLUDING DESCRIPTION, LOCATION, AND ELEVATION; THE BENCHMARKS SHOULD BE TIED TO A TRAVIS COUNTY CONTROL BENCHMARK WHEN POSSIBLE.
14. ANY EXISTING PAVEMENT, CURBS, SIDEWALKS, OR DRAINAGE STRUCTURES WITHIN COUNTY RIGHT-OF-WAY WHICH ARE DAMAGED, REMOVED, OR SILTED, WILL BE REPAIRED BY THE CONTRACTOR AT OWNER OR CONTRACTOR'S EXPENSE BEFORE APPROVAL AND ACCEPTANCE OF THE CONSTRUCTION BY TRAVIS COUNTY.
15. CALL THE TEXAS EXCAVATION SAFETY SYSTEM AT 8-1-1 AT LEAST 2 BUSINESS DAYS BEFORE BEGINNING EXCAVATION ACTIVITIES.
16. ALL STORM SEWER PIPES SHALL BE CLASS III RCP, UNLESS OTHERWISE NOTED.
17. CONTRACTOR IS REQUIRED TO OBTAIN A UTILITY INSTALLATION PERMIT IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.901(A)(3) BEFORE ANY CONSTRUCTION OF UTILITIES WITHIN ANY TRAVIS COUNTY RIGHT-OF-WAY.
18. THIS PROJECT IS LOCATED ON FEDERAL INSURANCE ADMINISTRATION FIRM PANEL 48453C0590J, DATED JANURARY 22 2020 FOR TRAVIS COUNTY, TEXAS.
19. TEMPORARY STABILIZATION MUST BE PERFORMED IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.
20. PERMANENT SITE STABILIZATION/RE-VEGETATION MUST BE PERFORMED IMMEDIATELY IN ALL SITE AREAS WHICH ARE AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED IN THE APPROVED PLANS FOR PHASED RE-VEGETATION, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.
21. ALL TREES WITHIN THE RIGHT-OF-WAY AND DRAINAGE EASEMENTS SHALL BE SAVED OR REMOVED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS. TRAVIS COUNTY TREE PRESERVATION STANDARDS IN TRAVIS COUNTY CODE SECTION 482.973, INCLUDING INSTALLATION AND MAINTENANCE OF ALL SPECIFIED TREE PROTECTION MEASURES, MUST BE FOLLOWED DURING CONSTRUCTION.
22. AN ENGINEER'S CONCURRENCE LETTER IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.953 MUST BE SUBMITTED VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE. THE ENGINEER'S CONCURRENCE LETTER MUST BE SUBMITTED BEFORE THE CONTRACTOR OR PRIMARY OPERATOR REQUESTS A FINAL INSPECTION BY TRAVIS COUNTY.
23. SITE IMPROVEMENTS MUST BE CONSTRUCTED IN CONFORMANCE WITH THE ENGINEER'S CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY. NON-CONFORMANCE WITH THE APPROVED PLANS WILL DELAY FINAL INSPECTION APPROVAL BY THE COUNTY UNTIL PLAN CONFORMANCE IS ACHIEVED OR ANY REQUIRED PLAN REVISIONS ARE APPROVED.
24. FINAL SITE STABILIZATION. ALL AREAS DISTURBED BY THE CONSTRUCTION MUST BE PERMANENTLY REVEGETATED AND ALL TEMPORARY SEDIMENT CONTROLS AND ACCUMULATED SEDIMENTATION MUST BE REMOVED BEFORE THE COUNTY WILL ISSUE A CERTIFICATE OF COMPLIANCE FOR FINAL SITE STABILIZATION AS PART OF FINAL INSPECTION AND PROJECT COMPLETION. A DEVELOPERS CONTRACT, AS DESCRIBED IN THE SWP3 AND ESC NOTES SHEET MAY BE EXECUTED WITH TRAVIS COUNTY FOR CONDITIONAL ACCEPTANCE OF A PROJECT FOR WHICH HAS ESC FISCAL SECURITY POSTED AND FOR WHICH ALL ITEMS ARE COMPLETE.

EXHIBIT 482.301E.

SEQUENCE OF CONSTRUCTION AND PRIORITY INSPECTIONS – SITE DEVELOPMENT

THE OWNER AND PRIMARY OPERATOR MUST FOLLOW THIS BASIC SEQUENCE OF CONSTRUCTION FOR EACH SITE DEVELOPMENT, INCLUSIVE OF ALL NON-RESIDENTIAL SITE DEVELOPMENT PROJECTS. WITHIN THE FOLLOWING SEQUENCE OF CONSTRUCTION ARE LISTED PRIORITY INSPECTIONS THAT THE OWNER AND PRIMARY OPERATOR MUST REQUEST FROM A REPRESENTATIVE OF TRAVIS COUNTY'S STORM WATER MANAGEMENT PROGRAM INSPECTION TEAM. EACH PRIORITY INSPECTION MUST BE REQUESTED ON-LINE THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. THE PRIORITY INSPECTIONS IN THIS EXHIBIT ARE CONSISTENT WITH THE PRIORITY INSPECTIONS FOUND IN THE CUSTOMER PORTAL FOR THE PROJECT. FOR ASSURANCE PURPOSES, A SECOND REQUEST TO TRAVIS COUNTY IS STRONGLY ENCOURAGED BY ADDITIONALLY SENDING AN E-MAIL TO ENV-INSPECT@TRAVISCOUNTYTX.GOV.

THE SEQUENCE FOR ITEMS 1-4 AND ITEMS 9-12 MUST NOT BE ALTERED, BUT THE SEQUENCE FOR ITEMS 5-8 MAY BE MODIFIED WITH THE WRITTEN APPROVAL OF THE COUNTY.

1. ESC INSTALLATION. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS (ESC) AND TREE PROTECTION MEASURES IN ACCORDANCE WITH THE APPROVED ESC PLAN SHEETS AND THE SWP3.
   a. HAVE A QUALIFIED INSPECTOR (AS SPECIFIED IN SECTION 482.934(C)(3) OF THE TRAVIS COUNTY CODE) INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROLS AND PREPARE A CERTIFIED SWP3 INSPECTION REPORT REGARDING WHETHER THE TEMPORARY EROSION AND SEDIMENT CONTROLS WERE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS;
   b. UPLOAD THE QUALIFIED INSPECTOR'S CERTIFIED SWP3 INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY; AND
   c. REQUEST A MANDATORY PRE-CONSTRUCTION MEETING WITH TRAVIS COUNTY THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY GIVING AT LEAST 3 BUSINESS DAYS NOTIFICATION.
2. PRE-CONSTRUCTION MEETING AND ESC INSPECTION. HOLD A MANDATORY PRE-CONSTRUCTION MEETING THAT ADDRESSES THE ITEMS IN EXHIBIT 482.950 AND THE ESC PRE-CONSTRUCTION INSPECTION BY THE COUNTY AND OBTAIN COUNTY'S APPROVAL TO START CONSTRUCTION. (PRIORITY INSPECTION)
3. INSPECT FOR COMPLIANCE WITH SWP3 AND ESC PLAN. MAINTAIN AND INSPECT THE SWP3 CONTROLS AND PREPARE AND UPLOAD A WEEKLY CERTIFIED SWP3 INSPECTION REPORT THAT INCLUDES THE CONTENTS LISTED IN EXHIBIT 482.951 TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY.
4. CONSTRUCT SEDIMENT BASIN(S). CONSTRUCT ANY STORM WATER POND(S) FIRST, WHENEVER APPLICABLE, TO BE FUNCTIONAL AS CONSTRUCTION SEDIMENT BASIN(S) BEFORE GRADING AND EXCAVATING THE ENTIRE SITE, AS FOLLOWS:
   a. CLEAR, GRUB, AND EXCAVATE ONLY THE SITE AREAS AND CUT AND FILL QUANTITIES NECESSARY TO CONSTRUCT THE POND(S) IN ACCORDANCE WITH THESE APPROVED PLANS AND THE MINIMUM STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES FOR THE TEMPORARY SEDIMENT BASIN EMBANKMENTS, WALLS, INFLOWS, OUTFALLS, DRAINAGE CONVEYANCE MEASURES, SEDIMENT CONTROLS, AND STABILIZATION.
   b. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE TEMPORARY SEDIMENT BASIN(S) BEFORE PROCEEDING FURTHER IN THE SEQUENCE OF CONSTRUCTION. (PRIORITY INSPECTION)
5. CONSTRUCT SITE IMPROVEMENTS. BEGIN THE PRIMARY SITE CLEARING, EXCAVATION, AND CONSTRUCTION ACTIVITIES AND CONTINUE THE SWP3 AND ESC PLAN IMPLEMENTATION AND MAINTENANCE PER THE APPROVED PLANS.
6. CONSTRUCT DRIVEWAY APPROACH AND RIGHT-OF-WAY IMPROVEMENTS. INSTALL DRIVEWAY APPROACH AND DRAINAGE AND ROAD IMPROVEMENTS IN THE COUNTY RIGHT-OF-WAY PER APPROVED PLANS, WHEN APPLICABLE. REQUEST A COUNTY PRE-POUR INSPECTION OF THE DRIVEWAY THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY GIVING AT LEAST 3 BUSINESS DAYS NOTIFICATION. (PRIORITY INSPECTION).
7. PERFORM TEMPORARY STABILIZATION IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER.
8. PERFORM PERMANENT SITE STABILIZATION/RE-VEGETATION IMMEDIATELY IN ALL SITE AREAS AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED FOR PHASED RE-VEGETATION.
9. COMPLETE PERMANENT WATER QUALITY CONTROLS. BEGIN COMPLETION OF PERMANENT WATER QUALITY CONTROL(S) AND INSTALL THE UNDERDRAIN PER APPROVED PLANS, WHEN APPLICABLE.
   a. REMOVE CONSTRUCTION SEDIMENT, RE-ESTABLISH THE BASIN SUBGRADE, AND INSTALL UNDERDRAIN PIPING.
   b. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE UNDERDRAIN PIPING INSTALLATION AND ASSOCIATED CONSTRUCTION MATERIALS (AGGREGATE, FILTER MEDIA, ETC.) BEFORE COVERING THE UNDERDRAIN AND PROCEEDING WITH CONSTRUCTION OF THE CONTROL. (PRIORITY INSPECTION).
10. COMPLETE CONSTRUCTION SITE IMPROVEMENTS AND FINAL STABILIZATION PER THE APPROVED PLANS.
11. PROVIDE ENGINEER'S CONCURRENCE LETTER THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE AND REQUEST A FINAL INSPECTION BY TRAVIS COUNTY. (PRIORITY INSPECTION)
12. OBTAIN A CERTIFICATE OF COMPLIANCE WHEN ALL FINAL INSPECTION PUNCH LIST ITEMS, INCLUDING FINAL SITE STABILIZATION AND REMOVAL OF TEMPORARY SEDIMENT CONTROLS. IF NECESSARY, PROVIDE A DEVELOPERS CONTRACT TO THE COUNTY TO REQUEST CONDITIONAL ACCEPTANCE FOR USE OR OCCUPANCY OF THE SITE WITH ALL ITEMS COMPLETED EXCEPT RE-VEGETATION GROWTH COVERAGE. REQUEST A RE-INSPECTION WHEN RE-VEGETATION COVERAGE IS COMPLETE. (PRIORITY INSPECTION)

63EXHIBITS IN 482.1004 AMENDED 6/28/2016, ITEM 24.

TRAVIS COUNTY CLOSE-OUT AND FISCAL RELEASE NOTES:

1. PRIOR TO PROJECT CLOSE-OUT AND ISSUANCE OF THE CERTIFICATE OF COMPLETION (COC) AND FISCAL RELEASE, THE FOLLOWING MUST BE COMPLETED:

2. THE OWNER MUST COMPLETE AND SUBMIT A PWQC MAINTENANCE PERMIT APPLICATION FOR REVIEW AND APPROVAL. SEND CONTACT INFORMATION TO POSTINSPECTION@TRAVISCOUNTYTX.GOV TO BEGIN THE APPLICATION PROCESS NEAR THE END OF CONSTRUCTION.

3. THE OWNER MUST COMPLETE AND SUBMIT A PWQC MAINTENANCE PLAN DOCUMENT TO POSTINSPECTION@TRAVISCOUNTYTX.GOV FOR REVIEW AND APPROVAL. AN EXAMPLE TEMPLATE DOCUMENT HAS BEEN UPLOADED TO THE CUSTOMER PORTAL. UPON APPROVAL, THE DOCUMENT WILL BE RETURNED TO BE SEALED, SIGNED (WITH NOTARY) BY THE DESIGN ENGINEER AND LEGALLY RECORDED WITH THE COUNTY CLERK'S OFFICE. A DIGITAL RECORDED COPY MUST BE PROVIDED.

4. PROVIDE A WATER QUALITY PROTECTIVE EASEMENT DOCUMENT FOR THE PWQC TO POSTINSPECTION@TRAVISCOUNTYTX.GOV FOR REVIEW AND APPROVAL PRIOR TO NOTARIZING OR RECORDING IT. A TEMPLATE DOCUMENT HAS BEEN UPLOADED TO THE CUSTOMER PORTAL. THE DOCUMENT MUST INCLUDE THE FOLLOWING EXHIBITS:
   A. EXHIBIT A: LOCATION AND DIMENSIONS, METES AND BOUNDS, AND SURVEY MAP OF THE BMP(S) IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.944(D).
   B. EXHIBIT B: APPROVED WATER QUALITY CONSTRUCTION PLAN SHEET(S) FOR THE PWQC(S) PROPOSED.

EXHIBIT 482.950

PRE-CONSTRUCTION CONFERENCE PLANNING AND AGENDA FOR SWP3 AND ESC PLAN

BEFORE STARTING CONSTRUCTION, THE OWNER OR THEIR REPRESENTATIVE MUST SUBMIT A REQUEST, USING THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY, TO PARTICIPATE IN A PRE-CONSTRUCTION CONFERENCE WITH THE DESIGNATED COUNTY INSPECTOR. PRIOR TO THE PRE-CONSTRUCTION CONFERENCE REQUEST, THE OWNER OR OWNER'S REPRESENTATIVE SHALL ENSURE THE FIRST PHASE OF THE ESC CONTROLS ARE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS, THE OWNER'S QUALIFIED INSPECTOR HAS INSPECTED THE CONTROLS AND VERIFIED COMPLIANCE WITH THE PLANS, AND AN SWP3 INSPECTION REPORT DOCUMENTING THIS INFORMATION HAS BEEN SENT TO THE COUNTY THROUGH THE METHOD SPECIFIED BY THE DESIGNATED COUNTY INSPECTOR.

AFTER ARRANGING AN AGREED UPON DATE WITH THE COUNTY AND PROVIDING THE INITIAL SWP3 INSPECTION REPORT, THE OWNER OR OWNER'S DESIGNATED REPRESENTATIVE SHALL PROVIDE NOTICE OF THE SWP3 PRE-CONSTRUCTION CONFERENCE AND A COPY OF THE APPROVED PLANS, IF REQUESTED, TO THE FOLLOWING PERSONS OR ENTITIES AT LEAST TWO BUSINESS DAYS BEFORE THE CONFERENCE:

1. DESIGNATED COUNTY INSPECTOR(S)
2. DESIGN ENGINEER FOR THE APPROVED PLANS AND SWP3, OR THEIR REPRESENTATIVE
3. CONTRACTOR(S)/PRIMARY OPERATOR(S)
4. PRIMARY OPERATOR'S QUALIFIED INSPECTOR RESPONSIBLE FOR PREPARING THE SWP3 INSPECTION REPORTS
5. OTHER STAKEHOLDERS, AS APPROPRIATE: MUNICIPALITIES, UTILITIES, ETC.

THE SWP3 PRE-CONSTRUCTION CONFERENCE MAY BE A STANDALONE MEETING OR A PART OF A LARGER PRE-CONSTRUCTION CONFERENCE, BUT MUST INCLUDE AN ON-SITE INSPECTION APPROVAL OF THE FIRST PHASE OF THE PROJECT'S ESC PLAN BY THE COUNTY INSPECTOR BEFORE CONSTRUCTION BEGINS. THE COUNTY INSPECTOR WILL DISCUSS THE FOLLOWING APPLICABLE ITEMS IN THE APPROVED PLANS AND THE SWP3 WITH THE PARTICIPANTS:

1. THE SWP3 SITE NOTEBOOK FOR THE PROJECT, INCLUDING REVIEW OF COMPLETENESS, SIGNATURES, CONSISTENCY WITH THE APPROVED CONSTRUCTION AND ESC PLANS, AND THE REQUIREMENTS FOR MAINTAINING THE SWP3 SITE NOTEBOOK DURING THE CONSTRUCTION PROCESS.
2. THE SEQUENCE OF CONSTRUCTION AND ESC PLAN IMPLEMENTATION; SEDIMENT BASIN CONSTRUCTION SCOPE PRIOR TO FULL SITE GRADING; NON-STRUCTURAL EROSION SOURCE CONTROLS; START DATES AND SCHEDULE OF EVENTS.
3. SEDIMENT CONTROLS; PHASING OF PERIMETER AND INTERIOR SEDIMENT CONTROLS DURING CONSTRUCTION; STRUCTURAL EROSION SOURCE CONTROLS SUCH AS DRAINAGE DIVERSION; ESC MAINTENANCE REQUIREMENTS.
4. ADEQUACY OF THE FIRST ESC PHASE AND FUTURE ESC PHASES TO ADDRESS SPECIFIC SITE CONDITIONS, AND ADJUSTMENT AND REVISION OF THE ESC PLAN AND SWP3 CONTROLS DURING CONSTRUCTION.
5. TEMPORARY AND PERMANENT STABILIZATION AND RE-VEGETATION REQUIREMENTS, INCLUDING SCHEDULE, CRITICAL SITE IMPROVEMENTS AND PRIORITY RE-VEGETATION AREAS.
6. ON AND OFF-SITE TEMPORARY AND PERMANENT SPOIL AND FILL DISPOSAL AREAS, HAUL ROADS, STAGING AREAS, AND STABILIZED CONSTRUCTION ENTRANCES;
7. PERMANENT WATER QUALITY CONTROLS CONSTRUCTION AND COUNTY INSPECTIONS, AND RELATED GRADING AND DRAINAGE CONSTRUCTION.
8. SUPERVISION OF THE SWP3 IMPLEMENTATION BY THE PRIMARY OPERATOR'S DESIGNATED PROJECT MANAGER, INCLUDING ROLES, RESPONSIBILITIES, AND COORDINATION WHEN MORE THAN ONE OPERATOR IS RESPONSIBLE FOR IMPLEMENTATION.

9 INSPECTION AND PREPARATION OF THE WEEKLY SWP3 INSPECTION REPORTS BY THE PRIMARY OPERATOR'S QUALIFIED INSPECTOR; REPORT SUBMITTAL BY THE PRIMARY OPERATOR, AND SWP3 MONITORING INSPECTIONS CONDUCTED BY THE COUNTY INSPECTOR.

10. OBSERVATION AND DOCUMENTATION OF EXISTING SITE CONDITIONS ADJACENT TO THE LIMITS OF CONSTRUCTION BEFORE CONSTRUCTION, INCLUDING WATERWAYS AND POTENTIAL OUTFALL DISCHARGE ROUTES, RIGHTS-OF-WAY AND EASEMENTS, BUFFER ZONES, AND CRITICAL ENVIRONMENTAL FEATURES.
11. SPECIAL SITE CONDITIONS AND PLAN PROVISIONS, SUCH AS PROTECTION OF WATERWAYS, CRITICAL ENVIRONMENTAL FEATURES, TREES TO BE SAVED, AND FUTURE HOMEBUILDING ON SUBDIVISION LOTS.
12. RAIN GAGE LOCATION OR RAINFALL INFORMATION SOURCE TO BE USED DURING CONSTRUCTION AND REPORTING.
13. FINAL INSPECTION AND ACCEPTANCE REQUIREMENTS, INCLUDING THE ENGINEER'S CONCURRENCE LETTER, COMPLETION OF REVEGETATION COVERAGE BEFORE THE NOTICE OF TERMINATION IS SUBMITTED BY THE PRIMARY OPERATOR, STABILIZATION OF RESIDENTIAL SUBDIVISION LOTS, REMOVAL OF TEMPORARY SEDIMENT CONTROLS, THE CERTIFICATE OF COMPLIANCE AND RELEASE OF ESC FISCAL SURETY.
14. EXCHANGE OF TELEPHONE NUMBERS AND CONTACT INFORMATION FOR THE PRIMARY PARTICIPANTS.

THE DESIGN ENGINEER SHALL PREPARE AND DISTRIBUTE NOTES, KEY DECISIONS, AND FOLLOW UP FROM THE PRECONSTRUCTION CONFERENCE TO ALL PARTICIPANTS WITHIN THREE BUSINESS DAYS AFTER COMPLETION OF THE CONFERENCE.

EXHIBIT 482.951

SWP3 INSPECTION AREAS AND REPORT CONTENTS

THE OWNER OR PRIMARY OPERATOR OF THE CONSTRUCTION SITE SHALL DESIGNATE A QUALIFIED INSPECTOR POSSESSING THE REQUIRED CERTIFICATION (AS SPECIFIED IN SECTION 482.934(C)(3)) TO PERFORM A WEEKLY SWP3 INSPECTION AND PREPARE A SIGNED SWP3 INSPECTION REPORT OF THE INSPECTION FINDINGS.

THE CONSTRUCTION SITE AREAS AND THE CONTROL MEASURES LISTED HEREIN ARE TO BE USED AS A MINIMUM AS THE UNIFORM CRITERIA BY THE OWNER'S QUALIFIED INSPECTOR, AS WELL AS THE COUNTY INSPECTOR, TO EVALUATE AND DETERMINE A PROJECT'S COMPLIANCE STATUS WITH THE APPROVED SWP3 AND ESC PLAN.

IN ADDITION, ON AN ONGOING BASIS AND FOLLOWING STORM EVENTS, THE PRIMARY OPERATOR'S RESPONSIBLE ON-SITE PERSONNEL SHALL ALSO INSPECT AND ADDRESS THESE ITEMS DURING CONSTRUCTION AS REQUIRED BY THE SWP3, ESC PLAN, AND TRAVIS COUNTY CODE, SECTION 482.951.

AREAS OF INSPECTION. AT THE VERY LEAST, THE FOLLOWING AREAS MUST BE INSPECTED:

1. DISTURBED AREAS AND THE APPROVED LIMITS OF CONSTRUCTION.
2. PERIMETER AND INTERIOR SEDIMENT CONTROLS.
3. AREAS UNDERGOING TEMPORARY STABILIZATION OR PERMANENT VEGETATION ESTABLISHMENT.
4. TEMPORARY AND PERMANENT FILL AND SPOIL STORAGE OR DISPOSAL AREAS.
5. STORAGE AREAS FOR MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO RAINFALL.
6. OUTFALL LOCATIONS AND THE AREAS IMMEDIATELY DOWNSTREAM.
7. STRUCTURAL CONTROLS, INCLUDING SEDIMENT PONDS, SEDIMENT TRAPS, AND DRAINAGE DIVERSIONS.
8. HAUL ROADS AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND ADJACENT ROADWAYS FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
9. WATERWAY CROSSINGS AND AREAS ADJACENT TO WATERWAYS AND CRITICAL ENVIRONMENTAL FEATURES.
10 CONCRETE WASH OUT AREAS AND ALL AREAS REQUIRING CONTROL MEASURES FOR NON-STORM WATER DISCHARGES, INCLUDING DUST, SOLID WASTE, DE-WATERING, MATERIAL SPILLS, VEHICLE MAINTENANCE AND WASHING, AND WASH WATER DISCHARGES.
11. LOCATIONS OF ALL CONTROL MEASURES THAT REQUIRE MAINTENANCE, INCLUDING ANY CONTROL MEASURE IDENTIFIED IN THE PREVIOUS SWP3 INSPECTION REPORT WHICH REQUIRED MAINTENANCE OR REVISION BY THE OWNER OR PRIMARY OPERATOR.
12. LOCATIONS OF ANY DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE AND ANY DISTURBANCE BEYOND THE APPROVED LIMITS OF CONSTRUCTION.
13. LOCATIONS OF CONTROL MEASURES THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION.
14. LOCATIONS WHERE AN ADDITIONAL ESC OR CONTROL MEASURE IS NEEDED.

THE SWP3 INSPECTION REPORT MUST INCLUDE:

A. FINDINGS AS TO WHETHER THE FOLLOWING STRUCTURAL AND NON-STRUCTURAL CONTROLS REQUIRED FOR THE SITE AREAS LISTED ABOVE ARE FUNCTIONING :IN COMPLIANCE WITH THE APPROVED SWP3 AND ESC PLAN:

1. EROSION SOURCE CONTROLS, INCLUDING THE APPROVED SEQUENCE OF CONSTRUCTION AND GRADING PLAN LIMITS, DRAINAGE DIVERSION MEASURES, TEMPORARY AND PERMANENT FILL DISPOSAL AND STOCKPILE MANAGEMENT MEASURES.
2. SEDIMENT CONTROLS, INCLUDING PERIMETER AND INTERIOR CONTROLS, SEDIMENT TRAPS AND BASINS, AND THE SEQUENCE OF CONSTRUCTION REQUIREMENTS FOR THE SEDIMENT CONTROLS.
3. PERMANENT EROSION AND SOIL STABILIZATION CONTROLS, BASED ON THE SEQUENCE OF CONSTRUCTION AND CRITICAL SITE IMPROVEMENTS, AND THE CESSATION OF CONSTRUCTION ACTIVITIES, INCLUDING TEMPORARY STABILIZATION MEASURES FOR AREAS INACTIVE FOR LONGER THAN 14 DAYS, AND PERMANENT STABILIZATION MEASURES FOR AREAS AT FINAL GRADE.
4. OTHER APPLICABLE CONTROLS AND POLLUTION PREVENTION MEASURES.

B.RAINFALL DOCUMENTATION:

1. FOR PROJECTS THAT COMPRISE TEN ACRES OR MORE, THE DOCUMENTATION MUST INCLUDE RAINFALL DATES AND AMOUNTS IN ACCORDANCE WITH SECTION 482.934(E); AND
2. FOR PROJECTS THAT COMPRISE LESS THAN TEN ACRES, THE DOCUMENTATION MUST INCLUDE ACCURATE RAINFALL DATA FROM A LOCATION CLOSEST TO THE SITE.

C. CORRECTIVE ACTIONS REQUIRED FOR ANY NON-COMPLIANT ITEMS AND THE SCHEDULE FOR BRINGING THESE ITEMS INTO COMPLIANCE.

THE SWP3 INSPECTION REPORT CONTENTS MUST CONTAIN THE INSPECTION FINDINGS FOR THE REQUIRED AREAS AND CONTROL MEASURES LISTED HEREIN AND CERTIFY WHETHER THE SITE IS IN COMPLIANCE WITH THE APPROVED SWP3 AND ESC PLAN.

EITHER AT THE TIME OF EACH SWP3 INSPECTION, OR NO LATER THAN THE DATE OF THE INSPECTION, THE OWNER'S QUALIFIED INSPECTOR SHALL PREPARE AND SIGN A SWP3 INSPECTION REPORT.

THE OWNER OR PRIMARY OPERATOR SHALL UPLOAD EACH REQUIRED SWP3 OR ESC PLAN INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. AN ALTERNATE METHOD OF REPORT SUBMITTAL MAY BE USED IF APPROVED BY THE COUNTY INSPECTOR.

65EXHIBIT 482.951 IN SECTION 482.1009 WAS ADDED 6/28/2016, ITEM 24.

GENERAL CONSTRUCTION NOTES

1. ALL MATERIALS AND CONSTRUCTION METHODS FOR SITE GRADING, PAVING, SITEWORK, UTILITIES AND DRAINAGE ARE IN STRICT ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS, UNLESS SPECIFICALLY DETAILED OTHERWISE.
2. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
3. THE CONTRACTOR SHALL CALL TEXAS 811 OR DIG TESS (1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN A CITY EASEMENT OR STREET RIGHT-OF-WAY.
4. FOR SLOPES OR TRENCHES MORE THAN 5 FEET IN DEPTH, THE FOLLOWING SHALL APPLY: "ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND AND HEALTH ADMINISTRATION," COPIES OF THE OSHA STANDARDS MAY BE PURCHASED FROM THE US GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 E. 6TH STREET, AUSTIN, TEXAS.
5. ALL SITE WORK MUST ALSO COMPLY WITH ENVIRONMENTAL REQUIREMENTS.
6. DESIGN PROCEDURES SHALL BE IN COMPLETE COMPLIANCE WITH THE CITY OF AUSTIN DRAINAGE CRITERIA MANUAL, EXCEPT WHERE WAIVERS OR VARIANCES ARE APPROVED BY THE CITY OF AUSTIN.
7. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN ALL PERMITS AS REQUIRED FOR THIS PROJECT.
8. <u>AMERICANS WITH DISABILITIES ACT</u>
   THE CITY HAS REVIEWED THIS PLAN FOR COMPLIANCE WITH CITY DEVELOPMENT REGULATIONS ONLY. THE APPLICANT, PROPERTY OWNER, AND OCCUPANT OF THE PREMISES ARE RESPONSIBLE FOR DETERMINING WHETHER THE PLAN COMPLIES WITH ALL OTHER LAWS, REGULATIONS, AND RESTRICTIONS WHICH MAY BE APPLICABLE TO THE PROPERTY AND IT'S USES.
9. THE PROJECT ARCHITECT IS RESPONSIBLE FOR SUBMITTING THE DRAWINGS TO THE ARCHITECTURAL BARRIERS DIVISION OF THE TEXAS DEPARTMENT OF LICENSE AND REGULATION FOR REVIEW AND APPROVAL OF THE PLANS IN ACCORDANCE WITH THE ARCHITECTURAL BARRIERS ACT.
10. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH AND BE RESPONSIBLE FOR PERFORMING THE WORK IN ACCORDANCE WITH THE RULES, REGULATIONS AND PROCEDURES OF TRAVIS COUNTY.
11. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODES, ORDINANCES, SAFETY CODES, AND RULES AND REGULATIONS OF TRAVIS COUNTY AND THE STATE OF TEXAS.
12. CONTRACTOR IS FULLY RESPONSIBLE FOR FOLLOWING THE REQUIREMENTS OF THE <u>TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES</u>, FOR TRAFFIC CONTROL FOR ALL WORK IN A PUBLIC OR PRIVATE RIGHT-OF-WAY.
13. ALL IMPROVEMENTS SHOWN TO BE CONSTRUCTED WITH THESE DRAWINGS SHALL BE STAKED BY A REGISTERED PUBLIC SURVEYOR, UTILIZING COORDINATE GEOMETRY. NO WORK SHALL BE SCALED FROM THE DRAWINGS.
14. WHEN EXISTING NATIVE TOPSOIL FROM THE SITE IS REUSED FOR FINISHED GRADE TOPSOIL, ANY ROCKS LARGER THAN 3/4" DIAMETER SHALL BE REMOVED. TOPSOIL SHALL BE PLACED IN DRAINAGE CHANNELS/DITCHES OTHERWISE, TOPSOIL SHALL BE PLACED OR MAINTAINED TO A MIN. DEPTH OF 4" IN ALL DISTURBED AREAS, OR TO A DEPTH AS SHOWN ON ANY LANDSCAPE DRAWINGS IN THIS SET OF DOCUMENTS OR ASSOCIATED WITH THIS PROJECT. TOPSOIL SHALL MEET THE MINIMUM REQUIREMENTS OF THE REFERENCED STANDARD CONSTRUCTION SPECIFICATIONS. THE PROVISION FOR TOPSOIL INCLUDES THE IMPORTING OF ANY QUANTITY NECESSARY TO MEET THE REQUIREMENTS OF THE PROJECT.
15. BLASTING IS NOT ALLOWED.
16. THE PROJECT CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION BETWEEN UTILITY COMPANIES, CITY, SUBCONTRACTORS AND ANY OTHER FIRM INVOLVED IN THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR SHALL ALSO ADVISE THE OWNER WITHIN 12 HOURS OF ANY CONFLICTS BETWEEN ANY FIRM CONTRACTOR, ETC.
17. DAILY CLEANING OF THE PROJECT SITE AND REMOVAL OF DEBRIS AND EXCAVATED MATERIALS SHALL BE TO THE SATISFACTION OF THE OWNER.
18. CONTRACTOR IS FULLY RESPONSIBLE FOR REPAIR, REPLACEMENT, OR RESTORATION OF ANY EXISTING PRIVATE OR PUBLIC IMPROVEMENT THAT IS DAMAGED, SCARRED, DENTED, SCRAPED OR DESTROYED DURING THE CONSTRUCTION.
19. ALL EXCAVATION FOR THIS PROJECT IS UNCLASSIFIED.
20. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR ACCEPTANCE, AS PROVIDED FOR IN THE CONSTRUCTION AGREEMENT WITH THE OWNER.
21. THE CONTRACTOR SHALL USE EFFECTIVE PRECAUTIONARY MEASURES WHEN OPERATING IN THE VICINITY OF ELECTRICAL LINES. IF THE CONTRACTOR CHOOSES TO USE EQUIPMENT WITH THE POTENTIAL OF COMING WITHIN THE DISTANCES PROSCRIBED BY STATUTE (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436 (C)), THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE WORK WITH THE ELECTRIC UTILITY.
22. THE CONTRACTOR SHALL FURNISH, INSTALL, AND MAINTAIN BARRICADES, WARNING SIGNS, FLASHERS, AND OTHER DEVICES OF THE TYPE AND SIZE AS INDICATED IN THE MOST CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND ADDITIONALLY AS DIRECTED BY THE OWNER.
23. ALL CONCRETE SHALL BE CLASS "A" (5 SACK, 3000 PSI AT 28 DAYS) AND ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60, UNLESS OTHERWISE SPECIFIED ON THE PLANS OR PROJECT SPECIFICATIONS.
24. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE SUBSURFACE CONDITIONS FOR THE PURPOSE OF VERIFYING THE GEOTECHNICAL AND SUBSURFACE CONDITIONS WHICH MAY BE ENCOUNTERED AT THE SITE.
25. THE CONTRACTOR SHALL MAINTAIN A SET OF AS-BUILT DRAWINGS NOTING ANY CHANGES IN CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL FURNISH THE AS-BUILT DRAWINGS TO THE OWNER PRIOR TO FINAL PAYMENT.
26. THE CONTRACTOR SHALL MAINTAIN THE JOB SITE IN A SAFE, NEAT AND WORKMAN-LIKE MANNER AT ALL TIMES. JOB SITE SAFETY SHALL NOT BE COMPROMISED. ANY UNATTRACTIVE NUISANCE SHALL BE REMOVED BY THE CONTRACTOR WHEN DIRECTED BY THE OWNER.
27. ALL HOLES, TRENCHES, AND OTHER HAZARDOUS AREAS SHALL BE ADEQUATELY PROTECTED BY BARRICADES, FENCING, STEEL PLATES, LIGHTS, AND/OR OTHER PROTECTIVE DEVICES AT ALL TIMES.
28. THE CONTRACTOR SHALL NOT ALLOW TRAFFIC ON NEWLY PLACED CONCRETE FOR AT LEAST 96 HOURS.
29. TREES OTHER THAN THOSE SHOWN ON THE TREE SURVEY THAT ARE DESIGNATED BY THE OWNER SHALL BE PROTECTED AND SAVED BY THE CONTRACTOR.
30. THE CONTRACTOR SHALL BE AWARE THAT DUE TO THE FACT EXISTING UTILITY LINES MAY BE CURRENTLY LIVE AND IN SERVICE, THERE MAY BE TIMES WHEN SHUTTING DOWN SAID LINES, CONNECTING TO SAID LINES OR TERMINATING SAID LINES WILL HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS AND POSSIBLY BETWEEN 12 A.M. AND 6 A.M.
31. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER, OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES AND SHALL REPAIR OR REPLACE TO NEW QUALITY.
32. ALL STORM SEWER PIPES TO BE CLASS III R.C.P. UNLESS NOTED OTHERWISE.
33. ALL DIMENSIONS ARE PERPENDICULAR OR RADIAL TO THE PROPERTY LINES, UNLESS NOTED OTHERWISE.
34. ALL DIMENSIONS TO PARKING LOTS AND DRIVEWAYS ARE TO FACE OF CURB. ALL RADII ARE TO FACE OF CURB.
35. ALL MANHOLE FRAMES, COVERS AND WATER VALVE COVERS SHALL BE RAISED TO FINISHED GRADE.
36. ASPHALTIC CONCRETE PAVEMENT CONSTRUCTION SHALL BE PLACED IN ACCORDANCE WITH ITEM 340S OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
37. A CURB LAY DOWN OR CURB RAMP IS REQUIRED AT ALL POINTS WHERE THE PROPOSED SIDEWALK INTERSECTS THE CURB.
38. THE CONTRACTOR <u>SHALL</u> <u>HAVE</u> AT ALL TIMES AND PRIOR TO STARTING CONSTRUCTION, A COPY OF THE CITY OF AUSTIN <u>STANDARD SPECIFICATIONS</u> MANUAL, IN THE PROJECT TRAILER, AS WELL AS THE COUNTY APPROVED SITE DEVELOPMENT DRAWINGS.
39. ALL WORK BENEATH AND WITHIN THE FLOODPLAIN MUST BE RETURNED TO EXISTING CONDITIONS.

DEVELOPER INFORMATION

RICK SCHEEN
FGS INVESTMENTS I LLC PHONE: 512-263-3464
PO BOX 340789
AUSTIN, TEXAS 78734

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:
MIGL ENGINEERING AND CONSULTING PHONE: 512-750-0440

PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:
CONTRACTOR PHONE: __________

PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:
CONTRACTOR PHONE: __________

BEARING BASIS
BEARING BASIS IS TEXAS COORDINATE SYSTEM, CENTRAL ZONE, NAD83 (2011), EPOCH 2010.00, GRID, BASED ON SURVEY MEASUREMENTS MADE TO SMARTNET USA CORS REFERENCE STATIONS LCAS (AUSTIN SE TX / RTCM REF-2292) AND TXJY (JOHNSON CITY TX), AND NATIONAL GEODETIC SURVEY (NGS) CORS REFERENCE STATIONS SAM2 (SAM AUSTIN CORS APR / DN6089) AND TXAU (AUSTIN RRP2 CORS ARP / DF4373).

BENCHMARK LIST: NAVD88 (GEOID-18)

BM-99:
1/2" IRON ROD WITH PLASTIC CAP STAMPED "BCG" SET
ELEVATION = 1106.67 FEET.

BM-300:
COTTON GIN SPINDLE SET IN THE SOUTH BASE OF A UTILITY POLE
ELEVATION = 1110.56 FEET.

BM-301:
COTTON GIN SPINDLE SET IN THE SOUTH BASE OF A UTILITY POLE
ELEVATION = 1107.32 FEET.

LEGEND

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

TAMMI R. MIGL
92607
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
GENERAL NOTES

PROJECT NO.
0193.001

SHEET NO.
C2
2 OF 42

IMAGES:
XREFS: * 0193.001 LANDWEST-BORDER.dwg * DYNAMIC SEAL - Migl.dwg
FILE: C:\Users\2020i\Box\MIGL ENGINEERING\0193.001 LANDWEST_OFFICE SITE RR1\08 CAD\PLANS\0193.001 LANDWEST-GEN NOTES.dwg LAST SAVED: 8/4/2025 3:42:16 PM BY: MARKR LAYOUT: GEN NOTES.

Texas Commission on Environmental Quality
Contributing Zone Plan
General Construction Notes

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any ground disturbance or construction activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.

2. All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan (CZP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on-site.

3. No hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.

4. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.

5. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.

6. Sediment must be removed from the sediment traps or sedimentation basins when it occupies 50% of the basin’s design capacity.

7. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.

8. All excavated material that will be stored on-site must have proper E&S controls.

9. If portions of the site will have a cease in construction activity lasting longer than 14 days, soil

stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.

10. The following records should be maintained and made available to the TCEQ upon request:
    - the dates when major grading activities occur;
    - the dates when construction activities temporarily or permanently cease on a portion of the site; and
    - the dates when stabilization measures are initiated.

11. The holder of any approved CZP must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

    A. any physical or operational modification of any best management practices (BMPs) or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;

    B. any change in the nature or character of the regulated activity from that which was originally approved;

    C. any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer; or

    D. any development of land previously identified as undeveloped in the approved contributing zone plan.

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

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
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Texas Registered Engineering Firm F-16967

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED
PROFESSIONAL ENGINEER
September 24, 2025

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CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
TCEQ NOTES

PROJECT NO.
0193.001

SHEET NO.
C3
3 OF 42

SITE COUNTY LINE

SCALE = 1:300

NOTES:

1. A PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
2. LOCATION OF EXISTING UNDERGROUND AND OVERHEAD UTILITIES ARE APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES MATERIAL, SIZE AND EXACT LOCATION, HORIZONTALLY AND VERTICALLY, PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROTECTING EXISTING UTILITIES AND FOR ANY AND ALL DAMAGES WHICH MIGHT OCCUR.
3. SHOULD THE CONTRACTOR FIND DISCREPANCIES WITH RECORD INFORMATION DRAWN/ NOTED ON THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF SUCH CONDITIONS.
4. THE CONTRACTOR SHALL CONTACT THE AREA "ONE CALL" SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
5. ANY DAMAGE TO EXISTING IMPROVEMENTS SUCH AS PAVEMENT, SIDEWALKS, CURB AND GUTTERS CAUSED BY THE INSTALLATION OF IMPROVEMENTS SHALL BE REPAIRED TO LIKE NEW CONDITION.
6. ALL DIRT, MUD, ROCKS, DEBRIS, ETC SPILLED, TRACKED, OR OTHERWISE DEPOSITED ON ANY EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY BY CONTRACTOR.
7. EROSION CONTROLS SHALL BE IN PLACE PRIOR TO ANY SITE DISTURBANCE.
8. ALL DISTURBED NATURAL AREAS SHALL BE REVEGETATED.

LEGEND:

- EXISTING BASELINE IMPERVIOUS COVER 7927 SF
- UNPERMITTED GRAVEL PARKING AND DRIVEWAY 51,010 SF

KEY NOTES:

1. EXISTING SEPTIC TANK, DEMO PH I (REFERENCE SEPARATE OSSF PLANS BY OTHERS)
2. EXISTING PAVED ROADWAY
3. EXISTING WATER METER
4. EXISTING POWER POLE
5. EXISTING 30' SEPTIC SPRAY HEADS, DEMO PH 1 (REFERENCE SEPARATE OSSF PLANS BY OTHERS)
6. PHASE II - REMOVE EXISTING ASPHALT DRIVEWAY
7. PHASE II - REMOVE EXISTING BUILDING
8. PHASE II - REMOVE EXISTING WOOD PATIO
9. PHASE II - REMOVE EXISTING 18" CMP
10. PHASE II - REMOVE GRAVEL WALKING PATH
11. PHASE I - REMOVE AND REPLACE EXISTING MAILBOX WITH AN AUSTIN TCM APPROVED CHAPTER 5 OF AASHTO. LOCATED NO CLOSER THAN 18" FROM FACE OF CURB OR EDGE OF PAVEMENT .
12. REMOVE EXISTING SITE DRIVEWAY AND REPLACE PER PROPOSED SITE PLAN
13. EXISTING GRAVEL LAYDOWN AREA TO REMAIN
14. EXISTING GRAVEL PARKING AREA TO BE REPLACED WITH PHASE II
15. EXISTING DECOMPOSED GRANITE WALKWAY

NOTE: ALL EXISTING IMPERVIOUS COVER HAS BEEN CONSIDERED AS NEW IMPERVIOUS COVER FOR THE PURPOSES OF WATER QUALITY.
ALL EXISTING IMPERVIOUS COVER EXCEPT THE BASELINE IMPERVIOUS COVER (ORIGINAL RESIDENCE) HAS BEEN CONSIDERED NEW IMPERVIOUS COVER FOR THE PURPOSE OF DETENTION.

811 Know what's below. Call before you dig.

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

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

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Texas Registered Engineering Firm F-16967

STATE OF TEXAS — TAMMI R. MIGL — 92607 — LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

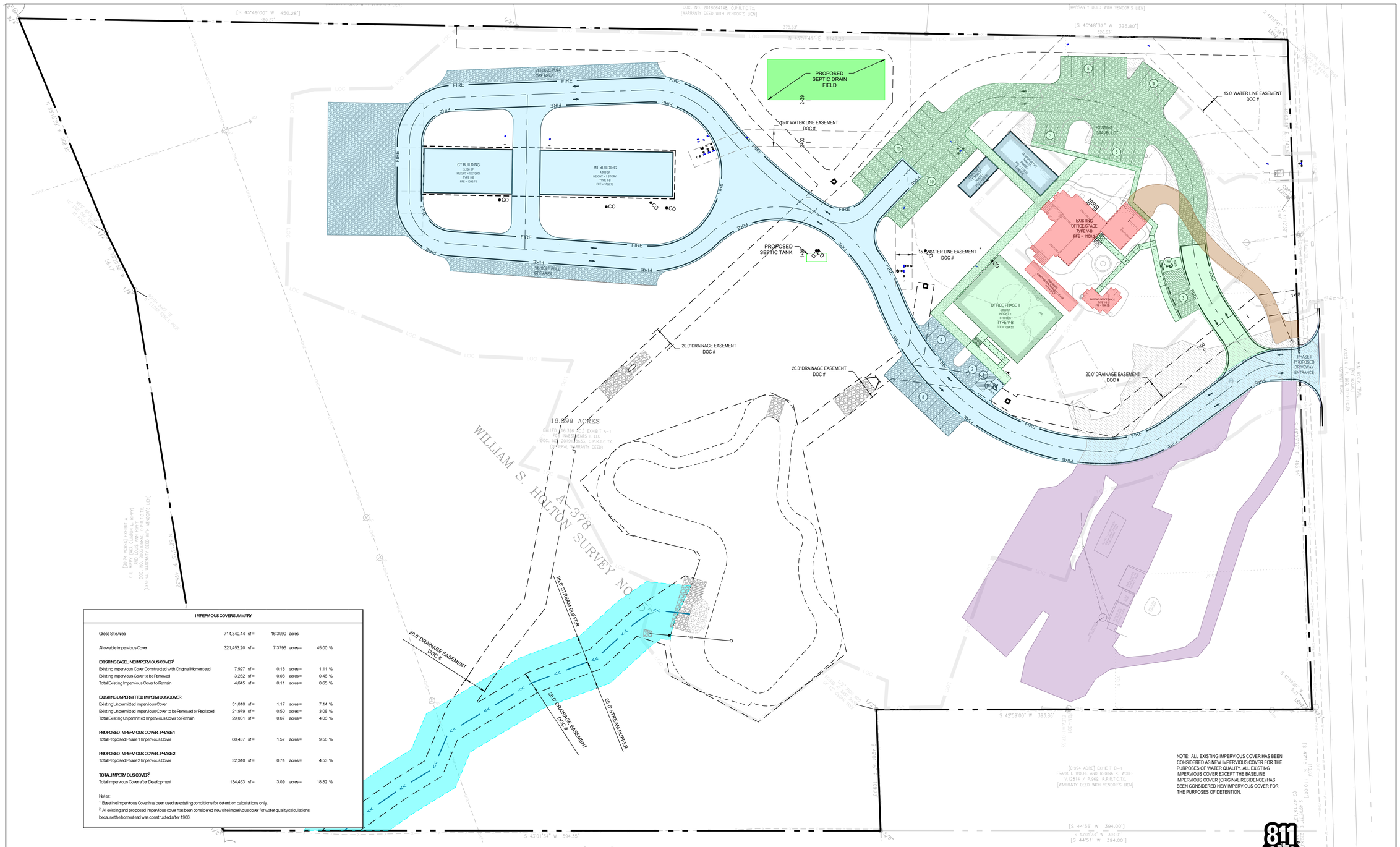
CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: EXISTING SITE AND DEMOLITION PLAN

PROJECT NO.: 0193.001

SHEET NO.: C7



IMPERVIOUS COVER SUMMARY

Gross Site Area	714,340.44	sf =	16.3990	acres		
Allowable Impervious Cover	321,453.20	sf =	7.3796	acres =	45.00	%
EXISTING BASELINE IMPERVIOUS COVER[1]						
Existing Impervious Cover Constructed with Original Homestead	7,927	sf =	0.18	acres =	1.11	%
Existing Impervious Cover to be Removed	3,282	sf =	0.08	acres =	0.46	%
Total Existing Impervious Cover to Remain	4,645	sf =	0.11	acres =	0.65	%
EXISTING UNPERMITTED IMPERVIOUS COVER						
Existing Unpermitted Impervious Cover	51,010	sf =	1.17	acres =	7.14	%
Existing Unpermitted Impervious Cover to be Removed or Replaced	21,979	sf =	0.50	acres =	3.08	%
Total Existing Unpermitted Impervious Cover to Remain	29,031	sf =	0.67	acres =	4.06	%
PROPOSED IMPERVIOUS COVER - PHASE 1						
Total Proposed Phase 1 Impervious Cover	68,437	sf =	1.57	acres =	9.58	%
PROPOSED IMPERVIOUS COVER - PHASE 2						
Total Proposed Phase 2 Impervious Cover	32,340	sf =	0.74	acres =	4.53	%
TOTAL IMPERVIOUS COVER[2]						
Total Impervious Cover after Development	134,453	sf =	3.09	acres =	18.82	%

Notes:

[1] Baseline Impervious Cover has been used as existing conditions for detention calculations only.

[2] All existing and proposed impervious cover has been considered new site imperivous cover for water quality calculations because the homestead was constructed after 1986.

NOTE: ALL EXISTING IMPERVIOUS COVER HAS BEEN CONSIDERED AS NEW IMPERVIOUS COVER FOR THE PURPOSES OF WATER QUALITY. ALL EXISTING IMPERVIOUS COVER EXCEPT THE BASELINE IMPERVIOUS COVER (ORIGINAL RESIDENCE) HAS BEEN CONSIDERED NEW IMPERVIOUS COVER FOR THE PURPOSES OF DETENTION.

🟥	EXISTING BASELINE IMPERVIOUS COVER 4645 SF
🟦	PHASE I IMPERVIOUS COVER IMP 68437 SF
🟪	EXISTING UNPERMITTED IMPERVIOUS COVER TO REMAIN 29031 SF
▨	EXISTING UNPERMITTED IMPERVIOUS COVER TO BE REMOVED OR REPLACED BY PROPOSED IMPROVEMENTS 21979 SF
🟩	PHASE II IMPERVIOUS COVER 32340 SF
🟧	EXISTING DRIVEWAY (BASELINE IMPERVIOUS COVER TO BE REMOVED) IMP 3282 SF

0 20' 40' 80'

Scale: 1" = 40'

811

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PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED OVERALL SITE AND PHASING PLAN

PROJECT NO.
0193.001

SHEET NO.
C8
8 OF 42

IMAGES:
XREFS: * 0193.001 LANDWEST-BORDER.dwg * x0193.001 landwest pbs.dwg * x0193.001 Landwest ebs.dwg * DYNAMIC SEAL - Migl.dwg * x0193.001 landwest putil ph1.dwg
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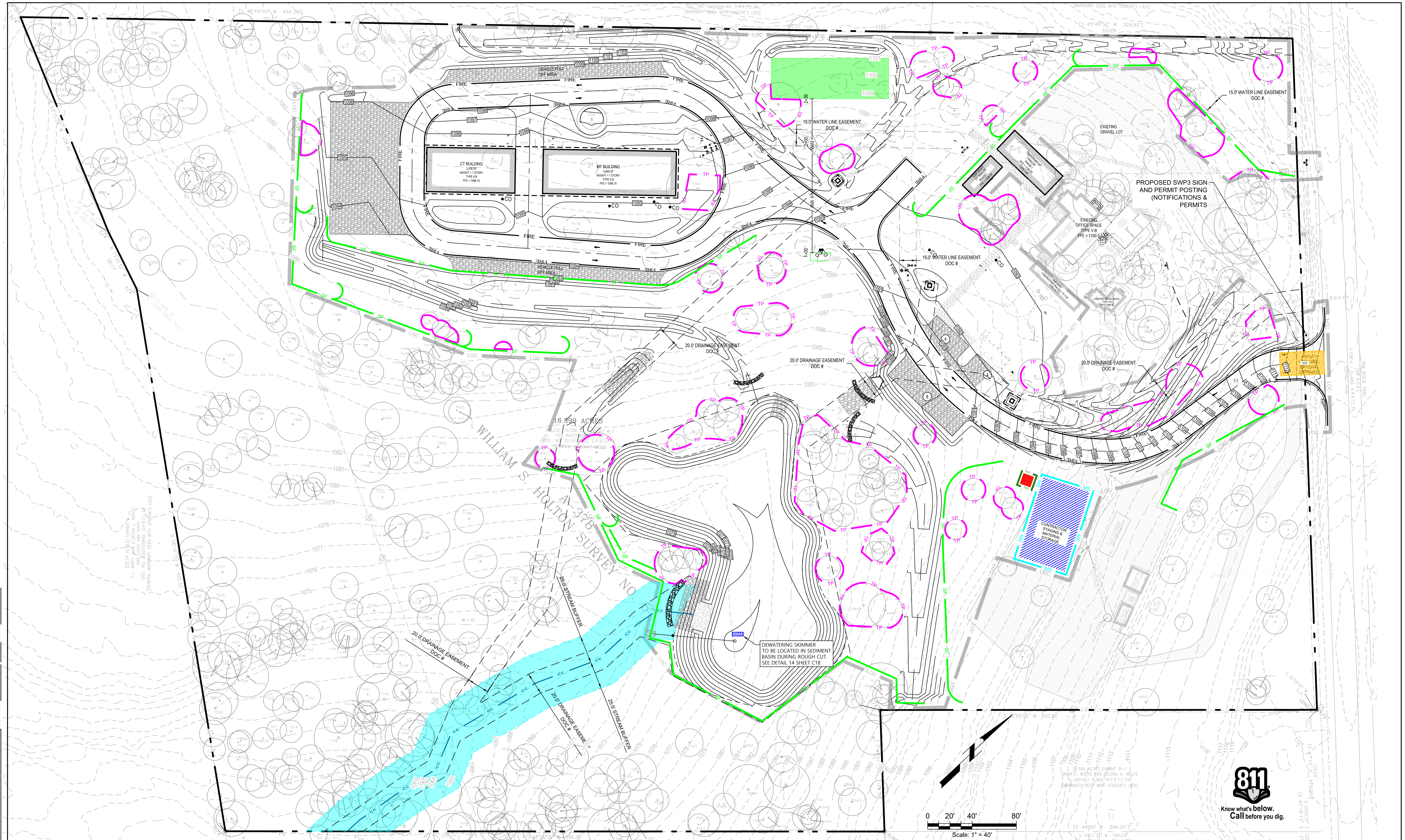

NOTES:

1. A TREE AND TOPOGRAPHIC SURVEY WITHIN THE LIMITS OF CONSTRUCTION WAS PERFORMED BY CHAPARRAL LAND SURVEYING ON 03/05/2019.
2. A TREE LIST IS INCLUDED ON SHEET C5.
3. A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
4. THE ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE TRAVIS COUNTY RULES AND REGULATIONS.
5. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY.
6. SILT FENCE TYPE AND INSTALLATION SHALL COMPLY WITH TRAVIS COUNTY ENVIRONMENTAL.
7. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 5 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP, OR REVEGETATION MATTING.
8. SEE SHEET C7 FOR EROSION/SEDIMENTATION CONTROL AND TREE PROTECTION NOTES AND DETAILS.
9. SEE SHEET C7 FOR REQUIREMENTS FOR MAINTAINING E/S CONTROLS.
10. SEE SHEET C7 FOR REVEGETATION SPECIFICATIONS.
11. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY SEDIMENT TRANSPORTED FROM THE LOC TO THE DETENTION/ WATER QUALITY PONDS.
12. CONTRACTOR WILL CONTINUOUSLY CLEAN UP SPOILS THAT MIGRATE BEYOND THE LIMIT OF CONSTRUCTION AND ONTO DRIVE AISLES, PARKING AREAS, ETC.
13. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
14. WHERE TREE PROTECTION FENCING CANNOT BE INSTALLED AROUND THE FULL CRZ, PLACE THE FENCING AT THE ½ CRZ AND ADD 8" OF HARDWOOD MULCH FROM THE ½ CRZ TO THE FULL CRZ. IF FENCING CANNOT BE INSTALLED AROUND THE ½ CRZ, 2"X4"X6' OR GREATER SIZE LUMBER SHALL BE STRAPPED VERTICALLY TO THE TREE AND 8" OF HARDWOOD MULCH SHALL BE APPLIED WITHIN THE FULL CRZ.
15. ANY MULCH THAT IS CREATED BY CONSTRUCTION ACTIVITIES IS TO BE RETAINED, STOCKPILED ON SITE TO BE USED AS TEMPORARY/TRANSITIONAL STABILIZATION MEASURES AS NEEDED.

Symbol	Description
LOC	LIMITS OF CONSTRUCTION
SF	SILT FENCE
TFD	TRINGULAR FILTER DIKE
MS	MULCH SOCK
TP	TREE PROTECTION FENCE
IP	INLET PROTECTION
	ROCK BERM
	STABILIZED CONSTRUCTION ENTRANCE
	CONTRACTOR STAGING AND SPOILS AREA
	CONCRETE WASHOUT AREA
	EROSION CONTROL BLANKET

TREES

Symbol	Description
1811	TREE TO BE SAVED
1811	TREE TO BE REMOVED
1811	TREE TO BE MITIGATED
	HERITAGE TREE

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ENVIRONMENTAL NOTES:

LIMITS OF CONSTRUCTION	=	7.70 AC
TREE PROTECTION FENCE	=	3841 LF
SILT FENCE	=	2194 LF
TRIANGULAR FILTER DIKE	=	168 LF
INLET PROTECTION	=	135 SF

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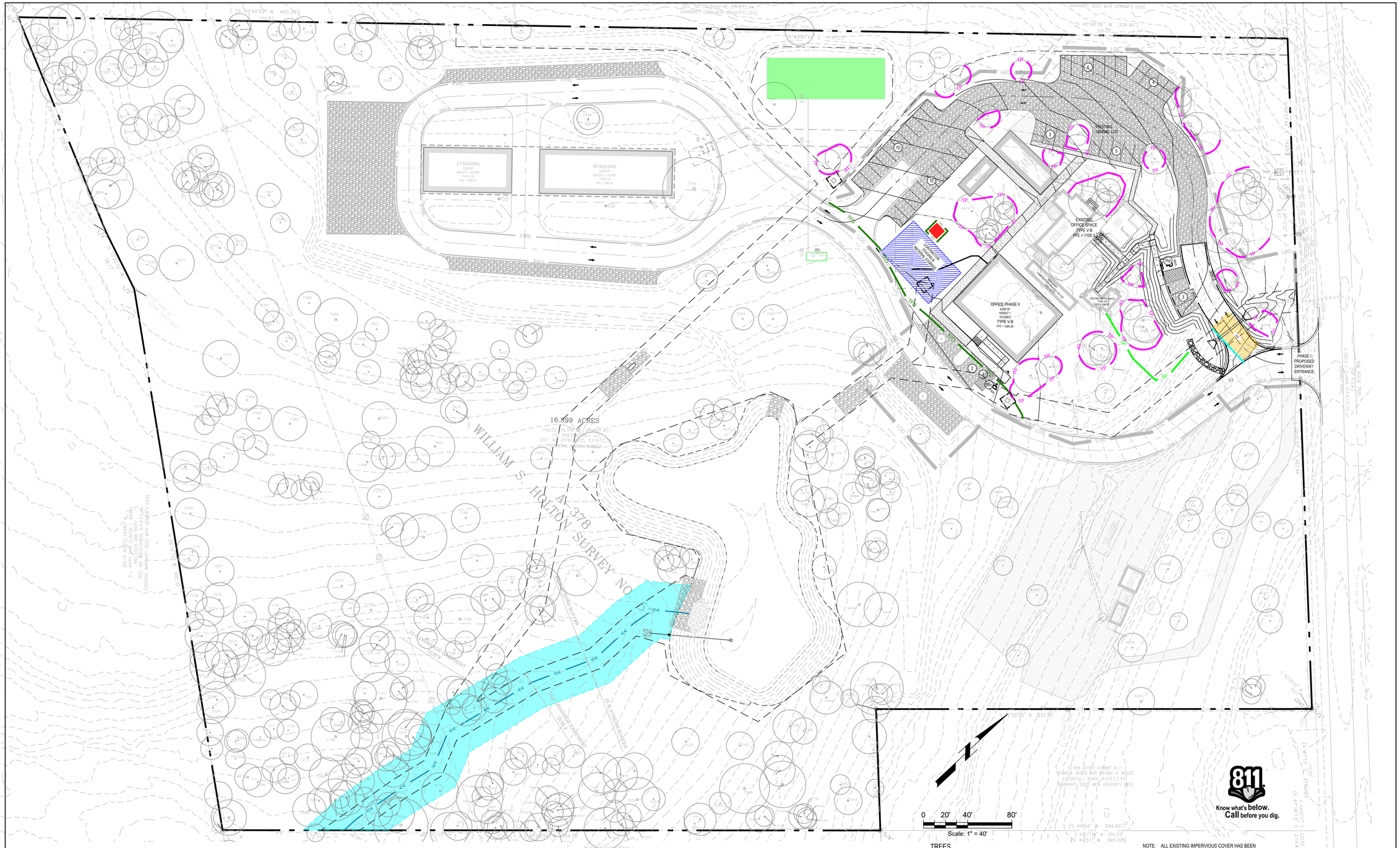
PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: EROSION AND SEDIMENTATION CONTROL PLAN PHASE I

PROJECT NO. 0193.001

SHEET NO. C9



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LOC	LIMITS OF CONSTRUCTION
SF	SILT FENCE
TFD	TRINGULAR FILTER DIKE
MS	MULCH SOCK
TP	TREE PROTECTION FENCE
—IP —IP —IP —IP —	INLET PROTECTION
▨	ROCK BERM
▨	STABILIZED CONSTRUCTION ENTRANCE
▨	CONTRACTOR STAGING AND SPOILS AREA
🟥	CONCRETE WASHOUT AREA
▨	EROSION CONTROL BLANKET

TREES

○ 1811	TREE TO BE SAVED
○ 1811	TREE TO BE REMOVED
○ 1811	TREE TO BE MITIGATED
● 1811	HERITAGE TREE

ENVIRONMENTAL NOTES:

LIMITS OF CONSTRUCTION = 2.48 AC
TREE PROTECTION FENCE = 1516 LF
SILT FENCE = 116 SF
TRIANGULAR FILTER DIKE = 312 LF
MULCH SOCK = 135LF

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SHEET TITLE
EROSION AND
SEDIMENTATION
CONTROL PLAN PHASE II

PROJECT NO.
0193.001

SHEET NO.
C10
10 OF 42

IMAGES:
XREFS: * 0193.001 LANDWEST-BORDER.dwg * x0193.001 Landwest ebs.dwg * x0193.001 landwest pbs.d
FILE: C:\Users\2020\Box\MIGL ENGINEERING\0193.001 LANDWEST OFFICE SITE RR1\08 CAD\PLANS\

Erosion/Sedimentation Control General Notes

1. The Contractor shall install erosion/sedimentation controls prior to any site preparation work (clearing, grubbing or excavation).

