Water Pollution Abatement Plan

For

Uptown Frontage Commercial Site Development

2900 North Shields Drive
Austin, Texas 78727

Submitted to:
Texas Commission on Environmental Quality
Austin Regional Office

June 19, 2025



This report is released under the authority of
Christopher McComb, P.E., on June 19, 2025

AMC Design Group, Inc.
P.O. Box 303086
Austin, Texas 78703

Tel 512.385.2911
Texas Engineering Firm Registration No. F-1708

Water Pollution Abatement Plan
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Section 1

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: Uptown Frontage						**2. Regulated Entity No.:**			
3. Customer Name: CS Vista, 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):**		1.134 acres	
9. Application Fee:	$4,650.00		**10. Permanent BMP(s):**			Yes			
11. SCS (Linear Ft.):	87		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Travis		**14. Watershed:**			Walnut 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.)	___	_1_	___
Region (1 req.)	___	_1_	___
County(ies)	___	_1_	___
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	_1_Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Christopher B. McComb, P.E.
Print Name of Customer/Authorized Agent
 6-19-25
Signature of Customer/Authorized Agent Date

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

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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)	06/29/2025

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

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

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
CS Vista, 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)*
803034388	32067381106	83-0783504	

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☒ Other: limited liability company

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 ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:	5801 Standing Rock Drive						
	City	Austin	**State**	TX	**ZIP**	78730	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	christine@texas2020.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(512) 573-5030		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

Uptown Frontage

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	2900 North Shields Drive							
	City	Austin	**State**	TX	**ZIP**	78727	**ZIP + 4**	
24. County	Travis							

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

25. Description to Physical Location:	Property is located approximately 0.5 miles north of Parmer Lane on the MOPAC northbound frontage road, also known as Burnet Road, at the intersection of North Shields Drive and Burnet Road.

26. Nearest City	State	Nearest ZIP Code
Austin	TX	78727

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

27. Latitude (N) In Decimal:	30.428		28. Longitude (W) In Decimal:	-97.701	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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)
6512		621111	

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

Commercial building for medical offices.

34. Mailing Address:	**2900 North Shields Drive**							
	City	**Austin**	**State**	**TX**	**ZIP**	**78727**	**ZIP + 4**	
35. E-Mail Address:	**christine@texas2020.com**							

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(512) 573-5030		( ) -

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

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

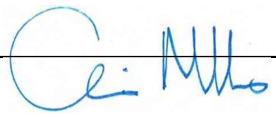
SECTION IV: Preparer Information

40. Name:	Christopher B McComb, P.E.	**41. Title:**	Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512 **)** 385-2911		**( )** -	chris@amcdesigngroup.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:	AMC Design Group, Inc.	**Job Title:**	President	
Name *(In Print):*	Christopher B. McComb, P.E.		**Phone:**	**(** 512 **)** 385- **2911**
Signature:			**Date:**	6/19/2025

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

I, Christine Wong
Print Name

Vice President of CS Vista, LLC

have authorized Chris McComb, P.E.
Print Name of Agent/Engineer

of AMC Design Group, Inc.
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Christine W

Applicant's Signature

6/17/2025

Date

THE STATE OF TEXAS §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared Christine Wong known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 17 day of June, 2025.

Zachary H Kasper

NOTARY PUBLIC

Zachary H Kasper

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: May 20, 2028

NOTARY PUBLIC STATE OF TEXAS

ZACHARY H KASPER
Notary ID #134902251
My Commission Expires
May 20, 2028

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Uptown Frontage
Regulated Entity Location: 2900 North Shields Drive, Austin, TX 78727
Name of Customer: CS Vista, LLC
Contact Person: Chris McComb, P.E. (Agent) Phone: 512-385-2911
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:

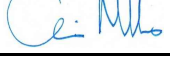
☒ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ 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	1.134 Acres	$ 4,000.00
Sewage Collection System	87 L.F.	$ 650.00
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: 

Date: 6/16/25

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

Section 2

General Information Form

Texas Commission on Environmental Quality

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

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

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

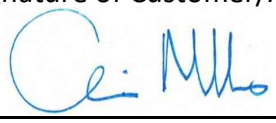
Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 6/19/25

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Uptown Frontage
2. County: Travis
3. Stream Basin: Walnut Creek
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

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

7. Customer (Applicant):

Contact Person: Christine Wong
Entity: CS Vista, LLC
Mailing Address: 5801 Standing Rock Drive
City, State: Austin, TX Zip: 78730
Telephone: 512-573-5030 FAX: _____
Email Address: christine@texas2020.com

8. Agent/Representative (If any):

Contact Person: Christopher McComb, P.E.
Entity: AMC Design Group, Inc.
Mailing Address: PO Box 303086
City, State: Austin, TX Zip: 78703
Telephone: 512-385-2911 FAX: _____
Email Address: chris@amcdesigngroup.com

9. Project Location:

☒ The project site is located inside the city limits of Austin.
☐ 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.

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

The property is located at 2900 North Shields Drive, which is on the NB frontage of Burnet Road (MOPAC frontage road), south of Scofield Ridge Parkway and north of Parmer Lane in Austin, Texas.

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

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

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

13. ☒ **The TCEQ must be able to inspect the project site or the application will be returned**. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment. The site is fenced and has a padlock on the gate. Please contact applicant or engineer/agent listed above for the site to be unlocked.

☐ Survey staking will be completed by this date: _____

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

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

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

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

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

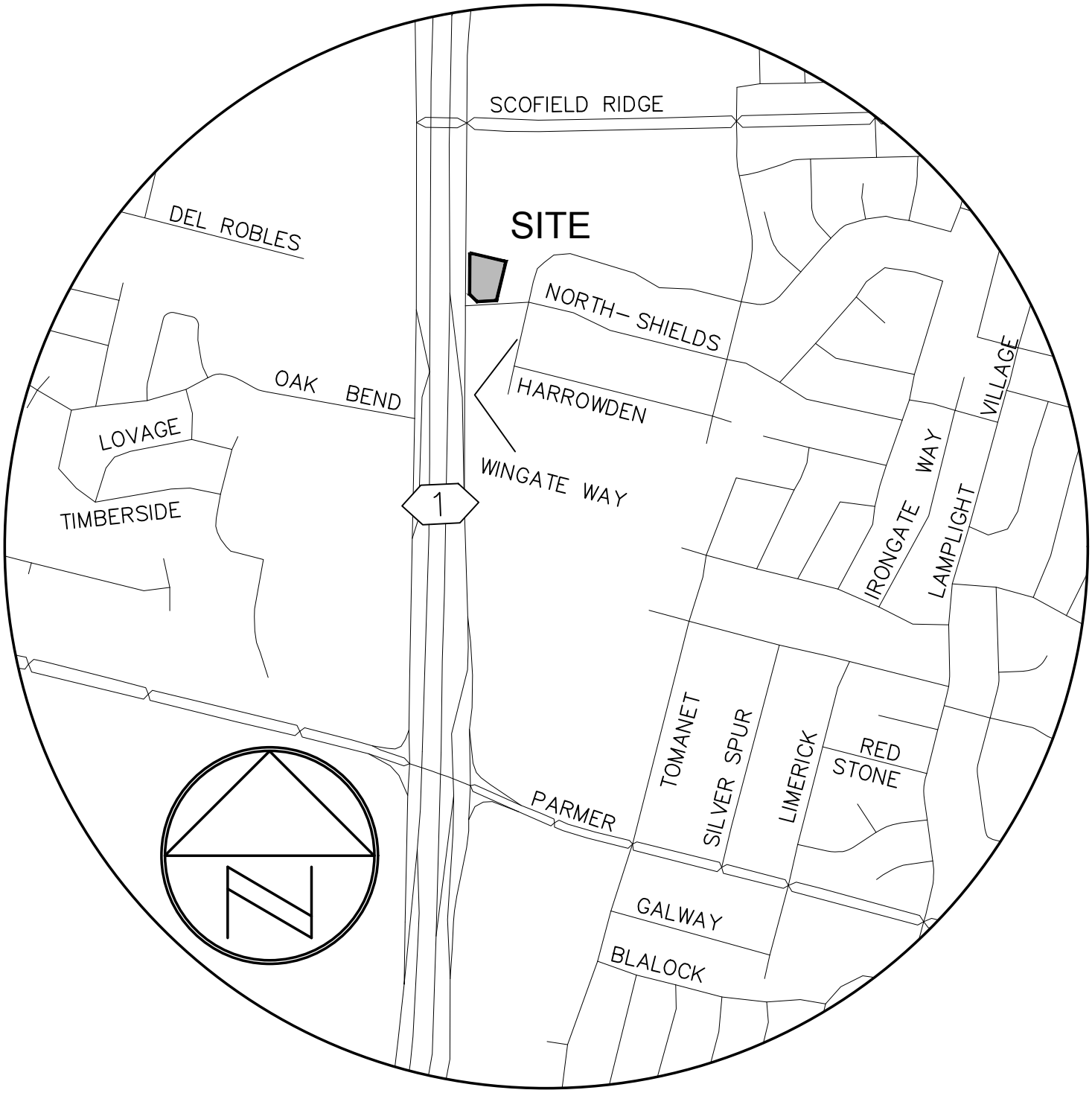
20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies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

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

Attachment A

A.0 Road/Location Map

2900 NORTH SHIELDS DRIVE, AUSTIN TX 78727



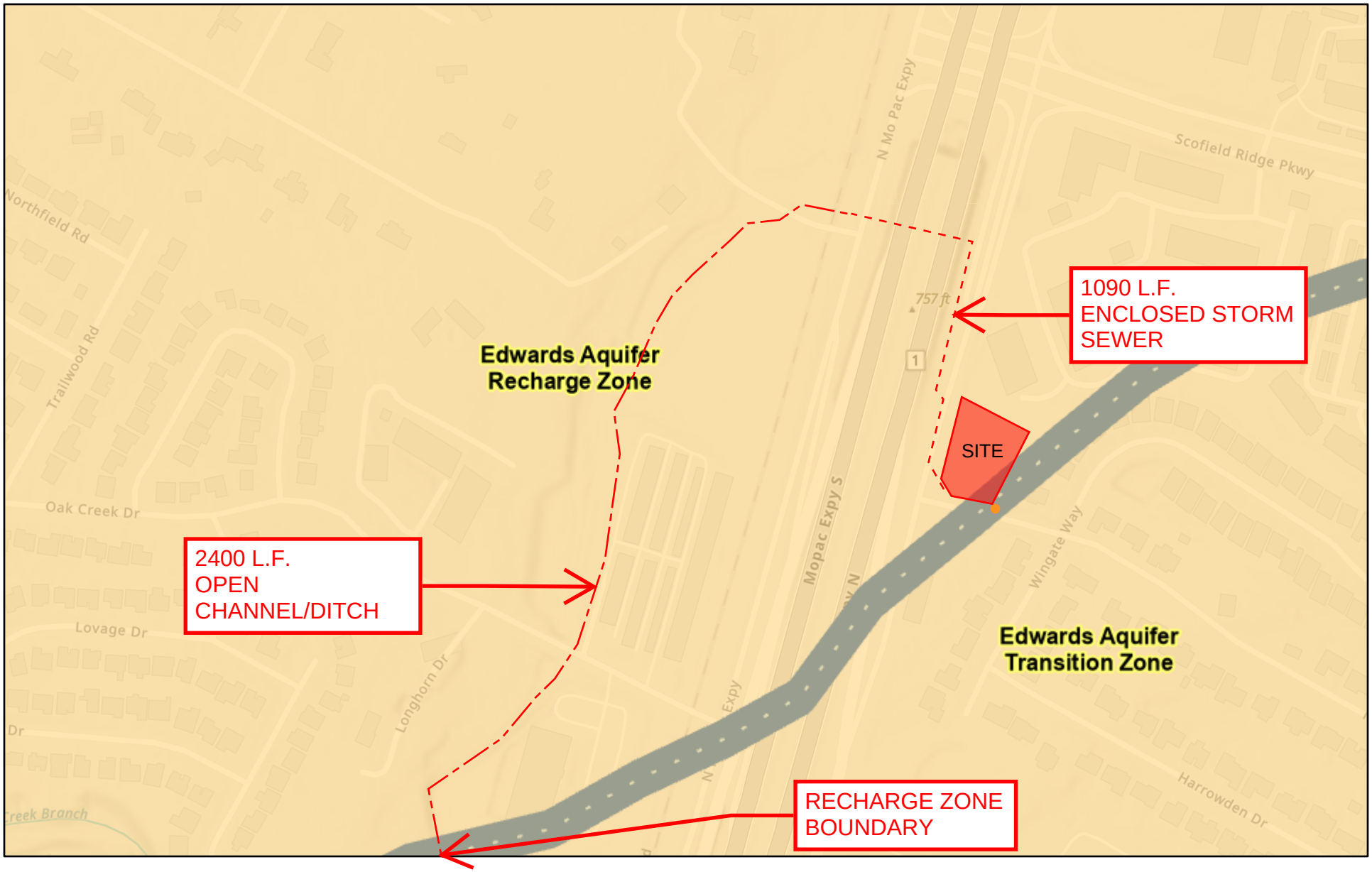
LOCATION MAP

N.T.S.

Attachment B

B.0 USGS/EDWARDS RECHARGE ZONE MAP

2900 North Shields Drive



6/17/2025, 3:25:02 PM

- ArcGIS World Geocoding Service
- TCEQ_EDWARDS_OFFICIAL_MAPS
- 7.5 Minute Quad Grid
- TX Counties
- City/Place
- Edwards Aquifer Boundary central line
- Edwards Aquifer Boundary
- Edwards Aquifer Label
- World_Hillshade

1:4,800

0 195 390 780 ft

0 55 110 220 m

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, TCEQ, Sources: Esri, Maxar,

Attachment C

C.0 Project Description

This project description incorporates all requirements for the Uptown Frontage project, a small commercial Water Pollution Abatement Plan submittal. The owner's intentions for the proposed development of the land encompassed within the 1.134 acre site include the construction of a new single story medical office building totaling 7180 s.f. The construction shall be on Lot 1, Block A of the Uptown Frontage Subdivision recorded as Document No. 202400141 of the Official Public Records of Travis County, Texas. Construction on the property will include new pavement totaling 16,992 s.f. for 36 parking spaces, proposed site utility improvements, drainage improvements, a proposed public wastewater extension, and related site construction. The property is undeveloped and undisturbed and located in Travis County. The existing site has 0.0 percent impervious cover. After the addition of these improvements, the site will be developed to 50.1 percent impervious cover.

The property is bounded by North Shields on the south, MOPAC Expressway (Burnet Road) on the west, multi-family to the north, and residential property to the east. R.O.W. was dedicated with a recent subdivision plat so no additional R.O.W. is required for this development. The property exists totally within the Walnut Creek Watershed and the Edwards Aquifer Recharge Zone. Refer to the construction documents, Drainage Plan and Calculations, for all drainage calculations and maps.

The property is irregular in shape with a high point located at the northeast corner of the tract, and drainage within the property flows to the southwest towards the North Shields and MOPAC frontage road right of ways. This study includes a 1.13-acre drainage area with negligible off-site drainage since the multi-family property to the north is fully developed with their own on-site stormwater management. The off-site area is shown as subbasin OS-1. The junction where drainage area reaches the southwest property corner is the analysis point for the drainage study. Drainage in the North Shields R.O.W. is captured in an existing curb inlet adjacent to the site. Drainage in the MOPAC frontage road (TxDOT R.O.W.) sheet flows across the pavement to the west, then drains into a roadside ditch then to an existing area inlet approximately 75 feet west of the northwest property corner. Once developed, the improvements in the proposed drainage areas will drain via sheet flow and on-site storm sewers to the proposed stormwater management ponds which include an on-site partial sedimentation/bio-filtration pond and on-site detention. Adjacent storm sewers were installed as part of the north MOPAC extension, and design included the site area of this property. The outfall from the proposed detention pond will tie into the existing storm sewer immediately adjacent to the pond.

The drainage area of the water quality pond is 0.79 acres and the pond will provide treatment for all of the site's developed area. Drainage from the proposed water quality pond will be tied into the on-site storm sewer and then drain to the existing public storm sewer located along the southwest property line. From there the runoff flows in a concrete storm sewer approximately 1090 l.f. north then northwest across the MOPAC (Burnet Road) ROW to an open channel, then southwest a total of 2400 l.f. to the boundary of the Recharge Zone.

Section 3

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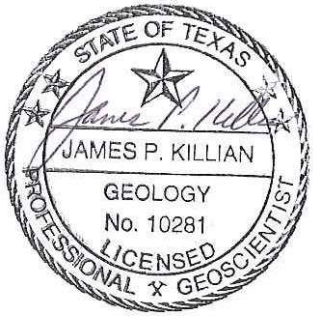
GEOLOGIC ASSESSMENT
APPROXIMATELY 1.15-ACRE CS VISTA COMMERCIAL TRACT
MOPAC SERVICE ROAD AND NORTH SHIELDS DRIVE
AUSTIN, TRAVIS COUNTY, TEXAS
HJN 23317 GA

PREPARED FOR:

THROWER DESIGN
AUSTIN, TEXAS

PREPARED BY:

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



JANUARY 2024

1507 S Interstate 35 • Austin, Texas 78741-2502 • 512.328.2430 • www.horizon-esi.com
A Branch of LJA Environmental Services, LLC • TBPG Firm No. 50679

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Environmental Services

TABLE OF CONTENTS

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II. ATTACHMENTS:

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B STRATIGRAPHIC COLUMN
C DESCRIPTION OF SITE GEOLOGY
D SITE GEOLOGIC MAP
E SUPPORTING INFORMATION
F ADDITIONAL SITE MAPS
G SITE PHOTOGRAPHS

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

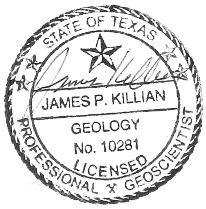
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

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

Date: 2 January 2024 Fax: 512-328-1804

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

Signature of Geologist:



Regulated Entity Name: Approximately 1.15-acre CS Vista Commercial Tract; MoPac Service Road and North Shields Drive, Austin, Travis County, Texas

Project Information

1. Date(s) Geologic Assessment was performed: 6 December 2023
2. Type of Project:
   - ☒ WPAP
   - ☒ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Eckrant and Speck soils, 0-2% slopes (TcA)	D	0.67

Soil Name	Group*	Thickness(feet)

** Soil Group Definitions (Abbreviated)*

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

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

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

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

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

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

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

   Applicant's Site Plan Scale: 1" = 300'
   Site Geologic Map Scale: 1" = 300'
   Site Soils Map Scale (if more than 1 soil type): 1" = 300'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.
   ☐ Other method(s). Please describe method of data collection: _____

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

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

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

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

Administrative Information

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

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ATTACHMENT A

GEOLOGIC ASSESSMENT TABLE

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

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ATTACHMENT B

STRATIGRAPHIC COLUMN

Geologic Unit	Hydrologic Unit	Approx. Thickness at Project Site (ft)	Elevation (ft msl)	Depth (ft)
			778	0
Buda Limestone (Kbu)	Edwards Aquifer	26		
			752	26
Del Rio Clay & Georgetown Formation, undivided (Kdg)	Edwards Aquifer	130		
			622	156

Note: Unit elevation and thickness given with respect to a ground surface elevation of 778 feet near the northeastern edge of the subject site.

Horizon™ Environmental Services

Date:	12/08/2023
Drawn:	TED
HJN NO:	23317.001 GA

Attachment B
Stratigraphic Column
CS Vista Commercial Tract
Austin, Travis County, Texas

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

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Horizon
Environmental Services

ATTACHMENT C

DESCRIPTION OF SITE GEOLOGY

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

A geologic assessment of approximately 1.15 acres located at MoPac Service Road and North Shields Drive, Austin, Travis County, Texas, was conducted pursuant to Texas rules for regulated activities in the Edwards Aquifer Recharge Zone (30 TAC 213). The subject site consists of undeveloped woodlands. Assessment findings were used to develop recommendations for site construction measures intended to be protective of water resources at the subject site and adjacent areas.

The entire subject site is located within the Edwards Aquifer Recharge Zone (EARZ), as defined by the Texas Commission on Environmental Quality (TCEQ). The EARZ occurs where surface water enters the subsurface through exposed limestone bedrock containing faults, fractures, sinkholes, and caves.

The subject site is completely underlain by Buda Limestone (Kbu) (UT-BEG, 1995), which has an estimated maximum thickness of about 26 feet thick.

No naturally occurring geologic features or man-made features were identified at this site. Further information pertaining to the subject site is presented in the following Attachments D, E, and F. Photographs of the subject site are presented in Attachment G.

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ATTACHMENT D

SITE GEOLOGIC MAP



Legend

- Buda Limestone (Kbu)
- Subject Site

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

Horizon™ Environmental Services

Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	Nearmap, 2023; UT-BEG, 1995

Attachment D

Site Geologic Map
CS Vista Commercial Tract
Austin, Travis County, Texas

N

0 150 300
Feet

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Horizon
Environmental Services

ATTACHMENT E

SUPPORTING INFORMATION

1.0 INTRODUCTION AND METHODOLOGY

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

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

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

2.0 ENVIRONMENTAL SETTING

2.1 LOCATION AND GENERAL DESCRIPTION

The subject site consists of approximately 1.15 acres of woodlands located adjacent to the northeastern corner of the intersection of MoPac Service Road and North Shields Drive in Travis County, Texas (Appendix F, Figure 1).

2.2 LAND USE

The subject site is reportedly vacant land. No habitable structures were observed on the site. MoPac Service Road borders the site to the west and North Shields Drive forms the southern border of the site. Surrounding lands are generally used for rural residences, single-family residences, multi-family residences, farming, and raising livestock.

2.3 TOPOGRAPHY AND SURFACE WATER

The subject site is situated on gently sloping terrain within the Walnut Creek-Colorado River watershed (Appendix F, Figures 2 and 3). Surface elevations on the subject site vary from a minimum of approximately 774 feet above mean sea level (amsl) near the southern property

boundary along North Shields Drive to a maximum of approximately 778 feet amsl near the northeastern property corner (USGS, 1987). Drainage on the site occurs primarily by overland sheet flow from northeast to southwest towards an unnamed tributary of Walnut Creek.

2.4 EDWARDS AQUIFER ZONE

The subject site is found within the Edwards Aquifer Recharge Zone (TCEQ, 2023) (Attachment F, Figure 2).

2.5 SURFACE SOILS

One soil unit is mapped within the subject site (NRCS, 2023) (Appendix F, Figure 4). The soil unit is described in further detail below.

Eckrant and Speck soils, 0 to 2% slopes (TcA) is a gently sloping soil found on uplands. The underlaying material is indurated limestone. The soil is well-drained with a moderately slow permeability and a very low available water capacity. Runoff is medium. This soil is primarily used for rangeland.

2.6 WATER WELLS

A review of TCEQ and Texas Water Development Board (TWDB) records revealed no water wells on the subject site and 8 wells within 0.5 miles of the subject site (TCEQ, 2023; TWDB, 2023). According to the TWDB records, all the off-site wells are reportedly completed within the Edwards Aquifer and Trinity Aquifer at total depths ranging from 15 to 510 feet below surface. Horizon observed no wells on the subject site.

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

2.7 GEOLOGY

Literature Review

The subject site is underlain by Buda Limestone (Kbu) (UT-BEG, 1995). Buda Limestone is fine-grained, bioclastic, commonly glauconitic, pyritiferous, hard, massive, poorly bedded to nodular, thinner bedded and argillaceous near upper contact, light gray to pale orange; and weathers dark gray to brown. Burrows are filled with chalky marl and abundant pelecypods. Thickness is up to 45 feet, locally absent to north.

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

The subject site is located within the Balcones Fault Zone. Available geologic reports indicate the nearest mapped fault is located approximately 0.25 miles to the west, trending from southwest to northeast (TWSC, 2023).

Field Assessment

No geologic or man-made features were identified within the subject site. The Site Geologic Map is provided as Attachment D.

3.0 CONCLUSIONS AND RECOMMENDATIONS

No geologic or man-made features were identified at the subject site that would require protection or mitigation pursuant to TCEQ rules for protection of the Edwards Aquifer (30 TAC 213). The site generally appears well-suited to development prospectuses. It should be noted that soil and drainage erosion would increase with ground disturbance. Native grasses and the cobbly content of the soil aid to prevent erosion. Soil and sedimentation fencing should be placed in all appropriate areas prior to any site disturbing activities.

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

4.0 REFERENCES

(CAPCOG) Capital Area Council of Governments. 10-foot contours, CAPCOG Center for Regional Development, Austin, Texas. 2018.

(COA) City of Austin. *Property Profile*. City of Austin Property Profile web map application. <http://www.austintexas.gov/gis/propertyprofile/>. Accessed 6 December 2023.

(Nearmap) Nearmap US, Inc. Nearmap Vertical™ digital orthographic photograph, <https://go.nearmap.com>. Imagery date 28 September 2023.

(NRCS) US Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey, <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Soil map data layer updated 12 September 2019. Accessed 4 December 2023.

(OSM) OpenStreetMap contributors. OpenStreetMap, <http://www.openstreetmap .org>. Available under the Open Database License (www.opendatacommons.org/ licenses/odbl). Accessed 7 December 2023.

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

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

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

_____. Edwards Aquifer Protection Program. Edwards Aquifer Viewer, <http://www.tceq. state.tx.us/field/eapp/viewer.html>. Accessed 6 December 2023.

(TWDB) Texas Water Development Board. Water Information Integration and Dissemination System. TWDB Groundwater Database, <https://www3.twdb.texas.gov/apps/water datainteractive/groundwaterdataviewer>. Accessed 6 December 2023.

(TWSC) United States Geological Survey, Texas Water Science Center. Geologic Database of Texas, <https://txpub.usgs.gov/txgeology/>. Updated 1 February 2014; Accessed 4 December 2023.

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

(USGS) US Geological Survey. 7.5-minute series topographic maps, Pflugerville West, Texas, quadrangle. 1987.

ATTACHMENT F

ADDITIONAL SITE MAPS



Horizon Environmental Services

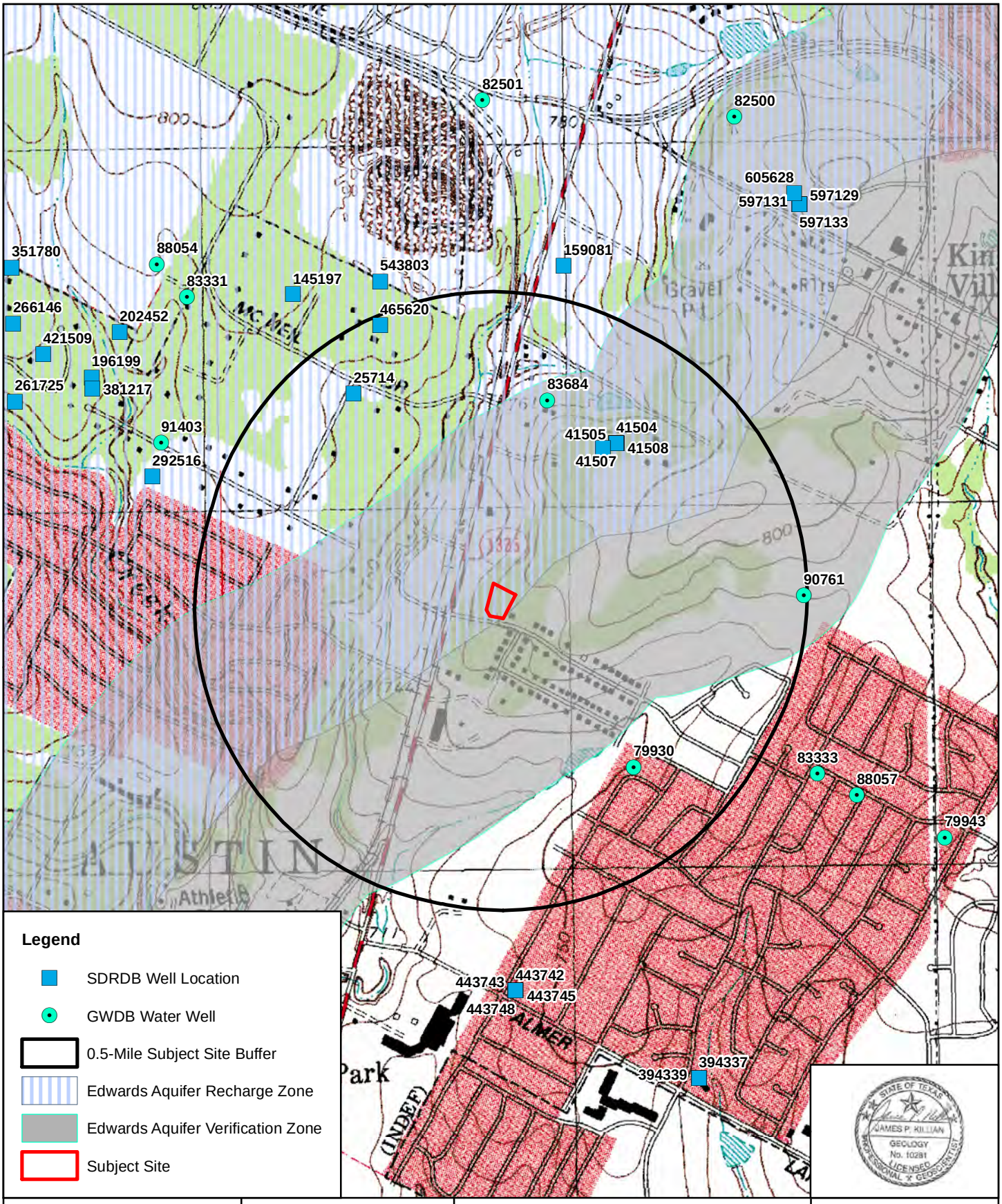
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Drawn:	TED
HJN NO:	23317.001 GA
Source:	OSM, 2023

Attachment F, Figure 1

Vicinity Map
CS Vista Commercial Tract
Austin, Travis County, Texas

0 1,000 2,000
Feet

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Horizon Environmental Services

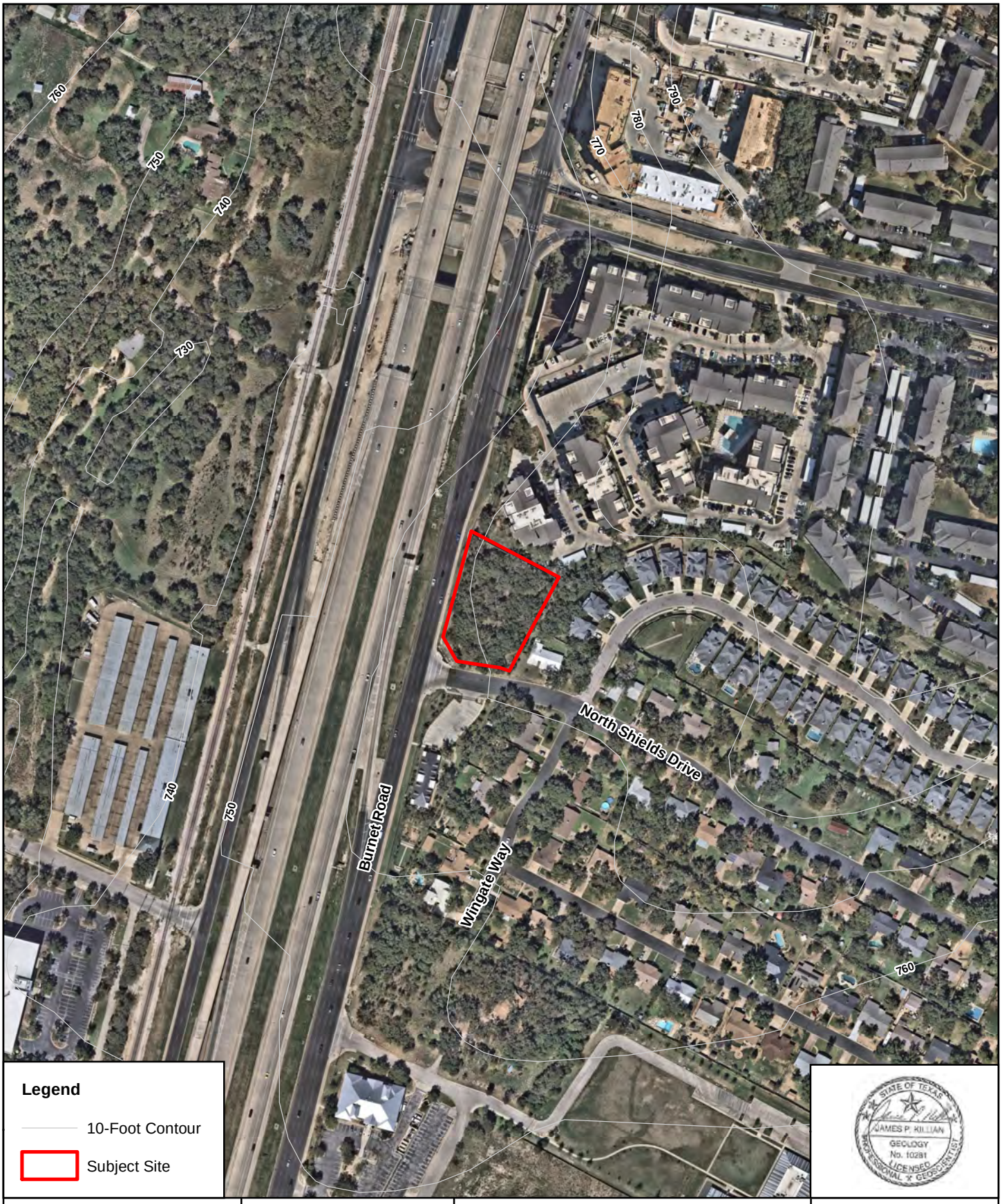
Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	TCEQ, 2023; TWDB, 2023; USGS, 1987

Attachment F, Figure 2

Topography and Hydrogeology Map
CS Vista Commercial Tract
Austin, Travis County, Texas

0 600 1,200
Feet

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Legend

10-Foot Contour

Subject Site

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

Horizon™ Environmental Services

Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	CAPCOG, 2018; Nearmap, 2023

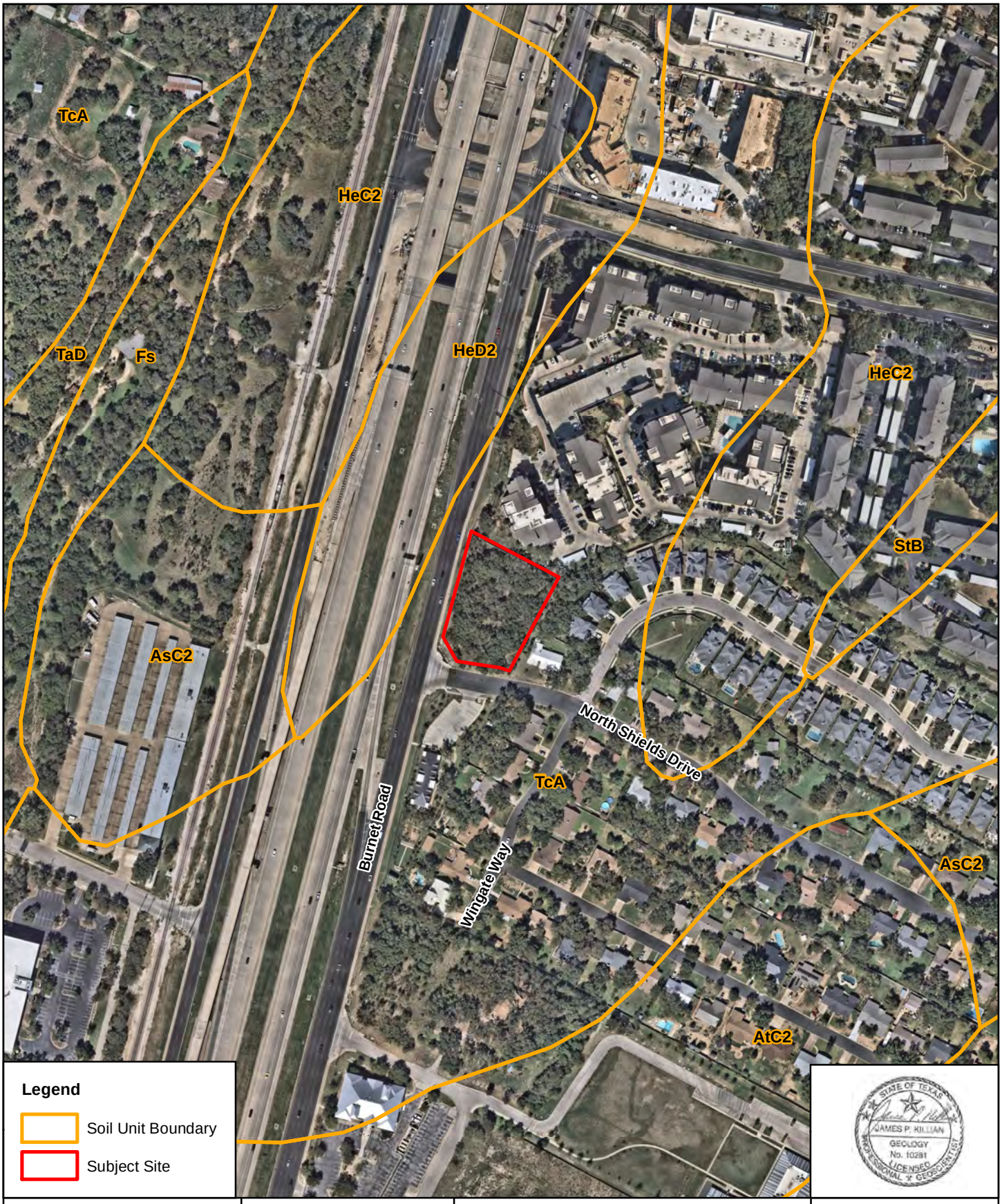
Attachment F, Figure 3

Site Topography Map
CS Vista Commercial Tract
Austin, Travis County, Texas

N

0 150 300
Feet

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Legend

- Soil Unit Boundary
- Subject Site

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

Horizon™ Environmental Services

Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	Nearmap, 2023; NRCS, 2019

Attachment F, Figure 4

Site Soil Map
CS Vista Commercial Tract
Austin, Travis County, Texas

N

0 150 300
Feet

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Horizon
Environmental Services

ATTACHMENT G

SITE PHOTOGRAPHS

Horizon
Environmental Services



PHOTO 1
View of general site conditions, facing north



PHOTO 2
View of general site conditions, facing east

Section 4

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

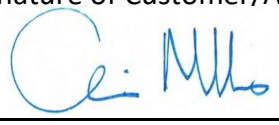
Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 6/19/25

Signature of Customer/Agent:



Regulated Entity Name: CS Vista, LLC

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property):1.134

3. Estimated projected population:8.4

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	7777	÷ 43,560 =	0.178
Parking	16,992	÷ 43,560 =	0.390
Other paved surfaces	0	÷ 43,560 =	0
Total Impervious Cover	24,769	÷ 43,560 =	0.568

Total Impervious Cover 0.568 **÷ Total Acreage** 1.134 **X 100 =** 50.1**% Impervious Cover**

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

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

For Road Projects Only

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

7. Type of project:

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

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

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

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

10. Length of pavement area: _____ feet.

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

100% Domestic	588 Gallons/day
0% Industrial	0 Gallons/day
0% Commingled	0 Gallons/day
TOTAL gallons/day 0	

15. Wastewater will be disposed of by:

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

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

☒ Sewage Collection System (Sewer Lines):

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

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

☒ The sewage collection system will convey the wastewater to the City of Austin Wastewater Treatment Plant (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 20'.

