Contributing Zone Plan

For

Len Bar Business Park

200 Len Bar Lane
Leander, TX 78641

10/30/2025

Prepared By
Hill Country Civil, LLC
391 Landa St. Ste. 1204
New Braunfels, TX 78130
Christopher B. Allison, PE

Hill Country Civil
Engineers • Consultants

Modification of a Previously Approved Contributing Zone Plan Checklist

- **Edwards Aquifer Application Cover Page (TCEQ-20705)**
- **Modification of a Previously Approved Contributing Zone Plan Form (TCEQ-10259)**

  Attachment A - Original Approval Letter and Approved Modification Letters
  Attachment B - Narrative of Proposed Modification
  Attachment C - Current site plan of the approved project

- **Contributing Zone Plan Application (TCEQ-10257)**
- **Storm Water Pollution Prevention Plan (SWPPP)**

  -OR-

- **Temporary Stormwater Section (TCEQ-0602)**
- **Copy of Notice of Intent (NOI)**
- **Agent Authorization Form (TCEQ-0599), if application submitted by agent**
- **Application Fee Form (TCEQ-0574)**
- **Check Payable to the "Texas Commission on Environmental Quality"**
- **Core Data Form (TCEQ-10400)**

Hill Country Civil
Engineers • Consultants

Application Cover Page

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

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

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Len Bar Business Park						**2. Regulated Entity No.:**			
3. Customer Name: JMA Entity LLC						**4. Customer No.:**			
5. Project Type: **(Please circle/check one)**	New		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		Non-residential			**8. Site (acres):**		5.74	
9. Application Fee:	$5,000		**10. Permanent BMP(s):**			Batch Detention			
11. SCS (Linear Ft.):			**12. AST/UST (No. Tanks):**						
13. County:	Williamson		**14. Watershed:**			South Fork San Gabriel River			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	_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 _X_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.

Christopher B. Allison

Print Name of Customer/Authorized Agent

10/30/25

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):	

Hill Country Civil
Engineers • Consultants

Modification of a Previously Approved Contributing Zone Plan

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.

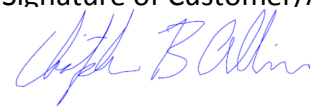
Signature

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: Christopher B. Allison

Date: 10/30/25

Signature of Customer/Agent:



Project Information

1. Current Regulated Entity Name: Len Bar Business Park
   Original Regulated Entity Name: Big Chief Storage
   Assigned Regulated Entity Number(s) (RN): 111808226
   Edwards Aquifer Protection Program ID Number(s):11003714
   ☐ The applicant has not changed and the Customer Number (CN) is: _____
   ☒ 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):

- [x] 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. [x] 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	5.74	5.74
Type of Development	Commercial	Commercial
Number of Residential Lots	N/A	N/A
Impervious Cover (acres)	2.47	2.89
Impervious Cover (%)	43	50
Permanent BMPs	Batch Detention Pond	Batch Detention Pond
Other		

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

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

5. [x] **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. [X] **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.
   - [X] 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. [X] 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. [X] 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.

Hill Country Civil
Engineers • Consultants

Attachment A - Original Approval Letter and Approved Modification letters

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 1, 2023

Mr. Terry Oliver
Big Chief Storage, LLC.
250 N. Bagdad Road
Leander, Texas 78641

Re: Approval of a Contributing Zone Plan (CZP)
Big Chief Storage; Located southeast of CR 270 and Len Bar Lane, inside the ETJ of Leander, Williamson County, Texas
Edwards Aquifer Protection Program ID: 11003714, Regulated Entity No. RN111808226

Dear Mr. Jones:

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 Eli Engineering, PLLC. on behalf of the applicant, Big Chief Storage, LLC. on September 11, 2023. Final review of the application was completed after additional material was received on November 17, 2023, and November 29, 2023.

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 5.74-acres. The project will include the construction of three buildings with associated parking lots, drives, and utilities. The impervious cover will be 2.47-acres (43 percent). According to a letter dated, July 26, 2023, signed by Mr. Christopher Moreno, with Williamson 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, one (1) batch detention pond and one (1) engineered vegetative filter strip, 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 2,150 pounds of TSS generated from the 2.47-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 not 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.

<u>After Completion of Construction:</u>

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 Mr. Drew Evans, P.G. of the Edwards Aquifer Protection Program at (210) 403-4053 or the regional office at 512-339-2929.

Sincerely,

Lillian Butler

Lillian I. Butler, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

LIB/de

cc: Mr. Gary Jones, P.E., Eli Engineering, LLC

Hill Country Civil
Engineers • Consultants

Attachment B-Narrative of Proposed Modification

Attachment B: Narrative of Proposed Modification

The Len Bar Business Park Contributing Zone Plan Modification (CZP MOD) is a first modification to a previously approved CZP plan called Big Chief Storage which was originally approved by TCEQ on December 1, 2023. The approved CZP included the construction of three buildings with associated parking lots, drives, utilities, and one batch detention pond. Approximately 2.47 acres of impervious cover. The previously approved CZP plan construction has not commenced. This plan proposes the construction of 3 commercial buildings, associated parking, utility infrastructure, and one batch detention pond. Approximately 2.89 acres of impervious cover. Len Bar Business Park is located at 200 Len Bar Lane, Leander, TX 78641; within the extraterritorial jurisdiction (ETJ) of the City of Leander.

The site lies within the South Fork San Gabriel River watershed. Since the project is located over the Edwards Contributing Zone, a Geologic Assessment was not conducted and is not required by 30 TAC 213 regulations. Therefore, no naturally occurring sensitive features are known to exist on the site. 30 TAC 213(f)(2) only applies to projects over the Edwards Recharge Zone.

This Len Bar Business Park CZP MOD proposes clearing and grubbing of vegetation where applicable, grading, construction of 3 commercial buildings with associated parking, landscaping, excavation, installation of drainage and utilities, and site cleanup. This will disturb approximately 5.74 acres.

The existing conditions contain 0.20 acres of impervious cover. Proposed development will disturb approximately 5.74 acres, of which, 2.89 acres is proposed impervious cover. Based on the total site acreage of 5.74 acres, the total impervious cover percentage with the proposed improvements is 50.35%.

Wastewater flows generated by the project will be treated by an onsite septic system.

Water will be provided by Aqua Texas, Inc.

Hill Country Civil
Engineers • Consultants

Attachment C-Current Site Plan of Approved Project

GEORGILIS
ACRES
2014099242

CAMELOT VENTURES, LLC
5.45 ACRES
DOC. NO. 2004042221

LEN BAR LANE

TBM #1

(SCALE IN FEET)
SCALE: 1"=20'

EXISTING WATER METER
PROPOSED WATER METER
BEGIN 173 LF CURB AND GUTTER PER CITY OF ROUND ROCK DETAIL ST-05
INSTALL TYPE 2 DRIVEWAY PER CITY OF AUSTIN DETAIL 433S-2
BEGIN 406 LF CHAIN LINK FENCE
BEGIN 122 LF RETAINING WALL SEE DETAIL SHEET 17.
EXIST PP
N63° 53' 04.00"E 592.89'
END 406 LF CHAIN LINK FENCE
BEGIN 327 LF CURB AND GUTTER PER CITY OF ROUND ROCK DETAIL ST-05
PROPOSED WATER STORAGE TANK (SEE DETAIL SHEET 19)
POINT A
POINT B
HC RAMP
PROPOSED OFFICE 2952 SF FFE=920.25
POINT C
POINT D
ENTRY KEYPAD WITH KNOX BOX KEY ENTRY
N26° 06' 56.00"W 150.05'
5.0' SDWK
35 LF CHAIN LINK FENCE
GATED ACCESS
41 LF CHAIN LINK FENCE
END 327 LF CURB AND GUTTER
BEGIN 514 LF CURB AND GUTTER
EX CHAIN LINK FENCE
INSTALL DUMPSTER WITH 10'x10' PAD
N63° 53' 04.00"E 142.07'
N63° 53' 04.00"E 22.13'
END 173 LF CURB AND GUTTER BEGIN 353 LF 18" LAYDOWN CURB PER CITY OF ROUND ROCK DETAIL ST-04
S33° 24' 07.00"W 445.62'
END 122 LF RETAINING WALL SEE DETAIL SHEET 17.
BIG CHIEF STORAGE, LLC
5.74 ACRES
DOC. NO. 2022102130
3'x3' GRATE INLET
146.00'
S63° 53' 04.00"W
POINT E
POINT F
POINT G
POINT H
INSTALL BOLLARDS PER DETAIL (SEE SHEET 17)
PROPOSED BLDG 1 12000 SF FFE=910.80
N26° 06' 56.00"W 127.50'
S26° 06' 56.00"E 127.50'
N63° 53' 04.00"E 146.00'
N63° 53' 04.00"E 163.50'
POINT I
POINT J
POINT K
POINT L
5' SIDEWALK
PROPOSED BLDG 2 12000 SF FFE=906.80 (CLIMATE CONTROLLED)
END 514 LF CURB AND GUTTER
2'x2'x4' CUT STONE RETAINING WALL
CUT STONE WALL CAP TO REMAIN 6" ABOVE FINISHED PAVEMENT
END 426 LF 18" LAYDOWN CURB
END 353 LF 18" LAYDOWN CURB PER CITY OF ROUND ROCK DETAIL ST-04
24" PIPE OUTLET (SEE SHEET 13)
PROPOSED WATER QUALITY & DETENTION POND (SEE SHEET 14)
2'x2'x4' CUT STONE RETAINING WALLS

NOTES:

1) ALL DIMENSIONS ARE TO PROPOSED FACE OF CURB OR FACE OF WALL UNLESS OTHERWISE NOTED.

2) STANDARD PARKING SPACES ARE 9' x 18.5', TYP.

4) ALL EXISTING EASEMENTS ARE SHOWN ON SITE PLAN.

5) SEE SHEET 17-19 FOR SITE SPECIFIC DETAILS AS REFERENCED.

6) ALL SITE UTILITY LINES AND PROPOSED TO BE LOCATED UNDERGROUND.

7) ALL EASEMENTS OF RECORD AS INDICATED ON THE MOST RECENT TITLE RUN (01-10-2021 BY SURVTEX, LLC) FOR THIS PROPERTY ARE SHOWN ON THIS SITE PLAN.

8) SEE SHEET 9, 17AND 14 FOR RETAINING WALL DETAILS AND ELEVATIONS.

PROPOSED BUILDING CORNERS

POINT A: N=10194124.51 E=3080681.32	POINT E: N=10194165.96 E=3080790.15	POINT I: N=10194243.87 E=3080949.08
POINT B: N=10194153.57 E=3080740.58	POINT F: N=10194218.78 E=3080897.89	POINT J: N=10194296.70 E=3081056.83
POINT C: N=10194085.71 E=3080705.91	POINT G: N=10194076.17 E=3080834.16	POINT K: N=10194154.08 E=3080993.09
POINT D: N=10194112.56 E=3080760.69	POINT H: N=10194128.99 E=3080941.91	POINT L: N=10194206.90 E=3081100.84

LEGEND

- CONCRETE SIDEWALK/PAVEMENT
- LANDSCAPE AREA
- INTERNAL CIRCULATION ROUTE
- ADA ACCESSIBLE ROUTE
- FIRELANE ACCESS
- ADJACENT PROPERTY LINES
- EASEMENTS
- SETBACK LINES

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

THIS AREA IS RESERVED FOR FUTURE CITY APPROVAL STAMP

PROJECT / PERMIT # : _____

NO.	DATE	REVISION	BY

STATE OF TEXAS
GARY ELI JONES
79198
REGISTERED
PROFESSIONAL ENGINEER
Jun 14, 2023

ELI ENGINEERING

TBPELS FIRM No. 17877

ELI ENGINEERING, PLLC.
700 THERESA COVE, CEDAR PARK, TX 78613
512-658-8095
gejtexas@gmail.com

WILLIAMSON COUNTY, TEXAS

BIG CHIEF STORAGE

SITE PLAN IMPROVEMENTS

SITE AND DIMENSIONAL CONTROL PLAN

DRAWING SCALE: HOR.Z.= VERT.=
SURVEYED:
FILE NAME:
DATE:
DRAWN: GEJ
DESIGNED: EEJ

SHEET 7 OF 19

PROJECT No. / PERMIT# : _____

C:\Users\Victoria\Desktop\Projects\VEJ--ELI\Wip chief storage\CAD\plan sheets\VEJ_BIG CHIEF STORAGE_SITE--DIMCON.dwg Jun 14, 23 2:23 pm

Hill Country Civil
Engineers • Consultants

Contributing Zone Plan Application

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.

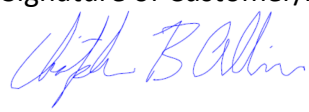
Signature

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: Christopher B. Allison

Date: 10/30/25

Signature of Customer/Agent:



Regulated Entity Name: Len Bar Business Park

Project Information

1. County: Williamson
2. Stream Basin: South Fork San Gabriel River
3. Groundwater Conservation District (if applicable): N/A
4. Customer (Applicant):

   Contact Person: John Muhich
   Entity: JMA Entity LLC
   Mailing Address: 4203 Spinnaker Cv.
   City, State: Austin, TX Zip: 78731
   Telephone: 512-452-7789 Fax: _____
   Email Address: johnsmuhich@gmail.com

5. Agent/Representative (If any):

Contact Person: Christopher B. Allison
Entity: Hill Country Civil
Mailing Address: 391 Landa St. Ste 1204
City, State: New Braunfels, TX Zip: 78130
Telephone: 817-659-9078 Fax: _____
Email Address: blake@hillcountrycivil.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 Leander
☐ 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.

200 Len Bar Lane, Leader, TX 78641

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): 5.74 Acres

Total disturbed area: 5.74 Acres

14. Estimated projected population: 20

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	57,375	÷ 43,560 =	1.32
Parking	62,493	÷ 43,560 =	1.43
Other paved surfaces	6,098	÷ 43,560 =	0.14
Total Impervious Cover	125,966	÷ 43,560 =	2.89

Total Impervious Cover 2.89 **÷ Total Acreage** 5.74 **X 100 =** 50.35 **% 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:

[x] On-Site Sewage Facility (OSSF/Septic Tank):

[x] **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.

[x] 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.

[x] 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" = 30 '.

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): 48491C0455F effective 12/20/2019.

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. [X] 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. [X] 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. [X] 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.

[X] The Temporary Stormwater Section (TCEQ-0602) is included with the application.

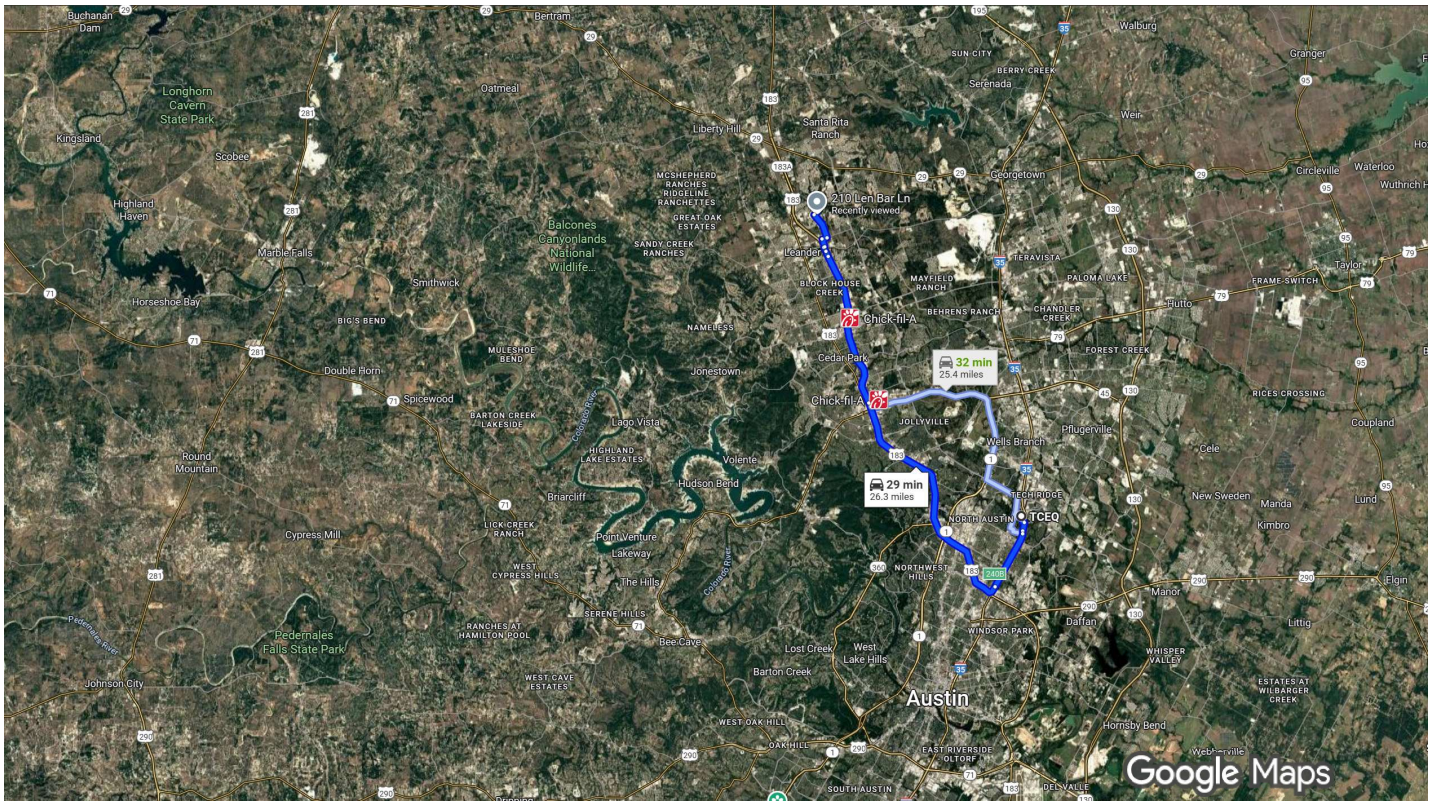
Hill Country Civil
Engineers • Consultants

Attachment A-Road Map

Google Maps

TCEQ, 12100 Park 35 Cir, Austin, TX 78753
to 200 Len Bar Ln, Leander, TX 78641

Drive 26.3 miles, 29 min



Map data ©2025 , Map data ©2025 Google 2 mi

TCEQ
12100 Park 35 Cir, Austin, TX 78753

⚠ This route has tolls.

Get on I-35 S from Park 35 Cir and S I-35 Frontage Rd

3 min (1.0 mi)

1. Head west toward Park 35 Cir

177 ft

2. Turn left

371 ft

3. Turn right toward Park 35 Cir

377 ft

4. Turn right onto Park 35 Cir

0.3 mi

5. Turn right onto S I-35 Frontage Rd

0.4 mi

6. Use the left lane to take the ramp onto I-35 S

0.1 mi

Take US-183 N and 183A Toll Rd N to 183A Frontage Rd in Leander. Take the exit toward RM 2243/Hero Way from 183A Toll Rd N

21 min (23.0 mi)

7. Merge onto I-35 S

2.9 mi

8. Take exit 240B to merge onto US-183 N toward Lampasas

⚠ Toll road

12.2 mi

9. Continue onto 183A Toll Rd N

⚠ Toll road

7.6 mi

10. Take the exit toward RM 2243/Hero Way

0.3 mi

Take Co Rd 270 to Len Bar Ln

5 min (2.3 mi)

11. Merge onto 183A Frontage Rd

0.2 mi

12. Turn right onto Ranch to Market Rd 2243

322 ft

13. Turn left onto Co Rd 269

0.4 mi

14. Turn right onto Hero Way

0.2 mi

15. Turn left onto Co Rd 270

1.3 mi

16. Turn right onto Len Bar Ln

ⓘ Destination will be on the right

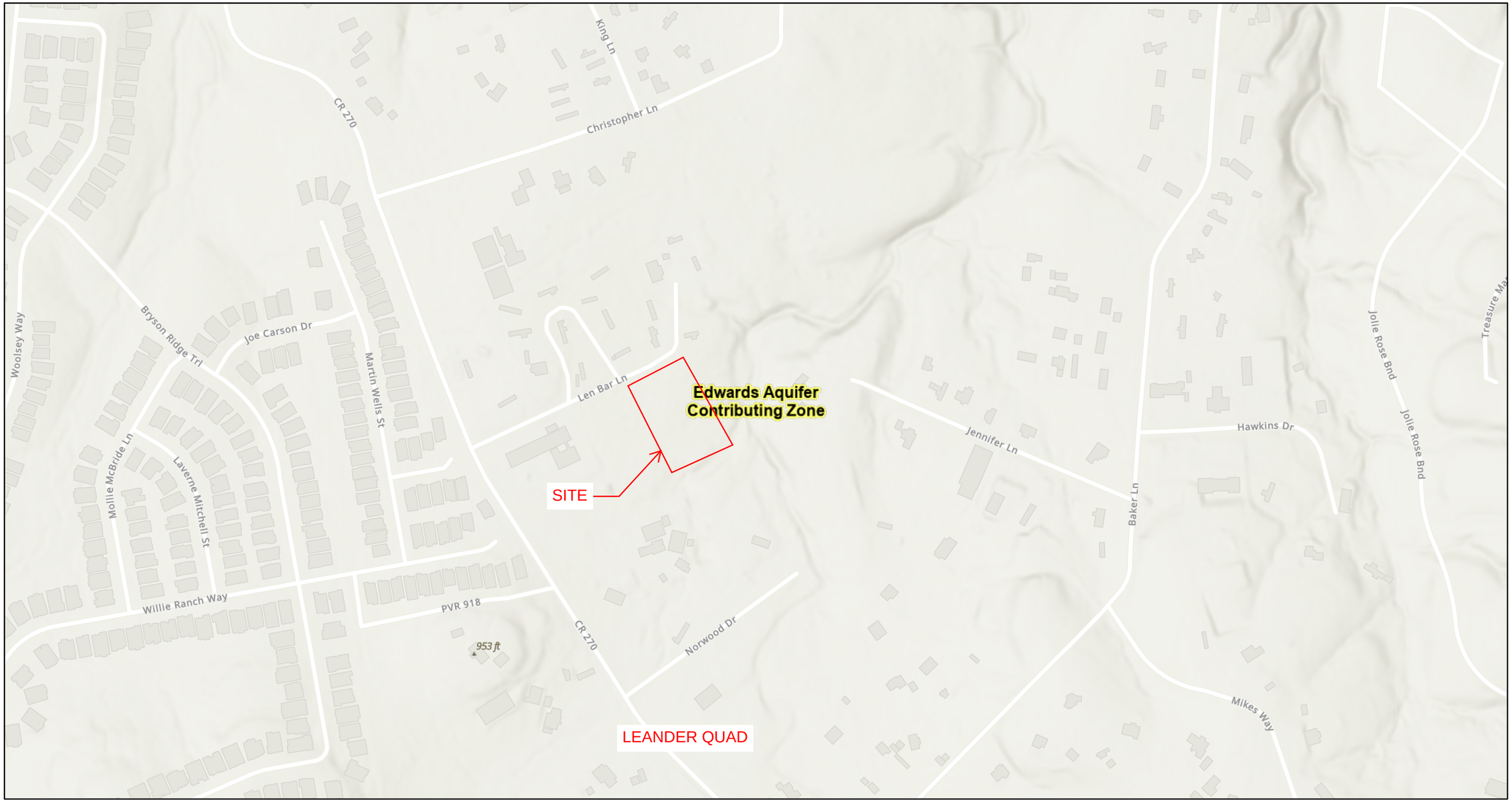
0.1 mi

200 Len Bar Ln
Leander, TX 78641

Hill Country Civil
Engineers • Consultants

Attachment B-USGS Quadrangle Map

Edwards Aquifer Viewer Custom Print



10/7/2025, 6:56:28 PM

1:4,582

0 0.05 0.1 0.2 mi

0 0.07 0.15 0.3 km

- TCEQ_EDWARDS_OFFICIAL_MAPS
- 7.5 Minute Quad Grid
- TX Counties
- Edwards Aquifer Label
- World_Hillshade

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, TCEQ, Sources: Esri, Maxar, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA,

Hill Country Civil
Engineers • Consultants

Attachment C-Project Narrative

Attachment C: Project Narrative

The proposed Len Bar Business Park Development is located at 200 Len Bar Lane, Leader, TX 78641. The 5.74-acre property is located within the ETJ limits of the City of Leander. The property is locate within the Edwards Aquifer Contributing Zone and a portion of the property is located within the FEMA floodplain based on FIRM Panel 48491C0455F effective date 12/20/2019.

In accordance with 30 TAC Chapter 213, this CZP application is being submitted for the proposed development to occur onsite.

The site lies within the South Fork San Gabriel River watershed. Since the project is located over the Edwards Contributing Zone, a Geologic Assessment was not conducted and is not required by 30 TAC 213 regulations. Therefore, no naturally occurring sensitive features are known to exist on the site. 30 TAC 213(f)(2) only applies to projects over the Edwards Recharge Zone.

The property is currently primarily undeveloped with a driveway apron to the site. There is a proposed Batch Detention Pond that has been designed to accept and treat the stormwater from the proposed development. The proposed development consists of 3 commercial buildings, associated parking, drainage facilities, and utility infrastructure.

The existing development currently contains an existing concrete driveway apron, consisting of 0.20 acres of impervious cover. New development will disturb approximately 5.74 acres, of which, 2.89 acres is proposed impervious cover. Based on the total site acreage of 5.74 acres, the total impervious cover percentage with the proposed improvements is 50.35%.

The proposed permanent BMP to treat the impervious cover is one (1) Batch Detention Pond adhering to TCEQ's Technical Guidance Manual (TGM) RG-348. Using the TCEQ spreadsheet, the Batch Detention Pond has a treatment removal efficiency of 91%.

Temporary stormwater BMPs will include a stabilized construction entrance, concrete washout, and silt fence.

Wastewater flows generated by the project will be treated by an onsite septic system.

Water will be provided by Aqua Texas, Inc.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: AAA LEN BAR
Date Prepared: 9/12/2025

10/30/25

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

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

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

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

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

County =	Williamson	
Total project area included in plan * =	5.74	acres
Predevelopment impervious area within the limits of the plan * =	0.20	acres
Total post-development impervious area within the limits of the plan * =	2.89	acres
Total post-development impervious cover fraction * =	0.50	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	2341	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	3.53	acres
Predevelopment impervious area within drainage basin/outfall area =	0.16	acres
Post-development impervious area within drainage basin/outfall area =	2.85	acres
Post-development impervious fraction within drainage basin/outfall area =	0.81	
$L_{M\ THIS\ BASIN}$ =	2341	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention
Removal efficiency = 91 percent

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

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 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 =	3.53	acres
A_I =	2.85	acres
A_P =	0.68	acres
L_R =	2882	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 2341 lbs.