2. The placement of erosion/sedimentation controls shall be in accordance with the LCRA Water Quality Management Technical Manual and the approved Erosion and Sedimentation Control Plan.

3. A pre-construction conference shall be held on-site with the Contractor, Design Engineer/Permit Applicant and LCRA Watershed Management Inspector after installation of the erosion/sedimentation controls and prior to beginning any site preparation work. The Contractor shall notify the LCRA Inspector, at least three days prior to the meeting date.

4. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the LCRA Watershed Management Program. Minor changes to be made as field revisions to the Erosion and Sedimentation Control Plan may be required by the LCRA Watershed Management Inspector during the course of construction to correct control inadequacies.

5. The Contractor is required to inspect the controls and fences at weekly intervals and after rainfall events in excess of 0.5" to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.

6. Prior to final acceptance by the LCRA, haul roads and waterway crossings constructed for temporary contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved spoil disposal sites.

7. Permanent Erosion Control: All disturbed areas shall be restored as noted below.

A. A minimum of four inches of topsoil shall be placed on all disturbed areas (except rock outcrop). Salvaged topsoil from the site should be used whenever possible. Imported topsoil shall be weed free with a minimum 20% organic content. Topsoil placed on slopes exceeding 5 horizontal to 1 vertical shall have a relatively high resistivity to erosion.

B. The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows (select one of the three seed combinations listed below):

Dates	Climate	Species (lb/ac)	
Year Round	Permanent Cool/Warm Season (Native Species)	Purple three-awn (Aristida purpurea)	1.4
		Sideoats grama (Bouteloua curtipendula)	2.0
		Silver bluestem (Bothriochloa laguroides)	6.0
		Buffalograss (Buchloe dactyloides)	1.4
		Canadian wildrye (Elymus Canadensis)	1.4
		Engelmann's daisy (Engelmannia pinnatif	0.6
		Green sprangletop (Leptochloa dubia)	2.6
		Mexican hat (Ratibida columnifera)	1.0
		Little bluestem (Schizachyrium scoparium	1.8
		Indiangrass (Sorghastrum nutans)	1.8
		Texas Wintergrass (Nassella leucotricha)	15.0
		Total	**35.0**
Mar 30-Oct 1	Permanent Warm Season	Bermuda (Cynodon dactylon)(hulled)	45.0
Oct 1-Mar 30	Permanent Cool/Warm Season	Bermuda (Cynodon dactylon)(unhulled)	70.0
		*Cereal Rye (Secale cereale)	90.0
		Total	**160.0**

Take care to distribute seed evenly, by sowing fine and large seeds separately or by using a fine seed box. When broadcasting seeding, the application rate should be doubled and the area rolled to ensure a good seed/soil contact

*From September 15 to March 1, Oats (21 lb/acre) and Winter Wheat (30 lb/acre) may be substituted for Rye.

Mulch type used shall be hay, straw or mulch applied at a rate of 3500 lb/acre (hay), 4500 lb/acre (straw) or 2500 lb/acre (hydraulic mulch). Tackifier, if used shall be biodegradable.

C. The planted area shall be irrigated or sprinkled in a manner that will not erode the topsoil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of ½ inch or more shall postpone the watering schedule for one week.

D. Restoration shall be acceptable when the grass has grown at least 1½ inches high with 70% coverage, provided no bare spots larger than 16 square feet exist. Critical areas including creek crossings, slopes, stormwater discharge points must be completely stabilized. Permanent Water quality BMPs must attain 80% coverage.

8. Developer Information:

Owner FGS INVESTMENTS I LLC Phone # 512-263-3464

Address PO BOX 340789, AUSTIN, TEXAS 78734

Owner's representative responsible for plan alterations:

TAMMI MIGL, P.E. Phone # 512 - 750 - 0440

Person or firm responsible for erosion/sedimentation control maintenance:

_______________ Phone # _______________

Person or firm responsible for tree/natural area protection Maintenance:

_______________ Phone # _______________

9. The contractor shall not dispose of surplus excavated material from the site without notifying the LCRA Watershed Management Inspector at least 48 hours prior with the location and a copy of the permit issued to receive the material.

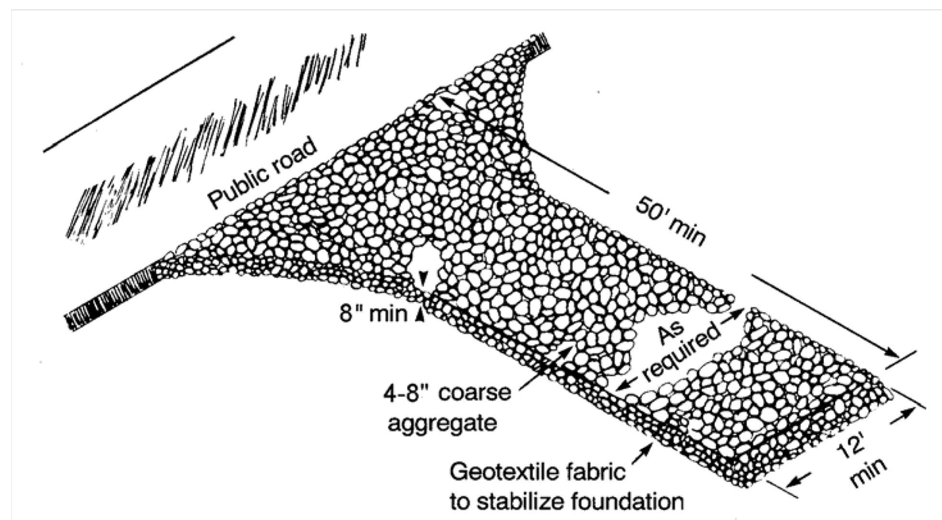
Lower Colorado River Authority
Watershed Management
Erosion and Sedimentation Control Details

Temporary Construction Entrance/Exit

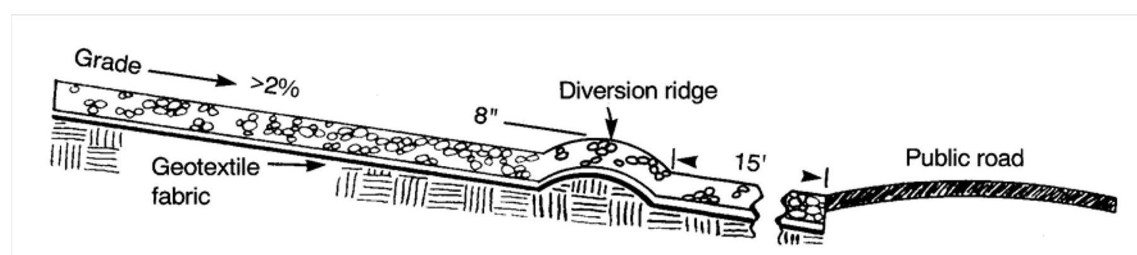
The purpose of a temporary construction entrance is to provide a stable entrance/exit condition from the construction site and keep mud and sediment off of roads.

Notes:

1. Use 4 to 8 inch washed stone and place with a minimum thickness of 8 inches.
2. Use geotextile fabric with an approximate weight of 4 oz/yd2 as needed to improve stability.
3. The minimum width of the entrance/exit should be 12 feet or the full width of exit roadway, whichever is greater.
4. The construction entrance should be at least 50 feet long.
5. Divert all surface runoff and drainage from the stone pad to a sediment trap or basin if necessary.
6. Inspect entrance/exit and after each rain event (of 0.5 inch or more). Repair any damage by adding stone and/or cleaning any measures used to trap sediment.
7. Promptly remove all sediment spilled, dropped, washed or tracked onto public rights-of-way. Dispose of sediment in a manner that will not cause additional siltation.
8. When construction is complete, properly dispose of any sediment buildup and restore the prior location of the entrance/exit.



Schematic of Temporary Construction Entrance/Exit



Cross-section of a Construction Entrance/Exit

For more information, see the LCRA Water Quality Management Technical Manual
For questions or information, call LCRA at (800) 776-5272, ext. 2324 or visit www.lcra.org

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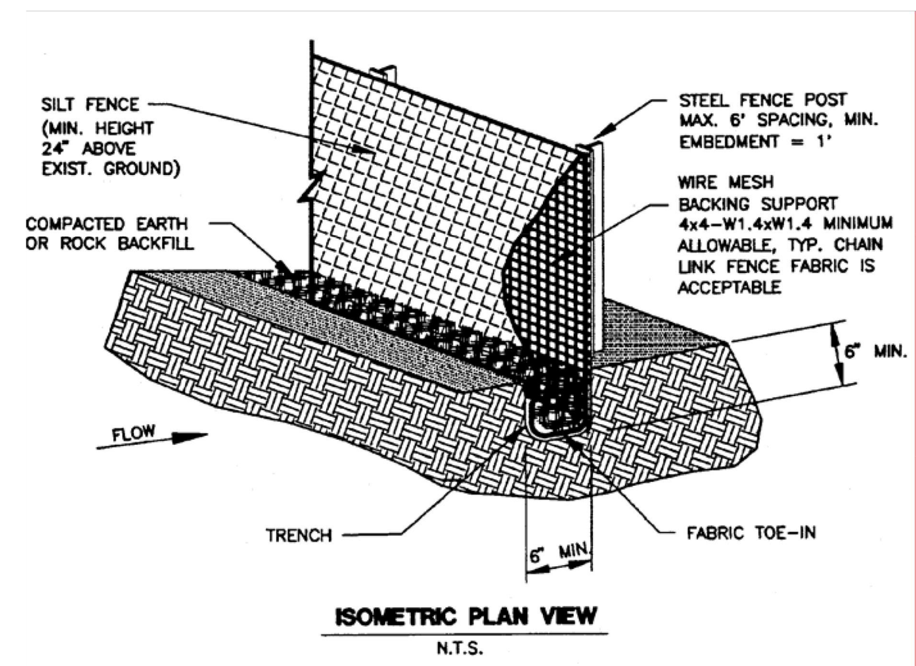
Lower Colorado River Authority
Watershed Management
Erosion and Sedimentation Control Details

Silt Fence

The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas of a limited extent (maximum contributing drainage area of 2 acres).

Notes:

1. Use polypropylene, polyethylene or polyamide woven or nonwoven fabric (36 inches wide, weighing 4 oz/yd) and 2" x 4", 12 gauge minimum woven wire backing.
2. Use steel fence posts, at least 4 feet long, embedded 1-foot deep and spaced not more than 8 feet on center.
3. Toe in the silt fence so that the down-slope face of the trench is flat and perpendicular to the line of flow (6" x 6" trench). Where fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.
4. Use J-hooks as needed when silt fences cross contour lines to create catchment areas and slow flow velocity. Use J-hooks at downhill fence ends to prevent runoff from escaping around sides. Refer to the J-hook placement detail found below.
5. Inspect silt fences weekly and after each rain event (of 0.5 inch or more) to locate and repair any damage. Replace any torn fabric and repair any sections crushed or collapsed in the course of construction activity.
6. Remove sediment when buildup reaches 6 inches. Dispose of sediment in a manner that will not cause additional siltation.
7. When construction is complete, properly dispose of sediment buildup and restore the prior location of the silt fence. The fence materials should be disposed of in an approved landfill or reused if in serviceable condition.



Schematic of a Silt Fence Installation

For more information, see the LCRA Water Quality Management Technical Manual
For questions or information, call LCRA at (800) 776-5272, ext. 2324 or visit www.lcra.org

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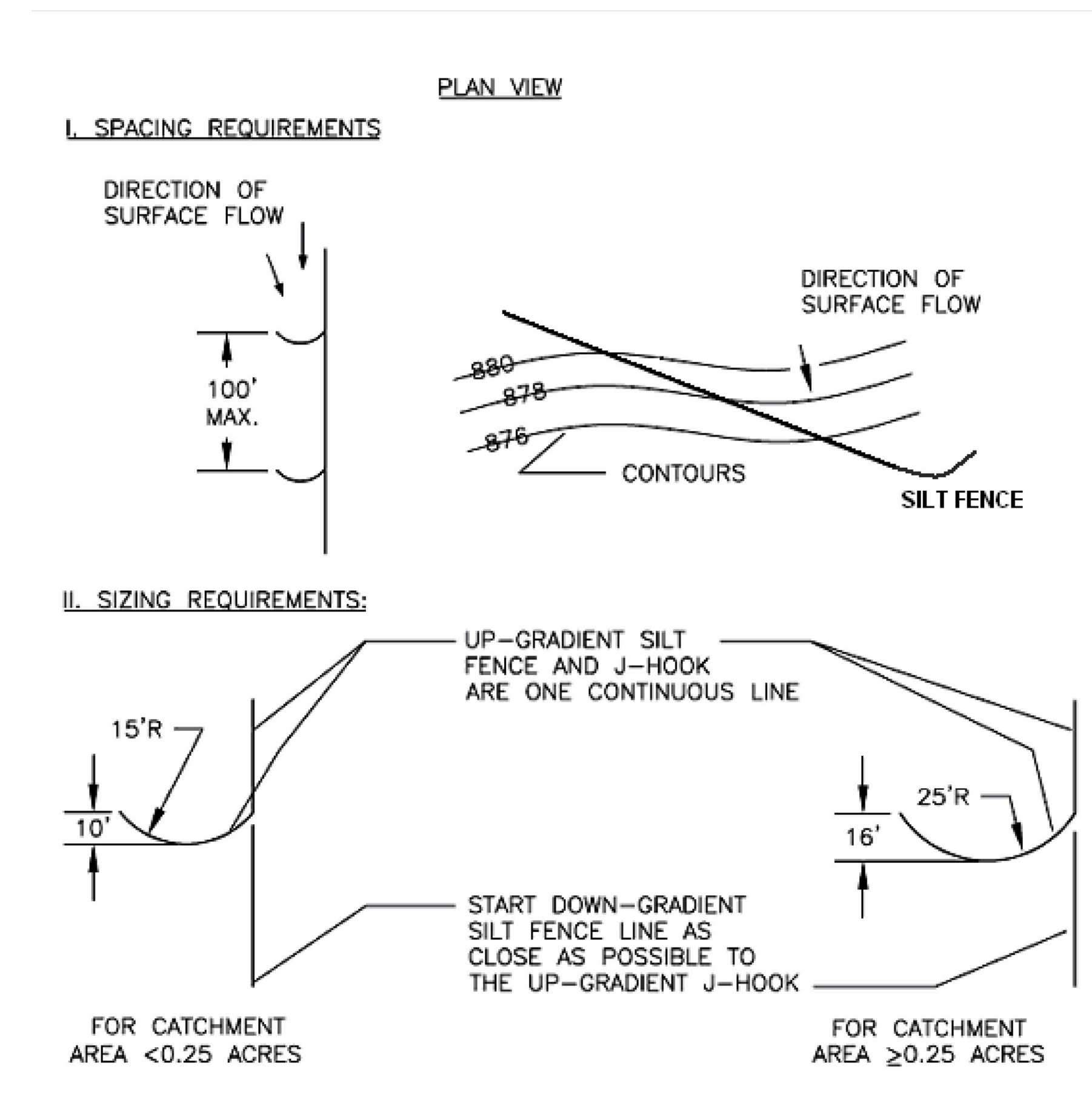
Recommended Silt Fence Spacing on Sloping Sites

Slope angle	Soil Type: Silty	Clays	Sandy
Very steep (1:1)	50 ft.	75 ft.	100 ft.
Steep (2:1)	75 ft.	100 ft.	125 ft.
Moderate (4:1)	100 ft.	125 ft.	150 ft.
Slight (10:1)	125 ft.	150 ft.	200 ft.



J-hook Placement Details

For more information, see the LCRA Water Quality Management Technical Manual
For questions or information, call LCRA at (800) 776-5272, ext. 2324 or visit www.lcra.org

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TRAVIS COUNTY EROSION AND SEDIMENTATION CONTROL NOTES

1. IF AN ADDITIONAL CONCRETE WASHOUT IS NEEDED, THE LOCATION WILL BE DETERMINED ONCE CONSTRUCTION HAS BEGUN AND WILL BE PROPERLY NOTATED ON THE ESC PLAN SHEET AND SWP3 AT THAT TIME.
2. ALL REQUIRED NOTICES AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE BEFORE THE COMMENCEMENT OF CONSTRUCTION.
3. ALL EROSION AND SEDIMENTATION CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO THE PROJECT SITE.
4. INSTALL SILT FENCE ACCORDINGLY FOR RUN-ON DIVERSION OR OFFSITE SEDIMENT CONTROL DEPENDING ON UP OR DOWN SLOPE, FACING POST SIDE ON THE DOWN GRADIENT SIDE.
5. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
6. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
7. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY COUNTY INSPECTOR.
8. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
9. CONTRACTOR SHALL MAINTAIN AND UTILIZE DUST CONTROL FOR THE DURATION OF THE PROJECT.
10. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING ONTO THE PUBLIC ROADWAY ON AN ONGOING/REGULAR BASIS.
11. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY UPON INLET INSTALLATION.
12. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
13. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
14. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
15. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
16. TEMPORARY ESC MEASURES SHALL REMAIN IN PLACE IN ALL DISTURBED AREAS UNTIL ADEQUATE STABILIZATION HAS BEEN ACHIEVED.
17. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL STORM SEWER INLET BOXES, LINES, PIPES AND CULVERTS BEFORE CONDITIONAL/FINAL ACCEPTANCE CAN OBTAINED.
18. TRAVIS COUNTY REQUIRES CERTIFIED SWP3 INSPECTORS TO CONDUCT SWP3 INSPECTIONS AND REPORTING ON ALL PROJECTS WITH ONE ACRE OF DISTURBANCE AND LARGER.
19. PERMITTEE SHALL INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY SWP3 REPORT, UPON RECEIVING A FORECAST CALLING FOR A RAIN EVENT FOR AN EXTENDED PERIOD, MODIFICATION OF INLET PROTECTION SHOULD BE MADE TO PREVENT FLOODING OR PONDING OF WATER IF TRAFFIC OR PROPERTY CONCERNS ARISE.

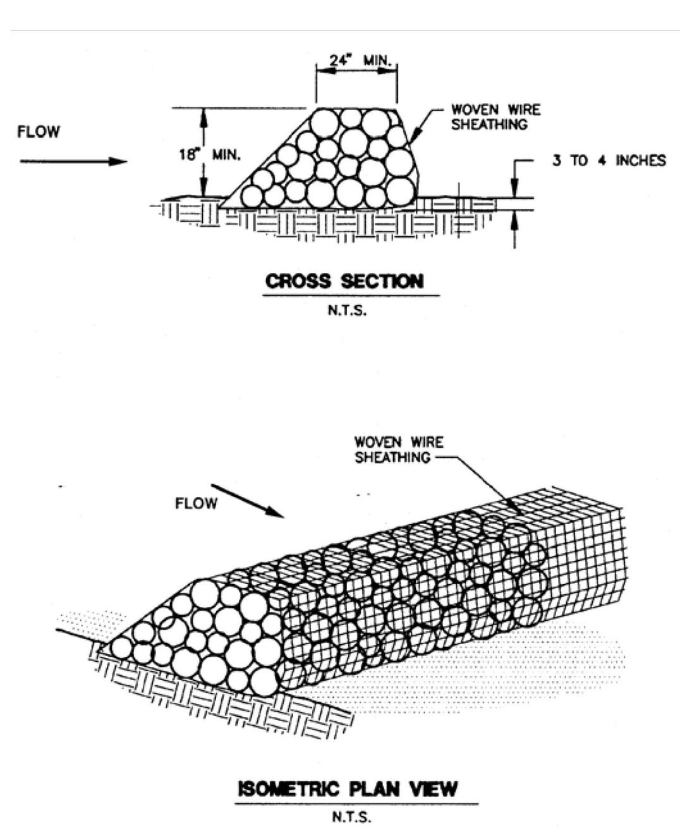
Lower Colorado River Authority
Watershed Management
Erosion and Sedimentation Control Details

Rock Berms

The purpose of a rock berm is to serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detain the sediment and release the water in sheet flow.

Notes:

1. Use clean, open graded 3- to 5-inch diameter rock.
2. Use a woven wire sheathing (maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized), and secure with shoat rings.
3. The height should be at least 18" and the top width of at least 2 feet.
4. Install berm along a constant contour and perpendicular to the flow path to prevent runoff from escaping around the sides.
5. Inspect weekly and after each rain event (of 0.5 inch or more) to locate and repair damage.
6. Remove sediment when buildup reaches 6 inches. Dispose of sediment in a manner that will not cause additional siltation.
7. When construction is complete, properly dispose of any sediment buildup. The rock berm should be removed when the site has been revegetated, but may be left in place as a permanent BMP in certain cases (e.g. when used as a check dam in a constructed ditch or swale).



Schematic Diagram of a Rock Berm

Rock Berm Spacing on Channels

Ditch slope	Spacing
30%	10 ft.
20%	15 ft.
15%	20 ft.
10%	35 ft.
5%	55 ft.
3%	100 ft.
2%	150 ft.
1%	300 ft.
0.50%	600 ft.

(applies for rock berms, high service rock berms, brush berms, and fiber rolls)

For more information, see the LCRA Water Quality Management Technical Manual
For questions or information, call LCRA at (800) 776-5272, ext. 2324 or visit www.lcra.org

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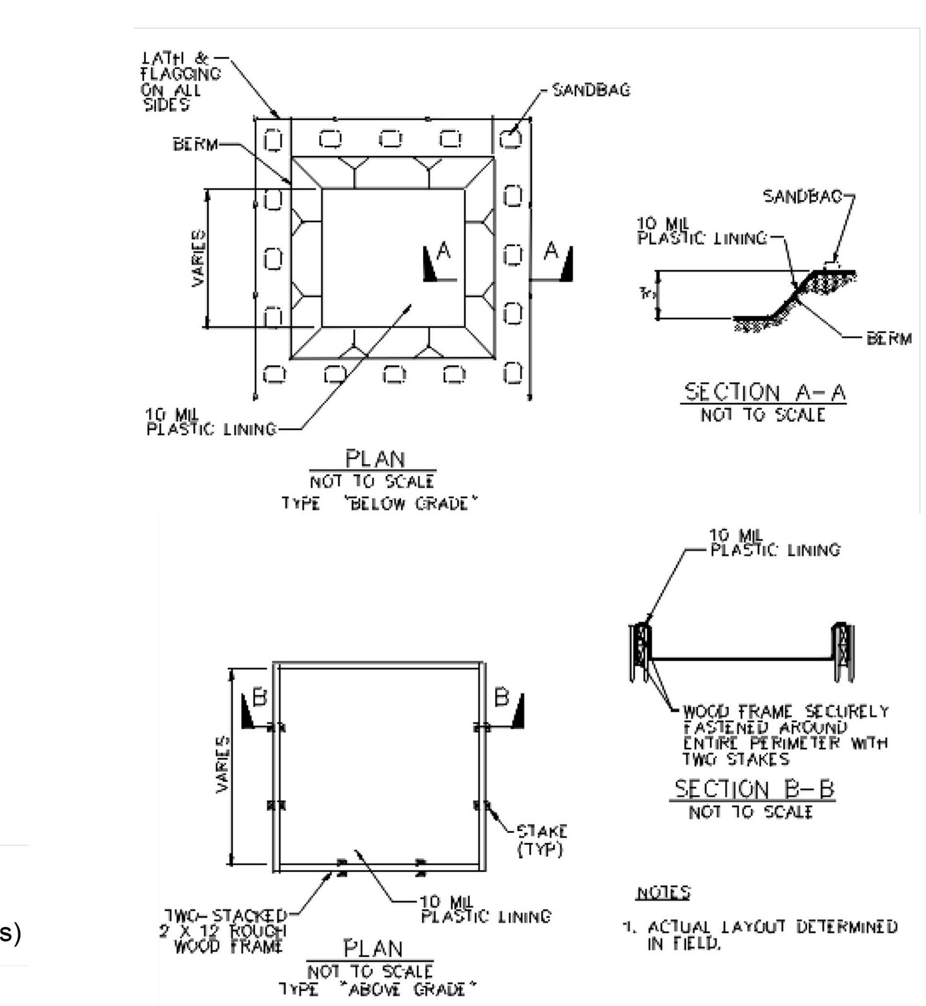
Lower Colorado River Authority
Watershed Management
Erosion and Sedimentation Control Details

Concrete Washout Areas

The purpose of concrete washout areas is to prevent or reduce the discharge of pollutants to stormwater from concrete waste by conducting washout offsite, performing onsite washout in a designated area, and training employees and subcontractors.

Notes:

1. Avoid mixing excess amounts of fresh concrete.
2. Perform washout of concrete trucks in designated areas only.
3. Construct washout area using 10 mil plastic lining and anchor the lining with sandbags or rocks.
4. Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. **Do not allow runoff from this area - construct a temporary pit or bermed area large enough to contain both liquid and solid waste.**
5. Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly, along with the lining.
6. Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled, repaired, and revegetated or otherwise stabilized.



Schematics of Concrete Washout Areas

For more information, see the LCRA Water Quality Management Technical Manual
For questions or information, call LCRA at (800) 776-5272, ext. 2324 or visit www.lcra.org

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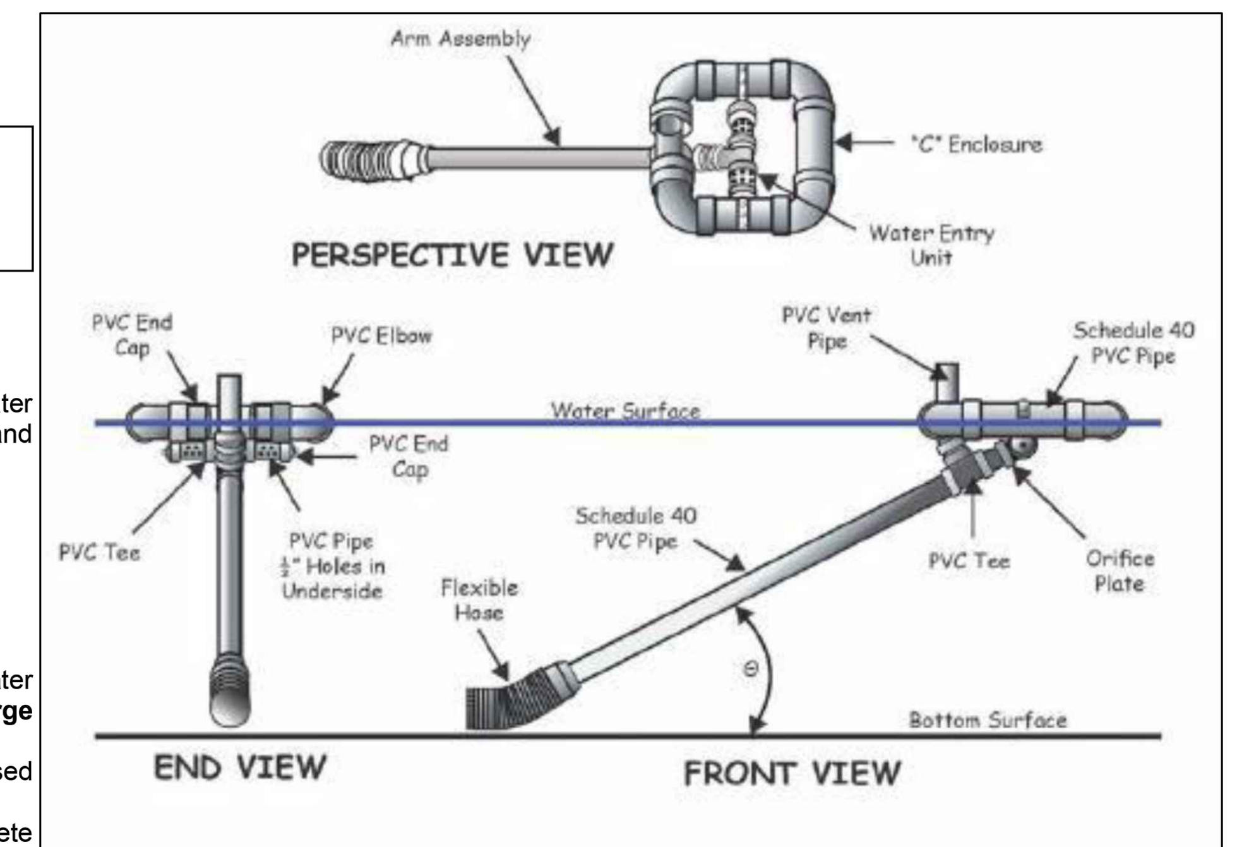
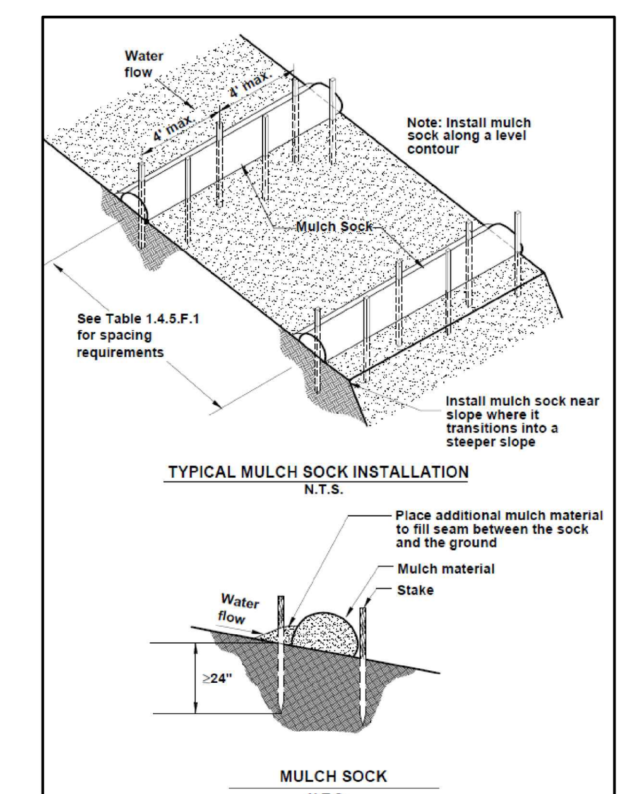


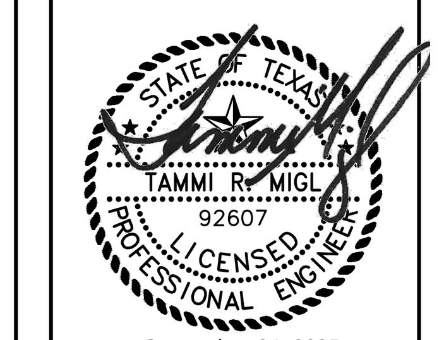
Figure 6.64a Schematic of a skimmer, from Pennsylvania Erosion and Sediment Pollution Control Manual, March, 2000.

01 DE WATERING SKIMMER. NTS



02 MULCH SOCK NTS

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967



September 24, 2025

NO.	DATE	REVISIONS	RECM'D

CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

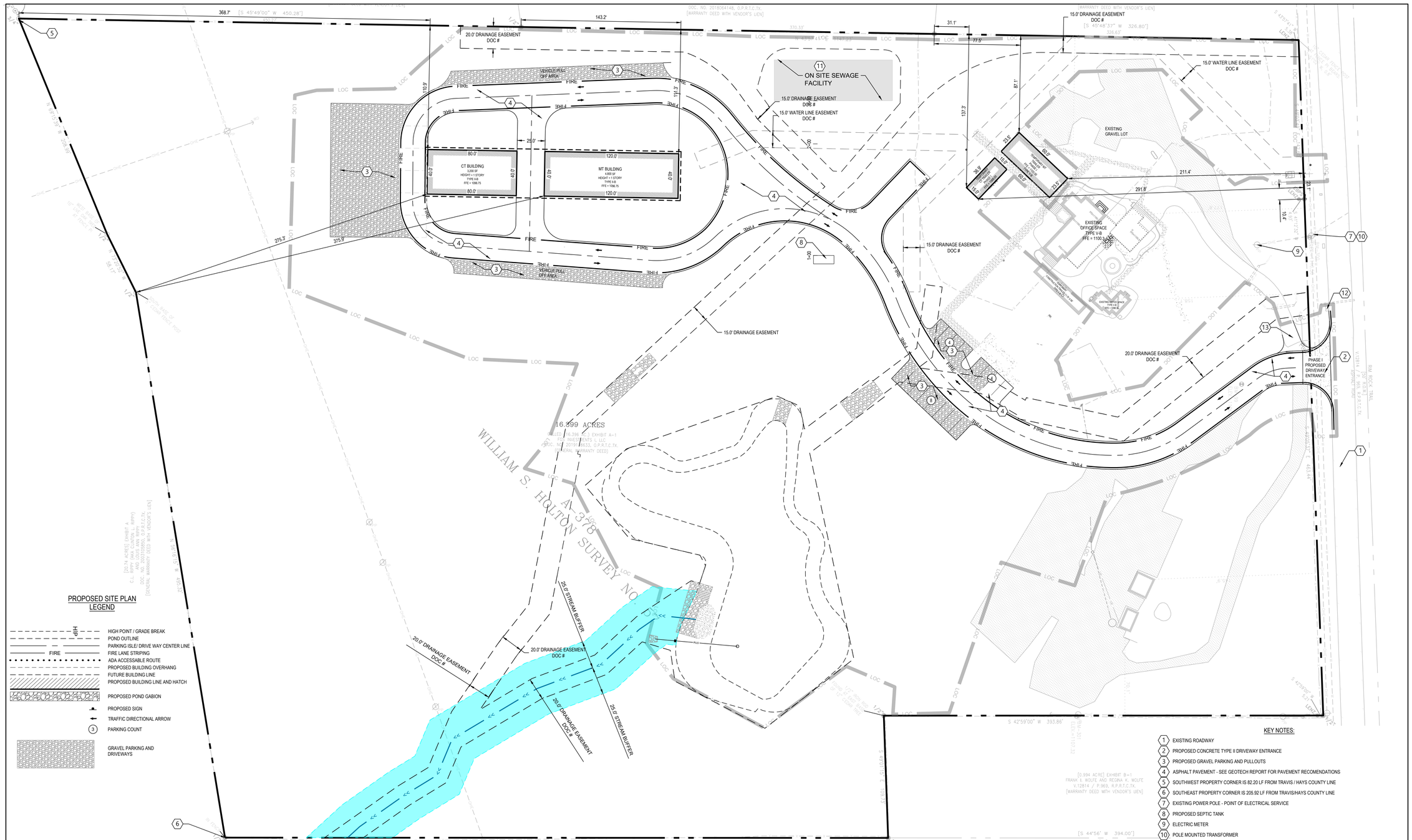
SHEET TITLE: EROSION AND SEDIMENTATION CONTROL NOTES AND DETAILS

APPROVAL STAMP ONLY

PROJECT NO. 0193.001

SHEET NO. C11

11 OF 41



PROPOSED SITE PLAN LEGEND

— — — HIP — — —	HIGH POINT / GRADE BREAK
— — — — — —	POND OUTLINE
———— — ————	PARKING ISLE/ DRIVE WAY CENTER LINE
——— FIRE ———	FIRE LANE STRIPING
• • • • • • •	ADA ACCESSABLE ROUTE
– – – – – – –	PROPOSED BUILDING OVERHANG
— — — — — —	FUTURE BUILDING LINE
▨	PROPOSED BUILDING LINE AND HATCH
▨	PROPOSED POND GABION
●	PROPOSED SIGN
←	TRAFFIC DIRECTIONAL ARROW
③	PARKING COUNT
▨	GRAVEL PARKING AND DRIVEWAYS

KEY NOTES:

1. EXISTING ROADWAY
2. PROPOSED CONCRETE TYPE II DRIVEWAY ENTRANCE
3. PROPOSED GRAVEL PARKING AND PULLOUTS
4. ASPHALT PAVEMENT - SEE GEOTECH REPORT FOR PAVEMENT RECOMENDATIONS
5. SOUTHWEST PROPERTY CORNER IS 82.20 LF FROM TRAVIS / HAYS COUNTY LINE
6. SOUTHEAST PROPERTY CORNER IS 205.92 LF FROM TRAVIS/HAYS COUNTY LINE
7. EXISTING POWER POLE - POINT OF ELECTRICAL SERVICE
8. PROPOSED SEPTIC TANK
9. ELECTRIC METER
10. POLE MOUNTED TRANSFORMER
11. PROPOSED SEPTIC DRAIN FIELD
12. REMOVE AND REPLACE EXISTING MAILBOX WITH AN AUSTIN TCM APPROVED CHAPTER 5 OF AASHTO. LOCATED NO CLOSER THAN 18" FROM FACE OF CURB OR EDGE OF PAVEMENT .
13. TEMPORARY ASPHALT DRIVE TO EXISTING PARKING AREA TO BE REMOVED WITH PHASE II CONSTRUCTION

NOTES:

1. ALL DIMENSIONS ARE PERPENDICULAR OR RADIAL TO THE PROPERTY LINES, UNLESS NOTED OTHERWISE.
2. EVERY ACCESSIBLE PARKING SPACE MUST BE IDENTIFIED BY A SIGN, CENTERED AT THE HEAD OF THE PARKING SPACE. THE SIGN MUST INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND STATE RESERVED, OR EQUIVALENT LANGUAGE. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE". SIGNS SHALL BE 60" MINIMUM ABOVE THE GROUND MEASURED TO THE BOTTOM OF THE SIGN. SEE ADA NOTES, THIS PAGE.
3. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT BE STEEPER THAN 1:20 UNLESS DESIGNED AS A RAMP. THE CROSS SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT BE STEEPER THAN 1:50.
4. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 INCHES.
5. ACCESSIBLE ROUTES TO BE CONCRETE WITH SLIP RESISTANT FINISH.
6. ALL EXISTING AND PROPOSED EASEMENTS ARE SHOWN ON THIS SITE PLAN.
7. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. IN ANY LOCATION WITHIN THE UNINCORPORATED AREAS OF TRAVIS COUNTY, TRENCHES MUST BE LIMITED TO 300' OF OPEN TRENCH AT A TIME IN LOCATIONS WHERE ANY PROPOSED UTILITIES WILL BE TRENCHED.

SITE PLAN RELEASE NOTES:

1. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE RELEASED SITE PLAN. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE SITE PLAN AMENDMENT AND APPROVAL OF THE DEVELOPMENT SERVICES DEPARTMENT.
2. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
3. ANY DAMAGE TO EXISTING IMPROVEMENTS SUCH AS PAVEMENT, SIDEWALKS, CURB AND GUTTERS CAUSED BY THE INSTALLATION OF IMPROVEMENTS SHALL BE REPAIRED TO LIKE NEW CONDITION.
4. ALL DIRT, MUD, ROCKS, DEBRIS, ETC SPILLED, TRACKED, OR OTHERWISE DEPOSITED ON ANY EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY BY CONTRACTOR.
5. EROSION CONTROLS SHALL BE IN PLACE PRIOR TO ANY SITE DISTURBANCE.
6. ALL DISTURBED NATURAL AREAS SHALL BE REVEGETATED.
7. NO SLOPES TO EXCEED 15%.
8. APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.
9. ADDITIONAL ELECTRIC EASEMENTS MAY BE REQUIRED AT A LATER DATE.
10. WATER SERVICE WILL BE PROVIDED BY WTCPUA.
11. FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.
12. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED.
13. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, CONTRACTOR TO UTILIZE APPROPRIATE TxDOT TRAFFIC CONTROL STANDARDS AND DETAILS INCLUDED WITHIN THIS PLANSET.

ADA NOTES:

PER TEXAS ACCESSIBILITY STANDARDS 68.104, ACCESSIBLE PARKING SPACES:

- (a) A PAVED ACCESSIBLE PARKING SPACE MUST INCLUDE:
  - (1) THE INTERNATIONAL SYMBOL OF ACCESSIBILITY PAINTED CONSPICUOUSLY ON THE SURFACE IN A COLOR THAT CONTRASTS THE PAVEMENT;
  - (2) THE WORDS "NO PARKING" PAINTED ON ANY ACCESS AISLE ADJACENT TO THE PARKING SPACE. THE WORDS MUST BE PAINTED:
    - (A) IN ALL CAPITAL LETTERS;
    - (B) WITH A LETTER HEIGHT OF AT LEAST TWELVE INCHES, AND A STROKE WIDTH OF AT LEAST TWO INCHES; AND
    - (C) CENTERED WITHIN EACH ACCESS AISLE ADJACENT TO THE PARKING SPACE; AND
  - (3) A SIGN IDENTIFYING THE CONSEQUENCES OF PARKING ILLEGALLY IN A PAVED ACCESSIBLE PARKING SPACE. THE SIGN MUST:
    - (A) AT A MINIMUM STATE "VIOLATORS SUBJECT TO FINE AND TOWING" IN A LETTER HEIGHT OF AT LEAST ONE INCH;
    - (B) BE MOUNTED ON A POLE, POST, WALL OR FREESTANDING BOARD;
    - (C) BE NO MORE THAN EIGHT INCHES BELOW A SIGN REQUIRED BY TEXAS ACCESSIBILITY STANDARDS, 502.6; AND
    - (D) BE INSTALLED SO THAT THE BOTTOM EDGE OF THE SIGN IS NO LOWER THAN 48 INCHES AND NO HIGHER THAN 80 INCHES ABOVE GROUND LEVEL.
- (b) A PARKING SPACE IDENTIFICATION SIGN THAT COMPLIES WITH TEXAS ACCESSIBILITY STANDARDS, 502.6, THAT INCLUDES THE REQUIREMENTS IN SUBSECTION (A)(3)(A) SATISFIES SUBSECTION (A)(3).

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

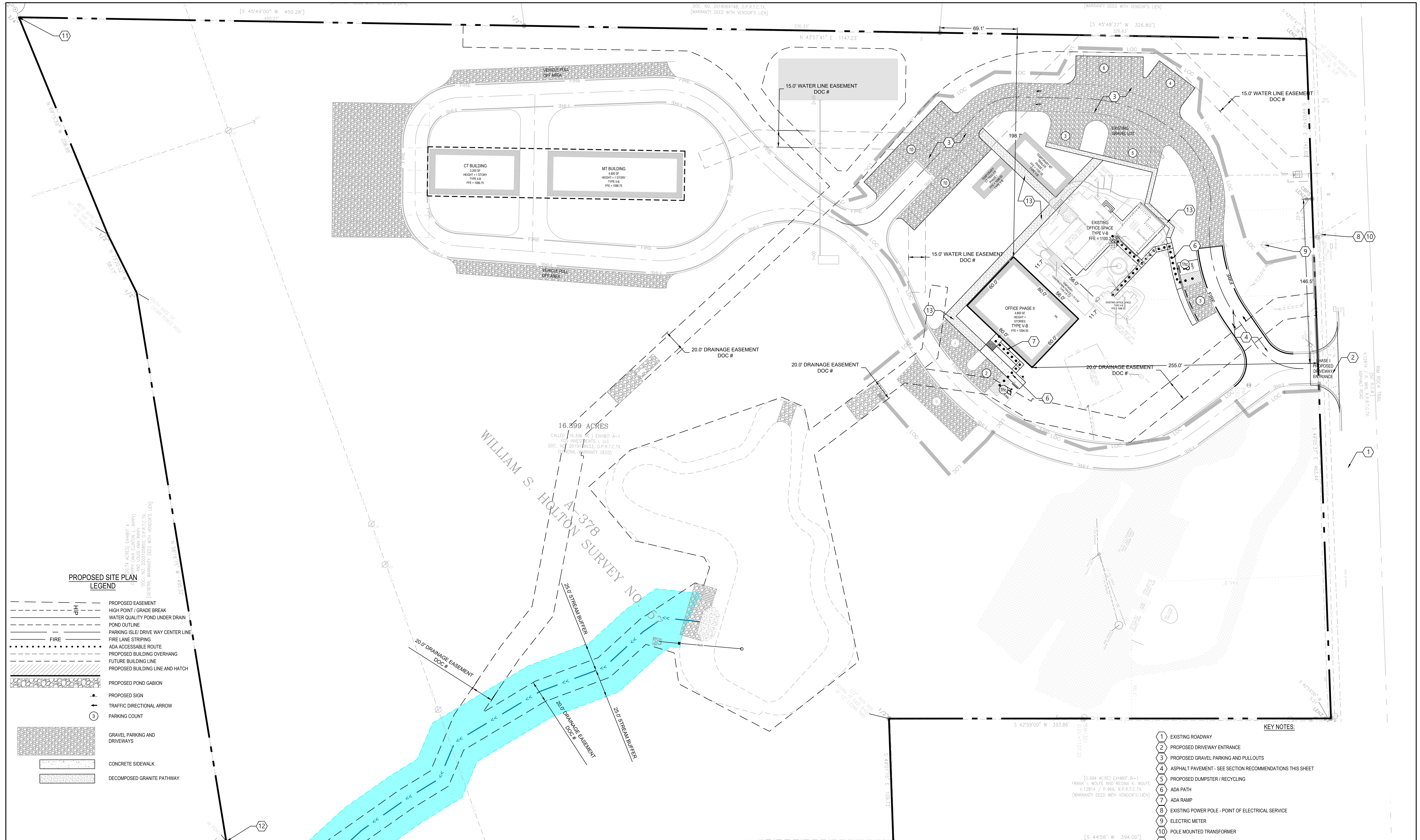
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED SITE PLAN
PHASE I

PROJECT NO.
0193.001

SHEET NO.
C12
12 OF 42



PROPOSED SITE PLAN LEGEND

- PROPOSED EASEMENT
- HIGH POINT / GRADE BREAK
- WATER QUALITY POND UNDER DRAIN
- POND OUTLINE
- PARKING ISLE/ DRIVE WAY CENTER LINE
- FIRE LANE STRIPING
- ADA ACCESSABLE ROUTE
- PROPOSED BUILDING OVERHANG
- FUTURE BUILDING LINE
- PROPOSED BUILDING LINE AND HATCH
- PROPOSED POND GABION
- PROPOSED SIGN
- TRAFFIC DIRECTIONAL ARROW
- PARKING COUNT
- GRAVEL PARKING AND DRIVEWAYS
- CONCRETE SIDEWALK
- DECOMPOSED GRANITE PATHWAY

KEY NOTES:

1. EXISTING ROADWAY
2. PROPOSED DRIVEWAY ENTRANCE
3. PROPOSED GRAVEL PARKING AND PULLOUTS
4. ASPHALT PAVEMENT - SEE SECTION RECOMMENDATIONS THIS SHEET
5. PROPOSED DUMPSTER / RECYCLING
6. ADA PATH
7. ADA RAMP
8. EXISTING POWER POLE - POINT OF ELECTRICAL SERVICE
9. ELECTRIC METER
10. POLE MOUNTED TRANSFORMER
11. SOUTHWEST PROPERTY CORNER IS 82.20 LF FROM TRAVIS / HAYS COUNTY LINE
12. SOUTHEAST PROPERTY CORNER IS 205.92 LF FROM TRAVIS/HAYS COUNTY
13. DECOMPOSED GRANITE WALKWAY

NOTES:

1. ALL DIMENSIONS ARE PERPENDICULAR OR RADIAL TO THE PROPERTY LINES, UNLESS NOTED OTHERWISE.
2. EVERY ACCESSIBLE PARKING SPACE MUST BE IDENTIFIED BY A SIGN, CENTERED AT THE HEAD OF THE PARKING SPACE. THE SIGN MUST INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND STATE RESERVED, OR EQUIVALENT LANGUAGE. SIGNS IDENTIFYING VAN PARKING SPACES SHALL CONTAIN THE DESIGNATION "VAN ACCESSIBLE". SIGNS SHALL BE 60" MINIMUM ABOVE THE GROUND MEASURED TO THE BOTTOM OF THE SIGN. SEE ADA NOTES, THIS PAGE.
3. THE RUNNING SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT BE STEEPER THAN 1:20 UNLESS DESIGNED AS A RAMP. THE CROSS SLOPE OF AN ACCESSIBLE ROUTE SHALL NOT BE STEEPER THAN 1:50.
4. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 INCHES.
5. ACCESSIBLE ROUTES TO BE CONCRETE WITH SLIP RESISTANT FINISH.
6. ALL EXISTING AND PROPOSED EASEMENTS ARE SHOWN ON THIS SITE PLAN.
7. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
8. IN ANY LOCATION WITHIN THE UNINCORPORATED AREAS OF TRAVIS COUNTY, TRENCHES MUST BE LIMITED TO 300' OF OPEN TRENCH AT A TIME IN LOCATIONS WHERE ANY PROPOSED UTILITIES WILL BE TRENCHED.

SITE PLAN RELEASE NOTES:

1. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE RELEASED SITE PLAN. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE SITE PLAN AMENDMENT AND APPROVAL OF THE DEVELOPMENT SERVICES DEPARTMENT.
2. CONTRACTOR TO FIELD VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
3. ANY DAMAGE TO EXISTING IMPROVEMENTS SUCH AS PAVEMENT, SIDEWALKS, CURB AND GUTTERS CAUSED BY THE INSTALLATION OF IMPROVEMENTS SHALL BE REPAIRED TO LIKE NEW CONDITION.
4. ALL DIRT, MUD, ROCKS, DEBRIS, ETC SPILLED, TRACKED, OR OTHERWISE DEPOSITED ON ANY EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY BY CONTRACTOR.
5. EROSION CONTROLS SHALL BE IN PLACE PRIOR TO ANY SITE DISTURBANCE.
6. ALL DISTURBED NATURAL AREAS SHALL BE REVEGETATED.
7. NO SLOPES TO EXCEED 15%.
8. APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.
9. ADDITIONAL ELECTRIC EASEMENTS MAY BE REQUIRED AT A LATER DATE.
10. WATER SERVICE WILL BE PROVIDED BY WTCPUA.
11. FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.
12. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED.
13. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, CONTRACTOR TO UTILIZE APPROPRIATE TXDOT TRAFFIC CONTROL STANDARDS AND DETAILS INCLUDED WITHIN THIS PLANSET.

ADA NOTES:

PER TEXAS ACCESSIBILITY STANDARDS 68.104, ACCESSIBLE PARKING SPACES:

(a) A PAVED ACCESSIBLE PARKING SPACE MUST INCLUDE:
- (1) THE INTERNATIONAL SYMBOL OF ACCESSIBILITY PAINTED CONSPICUOUSLY ON THE SURFACE IN A COLOR THAT CONTRASTS THE PAVEMENT;
- (2) THE WORDS "NO PARKING" PAINTED ON ANY ACCESS AISLE ADJACENT TO THE PARKING SPACE. THE WORDS MUST BE PAINTED:
  - (A) IN ALL CAPITAL LETTERS;
  - (B) WITH A LETTER HEIGHT OF AT LEAST TWELVE INCHES, AND A STROKE WIDTH OF AT LEAST TWO INCHES; AND
  - (C) CENTERED WITHIN EACH ACCESS AISLE ADJACENT TO THE PARKING SPACE; AND
- (3) A SIGN IDENTIFYING THE CONSEQUENCES OF PARKING ILLEGALLY IN A PAVED ACCESSIBLE PARKING SPACE. THE SIGN MUST:
  - (A) AT A MINIMUM STATE "VIOLATORS SUBJECT TO FINE AND TOWING" IN A LETTER HEIGHT OF AT LEAST ONE INCH;
  - (B) BE MOUNTED ON A POLE, POST, WALL OR FREESTANDING BOARD;
  - (C) BE NO MORE THAN EIGHT INCHES BELOW A SIGN REQUIRED BY TEXAS ACCESSIBILITY STANDARDS, 502.6; AND
  - (D) BE INSTALLED SO THAT THE BOTTOM EDGE OF THE SIGN IS NO LOWER THAN 48 INCHES AND NO HIGHER THAN 80 INCHES ABOVE GROUND LEVEL.

(b) A PARKING SPACE IDENTIFICATION SIGN THAT COMPLIES WITH TEXAS ACCESSIBILITY STANDARDS, 502.6, THAT INCLUDES THE REQUIREMENTS IN SUBSECTION (A)(3)(A) SATISFIES SUBSECTION (A)(3).

Know what's below. Call before you dig.

