MODIFICATION OF AN APPROVED CONTRIBUTING ZONE PLAN

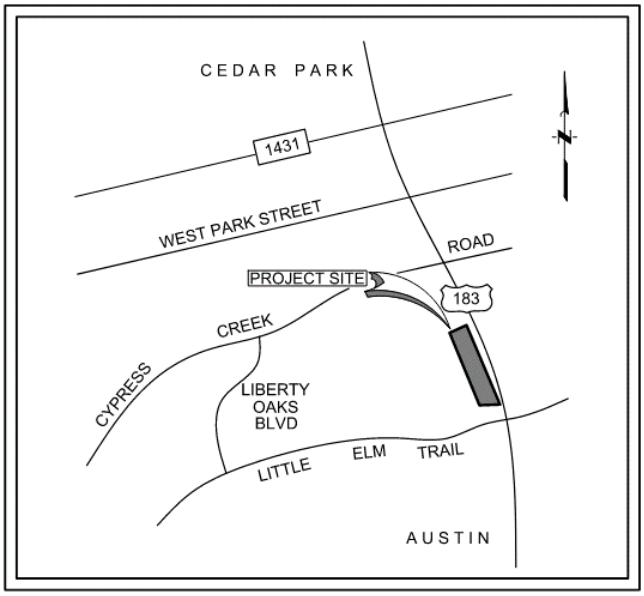
FOR

S BELL BLVD COMMERCIAL

1005 S BELL BLVD

IN

CEDAR PARK, TEXAS



QUIDDITY

3100 Alvin Devane Boulevard, Suite 150
Austin, Texas 78741
Tel: 512.441.9493
Fax: 512.445.2286

NOVEMBER 2023

Modification of a Previously Approved Contributing Zone Plan Checklist

X **Edwards Aquifer Application Cover Page (TCEQ-20705)**

X **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
Attachment D - Title Survey

X **Contributing Zone Plan Application (TCEQ-10257)**

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

-OR-

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

– **Copy of Notice of Intent (NOI)** Total acres disturbed is less than 5 acres

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

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

– **Check Payable to the "Texas Commission on Environmental Quality"**

X **Core Data Form (TCEQ-10400)**

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

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

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

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: S Bell Blvd Commercial						**2. Regulated Entity No.:**			
3. Customer Name: BELL SOUTH COMMERCIAL 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):**			4.12 (Modified)
9. Application Fee:	$4,000		**10. Permanent BMP(s):**			Sedimentation & Filtration/Detention Pond			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Williamson		**14. Watershed:**			Turkey Creek-Brushy Creek			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	X
Region (1 req.)	__	__	X
County(ies)	__	__	X
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin X Cedar Park __Florence __Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Joshua V. Elledge Print Name of Customer/Authorized Agent
5/13/2024 Signature of Customer/Authorized Agent Date

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

MODIFICATION OF A PREVIOUSLY APPROVED CONTRIBUTING ZONE PLAN FORM (TCEQ-10259)

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: Joshua V. Elledge

Signature of Customer/Agent:

Regulated Entity Name: S Bell Blvd. Commercial

Project Information

1. Current Regulated Entity Name: S Bell Blvd. Commercial
   Original Regulated Entity Name: Cypress Corner Subdivision
   Assigned Regulated Entity Number(s) (RN): RN106424989
   Edwards Aquifer Protection Program ID Number(s): 11-12060101
   ☐ 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):

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

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

CZP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	Site Area - 55.87 acres	-
Type of Development	Commercial	Commercial
Number of Residential Lots	N/A	N/A
Impervious Cover (acres)	29.98	-
Impervious Cover (%)	53.7%	-
Permanent BMPs	Sed/Fil Pond	Sed/Fil Pond (Utilize Existing)
Other		

AST Modification Summary	***Approved Project***	***Proposed Modification***
Number of ASTs	0	0
Other	N/A	N/A

UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs	0	0
Other	N/A	N/A

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

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

6. [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.
   - [ ] 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.
   - [X] 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.

Mod Attachment A: Original Approval Letter and Approved Modification Letters

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 28, 2012

Mr. William Pohl
Pohl Partners, Inc.
10800 Pecan Park Boulevard, Suite 240
Austin, Texas 78750

Re: Edwards Aquifer, Williamson County
NAME OF PROJECT: Cypress Corner Subdivision; Located US 183 and Cypress Creek Road; Cedar Park, Texas
TYPE OF PLAN: Request for Approval of a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer; Edwards Aquifer Protection Program ID No. 11-12060101

Dear Mr. Pohl:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the CZP application for the above-referenced project submitted to the Austin Regional Office by Robert L. Koster Consulting Engineer on behalf of Pohl Partners, Inc. on June 1, 2012. Final review of the CZP was completed after additional materials were received on August 8, 2012. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas licensed professional engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas licensed professional engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in 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 Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) 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 requested.*

PROJECT DESCRIPTION

This is the first phase for Cypress Corner subdivision to initiate clearing, begin Alexis Drive, and provide utility and water quality improvements. The proposed non-residential site is located on the Edwards Aquifer Contributing Zone. The proposed project will disturb an area of approximately 4.1 acres and runoff will be directed to newly constructed WQPs. Outflows are into the Brushy Creek watershed. According to

the applicant, the site will convey wastewater to the Cedar Park WWTP reclamation facility.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, a large and a small sedimentation and filtration basin designed using the TCEQ technical guidance document, 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 BMP is 26,095 pounds of TSS generated from a future planned 29.7 acres of impervious cover on 55.9 acres. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project. The small BMP treats the 400 foot entry section of Alexis Drive.

Engineering calculations and plans sealed by Robert Koster, P.E., demonstrate the BMPs are sized appropriately and can accommodate the created load.

SPECIAL CONDITIONS

I. Within 60 days of receiving written approval of an Edwards Aquifer Contributing Zone Plan, the applicant must submit to the Austin Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested format (Deed Recordation Affidavit, TCEQ-0625A) that you may use to deed record the approved CZP is enclosed.

II. The future school and commercial additions would need separate Executive Director approval before commencing construction.

STANDARD CONDITIONS

1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.

Prior to Commencement of Construction:

3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved CZP and this notice of approval shall be maintained at the project location until all regulated activities are completed.

4. Any modification to the activities described in the referenced CZP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the Austin Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.

6. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) 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:

7. During the course of regulated activities related to this project, the applicant or his agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

8. 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 by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been significantly reduced. 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).

9. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.

10. 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.

11. 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.

12. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment.

After Completion of Construction:

13. Owners of permanent BMPs and measures must insure that the 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 Austin Regional Office within 30 days of site completion.

14. 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 (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. A copy of the transfer of responsibility must be filed with the executive director through the Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

15. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved CZP. If the new owner intends to commence any new regulated activity on the site, a new CZP that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

16. A CZP approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone Plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

17. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Kevin Lee Smith, P.E. of the Edwards Aquifer Protection Program of the Austin Regional Office at 512-339-2929.

Sincerely,

Carolyn Runyon, Water Section Manager
Austin Region Office
Texas Commission on Environmental Quality

CDR/kls

Enclosure: Deed Recordation Affidavit, TCEQ-0625
Change in Responsibility for Maintenance of Permanent BMPs, TCEQ-10263A

cc: Mr. Joe M. England, P.E., County Engineer, Williamson County
Mr. Sam Roberts, P.E., Director of Public Works, City of Cedar Park
Mr. Robert Koster, P.E., Cedar Park
TCEQ Central Records, Building F, MC 212

Mod Attachment B: Narrative of Proposed Modification

S Bell Blvd Commercial is located between Cypress Creek Road and Little Elm Trail and directly adjacent to the west of South Bell Boulevard in Cedar Park, Texas. The *S Bell Blvd Commercial* project is to be constructed on Lot 1, Block A of the TSSD3 subdivision, an approximately 10.34-acre undeveloped tract (considered total site area). The 10.34-acre site is located within the limits of "Unshaded Zone X" as shown on FIRM Panel No. 48491C0605F & 48491C0610F dated December 20, 2019. The site is located within the city limits of Cedar Park and the limits of the Brushy Creek-Turkey Creek watershed & Contributing Zone of the Edwards Aquifer.

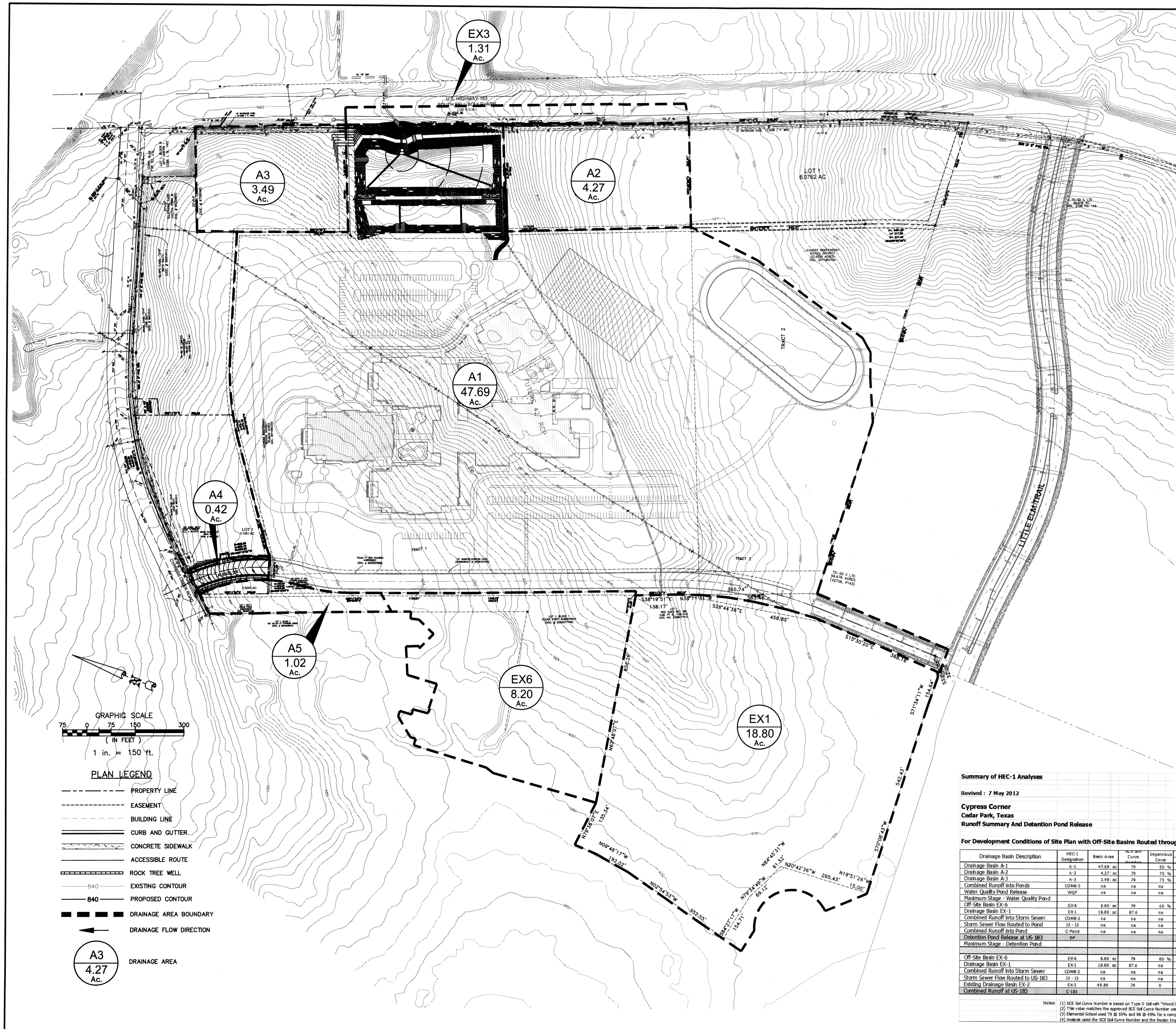
Within the *S Bell Blvd Commercial* site is the currently approved Contributing Zone Plan titled *Cypress Corner Subdivision* (EAPP ID No. 11-12060101). This CZP was originally approved on September 28, 2012, with an approved site area of 55.87 acres listed for commercial use. Specifically, the *Cypress Corner Subdivision* CZP approved the construction of a future 47.69-acre school, 7.76 acres of future commercial development, 0.42 acres for the Alexis Drive roadway connection, a sedimentation-filtration/detention facility, grading, drainage & wet utility improvements. The approved CZP proposed 29.98 acres of future impervious cover (buildings, pavement & sidewalk) over 55.87 acres (53.7% IC). Currently, only the 0.42-acre roadway connection, sedimentation-filtration/detention pond & drainage & wet utilities have been constructed per the original approved construction plans. All improvements (both constructed & future) drain to the constructed regional sedimentation-filtration/detention pond.

Included with the approved *Cypress Corner Subdivision* CZP (55.87 acres) is a northern portion of the *S Bell Blvd Commercial* site (4.12 acres). The *S Bell Blvd Commercial* site is a modification to the approved CZP. The proposed modifications include the construction of driveway connections, grading, drainage & utility improvements for future commercial use.

Per the approved *Cypress Corner Subdivision CZP* construction plans **(Mod Attachment C)**, the "A-2" post development drainage area was proposed as 75% impervious cover. The *S. Bell Blvd Commercial* site (4.12 acres) is located within the "A-2" drainage area. Per **Attachment J,** the post development drainage area "DA-2" for the *S.Bell Blvd Commercial* site consists of 0.08 acres of impervious cover within the 4.12 acres (2.04%). The proposed impervious cover is well below the original assumptions, therfore no modification to the approved CZP impervious cover is proposed.

The *S Bell Blvd Commercial* tract (4.12 acres) will continue to utilize the existing regional sedimentation-filtration pond to satisfy water quality requirements that have been accounted for in the currently approved CZP. Stormwater runoff within the modified site will be conveyed to the pond via sheet flow & shallow concentrated flow over the existing pond berm.

Mod Attachment C: Current Site Plan of the Approved Project



REVISED : SEPTEMBER 2011

210-VI-TR-55, Second Ed., June 1986
Worksheet 3: Time of concentration (Tc) or travel time (Tt)

Project: CYPRESS CORNER — By: MTP — Date: 5/4/2011
Location: Cedar Park, Texas — Checked: MTP — Date: 5/4/2011
Circle one: Present **Developed** — DEVELOPED CONDITIONS - SITE DRAINAGE BASIN DA-1
Circle one: **Tc** Tt through subarea
NOTES: Space for as many as two segments per flow type can be used for each worksheet.
Include a map, schematic, or description of flow segments.