F = 0.81

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

Rainfall Depth =	1.12	inches
Post Development Runoff Coefficient =	0.63	
On-site Water Quality Volume =	9101	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site Runoff Coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1820	
Total Capture Volume (required water quality volume(s) x 1.20) =	10921	cubic feet (0.25 Acre-ft)

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

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr	Enter determined permeability rate or assumed value of 0.1
Irrigation area =	NA	square feet	
	NA	acres	

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	NA	cubic feet	
Minimum filter basin area =	NA	square feet	
Maximum sedimentation basin area =	NA	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	NA	square feet	For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	NA	cubic feet	
Minimum filter basin area =	NA	square feet	
Maximum sedimentation basin area =	NA	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	NA	square feet	For maximum water depth of 8 feet

10. Bioretention System Designed as Required in RG-348 Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins Designed as Required in RG-348 Pages 3-66 to 3-71

Required capacity of Permanent Pool = **NA** cubic feet **Permanent Pool Capacity is 1.20 times the WQV**
Required capacity at WQV Elevation = **NA** cubic feet **Total Capacity should be the Permanent Pool Capacity plus a second WQV.**

12. Constructed Wetlands Designed as Required in RG-348 Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands = **NA** cubic feet

13. AquaLogic™ Cartridge System Designed as Required in RG-348 Pages 3-74 to 3-78

**** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.**

Required Sedimentation chamber capacity = **NA** cubic feet
Filter canisters (FCs) to treat WQV = **NA** cartridges
Filter basin area (RIA_F) = **NA** square feet

14. Stormwater Management StormFilter® by CONTECH

Required Water Quality Volume for Contech StormFilter System = **NA** cubic feet

THE SIZING REQUIREMENTS FOR THE FOLLOWING BMPs / LOAD REMOVALS ARE BASED UPON FLOW RATES - NOT CALCULATED WATER QUALITY VOLUMES

15. Grassy Swales Designed as Required in RG-348 Pages 3-51 to 3-54

Design parameters for the swale:

Drainage Area to be Treated by the Swale = A = 1.87 acres
Impervious Cover in Drainage Area = 0.15 acres
Rainfall intensity = i = 1.1 in/hr
Swale Slope = 0.01 ft/ft
Side Slope (z) = 3
Design Water Depth = y = 0.33 ft
Weighted Runoff Coefficient = C = 0.36

A_{CS} = cross-sectional area of flow in Swale = 2.09 sf
P_W = Wetted Perimeter = 7.37 feet
R_H = hydraulic radius of flow cross-section = A_{CS}/P_W = 0.28 feet
n = Manning's roughness coefficient = 0.2

15A. Using the Method Described in the RG-348

Manning's Equation: $Q = \frac{1.49}{n} A_{CS} R_H^{2/3} S^{0.5}$

$b = \frac{0.134 \times Q}{y^{1.67} S^{0.5}} - zy$ = 5.26 feet

Q = CiA = 0.75 cfs

To calculate the flow velocity in the swale:

V (Velocity of Flow in the swale) = Q/A_{CS} = 0.36 ft/sec

To calculate the resulting swale length:

L = Minimum Swale Length = V (ft/sec) * 300 (sec) = 107.24 feet

If any of the resulting values do not meet the design requirement set forth in RG-348, the design parameters must be modified and the solver rerun.

15B. Alternative Method using Excel Solver

Design Q = CiA = 0.75 cfs

Manning's Equation Q = 0.76 cfs Error 1 = -0.01
Swale Width= 6.00 ft

Instructions are provided to the right (green comments).

Flow Velocity 0.36 ft/s
Minimum Length = 107.24 ft

Instructions are provided to the right (blue comments).

Design Width = 6 ft
Design Discharge = 0.76 cfs Error 2 = -0.01
Design Depth = 0.33 ft
Flow Velocity = 0.32 cfs
Minimum Length = 97.48 ft

If any of the resulting values do not meet the design requirement set forth in RG-348, the design parameters may be modified and the solver rerun.
If any of the resulting values still do not meet the design requirement set forth in RG-348, widening the swale bottom value may not be possible.

16. Vegetated Filter Strips Designed as Required in RG-348 Pages 3-55 to 3-57

There are no calculations required for determining the load or size of vegetative filter strips.
The 80% removal is provided when the contributing drainage area does not exceed 72 feet (direction of flow) and the sheet flow leaving the impervious cover is directed across 15 feet of engineered filter strips with maximum slope of 20% or across 50 feet of natural vegetation with a maximum slope of 10%. There can be a break in grade as long as no slope exceeds 20%.

If vegetative filter strips are proposed for an interim permanent BMP, they may be sized as described on Page 3-56 of RG-348.

17. Wet Vaults Designed as Required in RG-348 Pages 3-30 to 3-32 & 3-79

Required Load Removal Based upon Equation 3.3 = **NA** lbs

First calculate the load removal at 1.1 in/hour

RG-348 Page 3-30 Equation 3.4: Q = CiA

C = runoff coefficient for the drainage area = 0.65 **C = Runoff Coefficient = 0.546 (IC)^2 + 0.328 (IC) + 0.03**
i = design rainfall intensity = 1.1 in/hour
A = drainage area in acres = 1 acres

Q = flow rate in cubic feet per second = 0.72 cubic feet/sec

RG-348 Page 3-31 Equation 3.5: $V_{OR} = Q/A$

Q = Runoff rate calculated above = 0.72 cubic feet/sec
A = Water surface area in the wet vault = 150 square feet

V_{OR} = Overflow Rate = 0.00 feet/sec

Percent TSS Removal from Figure 3-1 (RG-348 Page 3-31) = 53 percent

Load removed by Wet Vault = #VALUE! lbs

If a bypass occurs at a rainfall intensity of less than 1.1 in/hours
Calculate the efficiency reduction for the actual rainfall intensity rate

Actual Rainfall Intensity at which Wet Vault bypass Occurs = 0.5 in/hour

Fraction of rainfall treated from Figure 3-2 RG-348 Page 3-32 = 0.75 percent
Efficiency Reduction for Actual Rainfall Intensity = 0.83 percent

To solve for bottom width of the trapezoidal swale (b) using the Excel solver:
Excel can simultaneously solve the "Design Q" (C217) vs "Manning's Q" (C219) by varying the "Swale Width" (C220).
The required "Swale Width" occurs when the "Design Q" = "Manning's Q"

First, highlight Cell F219 (Error 1 value). The equation showing in the fx screen for Cell F219 should be "= C217-C219"
Then click on "Tools" and "Solver". The "Solver Parameters" screen pops up.
The value in the "Set Target cell" should be F219 "Error 1 ="
The value in the "By Changing Cells" should be C220 "Swale Width"
Click on solve.

The resulting "Swale Width" must be less than 10 feet to meet the requirements of the TGM.
If the resulting "Swale Width" exceeds 10 feet then the design parameters must be revised and the solver run again.

If there is not the option for "Solver" under "Tools"
Click on "Tools" and "Add Ins" and then check "Solver Add-in"
Then proceed as instructed above.

If you would like to increase the bottom width of the trapezoidal swale (b):
Excel can simultaneously solve the "Design Q" (C217) vs "Design Discharge" (C232) by varying the "Design Depth" (C233).
The required "Design Depth" for a 10-foot bottom width occurs when the "Design Q" (C217) = the "Design Discharge" (C232).

First set the desired bottom width in Cell C231.
Highlight Cell F232. The equation showing in the fx screen for Cell F232 should be "= C217-C232"

Click on "Tools" and "Solver". The "Solver Parameters" screen pops up.
The value in the "Set Target cell" should be F232 "Error 2"
The value in the "By Changing Cells" should be C233 "Design Depth"
Click on solve.

The resulting "Design Depth" must be equal to or less than 0.33 feet to meet the requirements of the TGM.
If the resulting "Design Depth" exceeds 0.33 feet then the design parameters must be revised and the solver run again.
First set the desired bottom width in Cell C231.
Highlight Cell F232. The equation showing in the fx screen for Cell F232 should be "= C217-C232"
Click on "Tools" and "Solver". The "Solver Parameters" screen pops up.
The value in the "Set Target cell" should be F232 "Error 2"
The value in the "By Changing Cells" should be C233 "Design Depth"
Click on solve.

The resulting "Design Depth" must be equal to or less than 0.33 feet to meet the requirements of the TGM.
If the resulting "Design Depth" exceeds 0.33 feet then the design parameters must be revised and the solver run again.

Hill Country Civil
Engineers • Consultants

Attachment D-Factors Affecting Surface Water Quality

Attachment D: Factors Affecting Surface Water Quality

The list below are potential sources of pollution that may be reasonably expected to impact the quality of stormwater runoff from the site during construction.

- Hydrocarbons from asphalt paving construction
- Oil, fuel, grease and hydraulic fluid from construction equipment and automobiles
- Soil erosion due to site clearing, grading and demolition activities
- Trash, litter and construction debris from workers and construction activities
- Concrete truck washout
- Concrete/masonry
- Fertilizers
- Cleaning solvents

The list below are potential sources of pollution that may be reasonably expected to impact the quality of stormwater runoff from the site after construction or after development.

- Trash and litter typical of daily use from customers and tenants
- Oil, fuel, grease and hydraulic fluid from vehicles parked/traveling onsite
- Dirt and dust from landscape areas and vehicles
- Fertilizers
- Cleaning solvents

Hill Country Civil
Engineers • Consultants

Attachment E-Volume and Character of Stormwater

Attachment E: Volume and Character of Stormwater

The Len Bar Business Park Development site will generate stormwater typical of commercial development. Runoff will increase as a result of the development for all storm events. However, the site features a proposed Batch Detention Basin that will mitigate this increase in flows and flows ultimately leaving the tract to be less than or equal to existing conditions. for the 100-year storm. The runoff coefficient Curve Number (CN) changes from 80 to 95 for the project. Values are based on the SCS Method using Curve Number coefficients per the City of Austin drainage criteria manual.

Hill Country Civil
Engineers • Consultants

Attachment F-Suitability Letter from Authorized Agent

Department of Infrastructure
County Engineer's Office
3151 SE Inner Loop, Ste B
Georgetown, TX 78626
T: 512.943.3330
F: 512.943.3335

J. Terron Evertson, PE, DR, CFM

WILLIAMSON COUNTY
1848

July 26, 2023

Big Chief Storage LLC
250 North Bagdad Road
Leander, Texas 78641

RE: 200 Len Bar Lane, Leander, Texas 78641
South San Gabriel Ranches, Lot 7 E/PT, ACRES 5.74

The above referenced property is located within the Edwards Aquifer Contributing Zone.

Based on the surrounding subdivisions and the soil survey for Williamson County and planning material received, this office is able to determine that the soil and site conditions of this lot is suitable to allow the use of on-site sewage facilities (OSSF). It should be noted that this office has not actually studied the physical properties of this site. Site specific conditions such as OSSF setbacks, recharge features, drainage, soil conditions, etc…, will need taken into account in planning any OSSF.

These OSSF's will have to be designed by a professional engineer or a registered sanitarian. An Edwards Aquifer protection plan shall be approved by the appropriate TCEQ regional office before an authorization to construct an OSSF may be issued. The owner will be required to inform each prospective buyer, lessee or renter of the following in writing:

- That an authorization to construct shall be required before an OSSF can be constructed in the subdivision;
- That a notice of approval shall be required for the operation of an OSSF;
- Whether an application for a water pollution abatement plan as defined in Chapter 213 has been made, whether it has been approved and if any restrictions or conditions have been placed on the approval.

If this office can be of further assistance, please do not hesitate to call.

Sincerely,

Christoper Moreno, OS 35962
Williamson County - OSSF

Hill Country Civil
Engineers • Consultants

Attachment G-Alternative Secondary Containment Methods
N/A

Hill Country Civil
Engineers • Consultants

Attachment H-AST Containment Structure Drawings
N/A

Hill Country Civil
Engineers • Consultants

Attachment I-20% of Less Impervious Cover Declaration
N/A

Hill Country Civil
Engineers • Consultants

Attachment J-BMPs for Upgradient Stormwater

Attachment J: BMPs for Upgradient Stormwater

There is one (1) existing offsite drainage area that flows onto the site. No permanent BMPs are required to prevent pollution. Offsite drainage area OS 1 is not routed through the proposed Batch Detention Pond.

All temporary BMPs are shown on the plan set and are describe more fully in the SWPPP in Section 3 of this application.

Hill Country Civil
Engineers • Consultants

Attachment K-BMPs for On-site Stormwater

Attachment K: BMPs for On-site Stormwater

Approximately 2.89 acres of impervious cover (50.35% of the 5.74-acre site) are proposed for construction in this CZP. A proposed Batch Detention Pond is a PBMP for the site and has been designed in accordance with TCEQ's Technical Guidance Manual (TGM) RG-348.

Batch Detention ponds capture and temporarily detain the water quality volume from a storm event, for a period of 12-48 hours, using an automated controller and valve. The batch detention outfall details and logic controls can be found on the attached Construction Drawings, reference the Batch Detention Pond Detail Sheets.

Attachment L-BMPs for Surface Streams
N/A

Attachment M-Construction Plans

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7,SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)

CIVIL CONSTRUCTION SITE PLANS

FOR

LEN BAR BUSINESS PARK

LEANDER, TX

CONTACT INFORMATION

OWNER / DEVELOPER:

A-A-A STORAGE DRIPPING SPRINGS LLC
4203 SPINNAKER CV
AUSTIN, TX 78731
CONTACT: JOHN MUHICH
PHONE: (512) 657-6789

ENGINEER:

HILL COUNTRY CIVIL, LLC
391 LANDA ST. STE. 1204
NEW BRAUNFELS, TX 78070
CONTACT: ROSS CORDER, PE
PHONE: (210) 378-4953
EMAIL: ROSS@HILLCOUNTRYCIVIL.COM

SURVEYOR:

ALL STAR LAND SURVEYING
9020 ANDERSON MILL RD
AUSTIN, TX 78729
CONTACT: EDWARD RUMSEY
PHONE: (512) 249-8149

SITE INFORMATION

PROJECT ADDRESS

200 LEN BAR LANE
LEANDER, TX 78641

WATERSHED

SOUTH FORK SAN GABRIEL RIVER

FLOOD PLAIN NOTE

A PORTION OF THIS PROPERTY LIES WITHIN THE 100-YEAR FLOODPLAIN AS SHOWN ON THE FLOOD INSURANCE RATE MAPS F.I.R.M. MAP No. 48491C0455F, DATED DECEMBER 20, 2019.

CONTRIBUTING PLAN ZONE NOTE

THIS PROPERTY IS LOCATED OVER THE EDWARDS AQUIFER CONTRIBUTING ZONE. A PROPOSED CONTRIBUTING ZONE PLAN IS REQUIRED FOR THE PROPOSED IMPROVEMENTS AND WILL BE PERMITTED WITH THE TCEQ.

WATER NOTE

THE PROJECT SITE IS SERVED BY AQUA TEXAS, INC.

WASTEWATER NOTE

ALL WASTEWATER GENERATED BY THE SITE IS TREATED BY ONSITE OSSF TREATMENT SYSTEM DESIGNED BY OTHERS AND PERMITTED THROUGH WILLIAMSON COUNTY.

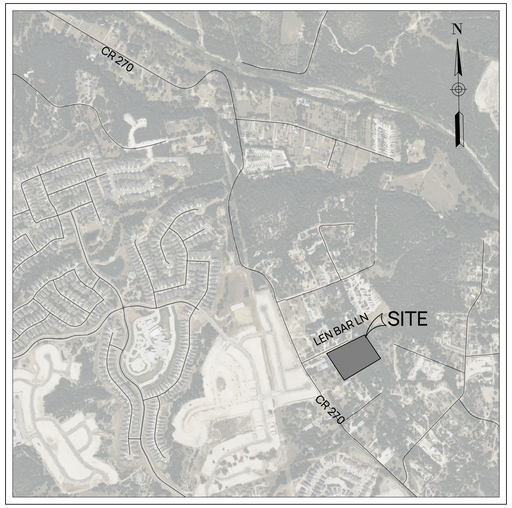
WILLIAMSON COUNTY PERMIT No.:

Professional Engineer's Certification

I, _____, do hereby certify that the information contained on this site plan complies with the regulations adopted by Williamson County, Texas.

Reviewed for Compliance with Country Requirements 2025.

_____
Adam D. Boatright, P.E. Date
Williamson County Engineer



LOCATION MAP
1"=1,000'

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL CONSTRUCTION NOTES
3	SOUTH SAN GABRIEL RANCHES PLAT 1 OF 2
4	SOUTH SAN GABRIEL RANCHES PLAT 2 OF 2
5	EXISTING CONDITIONS AND DEMOLITION PLAN
6	EROSION CONTROL PLAN
7	EROSION CONTROL DETAILS
8	SITE PLAN
9	OVERALL GRADING PLAN
10	DETENTION POND PLAN
11	POND DETAILS
12	BATCH POND DETAILS
13	EXISTING DRAINAGE AREA MAP
14	PROPOSED DRAINAGE AREA MAP
15	DRAINAGE CALCULATIONS
16	OVERALL UTILITY CONNECTION PLAN
17	UTILITY DETAILS
18	SITE DETAILS (1 OF 2)
19	SITE DETAILS (2 OF 2)

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN, SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

HCC JOB NUMBER: 041-06

Hill Country Civil
Engineers ★ Consultants
TBPE Firm # 20767
391 Landa Street, Ste. 1204, New Braunfels, TX 78130
Phone 877-669-3078 or 210-378-4953
www.hillcountrycivil.com

STATE OF TEXAS
ROSS T CORDER
125401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:.. RTC

COVER SHEET

SHEET No.
1
OF 19

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7,SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)

GENERAL CONSTRUCTION NOTES:

1. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL BUILDING CODES APPLICABLE TO THIS PROJECT. FURTHERMORE, THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING REQUIRED PERMITS AND SHALL NOTIFY ALL GOVERNMENT AGENCIES, TCEQ, AND/OR UTILITY AGENCIES AFFECTED BY THE PROPOSED CONSTRUCTION IMPROVEMENTS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SAFETY SYSTEMS, PLANS AND DESIGNS APPLICABLE TO THE PROJECT. HILL COUNTRY CIVIL DOES NOT EXTEND TO OR INCLUDE DESIGNS OR PLANS PERTAINING TO THE SAFETY OF THE CONTRACTOR, SUBCONTRACTORS, EMPLOYEES OR PROJECT SITE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ALL SAFETY REGULATIONS, CODES AND ORDINANCES ARE BEING MET DURING THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL FOLLOW ALL SAFETY REQUIREMENTS AND REGULATIONS OUTLINED BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
4. CONTRACTOR SHALL KEEP A COPY OF THE APPROVED PLANS AT THE JOBSITE THROUGHOUT THE DURATION AND COMPLETION OF THE PROJECT.
5. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH LOCAL TV, ELECTRIC, GAS, WATER, SEWER AND PHONE PROVIDERS AS REQUIRED TO PROVIDE SERVICE TO THE PROJECT SITE. IN ADDITION, CONTRACTOR SHALL COORDINATE ANY INTERRUPTIONS OF UTILITY SERVICE TO THE APPLICABLE SERVICE PROVIDER.
6. CONTRACTOR TO EXERCISE EXTREME CAUTION WHEN OPERATING NEAR OR AROUND EXISTING GAS LINES. CONTRACTOR SHALL NOTIFY GAS COMPANY 72 HOURS PRIOR TO CONSTRUCTION WHEN OPERATING NEAR GAS LINE FACILITIES.
7. CONTRACTOR SHALL PROTECT ALL EXISTING FACILITIES INCLUDING BUT NOT LIMITED TO UTILITIES, PAVEMENT, STREETS, CURB AND GUTTER, TREES, LANDSCAPING, IRRIGATION SYSTEMS, ETC., IMPACTED BY THE PROJECT CONSTRUCTION LIMITS. CONTRACTOR RESTORE ANY DISTURBED AREAS IMPACTED BY CONSTRUCTION TO ITS ORIGINAL OR BETTER CONDITION, INCLUDING ANY AREAS DAMAGED REQUIRING REPAIR (NO SEPARATE PAY ITEM).
8. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT. FURTHERMORE, CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, TELEPHONE, SEWER, FIBER OPTIC, ELECTRIC, DUCT BANKS, IRRIGATION LINES AND GAS LINES.
9. LOCATION AND DEPICTION OF UTILITIES SHOWN ARE FOR REFERENCE ONLY AND PER NOTE 8 ABOVE, SHOULD BE CONFIRMED BEFORE STARTING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY REPAIR COSTS SHALL BE BORNE BY THE CONTRACTOR
10. CONTRACTOR SHALL PROTECT EXISTING TREES, BOTH DEPICTED ON THE CONSTRUCTION DRAWINGS AND THOSE TREES WHICH ARE NOT AS WELL. ANY TREES THAT EXIST ON SITE NOT SHOWN TO BE REMOVED, BUT APPEAR TO BE DISTURBED, OR REQUIRED TO BE REMOVED IN ORDER TO MEET THE PROPOSED SITE PLAN, SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT, CIVIL ENGINEER OR OWNER PRIOR TO REMOVAL.
11. DURING CONSTRUCTION, CONTRACTOR SHALL MAINTAIN UNRESTRICTED DRAINAGE. NO PONDING OF STORM DRAINAGE SHALL BE PERMITTED IN AREAS OF PREPARED SUBGRADE OR EXCAVATION, EMBANKMENT. IF PONDING SHOULD OCCUR, CONTRACTOR SHALL IMMEDIATELY PUMP OUT OR GRAVITY DRAIN PONDING WATER OUT OF IMPACTED AREAS. IF ANY DAMAGE OCCURRED TO SUBGRADE, BUILDING PAD OR EXCAVATION AREAS, THE SOILS MUST BE DRIED OUT, REMOVED, REPLACED AND RE-COMPACTED.
12. DISTURBED AREAS (CONSTRUCTION AREAS) SHALL BE STRIPPED OF VEGETATION, LOOSE TOPSOIL, ORGANICS, BRUSH AND DEBRIS. AFTERWARDS, THE EXPOSED SUBGRADE SHALL SHALL BE PROOF ROLLED WITH A MINIMUM 25 TON PNEUMATIC ROLLER. ANY WEAK AREAS DETECTED SHALL BE REMOVED AND REPLACED WITH SUITABLE SOILS OF SIMILAR TYPE (CLASSIFICATION, MOISTURE CONTENT AND DENSITY).
13. IF REQUIRED TO MODIFY EXISTING GRADE, FILL MATERIALS SHOULD BE PLACED ON PREPARED SURFACES IN LIFTS NOT EXCEED 8 INCHES (LOOSE MEASURE), WITH COMPACTED THICKNESS NOT TO EXCEED 6 INCHES OR AS INDICATED IN SITE GEOTECHNICAL REPORT. FILL SHALL BE COMPACTED TO OPTIMUM MOISTURE CONTENT OR UP TO +3 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT TO A MINIMUM OF 95% MAXIMUM DENSITY AS DETERMINED BY TXDOT, TEX-114-E OR AS DESCRIBED IN THE SITE GEOTECHNICAL REPORT.
14. ALL FILL MATERIALS SHALL BE CLEAR OF DEBRIS, ORGANICS AND VEGETATION. IF IMPORTED FILL IS USED, IT SHALL BE A RELATIVELY HOMOGENEOUS PARTICLE SIZE DISTRIBUTION, WITH MAX SIZE OF 3 INCHES , PLASTICITY INDEX BETWEEN 7 AND 20 AND A LIQUID LIMIT LESS THAN 40; OR AS INDICATED ON THE GEOTECHNICAL REPORT.
15. ANY EXCESS EXCAVATION MATERIALS NOT USED, SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS.
16. CONTRACTOR IS RESPONSIBLE FOR FILING WITH THE TCEQ FOR THE TEMPORARY STORM WATER POLLUTION PREVENTION PLAN NOTICE TO PROCEED AND NOTICE OF TERMINATION AT THE START AND END OF CONSTRUCTION.
17. AFTER COMPLETION OF CONSTRUCTION, THE SITE SHALL BE THOROUGHLY CLEANED OF CONSTRUCTION DEBRIS, SEDIMENT, MATERIAL, ETC. PRIOR TO TURNING OVER TO OWNER.
18. CONTRACTOR SHALL INCLUDE IN THEIR BASE BID ANY TRAFFIC AND/OR PEDESTRIAN CONTROL DEVICES, PLANS OR LAYOUT NECESSARY FOR CONSTRUCTION; INCLUDING SEQUENCING OF CONSTRUCTION, DELIVERIES OF CONSTRUCTION MATERIAL AND EQUIPMENT, AND DEMOLITION ACTIVITIES, SO THAT THE ADJACENT ROADWAYS AND NEIGHBORING PROPERTIES HAVE SUITABLE VEHICULAR AND PEDESTRIAN ACCESS.
19. NOTES, CALLOUTS OR ITEMS NOTED AS "BY-OTHERS" SHALL BE CONSIDERED OUTSIDE THE SCOPE OF SERVICES PERFORMED BY HILL COUNTRY CIVIL. THESE ITEMS ARE CALLED OUT FOR REFERENCE ONLY, AND THE CONTRACTOR SHALL CONFIRM WITH OWNER, OTHER CONSULTANT OR MANUFACTURE FOR PLANS, OR DESIGNS DETAILING THOSE SPECIFIC ITEMS.
20. CONTRACTOR IS RESPONSIBLE FOR ALL VERTICAL AND HORIZONTAL CONTROL THROUGHOUT CONSTRUCTION.

B4 - CONSTRUCTION - GENERAL:

1. A PRECONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO THE START OF CONSTRUCTION. THE DESIGN ENGINEER, OWNER, CONTRACTOR, SUBCONTRACTOR, AND COUNTY ENGINEER SHALL ATTEND THIS MEETING. ALL ROADS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AS APPROVED BY THE COUNTY ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS FOUND IN THE CURRENT VERSION OF THE "TEXAS DEPARTMENT OF TRANSPORTATION MANUAL STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES" UNLESS OTHERWISE STATED ON THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER.
2. ALL MATERIALS SHALL BE SAMPLED AND TESTED BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER. THE OWNER SHALL PAY FOR ALL TESTING SERVICES AND SHALL FURNISH THE COUNTY ENGINEER WITH CERTIFIED COPIES OF THESE TEST RESULTS. THE COUNTY ENGINEER MUST APPROVE THE TEST RESULTS PRIOR TO CONSTRUCTING THE NEXT COURSE OF THE ROADWAY STRUCTURE. ANY MATERIAL WHICH DOES NOT MEET THE MINIMUM REQUIRED TEST SPECIFICATIONS SHALL BE REMOVED AND RECOMPACTED OR REPLACED UNLESS ALTERNATIVE REMEDIAL ACTION IS APPROVED IN WRITING FROM THE COUNTY ENGINEER.
3. EXCEPT FOR ELECTRICAL LINES, ALL UNDERGROUND NONFERROUS UTILITIES WITHIN A RIGHT-OF-WAY OR EASEMENT MUST BE ACCOMPANIED BY FERROUS METAL LINES TO AID IN TRACING THE LOCATION OF SAID UTILITIES THROUGH THE USE OF A METAL DETECTOR.
4. ALL PAVEMENTS ARE TO BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER. THE DESIGN SHALL BE BASED ON A 20-YEAR DESIGN LIFE AND IN CONJUNCTION WITH RECOMMENDATIONS BASED UPON A SOILS REPORT OF SAMPLES TAKEN ALONG THE PROPOSED ROADWAYS. TEST BORINGS SHALL BE PLACED AT A MAXIMUM SPACING OF 500 FEET OR OTHER SAMPLING FREQUENCY APPROVED BY THE COUNTY ENGINEER BASED ON RECOMMENDATIONS PROVIDED BY THE GEOTECHNICAL ENGINEER. BORINGS SHALL BE TO A DEPTH OF TEN FT OR, IF SOLID ROCK IS ENCOUNTERED, ONE FT BELOW NON-FRACTURED ROCK. THE SOILS REPORT AND PAVEMENT DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR REVIEW. THE PAVEMENT DESIGN MUST BE APPROVED BY THE COUNTY ENGINEER PRIOR TO OR CONCURRENTLY WITH THE REVIEW AND APPROVAL OF THE CONSTRUCTION PLANS. IN ADDITION TO THE BASIS OF THE PAVEMENT DESIGN, THE SOILS REPORT SHALL CONTAIN THE RESULTS OF SAMPLED AND TESTED SUBGRADE FOR PLASTICITY INDEX.