CAUTION - ELECTRICITY PRESENT

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MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: PROPOSED SITE PLAN PHASE II

PROJECT NO. 0193.001

SHEET NO. C13

IMAGES:
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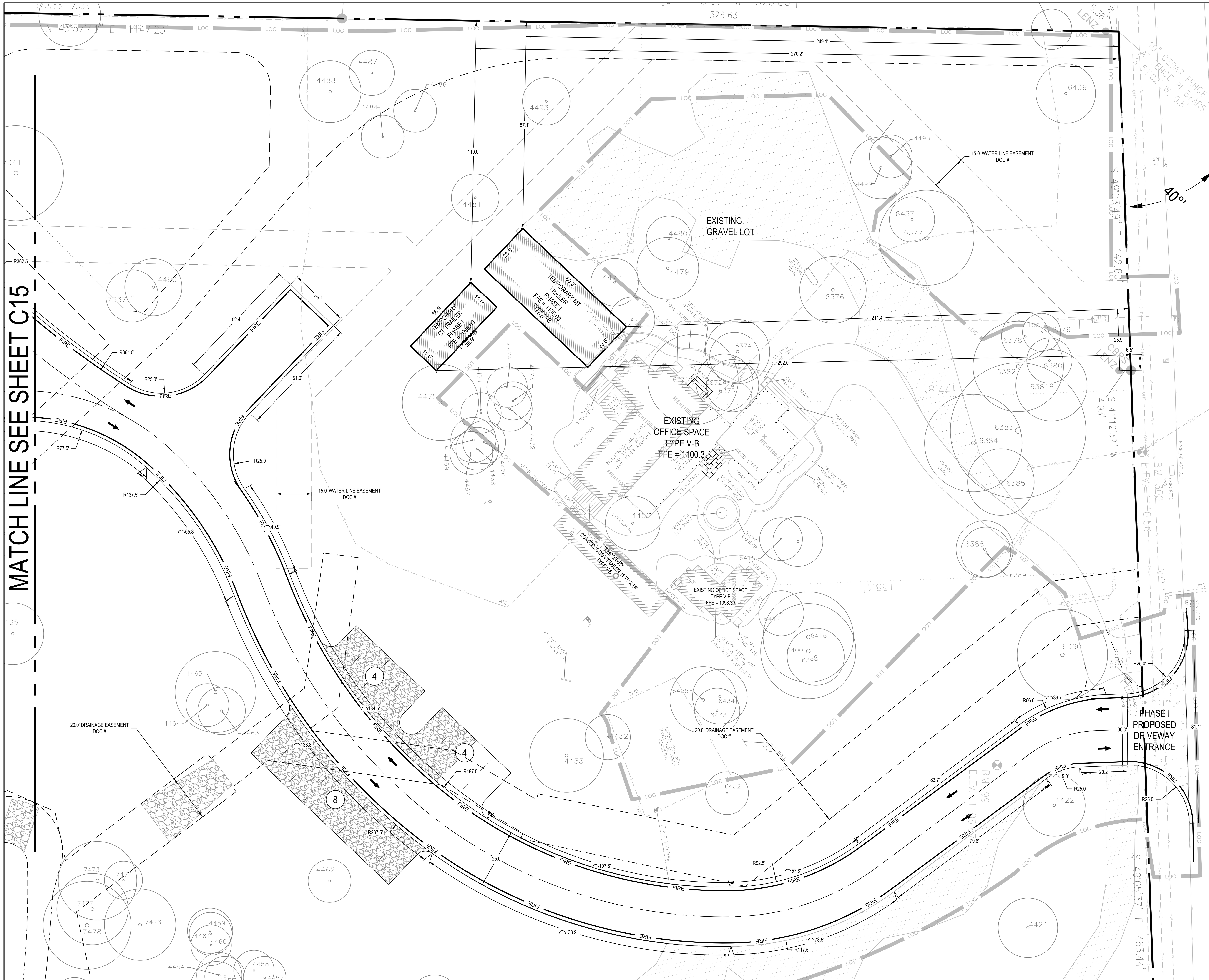
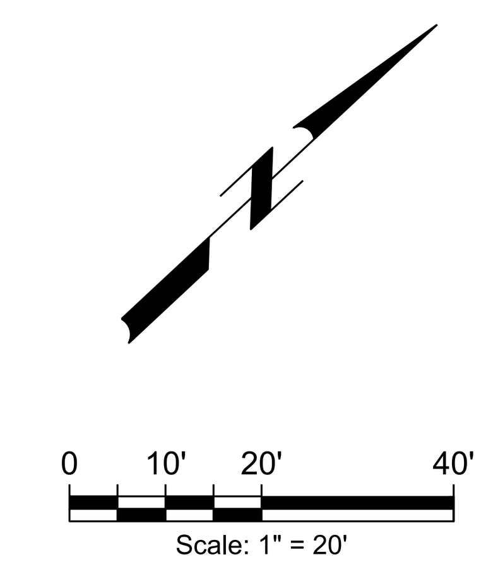
FILE: C:\Users\2020j\Box\MIGL ENGINEERING\0193.001 LANDWEST OFFICE SITE RR1108 CAD\PLANS\0193.001 LANDWEST-PSITE PLAN PH2.dwg LAST SAVED: 9/24/2025 1:34:25 PM BY: 2020J LAYOUT: Prop Site Plan PH II





811
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NO.	DATE	REVISIONS	RECOM'D

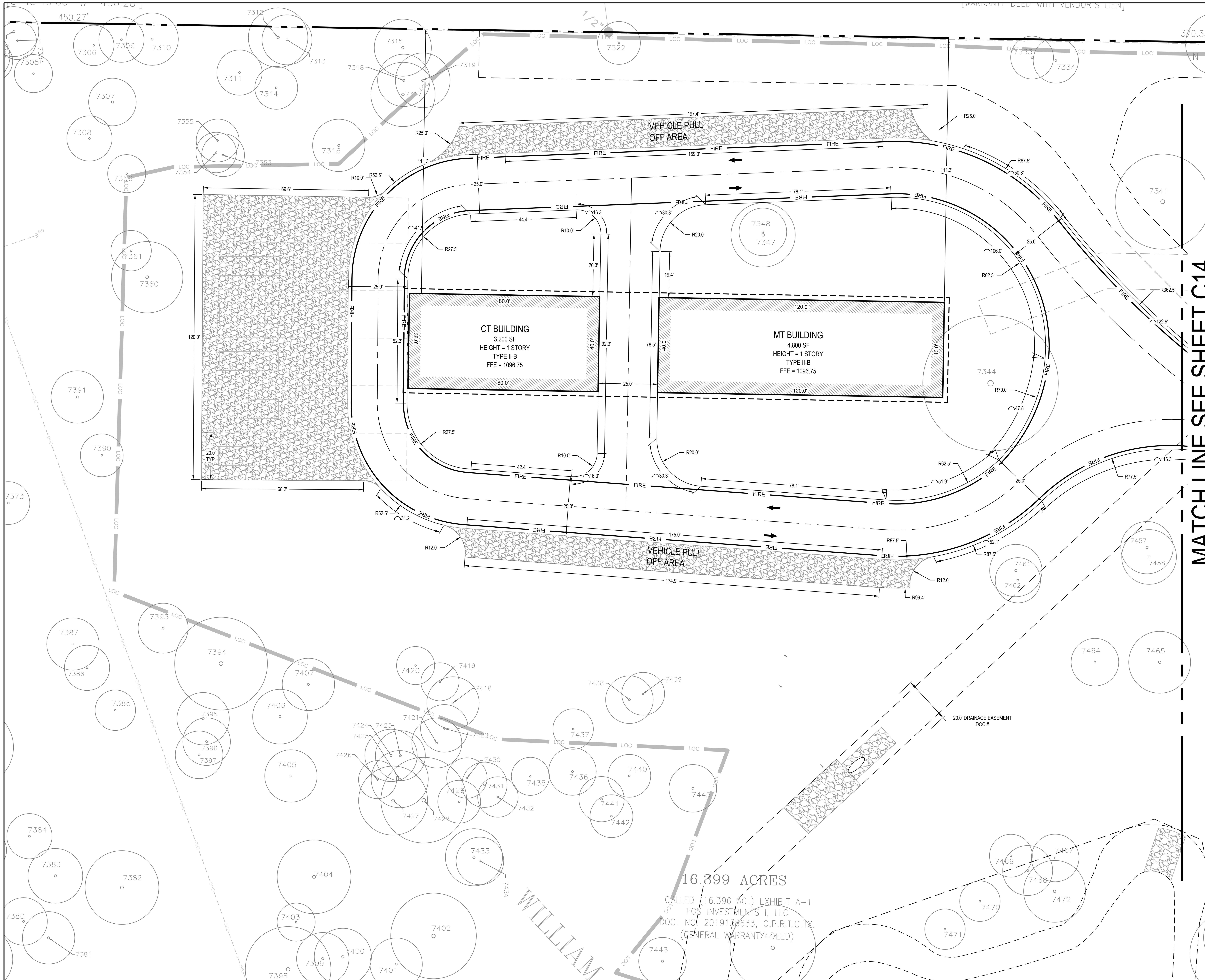
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED DIMENSIONAL CONTROL PLAN PHASE I (1 OF 2)

PROJECT NO.
0193.001

SHEET NO.
C14



0 10' 20' 40'
Scale: 1" = 20'

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STATE OF TEXAS
TAMMI R. MIGL
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September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

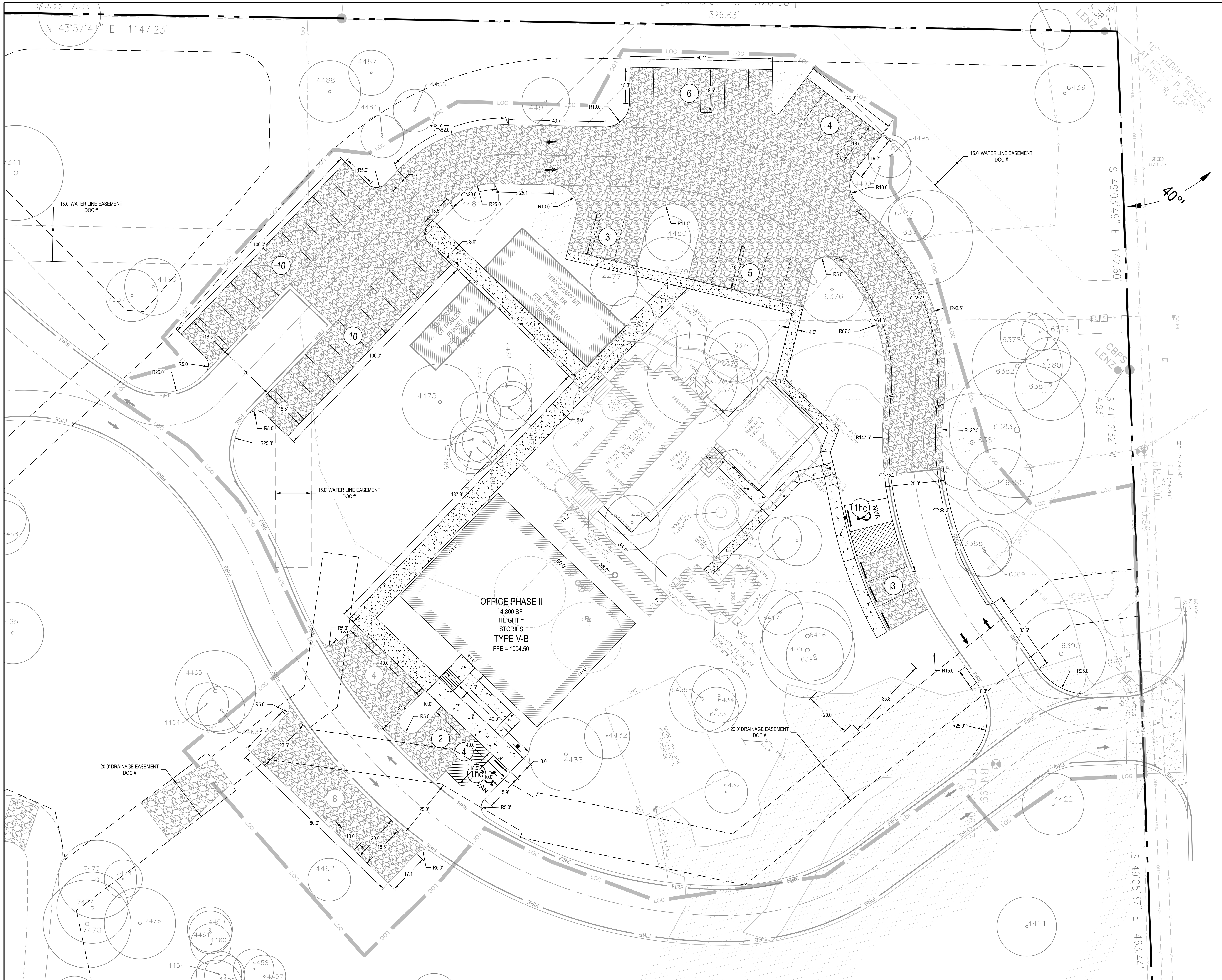
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED DIMENSIONAL CONTROL PLAN PHASE I (2 OF 2)

PROJECT NO.
0193.001

SHEET NO.
C15



0 10' 20' 40'
Scale: 1" = 20'

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STATE OF TEXAS
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September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT: LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

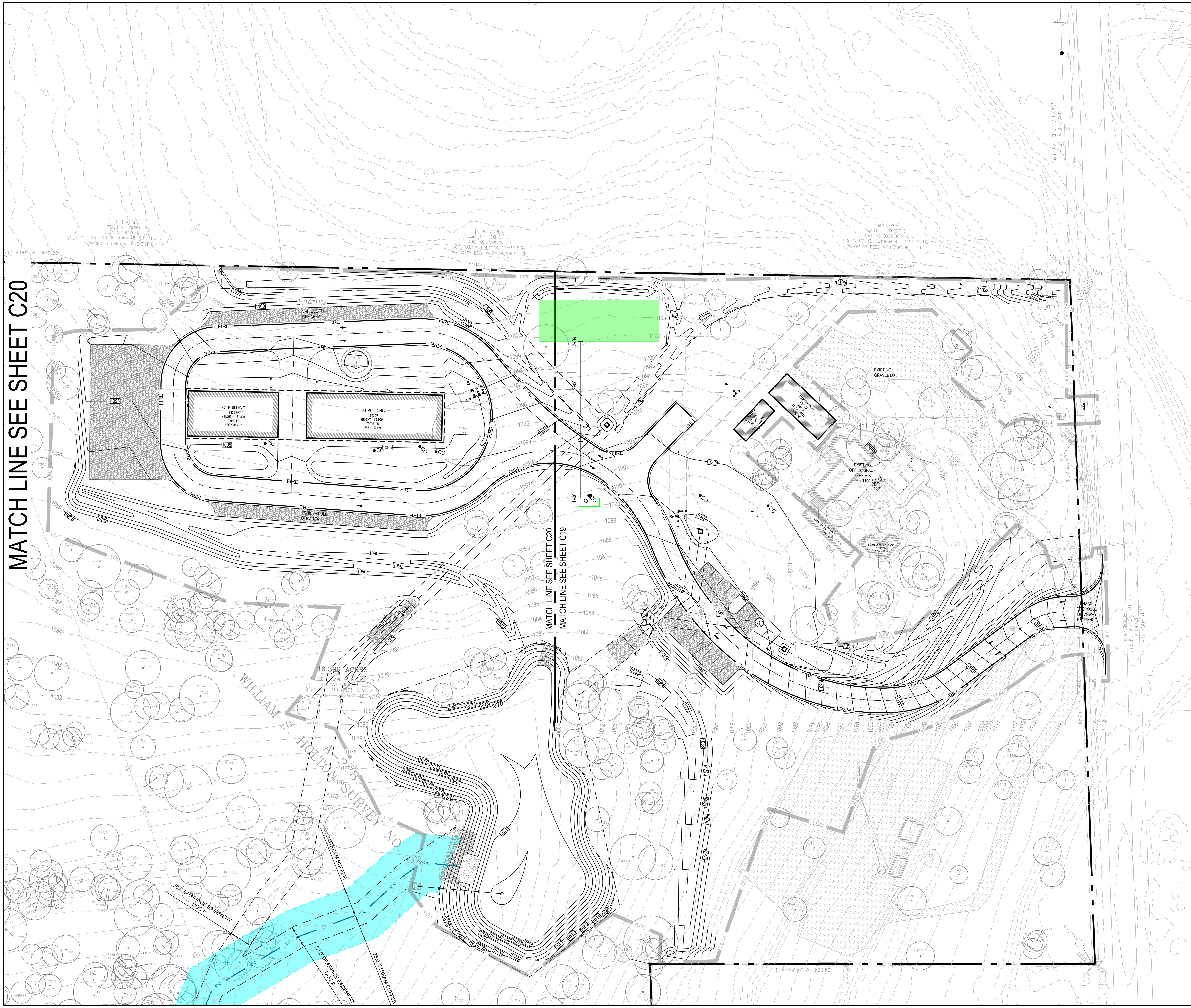
PROJECT: LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: PROPOSED DIMENSIONAL CONTROL PLAN PHASE II

PROJECT NO. 0193.001

SHEET NO. C16

16 OF 42



NOTES:

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2. SHOULD THE CONTRACTOR FIND DISCREPANCIES WITH RECORD INFORMATION DRAWN/ NOTED ON THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF SUCH CONDITIONS.
3. THE CONTRACTOR SHALL CONTACT THE AREA "ONE CALL" SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
4. ANY DAMAGE TO EXISTING IMPROVEMENTS SUCH AS PAVEMENT, SIDEWALKS, CURB AND GUTTERS CAUSED BY THE INSTALLATION OF IMPROVEMENTS SHALL BE REPAIRED TO LIKE NEW CONDITION.
5. THE CURRENT CITY OF AUSTIN STANDARD CONSTRUCTION SPECIFICATIONS SHALL COVER MATERIAL AND METHODS USED TO DO THIS WORK.
6. ALL DISTURBED NATURAL AREAS SHALL BE REVEGETATED.
7. SLEEVES UNDER PAVING FOR IRRIGATION LINES MAY BE REQUIRED.
8. THE MAXIMUM LONGITUDINAL SLOPE OF 1:20 SHALL BE USED ON ALL SIDEWALKS.
9. THE MAXIMUM CROSS SLOPE OF 1:50 SHALL BE USED ON ALL SIDEWALKS AND ACCESSIBLE AREAS.
10. APPROVAL OF THESE PLANS BY THE TRAVIS COUNTY INDICATES COMPLIANCE WITH APPLICABLE COUNTY REGULATIONS ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS SUCH AS THE 2010 STANDARDS FOR ACCESSIBLE DESIGN OR THE 2012 TEXAS ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.
11. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50. [ANSI 403.3]
12. ACCESSIBLE PARKING SPACES MUST BE LOCATED ON A SURFACE WITH A SLOPE NOT EXCEEDING 1:50. [ANSI 502.5]
13. SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP. [ANSI 403.3]
14. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 IN. THE MAXIMUM HORIZONTAL PROJECTION IS 30 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:12 AND 1:15, AND 40 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:16 AND 1:20. [ANSI 405.2 - 405.6]
15. ALL ROOF DRAIN LEADS TO HAVE A MINIMUM SLOPE OF 1.5% AND COVER OF 18" IN NON VEHICLE TRAFFIC AREAS AND 24" IN VEHICLE TRAFFIC AREAS.
16. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE DEVELOPMENT SERVICES DEPARTMENT, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DETENTION AND FILTRATION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
17. CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1 800 344 8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET ROW.
18. 6' CURB ALONG RAMP TO TRANSITION INTO TOP OF WALL.
19. SOIL BENEATH SIDEWALKS SHOULD BE COMPACTED TO 95% OF ITS MAXIMUM POSSIBLE DRY DENSITY AS DETERMINED BY A PROCTOR TEST.

GRADING SPOT ELEVATIONS

•	PAVEMENT
• TC	TOP OF CONCRETE
• HP	HIGH POINT
• FG	FINISHED GRADE
• TW	TOP OF WALL
• BW	BOTTOM OF WALL
• FS	FINISHED SLAB
• FL	FLOWLINE
• TG	TOP OF GRATE
• BC	BACK OF CURB
• WD	WOOD DECK

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STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

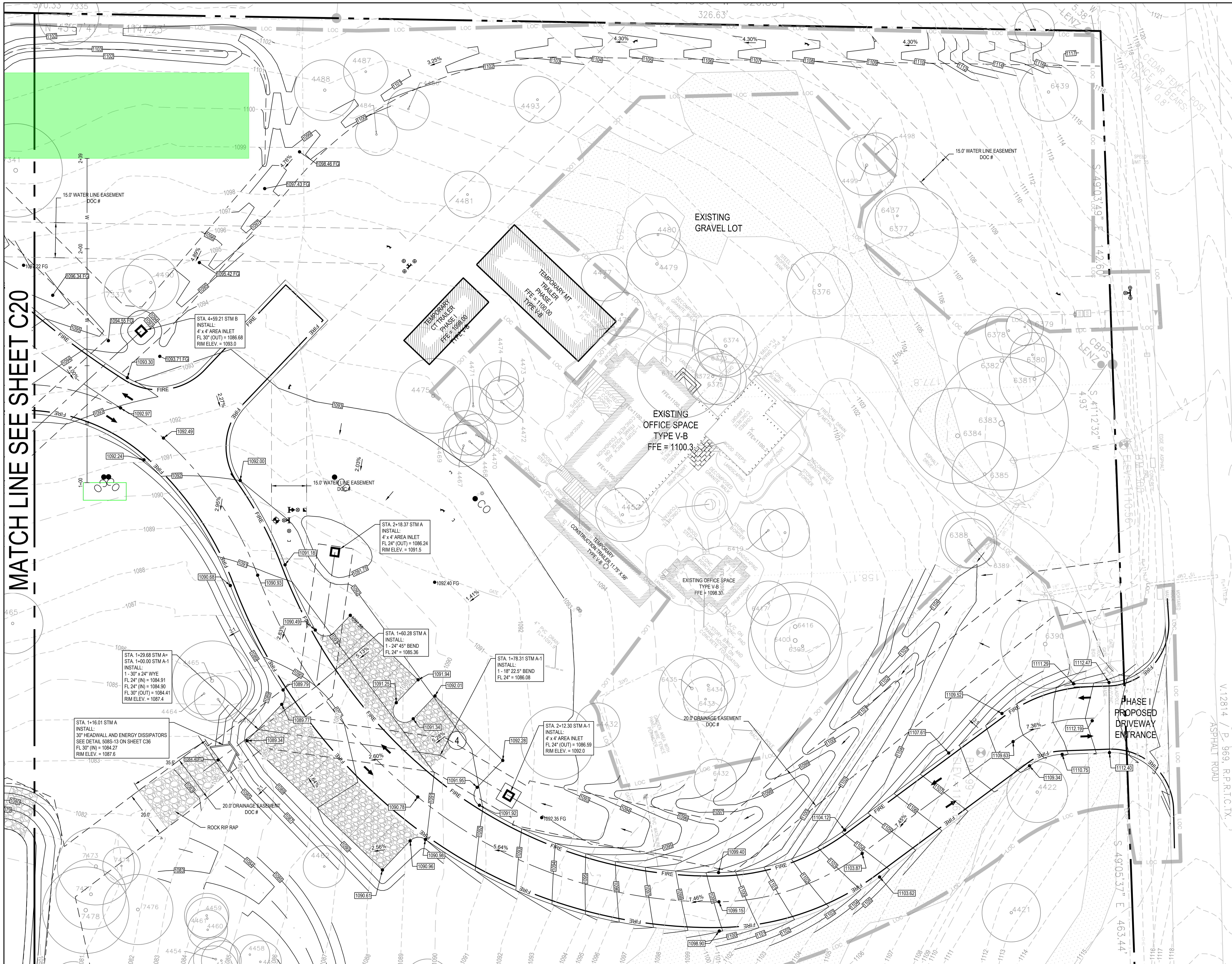
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
OVERALL GRADING PLAN

PROJECT NO.
0193.001

SHEET NO.
C18



0 10' 20' 40'
Scale: 1" = 20'

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GRADING SPOT ELEVATIONS

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● TC	TOP OF CONCRETE
● HP	HIGH POINT
● FG	FINISHED GRADE
● TW	TOP OF WALL
● BW	BOTTOM OF WALL
● FS	FINISHED SLAB
● FL	FLOWLINE
● TG	TOP OF GRATE
● BC	BACK OF CURB
● WD	WOOD DECK

811 Know what's below. Call before you dig.

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STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

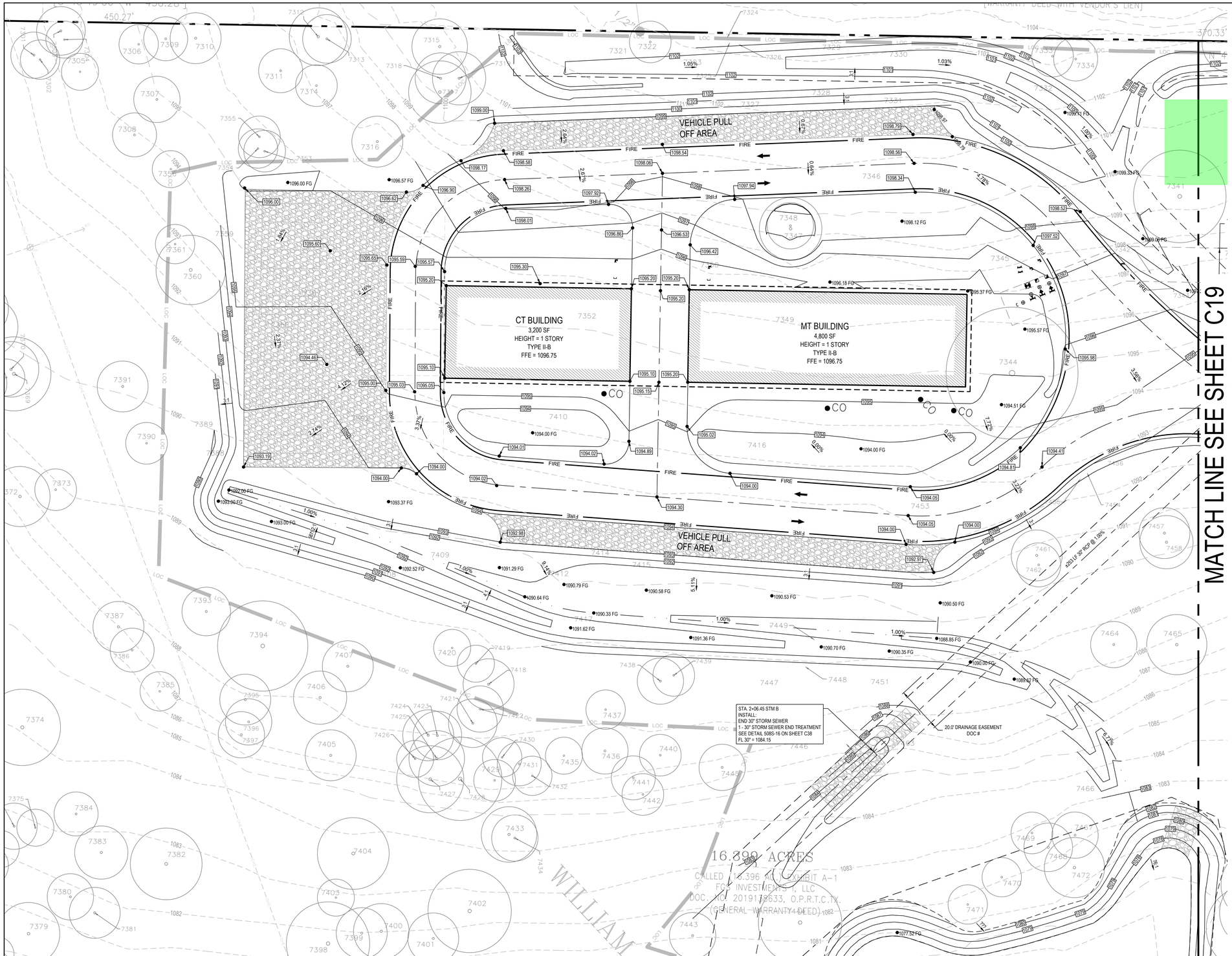
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED GRADING AND DRAINAGE PLAN PHASE I (1 of 2)

PROJECT NO.
0193.001

SHEET NO.
C19
19 OF 42



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8. THE MAXIMUM LONGITUDINAL SLOPE OF 1:20 SHALL BE USED ON ALL SIDEWALKS.
9. THE MAXIMUM CROSS SLOPE OF 1:50 SHALL BE USED ON ALL SIDEWALKS AND ACCESSIBLE AREAS.
10. APPROVAL OF THESE PLANS BY THE TRAVIS COUNTY INDICATES COMPLIANCE WITH APPLICABLE COUNTY REGULATIONS ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS SUCH AS THE 2010 STANDARDS FOR ACCESSIBLE DESIGN OR THE 2012 TEXAS ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.
11. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50. [ANSI 403.3]
12. ACCESSIBLE PARKING SPACES MUST BE LOCATED ON A SURFACE WITH A SLOPE NOT EXCEEDING 1:50. [ANSI 502.5]
13. SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP. [ANSI 403.3]
14. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 IN. THE MAXIMUM HORIZONTAL PROJECTION IS 30 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:12 AND 1:15, AND 40 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:16 AND 1:20. [ANSI 405.2 - 405.6]
15. ALL ROOF DRAIN LEADS TO HAVE A MINIMUM SLOPE OF 1.5% AND COVER OF 18" IN NON VEHICLE TRAFFIC AREAS AND 24" IN VEHICLE TRAFFIC AREAS.
16. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE DEVELOPMENT SERVICES DEPARTMENT, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DETENTION AND FILTRATION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
17. CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1 800 344 8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET ROW.
18. 6' CURB ALONG RAMP TO TRANSITION INTO TOP OF WALL.
19. SOIL BENEATH SIDEWALKS SHOULD BE COMPACTED TO 95% OF ITS MAXIMUM POSSIBLE DRY DENSITY AS DETERMINED BY A PROCTOR TEST.

GRADING SPOT ELEVATIONS

●		PAVEMENT
●	TC	TOP OF CONCRETE
●	HP	HIGH POINT
●	FG	FINISHED GRADE
●	TW	TOP OF WALL
●	BW	BOTTOM OF WALL
●	FS	FINISHED SLAB
●	FL	FLOWLINE
●	TG	TOP OF GRATE
●	BC	BACK OF CURB
●	WD	WOOD DECK

811
Know what's **below.**
Call before you dig.

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

TAMMI R. MIGL
92607
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

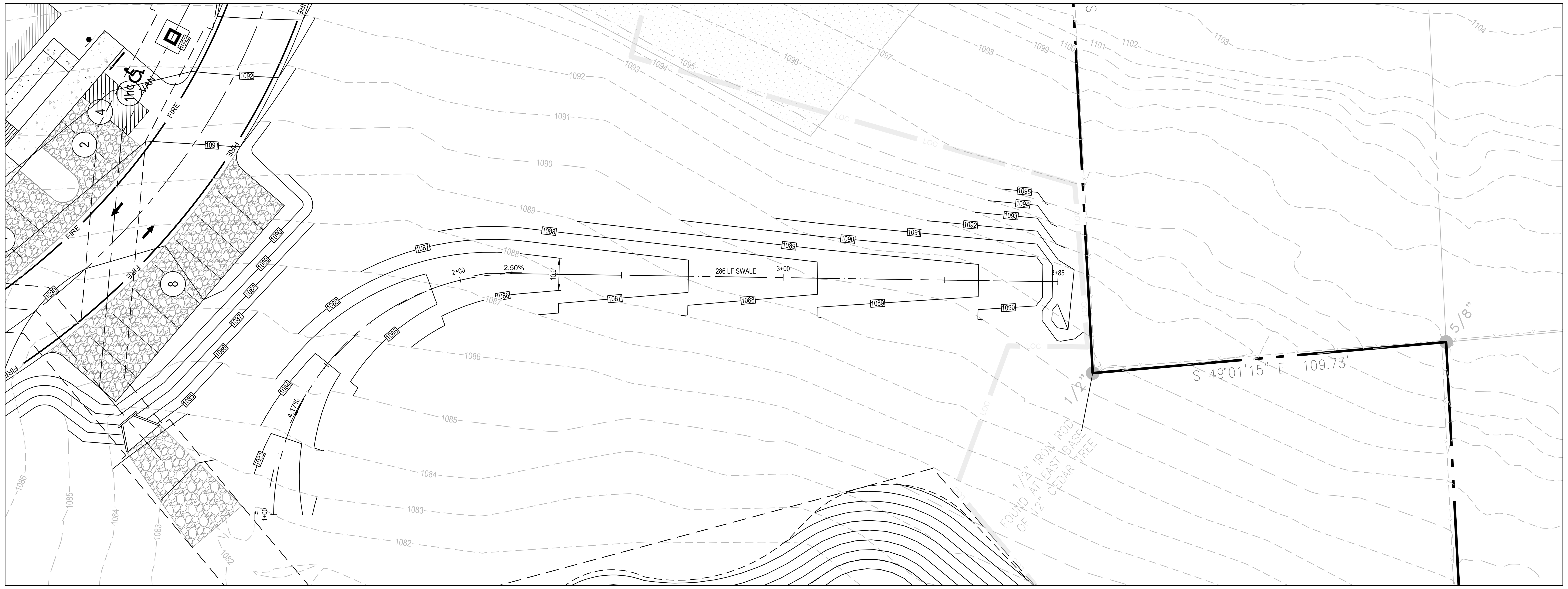
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED GRADING AND DRAINAGE PLAN PHASE I (2 of 2)

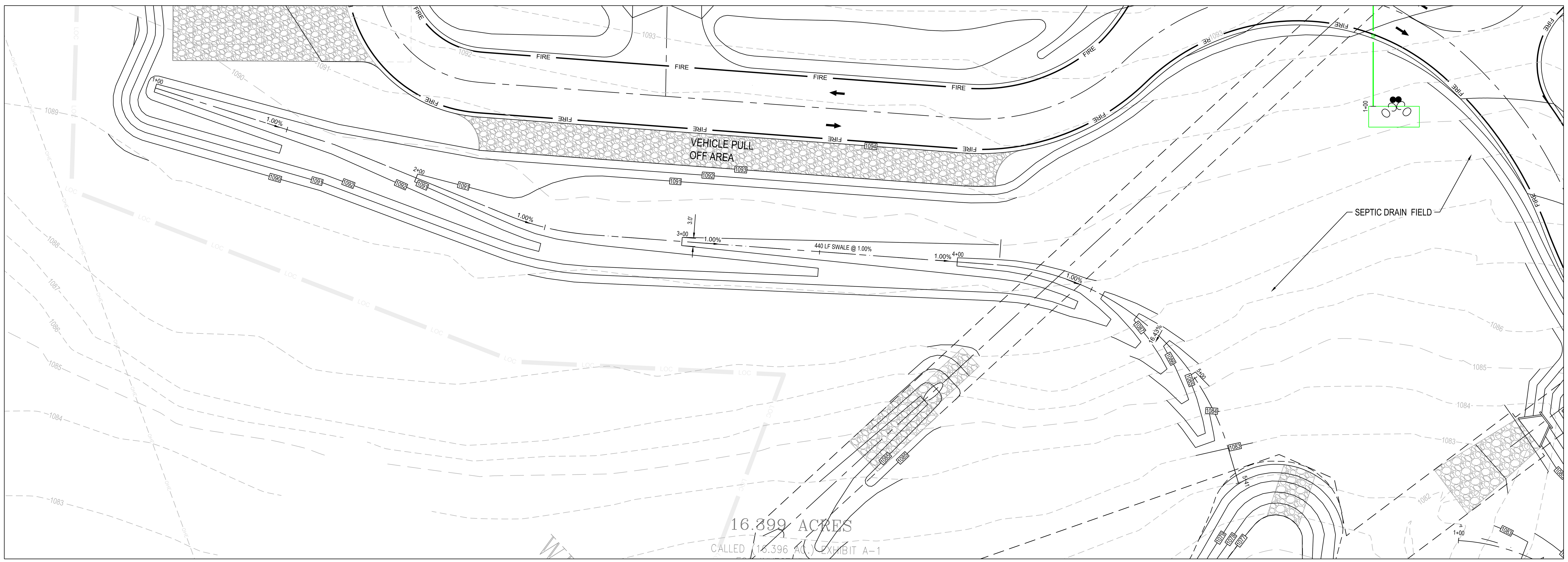
PROJECT NO.
0193.001

SHEET NO.
C20
20 OF 42



EAST SWALE

0 10' 20' 40'
Scale: 1" = 20'



WEST SWALE

0 10' 20' 40'
Scale: 1" = 20'

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STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

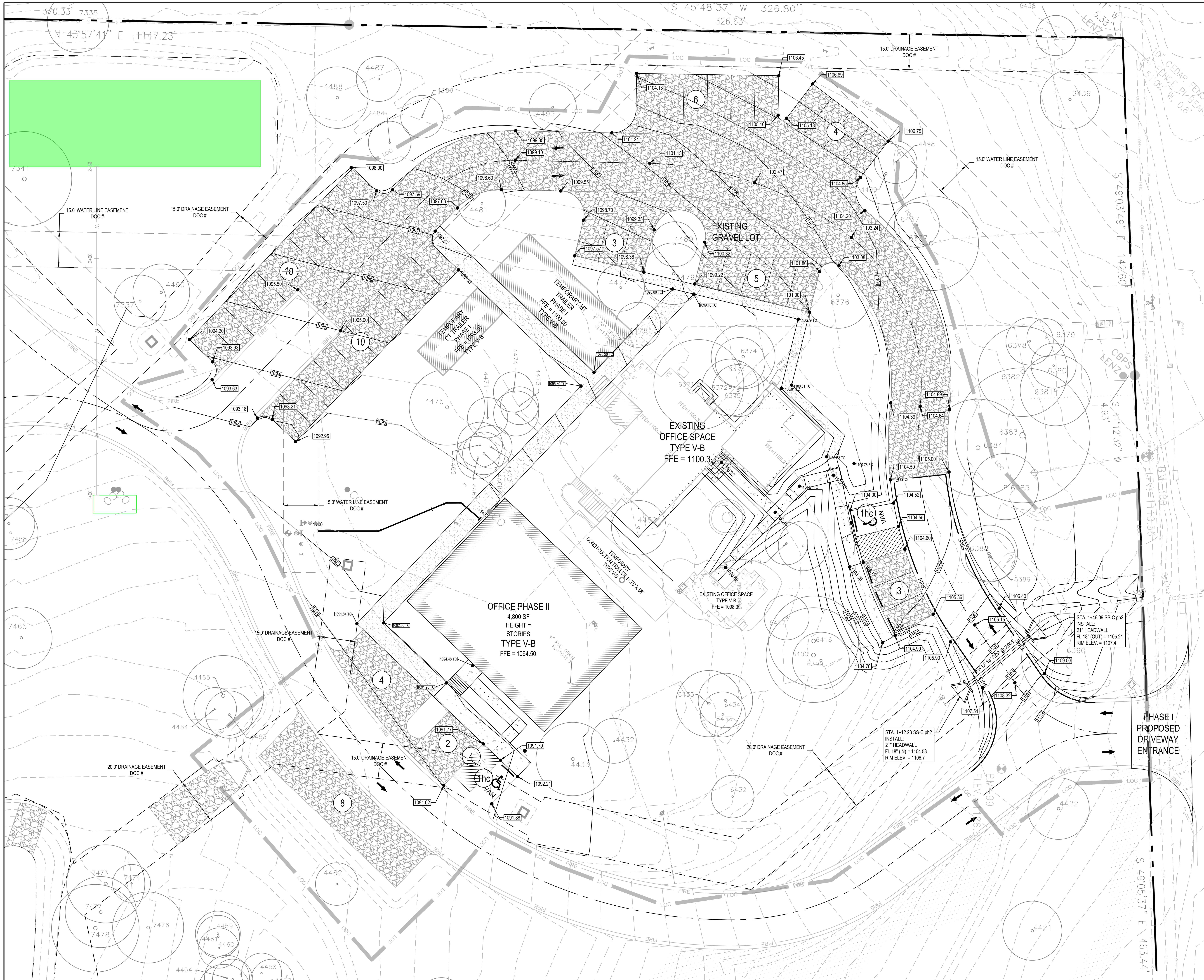
CLIENT: LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: SWALE GRADING PLANS

PROJECT NO. 0193.001

SHEET NO. C20
20 OF 42



GRADING SPOT ELEVATIONS

●		PAVEMENT
●	TC	TOP OF CONCRETE
●	HP	HIGH POINT
●	FG	FINISHED GRADE
●	TW	TOP OF WALL
●	BW	BOTTOM OF WALL
●	FS	FINISHED SLAB
●	FL	FLOWLINE
●	TG	TOP OF GRATE
●	BC	BACK OF CURB
●	WD	WOOD DECK

811 Know what's below. Call before you dig.

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

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September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

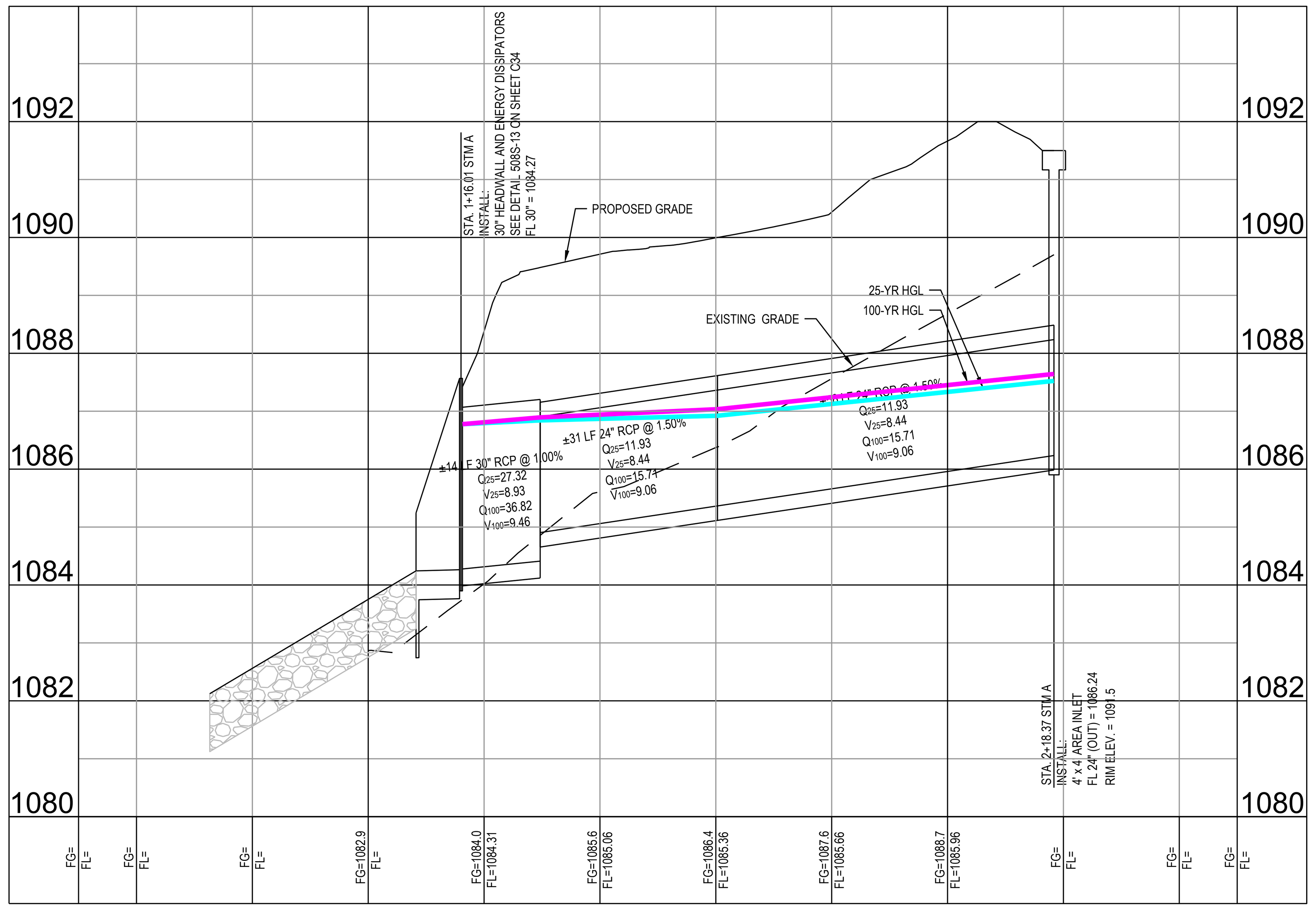
CLIENT: LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

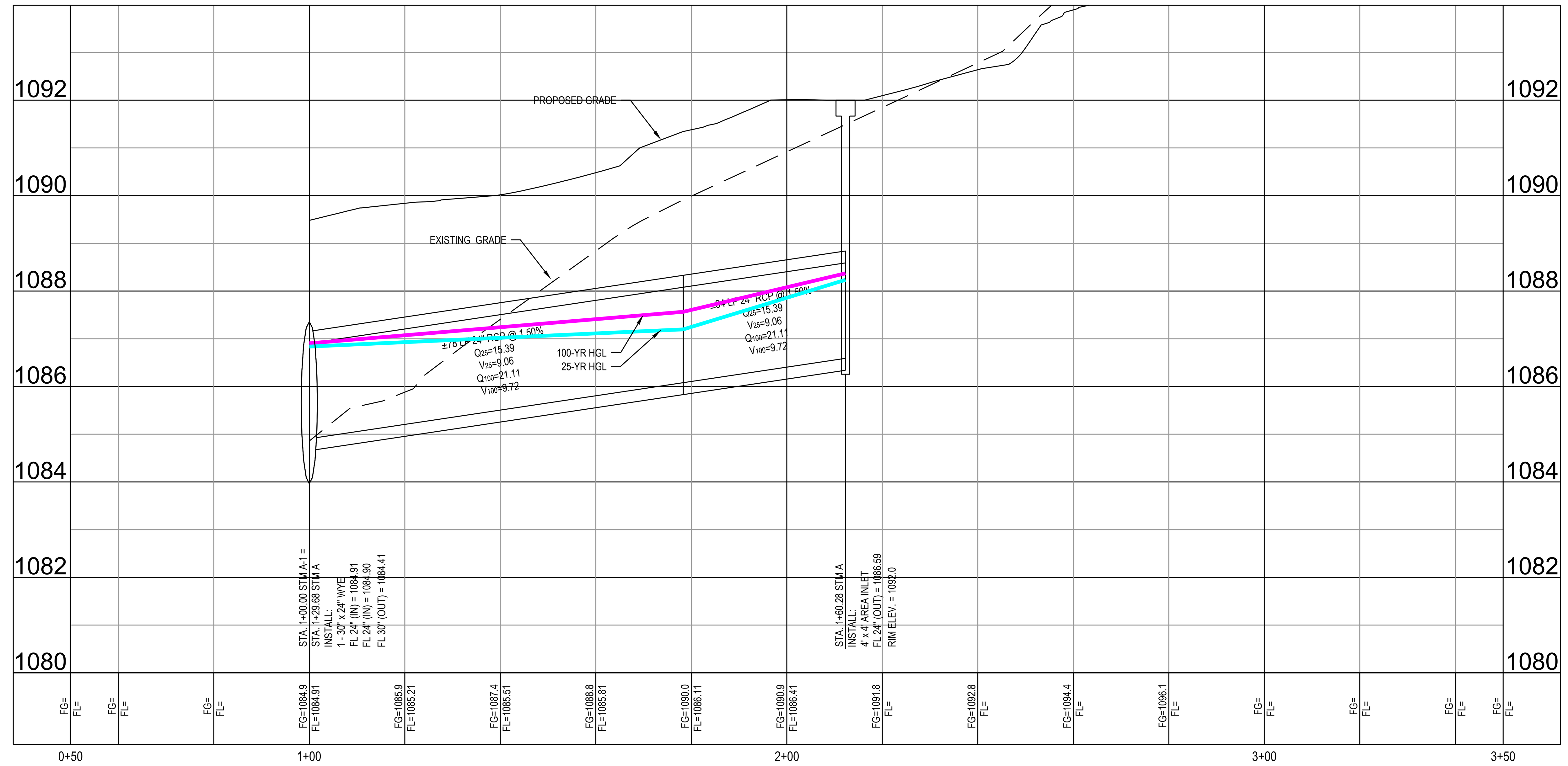
SHEET TITLE: PROPOSED GRADING AND DRAINAGE PLAN PHASE II

PROJECT NO. 0193.001

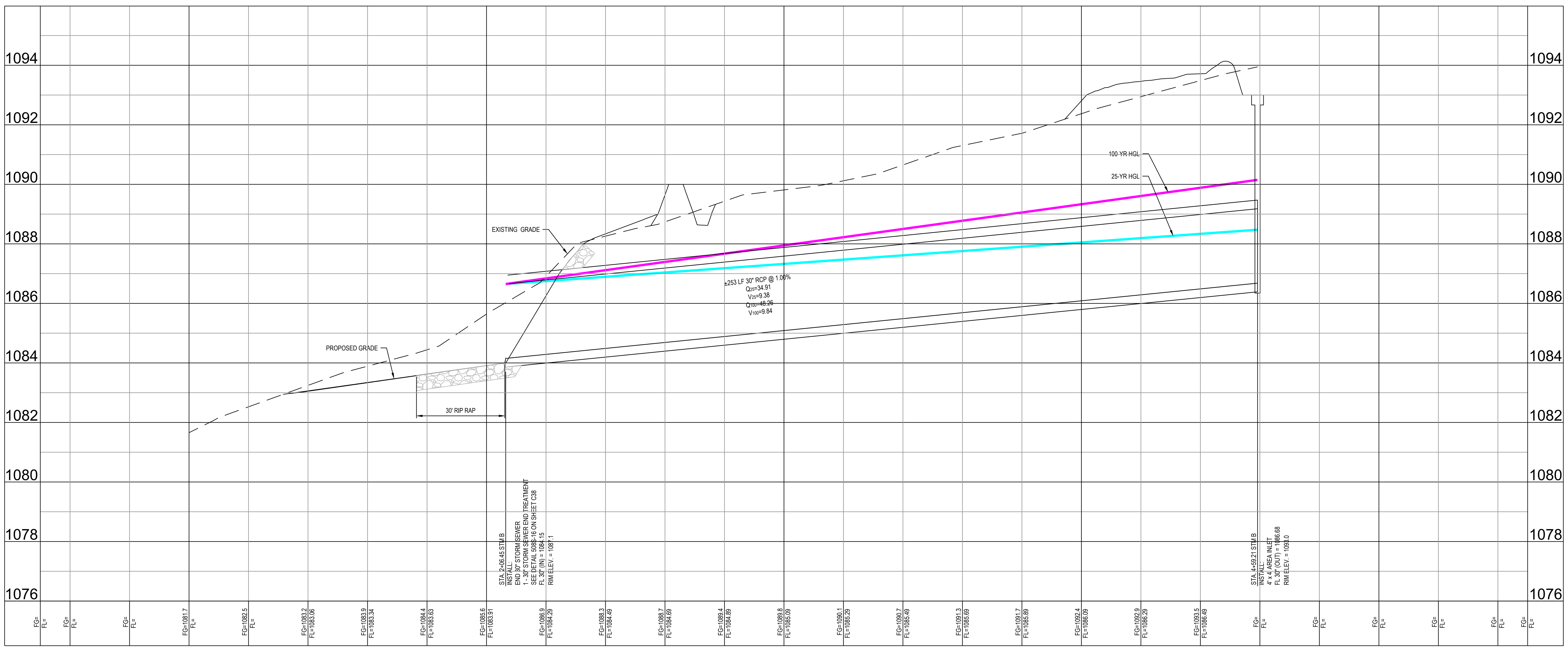
SHEET NO. C22



STM A
STA. 0+50.00 - STA. 2+50.00
SCALE:
1" = 20' (HOR.)
1" = 2' (VERT.)



STM A-1
STA. 0+50.00 - STA. 3+50.00
SCALE:
1" = 20' (HOR.)
1" = 2' (VERT.)



STM B
STA. 0+50.00 - STA. 5+50.00
SCALE:
1" = 20' (HOR.)
1" = 2' (VERT.)

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September 24, 2025

RECOM'D | REVISIONS | DATE | NO.

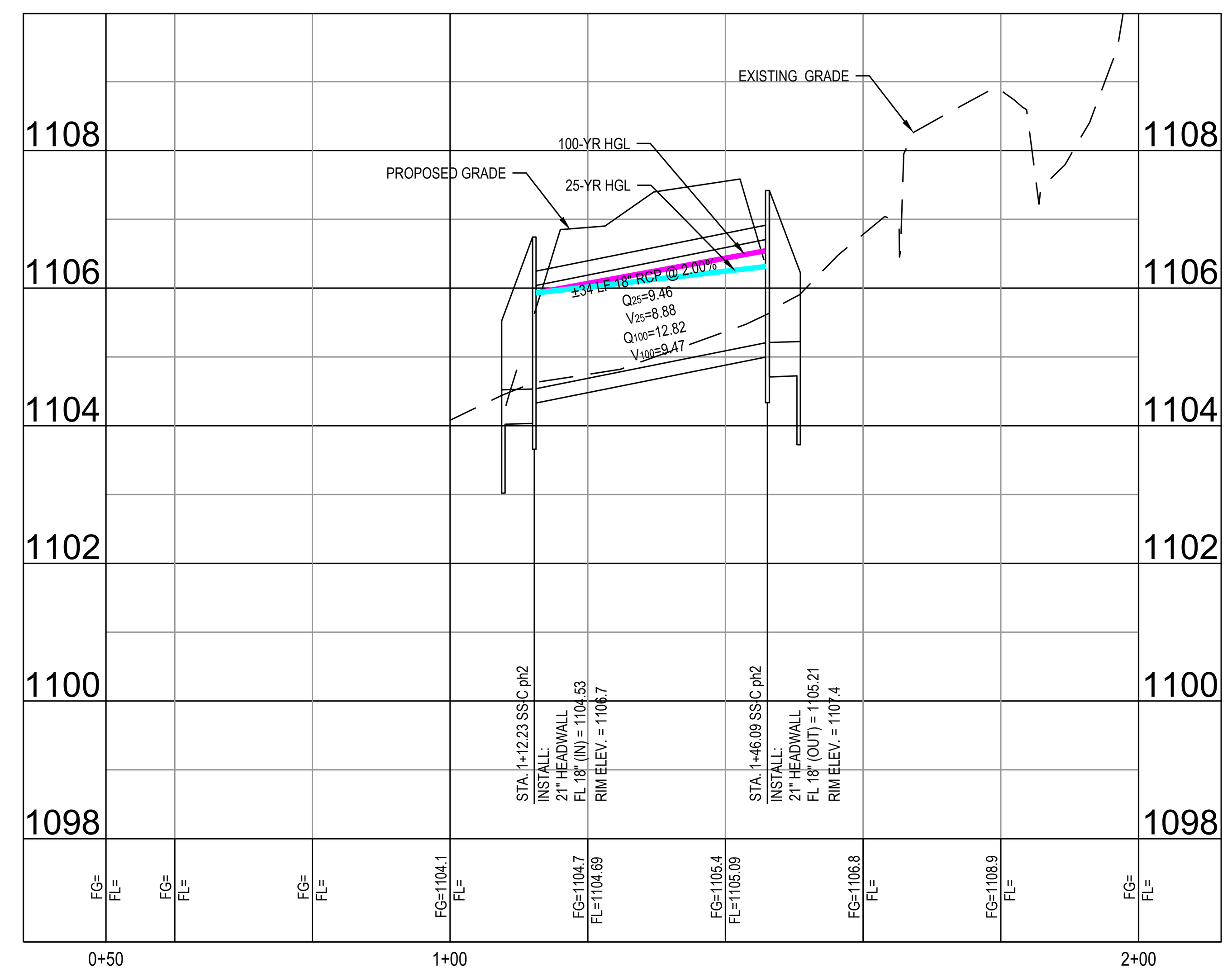
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED STORM SEWER PROFILES A, A-1 & B

PROJECT NO.
0193.001

SHEET NO.
C23
23 OF 42



SS-C ph2
STA. 0+50.00 - STA. 2+00.00
SCALE:
1" = 20' (HOR.)
1" = 2' (VERT.)

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STATE OF TEXAS
TAMMI R. MIGL
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LICENSED
PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED STORM SEWER
LINE C

PROJECT NO.
0193.001

SHEET NO.
C24
24 OF 42

Elevations Table

Number	Minimum Elevation	Maximum Elevation	Color
1	-6.800	-4.000	
2	-4.000	-2.000	
3	-2.000	0.000	
4	0.000	2.000	
5	2.000	4.000	
6	4.000	6.000	
7	6.000	6.369	

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NO.	DATE	REVISIONS	RECOM'D

CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
CUT-FILL MAP
PHASE I AND II

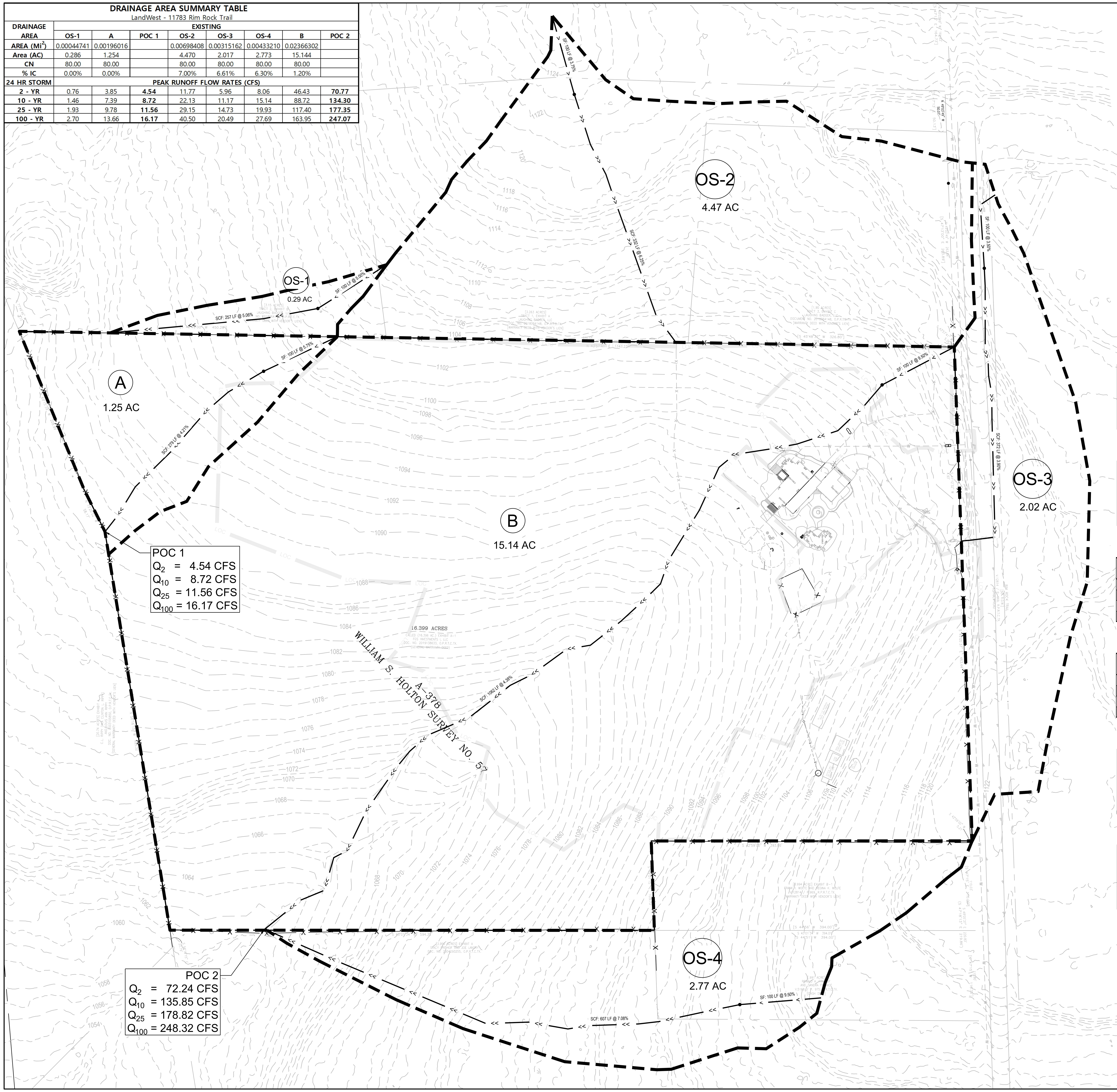
PROJECT NO.
0193.001

SHEET NO.
25
25 OF 42

DRAINAGE AREA SUMMARY TABLE

LandWest - 11783 Rim Rock Trail

DRAINAGE AREA	EXISTING							
	OS-1	A	POC 1	OS-2	OS-3	OS-4	B	POC 2
AREA (Mi^2)	0.00044741	0.00196016		0.00698408	0.00315162	0.00433210	0.02366302	
Area (AC)	0.286	1.254		4.470	2.017	2.773	15.144	
CN	80.00	80.00		80.00	80.00	80.00	80.00	
% IC	0.00%	0.00%		7.00%	6.61%	6.30%	1.20%	
24 HR STORM	PEAK RUNOFF FLOW RATES (CFS)							
2 - YR	0.76	3.85	**4.54**	11.77	5.96	8.06	46.43	**70.77**
10 - YR	1.46	7.39	**8.72**	22.13	11.17	15.14	88.72	**134.30**
25 - YR	1.93	9.78	**11.56**	29.15	14.73	19.93	117.40	**177.35**
100 - YR	2.70	13.66	**16.17**	40.50	20.49	27.69	163.95	**247.07**



LEGEND

- SHEET FLOW
- SHALLOW CONCENTRATED FLOW
- CHANNEL FLOW
- EXISTING DRAINAGE AREA DELINEATION
- (B) 10.28 AC — DRAINAGE AREA

0 30' 60' 120'
Scale: 1" = 60'

Sheet Flow Surface Codes

- a smooth surface
- b fallow (no residue)
- c cultivated < 20% Res.
- d cultivated > 20% Res.
- e grass - range, short
- f grass, dense
- g grass, bermuda
- h woods, light
- i woods, dense
- j range, natural

Shallow Concentrated Surface Codes

- u unpaved surface
- p paved surface

Manning's coefficients

a smooth surface	0.011
b fallow (no residue)	0.05
c cultivated < 20% Res.	0.06
d cultivated > 20% Res.	0.17
e grass - range, short	0.15
f grass, dense	0.24
g grass, bermuda	0.41
h woods, light	0.4
i woods, dense	0.8
j range, natural	0.13
Atlas 14 2-year 24-hr NZ	4.06
Atlas 14 2-year 24-hr SZ	4.14

SCS TR-55 TIME OF CONCENTRATION AND TRAVEL TIME - EXISTING CONDITIONS

DRAINAGE AREA "OS-1"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0500	h	**0.4**	n/a	n/a	n/a	0.218 hours
SHALLOW CONCENTRATED	257	0.0506	u	n/a	n/a	n/a	**3.63**	0.020 hours

Time of Concentration 0.238 hours
Lag Time 8.560

DRAINAGE AREA "OS-2"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0375	h	**0.4**	n/a	n/a	n/a	0.245 hours
SHALLOW CONCENTRATED	332	0.0625	u	n/a	n/a	n/a	**4.03**	0.023 hours

Time of Concentration 0.268 hours
Lag Time 9.632

DRAINAGE AREA "OS-3"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0350	f	**0.24**	n/a	n/a	n/a	0.167 hours
SHALLOW CONCENTRATED	372	0.0390	u	n/a	n/a	n/a	**3.19**	0.032 hours

Time of Concentration 0.200 hours
Lag Time 7.186

DRAINAGE AREA "OS-4"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0950	h	**0.4**	n/a	n/a	n/a	0.169 hours
SHALLOW CONCENTRATED	607	0.0708	u	n/a	n/a	n/a	**4.29**	0.039 hours

Time of Concentration 0.208 hours
Lag Time 7.487

DRAINAGE AREA "A"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0575	f	**0.24**	n/a	n/a	n/a	0.137 hours
SHALLOW CONCENTRATED	279	0.0421	u	n/a	n/a	n/a	**3.31**	0.023 hours

Time of Concentration 0.160 hours
Lag Time 5.777

DRAINAGE AREA "B"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0950	e	**0.15**	n/a	n/a	n/a	0.077 hours
SHALLOW CONCENTRATED	1062	0.0438	u	n/a	n/a	n/a	**3.38**	0.087 hours

Time of Concentration 0.164 hours
Lag Time 5.917

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STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO. | DATE | REVISIONS | RECOM'D

CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: EXISTING DRAINAGE AREA MAP