	Item	Unit	Segment 1	Segment 2	Total
Sheet flow	(Applicable to Tc only) Segment ID		A - B		
1.	Surface description (table 3-1)		Gr		
2.	Manning's roughness coeff., n (table 3-1)		0.24		
3.	Flow length, L (total L < 150 ft)	ft	150		
4.	Two year 24 hour rainfall, P2	in	4.2		
5.	Land slope, s	ft/ft	0.025		
6.	Tt = (0.007*(n*L)^0.8) / ((p2^0.5)*(s^0.4)) Compute Tt	hr	0.263	+	= 0.263
Shallow concentrated flow	Segment ID		B - C	C - D	
7.	Surface description (paved or unpaved)		Unpaved	Paved	
8.	Flow length, L	ft	170	380	
9.	Watercourse slope, s	ft/ft	0.0400	0.0260	
10.	Average velocity, V (figure 3-1)	ft/s	3.2	3.2	
11.	Tt = (L) / (3600*V) Compute Tt	hr	0.015	+ 0.033	= 0.048
Channel flow	Segment ID		(Pipe) D - E		
12.	Cross sectional flow area, a	ft^2	7.5		
13.	Wetted perimeter, Pw	ft	31		
14.	Hydraulic radius, r = a / Pw Compute r	ft	0.242		
15.	Channel slope, s	ft/ft	0.016		
16.	Manning's roughness coeff., n		0.012		
17.	V = (1.49 * (r^2/3) * (s^0.5)) / n Compute V	ft/s	6.06		
18.	Flow length, L	ft	1420		
19.	Tt = (L) / (3600*V) Compute Tt	hr	0.065	+	= 0.065
20.	Watershed or subarea Tc or Tt (add Tt in step 6, 11, and 19)	hr			0.376

Lag Time (Tlag)
21. Tlag = 3/5 (Tc) — Tlag = 0.225

REVISED : SEPTEMBER 2011

210-VI-TR-55, Second Ed., June 1986
Worksheet 3: Time of concentration (Tc) or travel time (Tt)

Project: CYPRESS CORNER — By: MTP — Date: 5/4/2011
Location: Cedar Park, Texas — Checked: MTP — Date: 5/4/2011
Circle one: Present **Developed** — DEVELOPED CONDITIONS - SITE DRAINAGE BASIN DA-2
Circle one: **Tc** Tt through subarea
NOTES: Space for as many as two segments per flow type can be used for each worksheet.
Include a map, schematic, or description of flow segments.

	Item	Unit	Segment 1	Segment 2	Total
Sheet flow	(Applicable to Tc only) Segment ID		A - B		
1.	Surface description (table 3-1)		Gr		
2.	Manning's roughness coeff., n (table 3-1)		0.3		
3.	Flow length, L (total L < 150 ft)	ft	50		
4.	Two year 24 hour rainfall, P2	in	4.2		
5.	Land slope, s	ft/ft	0.0200		
6.	Tt = (0.007*(n*L)^0.8) / ((p2^0.5)*(s^0.4)) Compute Tt	hr	0.143	+	= 0.143
Shallow concentrated flow	Segment ID		B - C		
7.	Surface description (paved or unpaved)		Paved		
8.	Flow length, L	ft	300		
9.	Watercourse slope, s	ft/ft	0.0200		
10.	Average velocity, V (figure 3-1)	ft/s	2.8		
11.	Tt = (L) / (3600*V) Compute Tt	hr	0.030	+	= 0.030
Channel flow	Segment ID				
12.	Cross sectional flow area, a	ft^2			
13.	Wetted perimeter, Pw	ft			
14.	Hydraulic radius, r = a / Pw Compute r	ft			
15.	Channel slope, s	ft/ft			
16.	Manning's roughness coeff., n				
17.	V = (1.49 * (r^2/3) * (s^0.5)) / n Compute V	ft/s			
18.	Flow length, L	ft			
19.	Tt = (L) / (3600*V) Compute Tt	hr		+	= 0.000
20.	Watershed or subarea Tc or Tt (add Tt in step 6, 11, and 19)	hr			0.172

Lag Time (Tlag)
21. Tlag = 3/5 (Tc) — Tlag = 0.103

REVISED : SEPTEMBER 2011

210-VI-TR-55, Second Ed., June 1986
Worksheet 3: Time of concentration (Tc) or travel time (Tt)

Project: CYPRESS CORNER — By: MTP — Date: 5/4/2011
Location: Cedar Park, Texas — Checked: MTP — Date: 5/4/2011
Circle one: Present **Developed** — DEVELOPED CONDITIONS - SITE DRAINAGE BASIN DA-3
Circle one: **Tc** Tt through subarea
NOTES: Space for as many as two segments per flow type can be used for each worksheet.
Include a map, schematic, or description of flow segments.

	Item	Unit	Segment 1	Segment 2	Total
Sheet flow	(Applicable to Tc only) Segment ID		A - B		
1.	Surface description (table 3-1)		Gr		
2.	Manning's roughness coeff., n (table 3-1)		0.3		
3.	Flow length, L (total L < 150 ft)	ft	50		
4.	Two year 24 hour rainfall, P2	in	4.2		
5.	Land slope, s	ft/ft	0.0200		
6.	Tt = (0.007*(n*L)^0.8) / ((p2^0.5)*(s^0.4)) Compute Tt	hr	0.143	+	= 0.143
Shallow concentrated flow	Segment ID		B - C		
7.	Surface description (paved or unpaved)		Paved		
8.	Flow length, L	ft	300		
9.	Watercourse slope, s	ft/ft	0.0350		
10.	Average velocity, V (figure 3-1)	ft/s	3.8		
11.	Tt = (L) / (3600*V) Compute Tt	hr	0.022	+	= 0.022
Channel flow	Segment ID				
12.	Cross sectional flow area, a	ft^2			
13.	Wetted perimeter, Pw	ft			
14.	Hydraulic radius, r = a / Pw Compute r	ft			
15.	Channel slope, s	ft/ft			
16.	Manning's roughness coeff., n				
17.	V = (1.49 * (r^2/3) * (s^0.5)) / n Compute V	ft/s			
18.	Flow length, L	ft			
19.	Tt = (L) / (3600*V) Compute Tt	hr		+	= 0.000
20.	Watershed or subarea Tc or Tt (add Tt in step 6, 11, and 19)	hr			0.164

Lag Time (Tlag)
21. Tlag = 3/5 (Tc) — Tlag = 0.099

Summary of HEC-1 Analyses

Revised : 7 May 2012

Cypress Corner
Cedar Park, Texas
Runoff Summary And Detention Pond Release

For Development Conditions of Site Plan with Off-Site Basins Routed through Detention Pond

Drainage Basin Description	HEC-1 Designation	Basin Area	SCS Soil Curve Number	Impervious Cover	Storm Events 2 yr	10 yr	25 yr	100 yr
Drainage Basin A-1	A-1	47.69 ac	79	50 %	76.54 cfs	155.07 cfs	201.55 cfs	279.06 cfs
Drainage Basin A-2	A-2	4.27 ac	79	75 %	9.67 cfs	18.22 cfs	23.22 cfs	31.56 cfs
Drainage Basin A-3	A-3	3.49 ac	79	75 %	7.81 cfs	14.73 cfs	18.78 cfs	25.52 cfs
Combined Runoff into Ponds	COMB-3	na	na	na	89.91 cfs	180.12 cfs	233.41 cfs	322.24 cfs
Water Quality Pond Release	WQP	na	na	na	88.98 cfs	179.55 cfs	233.29 cfs	321.41 cfs
Maximum Stage - Water Quality Pond					899.86 ft	900.12 ft	900.26 ft	900.46 ft
Off-Site Basin EX-6	EX-6	8.80 ac	79	60 %	16.66 cfs	32.58 cfs	42.04 cfs	57.82 cfs
Drainage Basin EX-1	EX-1	18.80 ac	87.6	na	30.20 cfs	63.19 cfs	82.20 cfs	113.50 cfs
Combined Runoff into Storm Sewer	COMB-2	na	na	na	44.37 cfs	91.48 cfs	118.86 cfs	164.13 cfs
Storm Sewer Flow Routed to Pond	J3 - J2	na	na	na	40.02 cfs	80.50 cfs	104.36 cfs	143.75 cfs
Combined Runoff into Pond	C-Pond	na	na	na	128.19 cfs	260.05 cfs	337.64 cfs	465.16 cfs
Detention Pond Release at US-183	DP				69.70 cfs	169.80 cfs	229.19 cfs	327.78 cfs
Maximum Stage - Detention Pond					894.42 ft	897.03 ft	898.19 ft	899.90 ft
Off-Site Basin EX-6	EX-6	8.80 ac	79	60 %	16.66 cfs	32.58 cfs	42.04 cfs	57.82 cfs
Drainage Basin EX-1	EX-1	18.80 ac	87.6	na	30.20 cfs	63.19 cfs	82.20 cfs	113.50 cfs
Combined Runoff into Storm Sewer	COMB-2	na	na	na	44.37 cfs	91.48 cfs	118.86 cfs	164.13 cfs
Storm Sewer Flow Routed to US-183	J3 - J2	na	na	na	40.02 cfs	80.50 cfs	104.36 cfs	143.75 cfs
Existing Drainage Basin EX-2	EX-2	49.89	79	0	45.05 cfs	113.27 cfs	154.52 cfs	223.54 cfs
Combined Runoff at US-183	C-183				82.54 cfs	188.23 cfs	250.94 cfs	335.07 cfs

Notes:
(1) SCE Soil Curve Number is based on Type D Soil with "Wood/Grass" in a good condition, for a value of 79.
(2) This value matches the approved SCE Soil Curve Number used for Elementary School 24 in Drainage Basin EX-1.
(3) Elemental School used 79 @ 55% and 98 @ 45% for a composite value of 87.6.
(4) Analysis used the SCS Soil Curve Number and the Design Impervious Cover to alowed HEC-1 to Calculate the Results.

CONSULTING ENGINEER
R.L. KOSTER
2013 Simbrah Drive Cedar Park, Texas 78613 512 331-7477
TBPE Firm Registration No.: 11700

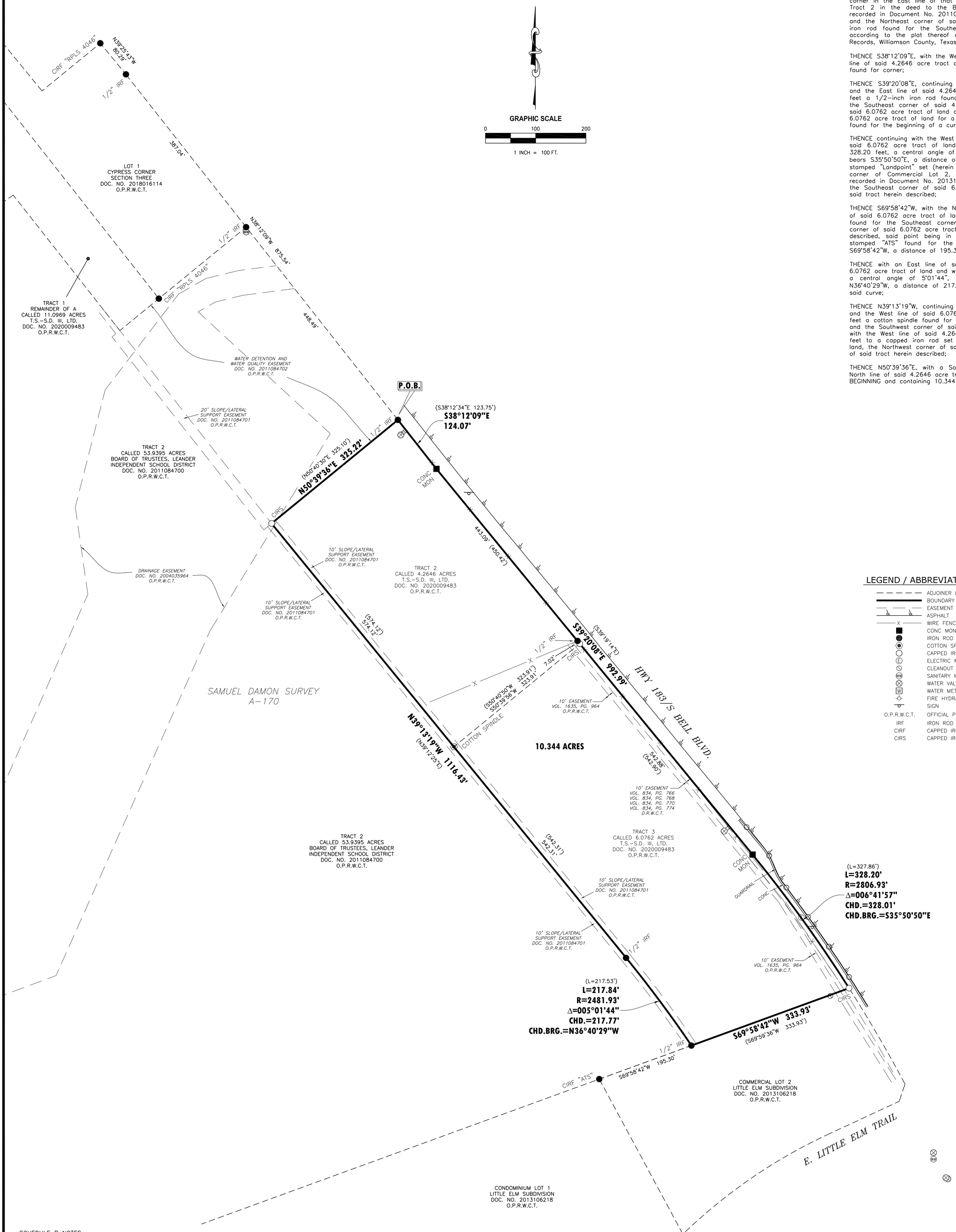
STATE OF TEXAS
ROBERT L. KOSTER
84499
LICENSED PROFESSIONAL ENGINEER
5-30-12

CYPRESS CORNER
CEDAR PARK, TEXAS
PROPOSED DRAINAGE PLAN

DATE: 5-30-12

Sheet Number
7
SHT 7 OF 28

Mod Attachment D: Site Title Survey



LEGAL DESCRIPTION

Being all that certain tract or parcel of land situated in the Samuel Damon Survey, Abstract No. 170, Williamson County, Texas, being all of that certain called 4.2646 acre tract of land described as Tract 2 in the deed to T.S.-S.D. III, Ltd., recorded in Document No. 2020009483, Official Public Records, Williamson County, Texas and all of that certain called 6.0762 acre tract of land described as Tract 3 in said Document No. 2020009483 and being more particularly described by metes and bounds and follows:

BEGINNING at the Northeast corner of the tract being described herein at a 1/2-inch iron rod found in the West right-of-way line of Highway 183 (S. Bell Blvd.) for an ell corner in the East line of that certain called 53.9395 acre tract of land described as Tract 2 in the deed to the Board of Trustees, Leander Independent School District, recorded in Document No. 2011084700, Official Public Records, Williamson County, Texas and the Northeast corner of said 4.2646 acre tract of land, from which a 1/2-inch iron rod found for the Southeast corner of Lot 1, Cypress Corner, Section Three, according to the plat thereof recorded in Document No. 2018016114, Official Public Records, Williamson County, Texas bears N38°12'09"W, a distance of 448.49 feet;

THENCE S38°12'09"E, with the West right-of-way line of said Highway 183 and the East line of said 4.2646 acre tract of land, a distance of 124.07 to a concrete monument found for corner;

THENCE S39°20'08"E, continuing with the West right-of-way line of said Highway 183 and the East line of said 4.2646 acre tract of land, passing at a distance of 443.09 feet a 1/2-inch iron rod found for reference, passing at a distance of 450.11 feet the Southeast corner of said 4.2646 acre tract of land and the Northeast corner of said 6.0762 acre tract of land and continuing on said course with the East line of said 6.0762 acre tract of land for a total distance of 992.99 feet to a concrete monument found for the beginning of a curve to the right;

THENCE continuing with the West right-of-way line of said Highway 183, the East line of said 6.0762 acre tract of land and with said curve to the right, an arc length of 328.20 feet, a central angle of 6°41'57", a radius of 2806.93 feet and a chord that bears S35°50'50"E, a distance of 328.01 feet to a 5/8-inch iron rod with plastic cap stamped "Landpoint" set (herein referred to as capped iron rod set) for the Northeast corner of Commercial Lot 2, Little Elm Subdivision, according to the plat thereof recorded in Document No. 2013106218, Official Public Records, Williamson County, Texas, the Southeast corner of said 6.0762 acre tract of land and the Southeast corner of said tract herein described;

THENCE S69°58'42"W, with the North line of said Commercial Lot 2 and the South line of said 6.0762 acre tract of land, a distance of 333.93 feet to a 1/2-inch iron rod found for the Southeast corner of said 53.9395 acre tract of land, the Southwest corner of said 6.0762 acre tract of land and the Southwest corner of said tract herein described, said point being in a curve to the left, from which a capped iron rod stamped "ATS" found for the Northwest corner of said Commercial Lot 2 bears S69°58'42"W, a distance of 195.30 feet;

THENCE with an East line of said 53.9395 acre tract of land, the West line of said 6.0762 acre tract of land and with said curve to the left, an arc length of 217.84 feet, a central angle of 5°01'44", a radius of 2481.93 feet and a chord that bears N36°40'29"W, a distance of 217.77 feet to a 1/2-inch iron rod found at the end of said curve;

THENCE N39°13'19"W, continuing with an East line of said 53.9395 acre tract of land and the West line of said 6.0762 acre tract of land, passing at a distance of 542.31 feet a cotton spindle found for the Northwest corner of said 6.0762 acre tract of land and the Southwest corner of said 4.2646 acre tract of land, continuing on said course with the West line of said 4.2646 acre tract of land for a total distance of 1116.43 feet to a capped iron rod set for a reentrant corner of said 53.9395 acre tract of land, the Northwest corner of said 4.2646 acre tract of land and the Northwest corner of said tract herein described;

THENCE N50°39'36"E, with a South line of said 53.9395 acre tract of land and the North line of said 4.2646 acre tract of land, a distance of 325.22 feet to the POINT OF BEGINNING and containing 10.344 acres of land.