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.

TREE LIST

TAG NO	SIZE (IN)	SPECIE
650	9.5	Live Oak
651	10.5	Cedar Elm
652	16	Live Oak
653	9	Live Oak
654	8	Live Oak
655	8	Live Oak
656	11.5	Live Oak
657	9	Live Oak
658	10	Live Oak
659	9	Live Oak
660	9.5	Live Oak
661	9	Live Oak
662	9	Live Oak
663	10.5	Live Oak
664	11.5	Live Oak
665		Tree Not Found
666		Tree Not Found
667	10	Live Oak
668	9	Live Oak
669	10.5	Live Oak
670	10.5	Red Oak
671	8.5	Red Oak
672	9.5	Red Oak
673	11.5	Red Oak
674		Tree Not Found
675	12.5	Live Oak
676	12	Live Oak
677	13	Live Oak
678	12.5	Live Oak
679	9	Live Oak
680	11	Live Oak
681	8	Red Oak
682	10	Live Oak
683	14	Cedar Elm
684	11.5	Live Oak
685	9	Red Oak
686	12.5	Live Oak
687	16	Live Oak
688	10	Live Oak
689	10	Live Oak
690	12.5	Live Oak
691	8.5	Live Oak
692	9	Live Oak
693	10.5	Live Oak
694	10.5	Red Oak
695	8	Red Oak
696	11.5	Live Oak
697	8.5	Live Oak
698	10.5	Cedar Elm
699	10.5	Cedar Elm
700	9.5	Red Oak
801	9.5	Red Oak
802	8.5	Red Oak
803	13	Red Oak
804	10	Red Oak
805	10	Red Oak
806	8.5	Red Oak
807	8	Red Oak
808	8	Red Oak
809	13.5	Cedar Elm
810	9	Cedar Elm
811	8.5	Cedar Elm
812	11.5	Cedar Elm
813	8.5	Red Oak
814	17	Red Oak
815	13.5	Red Oak
816	14	Red Oak
817	16	Red Oak
818	12	Red Oak
819	11.5	Red Oak
820	9	Red Oak
821	8.5	Cedar Elm
822	8.5	Cedar Elm
823	8.5	Cedar Elm
824	9	Cedar Elm
825	9.5	Red Oak
826	8	Red Oak
827	10	Shin Oak
828	8	Cedar Elm
829	8	Shin Oak
830	8	Shin Oak
831	9	Red Oak
832	11	Red Oak
833	12.5	Red Oak
834	8	Red Oak
835	20	Black Willow
836	10.5	Red Oak
837	11.5	Red Oak
838	12	Red Oak
839	13.5	Red Oak
840	8.5	Red Oak
841	9	Red Oak
842	11.5	Red Oak
843	9.5	Red Oak
844	8	Red Oak
845	9	American Elm
846	9.5	Red Oak
847	8.5	Red Oak
848	9.5	Cedar Elm
849	9.5	Red Oak
850	14.5	Red Oak
851	8.5	Red Oak
852	12	Cedar Elm
853	10.5	Cedar Elm
854		Tree Not Found
855		Tree Not Found
856	11	Red Oak

SURVEY NOTES:

A portion of this tract lies in Zone A (Special Flood Hazard Areas, without base flood elevation), per FEMA Floodplain Flood Insurance Rate Map No. 48491C0455F, effective date: 12-20-2019.

Bearings are referenced to the Texas Coordinate System of 1983 (NAD83), Central Zone, based on GPS observations. Distances are surface values and may be converted to grid by applying the combined adjustment factor of 0.99986628338.

The tree caliper and specie identification shown hereon were provided by the client.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN, SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ◆ Consultants
Texas Firm Registration # 20183
591 Leslie Street, Ste. 1204, New Braunfels, TX 78130
Phone 877-669-5078 or 210-378-0353
www.hillcountrycivil.com

ROSS T CORDER
STATE OF TEXAS
125401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06 DRAWN BY:.. RTC

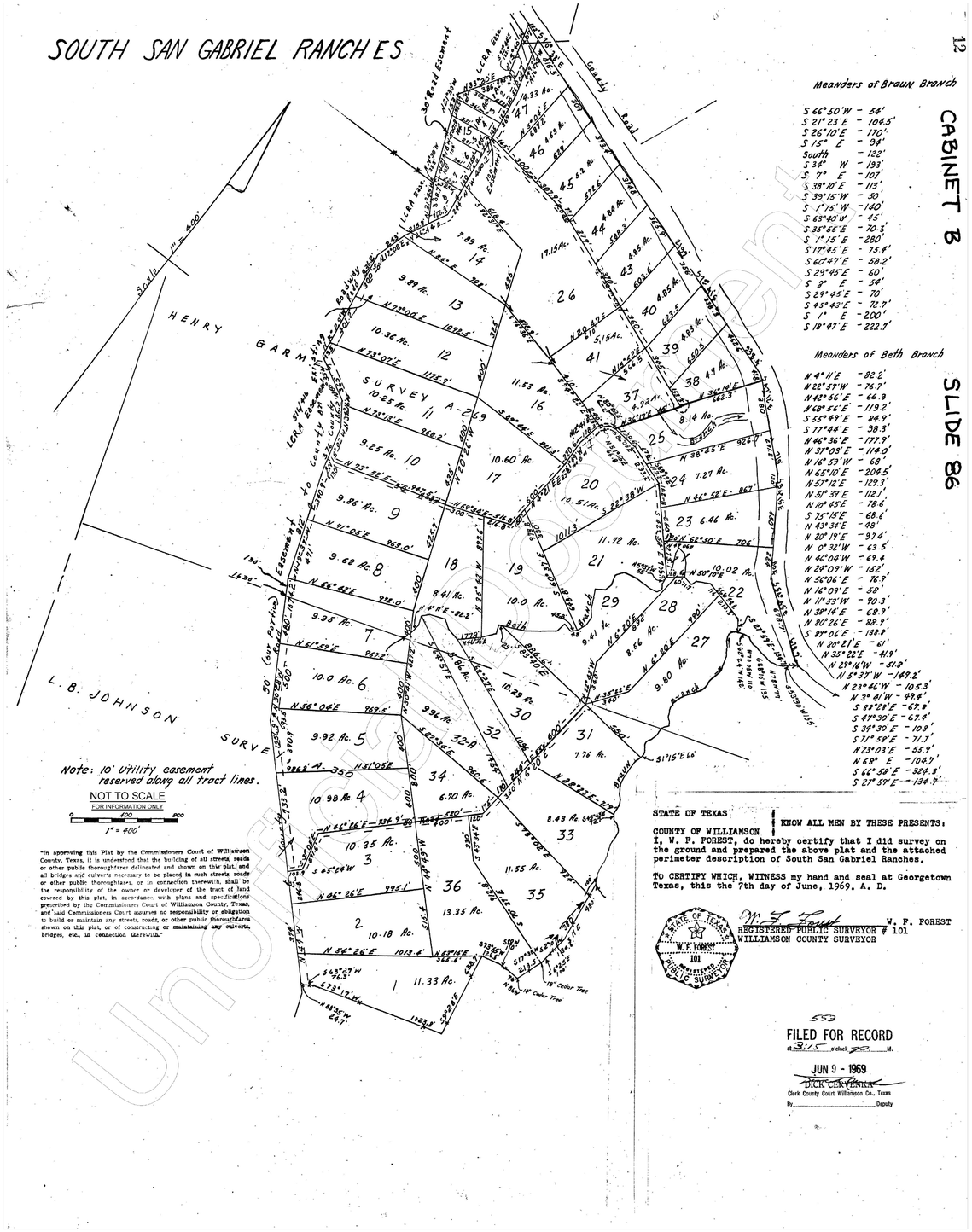
GENERAL CONSTRUCTION NOTES

SHEET No.
2
OF 19

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7 SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)

SOUTH SAN GABRIEL RANCHES

12 CABINET B SLIDE 86



"In approving this Plat by the Commissioners Court of Williamson County, Texas, it is understood that the building of all streets, roads or other public thoroughfares delineated and shown on this plat, and all bridges and culverts necessary to be placed in such streets roads or other public thoroughfares, or in connection therewith, shall be the responsibility of the owner or developer of the tract of land covered by this plat, in accordance with plans and specifications prescribed by the Commissioners Court of Williamson County, Texas, and said Commissioners Court assumes no responsibility or obligation to build or maintain any streets, roads, or other public thoroughfares shown on this plat, or of constructing or maintaining any culverts, bridges, etc., in connection therewith."

Meanders of Braun Branch

S 66° 50' W - 54'
S 21° 23' E - 104.5'
S 26° 10' E - 170'
S 15° E - 94'
South - 122'
S 34° W - 193'
S 7° E - 107'
S 38° 10' E - 115'
S 39° 15' W - 50'
S 1° 15' W - 140'
S 63° 40' W - 45'
S 35° 55' E - 70.3'
S 1° 15' E - 280'
S 17° 45' E - 75.4'
S 60° 47' E - 58.2'
S 29° 45' E - 60'
S 3° E - 54'
S 29° 45' E - 70'
S 95° 43' E - 72.7'
S 1° E - 200'
S 18° 47' E - 222.7'

Meanders of Beth Branch

N 4° 11' E - 82.2'
N 22° 57' W - 76.7'
N 42° 56' E - 66.9'
N 68° 56' E - 119.2'
S 55° 49' E - 84.9'
S 77° 44' E - 98.3'
N 46° 36' E - 171.9'
N 37° 03' E - 114.0'
N 14° 59' W - 69'
N 65° 10' E - 204.5'
N 57° 12' E - 129.3'
N 51° 39' E - 112.1'
N 10° 45' E - 78.6'
S 75° 15' E - 68.6'
N 43° 36' E - 98'
N 20° 19' E - 97.4'
N 0° 32' W - 63.5'
N 46° 04' W - 69.4'
N 39° 09' W - 142'
N 56° 06' E - 76.9'
N 14° 09' E - 59'
N 11° 53' W - 90.3'
N 38° 14' E - 68.9'
N 90° 26' E - 89.9'
S 89° 06' E - 188.8'
N 90° 21' E - 61'
N 35° 22' E - 41.9'
N 29° 14' W - 51.8'
N 5° 37' W - 149.2'
N 23° 46' W - 105.3'
N 3° 41' W - 99.8'
S 88° 28' E - 67.6'
S 47° 30' E - 67.8'
S 39° 30' E - 108'
S 71° 58' E - 71.7'
N 23° 03' E - 55.9'
N 68° E - 104.7'
S 62° 58' E - 364.8'
S 27° 58' E - 134.7'

STATE OF TEXAS | KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF WILLIAMSON |

I, W. F. FOREST, do hereby certify that I did survey on the ground and prepared the above plat and the attached perimeter description of South San Gabriel Ranches.

TO CERTIFY WHICH, WITNESS my hand and seal at Georgetown Texas, this the 7th day of June, 1969. A. D.

W. F. FOREST
REGISTERED PUBLIC SURVEYOR # 101
WILLIAMSON COUNTY SURVEYOR

STATE OF TEXAS · W. F. FOREST · 101 · REGISTERED PUBLIC SURVEYOR

553
FILED FOR RECORD
at 3:15 o'clock P M.
JUN 9 - 1969
DICK CERVENKA
Clerk County Court Williamson Co., Texas
By ..... Deputy

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN. SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ★ Consultants
Texas Registered Engineering Firm F-19121
591 Landa Street, Ste. 204, New Braunfels, TX 78130
Phone 830-609-5078 or 210-378-0353
www.hillcountrycivil.com

ROSS T. CORDER · STATE OF TEXAS · 125401 · LICENSED PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

HCC JOB No. 041-06 DRAWN BY:: RTC

SOUTH SAN GABRIEL RANCHES
PLAT 1 OF 2

SHEET No.
3
OF 19

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7 SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)

CABINET B 553 SLIDE 87

THE STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF WILLIAMSON

That Gene Bilberry, Trustee, with principal offices and place of business in Kingsland, Llano County, Texas, owner of the hereon designated land out of the L. B. Johnson Survey, A-350 and the Henry Garmes Survey, A-269, in Williamson County, Texas, being that certain 407.56 acre tract conveyed by L. G. Whitehead et ux to Gene Bilberry, Trustee, by deed dated May 8, 1969 recorded in Vol. 517, Page 612, of the Deed Records of Williamson County, Texas, do hereby subdivide said 407.56 acres in accordance with the foregoing plat and do hereby adopt this plat and subdivision to be known as SOUTH SAN GABRIEL RANCHES and do hereby dedicate to the public use all streets and easements shown on said plat.

WITNESS MY HAND this the 22nd day of May A. D. 1969.

Gene Bilberry
GENE BILBERRY, TRUSTEE

THE STATE OF TEXAS

COUNTY OF WILLIAMSON

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared Gene Bilberry, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 22nd day of May A. D. 1969.

NOTARY PUBLIC IN AND FOR
WILLIAMSON COUNTY, TEXAS.

THE STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF WILLIAMSON

That I, L. G. Whitehead, lienholder on the hereabove designated 407.56 acres of land out of the L. B. Johnson Survey, A-350 and the Henry Garmes Survey, A-269, Williamson County, Texas, as evidenced by Deed of Trust to Joe B. McMaster, Trustee, recorded in Vol. 139, Page 170, of the Deed of Trust Records of Williamson County, Texas, do hereby adopt this plat as a subdivision to be known as SOUTH SAN GABRIEL RANCHES, and do hereby dedicate to the public use, all streets and easements shown thereon.

WITNESS OUR HANDS this the 22nd day of May A. D. 1969.

L. G. WHITEHEAD

THE STATE OF TEXAS

COUNTY OF WILLIAMSON

BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared L. G. Whitehead, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this 22nd day of May A. D. 1969.

NOTARY PUBLIC IN AND FOR
WILLIAMSON COUNTY, TEXAS

PERIMETER FIELD NOTES OF SOUTH SAN GABRIEL RANCHES

BEING 407.56 acres in Williamson County, Texas, 269.76 acres of the Henry Garmes Survey, Abst. # 269, and 137.8 acres of the L. B. Johnson Survey, Abst. # 350, being the same tract called 407.38 acres described in a deed to L. G. Whitehead of record in Vol. 451, Page 641, Deed Records, Williamson County, Texas. Surveyed on the ground by W. F. Forest, Registered Public Surveyor # 101, in May of 1969.

BEGINNING at an iron pin set beside a fence corner post at the lower S E corner of the Whitehead tract. This point stands S 73° E 4657 feet from the N W corner of the L. B. Johnson Survey.

THENCE S 73° 17' W 1023.8 feet with a fence to set an iron pin in a fence.

THENCE S 63° 27' W 76.3 feet to set an iron pin beside a fence corner post in the East line of a County Road.

THENCE N 88° 35' W 24.7 feet to set an iron pin in the center of the road.

THENCE with center of said road, marking all angle points with iron pins as follows; N 44° W 1956.9 feet, N 30° 28' W 1074.2 feet, N 19° 37'W 812 feet, N 15° 02' W 376 feet, N 34° 16' W 184.2 feet, N 60° 35' W365 feet, N 8° 29' W 836.2 feet, N 17° 08' E 243 feet, N 26° 44' E 215.8 feet.

THENCE N 31° 45' W, leaving the road, at 61.7 feet pass a 17 inch Elm fence corner, continuing with an old fence 308.7 feet to a 14 inch Liveoak fence corner.

THENCE N 14° 30' W 33.3 feet, N 21° 18' W 500.8 feet, N 21° 30' W 153 feet, with an old fence to a fence corner.

THENCE N 33° 30' E, at 51 feet pass a field fence corner, in all 386 feet to set an iron pin at a bend in a fence.

THENCE N 15° 40' W with a fence, at 257 feet set an iron pin in the center of the road, 407 feet to a point in the center of the South San Gabriel River and N W corner of the Whitehead tract.

THENCE down stream down center of river, S 70° 38' E 2199 feet, S 72° 41' E 938.4 feet, S 47° 12' E 719 feet, S 34° 15' E 804 feet, S 54° 45' E 678.7 feet to a corner of Whitehead tract opposite the mouth of Braun Branch.

THENCE up said branch as follows; S 53° 30' W 155 feet, N 78° W 77 feet, S 88° 10' W 135 feet, N 70° 05' W 110 feet, S 62° 24' W 142 feet, setting iron pins at all angle points, to the junction of Braun and Beth Branches.

THENCE with Braun Branch, S 66° 50' W 54 feet, S 21° 23' E 104.5 feet, S 26° 10' E 170 feet, S 15° E 94 feet, South 122 feet, S 34° W 193 feet, S 7° E 107 feet, S 38° 10' E 113 feet, S 39° 15' W 50 feet, S 1° 15' W 140 feet, S 63° 40' W 45 feet, S 35° 55' E 70.3 feet, S 1° 15' E 280 feet, S 17° 45' E 75.4 feet, S 60° 47' E 58.2 feet, S 29° 45' E 60 feet, S 8° E54 feet, S 29° 45' E 70 feet, S 45° 43' E 72.7 feet, S 1° E 200 feet, S 18° 47' E 222.7 feet to a fence corner at the head of this branch.

THENCE S 11° E 480 feet, S 2° 10' W 134.6 feet, S 6° 25' E 100 feet and S 17° 35' W 213.5 feet to a 14 inch cedar fence corner.

THENCE N 86° W 76 feet, S 88° W 110 feet, S 73° 55' W 126.8 feet with a fence to set an iron pin at a fence corner post.

THENCE S 9° 28' E 638.7 feet with an old fence to the POINT OF BEGINNING.

STATE OF TEXAS
COUNTY OF WILLIAMSON ‖ KNOW ALL MEN BY THESE PRESENTS:

I, W. F. FOREST, do hereby certify that I did prepare the above description and made survey on the ground.

TO CERTIFY WHICH, WITNESS my hand and seal at Georgetown, Texas this the 7th day of June, 1969. A. D.

W. F. FOREST
REGISTERED PUBLIC SURVEYOR # 101
WILLIAMSON COUNTY SURVEYOR

STATE OF TEXAS
W. F. FOREST
101
REGISTERED
PUBLIC SURVEYOR

BE IT RESOLVED BY THE COMMISSIONERS COURT OF WILLIAMSON COUNTY, TEXAS,

1. That the owner, Gene Bilberry, Trustee, of that certain tract of land designated " South San Gabriel Ranches " is hereby authorized to file for record in the office of the County Clerk of Williamson County, Texas, the map or plat of said attached tract, and the said County Clerk of Williamson County, Texas is hereby authorized to accept for fileing and tb record said map or plat of said tract.

2. In approving this plat by the Commissioners Court of Williamson County, Texas it is understood that the building of all streets, roads and all other public thoroughfares delineated and shown on this plat and all bridges and culverts necessary to be placed in such streets, roads or other public thoroughfares or in connection therewith shall be the responsibility of the owner or developer of the tract of land covered by this plat, in accordance with plans and specifications prescribed by the Commissioners Court of Williamson County, Texas, and said Commissioners Court assums no responsibility or obligation to build or maintain any streets, roads or other public thoroughfares shown on this plat or of constructiog or maintaining any culverts bridges, etc. in connection therewith.

ADOPTED AND APPROVED this the 9th. day of June L969 A. D.

SAM V. STONE COUNTY JUDGE

ATTEST:
I, Sam V. Stone, County Judge of Williamson County, Texas, do hereby certify that the above and foregoing resolution is a true and correct exemplfication of the original resolution passed and adopted by the Commissioners Court of Williamson County, Texas, at the Regular meeting held at Georgetown, Texas on this the 9th. day of June 1969 A. D. , at which time a quorum was present.

SAM V. STONE COUNTY JUDGE

STATE OF TEXAS
COUNTY OF WILLIAMSON ‖ BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared, Sam V. Stone, known by me to be the person whose name is suscribed to the foregoing instrument and acknowledges to me that he executed the same in the capacity of County Judge and Chairman of the Commissioners Count, and that he executed the same for the purposes and consideration expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 9th. day of June , 1969. A. D.

Bess W. Kurio NOTARY PUBLIC

Filed for record June 9, 1969, at 3:15 o'clock P. M.
Recorded June 10, 1969, at 10:45 o'clock A. M.

Dick Cervenka,
County Clerk, Williamson
County, Texas

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN. SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ◆ Consultants
Texas Firm # 20201
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 830-609-3078 or 210-378-0353
www.hillcountrycivil.com

ROSS T. CORDER
125401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

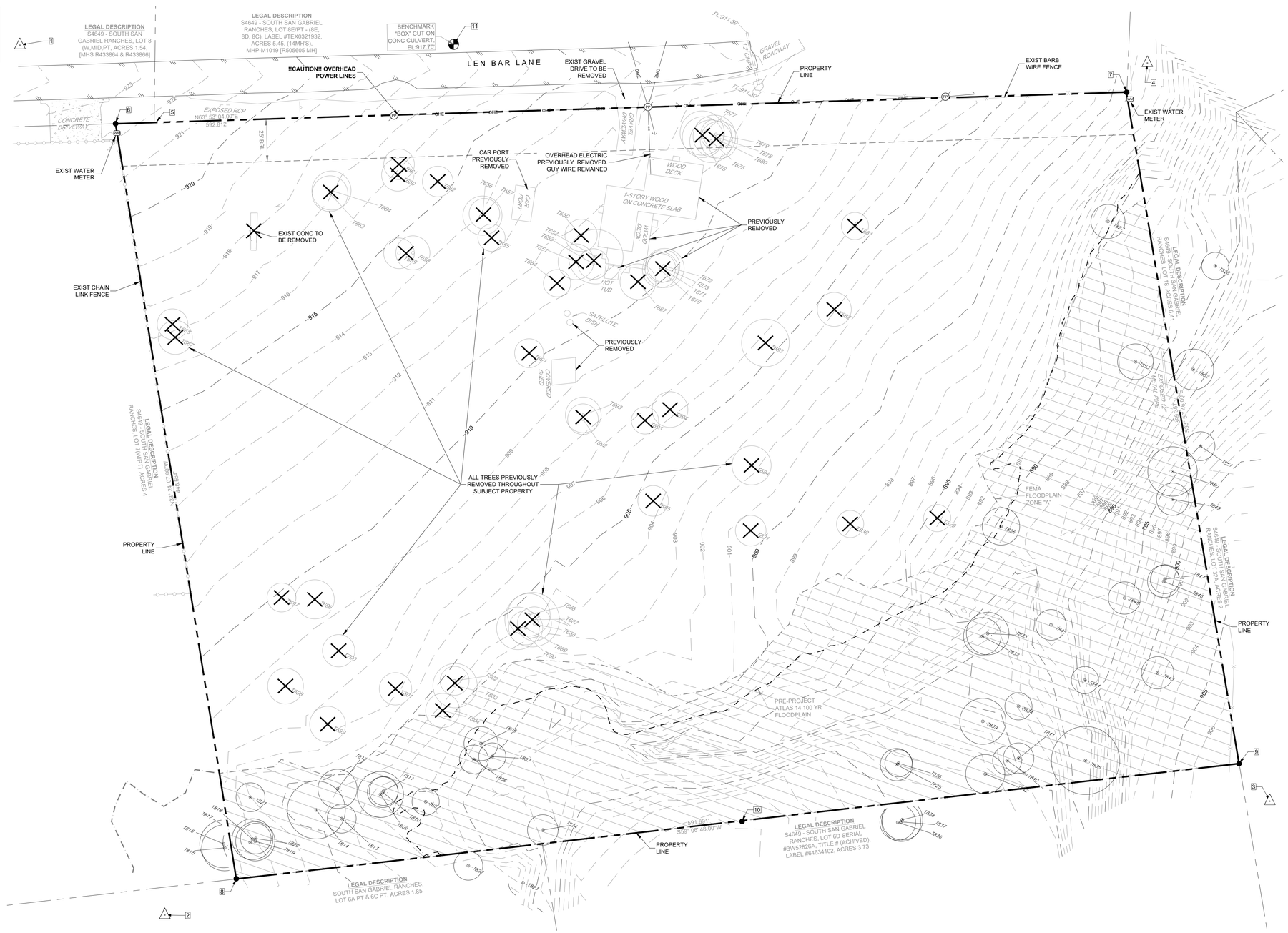
LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

HCC JOB No.:041-06 DRAWN BY:: RTC

SOUTH SAN GABRIEL RANCHES
PLAT 2 OF 2

SHEET No.
4
OF 19

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7 SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)



LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- OHE — EXIST OVERHEAD UTILITY
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- EXIST TREE PREVIOUSLY REMOVED
- EXIST TREE

DEMOLITION PLAN NOTES:

1. PRIOR TO START OF CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL CONSTRUCT ALL REQUIRED EROSION CONTROL AND TREE PROTECTION MEASURES AS INDICATED ON STORM WATER POLLUTION PREVENTION PLAN AND/OR LANDSCAPE ARCHITECT DRAWINGS.
2. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH LOCAL TV, ELECTRIC, GAS, WATER, SEWER AND PHONE PROVIDERS AS REQUIRED TO PROVIDE SERVICE TO THE PROJECT SITE.
3. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.
4. ANY GARBAGE OR DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE.
5. REMOVAL , RELOCATION OR DISCONNECTION FROM A UTILITY SERVICE (ELECTRIC, GAS, WATER, SEWER, CABLE, TV, FIBER, ETC.) SHALL BE COORDINATED WITH APPROPRIATE UTILITY SERVICE PROVIDER PRIOR TO START OF DEMOLITION ACTIVITIES.
6. CONTRACTOR SHALL PROPERLY DISPOSE OF ANY HAZARDOUS MATERIALS IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. FURTHERMORE, HAZARDOUS MATERIALS SHALL BE HANDLED BY PROPERLY LICENSED AND TRAINED HAZARDOUS MATERIAL SUB-CONTRACTORS/INDIVIDUALS.
7. CONTRACTOR SHALL COORDINATE ALL REMOVED ITEMS WITH OWNER. CONTRACTOR IS RESPONSIBLE FOR ALL DISPOSAL AND HAULING COSTS AND SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS FOR DISPOSING OF DEMOLISHED MATERIALS.