PROJECT NO. 0193.001

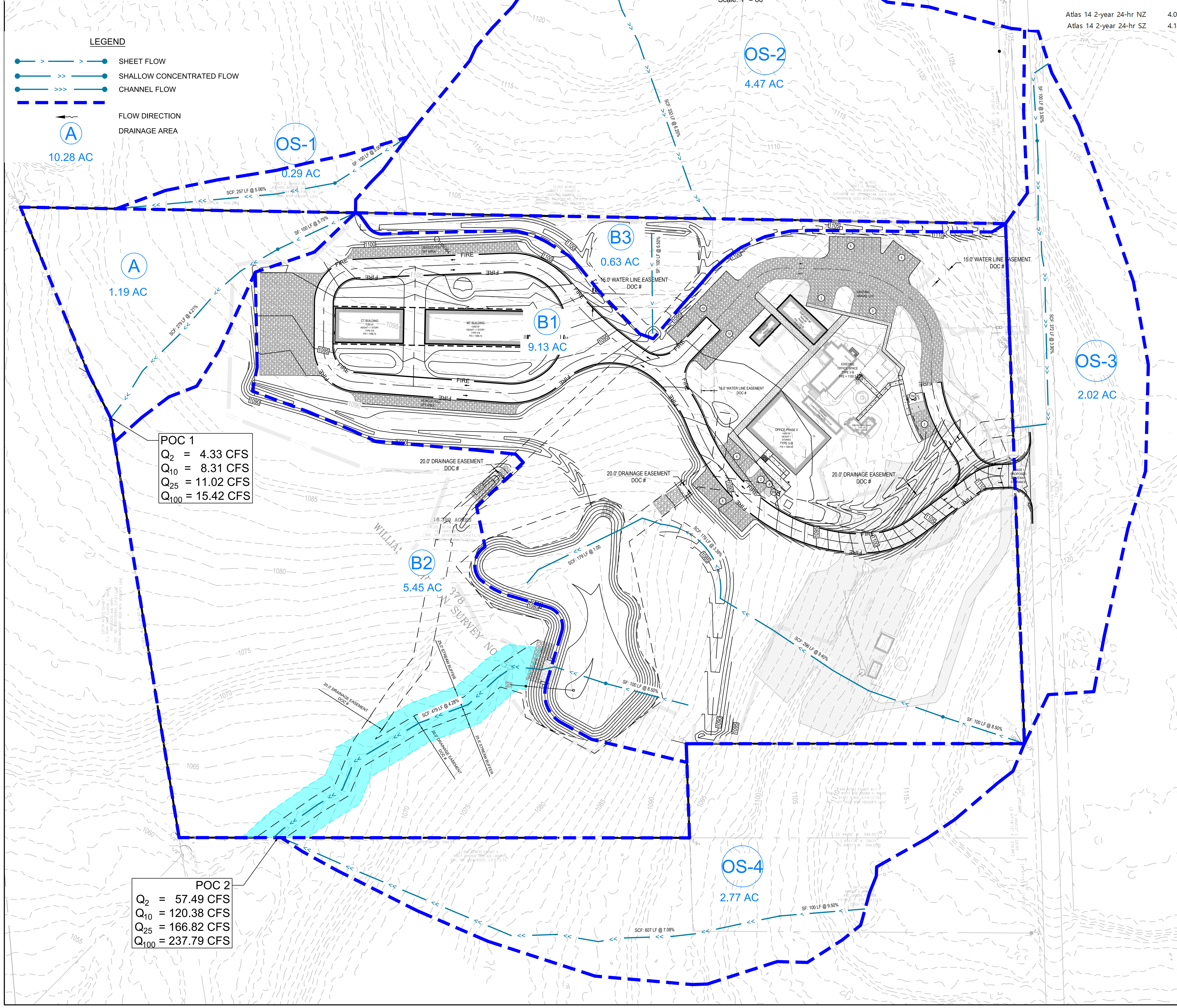
SHEET NO. C26

DRAINAGE AREA SUMMARY TABLE

LandWest - 11783 Rim Rock Trail

DRAINAGE AREA	OS-1	A	POC 1	OS-3	B1	POND	OS-2	OS-4	B2	B3	POC 2
	PROPOSED										
AREA (Mi^2)	0.00044741	0.00185151		0.00315162	0.01426182		0.00698408	0.00433210	0.00852315	0.00098726	
Area (AC)	0.286	1.185		2.017	9.128		4.470	2.773	5.455	0.632	
CN	80.00	80.00		80.00	80.00		80.00	80.00	80.00	80.00	
% IC	0.00%	0.00%		6.61%	33.85%		7.00%	6.30%	0.00%	0.00%	
24 HR STORM	PEAK RUNOFF FLOW RATES (CFS)										
2 - YR	0.76	3.64	**4.33**	5.96	33.38	24.70	11.77	8.06	17.90	2.22	***57.49**
10 - YR	1.46	6.98	**8.31**	11.17	57.90	53.53	22.13	15.14	34.20	4.24	**120.38**
25 - YR	1.93	9.24	**11.02**	14.73	74.43	75.15	29.15	19.93	45.25	5.60	**166.82**
100 - YR	2.70	12.91	**15.42**	20.49	101.34	107.99	40.50	27.69	63.21	7.82	**237.79**

**50% retention of 2 - YR maximum allowed release 57.63 cfs, provided 57.49 cfs*



Sheet Flow Surface Codes

- a smooth surface
- b fallow (no residue)
- c cultivated < 20% Res.
- d cultivated > 20% Res.
- e grass - range, short
- f grass, dense
- g grass, bermuda
- h woods, light
- i woods, dense
- j range, natural

Shallow Concentrated Surface Codes

- u unpaved surface
- p paved surface

Manning's coefficients

a smooth surface	0.011
b fallow (no residue)	0.05
c cultivated < 20% Res.	0.06
d cultivated > 20% Res.	0.17
e grass - range, short	0.15
f grass, dense	0.24
g grass, bermuda	0.41
h woods, light	0.4
i woods, dense	0.8
j range, natural	0.13
Atlas 14 2-year 24-hr NZ	4.06
Atlas 14 2-year 24-hr SZ	4.14

DRAINAGE AREA "A"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0575	f	**0.24**	n/a	n/a	n/a	0.137 hours
SHALLOW CONCENTRATED	279	0.0421	u	n/a	n/a	n/a	**3.31**	0.023 hours

Time of Concentration **0.160 hours**
Lag Time 5.777

DRAINAGE AREA "B1"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0850	f	**0.24**	n/a	n/a	n/a	0.117 hours
SHALLOW CONCENTRATED	296	0.0948	u	n/a	n/a	n/a	**4.97**	0.017 hours
SHALLOW CONCENTRATED	179	0.0339	u	n/a	n/a	n/a	**2.97**	0.017 hours
SHALLOW CONCENTRATED	100	0.0100	u	n/a	n/a	n/a	**1.61**	0.017 hours

Time of Concentration **0.168 hours**
Lag Time 6.038

DRAINAGE AREA "B2"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0650	f	**0.24**	n/a	n/a	n/a	0.130 hours
SHALLOW CONCENTRATED				n/a	n/a	n/a	n/a	0.000 hours
SHALLOW CONCENTRATED				n/a	n/a	n/a	-----------	0.000 hours
OPEN CHANNEL	1	9.0000	n/a	0.05	11	14	**48.98**	0.000 hours

Time of Concentration **0.131 hours**
Lag Time 4.698

DRAINAGE AREA "B3"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	45	0.1111	e	**0.15**	n/a	n/a	n/a	0.038 hours
SHALLOW CONCENTRATED	474	0.0348	u	n/a	n/a	n/a	**3.01**	0.044 hours

Time of Concentration **0.100 hours**
Lag Time 3.600

DRAINAGE AREA "OS-1"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0500	h	**0.4**	n/a	n/a	n/a	0.218 hours
SHALLOW CONCENTRATED	257	0.0506	u	n/a	n/a	n/a	**3.63**	0.020 hours

Time of Concentration **0.238 hours**
Lag Time 8.560

DRAINAGE AREA "OS-2"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0375	h	**0.4**	n/a	n/a	n/a	0.245 hours
SHALLOW CONCENTRATED	332	0.0625	u	n/a	n/a	n/a	**4.03**	0.023 hours

Time of Concentration **0.268 hours**
Lag Time 9.632

DRAINAGE AREA "OS-3"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0350	f	**0.24**	n/a	n/a	n/a	0.167 hours
SHALLOW CONCENTRATED	372	0.0390	u	n/a	n/a	n/a	**3.19**	0.032 hours

Time of Concentration **0.200 hours**
Lag Time 7.186

DRAINAGE AREA "OS-4"

FLOW TYPE	LENGTH (FT)	SLOPE (ft/ft)	SURFACE	MANNINGS "N"	AREA (SF)	WP (FT)	VELOCITY (FPS)	TRAVEL TIME
SHEET	100	0.0950	h	**0.4**	n/a	n/a	n/a	0.169 hours
SHALLOW CONCENTRATED	607	0.0708	u	n/a	n/a	n/a	**4.29**	0.039 hours

Time of Concentration **0.208 hours**
Lag Time 7.487

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Texas Registered Engineering Firm F-16967

STATE OF TEXAS TAMMI R. MIGL 92607 LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO. | DATE | REVISIONS | RECOM'D

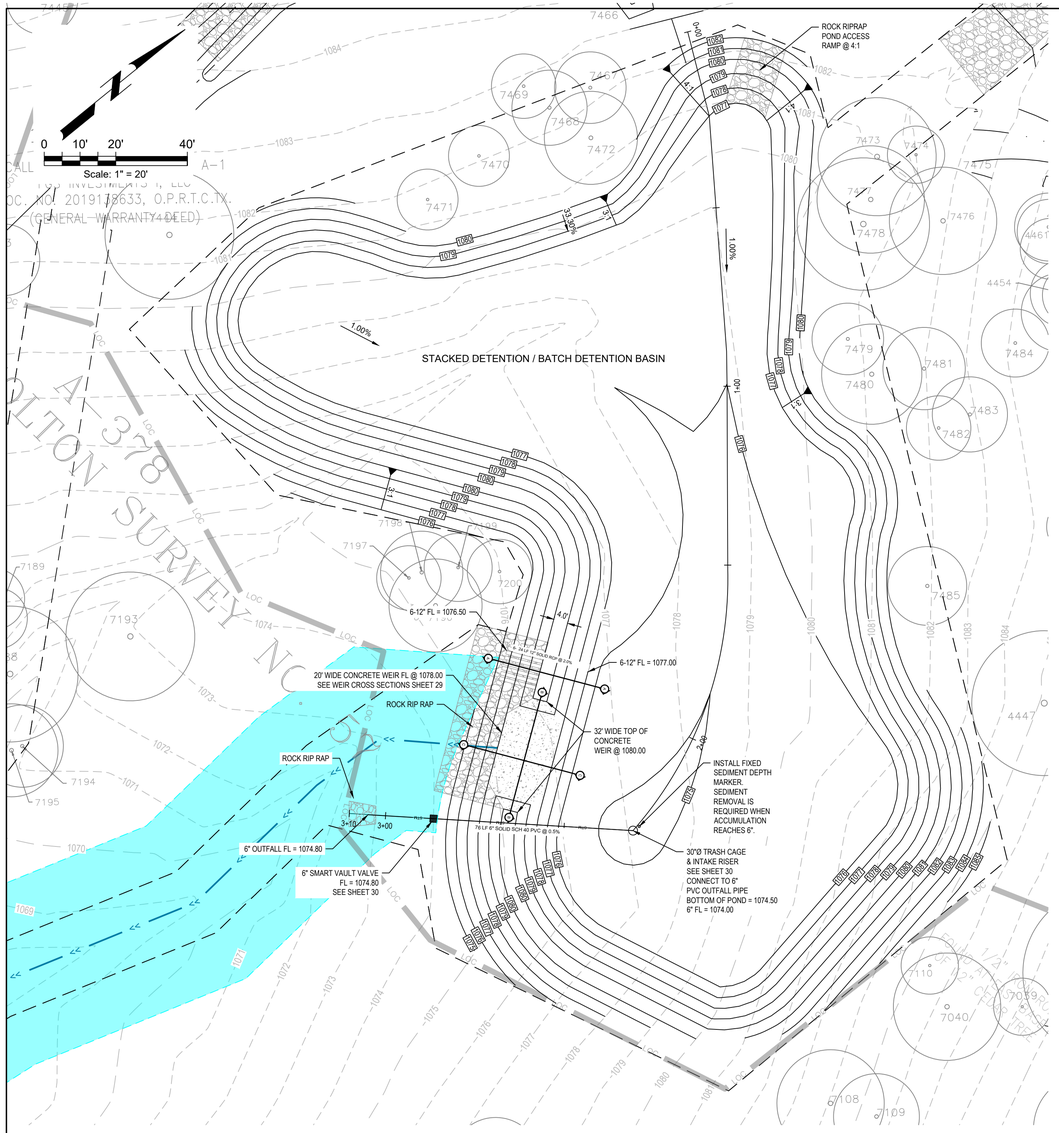
CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

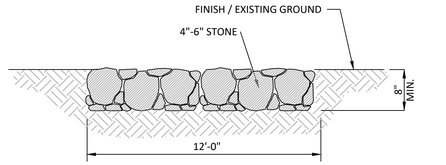
PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: PROPOSED DRAINAGE AREA MAP

PROJECT NO. 0193.001

SHEET NO. C27





POND MAINTENANCE ACCESS SECTION

NOT TO SCALE

NOTES:

1. ALL EARTHEN EMBANKMENTS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY IN ACCORDANCE WITH CITY OF AUSTIN ROCK DACS - STANDARD SPECIFICATIONS MANUAL.
2. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.

Batch Basin Volume

Stage (ft. msl)	Area (sf)	Height (ft)	Avg. End Area (sf	Volume (cf)	Cumul. Vol. (cf)
1074.5	0	----	0	0	0
1075	509	0.50	255	127	127
1076	9312	1.00	4,911	4,911	5,038
1077	19877	1.00	14,595	14,595	19,632

DETENTION POND - Depth vs Storage vs Discharge Table

Elevation (ft)	Depth (ft)	Storage Volume (ft^3)	Storage Volume (ac-ft)	Discharge Rate (cfs)*			
AMSL	Detention Pond	Detention Pond	Total	**Outflow Orifice	***Outflow Overflow Weir	Total Outlet Flow	Comments
1077.00	0.00	0	0.0000	0.00	0.00	0.00	2-YR DETENTION POND VOL. WSEL = 1078.23, 25.94 CFS
1078.00	1.00	22,139	0.5083	16.04	0.00	16.04	10-YR DETENTION POND VOL. WSEL = 1078.62, 56.27 CFS
1079.00	2.00	24,459	0.5615	27.79	81.00	108.79	25-YR DETENTION POND VOL. WSEL = 1078.79, 78.76 CFS
1080.00	3.00	26,834	0.6160	35.88	271.53	307.41	100-YR DETENTION POND VOL. WSEL = 1079.00, 112.44 CFS

Notes: * This table represents an approximation of the outlet structure discharge rates. The HEC-HMS model has orifice and spillway dimensions entered and the program calculates the discharge curve.

**6-12" Outlets at flowline 1077.00 AMSL

*** 1- 20' wide bottom of weir at flow line 1078.00 AMSL & 32' wide top of weir at flow line 1080.00 AMSL

NOTE:

CONTACT POSTINSPECTION@TRAVISCOUNTYTX.GOV TO SCHEDULE THE FOLLOWING MILESTONE INSPECTION(S) FOR THE WATER QUALITY STRUCTURES WITH AT LEAST A 48-HOUR NOTICE, IF APPLICABLE:

- INSPECTION OF THE INSTALLED SAND FILTRATION UNDERDRAIN PIPING AND INSPECTION OF FILTRATION MEDIA AND ROCK PRIOR TO COVERING – IF COVERED, REMOVAL OF MATERIAL WILL BE REQUIRED.
- INSPECTION OF THE INSTALLED RISER PIPE STRUCTURE PRIOR TO FILLING WITH ROCK.
- SUBSOIL INFILTRATION RATE TESTING FOR GRASSY SWALES.
- COMPLETION OF CONSTRUCTION OF WATER QUALITY STRUCTURE(S).
- REVEGETATION OF THE POND AND ALL DISTURBED AREAS IS REQUIRED. THE FACILITY SHOULD BE PLANTED AND MAINTAINED TO PROVIDE FOR A FULL AND ROBUST COVER. VEGETATION ON THE BASIN EMBANKMENTS SHOULD BE MOWED AS APPROPRIATE TO PREVENT THE ESTABLISHMENT OF WOODY VEGETATION.

POND MAINTENANCE AND CONSTRUCTION REQUIREMENTS:

- MAINTENANCE RESPONSIBILITIES. PROPER MAINTENANCE IS AS IMPORTANT AS ENGINEERING DESIGN AND CONSTRUCTION IN ORDER TO ENSURE THAT WATER QUALITY CONTROLS, REFERRED TO HEREIN AS STORMWATER CONTROL MEASURES (SCMS), WILL FUNCTION EFFECTIVELY. MAINTENANCE SHALL BE PERFORMED ON SCMS WHEN NECESSARY AS DEFINED BY THIS SECTION.
- STORMWATER CONTROL MEASURES REQUIRED FOR COMMERCIAL AND MULTI-FAMILY DEVELOPMENT SHALL BE MAINTAINED BY THE PROPERTY OWNER.
- MAINTENANCE REQUIREMENTS--DESIGN AND CONSTRUCTION.
- THE DESIGN OF DRAINAGE FACILITIES (INCLUDING BUT NOT LIMITED TO HEADWALLS, OPEN CHANNELS, STORM SEWERS, AREA INLETS, AND DETENTION, RETENTION AND STORMWATER CONTROL MEASURES AND THEIR APPURTENANCES) SHALL COMPLY WITH FOLLOWING CONSTRUCTION REQUIREMENTS:
- SEDIMENT REMOVED DURING CONSTRUCTION OF A DETENTION, RETENTION, OR WATER QUALITY FACILITIES MAY BE DISPOSED OF ON-SITE IF PROPERLY STABILIZED ACCORDING TO THE PRACTICES OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL CRITERIA FOUND IN CITY OF AUSTIN ECM SECTION 1.4.0. ONCE THE STORMWATER FACILITY HAS BEEN ACCEPTED, DISPOSAL OF SEDIMENT MUST BE AT AN APPROVED LANDFILL.
- DURING CONSTRUCTION OF SCMS, TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED.
- FOR SITES WITH A SEDIMENTATION/ FILTRATION BASIN, IF RUNOFF IS TO ENTER THE SAND FILTRATION CHAMBER OF A WATER QUALITY CONTROL FACILITY PRIOR TO COMPLETION OF SITE CONSTRUCTION AND REVEGETATION, INSPECTION AND MAINTENANCE OF ALL TEMPORARY EROSION/SEDIMENTATION CONTROLS ARE REQUIRED, AS DESCRIBED IN THE CITY OF AUSTIN ECM SECTION 1.4.4, TO PREVENT HEAVY SEDIMENT LOADS CAUSED BY HOME CONSTRUCTION FROM CLOGGING THE FILTRATION MEDIA.
- FOR SITES WITH FILTRATION SYSTEMS, THE DESIGN MEDIA DEPTH MUST BE VERIFIED, ACCOUNTING FOR CONSOLIDATION. IF INSUFFICIENT DEPTH IS PRESENT, ADDITIONAL MEDIA MUST BE ADDED AND PRE-SOAKED UNTIL THE DESIGN DEPTH IS ACHIEVED. PRE-SOAKING - APPLY 5--10 GALLONS OF WATER PER SQUARE FOOT OF MEDIA AREA WITHIN ONE HOUR.
- RETAINING WALLS - RETAINING WALLS WITHIN SCMS REQUIRE WATER-TIGHTNESS. WATER-TIGHTNESS IN RETAINING WALLS IS ESSENTIAL TO THE FUNCTION OF THE STRUCTURE. WATERSTOPS SHALL BE PROVIDED DURING CONSTRUCTION OF EXPANSION JOINTS IN RETAINING WALLS PER COA STANDARD SPECIFICATION 414S, CONCRETE RETAINING WALLS.
- GROUTED ROCK WALLS - GROUTED ROCK WALLS ARE ACCEPTABLE ONLY IF THE DESIGN INCLUDES AN IMPERMEABLE BARRIER SUCH AS AN APPROVED GEOMEMBRANE LINER OR REINFORCED CONCRETE RETAINING WALL. FREE STANDING DRY STACKED ROCK WALLS ARE NOT ACCEPTABLE IN ANY SCM.
- AS-BUILT SURVEYS - AS-BUILT SURVEYS OF ALL FLOOD DETENTION BASINS AND WATER QUALITY SCMS SHALL BE SUBMITTED TO THE ENGINEER UPON COMPLETION OF FINAL GRADE. SURVEYS SHALL BE CONDUCTED BY A LICENSED SURVEYOR AND INCLUDE REPRESENTATIVE SURVEY POINTS WITH ELEVATIONS TAKEN AT TOP OF WALL, BOTTOM OF WALL, CENTER OF BASIN, INLETS, OUTFALLS, OVERFLOW STRUCTURES, AND SIDE SLOPES. ADDITIONAL SURVEY POINTS MAY BE REQUESTED AT THE DISCRETION OF THE ENGINEER TO ENSURE BASIN INTEGRITY. WATER QUALITY BASINS WITH A DRAINAGE AREA OF LESS THAN TWO (2) ACRES AS WELL AS VEGETATED FILTER STRIPS DO NOT REQUIRE SUBMITTAL OF AS-BUILT SURVEYS UNLESS DEEMED NECESSARY BY THE ENGINEER.
- **MAJOR MAINTENANCE REQUIREMENTS.**
- THE FOLLOWING MAINTENANCE ACTIVITIES SHALL BE PERFORMED ON ALL SCMS, IN ADDITION TO THE REQUIREMENTS LISTED FOR THE INDIVIDUAL SCM TYPES, TO ENSURE PROPER FUNCTION:
- ACCUMULATED PAPER, TRASH AND DEBRIS SHALL BE REMOVED EVERY SIX (6) MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.
- STRUCTURAL INTEGRITY SHALL BE MAINTAINED AT ALL TIMES. BASINS AND ALL APPURTENANCES SHALL BE INSPECTED ANNUALLY, OR MORE FREQUENTLY IF SPECIFIED, AND REPAIRS SHALL BE MADE IF NECESSARY. WHEN MAINTENANCE OR REPAIRS ARE PERFORMED, THE SCM SHALL BE RESTORED TO THE ORIGINAL LINES AND GRADES.
- **CORRECTIVE MAINTENANCE SHALL OCCUR:**
- ANY TIME DRAWDOWN OF THE WATER QUALITY VOLUME DOES NOT OCCUR WITHIN NINETY-SIX (96) HOURS (I.E., NO STANDING WATER IS ALLOWED), UNLESS A GREATER MAXIMUM DRAWDOWN TIME IS SPECIFIED IN THE PLANS.
- FOR DETENTION PONDS ONLY, ANY TIME DRAWDOWN DOES NOT OCCUR WITHIN TWENTY-FOUR (24) HOURS.
- THE INLET AND OUTLET OF SCMS SHALL BE MAINTAINED UNIMPEDED IN ORDER TO CONVEY FLOW AT ALL TIMES. OBSERVED BLOCKAGES TO THE INLET AND OUTLET, DUE TO VEGETATION, SEDIMENT, DEBRIS, OR ANY OTHER CAUSE, SHALL BE REMOVED.
- NO UNVEGETATED AREA SHALL EXCEED TEN (10) SQUARE FEET. THIS PERFORMANCE REQUIREMENT APPLIES TO THE ENTIRE POND INCLUDING THE POND BOTTOM, SIDE SLOPES, AND AREAS ADJACENT TO THE POND, AND IS INTENDED TO LIMIT EROSION.
- INTEGRATED PEST MANAGEMENT SHALL BE PERFORMED AND SHALL ADHERE TO COA ECM SECTION 1.6.2.F, INTEGRATED PEST MANAGEMENT GUIDELINES.
- THE MINIMUM VEGETATION HEIGHT SHALL BE FOUR (4) INCHES IN THE SCM AND ALL APPURTENANCES, INCLUDING THE TOE OF THE BERM OR WALL OUTSIDE THE SCM, WHERE APPLICABLE.
- **SEDIMENT BUILD-UP SHALL BE REMOVED:**
- WHEN THE ACCUMULATION EXCEEDS SIX (6) INCHES IN SPLITTER BOXES, WET WELLS AND BASINS.
- WHEN SEDIMENT TRAPS ARE FULL.
- WHEN SEDIMENT, OF ANY AMOUNT, CAUSES STANDING WATER CONDITIONS OR REDUCES BASIN STORAGE BY MORE THAN 10%.
- WHEN SEDIMENT IS REMOVED, THE FOLLOWING REQUIREMENTS APPLY:
- IRRIGATION SHALL BE PROVIDED, AS NEEDED, UNTIL VEGETATION IS ESTABLISHED (WELL ROOTED). SEE ECM SECTION 1.6.3.D, IRRIGATION GUIDELINES.
- THE DESIGN DEPTH OF THE FILTRATION MEDIA SHALL BE VERIFIED. SEE SECTION ECM 1.6.3.B.5.
- TILLING OF THE FILTRATION MEDIUM IS NOT ALLOWED.
- FOR SUBSURFACE PONDS MAINTENANCE PLAN REQUIREMENTS, REFER TO ECM SECTION 1.6.2(E).
- SEDIMENTATION AND FILTRATION SCMS (SECTION 1.6.5).
- VEGETATION WITHIN THE SCM SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME, EXCEPT AS CALLED FOR IN THE DESIGN.
- VEGETATION THAT IS MOWED OR CUT SHALL BE REMOVED FROM THE SCM.
- **DETENTION BASINS.**
- VEGETATION WITHIN THE BASIN SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME.
- **BATCH DETENTION.**
- INSPECTIONS SHOULD TAKE PLACE FOR A MINIMUM OF TWICE A YEAR. ONE INSPECTION SHOULD TAKE PLACE DURING WET WEATHER TO DETERMINE IF THE BASIN IS MEETING THE TARGET DETENTION TIME OF 12 HOURS AND A DRAWDOWN TIME OF NO MORE THAN 48 HOURS. THE REMAINING INSPECTIONS SHOULD OCCUR BETWEEN STORM EVENTS SO THAT MANUAL OPERATION OF THE VALVE AND CONTROLLER CAN BE VERIFIED. THE LEVEL SENSOR IN THE BASIN SHOULD BE INSPECTED AND ANY DEBRIS OR SEDIMENT IN THE AREA SHOULD BE REMOVED. THE OUTLET STRUCTURE AND THE TRASH SCREEN SHOULD BE INSPECTED FOR SIGNS OF CLOGGING. DEBRIS AND SEDIMENT SHOULD BE REMOVED FROM THE ORIFICE AND OUTLETS. DEBRIS OBSTRUCTING THE VALVE SHOULD BE REMOVED. DURING EACH INSPECTION, EROSION AREAS INSIDE AND DOWNSTREAM OF THE BATCH DETENTION POND SHOULD BE IDENTIFIED AND REPAIRED/REVEGETATED IMMEDIATELY.
- THE BASIN, BASIN SIDE-SLOPES, AND EMBANKMENT OF THE BASIN MUST BE MOWED TO PREVENT WOODY GROWTH AND CONTROL WEEDS. A MULCHING MOWER SHOULD BE USED, OR THE GRASS CLIPPINGS SHOULD BE CAUGHT AND REMOVED. MOWING SHOULD TAKE PLACE AT LEAST TWICE A YEAR, OR MORE FREQUENTLY IF VEGETATION EXCEEDS 18 INCHES IN HEIGHT. MORE FREQUENT MOWING TO MAINTAIN AESTHETIC APPEAL MAY BE NECESSARY IN LANDSCAPED AREAS.
- LITTER AND DEBRIS REMOVAL SHOULD TAKE PLACE AT LEAST TWICE A YEAR, AS PART OF THE PERIODIC MOWING OPERATIONS AND INSPECTIONS. DEBRIS AND LITTER SHOULD BE REMOVED FROM THE SURFACE OF THE BASIN. PARTICULAR ATTENTION SHOULD BE PAID TO FLOATABLE DEBRIS AROUND THE OUTLET STRUCTURE. THE OUTLET SHOULD BE CHECKED FOR POSSIBLE CLOGGING OR OBSTRUCTIONS AND ANY DEBRIS REMOVED.

POND MAINTENANCE AND CONSTRUCTION REQUIREMENTS (CONTINUES):

- THE BASIN SIDE SLOPES AND EMBANKMENT ALL MAY PERIODICALLY SUFFER FROM SLUMPING AND EROSION. TO CORRECT THESE PROBLEMS, CORRECTIVE ACTION, SUCH AS REGRADING AND REVEGETATION, MAY BE NECESSARY. CORRECTION OF EROSION CONTROL SHOULD TAKE PLACE WHENEVER REQUIRED BASED ON THE PERIODIC INSPECTIONS.
- STANDING WATER OR SOGGY CONDITIONS MAY OCCUR IN THE BASIN. SOME STANDING WATER MAY OCCUR AFTER A STORM EVENT SINCE THE VALVE MAY CLOSE WITH 2 TO 3 INCHES OF WATER IN THE BASIN. SOME FLOW INTO THE BASIN MAY ALSO OCCUR BETWEEN STORMS DUE TO SPRING FLOW AND WATER USE THAT ENTERS THE STORM SEWER SYSTEM. TWICE A YEAR, THE FACILITY SHOULD BE EVALUATED IN TERMS OF NUISANCE CONTROL (INSECTS, WEEDS, ODORS, ALGAE, ETC.).
- STRUCTURAL REPAIRS AND REPLACEMENT: WITH EACH INSPECTION, ANY DAMAGE TO STRUCTURAL ELEMENTS OF THE BASIN (PIPES, DRAINAGE STRUCTURES, BERMS, ETC.) SHOULD BE IDENTIFIED AND REPAIRED IMMEDIATELY. AN EXAMPLE OF THIS TYPE OF REPAIR CAN INCLUDE BERM EROSION CONTROL, SEALING OF VOIDS, REMOVAL OF VEGETATION FROM JOINTS. THE VARIOUS INLET/OUTLET STRUCTURES IN A BASIN WILL EVENTUALLY DETERIORATE AND MUST BE REPLACED.
- SEDIMENT REMOVAL: A PROPERLY DESIGNED BATCH DETENTION BASIN WILL ACCUMULATE QUANTITIES OF SEDIMENT OVER TIME. THE ACCUMULATED SEDIMENT CAN DETRACT FROM THE APPEARANCE OF THE FACILITY AND REDUCE THE POLLUTANT REMOVAL PERFORMANCE OF THE FACILITY. THE SEDIMENT ALSO TENDS TO ACCUMULATE NEAR THE OUTLET STRUCTURE AND CAN INTERFERE WITH THE LEVEL SENSOR OPERATION. SEDIMENT SHALL BE REMOVED FROM THE BASIN AT LEAST EVERY 5 YEARS, WHEN SEDIMENT DEPTH EXCEEDS 6 INCHES, WHEN THE SEDIMENT INTERFERES WITH THE LEVEL SENSOR OR WHEN THE BASIN DOES NOT DRAIN WITHIN 48 HOURS. CARE SHOULD BE TAKEN NOT TO COMPROMISE THE BASIN LINING DURING MAINTENANCE.
- LOGIC CONTROLLER: THE LOGIC CONTROLLER SHOULD BE INSPECTED AS PART OF THE TWICE-YEARLY INVESTIGATIONS. VERIFY THAT THE EXTERNAL INDICATORS (ACTIVE, CYCLE IN PROGRESS) ARE OPERATING PROPERLY BY TURNING THE CONTROLLER OFF AND ON, AND BY INITIATING A CYCLE BY TRIGGERING THE LEVEL SENSOR IN THE BASIN. THE VALVE SHOULD BE MANUALLY OPENED AND CLOSED USING THE OPEN/CLOSE SWITCH TO VERIFY VALVE OPERATION AND TO ASSIST IN INSPECTING THE VALVE FOR DEBRIS. THE SOLAR PANEL SHOULD BE INSPECTED AND ANY DUST OR DEBRIS ON THE PANEL SHOULD BE CAREFULLY REMOVED. THE CONTROLLER AND ALL OTHER CIRCUITRY AND WIRING SHOULD BE INSPECTED FOR SIGNS OF CORROSION, DAMAGE FROM INSECTS, WATER LEAKS, OR OTHER DAMAGE. AT THE END OF THE INSPECTION, THE CONTROLLER SHOULD BE RESET.
- **GRASSY SWALES**
- MAINTENANCE FOR GRASSY SWALES IS MINIMAL AND IS LARGELY AIMED AT KEEPING THE GRASS COVER DENSE AND VIGOROUS. MAINTENANCE PRACTICES AND SCHEDULES SHOULD BE DEVELOPED AND INCLUDED AS PART OF THE ORIGINAL PLANS TO ALLEVIATE MAINTENANCE PROBLEMS IN THE FUTURE. RECOMMENDED PRACTICES INCLUDE (MODIFIED FROM YOUNG ET AL., 1996):
- AN INTEGRATED PEST MANAGEMENT (IPM) PLAN SHOULD BE DEVELOPED FOR VEGETATED AREAS. THIS PLAN SHOULD SPECIFY HOW PROBLEM INSECTS AND WEEDS WILL BE CONTROLLED WITH MINIMAL OR NO USE OF INSECTICIDES AND HERBICIDES.
- SEASONAL MOWING AND LAWN CARE: LAWN MOWING SHOULD BE PERFORMED ROUTINELY, AS NEEDED, THROUGHOUT THE GROWING SEASON. GRASS HEIGHT SHOULD NOT EXCEED 18 INCHES. GRASS CUTTINGS SHOULD BE COLLECTED AND DISPOSED OF OFFSITE, OR A MULCHING MOWER CAN BE USED. REGULAR MOWING SHOULD ALSO INCLUDE WEED CONTROL PRACTICES; HOWEVER, HERBICIDE USE SHOULD BE KEPT TO A MINIMUM (URBONAS ET AL., 1992). HEALTHY GRASS CAN BE MAINTAINED WITHOUT USING FERTILIZERS BECAUSE RUNOFF USUALLY CONTAINS SUFFICIENT NUTRIENTS.
- INSPECT SWALES AT LEAST TWICE ANNUALLY FOR EROSION OR DAMAGE TO VEGETATION; HOWEVER, ADDITIONAL INSPECTION AFTER PERIODS OF HEAVY RUNOFF IS MOST DESIRABLE. THE SWALE SHOULD BE CHECKED FOR UNIFORMITY OF GRASS COVER, DEBRIS AND LITTER, AND AREAS OF SEDIMENT ACCUMULATION. MORE FREQUENT INSPECTIONS OF THE GRASS COVER DURING THE FIRST FEW YEARS AFTER ESTABLISHMENT WILL HELP TO DETERMINE IF ANY PROBLEMS ARE DEVELOPING, AND TO PLAN FOR LONG-TERM RESTORATIVE MAINTENANCE NEEDS. BARE SPOTS AND AREAS OF EROSION IDENTIFIED DURING SEMI-ANNUAL INSPECTIONS SHOULD BE REPLANTED AND RESTORED TO MEET SPECIFICATIONS. CONSTRUCTION OF A LEVEL SPREADER DEVICE MAY BE NECESSARY TO REESTABLISH SHALLOW OVERLAND FLOW.
- DEBRIS AND LITTER REMOVAL: TRASH TENDS TO ACCUMULATE IN SWALE AREAS, PARTICULARLY ALONG HIGHWAYS. ANY SWALE STRUCTURES (I.E. CHECK DAMS) SHOULD BE KEPT FREE OF OBSTRUCTIONS TO REDUCE FLOATABLES BEING FLUSHED DOWNSTREAM, AND FOR AESTHETIC REASONS. THE NEED FOR THIS PRACTICE IS DETERMINED THROUGH PERIODIC INSPECTION BUT SHOULD BE PERFORMED NO LESS THAN TWO TIMES PER YEAR (URBONAS ET AL., 1992).
- SEDIMENT REMOVAL: SEDIMENT ACCUMULATING NEAR CULVERTS AND IN CHANNELS NEEDS TO BE REMOVED WHEN THEY BUILD UP TO 3 INCHES AT ANY SPOT OR COVER VEGETATION. EXCESS SEDIMENT SHOULD BE REMOVED BY HAND OR WITH FLAT-BOTTOMED SHOVELS. IF AREAS ARE ERODED, THEY SHOULD BE FILLED, COMPACTED, AND RESEEDED SO THAT THE FINAL GRADE IS LEVEL WITH THE BOTTOM OF THE SWALE. SEDIMENT REMOVAL SHOULD BE PERFORMED PERIODICALLY, AS DETERMINED THROUGH INSPECTION.
- GRASS RESEEDING AND MULCHING: A HEALTHY DENSE GRASS SHOULD BE MAINTAINED IN THE CHANNEL AND SIDE SLOPES. GRASS DAMAGED DURING THE SEDIMENT REMOVAL PROCESS SHOULD BE PROMPTLY REPLACED USING THE SAME SEED MIX USED DURING SWALE ESTABLISHMENT. IF POSSIBLE, FLOW SHOULD BE DIVERTED FROM THE DAMAGED AREAS UNTIL THE GRASS IS FIRMLY ESTABLISHED.
- MAINTAIN A FIELD LOGBOOK TO RECORD ANY RELEVANT INFORMATION NOTED DURING INSPECTIONS. AT A MINIMUM, THE FIELD NOTEBOOK SHOULD INCLUDE THE DATE AND TIME, FIELD STAFF NAMES, WEATHER CONDITIONS, UNIFORMITY OF GRASS COVER, PRESENCE OF DEBRIS AND/OR LITTER, AND AREAS OF SEDIMENT ACCUMULATION AS WELL AS ANY CORRECTIVE ACTIONS TAKEN AND DATE THEY WERE COMPLETED. RECORDS SHALL BE MAINTAINED FOR A MINIMUM OF 3 YEARS AND SHALL BE MADE AVAILABLE TO TCEQ UPON REQUEST.
- **IRRIGATION GUIDELINES.**
- IRRIGATION IS NECESSARY TO ESTABLISH PLANTS DURING THE FIRST 12-MONTHS AFTER INSTALLATION. THEREAFTER IRRIGATION NEEDS SHOULD BE MINIMAL AND AN IRRIGATION SYSTEM WHETHER PERMANENT OR TEMPORARY MAY NOT BE NECESSARY DEPENDING ON THE WEATHER, TYPE OF PLANTS, AND EXTENT OF PLANT ESTABLISHMENT.
- SUPPLEMENTAL WATERING AFTER THE FIRST 12-MONTHS MAY BE REQUIRED DURING PERIODS OF EXTENDED DROUGHT IF PLANT REPLACEMENT OCCURRED AFTER THE FIRST YEAR, FOR MORE MESIC-TYPE PLANTS, AND FOR TREES. TREES TYPICALLY REQUIRE TWO TO THREE YEARS OF SUPPLEMENTAL WATER. THE NECESSITY FOR CONTINUED IRRIGATION AFTER THE FIRST YEAR SHOULD BE MADE BY A LANDSCAPE PROFESSIONAL.
- IF AN IRRIGATION SYSTEM IS PROPOSED, THE DESIGN SHALL ADDRESS BOTH THE SCM AND PLANT HEALTH NEEDS. IN PARTICULAR, OVERWATERING IS UNACCEPTABLE AS IT WILL NEGATIVELY IMPACT THE HYDRAULIC PERFORMANCE AND POLLUTANT REMOVAL CAPABILITIES OF SCM.
- TREATED WASTEWATER EFFLUENT (ALSO REFERRED TO AS RECLAIMED WATER) CONTAINS NUTRIENTS AT CONCENTRATIONS HIGHER THAN STORMWATER RUNOFF. BECAUSE THESE ELEVATED NUTRIENT CONCENTRATIONS WOULD IMPAIR THE NUTRIENT REMOVAL FUNCTION OF SCM, NO TEMPORARY OR PERMANENT IRRIGATION OF SCM MAY OCCUR WITH RECLAIMED WATER OR TREATED WASTEWATER EFFLUENT.
- **THE FOLLOWING MINIMUM CRITERIA WILL APPLY FOR PERMANENT IRRIGATION SYSTEMS:**
- SOIL WATER MOISTURE SENSORS SHALL BE INSTALLED AND CONNECTED TO THE CONTROLLER AT APPROPRIATE DEPTHS AND LOCATIONS IN THE BIOFILTRATION BASIN.
- NO IRRIGATION DURING PERIODS WHEN RAINFALL IS OCCURRING.
- IRRIGATION SHALL NOT COMMENCE UNTIL THE SOIL MOISTURE CONTENT OF THE FILTRATION MEDIA IS ≤ 25% OF THE AVAILABLE WATER CAPACITY (AWC). FOR PLANTS NATIVE OR ADAPTED TO ARID AND SEMI-ARID CONDITIONS, IRRIGATION SHALL NOT COMMENCE UNTIL THE SOIL MOISTURE CONTENT IS ≤ WILTING POINT (WP), OR 0% AWC.
- IRRIGATION SHALL CEASE ONCE THE SOIL MOISTURE CONTENT IS ≤ 75% AWC; 50% FOR PLANTS NATIVE OR ADAPTED TO ARID AND SEMI-ARID CONDITIONS.

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd. Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

TAMMI R. MIGL
92607
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

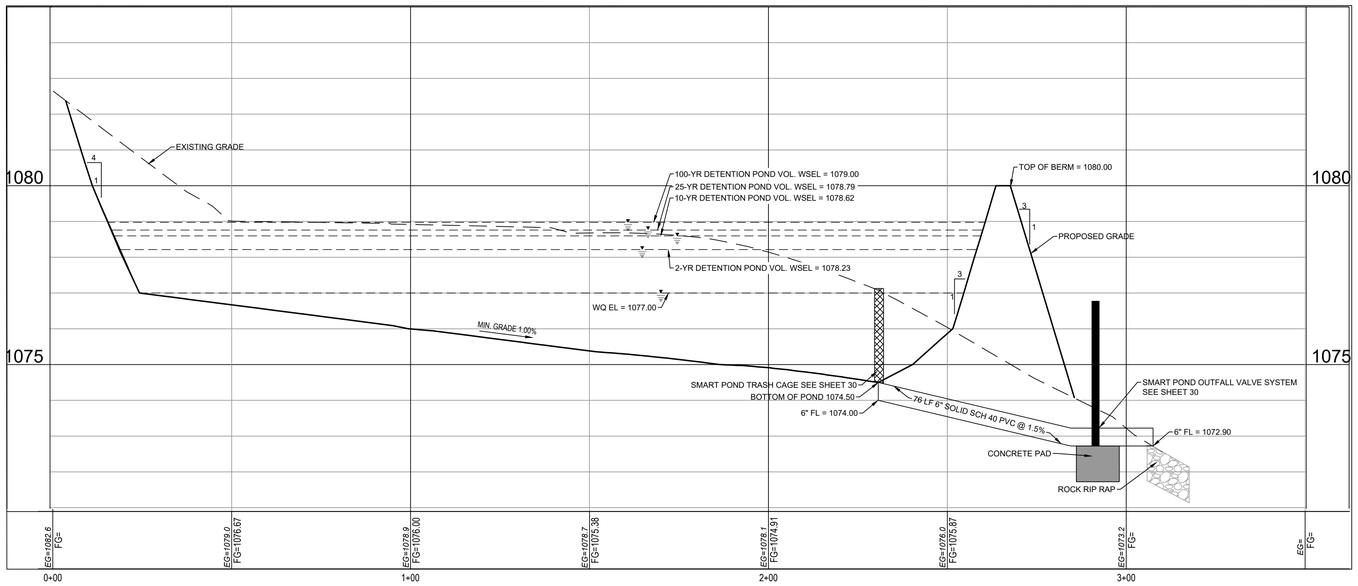
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED WATER QUALITY AND DETENTION POND PLAN

PROJECT NO.
0193.001

SHEET NO.
C28
28 OF 42



DETENTION POND
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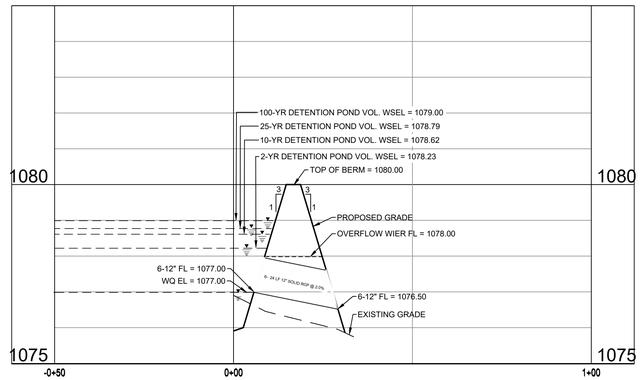
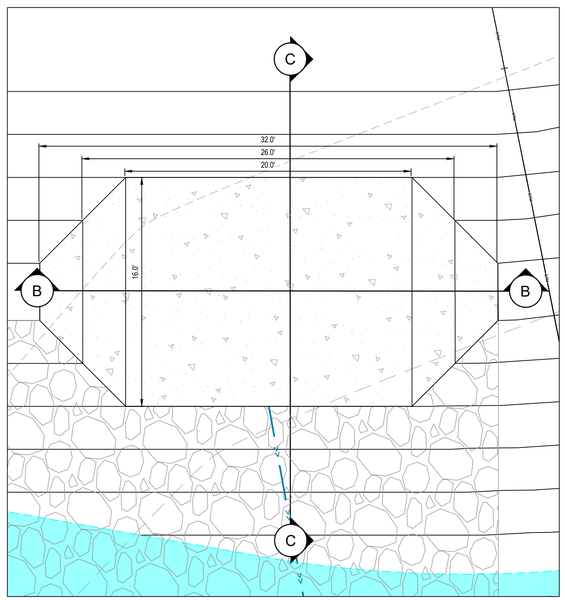
SCALE:
1" = 20' (HOR.)
1" = 2' (VERT.)

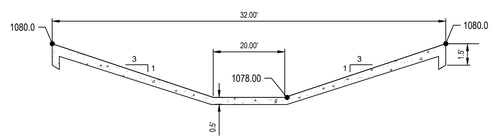


A-A
STA. -0+50.00 - STA. 1+00.00
SCALE:
1" = 20' (HOR.)
1" = 2' (VERT.)

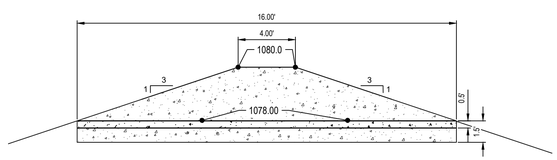


CONCRETE WEIR PLAN DEATIL

SCALE 1" = 5'



CONCRETE WEIR SECTION B-B



CONCRETE WEIR SECTION C-C

Know what's **below.**
Call before you dig.

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

IMAGES:
XREFS: * 0193.001 LANDWEST-BORDER.dwg * x0193.001 Landwest etrees.dwg * x0193.001 landwest pbs.dwg * 0193.001 Landwest pto.dwg * x0193.001 Landwest ebs.dwg * x0193.001 Landwest eto.dwg * x0193.001 landwest putil ph1.dwg * DYNAMIC SEAL - Migl.dwg
FILE: C:\Users\2020j\Box\MIGL ENGINEERING\0193.001 LANDWEST OFFICE SITE RR1\08 CAD\PLANS\0193.001 LANDWEST-PROP POND PLAN.dwg **LAST SAVED:** 9/24/2025 4:19:23 PM BY: 2020J **LAYOUT:** Prop Pond Det

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9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

TAMMI R. MIGL
92607
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
PROPOSED POND DETAILS

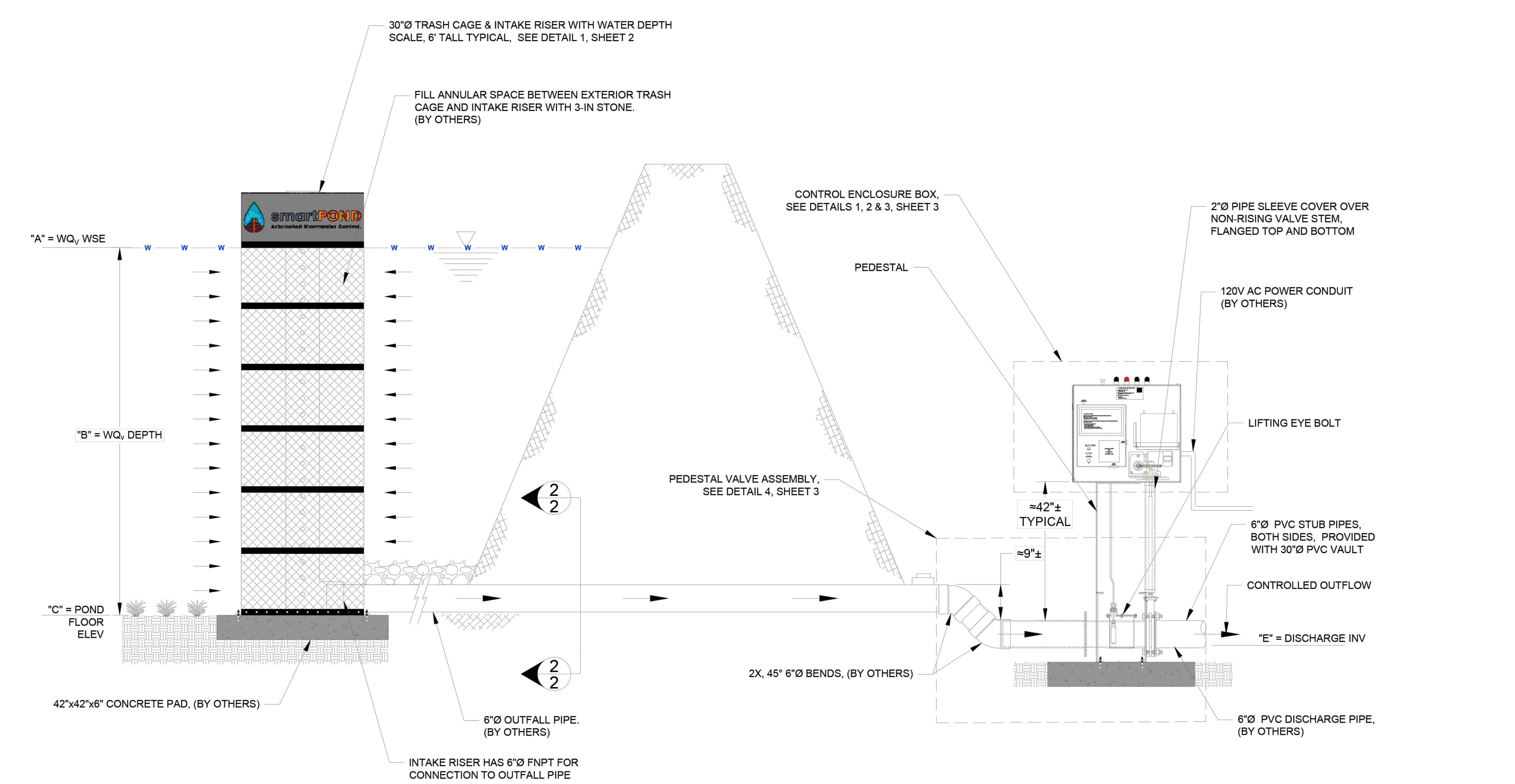
PROJECT NO.
0193.001

SHEET NO.
C29

smartPOND OUTFALL VALVE CONFIGURED IN DETENTION EMBANKMENT

ELEVATIONS & DEPTHS		
A	WATER QUALITY VOLUME SURFACE ELEVATION (WSE)	1077.00'
B	WATER QUALITY VOLUME (WQ_V) DEPTH (FEET)	2.5'
C	POND FLOOR ELEVATION (FEET)	1074.50'
D	RIM, TOP OF BERM (TOB) ELEVATION (FEET)	1080.00'
E	DISCHARGE PIPE INVERT ELEVATION (FEET)	1074.00'
F	RIM TO DISCHARGE PIPE INVERT (FEET-INCHES)	6'-0"
J	TOTAL DEPTH OF VAULT (FEET-INCHES)	XX'-XX"

DETENTION SETTING	
REQUIRED DETENTION VOLUME	18,403.00-FT^3
DETENTION VOLUME PROVIDED	19,153.00-FT^3/S
REQUIRED DETENTION TIME	12-HOURS



NOTE: ENGINEER OF RECORD TO REVIEW, APPROVE AND ENDORSE FINAL SITE SPECIFIC DESIGN.

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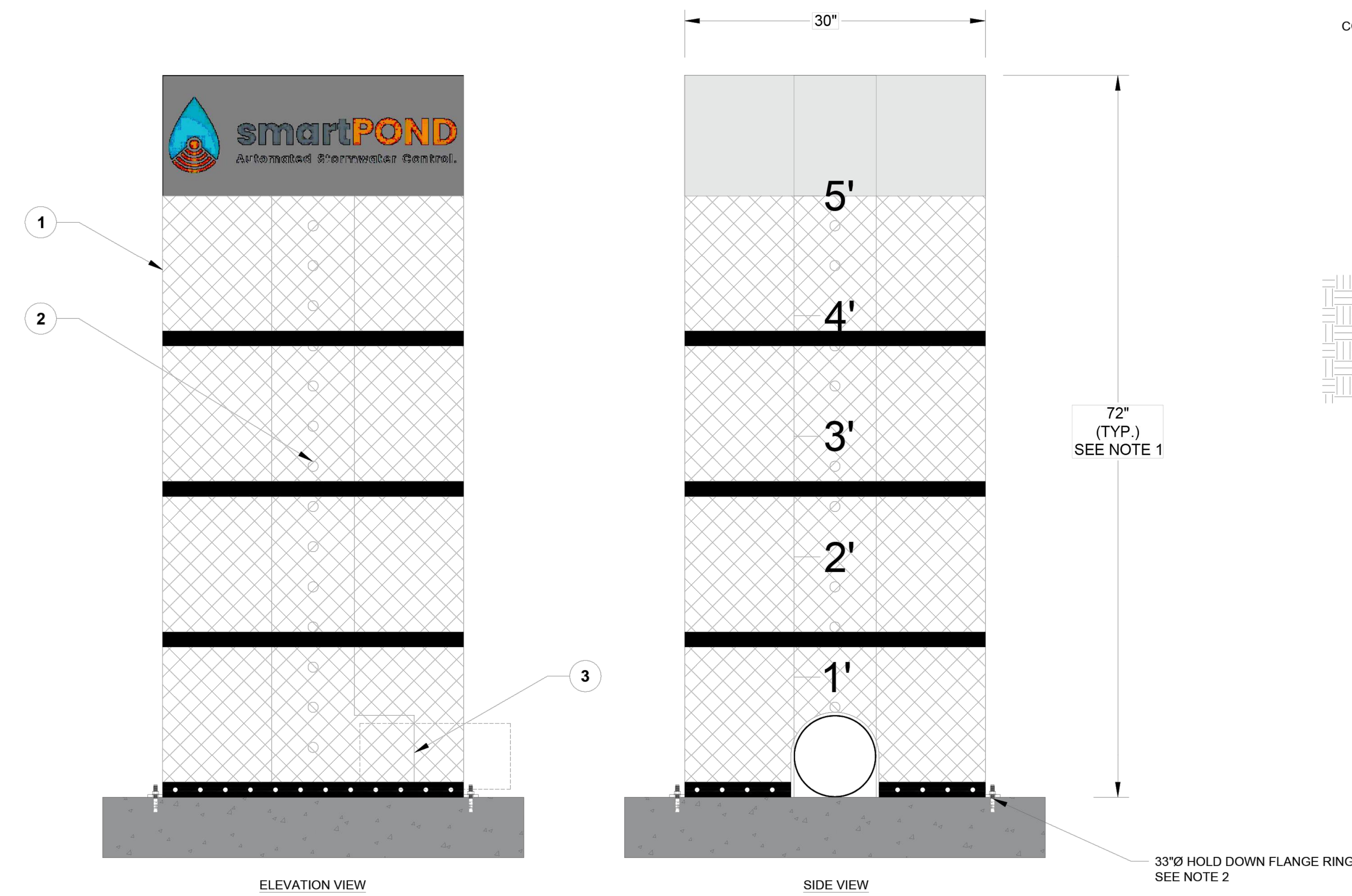
smartPOND OUTFALL VALVE

REVISION NO. 0 DATE 3/22/2024 SHEET NO. 1

DETAIL 1 - TRASH CAGE & INTAKE RISER

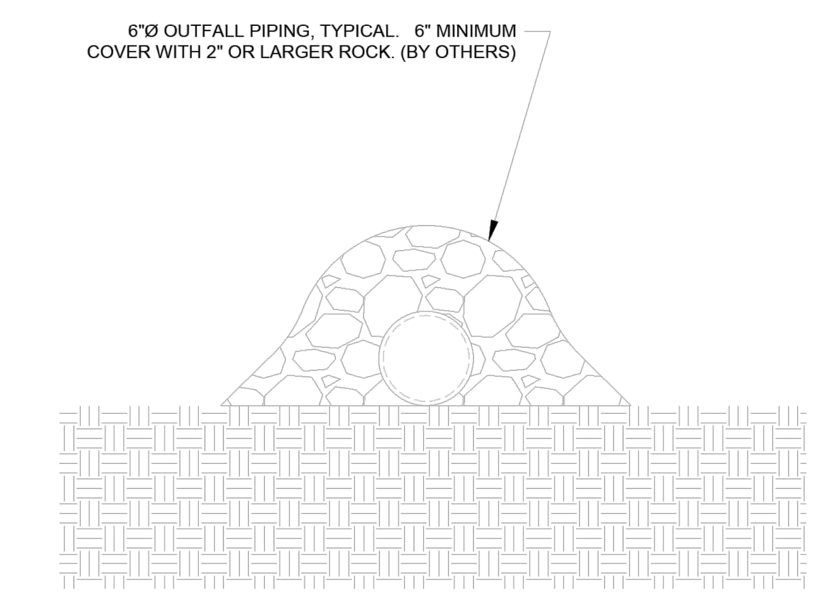


TRASH CAGE & INTAKE RISER NOTES:

1. STRUCTURAL DESIGN OF TRASH CAGE HAS BEEN SPECIFICALLY DESIGNED TO RESIST THE STRESS OF HOGS AND ORTHER MAMALS USING THE CAGE AS RUBBING/SCRATCH POST.
2. DESIGN HEIGHT OF INTAKE TRASH CAGE AND INTAKE RISER TO MATCH REQUIRED DETENTION DEPTHS.
3. USE 4X, $\frac{1}{2}$"Ø X 3.5" SS WEDGE ANCHOR BOLTS TO CONNECT OUTFALL ASSEMBLY TO CONCRETE PAD, 2.5" MINIMUM EMBEDMENT.