18. 100-year floodplain boundaries:

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

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

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

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

☐ There are 0 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

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

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

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

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

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

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

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

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

26. ☐ Surface waters (including wetlands).

    ☒ N/A

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

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

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

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

Attachment A

A.0 Factors Affecting Water Quality

A.1 Asphalt Products

A1.1 Project encompasses a commercial project including a paved parking area for an proposed commercial self storage site. Asphalt and concrete paving will be used for paving. To prevent asphaltic products from washing off the project site, the contractor will be instructed to not place asphalt products on the ground within 48 hours of forecasted rain.

A1.2 After placement of asphalt, the applicant will maintain, for the duration of the asphalt product curing time, standby emergency personnel and equipment to contain any asphalt wash off should an unexpected rain occur.

A.2 Vehicle Maintenance

A2.1 Purposeful release of vehicle or equipment fluids onto the ground will not be allowed. Contaminated soil resulting from accidental spills will be removed and disposed of properly.

A.3 Construction Debris

A3.1 All construction material/debris will be placed in an on-site container and disposed of properly at an authorized landfill.

A.4 Soil Spoils/Stockpiles

A4.1 All soil, sand, gravel and excavated materials stockpiled on-site will have appropriately sized erosion and sedimentation controls placed up-gradient and down-gradient.

Attachment B

B.0 Volume and Character of Stormwater

B.1 Existing/Proposed Runoff Conditions

B.1.1 Calculations based on the Atlas 14 City of Austin 24-Hour design storm (2, 10, 25 and 100-year):
Proposed On-Site Drainage Area to Water Quality Pond A: 0.77 Acres (Area P-1)
Proposed Impervious Cover: 70.5% (for pond design purposes)
Note Water Quality Pond drainage area for design purposes is 0.79 Acres taking into account 0.02 Acres of off-site drainage that flows onto the site.

B.1.2 Composite curve numbers are calculated using USDA soil survey data.

EXISTING DRAINAGE CONDITIONS - ATLAS 14 RAINFALL DISTRIBUTION

DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (COMPOSITE)	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
E-1	0.86	0.24	77.0	1.75	3.54	4.79	6.89
E-2	0.28	0.24	77.0	0.58	1.16	1.57	2.26
OS-1	0.02	0.25	80.0	0.06	0.10	0.12	0.17
ANALYSIS POINT JUNCTION 1				2.39	4.81	6.48	9.31

PROPOSED DRAINAGE CONDITIONS

DRAINAGE AREA	AREA ACRES	Tc HOUR	DEVELOPED I.C. %	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
P-1	0.77	0.10	70.5	3.32	5.31	6.64	8.90
P-2	0.36	0.10	7.2	1.02	2.02	2.68	3.80
OS-1	0.02	0.25	60.0	0.06	0.10	0.12	0.17
JUNCTION 1 INCLUDING DETENTION POND ROUTING				2.88	4.66	5.74	7.51

*CITY OF AUSTIN ATLAS 14 FREQUENCY STORM

OS-1 IS A NEGLIGABLE SUBAREA OF PERVIOUS AREA FROM A FULLY DEVELOPED SITE.
IF IT IS EVER RE-DEVELOPED IT WILL BE REQUIRED TO BE CONTAINED AND DIRECTED TO THAT PROJECT'S SWM.

B.2.1 Drainage Area Map, see construction plans (sheet 10) for the on-site drainage area map.

Section 5

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

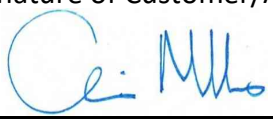
Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 6/19/25

Signature of Customer/Agent:



Regulated Entity Name: CS Vista, LLC

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Tributary of Walnut Creek

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

Attachment A

A.0 Spill Response Actions

A.1 Petroleum Products

A.1.2 All on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.

A.2 Fertilizers

A.2.1 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 stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

A.3 Paints

A.3.1 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 according to manufacturers' instructions or State and local regulations.

A.4 Concrete Trucks

A.4.1 Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site only at specific location shown on the plan.

A.5 In addition to the good housekeeping and material management practices discussed in the previous section of this plan, the following practices will be followed for spill prevention and cleanup:

A.5.1 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.

A.5.2 Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. 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.

A.5.3 All spills will be cleaned up immediately after discovery.

A.5.4 The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

A.5.5 Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of size.

A.5.6 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.

A.5.7 The owner's representative & site construction manager responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the officer trailer on-site.

A.5.8 Notification Requirements and Procedures
Notify TCEQ immediately in the event of:

- Any spill that threatens to enter a storm sewer or watercourse.
- All petroleum spills greater than 5 gallons.
- Any hazardous or unknown material spill, e.g. many solvents, cleaners, etc.
- Any discharge suspected of being in violation of State or Municipal codes, e.g. discharges which are cloudy, foul smelling, colored, contain chemicals or heavy sediment loads.

TCEQ SPILL REPORTING HOTLINE
800-832-8224 (24-HOURS A DAY)

PLEASE DO NOT LEAVE MESSAGES ON VOICE MAILBOXES FOR INCIDENTS THAT NEED IMMEDIATE ATTENTION.

Attachment B

Potential Sources of Contamination

The materials listed below are anticipated to be present on-site during construction:

1. Concrete
2. Detergents
3. Paints (enamel and latex)
4. Tar
5. Fertilizers
6. Petroleum based products
7. Cleaning solvents
8. Wood

Material management practices will be utilized to reduce the risk of spills or other accidental exposure of the materials listed above to stormwater runoff, including the following:

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

The following practices will be used to reduce the risks associated with hazardous materials, if hazardous materials are needed for the work:

1. Products will be kept in original containers unless they are not re-sealable.
2. Original labels and material safety data will be retained.
3. If surplus product must be disposed of, manufacturer or local and state recommended methods for proper disposal will be followed.

Product specific practices and spill prevention practices have been included with this report as Attachment A.

The following are authorized non-stormwater discharges:

1. Discharges from fire fighting activities.
2. Fire hydrant flushing.
3. Water used to wash vehicles and pavement where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed, and if local, state or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, and dust.
4. Water used to control dust.
5. Potable water sources including waterline flushing.
6. Uncontaminated groundwater or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

7. Air conditioning condensate originating from on site vehicles or the construction trailer, if present.

Each and all of these authorized non-stormwater discharges will be directed along the same channels as the stormwater run-off and through the same pollution control devices.

Attachment C

C.0 Sequence of Major Activities

C.1 Construction activities will proceed in the following sequence:

1. Assign an environmental project manager who will be onsite grater than 90% of the time during construction activity and be responsible for the items listed under Section 1.2.3.3 of the Environmental Criteria Manual.

2. Provide 72-hour notification of EV inspector (512-974-2278) prior to pre-construction.

3. Erosion controls are to be installed as indicated on the approved site plan.

4. The Environmental Project Manager must contact the Watershed Protection and Development Review Department to schedule a pre construction coordination meeting to be held on site.

5. Erosion controls will be revised, if needed, to comply with Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.

6. Rough cut water quality ponds, if ponds are required, prior to rough grading site. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of any embankment or excavation that leads to ponding conditions. The outlet system must consist of a low-level outlet and an emergency overflow meeting the requirements of the Drainage Criteria Manual (section 8.3) and/or the Environmental Criteria Manual (Section 1.4.2.K) as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until final restoration is achieved.

7. Temporary controls to be inspected and maintained weekly and prior to anticipated rainfall events, and after rainfall events, as needed.

8. Environmental Project Manager will schedule a mid-construction conference to coordinate changes in the construction schedule and evaluate effectiveness of the erosion control plan after possible construction alterations to the site. Participants shall include the City Inspector, Project Engineer, General Contractor and Environmental Project Manager. The anticipated completion date and final construction sequence and inspection schedule will be coordinated with the appropriate City Inspector.

9. Clear and grub site.

10. Construct building pad and grade site for parking areas.

11. Construct sewer extension to the site.

12. Complete construction of project.

13. Permanent controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.

14. Revegetate disturbed areas, including the removal of any remaining temporary controls, or execute a developers contract for the revegetation along with the engineer's concurrence letter submitted to the City after the engineer inspects the site.

15. A mid-construction conference is required for each phase, if phasing is proposed, with the Watershed Protection and Development Review Department Staff, which will be coordinated based upon completion of buildings, drainage facilities, water quality controls and temporary erosion controls by phase.

Attachment D

D.0 Temporary Best Management Practices and Measures

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

D.1.2 The placement of erosion/sedimentation controls shall be in accordance with the City of Austin Environmental Criteria manual and TCEQ guidelines.

D.1.3 See the Erosion & Sedimentation Control Plan, for all temporary erosion control structure locations.

D.1.4 Significant variation in materials or locations of controls or fences from those shown on the approved plan must be approved by the design engineer, or the city engineer as appropriate.

D.1.5 The contractor is required to inspect the controls and silt fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches 6 inches.

D.1.6 The stabilized construction entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public roadways. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public roadway must be removed immediately.

Attachment F

F.0 Structural Practices

The following structural practices will be followed to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site.

1. Silt fencing on the down slope side of disturbed areas.
2. Silt fencing around all sensitive features as shown on the E&S Plan.
3. Silt fencing around the temporary spoils, construction and staging areas.
4. Rough cutting of the detention pond and water quality pond.
5. Provide the temporary stormwater pumping discharge area as shown on the E&S Plan.

Placement of structural practices in floodplains has been avoided.

Attachment G

G.0 Drainage Area Map

G.1 Refer to the Site Drainage Plan for all drainage information, or the F-0584 Attachments.

Attachment H

H.0 Temporary Sediment Pond Plans and Calculations

H.1 Refer to Sheet 7 of the Construction Plans, The Erosion/Sedimentation Control Plan for the temporary sediment trap layout and calculations.

H.2 Refer to Sheets 6 and 18 of the Construction Plans for temporary sediment trap details.

Attachment I

I.0 Inspection and Maintenance for BMPs

I.1 Temporary erosion and sedimentation controls will be inspected and maintained at weekly intervals, and after significant rainfall events in excess of ½ inch of precipitation to insure that controls are functioning properly. Damaged controls will be repaired or replaced immediately and will be conducted within twenty-four hours of the inspection report.

I.2 Silt accumulation at each control will be removed and properly disposed when the depth of accumulation exceeds six (6) inches.

I.3 Permanent seeding and planting will be inspected for bare spots, washouts and healthy growth.

I.4 The contractor of record will designate a qualified person or persons to perform the following inspections:

1. Disturbed areas and areas used for storage of materials that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants entering the drainage system.

2. Erosion and sediment control measures identified in the plan will be observed to ensure that they are operating correctly. Repairs, if necessary, will be initiated within twenty-four hours of report.

3. Where stormwater discharge locations are accessible, they will be inspected to determine whether erosion control measures are effective in preventing significant impacts to receiving waters.

4. Locations where vehicles enter or exit the site will be inspected for evidence of off-site sediment tracking.

I.5 Based on the results of the weekly inspection, the Site Description Controls of this Pollution Prevention Plan will be revised as appropriate, but in no case later than seven (7) calendar days following the inspection.

I.6 A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with items above will be made retained as part of the storm water pollution plan for at least three (3) years from the date that the site is finally stabilized. The report will be signed by applicable personnel at the conclusion of all construction activities.

I.7 Copies of the forms to be used for the Inspection and Maintenance report are included herein.

Attachment J

J.0 Schedule of Interim and Permanent Soil Stabilization Practices

J.1 All disturbed areas shall be restored as noted below:

a. A minimum of four inches of topsoil shall be placed in all drainage channels (except concrete or rock) and between the curb and right-of-way line.

b. The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows:
   I. From September 15 to March 1, seeding shall be with a combination of 1 pound per 1000 s.f. of unhulled Bermuda and 3 pounds per 1000 s.f. of winter rye with a purity of 95% with 90%.
   II. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 s.f. with a purity of 95% with 85% germination.

c. Fertilizer shall have an analysis of 15-5-10 and shall be applied at the rate of 500 pounds per acre.

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

e. Mulch type used shall be cellulose fiber, applied at a rate of 2000 pounds per acre.

f. Restoration shall be acceptable when the grass has grown at least 1 inch high with 95% coverage, provided no bare spots larger than 16 s.f. exist.

Section 6

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

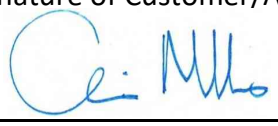
Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 6/19/25

Signature of Customer/Agent



Regulated Entity Name: CS Vista, LLC

Permanent Best Management Practices (BMPs)

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

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

   ☐ N/A

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

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

☒ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: City of Austin Environmental Criteria Manual

☐ N/A

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

   ☐ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

☐ N/A

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

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

    ☐ N/A

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

    ☒ N/A

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

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☐ N/A

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

    ☐ N/A

Attachment B

B.0 BMPs for Upgradient Stormwater

B.1 The overall drainage plan, Sheet 10 of the Construction Plans, shows a small 0.02 acre area of off-site drainage that impacts the site and is labeled as Sub basin OS-1. Because of the small size, this area is added to the on-site drainage and routed through the water quality pond. There are no other off-site drainage flows that enter the site.

Attachment D

D.0 BMP's for Surface Streams

Prevention of pollutants from entering surface streams, sensitive features, or the aquifer will be handled as follows.

During construction, standard erosion control measures will be used as shown in the construction plans. The entire limits of construction will be contained by a silt fence until construction is complete. Entry and exit from the site will be through a stabilized construction entrance. The water quality pond will be rough cut and a sediment trap will be installed to handle pumped discharge after rain events. After completion of the project, all impervious areas will be silt fenced until vegetative cover is established.

There are no sensitive features on this site, so additional measures will not be required, unless a sensitive feature is found during construction.

Additional prevention measures include the following:

- No asphalt products will be allowed within the property boundary.
- No fuel storage tanks will be allowed within the property boundary, both during and after construction.
- Vehicles stored on site must be stored over a concrete pad in order to contain fluid leaks. They also must have a roof overhead in order to minimize contaminate storm runoff.
- All proposed impervious cover shall be re-directed to the sedimentation/biofiltration pond.
- This site plan reflects the full buildout of the site. No future development is anticipated.

Attachment C

C.0 BMPs for On-site Stormwater

C.1 Partial Sedimentation/Bio-filtration Pond

C.1.1 A single partial sedimentation/bio-filtration pond shall be constructed to collect the first flush runoff from all developed areas on-site. This pond shall discharge to an existing public storm sewer for storm water management, and will remove permanent erosion concerns since the stormwater will be released at rates equal to or less than existing conditions.

C.1.2 Removal Rate Calculations – BMP Sizing Calculations. Ref. *TCEQ TGM, June 20, 2005* See attached printout, next sheet.

C.1.3 Refer to the attached sheets of the Construction Plans for all specific water quality control area/volume calculations and for specific water quality control construction details.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Uptown Frontage
Date Prepared: 6/13/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue 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 =	Travis	
Total project area included in plan * =	1.14	acres
Predevelopment impervious area within the limits of the plan* =	0.00	acres
Total post-development impervious area within the limits of the plan* =	0.57	acres
Total post-development impervious cover fraction* =	0.50	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	495	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=	0.77	acres
Predevelopment impervious area within drainage basin/outfall area=	0.00	acres
Post-development impervious area within drainage basin/outfall area=	0.57	acres
Post-development impervious fraction within drainage basin/outfall area=	0.74	
$L_{M\ THIS\ BASIN}$ =	496	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

Equivalent efficiency to the City of Austin partial bio-filtration water quality BMP

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 =	0.77	acres
A_I =	0.57	acres
A_P =	0.20	acres
L_R =	565	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 496 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 =	0.55	
On-site Water Quality Volume =	2301	cubic feet

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

Off-site area draining to BMP =	0.02	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	2	cubic feet
Storage for Sediment =	461	
Total Capture Volume (required water quality volume(s) x 1.20) =	2763	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.

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

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	2763	cubic feet
Minimum filter basin area =	230	square feet
Maximum sedimentation basin area =	920	square feet **For minimum water depth of 2 feet**
Minimum sedimentation basin area =	58	square feet **For maximum water depth of 8 feet**

Attachment F

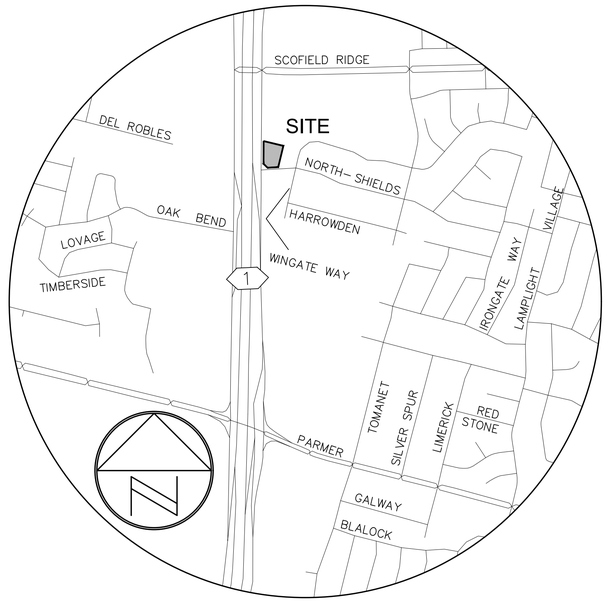
F.0 Construction Plans

1. **COVER SHEET**
2. **CONSTRUCTION NOTES**
3. **AUSTIN WATER UTILITY NOTES**
4. **PLAT**
5. **SURVEY**
6. **EROSION CONTROL NOTES**
7. **EROSION/SEDIMENTATION CONTROL PLAN**
8. **SITE PLAN**
9. **GRADING PLAN**
10. **EXISTING & PROPOSED DRAINAGE PLAN**
11. **STORM SEWER PLAN**
12. **POND PLAN**
13. **POND DETAILS**
14. **POND QAQC**
15. **UTILITY PLAN**
16. **CONSTRUCTION DETAILS 1 OF 2**
17. **CONSTRUCTION DETAILS 2 OF 2**
18. **STANDARD DETAILS**
19. **STANDARD DETAILS**
20. **STANDARD DETAILS**
21. **STANDARD DETAILS**
22. **TCEQ SCS CONSTRUCTION NOTES**
23. **LANDSCAPE PLAN 1 OF 3**
24. **LANDSCAPE PLAN 2 OF 3**
25. **LANDSCAPE PLAN 3 OF 3**
26. **BUILDING ELEVATIONS**

UPTOWN FRONTAGE

SITE PLAN

2900 NORTH SHIELDS DRIVE,
AUSTIN TX 78727



LOCATION MAP
N.T.S.

THIS NOTE IS BEING PLACED ON THE PLAN SET IN PLACE OF A TEMPORARY TRAFFIC CONTROL STRATEGY WITH THE FULL UNDERSTANDING THAT, AT A MINIMUM OF 6 WEEKS PRIOR TO THE START OF CONSTRUCTION, A TEMPORARY TRAFFIC CONTROL PLAN MUST BE REVIEWED AND APPROVED BY THE RIGHT OF WAY MANAGEMENT DIVISION. THE OWNER/ REPRESENTATIVE FURTHER RECOGNIZES THAT A REVIEW FEE, AS PRESCRIBED BY THE MOST CURRENT VERSION OF THE CITY'S FEE ORDINANCE, SHALL BE PAID EACH TIME A PLAN OR PLAN REVISION IS SUBMITTED TO RIGHT OF WAY MANAGEMENT DIVISION FOR REVIEW.
THE FOLLOWING MUST BE TAKEN INTO CONSIDERATION WHEN DEVELOPING FUTURE TRAFFIC CONTROL STRATEGIES:

- PEDESTRIAN AND BICYCLE TRAFFIC ACCESS MUST BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE AUTHORIZED BY RIGHT OF WAY MANAGEMENT.
- NO LONG-TERM LANE CLOSURES WILL BE AUTHORIZED, UNLESS RIGHT OF WAY MANAGEMENT DETERMINES THAT ADEQUATE ACCOMMODATIONS HAVE BEEN MADE TO MINIMIZE TRAFFIC IMPACT.
- PROJECT SHOULD BE PHASED SO THAT UTILITY INSTALLATION MINIMALLY IMPACTS EXISTING OR TEMPORARY PEDESTRIAN FACILITIES.

OWNER/DEVELOPER

CS VISTA, LLC
5801 STANDING ROCK DRIVE
AUSTIN, TX 78730

OWNER'S REP FOR PLAN ALTERATIONS

LAND PLANNER	THROWER DESIGN P.O. BOX 41957 AUSTIN, TEXAS 78704 512-476-4456
CIVIL ENGINEER	AMC DESIGN GROUP INC. P.O. BOX 303086 AUSTIN, TEXAS 78703 512-385-2911
LANDSCAPE ARCHITECT	CIRCLE V LANDSCAPING P.O. BOX 170822 AUSTIN, TEXAS 78717 512-537-2384
SURVEYOR	EARLY LAND SURVEYING, LLC P.O. BOX 92588 AUSTIN, TEXAS 78709 512-202-8631

LEGAL DESCRIPTION

1.134 ACRES
LOT 1, BLOCK A, UPTOWN FRONTAGE SUBDIVISION, A SUBDIVISION OF RECORD IN DOCUMENT NO. 202400141 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.

RELATED CASE NO.

SUBDIVISION C8-2024-0032.0A

LOCATION INFO

GRID #: L36
MAPSCO #: 466E

WATERSHED STATUS

THIS SITE IS LOCATED IN THE WALNUT CREEK WATERSHED, WHICH IS CLASSIFIED AS SUBURBAN.

THIS SITE IS LOCATED OVER THE EDWARD'S AQUIFER RECHARGE ZONE.

FLOODPLAIN INFORMATION

NO PORTION OF THIS SITE IS WITHIN THE 100 YEAR FLOODPLAIN AS PER FEMA FIRM PANEL 48453C0265K DATED JANUARY 16, 2016, FOR TRAVIS COUNTY, TEXAS.

GENERAL NOTES

1. REFER TO SHEET 2 FOR ALL CITY AND GENERAL CONSTRUCTION NOTES.
2. ALL DETENTION BASINS, WATER QUALITY PONDS, AND APPURTENANCES WHICH RECEIVE STORMWATER RUNOFF FROM COMMERCIAL OR MULTI-FAMILY DEVELOPMENT SHALL BE MAINTAINED BY THE RECORD OWNER IN ACCORDANCE WITH THE MAINTENANCE STANDARDS IN THE DRAINAGE AND ENVIRONMENTAL CRITERIA MANUALS.
3. THE DISTURBED AREAS WITHIN THIS PROJECT SHALL BE REVEGETATED AND ALL PERMANENT EROSION/ SEDIMENTATION CONTROLS COMPLETED PRIOR TO THE RELEASE OF FISCAL SURETY FOR THAT PHASE. TEMPORARY EROSION/SEDIMENTATION CONTROLS SHALL BE ADJUSTED AS NEEDED PRIOR TO THIS RELEASE TO ENSURE THAT SUBSEQUENT PHASE DISTURBED AREAS ARE ADEQUATELY COVERED. ANY AREA WITHIN THE LIMIT OF DISTURBANCE OF THE PROJECT WHICH IS NOT ADEQUATELY REVEGETATED SHALL BE BROUGHT INTO COMPLIANCE PRIOR TO THE RELEASE OF THE FINAL PHASE.
4. THIS SITE PLAN IS SUBJECT TO SUBCHAPTER E OF THE LAND DEVELOPMENT CODE (COMMERCIAL DESIGN STANDARDS).
5. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATIONS ONLY. APPROVAL BY OTHER GOVERNMENTAL ENTITIES MAY BE REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR DETERMINING WHAT ADDITIONAL APPROVALS MAY BE NECESSARY.
6. RETAINING WALLS OVER FOUR FEET IN HEIGHT, MEASURED FROM THE BOTTOM OF THE FOOTING TO THE TOP OF THE WALL, SHALL BE ENGINEERED AND WILL REQUIRE A SEPARATE PERMIT (UNIFORM BUILDING CODE 106.2.5).
7. DEVELOPMENT OF STRUCTURES THAT REQUIRE A BUILDING PERMIT WITHIN THIS SITE PLAN, OR REVISIONS THEREOF, ARE REQUIRED TO COMPLY WITH THE CITY OF AUSTIN STREET IMPACT FEE ORDINANCES, AS APPLICABLE, AND MUST BE PAID UPON COMPLETION OF THE BUILDING PERMIT PLAN REVIEW FOR EACH BUILDING.
REFERENCE: LDC 25-6-662
8. THIS PROJECT IS SUBJECT TO THE VOID AND WATER FLOW MITIGATION RULE (COA ECM 1.12.0 AND COA ITEM NO. 658S OF THE SSM) PROVISION THAT ALL TRENCHING GREATER THAN 5 FEET DEEP MUST BE INSPECTED BY A GEOLOGIST (TEXAS P.G.) OR A GEOLOGIST'S REPRESENTATIVE.
9. IF AT ANY TIME DURING CONSTRUCTION OF THIS PROJECT AN UNDERGROUND STORAGE TANK (UST) IS FOUND, CONSTRUCTION IN THAT AREA MUST STOP UNTIL A CITY OF AUSTIN UST CONSTRUCTION PERMIT IS APPLIED FOR AND APPROVED. ANY UST REMOVAL WORK MUST BE CONDUCTED BY A UST CONTRACTOR THAT IS REGISTERED WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). CONTACT ELIZABETH SIMMONS AT ELIZABETH.SIMMONS@AUSTINTEXAS.GOV IF YOU HAVE ANY QUESTIONS. [COA TITLE 6]
10. THIS PROJECT IS SUBJECT TO THE VOID AND WATER FLOW MITIGATION RULE (COA ECM 1.12.0 AND COA ITEM NO. 658S OF THE SSM) PROVISION THAT ALL TRENCHING/DISTURBANCE GREATER THAN 5 FEET DEEP MUST BE INSPECTED BY A GEOLOGIST (TEXAS P.G.) OR A GEOLOGIST'S REPRESENTATIVE.

CITY OF AUSTIN REVISIONS/CORRECTIONS TABLE

Correction/ Revision No.	Description	Revise (R) Replacement (RP) Add (A) Void (V) Sheet No.'s	Total # Sheets in Plan Set	Net Change Imp. Cover (SF)	Total Site Imp. Cover (SF and %)	City of Austin Signature	City of Austin Approval Date

Know what's below.
Call before you dig.

811

SUBMITTAL DATE: 9/4/24
SUBMITTED FOR APPROVAL BY:

CHRIS MCCOMB, P.E.

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

SHEET INDEX

SHEET 1	COVER SHEET
SHEET 2	CONSTRUCTION NOTES
SHEET 3	AUSTIN WATER UTILITY NOTES
SHEET 4	PLAT
SHEET 5	SURVEY
SHEET 6	EROSION CONTROL NOTES
SHEET 7	EROSION/SEDIMENTATION CONTROL PLAN
SHEET 8	SITE PLAN
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SHEET 23	LANDSCAPE PLAN 1 OF 3
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SHEET 25	LANDSCAPE PLAN 3 OF 3
SHEET 26	BUILDING ELEVATIONS

APPROVALS

INDUSTRIAL WASTE (DATE)

CITY OF AUSTIN FIRE DEPARTMENT (DATE)

AUSTIN WATER (DATE)

DEVELOPMENT SERVICES DEPARTMENT (DATE)

AUSTIN FIRE DEPARTMENT - PROJECT INFORMATION TABLE

FIRE DESIGN CODE	2021 IFC W/COA LOCAL AMENDMENTS
FIRE FLOW DEMAND @ 20 PSI (GPM)	2250 G.P.M.
OCCUPANCY CLASSIFICATION	B
CONSTRUCTION CLASSIFICATION	V-B
BUILDING FIRE AREA (SF):	7180
AUTOMATIC FIRE SPRINKLER SYSTEM TYPE: (IF APPLICABLE)	NFPA 13
REDUCED FIRE FLOW DEMAND @ 20 PSI FOR HAVING A SPRINKLER SYSTEM (GPM) (IF APPLICABLE)	1000
AFD FIRE HYDRANT FLOW TEST DATE:	4/20/24
AFD FIRE HYDRANT FLOW TEST LOCATION:	13100 BURNET
CITY OF AUSTIN PIPELINE ORDINANCE	NO
HIGH-RISE	NO
INT'L WILDLAND URBAN INTERFACE CODE	NO
ALTERNATIVE METHOD OF COMPLIANCE (AMoC:)	N/A
IF APPLICABLE TO YOUR PROJECT	

BUILDING PERMITS ARE THE RESPONSIBILITY OF THE OWNER. ALL BUILDING PERMITS MUST BE OBTAINED PRIOR TO SITE PLAN EXPIRATION.

SECTION 608.2 OF THE LOCAL AMENDMENTS TO THE UNIFORM PLUMBING CODE REQUIRES A PRESSURE REDUCING VALVE IF THE LOCAL STATIC PRESSURE IS ABOVE 65 PSI. THE PRV SET AT 65 PSI MUST BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE WATER METER.

A PRV IS/IS NOT REQUIRED FOR THIS PROJECT.

SITE PLAN APPROVAL

CASE NUMBER SP-2024-0345C APPLICATION DATE SEPTEMBER 4, 2024
APPROVED ON _____ ☐ADMINISTRATIVELY ☐BY COMMISSION
UNDER SECTION ☐112 ☐142 OF CHAPTER 25-5 OF THE CITY OF AUSTIN CODE
EXPIRATION DATE (LDC 25-5-81) _____ CASE MANAGER KATE CASTLES

_____
DEVELOPMENT SERVICES DEPARTMENT

RELEASED FOR GENERAL COMPLIANCE_____ZONING LO

APPROVAL STAMPS:

Rev. 1 _____ Correction 1 _____
Rev. 2 _____ Correction 2 _____
Rev. 3 _____ Correction 3 _____

FINAL PLAT MUST BE RECORDED BY THE PROJECT EXPIRATION DATE, IF APPLICABLE. SUBSEQUENT SITE PLANS WHICH DO NOT COMPLY WITH THE CODE CURRENT AT THE TIME OF FILING, AND ALL REQUIRED BUILDING PERMITS AND/OR A NOTICE OF CONSTRUCTION (IF A BUILDING PERMIT IS NOT REQUIRED), MUST ALSO BE APPROVED PRIOR TO THE PROJECT EXPIRATION DATE.

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STATE OF TEXAS
CHRIS McCOMB
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LICENSED PROFESSIONAL ENGINEER
6/13/25

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LAND PLANNERS

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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

COVER SHEET

1 OF 26

SP-2024-0345C

BASIC REQUIREMENTS

DESCRIPTION OF PROJECT
A. THE PORTION OF WORK WITHIN THESE DOCUMENTS INCLUDES SITE WORK, SITE UTILITIES AND DRAINAGE IMPROVEMENTS REQUIRED TO COMPLETE THE WORK WITHIN THE LIMITS OF CONSTRUCTION SHOWN.

SITE INVESTIGATION
A. ALL INFORMATION OBTAINED BY THE OWNER REGARDING SITE CONDITIONS; TOPOGRAPHY; EXISTING CONSTRUCTION OF SITE FACILITIES; AND SUBSURFACE INVESTIGATIONS, INCLUDING TEST BORING LOGS ARE AVAILABLE FOR EXAMINATION AT THE OFFICE OF THE ENGINEER.

EXISTING UTILITIES
A. APPROXIMATE LOCATIONS OF MAJOR UTILITIES AND STRUCTURES ARE SHOWN ON THE DRAWINGS, THERE MAY BE SOME DISCREPANCIES AND OMISSIONS IN THE LOCATIONS AND SIZE OF UTILITIES AND STRUCTURES SHOWN.
B. NOTIFY ALL UTILITY OFFICES THAT ARE AFFECTED BY THE CONSTRUCTION OPERATION AT LEAST 48 HOURS IN ADVANCE.