BENCH MARK, CONTROL POINTS, IRON RODS FOUND

Point #	Elevation	Northing	Easting	Description
1	924.35	10192759.56	3080101.66	GBI CP
2	909.37	10192329.61	3080389.19	GBI CP
3	908.45	10192657.25	3080951.94	GBI CP
4	898.27	10193022.21	3080708.22	GBI CP
5	921.54	10192751.19	3080193.07	FIR5
6	921.97	10192740.71	3080171.69	FIR5 LEANING
7	899.75	10193001.58	3080704.24	FIRC4
8	907.27	10192366.32	3080418.57	FIR4
9	906.96	10192669.91	3080926.42	FIP 1"
10	904.31	10192519.00	3080674.94	FIR4
11	917.58	10192864.67	3080333.16	BM "BOX" ON CULVERT

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN. SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ◆ Consultants
Texas Firm # 20081
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-669-3078 or 210-378-9363
www.hillcountrycivil.com

ROSS T. CORDER
125401
LICENSED PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

HCC JOB No.:041-06 DRAWN BY:: RTC

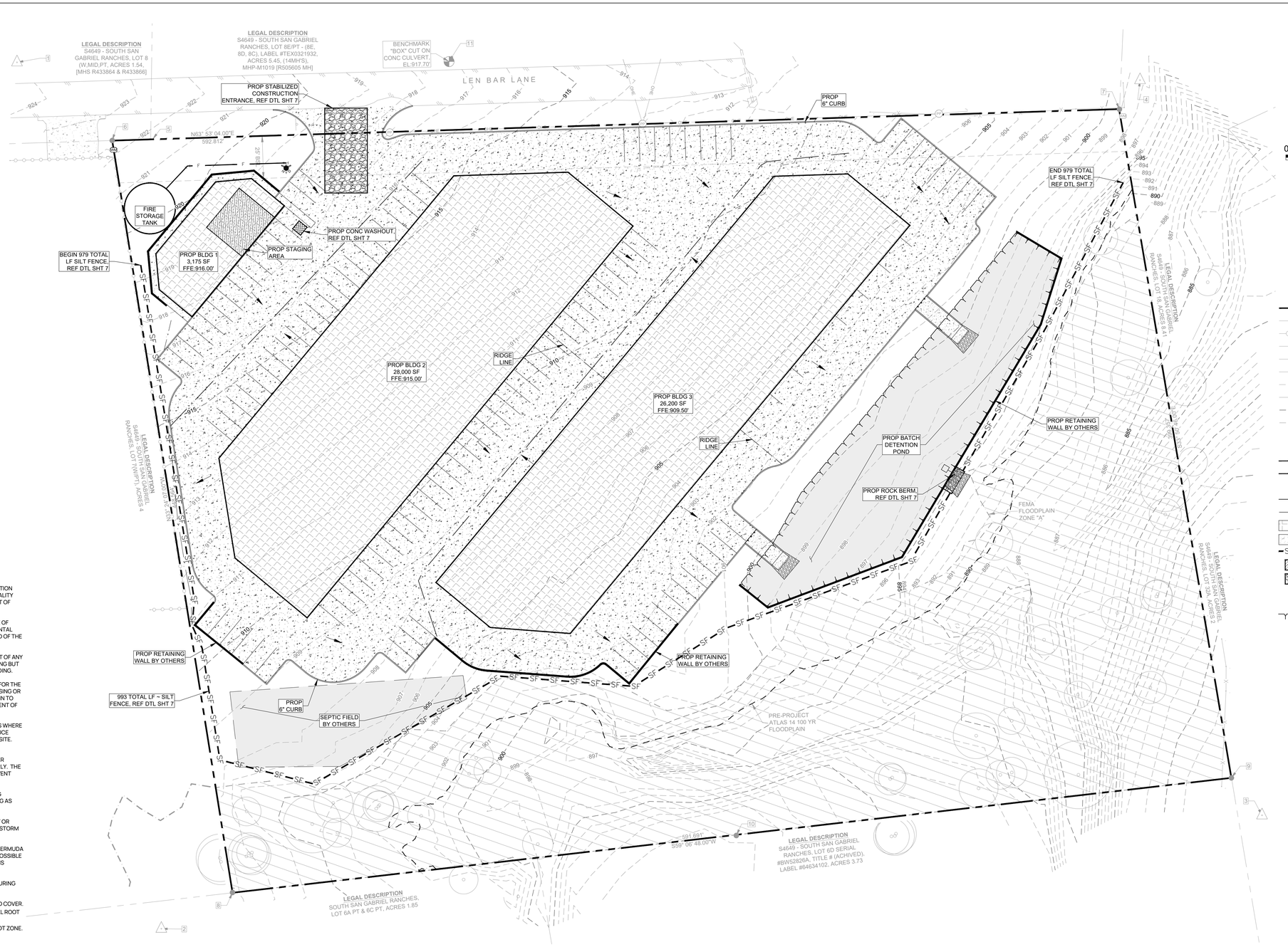
EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET No.
5
OF 19

C:\HCC\Orchrd\rtm - Hill Country Civil\Projects\041 AAA Storage\09 AAA Len Bsn't - CADD 2 - Sheets\041-06 EXIST.dwg

 30 OCTOBER 2025

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7 SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)



0 15 30 60
SCALE (FEET)

LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- EXIST OVERHEAD UTILITY
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- EXIST TREE
- 860 — PROP MAJOR CONTOUR
- 861 — PROP MINOR CONTOUR
- PROP FLOW ARROW
- PROP DRAINAGE SWALE
- RIDGE LINE
- PROP BUILDING
- HEAVY DUTY CONC PAVEMENT
- SF SF SF — SILT FENCE
- STAGING AREA
- STABILIZED CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT PIT
- TOP OF POND

EROSION CONTROL PLAN NOTES:

1. CONTRACTOR SHALL FILE STORM WATER POLLUTION PREVENTION PLAN WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND POST A SITE NOTICE AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.
2. CONTRACTOR SHALL FILE THE NOTICE OF INTENT AND NOTICE OF TERMINATION WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY PRIOR TO START OF CONSTRUCTION AND AT THE END OF THE PROJECT.
3. ALL STRUCTURAL BMP'S SHALL BE INSTALLED PRIOR TO START OF ANY DISTURBANCE OR CONSTRUCTION ACTIVITY ONSITE, INCLUDING BUT NOT LIMITED TO EXCAVATION, CLEARING, GRUBBING, OR GRADING.
4. CONTRACTOR SHALL INSTALL BMP'S AS REQUIRED BY PHASE FOR THE PROJECT OR AS SPECIFICALLY INDICATED PER PLAN . ALL PHASING OR ADJUSTMENTS TO THE EROSION CONTROL PLAN SHALL TAKE IN TO ACCOUNT UP-GRADIENT STORM WATER FLOWS FOR PLACEMENT OF BMP'S.
5. CONTRACTOR SHOULD IN BEST EFFORT, ONLY DISTURB AREAS WHERE CONSTRUCTION ACTIVITY IS REQUIRED IN AN EFFORT TO REDUCE POTENTIAL OF STORM WATER POLLUTION RUNOFF FROM THE SITE.
6. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND INSPECTING STRUCTURAL BMP'S DAILY AND ESPECIALLY AFTER STORM EVENTS TO ENSURE BMP'S ARE FUNCTIONING PROPERLY. THE CONTRACTOR MAY MODIFY CONTROLS AS REQUIRED TO PREVENT SEDIMENT RUNOFF DOWNSTREAM IMPACTS.
7. CONTRACTOR SHALL USE DUST CONTROL MEASURES DURING CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS REQUIRED.
8. CONTRACTOR SHALL CLEAN UP ANY SEDIMENTATION RUNOFF OR SPOILS THAT MIGRATE ONTO ADJACENT ROADWAYS AFTER A STORM EVENT OR AS REQUIRED BY THE LOCAL INSPECTOR.
9. CONTRACTOR SHALL SEED OR SOD DISTURBED AREAS WITH BERMUDA GRASS OR SOME OTHER FORM OF HARD GRASS AS SOON AS POSSIBLE TO AVOID SOIL RUNOFF AFTER CONSTRUCTION IN THAT AREA IS COMPLETED.
10. TREES PROPOSED TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION AND MUST MEET THE FOLLOWING CRITERIA:
    - 10.1. MINIMUM OF 50% OF THE CRITICAL ROOT ZONE MUST BE PRESERVED AT NATURAL GRADE, WITH NATURAL GROUND COVER.
    - 10.2. CUT OR FILL IS LIMITED TO 4-INCHES FROM THE ½ CRITICAL ROOT ZONE TO THE ½ CRITICAL ROOT ZONE.
    - 10.3. NO CUT OR FILL IS PERMITTED WITHIN THE ½ CRITICAL ROOT ZONE.
11. BMP'S MAY ONLY BE REMOVED ONCE THE SITE ACHIEVES 80% RE-VEGETATION IN DISTURBED AREAS.

BENCH MARK, CONTROL POINTS, IRON RODS FOUND

Point #	Elevation	Northing	Easting	Description
1	924.35	10192759.56	3080101.66	GBI CP
2	909.37	10192329.61	3080389.19	GBI CP
3	908.45	10192657.25	3080951.94	GBI CP
4	898.27	10193022.21	3080708.22	GBI CP
5	921.54	10192751.19	3080193.07	FIR5
6	921.97	10192740.71	3080171.69	FIR5 LEANING
7	899.75	10193001.58	3080704.24	FIRC4
8	907.27	10192366.32	3080418.57	FIR4
9	906.96	10192669.91	3080926.42	FIP 1"
10	904.31	10192519.00	3080674.94	FIR4
11	917.58	10192864.67	3080333.16	BM "BOX" ON CULVERT

SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES:

1. INSTALLATION OF TEMPORARY BMPS.
2. SITE CLEARING AND GRUBBING.
3. SITE DEMOLITION ACTIVITIES.
4. ROUGH SITE GRADING AND SUBGRADE PREPARATION.
5. STORMWATER FACILITIES CONSTRUCTED.
6. UTILITY CONSTRUCTION.
7. FINAL SITE GRADING AND SUBGRADE PREPARATION.
8. PAVEMENT INSTALLATION, INCLUDING BASE MATERIALS AND CONCRETE/ASPHALT PAVEMENT AND CURBS.
9. BUILDING PAD CONSTRUCTION.
10. BUILDING CONSTRUCTION.
11. LANDSCAPING AND IRRIGATION CONSTRUCTION.
12. SITE STABILIZATION, REVEGETATION OF DISTURBED AREAS.
13. SITE CLEANUP AND REMOVAL OF TEMPORARY BMPS.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT. THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN. SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ◆ Consultants
Texas Firm No. 20204
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-609-5078 or 210-378-0353
www.hillcountrycivil.com

STATE OF TEXAS
ROSS T. CORDER
128401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

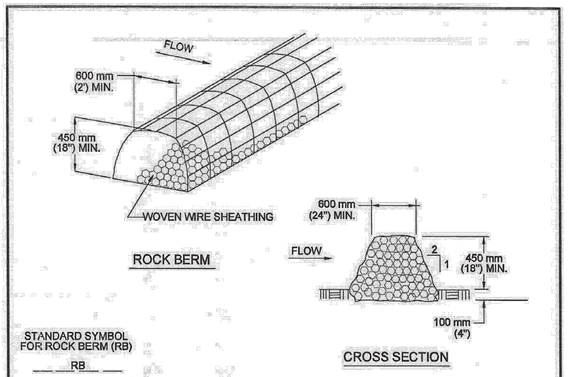
HCC JOB No.:041-06
DRAWN BY:: RTC

EROSION CONTROL PLAN

SHEET No.
6
OF 19

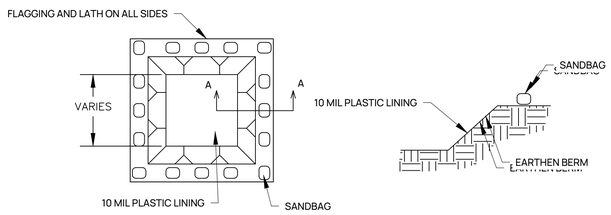
C:\HCCDocs\Hm - Hill Country Civil\Projects\041 AAA Storage\06 AAA Len Bar\1 - CAD\2 - Sheets\041-06 SWPP.dwg

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7 SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)



NOTES:
1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
Mary S. Knox P.E. 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1

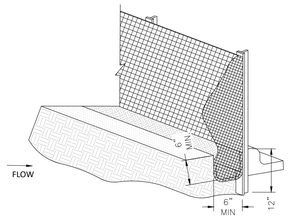


PLAN VIEW
N.T.S.

SECTION A-A
N.T.S.

NOTES
1. REFERENCE EROSION CONTROL PLAN. FIELD LOCATION AND LAYOUT TO BE ADJUSTED BY CONTRACTOR OUT IN FIELD, OR AS CONSTRUCTION PROGRESS.

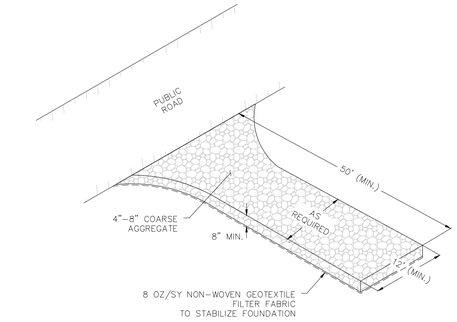
CONCRETE WASHOUT DETAIL
N.T.S.



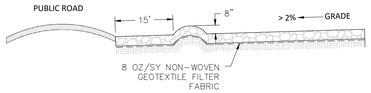
ISOMETRIC PLAN VIEW

NOTES:
- SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4 OZ/YD, ULTRAVIOLET STABILITY EXCEEDING 70%, AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
- FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR Y-BAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/SF, AND BRINDELL HARDNESS EXCEEDING 140.
- WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2□□X 4□□WELDED WIRE, 12 GAUGE MINIMUM.
- STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
- LAY OUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. UTILIZE J-HOOKS AS NECESSARY AS SHOWN IN THIS DETAIL. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
- THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. 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.
- THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
- SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL IN EXCESS OF 0.5 INCH OR MORE. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES. REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
- WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

SILT FENCE DETAIL
N.T.S.



ISOMETRIC VIEW



PROFILE VIEW

NOTE:
1. FOD TRACKOUT CONTROL SYSTEM MAY BE USED IN LIEU OF ROCK STABILIZED CONSTRUCTION ENTRANCE.

NOTES:
- THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
- THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
- THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 8 OZ/SY.
- IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4 INCH DIAMETER WASHED STONE OR COMMERCIAL RACK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.
- AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
- THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF THE EXIT ROADWAY, WHICHEVER IS GREATER.
- THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG. EXTEND PAD BEYOND MINIMUM 50 FOOT LENGTH AS NECESSARY.
- IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A DIVERSION RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
- PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
- PLACE STONE DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
- DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN IF NECESSARY.
- INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATER COURSE BY USING APPROVED METHODS.

STABILIZED CONSTRUCTION ENTRANCE DETAIL
N.T.S.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN. SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS. SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ★ Consultants
Texas Firm # 20201
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 817-659-3078 or 210-378-0353
www.hillcountry.pro.com

ROSS T CORDER 128401 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
10/30/2025

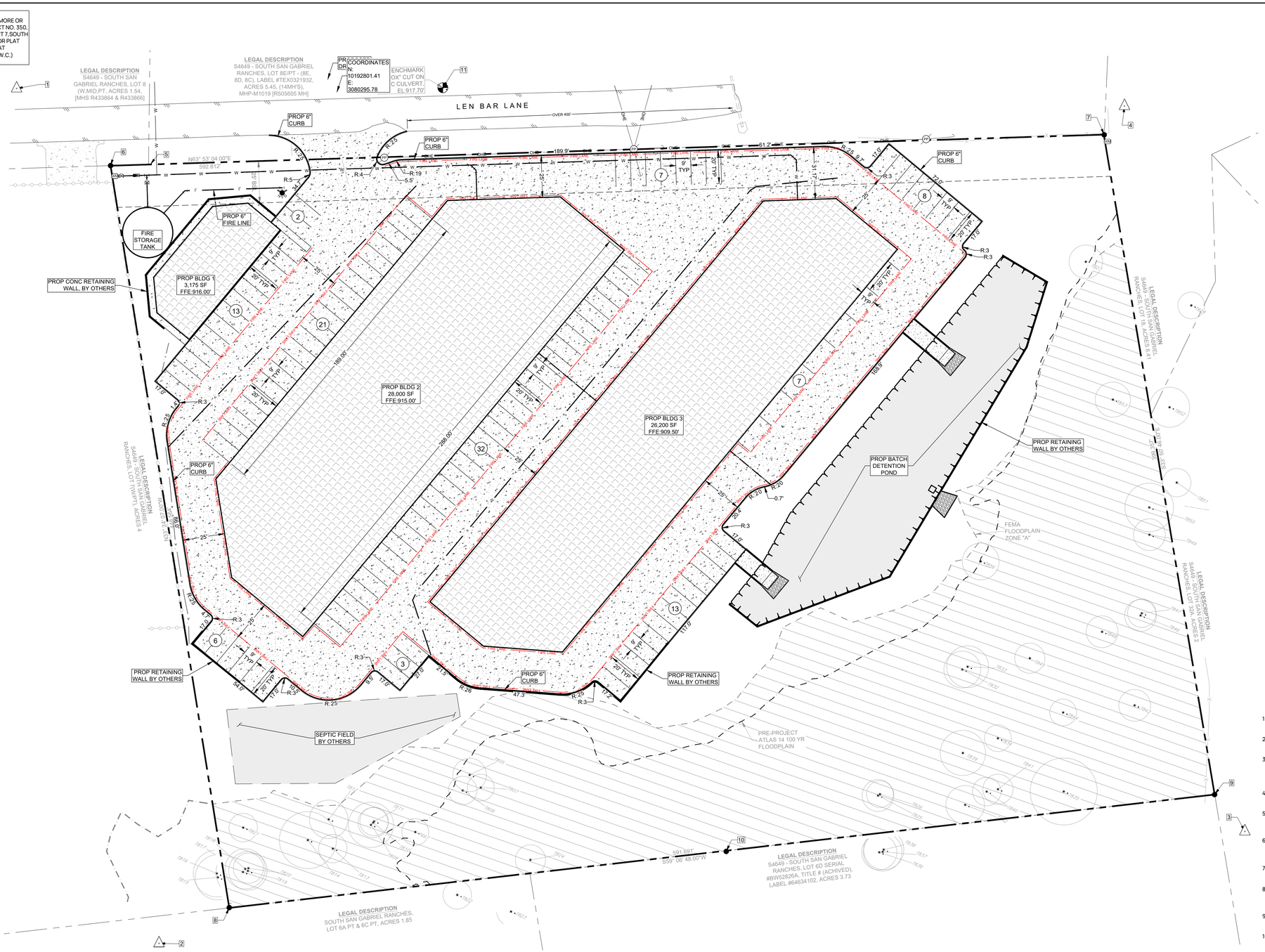
No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:... RTC

EROSION CONTROL DETAILS

SHEET No.
7
OF 19

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7,SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)



LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- WM — EXIST WATER METER
- PP — EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- OHE — EXIST OVERHEAD UTILITY
- EXIST TREE
- PROP BUILDING
- HEAVY DUTY CONC PAVEMENT
- 0 — PARKING COUNT
- PROP FIRE HYDRANT
- FIRE TRUCK HOSE PULL (FTP)
- FIRE TRUCK MAN PULL (MP)
- FIRE LANE — PROP FIRELANE
- TOP OF POND

SITE PLAN NOTES

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL BUILDING, SAFETY, AND INSPECTION REGULATIONS.
2. CONTRACTOR SHALL KEEP A COPY OF ACCEPTED CONSTRUCTION DRAWINGS ONSITE AT ALL TIMES.
3. PROPERTY LIES PARTIALLY IN SHADED ZONE "A", AND ZONE AE AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR WILLIAMSON COUNTY UNINCORPORATED AREAS, MAP NO. 48491C0455F, MAP EFFECTIVE DECEMBER 20, 2019.
4. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB OR EDGE OF PAVEMENT UNLESS STATED OTHERWISE.
5. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH LOCAL TV, ELECTRIC, GAS, WATER, SEWER AND PHONE PROVIDERS AS REQUIRED TO PROVIDE SERVICE TO THE PROJECT SITE.
6. CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.
7. ALL RAMPS, ACCESSIBLE PATHS, AND ACCESSIBLE PARKING SPOTS SHALL BE IN COMPLIANCE WITH THE LATEST TEXAS ACCESSIBILITY STANDARDS (TAS) .
8. WHEELSTOPS SHALL BE PRE-CAST CONCRETE AND AND 6' IN LENGTH, OR AS SPECIFICALLY CALLED OUT ON PLANS. FURTHERMORE, WHEELSTOPS SHALL BE DOWELED IN PLACE A MINIMUM OF 12" INTO PAVEMENT AND BASE SECTION.
9. CONTRACTOR SHALL COORDINATE WITH ELECTRICAL ENGINEER OR LIGHTING CONSULTANT FOR LAYOUT OF PARKING LOT LIGHTS.
10. ALL DUMPSTER PADS AND APRONS SHALL BE CONSTRUCTED OF 7" REINFORCED CONCRETE PAVEMENT (4,000 PSI @ 28 DAYS), FOUNDED ON 4" FLEXIBLE BASE. CONCRETE SECTION SHALL BE REINFORCED WITH #3 BARS, 16" O.C.E.W.
11. PROPOSED PAVEMENT SECTIONS SHALL BE PER THE SITE GEOTECH OR OWNER SPECIFICATIONS.
12. FIRE LANE STRIPING SHALL BE RED PAINT STRIPING WITH 4" TYPE D BLOCK WHITE LETTERING SPACED EVERY 40'. WHITE LETTERING SHALL STATE: "FIRE LANE - NO PARKING - TOW AWAY ZONE".

BENCH MARK, CONTROL POINTS, IRON RODS FOUND

Point #	Elevation	Northing	Easting	Description
1	924.35	10192759.56	3080101.66	GBI CP
2	909.37	10192329.61	3080389.19	GBI CP
3	908.45	10192657.25	3080951.94	GBI CP
4	898.27	10193022.21	3080708.22	GBI CP
5	921.54	10192751.19	3080193.07	FIR5
6	921.97	10192740.71	3080171.69	FIR5 LEANING
7	899.75	10193001.58	3080704.24	FIRC4
8	907.27	10192366.32	3080418.57	FIR4
9	906.96	10192669.91	3080926.42	FIP 1"
10	904.31	10192519.00	3080674.94	FIR4
11	917.58	10192864.67	3080333.16	BM "BOX" ON CULVERT

SITE SUMMARY TABLE

EXISTING IMPERVIOUS COVER (SF)	8,922
PROPOSED IMPERVIOUS COVER (SF)	126,289
BUILDING SQUARE FOOTAGE	57,375
PARKING REQUIRED	**
PARKING PROVIDED	112
ADA PARKING REQUIRED	**
ADA PARKING PROVIDED	**

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT. THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN, SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ★ Consultants
Texas Firm Registration # 20281
591 Landa Street, Ste. 200N, New Braunfels, TX 78130
Phone 830-669-3078 or 210-378-0353
www.hillcountrycivil.com

ROSS T CORDER
STATE OF TEXAS
128401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

DRAWN BY: RTC
HCC JOB No.:041-06

SITE PLAN

SHEET No.
8
OF 19

LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7,SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)

GRADING NOTES

1. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL BUILDING, SAFETY, AND INSPECTION REGULATIONS.
2. CONTRACTOR SHALL PROTECT EXISTING FACILITIES TO REMAIN INCLUDING BUT NOT LIMITED TO STRUCTURES, PAVEMENT, TREES, FENCES LANDSCAPING, UTILITIES, ETC. ALL EXISTING FACILITIES SHALL BE IN ORIGINAL OR BETTER CONDITION AT THE COMPLETION OF THE PROJECT.
3. DURING CONSTRUCTION, CONTRACTOR SHALL MAINTAIN UNRESTRICTED DRAINAGE. NO PONDING OF STORM DRAINAGE SHALL BE PERMITTED IN AREAS OF PREPARED SUBGRADE OR EXCAVATION, EMBANKMENT. IF PONDING SHOULD OCCUR, CONTRACTOR SHALL IMMEDIATELY PUMP OUT OR GRAVITY DRAIN PONDING WATER OUT OF IMPACTED AREAS. IF ANY DAMAGE OCCURRED TO SUBGRADE, BUILDING PAD OR EXCAVATION AREAS, THE SOILS MUST BE DRIED OUT, REMOVED, REPLACED AND RE-COMPACTED.
4. DISTURBED AREAS (CONSTRUCTION AREAS) SHALL BE STRIPPED OF VEGETATION, LOOSE TOPSOIL, ORGANICS, BRUSH AND DEBRIS. AFTERWARDS, THE EXPOSED SUBGRADE SHALL SHALL BE PROOF ROLLED WITH A MINIMUM 25 TON PNEUMATIC ROLLER. ANY WEAK AREAS DETECTED SHALL BE REMOVED AND REPLACED WITH SUITABLE SOILS OF SIMILAR TYPE (CLASSIFICATION, MOISTURE CONTENT AND DENSITY).
5. IF REQUIRED TO MODIFY EXISTING GRADE, FILL MATERIALS SHOULD BE PLACED ON PREPARED SURFACES IN LIFTS NOT EXCEED 8 INCHES (LOOSE MEASURE), WITH COMPACTED THICKNESS NOT TO EXCEED 6 INCHES OR AS INDICATED IN SITE GEOTECHNICAL REPORT. FILL SHALL BE COMPACTED TO OPTIMUM MOISTURE CONTENT OR UP TO +3 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT TO A MINIMUM OF 95% MAXIMUM DENSITY AS DETERMINED BY TXDOT, TEX-114-E OR AS DESCRIBED IN THE SITE GEOTECHNICAL REPORT.
6. ALL FILL MATERIALS SHALL BE CLEAR OF DEBRIS, ORGANICS AND VEGETATION. IF IMPORTED FILL IS USED, IT SHALL BE A RELATIVELY HOMOGENEOUS PARTICLE SIZE DISTRIBUTION, WITH MAX SIZE OF 3 INCHES , PLASTICITY INDEX BETWEEN 7 AND 20 AND A LIQUID LIMIT LESS THAN 40; OR AS INDICATED ON THE GEOTECHNICAL REPORT.
7. ANY EXCESS EXCAVATION MATERIALS NOT USED, SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF OFFSITE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL LAWS.
8. CONTRACTOR IS RESPONSIBLE FOR FILING WITH THE TCEQ FOR THE TEMPORARY STORM WATER POLLUTION PREVENTION PLAN NOTICE TO PROCEED AND NOTICE OF TERMINATION AT THE START AND END OF CONSTRUCTION.
9. CONTRACTOR SHALL KEEP A COPY OF APPROVED CONSTRUCTION DRAWINGS ONSITE AT ALL TIMES.
10. ALL SPOT ELEVATIONS ARE TO EDGE OF PAVEMENT/GUTTER LINE OF CURB, FINISHED GRADE, FINISHED GRADE ADJACENT TO WALLS UNLESS OTHERWISE SPECIFIED AS BELOW

HP	HIGH POINT
LP	LOW POINT
ME	MATCH EXISTING
TC	TOP OF CURB AT BACK
TS	TOP OF STRUCTURE
TW	TOP OF WALL
BW	FINISHED GRADE AT BOTTOM OF WALL
FFE	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE

11. STORM SEWER PIPE SHALL BE ADS HP STORM (HPPP) PIPE, OR AS CALLED OUT ON PLANS.
12. ALL ADA PARKING STALLS, WALKING AISLES AND PATHWAYS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION. RAMPS SHALL NOT EXCEED 8.033% SLOPE.

LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- OHE — EXIST OVERHEAD UTILITY
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- EXIST TREE
- 860 — PROP MAJOR CONTOUR
- 861 — PROP MINOR CONTOUR
- PROP FLOW ARROW
- PROP DRNG SWALE/CONCENTRATED FLOW PATH IN PAVED AREAS
- 600.00 — PROP SPOT ELEVATION
- RIDGE LINE
- PROP BUILDING
- HEAVY DUTY CONC PAVEMENT
- PROP FIRE HYDRANT
- FIRE LANE — PROP FIRELANE

BENCH MARK, CONTROL POINTS, IRON RODS FOUND

Point #	Elevation	Northing	Easting	Description
1	924.35	10192759.56	3080101.66	GBI CP
2	909.37	10192329.61	3080389.19	GBI CP
3	908.45	10192657.25	3080951.94	GBI CP
4	898.27	10193022.21	3080708.22	GBI CP
5	921.54	10192751.19	3080193.07	FIR5
6	921.97	10192740.71	3080171.69	FIR5 LEANING
7	899.75	10193001.58	3080704.24	FIRC4
8	907.27	10192366.32	3080418.57	FIR4
9	906.96	10192669.91	3080926.42	FIP 1"
10	904.31	10192519.00	3080674.94	FIR4
11	917.58	10192864.67	3080333.16	BM "BOX" ON CULVERT

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN, SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ◆ Consultants
Texas Firm #20194
591 Leslie Street, Ste. 200A, New Braunfels, TX 78130
Phone 830-609-5078 or 210-378-9353
www.hillcountrycivil.com

STATE OF TEXAS
ROSS T. CORDER
128401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:: RTC

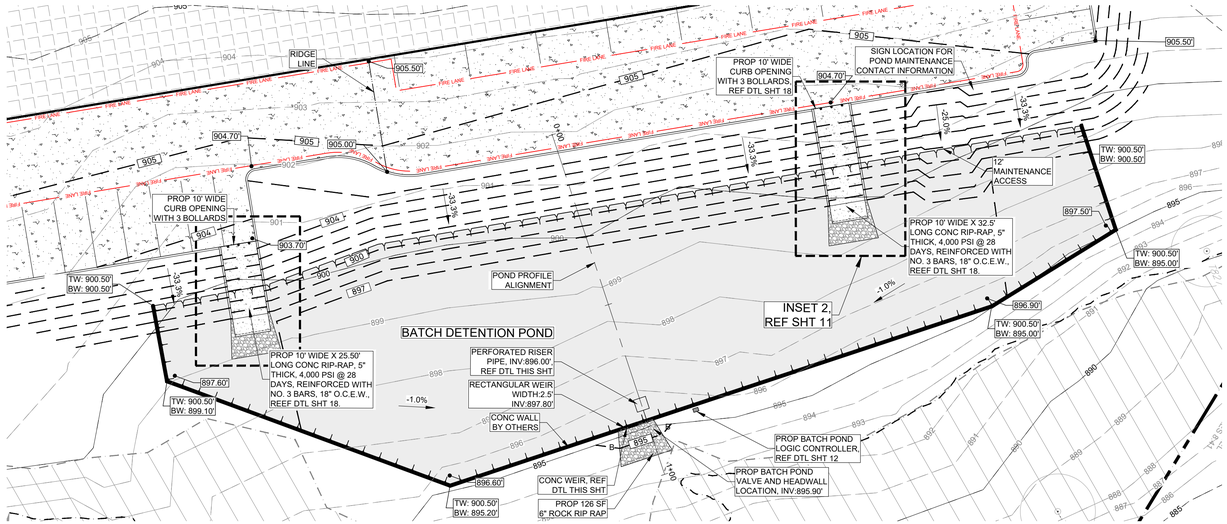
OVERALL GRADING PLAN

SHEET No.
9
OF 19

C:\HCC\OneDrive - Hill Country Civil\Projects\041 AAA Storage\06 AAA Len Bar\1 - CAD\2 - Sheets\041-06 GRD.dwg

DETENTION PLAN NOTES:

1. THE CONSTRUCTION HEIGHT OF AN EARTHEN EMBANKMENT SHALL BE EQUAL TO THE DESIGN HEIGHT PLUS THE AMOUNT NECESSARY TO ENSURE THAT THE DESIGN HEIGHT WILL BE MAINTAINED ONCE ALL SETTLEMENT HAS TAKEN PLACE. ALL EARTHEN EMBANKMENTS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY.
2. ALL ROCK RIP RAP SHALL BE A MINIMUM 6" AND HAVE A MINIMUM APRON LENGTH OF 6' UNLESS SIZE IS SPECIFIED ON THE PLANS. EMBEDMENT DEPTH OF RIP RAP SHALL BE 1.5 TIMES THE DIAMETER OF THE ROCK.
3. ALL ROCK RIP RAP TO BE LINED WITH AN 8-OZ NON-WOVEN GEOTEXTILE FILTER FABRIC.
4. ALL DISTURBED AREAS SHALL BE RESTORED AND PERMANENTLY REVEGETATED UNLESS OTHERWISE NOTED IN THE PLANS.
5. AT A MINIMUM DISTURBED AREAS NEED TO BE REVEGETATED AS PER TXDOT ITEM 164 SEEDING FOR EROSION CONTROL. PLANTING MUST FOLLOW EITHER SAN ANTONIO OR AUSTIN TXDOT REQUIREMENTS FOR SEED WEIGHT PER ACRE.
6. THE PLANTED AREAS 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 $\frac{1}{2}$ INCH OF MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK.
7. REFER TO DETENTION POND DETAILS SHEET FOR ADDITIONAL DETAILS ON POND DESIGN.
8. ADD SIGN NEXT TO MAINTENANCE ACCESS RAMP SHOWING OWNER'S AND TCEQ AUSTIN REGIONAL OFFICE CONTACT INFORMATION:
   - 8.1. OWNER'S CONTACT:
     A-A-A STORAGE DRIPPING SPRINGS LLC
     4203 SPINNAKER CV
     AUSTIN, TX 78731
     CONTACT: JOHN MUHICH
     PHONE: (512) 657-6789
   - 8.2. TCEQ AUSTIN REGIONAL OFFICE:
     12100 PARK 35 COR.,
     AUSTIN, TX 78753
     PHONE: (512) 239-1000



0 10 20 40

SCALE (FEET)

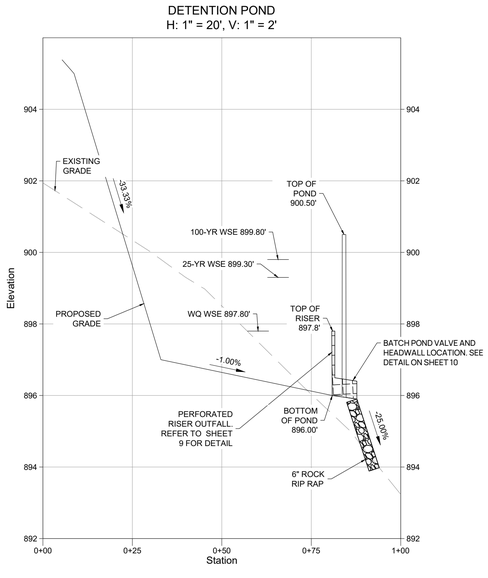
LEGEND

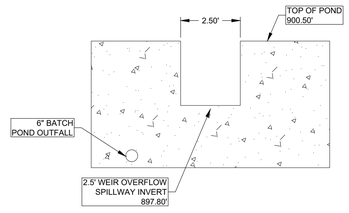
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- EXIST TREE
- 860 — PROP MAJOR CONTOUR
- 861 — PROP MINOR CONTOUR
- FIRE LANE — PROP FIRELANE
- RIDGE LINE
- PROP BUILDING
- HEAVY DUTY CONC PAVEMENT
- TOP OF POND

POND 1 STAGE, STORAGE, DISCHARGE

Stage (ft)	Elevation (ft)	Area (sqft)	Total Storage (cuft)
0.00	896.00	0.00	0.00
1.00	897.00	9,448.00	3,149.00
2.00	898.00	11,338.00	13,528.00
3.00	899.00	12,197.00	25,293.00
4.00	900.00	13,077.00	37,927.00
4.50	900.50	13,528.00	44,578.00

Storm Event	Stage (ft)	Storage (cuft)	Discharge (cfs)
2-yr	898.40	17,424.00	4.600
10-yr	899.00	26,136.00	11.300
25-yr	899.30	30,492.00	16.000
100-yr	899.80	34,847.90	23.300





WEIR CROSS-SECTION B-B

NTS

Hill Country Civil
Engineers ● Consultants
Texas Firm # 20181
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-669-3078 or 210-378-0353
www.hillcountrycivil.com

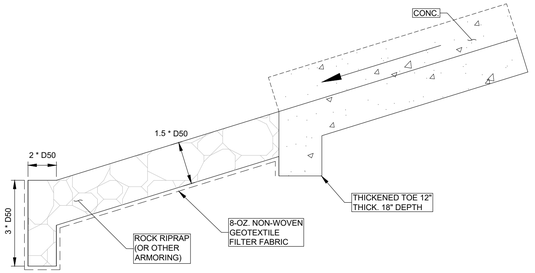
ROSS T CORDER
STATE OF TEXAS
128401
LICENSED PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:: RTC

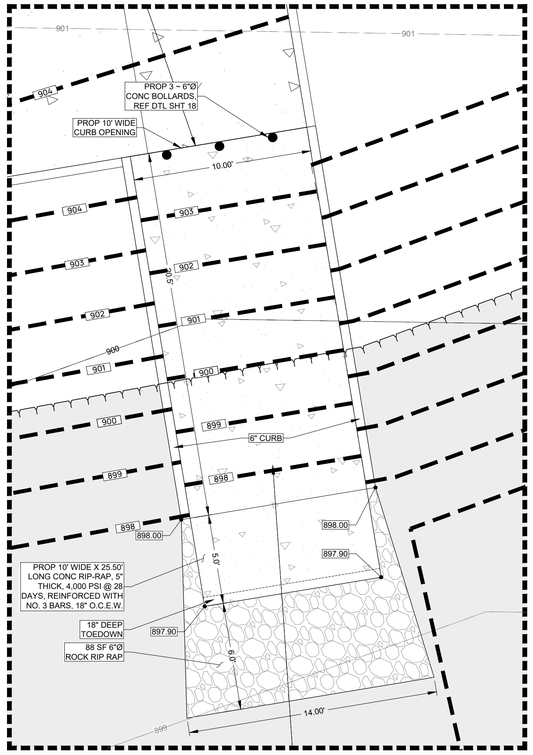
DETENTION POND PLAN

SHEET No.
10
OF 19



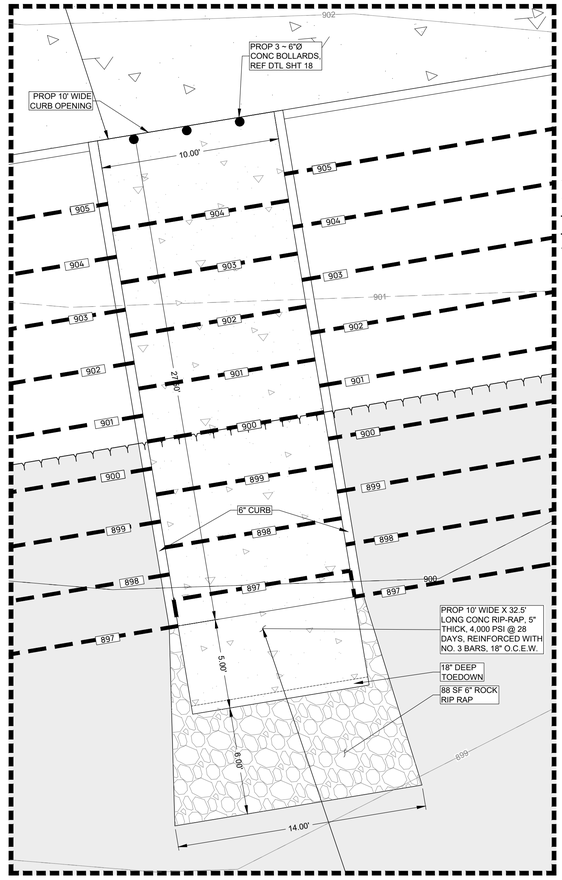
RIP RAP CROSS-SECTION (TYP)

NTS



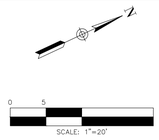
INSET 1

SCALE: 1" = 4'



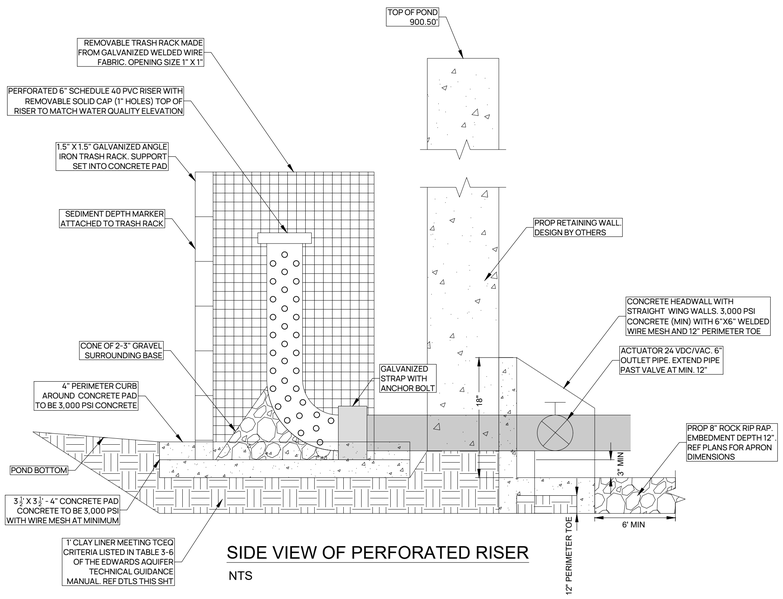
INSET 2

SCALE: 1" = 4'



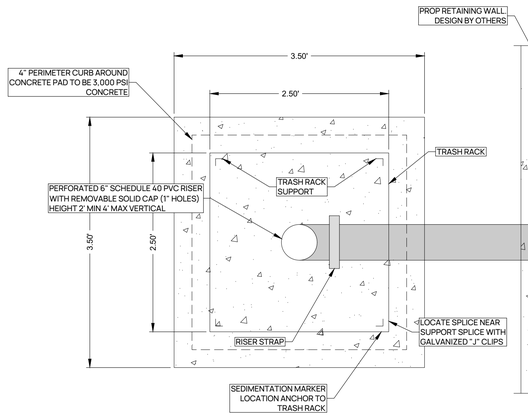
LEGEND

- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- 860 — PROP MAJOR CONTOUR
- 861 — PROP MINOR CONTOUR
- TOP OF POND



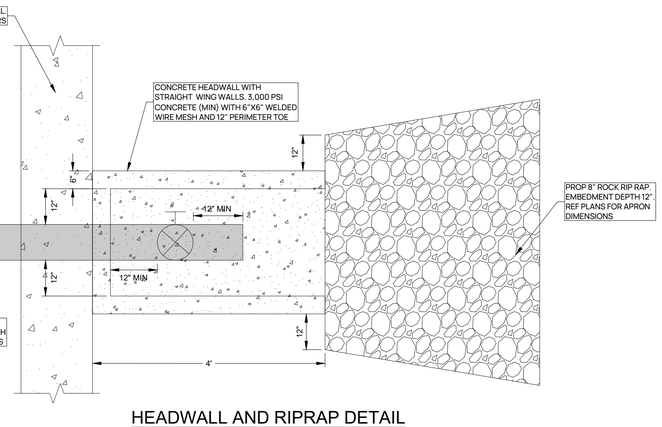
SIDE VIEW OF PERFORATED RISER

NTS



PLAN VIEW OF PERFORATED RISER

NTS



HEADWALL AND RIPRAP DETAIL

NTS

NOTES

1. ROCK RIP RAP APRON SIZES SHOWN ARE MINIMUM. ADDITIONAL RIP RAP MAY BE INSTALLED IF DESIRED.
2. ROCK RIP RAP EMBEDMENT DEPTH SHALL BE AT LEAST 1.5 TIMES THE DIAMETER OF THE ROCK.

Hill Country Civil
Engineers ★ Consultants
Texas Firm Registration # 20201
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-659-3078 or 210-378-0353
www.hillcountrycivil.com

ROSS T CORDER
STATE OF TEXAS
128401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

HCC JOB No.:041-06 DRAWN BY:: RTC

POND DETAILS

SHEET No.
11
OF 19

Batch Detention Pond Specification Submittal

Preface – The following specifications describe the general function and components of a typical Texas Commission on Environmental Quality (TCEQ) approved batch detention pond. The system operates as an "off-grid" electronically controlled solar powered storm water management unit. This batch detention system uses a water level sensor, solar power panel, logic controller w/ microprocessor, and a plug valve with actuator to meet batch detention standards as set by the TCEQ.

Certification – All of the components described below meet TCEQ's batch detention specifications for a 91% Total Suspended Solid removal rate. See attached logic flow chart for overview of system cycles.

Components:

- Valve – 4" or 6", cast iron, actuated by an electric motor, valve placed in concrete vault when installed below ground, valve placed on concrete pad due to weight
- Actuator – low voltage motor mounted on top of valve, bolted in place to concrete vault ceiling
- Extended bonnet - Cold rolled steel stem extension that connects valve to actuator when valve is used in subgrade applications, stainless steel flanges
- Main board – 24-volt panel that controls all aspects of batch control system
- Batteries – two 12-volt 35 amp/hr. sealed lead acid (SLA) connected in series
- Solar Panel – 24-volt 30-watt. One charge controller regulates solar panel power for batch control system.
- Sensor 1 – float switch – mounted on trash rack that indicates when water present in pond and when pond is empty
- Sensor 2 – position sensor in actuator – determines the orientation of the valve to control positions for start and stop

RAINWATER SPECIALISTS RIGHT AS RAIN

For additional information please contact
Rainwater Specialists
512-677-7246
www.txrws.com

Controller Programming – All functions of the system are factory programmed which allows the control box, valve, and actuator to received and send commands on their own based on environmental conditions without any human interaction. Manual mode to override switch to open and close valve by flip of a switch and to test all components during inspections. Reset button to reset controller.

Alerts - The main board will illuminate an exterior red light for the following conditions:

- Improper valve function
- Low battery
- Sensor 1 float switch inoperable

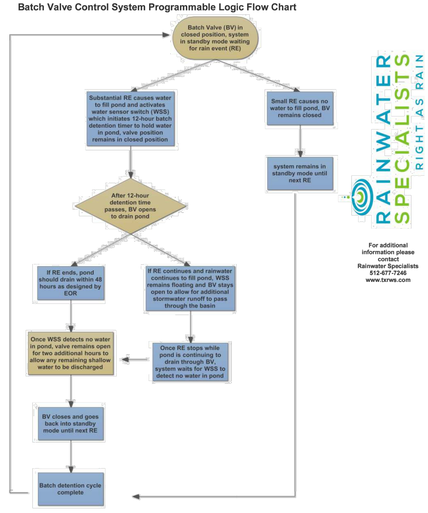
Manual Control - In case of electronic inoperability or failed actuator, an effortless clutchless handwheel on the actuator can be turned to open or close valve manually, easy-to-read position indicator displays open/closed valve position

Service Schedule:

- Batteries – Sealed lead acid batteries can have a design life of anywhere from 3-5 years. Many factors affect service life of the battery, temperature being ones of those factors. Recommended replacement is every 3-5 years. Batteries can be tested annually to determine remaining life expectancy. Battery terminals to be inspected annually.
- Solar Panel(s) - Solar panels last 25-30 years. Annual inspection of the batch detention system should verify the surface of the solar panel is clean, facing south, is secure, and has no debris/trees blocking panel from sun.

Quality Installation - Rainwater Specialists, LLC agrees to perform in a good and workmanlike manner. All work detailed in the detailed scope of work sheet shall guarantee the installation of all products and material according to manufacturer's written instructions and construction industry standards.

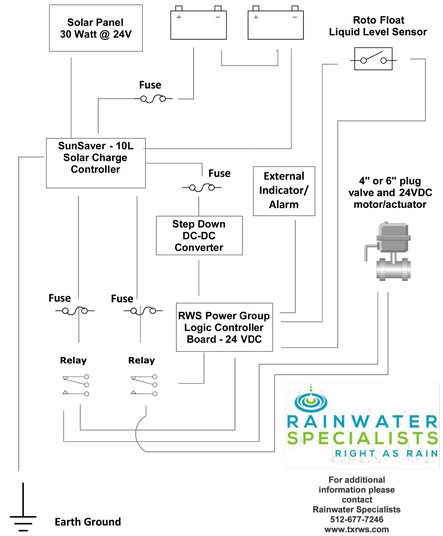
Batch Valve Control System Programmable Logic Flow Chart



RAINWATER SPECIALISTS RIGHT AS RAIN

For additional information please contact
Rainwater Specialists
512-677-7246
www.txrws.com

Circuit Block Diagram



RAINWATER SPECIALISTS RIGHT AS RAIN

For additional information please contact
Rainwater Specialists
512-677-7246
www.txrws.com

Rainwater Specialists, LLC
15001 Crosscreek Dr.
Austin, TX 78737
www.rainwaterspecialists.com
512-677-RAIN

Batch Detention Pond Solar Specifications and Performance

System Power Consumption – 6.15 AH/day or ~75 wh/day average @ 8 valve turns maximum/week, sized for 5 days of autonomy

Control Board System – 24VDC PCB with error indication and remote cell output

Valve – 24 VDC @ 9 amps, one turn @ 16 seconds

Solar Panel - Solarland 30 Watt, 24 Volts polycrystalline solar module with junction box. Vmp: 34.4V, Imp: 0.87A, Voc: 43.2V, Isc: 0.96A. 21.3" x 20.08" x 1.18", 8.27 lbs.

Charge controller - SunSaver 10 10 Amp, 24 Volt solar charge controller with LVD 6' x 2.18' x 1.32'

Batteries - Universal Power Group UB12350(Group U1) 12V 35 amph 7.68" x 5.16" x 6.14" 23.15lbs

Hill Country Civil
Engineers ★ Consultants
Texas Firm #20221
591 Leslie Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-669-5078 or 210-378-0363
www.hillcountrycivil.com

ROSS T. CORDER 128401 LICENSED PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
DRAWN BY:.. RTC
HCC JOB No.:041-06

BATCH POND DETAILS

SHEET No.
12
OF 19

Valworx — Electric Actuated Butterfly Valves

Ductile Iron Lug Body ASME 150#
2" to 6" Pipe

SERIES 5673

Features

- Direct mount lug butterfly valve with ISO5211 mount
- Epoxy coated ductile iron body with 316 SS disc
- Unique wave line seat reduces torque and extends seal life
- Visual valve position indicator
- Rugged aluminum Type 4X weatherproof actuator
- Heavy duty motors with overload protection
- Thermostatically controlled anti-condensation heater
- Manual override with end of travel mechanical stops
- Two auxiliary position confirmation limit switches
- EPS - Electronic Positioning System models available
- Actuators CSA Listed per UL429 and CSA C22.2

Applications

EPDM seals typically used for on-off control of water and other compatible media. NBR (Buna-N) seals typically used for air, oil, vacuum and other compatible media. FPM (Viton) seals typically used for on-off control of hydrocarbons, oils and other compatible chemicals/media. Suitable for use with ANSI/ASME Class 125/150 pipe flanges. Actuators designed for 70% duty cycle.

Operation

On-Off electric actuated valve uses power-to-open and power-to-close, stays in the last known position with loss of power. On receipt of a continuous voltage signal, the motor runs and via a rugged all metal gear system rotates the ball 90°. The motor is automatically stopped by internal cams striking limit switches. On receipt of a reversing continuous signal, the motor turns in the opposite direction reversing the valve position. Power connections direct to terminal strip via included cable connector, or optional 1/2" NPT conduit adapters.

Construction

Valve Body	Epoxy coated ductile iron
Disc	316 stainless steel CF8M
Disc Seat/Liner	EPDM, NBR (Buna-N) or FPM (Viton)
Stem/Stem Seals	420 stainless steel / (2) v-ring, same material as seat
Gear Drive	Heavy duty alloy steel and aluminum bronze, self locking
Actuator Enclosure	Aluminum, polyester powder painted, Type 4X, IP67
Visual Valve Position Indicator	Clear polycarbonate window, ,red/yellow open-closed
Fasteners	Stainless Steel
Auxiliary Limit Switches	2 x SPDT (125VAC/5A)

Description

Electric operated direct mount butterfly valves with epoxy- coated ductile iron lug body are designed for commercial and industrial applications. Valve mounts between two standard ANSI/ASME Class 150 flanges and includes integral molded flange gaskets. Disc is precision machined 316SS. Two piece stem and disc design enhances the flow capacity and reduces turbulence. Rugged corrosion resistant electric actuator includes a manual override, valve position confirmation switches, thermostatically controlled anti-condensation heater, and over-torque protection.