TRASH CAGE WITH INTAKE RISER - PARTS LIST	
ITEM	COMPONENT DESCRIPTION
1	30"Ø CAGE MANUFACTURED IN SQUARE 7-GAUGE THICKNESS, 1.0" TALL BY 2.5" WIDE DIAMOND GALVANIZED SCREEN. SUPPORTING HORIZONTAL BANDS AND STRUTS ARE 0.25' THICK STEEL BRACING WELDED TO 8'X8' STEEL INTAKE RISER.
2	8" SQUARE PERFORATED TUBING WITH 1"Ø PERFORATIONS, SPACED 4" ON CENTERS WITH WATER DEPTH SCALE
3	6"Ø FNPTS PROVIDED AT BOTTOM DISCHARGE OF INTAKE RISER

DETAIL 2 - ROCK COVER OVER OUTFALL PIPE



ELEVATION VIEW

smartPOND Automated Stormwater Control.

smartPOND OUTFALL VALVE

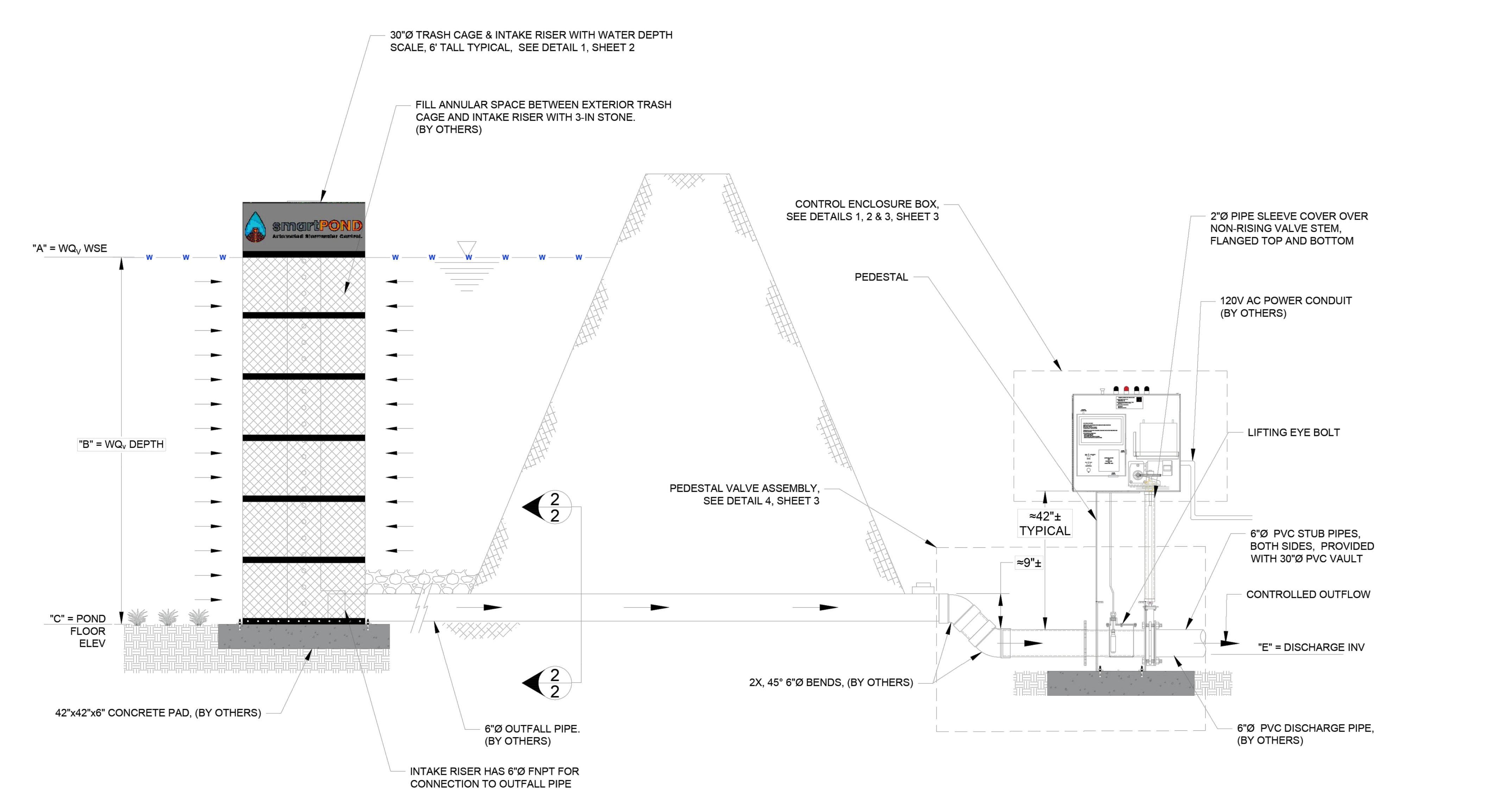
OUTFALL VALVE DETAILS

REVISION NO. 0 DATE 3/22/2024 SHEET NO. 2

smartPOND OUTFALL VALVE CONFIGURED IN DETENTION EMBANKMENT

ELEVATIONS & DEPTHS		
A	WATER QUALITY VOLUME SURFACE ELEVATION (WSE)	1077.00'
B	WATER QUALITY VOLUME (WQ_V) DEPTH (FEET)	2.5'
C	POND FLOOR ELEVATION (FEET)	1074.50'
D	RIM, TOP OF BERM (TOB) ELEVATION (FEET)	1080.00'
E	DISCHARGE PIPE INVERT ELEVATION (FEET)	1074.00'
F	RIM TO DISCHARGE PIPE INVERT (FEET-INCHES)	6'-0"
J	TOTAL DEPTH OF VAULT (FEET-INCHES)	XX'-XX"

DETENTION SETTING	
REQUIRED DETENTION VOLUME	18,403.00-FT^3
DETENTION VOLUME PROVIDED	19,153.00-FT^3/S
REQUIRED DETENTION TIME	12-HOURS

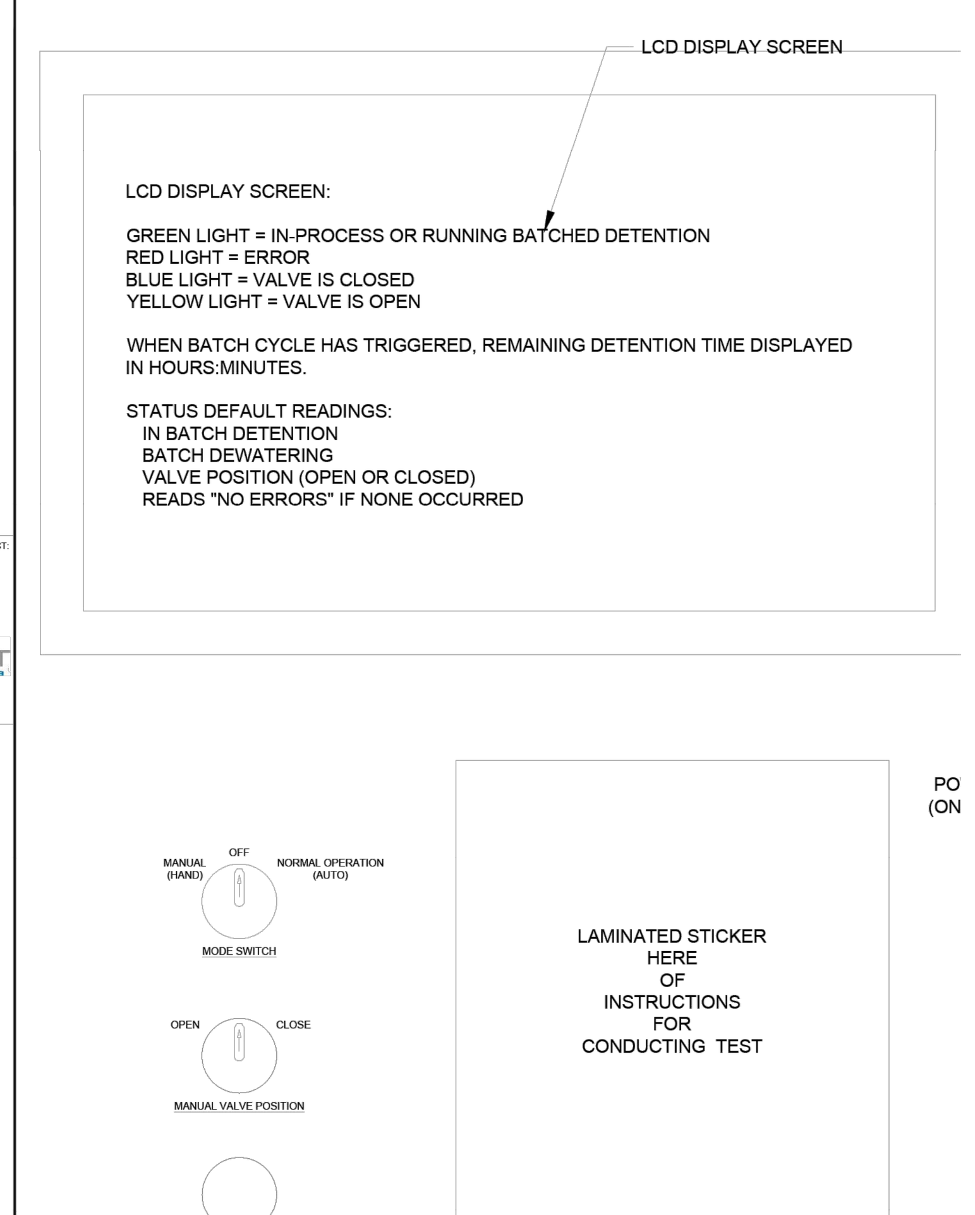


NOTE: ENGINEER OF RECORD TO REVIEW, APPROVE AND ENDORSE FINAL SITE SPECIFIC DESIGN.

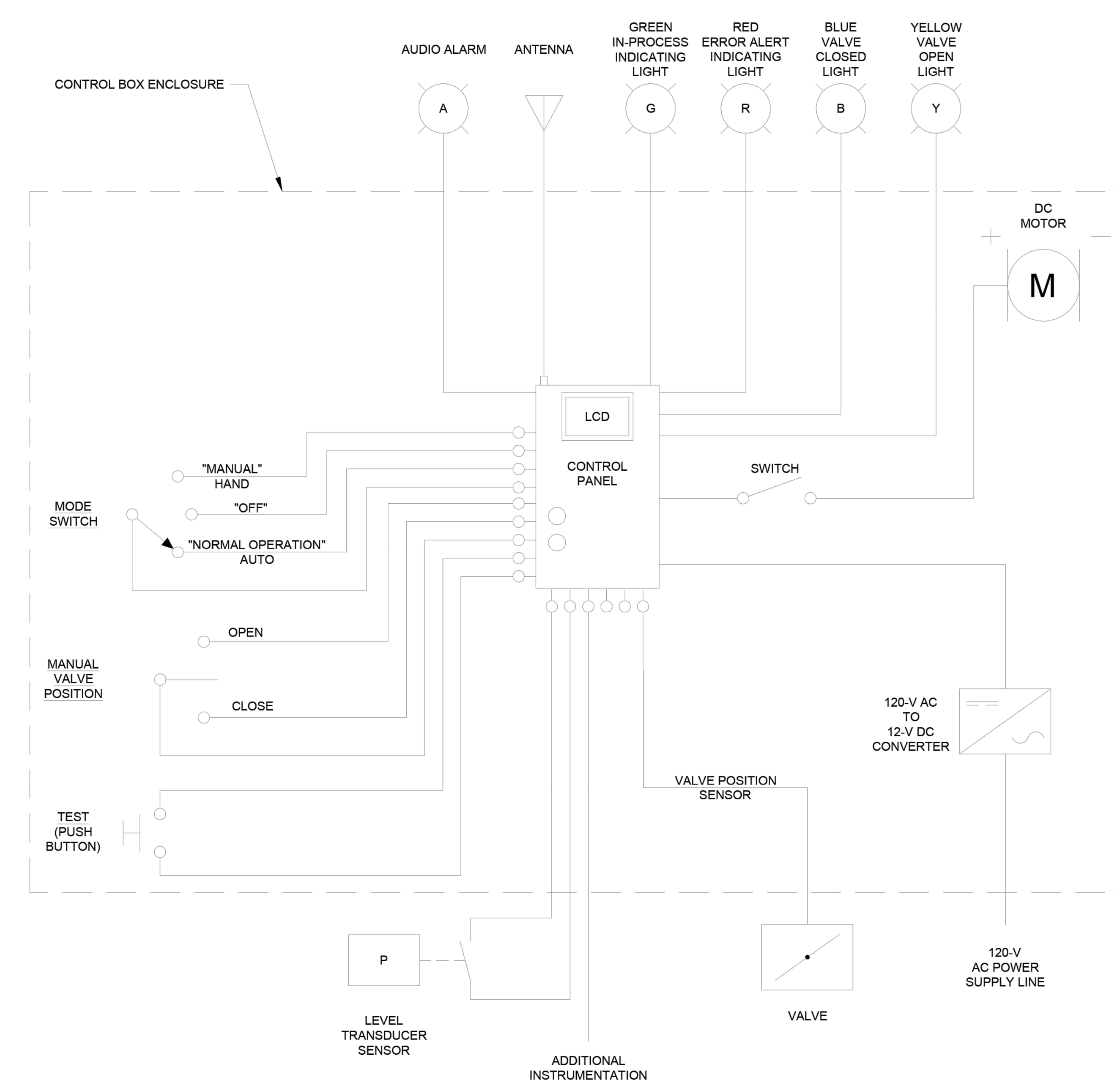
smartPOND OUTFALL VALVE

REVISION NO. 0 DATE 3/22/2024 SHEET NO. 1

DETAIL 1 - CONTROL PANEL CONFIGURATION CITY OF SAN MARCOS, TX



DETAIL 2 - PROCESS & INSTRUMENTATION DIAGRAM (P&ID)



NOTES: THE INDICATOR LIGHTS SHALL BE:

1. GREEN WHEN THE SYSTEM IS IN ACTIVE BATCH DETENTION MANAGEMENT OF A STORM EVENT.
2. RED WHEN ALERTING OF A MALFUNCTION OR ERROR.
3. BLUE WHEN VALVE CLOSED
4. YELLOW WHEN VALVE OPEN

smartPOND OUTFALL VALVE

OUTFALL VALVE DETAILS

REVISION NO. 0 DATE 3/22/2024 SHEET NO. 4

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9600 Escarpment Blvd, Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

STATE OF TEXAS TAMMI R. MIGL 92607 LICENSED PROFESSIONAL ENGINEER
September 24, 2025

RECOM'D | REVISIONS | DATE | NO.

CLIENT: LANDWEST DESIGN GROUP 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: BATCH DETENTION DETAILS

PROJECT NO. 0193.001

SHEET NO. C30

smartPOND OUTFALL VALVE SPECIFICATIONS

CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), WITH PROGRAM CONTROLLED OUTFALL VALVE

1. **CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS) DEVICE**: THE CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), SHOWN ON THE PLANS AS THE VAULT ASSEMBLY SHALL BE A smartPOND™ OUTFALL VALVE PROVIDED BY:

   CONVERGENT WATER TECHNOLOGIES
   800.711.5428
   WWW.CONVERGENTWATER.COM

   THE smartPOND™ OUTFALL VALVE SHALL SHALL PROVIDE FOR ACTIVE MANAGEMENT OF DETAINED STORMWATER VOLUME AND / OR ITS ALLOWABLE DISCHARGE RATE. THE smartPOND™ OUTFALL VALVE SHALL BE PROGRAMMABLE TO DETAIN A SPECIFIED VOLUME OF STORMWATER FOR A SPECIFIED REQUIRED PERIOD OF TIME. THE smartPOND™ OUTFALL VALVE MAXIMIZES THE DETENTION TO PROMOTE THE SETTLEMENT OF SOLIDS BEFORE AUTOMATICALLY DEWATERING THE DETENTION POND COMPLETELY.

   THE FOLLOWING SPECIFICATIONS DESCRIBE THE FUNCTIONS, APPLICATIONS AND COMPONENTS OF A CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), USING THE PROGRAMMED smartPOND™ OUTFALL VALVE.

THIS smartPOND™ OUTFALL VALVE SHALL FUNCTION AS AN ELECTRONICALLY CONTROLLED, STORMWATER MANAGEMENT DEVICE, PROVIDING PRECISION STORMWATER VOLUME MANAGEMENT CAPABILITIES AND REAL-TIME DATA. USING SENSORS, AN ELECTRICAL MOTOR DRIVEN GEAR ACTUATOR, PROGRAMMABLE LOGIC CONTROLLER (PLC) AND AN INTERNET-BASED DASHBOARD. THE smartPOND™ OUTFALL VALVE CONNECTS TO A SPECIALIZED PERFORATED INTAKE RISER INSIDE THE STORMWATER IMPOUNDMENT AREA TO ENABLE PRECISE CONTROL OF REQUIRED DETAINED OR RETAINED STORMWATER CONTROL VOLUMES AUTOMATICALLY OR IN REAL TIME.

1.1 PRE-PROGRAMMED OUTFALL VALVE CONTROL FOR WATER QUALITY: THE OUTFALL VALVE SHALL BE PRE-PROGRAMMED TO EXECUTE COMMANDS BASED ON STORM EVENTS, REQUIRED WATER QUALITY CONTROL VOLUMES AND REQUIRED DETENTION TIMES.

BATCH DETENTION FUNCTION FOR STORMWATER QUALITY: THE smartPOND™ OUTFALL VALVE SHALL BE PROGRAMMED TO ADHERE TO THE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), BATCH DETENTION REQUIREMENTS AND SHALL ACHIEVE 91% TOTAL SUSPENDED SOLIDS (TSS), REMOVAL RATES. THE CALCULATED WATER QUALITY VOLUME (WQ_V), OF STORMWATER SHALL BE HELD FOR 12-HOURS. AFTER THE REQUIRED 12-HOUR DETENTION TIME, THE VALVE OPENS AND RELEASES THE WATER.

1.2 REAL-TIME MONITORING: smartPOND™ SHALL COME WITH TELEMETRY THAT SHALL ENABLE REAL-TIME REMOTE MONITORING THROUGH A SECURE WEB-BASED DASHBOARD. THE SECURE WEB-BASED DASHBOARD SHALL ALSO ENABLE A USER TO:

- DETERMINE THE WATER SURFACE ELEVATION (WSE) AND/OR POND DEPTH.
- RECEIVE OUTFALL VALVE FAILURE ALERT.

A COMPLETE SET OF USER INSTRUCTIONS FOR THIS SECURE WEB-BASE DASHBOARD SHALL BE PROVIDED IN THE CONSTRUCTION SUBMITTALS AND A COPY OF THESE INSTRUCTIONS SHALL BE PLACED IN THE ENCLOSURE BOX ON ACCESSING AND USING THIS SECURE WEB-BASED DASHBOARD.

2. **COMPONENTS**: THE smartPOND™ OUTFALL VALVE MAY BE IMPLEMENTED EITHER ABOVE OR BELOW GROUND, AND IS COMPRISED OF THE FOLLOWING COMPONENTS:

2.1 HARDWARE AND CONFIGURATION:

THE STANDARD smartPOND™ OUTFALL VALVE SYSTEM CONSISTS OF A LOWER AND UPPER COMPONENT: THE LOWER COMPONENT IS THE PEDESTAL VALVE ASSEMBLY WITH 6"Ø PIPE SPOOL AND 6"Ø ACTUATED OUTFALL VALVE AND PRESSURE TRANSDUCER HOUSING.

THE SECOND, UPPER COMPONENT IS THE LOCKABLE STEEL WEATHERPROOF ENCLOSURE BOX WITH ALERT AND PROCESS LIGHTS MOUNTED ON ITS TOP. THIS ENCLOSURE BOX HOUSES THE PROGRAMMABLE CONTROLLER INSIDE A NEMA-3R BOX, ELECTRIC MOTOR, ACTUATOR GEARING AND AN EXTENDABLE NON-RISING VALVE STEM BETWEEN THE ACTUATOR AND THE 6"Ø OUTFALL VALVE.

THE ENCLOSURE BOX SHALL BE BOLTED TO THE TOP OF THE VAULT WITH $\frac{1}{2}$"Ø " STAINLESS STEEL (SS) BOLT, NUTS AND WASHERS.

THE LOWER PEDESTAL VALVE ASSEMBLY IS ANCHORED TO A CONCRETE PAD USING ANCHOR BOLTS CALLED OUT ON THE PLAN.

THE OUTFALL PIPE FROM THE DETENTION SYSTEM CONNECTS TO THE 6"Ø PVC INLET FLANGE.

2.2 OTHER ELECTRONICS SPECIFICATIONS:

- AUDIO ALARM - AN AUDIO ALARM FOR NOTIFICATION OF MALFUNCTIONING VALVE OR ERRORS.
- DISPLAY SCREEN - A MINIMUM 6" X 12" SIZED DISPLAY SCREEN PROVIDES VALVE POSITION AND POSITION TIMING.
- MOTOR - OPERATES ON 12-VOLTS AND HAS TWO WIRES CONNECTING TO THE MOTOR CONTROLLER BOARD.
- ALERT LIGHTS - FOUR (4X) LIGHTS COLORED: RED, GREEN, BLUE AND YELLOW LIGHT ON TOP OF THE CONTROL ENCLOSURE BOX:
  - RED FOR MALFUNCTION/ERROR ALERTS AND
  - GREEN FOR NOTIFICATION THAT VALVE IS IN THE ACTIVE OPERATION PROCESS OF BATCH DETENTION PROCESS.
  - BLUE FOR VALVE IN THE CLOSED POSITION
  - YELLOW FOR VALVE IN THE OPEN POSITIONS
- VOLTAGE / CURRENT CONVERTER - 120-VOLT ALTERNATING CURRENT CONVERTER TO 12-VOLT DIRECT CURRENT WHEN CONTROL IS POWER BY 120-VOLT AC VIA A POWER CONDUIT DESIGNED IN BY THE ENGINEER AND INSTALLED BY THE CONTRACTOR.
- CELL DATA MODEM - REQUIRED FOR REAL TIME CONTROL AND ALERTS.
- ANTENNA - FOR CELLULAR CONNECTION.

SENSORS:

- PRESSURE TRANSDUCER - A SENSOR CAPABLE OF STAYING SUBMERSED IN WATER INDEFINITELY AND IS MOUNTED IN CENTER PIPE SPOOL OF THE LOWER PEDESTAL COMPONENT.
- VAULT VALVE POSITION SENSOR - DETERMINES THE POSITION OF THE OUTFALL VALVE.

OPTIONAL COMPONENTS & SENSORS:

- HYDROCARBON SENSOR - THIS OPTIONAL SENSOR MAY BE FITTED TO THE smartPOND™ OUTFALL VALVE TO PERFORM SPECIFIC FUNCTIONS BASED ON THE PRESENCE OF HYDROCARBON CONTAMINATION.
- BATTERY - THIS IS A GEL BATTERY THAT PROVIDES 12-VOLTS, 30 AMP/HOUR OF POWER TO THE OUTFALLt VALVE ASSEMBLY.
- SOLAR PANEL - PROVIDES 15-WATT CHARGING TO THE 12-VOLT GEL BATTERY.
- SOLAR CHARGE CONTROLLER - REGULATES THE VOLTAGE AND CURRENT DELIVERED TO THE GEL BATTERY.

3. **ADDITIONAL COMPONENTS LIST**:

3.1 INTAKE RISER: THIS SHALL BE A PERFORATED STEEL RISER CONNECTED TO THE 6"Ø VAULT PIPE WITHIN THE POND AREA. THIS INTAKE RISER SHALL BE AN 8" SQUARE STEEL WITH FOUR (4X) 1"Ø HOLES AT 90-DEGREES EACH, EVERY 4 VERTICAL INCHES. THE DISCHARGE OF THIS INTAKE TUBING SHALL HAVE FEMALE NATIONAL PIPE THREADS (FNPT) TO MATCH THE 6"Ø SCHEDULE 40 PVC VAULT PIPE.

3.2 TRASH CAGE: THE TRASH CAGE ATTACHES TO THE PERFORATED RISER WITH A COUPLING AND CALDER PIN PROVIDED WITH THE THE SYSTEM. THE TRASH CAGE SHALL BE COMPRISED OF STEEL BANDING AND A 1.5" X 1.5" MESH TO PREVENT FLOATABLE'S AND OTHER CONTAMINANTS FROM ENTERING AND CLOGGING THE PERFORATED RISER. THE TRASH CAGE WILL SIT 0.5" ABOVE THE BOTTOM OF THE IMPOUNDMENT TO ALLOW THE LAST 0.5" OUT OF THE IMPOUNDMENT. THIS TRASH CAGE SHALL BE FILLED WITH 3"Ø WASHED ROCK BY THE CONTRACTOR. ROCK NOT PROVIDED WITH smartPOND™.

4. **ALERTS**: THE smartPOND™ OUTFALL VALVE WILL INDICATE THE FOLLOWING ALERTS BY ILLUMINATING A RED COLORED EXTERIORLY VISIBLE BLINKING LIGHT ON TOP OF THE ENCLOSURE BOX:

- LOSS OF VALVE FUNCTION
- OUTFALL VALVE MALFUNCTION WHEN POSITION DOES NOT MATCH THE AUTO MODE'S PROGRAMMED COMMAND.

THE TELEMETRY OF THE smartPOND™ WILL SHALL UPLOAD THESE ALERTS TO THE DASHBOARD AND NOTIFY THE OPERATOR VIA TEXT OR EMAIL. OWNER CONTACT INFORMATION MUST BE PROVIDED TO EXECUTE THIS TELEMETRY.

5. **MODES OF VALVE OPERATIONS:** THE CONTROL PANEL SHALL HAVE FOLLOWING TWO (2X), SELECTOR AND ONE PUSH BUTTON SWITCHES MOUNTED ON THE CONTROL PANEL FACE TO ENABLE INSPECTION AND CONTROL VALVE OPERATION MODES:

5.1 MODE SWITCH: THIS SELECTOR SWITCH LABELED "MODE SWITCH". THIS SELECTOR SWITCH WILL HAVE THREE (3X) SETTINGS:

"MANUAL", "OFF" AND "NORMAL OPERATION".

"MANUAL" MODE: ALSO KNOWN AS (AKA) "HAND" ENABLES THE VALVE TO BE MANUALLY OPENED AND CLOSED USING THE "MANUAL VALVE POSITION" SWITCH.

"NORMAL OPERATION" MODE: AKA "AUTO" THE VALVE CLOSED, EXECUTES AN OPERATIONAL PROGRAM THAT ADHERES TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ), 12-HOURS HOLDING TIME OF STORMWATER IN THE POND BEFORE OPENING THE VALVE AND DRAINING DOWN THE POND. IN THIS MODE, ONCE THE POND IS COMPLETELY DRAINED DOWN, THE VALVE REMAINS OPEN FOR A 2-HOUR ANTECEDENT DRY PERIOD, DETECTING NO ADDITIONAL STORMWATER IN THE POND AND THEN CLOSES.

5.2 "MANUAL VALVE POSITION": THIS MOMENTARY SWITCH IS AKA "HAND" OPENS OR CLOSES THE VALVE WHEN THE "MODE SWITCH" IS SET ON "MANUAL". THIS IS A 3-POSITION MOMENTARY SELECTOR SWITCH ENABLES MANUAL OPERATION TO OPEN OR CLOSE THE VALVE AND IS NORMALLY IN THE NEUTRAL POSITION .

5.3 "TEST": THIS BUTTON SWITCH IS LABELED "TEST".

"TEST": TEST "MODE" WILL BE ACTIVATED WHEN "MODE SWITCH" IS SET ON "NORMAL OPERATION" AND THE TEST BUTTON IS PROCESS FOR 5-SECONDS. THIS TEMPORARILY REDUCES THE TRIGGER LEVEL FOR DETENTION AND REDUCES THE DETENTION EMPTY TIME. SUCCESSFUL TEST OBSERVATION: AFTER A 1-MINUTE DELAY, THE VALVE WILL OPEN PROVIDED THAT THE PRESSURE TRANSDUCER DETECTS WATER. THE VALVE WILL CLOSE 1-MINUTE AFTER NO WATER IS DETECTED UPSTREAM OF THE VALVE.

5.4 MODES OF OPERATION: DETAILED INSTRUCTIONS ON MODES OF OPERATION AND PROPER USE OF THESE SELECTOR SWITCHES TO CONTROL THE VALVE AND ENSURE TCEQ COMPLIANT BATCH DETENTION OPERATIONS, WILL BE PROVIDED IN THE OPERATIONS AND MAINTENANCE MANUAL DURING THE CONSTRUCTION SUBMITTAL.

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smartPOND OUTFALL VALVE SPECIFICATIONS

REVISION NO. 0
DATE 3/22/2024
SHEET NO. 5

smartPOND OUTFALL VALVE SPECIFICATIONS

CONTINUOUSLY MONITORED AUTOMATED STORMWATER SYSTEM (C-MASS), WITH PROGRAM CONTROLLED OUTFALL VALVE

6. **MAINTENANCE & OPERATION SUBMITTAL**: AN OPERATION AND MAINTENANCE MANUAL SHALL BE PROVIDED, REVIEWED AND APPROVED DURING THE CONSTRUCTION SUBMITTAL PROCESS AND SHALL INCLUDE AT A MINIMUM: GREASING AND LUBRICATION ITEMS AND CYCLE FOR THE ACTUATOR, MOTOR AND VALVE; INSPECTION AND MAINTENANCE OF THE TRASH CAGE AND INTAKE RISER; AND PROCEDURES FOR VALVE OPERATION IN CASE OF TOTAL ELECTRONIC OR MOTOR FAILURE.

7. **SHIPPING AND HANDLING STORAGE**: THE smartPOND™ OUTFALL VALVE IS SHIPPED IN A NEAR-FULLY ASSEMBLED CONFIGURATION AND SHOULD BE STORED LIKEWISE. THE SYSTEMS ARE TRANSPORTED AND STORED ON PALLETS AND MUST REMAIN SECURED VIA STRAPS OR STEEL BANDS TO SAID PALLET AT ALL TIMES.

8. **INSTALLATION**: INSTALL THE smartPOND™ OUTFALL ASSEMBLY FIRST WITHOUT THE SOLAR PANEL. MOUNT SOLAR PANEL WITH THE CONNECTION BOLTS PROVIDED AFTER THE ASSEMBLY IS ANCHORED TO THE CONCRETE PAD USING THE ANCHOR BOLTS CALLED OUT ON THE PLANS.

9. **SAFETY INFORMATION AND WARNINGS**:

- ALWAYS KEEP HANDS CLEAR OF THE OUTFALL VALVE AND MOTOR WHEN UNIT IS IN OPERATION.
- TURN THE POWER SWITCH OFF WHEN DOING ANY ELECTRICAL WORK.
- DO NOT ENTER THE WATER WHEN THE DEVICE IS ACTIVELY DRAINING WATER.
- ALWAYS USE PROPER PERSONAL PROTECTION EQUIPMENT (PPE), AND CONFINED SPACE PROTOCOL WHEN SERVICING A OUTFALL VALVE BENEATH GROUND.

10. **PRODUCTS**: THE MANUFACTURER SHALL BE AN ESTABLISHED STORMWATER COMPANY THAT HAS AT LEAST FIVE (5X) INSTALLATIONS OF C-MASS DEVICES THAT HAVE BEEN IN USE AND FUNCTIONAL FOR FIVE (5X) OR MORE YEARS.

11. **QUALITY ASSURANCE AND PERFORMANCE SPECIFICATIONS**: THE QUALITY OF ALL SYSTEM COMPONENTS AND ALL OTHER APPURTENANCES AND THEIR ASSEMBLY PROCESS SHALL BE SUBJECT TO INSPECTION UPON DELIVERY OF THE SYSTEM TO THE WORK SITE. INSTALLATION IS TO BE PERFORMED ONLY BY SKILLED WORK PEOPLE WITH SATISFACTORY RECORD OF PERFORMANCE ON EARTHWORKS, PIPE, WELDING, CHAMBER, OR POND/LANDFILL CONSTRUCTION PROJECTS OF COMPARABLE SIZE AND QUALITY.

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smartPOND OUTFALL VALVE SPECIFICATIONS

REVISION NO. 0
DATE 3/22/2024
SHEET NO. 6

MIGL ENGINEERING AND CONSULTING
9600 Escarpment Blvd. Suite 745-174
Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE
BATCH DETENTION VALVE NOTES

PROJECT NO. 0193.001

SHEET NO. C31

LAST SAVED: 9/23/2025 5:37:57 PM BY: 2020J LAYOUT: SMART POND NOTES

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTCPUA)

TSS Removal Calculations per RG348A

Project Name: **Land West**
Date Prepared: **9/4/2025**

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

1. The Required Load Reduction for the total project: Calculations from RG-348A Page 21

Page 21 Equation 4.3: $L_M = 27.7(A_N \times P)$

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

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

County =	**Travis**	
Total project area included in plan * =	**16.40**	acres
Predevelopment impervious area within the limits of the plan * =	**0.00**	acres
Total post-development impervious area within the limits of the plan* =	3.09	acres
Total post-development impervious cover fraction * =	0.19	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	**2739**	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. = B1

Total drainage basin/outfall area =	**8.71**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**3.09**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.35**	
$L_{M\ THIS\ BASIN}$ =	**2739**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Batch Detention Basin**
Removal efficiency = **91.00** percent

Aqualogic Cartridge Filter
Bioretention
Batch Detention Basin
BaySeparator
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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 34.6 + A_P x 0.54)

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

A_C =	**8.71**	acres
A_I =	**3.09**	acres
A_P =	**5.62**	acres
L_R =	**3202**	lbs

0.35476464

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

Desired $L_{M\ THIS\ BASIN}$ = **2739** lbs.

F = **0.86**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**1.38**	inches
Post Development Runoff Coefficient =	**0.35**	
On-site Water Quality Volume =	**15339**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**2.02**	acres
Off-site Impervious cover draining to BMP =	**0.13**	acres
Impervious fraction of off-site area =	**0.06**	
Off-site Runoff Coefficient =	**0.09**	
Off-site Water Quality Volume =	**925**	cubic feet
Storage for Sediment =	**3253**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**19517**	cubic feet

MIGL ENGINEERING AND CONSULTING
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Austin, TX 78749 | 512 750 0440
Texas Registered Engineering Firm F-16967

STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

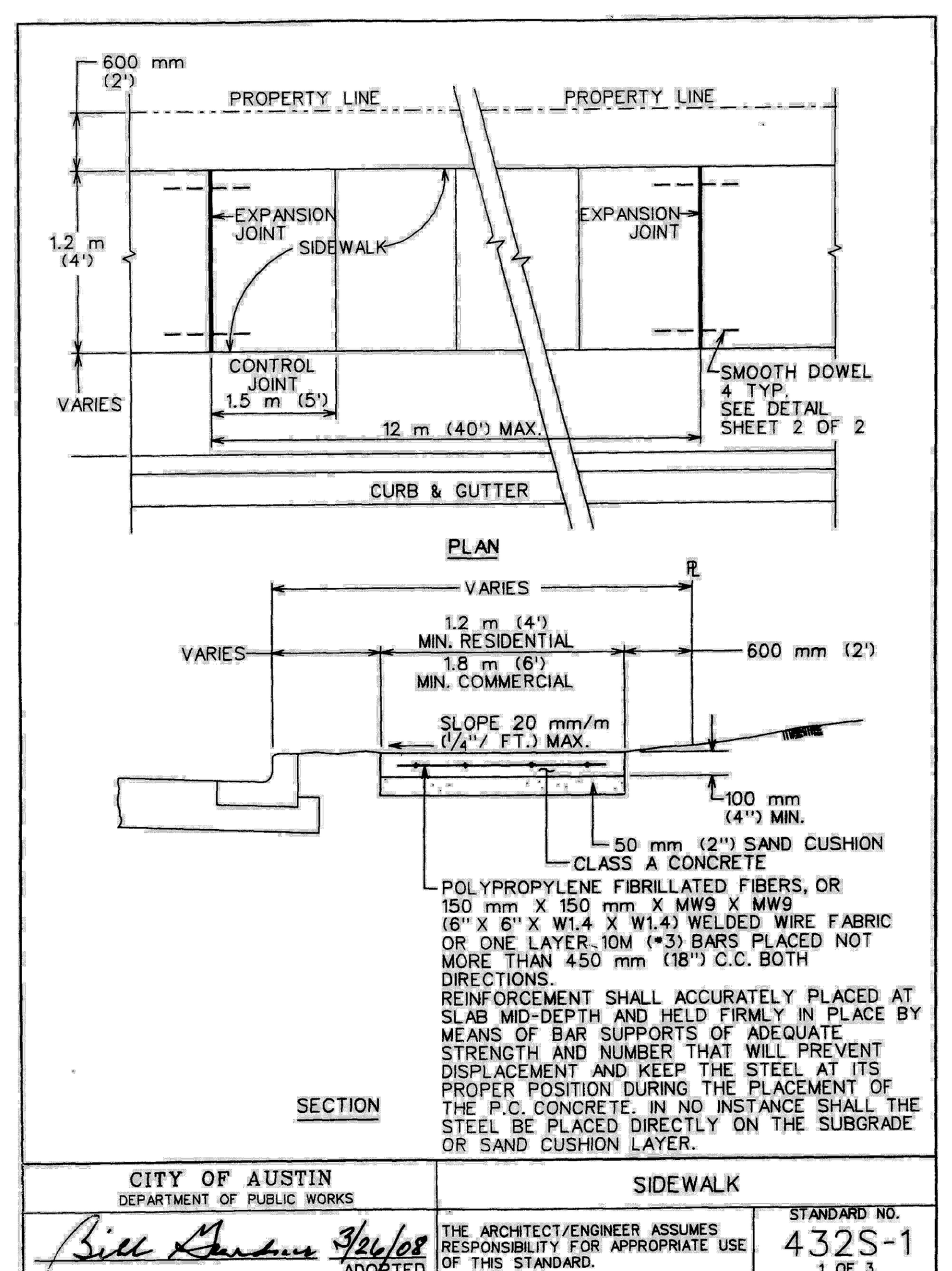
CLIENT
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT
LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

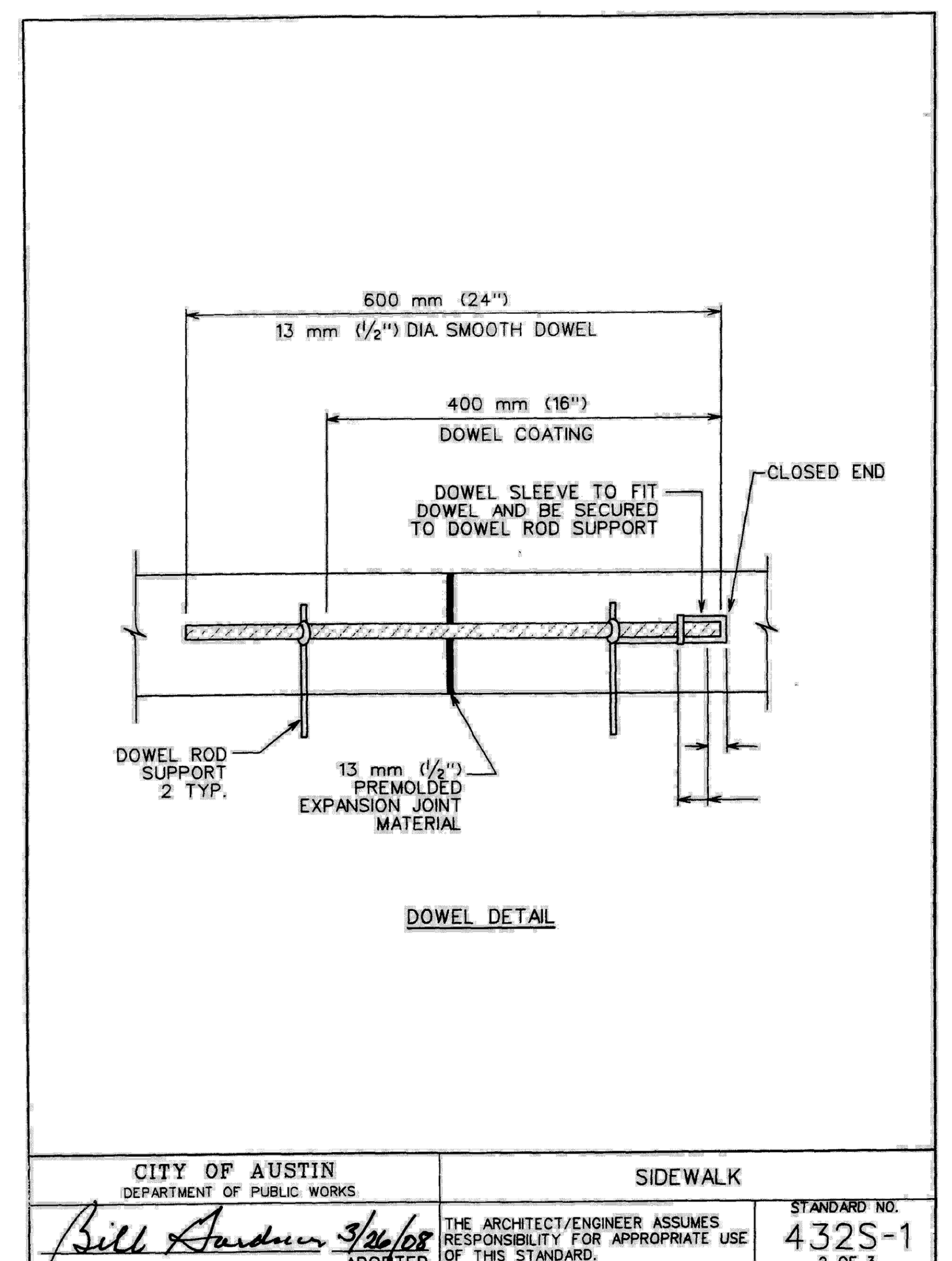
SHEET TITLE
TTS BATCH DETENTION REMOVAL CALCULATIONS

PROJECT NO.
0193.001

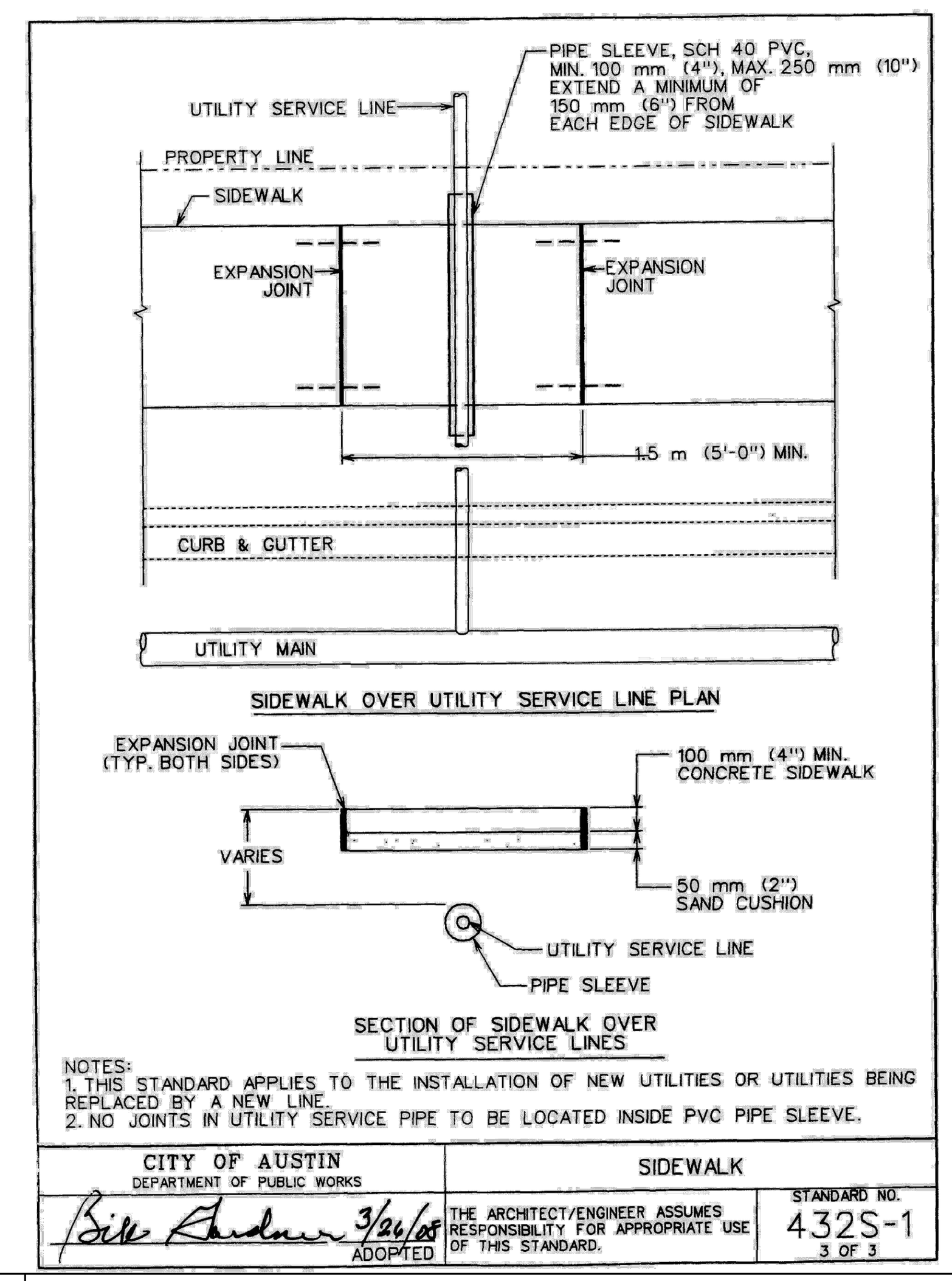
SHEET NO.
C32



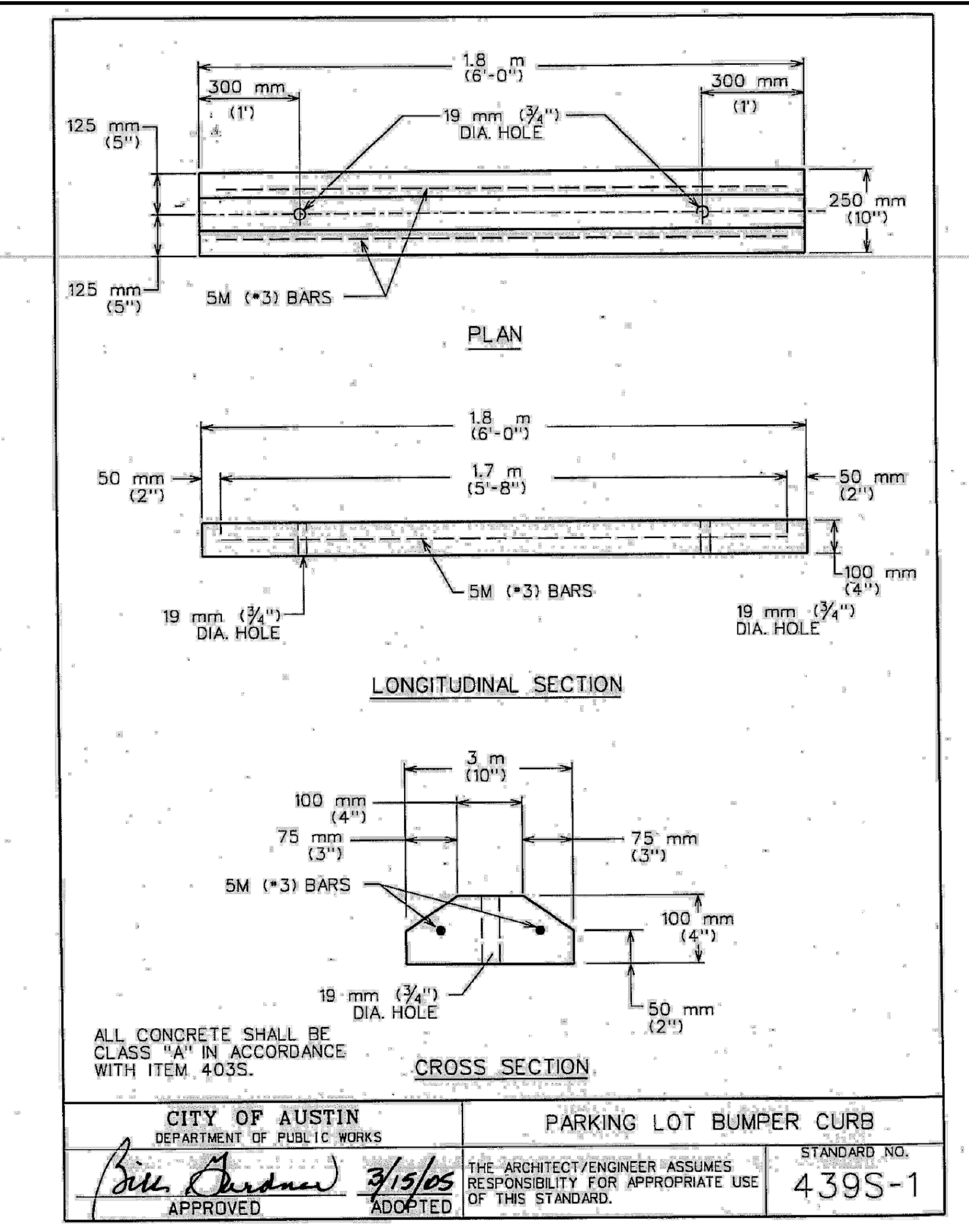
01 SIDEWALK NTS



02 SIDEWALK NTS



03 SIDEWALK NTS



04 PARKING LOT BUMPER CURB NTS

ADA/TAS DESIGN - GENERAL

THE CONTRACTOR IS FULLY RESPONSIBLE FOR CONSTRUCTION OF SIDEWALKS, LANDINGS, PORCHES, RAMPS & PARKING SPACES THAT MEET ADA/TAS REQUIREMENTS. THE CONTRACTOR SHALL HAVE FULL KNOWLEDGE OF THE DETAILS ON THESE PLANS AND OF ADA/TAS REGULATIONS. SHOULD THE CONTRACTOR FIND AN ELEVATION OR CONDITION THAT IS DIFFERENT THAN SHOWN ON THE PLANS, IT IS THE CONTRACTORS FINAL RESPONSIBILITY TO CONTACT THE CIVIL DESIGNER AND WORK OUT A DESIGN THAT MEETS ADA & TAS, PRIOR TO CONSTRUCTION, NOT AFTER THE WORK IS COMPLETED.

ADA SIDEWALK RAMP SLOPES

DETERMINE THE LENGTH OF A RAMP BY CHECKING THE ELEVATIONS AT THE TOP AND BOTTOM ELEVATION OF THE RAMPS. THE DESIGN SHALL BE FOR A RUNNING SLOPE OF 8.3%

ADA CURB RAMP SLOPES

THE DESIGN SHALL BE FOR A RAMP SLOPE OF 8.3%. IT IS IMPOSSIBLE TO HAVE A 6' LONG RAMP WITHOUT THE TOP AND BOTTOM OF RAMP BEING NO MORE THAN 6" DIFFERENCE IN ELEVATION. DETERMINE THE LENGTH BY CHECKING THE TOP AND BOTTOM ELEVATIONS OF THE RAMP.

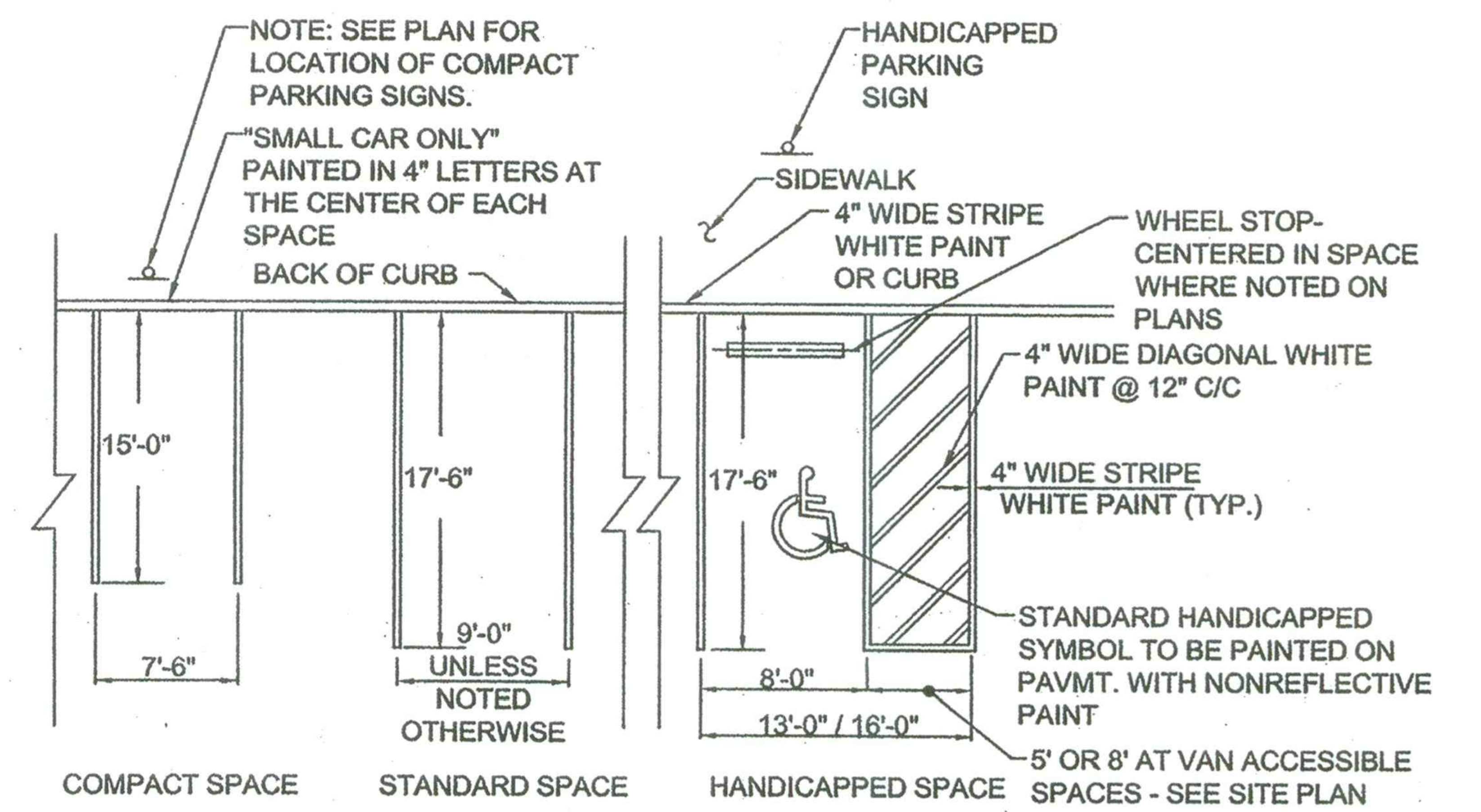
ADA HANDICAP PARKING SPACES

NO SLOPE WITHIN A PARKING SPACE OR A STRIPED AISLE SHALL EXCEED 2% IN EITHER DIRECTION.

ADA CROSSWALKS, SIDEWALKS, AND ACCESSIBLE ROUTES

NO CROSS SLOPE SHALL EXCEED 2%. NO RUNNING SLOPE SHALL EXCEED 5%.

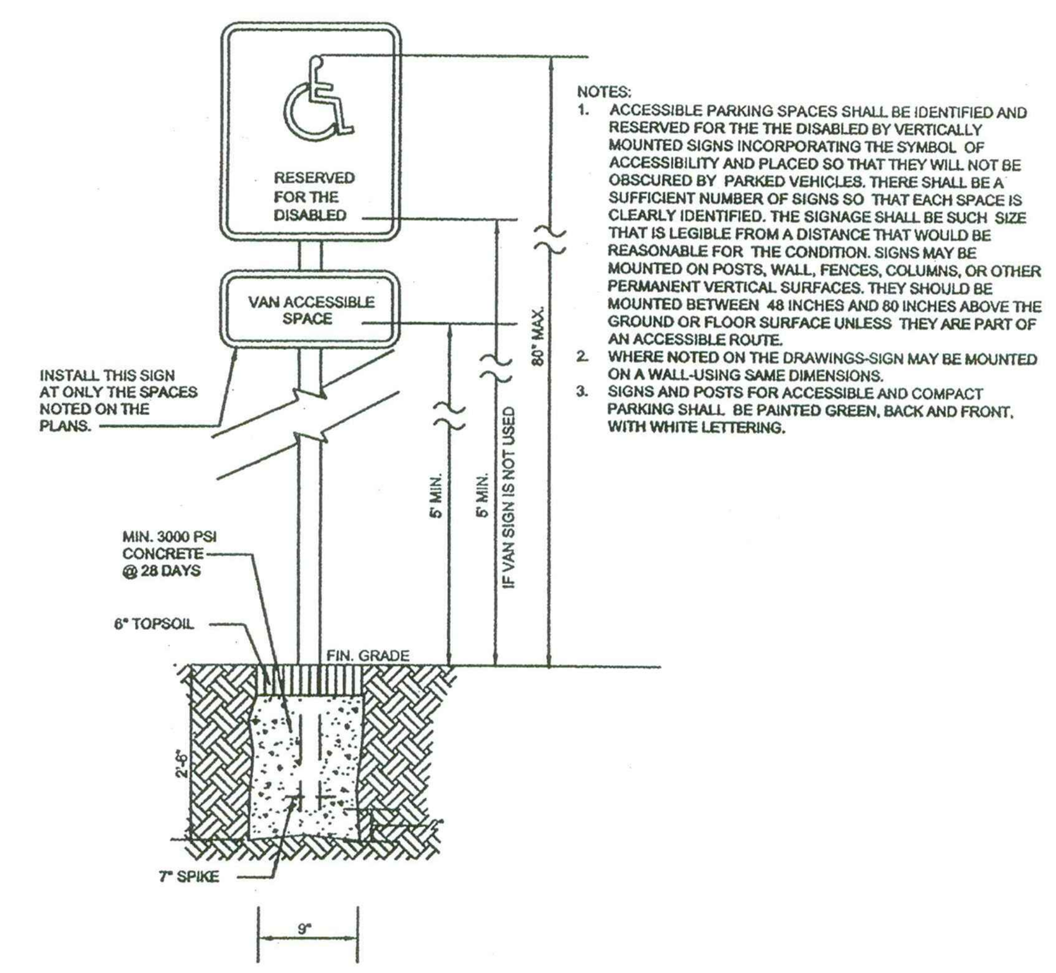
05 ADA NOTES NTS



TYPICAL PARKING SPACE LAYOUT
N.T.S.

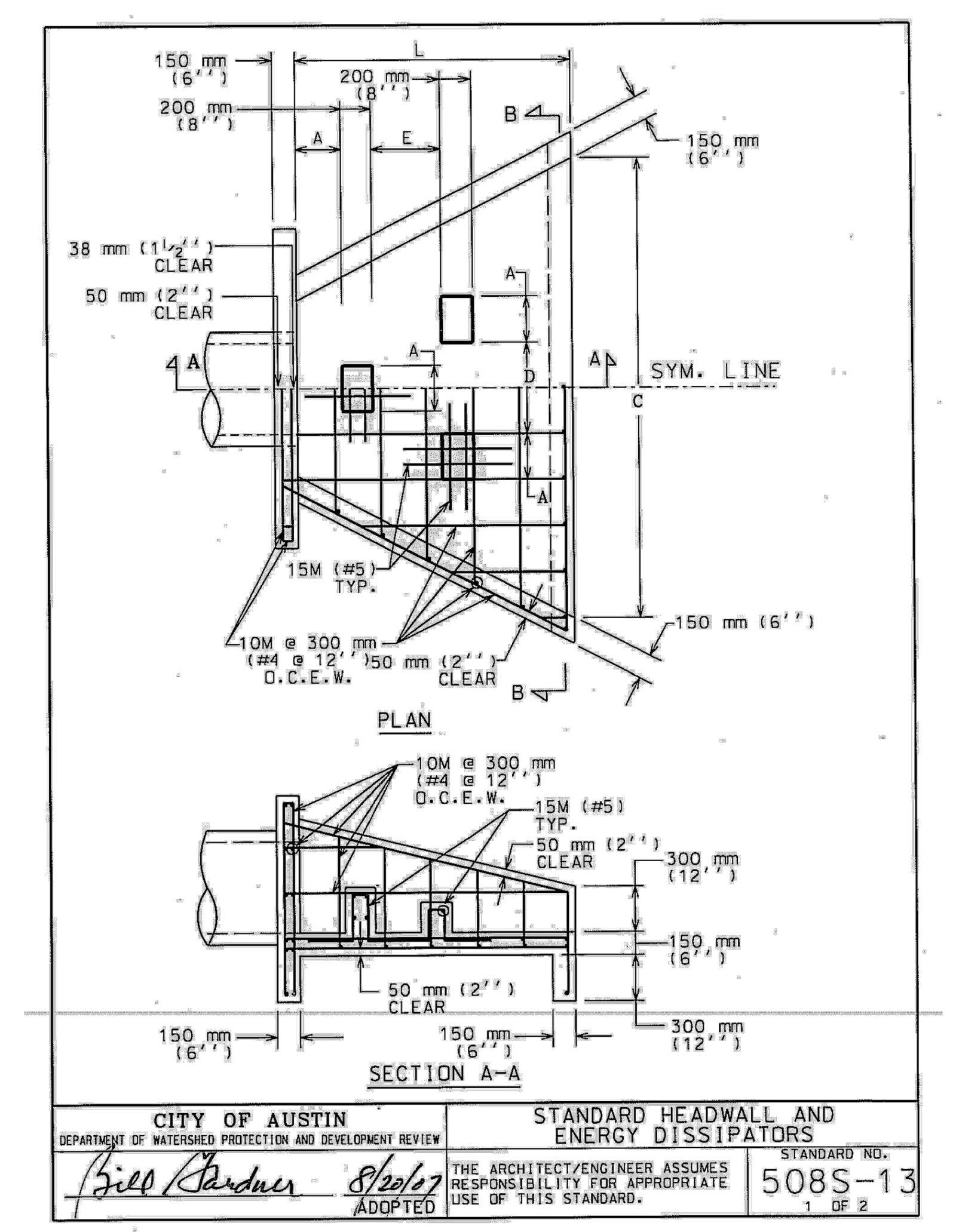
06 TYPICAL STRIPING NTS

07 NTS

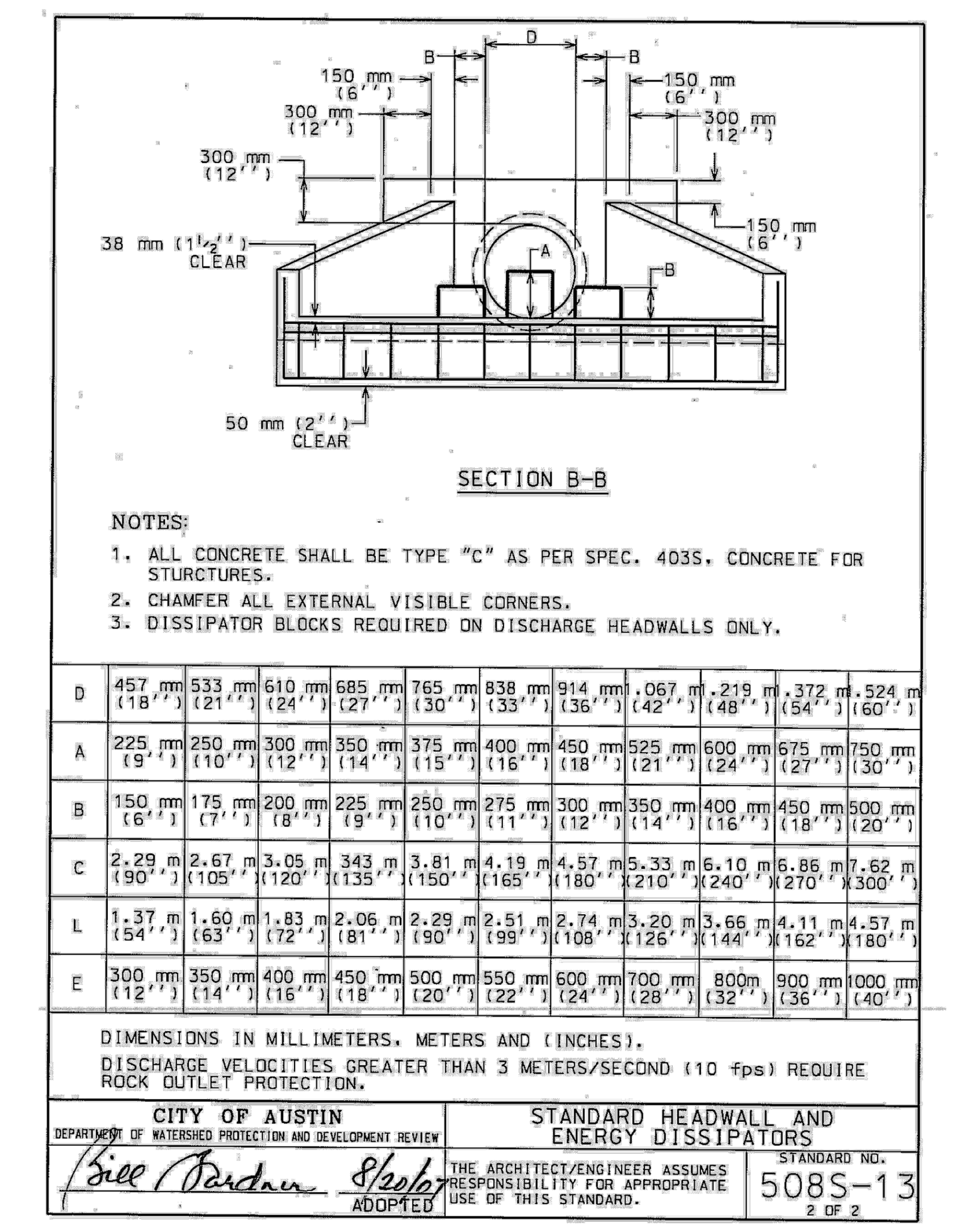


ACCESSIBLE SIGNAGE
N.T.S.