CUTTING AND PATCHING
A. EMPLOY A SKILLED AND EXPERIENCED INSTALLER TO PERFORM CUTTING AND PATCHING NEW WORK; RESTORE WORK WITH NEW PRODUCTS.
B. SUBMIT WRITTEN REQUEST IN ADVANCE OF CUTTING OR ALTERING EXISTING STRUCTURES OR UTILITIES.
C. FIT WORK TIGHT TO ADJACENT ELEMENTS AND MAINTAIN INTEGRITY OF EXISTING WORK.

PROGRESS MEETINGS
A. SCHEDULE AND ADMINISTER MEETINGS AT THE SITE THROUGHOUT PROGRESS OF THE WORK AT MINIMUM MONTHLY INTERVALS.
B. PRESIDE AT MEETINGS, RECORD MINUTES, AND DISTRIBUTE TYPED COPIES WITHIN TWO DAYS TO THOSE AFFECTED BY DECISIONS MADE.

SUBMITTAL PROCEDURES
A. SUBMITTAL FORM TO IDENTIFY PROJECT, CONTRACTOR, SUBCONTRACTOR OR SUPPLIER, AND PERTINENT CONTRACT DOCUMENT REFERENCE.
B. APPLY CONTRACTOR'S STAMP, SIGNED OR INITIALLED, CERTIFYING THAT REVIEW, VERIFICATION OF PRODUCTS REQUIRED, FIELD DIMENSIONS, ADJACENT CONSTRUCTION WORK, AND COORDINATION OF INFORMATION IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE WORK AND CONTRACT DOCUMENTS.
C. IDENTIFY VARIATIONS FROM CONTRACT DOCUMENTS AND PRODUCT OR SYSTEM LIMITATIONS WHICH MAY BE DETRIMENTAL TO SUCCESSFUL PERFORMANCE OF COMPLETED WORK.
D. REVISE AND RESUBMIT AS REQUIRED; IDENTIFY ALL CHANGES MADE SINCE PREVIOUS SUBMITTAL.

CONSTRUCTION PROGRESS SCHEDULE
A. SUBMIT INITIAL PROGRESS SCHEDULE IN DUPLICATE WITHIN 10 DAYS AFTER DATE OF CONTRACT.
B. SUBMIT REVISED SCHEDULES WITH EACH APPLICATION FOR PAYMENT, IDENTIFYING CHANGES SINCE PREVIOUS VERSION. INDICATE ESTIMATE PERCENTAGE OF COMPLETION FOR EACH ITEM OF WORK AT EACH SUBMISSION.
C. SUBMIT HORIZONTAL BAR CHART WITH SEPARATE LINE FOR EACH MAJOR SECTION OF WORK OR OPERATION, IDENTIFYING FIRST WORK DAY OF EACH WEEK.

SHOP DRAWINGS
A. SUBMIT NUMBER OF COPIES WHICH THE CONTRACTOR REQUIRES, PLUS TWO COPIES WHICH WILL BE RETAINED BY THE ENGINEER.
B. INCLUDE AS A MINIMUM DIMENSIONS, SIZE, LOCATION OF CONNECTIONS TO OTHER WORK, WEIGHT OF EQUIPMENT, AND SUPPORTING CALCULATIONS.

PRODUCT DATA
A. SUBMIT NUMBER OF COPIES WHICH THE CONTRACTOR REQUIRES, PLUS TWO COPIES WHICH WILL BE RETAINED BY THE ENGINEER.
B. MARK EACH COPY TO IDENTIFY APPLICABLE PRODUCTS, MODELS, OPTIONS, AND OTHER DATA. SUPPLEMENT MANUFACTURER'S STANDARD DATA TO PROVIDE INFORMATION UNIQUE TO THIS PROJECT.

MANUFACTURERS' INSTRUCTIONS AND CERTIFICATIONS
A. SUBMIT AS NOTED IN INDIVIDUAL SPECIFICATION SECTIONS.

QUALITY ASSURANCE
A. MAINTAIN QUALITY CONTROL OVER SUPPLIERS, MANUFACTURERS, PRODUCTS, SERVICES, SITE CONDITIONS, AND WORKMANSHIP TO PRODUCE WORK OF SPECIFIED QUALITY.
B. COMPLY FULLY WITH MANUFACTURER'S INSTRUCTIONS.
C. COMPLY WITH SPECIFIED STANDARDS AS A MINIMUM QUALITY FOR THE WORK EXCEPT WHEN MORE STRINGENT TOLERANCES, CODES, OR SPECIFIED REQUIREMENTS INDICATE HIGHER STANDARDS OR MORE PRECISE WORKMANSHIP.

REFERENCES
A. CONFORM TO REFERENCE STANDARD BY DATE OF ISSUE CURRENT AS OF DATE OF CONTRACT.
B. SHOULD SPECIFIED REFERENCE STANDARD CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ENGINEER BEFORE PROCEEDING.

MANUFACTURERS' FIELD SERVICES
A. REPRESENTATIVE SHALL SUBMIT WRITTEN REPORT TO ENGINEER LISTING OBSERVATIONS AND RECOMMENDATIONS.

TESTING LABORATORY SERVICES
A. OWNER WILL SELECT A TESTING LABORATORY TO PERFORM INSPECTIONS, TESTS, AND OTHER SERVICES REQUIRED BY INDIVIDUAL SPECIFICATION SECTIONS.
B. ALL COSTS FOR LABORATORY TESTING OF EARTHWORK AND CONCRETE SHALL BE PAID FOR BY THE OWNER. THE CONTRACTOR SHALL BEAR THE COSTS FOR ALL TESTS REQUIRED TO BE REPEATED.
C. SERVICES WILL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING AUTHORITIES AND WITH SPECIFIED STANDARDS.
D. CONTRACTOR SHALL COOPERATE WITH TESTING LABORATORY PERSONNEL; FURNISH TOOLS, SAMPLES OF MATERIALS, DESIGN MIX, EQUIPMENT, STORAGE AND ASSISTANCE AS REQUESTED.
E. NOTIFY ENGINEER/TESTING LABORATORY 48 HOURS PRIOR TO EXPECTED TIME FOR OPERATIONS REQUIRING TESTING SERVICES.
F. MAKE ARRANGEMENTS WITH TESTING LABORATORY AND PAY FOR ADDITIONAL SAMPLES AND TESTS FOR CONTRACTOR'S CONVENIENCE.
G. FURNISH AND DELIVER SAMPLES/CYLINDERS TO LAB FOR TESTING.

TEMPORARY ELECTRIC POWER AND LIGHTING
A. PROVIDE AND PAY FOR POWER SERVICES REQUIRED FROM SOURCE.
B. PROVIDE POWER OUTLETS FOR CONSTRUCTION OPERATIONS, BRANCH WIRING, DISTRIBUTION BOXES, AND FLEXIBLE POWER CORDS AS REQUIRED.

TEMPORARY WATER
A. PROVIDE WATER, AS NEEDED, FOR OWN USE.
B. PROVIDE AN ADEQUATE SUPPLY OF POTABLE DRINKING WATER FOR USE BY EMPLOYEES AND ENGINEER'S EMPLOYEES.

SANITARY FACILITIES
A. PROVIDE AND MAINTAIN REQUIRED SANITARY FACILITIES AND ENCLOSURES.
B. MAINTAIN CLEAN AND SANITARY CONDITION.

WATER FOR TESTING
A. PROVIDE THE NECESSARY WATER REQUIRED FOR TESTING EQUIPMENT PRIOR TO ACCEPTANCE OF THE WORK, UNLESS OTHERWISE SPECIFICALLY STATED IN THE SPECIFICATIONS FOR THE EQUIPMENT, SYSTEM, OR FACILITY.

TEMPORARY TELEPHONE SERVICE
A. PROVIDE ON-SITE TELEPHONE SERVICE FOR CONTRACTOR'S AND ENGINEER'S USE DURING THE PERIOD OF CONSTRUCTION OF THE CONTRACT.

TEMPORARY WATER CONTROL
A. MAINTAIN EXCAVATIONS AND TRENCHES FREE OF WATER. PROVIDE AND OPERATE PUMPING EQUIPMENT OF A CAPACITY TO CONTROL WATER FLOW.
B. PROVIDE DEWATERING SYSTEM AND PUMPING TO MAINTAIN EXCAVATIONS DRY AND FREE OF WATER INFLOW ON A 24 HOURS BASIS.
C. PROVIDE PIPING TO HANDLE PUMPING OUTFLOW TO DISCHARGE IN A MANNER TO AVOID EROSION OR DEPOSIT OF SILT.

TEMPORARY ACCESS ROADS AND PARKING
A. CONSTRUCT AND MAINTAIN TEMPORARY CONSTRUCTION ACCESS ROADS, PARKING AREAS, AND DETOURS AS ARE REQUIRED TO EXECUTE THE WORK.

TEMPORARY HEATING AND VENTILATING
A. PROVIDE ADEQUATE HEAT AND VENTILATION TO ALL PARTS OF THE WORK.
B. SEE REQUIREMENTS OF SPECIFICATIONS FOR MINIMUM TEMPERATURE TO BE MAINTAINED FOR VARIOUS TRADES.
C. VENTILATE ENCLOSED AREAS.
D. DO NOT USE PERMANENT SYSTEMS TO PROVIDE TEMPORARY HEATING OR VENTILATION.

PROTECTION OF FINISHED WORK
A. PROTECT INSTALLED WORK AND PROVIDE SPECIAL PROTECTION WHERE SPECIFIED IN INDIVIDUAL SPECIFICATION SECTIONS.

PROGRESS CLEANING
A. MAINTAIN AREAS FREE OF WASTE MATERIALS, DEBRIS, AND RUBBISH. MAINTAIN SITE IN A CLEAN AND ORDERLY CONDITION.

FIELD OFFICES AND SHEDS
A. OFFICE: WEATHER TIGHT, SECURE, WITH LIGHTING, ELECTRICAL OUTLETS, HEATING, COOLING AND VENTILATING EQUIPMENT, AND EQUIPPED WITH STURDY FURNITURE, DRAWING DISPLAY TABLE, AND TELEPHONE.
B. PROVIDE SPACE FOR PROJECT MEETINGS WITH TABLE AND CHAIRS.
C. SHEDS: WEATHER TIGHT, SECURE, AND VENTILATED.

BASIC REQUIREMENTS (CON'T.)

REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS
A. REMOVE TEMPORARY EROSION CONTROL CONSTRUCTION, ABOVE GRADE OR BURIED UTILITIES, EQUIPMENT, FACILITIES, AND MATERIALS, PRIOR TO SUBSTANTIAL COMPLETION INSPECTION.
B. REMOVE AND REPAIR DAMAGE CAUSED BY INSTALLATION OR USE OF TEMPORARY WORK.

PRODUCTS
A. PRODUCTS: NEW MATERIAL, MACHINERY, COMPONENTS, EQUIPMENT, AND SYSTEMS FORMING WORK, BUT DOES NOT INCLUDE MACHINERY OR EQUIPMENT USED FOR PREPARATION, FABRICATION, OR ERECTION OF WORK.
B. USE INTERCHANGEABLE COMPONENTS OF THE SAME MANUFACTURE FOR SIMILAR COMPONENTS.

TRANSPORTATION, HANDLING, STORAGE, AND PROTECTION
A. TRANSPORT, HANDLE, STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

SUBSTITUTIONS
A. ONLY WITH SUBMITTAL OF THE BID WILL ENGINEER CONSIDER REQUESTS FROM CONTRACTOR FOR SUBSTITUTIONS. SUBSEQUENTLY, SUBSTITUTIONS WILL BE CONSIDERED ONLY WHEN A PRODUCT BECOMES UNAVAILABLE DUE TO NO FAULT OF CONTRACTOR.
B. DOCUMENT EACH REQUEST WITH COMPLETE DATA SUBSTANTIATING COMPLIANCE OF PROPOSED SUBSTITUTION WITH CONTRACT DOCUMENTS.

SYSTEMS DEMONSTRATION
A. PRIOR TO FINAL INSPECTION, DEMONSTRATE OPERATION OF EACH SYSTEM TO ENGINEER AND OWNER.
B. INSTRUCT OWNER'S PERSONNEL IN OPERATION, ADJUSTMENT, AND MAINTENANCE OF EQUIPMENT AND SYSTEMS, USING THE OPERATION AND MAINTENANCE DATA AS THE BASIS OF INSTRUCTION.

CONTRACT CLOSEOUT PROCEDURES
A. SUBMIT WRITTEN CERTIFICATION THAT CONTRACT DOCUMENTS HAVE BEEN REVIEWED, WORK HAS BEEN INSPECTED, AND WORK IS COMPLETE IN ACCORDANCE WITH CONTRACT DOCUMENTS AND READY FOR ENGINEERS INSPECTION.
B. SUBMIT FINAL APPLICATION FOR PAYMENT IDENTIFYING TOTAL ADJUSTED CONTRACT PRICE, PREVIOUS PAYMENTS, AND AMOUNT REMAINING DUE.

FINAL CLEANING
A. EXECUTE FINAL CLEANING PRIOR TO FINAL INSPECTION.
B. CLEAN INTERIOR AND EXTERIOR SURFACES EXPOSED TO VIEW.
C. CLEAN DEBRIS, WASTE AND SURPLUS SUPPLIES, RUBBISH, AND CONSTRUCTION FACILITIES FROM SITE.

PROJECT RECORD DOCUMENT
A. MAINTAIN ON SITE IN THE OFFICE, ONE SET OF CONTRACT DOCUMENTS, SHOP DRAWINGS, AND PRODUCT SUBMITTALS TO BE UTILIZED FOR RECORD DOCUMENTS.
B. RECORD ACTUAL REVISIONS TO THE WORK CONCURRENT WITH CONSTRUCTION PROGRESS.
C. SPECIFICATION, RECORD DOCUMENTS, AND SHOP DRAWINGS: LEGIBLY MARK EACH ITEM TO RECORD ACTUAL CONSTRUCTION OR PRODUCT INSTALLED.
D. SUBMIT DOCUMENTS TO ENGINEER WITH FINAL APPLICATION FOR PAYMENT.

OPERATION AND MAINTENANCE DATA
A. SUBMIT 2 SETS PRIOR TO FINAL INSPECTION, BOUND IN 8-1/2 X 11 INCH TEXT PAGES WITH DURABLE PLASTIC COVERS.
B. PREPARE BINDER COVER WITH PRINTED TITLE "OPERATION AND MAINTENANCE MANUAL", AND TITLE OF PROJECT.
C. INTERNALLY SUBDIVIDE THE BINDER CONTENTS WITH PERMANENT PAGE DIVIDERS, LOGICALLY ORGANIZED, WITH TABS CLEARLY PRINTED UNDER REINFORCED LAMINATED PLASTIC TABS.
D. CONTENTS:
1.1. DIRECTORY LISTING NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF ENGINEER, CONTRACTOR, SUBCONTRACTORS, AND MAJOR EQUIPMENT SUPPLIERS.
1.2. OPERATION AND MAINTENANCE INSTRUCTIONS, ARRANGED BY SYSTEM.
1.3. CERTIFICATES.
1.4. SHOP DRAWINGS.
1.5. PRODUCT DATA.
1.6. WARRANTIES.

WARRANTIES
A. PROVIDE DUPLICATE NOTARIZED COPIES.
B. EXECUTE AND ASSEMBLE DOCUMENTS FROM SUBCONTRACTORS, SUPPLIERS, AND MANUFACTURERS.
C. SUBMIT PRIOR TO FINAL APPLICATION FOR PAYMENT.
D. UNLESS NOTED IN THE CONTRACT DOCUMENTS, PROVIDE A WARRANTY LASTING 12 MONTHS FROM SUBSTANTIAL COMPLETION.

SPARE PARTS AND MAINTENANCE MATERIALS
A. PROVIDE PRODUCTS, SPARE PARTS, MAINTENANCE AND EXTRA MATERIALS IN QUANTITIES SPECIFIED IN INDIVIDUAL SPECIFICATION SECTIONS.
B. DELIVER TO PROJECT SITE AND PLACE IN LOCATIONS AS DIRECTED; OBTAIN RECEIPT PRIOR TO FINAL PAYMENT.

Q TABLE

APPENDIX Q2

Impervious cover allowed at 80 % X GROSS SITE AREA = 1.134 ac.

ALLOWABLE IMPERVIOUS COVER BREAKDOWN BY SLOPE CATEGORY

Total acreage 15 - 25% = 0 Acres X 10% = 0 ac.

PROPOSED TOTAL IMPERVIOUS COVER

Total Proposed Impervious Cover = 0.569 ac. 50.10%

PROPOSED IMPERVIOUS COVER ON SLOPES

		IMPERVIOUS COVER		
		BUILDING/AND OTHER IMPERVIOUS COVER	% OF CATEGORY	DRIVEWAYS ROADWAYS
SLOPE CATEGORIES	ACRES	ACRES		ACRES
0-15%	1.108	0.569	50.10%	0.000
15-25%	0.008	0.000	0.00%	0.000
25-35%	0.001	0.000	0.00%	0.000
Over 35%	0.017	0.000	0.00%	0.000
Total Site Area	1.134			

CITY OF AUSTIN GENERAL CONSTRUCTION NOTES

1. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
2. CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET R.O.W.
3. CONTRACTOR SHALL NOTIFY THE CITY OF AUSTIN - SITE & SUBDIVISION DIVISION TO SUBMIT REQUIRED DOCUMENTATION, PAY CONSTRUCTION INSPECTION FEES, AND TO SCHEDULE THE REQUIRED SITE AND SUBDIVISION PRE-CONSTRUCTION MEETING. THIS MEETING MUST BE HELD PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN THE R.O.W. OR PUBLIC EASEMENTS. PLEASE VISIT HTTP://AUSTINTEXAS.GOV/PAGE/COMMERCIAL-SITE-AND-SUBDIVISION-INSPECTIONS FOR A LIST OF SUBMITTAL REQUIREMENTS, INFORMATION CONCERNING FEES, AND CONTACT INFORMATION.
4. FOR SLOPES OR TRENCHES GREATER THAN FIVE FEET IN DEPTH, A NOTE MUST BE ADDED STATING: "ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION." (OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 EAST 6TH STREET, AUSTIN TEXAS.).
5. ALL SITE WORK MUST ALSO COMPLY WITH ENVIRONMENTAL REQUIREMENTS.
6. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS AND PRIOR TO THE FOLLOWING, THE ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE, FILTRATION AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS:

-RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE DEVELOPMENT SERVICES DEPARTMENT (INSIDE THE CITY LIMITS); OR
-INSTALLATION OF AN ELECTRIC OR WATER METER (IN THE FIVE-MILE ETJ)

DEVELOPER INFORMATION:

DEVELOPER: CS VISTA, LLC
5801 STANDING ROCK DRIVE
AUSTIN, TX 78730

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

CIVIL ENGINEER: AMC DESIGN GROUP, INC.
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911

FIRM RESPONSIBLE FOR E/S CONTROL AND WQC MAINTENANCE:
CONTRACTOR

FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:
CONTRACTOR

FIRE DEPARTMENT NOTES

CONSTRUCTION DOCUMENTS RELATED TO SITE PLAN AND BUILDING PERMIT APPROVALS SHALL ADDRESS GENERAL EMERGENCY ACCESS PROVISIONS AND CONSTRUCTION SEQUENCING THAT AFFECTS FIRE OR LIFE SAFETY. ONE ASPECT OF MEETING THIS REQUIREMENT IS TO INCLUDE IN THE SITE PLAN SUBMITTAL GENERAL CONSTRUCTION NOTES WHICH SHOULD INCLUDE, BUT NEED NOT BE LIMITED TO THE FOLLOWING:

1. THE AUSTIN FIRE DEPARTMENT REQUIRES FINAL ASPHALT OR CONCRETE PAVEMENT ON REQUIRED ACCESS ROADS PRIOR TO THE START OF COMBUSTIBLE CONSTRUCTION. ANY OTHER METHOD OF PROVIDING "ALL-WEATHER DRIVING CAPABILITIES" SHALL BE REQUIRED TO BE DOCUMENTED AND APPROVED AS AN ALTERNATE METHOD OF CONSTRUCTION IN ACCORDANCE WITH THE APPLICABLE RULES FOR TEMPORARY ROADS OUTLINED IN THE CITY OF AUSTIN FIRE PROTECTION CRITERIA MANUAL.
2. FIRE HYDRANTS SHALL BE INSTALLED WITH THE CENTER OF THE FOUR (4) INCH OPENING (STEAMER) LOCATED AT LEAST 18 INCHES ABOVE FINISHED GRADE. THE STEAMER OPENING OF FIRE HYDRANTS SHALL FACE THE APPROVED FIRE ACCESS DRIVEWAY OR PUBLIC STREET AND SET BACK FROM THE CURB LINE(S) AN APPROVED DISTANCE, TYPICALLY THREE (3) TO SIX (6) FEET. THE AREA WITHIN THREE (3) FEET IN ALL DIRECTIONS FROM ANY FIRE HYDRANT SHALL BE FREE OF OBSTRUCTIONS, AND THE AREA BETWEEN THE STEAMER OPENING AND THE STREET OR DRIVEWAY GIVING EMERGENCY VEHICLE ACCESS SHALL BE FREE OF OBSTRUCTIONS.
3. TIMING OF INSTALLATIONS: WHEN FIRE PROTECTION FACILITIES ARE INSTALLED BY THE CONTRACTOR, SUCH FACILITIES SHALL INCLUDE SURFACE ACCESS ROADS. EMERGENCY ACCESS ROADS OR DRIVES SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF CONSTRUCTION. WHEN THE FIRE DEPARTMENT APPROVES AN ALTERNATE METHOD OF PROTECTION, THIS REQUIREMENT MAY BE MODIFIED AS DOCUMENTED IN THE APPROVAL OF THE ALTERNATE METHOD.
4. ALL EMERGENCY ACCESS ROADWAYS AND FIRE LANES, INCLUDING PERVIOUS/DECORATIVE PAVING, SHALL BE ENGINEERED AND INSTALLED AS REQUIRED TO SUPPORT THE AXLE LOADS OF EMERGENCY VEHICLES. A LOAD CAPACITY SUFFICIENT TO MEET THE REQUIREMENTS FOR HS-20 LOADING (16 KIPS/WHEEL) AND A TOTAL VEHICLE LIVE LOAD OF 80,000 POUNDS IS CONSIDERED COMPLIANT WITH THIS REQUIREMENT.
5. FIRE LANES DESIGNATED ON SITE PLANS SHALL BE REGISTERED WITH THE CITY OF AUSTIN FIRE DEPARTMENT AND INSPECTED FOR FINAL APPROVAL.
6. THE MINIMUM VERTICAL CLEARANCE REQUIRED FOR EMERGENCY VEHICLE ACCESS ROADS OR DRIVES IS 14 FEET FOR THE FULL WIDTH OF THE ROADWAY OR DRIVEWAY.

AUSTIN ENERGY NOTES

1. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH CHAPTER 25-8, SUBCHAPTER B OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
2. THE OWNER/DEVELOPER OF THIS SUBDIVISION/LOT SHALL PROVIDE AUSTIN ENERGY WITH ANY EASEMENT AND/OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE BUILDING, AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH CHAPTER 25-8 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
3. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
4. THE OWNER OF THE PROPERTY IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, CITY OF AUSTIN RULES AND REGULATIONS AND TEXAS STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICE UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
5. ANY RELOCATION OF ELECTRIC FACILITIES SHALL BE AT OWNER'S EXPENSE.

AMERICANS WITH DISABILITIES ACT

THE CITY OF AUSTIN HAS REVIEWED THIS PLAN FOR COMPLIANCE WITH CITY DEVELOPMENT REGULATIONS ONLY. THE APPLICANT, PROPERTY OWNER, AND OCCUPANT OF THE PREMISES ARE RESPONSIBLE FOR DETERMINING WHETHER THE PLAN COMPLIES WITH ALL OTHER LAWS, REGULATIONS, AND RESTRICTIONS WHICH MAY BE APPLICABLE TO THE PROPERTY AND ITS USE.

ORDINANCE REQUIREMENTS

1. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE RELEASED SITE PLAN. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE SITE PLAN AMENDMENT AND APPROVAL OF THE DEVELOPMENT SERVICES DEPARTMENT.
2. APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.
3. ALL SIGNS MUST COMPLY WITH REQUIREMENTS OF THE LAND DEVELOPMENT CODE (CHAPTER 25-10).
4. ADDITIONAL ELECTRIC EASEMENTS MAY BE REQUIRED AT A LATER DATE.
5. WATER AND WASTEWATER SERVICE WILL BE PROVIDED BY THE CITY OF AUSTIN [OR IDENTIFY THE SERVICE PROVIDER IF OTHER THAN THE CITY OF AUSTIN].
6. ALL EXISTING STRUCTURES SHOWN TO BE REMOVED WILL REQUIRE A DEMOLITION PERMIT FROM THE CITY OF AUSTIN DEVELOPMENT SERVICES DEPT.
7. A DEVELOPMENT PERMIT MUST BE ISSUED PRIOR TO AN APPLICATION FOR BUILDING PERMIT FOR NON-CONSOLIDATED OR PLANNING COMMISSION APPROVED SITE PLANS.
8. NO CERTIFICATE OF OCCUPANCY MAY BE ISSUED FOR THE PROPOSED RESIDENTIAL CONDOMINIUM PROJECT UNTIL THE OWNER OR OWNERS OF THE PROPERTY HAVE COMPLIED WITH CHAPTER 81 AND 82 OF THE PROPERTY CODE OF THE STATE OF TEXAS OR ANY OTHER STATUTES ENACTED BY THE STATE CONCERNING CONDOMINIUMS.
9. FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.
10. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL CONSTRUCTION NOTES

TCEQ-0592 (Rev. July 15, 2015)

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
   - THE NAME OF THE APPROVED PROJECT;
   - THE ACTIVITY START DATE; AND
   - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

5. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
6. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
7. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
8. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
9. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.
10. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
    - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
    - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION
    - OF THE SITE; AND
    - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
    A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVER

GENERAL NOTES

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN DOES NOT REMOVE THESE RESPONSIBILITIES.

"REVIEWED BY AUSTIN WATER" APPLIES ONLY TO AW PUBLIC FACILITIES. ALL OTHER WATER AND WASTEWATER FACILITIES INSIDE PRIVATE PROPERTY ARE UNDER THE JURISDICTION OF BUILDING INSPECTIONS.

USE OF ELECTRONIC FILES GENERAL DISCLAIMER:

USE OF THE ATTACHED FILES IN ANY MANNER INDICATES YOUR ACCEPTANCE OF TERMS AND CONDITIONS AS SET FORTH BELOW. IF YOU DO NOT AGREE TO ALL OF THE TERMS AND CONDITIONS, PLEASE CONTACT AUSTIN WATER PIPELINE ENGINEERING, PROJECT COORDINATOR PRIOR TO USE OF THE REFERENCED INFORMATION. PLEASE BE ADVISED THAT THE ATTACHED FILES ARE IN A FORMAT THAT CAN BE ALTERED BY THE USER. DUE TO THIS FACT, ANY REUSE OF THE DATA WILL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE CITY OF AUSTIN AND USER SHALL INDEMNIFY AND HOLD HARMLESS THE CITY OF AUSTIN FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING FROM USING THE DIGITAL FILE. IN ADDITION, IT IS THE RESPONSIBILITY OF THE USER TO COMPARE ALL DATA WITH THE PDF VERSION OF THIS DRAWING. IN THE EVENT THERE IS A CONFLICT BETWEEN THE PDF VERSION DRAWING AND THE ELECTRONIC FILE, THE PDF VERSION DRAWING SHALL PREVAIL.

AUSTIN FIRE DEPARTMENT
FIRE PREVENTION DIVISION
6310 Wilhelmina Delco Dr., Austin, Texas 78752
afd.hydrants@austintexas.gov

Hydrant Flow Test Report

TEST DATE	**04/20/2024**	FIRE BOX	**2801**	COMPANY	**PREVENTION**
TIME	**1535** HRS	MAP GRID ID	**L36**	AFD STAFF	**SANTIAGO, JESUS**

RESIDUAL HYDRANT

RESIDUAL HYDRANT #	**248409**	MAIN SIZE (in.)	**12**

BLK #	DIRECTION	STREET NAME	TYPE
13100		**BURNET**	**RD**

STATIC PRESSURE (PSI)	**106**	RESIDUAL PRESSURE (PSI)	**102**

FLOW HYDRANT

FLOW HYDRANT #	**613593**	MAIN SIZE (in.)	**12**

BLK #	DIRECTION	STREET NAME	TYPE
13100		**BURNET**	**RD**

STATIC PRESSURE (PSI)	**102**	RESIDUAL PRESSURE (PSI)	**90**

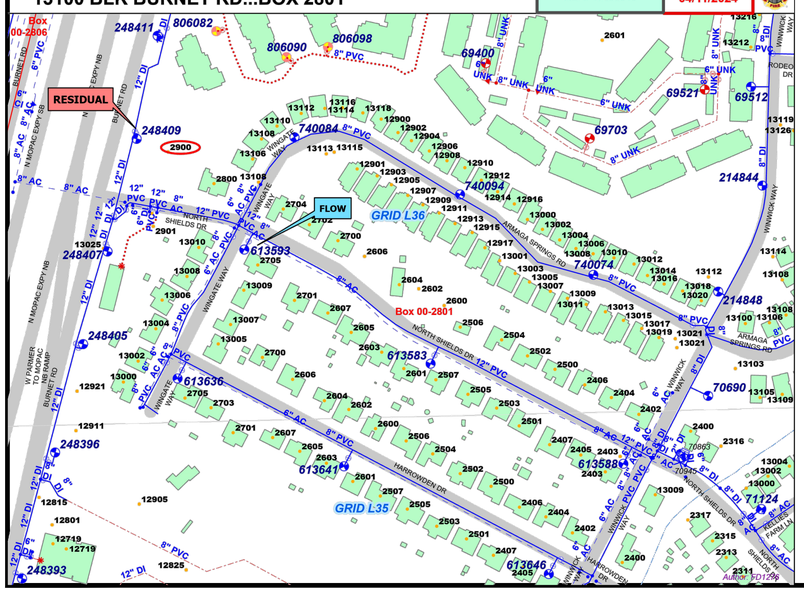
Comments	dc = discharge coefficient straight 2½" butt = 0.9 w/ 45° elbow = 0.75	**0.9**
	FLOW RATE (GPM) =	**1592**

NOTE: This information represents the water supply characteristics in the immediate area on the date and time tested. The City of Austin does not guarantee this data will be representative of the water supply characteristics at any time in the future. It is the requesting party's responsibility to ensure that this test information is appropriate to the location of the project in question and that any differences in elevation between the test location and project are accounted for and included in the hydraulic calculations.

HFTR #17722983

13100 BLK BURNET RD...BOX 2801

REF# 17696340 — 04/11/2024



AUTOMATED METERING INFRASTRUCTURE: EFFECTIVE MARCH 2022, NEW WATER METERS INSTALLED SHALL BE IN CONFORMANCE WITH AW'S AUTOMATED METERING INFRASTRUCTURE TECHNOLOGY, AND WITH THE APPLICABLE STANDARD PRODUCT LIST. APPLICANTS FILING A SITE PLAN OR SUBDIVISION PLAN WILL BE REQUIRED TO COORDINATE WITH THE AUSTIN WATER PLAN REVIEWER FOR DETAILS ON APPROVAL AND INSTALLATION.

PRIOR TO THE HANDLING AND DISPOSAL OF ASBESTOS PIPE, THE CONTRACTOR'S WORK PLANS WILL BE REVIEWED AND COORDINATED THROUGH AUSTIN WATER'S ASBESTOS PROGRAM MANAGER WHO CAN BE REACHED AT 512-972-0915. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE A TRAINED, CERTIFIED AND LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH THE FEDERAL, STATE AND LOCAL REGULATIONS.

MODIFICATIONS TO AUSTIN WATER SIGNED AND STAMPED SHEETS ARE NOT PERMITTED. ALL DESIGN MODIFICATIONS WILL NEED TO BE SUBMITTED VIA THE ABC PORTAL FOR A PLAN CORRECTION OR REVISION. ALL UNETHICAL ENGINEERING PRACTICES, INCLUDING MODIFYING CITY STAMPED PLAN SHEETS, SHALL BE REPORTED TO THE TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS (PELS).
REFERENCE: TEXAS ENGINEERING PRACTICE ACT AND RULES, SUBCHAPTER C: PROFESSIONAL CONDUCT AND ETHICS

Additional Review Acknowledgement

Onsite Water Reuse & AW Reclaimed Information

Does this development have a total gross floor building area of 250,000 square feet or more?

☐YES
☒NO

Distance to nearest existing AW reclaimed main?

☐250' or less
☐251' to 500'
☒Greater than 500'

Automated Metering Information

Is this project within the current service area of AW's Data Collection Units (DCUs)?

☒YES
☐NO

Does this project require a dedicated easement for DCU infrastructure?

☐YES
☒NO

AULCC Requirement

DOES THIS PROJECT REQUIRE AN AULCC REVIEW?

☐YES
☒NO

IF YES, PLEASE PROVIDE UCC#

SERVICE EXTENSION REQUESTS

WATER SER NO. ____

NOT REQUIRED

WASTEWATER SER NO.____

NOT REQUIRED

AW INFRASTRUCTURE INFORMATION

PROPOSED PRODUCT TYPE (TO BE INSTALLED)	LENGTH OF PIPE (L.F.)	SIZE OF PIPE (INCH)	NO. OF SERVICES
WATER MAIN	10	8	2
WASTEWATER MAIN	NA	NA	1
RECLAIMED WATER MAIN	NA	NA	NA
WATER SERVICE	12.5	2	2
WASTEWATER SERVICE	6.7	6	1
RECLAIMED WATER SERVICE	NA	NA	NA

EXPAND OR REDUCE TABLE AS NEEDED*
THE INFORMATION INCLUDED IN THIS TABLE ARE APPROXIMATE VALUES ESTIMATED BASED ON GENERAL ENGINEERING GUIDELINES

CITY OF AUSTIN
WATER AND WASTEWATER UTILITY
SPECIAL SERVICES DIVISION
(512) 972-1060
THIS PROJECT HAS 1 PRIVATE HYDRANTS LOCATED WITHIN THE PROPERTY. THE PROPERTY OWNER IS REQUIRED TO COMPLY WITH AUSTIN FIRE CODE. FAILURE TO COMPLY MAY RESULT IN CIVIL AND/OR CRIMINAL REMEDIES AVAILABLE TO THE CITY. THE PERFORMANCE OF THIS OBLIGATION SHALL ALWAYS REST WITH THE OWNER OF RECORD. FIRE HYDRANTS ON PRIVATE PROPERTY ARE REQUIRED TO BE SERVICED, MAINTAINED AND FLOWED ANNUALLY, USING A CONTRACTOR REGISTERED WITH THE CITY TO PROVIDE THE SERVICE.

PROJECT INFORMATION[1]

FIRE, DOMESTIC AND IRRIGATION DEMAND DATA	
GRID NUMBER:	L-36
MAPSCO NUMBER:	466E
AW INTERSECTION NUMBER:	8123
BUILDING SIZE IN SQUARE FEET:	7180
BUILDING TYPE PER IFC:	V-B
BUILDING HEIGHT:	1-STORY
AVAILABLE FIRE FLOW CALCS AT 20 PSI:	8346
REQUIRED BUILDING FIRE FLOW PER IFC TABLE B105.1(2):	2250
REDUCED FIRE FLOW PER 75% FIRE SPRINKLER REDUCTION PER IFC TABLE B105.2:	563
MINIMUM FIRE FLOW (SEE NOTE #2 BELOW):	1000
DOMESTIC WATER DEMAND IN GPM:	49
WATER SUPPLY FIXTURE UNITS (WSFU): FLUSH TANKS OR FLUSHOMETERS	125
AUSTIN WATER PRESSURE ZONE:	NORTHWEST A NWA1
STATIC WATER PRESSURE IN PSI:	86.6 - 106.1 PSI
STATIC PRESSURE AT HIGHEST LOT SERVED IN PSI:	N/A
STATIC PRESSURE AT LOWEST LOT SERVED IN PSI:	N/A
MAXIMUM IRRIGATION DEMAND:	25
FIRE LINE VELOCITY:	5.0 FPS
DOMESTIC LINE VELOCITY:	N/A
LIVING UNIT EQUIVALENTS (LUEs):	N/A

NOTES: LOTS WITH 65 PSI OR GREATER REQUIRE A PRV TO BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE DOMESTIC WATER METER.