THENCE N50°39'36"E, with a South line of said 53.9395 acre tract of land and the North line of said 4.2646 acre tract of land, a distance of 325.22 feet to the POINT OF BEGINNING and containing 10.344 acres of land.

LEGEND / ABBREVIATIONS

	ADJOINER LINE
	BOUNDARY LINE
	EASEMENT LINE
	ASPHALT
X	WIRE FENCE
■	CONC MON FOUND (TYPE 1)
●	IRON ROD FOUND
⊙	COTTON SPINDLE FOUND
○	CAPPED IRON ROD SET
Ⓔ	ELECTRIC MANHOLE
⊘	CLEANOUT
Ⓢ	SANITARY MANHOLE
⊗	WATER VALVE
Ⓦ	WATER METER
	FIRE HYDRANT
	SIGN
O.P.R.W.C.T.	OFFICIAL PUBLIC RECORDS, WILLIAMSON COUNTY, TEXAS
IRF	IRON ROD FOUND
CIRF	CAPPED IRON ROD FOUND
CIRS	CAPPED IRON ROD SET

SCHEDULE B NOTES

10a. Rights of parties in possession. (Owner's Policy Only) This exception may a. be deleted at the request of the proposed insured, upon a physical inspection by the Title Company and payment of its reasonable and actual costs thereof.

10b. All leases, grants, exceptions or reservations of coal, lignite, oil, gas and other minerals, together with all rights, privileges and immunities relating thereto, appearing in the Public Records whether listed in Schedule B or not. There may be leases, grants, exceptions or reservations of mineral interest that are not listed.

10c. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the title that would be disclosed by an accurate and complete land survey of the land. The term "encroachment" includes encroachment of existing improvements located on the Land onto adjoining land, and encroachments on the Land of existing improvements located on adjoining land. In the event of a conflict between this exception and Covered Risk '1.(c)', this exception shall control. (Applies to Owner's Policy only)

10d. Rights of tenants in possession under unrecorded leases or rental agreements.

10e. Easement granted to Texas Power & Light Company, dated October 4, 1927, recorded in Volume 236, Page 339, of the Deed Records of Williamson County, Texas, can not be located by description.

10f. Easement granted to Cedar Park Water Supply Corporation, dated May 30, 1967, recorded in Volume 499, Page 695, of the Deed Records of Williamson County, Texas, 10' easement with the centerline thereof being the pipeline as installed, affects by rights of ingress and egress.

10g. Easement granted to Southwestern Bell Telephone Company, dated , recorded in Volume 834, Page 766, Volume 834, Page 768, Volume 834, Page 770 and Volume 834, Page 774, of the Deed Records of Williamson County, Texas, affects as shown.

10h. Easement granted to City of Cedar Park, dated March 1, 1983, recorded in Volume 921, Page 431, of the Deed Records of Williamson County, Texas, does not affect subject tract.

10i. Easement granted to City of Cedar Park, dated February 16, 1988, recorded in Volume 1635, Page 964, of the Official Records of Williamson County, Texas, affects as shown.

10J. Easement granted to City of Cedar Park, dated April 30, 2004, recorded in Document No. 2004035964, of the Official Public Records of Williamson County, Texas, affects as shown.

10k. Easements, terms, conditions, and stipulations in that certain Easement for Access, Lateral Support, & Utilities, by and between Leander Independent School District and T.S.-S.D. III, Ltd., as recorded in Document No. 2011084701, of the Official Public Records of Williamson County, Texas, affects as shown.

10l. Terms, conditions, and stipulations in that certain Water Detention and Water Quality Easement, by and between Leander Independent School District and T.S-S.D. III, Ltd., as recorded in Document No. 2011084702, of the Official Public Records of Williamson County, Texas, affects as shown.

10m. Terms, conditions, and stipulations in that certain Deed Recordation Affidavit, as recorded in Document No. 2012077063, of the Official Public Records of Williamson County, Texas.

10n. Subject property lies within the boundaries of Upper Brushy Creek WCID and may be subject to taxes or special assessments as provided by law.

GENERAL NOTES

1. The surveyor has not abstracted the site. This survey relies on the title search from Fidelity National Title Insurance Company, GF No. 21-0072-C, effective date: January 11, 2021, issue date: January 21, 2021.

2. Bearing based on Texas State Plane Coordinates, Central Zone, 4203, NAD83-US Survey feet, derived from GPS observations.

3. All 'CIRS' are 5/8-inch iron rod with plastic cap stamped "Landpoint" unless otherwise noted.

4. This original work is protected under copyright laws, Title 17 United States Code Sections 101 and 102. All violators will be prosecuted to the fullest extent of the law. This survey is being provided solely for the use of the recipients named and no license has been created, express or implied, to copy the survey except as is necessary in conjunction with the original transaction, which shall take place within thirty (30) days from the date adjacent to the signature line herein.

5. Flood Statement: This site is situated in Non-shaded Zone "X" in The City of Cedar Park, Williamson County, Texas according to FEMA map number 48491C0605 F & 48491C0610F, dated DECEMBER 20, 2019. Warning: This statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. This determination has been made by scaling the property on the referenced map and is not the result of an elevation survey. This flood statement shall not create liability on the part of the surveyor.

TITLE SURVEY
10.344 ACRES IN THE
SAMUEL DAMON SURVEY, A-170
WILLIAMSON COUNTY, TEXAS

CERTIFICATION: Sterling Multifamily Company, T.S.-S.D.III, LTD., Fidelity National Title Insurance Company

I, Robert Glen Maloy, certify that this plat was prepared under my direct supervision from a survey made on the ground on February 21, 2021, that this plat correctly represents the facts found at the time of said survey and that this professional service substantially conforms to the current Texas Society of Professional Surveyors Standards and Specifications for a Category 1A, Condition III Survey.

STATE OF TEXAS · REGISTERED · ROBERT GLEN MALOY 6028 · PROFESSIONAL LAND SURVEYOR

03/01/2021

Robert Glen Maloy
Registered Professional Land Surveyor
Texas Registration No. 6028

OWNER	FIELD BOOK	N/A
T.S.-S.D. III, LTD.	FIELD WORK	AD
	DATE	02/21/2021
	DRAFTING	CJ
PURCHASER	DATE	02/28/2021
STERLING MULTIFAMILY COMPANY	CHECKED	RGM
	DATE	03/01/2021
	MTGE. CO.	N/A
ADDRESS	TITLE CO.	FIDELITY NATIONAL
S. BELL BLVD. CEDAR PARK, TX 78613	G.F. NO.	21-0072-C
	SCALE	1"=100'
	KEY MAP	N/A
	JOB. NO.	21-0390

LANDPOINT INC.
6410 SOUTHWEST BLVD, STE. 127
FORT WORTH, TX 76109
(817) 554-1805
www.landpoint.net
TBPLS REG. NO. 10194220

X:\2021\21-0390\Dwg\21-0390 HWY 183.dwg

CONTRIBUTING ZONE PLAN APPLICATION (TCEQ-10257)

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.

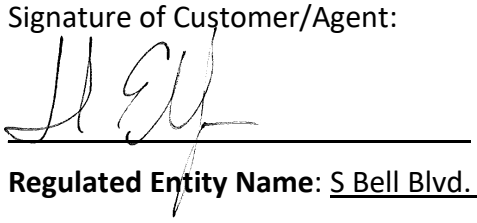
Signature

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: Joshua V. Elledge

Date: 5/13/2024

Signature of Customer/Agent:



Regulated Entity Name: S Bell Blvd. Commercial

Project Information

1. County: Williamson
2. Stream Basin: Turkey Creek/Brushy Creek
3. Groundwater Conservation District (if applicable): N/A
4. Customer (Applicant):

   Contact Person: Mr. Benny Nguyen
   Entity: BELL SOUTH COMMERCIAL LLC
   Mailing Address: 675 Bering Drive, Suite 500
   City, State: Houston, Texas Zip: 77057
   Telephone: (512)-965-4200 Fax: N/A
   Email Address: benny@halonare.com

5. Agent/Representative (If any):

Contact Person: Joshua V. Elledge
Entity: Quiddity Engineering
Mailing Address: 3100 Alvin Devane Blvd, Suite 150
City, State: Austin, Texas Zip: 78741
Telephone: (512)-685-5160 Fax: (512)-445-2286
Email Address: jelledge@quiddity.com

6. Project Location:

[X] The project site is located inside the city limits of Cedar Park, Texas
[ ] The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
[ ] The project site is not located within any city's limits or ETJ.

7. [X] 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.

1005 S Bell Blvd., Cedar Park, Texas 78613

8. [X] **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. [X] **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:

[X] Project site boundaries.
[X] USGS Quadrangle Name(s).

10. [X] **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:

[X] Area of the site
[X] Offsite areas
[X] Impervious cover
[X] Permanent BMP(s)
[X] Proposed site use
[X] Site history
[X] Previous development
[X] 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): 4.12 Acres

Total disturbed area: 0.084 Acres

14. Estimated projected population: N/A

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		÷ 43,560 =	
Parking		÷ 43,560 =	
Other paved surfaces	3,655	÷ 43,560 =	0.084
Total Impervious Cover	3,655	÷ 43,560 =	0.084

Total Impervious Cover 0.084 **÷ Total Acreage** 4.12 **X 100 =** 2.04 **% Impervious Cover**

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

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

For Road Projects Only

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

☒ N/A

18. Type of project:

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

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

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

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

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

21. Pavement Area:

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

☒ N/A

26. Wastewater will be disposed of by:

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

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

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

☒ Sewage Collection System (Sewer Lines):
The sewage collection system will convey the wastewater to the Brushy Creek West Regional Wastewater Treatment Plant (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

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

☒ N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

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

Total x 1.5 = _____ Gallons

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

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

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

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

Table 3 - Secondary Containment

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

Total: _____ Gallons

30. Piping:

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

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

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

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

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

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

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

Site Plan Requirements

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

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

    Site Plan Scale: 1" = 80'.

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): 48491C0605F & 48491C0610F eff. 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

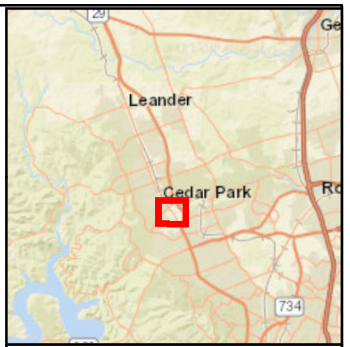
61. [X] Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.

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.

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

Attachment A: Road Map



VICINITY MAP
1 INCH = 10 MILES

LEGEND

- Site Boundary
- Creek Centerlines

FEMA Effective Floodplain

- Zone A (100-year)
- Zone AE (100-year)
- Zone AE (Floodway)
- Zone X (500-year)
- Parcel Lines

Aerial Imagery Dated: April 2023

Exhibit 1: Vicinity Map

CEDAR PARK
WILLIAMSON COUNTY, TEXAS

N S W E

0 300
1 INCH : 300 FEET
IMAGERY PROVIDED BY NEARMAP

Disclaimer: This product is offered for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property, governmental and/or political boundaries or related facilities to said boundary. No express warranties are made by Quiddity Engineering concerning the accuracy, completeness, reliability, or usability of the information included within this exhibit.

QUIDDITY
Texas Board of Professional Engineers Registration No. F-23290

Path: \\jonescarter.corp\cfs\Projects\28106\28106-0001-02 1201 S. Bell Blvd. - Commerical Subdivision\2 Design Phase\Reports\H&H\2 - Exhibits\1 - MXD\EX 1 - Vicinity Map.mxd Project Number: 05636-0900-21-006 Date: 9/15/2023 User Name: jw1

Attachment B: USGS

USGS U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Attachment B: USGS

The National Map US Topo

JOLLYVILLE QUADRANGLE
TEXAS
7.5-MINUTE SERIES

Produced by the United States Geological Survey
North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid:Universal Transverse Mercator, Zone 14R

This map is not a legal document. Boundaries may be generalized for this map scale. Private lands within government reservations may not be shown. Obtain permission before entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads..... U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 1979 - 2022
Hydrography.....National Hydrography Dataset, 2002 - 2020
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2019 - 2021

Wetlands.....FWS National Wetlands Inventory Not Available

MN
GN
0°36′ 11 MILS
3°46′ 67 MILS
UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000 - m Square ID
PU
Grid Zone Designation 14R

SCALE 1:24 000

1 0.5 0 KILOMETERS 1 2
1000 500 0 METERS 1000 2000
1 0.5 0 1 MILES
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

This map was produced to conform with the National Geospatial Program US Topo Product Standard.

QUADRANGLE LOCATION

1	2	3
4		5
6	7	8

ADJOINING QUADRANGLES
1 Nameless
2 Leander
3 Round Rock
4 Mansfield Dam
5 Pflugerville West
6 Bee Cave
7 Austin West
8 Austin East

ROAD CLASSIFICATION
Expressway
Secondary Hwy
Ramp
Local Connector
Local Road
4WD
Interstate Route
US Route
State Route

JOLLYVILLE, TX
2022

NSN 7643016396729
NGA REF NO.USGSX24K22747

Attachment C: Project Narrative

S Bell Blvd Commercial is located between Cypress Creek Road and Little Elm Trail and directly adjacent to the west of South Bell Boulevard in Cedar Park, Texas. The *S Bell Blvd Commercial* project is to be constructed on Lot 1, Block A of the TSSD3 subdivision, an approximately 10.34-acre undeveloped tract (considered total site area). The 10.34-acre site is located within “Unshaded Zone the 100-year floodplain as shown on FIRM Panel No. 48491C0605F & 48491C0610F dated December 20, 2019. The site is located within the city limits of Cedar Park and the limits of the Brushy Creek-Turkey Creek watershed & Contributing Zone of the Edwards Aquifer.

Within the *S Bell Blvd Commercial* site is the currently approved Contributing Zone Plan titled *Cypress Corner Subdivision* (EAPP ID No. 11-12060101). This CZP was originally approved on September 28, 2012, with an approved site area of 55.87 acres listed for commercial use. Specifically, the *Cypress Corner Subdivision* CZP approved the construction of a future 47.69-acre school, 7.76 acres of future commercial development, 0.42 acres for the Alexis Drive roadway connection, a sedimentation-filtration/detention facility, grading, drainage & wet utility improvements. The approved CZP proposed 29.98 acres of future impervious cover (buildings, pavement & sidewalk) over 55.87 acres (53.7% IC). Currently, only the 0.42-acre roadway connection, sedimentation-filtration/detention pond & drainage & wet utilities have been constructed per the original approved construction plans. All improvements (both constructed & future) drain to the constructed regional sedimentation-filtration/detention pond.