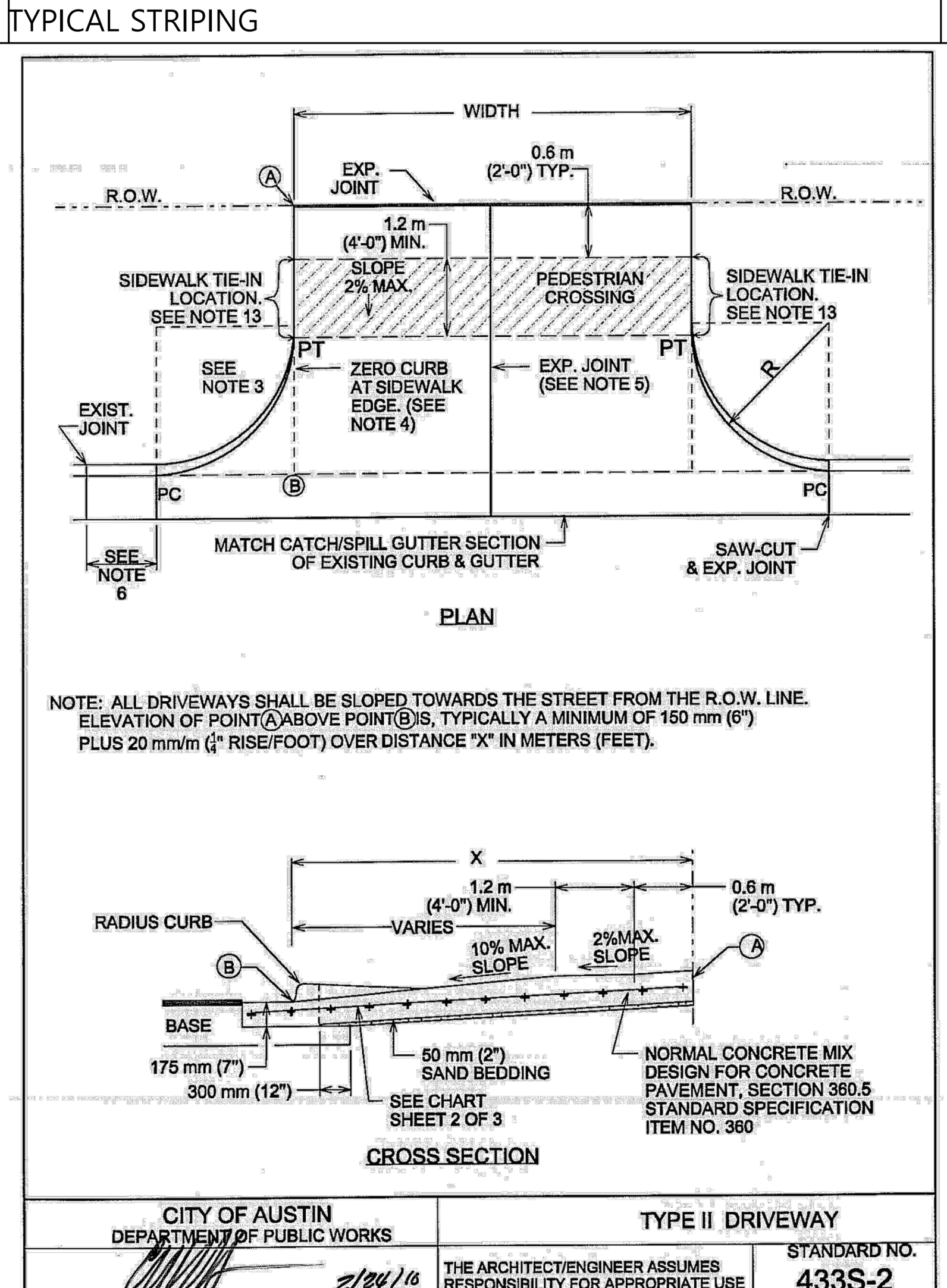
08 ACCESSIBLE SIGNAGE NTS



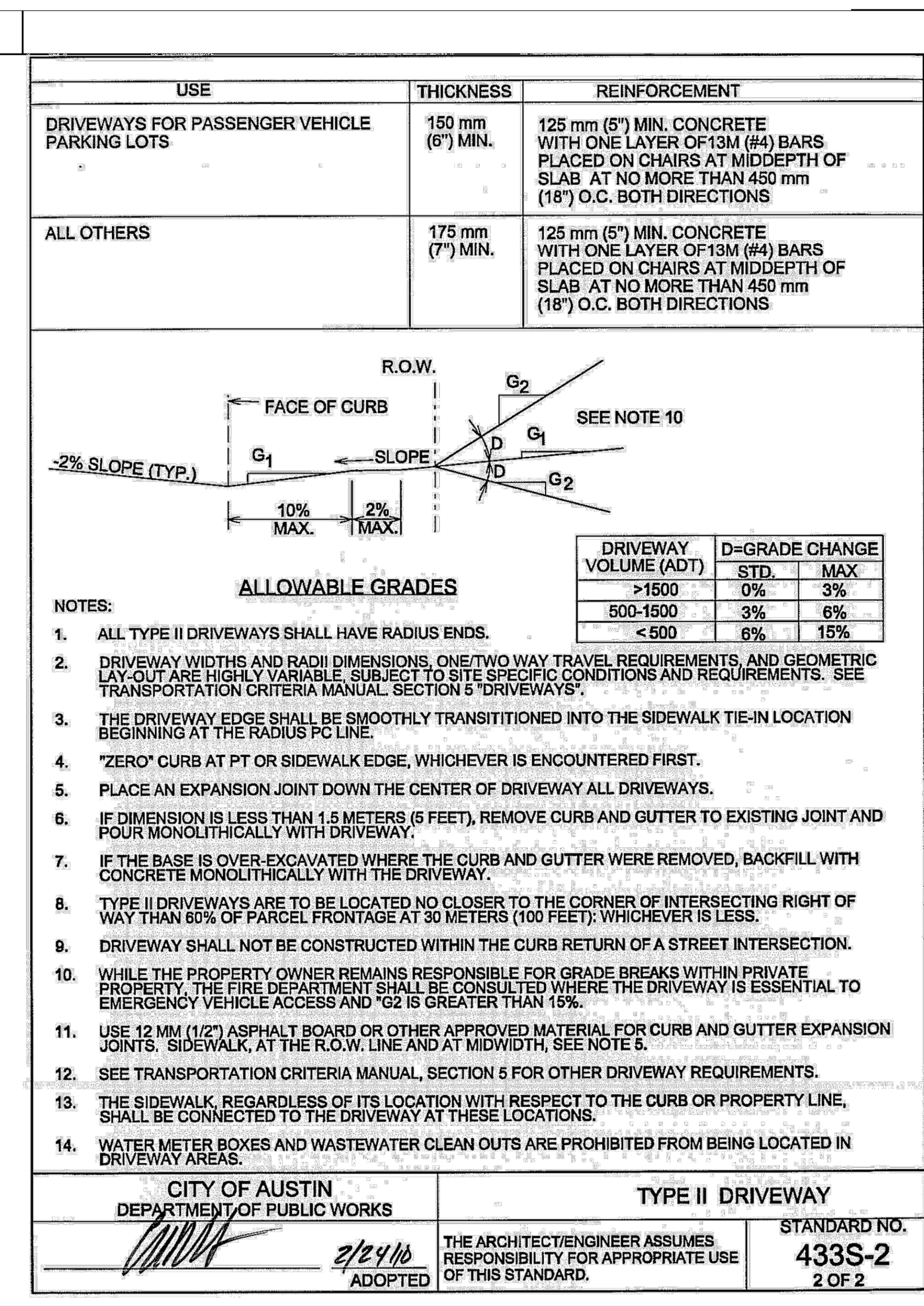
09 HEADWALL WITH ENERGY DISSIPATORS



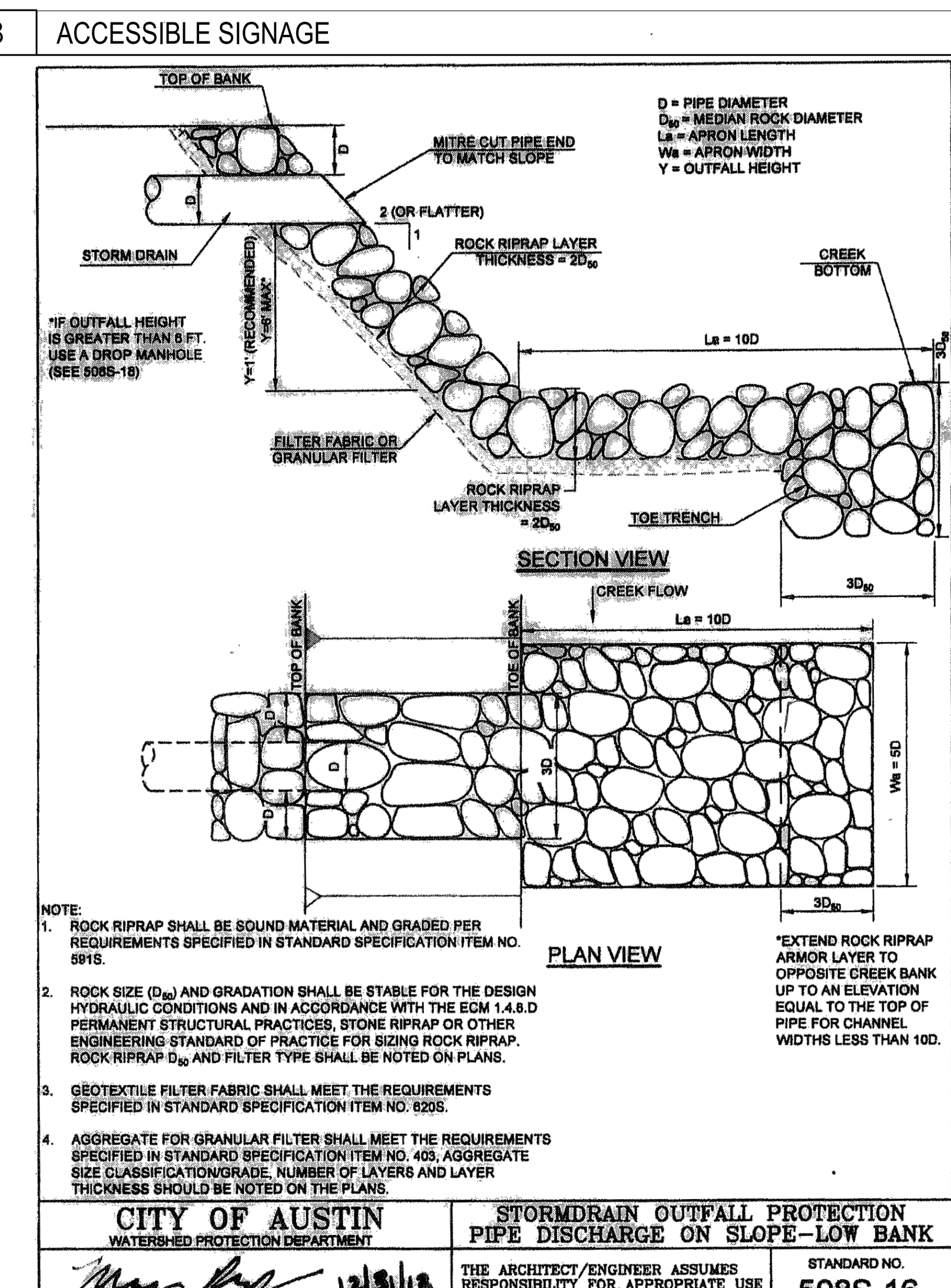
10 HEADWALL WITH ENERGY DISSIPATORS NTS



11 TYPE II DRIVEWAY (1 OF 2) NTS

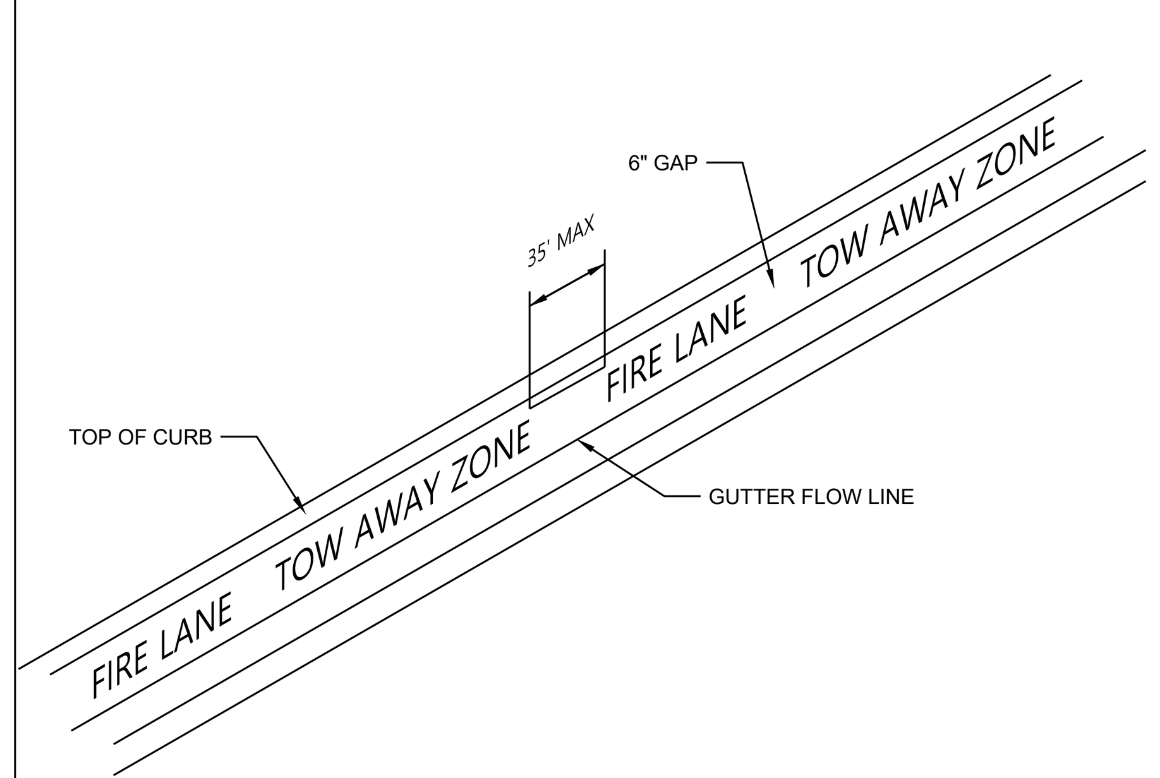


12 TYPE II DRIVEWAY (1 OF 2) NTS



13 STORMDRAIN OUTFALL PROTECTION PIPE DISCHARGE NTS

14 NTS



NOTES:

FIRE LANE STRIPING TO BE WHERE CURB AND GUTTERING EXISTS, ALL CURBS OF FIRE APPARATUS ACCESS ROADS SHALL BE PAINTED RED AND BE CONSPICUOUSLY AND LEGIBLY MARKED WITH THE WARNING "FIRE LANE – TOW AWAY ZONE" IN WHITE LETTERS AT LEAST THREE INCHES TALL, AT INTERVALS NOT EXCEEDING 35 FEET.WHERE THERE IS NO CURB, LAY DOWN STRIPING SHALL BE USED.

15 FIRE LANE STRIPING NTS

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9600 Escarpment Blvd, Suite 745-174
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STATE OF TEXAS – TAMMI R. MIGL – 92607 – LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

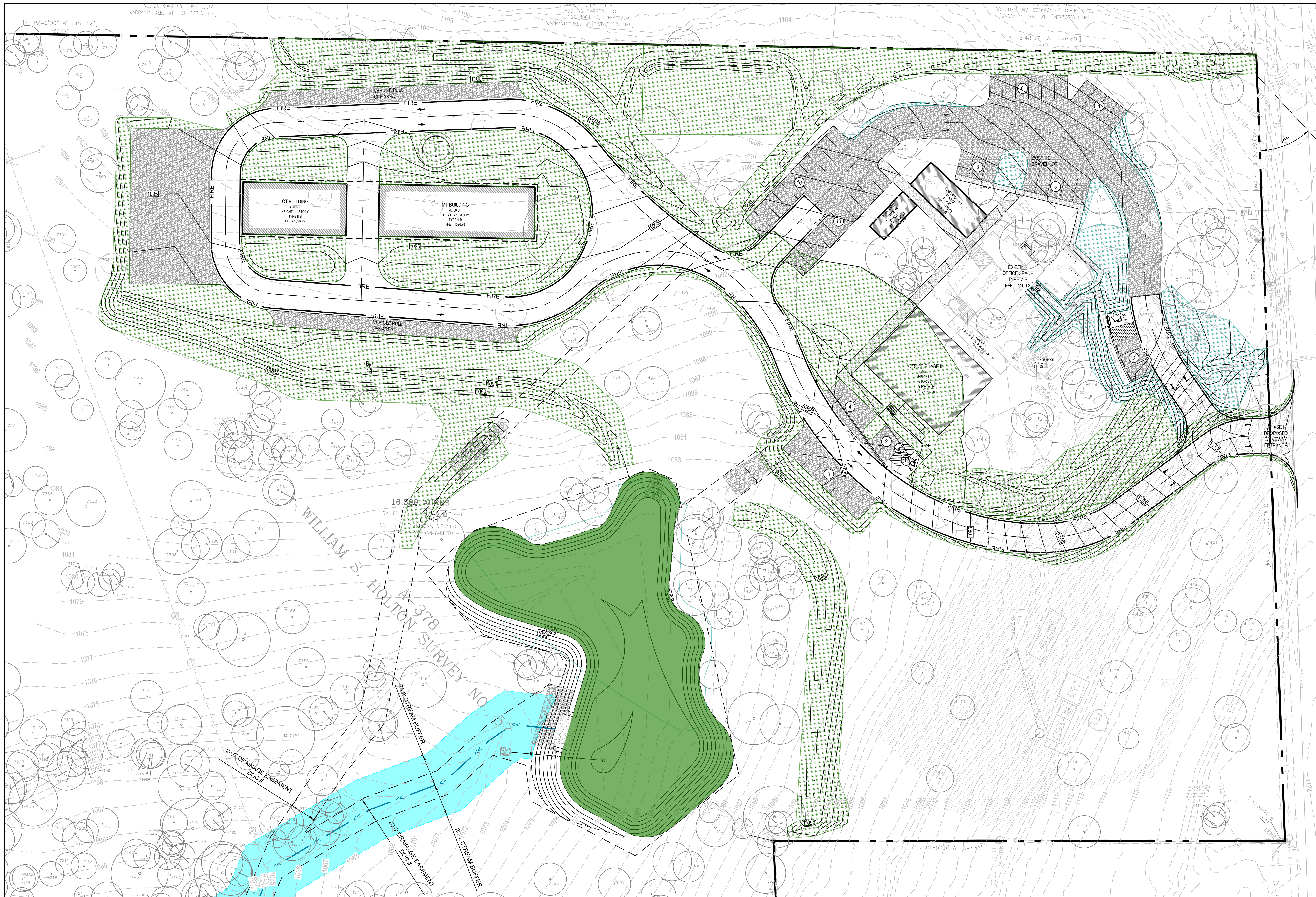
PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: SITE AND UTILITY DETAILS (1 OF 3)

PROJECT NO. 0193.001

SHEET NO. C37

37 OF 42



0 20' 40' 80'
Scale: 1" = 40'

NOTES:

1. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED IN ANY GIVEN AREA.
2. THE FINAL STABILIZATION/REVEGETATION EFFORTS SHALL BE IN ACCORDANCE WITH THE APPROVED RESTORATION PLAN DETAILS AND SPECIFICATIONS.
3. ALL 3:1 SLOPES OR STEEPER REQUIRE SOIL RETENTION BLANKET (SRB).
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE WATERING/IRRIGATION TO ACHIEVE THE PERMANENT STABILIZATION REQUIREMENTS IN ALL DISTURBED/REVEGETATED AREAS BEFORE FINAL ACCEPTANCE FOR THIS PROJECT CAN BE OBTAINED.
5. ALL COMMON AREAS INCLUDING PWQC STRUCTURES MUST BE PERMANENTLY STABILIZED PER; JURISDICTIONAL TECHNICAL SPECIFICATIONS BEFORE A CONDITIONAL ACCEPTANCE CAN BE ISSUED.
6. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
7. ANY DISTURBED AREA(S) NOT INDICTED TO BE RESTORED ON THE RESTORATION PLAN REQUIRES THE SAME EFFORTS AS THOSE INDICATED.
8. ALL DISTURBED AREAS MUST MEET THE REQUIREMENT FOR PERMANENT STABILIZATION.
9. THE NOTICE OF TERMINATION (NOT) FOR THIS PROJECT SHALL NOT BE SUBMITTED UNTIL THE TRAVIS COUNTY ENVIRONMENTAL INSPECTOR APPROVES CLEARANCE.

LEGEND

PHASE I RESTORATION AREA (147465.21 SF)

PHASE II RESTORATION AREA (10410.18 SF)

QUANTITIES

1,485 LF	SILT FENCE
375 LF	TREE PROTECTION
1 EA	STABILIZED CONSTRUCTION ENTRANCE
1 EA	CONCRETE WASHOUT

ROCK BERM
LOC — LIMITS OF CONSTRUCTION
SF — SILT FENCE
TP — TREE PROTECTION

Know what's below. Call before you dig.

CAUTION - ELECTRICITY PRESENT

THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS THAT ENTER OR WORK ON THIS PROJECT ARE RESPONSIBLE FOR LOCATING, USING ONE-CALL OR THE ELECTRIC UTILITIES THEMSELVES, ALL OVERHEAD AND UNDERGROUND ELECTRICAL OF ANY NATURE AND FOR SAFEGUARDING ALL PERSONNEL ON THIS PROJECT, INCLUDING ANY OFF-SITE WORK AREAS SHOWN ON THE PLAN, FROM ANY INTERFERENCE WITH THE ELECTRIC LINES OR FROM DAMAGING, DIGGING UP OR UNCOVERING THE ELECTRIC LINES, GETTING A LADDER IN HARMS WAY OR ANY OTHER ACTIVITY OF ANY NATURE THAT COULD HARM ANY INDIVIDUAL IN ANY MANNER. THIS RESPONSIBILITY HEREBY REMOVES MIGL ENGINEERING AND CONSULTING AND THE OWNER FROM ANY LIABILITY OF ANY NATURE.

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STATE OF TEXAS
TAMMI R. MIGL
92607
LICENSED PROFESSIONAL ENGINEER
September 24, 2025

NO.	DATE	REVISIONS	RECOM'D

CLIENT: LANDWEST DESIGN GROUP, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

PROJECT: LANDWEST RIM ROCK 1, 11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737

SHEET TITLE: STABILIZATION AND RESTORATION PLAN

PROJECT NO. 0193.001

SHEET NO. C40

MIGL
ENGINEERING
AND CONSULTING

TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES)
GENERAL PERMIT TXR 150000

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

LANDWEST RIM ROCK 1

11783 RIM ROCK TRAIL
AUSTIN, TEXAS 78737

☐ **SMALL CONSTRUCTION ACTIVITY (One To Five Acres of Disturbance)**

☒ **LARGE CONSTRUCTION ACTIVITY (More Than Five Acres of Disturbance)**

SITE DISCHARGED TO EDWARDS AQUIFER
RECHARGE OR CONTRIBUTING ZONE
(REQUIRING A CHAPTER 213, EDWARDS AQUIFER SUBMITTAL)

☒ **YES** ☐ **NO**

Prepared for:
LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL
AUSTIN, TEXAS 78737

Revised September 2025
Project No. 0193.001

09/25/2025

TABLE OF CONTENTS

STORMWATER POLLUTION PREVENTION PLAN

Project Name and Location:

LANDWEST RIM ROCK 1
11783 RIM ROCK TRAIL, AUSTIN, TEXAS 78737
TRAVIS COUNTY

Owner Name and Address:

FGS INVESTMENTS LLC
PO BOX 340789
AUSTIN, TEXAS 78734

Contractor Name and Address:

LANDWEST DESIGN GROUP
11783 RIM ROCK TRAIL
AUSTIN, TEXAS 78737

* The Contractor is the responsible Permittee/Operator for the implementation, day-to-day control, maintenance, and inspection of the SWPPP.

1.0 PROJECT DESCRIPTION

1.1 DESCRIPTION OF CONSTRUCTION ACTIVITIES

This application consists of the Site Development Plans for a proposed office, two equipment and material storage warehouses, and associated parking, sidewalk, water services, water quality, and stormwater detention improvements for LandWest Rim Rock 1 located at 11783 Rim Rock Trail, Austin, Texas. Approximately 8.268 acres of the 16.399 of land will be utilized for the new development. The site is located within the jurisdictions of Travis County Transportation and Natural Resources, Travis County Fire Marshal's

Office, West Travis County Public Utility Agency, and the Texas Commission on Environmental Quality.

The site is currently developed with a residential home converted into an office, gravel parking lots, and native grasses with coverage from many trees of varying species. The site slopes from east to west with slopes ranging from 2% to 25%. The property is located in the Bear Creek watershed and no portion of the site is located within the 100-year (Atlas 14) floodplain.

The proposed improvements to the subject tract consist of a 4,800 sf office, a 3,600 sf material storage warehouse, a 4,800 sf equipment storage warehouse, associated parking, fire lanes, drive aisles, water quality controls, detention pond, on-site septic field, and new municipal water services.

The site wastewater gravity drains to a private septic tank with a septic field; 4" wastewater line will serve the improvements. Wastewater from the proposed buildings will be discharged to this septic tank.

The site is located in the Bear Creek Watershed and located outside the Edwards Aquifer Recharge Zone and inside it's contributing zone per TCEQ Maps. The proposed site development will add approximately 126,526 square feet of impervious cover to the site, for a total of 134,453 square feet (3.09 acres) or 18.8% of impervious cover.

The existing drainage pattern flows generally from the north to south on the property. 6.49 acres of offsite runoff crosses the subject tract as the property upgradient has been developed with single family residences. The onsite runoff flows towards a creek that ultimately outfalls into Bear Creek. No portion of the lot is inundated by the 100-year floodplain as shown on the Federal Flood Insurance Administration Firm Panel Number 48453C0555J, dated January 22, 2020 for Travis County, Texas (EXHIBIT 4).

The detention for the improvements is provided by a pond in the middle of the property with a storage of 0.6160 acre-feet. The proposed water quality will provide treatment that will meet the required water quality volume of 19,517 cubic feet for runoff from impervious cover.

Potential pollutants for this project are described in Section 5.4 of this SWPPP.

1.2 SEQUENCE OF MAJOR ACTIVITIES

The following list of activities will be followed once construction begins.

1. Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan and in accordance with the Stormwater Pollution Prevention Plan (SWPPP) that is required to be posted on the site. Install tree protection and initiate tree mitigation measures.

2. Hold a pre-construction conference.

3. Rough grade proposed water quality and detention ponds at 100% capacity. Either the permanent outlet structure or temporary outlet must be constructed prior to development of embankment or excavation that leads to ponding conditions. The outlet system must consist of a sump pit outlet and an emergency spillway meeting the requirements of the Drainage Criteria Manual and/or Environmental Criteria Manual, as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until installation of the permanent water quality pond(s).

4. Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the Storm Water Pollution Prevention Plan (SWPPP) posted on the site.

5. Begin site clearing/construction (or demolition) activities.

6. Permanent water quality ponds or controls will be cleaned out prior to/concurrently with revegetation of site.

7. Complete construction and start revegetation of the site and installation of landscaping.

8. Upon completion of the site construction and revegetation of a project site, the design engineer shall submit an engineer's letter of concurrence indicating that construction, including revegetation, is complete and in substantial conformity with the approved plans. After

receiving this letter, a final inspection will be scheduled by the appropriate City Inspector.

9. After a final inspection has been conducted by the City Inspector and with approval from the City Inspector, remove the temporary erosion and sedimentation controls and complete any necessary final revegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation of the water quality ponds or controls.

10. 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 Austin Regional Office within 30 days of site completion.

11. Certification by a Texas Licensed Professional Engineer of the testing of sewage collection systems required by 30 TAC Chapter 213 and Chapter 217 shall be submitted to the Austin Regional Office within 30 days of test completion and prior to the new sewage collection system being put into service. The certification should include the project name as it appeared on the approved application, the program ID number, and two copies of a site plan sheets) indicating the wastewater lines and manholes that were tested and are being certified as complying with the appropriate regulations. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Should any test result fail to meet passing test criteria and then subsequently pass testing, the results) and an explanation of what repair, adjustment, or other means were taken to facilitate a subsequent passing result shall be provided.

1.3 ESTIMATED TOTAL SITE AREA, TOTAL DISTURBED AREA
(Includes any off-site material storage, stockpiles, etc.)

The total site area to be developed totals approximately 8.268 acres. The total limit of disturbance (limits of construction) is approximately 7.70 acres which includes driveway and utility disturbance outside of the property lines of the site, site access and staging.

1.4 DESCRIPTION OF SOILS

Based on USGS soil data the soil was identified as Brackett-Rock outcrop, Hydrologic group D, which is a high runoff class.

1.5 SITE MAP

A location map of the project is attached in the appendices, as Appendix "A".

1.6 DETAILED PLANS

The construction drawing plan set titled **"SITE DEVELOPMENT PLANS FOR LANDWEST RIM ROCK 1"** is hereby made a part of this SWPPP. This **"Plan Set"** contains maps and plans showing drainage patterns, areas of soil disturbance, locations and details of structural controls, stabilization practices to be used, water and drainage ways, and locations of stormwater discharges.

1.7 ASPHALT AND CONCRETE PLANTS

None are associated with this project.

1.8 NAME OF RECEIVING WATER AND EXTENT OF WETLANDS

The project site is in the Bear Creek Watershed which empties into Onion Creek Creek which then discharges into the Colorado River.

1.9 CONDITIONS OF THE PERMIT

The Permittee/Operator can be found to be criminally responsible for all aspects of implementation of the conditions of this plan.

The Permittee's/Operator's responsibilities are fully outlined in PART III of TXR 150000.

1.10 TPDES GENERAL PERMIT TXR 150000

A copy of the TPDES General Permit TXR 150000 is attached in the Appendices.

2.0 BEST MANAGEMENT PRACTICES (BMP)

2.1 EROSION AND SEDIMENT CONTROLS

2.1.1 All erosion and sediment controls for areas disturbed by construction activities shall be installed as shown and/or noted on the Plan Set.

2.1.2 All controls as shown on the Plan Set shall be fully installed prior to starting any construction activities. Inspections must be performed at least once every 7 days and/or within 24 hours of a rainfall event of 0.5 inches or more. If periodic inspections or other information indicates a control is performing inadequately, the operator shall replace or modify the control as soon as practicable after discovery that the control is performing inadequately or is damaged. The operator shall provide the means to measure the rainfall events at the project site.

2.1.3 Sediment must be removed from sediment traps and/or sedimentation ponds no later than the time that the design capacity has been reduced by 50%.

2.1.4 Controls have been developed to limit, to the extent practicable, offsite transport of sediment, litter, construction debris, and construction materials. If sediment escapes the site, accumulations must be removed at a frequency to minimize further negative effects, and whenever feasible, prior to the next rain event.

2.2 STABILIZATION PRACTICES

2.2.1 All disturbed areas shall be fully stabilized using hydromulching, sod, or as noted and detailed on the plan set.

2.2.2 The following records must be maintained and either attached to or referenced in the SWPPP, and made readily available upon request to the parties in Part III.D.1 of the General Permit TXR 150000:

(1) Dates when major grading activities occur.

(2) Dates when construction activities temporarily or permanently cease on a portion of the site.

(3) Dates when stabilization measures are initiated.

* Records are available in the Appendices.

2.2.3 Stabilization measures must be initiated as soon as practicable in portions of the site where construction activities have temporarily or

permanently ceased, and except as provided in (1) through (3) below, must be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased.

(1) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

(2) Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of site.

(3) In arid areas (areas with an average annual rainfall of 0 to 10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practicable.

2.2.4 The project shall not be considered stabilized until the disturbed areas have a uniform perennial vegetative cover of at least 70%.

3.0 STRUCTURAL CONTROL PRACTICES

3.1 SEDIMENT BASINS

In lieu of sediment basins, temporary silt fence shall be installed to treat storm runoff and limit the discharge of silt and pollutants throughout the construction process.

3.2 SEDIMENT TRAPS

Silt fencing will be placed on the down gradient side of disturbed areas, to limit the discharge of silt and pollutants. Inlet protection will be used to limit the discharge of silt and pollutants into the drainage pipes.

4.0 PERMANENT STORM WATER CONTROLS

WATERSHED

The property is located within the Bear Creek Watershed which is located in the Edwards Aquifer Contributing Zone. No portion of the limits of construction is located within a 100-year floodplain per Federal Emergency Management Administration (FEMA) Panel No. 48453C0555J, dated January 22, 2020.

DRAINAGE

The site basins, identified as A, B1, B2, B3, and, encompass a total area of 16.39 acres, with an additional offsite runoff area of 6.49 acres. Runoff from the undeveloped portions of the site will be directed to the batch basin via basin B3 and B2. The design ensures that stormwater attenuation aligns with existing peak flow rates, maintaining pre-development conditions. Basin A, covering areas with no proposed improvements, will remain unchanged, thereby preserving the existing conditions. The runoff from areas with parking improvements and roof surfaces will be managed through the proposed partial sedimentation-filtration/detention pond.

WATER QUALITY

Water quality treatment will be provided through the proposed batch basin, designed to manage a required volume of 19,517 cubic feet of water quality volume per TCEQ TSS RG-384-A removal standards. This pond will receive runoff from roof drains and parking lots, ensuring effective management and treatment of stormwater. The treated water will be discharged through a designated 6" smart valve outfall, with the system ensuring that water quality standards are met. The batch basin, along with the detention components, will work together to provide comprehensive water quality treatment for the site.

DETENTION

Detention will be managed through a combination of a stacked detention, and a batch basin, all designed to outfall through a 6-inch smart valve outfall onto a creek that outfalls into Bear Creek. Basin B2 and B3 will convey runoff around the batch basin/detention pond, ensuring efficient management of stormwater from undeveloped portions of the site. The proposed batch basin/detention pond will contribute to the detention by receiving runoff from parking areas and roof drains developed withing basin B1. This comprehensive approach will ensure that

stormwater is detained and discharged at rates consistent with pre-development peak flow conditions. The detention pond capture volume and outlet structure are sized to attenuate the 2-, 10-, 25-, and 100-year design storm events to pre-development conditions. The results are shown in the Drainage Area Summary Table.

DRAINAGE AREA SUMMARY TABLE
LandWest - 11783 Rim Rock Trail

DRAINAGE AREA	PROPOSED										
	OS-1	A	POC 1	OS-3	B1	POND	OS-2	OS-4	B2	B3	POC 2
AREA (Mi^2)	0.00044741	0.00185151		0.00315162	0.01426182		0.00698408	0.00433210	0.00852315	0.00098726	
Area (AC)	0.286	1.185		2.017	9.128		4.470	2.773	5.455	0.632	
CN	80.00	80.00		80.00	80.00		80.00	80.00	80.00	80.00	
% IC	0.00%	0.00%		6.61%	33.85%		7.00%	6.30%	0.00%	0.00%	
24 HR STORM	PEAK RUNOFF FLOW RATES (CFS)										
2 - YR	0.76	3.64	**4.33**	5.96	33.38	24.70	11.77	8.06	17.90	2.22	***57.49**
10 - YR	1.46	6.98	**8.31**	11.17	57.90	53.53	22.13	15.14	34.20	4.24	**120.38**
25 - YR	1.93	9.24	**11.02**	14.73	74.43	75.15	29.15	19.93	45.25	5.60	**166.82**
100 - YR	2.70	12.91	**15.42**	20.49	101.34	107.99	40.50	27.69	63.21	7.82	**237.79**

**50% retention of 2 - YR maximum allowed release 57.63 cfs, provided 57.49 cfs*

5.0 OTHER CONTROLS

5.1 GOOD HOUSEKEEPING

The following good housekeeping practices shall be followed on-site during the construction of the project. The good housekeeping will reduce the risks associated with handling of hazardous materials and accidental discharges.

(1) An effort shall be made to store only enough product required to do the job.

(2) All materials stored on-site shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.

(3) Products shall be kept in their original containers, unless they are not re-sealable, with the original manufacturer's label and material safety data (i.e. MSDS Sheets).

(4) Manufacturer's recommendations for proper use shall be followed. Substances shall not be mixed with one another, unless recommended by the manufacturer.

(5) Whenever possible, all of a product will be used up before disposing of the container. If surplus product must be disposed of, manufacturers' or local state recommended methods for proper disposal shall be followed.
(6) The superintendent, the individual who manages day-to-day operations, shall ensure proper use and disposal of materials on-site.

5.2 OFF-SITE VEHICLE TRACKING

Any dirt, mud, debris, etc., spilled, tracked or otherwise deposited on existing paved streets shall be immediately cleaned up. Stabilized construction entrances shall be used, as shown on the plan set.

5.3 CONSTRUCTION & WASTE MATERIAL

The following materials are expected to be present on-site during construction:

Pipe	Fertilizers	Soils
Concrete	Wood	Pipe Bedding
Detergents	Asphalt	Plastics
Fuels	Paints	
Lubricants	Base	

The items listed above are not to be considered all inclusive. Others similar materials consistent with the proposed improvements would also be expected to be present on-site during construction.

5.3.1 Solid Waste Disposal

All waste materials shall be collected and stored in metal dumpsters rented from a licensed solid waste management company. The dumpsters shall meet all local and state solid waste management regulations. All trash and construction debris from the site shall be deposited in the dumpsters. The Contractor shall remove all excess non-hazardous material to an approved municipal or construction landfill, which has been authorized by local and state solid waste management authorities before disposal. Any hazardous waste generated as a result of this project shall be managed and disposed by the Contractor. No construction waste material shall be buried on-site. All personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these Practices, shall be posted in the office of the Contractor's Superintendent, the individual who manages the day-to-day site

operations, and he/she will be responsible for seeing that these procedures are followed.

5.3.2 Hazardous Waste

No hazardous waste is expected to be generated or encountered in this project. In the event that hazardous waste is encountered, all hazardous waste materials will be disposed of in the manner specified by local or state regulations or by the manufacturer. The Superintendent, the individual who manages day-to-day operations, will be responsible for seeing that these practices are followed.

5.3.3 Sanitary Waste

All sanitary waste will be regularly collected from the portable units, which will be leased for use on site from a licensed sanitary waste management contractor.

5.3.4 Spill Prevention

(1) The spill prevention practices to be followed are listed in Table 1, which is located in the Appendices.

(2) In the event of a spill, the operator shall report all spills and releases of reportable quantities (as described by 30 TAC Section 327.1-327.5 which is summarized in the "TNRCC Regulatory Guidance" handout attached in the Appendices), to the local HAZ-MAT authority and the Natural Response Center at 800/424-8802, as soon as the Contractor has knowledge of the spill. Procedures for contain the spill are as follows:

1) Stop the source of the spill.
2) Contain the spill.
3) Cover the spill with absorbent material.
4) Properly dispose of absorbent material.
5) If necessary, use a private firm that specializes in spill remediation.

(3) The SWPPP must be modified within 14 days to provide a description of the release, the circumstances leading to the release and the date of the release.

5.4 POLLUTANT SOURCES

The primary storm water contaminates expected to be generated during the construction project are the entrainment of solids (soil particles) which will affect the turbidity of the run-off water. For this project, disturbed soils will result from:

1. Clearing and grubbing of the site.
2. Grading/ excavation of the lot in preparation for construction.
3. Stockpiling of spoils, base material, & pipe bedding materials.
4. Revegetation and Landscaping

Increased sediment loading in the storm water can be attributed to: a) direct impingement of rain onto disturbed soil areas, sand gravel and rock areas where rains dislodge or entrain particles; b) erosion of disturbed soil areas and trenches; c) the transfer of soils and particulate matter via equipment of vehicle tires onto non-disturbed areas or onto paved areas where they are washed into drainage ditches.

There is a potential for hydrocarbon contamination in the form of oil and grease from equipment and vehicles, and from fuel spillage on the site. Oil and grease are typically released to the environment because of equipment failure, or routine or non-routine maintenance operations. Releases of fuel typically result from on-site fueling operations. Since most construction equipment operates hydraulically, there is the potential that releases of hydraulic fluids may occur. The primary reason for hydraulic release is lack of a maintenance program to replace worn hydraulic hoses, seal failures on hydraulic pistons, and spillage during maintenance programs.

In the event of hydrocarbon or hazardous substance spill, the contactor shall follow the procedures in Section 5.3.4 of this SWPPP.

5.5 VELOCITY DISSIPATION DEVICES

The site drains to proposed water quality and detention ponds.

All areas disturbed by construction activities will be revegetated.

6.0 STATE AND LOCAL REQUIREMENTS

6.1 COMPLIANCE

This SWPPP complies with applicable state and local officials. To ensure compliance, this plan was prepared in substantial compliance with the "City of Austin Ordinances". In the event of conflicting criteria, the most stringent criteria shall be followed.

6.2 COMPLIANCE UPDATE

The SWPPP and Plan Set shall be updated, as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or storm water management site plans or site permits approved by state or local official for which the operator receives written notice.

7.0 MAINTENANCE

7.1 REQUIREMENTS

It will be the responsibility of the operator to ensure that proper inspection and maintenance procedures are carried out as outlined in this SWPPP. The Operator will designate a qualified person or persons to perform the inspections.

All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. If through inspections the operator determines that BMPs are not operating effectively, maintenance must be performed before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable. Erosion and sediment controls that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective, must be replaced or corrected immediately upon discovery.

8.0 INSPECTION OF CONTROLS

8.1 INSPECTION SCHEDULE

In the event of flooding or other uncontrollable situations, which prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable.

Personnel provided by the permittee and familiar with the SWPPP must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, and structural controls for evidence of, or the potential for, pollutants entering the drainage system. Sediment and erosion control measures identified in the SWPPP must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections must be conducted at least once every seven (7) calendar days and/or within twenty-four (24) hours of the end of a storm event of 0.5 inches or greater. The weekly inspection shall be conducted every **Monday**, regardless of whether or not there has been an event since the previous inspection.

8.2 SWPPP REVISIONS

The SWPPP and Plan Set shall be revised based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWPPP and Plan Set must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWPPP and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.

8.3 INSPECTION REPORTS

A report summarizing the scope of the inspection, names and qualifications of personnel making the inspection, the dates of the inspection, and major observations relating to the implementation of the SWPPP must be made and retained as part of the SWPPP. Major observations should include, but not limited to:

(1) The locations of discharges of sediment or other pollutants from the site.

(2) Locations of BMPs that need to be maintained.
(3) Locations of BMPs that failed to operate as designed or proved inadequate for a particular location.
(4) Locations where additional BMPs are needed.

Actions taken as a result of inspections must be described within, and retained as a part of, the SWPPP. Reports must identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report must contain a certification that the facility or site is in compliance with the SWPPP and this permit. The report must be signed by the operator and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports)

Inspection reports are available in the Appendices. The operator will need to reproduce the applicable original report for use at each reporting event. (e.g. use the blank only for making copies and fill in the page number as each weekly or event report is made).

All inspection reports and records are required to be kept at the site during construction or, if the site is inactive or does not have an on-site location to store the SWPPP, a notice must be posted describing the location of the SWPPP. A three (3) ring binder is advised for maintaining the SWPPP documents.

8.4 RETENTION OF RECORDS

Records must be retained for all maintenance and inspection activities for a minimum of three (3) years following completion of the final stabilization or another permitted operator has assumed control of the site. Other requirements and contents of records to be retained are outlined in Part VI of the General Permit TXR 150000.

Records using the forms found in the Appendices of this SWPPP may be utilized, in order to keep and maintain on-going records of the items noted below. The records must be readily available for viewing as noted in Part III.D.1 of TXR 150000.

(1) Maintenance and inspections of Best Management Practices (Temporary and Permanent).

(2) Plan changes or modifications.

(3) Major grading activities.

(4) Ceased construction activities.

(5) Areas of temporary or permanent stabilization.

(6) A copy of the SWPPP, including the Construction Site Notice.

9.0 ELIGIBLE NON-STORM WATER DISCHARGES

9.1 PERMITTED NON-STORM WATER DISCHARGES

The permitted Non-Storm Water Discharge will use the same BMPs as described in this SWPPP for Storm Water Discharges. The following are permitted non-stormwater discharges:

(a) Discharges from fire fighting activities.

(b) Fire hydrant flushing.

(c) Vehicle, external building, and pavement wash water where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local, state or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, and dust.

(d) Water used to control dust.

(e) Potable water sources including water line flushing.

(f) Air conditioning condensate.

(g) Uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

9.2 OTHER PERMITTED DISCHARGES

Any discharge authorized under a separate NPDES, TPDES, or TCEQ permits may be combined with discharges authorized by this General Permit TXR 150000.

10.0 CONSTRUCTION/IMPLEMENTATION

10.1 SIGN INFORMATION

Before any construction starts, the operator, (Contractor), must complete and sign the "Notice of Intent" (NOI). The notice must be posted on a sign at the entrance to the construction site where it is readily available for viewing by the general public, local, state and federal authorities. The notice must include the NOI permit number (once received), point of contact, phone number for point of contact, site description and location of the SWPPP. The notice must be maintained on the sign until completion of all construction activity.

If your construction activity is between one and five acres of disturbances ensure the "Construction Site Notice" is posted at the entrance sign. (No NOI will be required.)

The "Notice of Intent" or "Construction Site Notice" is available in the appendices.

NOTE: If a new operator is selected, a new "Notice of Intent" or "Construction Site Notice" must be posted within 2 days prior to commencing work.

10.2 SWPPP

1. Once the documents in this plan are completed and signed, bound and attached or affixed to the Plan Set, this complete set of documents constitutes the SWPPP.

2. All operators must complete and sign the "Contractor/Subcontractor Certification" in this Plan.

3. Ensure your SWPPP has the following items; signed certifications, signed "Notice of Intent" (NOI) or "Construction Site Notice", and inspection reports. Lastly, if someone other than the authority signs the inspection reports, ensure a "delegation" letter has been sent to TCEQ and a copy of this letter is included in the SWPPP.

4. The SWPPP must be retained onsite or within a distance of 1 hour from the site, if the site is inactive or does not have an onsite location to store the plan, a notice must be posted describing the location of the SWPPP. The SWPPP must be made readily available at the time of an onsite inspection to: the executive director; a federal, state or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site.

5. Ensure the inspection reports in the plan are current and have documented correction items with dates and initials.

6. The Operators shall be aware of the responsibilities as outlined in Part III, Section B “Responsibilities of Operators”, page 25 of the General Permit TXR 150000.

APPENDICES

A. Site Location Map

B. Spill Prevention and Response

C. Operator Certification

D. Maintenance/Inspection Requirements & Forms

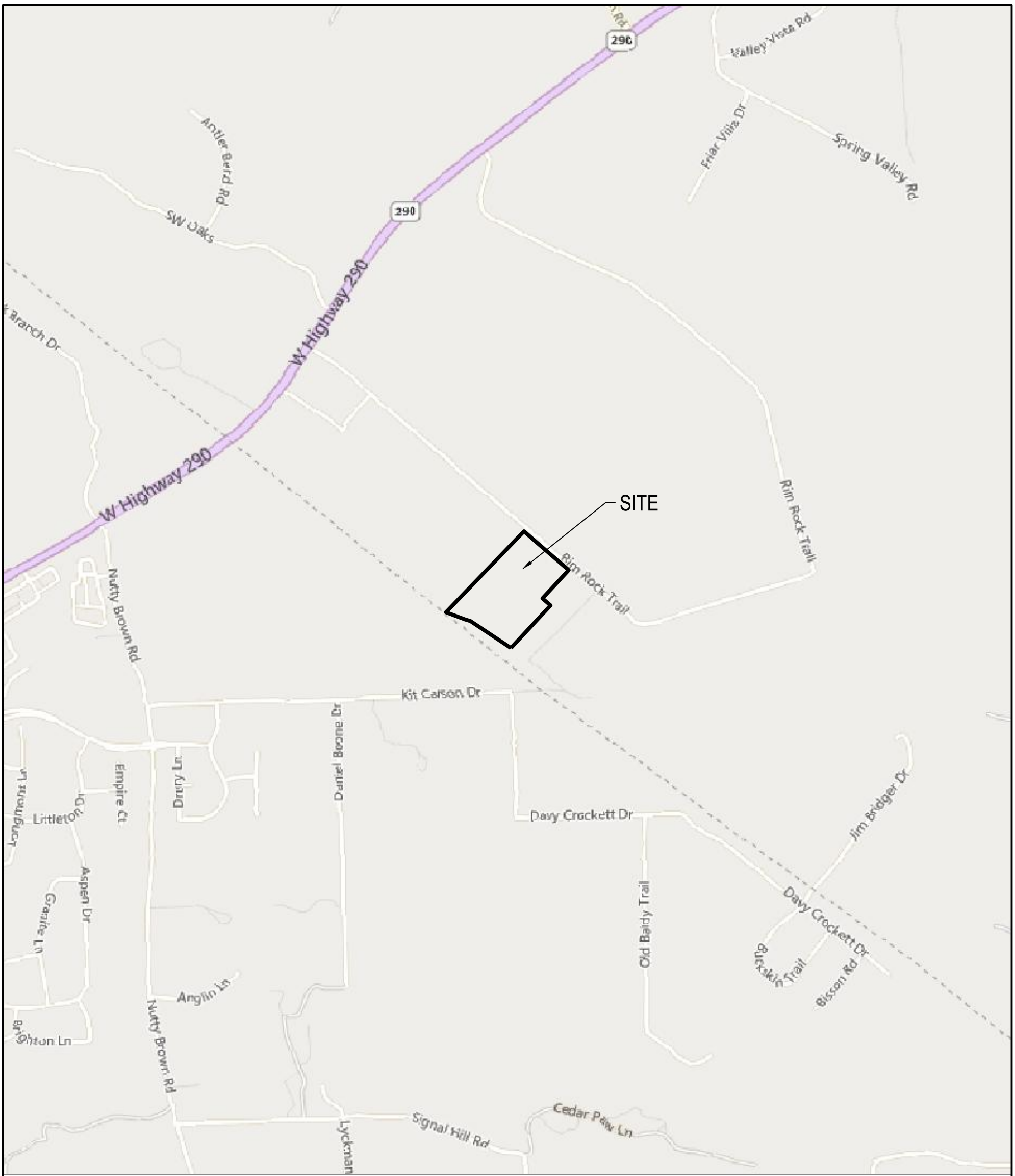
E. Large Construction Site Notice for Primary Operator

F. Large Construction Site Notice for Secondary Operator

G. TPDES General Permit TXR 150000, effective date February 27, 2023

APPENDIX A

SITE LOCATION MAP



LOCATION MAP

LAND WEST RIM ROCK 1

08/08/2024

MIGL
ENGINEERING
AND CONSULTING

APPENDIX B

SPILL PREVENTION AND RESPONSE

SPILL PREVENTION AND RESPONSE

SPILL PREVENTION PRACTICES

In addition to good housekeeping and material management practices, the following practices should be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept on site in the material storage area. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, sawdust or other absorbent materials, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well-ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the appropriate state or local government agency.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and cleanup measures will also be included.
- The Site Superintendent responsible for the day-to-day site operations, will be the spill prevention and cleanup coordinator.

PRODUCT-SPECIFIC PRACTICES

The following product-specific practices will be followed on-site:

PETROLEUM PRODUCTS:

All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.

FERTILIZERS:

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked in the soil to limit exposure to

stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

PAINTS:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer but will be properly disposed of according to manufacturer's instructions or state and local regulations.

CONCRETE TRUCKS:

Concrete trucks must use the concrete wash-out area designated on the site plan.

SPILL RESPONSE

Spills will be prevented utilizing Bet Management Practices such as proper material storage, handling, and disposal practices. However, despite such efforts, a spill may occur on site. If a spill occurs, the following procedures will be utilized.

1. ***Stop the spill, if possible.*** This can include shutting off power to a pump, righting an overturned container, or plugging a hole in a damaged container.
2. ***Contain the spill, safely.*** Spill containment can be accomplished using a variety of materials and methods such as the use of absorbents (ie sawdust, rags, sand, booms, etc) to dike the area around the spill, or placing a leaking container inside one which is not leaking. Spill containment should only be attempted if it is safe to do so. Proper safety equipment such as gloves and eye protection should be used as directed on the Material Safety Data Sheet for the spilled material.
3. ***Report the spill, if necessary.*** Certain quantities of hazardous or toxic materials such as pesticides, paint thinners, gasoline, etc are required by Federal Law to be reported to the National Response Center (NRC) at 1-800-424-8802 as soon as you have knowledge of the spill. Since most of the quantities which require reporting to the NRC are larger than that found on a typical construction site, spill reporting to the State or Local authorities is more likely. When in doubt, report the spill.

   The TCEQ is the state's lead agency in responding to spills of all hazardous substances, including refined petroleum products from pipelines; releases of crude oil being transported over the roadway; and discharges of any other substances that may cause pollution or that may harm air quality pursuant to the Texas Hazardous Substances Spill Prevention and Control Act (Texas Water Code §26.261 et seq) and the Texas Clean Air Act (Texas Health & Safety Code §382.001).

TCEQ requires reporting of spills of 25 gallons or greater, especially those which might impact a waterway.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ)

1-800-832-8224

When making a telephone report of a spill or pollution complaint, it will be helpful if the following information at hand:

- The date and time of the spill or release.
- The identity or chemical name of any material released or spilled, as well as whether the substance is extremely hazardous.
- An estimate of the quantity of material released or spilled and the time or duration of the event.
- The exact location of the spill, including the name of waters involved or threatened, and any other media affected by the release or spill.
- The extent of actual and potential water pollution.
- The source of the release or spill.
- The name, address, and phone number of the party in charge of, or responsible for, the facility, vessel, or activity associated with the release or spill. If that party is not at the site, also have the name and phone number of the party at the site who is in charge of operations.
- The steps being taken or proposed to contain and clean up the released or spilled material and any precautions taken to minimize impacts, including evacuation.
- The extent of injuries, if any.
- Any known or anticipated health risks associated with the incident and, where appropriate, advice regarding medical attention necessary for persons exposed.
- Possible hazards to the environment (air, soil, water, wildlife, etc.). This assessment may include references to accepted chemical databases, material safety data sheets, and health advisories. The TCEQ may request estimated or measured concentrations of the contaminant for the state's hazard assessment.
- The identities of any government or private-sector representatives responding at the scene.

4. *Clean the spill up properly.* Spill cleanup should be performed in accordance with applicable regulations or according to the manufacturer's recommendations on the Material Safety Data Sheet. In most cases, proper spill cleanup is to use a dry method such as absorbing the spill and containerize for disposal via a licensed disposal company. For non-hazardous and non-toxic materials this may be through your solid waste disposal service with prior approval.
5. *Document the spill and corrective action.*

Spill Date	Material Spilled	~ Amount of spill (gallons)	Cause of Spill	Corrective Action	Correction Date

APPENDIX C

OPERATOR CERTIFICATION

CONTRACTOR / SUBCONTRACTOR CERTIFICATION

I certify under penalty of law that I understand the terms and conditions of the general Texas Pollutant Discharge Elimination System (TPDES) permit that authorized the storm water discharges associated with activity from the construction site identified at the beginning of this document and as noted hereon and that I have read the attached TPDES General Permit TXR 150000.

SIGNATURE / DATES	COMPANY / FIRM	RESPONSIBLE FOR:
Signature		Operational Control over Construction Plans and Specifications, and Day-to-Day Operational Control
Printed Name	General Contractor	
Title		
Date		
Signature		
Printed Name		
Title		
Date		

APPENDIX D

MAINTENANCE/ INSPECTION REQUIREMENTS AND FORMS

INSPECTION AND MAINTENANCE REPORTS

The following reports will provide the operator with an original that will need to be reproduced for use at each reporting event. Use the blank only for making copies.

All reports are required to be kept at the site during construction. A three (3) ring binder is advised which will also contain the SWPPP documents.

STORMWATER POLLUTION PREVENTION PLAN

CONSTRUCTION ACTIVITIES REPORT

MAJOR GRADING ACTIVITIES (Explain where major grading activities occur in a particular area, with dates for same.)

CEASED CONSTRUCTION ACTIVITIES (Explain when activities are temporarily or permanently ceased in a particular area, with dates for same.)

AREAS STABILIZED (Explain what particular areas are temporarily or permanently stabilized, with dates for same.)

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

____ Report for week of _____

____ Event Report on _____

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: ___ INCHES

STABILIZATION MEASURES

AREA	DATE SINCE LAST DISTURBED	DATE OF NEXT DISTURBANCE	STABILIZED (YES OR NO)	STABILIZED WITH	CONDITION

STABILIZATION REQUIRED:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

COMMENTS:
Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three (3) years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

CERTIFICATION STATEMENT:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that quality 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."

SIGNATURE: _____ COMPANY: _____

PRINTED NAME: _____ TELEPHONE: _____

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

____ Report for week of _____

____ Event Report on _____

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: ___ INCHES

SILT FENCE

LOCATION	BOTTOM OF FABRIC STILL BURIED (YES OR NO)	FABRIC TORN OR SAGGING (YES OR NO)	POSTS TIPPING OVER (YES OR NO)	HOW DEEP IS SEDIMENT (INCHES)

MAINTENANCE REQUIRED FOR SILT FENCE:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

COMMENTS:
Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three (3) years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

CERTIFICATION STATEMENT:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that quality 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."

SIGNATURE: _____ COMPANY: _____

PRINTED NAME: _____ TELEPHONE: _____

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

____ Report for week of _____

____ Event Report on _____

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: ___ INCHES

MULCH SOCK

LOCATION	CONDITION	IN PLACE (YES OR NO)	HOW DEEP IS SEDIMENT (INCHES)

MAINTENANCE REQUIRED FOR ROCK BERM:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

COMMENTS:
Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three (3) years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

CERTIFICATION STATEMENT:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that quality 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."