1. WITH THE EXCEPTION OF PROVIDING THE REQUIRED INFORMATION, DO NOT REVISE THESE TABLES IN ANYWAY.
2. MIN FIRE FLOW: DESIGN ENGINEER MUST INDICATE VALUES WHICH COMPLY WITH IFC TABLES B105.1(2) OR B105.2 (REQUIRED OR REDUCED FIRE FLOWS). MIN FIRE FLOW VALUE SHALL BE NO LESS THAN 1000 GPM FOR NFPA 13 SYSTEMS OR 1500 GPM FOR NFPA 13R SYSTEMS (FOOTNOTES A AND B FOR TABLE B105.2).
3. IF DEMAND, OTHER THAN MINIMUM FIRE FLOW, IS UTILIZED IN FIRE LINE VELOCITY DETERMINATION, ENGINEERING JUSTIFICATION SHALL BE SHOWN ON THIS SHEET WITH APPLICABLE DATA AND CALCULATIONS.

METER NOTICE:

METER 1.5 INCHES AND LARGER MUST BE PURCHASED AND ORDERED 90 DAYS IN ADVANCE OF INSTALLATION.

DOMESTIC
METER REQUIREMENT FOR PROJECT ADDRESS: 2900 N. SHIELDS
TYPE: P.D.
SIZE 1" GPM 3-50
SERVICE UNITS 2.5

IRRIGATION
METER REQUIREMENT FOR PROJECT ADDRESS: 2900 N. SHIELDS
TYPE: P.D.
SIZE 3/4" GPM 2-30
SERVICE UNITS 1.5

~~RECLAIM~~
~~METER REQUIREMENT FOR PROJECT~~
~~TYPE: TURBINE~~
~~SIZE GPM~~
~~SERVICE UNITS~~

INSPECTION NOTES

PLEASE CONTACT DEVELOPMENT SERVICES DEPARTMENT, SITE AND SUBDIVISION INSPECTION AT sitesubintake@austintexas.gov FOR ARRANGEMENTS FOR PAYMENT OF INSPECTION FEES AND JOB ASSIGNMENT FOR INSPECTION OF THE PUBLIC UTILITIES TO THIS SITE. INSPECTION FEES MUST BE PAID BEFORE ANY PRE-CONSTRUCTION MEETING CAN BE HELD.

STANDARD CONSTRUCTION NOTES REVISED FEBRUARY 7, 2025

1. THE CITY STANDARD CONSTRUCTION SPECIFICATIONS CURRENT AT THE TIME OF BIDDING SHALL COVER MATERIALS AND METHODS USED TO DO THIS WORK.
2. CONTRACTOR MUST OBTAIN A ROW PERMIT FROM AUSTIN TRANSPORTATION AND PUBLIC WORKS DEPARTMENT, RIGHT OF WAY MANAGEMENT DIVISION BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR ALLEY. ACTIVITY WITHIN RIGHT-OF-WAY SHALL COMPLY WITH APPROVED TRAFFIC CONTROL PLAN (TCP).
3. AT LEAST 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION ACTIVITY IN PUBLIC ROW OR PUBLIC EASEMENT, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE CITY OF AUSTIN INSPECTION GROUP (AUSTIN TRANSPORTATION AND PUBLIC WORKS DEPARTMENT (TPW), OR DEVELOPMENT SERVICES). SEE CURRENT NOTIFICATION REQUIREMENTS AT WWW.AUSTINTEXAS.GOV.
4. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. THE CITY OF AUSTIN WATER AND WASTEWATER MAINTENANCE RESPONSIBILITY ENDS AT R.O.W./EASEMENT LINES.
5. NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND WASTEWATER SERVICES.
6. MINIMUM TRENCH SAFETY MEASURES SHALL BE PROVIDED, AS REQUIRED BY OSHA, CITY SPECIFICATION 509S, AND CITY/COUNTY CONSTRUCTION INSPECTORS.
7. PRESSURE TAPS WILL ONLY BE ALLOWED ON A CASE BY CASE BASIS, AS DETERMINED BY THE DIRECTOR'S DESIGNEE. NORMALLY PRESSURE TAPS 4 INCHES AND LARGER SHALL BE ALLOWED IN THE FOLLOWING CASES: A) A TEST SHUT OUT INDICATES AN ADEQUATE SHUT OUT TO PERFORM THE WORK IS NOT FEASIBLE B) MORE THAN 30 CUSTOMERS OR A SINGLE CRITICAL CUSTOMER (AS DEFINED BY AUSTIN WATER) WOULD BE IMPACTED BY THE SHUT OUT OR C) THE EXISTING WATER LINE WARRANTS IT.
8. WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEMS 510.3 (27)-(29). FORCE MAIN PRESSURE TESTING SHALL BE CONDUCTED AND FALL UNDER THE SPECIFICATIONS AS WATER LINES (PRESSURE PIPE) OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
9. ALL MATERIAL USED ON THIS PROJECT MUST BE LISTED ON THE STANDARD PRODUCTS LISTING. ANY MATERIAL NOT LISTED HAS TO GO THROUGH THE REVIEW OF THE STANDARDS COMMITTEE FOR REVIEW AND APPROVAL PRIOR TO START OF PROJECT. TESTING AND EVALUATION OF PRODUCTS ARE REQUIRED BEFORE APPROVAL WILL BE GIVEN ANY CONSIDERATION.
10. WHEN WATER SERVICES ARE DAMAGED AND THE SERVICE MATERIAL IS POLYETHYLENE (PE), THE LINE SHALL BE REPAIRED ONLY BY HEAT FUSION WELD, AT BRASS FITTINGS, OR THE FULL LENGTH SHALL BE REPLACED PER CURRENT STANDARD DETAIL(S). WHEN POLYBUTYLENE (PB) TUBING IS DAMAGED OR TAMPERED WITH IN ANY WAY, THE FULL LENGTH OF SERVICE LINE SHALL BE REPLACED. (NOTE: FULL LENGTH IS FROM THE CORPORATION STOP TO THE METER.) REPAIR COUPLINGS ARE NOT ALLOWED FOR ANY WATER OR WASTEWATER SERVICE LINE REPAIR, RECONNECT, OR REPLACEMENT.
11. WHEN AN EXISTING WATERLINE SHUT OUT IS NECESSARY AND POSSIBLE, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTOR WHO WILL THEN NOTIFY AUSTIN WATER DISPATCH AND THE AFFECTED CUSTOMERS A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE.
12. THE INSPECTOR SHALL NOTIFY AUSTIN WATER AT 972-1000 AT A MINIMUM OF 72 HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METERS.
13. PROJECT-SPECIFIC SHOP DRAWINGS SHALL BE SUBMITTED FOR AW APPROVAL FOR PRE-CAST CIRCULAR VERTICAL MANHOLE SECTIONS LARGER THAN 48" DIAMETER. THE SHOP DRAWINGS SHALL INCLUDE THE FLOWLINE ELEVATION OF ALL CONNECTING PIPES; ELEVATIONS OF TRANSITIONS FROM LARGE DIAMETER SECTIONS TO 48" DIAMETER SECTIONS; TOP OF MANHOLE AND SURROUNDING GROUND ELEVATIONS; AND DETAILS OF SPECIAL CONSTRUCTION CONSIDERATIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
14. WHEN CONCRETE MANHOLES LARGER THAN 48 INCH DIAMETER ARE USED, DRAWINGS THAT ARE SEALED BY A PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR BASE SLABS, FLAT TOP LIDS (IF USED), AND FLAT TYPE CONCRETE PIECES USED TO TRANSITION FROM LARGER TO SMALLER DIAMETER MANHOLE SECTIONS.
15. ALL FIRE HYDRANTS AND VALVES THAT ARE TO BE ABANDONED SHALL BE REMOVED, SALVAGED AND RETURNED TO AUSTIN WATER. NOTICE SHOULD BE GIVEN 48 HOURS PRIOR, TO PIPELINE OPERATIONS DISTRIBUTION SYSTEM -VALVES AND HYDRANT SERVICES SUPERVISOR AT AWDSM-ASSET-RECOVERY@CITYOFAUSTIN.ONMICROSOFT.COM.
16. ALL EXISTING WATER METERS IDENTIFIED TO BE RELOCATED OR ABANDONED AT THE DEVELOPMENT SHALL BE REMOVED FROM THE METER BOX PRIOR TO CONSTRUCTION AND GIVEN IMMEDIATELY TO THE CITY OF AUSTIN INSPECTOR.
17. THE ENGINEER SHALL CALL OUT THE SIZE, TYPE AND USE (DOMESTIC, IRRIGATION OR RECLAIM) OF ALL EXISTING WATER METERS TO BE RELOCATED OR REPURPOSED. WATER METER NUMBERS WILL NOT BE REQUIRED TO BE PLACED ON THE PLAN SHEET. A SEPARATE UTILITY PERMITTING OFFICE FORM CAN BE USED TO PROVIDE RELEVANT DATA FOR THE EXISTING INFORMATION ON EXISTING METERS TO RECEIVE APPROPRIATE CREDITS. THIS FORM SHALL BE DIRECTLY SUBMITTED TO UTILITY PERMITTING OFFICE FOR REVIEW AND PROCESSING.
18. NO CONNECTION MAY BE MADE BETWEEN THE PRIVATE PLUMBING AND AUSTIN WATER INFRASTRUCTURE UNTIL A CITY APPROVED WATER METER HAS BEEN INSTALLED.
19. METER BOXES AND CLEAN OUTS SHALL NOT BE LOCATED WITHIN PAVED AREAS SUCH AS DRIVEWAYS AND SIDEWALKS.
20. NO SOIL COMPACTION EQUIPMENT SHALL COME WITHIN 24-INCHES FROM THE TOP OF THE WATER OR WASTEWATER PIPE. BETWEEN 24-36 INCHES FROM TOP OF THE PIPE, ONLY LIGHT SOIL COMPACTION EQUIPMENT (E.G., RAMMERS OR "WHACKER PACKERS", VIBRATING PLATE COMPACTORS, WALK-BEHIND HAND-GUIDED ROLLERS) OR SMOOTH ROLLER COMPACTION EQUIPMENT WEIGHING LESS THAN 5,000 LBS. WILL BE ALLOWED. WHERE SOIL COMPACTION EQUIPMENT WILL BE 36-INCHES OR GREATER FROM THE TOP OF THE PIPE, HS20 LOADS SHALL NOT BE EXCEEDED. PIPE DEPTHS SHALL BE VERIFIED THROUGH POTHOLING, LEVEL A SUE OR BY MH INVERT DATA.
21. THE DESIGN AND CONSTRUCTION OF RETAINING WALLS, BRIDGES, CULVERTS, HEADWALLS, JUNCTION STRUCTURES, SCREENING WALLS, AND STORMWATER DRAINAGE PIPE WITHIN THE VICINITY OF AW UTILITIES SHALL BE IN COMPLIANCE WITH SECTION 13 OF THE COA'S TRANSPORTATION CRITERIA MANUAL.
22. THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 510.3(22) AND SPL WW-27A, WW-27A-01, WW-27A-02 AND WW-27F.
23. ALL WATERLINE BRANCH CONNECTIONS SHALL HAVE AN MJ GATE VALVE POSITIVELY RESTRAINED TO THE MJ TEE BY USING A SWIVEL TEE, FOSTER ADAPTOR, OR SWIVEL X SOLID HYDRANT ADAPTOR (WITH SWIVEL GLAND).

VERSION 2.0
STANDARD NO.
1 OF 1

CITY OF AUSTIN
AUSTIN WATER
October 2021

AUSTIN WATER GENERAL INFORMATION AND CONSTRUCTION NOTES FOR COMMERCIAL SITES AND SUBDIVISION PLANS

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303036
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

STATE OF TEXAS — CHRIS McCOMB — 80442 — LICENSED PROFESSIONAL ENGINEER — 6/13/25

Thrauer Design
LAND PLANNERS
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456

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NO	DATE	DESCRIPTION

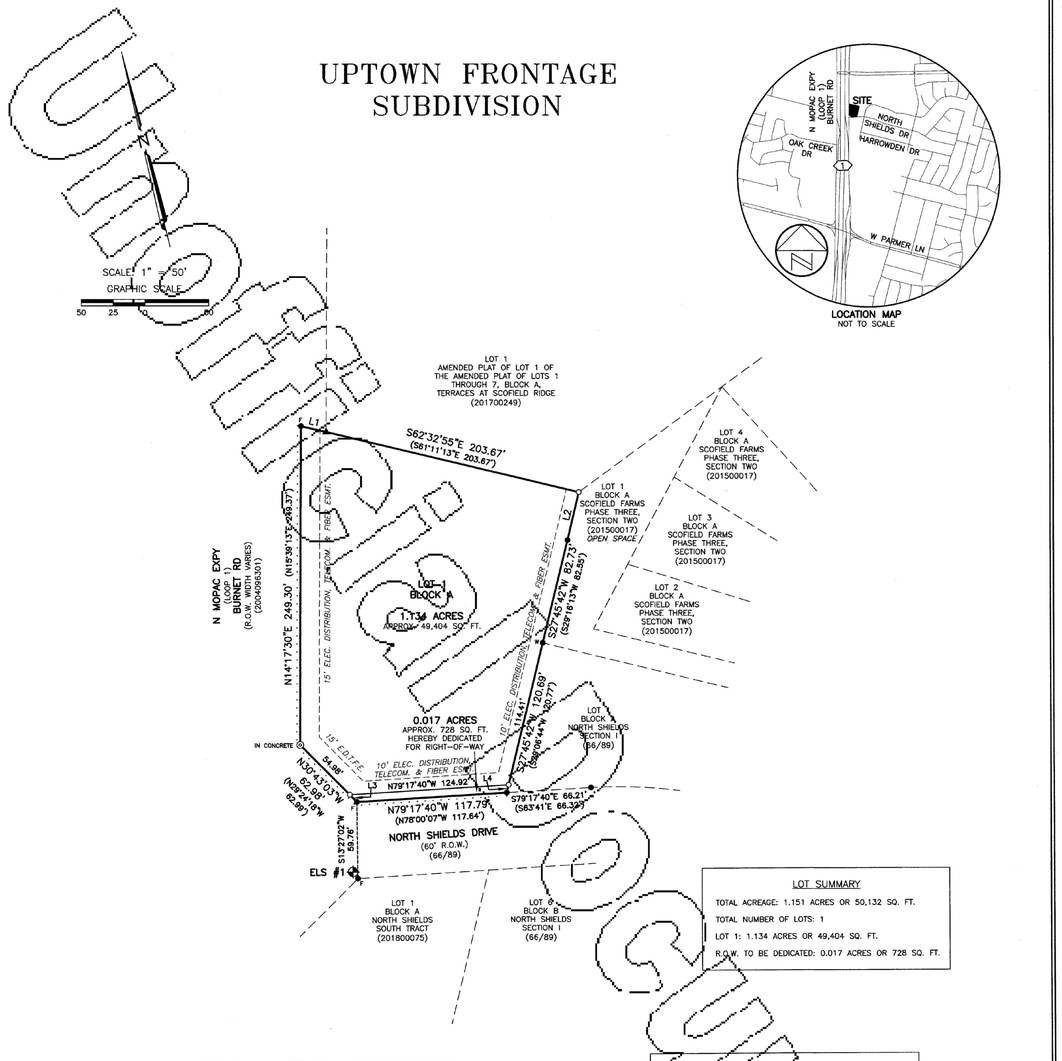
UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

AUSTIN WATER INFORMATION SHEET VER. 2.0

SP-2024-0345C

$74.00 08/20/2024 202400141

UPTOWN FRONTAGE SUBDIVISION



LOT SUMMARY

TOTAL ACREAGE: 1.151 ACRES OR 50,132 SQ. FT.

TOTAL NUMBER OF LOTS: 1

LOT 1: 1.134 ACRES OR 49,404 SQ. FT.

R.O.W. TO BE DEDICATED: 0.017 ACRES OR 728 SQ. FT.

BENCHMARK INFORMATION:

ELS #1: MAG NAIL WITH WASHER SET IN INLET AT THE SOUTHEAST INTERSECTION OF LOOP 1 (N MOPAC EXPRESSWAY) AND NORTH SHIELDS DRIVE AND APPROX. 31' SOUTH OF A STORMSEWER MANHOLE LOCATED IN NORTH SHIELDS DRIVE.

ELEVATION = 770.65'

VERTICAL DATUM: NAVD 88 (GEOID 12B)

LEGEND

●	1/2" REBAR FOUND (OR AS NOTED)
F●	1/2" REBAR WITH "FOREST" CAP FOUND
W●	1/2" REBAR WITH "WATSON" CAP FOUND
○	1/2" REBAR WITH "EARLY BOUNDARY" CAP SET
◎	TXDOT TYPE II DISK IN CONCRETE FOUND
▲	MAG NAIL WASHER WITH "RL SURVEYING" FOUND ON TOP OF COLUMN
⊕	CONTROL POINT/BENCHMARK LOCATION
. . . .	SIDEWALK LOCATION
E.D.T.F.E.	ELECTRIC DISTRIBUTION, TELECOM. & FIBER EASEMENT
( )	RECORD INFORMATION

LINE TABLE			
LINE	BEARING	DISTANCE	(RECORD)
L1	S62°32'55"E	20.38'	(S61°06'26"E 20.44')
L2	S27°17'35"W	38.62'	(S28°39'17"W 38.62')
L3	N30°43'03"W	8.00'	
L4	S27°45'42"W	6.28'	

JOE BEN EARLY, JR. 6016 REGISTERED PROFESSIONAL LAND SURVEYOR

7/16/2024

C8-2024-0032.0A

EARLY LAND SURVEYING
A LIMITED LIABILITY COMPANY
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631
TBPELS FIRM NO. 10194487

PROJECT NO.: 1013-018
DRAWING NO.: 1013-018-PL1
PLOT DATE: 7/16/24
PLOT SCALE: 1" = 50'
DRAWN BY: JBE
SHEET 01 OF 02

202400141

UPTOWN FRONTAGE SUBDIVISION

STATE OF TEXAS
COUNTY OF TRAVIS

KNOW ALL MEN BY THESE PRESENTS:

THAT CS VISTA, LLC, ACTING BY AND THROUGH CHRISTINE WONG, BEING THE OWNER OF THAT CERTAIN 1.15 ACRE TRACT OF LAND OUT OF THE FRANCISCO GARCIA SURVEY NO. 60, ABSTRACT NO. 312 SITUATED IN TRAVIS COUNTY, TEXAS, AS CONVEYED BY DEED AS RECORDED IN DOCUMENT NO. 2018108050 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS; DOES HEREBY SUBDIVIDE 1.15 ACRES OF LAND IN ACCORDANCE WITH THE ATTACHED MAP OR PLAT SHOWN HEREON, PURSUANT TO CHAPTER 212 OF THE TEXAS LOCAL GOVERNMENT CODE, TO BE KNOWN AS:

UPTOWN FRONTAGE SUBDIVISION

AND DO HEREBY DEDICATE TO THE PUBLIC, THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND THIS THE 14th DAY OF August 2024 A.D.

BY: Christine Wong

CS VISTA, LLC
5801 STANDING ROCK DRIVE
AUSTIN, TX 78730

BY: _____ DATE 8/14/24

PRINTED NAME: Christine Wong
Vice President
CS Vista, LLC

STATE OF TEXAS
COUNTY OF TRAVIS

BEFORE ME, THE UNDERSIGNED AUTHORITY, A NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS ON THIS DAY DID PERSONALLY APPEAR Christine Wong, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND HAS ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

WITNESS MY HAND AND SEALED IN MY OFFICE, THIS THE 14 DAY OF August 2024 AD.

NOTARY PUBLIC, STATE OF TEXAS

Yahaira Camacho Lopez — PRINTED NAME

My Commission Expires 10-20-2026 — MY COMMISSION EXPIRES

Notary ID 132234639

SURVEYOR'S CERTIFICATION

I, JOE BEN EARLY, JR., AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT THIS PLAT COMPLIES WITH THE SURVEYING RELATED PORTIONS OF TITLE 25 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, AND WAS PREPARED FROM AN ACTUAL ON THE GROUND SURVEY OF THE PROPERTY MADE UNDER MY DIRECTION AND SUPERVISION ON THE GROUND ON APRIL 19, 2024.

7/16/2024

JOE BEN EARLY, JR., R.P.L.S. 6016

SURVEYING BY:
EARLY LAND SURVEYING, LLC
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631

STATE OF TEXAS — JOE BEN EARLY, JR. — 6016 — REGISTERED PROFESSIONAL LAND SURVEYOR

ENGINEER'S CERTIFICATION:

I, CHRIS MCCOMB, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF ENGINEERING AND HEREBY CERTIFY THAT THIS PLAT IS FEASIBLE FROM AN ENGINEERING STANDPOINT AND COMPLIES WITH THE ENGINEERING RELATED PORTIONS OF TITLE 25 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

NO PORTION OF THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100 YEAR FLOODPLAIN ACCORDING TO DATA FROM THE FEDERAL INSURANCE ADMINISTRATION FIRM PANEL NO. 48453C0285K, DATED 01/16/2016, FOR TRAVIS COUNTY AND INCORPORATED AREAS.

7/25/24

CHRIS MCCOMB
PROFESSIONAL ENGINEER NO. 80442
STATE OF TEXAS

STATE OF TEXAS — CHRIS McCOMB — 80442 — LICENSED PROFESSIONAL ENGINEER

ENGINEERING BY:

AMC DESIGN GROUP, INC.
REGISTERED ENGINEERING FIRM F-1708
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911

THIS SUBDIVISION IS LOCATED WITHIN THE FULL-PURPOSE JURISDICTION OF THE CITY OF AUSTIN, TEXAS.

AS OF THIS 20 DAY OF AUGUST, 2024 A.D.

APPROVED, ACCEPTED AND AUTHORIZED FOR RECORD BY THE DIRECTOR, DEVELOPMENT SERVICES DEPARTMENT, CITY OF AUSTIN, COUNTY OF TRAVIS, THIS THE

20 DAY OF AUGUST, 2024 AD.

ANGELA GALLEGOS FOR:
JOSE ROIG, DIRECTOR
DEVELOPMENT SERVICES DEPARTMENT

SUBDIVISION NOTES

1. NO LOT SHALL BE OCCUPIED UNTIL THE STRUCTURE IS CONNECTED TO THE CITY OF AUSTIN WATER AND WASTEWATER UTILITY SYSTEM.
2. PRIOR TO CONSTRUCTION, EXCEPT DETACHED SINGLE FAMILY, ON ANY LOT IN THIS SUBDIVISION, A SITE DEVELOPMENT PERMIT MUST BE OBTAINED FROM THE CITY OF AUSTIN.
3. PRIOR TO CONSTRUCTION ON LOTS IN THIS SUBDIVISION, DRAINAGE PLANS WILL BE SUBMITTED TO THE CITY OF AUSTIN FOR REVIEW. RAINFALL RUN-OFF SHALL BE HELD TO THE AMOUNT EXISTING AT UNDEVELOPED STATUS BY PONDING OR OTHER APPROVED METHODS.
4. NO BUILDINGS, FENCES, LANDSCAPING OR OTHER OBSTRUCTIONS ARE PERMITTED IN DRAINAGE EASEMENTS EXCEPT AS APPROVED BY THE CITY OF AUSTIN. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS/HER ASSIGNS.
5. ALL STREETS, DRAINAGE, SIDEWALKS, EROSION CONTROL AND WATER AND WASTEWATER LINES SHALL BE CONSTRUCTED AND INSTALLED TO APPLICABLE CITY OF AUSTIN STANDARDS.
6. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS/HER ASSIGNS.
7. PROPERTY OWNER SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY GOVERNMENTAL AUTHORITIES.
8. THE WATER AND WASTEWATER UTILITY SYSTEM SERVING THIS SUBDIVISION MUST BE IN ACCORDANCE WITH THE CITY OF AUSTIN UTILITY DESIGN CRITERIA. THE WATER AND WASTEWATER UTILITY PLAN MUST BE REVIEWED AND APPROVED BY THE AUSTIN WATER UTILITY. ALL WATER AND WASTEWATER CONSTRUCTION MUST BE INSPECTED BY THE CITY OF AUSTIN. THE LANDOWNER MUST PAY THE CITY INSPECTION FEE WITH THE UTILITY CONSTRUCTION.
9. BUILDING SETBACK LINES SHALL BE IN CONFORMANCE WITH CITY OF AUSTIN ZONING ORDINANCE REQUIREMENTS.
10. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH CHAPTER 25-8, SUBCHAPTER B OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
11. THE OWNER/DEVELOPER OF THIS SUBDIVISION/LOT SHALL PROVIDE AUSTIN ENERGY WITH ANY EASEMENT AND/OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH CHAPTER 25-8 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
12. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
13. THE OWNER OF THE PROPERTY IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, CITY OF AUSTIN RULES AND REGULATIONS AND TEXAS STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICE UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
14. PUBLIC SIDEWALKS, BUILT TO CITY OF AUSTIN STANDARDS, ARE REQUIRED ALONG NORTH SHIELDS DR AND BURNET RD/LOOP 1 AS SHOWN BY A DOTTED LINE ON THE FACE OF THE PLAT. THE SIDEWALKS ALONG BURNET RD/LOOP 1 ARE SUBJECT TO THE APPROVAL OF THE TEXAS DEPARTMENT OF TRANSPORTATION AT THE SITE PLAN PHASE. THE REQUIRED SIDEWALKS SHALL BE IN PLACE PRIOR TO THE LOT BEING OCCUPIED. FAILURE TO CONSTRUCT THE REQUIRED SIDEWALKS MAY RESULT IN THE WITHHOLDING OF CERTIFICATES OF OCCUPANCY, BUILDING PERMITS, OR UTILITY CONNECTIONS BY THE GOVERNING BODY OR UTILITY COMPANY.
15. EROSION SEDIMENTATION CONTROLS ARE REQUIRED FOR ALL CONSTRUCTION ON EACH LOT, PURSUANT TO THE LAND DEVELOPMENT CODE AND THE ENVIRONMENTAL CRITERIA MANUAL.
16. THE OWNER OF THIS SUBDIVISION AND THE OWNER'S SUCCESSORS AND ASSIGNS ARE RESPONSIBLE FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS THAT COMPLY WITH CITY OF AUSTIN REGULATIONS. THE OWNER UNDERSTANDS THAT PLAT VACATION OR REPLATTING MAY BE REQUIRED, AT THE OWNER'S EXPENSE, IF PLANS TO CONSTRUCT THIS SUBDIVISION DO NOT COMPLY WITH THE REGULATIONS. APPROVAL OF THIS SUBDIVISION DOES NOT GUARANTEE FUTURE APPROVAL OF VARIANCES TO THE CITY OF AUSTIN REGULATIONS THAT MAY BE REQUIRED AT LATER STAGES OF DEVELOPMENT.
17. THE WATER AND/OR WASTEWATER EASEMENTS INDICATED ON THIS PLAT ARE FOR THE PURPOSE OF CONSTRUCTION, OPERATION, MAINTENANCE, REPAIR, REPLACEMENT, UPGRADE, DECOMMISSIONING AND REMOVAL OF WATER AND/OR WASTEWATER FACILITIES AND APPURTENANCES. NO INFRASTRUCTURE NOR OBJECTS, INCLUDING BUT NOT LIMITED TO, BUILDINGS, RETAINING WALLS, TREES OR OTHER STRUCTURES ARE PERMITTED IN WATER AND/OR WASTEWATER EASEMENTS EXCEPT AS APPROVED BY THE CITY OF AUSTIN.
18. BY APPROVING THIS PLAT, THE CITY OF AUSTIN ASSUMES NO OBLIGATION TO CONSTRUCT ANY INFRASTRUCTURE IN CONNECTION WITH THIS SUBDIVISION. ANY SUBDIVISION INFRASTRUCTURE REQUIRED FOR THE DEVELOPMENT OF THE LOTS IN THIS SUBDIVISION IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE OWNERS OF THE LOTS. FAILURE TO CONSTRUCT ANY REQUIRED INFRASTRUCTURE TO CITY STANDARDS MAY BE JUST CAUSE FOR THE CITY TO DENY APPLICATIONS FOR CERTAIN DEVELOPMENT PERMITS INCLUDING BUILDING PERMITS, SITE PLAN APPROVALS, AND/OR CERTIFICATES OF OCCUPANCY.
19. WATER QUALITY CONTROLS ARE REQUIRED FOR ALL DEVELOPMENT PURSUANT TO THE LAND DEVELOPMENT CODE.
20. ANY RELOCATION OF ELECTRIC FACILITIES SHALL BE AT THE LANDOWNER'S/DEVELOPER'S EXPENSE.
21. DEVELOPMENT OF STRUCTURES THAT REQUIRE A BUILDING PERMIT ON THIS PLAT WILL BE SUBJECT TO THE CITY OF AUSTIN STREET IMPACT FEE AS APPLICABLE PRIOR TO ACQUIRING THE BUILDING PERMIT.
22. NO STRUCTURE SHALL BE OCCUPIED UNTIL THE WATER QUALITY CONTROL AND DETENTION FACILITY HAVE BEEN CONSTRUCTED, INSPECTED, AND ACCEPTED BY THE CITY OF AUSTIN.
23. PARKLAND DEDICATION IS REQUIRED PER CITY CODE §25-1-601, AS AMENDED, PRIOR TO APPROVAL OF A SITE PLAN IN THIS SUBDIVISION FOR ANY APPLICABLE USES.
24. THIS SINGLE LOT SUBDIVISION SHALL HAVE INDEPENDENT SEWER TAP(S), INDEPENDENT WATER METER(S), AND ITS PRIVATE WATER AND SEWER SERVICE LINES SHALL BE POSITIONED OR LOCATED IN A MANNER THAT WILL NOT CROSS LOT LINES.
25. THIS PARCEL IS LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE AS DEFINED BY CITY OF AUSTIN LAND DEVELOPMENT CODE.
26. PARKLAND DEDICATION IS REQUIRED PER CITY CODE §25-1-601, AS AMENDED, PRIOR TO APPROVAL OF A SITE PLAN IN THIS SUBDIVISION FOR ANY APPLICABLE USES.

STATE OF TEXAS
COUNTY OF TRAVIS

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING AND ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE 20th DAY OF August, 2024 A.D., AT 4:21 O'CLOCK P M., DULY RECORDED ON THE 20th DAY OF August 2024 A.D., AT 4:21 O'CLOCK P M., OF SAID COUNTY AND STATE IN DOCUMENT NUMBER 202400141 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY.

WITNESS MY HAND AND SEAL OF THE OFFICE OF THE COUNTY CLERK, THIS THE 20th DAY OF August 2024 A.D.

DEPUTY, COUNTY CLERK TRAVIS COUNTY, TEXAS — A. MACEDO

C8-2024-0032.0A

EARLY LAND SURVEYING
A LIMITED LIABILITY COMPANY
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631
TBPELS FIRM NO. 10194487

PROJECT NO.: 1013-018
DRAWING NO.: 1013-018-PL1
PLOT DATE: 7/16/24
PLOT SCALE: 1" = 50'
DRAWN BY: JBE
SHEET 02 OF 02

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

Thrower Design
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456
LAND PLANNERS

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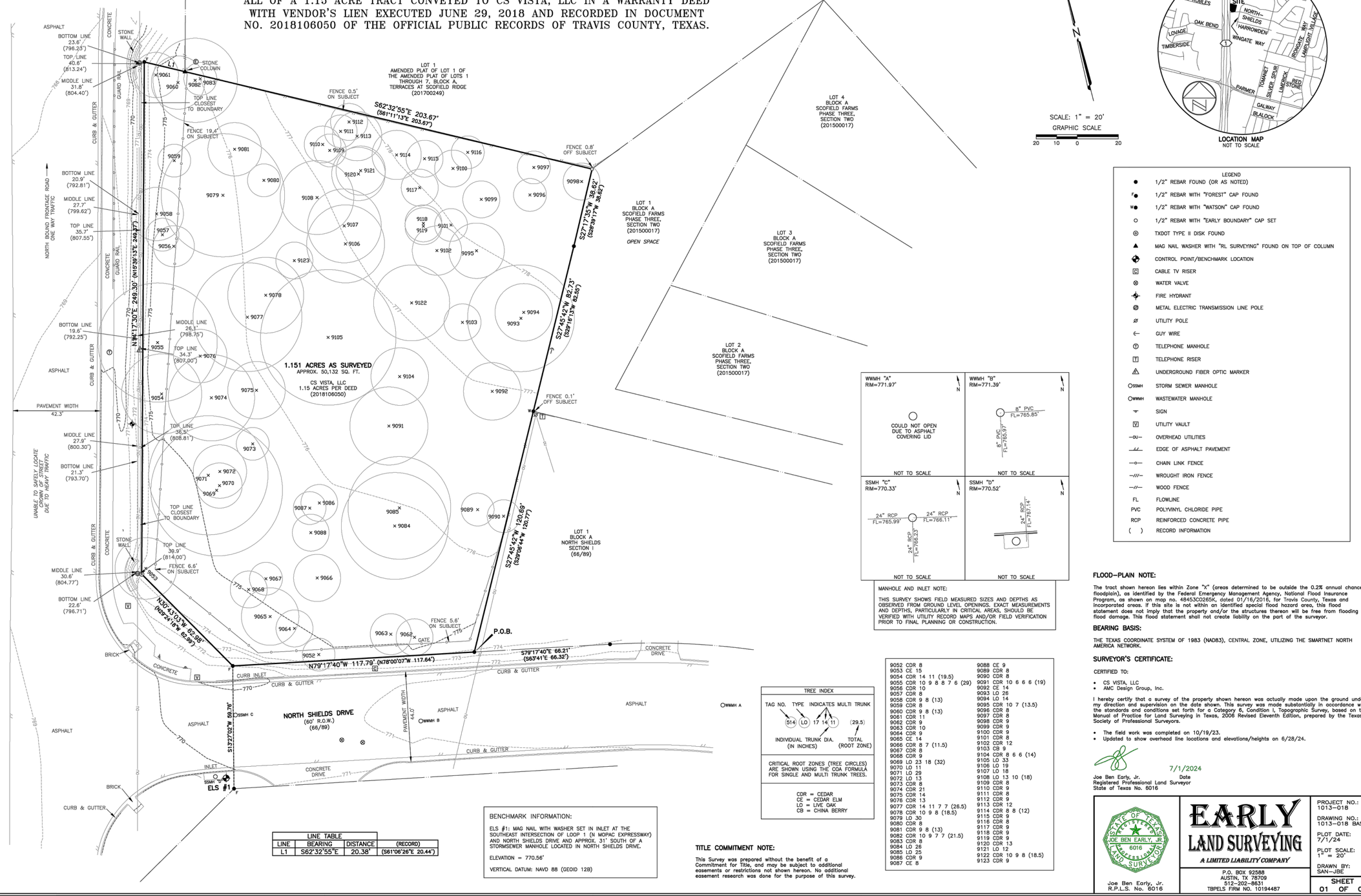
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

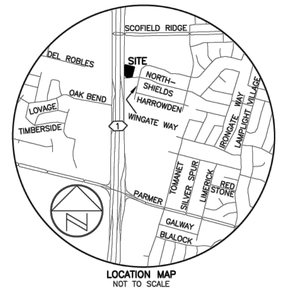
FINAL PLAT

SP-2024-0345C

A SURVEY OF 1.151 ACRES (APPROXIMATELY 50,132 SQ. FT.), IN THE FRANCISCO GARCIA SURVEY NO. 60, ABSTRACT NO. 312 IN TRAVIS COUNTY, TEXAS, BEING ALL OF A 1.15 ACRE TRACT CONVEYED TO CS VISTA, LLC IN A WARRANTY DEED WITH VENDOR'S LIEN EXECUTED JUNE 29, 2018 AND RECORDED IN DOCUMENT NO. 2018106050 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.