Included with the approved *Cypress Corner Subdivision* CZP (55.87 acres) is a northern portion of the *S Bell Blvd Commercial* site (4.12 acres). The *S Bell Blvd Commercial* site is a modification to the approved CZP. The proposed modifications include the construction of driveway connections, grading, drainage & utility improvements for future commercial use.

Per the approved *Cypress Corner Subdivision CZP* construction plans **(Mod Attachment C)**, the "A-2" post development drainage area was proposed as 75% impervious cover. The *S. Bell Blvd Commercial* site (4.12 acres) is located within the "A-2" drainage area. Per **Attachment J,** the post development drainage area "DA-2" for the *S.Bell Blvd Commercial* site consists of 0.08 acres of impervious cover within the 4.12 acres (2.04%). The proposed impervious cover is well below the original assumptions, therfore no modification to the approved CZP impervious cover is proposed.

The *S Bell Blvd Commercial* tract (4.12 acres) will continue to utilize the existing regional sedimentation-filtration pond to satisfy water quality requirements that have been accounted for in the currently approved CZP. Stormwater runoff within the modified site will be conveyed to the pond via sheet flow & shallow concentrated flow over the existing pond berm.

Attachment D: Factors Affecting Surface Water Quality

Factors that may affect surface water quality are as follows:

Site Development Criteria

- The site will be used for commercial development
- When necessary, rock rip-rap or concrete outfall aprons will be designed to reduce runoff velocities resulting in settlement of suspended solids and minimizing scouring conditions.

Construction Stage

- Clearing will disturb areas and create the potential for pollutants to runoff from rainfall.
- Temporary BMP's will be maintained throughout construction and will include measures such as a stabilized construction entrance/exit, silt fencing, inlet protection, rock berms, a temporary sediment basin and other measures which will reduce TSS in runoff leaving the site.

Vehicular Traffic

- Mud or fine particles may be dropped from vehicular traffic.
- Fluids may be dropped from vehicular traffic.

Landscape and Property Maintenance

- Pesticides or herbicides used for landscape maintenance may not be applied at a proper rate and may leak into groundwater or runoff into surface drains.
- Fine particles may be washed from driveway surfaces into roadways and drains.
- Natural vegetative filter strips and wet pond will be utilized to treat TSS coming from the site, which will minimize the impact of TSS from impervious areas.
- A maintenance plan will be implemented for all temporary BMP's in accordance with the SWPPP and for all permanent BMP's in accordance with **Attachment N**.

Attachment E: Volume and Character of Stormwater

The stormwater runoff calculations included in this section were based on the SCS Method using HEC-HMS modeling in conjunction with drainage criteria specified by the City of Cedar Park (defers to City of Austin Drainage Criteria Manual). In the attached drainage area maps (**Attachment J**) for the proposed *S. Bell Commercial* site (4.12 acres), the analysis point of study is for the north end of the project site titled “Analysis Point 2”. The objective of the hydrologic analysis is to show that the existing sedimentation-filtration/detention pond designed pre-Atlas 14 has the capacity to store runoff from the ultimate development using the Atlas 14 100-year storm event.

Drainage area “DA-2” is considered undeveloped in its existing conditions and is proposed to reflect the construction of a driveway for future commercial development in post-developed conditions. A hydrologic analysis was conducted to convert precipitation data to runoff values for the given site. Precipitation values were taken from the City of Cedar Park Atlas-14 rainfall depths and converted to runoff using Depth Duration Frequencies and TR-55 methodologies in HEC-HMS v 4.8. The National Resources Conservation Service (NRCS) web soil survey shows the site to be a hydrologic soil type “D”, which has a low infiltration rate when saturated and exhibits the highest runoff potential of all hydrological soil groups. For HEC-HMS modeling, the existing & proposed impervious cover numbers were held to match existing conditions. To reflect the post-developed conditions, the proposed curve numbers were modified in regard to the existing.

The attached Existing and Proposed Drainage Area Maps for the proposed site are included in this section and show the drainage areas and flow patterns within the project. The area utilized for this CZP application is shown/marked in the proposed drainage area map. The drainage area map sheets also show the pre- and post-development runoff rates at “Analysis Point 2” including the offsite runoff flow paths, as well as a table summarizing the components of the HEC-HMS model for both the existing and proposed conditions. In regard to “Analysis Point 2”, the post-developed rates are slightly increased compared to the pre-developed conditions. However, per the City of Austin Drainage Criteria Manual, increased runoff is allowable due to the development being multi-phased with prior phases being designed pre-Atlas 14 in which the pond capacity is able to detain the additional post-development flow. Please see the drainage study for more information regarding these assumptions, calculations & findings provided as **Appendix A** at the end of this report.

Attachment F: Suitability Letter from Authorized Agent

Attachment F is not applicable to this project

Attachment G: Alternative Secondary Containment Methods

Attachment G is not applicable to this project

Attachment H: Alternative Secondary Containment Methods

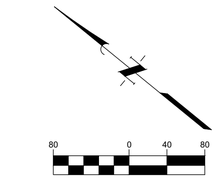
Attachment H is not applicable to this project

Attachment I: 20% or Less Impervious Cover Waiver

Attachment I is not applicable to this project

Attachment J: BMPs for Upgradient Stormwater

There is a 1.29-acre undeveloped offsite area that flows into the northwest corner of the *S Bell Blvd Commercial* site & into the existing *Cypress Corner* sedimentation-filtration/detention pond in existing conditions via sheet & concentrated flows. This area designated “OS-2” is undeveloped in which the same drainage pattern & conditions are to be unaffected with the post-development conditions of the *S Bell Blvd Commercial* project. Please see the attached existing and proposed drainage area map sheets for the *S Bell Blvd Commercial* project. Additionally, please see the attached pond construction sheet from the *Cypress Corner Subdivision* plans.



SCALE: 1" = 80'

DA-1 Impervious Cover

Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each Proportion
Roads	0.00	0.00	100	0.00
Fair Woods	14.71	0.97	0	0.00
Fair Brush	0.03	0.00	0	0.00
1/8 Ac Single-Family	0.36	0.02	65	1.54
Total	15.10	1.00	Cumulative Result:	**1.54**

DA-2 Impervious Cover Calculation

Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each Proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.55	0.13	0	0.00
Fair Brush	3.57	0.87	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Total	4.12	1.00	Cumulative Result:	**0.00**

OS-1B Impervious Cover Calculation

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each Proportion
Roads	1.02	0.74	100	73.78
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.36	0.26	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Total	1.38	1.00	Cumulative Result:	**73.78**

DAMAP LEGEND

1.82 Ac. — DRAINAGE AREA IN ACRES

DRAINAGE AREA LINE

A–1 — DRAINAGE AREA NUMBER

FLOW DIRECTION

TO — TO — TIME OF CONCENTRATION

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTES:

1. Offsite Drainage Area "OS-2" is not delineated within the Drainage Analysis study because this area is analyzed within the larger "A1" drainage area which drains to the existing regional detention pond. See Drainage Analysis for more information.
2. The fl ow off the site has not been increased from existing condition. (For Offsite Drainage Area "OS-2", see Note 1 above)
3. HEC-HMS 4.8 was utilized to calculate post development flows for 2, 10, 25 & 100 year storm events.
4. Engineer has reviewed plans pertaining to the design of the existing detention facilities and agrees with their design. Proposed development does not adversely affect any downstream properties.

Analysis Point 2: DA-2 & OS-2 (Pre Development)
[Includes Flow From Larger DA "A1" area - See Note 1]
2-YR STORM: 99.0 CFS
10-YR STORM: 180.5 CFS
25-YR STORM: 235.6 CFS
100-YR STORM: 317.1 CFS

Analysis Point 1: DA-1, OS-B1 (Pre Development)
2-YR STORM: 24.2 CFS
10-YR STORM: 46.8 CFS
25-YR STORM: 62.9 CFS
100-YR STORM: 90.9 CFS

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Time of Concentration Calculation

P2 = 3.96 *in.*

$$t_{sh} = \frac{0.007(n_{ol}L_{sh})^{0.8}}{P_2^{0.5}S_{sh}^{0.4}} \qquad t_{sc} = \frac{L_{sc}}{3600\,K\,S_{sc}^{0.5}} \qquad t_{ch} = \frac{L_{ch}}{\left(3600\,\frac{1.49}{n}\,R^{2/3}S_{ch}^{1/2}\right)}$$

catchment name	L_{sh} sheet flow length	S_{sh} sheet flow slope (ft/ft)	surface description	P_2 2-yr, 24-hr rainfall depth (in.)	n_{ol} overland flow roughness coeff.	t_{sh} sheet flow travel time (hr)	L_{sc} shallow conc. flow length (ft)	S_{sc} shallow conc. flow slope (ft/ft)	K 16.13 - unpaved surface	t_{sc} shallow conc. flow time (hr)	L_{ch} channel Length (ft)	S_{ch} channel flow slope (ft/ft)	n Manning's roughness coeff.	R hydraulic radius (ft)	t TC	t_c time of conc. (hr)	t_c time of conc. (min)	t_l lag time (min)
DA-1	100	0.007	Med Brush	3.96	0.40	**0.49**	1,155	0.036	16.13	**0.11**						**0.59**	**35.5**	**21.31**
DA-2	100	0.004	Med Brush	3.96	0.40	**0.61**	522	0.050	16.13	**0.04**						**0.65**	**38.8**	**23.28**
OS-1B	100	0.015	Asphalt	3.96	0.02	**0.03**					446	0.026	0.060	0.78	**0.04**	**0.06**	**5.0**	**3.00**
OS-2 (for site plans, not for HH study)	100	0.006	Woods (light underbrush)	3.96	0.40	**0.51**	1,636	0.022	16.13	**0.19**						**0.70**	**41.8**	**25.06**

K:\28106\28106-0001-02 1201 S. Rell Blvd. - Commercial Subdivision\3 Design Phase\CAD\Subdivision\28106-0001-02 DAMAP-E.dwg cbarch May 09, 2024

REVISIONS

No.	Date	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. P-12000 & 10040100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN | DESIGNED BY: JVE
DATE: U1 - APRIL 2024 | CHECKED BY: GNR
JOB NO.: 28106-0001-02 | DRAWN BY: CCB

INTERIM REVIEW
Not intended for construction, bidding or permit purposes.
Engineer: GEMSONG RYAN, P.E.
P.E. Serial No.: 99300
Date: MAY 2024

TERRA HALONA, LLC
S BELL COMMERCIAL
1005 S BELL BLVD

EXISTING DRAINAGE AREA MAP

SHEET NO. **29** OF **36**

2023-29-SD

DA-1A Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	2.77	1.00	75	75.00
Total	2.77		Cumulative Result:	**75.00**

DA-1B Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	3.32	1.00	75	75.00
Total	3.32		Cumulative Result:	**75.00**

DA-1C Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	0.13	1.00	75	75.00
Total	0.13		Cumulative Result:	**75.00**

80 0 40 80

SCALE: 1" = 80'

DAMAP LEGEND

1.82 Ac. — DRAINAGE AREA IN ACRES

DRAINAGE AREA LINE

A–1 — DRAINAGE AREA NUMBER

FLOW DIRECTION

TO — TO — TIME OF CONCENTRATION

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTES:

1. Offsite Drainage Area "OS-2" is not delineated within the Drainage Analysis study because this area is analyzed within the larger "A1" drainage area which drains to the existing regional detention pond. See Drainage Analysis for more information.
2. The fl ow off the site has not been increased from existing condition. (For Offsite Drainage Area "OS-2", see Note 1 above)
3. HEC-HMS 4.8 was utilized to calculate post development flows for 2, 10, 25 & 100 year storm events.
4. The flow off the site has not been increased from the existing condition.
5. The engineer has reviewed plans pertaining to the design of the existing detention facilities and agrees with their design. The proposed development does not adversely affect any downstream properties.
6. Flows from Drainage Areas "DA-1A" and "DA-1B" shall be conveyed to the offsite pond in fully developed conditions.

Analysis Point 2: DA-2 & OS-2 (Post Development)
(Includes Flow From Larger DA "A1" area - See Note 1)
2-YR STORM: 142.6 CFS
10-YR STORM: 232.3 CFS
25-YR STORM: 285.2 CFS
100-YR STORM: 364.4 CFS

Analysis Point 1: DA-1, OS-A1, OS-B1 (Post Development)
2-YR STORM: 23.4 CFS
10-YR STORM: 45.4 CFS
25-YR STORM: 61.1 CFS
100-YR STORM: 87.0 CFS

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

7.4519 ACRES

(LT 1 REPLAT), Lot 1A
22.136 ACRES

HWY 183/S BELL BLVD.

DA–2 4.12 Ac.

DA–1A 2.77 Ac.

DA–1B 3.32 Ac.

DA–1C 0.13 Ac.

OS–1B 1.38 Ac.

OS–2 1.29 Ac.

OS–1A 8.49 Ac.

10.344 ACRES

LOT 1 1.66 AC. | LOT 2 0.82 AC. | LOT 3 0.75 AC. | LOT 4 1.00 AC. | LOT 5 0.92 AC. | LOT 6 0.95 AC. | LOT 7 1.00 AC. | LOT 8 1.25 AC. | LOT 9 0.88 AC. | LOT 10 1.13 AC.

PROPOSED PRIVATE 28' CONSTRUCTION AND ACCESS EASEMENT DOC. #

PROPOSED PRIVATE VARIABLE WIDTH DRAINAGE EASEMENT (MIN 15') DOC. #

PROPOSED 12' CONSTRUCTION AND ACCESS EASEMENT DOC. #

PROPOSED 1.31 AC DRAINAGE & DETENTION AREA EASEMENT DOC. #

WATER QUALITY SED. BASIN

WATER QUALITY FILTRATION BASIN

DETENTION BASIN (STACKED)

PRIVATE WATER DETENTION AND WATER QUALITY EASEMENT DOC. NO. 20110847O2 O.P.R.W.C.T.

WATER QUALITY UNDERDRAIN'S

TRACT 2
CALLED 53.9395 ACRES
BOARD OF TRUSTEES, LEANDER INDEPENDENT SCHOOL DISTRICT
DOC. NO. 2011084700
O.P.R.W.C.T.

COMMERCIAL LOT 2
LITTLE ELM SUBDIVISION
DOC. NO. 2013106218
O.P.R.W.C.T.

CONDOMINIUM LOT 1
LITTLE ELM SUBDIVISION
DOC. NO. 2013106218
O.P.R.W.C.T.