SIGNATURE: _____ COMPANY: _____

PRINTED NAME: _____ TELEPHONE: _____

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

____ Report for week of _____

____ Event Report on _____

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: ___ INCHES

ROCK BERM

LOCATION	CONDITION	IN PLACE (YES OR NO)	HOW DEEP IS SEDIMENT (INCHES)

MAINTENANCE REQUIRED FOR ROCK BERM:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

COMMENTS:
Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three (3) years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

CERTIFICATION STATEMENT:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that quality 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."

SIGNATURE: _____ COMPANY: _____

PRINTED NAME: _____ TELEPHONE: _____

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

____ Report for week of _____

____ Event Report on _____

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: ___ INCHES

STABILIZED CONSTRUCTION ENTRANCE/ CONTRACTOR STAGING AREA

DOES MUCH SEDIMENT GET TRACKED ONTO ROAD	ENTRY SURFACE CLEAN OR SEDIMENT FILLED	DOES ALL TRAFFIC USE ENTRANCE (YES OR NO)

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCE/ CONTRACTOR STAGING AREA:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

COMMENTS:
Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three (3) years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

CERTIFICATION STATEMENT:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that quality 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."

SIGNATURE: _____ COMPANY: _____

PRINTED NAME: _____ TELEPHONE: _____

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

____ Report for week of _____

____ Event Report on _____

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: ___ INCHES

TREE PROTECTION FENCING

LOCATION	CONDITION	IN PLACE (YES OR NO)

MAINTENANCE REQUIRED FOR TREE PROTECTION:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

COMMENTS:
Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three (3) years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

CERTIFICATION STATEMENT:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that quality 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."

SIGNATURE: _____ COMPANY: _____

PRINTED NAME: _____ TELEPHONE: _____

STORMWATER POLLUTION PREVENTION PLAN
INSPECTION AND MAINTENANCE REPORT

____ Report for week of _____

____ Event Report on _____

INSPECTOR: _____ DATE: _____

DAYS SINCE LAST RAINFALL: _____ AMOUNT OF LAST RAINFALL: ___ INCHES

INLET PROTECTION

LOCATION	CONDITION	IN PLACE (YES OR NO)

MAINTENANCE REQUIRED FOR INLET PROTECTION:

_____

_____

_____

_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

COMMENTS:
Based on the results of the inspection, necessary control modifications shall be implemented within seven (7) calendar days. These reports shall be kept on file as part of the Storm Water Pollution Prevention Plan for at least three (3) years from the date that the site is finally stabilized. A copy of the SWPPP shall be kept at the site at all times during construction.

CERTIFICATION STATEMENT:
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with the system designed to assure that quality 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."

SIGNATURE: _____ COMPANY: _____

PRINTED NAME: _____ TELEPHONE: _____

APPENDIX E

LARGE CONSTRUCTION SITE NOTICE

TCEQ Large Construction Site Notice

Primary Operator

Large construction sites disturb more than five acres or are part of a larger common plan of development that disturbs more than five acres. Primary operators of large construction sites will fill out this notice. Primary operators will then post this notice at the construction site in a location where it is safely and readily available for viewing by the general public and local, state, and federal authorities. Additional information about the TCEQ Construction Stormwater General Permit may be found on TCEQ's webpage on Assistance Tools for Construction Stormwater General Permits.

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

Site-Specific TPDES Authorization Number: TXR15_____

Primary Operator Name:_____

Contact Name and Phone Number: _____

_____

Project Description:

Physical

Location/Description_____

_____

Estimated Start Date_____

Projected End Date or Date Disturbed Soils Will Be Stabilized_____

Location of Stormwater Pollution Prevention Plan (SWP3):_____

_____

TCEQ Large Construction Site Notice

Secondary Operator

Large construction sites disturb more than five acres or are part of a larger common plan of development that disturbs more than five acres. Secondary operators of large construction sites will fill out this notice. Secondary operators will then post this notice at the construction site in a location where it is safely and readily available for viewing by the general public and local, state, and federal authorities. Additional information about the TCEQ Construction Stormwater General Permit may be found on TCEQ's webpage on Assistance Tools for Construction Stormwater General Permits.

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

Site-Specific TPDES Authorization Number: TXR15_____

Secondary Operator Name:_____

Contact Name and Phone Number:_____

_____

Project Description:

Physical

Location/Description_____

_____

Estimated Start Date_____

Projected End Date or Date Disturbed Soils Will Be Stabilized_____

Location of Stormwater Pollution Prevention Plan (SWP3):_____

_____

For Large Construction Activities Authorized Under Part II.E.3. (Obtaining Authorization to Discharge) the following certification must be completed:

I _____ (*Typed or Printed Name Person Completing This Certification*) certify under penalty of law that I have read and understand the eligibility requirements for claiming an authorization under Part II.E.3. of TPDES General Permit TXR150000 and agree to comply with the terms of this permit. A stormwater pollution prevention plan has been developed and will be implemented prior to construction, according to permit requirements. A copy of this signed notice is supplied to the operator of the Municipal Separate Storm Sewer System (MS4) if discharges enter an MS4. I am aware there are significant penalties for providing false information or for conducting unauthorized discharges, including the possibility of fine and imprisonment for knowing violations.

Signature and Title_____ Date _____

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

*Date Site Notice Removed*_____

APPENDIX F

TPDES GENERAL PERMIT TXR 150000

Texas Commission on Environmental Quality

P.O. Box 13087, Austin, Texas 78711-3087

GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR150000,
effective March 5, 2018, and amended January 28, 2022

Construction sites that discharge stormwater associated with construction activity located in the state of Texas may discharge to surface water in the state only according to monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the Commission of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, on March 5, 2028.

EFFECTIVE DATE: March 5, 2023

ISSUED DATE: February 27, 2023

For the Commission

TPDES GENERAL PERMIT NUMBER TXR150000

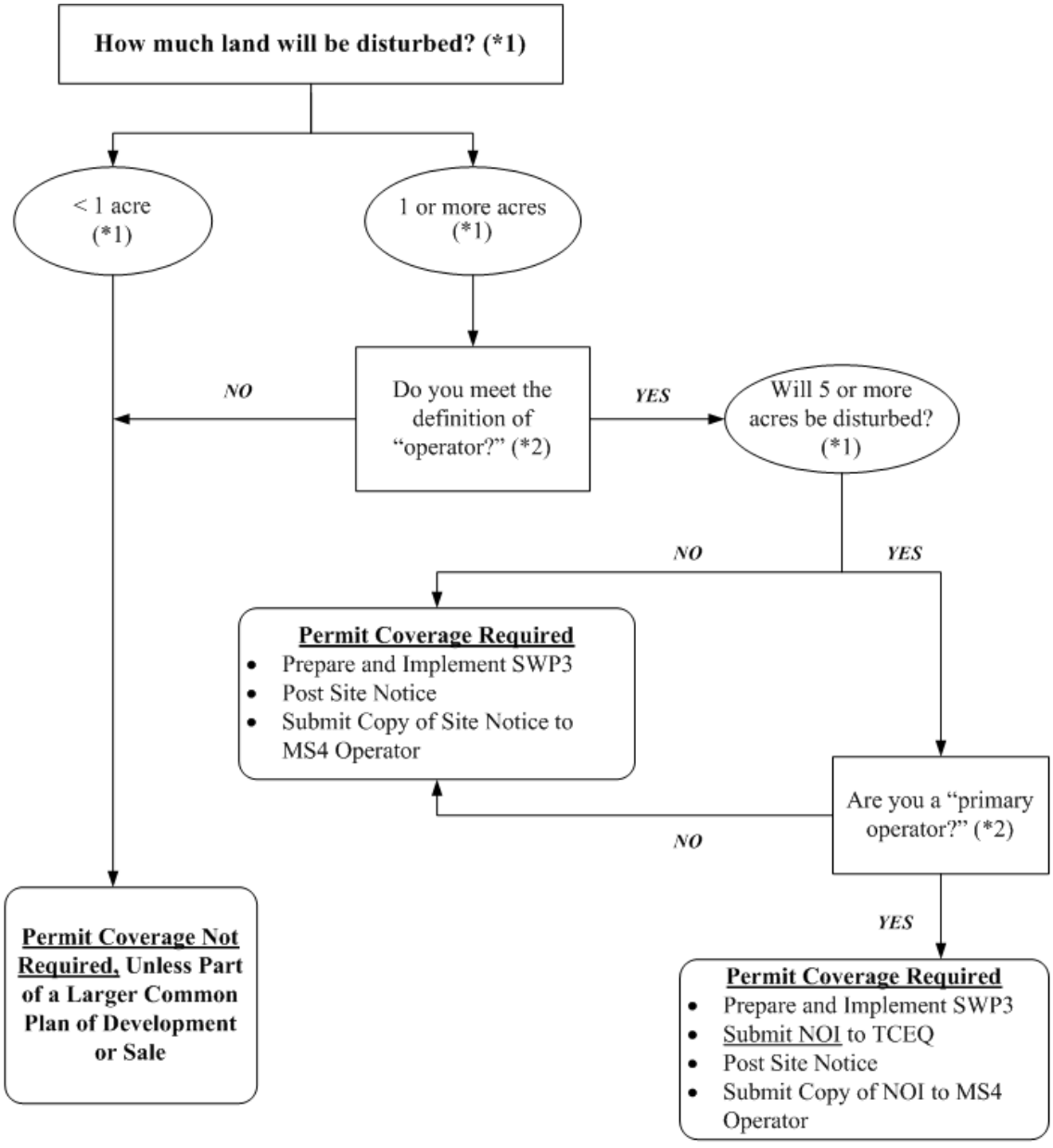
RELATING TO STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

Table of Contents

Part I. Flow Chart and Definitions

Section A. Flow Chart to Determine Whether Coverage is Required

When calculating the acreage of land area disturbed, include the disturbed land-area of all construction and construction support activities.



(*1) ***To determine the size of the construction project, use the size of the entire area to be disturbed, and include the size of the larger common plan of development or sale, if the project is part of a larger project (refer to Part I.B., "Definitions," for an explanation of "common plan of development or sale").***

(*2) ***Refer to the definitions for "operator," "primary operator," and "secondary operator" in Part I., Section B. of this permit.***

Section B. Definitions

Arid Areas – Areas with an average annual rainfall of zero (0) to ten (10) inches.

Best Management Practices (BMPs) – Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Commencement of Construction – The initial disturbance of soils associated with clearing, grading, or excavation activities, as well as other construction-related activities (e.g., demolition; grubbing; stockpiling of fill material; placement of raw materials at the site).

Common Plan of Development – A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development (also known as a "common plan of development or sale") is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities. A common plan of development does not necessarily include all construction projects within the jurisdiction of a public entity (e.g., a city or university). Construction of roads or buildings in different parts of the jurisdiction would be considered separate "common plans," with only the interconnected parts of a project being considered part of a "common plan" (e.g., a building and its associated parking lot and driveways, airport runway and associated taxiways, a building complex, etc.). Where discrete construction projects occur within a larger common plan of development or sale but are located one quarter (¼) mile or more apart, and the area between the projects is not being disturbed, each individual project can be treated as a separate plan of development or sale, provided that any interconnecting road, pipeline or utility project that is part of the same "common plan" is not included in the area to be disturbed.

Construction Activity – Includes soil disturbance activities, including clearing, grading, excavating, construction-related activity (e.g., stockpiling of fill material, demolition), and construction support activity. This does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing rights-of-way, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

Construction Support Activity – A construction-related activity that specifically supports construction activity, which can involve earth disturbance or pollutant-generating activities of its own, and can include, but are not limited to, activities associated with concrete or asphalt batch plants, rock crushers, equipment staging or storage areas, chemical storage areas, material storage areas, material borrow areas, and excavated material disposal areas. Construction support activity must only directly support the construction activity authorized under this general permit.

Dewatering – The act of draining accumulated stormwater or groundwater from building foundations, vaults, trenches, and other similar points of accumulation.

Discharge – For the purposes of this permit, the drainage, release, or disposal of pollutants in stormwater and certain non-stormwater from areas where soil disturbing activities (e.g., clearing, grading, excavation, stockpiling of fill material, and demolition), construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck wash out, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located.

Drought-Stricken Area – For the purposes of this permit, an area in which the National Oceanic and Atmospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html.

Edwards Aquifer – As defined under Texas Administrative Code (TAC) § 213.3 of this title (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone – Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located in the offices of the Texas Commission on Environmental Quality (TCEQ) and the appropriate regional office. The Edwards Aquifer Map Viewer, located at https://www.tceq.texas.gov/gis/edwards-viewer.html

Edwards Aquifer Contributing Zone – The area or watershed where runoff from precipitation flows downgradient to the recharge zone of the Edwards Aquifer. The contributing zone is located upstream (upgradient) and generally north and northwest of the recharge zone for the following counties: all areas within Kinney County, except the area within the watershed draining to Segment No. 2304 of the Rio Grande Basin; all areas within Uvalde, Medina, Bexar, and Comal Counties; all areas within Hays and Travis Counties, except the area within the watersheds draining to the Colorado River above a point 1.3 miles upstream from Tom Miller Dam, Lake Austin at the confluence of Barrow Brook Cove, Segment No. 1403 of the Colorado River Basin; and all areas within Williamson County, except the area within the watersheds draining to the Lampasas River above the dam at Stillhouse Hollow reservoir, Segment No. 1216 of the Brazos River Basin. The contributing zone is illustrated on the Edwards Aquifer map viewer at https://www.tceq.texas.gov/gis/edwards-viewer.html

Effluent Limitations Guideline (ELG) – Defined in 40 Code of Federal Regulations (CFR) § 122.2 as a regulation published by the Administrator under § 304(b) of the Clean Water Act (CWA) to adopt or revise effluent limitations.

Facility or Activity – For the purpose of this permit, referring to a construction site, the location of construction activity, or a construction support activity that is regulated under this general permit, including all contiguous land and fixtures (for example, ponds and materials stockpiles), structures, or appurtenances used at a construction site or industrial site.

Final Stabilization – A construction site status where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (that is, evenly distributed, without large bare areas) perennial vegetative cover with a density of at least 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, or gabions) have been employed.

(b) For individual lots in a residential construction site by either:

(1) the homebuilder completing final stabilization as specified in condition (a) above; or

(2) the homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization. If temporary stabilization is not feasible, then the homebuilder may fulfill this requirement by retaining perimeter controls or BMPs, and informing the homeowner of the need for removal of temporary controls and the establishment of final stabilization. Fulfillment of this requirement must be documented in the homebuilder's stormwater pollution prevention plan (SWP3).

(c) For construction activities on land used for agricultural purposes (such as pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to surface water and areas that are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) temporary erosion control measures (for example, degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) the temporary erosion control measures are selected, designed, and installed to achieve 70% of the native background vegetative coverage within three years.

High-Level Radioactive Waste – Meaning as assigned by 42 United States Code (U.S.C.) Section 10101 (12) and includes spent nuclear fuel as defined by 42 U.S.C. Section 10101 (23).

Hyperchlorination of Waterlines – Treatment of potable water lines or tanks with chlorine for disinfection purposes, typically following repair or partial replacement of the waterline or tank, and subsequently flushing the contents.

Impaired Water – A surface water body that is identified as impaired on the latest approved CWA § 303(d) List or waters with an EPA-approved or established total maximum daily load (TMDL) that are found on the latest EPA approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, which lists the category 4 and 5 water bodies.

Indian Country Land – (1) All land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation; (2) all dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and (3) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. (40 CFR § 122.2)

Indian Tribe – Any Indian Tribe, band, group, or community recognized by the Secretary of the Interior and exercising governmental authority over a Federal Indian Reservation (40 CFR § 122.2).

Infeasible – Not technologically possible, or not economically practicable and achievable in light of best industry practices. (40 CFR § 450.11(b)).

Large Construction Activity – Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than five (5) acres of land. Large construction activity also includes the disturbance of less than five (5) acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five (5) acres of land. Large construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities).

Linear Project – Includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

Low Rainfall Erosivity Waiver (LREW) – A written submission to the executive director from an operator of a construction site that is considered as small construction activity under the permit, which qualifies for a waiver from the requirements for small construction activities, only during the period of time when the calculated rainfall erosivity factor is less than five (5).

Minimize – To reduce or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) – A separate storm sewer system owned or operated by the United States, a state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, that discharges to surface water in the state.

Notice of Change (NOC) – Written notification to the executive director from a discharger authorized under this permit, providing changes to information that was previously provided to the agency in a notice of intent form.

Notice of Intent (NOI) – A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) – A written submission to the executive director from a discharger authorized under this general permit requesting termination of coverage.

Operator – The person or persons associated with a large or small construction activity that is either a primary or secondary operator as defined below:

Primary Operator – The person or persons associated with construction activity that meets either of the following two criteria:

(a) the person or persons have on-site operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or

(b) the person or persons have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a Stormwater Pollution Prevention Plan (SWP3) for the site or other permit conditions (for example, they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Secondary Operator – The person or entity, often the property owner, whose operational control is limited to:

(a) the employment of other operators, such as a general contractor, to perform or supervise construction activities; or

(b) the ability to approve or disapprove changes to construction plans and specifications, but who does not have day-to-day on-site operational control over construction activities at the site.

Secondary operators must either prepare their own SWP3 or participate in a shared SWP3 that covers the areas of the construction site, where they have control over the construction plans and specifications.

If there is not a primary operator at the construction site, then the secondary operator is defined as the primary operator and must comply with the requirements for primary operators.

Outfall – For the purpose of this permit, a point source at the point where stormwater runoff associated with construction activity discharges to surface water in the state and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other water of the U.S. and are used to convey waters of the U.S.

Permittee – An operator authorized under this general permit. The authorization may be gained through submission of a notice of intent, by waiver, or by meeting the requirements for automatic coverage to discharge stormwater runoff and certain non-stormwater discharges from construction activity.

Point Source – Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are, or may be, discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff (40 CFR § 122.2).

Pollutant – Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, filter backwash, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into any surface water in the state. The term "pollutant" does not include tail water or runoff water from irrigation or rainwater runoff from cultivated or uncultivated rangeland, pastureland, and farmland. For the purpose of this permit, the term “pollutant” includes sediment.

Pollution – The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any surface water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property or to public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose (Texas Water Code (TWC) § 26.001(14)).

Rainfall Erosivity Factor (R factor) – The total annual erosive potential that is due to climatic effects, and is part of the Revised Universal Soil Loss Equation (RUSLE).

Receiving Water – A "Water of the United States" as defined in 40 CFR § 122.2 or a surface water in the state into which the regulated stormwater discharges.

Semi-arid Areas – Areas with an average annual rainfall of 10 to 20 inches.

Separate Storm Sewer System – A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains), designed or used for collecting or conveying stormwater; that is not a combined sewer, and that is not part of a publicly owned treatment works (POTW).

Small Construction Activity – Construction activities including clearing, grading, and excavating that result in land disturbance of equal to or greater than one (1) acre and less than five (5) acres of land. Small construction activity also includes the disturbance of less than one (1) acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one (1) and less than five (5) acres of land. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (for example, the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities).

Steep Slopes – Where a state, Tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

Stormwater (or Stormwater Runoff) – Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity – Stormwater runoff, as defined above, from a construction activity.

Structural Control (or Practice) – A pollution prevention practice that requires the construction of a device, or the use of a device, to reduce or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to: silt fences, earthen dikes, drainage swales, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Surface Water in the State – Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or non-navigable, and including the beds and banks of all water-courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state; except that waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Temporary Stabilization – A condition where exposed soils or disturbed areas are provided a protective cover or other structural control to prevent the migration of pollutants. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either permanent stabilization can be achieved or until further construction activities take place.

Thawing Conditions – For the purposes of this permit, thawing conditions are expected based on the historical likelihood of two (2) or more days with daytime temperatures greater than 32 degrees Fahrenheit (℉). This date can be determined by looking at historical weather data.

NOTE: The estimation of thawing conditions is for planning purposes only. During construction, the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

Total Maximum Daily Load (TMDL) – The total amount of a pollutant that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Turbidity – A condition of water quality characterized by the presence of suspended solids and/or organic material.

Waters of the United States – Waters of the United States or waters of the U.S. means the term as defined in 40 CFR § 122.2.

Part II. Permit Applicability and Coverage

Section A. Discharges Eligible for Authorization

1. Stormwater Associated with Construction Activity

   Discharges of stormwater runoff and certain non-stormwater discharges from small and large construction activities may be authorized under this general permit, except as described in Part II.C. of this permit.

2. Discharges of Stormwater Associated with Construction Support Activities

   Discharges of stormwater runoff and certain non-stormwater discharges from construction support activities as defined in Part I.B. of this general permit may be authorized, provided that the following conditions are met:

   (a) the construction support activities are located within one (1) mile from the boundary of the construction site where the construction activity authorized under the permit is being conducted that requires the support of these activities;

   (b) an SWP3 is developed and implemented for the permitted construction site according to the provisions in Part III.F. of this general permit, including appropriate controls and measures to reduce erosion and the discharge of pollutants in stormwater runoff according to the provisions in Part IV. of this general permit;

   (c) the activities are directly related to the construction site;

   (d) the activities are not a commercial operation, nor serve other unrelated construction projects; and

   (e) the activities do not continue to operate beyond the completion of the construction activity at the project it supports.

   Construction support activities that operate outside the terms provided in (a) through (e) above must obtain authorization under a separate Texas Pollutant Discharge Elimination System (TPDES) permit, which may include the TPDES Multi-Sector General Permit (MSGP), TXR050000 (related to stormwater discharges associated with industrial activity), an alternative general permit (if available), or an individual water quality permit.

3. Non-Stormwater Discharges

   The following non-stormwater discharges from sites authorized under this general permit are also eligible for authorization under this general permit:

(a) discharges from emergency fire-fighting activities (emergency fire-fighting activities do not include washing of trucks, run-off water from training activities, test water from fire suppression systems, or similar activities);

(b) uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);

(c) water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where solvents, detergents, and soaps are not used, where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;

(d) uncontaminated water used to control dust;

(e) potable water sources, including waterline flushings, but excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life;

(f) uncontaminated air conditioning condensate;

(g) uncontaminated ground water or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents; and

(h) lawn watering and similar irrigation drainage.

4. Other Permitted Discharges

Any discharge authorized under a separate National Pollutant Discharge Elimination System (NPDES), TPDES, or TCEQ permit may be combined with discharges authorized by this general permit, provided those discharges comply with the associated permit.

Section B. Concrete Truck Wash Out

The wash out of concrete trucks at regulated construction sites must be performed in accordance with the requirements of Part VI of this general permit.

Section C. Limitations on Permit Coverage

1. Post Construction Discharges

Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under this general permit. Discharges originating from the sites are not authorized under this general permit following the submission of the Notice of Termination (NOT) or removal of the appropriate TCEQ site notice, as applicable, for the regulated construction activity.

2. Prohibition of Non-Stormwater Discharges

Except as otherwise provided in Part II.A. of this general permit, only discharges that are composed entirely of stormwater associated with construction activity may be authorized under this general permit.

3. Compliance with Water Quality Standards

   Discharges to surface water in the state that would cause, have the reasonable potential to cause, or contribute to a violation of water quality standards or that would fail to protect and maintain existing designated uses of surface water in the state are not eligible for coverage under this general permit. The executive director may require an application for an individual permit or alternative general permit (see Parts II.H.2. and 3.) to authorize discharges to surface water in the state if the executive director determines that any activity will cause, has the reasonable potential to cause, or contribute to a violation of water quality standards or is found to cause, has the reasonable potential to cause, or contribute to, the impairment of a designated use. The executive director may also require an application for an individual permit considering factors described in Part II.H.3. of this general permit.

4. Impaired Receiving Waters and Total Maximum Daily Load (TMDL) Requirements

   The permittee shall determine whether the authorized discharge is to an impaired water body on the latest EPA-approved CWA § 303(d) List or waters with an EPA-approved or established TMDL that are found on the latest EPA-approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, which lists the category 4 and 5 water bodies.

   New sources or new discharges of the pollutants of concern to impaired waters are not authorized by this permit unless otherwise allowable under 30 TAC Chapter 305 and applicable state law. Impaired waters are those that do not meet applicable water quality standard(s) and are listed as category 4 or 5 in the current version of the *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)*, and waterbodies listed on the CWA § 303(d) List. Pollutants of concern are those for which the water body is listed as impaired.

   Discharges of the pollutants of concern to impaired water bodies for which there is a TMDL are not eligible for coverage under this general permit unless they are consistent with the approved TMDL. Permittees must incorporate the conditions and requirements applicable to their discharges into their SWP3, in order to be eligible for coverage under this general permit. For consistency with the construction stormwater-related items in an approved TMDL, the SWP3 must be consistent with any applicable condition, goal, or requirement in the TMDL, TMDL Implementation Plan (I-Plan), or as otherwise directed by the executive director.

5. Discharges to the Edwards Aquifer Recharge or Contributing Zone

   Discharges cannot be authorized by this general permit where prohibited by 30 TAC Chapter 213 (relating to Edwards Aquifer). In addition, commencement of construction (see definition for commencement of construction in Part I.B. above)) at a site regulated under 30 TAC Chapter 213, may not begin until the appropriate Edwards Aquifer Protection Plan (EAPP) has been approved by the TCEQ's Edwards Aquifer Protection Program.

   (a) For new discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone (CZ), operators must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

(b) For existing discharges located within the Edwards Aquifer Recharge Zone, the requirements of the agency-approved Water Pollution Abatement Plan (WPAP) under the Edwards Aquifer Rule are in addition to the requirements of this general permit. BMPs and maintenance schedules for structural stormwater controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in stormwater runoff are in addition to the requirements in this general permit for this pollutant.

(c) For discharges located within ten (10) stream miles upstream of the Edwards Aquifer recharge zone, applicants shall also submit a copy of the NOI to the appropriate TCEQ regional office.

Counties: Comal, Bexar, Medina, Uvalde, and Kinney

Contact: TCEQ Water Program Manager
San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
(210) 490-3096

Counties: Williamson, Travis, and Hays

Contact: TCEQ Water Program Manager
Austin Regional Office
12100 Park 35 Circle
Room 179, Building A
Austin, Texas 78753
(512) 339-2929

6. Discharges to Specific Watersheds and Water Quality Areas

Discharges otherwise eligible for coverage cannot be authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

7. Protection of Streams and Watersheds by Other Governmental Entities

This general permit does not limit the authority or ability of federal, other state, or local governmental entities from placing additional or more stringent requirements on construction activities or discharges from construction activities.

8. Indian Country Lands

Stormwater runoff from construction activities occurring on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of stormwater require authorization under federal NPDES regulations, authority for these discharges must be obtained from the U.S. Environmental Protection Agency (EPA).

9. Exempt Oil and Gas Activities

The CWA § 402(l)(2) provides that stormwater discharges from construction activities related to oil and gas exploration, production, processing, or treatment, or transmission facilities are exempt from regulation under this permit. The term “oil and gas exploration, production, processing, or treatment operations, or transmission facilities” is defined in 33 U.S.C. Annotated § 1362 (24).

The exemption in CWA § 402(l)(2) *includes* stormwater discharges from construction activities regardless of the amount of disturbed acreage, which are necessary to prepare a site for drilling and the movement and placement of drilling equipment, drilling waste management pits, in field treatment plants, and in field transportation infrastructure (e.g., crude oil pipelines, natural gas treatment plants, and both natural gas transmission pipeline compressor and crude oil pumping stations) necessary for the operation of most producing oil and gas fields. Construction activities are defined in 33 U.S. Code § 1362(24) and interpreted by EPA in the final rule. *See* June 12, 2006 Amendments to the NPDES Regulations for Storm Water Discharges Associated with Oil and Gas Exploration, Production, Processing, or Treatment Operations or Transmission Facilities (71 FR 33628, Part V. Terminology).

The exemption *does not include* stormwater discharges from the construction of administrative buildings, parking lots, and roads servicing an administrative building at an oil and gas site, as these are considered traditional construction activities.

As described in 40 CFR § 122.26(c)(1)(iii) [*regulations prior to 2006*], discharges from oil and gas construction activities are waived from CWA § 402(l)(2) permit coverage *unless* the construction activity (or construction support activity) has had a discharge of stormwater resulting in the discharge of a reportable quantity of oil or hazardous substances or the discharge contributes to a violation of water quality standards.

Exempt oil and gas activities which have lost their exemption as a result of one of the above discharges, must obtain permit coverage under this general permit, an alternative general permit, or a TPDES individual permit prior to the next discharge.

10. Stormwater Discharges from Agricultural Activities

Stormwater discharges from agricultural activities that are not point source discharges of stormwater are not subject to TPDES permit requirements. These activities may include clearing and cultivating ground for crops, construction of fences to contain livestock, construction of stock ponds, and other similar agricultural activities. Discharges of stormwater runoff associated with the construction of facilities that are subject to TPDES regulations, such as the construction of concentrated animal feeding operations, would be point sources regulated under this general permit.

11. Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened aquatic or aquatic-dependent species or its critical habitat are not authorized by this permit, unless the requirements of the Endangered Species Act are satisfied. Federal requirements related to endangered species apply to all TPDES permitted discharges and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved. If a permittee has concerns over potential impacts to listed species, the permittee may contact TCEQ for additional information.

12. Storage of High-Level Radioactive Waste

Discharges of stormwater from construction activities associated with the construction of a facility that is licensed for the storage of high-level radioactive waste by the United States Nuclear Regulatory Commission under 10 CFR Part 72 are not authorized by this general permit. Texas Health and Safety Code (THSC) § 401.0525 prohibits TCEQ from issuing any TPDES authorizations for the construction or operation of these facilities.

Discharges of stormwater from the construction activities associated with the construction of a facility located at the site of currently or formerly operating nuclear power reactors and currently or formerly operating nuclear research and test reactors operated by a university are not prohibited under THSC § 401.0525 and continue to be regulated under this general permit.

13. Other

    Nothing in Part II. of the general permit is intended to negate any person's ability to assert *force majeure* (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC § 70.7

Section D. Deadlines for Obtaining Authorization to Discharge

1. Large Construction Activities

   (a) New Construction – Discharges from sites where the commencement of construction activity occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

   (b) Ongoing Construction – Operators of large construction activities continuing to operate after the effective date of this permit, and authorized under the TPDES Construction General Permit (CGP) TXR150000 (effective on March 5, 2018, and amended on January 28, 2022), must submit an NOI to renew authorization or an NOT to terminate coverage under this general permit within 90 days of the effective date of this general permit. During this interim or grace period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the issued and amended 2018 TPDES CGP.

2. Small Construction Activities

   (a) New Construction – Discharges from sites where the commencement of construction activity occurs on or after the effective date of this general permit must be authorized, either under this general permit or a separate TPDES permit, prior to the commencement of those construction activities.

   (b) Ongoing Construction – Discharges from ongoing small construction activities that commenced prior to the effective date of this general permit, and that do not meet the conditions to qualify for termination of this permit as described in Part II.F. of this general permit, must meet the requirements to be authorized, either under this general permit or a separate TPDES permit, within 90 days of the effective date of this general permit. During this interim period, as a requirement of this TPDES permit, the operator must continue to meet the conditions and requirements of the issued and amended 2018 TPDES CGP.

Section E. Obtaining Authorization to Discharge

1. Automatic Authorization for Small Construction Activities with Low Potential for Erosion

   Operators of small construction activity, as defined in Part I.B. of this general permit, shall not submit an NOI for coverage, unless otherwise required by the executive director.

   Operators of small construction activities, which occur in certain counties and during periods of low potential for erosion that do not meet the conditions of the waiver described in Part II.G. of this general permit, may be automatically authorized under this general permit if all the following conditions are met prior to the commencement of construction.

   (a) The construction activity occurs in a county and during the corresponding date range(s) listed in Appendix A;

(b) The construction activity is initiated and completed, including either final or temporary stabilization of all disturbed areas, within the time frame identified in Appendix A for the location of the construction site;

(c) All temporary stabilization is adequately maintained to effectively reduce or prohibit erosion, permanent stabilization activities have been initiated, and a condition of final stabilization is completed no later than 30 days following the end date of the time frame identified in Appendix A for the location of the construction site; the permittee signs a completed TCEQ Small Construction Site Notice for low potential for erosion (Form TCEQ-20964), including the certification statement;

(d) A signed and certified copy of the TCEQ Small Construction Site Notice for low potential for erosion is posted at the construction site in a location where it is readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and maintained in that location until final stabilization has been achieved;

NOTE: Posted TCEQ site notices may have a redacted signature as long as there is an original signed and certified TCEQ site notice, with a viewable signature, located on-site and available for review by any applicable regulatory authority.

(e) A copy of the signed and certified TCEQ Small Construction Site Notice for low potential for erosion is provided to the operator of any MS4 receiving the discharge at least two (2) days prior to commencement of construction activities;

(f) Discharges of stormwater runoff or other non-stormwater discharges from any supporting concrete batch plant or asphalt batch plant is separately authorized under an individual TPDES permit, another TPDES general permit, or under an individual TCEQ permit where stormwater and non-stormwater is disposed of by evaporation or irrigation (discharges are adjacent to water in the state); and

(g) Any non-stormwater discharges are either authorized under a separate permit or authorization, are not considered by TCEQ to be a wastewater, or are captured and routed for disposal at a publicly operated treatment works or licensed waste disposal facility.

If all of the conditions in (a) – (h) above are met, then the operator(s) of small construction activities with low potential for erosion are not required to develop a SWP3.

If an operator is conducting small construction activities and any of the above conditions (a) – (h) are not met, the operator cannot declare coverage under the automatic authorization for small construction activities with low potential for erosion and must meet the requirements for automatic authorization (all other) small construction activities, described below in Part II.E.2.

For small construction activities that occur during a period with a low potential for erosion, where automatic authorization under this section is not available, an operator may apply for and obtain a waiver from permitting (Low Rainfall Erosivity Waiver – LREW), as described in Part II.G. of this general permit. Waivers from coverage under the LREW do not allow for any discharges of non-stormwater and the operator must ensure that discharges on non-stormwater are either authorized under a separate permit or authorization.

2. Automatic Authorization for Small Construction Activities

Operators of small construction activities as defined in Part I.B. of this general permit shall not submit an NOI for coverage, unless otherwise required by the executive director.

Operators of small construction activities, as defined in Part I.B. of this general permit or as defined but who do not meet in the conditions and requirements located in Part II.E.1 above, may be automatically authorized for small construction activities, provided that they meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit, that covers either the entire site or all portions of the site for which the applicant is the operator, and implement the SWP3 prior to commencing construction activities;

(b) all operators of regulated small construction activities must post a copy of a signed and certified TCEQ Small Construction Site Notice (Form TCEQ-20963), the notice must be posted at the construction site in a location where it is safely and readily available for viewing by the general public, local, state, and federal authorities, at least two (2) days prior to commencing construction activity , and maintain the notice in that location until completion of the construction activity (for linear construction activities, e.g. pipeline or highway, the TCEQ site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public; local, state, and federal authorities);

(c) operators must maintain a posted TCEQ Small Construction Site Notice on the approved TCEQ form at the construction site until final stabilization has been achieved; and

> NOTE: Posted TCEQ site notices may have a redacted signature as long as there is an original signed and certified TCEQ Small Construction Site Notice, with a viewable signature, located on-site and available for review by an applicable regulatory authority.

(d) provide a copy of the signed and certified TCEQ Small Construction Site Notice to the operator of any municipal separate storm sewer system (MS4) receiving the discharge at least two (2) days prior to commencement of construction activities.

(e) if signatory authority is delegated by an authorized representative, then a Delegation of Signatory form must be submitted as required by 30 TAC § 305.128 (relating to Signatories to Reports). Operators for small construction activities must submit this form via mail following the instructions on the approved TCEQ paper form. A new Delegation of Signatory form must be submitted if the delegation changes to another individual or position.

As described in Part I.B of this general permit, large construction activities include those that will disturb less than five (5) acres of land, but that are part of a larger common plan of development or sale that will ultimately disturb five (5) or more acres of land and must meet the requirements of Part II.E.3. below.

3. Authorization for Large Construction Activities

Operators of large construction activities that qualify for coverage under this general permit must meet all of the following conditions:

(a) develop a SWP3 according to the provisions of this general permit that covers either the entire site or all portions of the site where the applicant is the operator. The SWP3 must be developed and implemented prior to obtaining coverage and prior to commencing construction activities;

(b) primary operators of large construction activities must submit an NOI prior to commencing construction activity at a construction site. A completed NOI must be submitted to TCEQ electronically using the online ePermits system on TCEQ's website.

Operators with an electronic reporting waiver must submit a completed paper NOI to TCEQ at least seven (7) days prior to commencing construction activity to obtain provisional coverage 48-hours from the postmark date for delivery to the TCEQ. An authorization is no longer provisional when the executive director finds the NOI is administratively complete, and an authorization number is issued to the permittee for the construction site indicated on the NOI.

If an additional primary operator is added after the initial NOI is submitted, the additional primary operator must meet the same requirements for existing primary operator(s), as indicated above.

If the primary operator changes due to responsibility at the site being transferred from one primary operator to another after the initial NOI is submitted, the new primary operator must submit an electronic NOI, unless they request and obtain a waiver from electronic reporting, at least ten (10) days prior to assuming operational control of a construction site and commencing construction activity.

(c) all operators of large construction activities must post a TCEQ Large Construction Site Notice on the approved TCEQ form (Form TCEQ-20961) in accordance with Part III.D.2. of this permit. The TCEQ site notice must be located where it is safely and readily available for viewing by the general public, local, state, and federal authorities prior to commencing construction activities, and must be maintained in that location until final stabilization has been achieved. For linear construction activities, e.g., pipeline or highway, the TCEQ site notice must be placed in a publicly accessible location near where construction is actively underway; notice for these linear sites may be relocated, as necessary, along the length of the project, and the notice must be safely and readily available for viewing by the general public, local, state, and federal authorities;

(d) two days prior to commencing construction activities, all primary operators must:

i. provide a copy of the signed NOI to the operator of any MS4 receiving the discharge and to any secondary construction operator, and

ii. list in the SWP3 the names and addresses of all MS4 operators receiving a copy;

(e) if signatory authority is delegated by an authorized representative, then a Delegation of Signatories form must be submitted as required by 30 TAC § 305.128 (relating to Signatories to Reports). Primary operators must submit this form electronically using the State of Texas Environmental Electronic Reporting System (STEERS), TCEQ's online permitting system, or by paper if the permittee requested and obtained an electronic reporting waiver. A new Delegation of Signatories form must be submitted, if the delegation changes to another individual or position;

(f) all persons meeting the definition of "secondary operator" in Part I of this permit are hereby notified that they are regulated under this general permit, but are not required to submit an NOI, provided that a primary operator at the site has submitted an NOI, or prior to commencement of construction activities, a primary operator is required to submit an NOI and the secondary operator has provided notification to the operator(s) of the need to obtain coverage (with records of notification available upon request). Any secondary operator notified under this provision may alternatively submit an NOI under this general permit, may seek coverage under an alternative TPDES individual permit, or may seek coverage under an alternative TPDES general permit if available; and

(g) all secondary operators of large construction activities must post a copy of the signed and certified TCEQ Large Construction Site Notice for Secondary Operators on the approved TCEQ form (Form TCEQ-20962) and provide a copy of the signed and certified TCEQ site notice to the operator of any MS4 receiving the discharge at least two (2) days prior to the commencement construction activities.

NOTE: Posted TCEQ site notices may have a redacted signature as long as there is an original signed and certified TCEQ Large Construction Site Notice for Secondary Operators, with a viewable signature, located on-site and available for review by an applicable regulatory authority.

Applicants must submit an NOI using the online ePermits system (accessed using STEERS) available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

4. Waivers for Small Construction Activities:

Operators of certain small construction activities may obtain a waiver from coverage under this general permit, if applicable. The requirements are outlined in Part II.G. below.

5. Effective Date of Coverage

(a) Operators of small construction activities as described in either Part II.E.1. or II.E.2. above are authorized immediately following compliance with the applicable conditions of Part II.E.1. or II.E.2. Secondary operators of large construction activities as described in Part II.E.3. above are authorized immediately following compliance with the applicable conditions in Part II.E.3. For activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(b) Primary operators of large construction activities as described in Part II.E.3. above that electronically submit an NOI are authorized immediately following confirmation of receipt of the electronic form by the TCEQ, unless otherwise notified by the executive director.

Operators with an electronic reporting waiver are provisionally authorized 48-hours from the date that a completed paper NOI is postmarked for delivery to the TCEQ, unless otherwise notified by the executive director. An authorization is no longer provisional when the executive director finds the NOI is administratively complete and an authorization number is issued to the permittee for the construction site indicated on the NOI.

For construction activities located in areas regulated by 30 TAC Chapter 213, related to the Edwards Aquifer, this authorization to discharge is separate from the requirements of the operator's responsibilities under that rule. Construction activities may not commence for sites regulated under 30 TAC Chapter 213 until all applicable requirements of that rule are met.

(c) Operators are not prohibited from submitting late NOIs or posting late site notices to obtain authorization under this general permit. The TCEQ reserves the right to take appropriate enforcement action for any unpermitted activities that may have occurred between the time construction commenced and authorization under this general permit was obtained.

(d) If operators that submitted NOIs have active authorizations for construction activities that are ongoing when this general permit expires on March 5, 2028, and a new general permit is issued, a 90-day interim (grace) period is granted to provide coverage that is administratively continued until operators with active authorizations can obtain coverage under the newly issued CGP. The 90-day grace period starts on the effective date of the newly issued CGP.

6. Contents of the NOI

The NOI form shall require, at a minimum, the following information:

(a) the TPDES CGP authorization number for existing authorizations under this general permit, where the operator submits an NOI to renew coverage within 90 days of the effective date of this general permit;

(b) the name, address, and telephone number of the operator filing the NOI for permit coverage;

(c) the name (or other identifier), address, county, and latitude/longitude of the construction project or site;

(d) the number of acres that will be disturbed by the applicant;

(e) the estimated construction project start date and end date;

(f) confirmation that the project or site will not be located on Indian Country lands;

(g) confirmation if the construction activity is associated with an oil and gas exploration, production, processing, or treatment, or transmission facility (see Part II.C.9.)

(h) confirmation that the construction activities are not associated with the construction of a facility that is licensed for the storage of high-level radioactive waste by the United States Nuclear Regulatory Commission under 10 CFR Part 72 (see Part II.C.12.);

(i) confirmation that a SWP3 has been developed in accordance with all conditions of this general permit, that it will be implemented prior to commencement of construction activities, and that it is compliant with any applicable local sediment and erosion control plans; for multiple operators who prepare a shared SWP3, the confirmation for an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator;

(j) name of the receiving water(s);

(k) the classified segment number for each classified segment that receives discharges from the regulated construction activity (if the discharge is not directly to a classified segment, then the classified segment number of the first classified segment that those discharges reach); and

(l) the name of all surface waters receiving discharges from the regulated construction activity that are on the latest EPA-approved CWA § 303(d) List of impaired waters or *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* as not meeting applicable state water quality standards.

7. Notice of Change (NOC)

(a) If relevant information provided in the NOI changes, the operator that has submitted the NOI must submit an NOC to TCEQ at least fourteen (14) days before the change occurs. Where a 14-day advance notice is not possible, the operator must submit an NOC to TCEQ within fourteen (14) days of discovery of the change. If the operator becomes aware that it failed to submit any relevant facts or submitted

incorrect information in an NOI, the correct information must be submitted to TCEQ in an NOC within fourteen (14) days after discovery.

(b) Information on an NOC may include, but is not limited to, the following:

i. a change in the description of the construction project;

ii. an increase in the number of acres disturbed (for increases of one (1) or more acres);

iii. or the name of the operator (where the name of the operator has changed).

(c) Electronic NOC.

Applicants must submit an NOC using the online ePermits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. All waivers from electronic reporting are not transferrable. Electronic reporting waivers expire on the same date as the authorization to discharge, except for temporary waivers that expire one (1) year from issuance. A copy of the NOC form or letter must also be placed in the SWP3 and provided to the operator of any MS4 receiving the discharge. Operators are authorized immediately following confirmation of receipt of the electronic form by the TCEQ, unless otherwise notified by the executive director.

(d) Paper NOC.

Applicants who request and obtain an electronic reporting waiver shall submit the NOC on a paper form provided by the executive director, or by letter if an NOC form is not available.

(e) A copy of the NOC form or letter must also be placed in the SWP3 and provided to the operator of any MS4 receiving the discharge. A list that includes the names and addresses of all MS4 operators receiving a copy of the NOC (or NOC letter) must be included in the SWP3. Information that may not be included on an NOC includes but is not limited to the following:

i. transfer of operational control from one operator to another, including a transfer of the ownership of a company. A transfer of ownership of a company includes changes to the structure of a company, such as changing from a partnership to a corporation or changing corporation types, so that the filing or charter number that is on record with the Texas Secretary of State (SOS) must be changed.

ii. coverage under this general permit is not transferable from one operator to another. Instead, the new operator will need to submit an NOI or LREW, as applicable, and the previous operator will need to submit an NOT.

iii. a decrease in the number of acres disturbed. This information must be included in the SWP3 and retained on site.

8. Signatory Requirement for NOI Forms, NOT Forms, NOC Forms, and Construction Site Notices

NOI forms, NOT forms, NOC forms, and Construction Site Notices that require a signature must be signed according to 30 TAC § 305.44 (relating to Signatories for Applications).

Section F. Terminating Coverage

1. Notice of Termination (NOT) Required

   Each operator that has submitted an NOI for authorization of large construction activities under this general permit must apply to terminate that authorization following the conditions described in this section of the general permit.

   Authorization of large construction must be terminated by submitting an NOT electronically via the online ePermits system available through the TCEQ website, or on a paper NOT form to TCEQ supplied by the executive director with an approved waiver from electronic reporting. Authorization to discharge under this general permit terminates at midnight on the day a paper NOT is postmarked for delivery to the TCEQ or immediately following confirmation of the receipt of the NOT submitted electronically by the TCEQ.

   Applicants must submit an NOT using the online ePermits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge, except for temporary waivers that expire one (1) year from issuance.

   The NOT must be submitted to TCEQ, and a copy of the NOT provided to the operator of any MS4 receiving the discharge (with a list in the SWP3 of the names and addresses of all MS4 operators receiving a copy), within 30 days after any of the following conditions are met:

   (a) final stabilization has been achieved on all portions of the site that are the responsibility of the operator;

   (b) a transfer of operational control has occurred (See Section II.F.4. below); or

   (c) the operator has obtained alternative authorization under an individual TPDES permit or alternative TPDES general permit.

   Compliance with the conditions and requirements of this permit is required until the NOT is submitted and approved by TCEQ.

2. Minimum Contents of the NOT

   The NOT form shall require, at a minimum, the following information:

   (a) if authorization for construction activity was granted following submission of an NOI, the permittee's site-specific TPDES authorization number for a specific construction site;

   (b) an indication of whether final stabilization has been achieved at the site and a NOT has been submitted or if the permittee is simply no longer an operator at the site;

   (c) the name, address, and telephone number of the permittee submitting the NOT;

   (d) the name (or other identifier), address, county, and location (latitude/longitude) of the construction project or site; and

   (e) a signed certification that either all stormwater discharges requiring authorization under this general permit will no longer occur, or that the applicant is no longer the operator of the facility or construction site, and that all temporary structural erosion controls have either been removed, will be removed on a schedule defined in the SWP3, or have been transferred to a new operator if the new operator has applied for permit coverage. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal.

3. Termination of Coverage for Small Construction Sites and for Secondary Operators at Large Construction Sites

   (a) Each operator that has obtained automatic authorization for small construction or is a secondary operator for large construction must perform the following when terminating coverage under the permit:

      i. remove the TCEQ site notice;

      ii. complete the applicable portion of the TCEQ site notice related to removal of the TCEQ site notice; and

      iii. submit a copy of the completed TCEQ site notice to the operator of any MS4 receiving the discharge (or provide alternative notification as allowed by the MS4 operator, with documentation of such notification included in the SWP3).

   (b) The activities described in Part II.F.3.(a) above must be completed by the operator within 30 days of meeting any of the following conditions:

      i. final stabilization has been achieved on all portions of the site that are the responsibility of the operator;

      ii. a transfer of day-to-day operational control over activities necessary to ensure compliance with the SWP3 and other permit conditions has occurred (See Section II.F.4. below); or

      iii. the operator has obtained alternative authorization under an individual or general TPDES permit.

   For Small Construction Sites and Secondary Operators at Large Construction Sites, authorization to discharge under this general permit terminates immediately upon removal of the applicable TCEQ construction site notice. Compliance with the conditions and requirements of this permit is required until the TCEQ construction site notice is removed. The construction site notice cannot be removed until final stabilization has been achieved.

4. Transfer of Day-to-Day Operational Control

   (a) When the primary operator of a large construction activity changes or operational control over activities necessary to ensure compliance with the SWP3 and other permit conditions is transferred to another primary operator, the original operator must do the following:

      i. submit an NOT within ten (10) days prior to the date that responsibility for operations terminates, and the new operator must submit an NOI at least ten (10) days prior to the transfer of operational control, in accordance with condition (c) below; and

      ii. submit a copy of the NOT from the primary operator terminating its coverage under the permit and its operational control of the construction site and submit a copy of the NOI from the new primary operator to the operator of any MS4 receiving the discharge in accordance with Part II.F.1. above.

   (b) For transfer of operational control, operators of small construction activities and secondary operators of large construction activities who are not required to submit an NOI must do the following:

      i. the existing operator must remove the original TCEQ construction site notice, and the new operator must post the required TCEQ construction site notice prior to the transfer of operational control, in accordance with the conditions in Part II.F.4.(c) i or ii below; and

ii. a copy of the TCEQ construction site notice, which must be completed and provided to the operator of any MS4 receiving the discharge, in accordance with Part II.F.3. above.

(c) Each operator is responsible for determining its role as an operator as defined in Part I.B. and obtaining authorization under the permit, as described above in Part II.E. 1. - 3. Where authorization has been obtained by submitting an NOI for coverage under this general permit, permit coverage is not transferable from one operator to another. A transfer of operational control can include changes to the structure of a company, such as changing from a partnership to a corporation, or changing to a different corporation type such that a different filing (or charter) number is established with the Texas Secretary of State (SOS). A transfer of operational control can also occur when one of the following criteria is met, as applicable:

i. another operator has assumed control over all areas of the site that do not meet the definition for final stabilization;

ii. all silt fences and other temporary erosion controls have either been removed, scheduled for removal as defined in the SWP3, or transferred to a new operator, provided that the original permitted operator has attempted to notify the new operator in writing of the requirement to obtain permit coverage. Records of this notification (or attempt at notification) shall be retained by the operator transferring operational control to another operator in accordance with Part VI of this permit. Erosion controls that are designed to remain in place for an indefinite period, such as mulches and fiber mats, are not required to be removed or scheduled for removal; or

iii. a homebuilder has purchased one (1) or more lots from an operator who obtained coverage under this general permit for a common plan of development or sale. The homebuilder is considered a new operator and shall comply with the requirements of this permit. Under these circumstances, the homebuilder is only responsible for compliance with the general permit requirements as they apply to the lot(s) it has operational control over in a larger common plan of development, and the original operator remains responsible for common controls or discharges, and must amend its SWP3 to remove the lot(s) transferred to the homebuilder.

Section G. Waivers from Coverage

The executive director may waive the otherwise applicable requirements of this general permit for stormwater discharges from small construction activities under the terms and conditions described in this section.

1. Waiver Applicability and Coverage

Operators of small construction activities may apply for and receive a waiver from the requirements to obtain authorization under this general permit, when the calculated rainfall erosivity (R) factor for the entire period of the construction project is less than five (5).

The operator must submit a Low Rainfall Erosivity Waiver (LREW) certification form to the TCEQ electronically via the online ePermits system available through the TCEQ website. The LREW form is a certification by the operator that the small construction activity will commence and be completed within a period when the value of the calculated R factor is less than five (5).

Applicants who request and obtain an electronic reporting waiver shall submit the LREW on a paper form provided by the executive director at least seven (7) days prior to commencing construction activity to obtain provisional coverage 48-hours from the postmark date for delivery to the TCEQ. An authorization is no longer provisional when the executive director finds the LREW is administratively complete, and an authorization number is issued to the permittee for the construction site indicated on the LREW. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge, except for temporary waivers that expire one (1) year from issuance.

This LREW from coverage does not apply to any non-stormwater discharges, including what is allowed under this permit. The operator must ensure that all non-stormwater discharges are either authorized under a separate permit or authorization or are captured and routed to an authorized treatment facility for disposal.

2. Steps to Obtaining a Waiver

The construction site operator may calculate the R factor to request a waiver using the following steps:

(a) estimate the construction start date and the construction end date. The construction end date is the date that final stabilization will be achieved.

(b) find the appropriate Erosivity Index (EI) zone in Appendix B of this permit.

(c) find the EI percentage for the project period by adding the results for each period of the project using the table provided in Appendix D of this permit, in EPA Fact Sheet 2.1, or in USDA Handbook 703, by subtracting the start value from the end value to find the percent EI for the site.

(d) refer to the Isoerodent Map (Appendix C of this permit) and interpolate the annual isoerodent value for the proposed construction location.

(e) multiply the percent value obtained in Step (c) above by the annual isoerodent value obtained in Step (d). This is the R factor for the proposed project. If the value is less than five (5), then a waiver may be obtained. If the value is five (5) or more, then a waiver may not be obtained, and the operator must obtain coverage under Part II.E.2. of this permit.

Alternatively, the operator may calculate a site-specific R factor utilizing the following online calculator: https://lew.epa.gov/, or using another available resource.

A copy of the LREW certification form is not required to be posted at the small construction site.

3. Effective Date of an LREW

Unless otherwise notified by the executive director, operators of small construction activities seeking coverage under an LREW are provisionally waived from the otherwise applicable requirements of this general permit 48-hours from the date that a completed paper LREW certification form is postmarked for delivery to TCEQ, or immediately upon receiving confirmation of approval of an electronic submittal, made via the online ePermits system available through the TCEQ website.

Applicants seeking coverage under an LREW must submit an application for an LREW using the online ePermits system available through the TCEQ website, or request and obtain a waiver from electronic reporting from the TCEQ. Waivers from electronic reporting are not transferrable and expire on the same date as the authorization to discharge.

4. Activities Extending Beyond the LREW Period

   If a construction activity extends beyond the approved waiver period due to circumstances beyond the control of the operator, the operator must either:

   (a) recalculate the R factor using the original start date and a new projected ending date, and if the R factor is still under five (5), submit a new LREW form at least two (2) days before the end of the original waiver period; or

   (b) obtain authorization under this general permit according to the requirements for automatic authorization for small construction activities in Part II.E.2. of this permit, prior to the end of the approved LREW period.

Section H. Alternative TPDES Permit Coverage

1. Individual Permit Alternative

   Any discharge eligible for coverage under this general permit may alternatively be authorized under an individual TPDES permit according to 30 TAC Chapter 305 (relating to Consolidated Permits). Applications for individual permit coverage must be submitted at least 330 days prior to commencement of construction activities to ensure timely authorization. Existing coverage under this general permit should not be terminated until an individual permit is issued and in effect.

2. General Permit Alternative

   Any discharges eligible for authorization under this general permit may alternatively be authorized under a separate general permit according to 30 TAC Chapter 205 (relating to General Permits for Waste Discharges), as applicable.

3. Individual Permit Required

   The executive director may require an operator of a construction site, otherwise eligible for authorization under this general permit, to apply for an individual TPDES permit in the following circumstances:

   (a) the conditions of an approved TMDL or TMDL I-Plan on the receiving water;

   (b) the activity being determined to cause, has a reasonable potential to cause, or contribute to a violation of water quality standards or being found to cause, or contribute to, the loss of a designated use of surface water in the state; and

   (c) any other consideration defined in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges) including 30 TAC § 205.4(c)(3)(D), which allows the commission to deny authorization under the general permit and require an individual permit if a discharger has been determined by the executive director to have been out of compliance with any rule, order, or permit of the commission, including non-payment of fees assessed by the executive director.

      A discharger with a TCEQ compliance history rating of “unsatisfactory” is ineligible for coverage under this general permit. In that case, 30 TAC § 60.3 requires the executive director to deny or suspend an authorization to discharge under a general permit. However, per TWC § 26.040(h), a discharger is entitled to a hearing before the commission prior to having an authorization denied or suspended for having an “unsatisfactory” compliance history.

   Denial of authorization to discharge under this general permit or suspension of a permittee’s authorization under this general permit for reasons other than compliance history shall be done according to commission rules in 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

Section I. Permit Expiration

1. This general permit is effective for a term not to exceed five (5) years. All active discharge authorizations expire on the date provided on page one (1) of this permit. Following public notice and comment, as provided by 30 TAC § 205.3 (relating to Public Notice, Public Meetings, and Public Comment), the commission may amend, revoke, cancel, or renew this general permit. All authorizations that are active at the time the permit term expires will be administratively continued as indicated in Part II.I.2. below and in Part II.D.1.(b) and D.2.(b) of this permit.
2. If the executive director publishes a notice of the intent to renew or amend this general permit before the expiration date, the permit will remain in effect for existing, authorized discharges until the commission takes final action on the permit. Upon issuance of a renewed or amended permit, permittees may be required to submit an NOI within 90 days following the effective date of the renewed or amended permit, unless that permit provides for an alternative method for obtaining authorization.
3. If the commission does not propose to reissue this general permit within 90 days before the expiration date, permittees shall apply for authorization under an individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit. No new NOIs will be accepted nor new authorizations honored under the general permit after the expiration date.

Part III. Stormwater Pollution Prevention Plans (SWP3)

All regulated construction site operators shall prepare an SWP3, prior to submittal of an NOI, to address discharges authorized under Parts II.E.2. and II.E.3. of this general permit that will reach waters of the U.S. This includes discharges to MS4s and privately owned separate storm sewer systems that drain into surface water in the state or waters of the U.S.

Individual operators at a site may develop separate SWP3s that cover only their portion of the project, provided reference is made to the other operators at the site. Where there is more than one (1) SWP3 for a site, operators must coordinate to ensure that BMPs and controls are consistent and do not negate or impair the effectiveness of each other. Regardless of whether a single comprehensive SWP3 is developed or separate SWP3s are developed for each operator, it is the responsibility of each operator to ensure compliance with the terms and conditions of this general permit in the areas of the construction site where that operator has control over construction plans and specifications or day-to-day operations.

An SWP3 must describe the implementation of practices that will be used to minimize to the extent practicable the discharge of pollutants in stormwater associated with construction activity and non-stormwater discharges described in Part II.A.3., in compliance with the terms and conditions of this permit.

An SWP3 must also identify any potential sources of pollution that have been determined to cause, have a reasonable potential to cause, or contribute to a violation of water quality standards or have been found to cause or contribute to the loss of a designated use of surface water in the state from discharges of stormwater from construction activities and construction support activities. Where potential sources of these pollutants are present at a construction site, the SWP3 must also contain a description of the management practices that will be used to prevent these pollutants from being discharged into surface water in the state or waters of the U.S.

> NOTE: Construction support activities can also include vehicle repair areas, fueling areas, etc. that are present at a construction site solely for the support construction activities and are only used by operators at the construction site.

The SWP3 is intended to serve as a road map for how the construction operator will comply with the effluent limits and other conditions of this permit. Additional portions of the effluent limits are established in Part IV. of the permit.

Section A. Shared SWP3 Development

For more effective coordination of BMPs and opportunities for cost sharing, a cooperative effort by the different operators at a site is encouraged. Operators of small and large construction activities must independently obtain authorization under this permit but may work together with other regulated operators at the construction site to prepare and implement a single, comprehensive SWP3, which can be shared by some or all operators, for the construction activities that each of the operators are performing at the entire construction site.

1. The SWP3 must include the following:
   (a) for small construction activities – the name of each operator that participates in the shared SWP3;
   (b) for large construction activities – the name of each operator that participates in the shared SWP3, the general permit authorization numbers of each operator (or the date that the NOI was submitted to TCEQ by each operator that has not received an authorization number for coverage under this permit); and
   (c) for large and small construction activities – the signature of each operator participating in the shared SWP3.
2. The SWP3 must clearly indicate which operator is responsible for satisfying each shared requirement of the SWP3. If the responsibility for satisfying a requirement is not described in the plan, then each permittee is entirely responsible for meeting the requirement within the boundaries of the construction site where they perform construction activities. The SWP3 must clearly describe responsibilities for meeting each requirement in shared or common areas.
3. The SWP3 may provide that one operator is responsible for preparation of a SWP3 in compliance with the CGP, and another operator is responsible for implementation of the SWP3 at the project site.