LEGEND

- ● 1/2" REBAR FOUND (OR AS NOTED)
- F● 1/2" REBAR WITH "FOREST" CAP FOUND
- W● 1/2" REBAR WITH "WATSON" CAP FOUND
- ○ 1/2" REBAR WITH "EARLY BOUNDARY" CAP SET
- ◎ TXDOT TYPE II DISK FOUND
- ▲ MAG NAIL WASHER WITH "RL SURVEYING" FOUND ON TOP OF COLUMN
- CONTROL POINT/BENCHMARK LOCATION
- C CABLE TV RISER
- ⊗ WATER VALVE
- FIRE HYDRANT
- METAL ELECTRIC TRANSMISSION LINE POLE
- UTILITY POLE
- ← GUY WIRE
- T TELEPHONE MANHOLE
- T TELEPHONE RISER
- UNDERGROUND FIBER OPTIC MARKER
- SSMH STORM SEWER MANHOLE
- WWMH WASTEWATER MANHOLE
- SIGN
- V UTILITY VAULT
- —OU— OVERHEAD UTILITIES
- EDGE OF ASPHALT PAVEMENT
- —o— CHAIN LINK FENCE
- —/// WROUGHT IRON FENCE
- —// WOOD FENCE
- FL FLOWLINE
- PVC POLYVINYL CHLORIDE PIPE
- RCP REINFORCED CONCRETE PIPE
- ( ) RECORD INFORMATION

MANHOLE AND INLET NOTE:

THIS SURVEY SHOWS FIELD MEASURED SIZES AND DEPTHS AS OBSERVED FROM GROUND LEVEL OPENINGS. EXACT MEASUREMENTS AND DEPTHS, PARTICULARLY IN CRITICAL AREAS, SHOULD BE VERIFIED WITH UTILITY RECORD MAPS AND/OR FIELD VERIFICATION PRIOR TO FINAL PLANNING OR CONSTRUCTION.

TREE INDEX

TAG NO. TYPE INDICATES MULTI TRUNK
(514) (LO) 17 14 11 (29.5)
INDIVIDUAL TRUNK DIA. (IN INCHES) TOTAL (ROOT ZONE)

CRITICAL ROOT ZONES (TREE CIRCLES) ARE SHOWN USING THE COA FORMULA FOR SINGLE AND MULTI TRUNK TREES.

CDR = CEDAR
CE = CEDAR ELM
LO = LIVE OAK
CB = CHINA BERRY

9052 CDR 8
9053 CE 15
9054 CDR 14 11 (19.5)
9055 CDR 10 9 8 8 7 6 (29)
9056 CDR 10
9057 CDR 8
9058 CDR 9 8 (13)
9059 CDR 8
9060 CDR 9 8 (13)
9061 CDR 11
9062 CDR 9
9063 CDR 10
9064 CDR 9
9065 CE 14
9066 CDR 8 7 (11.5)
9067 CDR 8
9068 CDR 9
9069 LO 23 18 (32)
9070 LO 11
9071 LO 29
9072 LO 13
9073 CDR 8
9074 CDR 21
9075 CDR 14
9076 CDR 13
9077 CDR 14 11 7 7 (26.5)
9078 CDR 10 9 8 (18.5)
9079 LO 30
9080 CDR 8
9081 CDR 9 8 (13)
9082 CDR 10 9 7 7 (21.5)
9083 CDR 8
9084 LO 26
9085 LO 25
9086 CDR 9
9087 CE 8
9088 CE 9
9089 CDR 8
9090 CDR 8
9091 CDR 10 6 6 6 (19)
9092 CE 14
9093 LO 26
9094 LO 14
9095 CDR 10 7 (13.5)
9096 CDR 8
9097 CDR 8
9098 CDR 9
9099 CDR 9
9100 CDR 9
9101 CDR 8
9102 CDR 12
9103 CB 9
9104 CDR 8 6 6 (14)
9105 LO 33
9106 LO 19
9107 LO 18
9108 LO 13 10 (18)
9109 CDR 8
9110 CDR 9
9111 CDR 8
9112 CDR 9
9113 CDR 12
9114 CDR 8 8 (12)
9115 CDR 9
9116 CDR 8
9117 CDR 9
9118 CDR 9
9119 CDR 9
9120 CDR 13
9121 LO 12
9122 CDR 10 9 8 (18.5)
9123 CDR 9

BENCHMARK INFORMATION:

ELS #1: MAG NAIL WITH WASHER SET IN INLET AT THE SOUTHEAST INTERSECTION OF LOOP 1 (N MOPAC EXPRESSWAY) AND NORTH SHIELDS DRIVE AND APPROX. 31' SOUTH OF A STORMSEWER MANHOLE LOCATED IN NORTH SHIELDS DRIVE.

ELEVATION = 770.56'

VERTICAL DATUM: NAVD 88 (GEOID 12B)

TITLE COMMITMENT NOTE:

This Survey was prepared without the benefit of a Commitment for Title, and may be subject to additional easements or restrictions not shown hereon. No additional easement research was done for the purpose of this survey.

FLOOD–PLAIN NOTE:

The tract shown hereon lies within Zone "X" (areas determined to be outside the 0.2% annual chance floodplain), as identified by the Federal Emergency Management Agency, National Flood Insurance Program, as shown on map no. 48453C0265K, dated 01/16/2018, for Travis County, Texas and incorporated areas. If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. This flood statement shall not create liability on the part of the surveyor.

BEARING BASIS:

THE TEXAS COORDINATE SYSTEM OF 1983 (NAD83), CENTRAL ZONE, UTILIZING THE SMARTNET NORTH AMERICA NETWORK.

SURVEYOR'S CERTIFICATE:

CERTIFIED TO:

- CS VISTA, LLC
- AMC Design Group, Inc.

I hereby certify that a survey of the property shown hereon was actually made upon the ground under my direction and supervision on the date shown. This survey was made substantially in accordance with the standards and conditions set forth for a Category 6, Condition I, Topographic Survey, based on the Manual of Practice for Land Surveying in Texas, 2006 Revised Eleventh Edition, prepared by the Texas Society of Professional Surveyors.

- The field work was completed on 10/19/23.
- Updated to show overhead line locations and elevations/heights on 6/28/24.

7/1/2024
Joe Ben Early, Jr. Date
Registered Professional Land Surveyor
State of Texas No. 6016

STATE OF TEXAS · REGISTERED · JOE BEN EARLY, JR. · 6016 · LAND SURVEYOR

Joe Ben Early, Jr.
R.P.L.S. No. 6016

EARLY LAND SURVEYING
A LIMITED LIABILITY COMPANY
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631
TBPELS FIRM NO. 10194487

PROJECT NO.: 1013-018
DRAWING NO.: 1013-018 BASE
PLOT DATE: 7/1/24
PLOT SCALE: 1" = 20'
DRAWN BY: SAN-JBE
SHEET 01 OF 01

AMC DESIGN GROUP
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512-385-2911
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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

SURVEY

5 OF 26

SP-2024-0345C

APPENDIX P-1
EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE COA ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR ALL TPDES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF AUSTIN ENVIRONMENTAL INSPECTOR AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE BASIC ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY COA EV PLAN REVIEWERS AS WELL AS COA EV INSPECTORS.
   -- PLAN SHEETS SUBMITTED TO THE CITY OF AUSTIN MUST SHOW THE FOLLOWING:
   DIRECTION OF FLOW DURING GRADING OPERATIONS.
   LOCATION, DESCRIPTION, AND CALCULATIONS FOR OFF-SITE FLOW DIVERSION STRUCTURES.
   AREAS THAT WILL NOT BE DISTURBED; NATURAL FEATURES TO BE PRESERVED.
   DELINEATION OF CONTRIBUTING DRAINAGE AREA TO EACH PROPOSED BMP (E.G., SILT FENCE, SEDIMENT BASIN, ETC.).
   LOCATION AND TYPE OF E&S BMPS FOR EACH PHASE OF DISTURBANCE.
   CALCULATIONS FOR BMPS AS REQUIRED.
   LOCATION AND DESCRIPTION OF TEMPORARY STABILIZATION MEASURES.
   LOCATION OF ON-SITE SPOILS, DESCRIPTION OF HANDLING AND DISPOSAL OF BORROW MATERIALS, AND DESCRIPTION OF ON-SITE PERMANENT SPOILS DISPOSAL AREAS, INCLUDING SIZE, DEPTH OF FILL AND REVEGETATION PROCEDURES.
   DESCRIBE SEQUENCE OF CONSTRUCTION AS IT PERTAINS TO ESC INCLUDING THE FOLLOWING ELEMENTS:
1. INSTALLATION SEQUENCE OF CONTROLS (E.G. PERIMETER CONTROLS, THEN SEDIMENT BASINS, THEN TEMPORARY STABILIZATION, THEN PERMANENT, ETC.)
2. PROJECT PHASING IF REQUIRED (LOC GREATER THAN 25 ACRES)
3. SEQUENCE OF GRADING OPERATIONS AND NOTATION OF TEMPORARY STABILIZATION MEASURES TO BE USED
4. SCHEDULE FOR CONVERTING TEMPORARY BASINS TO PERMANENT WQ CONTROLS
5. SCHEDULE FOR REMOVAL OF TEMPORARY CONTROLS
6. ANTICIPATED MAINTENANCE SCHEDULE FOR TEMPORARY CONTROLS
   – CATEGORIZE EACH BMP UNDER ONE OF THE FOLLOWING AREAS OF BMP ACTIVITY AS DESCRIBED BELOW:
   3.1 MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL
   3.2 CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT
   3.3 STABILIZE SOILS
   3.4 PROTECT SLOPES
   3.5 PROTECT STORM DRAIN INLETS
   3.6 ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS
   3.7 RETAIN SEDIMENT ON-SITE AND CONTROL DEWATERING PRACTICES
   3.8 ESTABLISH STABILIZED CONSTRUCTION EXITS
   3.9 ANY ADDITIONAL BMPS
   -- NOTE THE LOCATION OF EACH BMP ON YOUR SITE MAP(S).
   -- FOR ANY STRUCTURAL BMPS, YOU SHOULD PROVIDE DESIGN SPECIFICATIONS AND DETAILS AND REFER TO THEM.
   -- FOR MORE INFORMATION, SEE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL 1.4.
3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT, 512-974-2278, OR BY EMAIL AT ENVIRONMENTAL-INSPECTIONS@AUSTINTEXAS.GOV, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. COA APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY COA EV INSPECTOR AT THIS TIME.
5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST OR CITY ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED COA STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.
6. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC – IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER – INSPECTOR (CESSW OR CESSW – IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION (CISEC OR CISEC – IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (½) INCH OR GREATER RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES OR ONE-THIRD (⅓) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.
7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
8. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF AUSTIN ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION. IN ADDITION, IF THE PROJECT SITE IS LOCATED WITHIN THE EDWARDS AQUIFER, THE PROJECT MANAGER MUST NOTIFY THE TRAVIS COUNTY BALCONES CANYONLANDS CONSERVATION PRESERVE (BCCP) BY EMAIL AT BCCP@TRAVISCOUNTYTX.GOV. CONSTRUCTION ACTIVITIES WITHIN 50 FEET OF THE VOID MUST STOP.
9. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.
   A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A
   MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE STANDARD SPECIFICATION ITEM
   NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.
   - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 601S.
   - AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF STANDARD SPECIFICATION 601S BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.
   - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:

TEMPORARY VEGETATIVE STABILIZATION

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN (SECALE CEREALE) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT UTILIZE ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) OR PERENNIAL RYEGRASS (LOLIUM PERENNE). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEMS 604S OR 609S.
   A. FERTILIZER SHALL BE APPLIED ONLY IF WARRANTED BY A SOIL TEST AND SHALL CONFORM TO ITEM NO. 606S, FERTILIZER. FERTILIZATION SHOULD NOT OCCUR WHEN RAINFALL IS EXPECTED OR DURING SLOW PLANT GROWTH OR DORMANCY. CHEMICAL FERTILIZER MAY NOT BE APPLIED IN THE CRITICAL WATER QUALITY ZONE.
   B. HYDROMULCH SHALL COMPLY WITH TABLE 1, BELOW.
   C. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.
   D. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATIONS 604S OR 609S.

Table 1: Hydromulching for Temporary Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
100% or any blend of wood, cellulose, straw and/or cotton plant material (except no mulch shall exceed 30% paper)	70% or greater Wood/Straw 30% or less paper or natural fibers	0-3 months	Moderate slopes: from flat to 3:1	1500 to 2000 lbs per acre

PERMANENT VEGETATIVE STABILIZATION

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEMS 604S OR 609S.
   A. FERTILIZER FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.
   B. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.
   C. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDBED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE CHAPTER 6-4 (WATER CONSERVATION), AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE AUSTIN WATER UTILITY AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.
   D. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SF.
   E. E. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, ITEMS 604S OR 609S.

Table 2: Hydromulching for Permanent Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
Bonded Fiber Matrix (BFM)	80% Organic deflorated fibers 10% Tackifier	6 months	On slopes up to 2:1 and erosive soil conditions	2500 to 4000 lbs per acre (see manufacturer's recommendations)
Fiber Reinforced Matrix (FRM)	65% Organic deflorated fibers 25% Reinforcing Fibers or less 10% Tackifier	up to 12 months	On slopes up to 1:1 and erosive soil conditions	3000 to 4500 lbs per acre (see manufacturer's recommendations)

10. DEVELOPER INFORMATION:
    DEVELOPER: CS VISTA, LLC
    5801 STANDING ROCK DRIVE
    AUSTIN, TX 78730
    OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:
    CIVIL ENGINEER: AMC DESIGN GROUP, INC.
    P.O. BOX 341555
    AUSTIN, TEXAS 78734
    512-385-2911
    FIRM RESPONSIBLE FOR E/S CONTROL/WQC/TREE & NATURAL AREA PROTECTION MAINTENANCE:
    CONTRACTOR
11. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE DEVELOPMENT SERVICES DEPARTMENT AT 512-974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.

APPENDIX P-2
CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. BEFORE CONSTRUCTION
   - ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED PER ECM 3.6.1.
   - TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION. REFER TO ECM 3.6.1.A.
   - FENCING FOR TREE PROTECTION SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET AND SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE EXCEPT AS ALLOWED IN ECM 3.6.1.B.4.
   - UNFENCED SECTIONS OF THE CRITICAL ROOT ZONE SHALL BE COVERED WITH MULCH AT A MINIMUM DEPTH OF 8 INCHES AND A MAXIMUM DEPTH OF 12 INCHES PER ECM 3.6.1.C.
   - WHERE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OF A PRESERVED TREE, TRUNK WRAPPING SHALL BE INSTALLED PER ECM 3.6.1.D.
   - EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED SO AS NOT TO CAUSE IMPACTS THAT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.3.D.
2. DURING CONSTRUCTION
   - TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT DOES NOT EXCEED PRESERVATION CRITERIA FOR THE TREES TO REMAIN. REFER TO ECM 3.5.2 A.
   - FENCING MAY NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER. REFER TO ECM 3.6.1.B.3.
   - PRUNING SHALL BE IN COMPLIANCE WITH THE CURRENT ANSI A300 STANDARD FOR TREE CARE.
3. AFTER CONSTRUCTION
   - TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. REFER TO ECM 3.6.1.A.
   - LANDSCAPE INSTALLATION WITHIN THE CRZ OF PRESERVED TREES, INCLUDING IRRIGATION, SOIL AND PLANTINGS, SHALL NOT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.2.
   - DOCUMENTATION OF TREE WORK PERFORMED MUST BE PROVIDED TO INSPECTOR PER ECM APPENDIX P-6.
   - THIS LIST IS NOT EXHAUSTIVE.
   - REFER TO APPROPRIATE ECM SECTIONS FOR FULL REQUIREMENTS.

SPECIAL CONSTRUCTION TECHNIQUES
ECM 3.5.4(D)

PRIOR TO EXCAVATION WITHIN TREE DRIPLINES OR THE REMOVAL OF TREES ADJACENT TO OTHER TREES THAT ARE TO REMAIN, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE ROOT DAMAGE.

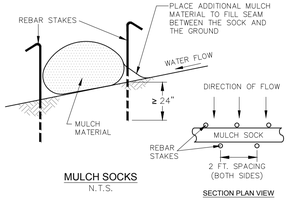
IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DURING CONSTRUCTION WITH FENCING AND WHERE HEAVY VEHICULAR TRAFFIC IS ANTICIPATED, COVER THOSE AREAS WITH A MINIMUM OF 12 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. IN AREAS WITH HIGH SOIL PLASTICITY GEOTEXTILE FABRIC, PER STANDARD SPECIFICATION 620S, SHOULD BE PLACED UNDER THE MULCH TO PREVENT EXCESSIVE MIXING OF THE SOIL AND MULCH. ADDITIONALLY, MATERIAL SUCH AS PLYWOOD AND METAL SHEETS, COULD BE REQUIRED BY THE CITY ARBORIST TO MINIMIZE ROOT IMPACTS FROM HEAVY EQUIPMENT. ONCE THE PROJECT IS COMPLETED, ALL MATERIALS SHOULD BE REMOVED, AND THE MULCH SHOULD BE REDUCED TO A DEPTH OF 3 INCHES.

PERFORM ALL GRADING WITHIN CRITICAL ROOT ZONE AREAS BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE.

WATER ALL TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.

WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.

MULCH SOCK DETAIL



MULCH SOCKS
N.T.S.

SECTION PLAN VIEW

APPENDIX P-4
STANDARD SEQUENCE OF CONSTRUCTION

1. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION, INITIATE TREE MITIGATION MEASURES AND CONDUCT "PRE – CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE).
2. THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE DEVELOPMENT SERVICES DEPARTMENT, ENVIRONMENTAL INSPECTION, AT 512-974-2278, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRECONSTRUCTION MEETING.
3. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REVISED, IF NEEDED, TO COMPLY WITH CITY INSPECTORS' DIRECTIVES, AND REVISED CONSTRUCTION SCHEDULE RELATIVE TO THE WATER QUALITY PLAN REQUIREMENTS AND THE EROSION PLAN.
4. ROUGH GRADE THE TEMPORARY SEDIMENT TRAP AT 100% PROPOSED CAPACITY IN THE LOCATION SHOWN. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF EMBANKMENT OR EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. THE OUTLET SYSTEM SHALL BE PROTECTED FROM EROSION AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL INSTALLATION OF THE PERMANENT WATER QUALITY POND(S). ONCE THE TEMPORARY SEDIMENT TRAP IS INSTALLED, THE DETENTION POND AND STORM SEWER OUTFALL CAN BE CONSTRUCTED NEXT. AFTER THE DETENTION POND WALLS ARE CONSTRUCTED THEN THE WATER QUALITY POND WALLS CAN BE CONSTRUCTED.
5. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.
6. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
7. PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIOR TO/CONCURRENTLY WITH REVEGETATION OF SITE.
8. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
9. UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE BEARING THE ENGINEER'S SEAL, SIGNATURE, AND DATE TO THE DEVELOPMENT SERVICES DEPARTMENT, INCLUDING THAT CONSTRUCTION, INCLUDING REVEGETATION, IS COMPLETE AND IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
10. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
11. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY INSPECTOR AND WITH APPROVAL FROM THE CITY INSPECTOR, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WATER QUALITY PONDS OR CONTROLS.

APPENDIX P-6
REMEDIAL TREE CARE NOTES
AERATION & SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS

AS A COMPONENT OF AN EFFECTIVE REMEDIAL TREE CARE PROGRAM PER ENVIRONMENTAL CRITERIA MANUAL SECTION 3.5.4, PRESERVED TREES WITHIN THE LIMITS OF CONSTRUCTION MAY REQUIRE SOIL AERATION AND SUPPLEMENTAL NUTRIENTS. SOIL AND/OR FOLIAR ANALYSIS SHOULD BE USED TO DETERMINE THE NEED FOR SUPPLEMENTAL NUTRIENTS. THE CITY ARBORIST MAY REQUIRE THESE ANALYSES AS PART OF A COMPREHENSIVE TREE CARE PLAN. SOIL PH SHALL BE CONSIDERED WHEN DETERMINING THE FERTILIZATION COMPOSITION AS SOIL PH INFLUENCES THE TREE'S ABILITY TO UPTAKE NUTRIENTS FROM THE SOIL. IF ANALYSES INDICATE THE NEED FOR SUPPLEMENTAL NUTRIENTS, THEN HUMATE/NUTRIENT SOLUTIONS WITH MYCORRHIZAE COMPONENTS ARE HIGHLY RECOMMENDED. IN ADDITION, SOIL ANALYSIS MAY BE NEEDED TO DETERMINE IF ORGANIC MATERIAL OR BENEFICIAL MICROORGANISMS ARE NEEDED TO IMPROVE SOIL HEALTH. MATERIALS AND METHODS ARE TO BE APPROVED BY THE CITY ARBORIST (512-974-1876) PRIOR TO APPLICATION. THE OWNER OR GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND ENSURE COORDINATION WITH THE CITY ARBORIST.

PRE-CONSTRUCTION TREATMENT SHOULD BE APPLIED IN THE APPROPRIATE SEASON, IDEALLY THE SEASON PRECEDING THE PROPOSED CONSTRUCTION. MINIMALLY, AREAS TO BE TREATED INCLUDE THE ENTIRE CRITICAL ROOT ZONE OF TREES AS DEPICTED ON THE CITY APPROVED PLANS. TREATMENT SHOULD INCLUDE, BUT NOT LIMITED TO, FERTILIZATION, SOIL TREATMENT, MULCHING, AND PROPER PRUNING.

POST-CONSTRUCTION TREATMENT SHOULD OCCUR DURING FINAL REVEGETATION OR AS DETERMINED BY A QUALIFIED ARBORIST AFTER CONSTRUCTION. CONSTRUCTION ACTIVITIES OFTEN RESULT IN A REDUCTION IN SOIL MACRO AND MICRO PORES AND AN INCREASE IN SOIL BULK DENSITY. TO AMELIORATE THE DEGRADED SOIL CONDITIONS, AERATION VIA WATER AND/OR AIR INJECTED INTO THE SOIL IS NEEDED OR BY OTHER METHODS AS APPROVED BY THE CITY ARBORIST. THE PROPOSED NUTRIENT MIX SPECIFICATIONS AND SOIL AND/OR FOLIAR ANALYSIS RESULTS NEED TO BE PROVIDED TO AND APPROVED BY THE CITY ARBORIST PRIOR TO APPLICATION (FAX # 512-974-3010). CONSTRUCTION WHICH WILL BE COMPLETED IN LESS THAN 90 DAYS MAY USE MATERIALS AT ½ RECOMMENDED RATES. ALTERNATIVE ORGANIC FERTILIZER MATERIALS ARE ACCEPTABLE WHEN APPROVED BY THE CITY ARBORIST. WITHIN 7 DAYS AFTER FERTILIZATION IS PERFORMED, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF THE WORK PERFORMED TO THE CITY ARBORIST, DEVELOPMENT SERVICES DEPARTMENT. P.O. BOX 1088, AUSTIN, TX 78767. THIS NOTE SHOULD BE REFERENCED AS ITEM #1 IN THE SEQUENCE OF CONSTRUCTION.

MULCH SOCK SPECIFICATIONS

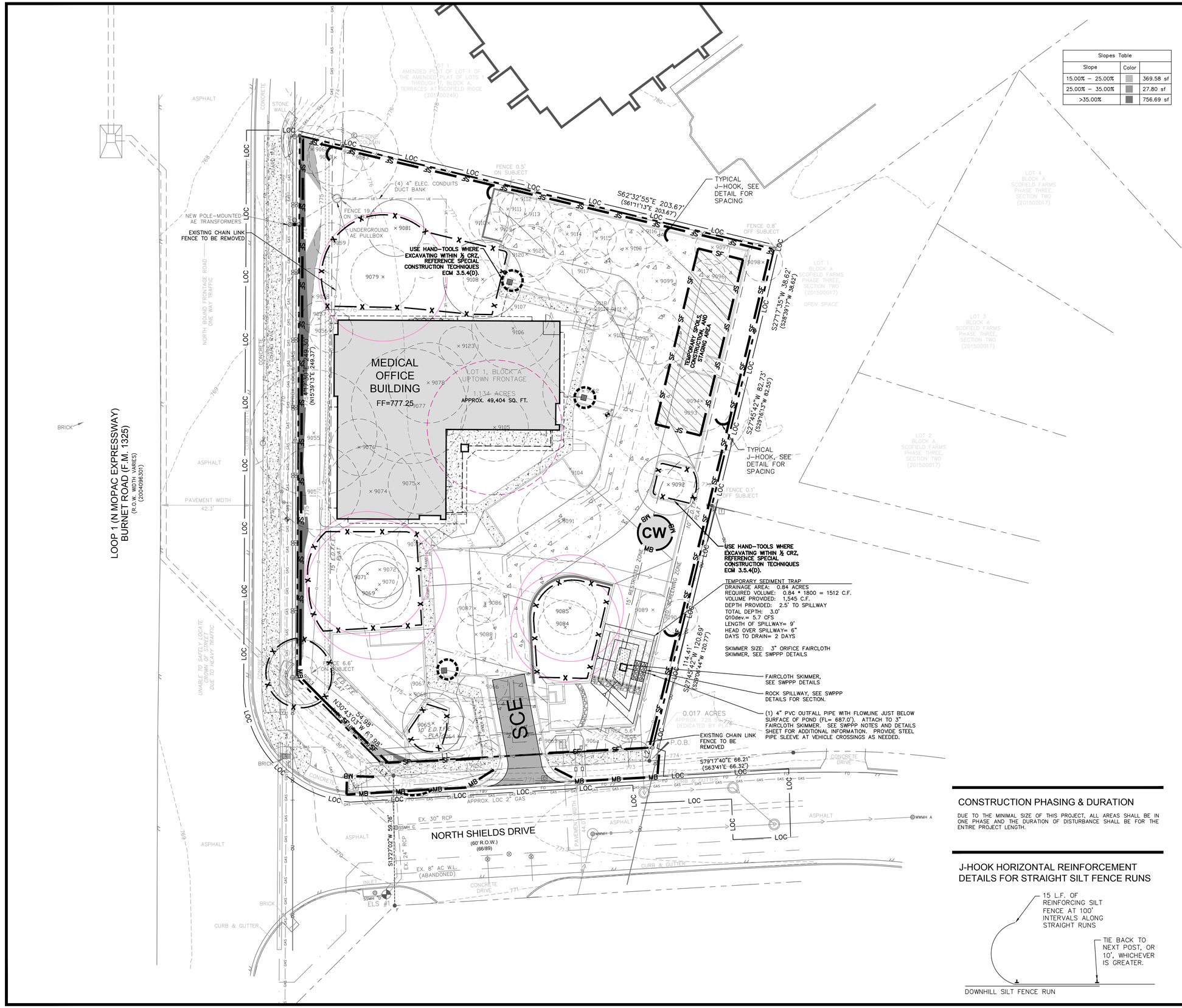
APPLICATION

FILTREXX SILTSOXXTM ARE TO BE INSTALLED DOWN SLOPE OF ANY DISTURBED AREA REQUIRING EROSION AND SEDIMENT CONTROL AND FILTRATION OF SOLUBLE POLLUTANTS FROM RUNOFF. SILTSOXXTM ARE EFFECTIVE WHEN INSTALLED PERPENDICULAR TO SHEET FLOW. ACCEPTABLE APPLICATIONS INCLUDE:

- SITE PERIMETERS AND INTERMEDIATE SHEET FLOW TREATMENT APPLICATIONS.
- ABOVE AND BELOW DISTURBED AREAS SUBJECT TO SHEET RUNOFF, INTERRILL AND RILL EROSION.
- ABOVE AND BELOW EXPOSED AND ERODABLE SLOPES MEETING THE SLOPE CRITERIA BELOW.
- ON COMPACTED SOILS WHERE TRENCHING OF SILT FENCE IS DIFFICULT OR IMPOSSIBLE.
- AROUND SENSITIVE TREES WHERE TRENCHING OF SILT FENCE IS NOT BENEFICIAL FOR TREE SURVIVAL OR MAY UNNECESSARILY DISTURB ESTABLISHED VEGETATION
- ON PAVED SURFACES WHERE TRENCHING OF SILT FENCE IS IMPOSSIBLE.

INSTALLATION

1. SILTSOXXTM USED FOR PERIMETER CONTROL OF SEDIMENT AND SOLUBLE POLLUTANTS IN STORM RUNOFF SHALL MEET FILTREXX SOXXTM MATERIAL SPECIFICATIONS AND USE CERTIFIED FILTREXX FILTERMEDIATM..
2. FILTERINGSTM USED FOR SOLIDS SEPARATION AND FILTRATION OF SOLUBLE POLLUTANTS FROM CONTAMINATED WATER SUCH AS CONCRETE WASH OUTS SHALL MEET FILTREXX FILTERSOXXTM MATERIAL SPECIFICATIONS AND USE CERTIFIED FILTREXX FILTERMEDIATM.
3. CONTRACTOR IS REQUIRED TO BE FILTREXX CERTIFIEDTM AS DETERMINED BY FILTREXX INTERNATIONAL, LLC (440-926-2607 OR VISIT WEBSITE AT WWW.FILTREXX.COM). CERTIFICATION SHALL BE CONSIDERED CUR



Slopes Table		
Slope	Color	
15.00% – 25.00%		369.58 sf
25.00% – 35.00%		27.80 sf
>35.00%		756.69 sf

SCALE: 1" = 20'
SCALE IN FEET
20 10 0 20

LEGEND

- SITE BOUNDARY
- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- X — TREE PROTECTION
- MB — ORGANIC FILTER BERM (MULCH SOCK)
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- INLET PROTECTION
- CW — CONCRETE WASHOUT
- HERITAGE TREE TO REMAIN W/ 1/2 C.R.Z.
- TREE TO REMAIN W/ 1/2 C.R.Z.
- TREE TO BE REMOVED
- HERITAGE TREE TO BE REMOVED

TREE LIST

DATE OF TREE SURVEY: 10/19/2023

TAG NO. TYPE INDICATES MULTI TRUNK (514 LO 17 14 11) (29.5)

CDR = CEDAR
CE = CEDAR ELM
LO = LIVE OAK
CB = CHINA BERRY
^^ DENOTES MEASUREMENT BY CITY ARBORIST

INDIVIDUAL TRUNK DIA. (IN INCHES) — TOTAL (ROOT ZONE)

9052 CDR 8
9053 CE 15
9054 CDR 14 11 (19.5)
9055 CDR 10 9 8 8 7 6 (29)
9056 CDR 10
9057 CDR 8
9058 CDR 9 8 (13)
9059 CDR 8
9060 CDR 9 8 (13)
9061 CDR 11
9062 CDR 9
9063 CDR 10
9064 CDR 9
9065 CE 14
9066 CDR 8 7 (11.5)
9067 CDR 8
9068 CDR 9
9069 LO 20.5,12,11 (32)^^
9070 LO 11
9071 LO 28.5^^
9072 LO 13
9073 CDR 8
9074 CDR 21
9075 CDR 14
9076 CDR 13
9077 CDR 14 11 7 7 (26.5)
9078 CDR 10 9 8 (18.5)
9079 LO 29.5^^
9080 CDR 8
9081 CDR 9 8 (13)
9082 CDR 10 9 7 7 (21.5)
9083 CDR 8
9084 LO 25^^
9085 LO 24.5^^
9086 CDR 9
9087 CE 8
9088 CE 9
9089 CDR 8
9090 CDR 8
9091 CDR 10 6 6 6 (19)
9092 CE 14
9093 LO 23.5^^
9094 LO 14
9095 CDR 10 7 (13.5)
9096 CDR 8
9097 CDR 8
9098 CDR 9
9099 CDR 9
9100 CDR 9
9101 CDR 8
9102 CDR 12
9103 CB 9
9104 CDR 8 6 6 (14)
9105 LO 31^^
9106 LO 19
9107 LO 18
9108 LO 13 10 (18)
9109 CDR 8
9110 CDR 9
9111 CDR 8
9112 CDR 9
9113 CDR 12
9114 CDR 8 8 (12)
9115 CDR 9
9116 CDR 8
9117 CDR 9
9118 CDR 9
9119 CDR 9
9120 CDR 13
9121 LO 12
9122 CDR 10 9 8 (18.5)
9123 CDR 9

NOTES

1. A PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
2. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLAINCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS. [LDC 25-8-183]
3. STORM INLET PROTECTION IS TO BE PROVIDED DOWN STREAM OF PROJECT.
4. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
5. THERE WILL BE NO ON-SITE FUEL STORAGE.
6. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP, OR REVEGETATION MATTING. [ECM 1.4.4.B.3, SECTION 5, I.]
7. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY. [ECM 1.4.4.D.4]
8. INTERNAL EROSION CONTROLS MAY BE SUBSTITUTED FOR MULCH SOCKS AS NECESSARY TO ALLOW FLEXIBILITY DURING CONSTRUCTION PHASES.
9. CONTRACTOR SHALL COORDINATE WORK AS NEEDED WITHIN TREE PROTECTION AREAS WITH THE ENVIRONMENTAL INSPECTOR.
10. REFER TO SHEET 2 FOR Q2 TABLE.
11. TOTAL LINEAR FOOTAGE OF PROPOSED SILT FENCE: 1,022
12. CONTRACTOR RESPONSIBLE FOR REMOVAL OF SEDIMENT TRANSPORTED FROM THE LIMITS OF CONSTRUCTION TO OFFSITE DETENTION/WATER QUALITY POND(S).
13. PER LDC 25-8-323(C), FOR AREAS ON THE SITE THAT ARE TO REMAIN PERVIOUS AFTER DEVELOPMENT, ANY SOILS THAT ARE COMPACTED DURING SITE GRADING AND CONSTRUCTION OPERATIONS MUST BE DECOMPACTED IN COMPLIANCE WITH THE ECM AND IN COMPLIANCE WITH SSM 661S.
14. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO HAVE A MINIMUM OF SIX (6) INCHES OF TOPSOIL. TOPSOIL SHALL MEET THE DEFINITION IN STANDARD SPECIFICATION 601S.3. IN AREAS WHERE NO TOPSOIL EXISTS, OR WHERE TOPSOIL IS NEEDED FOR VEGETATIVE ESTABLISHMENT, THE SUBGRADE SHALL BE LOOSENED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST TWO (2) INCHES PRIOR TO PLACEMENT OF SIX (6) INCHES OF TOPSOIL. [ECM 1.4.7, APPENDIX P-1]
15. PERMANENT VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE PER ECM APPENDIX P-1, UNLESS OTHERWISE INDICATED ON THE PLAN.
16. FOR PARKING-LOT ISLANDS, MEDIANS, PENINSULAS, AND SIMILAR LANDSCAPE AREAS THAT ARE TO RECEIVE PARKING-LOT STORMWATER RUNOFF, FINISHED ELEVATION MUST BE AT LEAST SIX (6) INCHES BELOW THE FINISHED CURB ELEVATION TO ALLOW FOR PLACEMENT OF SIX (6) INCHES OF TOPSOIL [ECM 1.4.7].

CONSTRUCTION PHASING & DURATION

DUE TO THE MINIMAL SIZE OF THIS PROJECT, ALL AREAS SHALL BE IN ONE PHASE AND THE DURATION OF DISTURBANCE SHALL BE FOR THE ENTIRE PROJECT LENGTH.