SEE NOTE 1 ON THIS SHEET

OS-1A Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	6.86	0.81	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.36	0.04	65	2.73
Commercial	0.00	0.00	75	0.00
Detention	1.27	0.15	0	0.00
Total	8.49		Cumulative Result:	**2.76**

DA-2 Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	4.12	1.00	75	75.00
Total	4.12		Cumulative Result:	**75.00**

OS-1B Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	1.02	0.74	100	73.73
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.36	0.26	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Total	1.38		Cumulative Result:	**73.78**

Time of Concentration Calculation

P2 = 3.96 *in.*

$$t_{sh} = \frac{0.007\,(n_{ol} L_{sh})^{0.8}}{P_2^{0.5} S_{sh}^{0.4}} \qquad t_{sc} = \frac{L_{sc}}{3600\,K\,S_{sc}^{0.5}} \qquad t_{ch} = \frac{L_{ch}}{\left(3600 \frac{1.49}{n} R^{2/3} S_{ch}^{1/2}\right)}$$

catchment name	L_{sh} *sheet flow length*	S_{sh} *sheet flow slope (ft/ft)*	*surface description*	P_2 *2-yr, 24-hr rainfall depth (in.)*	n_{ol} *overland flow roughness coeff.*	t_{sh} *sheet flow travel time (hr)*	L_{sc} *shallow conc. flow length (ft)*	S_{sc} *shallow conc. flow slope (ft/ft)*	K *16.13 - unpaved surf.*	t_{sc} *shallow conc. flow time (hr)*	L_p *Pipe flow length (ft)*	S_p *Assumed Velocity (ft/s)*	t_p *Pipe time (hr)*	L_{ch} *channel Length (ft)*	S_{ch} *channel flow slope (ft/ft)*	n *Manning's roughness coeff.*	R *hydraulic radius (ft)*	t *TC*	t_c *time of conc. (hr)*	t_c *time of conc. (min)*	t_L *lag time (min)*
DA-1A			Concrete	3.96	0.015				16.13		451	6.0	**0.02**						**0.02**	**5.0**	**3.00**
DA-1B			Concrete	3.96	0.015				16.13		406	6.0	**0.02**						**0.02**	**5.0**	**3.00**
DA-1C	90.5	0.001	Med Brush	3.96	0.400	**0.98**			16.13										**0.98**	**5.0**	**3.00**
DA-2	100	0.004	Concrete	3.96	0.015	**0.04**	522	0.050	16.13	**0.04**									**0.08**	**5.1**	**3.04**
OS-1A	100	0.007	Concrete	3.96	0.015	**0.04**	564	0.023	16.13	**0.06**									**0.10**	**6.0**	**3.58**
OS-1B	100	0.015	Asphalt	3.96	0.016	**0.03**			16.13					446	0.026	0.060	0.78	**0.04**	**0.06**	**5.0**	**3.00**

No. | Date | REVISIONS | App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-22800 & 10046100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN | DESIGNED BY: JVE
DATE: U1 - APRIL 2024 | CHECKED BY: GNR
JOB NO.: 28106-0001-02 | DRAWN BY: CCB

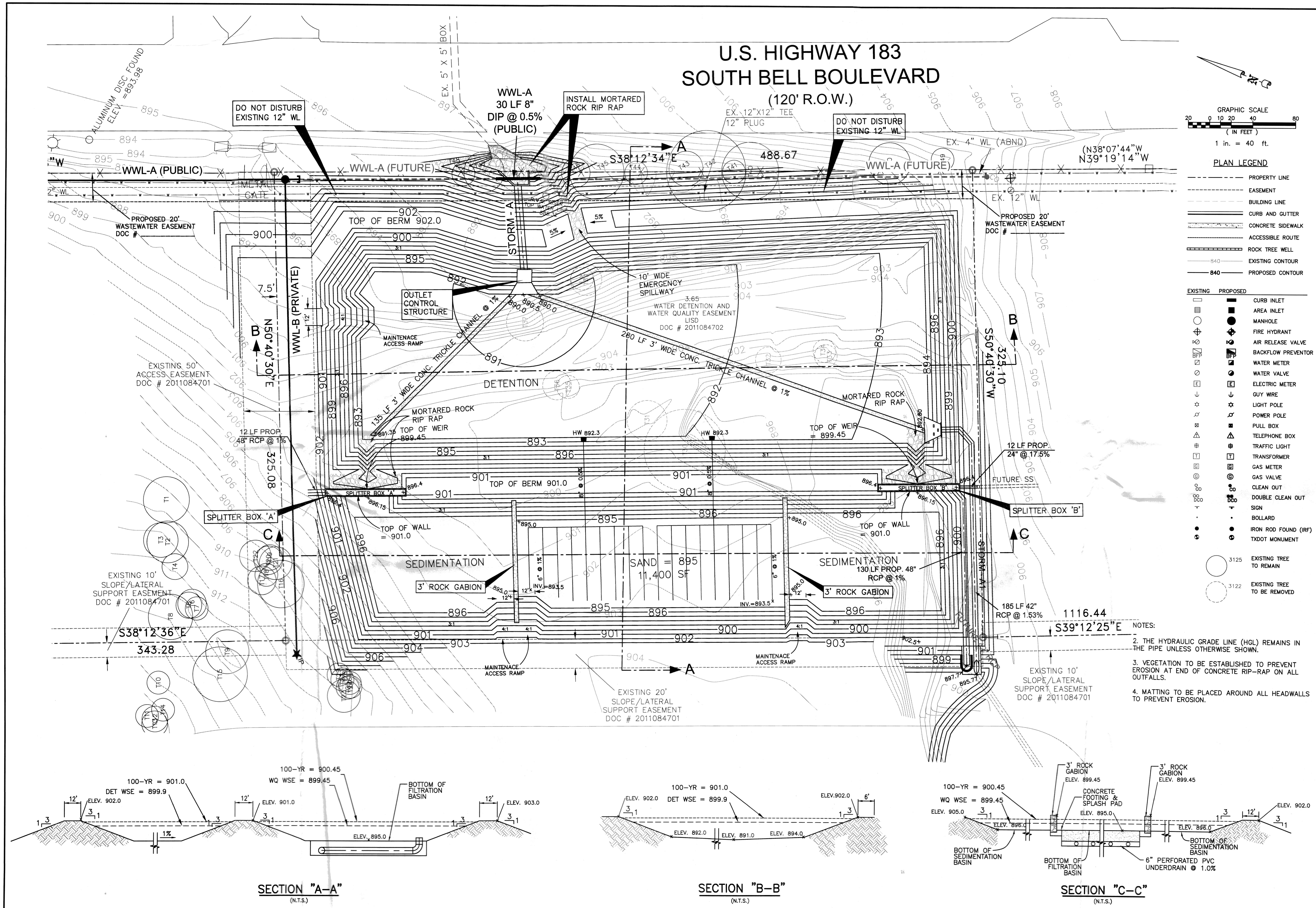
INTERIM REVIEW
Not intended for construction, bidding or permit purposes.
Engineer: GEMSONG RYAN, P.E.
P.E. Serial No.: 99300
Date: MAY 2024

TERRA HALONA, LLC
S BELL COMMERCIAL
1005 S BELL BLVD

PROPOSED DRAINAGE AREA MAP

SHEET NO. **30** OF **36**

2023-29-SD



U.S. HIGHWAY 183
SOUTH BELL BOULEVARD
(120' R.O.W.)
DO NOT DISTURB EXISTING 12" WL
WWL-A 30 LF 8" DIP @ 0.5% (PUBLIC)
INSTALL MORTARED ROCK RIP RAP
EX. 12"X12" TEE
12" PLUG
EX. 5' X 5' BOX
EX. 4" WL (ABND)
EX. 12" WL
WWL-A (PUBLIC)
WWL-A (FUTURE)
WWL-B (PRIVATE)
STORM-A
STORM-A1
S38°12'34"E
488.67
(N38°07'44"W
N39°19'14"W
N50°40'30"E
S50°40'30"W
325.10
325.08
S38°12'36"E
343.28
S39°12'25"E
1116.44
ALUMINUM DISC FOUND ELEV. = 893.98
PROPOSED 20' WASTEWATER EASEMENT DOC #
TOP OF BERM 902.0
TOP OF BERM 901.0
OUTLET CONTROL STRUCTURE
10' WIDE EMERGENCY SPILLWAY
WATER DETENTION AND WATER QUALITY EASEMENT LISD DOC # 2011084702
280 LF 3' WIDE CONC. TRICKLE CHANNEL @ 1%
135 LF 3' WIDE CONC. TRICKLE CHANNEL @ 1%
MAINTENANCE ACCESS RAMP
DETENTION
EXISTING 50' ACCESS EASEMENT DOC # 2011084701
MORTARED ROCK RIP RAP
TOP OF WEIR = 899.45
12 LF PROP. 48" RCP @ 1%
12 LF PROP. 24" @ 17.5%
HW 892.3
SPLITTER BOX 'A'
SPLITTER BOX 'B'
FUTURE SS
TOP OF WALL = 901.0
SEDIMENTATION
SAND = 895
11,400 SF
3' ROCK GABION
130 LF PROP. 48" RCP @ 1%
INV.=893.5
185 LF 42" RCP @ 1.53%
EXISTING 10' SLOPE/LATERAL SUPPORT EASEMENT DOC # 2011084701
EXISTING 20' SLOPE/LATERAL SUPPORT EASEMENT DOC # 2011084701
MAINTENACE ACCESS RAMP
100-YR = 901.0
DET WSE = 899.9
ELEV. 902.0
ELEV. 901.0
ELEV. 903.0
100-YR = 900.45
WQ WSE = 899.45
BOTTOM OF FILTRATION BASIN
ELEV. 895.0
SECTION "A-A"
(N.T.S.)
ELEV. 892.0
ELEV. 891.0
ELEV. 894.0
SECTION "B-B"
(N.T.S.)
ELEV. 905.0
3' ROCK GABION ELEV. 899.45
CONCRETE FOOTING & SPLASH PAD
ELEV. 896.0
BOTTOM OF SEDIMENTATION BASIN
6" PERFORATED PVC UNDERDRAIN @ 1.0%
SECTION "C-C"
(N.T.S.)
GRAPHIC SCALE
(IN FEET)
1 in. = 40 ft.

PLAN LEGEND

PROPERTY LINE	
EASEMENT	
BUILDING LINE	
CURB AND GUTTER	
CONCRETE SIDEWALK	
ACCESSIBLE ROUTE	
ROCK TREE WELL	
840	EXISTING CONTOUR
840	PROPOSED CONTOUR

EXISTING / PROPOSED: CURB INLET; AREA INLET; MANHOLE; FIRE HYDRANT; AIR RELEASE VALVE; BACKFLOW PREVENTOR; WATER METER; WATER VALVE; ELECTRIC METER; GUY WIRE; LIGHT POLE; POWER POLE; PULL BOX; TELEPHONE BOX; TRAFFIC LIGHT; TRANSFORMER; GAS METER; GAS VALVE; CLEAN OUT; DOUBLE CLEAN OUT; SIGN; BOLLARD; IRON ROD FOUND (IRF); TXDOT MONUMENT

3125 EXISTING TREE TO REMAIN

3122 EXISTING TREE TO BE REMOVED

NOTES:

2. THE HYDRAULIC GRADE LINE (HGL) REMAINS IN THE PIPE UNLESS OTHERWISE SHOWN.

3. VEGETATION TO BE ESTABLISHED TO PREVENT EROSION AT END OF CONCRETE RIP-RAP ON ALL OUTFALLS.

4. MATTING TO BE PLACED AROUND ALL HEADWALLS TO PREVENT EROSION.

R.L. KOSTER CONSULTING ENGINEER

STATE OF TEXAS ROBERT L. KOSTER 84499 LICENSED PROFESSIONAL ENGINEER

5-30-12

CYPRESS CORNER
CEDAR PARK, TEXAS
POND LAYOUT PLAN

DATE: 5-30-12

Sheet Number 16

SHT 16 OF 28

Attachment J - Existing Pond Sheets

WATER QUALITY STORAGE VOLUME DESIGN

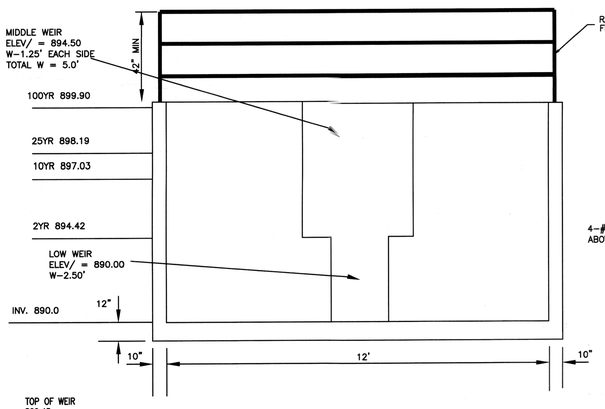
Centroidal Volumetric Methodology (D(2(A2-A1)/3+A1))

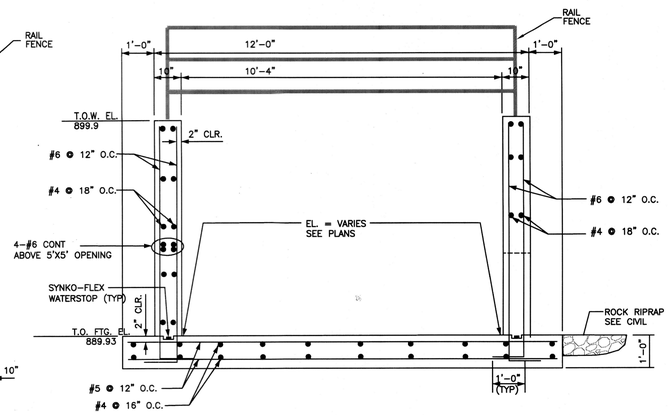
Elevation (feet)	Area (sf)	A1 (sf)	A2 (sf)	Depth (ft)	Incremental Volume (cf)	Storage Volume (cf)
901.0	42,026	39,251	42,026	1.0	41,101	199,027
900.0	39,251	36,339	39,251	1.0	38,280	157,926
899.0	36,339	33,438	36,339	1.0	35,372	119,646
898.0	33,438	30,544	33,438	1.0	32,473	84,274
897.0	30,544	27,638	30,544	1.0	29,575	51,801
896.0	27,638	11,400	27,638	1.0	22,225	22,225
895.0	11,400	0	11,400	0.0	0	0
894.0	0	0	0	0.0	0	0
893.0	0	0	0	0.0	0	0
892.0	0	0	0	0.0	0	0
891.0	0	0	0	0.0	0	0
890.0	0	-	0	0.0	0	0

Interpolation:		
Storm	Volume need	Elevation
100-yr	136,775	899.45

WEIR DESIGN

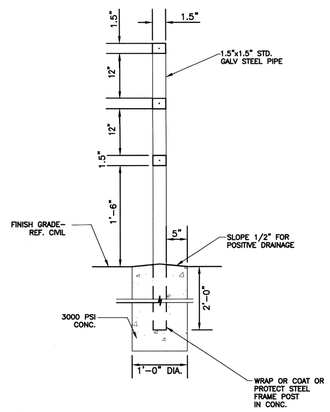
Spillway Rectangular Weir (storage ele 899.45	
Height (ft)	1.00
Length (ft)	100.00
Flow (cfs)	333.00





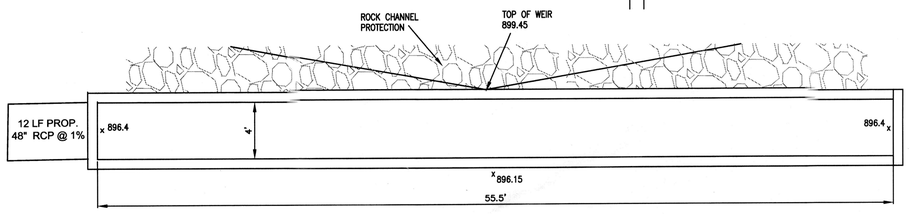
STORM WATER DETENTION OUTLET

SCALE: N.T.S.

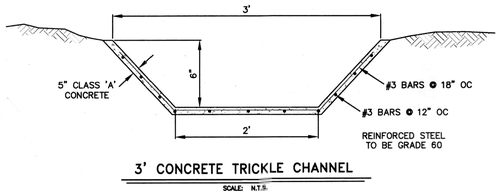


RAIL SECTION DETAIL

SCALE: N.T.S.



TOP VIEW



3' CONCRETE TRICKLE CHANNEL

SCALE: N.T.S.