Approvals

Actuators

- CSA Listed to:
  - UL429 and CSA C22.2 no 139
  - Type 4X, IP67 weatherproof enclosure
- CE conformance
  - ISO5211 Mounting

Valves

- Design complies with API-609, MSS SP-67
- Tests per API-598, AWWA C502-87
- CE according to PED 97/23/EC, ISO5208

Valworx — Electric Actuated Butterfly Valves

Ductile Iron Lug Body ASME 150#
Features and P/T Chart

SERIES 5673

Construction Features

Visual Valve Position Indicator

Pressure Rating

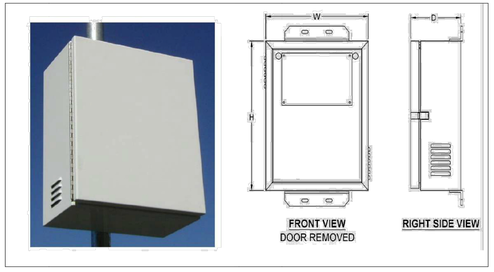
Pressure Rating: 230 PSI (16 Bar), Vacuum 29in Hg

Temperature Rating

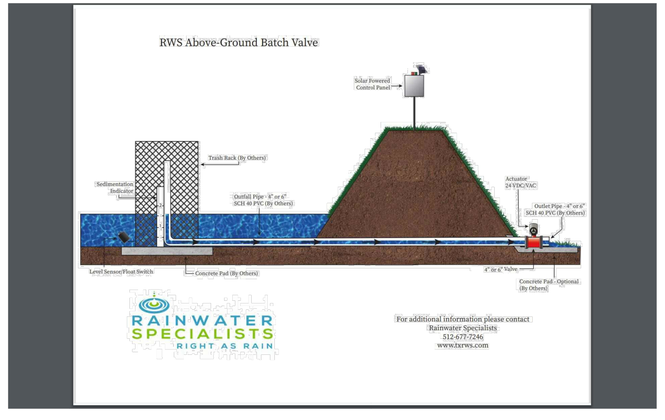
Actuator Temperature Rating: -13 to 131° F (-25 to 55° C)

Valve Temperature Rating: EPDM seals 0 to 248° F (-18 to 120°C)
NBR (Buna-N) seals 5 to 185° F (-15 to 85°C)
FPM (Viton) seals 5 to 338° F (-15 to 170°C)

Ground Mount Controller and Battery Enclosure



- Standard boxes are fabricated from .125" thick 5052--H32 aluminum
- Heavy--duty stainless steel continuous
- Heavy--duty stainless steel continuous hinge
- Seams are continuously welded and then sanded smooth
- Adjustable tension stainless steel padlock hasp
- Removable component mounting plate
- Standard finish is a bright white polyester powder--coat inside and out
- Two 7/8" diameter wire holes
- Built to NEMA 3R specifications
- Filtered or screened ventilation louvers
- Hinged front door with PORON door gasket
- Supplied with u--bolts (when pole specified)



RAINWATER SPECIALISTS RIGHT AS RAIN

For additional information please contact
Rainwater Specialists
512-677-7246
www.txrws.com

LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- OHE — EXIST OVERHEAD UTILITY
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- TOC — TIME OF CONCENTRATION
- DRAINAGE AREA BOUNDARY
- DA # / ACRES — DRAINAGE AREA LABEL
- EXIST TREE

Hill Country Civil
Engineers ◆ Consultants
Texas Registered Firm F-20281
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-659-3078 or 210-378-0353
www.hillcountry.pro/civil.com

STATE OF TEXAS
ROSS T. CORDER
125401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions
		App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:: RTC

EXISTING DRAINAGE AREA MAP

SHEET No.
13
OF 19

LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- OHE — EXIST OVERHEAD UTILITY
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- 860 — PROP MAJOR CONTOUR
- 861 — PROP MINOR CONTOUR
- TOC — TIME OF CONCENTRATION
- DRAINAGE AREA BOUNDARY
- DA # / ACRES — DRAINAGE AREA LABEL
- EXIST TREE

Hill Country Civil
Engineers ◆ Consultants
Texas Firm Registration # 20281
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 817-609-3078 or 210-378-9353
www.hillcountrycivil.com

ROSS T. CORDER — STATE OF TEXAS — 128401 — LICENSED PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions

App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

HCC JOB No.:041-06 DRAWN BY:.. RTC

PROPOSED DRAINAGE AREA MAP

SHEET No.
14
OF 19

TIME OF CONCENTRATION

Drainage Area Name: ODA 1
Proposed Time of Concentration (min): 13.6 **Lag Time** 8.2
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	935.00	932.50	0.240		N/A	N/A	0.025	11.8	11.8
2	Shall. Conc.	301.0	932.50	916.00			N/A	N/A	0.055	1.3	13.1
3	Channel or Sewer	151.0	916.00	911.60	0.035	4.58	8.00	4.00	0.029	0.5	13.6

Drainage Area Name: EDA 1
Proposed Time of Concentration (min): 11.3 **Lag Time** 6.8
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	922.20	918.20	0.240		N/A	N/A	0.040	9.7	9.7
2	Shall. Conc.	303.0	918.20	905.20			N/A	N/A	0.043	1.5	11.3
3	Channel or Sewer	0.0	0.00	0.00		0.00	N/A	N/A	0.000	0.0	11.3

Drainage Area Name: EDA 2
Proposed Time of Concentration (min): 10.9 **Lag Time** 6.5
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	920.70	915.80	0.240		N/A	N/A	0.049	9.0	9.0
2	Shall. Conc.	431.0	915.80	891.20			N/A	N/A	0.057	1.9	10.9
3	Channel or Sewer	0.0	891.20	0.00		0.00	N/A	N/A	0.000	0.0	10.9

Drainage Area Name: EDA 3
Proposed Time of Concentration (min): 10.9 **Lag Time** 6.5
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	913.40	909.90	0.240		N/A	N/A	0.035	10.3	10.3
2	Shall. Conc.	190.0	909.90	889.80			N/A	N/A	0.106	0.6	10.9
3	Channel or Sewer	0.0	0.00	0.00		0.00	N/A	N/A	0.000	0.0	10.9

Drainage Area Name: PDA 1
Proposed Time of Concentration (min): 11.6 **Lag Time** 6.9
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	922.20	918.30	0.240		N/A	N/A	0.039	9.8	9.8
2	Shall. Conc.	330.0	918.30	905.20			N/A	N/A	0.040	1.7	11.6
3	Channel or Sewer	0.0	0.00	0.00		6.000	N/A	N/A	0.000	0.0	11.6

Drainage Area Name: PDA 2
Proposed Time of Concentration (min): 14.2 **Lag Time** 8.5
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	920.70	918.50	0.240		N/A	N/A	0.022	12.4	12.4
2	Shall. Conc.	61.0	918.50	914.30			N/A	N/A	0.069	0.2	12.6
3	Channel or Sewer	747.0	914.30	892.00	0.020	8.11	8.00	4.00	0.030	1.5	14.2

Drainage Area Name: PDA 3
Proposed Time of Concentration (min): 11.2 **Lag Time** 6.7
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	913.40	910.10	0.240		N/A	N/A	0.033	10.5	10.5
2	Shall. Conc.	200.0	910.10	889.80			N/A	N/A	0.102	0.6	11.2
3	Channel or Sewer	0.0	0.00	0.00		6.000	N/A	N/A	0.000	0.0	11.2

COMPOSITE CURVE NUMBER

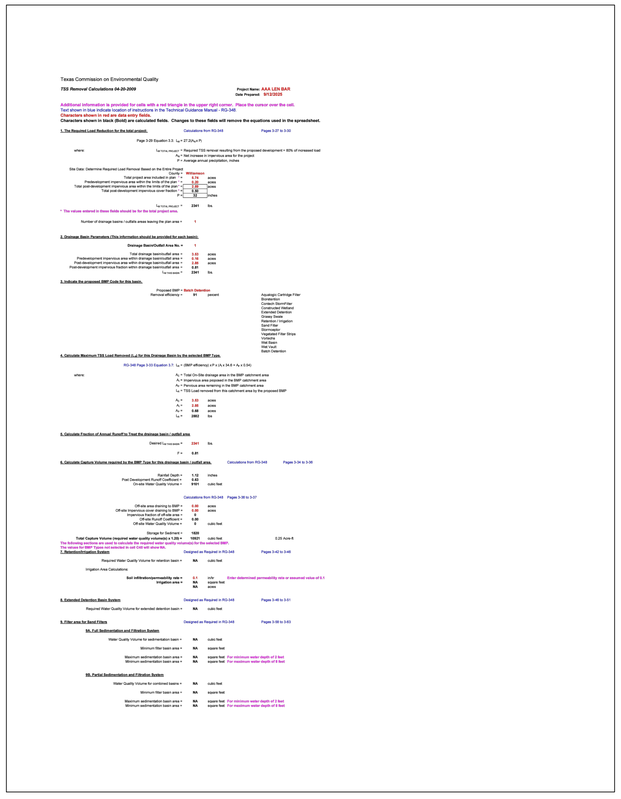
	Composite CN							
	CN Number	ODA 1	EDA 1	EDA 2	EDA 3	PDA 1	PDA 2	PDA 3
Open Space	80	1.35	1.16	2.60	0.41	0.51	0.68	0.26
Streets	98	0.00	0.01	0.16	0.03	0.02	2.85	0.03
Total Acreage		1.35	1.17	2.76	0.44	0.53	3.53	0.29
Composity CN Value		80	80	81	81	81	95	82

RUNOFF SUMMARY TABLE

Rainfall Runoff - Summary - City of Austin				
	Flow (cfs)			
Analysis Point	2 yr	10 yr	25 yr	100 yr
ODA 1	3.4	6.4	8.5	12.0
EDA 1	3.3	6.2	8.2	11.6
EDA 2	7.7	14.3	18.9	26.4
EDA 3	1.3	2.5	3.3	4.6
PDA 1	1.5	2.8	3.7	5.2
PDA 2	13.9	21.6	26.8	35.5
PDA 2 W/ POND	4.6	11.3	16.0	23.3
PDA 3	0.9	1.6	2.1	3.0

Rainfall Runoff - Summary - City of Austin				
	Flow (cfs)			
Analysis Point	2 yr	10 yr	25 yr	100 yr
EXISTING AP 1	3.3	6.2	8.2	11.6
PROPOSED AP 1	1.5	2.8	3.7	5.2
EXISTING AP 2	7.7	14.3	18.9	26.4
PROPOSED AP 2	4.6	11.3	16.0	23.3
EXISTING AP 3	4.7	8.9	11.7	16.5
PROPOSED AP 3	4.2	8.0	10.6	15.0

TCEQ WATER QUALITY CALCULATIONS



Texas Commission on Environmental Quality

TSS Removal Calculations 04-30-2009

Project Name: AAA LEN BAR
Date Prepared: 9/13/2025

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 italics is provided for guidance. Refer to the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

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

Page 3-29 Equation 3.3 $L_M = 27.2(\Delta_N P)$

where

L_M = Required TSS removal resulting from the proposed development = 80% of increased load
Δ_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

	Drainage Basin 1	Watershed
Total project area included in plan *	4.74	acres
Predevelopment impervious area within the limits of the plan *	0.00	acres
Total post-development impervious area within the limits of the plan *	3.87	acres
Total post-development impervious cover fraction *	0.82	
P *	32	inches

L_M = 2341 lbs.

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

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

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

Drainage Basin/Outfall Area No. =	1	
Total drainage basin/outfall area =	3.85	acres
Predevelopment impervious area within drainage basin/outfall area =	0.16	acres
Post-development impervious area within drainage basin/outfall area =	3.26	acres
Post-development impervious fraction within drainage basin/outfall area =	0.85	
L_M =	2341	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention
Removal efficiency = 91 percent

Assumings: Cartridge Filter
Bioretention
Constructed Filter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Wet Pond
Wet Basin
Wet Vault
Batch Detention

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 (1.2 x (Δ_A) + 0.1 x Δ_I)

where

Δ_I = Total On-Site drainage area in the BMP catchment area
Δ_A = Impervious area draining to the BMP catchment area
Δ_P = Pervious area draining to the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

Δ_I = 3.85 acres
Δ_I = 3.26 acres
Δ_P = 0.59 acres
L_R = 2982 lbs

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

Diverted $L_{M\ non-structural}$ = 2341 lbs.

F = 0.81

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

Rainfall Depth =	1.12	inches
Post Development Runoff Coefficient =	0.71	
On-site Water Quality Volume =	9161	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site runoff coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1836	
Total Capture Volume (required water quality volume(s)) = 1.25 x	**10021**	cubic feet 0.23 Acre-ft

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
Only the highlighted sections associated to soil infil rate values No.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-48

Required Water Quality Volume for retention basin =	NA	cubic feet

Irrigation Area Calculations

Soil infiltration/permeability rate =	0.1	in/hr Enter determined permeability rate or assumed value of 0.1
Irrigation area =	NA	square feet
	NA	acres

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-48 to 3-51

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	NA	cubic feet
Minimum filter basin area =	NA	square feet
Maximum sedimentation basin area =	NA	square feet For minimum water depth of 5 feet
Minimum sedimentation basin area =	NA	square feet For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	NA	cubic feet
Minimum filter basin area =	NA	square feet
Maximum sedimentation basin area =	NA	square feet For minimum water depth of 5 feet
Minimum sedimentation basin area =	NA	square feet For maximum water depth of 8 feet

Hill Country Civil
Engineers ◆ Consultants
Texas Firm Registration # 20123
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 817-659-5078 or 210-378-0353
www.hillcountrycivil.com

ROSS T CORDER 125401 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06 DRAWN BY:: RTC

DRAINAGE CALCULATIONS

SHEET No.
15
OF 19

C:\HCCDriveDrive - Hill Country Civil\Projects\041 AAA Storage\06 AAA Len Bar\1 - CAD\2 - Sheets\041-06 PDA.dwg

 30 OCTOBER 2025

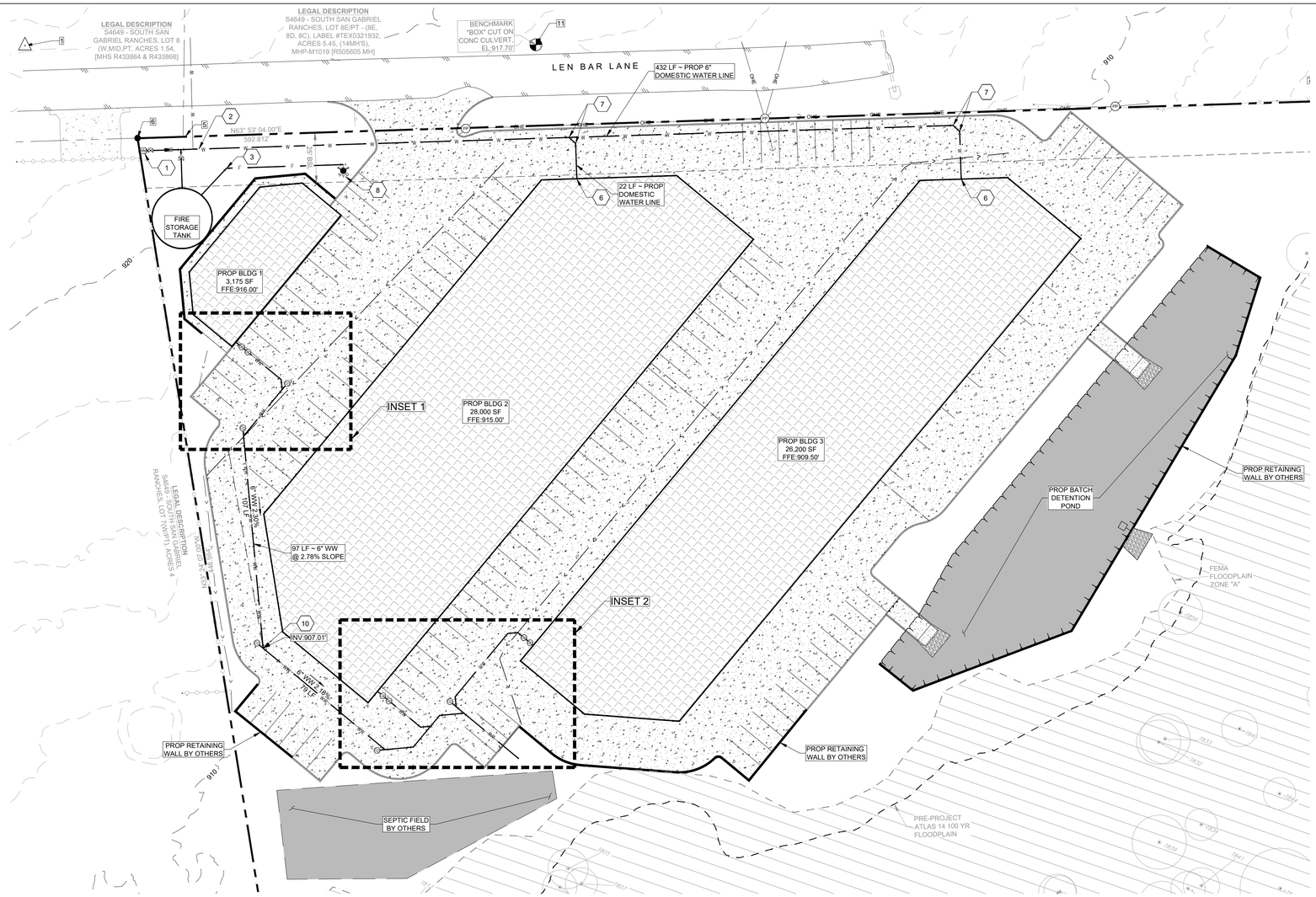
LEGAL DESCRIPTION
BEING A TRACT CONTAINING 5.74 ACRES OF LAND, MORE OR LESS, OUT OF THE L.B. JOHNSON SURVEY, ABSTRACT NO. 350, WILLIAMSON COUNTY, TEXAS AND A PART OF TRACT 7,SOUTH SAN GABRIEL RANCHES, ACCORDING TO THE MAP OR PLAT THEREFORE RECORDED IN CABINET B, SLIDE 86, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS (O.P.R.W.C.)

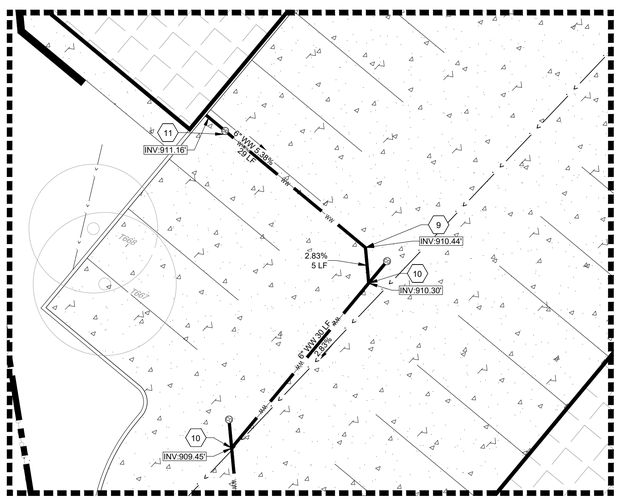
UTILITY KEYED NOTES

1. REMOVE AND REPLACE EXIST METER WITH A NEW 2" DOMESTIC METER WITH A 2" BACKFLOW PREVENTER
2. INSTALL: 2" WTR TEE, MJ.
3. INSTALL: 6" WTR 45° BEND, MJ.
4. INSTALL: 6" WTR TEE, MJ.
5. PROP DOMESTIC WATER CONNECTION TO BUILDING, REFERENCE MEP FOR CONTINUATION.
6. INSTALL: 2" WTR 45° BEND, MJ.
7. INSTALL: 6" WTR 90° BEND, MJ.
8. INSTALL: FIRE HYDRANT ASSEMBLY, REF DTL SHT 19
9. INSTALL: 6" WW 45° BEND
10. INSTALL: 6" WW WYE AND CLEANOUT
11. REF MEP PLANS FOR UTILITY CONNECTIONS TO BLDG

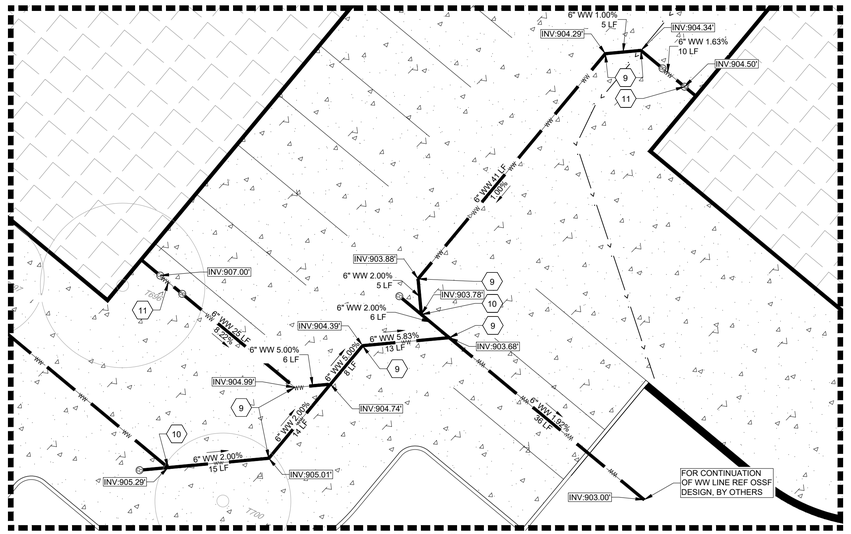
BENCH MARK, CONTROL POINTS, IRON RODS FOUND

Point #	Elevation	Northing	Easting	Description
1	924.35	10192759.56	3080101.66	GBI CP
2	909.37	10192329.61	3080389.19	GBI CP
3	908.45	10192657.25	3080951.94	GBI CP
4	898.27	10193022.21	3080708.22	GBI CP
5	921.54	10192751.19	3080193.07	FIR5
6	921.97	10192740.71	3080171.69	FIR5 LEANING
7	899.75	10193001.58	3080704.24	FIRC4
8	907.27	10192366.32	3080418.57	FIR4
9	906.96	10192669.91	3080926.42	FIP 1"
10	904.31	10192519.00	3080674.94	FIR4
11	917.58	10192864.67	3080333.16	BM "BOX" ON CULVERT





INSET 1
SCALE : 1" = 10'



INSET 2
SCALE : 1" = 10'

0 15 30 60
SCALE (FEET)

LEGEND

- IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- EXIST OVERHEAD UTILITY
- EXIST MAJOR CONTOUR
- EXIST MINOR CONTOUR
- EXIST TREE
- PROP MAJOR CONTOUR
- PROP MINOR CONTOUR
- PROP WATER LINE
- PROP FIRE LINE
- PROP WASTE WATER LINE
- PROP FIRE HYDRANT
- PROP REDUCER
- PROP ISOLATION/GATE VALVE
- PROP SERVICE SADDLE
- PROP WATER METER
- PROP BACKFLOW PREVENTOR
- PROP FLOW ARROW
- PROP SPOT ELEVATION
- PROP BUILDING
- HEAVY DUTY CONC PAVEMENT
- PROP DRNG SWALE/CONCENTRATED FLOW PATH IN PAVED AREAS

UTILITY NOTES:

1. CONTRACTOR SHALL VERIFY LOCATION, BOTH HORIZONTAL AND VERTICAL, FOR ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION; INCLUDING BUT NOT LIMITED TO, GAS, ELECTRIC, TV, PHONE,FIBER, WATER, AND SEWER.
2. ALL WATER LINES SHALL BE PVC C- 900 UNLESS OTHERWISE NOTED.
3. ALL WASTEWATER LINES SHALL BE PVC SDR -26 UNLESS OTHERWISE NOTED.
4. CONTRACTOR SHALL FOLLOW ALL PLUMBING CODES FOR WATER AND WASTEWATER LINES, FIXTURES, APPURTENANCES, CLEANOUTS, SLOPES, ETC.
5. WHERE WATER AND WASTEWATER (SEPTIC) LINES ARE CLOSER THAN 9' SEPARATION DISTANCE AS MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER, THE INSTALLATION OF WASTEWATER LINES SHALL BE IN ACCORDANCE WITH WITH TCEQ REGULATIONS. WASTEWATER LINES SHALL BE CONSTRUCTED OF PVC PIPE MEETING 150 PSI PRESSURE RATING FOR PIPES AND JOINTS AND IN ACCORDANCE WITH 30 TAC, SECTION 217.53 (D) (3) (I). WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT.
6. WHERE A NEW POTABLE WATERLINE CROSSES A NEW, PRESSURE RATED WASTEWATER MAIN OR LATERAL, ONE SEGMENT OF THE WATERLINE PIPE SHALL BE CENTERED OVER AND SHALL BE PERPENDICULAR TO THE WASTEWATER LINE SUCH THAT THE JOINTS OF THE WATERLINE PIPE ARE EQUIDISTANT AND AT LEAST NINE FEET HORIZONTALLY FROM THE CENTERLINE OF THE WASTEWATER MAIN OR LATERAL. THE POTABLE WATERLINE SHALL BE AT LEAST SIX INCHES ABOVE THE WASTEWATER MAIN OR LATERAL, WHENEVER POSSIBLE. THE CROSSING SHALL BE CENTERED BETWEEN THE JOINTS OF THE WASTEWATER MAIN OR LATERAL. THE WASTEWATER PIPE SHALL HAVE A MINIMUM PRESSURE RATING OF AT LEAST 150 PSI. THE WASTEWATER MAIN OR LATERAL SHALL BE EMBEDDED IN CEMENT STABILIZED SAND (SEE CLAUSE (V) OF THIS SUBPARAGRAPH) FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END.
7. ELECTRIC LAYOUT IS SHOWN FOR REFERENCE AND COORDINATION PURPOSES ONLY. FOR DETAILED ELECTRICAL DESIGN INFORMATION, REFERENCE ELECTRICAL SITE PLAN DRAWINGS PREPARED BY OTHERS.
8. SEPTIC SYSTEM DESIGNED BY OTHERS AND SHOWN FOR REFERENCE ONLY.
9. CLEANOUTS SHOULD BE INSTALLED EVERY 100 FEET PER PLUMBING CODE.

TRENCH EXCAVATION SAFETY PROTECTION

CONTRACTOR, SUB-CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL/GEOTECHNICAL/SAFETY EQUIPMENT CONSULTANT, SHALL REVIEW THESE PLANS AND GEOTECHNICAL REPORT, THE INSTALLATION SITES WITHIN THE PROJECT AREA IN ORDER TO IMPLEMENT CONTRACTORS TRENCH EXCAVATION SAFETY PROTECTION PLAN, SYSTEMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM OSHA STANDARDS, SPECIFICALLY , CONTRACTOR AND/OR RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PLAN IN ACCORDANCE WITH OSHA REGULATIONS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND/OR AROUND THE EXPOSED TRENCH EXCAVATION.

CAUTION!

CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION, EXCAVATION, CLEARING AND CONSTRUCTION ACTIVITIES NEAR OVERHEAD ELECTRIC LINES. CONTRACTOR SHALL COMPLY WITH ALL SAFETY REGULATIONS WHEN OPERATING NEAR POWER LINES.

DIG TESS

CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION ACTIVITY (ON OR OFFSITE) FOR THE PROJECT.