J-HOOK HORIZONTAL REINFORCEMENT DETAILS FOR STRAIGHT SILT FENCE RUNS

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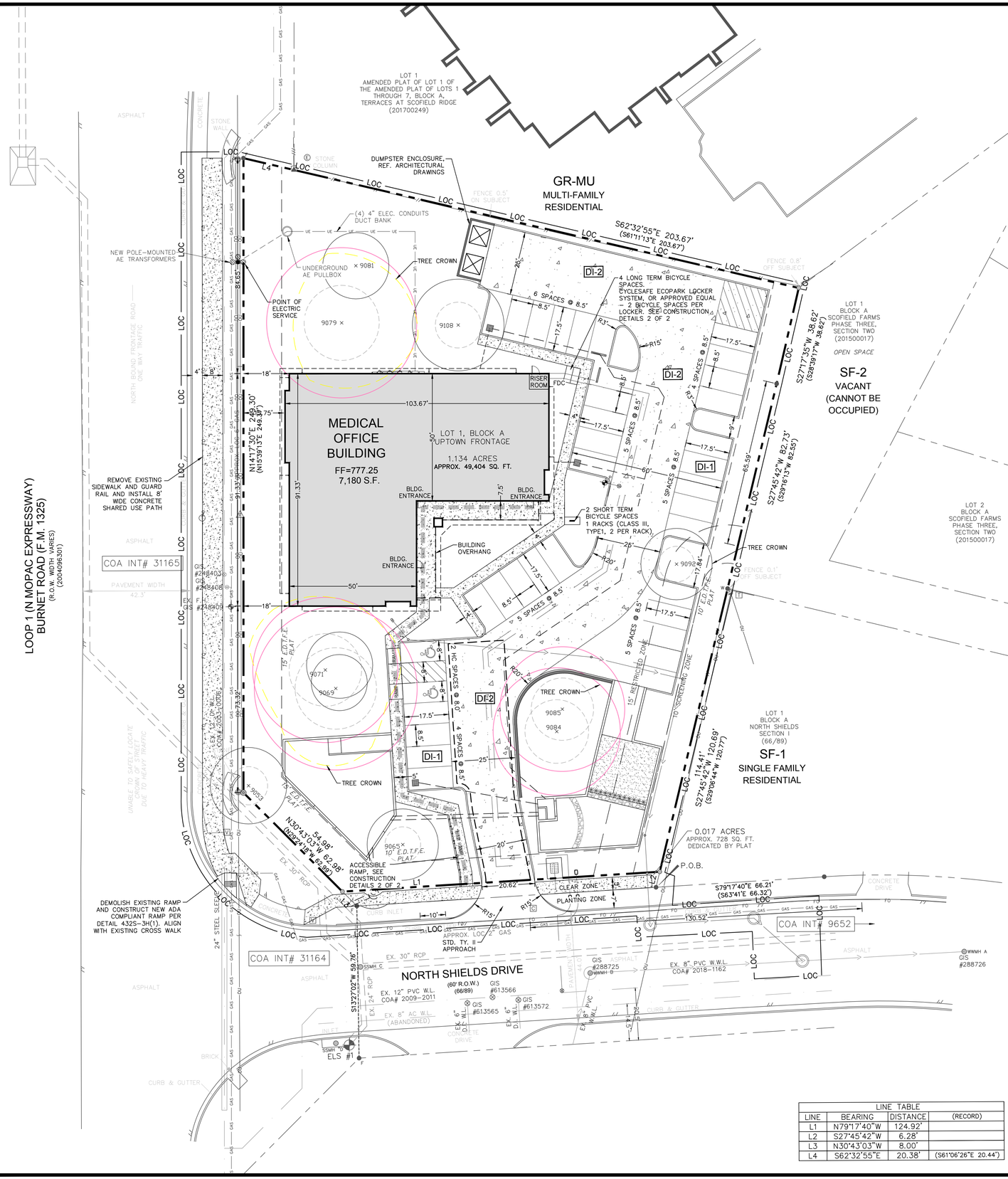
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UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

EROSION/ SEDIMENTATION CONTROL PLAN

SP-2024-0345C



LINE TABLE			
LINE	BEARING	DISTANCE	(RECORD)
L1	N79°17'40"W	124.92'	
L2	S27°45'42"W	6.28'	
L3	N30°43'03"W	8.00'	
L4	S62°32'55"E	20.38'	(S61°06'26"E 20.44')

LEGEND

LOC	LIMITS OF CONSTRUCTION
	FIRELANE STRIPING
	ACCESSIBLE ROUTE (SEE NOTES)
	DUMPSTER
DI-X	PAVEMENT TYPE

NOTES

SITE NOTES:

1. PARKING SURFACE TO BE ASPHALT AND CONCRETE FOR FIRE LANES AND DUMPSTER PADS, LABELED DI-1 AND DI-2. SEE CONSTRUCTION DETAILS.
2. FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF OR DAMAGE TO UTILITIES.
3. COORDINATE ALL CONSTRUCTION IN PRIVATE RIGHT-OF-WAY WITH OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
4. ALL DEMOLISHED MATERIALS ARE TO BE MOVED TO AN OFF-SITE LOCATION BY DEMOLITION CONTRACTOR.
5. THERE ARE NO OTHER STRUCTURES OR BUILDINGS WITHIN 50' OF THE LIMITS OF CONSTRUCTION OTHER THAN THOSE SHOWN.
6. ESTABLISH FIRE ZONES AS SHOWN ON SITE BY PAINTING GUTTER RED, STENCIL THE WORDS "FIRE ZONE/TOW-AWAY ZONE" IN WHITE LETTERS AT LEAST 3 INCHES HIGH AT 35' INTERVALS ALONG THE CURB OR PAVEMENT AS NOTED ON THE SITE PLAN.
7. GUARDRAILS ARE REQUIRED ON ALL STRUCTURES WHERE THE VERTICAL GRADE DIFFERENCE IS GREATER THAN 30 INCHES ACCORDING TO THE UNIFORM BUILDING CODE. REFER TO ARCHITECTURAL PLANS FOR GUARDRAIL DESIGN AND LAYOUT.

ACCESSIBILITY NOTES:

1. WHEN MORE THAN ONE BUILDING OR FACILITY IS LOCATED ON A SITE, AT LEAST ONE ACCESSIBLE ROUTE MUST BE PROVIDED BETWEEN ACCESSIBLE ELEMENTS, FACILITIES AND BUILDINGS.
2. SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP.
3. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50.
4. GROUND SURFACES ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM AND SLIP RESISTANT.
5. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 IN.THE MAXIMUM HORIZONTAL PROJECTION IS 30 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:12 AND 1:15, AND 40 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:16 AND 1:20.
6. DETECTABLE WARNINGS FOR CURB RAMPS SHALL FOLLOW TDLR TECHNICAL MEMORANDUM TM 08-01 AND HAVE TEXTURES CONSISTING OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN., A HEIGHT OF NOMINCAL 0.2 IN. AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK, OR DARK ON LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
7. ACCESSIBLE PARKING SPACES MUST BE LOCATED ON A SURFACE WITH SLOPE NOT EXCEEDING 1:50.
8. ACCESSIBLE PARKING SPACES MUST BE LOCATED ON THE SHORTEST POSSIBLE ACCESSIBLE ROUTE OF TRAVEL TO AN ACCESSIBLE BUILDING ENTRANCE. IN FACILITIES WITH MULTIPLE ACCESSIBLE BUILDING ENTRANCES WITH ADJACENT PARKING, ACCESSIBLE PARKING SPACES MUST BE DISPERSED AND LOCATED NEAR THE ACCESSIBLE ENTRANCES.
9. EVERY ACCESSIBLE PARKING SPACE MUST BE IDENTIFIED BY A SIGN, CENTERED AT THE HEAD OF THE PARKING SPACE. THE SIGN MUST INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND STATE "RESERVED" OR EQUIVALENT LANGUAGE. CHARACTERS AND SYMBOLS ON SUCH SIGNS MUST BE LOCATED 60" MINIMUM ABOVE THE GROUND SO THAT THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. SEE SIGN DETAIL ON CONSTRUCTION DETAILS SHEET.
10. AT EVERY PRIMARY PUBLIC ENTRANCE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL, THERE MUST BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS MUST INDICATE THE DIRECTION TO AN ACCESSIBLE BUILDING ENTRANCE.
11. THE CONTRACTOR SHALL VERIFY ALL GRADES CONCERNING ACCESSIBLE ROUTES AND WALKWAYS PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO CONCRETE PLACEMENT ON ALL ACCESSIBLE ROUTES AND WALKWAYS IN ORDER TO VERIFY FORM PLACEMENT, SLOPES AND GRADES.
12. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATIONS ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS SUCH AS THE 2010 STANDARDS FOR ACCESSIBLE DESIGN OR THE 2012 TEXAS ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.

COMPATIBILITY STANDARD NOTES

1. ALL EXTERIOR LIGHTING WILL BE HOODED OR SHIELDED FROM THE VIEW OF ADJACENT RESIDENTIAL PROPERTY.
2. THE USE OF HIGHLY REFLECTIVE SURFACES, SUCH AS REFLECTIVE GLASS AND REFLECTIVE METAL ROOFS, WHOSE PITCH IS MORE THAN A RUN OF SEVEN (7) TO A RISE OF TWELVE (12), WILL BE PROHIBITED.
3. THE NOISE LEVEL OF MECHANICAL EQUIPMENT WILL NOT EXCEED 70 DBA AT THE PROPERTY LINE ADJACENT TO RESIDENTIAL USES.
4. ALL ON-SITE AMENITIES, EXCEPT MULTI-USE TRAILS, ARE LOCATED MORE THAN 25 FEET FROM A RESIDENTIAL PROPERTY.
5. VEHICLE LIGHTS, GROUND FLOOR AND ROOFTOP MECHANICAL EQUIPMENT, OUTDOOR STORAGE, REFUSE RECEPTACLES AND COLLECTION AREAS, AND COMMON AREAS FOR AMENITIES WILL BE SCREENED AND WILL NOT BE VISIBLE AT THE PROPERTY LINE ADJACENT TO RESIDENTIAL USES.

THIS PROJECT COMPLIES WITH THE FOLLOWING BICYCLE/PEDESTRIAN IMPROVEMENT OPTIONS:

1. INTERNAL UTILITY LINES LOCATED IN DRIVE AISLES/INT. CIRC. ROUTE.
2. SHADED SIDEWALKS ARE PROVIDED ALONG 100% OF ALL PUBLICLY VISIBLE BUILDING FACADES.
3. REDUCED DRIVEWAYS.

COMMERCIAL DESIGN NOTES:

1. COMPLIANCE WITH BUILDING DESIGN STANDARDS, ARTICLE 3 OF SUBCHAPTER E, IS REQUIRED, AND IS TO BE REVIEWED FOR COMPLIANCE DURING BUILDING CODE REVIEW.
2. ALL EXTERIOR LIGHTING WILL BE FULL CUT-OFF AND FULLY SHIELDED IN COMPLIANCE WITH SUBCHAPTER E2.5 AND WILL BE REVIEWED DURING BUILDING PLAN REVIEW. ANY CHANGE OR SUBSTITUTION OF LAMP/LIGHT FIXTURES SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL IN ACCORDANCE WITH SECTION 2.5.2.E.
3. SCREENING FOR SOLID WASTE COLLECTION AND LOADING AREAS SHALL BE THE SAME AS, OR EQUAL QUALITY TO, PRINCIPLE BUILDING MATERIALS.

SITE CALCS

LIMITS OF CONSTRUCTION =		1.429 ACRES =	62,227	S.F.
SITE AREA		1.134 ACRES =	49,404	S.F.
IMPERVIOUS COVER SUMMARY				
ALLOWABLE IMPERVIOUS COVER	ALLOWABLE			
ZONING (LO)	70%	0.794 ACRES =	34,583	S.F.
EXISTING IMPERVIOUS COVER			-	S.F. 0.0%
PROPOSED IMPERVIOUS COVER				
BUILDING			7,777	S.F.
PARKING, DRIVES & WALKS			16,992	
			24,769	S.F. 50.1%
USE				
MEDICAL OFFICE				
BUILDING SUMMARY	ALLOWABLE			
BUILDING SIZE (G.F.A. IN SF) =			7,180	S.F.
BUILDING COVERAGE (SF) =			7,777	S.F.
	50%		15.7%	
BUILDING F.A.R. =	7:1		0.15	
BUILDING HEIGHT (FT)	40		16' 7 3/4"	
BUILDING STORIES	3		1	
FOUNDATION-SLAB ON GRADE				
PARKING SUMMARY				
PER APPENDIX A	UNITS	RATIO		
MEDICAL OFFICE	1.0	1/200	36	SPACES
REQUIRED HC PARKING			2	SPACES
PROVIDED PARKING				
STANDARD SPACES			34	
HANDICAP SPACES			2	
		TOTAL	36	SPACES
BICYCLE SPACES - TYPE III				
REQUIRED @ 10% OR 2 MIN.			4	SPACES
PROVIDED (CLASS III, TYPE I)				
SHORT TERM			2	SPACES
LONG TERM			4	SPACES
TOTAL			6	SPACES

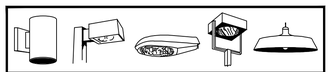


FIGURE 34
(REFERENCE SITE PLAN NOTE ON THIS SHEET)

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UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

SITE PLAN

SP-2024-0345C



SCALE: 1" = 20'

SCALE IN FEET

20 10 0 20

LEGEND

740.0	PROPOSED GRADING
✱740.0	SPOT ELEVATION
FF	FINISH FLOOR

NOTES

1. ALL EARTHWORK TO BE DONE IN ACCORDANCE WITH THE DIVISION 2 SPECIFICATIONS IN THE PROJECT MANUAL.
2. ANY UNSUITABLE SOIL TO BE REMOVED AND INSPECTED BY A QUALIFIED SOILS TECHNICIAN AND BACK FILLED TO THE REQUIRED ELEVATION WITH APPROVED FILL MATERIAL. ALL FILL TO BE PLACED IN LOOSE LIFTS NOT TO EXCEED EIGHT INCHES IN THICKNESS.
3. SUBMIT TO ENGINEER FOR APPROVAL THE FOLLOWING: SAMPLES OF ALL IMPORTED MATERIAL, SAMPLES OF ALL ON-SITE MATERIAL TO BE USED AS SELECT OR COMMON FILL. SUBMITTAL MUST INCLUDE CERTIFICATION FROM A QUALIFIED TESTING LABORATORY THAT IMPORTED MATERIALS CONFORM TO THE REQUIREMENTS AS DETERMINED BY THE GEOTECHNICAL REPORT AND THESE NOTES.
4. PRIOR TO BEGINNING ANY EXCAVATION OR FILL, STRIP THE TOPSOIL TO A DEPTH OF AT LEAST 6 INCHES OR TO A DEPTH SUFFICIENT TO REMOVE ALL ORGANIC OR EXPANSIVE SURFACE CLAYS AS NOTED IN THE GEOTECHNICAL REPORT. STOCKPILE THIS SOIL FOR FUTURE USE IN PREDETERMINED AREAS FOR USE IN LANDSCAPING AND NONSTRUCTURAL FILL.
5. ONCE FINAL SUBGRADE ELEVATIONS HAVE BEEN ACHIEVED, INCLUDING THE OVER-EXCAVATION REQUIRED FOR BUILDING PADS, THE EXPOSED SUBGRADE SHOULD BE CAREFULLY PROOFROLLED WITH A 20-TON PNEUMATIC ROLLER OR A FULLY LOADED DUMP TRUCK TO DETECT WEAK ZONES IN THE SUBGRADE. WEAK AREAS DETECTED AS WELL AS ZONES CONTAINING DEBRIS OR ORGANICS AND VOIDS RESULTING FROM REMOVAL OF TREE ROOTS, BOULDERS, ETC. SHOULD BE REMOVED AND REPLACED WITH SOILS EXHIBITING SIMILAR CLASSIFICATION, MOISTURE CONTENT AND DENSITY AS THE ADJACENT IN-SITU SOILS.
6. PROPER SITE DRAINAGE SHOULD BE MAINTAINED DURING CONSTRUCTION SO THAT PONDING OF SURFACE RUNOFF DOES NOT OCCUR AND CAUSES CONSTRUCTION DELAYS AND/OR INHIBIT SITE ACCESS.
7. FILL SHOULD NOT CONTAIN ROCK GREATER THAN THREE INCHES IN DIAMETER, MORE THAN 1% (DRY WEIGHT) OF ORGANIC MATTER OR DETRIMENTAL MATERIAL AND SHALL HAVE A P.I. OF LESS THAN 20. IF THIS SPECIFICATION CONFLICTS WITH THE GEOTECHNICAL REPORT, THE MORE STRINGENT REQUIREMENT APPLIES.
8. IMPORTED PAVING FILL SHOULD BE TYPE B SOIL (CL, SC, OR GC) PER TxDOT ITEM 132 OR CLASS B BORROW PER CITY OF AUSTIN ITEM 130S, WITH A MAXIMUM PI OF 30 AND NO ROCKS LARGER THAN 3 INCHES IN MAXIMUM DIMENSION. IMPORTED PAVING FILL SHOULD BE COMPACTED TO THE DENSITY AND MOISTURE REQUIREMENTS GIVEN IN THE GEOTECHNICAL REPORT.
9. EXCAVATED ON-SITE SOILS, IF FREE OF ORGANICS, DEBRIS AND ROCKS LARGER THAN 4 INCHES, MAY BE CONSIDERED FOR USE AS FILL IN PAVEMENT, UTILITY OR OTHER GENERAL EMBANKMENT AREAS. CLAYEY SOILS WITH PIs EXCEEDING OR EQUALLING 25 SHOULD BE MOISTURE CONDITIONED TO BETWEEN OPTIMUM AND +4 PERCENT OF OPTIMUM. CLAYEY SOILS WITH PIs LESS THAN 25 SHOULD BE MOISTURE CONDITIONED TO BETWEEN -3 AND +3 PERCENT OF OPTIMUM.
10. CONTRACTOR SHALL CONTROL DUST BY WATER OR OTHER MEANS ON AND NEAR THE LIMITS OF CONSTRUCTION IF DUST IS CAUSED BY CONTRACTOR'S OPERATIONS DURING PERFORMANCE OF THE WORK OR IF RESULTING FROM CONDITIONS IN WHICH THE CONTRACTOR LEAVES THE SITE.
11. CONTRACTOR SHALL CALL THE ONE CALL SYSTEM OR THE TEXAS EXCAVATION SAFETY SYSTEM, 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR HIGHWAY RIGHT OF WAY.
12. ALL DETAILS NOT SHOWN BUT ARE COVERED BY CITY STANDARD DETAILS AND SPECIFICATIONS SHALL CONFORM TO CITY OF AUSTIN STANDARDS. DIMENSIONS AND LIMITS OF THESE ITEMS ARE NOTED ON THE DRAWINGS.
13. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS THAT ARE REQUIRED TO COMPLY WITH SECTIONS 15-12-161 THROUGH 15-12-181 OF THE CITY CODE REGARDING EXCAVATION IN PUBLIC RIGHT-OF-WAY.
14. ADEQUATE BARRIERS BETWEEN ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, SUCH AS 6" CONCRETE CURB AREA REQUIRED. IF A STANDARD 6" CURB AND GUTTER ARE NOT PROVIDED FOR ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, COMPLY WITH ECM, SECTION 2.4.7, PROTECTION OF LANDSCAPE AREA.
15. THIS GRADING PLAN WAS PREPARED PRIOR TO THE DEVELOPMENT OF THE FINAL ARCHITECTURAL AND STRUCTURAL DRAWINGS. THEREFORE, MINOR FIELD ADJUSTMENTS MAY BE NECESSARY BETWEEN THE PAVEMENT AND BUILDINGS IN ORDER TO COMPLY WITH TEXAS ACCESSIBILITY STANDARDS.
16. THE CONTRACTOR SHALL VERIFY ALL GRADES CONCERNING ACCESSIBLE ROUTES AND WALKWAYS PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO CONCRETE PLACEMENT ON ALL ACCESSIBLE ROUTES AND WALKWAYS IN ORDER TO VERIFY FORM PLACEMENT, SLOPES AND GRADES.
17. CONTRACTOR SHALL, AT THEIR EXPENSE, RAISE EXISTING CASTINGS OF VALVES, MANHOLES, ELECTRIC VAULTS, AND OTHER STRUCTURES TO MEET THE PROPOSED GRADES.
18. DRY STACK ROCK WALLS SHOWN ON THIS PLAN SHALL CONFORM TO THE DETAIL PROVIDED ON THE CONSTRUCTION DETAILS SHEET OF THIS PLAN SET. MATCH THE TOP COURSE WITH THE TOP OF CURB, SIDEWALK OR FINISHED GRADE AS SHOWN, OR AS NOTED ON THE GRADING PLAN. THE FOOTING SHALL BE LOCATED A MINIMUM OF 6 INCHES BELOW FINISHED GRADE ON THE LOW SIDE.
19. FINISH GRADE INCLUDING FINISHED LANDSCAPE ELEVATION SHALL NOT BE CLOSER THAN 6" FROM FINISHED FLOOR.
20. WHEN STAIRS ARE SHOWN ON THE GRADING PLAN, HANDRAILS WILL BE REQUIRED PER THE CURRENT VERSION OF THE BUILDING CODE. DETAILS OF THESE HANDRAILS ARE SHOWN IN THE CONSTRUCTION DETAILS.

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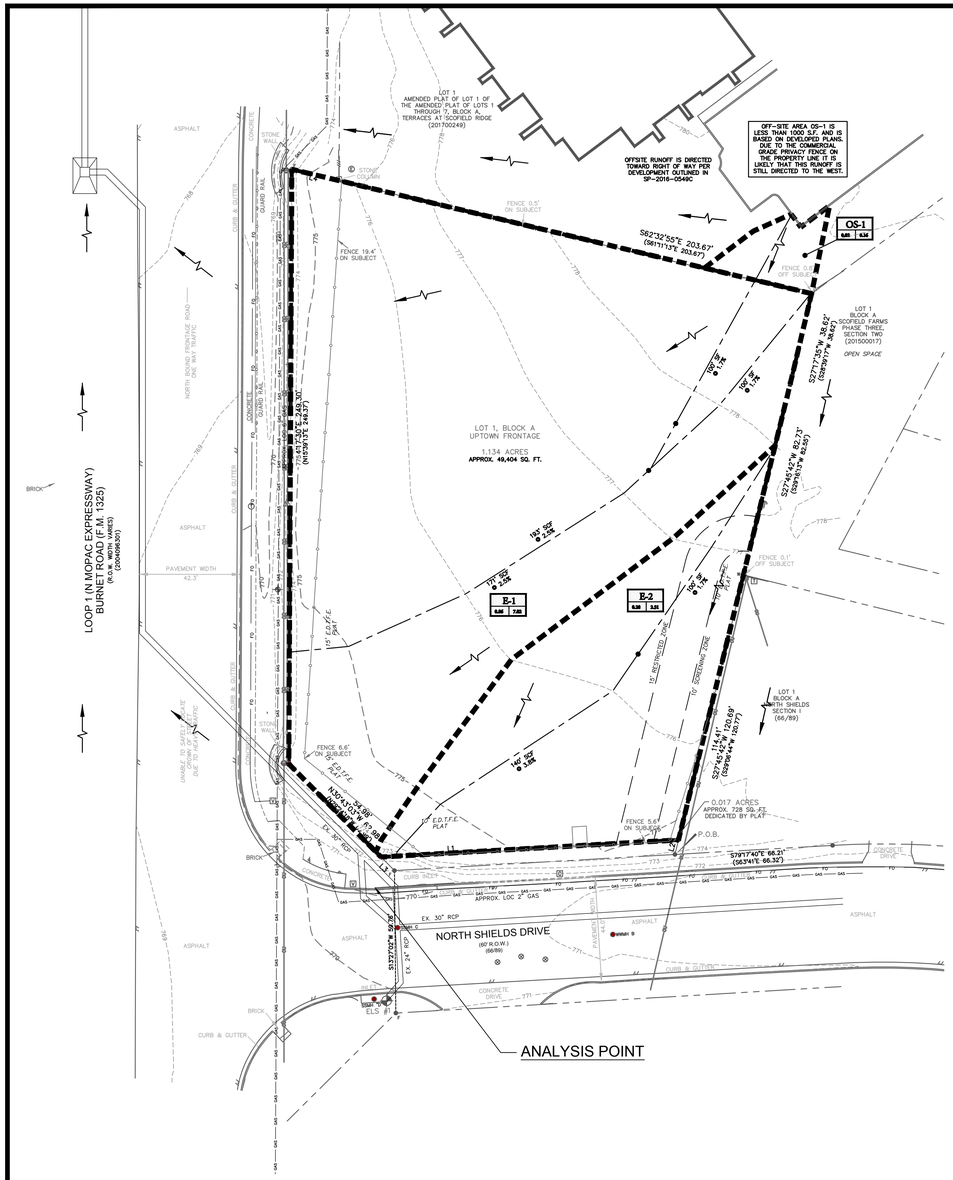
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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

GRADING PLAN

SP-2024-0345C



EXISTING DRAINAGE PLAN

SCALE: 1"=30'

PROPOSED DRAINAGE PLAN

SCALE: 1"=30'

SCALE: 1" = 30'

SCALE IN FEET

30 15 0 30

LEGEND

A / 1.0 | 1.0	EXISTING / PROPOSED DRAINAGE SUB AREA AREA ACREAGE 100 YR. FLOW, C.F.S.
	SUB AREA BOUNDARY
	FLOW DIRECTION
TcA	SOIL CLASSIFICATION (CLASS D SOILS)
	Tc TRAVEL PATH
	EXISTING STORMSEWER
	PROPOSED STORMSEWER
SF	SHEET FLOW
SCF	SHALLOW CONCENTRATED FLOW

NOTES

1. THE SITE DRAINAGE ANALYSIS WAS DESIGNED USING HEC-HMS AND THE ATLAS 14 FREQUENCY STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
2. THE STORM SEWER ANALYSIS WAS DESIGNED USING THE MODIFIED RATIONAL METHOD USING THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
3. REFER TO THE DRAINAGE CALCULATIONS AND THE ENGINEER'S REPORT FOR DETAILED INFORMATION ON ALL DRAINAGE CALCULATIONS.
4. AREAS SHOWN AS 'SUB AREAS' ARE ONLY USED FOR CALCULATING DRAINAGE CONDUITS AND INLETS. REFER TO DRAINAGE STUDY FOR IN DEPTH DRAINAGE INFORMATION.
5. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY OR FINAL INSPECTION RELEASE BY THE CITY, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
6. CONTRACTOR SHALL CALL THE TEXAS EXCAVATION SAFETY SYSTEM 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR STREET RIGHT OF WAY.

PROJECT: **UPTOWN FRONTAGE** DATE: 02/07/24
FIRM: AMC Design Group, Inc.

SUBAREA ID: **OS-1** **DEVELOPED CONDITIONS** ENGR: CBM

LAND USE DESCRIPTION	FRACTION		SOIL TYPE A	B	C	D	U	SCS CN	FRACTION SCS CN
Pasture grassland, fair condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	49	69	79	84	81.5	84	0.0
Pasture grassland, good condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	0.0
Pasture grassland, poor condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	68	79	86	89	87.5	89	0.0
Open Space lawns, parks, etc. good condition	1.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	80.0
Woods Grazed, fair	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	36	60	73	79	76	79	0.0
Woods Protected from grazing, good	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	30	55	70	77	73.5	77	0.0
Residential Districts 2 acre	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	46	65	77	82	79.5	82	0.0
Impervious Areas Gravel	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	76	85	89	91	90	91	0.0
Impervious Areas paved parking, roofs, driveways	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	98	98	98	98	98	98	0.0
	1.00							TOTAL OF PRODUCTS=	80.0
								USE CN=	80

NOTES:
Soil in drainage area is TcA.

PROJECT: **UPTOWN FRONTAGE** DATE: 02/07/24
FIRM: AMC Design Group, Inc.

SUBAREA ID: **E-1/E-2** **EXISTING CONDITIONS** ENGR: CBM

LAND USE DESCRIPTION	FRACTION		SOIL TYPE A	B	C	D	U	SCS CN	FRACTION SCS CN
Pasture grassland, fair condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	49	69	79	84	81.5	84	0.0
Pasture grassland, good condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	0.0
Pasture grassland, poor condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	68	79	86	89	87.5	89	0.0
Open Space lawns, parks, etc. good condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	0.0
Woods Grazed, fair	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	36	60	73	79	76	79	0.0
Woods Protected from grazing, good	1.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	30	55	70	77	73.5	77	77.0
Residential Districts 2 acre	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	46	65	77	82	79.5	82	0.0
Impervious Areas Gravel	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	76	85	89	91	90	91	0.0
Impervious Areas paved parking, roofs, driveways	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	98	98	98	98	98	98	0.0
	1.00							TOTAL OF PRODUCTS=	77.0
								USE CN=	77

NOTES:
Soil in drainage area is TcA.

TIME OF CONCENTRATION

BASIN	SHEET FLOW - DCM Eq. 2-4 (OVERTON & MEADOWS, 1976) 2yr., 24 HR. RAINFALL DEPTH (IN.)					SHALLOW CONCENTRATED FLOW - DCM Eq. 2-5&2-6					TOTALS	
	LENGTH (FT)	SLOPE (FT/FT)		MANNING'S n VALUE	Tc (HR.)	Tc= L/60*V LENGTH (FT)	SLOPE (FT/FT)	PAVED YES OR NO	VELOCITY (FPS)	Tc (HR.)	Tc TOTAL (HR.)	(MIN.)
E-1	100	0.017	4.06	0.24	0.23	171	0.025	N	2.55	0.02		
				Subtotal	0.23				Subtotal	0.02	0.24	14.6
E-2	100	0.017	4.06	0.24	0.23	140	0.038	N	3.15	0.01		
				Subtotal	0.23				Subtotal	0.01	0.24	14.3
P-1	23	0.024	4.06	0.24	0.06	11	0.024	Y	3.15	0.00		
	77	0.024	4.06	0.02	0.02	187	0.013	PIPE	10.00	0.01		
				Subtotal	0.06				Subtotal	0.01	0.10	6.0
P-2	60	0.045	4.06	0.24	0.10	0	0.045	N	3.42	0.00		
				Subtotal	0.10				Subtotal	0.00	0.10	6.1
OS-1 Pre dev.	100	0.017	4.06	0.24	0.23	193	0.025	N	2.55	0.02		
				Subtotal	0.23				Subtotal	0.02	0.25	14.8
OS-1 Post dev.	37	0.024	4.06	0.24	0.09	30	0.016	Y	2.57	0.00		
	63	0.024	4.06	0.02	0.02	187	0.013	PIPE	10.00	0.01		
				Subtotal	0.11				Subtotal	0.01	0.12	6.9

EXISTING DRAINAGE CONDITIONS - ATLAS 14 RAINFALL DISTRIBUTION

DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (COMPOSITE)	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
E-1	0.86	0.24	77.0	1.75	3.54	4.79	6.89
E-2	0.28	0.24	77.0	0.58	1.16	1.57	2.26
OS-1	0.02	0.25	80.0	0.06	0.10	0.12	0.17
ANALYSIS POINT							
JUNCTION 1				2.39	4.81	6.48	9.31

PROPOSED DRAINAGE CONDITIONS

DRAINAGE AREA	AREA ACRES	Tc HOUR	DEVELOPED I.C. %	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
P-1	0.77	0.10	70.5	3.32	5.31	6.64	8.90
P-2	0.36	0.10	7.2	1.02	2.02	2.68	3.80
OS-1	0.02	0.25	60.0	0.06	0.10	0.12	0.17
JUNCTION 1 INCLUDING DETENTION POND ROUTING *CITY OF AUSTIN ATLAS 14 FREQUENCY STORM				2.88	4.66	5.74	7.51

OS-1 IS A NEGLIGABLE SUBAREA OF PERVIOUS AREA FROM A FULLY DEVELOPED SITE. IF IT IS EVER RE-DEVELOPED IT WILL BE REQUIRED TO BE CONTAINED AND DIRECTED TO THAT PROJECT'S SWM.

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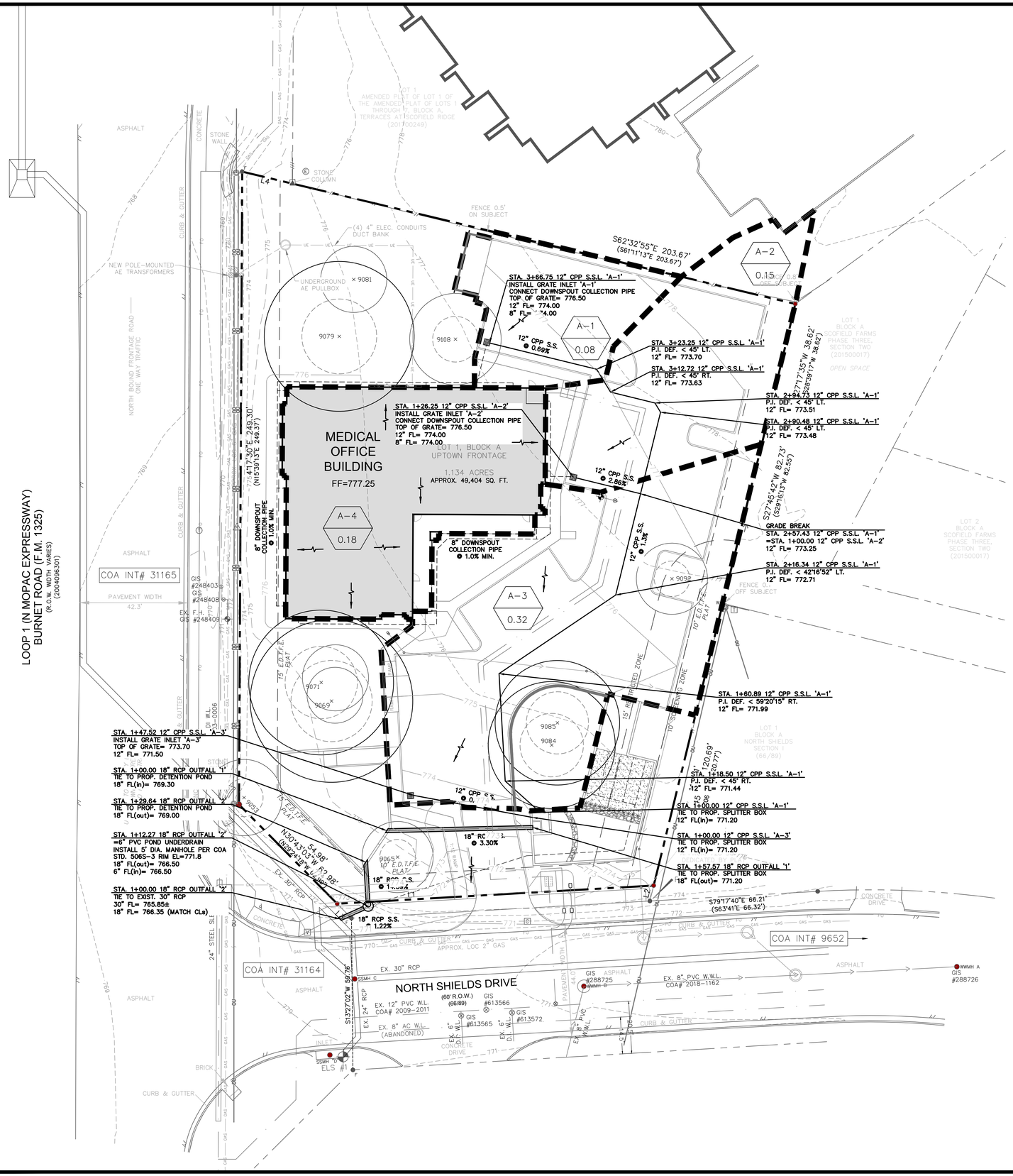
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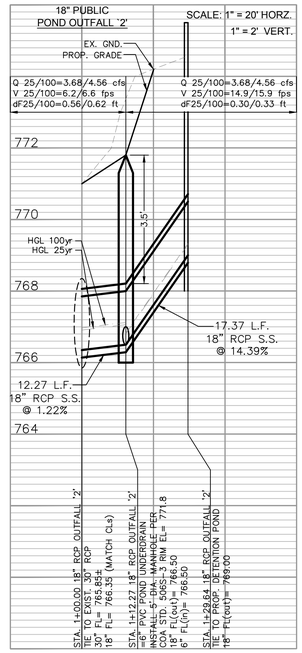
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

OVERALL DRAINAGE PLAN

SP-2024-0345C





SCALE: 1" = 20'
SCALE IN FEET
20 10 0 20

LEGEND

A / 0.0	DRAINAGE SUB AREA / SUB AREA ACREAGE
	SUB AREA BOUNDARY
	FLOW DIRECTION
RCP	REINFORCED CONCRETE PIPE
	EXISTING STORMSEWER
	PROPOSED STORMSEWER

NOTES

1. THE SITE DRAINAGE ANALYSIS WAS DESIGNED USING HEC-HMS AND THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
2. THE STORM SEWER ANALYSIS WAS DESIGNED USING THE MODIFIED RATIONAL METHOD USING THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
3. REFER TO THE DRAINAGE CALCULATIONS AND THE ENGINEER'S REPORT FOR DETAILED INFORMATION ON ALL DRAINAGE CALCULATIONS.
4. AREAS SHOWN AS 'SUB AREAS' ARE ONLY USED FOR CALCULATING DRAINAGE CONDUITS AND INLETS. REFER TO DRAINAGE STUDY FOR IN DEPTH DRAINAGE INFORMATION.
5. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY OR FINAL INSPECTION RELEASE BY THE CITY, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
6. CONTRACTOR SHALL CALL THE TEXAS EXCAVATION SAFETY SYSTEM 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR STREET RIGHT OF WAY.