FOR SEDIMENTATION AND FILTRATION PONDS

IMPERMEABLE LINERS MAY BE EITHER CLAY, CONCRETE OR GEOMEMBRANE. IF GEOMEMBRANE IS USED, SUITABLE GEOTEXTILE FABRIC SHALL BE PLACED ON THE TOP AND BOTTOM OF THE MEMBRANE FOR PUNCTURE PROTECTION. CLAY LINERS SHALL MEET THE FOLLOWING SPECIFICATIONS:

TABLE 1-7
CLAY LINER SPECIFICATION

PROPERTY	TEST METHOD	UNIT	SPECS.
PERMEABILITY	ASTM D-2434	Cm/Sec	1×10^{-6}
PLASTICITY INDEX OF CLAY	ASTM D-423 & D-424	%	NOT LESS THAN 15
LIQUID LIMIT OF CLAY	ASTM D-2216	%	NOT LESS THAN 30
CLAY PARTICLES PASSING	ASTM D-422	%	NOT LESS THAN 30
CLAY COMPACTION	ASTM D-2216	%	95% OF STANDARD PROCTOR DENSITY

THE CLAY LINER SHALL HAVE A MINIMUM THICKNESS OF 12 INCHES.

IF A GEOMEMBRANE LINER IS USED IT SHALL HAVE A MINIMUM THICKNESS OF 30 MILS AND BE ULTRAVIOLET RESISTANT.

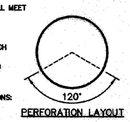
THE GEOTEXTILE FABRIC (FOR PROTECTION OF GEOMEMBRANE) SHALL MEET THE FOLLOWING SPECIFICATIONS:

SAND BED AND GEOTEXTILE FABRIC

FIRST (TOP) LAYER- FINE SAND, 0.02-0.04 INCH, AT LEAST 12 INCH TO 18 INCH DEPTH

SECOND LAYER- GRAVEL, 1/2-1 INCH, AT LEAST 1 INCH DEPTH TO 2 INCH DEPTH SURROUNDING UNDERDRAIN PIPING

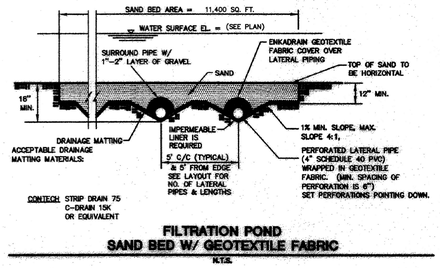
THE TWO LAYERS MUST BE SEPARATED FROM EACH OTHER USING SUITABLE GEOTEXTILE FABRIC MEETING THE FOLLOWING SPECIFICATIONS:



PERFORATION LAYOUT

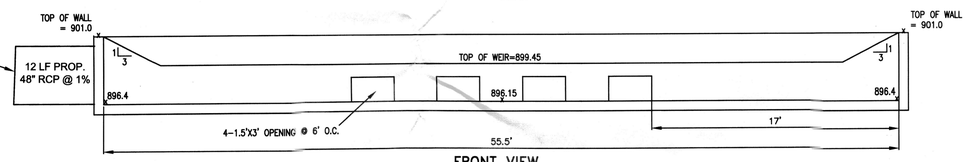
TABLE 1-9
DRAINAGE MATTING SPECIFICATIONS

PROPERTY	TEST METHOD	UNIT	SPECS.
MATERIAL			NONWOVEN GEOTEXTILE
UNIT WEIGHT		OZ/SQ.YD.	20
FLOW RATE (FABRIC)		GPM/FT^2	180 (MIN.)
PERMEABILITY	ASTM D-2434	CM/SEC	12.4×10^{-2}
GRAB STRENGTH (FABRIC)	ASTM D-1682	LB.	DRY LG 90 DRY WD:70 WET LG 95 WET WD:70
PUNCTURE STRENGTH	COE CW-02215	LB.	42 (MIN.)
MULLEN BURST STRENGTH	ASTM D-1117	PSI.	140 (MIN.)
EQUIV. OPENING SIZE	US STANDARD SIEVE	NO.	100 (70-120)
FLOW RATE (DRAINAGE CORE)	DREXEL UNIV. TEST METHOD	GPM/FT. WIDTH	14



FILTRATION POND
SAND BED W/ GEOTEXTILE FABRIC

N.T.S.

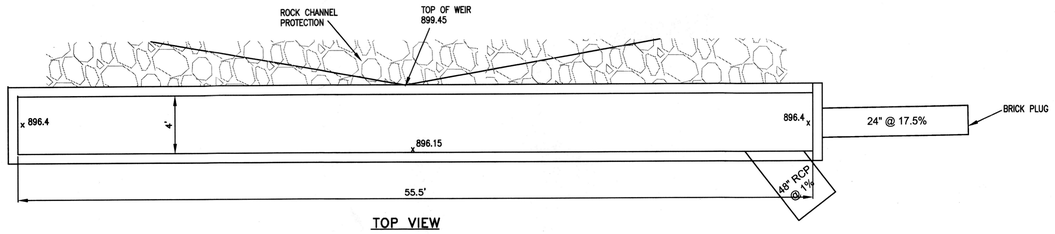


FRONT VIEW

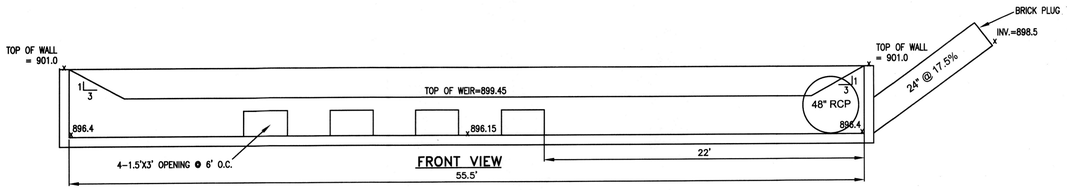
SPLITTER BOX 'A'

N.T.S.

ALL CONCRETE WALLS 8" THICK.
ALL STEEL #4 @ 12" O.C.



TOP VIEW

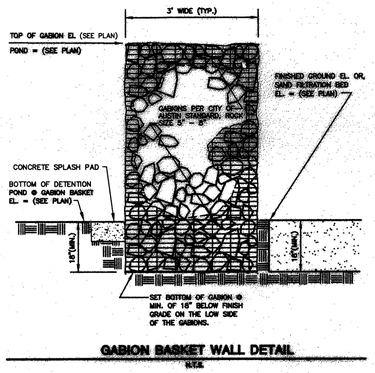


FRONT VIEW

SPLITTER BOX 'B'

N.T.S.

ALL CONCRETE WALLS 8" THICK.
ALL STEEL #4 @ 12" O.C.



GABION BASKET WALL DETAIL

N.T.S.

R.L. KOSTER CONSULTING ENGINEER
203 S. Jefferson Dr., Cedar Park, Texas 78613, P. 512.331.7477
TBPE Firm Registration No. 11700

STATE OF TEXAS
ROBERT L. KOSTER
84499
LICENSED PROFESSIONAL ENGINEER
5-30-12

CYPRESS CORNER
CEDAR PARK, TEXAS

WATER QUALITY POND DETAILS

DATE: 5-30-12

Sheet Number
17
SHT 17 OF 28

Attachment J - Existing Pond Sheets

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Cypress Corner @ 183
Date Prepared: 5/23/2012

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 * =	**55.87**	acres
Predevelopment impervious area within the limits of the plan * =	**0.00**	acres
Total post-development impervious area within the limits of the plan* =	**29.98**	acres
Total post-development impervious cover fraction * =	**0.54**	
P =	**32**	inches
$L_{M\ TOTAL\ PROJECT}$ =	**26095**	lbs.

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

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

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

Drainage Basin/Outfall Area No. =

Total drainage basin/outfall area =	**55.87**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**29.98**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.54**	
$L_{M\ THIS\ BASIN}$ =	**26095**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Sand Filter**
Removal efficiency = **89** 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

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

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

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

A_C =	**55.45**	acres
A_I =	**29.66**	acres
A_P =	**25.79**	acres
L_R =	**29624**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = **26095** lbs.

F = **0.88**

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 =	**1.50**	inches
Post Development Runoff Coefficient =	**0.38**	
On-site Water Quality Volume =	**113979**	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 =	**22796**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**136775**	cubic feet

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

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

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =		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 =	**136775**	cubic feet	
Minimum filter basin area =	**6332**	square feet	
Maximum sedimentation basin area =	**56990**	square feet	**For minimum water depth of 2 feet**
Minimum sedimentation basin area =	**14247**	square feet	**For maximum water depth of 8 feet**

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	**136775**	cubic feet	
Minimum filter basin area =	**11398**	square feet	
Maximum sedimentation basin area =	**45592**	square feet	**For minimum water depth of 2 feet**
Minimum sedimentation basin area =	**2849**	square feet	**For maximum water depth of 8 feet**

WATER QUALITY STORAGE VOLUME DESIGN

Centroidal Volumetric Methodology (D(2(A2-A1)/3+A1))

Elevation (feet)	Area (sf)	A1 (sf)	A2 (sf)	Depth (ft)	Incremental Volume (cf)	Storage Volume (cf)
901.0	42,026	39,251	42,026	1.0	41,101	199,027
900.0	39,251	36,339	39,251	1.0	38,280	157,926
899.0	36,339	33,438	36,339	1.0	35,372	119,646
898.0	33,438	30,544	33,438	1.0	32,473	84,274
897.0	30,544	27,638	30,544	1.0	29,575	51,801
896.0	27,638	11,400	27,638	1.0	22,225	22,225
895.0	11,400	0	11,400	0.0	0	0
894.0	0	0	0	0.0	0	0
893.0	0	0	0	0.0	0	0
892.0	0	0	0	0.0	0	0
891.0	0	0	0	0.0	0	0
890.0	0	-	0	0.0	0	0

Interpolation:		
Storm	Volume need	Elevation
100-yr	136,775	899.45

WEIR DESIGN

Spillway Rectangular Weir (storage ele 899.45	
Height (ft)	1.00
Length (ft)	100.00
Flow (cfs)	333.00

R.L. KOSTER CONSULTING ENGINEER
2013 Sandman Drive Cedar Park, Texas 78613 512.331.7477
TBPE Firm Registration No. 17900

STATE OF TEXAS
ROBERT L. KOSTER
84499
LICENSED
PROFESSIONAL ENGINEER
5-30-12

CYPRESS CORNER
CEDAR PARK, TEXAS
WATER QUALITY POND DETAILS

DATE: 5-30-12

Sheet Number
18
SHT 18 OF 28

Attachment J - Existing Pond Sheets

Attachment K: BMPs FOR ON-SITE STORMWATER

The existing regional water quality and detention pond servicing the development was designed in 2012 prior to the adoption of the Atlas 14 rainfall data. As such, the drainage analysis for this 4.12-acre project was based on the drainage requirements of the City of Cedar Park (defers to City of Austin Drainage Criteria Manual) for projects that are part of a phased development where prior phases were permitted or constructed using rainfall data pre-dating Atlas 14 (COA DCM 1.2.2.H). More specifically, the drainage analysis was focused on analyzing the existing regional sedimentation-filtration detention pond to confirm that the proposed development of the subject 4.12-acre lot would not cause the pond to overtop the embankment during the 100-year storm event using Atlas 14 rainfall data.

Per the attached drainage area map sheets (**Attachment J**), the impervious cover associated with the "DA-2" or the 4.12-acre portion of the *S Bell* Commercial project will be 0.08 acres (2.04% impervious cover). Per the approved Cypress Corner Subdivision CZP construction plans (**Mod Attachment C)**, an impervious cover percentage of 75% was considered for future developments within the "A-2" post-development drainage area. As "DA-2" is included within the "A-2" area, the maximum impervious cover percentage of 75% has not been exceeded. *S Bell Blvd Commercial* will continue to utilize the regional sedimentation-filtration/detention to satisfy water quality requirements.

Below is the TSS calculation for the modified site area & the summary table for the TSS calculations for the existing sedimentation-filtration pond. The TSS calculations for the existing sedimentation-filtration pond can be found within the attached existing pond sheets for the *Cypress Corner Subdivision.*

Approved CZP Project Name	TCEQ EAPP ID No.	Total Area	Cumulative IC Area (Acres)	IC (%)	Total Suspended Solids [TSS] (lbs)
Cypress Corner Subdivision	11-12060101	55.87	29.98 (Total Planned)	53.70%	26095

Approved CZP Project Name (Constructed Improvements)	TCEQ EAPP ID No.	Total Area	Cumulative IC Area (Acres)	IC (%)	Total Suspended Solids [TSS] (lbs)
Cypress Corner Subdivision	11-12060101	55.87	0.32 (Constructed - Alexis Drive)	0.57%	279

Modified CZP Project Name	TCEQ EAPP ID No.	Total Area	Cumulative IC Area (Acres)	IC (%)	Total Suspended Solids [TSS] (lbs)
S. Bell Blvd Commercial	Pending	4.12	0.08*	2.04%*	70*

* Please note that the approved Cypress Corner Subdivision CZP assumes 75% IC for TSS Allocations regarding the S. Bell Blvd Commercial site		Remaining Allocation From Approved CZP (Cypress Corner Subdivision)	Cumulative IC Area (Acres)	Cumulative IC (%)	Total Remaining Suspended Solids [TSS] (lbs)
			0.4	0.72%	25746

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

01/16/2024

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

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

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

where:

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

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

County =	**Williamson**	
Total project area included in plan * =	**4.12**	acres
Predevelopment impervious area within the limits of the plan * =	**0.00**	acres
Total post-development impervious area within the limits of the plan* =	**0.08**	acres
Total post-development impervious cover fraction * =	**0.02**	
P =	**32**	inches
$L_{M\ TOTAL\ PROJECT}$ =	**70**	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 =	**4.12**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.08**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.02**	
$L_{M\ THIS\ BASIN}$ =	**70**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Sand Filter**	
Removal efficiency =	**89**	percent

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

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 3

where:

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

A_C =	**4.12**	acres
A_I =	**0.08**	acres
A_P =	**4.04**	acres
L_R =	**141**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**70**	lbs.
F =	**0.49**	

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

Rainfall Depth =	**0.41**	inches
Post Development Runoff Coefficient =	**0.75**	
On-site Water Quality Volume =	**4588**	cubic feet

Calculations from RG-348

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 =	**918**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**5505**	cubic feet

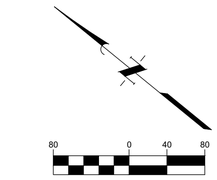
The following sections are used to calculate the required water quality volume(s) for the selected BMF
The values for BMP Types not selected in cell C45 will show NA.

Attachment L: BMPs for Surface Streams

Attachment L is not applicable to this project

Attachment M: Construction Plans

1. Modified CZP – Existing Drainage Area Map
2. Modified CZP – Proposed Drainage Area Map



SCALE: 1" = 80'

DA-1 Impervious Cover

Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each Proportion
Roads	0.00	0.00	100	0.00
Fair Woods	14.71	0.97	0	0.00
Fair Brush	0.03	0.00	0	0.00
1/8 Ac Single-Family	0.36	0.02	65	1.54
Total	15.10	1.00	Cumulative Result:	**1.54**

DA-2 Impervious Cover Calculation

Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each Proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.55	0.13	0	0.00
Fair Brush	3.57	0.87	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Total	4.12	1.00	Cumulative Result:	**0.00**

OS-1B Impervious Cover Calculation

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each Proportion
Roads	1.02	0.74	100	73.78
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.36	0.26	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Total	1.38	1.00	Cumulative Result:	**73.78**

DAMAP LEGEND

1.82 Ac. — DRAINAGE AREA IN ACRES

DRAINAGE AREA LINE

A–1 — DRAINAGE AREA NUMBER

FLOW DIRECTION

TO — TO — TIME OF CONCENTRATION

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTES:

1. Offsite Drainage Area "OS-2" is not delineated within the Drainage Analysis study because this area is analyzed within the larger "A1" drainage area which drains to the existing regional detention pond. See Drainage Analysis for more information.
2. The fl ow off the site has not been increased from existing condition. (For Offsite Drainage Area "OS-2", see Note 1 above)
3. HEC-HMS 4.8 was utilized to calculate post development flows for 2, 10, 25 & 100 year storm events.
4. Engineer has reviewed plans pertaining to the design of the existing detention facilities and agrees with their design. Proposed development does not adversely affect any downstream properties.