Hill Country Civil
Engineers ◆ Consultants
Texas Firm #20206
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 817-609-3078 or 210-378-0353
www.hillcountrycivil.com

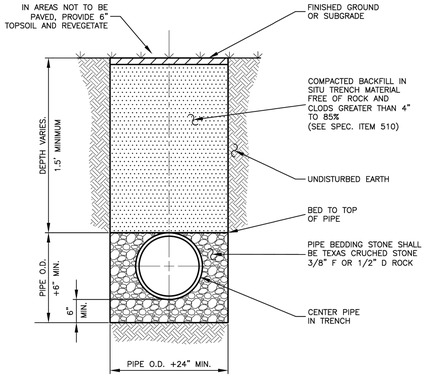
ROSS T CORDER 128401 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:: RTC

OVERALL UTILITY CONNECTION PLAN

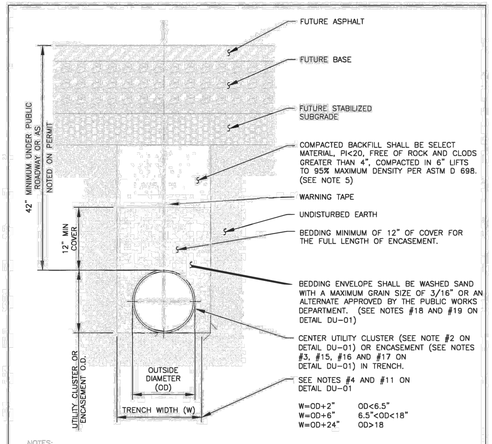
SHEET No.
16
OF 19



NOTE:

ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: DR-02
APPROVED 04-01-10 DATE	STORM SEWER LINE BEDDING DETAIL (NON-PAVED SURFACE)	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		

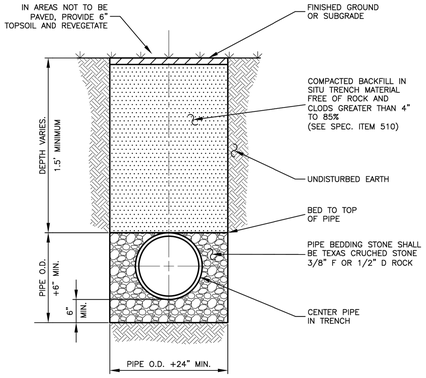


NOTES:

1. THIS DETAIL IS APPLICABLE WHERE FUTURE PAVEMENT IS SCHEDULED TO BE INSTALLED WITHIN TWO YEARS.
2. ALL TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
3. ENCASEMENT MUST EXTEND 10' PAST THE PROPOSED BACK OF CURB.
4. WORK ON INSTALLATION MUST BE COMPLETE THROUGH CLEAN UP BEFORE WORK RELATED TO PAVEMENT INSTALLATION IS SCHEDULED TO START, EXCEPT IN THE CASES THAT THE ROAD CONTRACTOR HAS AGREED TO ROUGH CUT BEFORE UTILITY TRENCHING OR THE SAME CONTRACTOR IS PERFORMING BOTH UTILITY AND ROAD WORK.
5. SPOILS MAY BE USED IF THEY MEET SELECT MATERIAL STANDARDS. THE INSPECTOR MAY STOP BACKFILL OPERATIONS UNTIL THE CONTRACTOR OBTAINS LAB TEST RESULTS IF THERE IS ANY QUESTION OF ACCEPTABILITY.
6. FOR ADDITIONAL GENERAL NOTES, SEE DETAIL DU-01.

SCALE: NTS

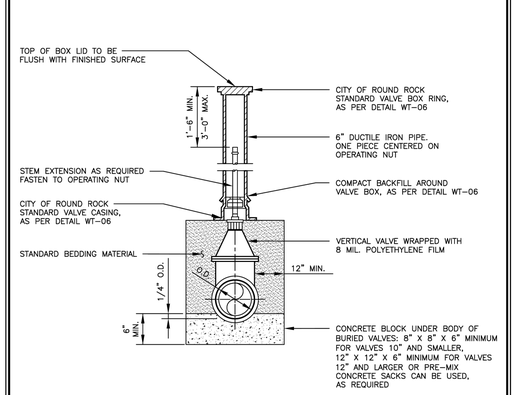
RECORD SIGNED COPY ON FILE	CITY OF ROUND ROCK	DRAWING NO: DU-04 SHEET 1 of 1
APPROVED 01-28-21 DATE	PROPOSED PAVEMENT AREA TRENCH (PPAT) DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		



NOTE:

ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

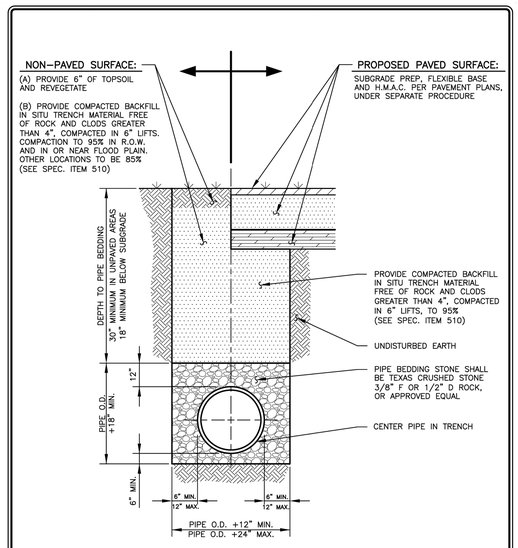
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: DR-02
APPROVED 04-01-10 DATE	STORM SEWER LINE BEDDING DETAIL (NON-PAVED SURFACE)	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



NOTES:

1. ALL VALVES AND VALVE CANS SHALL BE ACCESSIBLE FOR OPERATION ONCE THE NEW WATERLINE IS PUT INTO SERVICE. BURYING LINE VALVES IS PROHIBITED.
2. ALL VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED "V" ON FACE OF CURB.

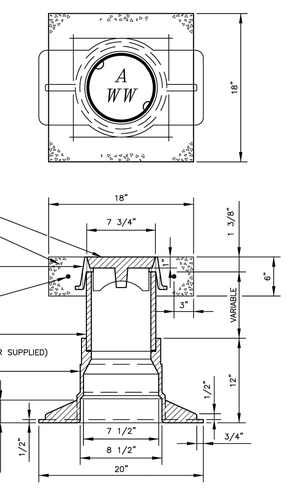
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT-11
APPROVED 03-01-18 DATE	VERTICAL VALVE INSTALLATION DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL. (NOT TO SCALE)		



NOTE:

1. ALL TRENCHING AND TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

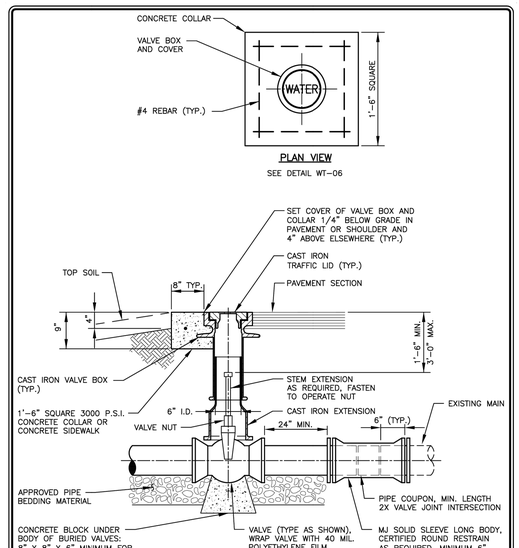
RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT-08
APPROVED 03-01-18 DATE	WATERLINE BEDDING AND SURFACE REPAIR DETAIL (NON-PAVED & PROPOSED PAVED SURFACE)	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)		



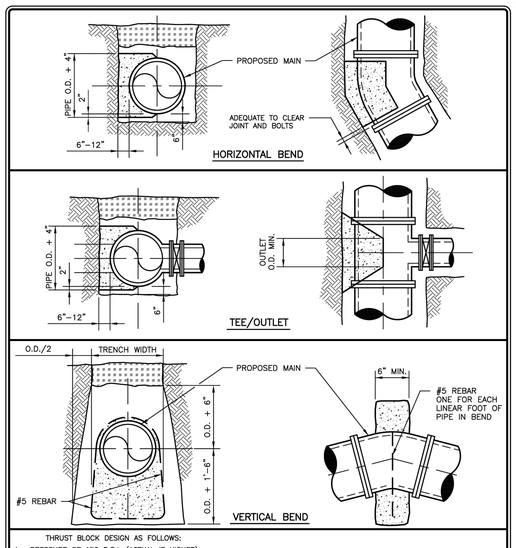
NOTES:

1. NUMBERED CASTINGS STANDARDS SHOWN IN PARENTHESES ARE REFERENCES TO THE CITY OF AUSTIN STANDARDS CRITERIA MANUAL.
2. DELETE CONCRETE AND REBAR WHEN VALVE IS WITHIN PAVED STREET.

RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT-06
APPROVED 03-01-18 DATE	VALVE BOX ASSEMBLY DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)		



RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT-22
APPROVED 03-01-18 DATE	GATE VALVE DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)		



THRUST BLOCK DESIGN AS FOLLOWS:

A. PRESSURE OF 150 P.S.I. (ACTUAL IF HIGHER) + 50% SURGE ALLOWANCE
B. MAXIMUM SOIL BEARING:
C. ALL PIPE & FITTING TO BE WRAPPED WITH 40 PLASTIC MIL.

SOIL TYPE	PRESSURE
LIMESTONE	4000 LBS./SQ. FT.
UNDISTURBED SOIL, CALICHE	2000 LBS./SQ. FT.
LOOSE OR SPONGY SOIL	1500 LBS./SQ. FT.

RECORD SIGNED COPY ON FILE AT U&ES DEPARTMENT	CITY OF ROUND ROCK	DRAWING NO: WT-25
APPROVED 03-01-18 DATE	THRUST BLOCK DETAIL	
THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)		

Hill Country Civil
Engineers ★ Consultants
Texas Registered Firm F-20201
591 Landa Street, Ste. 2204, New Braunfels, TX 78130
Phone 817-609-5078 or 210-378-0353
www.hillcountrycivil.com

ROSS T CORDER 125401 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
10/30/2025

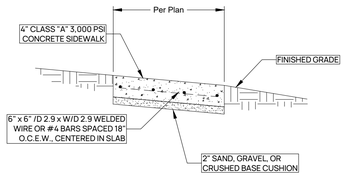
No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

DRAWN BY:: RTC
HCC JOB No.:041-06

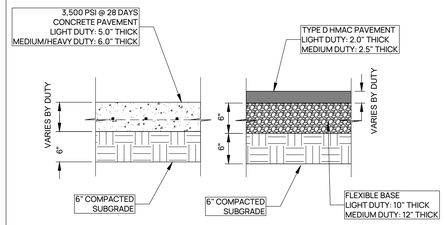
UTILITY DETAILS

SHEET No.
17
OF 19



SIDEWALK (TYP)

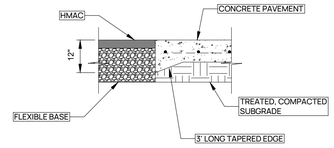
NTS



PAVEMENT SECTIONS SHOWN FOR REFERENCE. REFER TO SITE GEOTECHNICAL REPORT FOR PAVEMENT SPECIFICATIONS AND DETAILS.

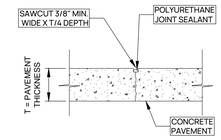
PAVEMENT SECTIONS

NTS



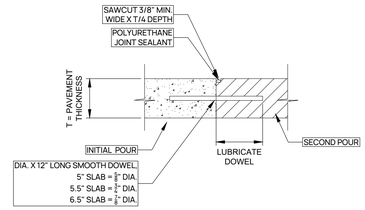
CONCRETE / ASPHALT JUNCTURE

NTS



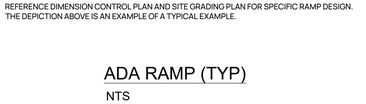
CONTROL JOINT DETAIL

NTS



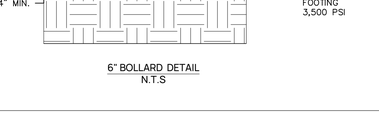
CONSTRUCTION JOINT DETAIL

NTS



STANDARD 6" CURB - CONCRETE PAVEMENT

NTS



STANDARD 6" CURB - ASPHALT PAVEMENT

NTS

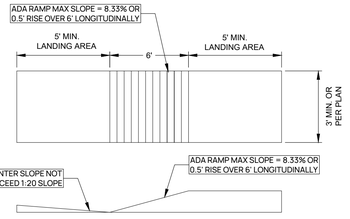
WHEELSTOP (TYP)

NTS

CURB OPENING (TYP)

NTS

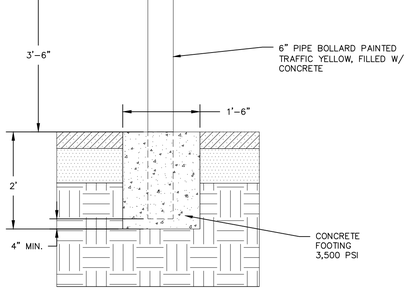
DEEP CURB
N.T.S



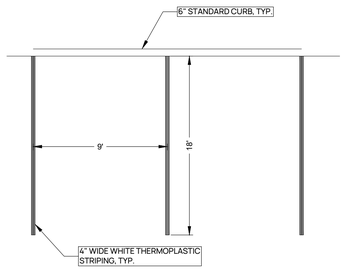
1. RAMPS SHALL BE IN ACCORDANCE WITH TAS STANDARDS, NOT TO EXCEED 1:12 SLOPE. WHEN RAMP RUNS EXCEED 0.5' OVER 6', HANDRAILS WILL BE REQUIRED. CROSS SLOPE ON RAMPS NOT TO EXCEED 2% SLOPE.
2. MAXIMUM SLOPE IN ANY DIRECTION AT LANDING AREAS NOT TO EXCEED 2% SLOPE.
3. ALL LANDINGS, RAMPS, PARKING, LOADING AREAS AND SIGNAGE SHALL BE COMPLIANT WITH TEXAS ACCESSIBILITY STANDARDS PER TAS STANDARDS SECTION 4.6.4.
4. REFERENCE DIMENSION CONTROL PLAN AND SITE GRADING PLAN FOR SPECIFIC RAMP DESIGN. THE DEPICTION ABOVE IS AN EXAMPLE OF A TYPICAL EXAMPLE.

ADA RAMP (TYP)

NTS

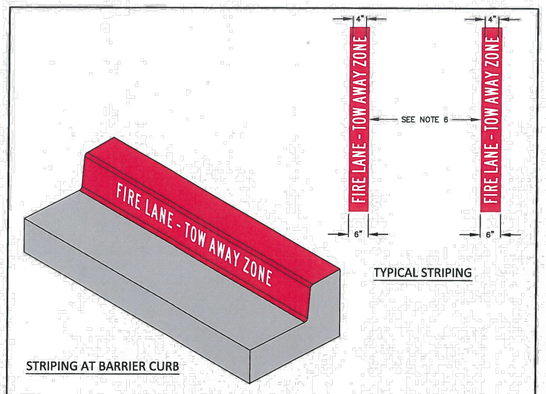


6" BOLLARD DETAIL
N.T.S



PARKING SPACE STRIPING (TYP)

NTS



TYPICAL STRIPING

STRIPING AT BARRIER CURB

NOTES:

1. ALL FIRE LANE STRIPING SHALL COMPLY WITH THE CURRENT INTERNATIONAL FIRE CODE, AS ADOPTED BY THE CITY OF LEANDER, AND CITY OF LEANDER CODE OF ORDINANCES.
2. FIRE LANES SHALL BE CONTINUOUSLY MARKED BY RED TRAFFIC PAINT THAT IS MINIMUM SIX INCHES (6") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE.
3. "FIRE LANE - TOW AWAY ZONE" SHALL APPEAR IN FOUR INCH (4") TYPE D WHITE BLOCK LETTERS AT TWENTY-FIVE FOOT (25') INTERVALS, OR LESS, ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANE.
4. WHERE A 6" BARRIER CURB EXISTS, THE FIRE LANE STRIPING SHALL BE ON BOTH THE VERTICAL FACE OF THE CURB AND TOP OF CURB. "FIRE LANE - TOW AWAY ZONE" SHALL BE MARKED IN 4" WHITE BLOCK LETTERS ON FACE OF CURB ONLY.
5. WHERE A FIRE LANE IS ADJACENT TO PARKING SPACES THE FIRE LANE STRIPING SHALL BE AN 8" RED STRIPE PAINTED ON THE DRIVE SURFACE WITH 4" WHITE LETTERS STATING "FIRE LANE NO PARKING TOW-AWAY ZONE." FIRE LANE STRIPING SHALL EXTEND BEHIND ALL PARKING SPACES.
6. WHERE A FIRE HYDRANT, FIRE DEPARTMENT CONNECTION, OR OTHER FIRE PROTECTION EQUIPMENT IS LOCATED ON A FIRE LANE, THE FIRE LANE SHALL BE A MINIMUM OF TWENTY-SIX FEET (26') IN WIDTH, EXCLUSIVE OF SHOULDERS.

*THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. DRAWING NOT TO SCALE.

STATE OF TEXAS · MICHAEL LAFFERTY · 118708 · LICENSED · PROFESSIONAL ENGINEER
2017-04-28
FIRE MARSHAL

City Of Leander, Texas
DETAIL #501-2
FIRE LANE STRIPING

Hill Country Civil
Engineers ◆ Consultants
Texas Registered Firm F-20213
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-669-5078 or 210-378-5053
www.hillcountrycivil.com

STATE OF TEXAS · ROSS T. CORDER · 125401 · LICENSED · PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions	App.

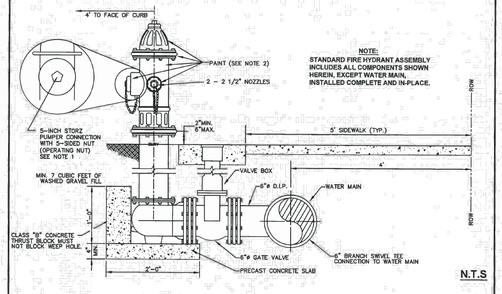
LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:: RTC

SITE DETAILS
(1 OF 2)

SHEET No.
18
OF 19

 30 OCTOBER 2025

FIRE HYDRANTS LACKING INTEGRAL STORZ CONNECTOR SHALL BE REJECTED (NO STORZ ADAPTERS ALLOWED)



N.T.S

NOTES:

1. FIRE HYDRANT SHALL BE CLOW MEDALLION F2545, AMERICAN DARLING B-84-B-5, MUELLER SUPER CENTURION, EJ 5CD250 WATERMASTER, KENNEDY K81D GUARDIAN, AVK 2780, OR APPROVED EQUAL VIA SUBMITTAL PROCESS. THE PRIMARY FEATURES REQUIRED INCLUDE: FACTORY INSTALLED INTEGRAL 5-INCH STORZ PUMPER NOZZLE; 1.5-INCH PENT OPERATING NUT ON NOZZLE CAP; OPEN LEFT; FACTORY PAINTED.
2. HYDRANTS SHALL BE FACTORY PAINTED WITH FLYNT ALUMINUM SILVER PAINT OR SHERWIN WILLIAMS SILVER B59S11. HYDRANTS WILL NOT BE ACCEPTED IF PAINTED AFTER DELIVERY OR IF PAINT IS FLAT IN APPEARANCE.
3. ALL DUCTILE OR CAST IRON FITTINGS AND/OR PIPE SHALL BE POLYWRAPPED.
4. ALL HYDRANTS SHALL BE EQUIPPED WITH A BREAKAWAY FLANGE. ALL FITTINGS SHALL BE EQUIPPED WITH JOINT RESTRAINT "MEGALUG" OR APPROVED EQUAL. ALL ANCHOR FITTING TO BE CONCRETE THRUST BLOCKED.
5. BLUE, BI-DIRECTIONAL REFLECTIVE PAVEMENT MARKER, ULTIMATE WET NIGHT VISIBILITY SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION AT THE CORRESPONDING ROADWAY STATION OFFSET 6" (SIX INCHES) FROM CENTER OF STREET TO THE SIDE HYDRANT IS LOCATED. AT INTERSECTIONS, MARKERS SHALL BE PLACED ON BOTH ROADWAYS ADJACENT TO HYDRANT.

LOCATION:

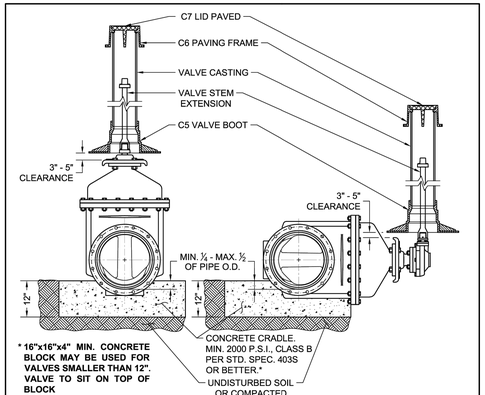
6. SET F.H. ON LOT LINE (EXTENDED WHEN POSSIBLE)
7. F.H. LOCATED AT STREET INTERSECTIONS SHALL BE PLACED A MINIMUM OF TEN FEET (10') FROM RADIUS TANGENT POINT.
8. NO OBSTRUCTIONS SHALL BE PERMITTED WITHIN THREE FEET (3') IN ALL DIRECTIONS FROM F.H.
9. 5-INCH STORZ PUMPER NOZZLE SHALL FACE THE FIRE LANE OR TRAVEL WAY UNLESS OTHERWISE NOTED.

STATE OF TEXAS · WAYNE S. WATTS · 86134 · LICENSED PROFESSIONAL ENGINEER

02/05/19

City Of Leander, Texas

DETAIL #101-4
STANDARD FIRE HYDRANT ASSEMBLY



*** 16"x16"x4" MIN. CONCRETE BLOCK MAY BE USED FOR VALVES SMALLER THAN 12". VALVE TO SIT ON TOP OF BLOCK**

VERTICAL VALVE

HORIZONTAL VALVE

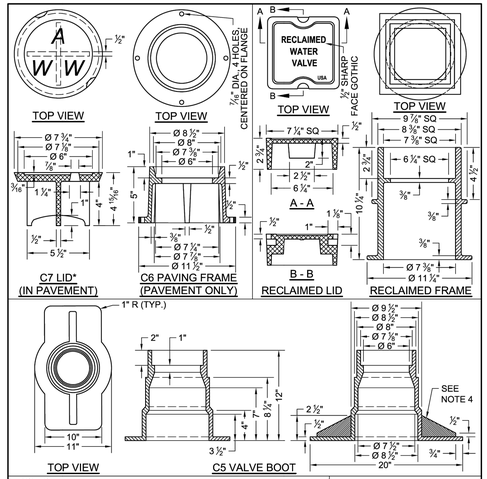
ONLY TO BE USED WHEN CALLED OUT ON THE DRAWINGS.

NOTES:

1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, [SCH. 80 FOR LENGTHS OVER 10'.]
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE **"RECLAIMED WATER"** CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 1 OF 4



NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:

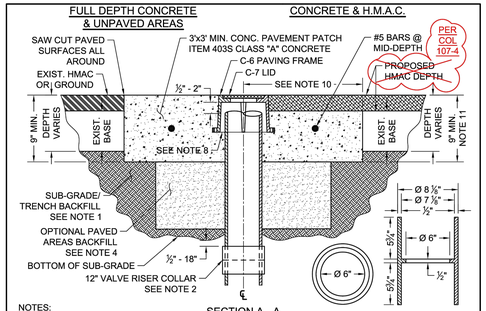
C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE 1 ½" 2 PICK BAR SLOTS REQUIRED

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 2 OF 4

FULL DEPTH CONCRETE & UNPAVED AREAS

CONCRETE & H.M.A.C.



NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18" BELOW SUB-GRADE. THE INSIDE "LIP" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE: FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE; NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

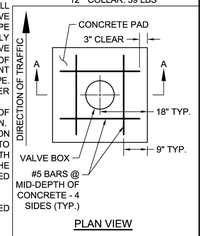
SECTION A - A

TOP VIEW

COLLAR *

12" VALVE RISER COLLAR

* 12" COLLAR: 39 LBS

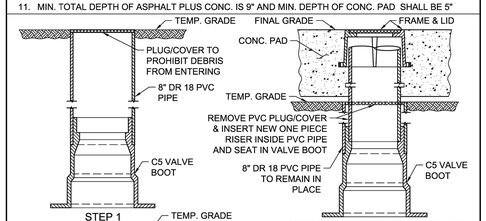


PLAN VIEW

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 3 OF 4

NOTES (CON'T):

8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT REST ON RISER.)
9. IN UNPAVED AREAS, INSTALL ONE DELINEATOR STAKE IMMEDIATELY ADJACENT TO THE EDGE OF THE CONCRETE PAD. DELINEATOR SHALL BE BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER AND SHALL EXTEND AT LEAST 60" ABOVE GROUND. DELINEATORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES.
10. VALVE SHALL TYPICALLY BE CENTERED IN CONCRETE DIAMOND BUT MAY BE OFFSET WITH A MIN. OF 12" FROM CENTER OF VALVE LID TO EDGE OF CONCRETE IN ALL DIRECTIONS.
11. MIN. TOTAL DEPTH OF ASPHALT PLUS CONC. IS 9" AND MIN. DEPTH OF CONC. PAD SHALL BE 5"



OPTIONAL ONE PIECE VALVE CASTING INSTALLATION

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L FLOWERS *05/18/2016* ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 4 OF 4

Hill Country Civil
Engineers ◆ Consultants
Texas Firm No. 19310
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-935-5078 or 210-378-0353
www.hillcountrycivil.com

ROSS T CORDER · STATE OF TEXAS · 128401 · LICENSED PROFESSIONAL ENGINEER

10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

HCC JOB No. 041-06 DRAWN BY:.. RTC

SITE DETAILS
(2 OF 2)

SHEET No.
19
OF 19

Hill Country Civil
Engineers • Consultants

Attachment N-Inspection, Maintenance, Repair, and Retrofit Plan

Attachment N: Inspection, Maintenance, Repair, Retrofit Plan

Batch Detention Pond:

Batch detention basins may have somewhat higher maintenance requirements than an extended detention basin since they are active stormwater controls. The maintenance activities are identical to those of extended detention basins with the addition of maintenance and inspection of the automatic controller and the valve at the outlet.

Inspection and Maintenance/Repair:

Inspections should take place a minimum of twice a year. Once 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 outlet as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately.

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.

Debris and Litter 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.

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.

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 residential 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:

With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. These repairs should include patching of cracked concrete, sealing of voids, and removal of vegetation from cracks and joints. The various inlet/outlet and riser works 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 circuity 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.

Detention Pond/BMP Records

☐ Inspection Date: _____

Type of Inspection: _____

Comments: _____

_____

_____

_____

Signature: _____ (Inspector)

☐ Maintenance Date: _____

Work Performed: _____

Comments: _____

_____

_____

_____

Signature: _____ (Maintenance Personnel)

☐ Other Date: _____

Comments: _____

_____

_____

_____

_____

_____

Signature: _____ (Title:) _____

Responsibility of Maintenance

I John Muhich,
Print Name

President
Title – Owner/President/Other

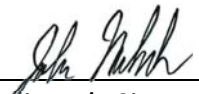
JMA Entity LLC
Corporation/Partnership/Entity Name

Agree to assume the responsibility of maintaining the permanent BMPs constructed as part of the Pecan Park Bulverde development in accordance with the rules and regulations of the Texas Commission on Environmental Quality (TCEQ).

I also understand that:

1. I am 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.

2. 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.