GRATE INLET CALCULATIONS AND SCHEDULE

INLET	Q(100) (cfs)	GRATE SIZE	OPEN AREA (sq. in.)	OPEN AREA W/ 50% CLOGGING	ORIFICE h (ft)	WEIR h (ft)	GRATE ELEVATION	PIPE DIAMETER (in)	PIPE F.L.
A-1	1.1	24" X 24"	490	245	0.02	0.08	776.50	12	774.00
A-2	1.8	24" X 24"	490	245	0.05	0.11	776.50	12	774.00
A-3	3.9	24" X 24"	490	245	0.22	0.17	773.70	12	771.50

NOTES:
1 $h = (1.67Q/A)^2 / 2g$
2 PRECAST CONCRETE INLETS W/ INTEGRATED METAL GRATES BY FORTERRA CONCRETE PRODUCTS

CALCULATION OF STORMWATER RUNOFF

AREA	ACRES	t(c) (min.)	C(2)	I(2)	Q(2)	C(10)	I(10)	Q(10)	C(25)	I(25)	Q(25)	C(100)	I(100)	Q(100)
A-1	0.08	5	0.68	6.27	0.3	0.76	9.43	0.6	0.81	11.62	0.8	0.90	15.32	1.1
A-2	0.15	5	0.59	6.27	0.6	0.66	9.43	0.9	0.71	11.62	1.2	0.79	15.32	1.8
A-3	0.32	5	0.59	6.27	1.2	0.66	9.43	2.0	0.71	11.62	2.6	0.79	15.32	3.9
A-4	0.18	5	0.74	6.27	0.8	0.82	9.43	1.4	0.87	11.62	1.8	0.96	15.32	2.6

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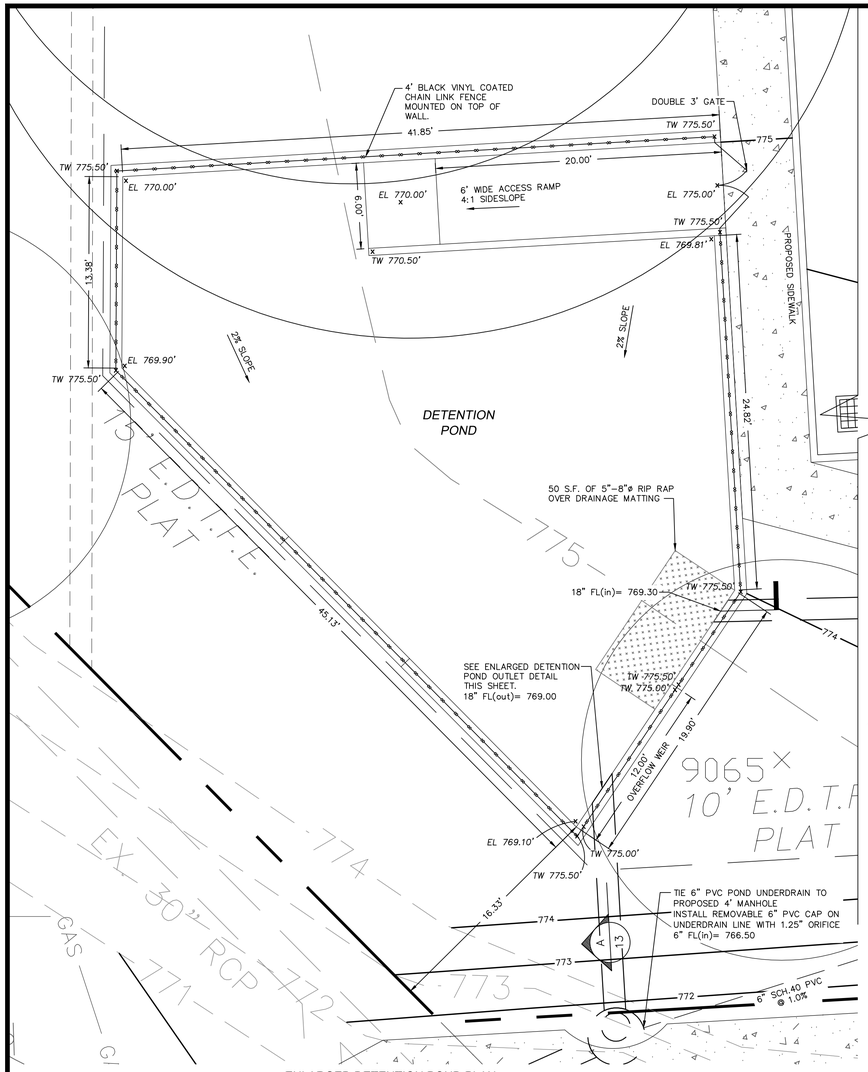
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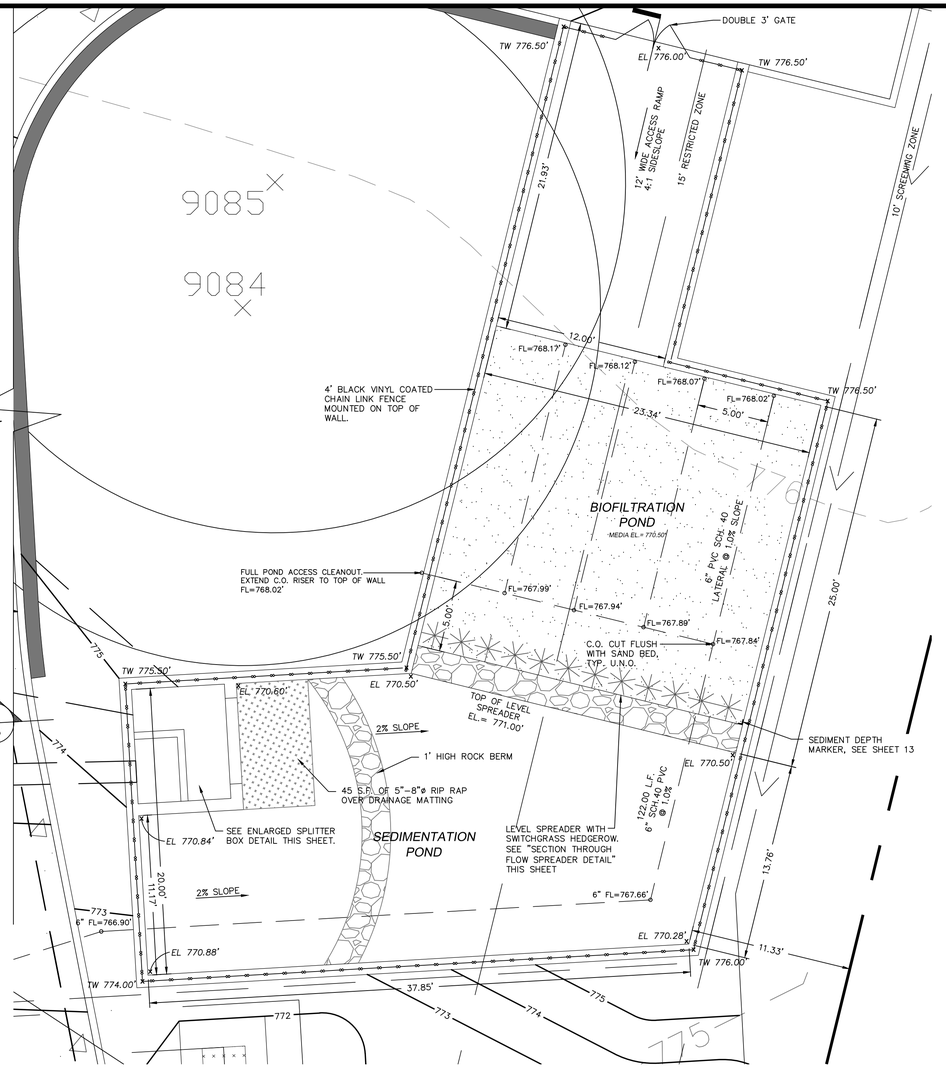
UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

PROPOSED STORM SEWER PLAN

SP-2024-0345C



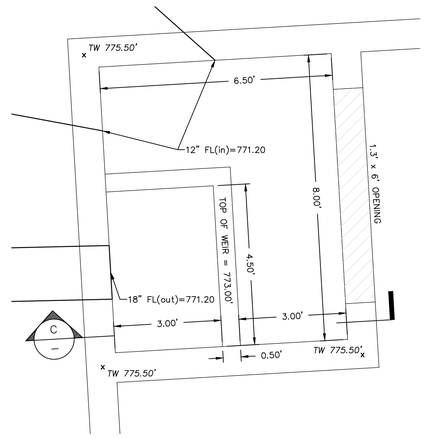
ENLARGED DETENTION POND PLAN
SCALE: 1" = 5'



ENLARGED WATER QUALITY POND PLAN
SCALE: 1" = 5'

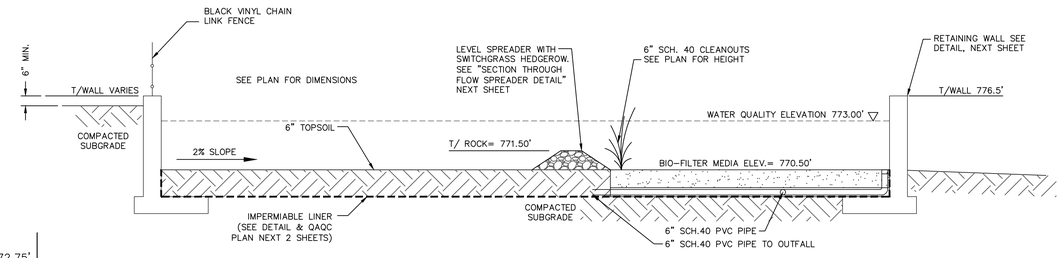
GENERAL NOTES:

1. ALL CONCRETE EDGES WHICH ARE GOING TO REMAIN EXPOSED AT THE END OF CONSTRUCTION TO HAVE A 3/4" CHAMFER.
2. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION END OF ACI 318.
3. ALL CAST-IN-PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
4. DEFORMED STEEL REINFORCING BARS SHALL BE GRADE 60 AND SHALL CONFORM TO ASTM A-615.
5. MINIMUM REINFORCING STEEL COVERAGES SHALL BE 3" FOR CONCRETE CAST DIRECTLY ON GRADE.
6. REINFORCING STEEL COVERAGES FOR CONCRETE EXPOSED TO EARTH OR WEATHER SHALL HAVE A MINIMUM OF 2" COVERAGE.
7. REINF. DOWELS PROJECTING OUT OF CONSTRUCTION JOINTS SHALL BE STANDARD HOOKS.
8. REINFORCING AND WALL DIMENSIONS ARE FOR BID PURPOSES ONLY. FINAL REINFORCING SCHEDULE TO BE DETERMINED BY OWNER'S STRUCTURAL ENGINEER ONCE A GEOTECHNICAL REPORT IS OBTAINED.
9. ALL HORIZONTAL & VERTICAL CONSTRUCTION JOINTS SHALL HAVE A 4" CENTER BULB WATERSTOP.
10. REFER TO ARCHITECTURAL FOR ALL FENCING LAYOUTS AND DETAILS. PONDS SHALL BE ADEQUATELY PROTECTED FROM THE PUBLIC AS PER THE LAND DEVELOPMENT CODE.
11. POND ACCESS LIDS TO BE 4'x6' DOUBLE LEAF PER SPL WW-614 (H20 LOADING REQUIRED) WITH SLAM LOCK.
12. ALL EARTHEN EMBANKMENTS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH COA STANDARD SPECIFICATIONS.
13. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.
14. BIOFILTRATION MEDIUM SHALL COMPLY WITH ECM 1.6.7.C.4(A).

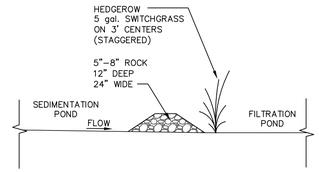


ENLARGED SPLITTER BOX PLAN
SCALE: 1" = 2'

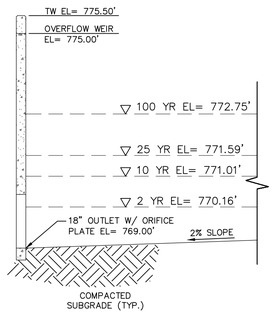
DIMENSION NOTE:
DUE TO IRREGULAR SHAPE OF PONDS, CONTRACTOR MAY OBTAIN STAKEOUT FILE FROM ENGINEER TO AID IN POND LAYOUT.



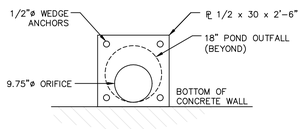
TYPICAL W.Q. POND SECTION
SCALE: N.T.S.



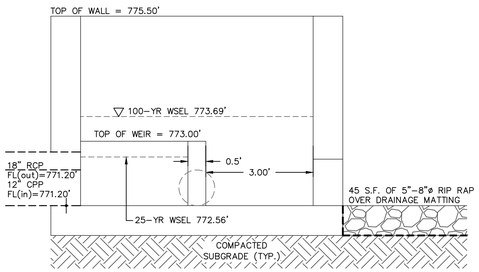
SECTION THRU FLOW SPREADER
SCALE: N.T.S.



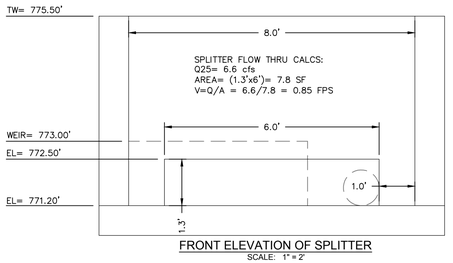
SECTION THROUGH DETENTION POND OUTLET
SCALE: N.T.S.



DETENTION POND OUTFALL ORIFICE PLATE
SCALE: N.T.S.



SECTION C
SCALE: 1" = 2'



FRONT ELEVATION OF SPLITTER
SCALE: 1" = 2'

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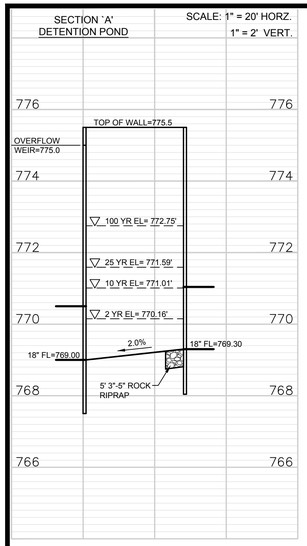
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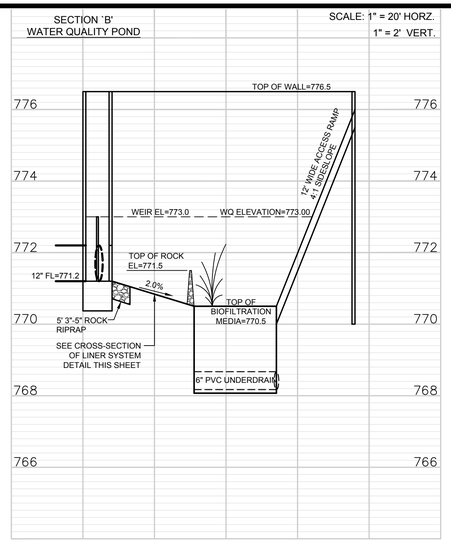
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

PROPOSED POND PLAN

SP-2024-0345C





DISCHARGE CALCULATIONS (BASED ON HEC-HMS & ATLAS 14
INCLUDES ALL DRAINAGE FROM THE DEVELOPED DRAINAGE AREA
ROUTED THROUGH DET. POND (DP) USING HEC-HMS.

2-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 2.76 CFS
Q ROUTED OUT DP: 2.16 CFS
MAXIMUM STAGE: 770.16 FT. MSL

10-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 5.39 CFS
Q ROUTED OUT DP: 3.15 CFS
MAXIMUM STAGE: 771.01 FT. MSL

25-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 6.64 CFS
Q ROUTED OUT DP: 3.68 CFS
MAXIMUM STAGE: 771.59 FT. MSL

100-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 9.04 CFS
Q ROUTED OUT DP: 4.56 CFS
MAXIMUM STAGE: 772.75 FT. MSL

POND 'A' STORAGE & DISCHARGE TABLE

ELEVATION FEET MSL	SURFACE (S.F.)	SURFACE (AC.)	STORAGE (C.F.)	STORAGE (AC-FT.)	DISCHARGE CFS
769.50	300	0.0069	0	0	0.00
770.00	1207	0.0277	754	0.0173	2.01
771.00	1227	0.0282	1971	0.0452	3.30
772.00	1247	0.0286	3208	0.0736	4.22
773.00	1267	0.0291	4465	0.1025	4.97
774.00	1287	0.0295	5742	0.1318	5.62
775.00	1387	0.0318	7079	0.1625	6.21

NOTE: POND OUTLET IS DESIGNED AS A SINGLE 9.75" ORIFICE.

$$a = \frac{2A}{C * t * \sqrt{2g}} * \left[\sqrt{h_1} - \sqrt{h_2}\right]$$

Orifice Plate Calculations for Water Quality Pond Outfall
AMC Design Group, Inc.

Project: Uptown Frontage
Date: 6/5/2025

Falling Head Orifice Equation	
Surface Area of Reservoir (s.f.)	1296
Orifice Coefficient (use 0.6 per DCM)	0.6
h1 (ft)	6.50
h2 (ft)	0
t (hrs.)	48
A orifice area (S.F.)	0.007942
Orifice diameter (in.)	1.21

Notes:
t is converted to seconds
A is converted to square inches
The orifice diameter needs to be within 1/16" based on drill bit sizes.



PROVIDE 5X5 CLAY TILE AS SHOWN. ATTACH TO CONCRETE CURB BEHIND AREA INLET WITH EPOXY GROUT.

STORM SEWER INLET SIGN
N.T.S.

WATER QUALITY CALCULATIONS FOR WATER QUALITY POND 'A'
APPENDIX R-6
PARTIAL BIOFILTRATION POND CALCULATIONS
FOR DEVELOPMENT PERMITS

DRAINAGE AREA DATA

DRAINAGE AREA:	0.79 ACRES
D.A. IMPERVIOUS COVER:	70.5%
CAPTURE DEPTH:	1.01 INCHES
SED. BASIN DEPTH:	2.5 FEET
FILTER BASIN DEPTH:	2.5 FEET

THE WATER QUALITY CONTROL IS TO BE PARTIAL BIOFILTRATION

WATER QUALITY CONTROL CALCULATIONS
Q25 PEAK FLOW RATE 6.64 C.F.S.
Q100 PEAK FLOW RATE 8.90 C.F.S.

	REQUIRED	PROVIDED
WATER QUALITY VOLUME:	2862	3051 C.F.
SEDIMENTATION POND AREA	-	761 S.F.
SEDIMENTATION POND VOL. (MIN 20% WQV)	576	1712 C.F.
FILTRATION POND AREA (DCM 1.6.7.c)	416	538 S.F.

WATER QUALITY ELEVATION:	773.00 FT. MSL
ELEVATION OF SPLITTER/OVERFLOW WEIR:	773.00 FT. MSL
LENGTH OF SPLITTER/OVERFLOW WEIR:	6.00 FT.
REQUIRED HEAD TO PASS Q100:	0.69 FT.
POND FREEBOARD PROVIDED:	1.00 FT.
POND FREEBOARD PROVIDED TO PASS Q100:	0.31 FT

BIOLOGICAL ELEMENTS CALCULATIONS:

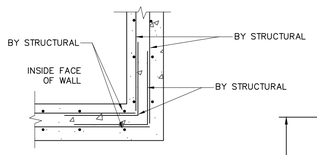
SURFACE AREA OF SED. POND	761 S.F.	
SEDIMENTATION POND PLANTINGS	76	95 PLANTS
FILTRATION POND PLANTINGS	107	113 PLANTS

SEDIMENTATION POND 'A' STORAGE TABLE

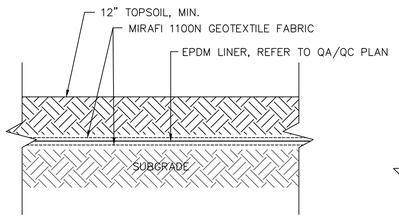
ELEV. FT.MSL	SURFACE (S.F.)	STORAGE (C.F.)
770.50	0	0
771.00	761	190
772.00	761	951
773.00	761	1712
774.00	761	2473

BIOFILTRATION POND 'A' STORAGE TABLE

ELEV. FT.MSL	SURFACE (S.F.)	STORAGE (C.F.)
770.50	535	0
771.00	535	268
772.00	535	803
773.00	535	1338
774.00	535	1874



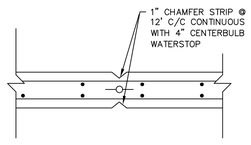
PLAN VIEW OF TYPICAL CORNER
SCALE: 1"=1'-0"



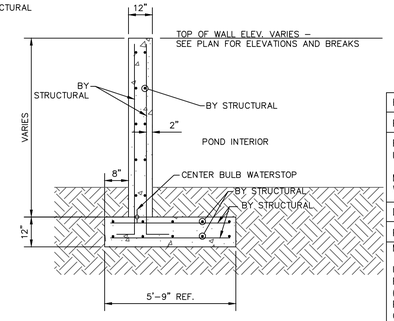
CROSS SECTION OF LINER SYSTEM
N.T.S.

QA/QC FOR CONSTRUCTION OF CONCRETE WATER QUALITY PONDS

REFER TO SHEET 14 FOR QA/QC PLAN.



RETAINING WALL VERTICAL CONTROL JOINT
SCALE: 1" = 1'-0"
THE CONCRETE WALL OF THE PONDS SHALL BE CONSTRUCTED WITH WATER TIGHT JOINTS.



TYPICAL RETAINING WALL FOR DETENTION POND
N.T.S.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: **Uptown Frontage**
Date Prepared: **6/13/2025**

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue 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 =	Travis	
Total project area included in plan * =	1.14	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	0.57	acres
Total post-development impervious cover fraction * =	0.50	
P =	32	inches
$L_{M\,TOTAL\,PROJECT}$ =	495	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 =	0.77	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.57	acres
Post-development impervious fraction within drainage basin/outfall area =	0.74	
$L_{M\,THIS\,BASIN}$ =	496	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: $L_R = (\text{BMP efficiency}) \times P \times (A_C \times 34.6 + A_P \times 0.54)$

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

A_C =	0.77	acres
A_I =	0.57	acres
A_P =	0.20	acres
L_R =	565	lbs

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

Desired $L_{M\,THIS\,BASIN}$ = 496 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 =	0.55	
On-site Water Quality Volume =	2301	cubic feet

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

Off-site area draining to BMP =	0.02	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	2	cubic feet
Storage for Sediment =	461	
Total Capture Volume (required water quality volume(s) x 1.20) =	2763	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.

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

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	2763	cubic feet
Minimum filter basin area =	230	square feet
Maximum sedimentation basin area =	920	square feet For minimum water depth of 2 feet
Minimum sedimentation basin area =	58	square feet For maximum water depth of 8 feet

MAINTENANCE AND CONSTRUCTION REQUIREMENTS
PER C.O.A. E.C.M. 1.6.3

A. MAINTENANCE RESPONSIBILITIES.

PROPER MAINTENANCE IS AS IMPORTANT AS ENGINEERING DESIGN AND CONSTRUCTION IN ORDER TO ENSURE THAT WATER QUALITY CONTROLS, REFERRED TO HEREIN AS STORMWATER CONTROL MEASURES (SCMS), WILL FUNCTION EFFECTIVELY. SECTION 25-8-231 OF THE LAND DEVELOPMENT CODE REQUIRES MAINTENANCE BE PERFORMED ON SCMS WHEN NECESSARY AS DEFINED BY THIS SECTION.

STORMWATER CONTROL MEASURES REQUIRED FOR COMMERCIAL AND MULTI-FAMILY DEVELOPMENT SHALL BE MAINTAINED BY THE PROPERTY OWNER.

B. MAINTENANCE REQUIREMENTS – DESIGN AND CONSTRUCTION.

THE DESIGN OF DRAINAGE FACILITIES (INCLUDING BUT NOT LIMITED TO HEADWALLS, OPEN CHANNELS, STORM SEWERS, AREA INLETS, AND DETENTION, RETENTION AND STORMWATER CONTROL MEASURES AND THEIR APPURTENANCES) SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1.2.4.E OF THE DRAINAGE CRITERIA MANUAL. IN ADDITION, SCMS SHALL COMPLY WITH THE FOLLOWING CONSTRUCTION REQUIREMENTS:

1. SEDIMENT REMOVED DURING CONSTRUCTION OF A DETENTION, RETENTION, OR WATER QUALITY FACILITIES MAY BE DISPOSED OF ON-SITE IF PROPERLY STABILIZED ACCORDING TO THE PRACTICES OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL CRITERIA FOUND IN SECTION 1.4.0 OF THIS MANUAL. AFTER THE CITY OF AUSTIN HAS ACCEPTED A STORMWATER FACILITY DISPOSAL OF SEDIMENT MUST BE AT AN APPROVED LANDFILL.

2. DURING CONSTRUCTION OF SCMS, TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED.

3. IF RUNOFF IS TO ENTER THE SAND FILTRATION CHAMBER OF A WATER QUALITY CONTROL FACILITY PRIOR TO COMPLETION OF SITE CONSTRUCTION AND REVEGETATION, INSPECTION AND MAINTENANCE OF ALL TEMPORARY EROSION/SEDIMENTATION CONTROLS ARE REQUIRED, AS DESCRIBED IN THE ENVIRONMENTAL CRITERIA MANUAL SECTION 1.4.4, TO PREVENT HEAVY SEDIMENT LOADS CAUSED BY HOME CONSTRUCTION FROM CLOGGING THE FILTRATION MEDIA.

4. IN ALL CASES, TREES SHALL BE PRESERVED ACCORDING TO THE REQUIREMENTS OF SECTION 3 OF THE ENVIRONMENTAL CRITERIA MANUAL. THE ACCESS DRIVE AND STAGING AREA SHALL BE DESIGNED TO PRESERVE TREES 8" (INCHES) IN DIAMETER AND GREATER TO THE MAXIMUM EXTENT POSSIBLE. TREES 8" IN DIAMETER AND LARGER SHALL BE SURVEYED AND SHOWN FOR THE PROPOSED ACCESS EASEMENT AT THE TIME OF CONSTRUCTION PLAN PERMITTING.

5. FOR FILTRATION SYSTEMS THE DESIGN MEDIA DEPTH MUST BE VERIFIED, ACCOUNTING FOR CONSOLIDATION. IF INSUFFICIENT DEPTH IS PRESENT, ADDITIONAL MEDIA MUST BE ADDED AND PRE-SOAKED UNTIL THE DESIGN DEPTH IS ACHIEVED. PRE-SOAKING – APPLY 5–10 GALLONS OF WATER PER SQUARE FOOT OF MEDIA AREA WITHIN ONE HOUR.

6. RETAINING WALLS – RETAINING WALLS WITHIN SCMS REQUIRE WATER-TIGHTNESS. WATER-TIGHTNESS IN RETAINING WALLS IS ESSENTIAL TO THE FUNCTION OF THE STRUCTURE. WATERSTOPS SHALL BE PROVIDED DURING CONSTRUCTION OF EXPANSION JOINTS IN RETAINING WALLS PER STANDARD SPECIFICATION 414S, CONCRETE RETAINING WALLS.

7. GROUTED ROCK WALLS – GROUTED ROCK WALLS ARE ACCEPTABLE ONLY IF THE DESIGN INCLUDES AN IMPERMEABLE BARRIER SUCH AS AN APPROVED GEOMEMBRANE LINER OR REINFORCED CONCRETE RETAINING WALL. FREE STANDING DRY STACKED ROCK WALLS ARE NOT ACCEPTABLE IN ANY SCM.

C. MAJOR MAINTENANCE REQUIREMENTS.

1. THE FOLLOWING MAINTENANCE ACTIVITIES SHALL BE PERFORMED ON ALL SCMS, IN ADDITION TO THE REQUIREMENTS LISTED FOR THE INDIVIDUAL SCM TYPES, TO ENSURE PROPER FUNCTION:

A) ACCUMULATED PAPER, TRASH AND DEBRIS SHALL BE REMOVED EVERY SIX (6) MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.

B) STRUCTURAL INTEGRITY SHALL BE MAINTAINED AT ALL TIMES. BASINS AND ALL APPURTENANCES SHALL BE INSPECTED ANNUALLY, OR MORE FREQUENTLY IF SPECIFIED, AND REPAIRS SHALL BE MADE IF NECESSARY. WHEN MAINTENANCE OR REPAIRS ARE PERFORMED, THE SCM SHALL BE RESTORED TO THE ORIGINAL LINES AND GRADES.

C) CORRECTIVE MAINTENANCE SHALL OCCUR:

I. ANY TIME DRAWDOWN OF THE WATER QUALITY VOLUME DOES NOT OCCUR WITHIN NINETY-SIX (96) HOURS (I.E., NO STANDING WATER IS ALLOWED), UNLESS A GREATER MAXIMUM DRAWDOWN TIME IS SPECIFIED IN THE PLANS.

II. FOR DETENTION PONDS ONLY, ANY TIME DRAWDOWN DOES NOT OCCUR WITHIN TWENTY-FOUR (24) HOURS.

D) THE INLET AND OUTLET OF SCMS SHALL BE MAINTAINED UNIMPEDED IN ORDER TO CONVEY FLOW AT ALL TIMES. OBSERVED BLOCKAGES TO THE INLET AND OUTLET, DUE TO VEGETATION, SEDIMENT, DEBRIS, OR ANY OTHER CAUSE, SHALL BE REMOVED.

E) NO UNVEGETATED AREA SHALL EXCEED TEN (10) SQUARE FEET. THIS PERFORMANCE REQUIREMENT APPLIES TO THE ENTIRE POND INCLUDING THE POND BOTTOM, SIDE SLOPES, AND AREAS ADJACENT TO THE POND, AND IS INTENDED TO LIMIT EROSION.

F) INTEGRATED PEST MANAGEMENT SHALL BE PERFORMED AND SHALL ADHERE TO SECTION 1.6.2.F, INTEGRATED PEST MANAGEMENT GUIDELINES (WHERE REQUIRED).

G) THE MINIMUM VEGETATION HEIGHT SHALL BE FOUR (4) INCHES IN THE SCM AND ALL APPURTENANCES, INCLUDING THE TOE OF THE BERM OR WALL OUTSIDE THE SCM, WHERE APPLICABLE.

H) SEDIMENT BUILD-UP SHALL BE REMOVED:

IJ. WHEN THE ACCUMULATION EXCEEDS SIX (6) INCHES IN SPLITTER BOXES, WET WELLS AND BASINS.

II. WHEN SEDIMENT TRAPS ARE FULL.

III. WHEN SEDIMENT, OF ANY AMOUNT, CAUSES STANDING WATER CONDITIONS OR REDUCES BASIN STORAGE BY MORE THAN 10%.

I) WHEN SEDIMENT IS REMOVED, THE FOLLOWING REQUIREMENTS APPLY:

I. IRRIGATION SHALL BE PROVIDED, AS NEEDED, UNTIL VEGETATION IS ESTABLISHED (WELL ROOTED). SEE SECTION 1.6.3.D, IRRIGATION GUIDELINES.

II. THE DESIGN DEPTH OF THE FILTRATION MEDIA SHALL BE VERIFIED. SEE SECTION 1.6.3.B.5.

III. TILLING OF THE FILTRATION MEDIUM IS NOT ALLOWED.

J) FOR SUBSURFACE PONDS MAINTENANCE PLAN REQUIREMENTS, REFER TO ECM SECTION 1.6.2(E).

2. SEDIMENTATION AND FILTRATION SCMS (SECTION 1.6.5).

A. VEGETATION WITHIN THE SCM SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME, EXCEPT AS CALLED FOR IN THE DESIGN.

B. VEGETATION THAT IS MOWED OR CUT SHALL BE REMOVED FROM THE SCM.

3. DETENTION BASINS.

A. VEGETATION WITHIN THE BASIN SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME.

4. BIO-FILTRATION & RAIN GARDENS (SECTIONS 1.6.7.5. C & H)

A. MAINTENANCE CONSIDERATIONS IN DESIGN.
A LACK OF MAINTENANCE CONSIDERATIONS IN THE DESIGN OF A LANDSCAPE COMMONLY RESULTS IN A SITE THAT IS MORE MAINTENANCE INTENSIVE (I.E., COSTLY) THAN NECESSARY AND/OR APPROPRIATE FOR ITS PURPOSE, AND ONE THAT REQUIRES THE ROUTINE USE OF PRACTICES THAT ARE UNDESIRABLE (E.G., EXTENSIVE PESTICIDE USE, INTENSIVE PRUNING OF PLANTS THAT GROW TOO LARGE FOR THE SPACES THEY OCCUPY). THE DESIGNER SHALL INCLUDE MAINTENANCE CONSIDERATIONS AND IPM THROUGHOUT THE PLANNING AND DESIGN PHASE OF A BIOFILTRATION PROJECT. LANDSCAPE SHAPES SHOULD BE DESIGNED TO ALLOW FOR THE ACCESS AND AID THE MANEUVERABILITY OF MAINTENANCE EQUIPMENT (E.G., IF AREAS OF THE POND ARE DESIGNED TO BE MOWN, ACUTE ANGLES SHOULD BE AVOIDED IN TURF AREAS; WIDE ANGLES, GENTLE, SWEEPING CURVES, AND STRAIGHT LINES ARE EASIER TO MOW).