Analysis Point 2: DA-2 & OS-2 (Pre Development)
[Includes Flow From Larger DA "A1" area - See Note 1]
2-YR STORM: 99.0 CFS
10-YR STORM: 180.5 CFS
25-YR STORM: 235.6 CFS
100-YR STORM: 317.1 CFS

Analysis Point 1: DA-1, OS-B1 (Pre Development)
2-YR STORM: 24.2 CFS
10-YR STORM: 46.8 CFS
25-YR STORM: 62.9 CFS
100-YR STORM: 90.9 CFS

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Time of Concentration Calculation

P2 = 3.96 *in.*

$$t_{sh} = \frac{0.007(n_{ol}L_{sh})^{0.8}}{P_2^{0.5}S_{sh}^{0.4}} \qquad t_{sc} = \frac{L_{sc}}{3600\,K\,S_{sc}^{0.5}} \qquad t_{ch} = \frac{L_{ch}}{\left(3600\,\frac{1.49}{n}\,R^{2/3}S_{ch}^{1/2}\right)}$$

catchment name	L_{sh} sheet flow length	S_{sh} sheet flow slope (ft/ft)	surface description	P_2 2-yr, 24-hr rainfall depth (in.)	n_{ol} overland flow roughness coeff.	t_{sh} sheet flow travel time (hr)	L_{sc} shallow conc. flow length (ft)	S_{sc} shallow conc. flow slope (ft/ft)	K 16.13 - unpaved surface	t_{sc} shallow conc. flow time (hr)	L_{ch} channel Length (ft)	S_{ch} channel flow slope (ft/ft)	n Manning's roughness coeff.	R hydraulic radius (ft)	t TC	t_c time of conc. (hr)	t_c time of conc. (min)	t_l lag time (min)
DA-1	100	0.007	Med Brush	3.96	0.40	**0.49**	1,155	0.036	16.13	**0.11**						**0.59**	**35.5**	**21.31**
DA-2	100	0.004	Med Brush	3.96	0.40	**0.61**	522	0.050	16.13	**0.04**						**0.65**	**38.8**	**23.28**
OS-1B	100	0.015	Asphalt	3.96	0.02	**0.03**					446	0.026	0.060	0.78	**0.04**	**0.06**	**5.0**	**3.00**
OS-2 (for site plans, not for HH study)	100	0.006	Woods (light underbrush)	3.96	0.40	**0.51**	1,636	0.022	16.13	**0.19**						**0.70**	**41.8**	**25.06**

K:\28106\28106-0001-02 1201 S. Rell Blvd. - Commercial Subdivision\3 Design Phase\CAD\Subdivision\28106-0001-02 DAMAP-E.dwg cbarch May 09, 2024

REVISIONS

No.	Date	App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. P-12000 & 10040100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN | DESIGNED BY: JVE
DATE: U1 - APRIL 2024 | CHECKED BY: GNR
JOB NO.: 28106-0001-02 | DRAWN BY: CCB

INTERIM REVIEW
Not intended for construction, bidding or permit purposes.
Engineer: GEMSONG RYAN, P.E.
P.E. Serial No.: 99300
Date: MAY 2024

TERRA HALONA, LLC
S BELL COMMERCIAL
1005 S BELL BLVD

EXISTING DRAINAGE AREA MAP

SHEET NO. **29** OF **36**

2023-29-SD

DA-1A Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	2.77	1.00	75	75.00
Total	2.77		Cumulative Result:	**75.00**

DA-1B Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	3.32	1.00	75	75.00
Total	3.32		Cumulative Result:	**75.00**

DA-1C Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	0.13	1.00	75	75.00
Total	0.13		Cumulative Result:	**75.00**

80 0 40 80

SCALE: 1" = 80'

DAMAP LEGEND

1.82 Ac. — DRAINAGE AREA IN ACRES

DRAINAGE AREA LINE

A–1 — DRAINAGE AREA NUMBER

FLOW DIRECTION

TO — TO — TIME OF CONCENTRATION

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTES:

1. Offsite Drainage Area "OS-2" is not delineated within the Drainage Analysis study because this area is analyzed within the larger "A1" drainage area which drains to the existing regional detention pond. See Drainage Analysis for more information.
2. The fl ow off the site has not been increased from existing condition. (For Offsite Drainage Area "OS-2", see Note 1 above)
3. HEC-HMS 4.8 was utilized to calculate post development flows for 2, 10, 25 & 100 year storm events.
4. The flow off the site has not been increased from the existing condition.
5. The engineer has reviewed plans pertaining to the design of the existing detention facilities and agrees with their design. The proposed development does not adversely affect any downstream properties.
6. Flows from Drainage Areas "DA-1A" and "DA-1B" shall be conveyed to the offsite pond in fully developed conditions.

Analysis Point 2: DA-2 & OS-2 (Post Development)
(Includes Flow From Larger DA "A1" area - See Note 1)
2-YR STORM: 142.6 CFS
10-YR STORM: 232.3 CFS
25-YR STORM: 285.2 CFS
100-YR STORM: 364.4 CFS

Analysis Point 1: DA-1, OS-A1, OS-B1 (Post Development)
2-YR STORM: 23.4 CFS
10-YR STORM: 45.4 CFS
25-YR STORM: 61.1 CFS
100-YR STORM: 87.0 CFS

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

Area not Included within the Modified CZP Submittal

7.4519 ACRES

(LT 1 REPLAT), Lot 1A
22.136 ACRES

HWY 183/S BELL BLVD.

DA–2 4.12 Ac.

DA–1A 2.77 Ac.

DA–1B 3.32 Ac.

DA–1C 0.13 Ac.

OS–1B 1.38 Ac.

OS–2 1.29 Ac.

OS–1A 8.49 Ac.

10.344 ACRES

LOT 1 1.66 AC. | LOT 2 0.82 AC. | LOT 3 0.75 AC. | LOT 4 1.00 AC. | LOT 5 0.92 AC. | LOT 6 0.95 AC. | LOT 7 1.00 AC. | LOT 8 1.25 AC. | LOT 9 0.88 AC. | LOT 10 1.13 AC.

PROPOSED PRIVATE 28' CONSTRUCTION AND ACCESS EASEMENT DOC. #

PROPOSED PRIVATE VARIABLE WIDTH DRAINAGE EASEMENT (MIN 15') DOC. #

PROPOSED 12' CONSTRUCTION AND ACCESS EASEMENT DOC. #

PROPOSED 1.31 AC DRAINAGE & DETENTION AREA EASEMENT DOC. #

WATER QUALITY SED. BASIN

WATER QUALITY FILTRATION BASIN

DETENTION BASIN (STACKED)

PRIVATE WATER DETENTION AND WATER QUALITY EASEMENT DOC. NO. 20110847O2 O.P.R.W.C.T.

WATER QUALITY UNDERDRAIN'S

TRACT 2
CALLED 53.9395 ACRES
BOARD OF TRUSTEES, LEANDER INDEPENDENT SCHOOL DISTRICT
DOC. NO. 2011084700
O.P.R.W.C.T.

COMMERCIAL LOT 2
LITTLE ELM SUBDIVISION
DOC. NO. 2013106218
O.P.R.W.C.T.

CONDOMINIUM LOT 1
LITTLE ELM SUBDIVISION
DOC. NO. 2013106218
O.P.R.W.C.T.

SEE NOTE 1 ON THIS SHEET

OS-1A Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	6.86	0.81	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.36	0.04	65	2.73
Commercial	0.00	0.00	75	0.00
Detention	1.27	0.15	0	0.00
Total	8.49		Cumulative Result:	**2.76**

DA-2 Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	0.00	0.00	100	0.00
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.00	0.00	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Commercial	4.12	1.00	75	75.00
Total	4.12		Cumulative Result:	**75.00**

OS-1B Impervious Cover Calculation (Proposed)

Proposed Land Type	Area (ac)	Proportion	% Impervious Cover	%IC for each proportion
Roads	1.02	0.74	100	73.73
Fair Woods	0.00	0.00	0	0.00
Fair Brush	0.36	0.26	0	0.00
1/8 Ac Single-Family	0.00	0.00	65	0.00
Total	1.38		Cumulative Result:	**73.78**

Time of Concentration Calculation

P2 = 3.96 *in.*

$$t_{sh} = \frac{0.007\,(n_{ol} L_{sh})^{0.8}}{P_2^{0.5} S_{sh}^{0.4}} \qquad t_{sc} = \frac{L_{sc}}{3600\,K\,S_{sc}^{0.5}} \qquad t_{ch} = \frac{L_{ch}}{\left(3600 \frac{1.49}{n} R^{2/3} S_{ch}^{1/2}\right)}$$

catchment name	L_{sh} *sheet flow length*	S_{sh} *sheet flow slope (ft/ft)*	*surface description*	P_2 *2-yr, 24-hr rainfall depth (in.)*	n_{ol} *overland flow roughness coeff.*	t_{sh} *sheet flow travel time (hr)*	L_{sc} *shallow conc. flow length (ft)*	S_{sc} *shallow conc. flow slope (ft/ft)*	K *16.13 - unpaved surf.*	t_{sc} *shallow conc. flow time (hr)*	L_p *Pipe flow length (ft)*	S_p *Assumed Velocity (ft/s)*	t_p *Pipe time (hr)*	L_{ch} *channel Length (ft)*	S_{ch} *channel flow slope (ft/ft)*	n *Manning's roughness coeff.*	R *hydraulic radius (ft)*	t *TC*	t_c *time of conc. (hr)*	t_c *time of conc. (min)*	t_L *lag time (min)*
DA-1A			Concrete	3.96	0.015				16.13		451	6.0	**0.02**						**0.02**	**5.0**	**3.00**
DA-1B			Concrete	3.96	0.015				16.13		406	6.0	**0.02**						**0.02**	**5.0**	**3.00**
DA-1C	90.5	0.001	Med Brush	3.96	0.400	**0.98**			16.13										**0.98**	**5.0**	**3.00**
DA-2	100	0.004	Concrete	3.96	0.015	**0.04**	522	0.050	16.13	**0.04**									**0.08**	**5.1**	**3.04**
OS-1A	100	0.007	Concrete	3.96	0.015	**0.04**	564	0.023	16.13	**0.06**									**0.10**	**6.0**	**3.58**
OS-1B	100	0.015	Asphalt	3.96	0.016	**0.03**			16.13					446	0.026	0.060	0.78	**0.04**	**0.06**	**5.0**	**3.00**

No. | Date | REVISIONS | App.

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Registration Nos. F-22800 & 10046100
3100 Alvin Devane Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9493

SCALE: AS SHOWN | DESIGNED BY: JVE
DATE: U1 - APRIL 2024 | CHECKED BY: GNR
JOB NO.: 28106-0001-02 | DRAWN BY: CCB

INTERIM REVIEW
Not intended for construction, bidding or permit purposes.
Engineer: GEMSONG RYAN, P.E.
P.E. Serial No.: 99300
Date: MAY 2024

TERRA HALONA, LLC
S BELL COMMERCIAL
1005 S BELL BLVD

PROPOSED DRAINAGE AREA MAP

SHEET NO. **30** OF **36**

2023-29-SD

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

Appendix N: Inspection, Maintenance, Repair and Retrofit Plan For Sediment and Sand Filtration Water Quality Pond

PROJECT NAME: Cypress Corner Subdivision c/o T.S.– S.D. III, LTD
ADDRESS: 10800 Pecan Park Blvd. Suite #240.
CITY, STATE, ZIP: Austin, Texas 78759

SEDIMENTATION BASINS:

Monthly The vegetative growth in the basin shall be checked. The growth shall not exceed 18 inches in height.

Quarterly: The level of accumulated silt shall be checked. If depth of silt exceeds 6 inches, it shall be removed and disposed of "properly".

The basin shall be checked for accumulation of debris and trash. The debris and trash shall be removed if excessive. All debris and trash shall be removed at least every six months.

Annually: The basin shall be inspected for structural integrity and repaired if necessary. Sediment shall be cleared from the inlet and outlet structures annually. Any visible trees or tree roots shall be removed to prevent growth of cracks and joints. All cracks, voids, and undermining shall be patched/filled.

After Rainfall: The basin shall be checked after each rainfall occurrence to insure that it drains within 48 hours after the storm is over. If it does not drain within this time, corrective maintenance will be accomplished.

FILTRATION BASINS:

Monthly: The vegetative growth shall be checked. Vegetation in the basin shall not exceed 18 inches in height.

Quarterly: The level of accumulated silt shall be checked. If the depth of silt/pollutants exceeds **1/2** inch or the drainage time exceeds 48 hours, it shall be removed and disposed of "properly".

The accumulation of pollutants/oils shall be checked. If the pollutants have significantly reduced the designed capacity of the sand filter, the pollutants shall be removed.

The basin shall be checked for accumulation of debris and trash. The debris and trash shall be removed if excessive, All debris and trash shall be removed at least every six months.

Annually: The basin shall be inspected for structural integrity and repaired if necessary. The under-drain piping network shall be inspected, and any built-up sediment shall be removed.

After Rainfall: The basin shall be checked after each rainfall occurrence to insure that it drains within 48 hours after the sedimentation basin has been emptied. If it does not drain within this time, corrective maintenance will be accomplished.

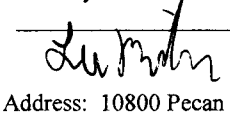
Non-Routine: If the draw-down time exceeds 48 hours, corrective maintenance shall occur. The upper layer of geotechnical material and gravel ballast should be removed and replaced with new material meeting the original specifications. Any discolored or silt contaminated sand should also be removed and replaced,

Following any required maintenance, the surface of the filtration basin shall be raked and leveled to restore the system to its designed condition.

"Proper" disposal of accumulated silt shall be accomplished following Texas Natural Resource Conservation Commission and City of Austin guidelines and specification.

An amended copy of this document will be provided to the Texas Natural Resource Conservation Commission within thirty (30) days of any changes in the following information,

Responsible Party: T.S.– S.D. III, LTD



05/31/2012

Signature Date

Mailing Address: 10800 Pecan Park Blvd. Suite #240.

Austin, Texas 78759 Telephone: 512-335-5577

Attachment O: Pilot Scale Field Testing Plan

Attachment O is not applicable to this project

Attachment P: Measures for Minimizing Surface Stream Contamination

Attachment P is not applicable to this project

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Cypress Corner Subdivision Storm Water Pollution Prevention Plan

Project information:

Owner: T.S.– S.D. III, LTD

Address: 10800 Pecan Park Blvd. Suite #240
Austin, Texas 78759

Legal Description: Cypress Corner Subdivision
Cedar Park, Williamson County, Texas

Project Limits: The corner lot property consists of 47.69 acres of a future LISD school containing 50% impervious cover, 7.76 acres of commercial property along US 183 containing 75% impervious cover and a 0.42 acre roadway, Alexis Dr, along Cypress Creek Rd containing 75% impervious cover for a total of 55.87 acres containing 29.98 acres of impervious cover. The total impervious cover for the future development is 53.7%. 55.87 acres will be disturbed by site development construction activities.

Project Description: The project consists of the construction of buildings, parking and driveways and accompanying curbing, sidewalks, and landscaping; accompanying storm sewer and utilities; and water quality controls.