10/24/2025

Applicant's Signature Date
Contact Person: John Muhich
Entity: President
Mailing Address: 4203 Spinnaker Cv., Austin TX 78731
Email: johnsmuhich@gmail.com

Attachment O-Pilot-Scale Field Testing Plan
N/A

Hill Country Civil
Engineers • Consultants

Attachment P-Measures for Minimizing Surface Stream Contamination

Attachment P: Measures for Minimizing Surface Stream Contamination

Upon approval of this plan, the Batch Detention Pond, traditionally designed, will be constructed before the proposed Len Bar Business Park starts. Therefore, any storm water run off leaving the site will be treated per TCEQ RG-348, and no surface steam contamination is anticipated.

Hill Country Civil
Engineers • Consultants

Temporary Stormwater Section

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

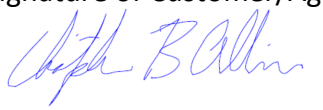
Signature

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

Print Name of Customer/Agent: Christopher B. Allison

Date: 10/30/25

Signature of Customer/Agent:



Regulated Entity Name: Len Bar Business Park

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: South Fork San Gabriel River

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

    [X] N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

Attachment A – Spill Response

Attachment A: Spill Response Actions

Contractors working onsite with materials which could potentially cause pollution shall implement the following measures to prevent stormwater pollution.

Education of Employees or Subcontractors Who Handle Materials Which Can Cause Pollution

- Employees should know what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when a spill must be reported to the TCEQ. Information is available in 30 TAC 327.4 and 40 CFR 302.4.
- Educate employees and subcontractors on the potential dangers to humans and the environment from spills and leaks and provide training in spill prevention and cleanup. Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
- Establish a continuing education program to indoctrinate new employees, who will use or handle potential pollutants.
- Provide for a superintendent or representative to oversee and enforce proper spill prevention and control measures.

General Measures

- To the extent that work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR part 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- Store hazardous materials and waste in covered containers and protect from vandalism.
- Place spill cleanup materials where it will be readily accessible.
- Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean-up activities.
- Do not bury spills onsite.
- Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP"s.
- Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
- Contain contaminated water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
- Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment

structures, covers, and liners should be repaired or replaced as needed to maintain proper function

Cleanup

- Clean up leaks and spills immediately, or as soon as it is safely practical.
- Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
- Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills

- Minor spills such as small quantities of oil, gasoline, paint, etc, should be controlled by the first responder at the discovery of the spill.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Absorbent materials should be promptly removed and disposed of properly.
- Follow the practice below for a minor spill:
    - Contain the spread of the spill.
    - Recover spilled materials.
    - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

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

Spills should be cleaned up immediately, or as soon as safely practical

- Contain spread of the spill.
- Notify the project foreman immediately.
- If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling absorbent materials and do not let the spill spread widely.
- If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
- If the spill occurs during rain, cover spill with tarps or other materials to prevent contaminating runoff.

Significant/Hazardous Spills

- Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
- For spills of federal reportable quantities, in conformance with the requirements in 40CFR parts 110, 119 and 302, the contractor should notify the National Response Center at (800) 424-8802.
- Notification should first be made by telephone and followed up with a written report. The services of a spill contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staff have arrived at the job site.
- Other agencies which may need to be contacted include, but are not limited to, City, Police Department, County Sheriff Office, Fire Departments, etc.

Vehicle and Equipment Maintenance

- If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
- Regularly inspect onsite vehicles and equipment for leaks and repair immediately. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles onsite.
- Always use secondary containment, such as drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- Place drip pans or absorbent materials under paving equipment when not in use.
- Use absorbent materials on small spills rather than hosing down or burying the spill.
- Remove the absorbent materials promptly and dispose of properly.
- Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil recycled. As the oil supplier or recycler about recycling oil filters.
- Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat as if it cracked. Put into the containment area until you are sure it is not leaking.
- If fueling must occur on site, used designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
- Discourage "topping off" on fuel tanks.
- Always use secondary containment, such as drain pan, when fueling to catch spill/leaks.

Hill Country Civil
Engineers • Consultants

Attachment B – Potential Source of Contamination

Attachment B: Potential Sources of Contamination

Asphalt products used on this project

- Preventative measures
    - After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of forecasted rain.

Oil, grease fuel and hydrocarbon fluid contamination from construction equipment and vehicle drippings.

- Preventative measures
    - Vehicle maintenance, when possible, will be performed within the construction staging area.
    - Construction vehicles and equipment shall be checked regularly for leaks and repaired immediately.

Accidental leaks or spills of oil, petroleum products and substances listed under 40 CFR parts 110, 117, and 302 used or stored temporarily on site.

- Preventative measures
    - Contractor to incorporate regular safety meetings, a discussion of spill prevention and appropriate disposal procedures.
    - Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures.
    - Hazardous material and waste shall be stored in covered containers and protected from vandalism.
    - A stockpile of spill cleanup materials shall be stored on site where it will be readily available.

Miscellaneous trash and litter from construction workers and material wrappings.

- Preventative measures
    - Trash containers will be placed throughout the site to encourage proper trash disposal.

Construction Debris

- Preventative measures
    - Construction debris will be monitored daily by the site contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case-by-case basis.

Spills/Overflow of waste from portable toilets

- Preventative measures
    - Portable toilets will be placed away from high traffic vehicular areas and storm drain inlets.
    - Portable toilets will be placed on a level ground surface.
    - Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.

Hill Country Civil
Engineers • Consultants

Attachment C – Sequence of Major Activities

Attachment C: Sequence of Major Construction Activities

The sequence of major construction activities that will disturb earth/soil of the proposed site will be completed in two stages. Initially, the limits of construction of the site will cleared and grubbed of existing vegetation and demolish of a portion of the existing driveway prepare for the proposed site plan. This stage will include installation of temporary erosion controls as outlined on the Erosion Control Plan. The second stage will include the construction of buildings, parking, drives, utilities, landscaping, and site cleanup. Once the site is fully stabilized with vegetation back in place, the temporary erosion controls may be removed. Both stages will disturb approximately 5.74 acres of land.

Hill Country Civil
Engineers • Consultants

Attachment D – Temporary Best Management Practices and Measures

Attachment D: Temporary Best Management Practices and Measures

7a A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

There are no upgradient flows therefore, there are no proposed BMPs are planned specifically for upgradient flows. The proposed existing offsite batch detention pond was sized to treat all onsite flows and impervious cover.

7b A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off-site, including pollution caused by contaminated stormwater runoff from the site.

Site preparations will disturb the largest amount of soil. Therefore, before any of this work can begin, the clearing and grading contractor will be responsible for the installation of all on-site control measures. The methodology for pollution prevention of on-site stormwater will include:

- Erection of silt fence along downgradient boundary of construction activities for temporary erosion and sedimentation controls.
- Installation of stabilized construction entrance/exits to reduce the dispersion of sediment from the site.
- Installation of concrete truck washout.
- Installation of rock berm.
- Installation of construction staging areas.

7c A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.

Temporary measures are intended to provide a method of controlling and slowing the flow of runoff from the construction site. By utilizing silt fence staged down gradient and along flow paths, will allow sediment and suspended solids to settle out of stormwater flows and be captured onsite. By containing the sediment and suspended solids within the site, they will not enter the aquifer, surface streams and/or sensitive features that may exist downstream of the site.

7d A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction

BMP measures utilized in this plan are intended to allow stormwater to continue downstream after passing through the BMPs. The BMPs are providing settlement of suspended solids and containment onsite, but stormwater flows will continue on their natural drainage path. Features discovered during construction will be reported and assessed in accordance with applicable regulations.

Hill Country Civil
Engineers • Consultants

Attachment E – Request to Temporarily Seal A Feature
N/A

Attachment F – Structural Practices

Attachment F: Structural Practices

The structural practices listed below are shown on the Erosion Control Plans and are listed on Attachment D of the Temporary Controls Section of the CZP.

- A stabilized construction entrance with washout pit will be constructed at all locations where vehicular traffic enters and leaves the site. This will reduce sediments which leave the site and are tracked or fall onto adjacent roadways. Currently there are one proposed stabilized construction entrance locations.

- A concrete truck washout will be located next to the stabilized construction entrance to prevent pollutants to stormwater from concrete waste.

- Silt fencing will be installed adjacent to any drainage way which receives sheet flow from upgradient-disturbed areas and along the side slope perimeter of disturbed areas.

- Rock Berm will be installed at the stormwater discharge locations to protect the outfalls and to reduce point discharge.

Attachment G – Drainage Area Map

LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- OHE — EXIST OVERHEAD UTILITY
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- TOC — TIME OF CONCENTRATION
- DRAINAGE AREA BOUNDARY
- DA # / ACRES — DRAINAGE AREA LABEL
- EXIST TREE

Hill Country Civil
Engineers ◆ Consultants
Texas Registered Firm F-20281
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 877-659-3078 or 210-378-0353
www.hillcountry.pro/civil.com

STATE OF TEXAS
ROSS T. CORDER
125401
LICENSED
PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions
		App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06
DRAWN BY:: RTC

EXISTING DRAINAGE AREA MAP

SHEET No.
13
OF 19

LEGEND

- IRF — IRON ROD FOUND (SIZE NOTED)
- CONTROL POINT
- BENCHMARK
- EXIST WATER METER
- EXIST POWER POLE
- EXIST SIGN
- EXIST MAILBOX
- EXIST GUY ANCHOR
- PROPERTY LINE
- ADJOINER LINE
- EXIST CHAINLINK FENCE
- EXIST BARBED WIRE FENCE
- EXIST EDGE OF PAVEMENT
- EXIST EASEMENT
- BUILDING SETBACK LINE (BSL)
- OHE — EXIST OVERHEAD UTILITY
- 910 — EXIST MAJOR CONTOUR
- 911 — EXIST MINOR CONTOUR
- 860 — PROP MAJOR CONTOUR
- 861 — PROP MINOR CONTOUR
- TOC — TIME OF CONCENTRATION
- DRAINAGE AREA BOUNDARY
- DA # / ACRES — DRAINAGE AREA LABEL
- EXIST TREE

Hill Country Civil
Engineers ◆ Consultants
Texas Firm Registration # 20281
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 817-609-3078 or 210-378-9353
www.hillcountrycivil.com

ROSS T. CORDER — STATE OF TEXAS — 128401 — LICENSED PROFESSIONAL ENGINEER
10/30/2025

No.	Date	Revisions

App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX

HCC JOB No.:041-06 DRAWN BY:.. RTC

PROPOSED DRAINAGE AREA MAP

SHEET No.
14
OF 19

TIME OF CONCENTRATION

Drainage Area Name: ODA 1
Proposed Time of Concentration (min): 13.6 **Lag Time** 8.2
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	935.00	932.50	0.240		N/A	N/A	0.025	11.8	11.8
2	Shall. Conc.	301.0	932.50	916.00			N/A	N/A	0.055	1.3	13.1
3	Channel or Sewer	151.0	916.00	911.60	0.035	4.58	8.00	4.00	0.029	0.5	13.6

Drainage Area Name: EDA 1
Proposed Time of Concentration (min): 11.3 **Lag Time** 6.8
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	922.20	918.20	0.240		N/A	N/A	0.040	9.7	9.7
2	Shall. Conc.	303.0	918.20	905.20			N/A	N/A	0.043	1.5	11.3
3	Channel or Sewer	0.0	0.00	0.00		0.00	N/A	N/A	0.000	0.0	11.3

Drainage Area Name: EDA 2
Proposed Time of Concentration (min): 10.9 **Lag Time** 6.5
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	920.70	915.80	0.240		N/A	N/A	0.049	9.0	9.0
2	Shall. Conc.	431.0	915.80	891.20			N/A	N/A	0.057	1.9	10.9
3	Channel or Sewer	0.0	891.20	0.00		0.00	N/A	N/A	0.000	0.0	10.9

Drainage Area Name: EDA 3
Proposed Time of Concentration (min): 10.9 **Lag Time** 6.5
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	913.40	909.90	0.240		N/A	N/A	0.035	10.3	10.3
2	Shall. Conc.	190.0	909.90	889.80			N/A	N/A	0.106	0.6	10.9
3	Channel or Sewer	0.0	0.00	0.00		0.00	N/A	N/A	0.000	0.0	10.9

Drainage Area Name: PDA 1
Proposed Time of Concentration (min): 11.6 **Lag Time** 6.9
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	922.20	918.30	0.240		N/A	N/A	0.039	9.8	9.8
2	Shall. Conc.	330.0	918.30	905.20			N/A	N/A	0.040	1.7	11.6
3	Channel or Sewer	0.0	0.00	0.00		6.000	N/A	N/A	0.000	0.0	11.6

Drainage Area Name: PDA 2
Proposed Time of Concentration (min): 14.2 **Lag Time** 8.5
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	920.70	918.50	0.240		N/A	N/A	0.022	12.4	12.4
2	Shall. Conc.	61.0	918.50	914.30			N/A	N/A	0.069	0.2	12.6
3	Channel or Sewer	747.0	914.30	892.00	0.020	8.11	8.00	4.00	0.030	1.5	14.2

Drainage Area Name: PDA 3
Proposed Time of Concentration (min): 11.2 **Lag Time** 6.7
**Minimum Initial T_c (min):* 5

Segment	Condition	Length (ft)	Elevation (ft) Start	Elevation (ft) End	Mannings n	Velocity (ft/s)	Wetted Perimeter (ft)	XS Area (sq. ft.)	Slope (ft/ft)	Incremental Time of Travel (min)	Cumulative Time of Travel (min)*
1	Sheet	100.0	913.40	910.10	0.240		N/A	N/A	0.033	10.5	10.5
2	Shall. Conc.	200.0	910.10	889.80			N/A	N/A	0.102	0.6	11.2
3	Channel or Sewer	0.0	0.00	0.00		6.000	N/A	N/A	0.000	0.0	11.2

COMPOSITE CURVE NUMBER

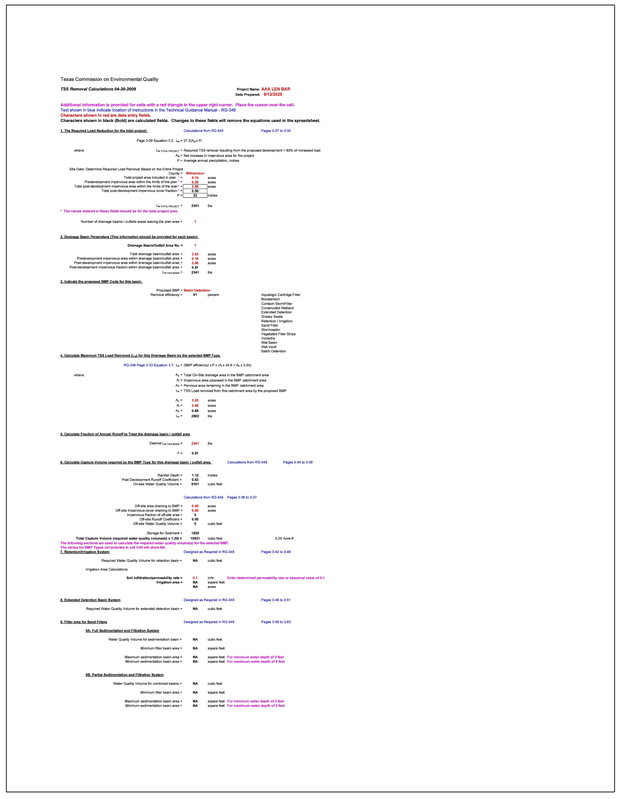
	Composite CN							
	CN Number	ODA 1	EDA 1	EDA 2	EDA 3	PDA 1	PDA 2	PDA 3
Open Space	80	1.35	1.16	2.60	0.41	0.51	0.68	0.26
Streets	98	0.00	0.01	0.16	0.03	0.02	2.85	0.03
Total Acreage		1.35	1.17	2.76	0.44	0.53	3.53	0.29
Composity CN Value		80	80	81	81	81	95	82

RUNOFF SUMMARY TABLE

Rainfall Runoff - Summary - City of Austin				
	Flow (cfs)			
Analysis Point	2 yr	10 yr	25 yr	100 yr
ODA 1	3.4	6.4	8.5	12.0
EDA 1	3.3	6.2	8.2	11.6
EDA 2	7.7	14.3	18.9	26.4
EDA 3	1.3	2.5	3.3	4.6
PDA 1	1.5	2.8	3.7	5.2
PDA 2	13.9	21.6	26.8	35.5
PDA 2 W/ POND	4.6	11.3	16.0	23.3
PDA 3	0.9	1.6	2.1	3.0

Rainfall Runoff - Summary - City of Austin				
	Flow (cfs)			
Analysis Point	2 yr	10 yr	25 yr	100 yr
EXISTING AP 1	3.3	6.2	8.2	11.6
PROPOSED AP 1	1.5	2.8	3.7	5.2
EXISTING AP 2	7.7	14.3	18.9	26.4
PROPOSED AP 2	4.6	11.3	16.0	23.3
EXISTING AP 3	4.7	8.9	11.7	16.5
PROPOSED AP 3	4.2	8.0	10.6	15.0

TCEQ WATER QUALITY CALCULATIONS



Texas Commission on Environmental Quality

TSS Removal Calculations 04-30-2009

Project Name: AAA LEN BAR
Date Prepared: 9/13/2025

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 italics is provided for guidance. Refer to the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

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

Page 3-29 Equation 3.3 $L_M = 27.2(\Delta_N P)$

where

L_M = Required TSS removal resulting from the proposed development = 80% of increased load
Δ_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

	Drainage Basin 1	Watershed
Total project area included in plan *	4.74	acres
Predevelopment impervious area within the limits of the plan *	0.00	acres
Total post-development impervious area within the limits of the plan *	3.87	acres
Total post-development impervious cover fraction *	0.82	
P *	32	inches

L_M = 2341 lbs.

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

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

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

Drainage Basin/Outfall Area No. =	1	
Total drainage basin/outfall area =	3.85	acres
Predevelopment impervious area within drainage basin/outfall area =	0.16	acres
Post-development impervious area within drainage basin/outfall area =	3.26	acres
Post-development impervious fraction within drainage basin/outfall area =	0.85	
L_M =	2341	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention
Removal efficiency = 91 percent

Assumings: Cartridge Filter
Bioretention
Constructed Filter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Wet Pond
Wet Basin
Wet Vault
Batch Detention

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 (1.2 x (Δ_A) + 0.1 x Δ_I)

where

Δ_I = Total On-Site drainage area in the BMP catchment area
Δ_A = Impervious area draining to the BMP catchment area
Δ_P = Pervious area draining to the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

Δ_I = 3.85 acres
Δ_I = 3.26 acres
Δ_P = 0.59 acres
L_R = 2982 lbs

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

Diverted $L_{M\ non-structural}$ = 2341 lbs.

F = 0.81

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

Rainfall Depth =	1.12	inches
Post Development Runoff Coefficient =	0.71	
On-site Water Quality Volume =	9161	cubic feet

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

Off-site area draining to BMP =	0.00	acres
Off-site impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0	
Off-site runoff coefficient =	0.00	
Off-site Water Quality Volume =	0	cubic feet
Storage for Sediment =	1836	
Total Capture Volume (required water quality volume(s)) = 1.25 x	**10021**	cubic feet 0.23 Acre-ft

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
Only the highlighted sections associated to soil infil rate values No.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-48

Required Water Quality Volume for retention basin =	NA	cubic feet

Irrigation Area Calculations

Soil infiltration/permeability rate =	0.1	in/hr Enter determined permeability rate or assumed value of 0.1
Irrigation area =	NA	square feet
	NA	acres

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-48 to 3-51

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

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	NA	cubic feet
Minimum filter basin area =	NA	square feet
Maximum sedimentation basin area =	NA	square feet For minimum water depth of 5 feet
Minimum sedimentation basin area =	NA	square feet For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	NA	cubic feet
Minimum filter basin area =	NA	square feet
Maximum sedimentation basin area =	NA	square feet For minimum water depth of 5 feet
Minimum sedimentation basin area =	NA	square feet For maximum water depth of 8 feet

Hill Country Civil
Engineers ◆ Consultants
Texas Firm Registration # 20123
591 Landa Street, Ste. 200A, New Braunfels, TX 78130
Phone 817-659-5078 or 210-378-0353
www.hillcountrycivil.com

ROSS T CORDER 125401 LICENSED PROFESSIONAL ENGINEER STATE OF TEXAS
10/30/2025

No.	Date	Revisions	App.

LEN BAR BUSINESS PARK
200 Len Bar Lane,
Leander, Williamson County, TX
HCC JOB No.:041-06 DRAWN BY:: RTC

DRAINAGE CALCULATIONS

SHEET No.
15
OF 19

C:\HCCDriveDrive - Hill Country Civil\Projects\041 AAA Storage\06 AAA Len Bar\1 - CAD\2 - Sheets\041-06 PDA.dwg

 30 OCTOBER 2025

Hill Country Civil
Engineers • Consultants

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

N/A

Hill Country Civil
Engineers • Consultants

Attachment I – Inspection and Maintenance for BMPs

Attachment I: Inspection and Maintenance for BMPs

The following list of items outlines and dictates Inspection and Maintenance for BMPs practices. Inspection and maintenance guidelines come from TCEQ RG-348.

In addition to these measures the contractor will be subject to the provisions of the TCEQ General Permit Number TXR 150000 relating to discharges from construction activities.

Temporary Construction Entrance/Exit

1. The entrance should be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repairs and/or cleanout of any measures used to trap sediment.
2. All sediment spilled, dropped, washed, or tracked onto public rights-of-way should be removed immediately by contractor.
3. When necessary, wheels should be cleaned to remove sediment prior to entrance on to public right-of-way.
4. When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin
5. All sediment should be prevented from entering any storm drain, ditch, or water course by using approved methods.

Silt Fence

1. Inspect all fencing weekly, and after any rainfall.
2. Remove sediment when buildup reaches 6 inches.
3. Replace any torn fabric or install a second line of fencing parallel to the torn section.
4. Replace or repair any sections crushed or collapsed during construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot to where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
5. When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

Concrete Washout

1. Concrete washout facilities should be inspected daily and after heavy rains to check for leaks, identify if any plastic linings and sidewalls have been damaged by construction activities, and determine whether they have been filled to over 75 percent capacity. When the washout container is filled to over 75 percent of its capacity, the washwater should be vacuumed off or allowed to evaporate to avoid overflows. Then when the remaining cementitious solids have hardened, they should be removed and recycled. Damage to the container should be repaired promptly. Before heavy rains, the washout container's liquid level should be lowered, or the container should be covered to avoid an overflow during the rain storm.

Rock Berm

1. Rock filter berm should be inspected weekly and after rainfall events, and at least daily during prolonged rain, to identify issues such as silt accumulation, damage to the wire sheath, or rock displacement.

2. Maintenance includes repairing or replacing damaged sheathing, removing silt when it reaches one-third the berms height (or 1 foot, whichever is less) and disposing of it properly, and generally maintain the berm's shape to prevent failure.

Hill Country Civil
Engineers • Consultants

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

Attachment J: Schedule of Interim and Permanent Soil Stabilization Practices

Onsite construction activities shall be conducted in accordance with the Erosion Control Plan for the project which includes the provisions of the TPDES General Permit TXR150000.

Interim on-site stabilization measures will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest duration and maximizing the use of natural vegetation. All disturbed soil will be stabilized as per project specifications in accordance with TCEQ Technical Guidance Manual RG-348 (2005).

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site has temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of the site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is preclude by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Interim Stabilization Measures will include one or more of the following methods.

1. Temporary Vegetation
2. Installation of blankets or matting material
3. Hydraulic Mulch
4. Sod

The interim and permanent stabilization will be installed in accordance with the standard specifications for the county or city having jurisdiction over the project, whichever is more stringent. If the governing entity does not have specifications for these items, the work shall be completed in compliance with the procedures and specifications outlined in the current Technical Guidance Manual published by the TCEQ.

Permanent Stabilization measures will include one or more of the following methods.

1. Permanent Vegetation including landscape planting with trees, shrubs, or ground cover.
2. Installation of blankets or matting material
3. Hydromulch
4. Grass Sodding
5. Rock or concrete riprap

A copy of the Erosion Control Plan is attached.

Hill Country Civil
Engineers • Consultants

Agent Authorization Form

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

I John Muhich,
Print Name

Manager,
Title - Owner/President/Other

of JMA Entity LLC,
Corporation/Partnership/Entity Name

have authorized Blake Allison, P.E.
Print Name of Agent/Engineer

of Hill Country Civil
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:

John Muhich
Applicant's Signature

10/15/2025
Date

THE STATE OF Texas §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared John Muhich 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 15 day of October 2025

NOTARY PUBLIC

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

Hill Country Civil
Engineers • Consultants

Application Fee Form

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Len Bar Business Park

Regulated Entity Location: 200 Len Bar Lane, Leander, TX 78641

Name of Customer: JMA Entity LLC

Contact Person: John Muhich Phone: 512-452-7789

Customer Reference Number (if issued):CN _____

Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ 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	5.74 Acres	$ 5,000
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 10/24/2025

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

Hill Country Civil
Engineers • Consultants

Core Data Form

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

☒ Other **Modification**

2. Customer Reference Number *(if issued)*

CN

Follow this link to search for CN or RN numbers in Central Registry**

3. Regulated Entity Reference Number *(if issued)*

RN

SECTION II: Customer Information

4. General Customer Information

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

☐ New Customer ☒ Update to Customer Information ☒ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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

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

JMA Entity LLC

If new Customer, enter previous Customer below:

7. TX SOS/CPA Filing Number

8. TX State Tax ID (11 digits)

9. Federal Tax ID (9 digits)

85-4269080

10. DUNS Number *(if applicable)*

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees

☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?

☒ **Yes** ☐ **No**

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

☐ Owner ☐ Operator ☒ Owner & Operator ☐ Other:

☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:

4203 Spinnaker Cv.

City	Austin	**State**	TX	**ZIP**	78731	**ZIP + 4**	5130

16. Country Mailing Information *(if outside USA)*

17. E-Mail Address *(if applicable)*

johnsmuhich@gmail.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(512) 452-7789		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

Len Bar Buisness Park

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	200 Len Bar Lane							
	City	Leander	**State**	TX	**ZIP**	78641	**ZIP + 4**	
24. County	Williamson							

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

25. Description to Physical Location:	

26. Nearest City	**State**	**Nearest ZIP Code**

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

27. Latitude (N) In Decimal:	30.605884		**28. Longitude (W) In Decimal:**	-97.841423	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	36	21.1818	-97	50	29.1228

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)
4225		531130	

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

Self-storage with office

34. Mailing Address:	**200 Len Bar Lane**							
	City	**Leander**	**State**	**TX**	**ZIP**	**78641**	**ZIP + 4**	
35. E-Mail Address:	**johnsmuhich@gmail.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 452-7789		( ) -

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

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

SECTION IV: Preparer Information

40. Name:	Christopher B. Allison	**41. Title:**	Civil Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(817 **)** 659-9078		**( )** -	blake@hillcountrycivil.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:	JMA Entity LLC.	**Job Title:**	Manager
Name *(In Print):*	John Muhich	**Phone:**	**(** 512 **)** 452- **7789**
Signature:		**Date:**	1-/15/2025