Section B. Responsibilities of Operators

1. Secondary Operators and Primary Operators with Control Over Construction Plans and Specifications

   All secondary operators and primary operators with control over construction plans and specifications shall:
   (a) ensure the project specifications allow or provide that adequate BMPs are developed to meet the requirements of Part III of this general permit;
   (b) ensure that the SWP3 indicates the areas of the project where they have control over project specifications, including the ability to make modifications in specifications;
   (c) ensure that all other operators affected by modifications in project specifications are notified in a timely manner so that those operators may modify their BMP s as necessary to remain compliant with the conditions of this general permit; and

(d) ensure that the SWP3 for portions of the project where each operator has control indicates the name and site-specific TPDES authorization number(s) for operators with the day-to-day operational control over those activities necessary to ensure compliance with the SWP3 and other permit conditions. If a primary operator has not been authorized or has abandoned the site, the secondary operator is considered to be the responsible party and must obtain authorization as a primary operator under the permit, until the authority for day-to-day operational control is transferred to another primary operator. The new primary operator must update or develop a new SWP3 that will reflect the transfer of operational control and include any additional updates to the SWP3 to meet requirements of the permit.

2. Primary Operators with Day-to-Day Operational Control

Primary operators with day-to-day operational control of those activities at a project that are necessary to ensure compliance with an SWP3 and other permit conditions must ensure that the SWP3 accomplishes the following requirements:

(a) meets the requirements of this general permit for those portions of the project where they are operators;

(b) identifies the parties responsible for implementation of BMPs described in the SWP3;

(c) indicates areas of the project where they have operational control over day-to-day activities; and

(d) the name and site-specific TPDES authorization number of the parties with control over project specifications, including the ability to make modifications in specifications for areas where they have operational control over day-to-day activities.

Section C. Deadlines for SWP3 Preparation, Implementation, and Compliance

The SWP3 must be prepared prior to obtaining authorization under this general permit, and implemented prior to commencing construction activities that result in soil disturbance. The SWP3 must be prepared so that it provides for compliance with the terms and conditions of this general permit.

Section D. Plan Review and Making Plans Available

1. The SWP3 must be retained on-site at the construction site or, if the site is inactive or does not have an on-site location to store the plan, a notice must be posted describing the location of the SWP3. The SWP3 must be made readily available at the time of an on-site inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; local government officials; and the operator of a municipal separate storm sewer receiving discharges from the site. If the SWP3 is retained off-site, then it shall be made available as soon as reasonably possible. In most instances, it is reasonable that the SWP3 shall be made available within 24 hours of the request.

   NOTE: The SWP3 may be prepared and kept electronically, rather than in paper form, if the records are: (a) in a format that can be read in a similar manner as a paper record; (b) legally valid with no less evidentiary value than their paper equivalent; and (c) immediately accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

2. Operators with authorization for construction activity under this general permit must post a TCEQ site notice at the construction site at a place readily available for viewing by the general public, and local, state, and federal authorities.

(a) Primary and secondary operators of large construction activities must each post a TCEQ construction site notice, respective to their role as an operator at the construction site, as required above and according to requirements in Part II.E.3. of this general permit.

(b) Primary and secondary operators of small construction activities must post the TCEQ site notice as required in Part III.D.2.(a) above and for the specific type of small construction described in Part II.E.1. and 2. of the permit.

(c) If the construction project is a linear construction project, such as a pipeline or highway, the notices must be placed in a publicly accessible location near where construction is actively underway. TCEQ construction site notices for small and large construction activities at these linear construction sites may be relocated, as necessary, along the length of the project, but must still be readily available for viewing by the general public; local, state, and federal authorities; and contain the following information:

i. the site-specific TPDES authorization number for the project if assigned;

ii. the operator name, contact name, and contact phone number;

iii. a brief description of the project; and

iv. the location of the SWP3.

3. This permit does not provide the general public with any right to trespass on a construction site for any reason, including inspection of a site; nor does this permit require that permittees allow members of the general public access to a construction site.

Section E. Revisions and Updates to SWP3s

The permittee must revise or update the SWP3, including the site map, within seven (7) days of when any of the following occurs:

1. a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3;
2. changing site conditions based on updated plans and specifications, new operators, new areas of responsibility, and changes in BMPs; or
3. results of inspections or investigations by construction site personnel authorized by the permittee, operators of a municipal separate storm sewer system receiving the discharge, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

Section F. Contents of SWP3

The SWP3 must be developed and implemented by primary operators of small and large construction activities and include, at a minimum, the information described in this section and must comply with the construction and development effluent guidelines in Part IV. of the general permit.

1. A site or project description, which includes the following information:

(a) a description of the nature of the construction activity;

(b) a list of potential pollutants and their sources;

(c) a description of the intended schedule or sequence of activities that will disturb soils for major portions of the site, including estimated start dates and duration of activities;

(d) the total number of acres of the entire property and the total number of acres where construction activities will occur, including areas where construction support activities (defined in Part I.B. of this general permit) occur;

(e) data describing the soil or the quality of any discharge from the site;

(f) a map showing the general location of the site (e.g., a portion of a city or county map);

(g) a detailed site map (or maps) indicating the following:

i. property boundary(ies);

ii. drainage patterns and approximate slopes anticipated before and after major grading activities;

iii. areas where soil disturbance will occur (note any phasing), including any demolition activities;

iv. locations of all controls and buffers, either planned or in place;

v. locations where temporary or permanent stabilization practices are expected to be used;

vi. locations of construction support activities, including those located off-site;

vii. surface waters (including wetlands) either at, adjacent, or in close proximity to the site, and also indicate whether those waters are impaired;

NOTE: Surface waters adjacent to or in close proximity to the site means any receiving waters within the site and all receiving waters within one mile downstream of the site's discharge point(s).

viii. locations where stormwater discharges from the site directly to a surface water body or a municipal separate storm sewer system;

ix. vehicle wash areas; and

x. designated points on the site where vehicles will exit onto paved roads (for instance, this applies to construction transition from unstable dirt areas to exterior paved roads).

Where the amount of information required to be included on the map would result in a single map being difficult to read and interpret, the operator shall develop a series of maps that collectively include the required information.

(h) the location and description of support activities authorized under the permittee's NOI, including asphalt plants, concrete plants, and other activities providing support to the construction site that is authorized under this general permit;

(i) the name of receiving waters at or near the site that may be disturbed or that may receive discharges from disturbed areas of the project;

(j) a copy of this TPDES general permit (an electronic copy of this TPDES general permit or a current link to this TPDES general permit on the TCEQ webpage is acceptable);

(k) the NOI and the acknowledgement of provisional and non-provisional authorization for primary operators of large construction sites, and the TCEQ site notice for small construction sites and for secondary operators of large construction sites;

(l) if signatory authority is delegated by an authorized representative, then a copy of the formal notification to TCEQ, as required by 30 TAC 305.128 relating to Signatories to Reports must be filed in the SWP3 and made available for review upon request by TCEQ or local MS4 Operator. For primary operators of large construction activities, the formal notification to TCEQ must be submitted either electronically through

STEERS, TCEQ's electronic reporting system, or, if qualifying for an electronic reporting waiver, by paper on a Delegation of Signatories form. For operators or small construction activities, the formal notification to TCEQ must be submitted by paper on a Delegation of Signatories form.

(m) stormwater and allowable non-stormwater discharge locations, including storm drain inlets on site and in the immediate vicinity of the construction site where construction support activities will occur; and

(n) locations of all pollutant-generating activities at the construction site and where construction support activities will occur, such as the following: Paving operations; concrete, paint and stucco washout and water disposal; solid waste storage and disposal; and dewatering operations.

2. A description of the BMPs that will be used to minimize pollution in runoff.

The description must identify the general timing or sequence for installation and implementation. At a minimum, the description must include the following components:

(a) General Requirements

i. Erosion and sediment controls must be designed to retain sediment on-site to the extent practicable with consideration for local topography, soil type, and rainfall.

ii. Control measures must be properly selected, installed, and maintained according to good engineering practices, and the manufacturer's or designer's specifications.

iii. Controls must be developed to minimize the offsite transport of litter, construction debris, construction materials, and other pollutants required of Part IV.D.

(b) Erosion Control and Stabilization Practices

The SWP3 must include a description of temporary and permanent erosion control and stabilization practices for the construction site, where small or large construction activity will occur. The erosion control and stabilization practices selected by the permittee must be compliant with the requirements for sediment and erosion control, located in Part IV. of this permit. The description of the SWP3 must also include a schedule of when the practices will be implemented. Site plans must ensure that existing vegetation at the construction site is preserved where it is possible.

i. Erosion control and stabilization practices may include but are not limited to: establishment of temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, slope texturing, temporary velocity dissipation devices, flow diversion mechanisms, and other similar measures.

ii. The following records must be maintained and either attached to or referenced in the SWP3, and made readily available upon request to the parties listed in Part III.D.1 of this general permit:

(A) the dates when major grading activities occur;

(B) the dates when construction activities temporarily or permanently cease on a portion of the site; and

(C) the dates when stabilization measures are initiated.

iii. Erosion control and stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily ceased and will not resume for a period exceeding fourteen (14) calendar days. Stabilization

measures that provide a protective cover must be initiated immediately in portions of the site where construction activities have permanently ceased. The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased. Except as provided in (A) through (D) below, these measures must be completed as soon as practicable, but no more than fourteen (14) calendar days after the initiation of soil stabilization measures:

(A) where the immediate initiation of vegetative stabilization measures after construction activity has temporarily or permanently ceased due to frozen conditions, non-vegetative controls must be implemented until thawing conditions (as defined in Part I.B. of this general permit) are present, and vegetative stabilization measures can be initiated as soon as practicable.

(B) in arid areas, semi-arid areas, or drought-stricken areas, as they are defined in Part I.B. of this general permit, where the immediate initiation of vegetative stabilization measures after construction activity has temporarily or permanently ceased or is precluded by arid conditions, other types of erosion control and stabilization measures must be initiated at the site as soon as practicable. Where vegetative controls are infeasible due to arid conditions, and within fourteen (14) calendar days of a temporary or permanent cessation of construction activity in any portion of the site, the operator shall immediately install non-vegetative erosion controls in areas of the construction site where construction activity is complete or has ceased. If non-vegetative controls are infeasible, the operator shall install temporary sediment controls as required in Part III.F.2.(b)iii.(C) below.

(C) in areas where non-vegetative controls are infeasible, the operator may alternatively utilize temporary perimeter controls. The operator must document in the SWP3 the reason why stabilization measures are not feasible, and must demonstrate that the perimeter controls will retain sediment on site to the extent practicable. The operator must continue to inspect the BMPs at the frequencies established in Part III.F.8.(c) for unstabilized sites.

(D) the requirement for permittees to initiate stabilization is triggered as soon as it is known with reasonable certainty that construction activity at the site or in certain areas of the site will be stopped for 14 or more additional calendar days. If the initiation or completion of vegetative stabilization is prevented by circumstances beyond the control of the permittee, the permittee must employ and implement alternative stabilization measures immediately. When conditions at the site changes that would allow for vegetative stabilization, then the permittee must initiate or complete vegetative stabilization as soon as practicable.

iv. Final stabilization must be achieved prior to termination of permit coverage.

v. TCEQ does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left un-vegetated or un-stabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

(c) Sediment Control Practices

The SWP3 must include a description of any sediment control practices used to remove eroded soils from stormwater runoff, including the general timing or sequence for implementation of controls. Controls selected by the permittee must be compliant with the requirements in Part IV. of this permit.

i. Sites With Drainage Areas of Ten (10) or More Acres

(A) Sedimentation Basin(s) or Impoundments

(1) A sedimentation basin or similar impoundment is required, where feasible, for a common drainage location that serves an area with ten (10) or more acres disturbed at one time. A sedimentation basin or impoundment may be temporary or permanent, and must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from offsite areas and flow from onsite areas that are either undisturbed or have already undergone permanent stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin or similar impoundment. Capacity calculations shall be included in the SWP3. Sedimentation basins must be designed for and appropriate for controlling runoff at the site and existing detention or retention ponds at the site may not be appropriate.

(2) Where rainfall data is not available, or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until final stabilization of the site.

(3) If a sedimentation basin or impoundment is not feasible, then the permittee shall provide equivalent control measures until final stabilization of the site. In determining whether installing a sediment basin or impoundment is feasible, the permittee may consider factors such as site soils, slope, available area, public safety, precipitation patterns, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins or impoundments are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins or impoundments.

(4) Unless infeasible, when discharging from sedimentation basins and impoundments, the permittee shall utilize outlet structures that withdraw water from the surface.

(B) Perimeter Controls: At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

ii. Controls for Sites with Drainage Areas Less than Ten (10) Acres:

(A) Sediment traps and sediment basins may be used to control solids in stormwater runoff for drainage locations serving less than ten (10) acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(B) Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in the SWP3.

(C) If sedimentation basins or impoundments are used, the permittee shall comply with the requirements in Part IV.F. of this general permit.

3. Description of Permanent Stormwater Controls

A description of any stormwater control measures that will be installed during the construction process to control pollutants in stormwater discharges that may occur after construction operations have been completed must be included in the SWP3. Permittees are responsible for the installation and maintenance of stormwater management measures, as follows:

(a) permittees authorized under the permit for small construction activities are responsible for the installation and maintenance of stormwater control measures prior to final stabilization of the site; or

(b) permittees authorized under the permit for large construction activities are responsible for the installation and maintenance of stormwater control measures prior to final stabilization of the site and prior to submission of an NOT.

4. Other Required Controls and BMPs

(a) Permittees shall minimize, to the extent practicable, the off-site vehicle tracking of sediments and dust. The SWP3 shall include a description of controls utilized to control the generation of pollutants that could be discharged in stormwater from the site.

(b) The SWP3 must include a description of construction and waste materials expected to be stored on-site and a description of controls to minimize pollutants from these materials.

(c) The SWP3 must include a description of potential pollutant sources in discharges of stormwater from all areas of the construction site where construction activity, including construction support activities, will be located, and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

(d) Permittees shall place velocity dissipation devices at discharge locations and along the length of any outfall channel (i.e., runoff conveyance) to provide a non-erosive flow velocity from the structure to a water course, so that the natural physical and biological characteristics and functions are maintained and protected.

(e) Permittees shall design and utilize appropriate controls in accordance with Part IV. of this permit to minimize the offsite transport of suspended sediments and other pollutants if it is necessary to pump or channel standing water from the site.

(f) Permittees shall ensure that all other required controls and BMPs comply with all of the requirements of Part IV. of this general permit.

(g) For demolition of any structure with at least 10,000 square feet of floor space that was built or renovated before January 1, 1980, and the receiving waterbody is impaired for polychlorinated biphenyls (PCBs):

i. implement controls to minimize the exposure of PCB-containing building materials, including paint, caulk, and pre-1980 fluorescent lighting fixtures to precipitation and to stormwater; and

ii. ensure that disposal of such materials is performed in compliance with applicable state, federal, and local laws.

5. Documentation of Compliance with Approved State and Local Plans

   (a) Permittees must ensure that the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by federal, state, or local officials.

   (b) SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or stormwater management site plans or site permits approved by state or local official for which the permittee receives written notice.

   (c) If the permittee is required to prepare a separate management plan, including but not limited to a WPAP or Contributing Zone Plan in accordance with 30 TAC Chapter 213 (related to the Edwards Aquifer), then a copy of that plan must be either included in the SWP3 or made readily available upon request to authorized personnel of the TCEQ. The permittee shall maintain a copy of the approval letter for the plan in its SWP3.

6. Maintenance Requirements

   (a) All protective measures identified in the SWP3 must be maintained in effective operating condition. If, through inspections or other means, as soon as the permittee determines that BMPs are not operating effectively, then the permittee shall perform maintenance as necessary to maintain the continued effectiveness of stormwater controls, and prior to the next rain event if feasible. If maintenance prior to the next anticipated storm event is impracticable, the reason shall be documented in the SWP3 and maintenance must be scheduled and accomplished as soon as practicable. Erosion and sediment controls that have been intentionally disabled, run-over, removed, or otherwise rendered ineffective must be replaced or corrected immediately upon discovery.

   (b) If periodic inspections or other information indicates a control has been used incorrectly, is performing inadequately, or is damaged, then the operator shall replace or modify the control as soon as practicable after making the discovery.

   (c) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.

   (d) If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee shall work with the owner or operator of the property to remove the sediment.

7. Observation and Evaluation of Dewatering Controls Pursuant to Part IV.C. of this General Permit

   (a) Personnel provided by the permittee must observe and evaluate dewatering controls at a minimum of once per day on the days where dewatering discharges from the construction site occur. Personnel conducting these evaluations must be knowledgeable of this general permit, the construction activities at the site, and the SWP3 for the site. Personnel conducting these evaluations are not required to have signatory authority for reports under 30 TAC § 305.128 (relating to Signatories to Reports).

(b) Requirements for Observations and Evaluations

i. A report summarizing the scope of any observation and evaluation must be completed within 24-hours following the evaluation. The report must also include, at a minimum, the following:

(A) date of the observations and evaluation;

(B) name(s) and title(s) of personnel making the observations and evaluation;

(C) approximate times that the dewatering discharge began and ended on the day of evaluation, or if the dewatering discharge is a continuous discharge that continues after normal business hours, indicate that the discharge is continuous (this information can be reported by personnel initiating the dewatering discharge);

(D) estimates of the rate (in gallons per day) of discharge on the day of evaluation;

(E) whether or not any indications of pollutant discharge were observed at the point of discharge (e.g., foam, oil sheen, noticeable odor, floating solids, suspended sediments, or other obvious indicators of stormwater pollution); and

(F) major observations, including: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

ii. Actions taken as a result of evaluations, including the date(s) of actions taken, must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

iii. The names and qualifications of personnel making the evaluations for the permittee may be documented once in the SWP3 rather than being included in each report.

8. Inspections of All Controls

(a) Personnel provided by the permittee must inspect disturbed areas (cleared, graded, or excavated) of the construction site that do not meet the requirements of final stabilization in this general permit, all locations where stabilization measures have been implemented, areas of construction support activity covered under this permit, stormwater controls (including pollution prevention controls) for evidence of, or the potential for, the discharge of pollutants, areas where stormwater typically flows within the construction site, and points of discharge from the construction site.

i. Personnel conducting these inspections must be knowledgeable of this general permit, the construction activities at the site, and the SWP3 for the site.

ii. Personnel conducting these inspections are not required to have signatory authority for inspection reports under 30 TAC § 305.128 (relating to Signatories to Reports).

(b) Requirements for Inspections

i. Inspect all stormwater controls (including sediment and erosion control measures identified in the SWP3) to ensure that they are installed properly, appear to be operational, and minimizing pollutants in discharges, as intended.

ii. Identify locations on the construction site where new or modified stormwater controls are necessary.

iii. Check for signs of visible erosion and sedimentation that can be attributed to the points of discharge where discharges leave the construction site or discharge into any surface water in the state flowing within or adjacent to the construction site.

iv. Identify any incidents of noncompliance observed during the inspection.

v. Inspect locations where vehicles enter or exit the site for evidence of off-site sediment tracking.

vi. If an inspection is performed when discharges from the construction site are occurring: identify all discharge points at the site, and observe and document the visual quality of the discharge (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, and other such indicators of pollutants in stormwater).

vii. Complete any necessary maintenance needed, based on the results of the inspection and in accordance with the requirements listed in Part III.F.6. above.

(c) Inspection frequencies:

i. Inspections of construction sites must be conducted at least once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, unless as otherwise provided below in Part III.F.8.(c)ii. – v. below.

(A) If a storm event produces 0.5 inches or more of rain within a 24-hour period (including when there are multiple, smaller storms that alone produce less than 0.5 inches but together produce 0.5 inches or more in 24 hours), you are required to conduct one inspection within 24 hours of when 0.5 inches of rain or more has fallen. When the 24-hour inspection time frame occurs entirely outside of normal working hours, you must conduct an inspection by no later than the end of the next business day.

(B) If a storm event produces 0.5 inches or more of rain within a 24-hour period on the first day of a storm and continues to produce 0.5 inches or more of rain on subsequent days, you must conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the last day of the storm that produces 0.5 inches or more of rain (i.e., only two (2) inspections would be required for such a storm event). When the 24-hour inspection time frame occurs entirely outside of normal working hours, you must conduct an inspection by no later than the end of the next business day.

ii. Inspection frequencies must be conducted at least once every month in areas of the construction site that meet final stabilization or have been temporarily stabilized.

iii. Inspection frequencies for construction sites, where runoff is unlikely due to the occurrence of frozen conditions at the site, must be conducted at least once every month until thawing conditions begin to occur (see definitions for thawing conditions in Part I.B.). The SWP3 must also contain a record of the approximate beginning and ending dates of when frozen conditions occurred at the site, which resulted in inspections being conducted monthly, while those

conditions persisted, instead of at the interval of once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

iv. In arid, semi-arid, or drought-stricken areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater. The SWP3 must also contain a record of the total rainfall measured, as well as the approximate beginning and ending dates of when drought conditions occurred at the site, which resulted in inspections being conducted monthly, while those conditions persisted, instead of at the interval of once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

v. As an alternative to the inspection schedule in Part III.F.8.(c)i. above, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, then the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.

vi. The inspection procedures described in Part III.F.8.(c)i. – v above can be performed at the frequencies and under the applicable conditions indicated for each schedule option, provided that the SWP3 reflects the current schedule and that any changes to the schedule are made in accordance with the following provisions: the inspection frequency schedule can only be changed a maximum of once per calendar month and implemented within the first five (5) business days of a calendar month; and the reason for the schedule change documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(d) Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may provide inspection personnel with limited access to the areas described in Part III.F.8.(a) above.

i. Inspection of linear construction sites could require the use of vehicles that could compromise areas of temporary or permanent stabilization, cause additional disturbance of soils, and result in the increase the potential for erosion. In these circumstances, controls must be inspected at least once every fourteen (14) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater, but representative inspections may be performed.

ii. For representative inspections, personnel must inspect controls along the construction site for 0.25 mile above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described in Part III.F.8.(a) above. The conditions of the controls along each inspected 0.25-mile portion may be considered as representative of the condition of controls along that reach extending from the end of the 0.25-mile portion to either the end of the next 0.25-mile inspected portion, or to the end of the project, whichever occurs first.

As an alternative to the inspection schedule described in Part III.F.8.(c)i. above, the SWP3 may be developed to require that these inspections will occur at least once every seven (7) calendar days. If this alternative schedule is developed, the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.

iii. the SWP3 for a linear construction site must reflect the current inspection schedule. Any changes to the inspection schedule must be made in accordance with the following provisions:

(A) the schedule may be changed a maximum of one time each month;

(B) the schedule change must be implemented at the beginning of a calendar month, and

(C) the reason for the schedule change must be documented in the SWP3 (e.g., end of "dry" season and beginning of "wet" season).

(e) Adverse Conditions.

Requirements for inspections may be temporarily suspended for adverse conditions. Adverse conditions are conditions that are either dangerous to personnel (e.g., high wind, excessive lightning) or conditions that prohibit access to the site (e.g., flooding, freezing conditions). Adverse conditions that result in the temporary suspension of a permit requirement to inspect must be documented and included as part of the SWP3. Documentation must include:

i. the date and time of the adverse condition,

ii. names of personnel that witnessed the adverse condition, and

iii. a narrative for the nature of the adverse condition.

(f) In the event of flooding or other adverse conditions which prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable. Inspection Reports.

i. A report summarizing the scope of any inspection must be completed within 24-hours following the inspection. The report must also include the date(s) of the inspection and major observations relating to the implementation of the SWP3. Major observations in the report must include: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

ii. Actions taken as a result of inspections, including the date(s) of actions taken, must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

iii. The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

(g) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable. If necessary, modify your site map to reflect changes to your stormwater controls that are no longer accurately reflected on the current site map.

9. The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-stormwater components of the discharge, as listed in Part II.A.3. of this permit.

10. The SWP3 must include the information required in Part III.B. of this general permit.

11. The SWP3 must include pollution prevention procedures that comply with Part IV.D. of this general permit.

Part IV. Erosion and Sediment Control Requirements Applicable to All Sites

Except as provided in 40 CFR §§ 125.30-125.32, any discharge regulated under this general permit, with the exception of sites that obtained waivers based on low rainfall erosivity, must achieve, at a minimum, the following effluent limitations representing the degree of effluent reduction attainable by application of the best practicable control technology currently available (BPT). The BPT are also required by and must satisfy the Effluent Limitations Guideline (ELG) permitting requirement for application of 40 CFR § 450.24 New Source Performance Standards (NSPS), 40 CFR § 450.22 Best Available Technology Economically Achievable (BAT), and 40 CFR § 450.23 Best Conventional Pollutant Control Technology (BCT).

Section A. Erosion and Sediment Controls

Design, install, and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed, and maintained to:

1. control stormwater volume and velocity within the site to minimize soil erosion in order to minimize pollutant discharges;
2. control stormwater discharges, including both peak flowrates and total stormwater volume, to minimize channel and streambank erosion and scour in the immediate vicinity of discharge point(s);
3. minimize the amount of soil exposed during construction activity;
4. minimize the disturbance of steep slopes;
5. minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
6. provide and maintain appropriate natural buffers around surface water in the state. Direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible. If providing buffers is infeasible, the permittee shall document the reason that natural buffers are infeasible and shall implement additional erosion and sediment controls to reduce sediment load;
7. preserve native topsoil at the site, unless the intended function of a specific area of the site dictates that the topsoil be disturbed or removed, or it is infeasible; and
8. minimize soil compaction. In areas of the construction site where final vegetative stabilization will occur or where infiltration practices will be installed, either:
   (a) restrict vehicle and equipment use to avoid soil compaction; or
   (b) prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible.

   Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted.
9. TCEQ does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute “surface water” for the purposes of triggering the buffer requirement in Part IV.A.(6) above.

Section B. Soil Stabilization

Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding fourteen (14) calendar days. In the context of this requirement, "immediately" means as soon as practicable, but no later than the end of the next workday, following the day when the earth-disturbing activities have temporarily or permanently ceased. Temporary stabilization must be completed no more than fourteen (14) calendar days after initiation of soil stabilization measures, and final stabilization must be achieved prior to termination of permit coverage. In arid, semi-arid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative non-vegetative stabilization measures must be employed as soon as practicable. Refer to Part III.F.2.(b) for complete erosion control and stabilization practice requirements. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed.

Section C. Dewatering

Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited, unless managed by appropriate controls to address sediment and prevent erosion. Operators must observe and evaluate the dewatering controls once per day while the dewatering discharge occurs as described in Part III.F.7. of this general permit.

Section D. Pollution Prevention Measures

Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:

1. minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
2. minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater;
3. minimize the exposure of waste materials by closing waste container lids at the end of the workday and during storm events. For waste containers that do not have lids, where the container itself is not sufficiently secure enough to prevent the discharge of pollutants absent a cover and could leak, the permittee must provide either a cover (e.g., a tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation, stormwater, and wind, or a similarly effective means designed to minimize the discharge of pollutants (e.g., secondary containment). Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use);
4. minimize exposure of wastes by implementing good housekeeping measures. Wastes must be cleaned up and disposed of in designated waste containers on days of operation at the site. Wastes must be cleaned up immediately if containers overflow;

5. minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the release. You must also, within seven (7) calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release; and
6. minimize exposure of sanitary waste by positioning portable toilets so that they are secure and will not be tipped or knocked over, and so that they are located away from surface water in the state and stormwater inlets or conveyances.

Section E. Prohibited Discharges

The following discharges are prohibited:

1. wastewater from wash out of concrete, unless managed by an appropriate control;
2. wastewater from wash out and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3. fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
4. soaps or solvents used in vehicle and equipment washing; and
5. toxic or hazardous substances from a spill or other release.

Section F. Surface Outlets

When discharging from basins and impoundments, utilize outlet structures that withdraw water from the surface, unless infeasible. If infeasible, the permittee must provide documentation in the SWP3 to support the determination, including the specific conditions or time periods when this exception will apply.

Part V. Stormwater Runoff from Concrete Batch Plants

Discharges of stormwater runoff from concrete batch plants present at regulated construction sites and operated as a construction support activity may be authorized under the provisions of this general permit, provided that the following requirements are met for concrete batch plant(s) authorized under this permit. Only the discharges of stormwater runoff and non-stormwater from concrete batch plants that meet the requirements of a construction support activity can be authorized under this permit (see the requirements for "Non-Stormwater Discharges" in Part II.A.3. and "Discharges of Stormwater Associated with Construction Support Activity" in Part II.A.2.).

If discharges of stormwater runoff or non-stormwater from concrete batch plants are not authorized under this general permit, then discharges must be authorized under an alternative general permit or individual permit [see the requirement in Part II.A.2.(c)].

This permit does not authorize the discharge or land disposal of any wastewater from concrete batch plants at regulated construction sites. Authorization for these wastes must be obtained under an individual permit or an alternative general permit.

Section A. Benchmark Sampling Requirements

1. Operators of concrete batch plants authorized under this general permit shall sample the stormwater runoff from the concrete batch plants according to the requirements of this section of this general permit, and must conduct evaluations on the effectiveness of the SWP3 based on the following benchmark monitoring values:

Table 1. Benchmark Parameters

Benchmark Parameter	Benchmark Value	Sampling Frequency	Sample Type
Oil and Grease (*1)	15 mg/L	1/quarter (*2) (*3)	Grab (*4)
Total Suspended Solids (*1)	50 mg/L	1/quarter (*2) (*3)	Grab (*4)
pH	6.0 – 9.0 Standard Units	1/quarter (*2) (*3)	Grab (*4)
Total Iron (*1)	1.3 mg/L	1/quarter (*2) (*3)	Grab (*4)

(*1) All analytical results for these parameters must be obtained from a laboratory that is accredited based on rules located in 30 TAC § 25.4 (a) or through the National Environmental Laboratory Accreditation Program (NELAP). Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §§ 136.1(c) and 122.44(i)(1)(iv).

(*2) When discharge occurs. Sampling is required within the first 30 minutes of discharge. If it is not practicable to take the sample, or to complete the sampling, within the first 30 minutes, sampling must be completed within the first hour of discharge. If sampling is not completed within the first 30 minutes of discharge, the reason must be documented and attached to all required reports and records of the sampling activity.

(*3) Sampling must be conducted at least once during each of the following periods. The first sample must be collected during the first full quarter that a stormwater discharge occurs from a concrete batch plant authorized under this general permit.

January through March
April through June
July through September
October through December

For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a stormwater discharge occurred at least once following submission of the NOI or following the date that automatic authorization was obtained under Part II.E.2., and prior to terminating coverage.

(*4) A grab sample shall be collected from the stormwater discharge resulting from a storm event that is at least 0.1 inches of measured precipitation that occurs at least 72 hours from the previously measurable storm event. The sample shall be collected downstream of the concrete batch plant, and where the discharge exits any BMPs utilized to handle the runoff from the batch plant, prior to commingling with any other water authorized under this general permit.

2. The permittee must compare the results of sample analyses to the benchmark values above, and must include this comparison in the overall assessment of the SWP3's effectiveness. Analytical results that exceed a benchmark value are not a violation of this permit, as these values are not numeric effluent limitations. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. The operator must investigate the cause for each exceedance and must document the results of this investigation in the SWP3 by the end of the quarter following the sampling event.

   The operator's investigation must identify the following:

   (a) any additional potential sources of pollution, such as spills that might have occurred;

   (b) necessary revisions to good housekeeping measures that are part of the SWP3;

   (c) additional BMPs, including a schedule to install or implement the BMPs; and

   (d) other parts of the SWP3 that may require revisions in order to meet the goal of the benchmark values.

   Background concentrations of specific pollutants may also be considered during the investigation. If the operator is able to relate the cause of the exceedance to background concentrations, then subsequent exceedances of benchmark values for that pollutant may be resolved by referencing earlier findings in the SWP3. Background concentrations may be identified by laboratory analyses of samples of stormwater run-on to the permitted facility, by laboratory analyses of samples of stormwater run-off from adjacent non-industrial areas, or by identifying the pollutant is a naturally occurring material in soils at the site.

Section B. Best Management Practices (BMPs) and SWP3 Requirements

Minimum SWP3 Requirements – The following are required in addition to other SWP3 requirements listed in this general permit, which include, but are not limited to the applicable requirements located in Part III.F.8. of this general permit, as follows:

1. Description of Potential Pollutant Sources – The SWP3 must provide a description of potential sources (activities and materials) that can cause, have a reasonable potential to cause or contribute to a violation of water quality standards or have been found to cause, or contribute to, the loss of a designated use of surface water in the state in stormwater discharges associated with concrete batch plants authorized under this permit. The SWP3 must describe the implementation of practices that will be used to minimize to the extent practicable the discharge of pollutants in stormwater discharges associated with industrial activity and non-stormwater discharges (described in Part II.A.3. of this general permit), in compliance with the terms and conditions of this general permit, including the protection of water quality, and must ensure the implementation of these practices.

   The following must be developed, at a minimum, in support of developing this description:

   (a) Drainage – The site map must include the following information:

      i. the location of all outfalls for stormwater discharges associated with concrete batch plants that are authorized under this permit;

      ii. a depiction of the drainage area and the direction of flow to the outfall(s);

      iii. structural controls used within the drainage area(s);

iv. the locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activities (including fueling, repair, and storage areas for vehicles and equipment scheduled for maintenance); areas used for the treatment, storage, or disposal of wastes; liquid storage tanks; material processing and storage areas; and loading and unloading areas; and

v. the locations of the following: any bag house or other dust control device(s); recycle/sedimentation pond, clarifier or other device used for the treatment of facility wastewater (including the areas that drain to the treatment device); areas with significant materials; and areas where major spills or leaks have occurred.

(b) Inventory of Exposed Materials – A list of materials handled at the concrete batch plant that may be exposed to stormwater and precipitation and that have a potential to affect the quality of stormwater discharges associated with concrete batch plants that are authorized under this general permit.

(c) Spills and Leaks – A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to stormwater and precipitation and that drain to stormwater outfalls associated with concrete batch plants authorized under this general permit must be developed, maintained, and updated as needed.

(d) Sampling Data – A summary of existing stormwater discharge sampling data must be maintained, if available.

2. Measures and Controls – The SWP3 must include a description of management controls to regulate pollutants identified in the SWP3's "Description of Potential Pollutant Sources" from Part V.B.1. of this permit, and a schedule for implementation of the measures and controls. This must include, at a minimum:

(a) Good Housekeeping – Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

i. Operators must prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant materials from paved portions of the site that are exposed to stormwater. Measures used to minimize the presence of these materials may include regular sweeping or other equivalent practices. These practices must be conducted at a frequency that is determined based on consideration of the amount of industrial activity occurring in the area and frequency of precipitation, and shall occur at least once per week when cement or aggregate is being handled or otherwise processed in the area.

ii. Operators must prevent the exposure of fine granular solids, such as cement, to stormwater. Where practicable, these materials must be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(b) Spill Prevention and Response Procedures – Areas where potential spills that can contribute pollutants to stormwater runoff and precipitation, and the drainage areas from these locations, must be identified in the SWP3. Where appropriate, the SWP3 must specify material handling procedures, storage requirements, and use of equipment. Procedures for cleaning up spills must be identified in the SWP3 and made available to the appropriate personnel.

(c) Inspections – Qualified facility personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) must be identified to inspect designated equipment and areas of the facility specified in the SWP3. Personnel conducting these inspections are not required to have signatory authority for inspection reports under 30 TAC § 305.128. Inspections of facilities in operation must be performed

once every seven (7) days. Inspections of facilities that are not in operation must be performed at a minimum of once per month. The current inspection frequency being implemented at the facility must be recorded in the SWP3. The inspection must take place while the facility is in operation and must, at a minimum, include all areas that are exposed to stormwater at the site, including material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, truck wash down and equipment cleaning areas. Follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained and be made readily available for inspection upon request.

(d) Employee Training – An employee training program must be developed to educate personnel responsible for implementing any component of the SWP3, or personnel otherwise responsible for stormwater pollution prevention, with the provisions of the SWP3. The frequency of training must be documented in the SWP3, and at a minimum, must consist of one (1) training prior to the initiation of operation of the concrete batch plant.

(e) Record Keeping and Internal Reporting Procedures – A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of stormwater discharges, must be included in the SWP3. Inspection and maintenance activities must be documented and records of those inspection and maintenance activities must be incorporated in the SWP3.

(f) Management of Runoff – The SWP3 shall contain a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

3. Comprehensive Compliance Evaluation – At least once per year, one or more qualified personnel (i.e., a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) shall conduct a compliance evaluation of the plant. The evaluation must include the following:

(a) visual examination of all areas draining stormwater associated with regulated concrete batch plants for evidence of, or the potential for, pollutants entering the drainage system. These include, but are not limited to: cleaning areas, material handling areas, above ground storage tanks, hoppers or silos, dust collection/containment systems, and truck wash down and equipment cleaning areas. Measures implemented to reduce pollutants in runoff (including structural controls and implementation of management practices) must be evaluated to determine if they are effective and if they are implemented in accordance with the terms of this permit and with the permittee's SWP3. The operator shall conduct a visual inspection of equipment needed to implement the SWP3, such as spill response equipment.

(b) based on the results of the evaluation, the following must be revised as appropriate within two (2) weeks of the evaluation: the description of potential pollutant sources identified in the SWP3 (as required in Part V.B.1., "Description of Potential Pollutant Sources"); and pollution prevention measures and controls identified in the SWP3 (as required in Part V.B.2., "Measures and Controls"). The revisions may include a schedule for implementing the necessary changes.

(c) the permittee shall prepare and include in the SWP3 a report summarizing the scope of the evaluation, the personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in response to the findings of the evaluation. The report must identify any incidents of noncompliance. Where the report does not identify incidences of noncompliance, the report must contain a statement that the evaluation did not identify any

incidence(s), and the report must be signed according to 30 TAC § 305.128 (relating to Signatories to Reports).

(d) the Comprehensive Compliance Evaluation may substitute for one of the required inspections delineated in Part V.B.2.(c) of this general permit.

Section C. Prohibition of Wastewater Discharges

Wastewater discharges associated with concrete production including wastewater disposal by land application are not authorized under this general permit. These wastewater discharges must be authorized under an alternative TCEQ water quality permit or otherwise disposed of in an authorized manner. Discharges of concrete truck wash out at construction sites may be authorized if conducted in accordance with the requirements of Part VI of this general permit.

Part VI. Concrete Truck Wash Out Requirements

This general permit authorizes the land disposal of wash out from concrete trucks at construction sites regulated under this general permit, provided the following requirements are met. Any discharge of concrete production wastewater to surface water in the state must be authorized under a separate TCEQ general permit or individual permit.

A. Discharge of concrete truck wash out water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.

B. Concrete truck wash out water shall be disposed in areas at the construction site where structural controls have been established to prevent discharge to surface water in the state, or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent discharge to surface water in the state. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.

C. Wash out of concrete trucks during rainfall events shall be minimized. The discharge of concrete truck wash out water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck wash out as the result of rainfall or stormwater runoff.

D. The disposal of wash out water from concrete trucks, made under authorization of this general permit must not cause or contribute to groundwater contamination.

E. If a SWP3 is required to be implemented, the SWP3 shall include concrete wash out areas on the associated site map.

Part VII. Retention of Records

The permittee must retain the following records for a minimum period of three (3) years from the date that a NOT is submitted as required in Part II.F.1. and 2. of this permit. For activities in which an NOT is not required, records shall be retained for a minimum period of three (3) years from the date that the operator terminates coverage under Section II.F.3. of this permit. Records include:

A. a copy of the SWP3;

B. all reports and actions required by this permit, including a copy of the TCEQ construction site notice;

C. all data used to complete the NOI, if an NOI is required for coverage under this general permit; and

D. all records of submittal of forms submitted to the operator of any MS4 receiving the discharge and to the secondary operator of a large construction site, if applicable.

Part VIII. Standard Permit Conditions

A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the permit and statutes under which it was issued (CWA and TWC), and is grounds for enforcement action, for terminating, revoking and reissuance, or modification, or denying coverage under this general permit, or for requiring a discharger to apply for and obtain an individual TPDES permit, based on rules located in TWC § 23.086, 30 TAC § 305.66, and 40 CFR § 122.41 (a).

B. Authorization under this general permit may be modified, suspended, revoked and reissued, terminated or otherwise suspended for cause, based on rules located in TWC § 23.086, 30 TAC § 305.66, and 40 CFR § 122.41(f). Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition. The permittee must furnish to the executive director, upon request and within a reasonable time, any information necessary for the executive director to determine whether cause exists for modifying, revoking and reissuing, terminating or, otherwise suspending authorization under this permit, based on rules located in TWC § 23.086, 30 TAC § 305.66, and 40 CFR § 122.41 (h). Additionally, the permittee must provide to the executive director, upon request, copies of all records that the permittee is required to maintain as a condition of this general permit.

C. It is not a defense for a discharger in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the permit conditions.

D. Inspection and entry shall be allowed under TWC Chapters 26-28, Texas Health and Safety Code §§ 361.032-361.033 and 361.037, and 40 CFR § 122.41(i). The statement in TWC § 26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.

E. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under TWC Chapter 7 for violations including but not limited to the following:

1. negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA § 402, or any requirement imposed in a pretreatment program approved under CWA §§ 402(a)(3) or 402(b)(8);
2. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance; and
3. knowingly violating CWA §303 and placing another person in imminent danger of death or serious bodily injury.

F. All reports and other information requested by the executive director must be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

G. Authorization under this general permit does not convey property or water rights of any sort and does not grant any exclusive privilege.

H. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

I. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

J. The permittee shall comply with the monitoring and reporting requirements in 40 CFR § 122.41(j) and (l), as applicable.

K. Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §§ 136.1(c) and 122.44(i)(1)(iv).

Part IX. Fees

A. A fee of must be submitted along with the NOI:

1. $225 if submitting an NOI electronically, or
2. $325 if submitting a paper NOI.

B. Fees are due upon submission of the NOI. An NOI will not be declared administratively complete unless the associated fee has been paid in full.

C. No separate annual fees will be assessed for this general permit. The Water Quality Annual Fee has been incorporated into the NOI fees as described above.

Appendix A: Automatic Authorization

Periods of Low Erosion Potential by County – Eligible Date Ranges

Andrews: Nov. 15 - Apr. 30

Archer: Dec. 15 - Feb. 14

Armstrong: Nov. 15 - Apr. 30

Bailey: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Baylor: Dec. 15 - Feb. 14

Borden: Nov. 15 - Apr. 30

Brewster: Nov. 15 - Apr. 30

Briscoe: Nov. 15 - Apr. 30

Brown: Dec. 15 - Feb. 14

Callahan: Dec. 15 - Feb. 14

Carson: Nov. 15 - Apr. 30

Castro: Nov. 15 - Apr. 30

Childress: Dec. 15 - Feb. 14

Cochran: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Coke: Dec. 15 - Feb. 14

Coleman: Dec. 15 - Feb. 14

Collingsworth: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Concho: Dec. 15 - Feb. 14

Cottle: Dec. 15 - Feb. 14

Crane: Nov. 15 - Apr. 30

Crockett: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Crosby: Nov. 15 - Apr. 30

Culberson: Nov. 1 - May 14

Dallam: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Dawson: Nov. 15 - Apr. 30

Deaf Smith: Nov. 15 - Apr. 30

Dickens: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Dimmit: Dec. 15 - Feb. 14

Donley: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28

Eastland: Dec. 15 - Feb. 14

Ector: Nov. 15 - Apr. 30

Edwards: Dec. 15 - Feb. 14

El Paso: Jan. 1 - Jul. 14, or May 15 - Jul. 31, or Jun. 1 - Aug. 14, or Jun. 15 - Sept. 14, or Jul. 1 - Oct. 14, or Jul. 15 - Oct. 31, or Aug. 1 - Apr. 30, or Aug. 15 - May 14, or Sept. 1 - May 30, or Oct. 1 - Jun. 14, or Nov. 1 - Jun. 30, or Nov. 15 - Jul. 14

Fisher: Dec. 15 - Feb. 14

Floyd: Nov. 15 - Apr. 30

Foard: Dec. 15 - Feb. 14

Gaines: Nov. 15 - Apr. 30

Garza: Nov. 15 - Apr. 30

Glasscock: Nov. 15 - Apr. 30

Hale: Nov. 15 - Apr. 30

Hall: Feb. 1 - Mar. 30

Hansford: Nov. 15 - Apr. 30

Hardeman: Dec. 15 - Feb. 14

Hartley: Nov. 15 - Apr. 30

Haskell: Dec. 15 - Feb. 14

Hockley: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Howard: Nov. 15 - Apr. 30

Hudspeth: Nov. 1 - May 14

Hutchinson: Nov. 15 - Apr. 30

Irion: Dec. 15 - Feb. 14

Jeff Davis: Nov. 1 - Apr. 30 or Nov. 15 - May 14

Jones: Dec. 15 - Feb. 14

Kent: Nov. 15 - Jan. 14 or Feb. 1 - Mar. 30

Kerr: Dec. 15 - Feb. 14

Kimble: Dec. 15 - Feb. 14

King: Dec. 15 - Feb. 14

Kinney: Dec. 15 - Feb. 14

Knox: Dec. 15 - Feb. 14

Lamb: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30

Loving: Nov. 1 - Apr. 30, or Nov. 15 - May 14

Lubbock: Nov. 15 - Apr. 30

Lynn: Nov. 15 - Apr. 30

Martin: Nov. 15 - Apr. 30

Mason: Dec. 15 - Feb. 14

Maverick: Dec. 15 - Feb. 14

McCulloch: Dec. 15 - Feb. 14

Menard: Dec. 15 - Feb. 14

Midland: Nov. 15 - Apr. 30

Mitchell: Nov. 15 - Apr. 30

Moore: Nov. 15 - Apr. 30

Motley: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30

Nolan: Dec. 15 - Feb. 14

Oldham: Nov. 15 - Apr. 30

Parmer: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30
Pecos: Nov. 15 - Apr. 30
Potter: Nov. 15 - Apr. 30
Presidio: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Randall: Nov. 15 - Apr. 30
Reagan: Nov. 15 - Apr. 30
Real: Dec. 15 - Feb. 14
Reeves: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Runnels: Dec. 15 - Feb. 14
Schleicher: Dec. 15 - Feb. 14
Scurry: Nov. 15 - Apr. 30
Shackelford: Dec. 15 - Feb. 14
Sherman: Nov. 15 - Apr. 30
Stephens: Dec. 15 - Feb. 14
Sterling: Nov. 15 - Apr. 30
Stonewall: Dec. 15 - Feb. 14
Sutton: Dec. 15 - Feb. 14
Swisher: Nov. 15 - Apr. 30
Taylor: Dec. 15 - Feb. 14
Terrell: Nov. 15 - Apr. 30
Terry: Nov. 15 - Apr. 30
Throckmorton: Dec. 15 - Feb. 14
Tom Green: Dec. 15 - Feb. 14
Upton: Nov. 15 - Apr. 30
Uvalde: Dec. 15 - Feb. 14
Val Verde: Nov. 15 - Jan. 14, or Feb. 1 - Mar. 30
Ward: Nov. 1 - Apr. 14, or Nov. 15 - Apr. 30
Wichita: Dec. 15 - Feb. 14
Wilbarger: Dec. 15 - Feb. 14
Winkler: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Yoakum: Nov. 1 - Apr. 30, or Nov. 15 - May 14
Young: Dec. 15 - Feb. 14
Wheeler: Jan. 1 - Mar. 30, or Dec. 1 - Feb. 28
Zavala: Dec. 15 - Feb. 14

Appendix B: Storm Erosivity (EI) Zones in Texas

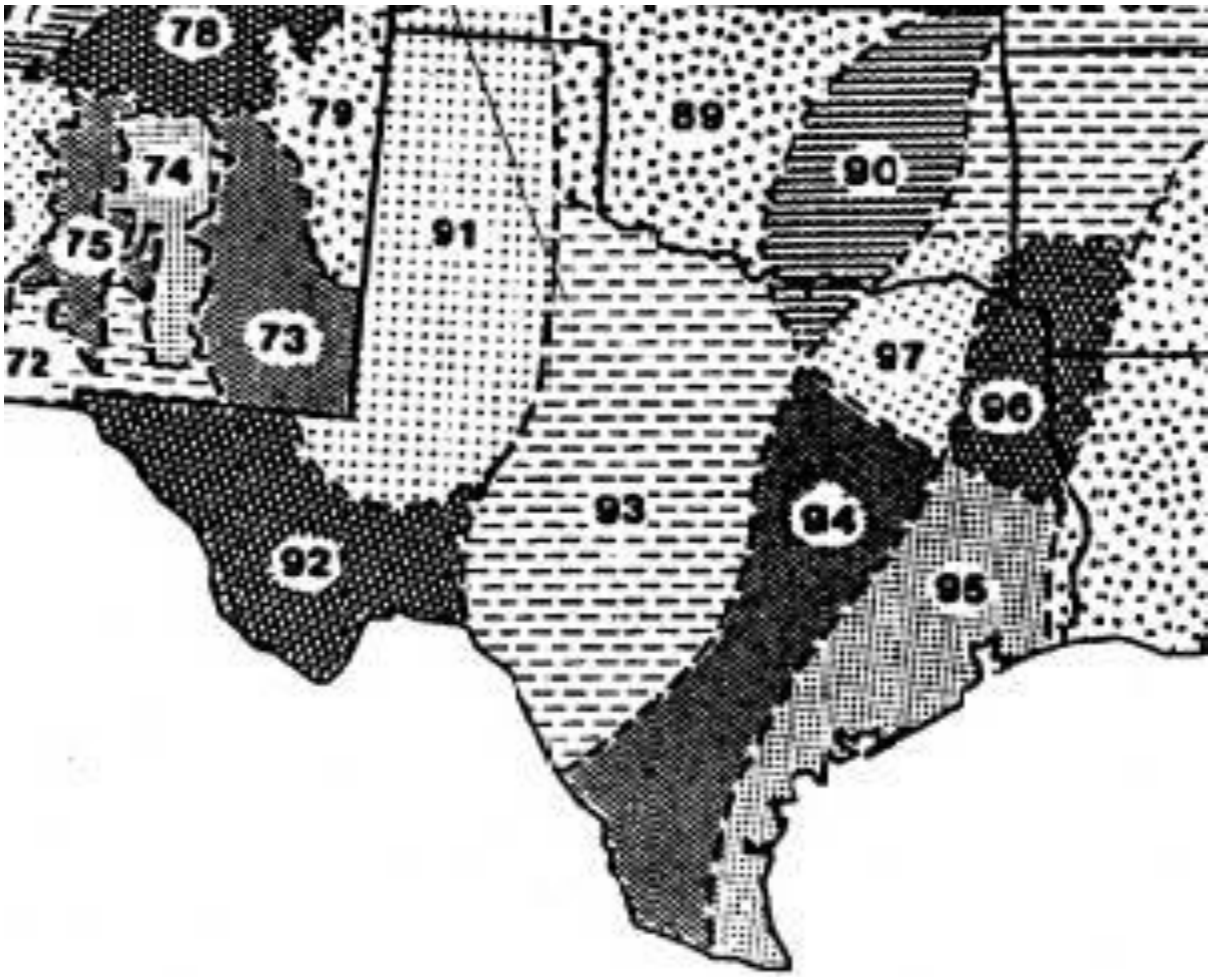


Figure B. EI Distribution Zones

Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix C: Isoerodent Map

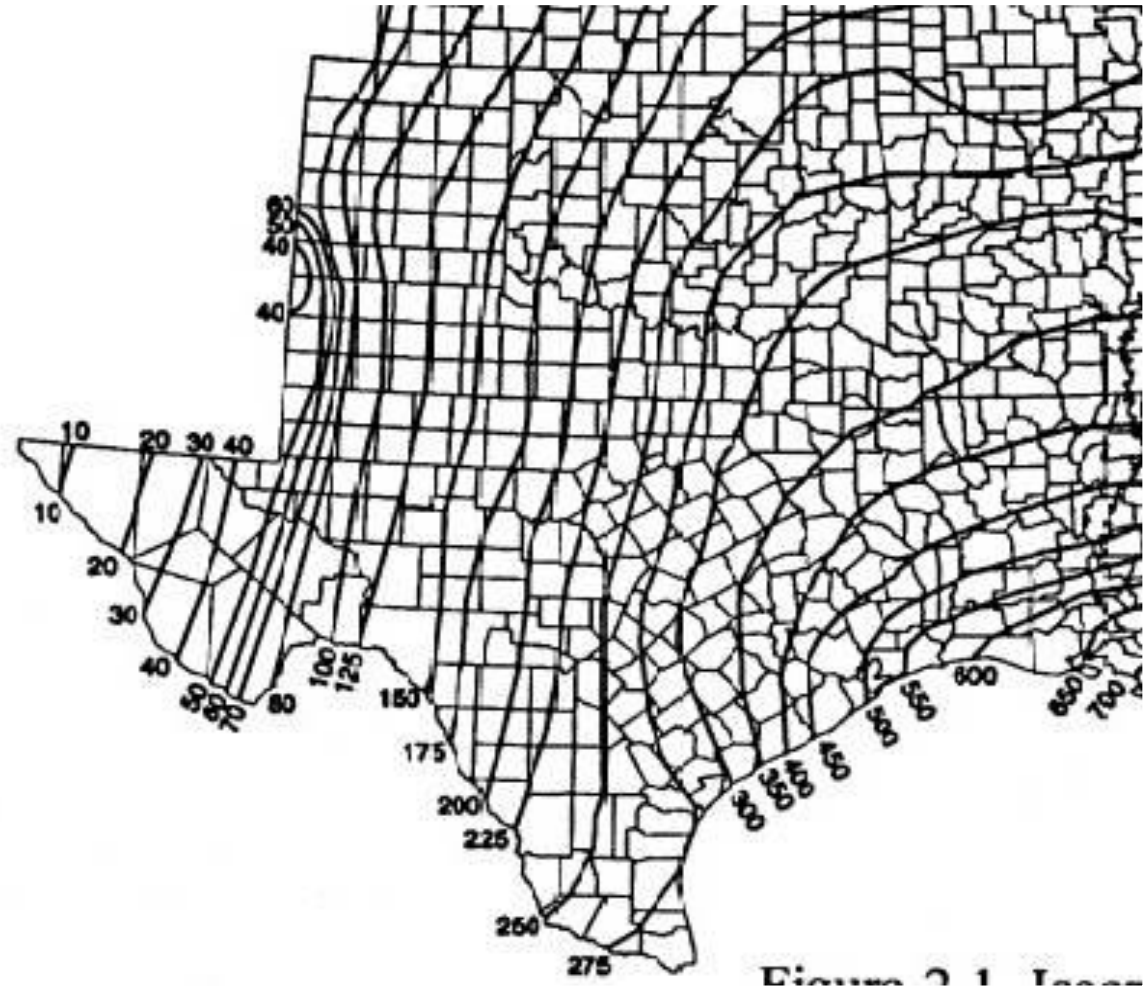


Figure C. Isoerodent Map of Texas. Units are hundreds ft*tonf*in(ac*h*yr)$^{-1}$

Adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service

Appendix D: Erosivity Indices for EI Zones in Texas

Table D. EI as percentage of average annual computed selected geographic areas (EI number) by date period (month/day).

Date Periods* (Month/Day)

EI #	1/1	1/16	1/31	2/15	3/1	3/16	3/31	4/15	4/30	5/15	5/30	6/14	6/29	7/14	7/29	8/13	8/28	9/12	9/27	10/12	10/27	11/11	11/26	12/11	12/31
89	0	1	1	2	3	4	7	2	8	27	38	48	55	62	69	76	83	90	94	97	98	99	100	100	100
90	0	1	2	3	4	6	8	13	21	29	37	46	54	60	65	69	74	81	87	92	95	97	98	99	100
91	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100	100
92	0	0	0	0	1	1	1	2	6	16	29	39	46	53	60	67	74	81	88	95	99	99	100	100	100
93	0	1	1	2	3	4	6	8	13	25	40	49	56	62	67	72	76	80	85	91	97	98	99	99	100
94	0	1	2	4	6	8	10	15	21	29	38	47	53	57	61	65	70	76	83	88	91	94	96	98	100
95	0	1	3	5	7	9	11	14	18	27	35	41	46	51	57	62	68	73	79	84	89	93	96	98	100
96	0	2	4	6	9	12	17	23	30	37	43	49	54	58	62	66	70	74	78	82	86	90	94	97	100
97	0	1	3	5	7	10	14	20	28	37	48	56	61	64	68	72	77	81	86	89	92	95	98	99	100
106	0	3	6	9	13	17	21	27	33	38	44	49	55	61	67	71	75	78	81	84	86	90	94	97	100

*Each period begins on the date listed in the table above and lasts until the day before the following period. The final period begins on December 11 and ends on December 31.

Table adapted from Chapter 2 of USDA Agriculture Handbook 703: "Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE)," U.S. Department of Agriculture, Agricultural Research Service.

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

I FREDERICK GOXEN SCHEEN III,
Print Name

Owner Pres,
Title - Owner/President/Other

of **FGS Investments I, LLC**,
Corporation/Partnership/Entity Name

have authorized **Tammi Migl, PE**
Print Name of Agent/Engineer

of **Migl Engineering and Consulting, PLLC**
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.

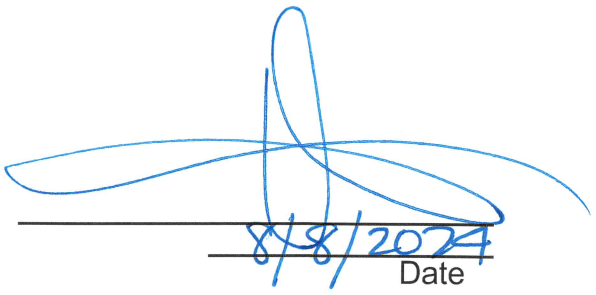
2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

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:



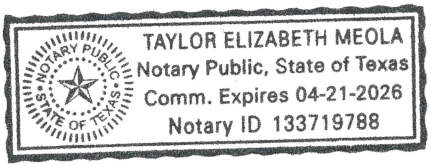
8/8/2024
Applicant's Signature Date

THE STATE OF TX §

County of Hays §

BEFORE ME, the undersigned authority, on this day personally appeared Frederick Scheen 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 8 day of August, 2024.



NOTARY PUBLIC

Taylor Meola
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 4-21-2026

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: LandWest Rim Rock 1
Regulated Entity Location: 11783 Rim Rock Trail, Austin, Texas 78737
Name of Customer: FGS Investments I, LLC
Contact Person: Tammi Migl, PE Phone: (512) 750-0440
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN 112167259

Austin Regional Office (3373)

☐ Hays ☒ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	16.399 Acres	$ 6,500
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: 09/09/2025

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 **CZP Modification**

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 606361723		**RN 112167259**

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	9/9/2025

☐ 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:*
FGS Investments I, 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)*
0803399808	32071688272	84-2841800	N/A

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

12. Number of Employees	13. Independently Owned and Operated?
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☒ **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:							
	FGS Investments I, LLC						
	P.O. Box 340789						
City	Austin	**State**	TX	**ZIP**	78734	**ZIP + 4**	0014

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) 263-3464		( ) -

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.*)

LandWest Rim Rock 1

23. Street Address of the Regulated Entity: *(No PO Boxes)*	11783 Rim Rock Trail						
	City	Austin	**State**	TX	**ZIP**	78737	**ZIP + 4**
24. County	Travis						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:					
26. Nearest City			**State**		**Nearest ZIP Code**

27. Latitude (N) In Decimal:	30.207552		**28. Longitude (W) In Decimal:**	97.959314		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
30	12	27.19	97	57	33.53	

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)
0782		561730	

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

Landscape Design

34. Mailing Address:	**LandWest Design Group**						
	11783 Rim Rock Trail						
	City	**Austin**	**State**	**TX**	**ZIP**	**78737**	**ZIP + 4**
35. E-Mail Address:	**tmeola@landwest.com**						

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 263-3464		**( ) -**

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
		CZP Mod		
☐ 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:	Tammi Migl, P.E.	**41. Title:**	Principal/ Founder

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 750-0440		( ) -	tammi@miglengineering.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:	Migl Engineering and Consulting, PLLC	**Job Title:**	Principal / Founder
Name *(In Print):*	Tammi Migl, PE	**Phone:**	(512) 750- **0440**
Signature:		**Date:**	09/25/2025