Major Soil Disturbing Activities: Soil disturbing activities will include, but not limited to, clearing & grubbing; installing a stabilized construction entrance; the grading, excavation, and embankment for the roadway; excavation for water quality ponds; the placement of utilities and storm sewer; construction of curb & gutter and sidewalks; drainage detention pond improvements and water quality controls; placement of erosion and sediment controls; and topsoil placement for seeding as shown on the plans.

Runoff Coefficient: The final coefficient of runoff for this site will be C = 0.70

Existing Conditions: The site is undeveloped, with stony, loamy soil and draining to a shallow swale

Name of Receiving Waters: The entire site will drain into Brushy Creek, which runs to the south and east of the site.

Refer to construction plans for paving, utility, storm sewer, grading, and temporary & permanent erosion and sedimentation controls.

Sequence of Major Activities:

1. The contractor will clear portions of the project area required for site preparation but limit vegetation and soil disturbance to essential construction sites only.

2. Install perimeter controls such as sediment fences, construction entrance, and sediment basin.

3. Implement phase construction. Construction shall consist of paving, grading and drainage.

4. Placement of topsoil and seeding where indicated on plans.

5. When all construction activity is complete and the site soils are stabilized to a condition approved by the engineer, temporary structural controls shall be removed with any vegetation disturbed during this process to be replaced.

Erosion and Sediment Controls:

Soil Stabilization Practices: Soil stabilization methods are shown on the construction plans and include, but not limited to, the following: permanent planting, sodding, and seeding, mulching, buffer zones, and preservation of natural resources. Disturbed areas on which construction activity has ceased (temporarily or permanently) shall be stabilized within 14 days unless activities are scheduled to resume and do within 21 days.

Structural Practices: Temporary erosion and sedimentation controls are shown on the construction plans and include, but not limited to, the following: silt fences, rock berms, diversion berms, rock bedding at construction exit, and sedimentation basin.

Permanent erosion and sedimentation controls are shown on the construction plans and include, but not limited to, the following: earthen dikes, diversion swales, drainage channel, storm sewers, curb & gutters, concrete outlet structures, and sand filtration ponds.

Storm Water Management: Storm water will be surface, curb & gutter, and storm sewer pipe drainage, connected splitter boxes which divide initial rainfall from full runoff. The initial runoff is diverted to the sand filtration ponds, while the rest is released directly to the drainage channel. All storm water management is handled by regional detention pond downstream on Brushy Creek.

Other Erosion and Sediment Controls:

Maintenance: All erosion and sedimentation controls will be maintained in good working order. If a repair is necessary, it will be done at the earliest date possible, but no later than 7 calendar days after the surrounding exposed ground has dried sufficiently to prevent further damage from heavy equipment. The areas adjacent to creeks and drainage ways shall have priority followed by devices protecting storm sewer inlets.

Inspection: An inspection will be performed by an owner specified inspector every week as well as after every half inch or more of rain (as recorded on a non-freezing rain gouge to be located at the Project Site). An inspection and Maintenance Report will be made per each inspection. Based on the inspection results, the controls shall be revised per the inspection report.

Waste Materials: All waste materials will be collected and stored in a securely lidded metal dumpster. The dumpster will meet all state and local city solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as necessary or as required by local regulation, and the trash will be hauled to a local dump. No construction waste material will be buried on site.

Hazardous Waste: At a minimum, any products in the following categories are considered hazardous: Points, Acids for cleaning masonry surfaces, Cleaning Solvents, Asphalts products, Chemical additives for soil stabilization, or Concrete curing compounds and additives. Hazardous waste materials will be disposed of in a manner specified by local or state regulation or by the manufacturer.

Sanitary Waste: All sanitary waste will be collected from the portable units as necessary or as required by local regulation by a licensed sanitary waste management contractor.

Offsite Vehicle Tracking: Stabilized construction exits shall be installed at all points of ingress & egress to the site, including material and storage areas. Other controls include, but are not limited to, the following: haul roads dampened for dust control, loaded haul trucks to be covered with tarpaulin, and excess dirt on road removed daily.

Remarks: Disposal areas, stockpiles and haul roads shall be constructed in a manner that will minimize and control the amount of sediment that may enter receiving waters. Disposal areas shall not be located in any wetland, water body, or streambed.

Construction staging areas and vehicle maintenance areas shall be constructed by the Contractor in a manner to minimize the runoff of pollutants.

All waterways shall be cleared as soon as practicable of temporary embankment, temporary bridges, matting, falsework, piling, debris or other obstructions placed during construction operations that are not a part of the finished work.

Inventory for Pollution Prevention Plan:

The materials or substances listed below are expected to be present onsite during construction:

- Concrete
- Asphaltic Cement
- Fertilizers
- Petroleum Based Products
- Paints (enamel and latex)
- Cleaning Solvents
- Wood

Spill Prevention:

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to storm water runoff.

The following good housekeeping practices will be followed onsite during the construction project.

- An effort will be made to store only enough product required to do the job
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure
- Products will be kept in their original containers with the original manufacturer's label
- Substances will not be mixed with one another unless recommended by the manufacturer
- Whenever possible, all of a product will be used up before disposing of the container
- Manufacturers' recommendations for proper use and disposal will be followed
- The site superintendent will inspect daily to ensure proper use and disposal of materials onsite.

These practices are used to reduce the risks associated with hazardous materials.

- Products will be kept in original containers unless they are not resealable
- Original labels and material safety data will be retained; they contain important product information
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed

The following product specific practices will be followed onsite:

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

Fertilizers: Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

Paints: All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or State and local regulations.

Concrete: Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

Spill Control Practices:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

- All spills will be cleaned up immediately after discovery,

- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size.

- The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

- The site superintendent responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator.

Pollution Prevention Plan Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance proper engineering practices, and the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Robert Koster 6-1-12

Robert Koster, PE Date

Contractor's Certification:

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

_____

Name Date

Signed Agent Authorization (TCEQ-0599)

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

I Benny Nguyen,
Print Name

Managing Partner,
Title - Owner/President/Other

of Bell South Commercial LLC,
Corporation/Partnership/Entity Name

have authorized Joshua V. Elledge
Print Name of Agent/Engineer

of Quiddity Engineering
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

11/20/2023
Date

ARLENE JACKSON
Notary Public
STATE OF TEXAS
My Comm. Exp. 07-07-26
Notary ID # 12574131-2

THE STATE OF Texas §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared Benny D Nguyen 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 20th day of November 2023

NOTARY PUBLIC

Arlene Jackson
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 07-07-2026

Signed Application Fee Form (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: S Bell Blvd Commercial
Regulated Entity Location: 1005 S Bell Blvd., Cedar Park, Texas 78613
Name of Customer: Bell South Commercial LLC
Contact Person: Mr. Benny Nguyen Phone: (512)-965-4200
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	4.12 Acres	$ 4,000
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: 5/8/2024

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Signed
Core Data Form
(TCEQ 10400)

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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

SECTION II: Customer Information

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

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

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

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

Bell South Commercial LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0804929188			

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

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

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

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

☐ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☒ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:

625 Bering Drive
Suite 500

City	State	ZIP	ZIP + 4
Houston	TX	77057	

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	benny@halonare.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(512) 965-4200		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (*If 'New Regulated Entity" is selected below this form should be accompanied by a permit application*)

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

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

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

S Bell Blvd Commercial

23. Street Address of the Regulated Entity: *(No PO Boxes)*	1005 S Bell Blvd.						
	City	Cedar Park	**State**	TX	**ZIP**	78613	**ZIP + 4**
24. County	Williamson						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	Located off South Bell Blvd. approximately 750 ft north of its intersection with Little Elm Trail in Cedar Park, TX

26. Nearest City	**State**	**Nearest ZIP Code**
Cedar Park	TX	78613

27. Latitude (N) In Decimal:	30.49590	**28. Longitude (W) In Decimal:**	97.81251

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	29	45.24	97	48	45.04

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)
6552	5940	236220	

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

Commercial

34. Mailing Address:							
	City		**State**		**ZIP**		**ZIP + 4**
35. E-Mail Address:							

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

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

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

SECTION IV: Preparer Information

40. Name:	Joshua V. Elledge	**41. Title:**	Senior Project Manager

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 685-5160		(512) 445-2286	jelledge@quiddity.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:	Terra Halona, LLC	**Job Title:**	Managing Partner
Name *(In Print):*	Benny Nguyen	**Phone:**	(512) 965- **4200**
Signature:		**Date:**	2/14/2024

Appendix

A. Drainage Area Metes and Bounds

Exhibit "**A**" Drainage Area

LEGAL DESCRIPTION

BEING a 4.1193 acre (179,437 sq. ft.) tract of land situated in the Samuel Damon Survey No. 11, Abstract No 170, Cedar Park, Williamson County, Texas, and being a portion of Lot 1, Block A of the TSSD3 Subdivision as recorded in Document No. 2023009524 of the Official Public Records of Williamson County, Texas, being the same property described in that Special Warranty Deed with Vendor's Lien to Bell South Commercial, LLC in Document No. 2023029877 of the Official Public Records of Williamson County, Texas; said 4.1193 acre tract of land being more particularly described as follows, with bearings based on the Texas Coordinate System of 1983, Central Zone:

BEGINNING: at a 1/2-inch iron rod found on the southwestern right-of-way line of U.S. Highway 183 (variable width right-of-way) for the northernmost corner of the said Lot 1, Block A, for the easternmost corner of a called 53.9395 acre tract of land described in that Warranty Deed to the Board of Trustees, Leander Independent School District in Document No. 2011084700 of the Official Public Records of Williamson County, Texas for the POINT OF BEGINNING and the northernmost corner of this herein described tract;

THENCE: along the southwestern right-of-way line of U.S. Highway 183, the northeastern line of the said Lot 1, Block A the following courses and distances;

1. South 38°19'34" East a distance of 124.07 feet to a TxDot Type I concrete monument found for a corner of U.S. Highway 183, a corner of the said Lot 1, Block A, for a corner of this herein described tract;
2. South 39°19'32" East a distance of 479.86 feet to a calculated point for the easternmost corner of this herein described tract;

THENCE: across the said Lot 1, Block A the following courses and distances;

1. South 82°52'30" West a distance of 66.32 feet to a calculated point;
2. South 65°31'15" West a distance of 93.85 feet to a calculated point;
3. South 58°48'54" West a distance of 61.69 feet to a calculated point;
4. South 42°35'20" West a distance of 93.38 feet to a calculated point;
5. South 30°22'45" West a distance of 25.26 feet to a calculated point on the southwestern line of the said Lot 1, Block A, the northeastern line of the said 53.9395 acre tract for the southernmost corner of this herein described tract;

THENCE: along the common line of the said Lot 1, Block A and the said 53.9395 acre tract the following courses and distances;

1. North 39°13'22" West a distance of 557.41 feet to a calculated point for the westernmost corner of the said Lot 1, Block A, a corner of the said 53.9395 acre tract, for the westernmost corner of this herein described tract;
2. North 50°37'37" East a distance of 325.22 feet to the POINT OF BEGINNING and CONTAINING an area of 4.1193 acres (179,437 sq. ft.) of land.

Bearing Basis:

All bearings shown are based on the Texas Coordinate System, Central Zone, NAD 83.

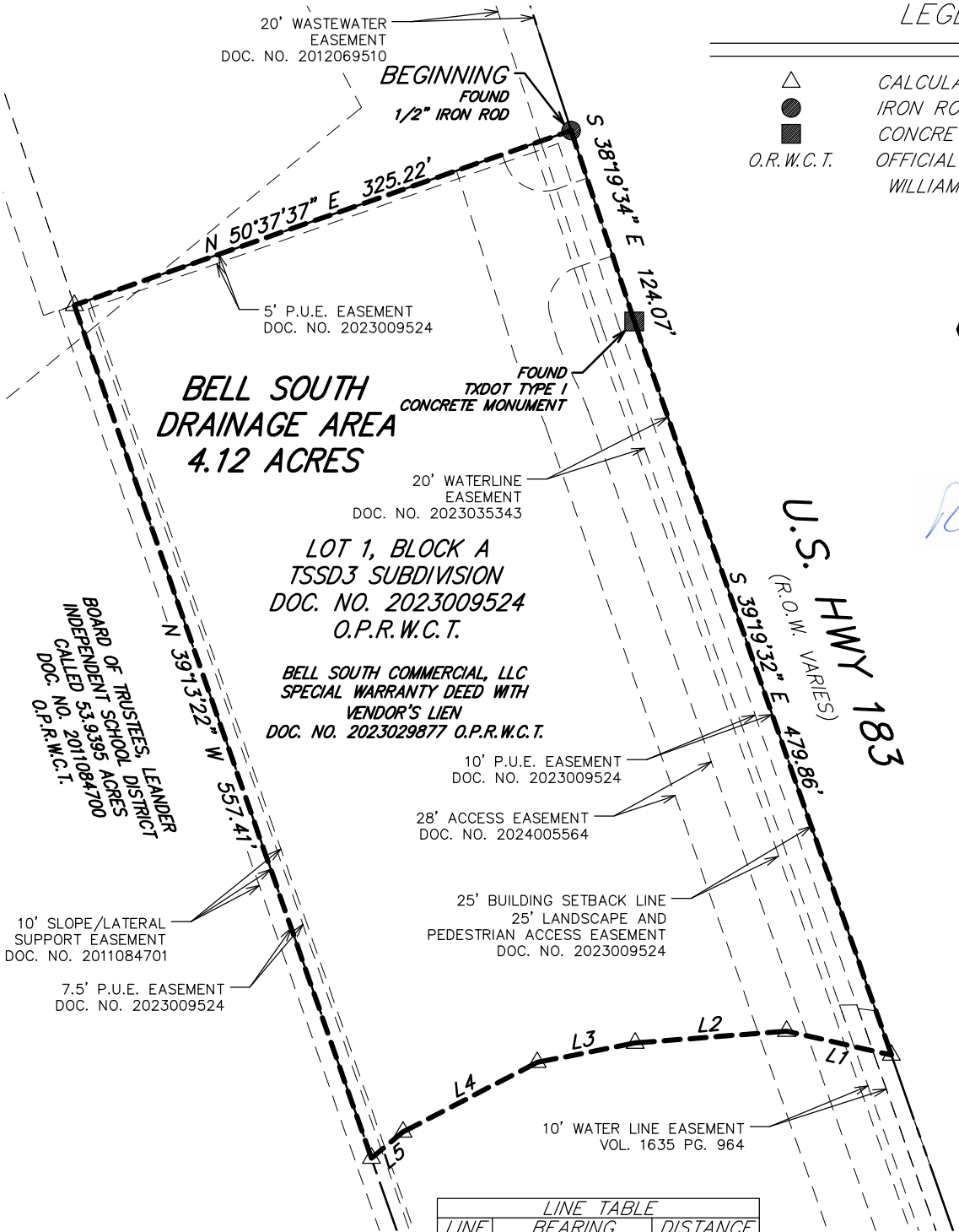
_____ _____05/13/2024____

Rex L. Hackett
Registered Professional Land Surveyor No. 5573
rhackett@quiddity.com

Date

BELL SOUTH DRAINAGE AREA SKETCH

SCALE 1" = 100'



LEGEND

△	CALCULATED POINT
●	IRON ROD FOUND
■	CONCRETE MONUMENT FOUND
O.R.W.C.T.	OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS

STATE OF TEXAS
REGISTERED
REX L. HACKETT
5573
PROFESSIONAL
LAND SURVEYOR

05/13/2024

LINE TABLE		
LINE	BEARING	DISTANCE
L1	S 82°52'30" W	66.32'
L2	S 65°31'15" W	93.85'
L3	S 58°48'54" W	61.69'
L4	S 42°35'20" W	93.38'
L5	S 30°22'45" W	25.26'

QUIDDITY
Texas Board of Professional Engineers and Land Surveyors Reg. No. 10046100
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