B. ROUTINE MAINTENANCE
ONCE VEGETATION IS ESTABLISHED, BIOFILTRATION SYSTEMS SHOULD REQUIRE LESS MAINTENANCE THAN SAND FILTRATION SYSTEMS BECAUSE THE VEGETATION PROTECTS THE FILTRATION MEDIA FROM SURFACE CRUSTING AND SEDIMENT CLOGGING. PLANT ROOTS ALSO PROVIDE A PATHWAY FOR WATER TO PERMEATE DOWN INTO THE MEDIA, THUS FURTHER ENHANCING THE HYDRAULIC PERFORMANCE OF THE SYSTEM. UNLESS DAMAGED BY UNUSUAL SEDIMENT LOADS, HIGH FLOWS, OR VANDALISM, THE BIOFILTRATION MEDIA SHOULD BE LEFT UNDISTURBED AND ALLOWED TO AGE NATURALLY, AND BIOFILTRATION POND VEGETATION SHALL BE MANAGED SO THAT A DENSE, HEALTHY VEGETATIVE COVER IS PRESERVED. THE FOLLOWING MAINTENANCE ITEMS SHOULD BE PERFORMED DEPENDING ON FREQUENCY AND TIME OF YEAR:

BIWEEKLY DURING FIRST GROWING SEASON: INSPECT VEGETATION UNTIL 95% VEGETATIVE COVER IS ESTABLISHED.

MONTHLY: CHECK FOR ACCUMULATED SEDIMENTS, REMOVE AS NEEDED.

QUARTERLY: REMOVE DEBRIS AND ACCUMULATED SEDIMENT; REPLACE SOIL MEDIA IN VOID AREAS CAUSED BY SETTLEMENT; REPAIR ERODED AREAS; REMULCH BY HAND ANY VOID AREAS.

SEMI-ANNUALLY: REMOVE AND REPLACE DEAD OR DISEASED VEGETATION THAT IS CONSIDERED BEYOND TREATMENT (SEE PLANTING SPECIFICATIONS); TREAT ALL DISEASED TREES AND SHRUBS MECHANICALLY OR BY HAND DEPENDING ON THE INSECT OR DISEASE INFESTATION. IF DRAWDOWN EXCEEDS THE DRAWDOWN TIME ACCORDING TO SECTION 1.6.3.C.1, LIGHTLY SCARIFY SOIL WITH HAND CULTIVATOR; IF STANDING WATER REMAINS FOR GREATER THAN 96 HOURS, REMOVE TOP LAYER OF SEDIMENT, MULCH, AND POTENTIALLY VEGETATION; DC-COMPACT SOIL BY SCARIFICATION, AND REPLACE MULCH AND DISTURBED VEGETATION.

LATE WINTER: TRIM BUNCH GRASSES; MOW TURF GRASSES; HARVEST OTHER TYPES OF VEGETATION ACCORDING TO RECOMMENDATIONS IN THE PLANTING SPECIFICATIONS. ADHERE TO SECTION 1.6.2.F.

SPRING: REMOVE PREVIOUS MULCH LAYER AND APPLY NEW MULCH LAYER BY HAND (OPTION) ONCE EVERY TWO TO THREE YEARS.

C. OTHER ITEMS.A.SIGNAGE SHALL BE USED TO DELINEATE THE BOUNDARIES OF THE BIOFILTRATION AREA THAT ARE MAINTAINED WITH MINIMAL MOWING, NO FERTILIZERS, AND LIMITED USE OF ORGANIC HERBICIDES.

PLANTING AND SOIL SPECIFICATIONS:

1. REFER TO LANDSCAPE PLAN FOR PLANT MATERIALS IN AND AROUND THE BIORETENTION POND.

2. PLANTING SOIL MIXTURE SHALL HAVE A MAXIMUM CLAY CONTENT BETWEEN 3 AND 10%. THE MIXTURE SHALL BE 70–90% SAND, 3–10% CLAY, AND 0–27% SILT PLUS CLAY. THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES.

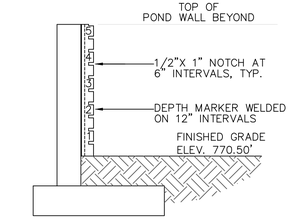
3. NO OTHER MATERIALS OR SUBSTANCES SHOULD BE MIXED OR DUMPED WITHIN THE BIORETENTION THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDERANCE TO THE PLANTING OR MAINTENANCE OPERATIONS.

4. SAND USED IN THE PLANTING SOIL SHALL MEET ASTM C–33 SPECIFICATIONS WITH A GRAIN SIZE OF 0.02–0.04 INCHES.

5. GRAVEL LAYER SHALL BE CLEAN AND WASHED RIVER GRAVEL, ½ – 1.5" DIAMETER.

6. SUPPLIER OF BIO–FILTRATION MEDIA MUST MEET THE REQUIREMENTS OF ECM 1.6.7.5.C.

7. THE FOLLOWING MIXTURE (% BY VOLUME) SHOULD CREATE AN APPROPRIATE BIOFILTRATION MEDIA, SUBJECT TO SPECIFIC CHARACTERISTICS OF THE TOPSOIL AND COMPOST INGREDIENTS:
A. 70–80% CONCRETE SAND
B. 20–30% SCREENED BULK TOPSOIL (CHOCOLATE LOAM IS ACCEPTABLE)



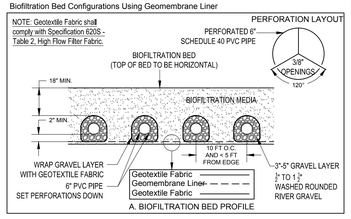
INSTALL L2x2x1/4 ANGLE WITH (2) 1/2" WEDGE ANCHORS TO WALL AT GABION

SEDIMENTATION DEPTH/MARKER
N.T.S.

HIGH FLOW FILTER FABRIC REQUIREMENTS		
PROPERTY	TEST METHOD	REQUIREMENTS
FABRIC WEIGHT	>D 3776	3.0 OUNCES/SQUARE YARD MINIMUM
ULTRAVIOLET (UV) RADIATION STABILITY	D 4355	70% STRENGTH RETAINED MINIMUM, AFTER 500 HOURS IN XENON ARC DEVICE
MULLEN BURST STRENGTH	D 3786	120 POUND PER SQUARE INCH MINIMUM
WATER FLOW RATE	D 4491	275 GALLONS/MINUTE/SQUARE FEET MINIMUM

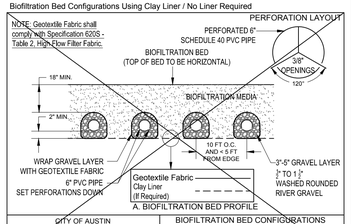
DRAINAGE MATTING SPECIFICATIONS			
PROPERTY	TEST METHOD	UNIT	SPECIFICATION
MATERIAL			NONWOVEN GEOTEXTILE FABRIC (MIRAFI 140NS OR EQ.)
UNIT WEIGHT		OZ/SQ.YD.	20
FLOW RATE (FABRIC)		GPM/FT^2	180 (MIN.)
PERMEABILITY	ASTM D-2434	CM/SEC	12.4X10^{-2}
GRAB STRENGTH (FABRIC)	ASTM D-1682	LB.	DRY LG.90 DRY WD: 70 WET LG.95 WET WD: 70
PUNCTURE STRENGTH (FABRIC)	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

Biofiltration Bed Configurations Using Geomembrane Liner



A. BIOFILTRATION BED PROFILE

Biofiltration Bed Configurations Using Clay Liner / No Liner Required



A. BIOFILTRATION BED PROFILE

CITY OF AUSTIN	BIOFILTRATION BED CONFIGURATIONS USING GEOMEMBRANE/CLAY LINER
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STANDARD NO.
RECORD COPY SIGNED 12/30/14	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. 661-3
ADOPTED	

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STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

Thrower Design
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456
LAND PLANNERS

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

POND DETAILS

13 OF 26

SP-2024-0345C

ECS SOUTHWEST, LLP
TX Registered Engineering Firm F-8461
Geotechnical • Construction Materials • Environmental • Facilities

August 28, 2024

Ms. Christine Wong
CS Vista, LLC
5801 Standing Rock Drive
Austin, Texas 78730

ECS Project Number 17:6545

Subject: Pond Liner QA/QC Plan
Uptown Frontage Office Building
2900 N. Sheilds Drive
Austin, Texas

Dear Ms. Wong:

As requested, ECS-Southwest, LLP (ECS) has completed a pond liner QA/QC plan for the proposed pond liner at the Uptown Frontage Office project in Austin, Texas. Our services were provided in general accordance with our Change Order No. 1 dated August 23, 2024, authorized by Ms. Christine Wong of CS Vista, LLC on August 26, 2024, via signature of the change order acceptance page.

Project Information

The project is generally located at 2900 N. Shields Drive in Austin, Texas. The *Geologic Map of the Austin Area* indicates that the site is underlain by the Buda Formation (Kbu), which generally consists of very hard limestone. It is understood that the proposed improvements will include the construction of a concrete walled bio-filtration pond with a bottom surface area of 1,450 square feet, and that a pond liner construction QA/QC plan is required. ECS previously completed a geotechnical report (ECS Project No. 17:6545 dated May 17, 2024) for the Uptown Frontage Office Building Development. Based on the information provided, it is understood that the proposed liner will consist of geomembrane construction.

Geomembrane Liner Construction Quality Assurance/Quality Control Plan

Part 1: GENERAL

An impermeable geomembrane liner can be considered for the proposed bio-filtration pond. The liner shall conform to material parameters as outlined herein.

1.01 SECTION INCLUDES

A. Construction and Testing of the Geomembrane Liner for the Pond

1.02 TEST REFERENCES

A.	ASTM D 698	Standard Test Method for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5-½-lb Hammer and 12-inch Drop
B.	ASTM D 1140	Standard Test Method for Amount of Material in Soils Finer Than the No. 200 Sieve
C.	ASTM D 2216	Standard Test Method for Laboratory Determination of Water (moisture) Content of Soil, Rock, and Soil-Aggregate Mixtures
D.	ASTM D 2487	Classification of Soils for Engineering Purposes
E.	ASTM D 4318	Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils
F.	ASTM D 4437	Standard Practice for Non-Destructive Testing (NDT) for Determining the Integrity of Seams Used in Joining Flexible Polymeric Sheet Geomembranes (Air Lance Test)
G.	ASTM D 6913	Standard Test Method for Particle Size Analysis of Soils
H.	ASTM D 6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
I.	ASTM D 7272	Standard Test Method for Determining the Integrity of Seams Used in Joining Membranes by Pre-manufactured Taped Methods

Part 2: MATERIAL

2.01 SUBGRADE

A. Soils to support the impermeable geomembrane liner shall be imported or on-site material compacted to at least 95% relative compaction as determined by ASTM D-698 Standard Proctor Method. Suitable fill should be classified as a clay according to the Unified Soils Classification System and be free of gravel larger than 0.375 inches in any one direction. Soft areas identified should be recompacted or replaced with suitable fill material. Subgrade materials shall be free of refuse, roots, rocks, material greater than 0.375 inches, and other deleterious materials.

2.02 GEOMEMBRANE LINER

A. The geomembrane liner shall be a Firestone EPDM geomembrane or equivalent. The geomembrane liner used should be resistant to degradation by ultraviolet light and should be at least 30 mils in thickness. The following data for the geomembrane to be used must be submitted to the engineer of record at least 10 working days prior to placement: raw material properties, roll and production quality assurance, and control data. Furthermore, a plan shall be provided to the engineer before the start of construction prepared by the contractor denoting geomembrane panel number and placement locations.

2.03 GEOTEXTILES

A. Geotextiles must be used to protect the geomembrane liner if particles greater than 0.375 inches in size are present in the subgrade or cover soils. Geotextiles used must conform to the following tabulated values:

Property	Minimum value
Unit Weight	8 oz/square yard
Puncture Strength	125 lbs
Mullen Burst Strength	400 psi
Tensile Strength	200 lbs

2.04 PROTECTIVE SOIL COVER

A. A protective soil cover shall be placed over the geomembrane liner system, including topsoil that conforms to COA Landscape criteria. Protective soil materials shall be free of refuse, roots, rocks, material greater than 0.375 inches, and other deleterious materials.

Part 3: EXECUTION

3.01 SUBGRADE PLACEMENT

A. Prior to geomembrane liner placement, the subgrade shall be excavated and removed to the elevations established on the plans. Loose soils/rocks shall be removed from the excavation. Soft areas identified should be recompacted or replaced with suitable fill material. If existing subgrade is soil, the subgrade shall be scarified to a depth of 12 inches, moisture conditioned (as in Item 3.01.D), and recompacted, unless rock is encountered. If rock is encountered, the surface shall be reasonably cleaned of large rocks and other loose material before placement of fill. At least 6 inches of clay fill or approved geotextile fabric must be placed between limestone and the geomembrane liner. Subgrade below the liner should be smooth.
B. Groundwater control during excavation and construction of the geomembrane liner is the responsibility of the contractor. Groundwater control must be provided such that it results in a stable and dry subgrade that is conducive to proper geomembrane liner placement and weld application. Appropriate measures such as perimeter and/or lateral interceptor trenches, sumps, and pumps shall be installed and maintained throughout construction, as needed.
C. Subgrade lift thicknesses shall be no greater than 6 inches in compacted lift thickness and no greater than 8 inches in loose lift thickness.
D. The subgrade below the geomembrane liner shall be compacted to at least 95 percent of the maximum dry density determined by the Standard Proctor Test, ASTM D 698. If the material classifies as a CH in accordance with USCS, the moisture content at the time of compaction shall be between optimum and +4 percentage points above the optimum moisture content. For all other soil materials, the moisture content at the time of compaction shall be between -3 and +3 percentage points above the optimum moisture content. Moisture/density control is not necessary in exposed limestone subgrade areas.
E. Areas that do not meet the moisture or density specifications during initial testing shall be reworked and retested until the material meets the specifications.
F. If material of a size greater than 0.375 inches is present at the finished subgrade surface, either a geotextile must be placed beneath the geomembrane liner, or at least two inches of a clean fine to medium grained sand must be placed beneath the geomembrane liner. The final prepared subgrade surface must be evaluated by the Construction Testing Firm before liner placement.

3.02 GEOTEXTILE PLACEMENT

A. Geotextiles shall be placed without tension with an overlap of at least 12 inches in width or a thermal weld of at least 4 inches width. If welded thermally the geotextile shall be allowed to relax for at least 30 minutes before welding. Geotextiles shall be weighed down to prevent displacement.

3.03 GEOMEMBRANE PLACEMENT

A. The Construction Testing Firm should have a field representative on site at all times during installation of the geomembrane.
B. The contractor should have an individual who is qualified in geomembrane installation on site during geomembrane installation. A qualified person is either a representative of the liner manufacturer or someone who has successfully completed a course presented by the liner manufacturer.
C. Geomembrane rolls must be transported and stored on clean surfaces free of sharp protrusions out of direct sunlight. Geomembrane rolls and accessories must be stored in a climate-controlled location, with a temperature of between 50 and 77 degrees Fahrenheit to protect the accessories against extreme weather conditions. When handling the liner, care should be taken to not tear or stretch the material.
D. Panels to be attached to the concrete side walls should extend at least 3 feet horizontally onto the pond bottom.
E. The geomembrane should be weighed down during installation to prevent displacement.
F. Do not weld or attach the membranes to any fixed structure for at least 30 minutes after placement.
G. All panels placed adjacent to other panels must be seamed during the same day.
H. At the end of each construction day's activities, completed sections of geomembrane that are not otherwise covered shall be covered with a geotextile or equivalent protective layer and weighted down to maintain the integrity of the liner and prevent displacement.

3.04 SEAMING

A. Seaming shall be done without application of tension to the geomembrane, and in accordance with manufacturer specifications.
B. Seaming of adjacent panels should be performed immediately after the relaxation period of 30 minutes.
C. Panels must be installed without tension and wrinkles, and must overlap by at least 4 inches before seaming.
D. Seams should not be made if there is moisture in the seam area, the subgrade soil is soft, it is raining, there is ponded water on the seam, there is fog, there is excessive wind/dust, the temperature is below 40 degrees Fahrenheit, or other contaminants are present on the seam. Moisture in the seam will cause the seam to fail.
E. Seams must be cleaned before seaming to ensure that no contaminants are present and the seam is clean.
F. Panels should be seamed the same day they are placed adjacent to other panels.
G. Panels shall be seamed as instructed by the geomembrane manufacturer.

H. Geomembranes being seamed shall not be moved during or immediately after seaming.
I. Unbonded areas as detected by the Air Lance Test (ASTM D 4437) shall be repaired when detected.

3.05 CONCRETE CONNECTIONS

A. The geomembrane liner should be fastened to the concrete retaining walls surrounding the quality pond in such a manner as to maintain integrity of the liner and prevent flow of water between the liner and the retaining wall. The geomembrane liner must be extended beyond the inflow gabions until either the liner can be extended above the maximum elevation of water for the quality pond or the liner can be fastened watertight to a concrete wall. A 12-inch protective layer of fine sand or at least two layers of geotextile in conjunction with 2 inches of sand should be provided between the inflow gabions and the geomembrane. If the liner will be more than 12 inches below the gabions, general protective fill (2.04) may be used in lieu of fine sand. Protective fill or an equivalent covering should be provided such that the geomembrane liners will not be exposed to sunlight at terminations.
B. The geomembrane liner shall extend below and around all concrete ramps, inflow/outflow headwall structures, aprons, walls, and other miscellaneous structures within the pond interior.
C. Connections to concrete should be performed in accordance with City of Austin Standard Detail 661-4A entitled "Concrete Wall Geomembrane Liner Attachment".
D. Concrete should be clean and smooth where it will be adhered to the geomembrane liner.
E. Neoprene gaskets shall be placed between the geomembrane and concrete and between the geomembrane liner and termination bar at bolted connections.
F. The geomembrane liner shall be secured to the concrete walls using adhesive such as Firestone Water-Block.
G. The opening to the seam between the geomembrane liner and the concrete wall shall not be directly exposed to water. A sealant shall be applied to the edge of the liner at the interface with the concrete. This seal shall be watertight.
H. A non-woven geotextile protective cushion at least 1/8 inch thick shall be placed between the geomembrane liner and the concrete surface in all areas where the liner will not be adhered to the concrete surface and would otherwise be in direct contact with concrete.
I. The top of the geomembrane liner – wall connection shall be located below the topsoil layer required as protective fill for the membrane.

3.06 THROUGH PENETRATIONS

A. Through penetrations of the geomembrane liner, such as those required for pipes, should be prepared in such a way as to maintain the integrity of the liner system.
B. The object requiring a through penetration should be firmly anchored in its final position before carrying out the following procedure.
C. A circular cut shall be made in the geomembrane liner approximately 80% of the size of the object and the geomembrane shall be placed over the object into final position and secured so that it will not move during the preparation of the flashing around the object.
D. Firestone Quickseam Formflash or equivalent shall be placed around the object, extending at least 2 inches above the geomembrane liner, and at least 3 inches in diameter around the

cut. This flashing shall be adhered to the geomembrane and the object using a suitable adhesive.
E. An additional piece of flashing shall be placed over the first, using a suitable adhesive. This piece shall extend at least 9 inches above the geomembrane liner around the object, and at least 2 inches in diameter around the opening.
F. The edges of the flashing shall be sealed with lap sealant. The top of the flashing around the object shall also be clamped with a stainless-steel ring. A layer of geomembrane shall be placed between the ring and the flashing before application and tightening.
G. Alternately, Firestone Quickseam Pipe Boots may be installed per Firestone's specifications. For reference we have included drawings from Firestone detailing through penetration flashing.

3.07 PROTECTIVE COVER

A. A. At least 24 inches of protective fill shall be placed over the geomembrane liner. The protective soil covering may be reduced to 12 inches if heavy equipment is prohibited from entering the pond. A minimum of 4 inches of topsoil meeting COA Landscape criteria should be provided as part of the protective fill. This fill should be free of material larger than 0.375 inches or a geotextile should be placed on top of the liner. The Construction Testing Firm shall have a field representative on site during the placement of protective cover directly on the liner.

Part 4: LINER REPAIR

4.01 REPAIR PROCEDURES

A. Any tear or hole smaller than 0.5 inches in the largest dimension shall be repaired by adding a patch of cover strip at least 6 inches wide and with dimensions at least 3 inches greater than the size of the discontinuity in all directions. The patch shall be circular, oval, or have rounded corners. Prepare the surface of the geomembrane for the patch using the same techniques used to prepare seams.
B. Alternately, holes smaller than 0.25 inches may be repaired using a Firestone 6" diameter QuickSeam Joint Cover, installed per manufacturer instructions.
C. Larger tears or holes may be repaired by adding a patch of geomembrane with dimensions at least 4 inches greater than the discontinuity in all directions and seaming the edges as described previously in Section 3.04. Only cover strip seams will be permitted for repairing larger tears or holes.

Part 5: SAMPLING AND TESTING

5.01 TEST TYPES AND FREQUENCY

A. For subgrade materials, at least one (1) sample shall be obtained per soil type within the exposed subgrade areas for testing of Atterberg Limits (ASTM D 4318), gradation (ASTM D 6913), and Moisture-Density Relationship (ASTM D 698). These samples shall be excavated from exposed areas in the field in sufficient quantities to perform the three laboratory tests itemized above, placed in sample containers, and transported to the laboratory for testing.

The excavated sample areas in the field shall be backfilled with similar subgrade materials, moisture conditioned, and compacted.
B. Additional samples shall be obtained as variations in material are observed.
C. In-place density and moisture content by Nuclear Methods (ASTM D 6938) shall be performed on all subgrade material at a minimum rate of one test per 5,000 square feet per lift (or a minimum of 3 tests per lift).
D. At the beginning of each day when seaming will be performed and after any midday break while seaming is performed, the seaming crew shall complete a test seam of at least 10 feet in length. Peel and Shear tests shall be performed on samples obtained from said test seam in general accordance with ASTM D 7272. Minimum shear strength required is 35 pounds per inch at 200% strain. Minimum peel strength required is 12 pounds per inch in cohesive bond mode.
E. Inspect all field seams for unbonded areas using the Air Lance Test as described in ASTM D4437. Use a minimum air supply of 50 psi, directed through a 0.188 inch nozzle held no more than 2 inches from the seam edge, and directed along the seam edge.
F. Areas detected to be unbonded shall be documented and retested when repaired.

Part 6: DOCUMENTATION

TEST REPORTS AND SUMMARY LETTERS

A. Test reports shall be issued for each test performed (including, but not limited to, all of the tests already mentioned above) and shall indicate compliance or non-compliance with the project specifications.
B. Failures or non-conforming areas shall be corrected, retested, and reported until the material meets the specifications, or the material shall be removed and replaced with material that meets the project specifications.
C. The Construction Testing Firm shall issue Daily Construction Reports indicating, at a minimum, the work performed by the contractor, the type of equipment utilized to perform stated work, the duties performed by the Construction Testing Firm representative (field technician), a summary of test results (may reference a separate report), any non-conforming test results or areas in need of corrective action (may reference a separate report), the technician's name, date of report, and a reviewer's signature.
D. After liner construction and evaluation is complete, a Geomembrane Liner Evaluation Report (GLER) shall be prepared and sealed by the Construction Testing Firm's Professional Engineer licensed in the State of Texas. This GLER letter shall summarize the types of tests performed and whether the results were in general conformance with the project plans and specifications. At a minimum, this letter report shall describe the subgrade preparation, moisture/density control, geomembrane placement including panel number, test frequencies and results, and test locations using the contractor provided drawing that shows proposed panel placement. This letter report shall refer to or include attachments of previous testing reports issued for the clay liner.
E. A Professional Surveyor registered in the State of Texas shall survey data points of his or her selection before, during, and after pond liner construction. After liner construction is complete, the Professional Surveyor registered in the State of Texas shall prepare and seal a letter documenting the surveying services and the thickness of the sum of the prepared subgrade, liner, and protective cover. This letter shall include a drawing indicating survey

point locations and the elevations at each point prior to and after subgrade, liner, and protective cover construction.
F. Any requests for information or changes to design and/or construction items shall be prepared by the Earthwork Contractor in the form of a Request for Information (RFI) and issued to the General Contractor, with copies to the Developer, the Civil Engineer, the Construction Testing Firm, and the City of Austin.

Closing

We appreciate the opportunity to be of service and look forward to the opportunity to work with you in the future. Should you have any questions, comments, or concerns regarding this letter report, please contact the undersigned.

Respectfully,

ECS-SOUTHWEST, LLP

Tyler Denney, P.E.
Department Manager
tdenney@ecslimited.com

STATE OF TEXAS
TYLER D. DENNEY
142015
LICENSED
PROFESSIONAL ENGINEER

Connor Roman, P.E.
Geotechnical Associate Principal
croman@ecslimited.com

Electronic seal approved by Tyler Denney, P.E. on August 28, 2024

Mateus Costa Segura, P.E.
Geotechnical Project Manager
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LAND PLANNERS

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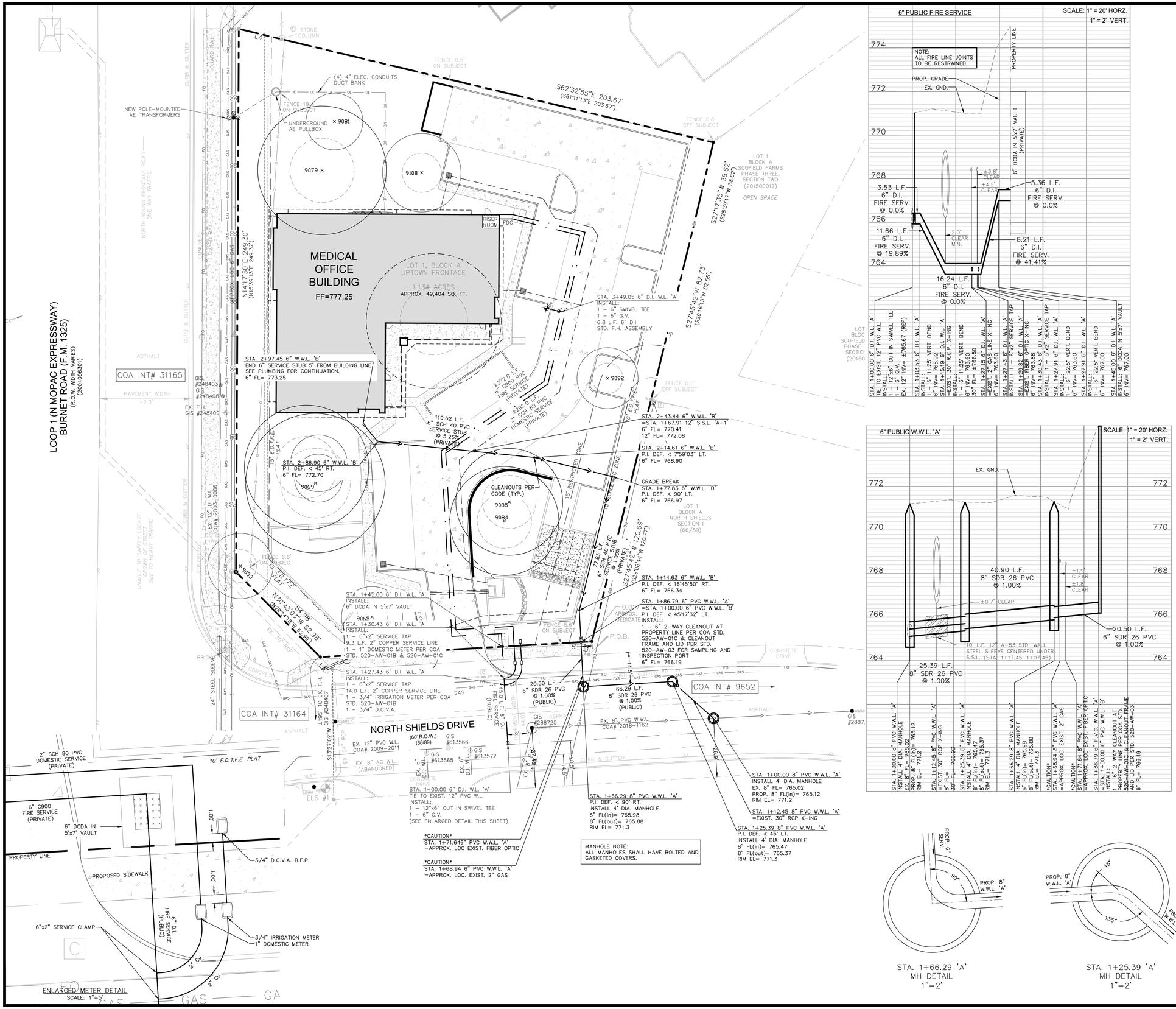
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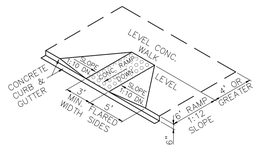
UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

POND QAQC PLAN

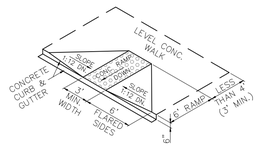
14 OF 26

SP-2024-0345C


LOOP 1 (N MOPAC EXPRESSWAY)
BURNET ROAD (F.M. 1325)
(R.O.W. WIDTH VARIES)
(2004096301)
COA INT# 31165
PAVEMENT WIDTH
42.3'
ASPHALT
CURB & GUTTER
GRAVEL RAIL
NORTH BOUND FRONTAGE ROAD
ONE WAY TRAFFIC
EX. F.H.
GIS #248409
GIS #248403
GIS #248408
EX. 12" D.I. W.L.
COA# 2003-0006
UNABLE TO SAFELY LOCATE
DOWN OF STREET
DUE TO HEAVY TRAFFIC
STONE COLUMN
FENCE 0.5' ON SUBJECT
(4) 4" ELEC. CONDUITS DUCT BANK
NEW POLE-MOUNTED AE TRANSFORMERS
UNDERGROUND AE PULLBOX
FENCE 1.9' ON SUBJECT
FENCE 0.8' OFF SUBJECT
S62°32'55"E 203.67'
(S61°11'13"E 203.67')
LOT 1
BLOCK A
SCOFIELD FARMS
PHASE THREE,
SECTION TWO
(201500017)
OPEN SPACE
S27°17'35"W 38.62'
(S28°39'17"W 38.62')
S27°45'42"W 82.73'
(S29°16'13"W 82.35')
N14°17'30"E 249.30'
(N15°39'13"E 246.37')
MEDICAL
OFFICE
BUILDING
FF=777.25
LOT 1, BLOCK A
UPTOWN FRONTAGE
1.134 ACRES
APPROX. 49,404 SQ. FT.
RISER ROOM
FDC
9079
9108
9092
9069
9085
9084
9065
9053
STA. 2+97.45 6" W.W.L. 'B'
END 6" SERVICE STUB 5' FROM BUILDING LINE.
SEE PLUMBING FOR CONTINUATION.
6" FL= 773.25
STA. 3+49.05 6" D.I. W.L. 'A'
INSTALL:
1 - 6" SWIVEL TEE
1 - 6" G.V.
6.8 L.F. 6" D.I.
STD. F.H. ASSEMBLY
±272.0 L.F. 6" C900 PVC FIRE SERVICE (PRIVATE)
±292.0 L.F. 2" SCH 80 PVC DOMESTIC SERVICE (PRIVATE)
119.62 L.F. 6" SCH 40 PVC SERVICE STUB @ 5.25% (PRIVATE)
STA. 2+43.44 6" W.W.L. 'B'
=STA. 1+67.91 12" S.S.L. 'A-1'
6" FL= 770.41
12" FL= 772.08
STA. 2+14.61 6" W.W.L. 'B'
P.I. DEF. < 7°59'03" LT.
6" FL= 768.90
GRADE BREAK
STA. 1+77.83 6" W.W.L. 'B'
P.I. DEF. < 90° LT.
6" FL= 766.97
LOT 1
BLOCK A
NORTH SHIELDS
SECTION I
(66/89)
STA. 2+86.90 6" W.W.L. 'B'
P.I. DEF. < 45° RT.
6" FL= 772.70
CLEANOUTS PER CODE (TYP.)
15' RESTRICTED ZONE
77.83 L.F. 6" SCH 40 PVC SERVICE STUB @ 1.00% (PRIVATE)
S27°45'42"W 120.69'
(S29°06'44"W 120.77')
STA. 1+14.63 6" W.W.L. 'B'
P.I. DEF. < 16°45'50" RT.
6" FL= 766.34
STA. 1+86.79 6" PVC W.W.L. 'A'
=STA. 1+00.00 6" PVC W.W.L. 'B'
P.I. DEF. < 45°17'32" LT.
INSTALL:
1 - 6" 2-WAY CLEANOUT AT PROPERTY LINE PER COA STD. 520-AW-01C & CLEANOUT FRAME AND LID PER STD. 520-AW-03 FOR SAMPLING AND INSPECTION PORT
6" FL= 766.19
STA. 1+45.00 6" D.I. W.L. 'A'
INSTALL:
6" DCDA IN 5'x7' VAULT
STA. 1+30.43 6" D.I. W.L. 'A'
INSTALL:
1 - 6"x2" SERVICE TAP
9.3 L.F. 2" COPPER SERVICE LINE
1 - 1" DOMESTIC METER PER COA STD. 520-AW-01B & 520-AW-01C
STA. 1+27.43 6" D.I. W.L. 'A'
INSTALL:
1 - 6"x2" SERVICE TAP
14.0 L.F. 2" COPPER SERVICE LINE
1 - 3/4" IRRIGATION METER PER COA STD. 520-AW-01B
1 - 3/4" D.C.V.A.
N30°43'03"W 54.98'
(N29°06'44"W 52.98')
N30°43'03"W 62.98'
(N29°06'44"W 60.98')
S32°07'02"W 135' TO EX. F.H. GIS #28407
EX. 30" RCP
EX. 24" RCP
EX. 12" PVC W.L.
COA# 2009-2011
EX. 8" AC W.L. (ABANDONED)
NORTH SHIELDS DRIVE
(60' R.O.W.) (66/89)
GIS #613566
GIS #613565
GIS #613572
EX. 6" D.I. W.L.
EX. 6" FIRE SERVICE (PUBLIC)
EX. 8" D.I. W.L.



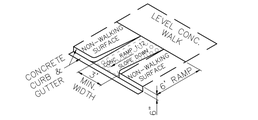
TYPICAL CURB RAMP



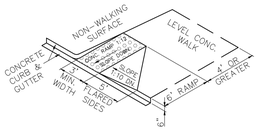
CONFINED CURB RAMP

NOTES:

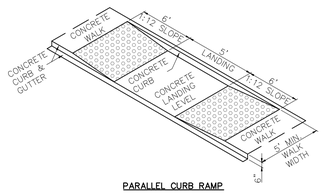
1. THESE DIMENSIONS REFLECT 6" TYPICAL CURB HEIGHT. ADJUST RAMP LENGTH & FLARED SIDES TO ACCOMMODATE ACTUAL CURB HEIGHT.
2. THE SLOPES SHOWN ARE THE MAXIMUM PERMITTED. SLOPES OF ADJOINING SURFACES SHALL NOT EXCEED 1:20.
3. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT OBSTRUCTION BY PARKED VEHICLES UTILIZING WHEEL STOPS SET 2'-6" FROM CURB.
4. BUILT UP CURB RAMPS SHALL NOT PROJECT INTO VEHICULAR TRAFFIC LANES, NOR INTO ACCESS AISLES.
5. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
6. MAXIMUM SLOPE OF A CURB RAMP SYSTEM SHALL BE 1:12 (8.33% MAXIMUM).
7. MAXIMUM SLOPE OF THE CURB RAMP'S "FLARED SIDES" SHALL BE 1:10 (1.0%).
8. SLOPE AND CROSSLOPE OF A SIDEWALK LEADING INTO A CURB RAMP SYSTEM SHALL BE A MAXIMUM OF 1:48 (2% MAXIMUM).
9. MAXIMUM SLOPE OF A HANDICAPPED ACCESSIBLE ROUTE ALONG A SIDEWALK LEADING INTO A CURB RAMP, BEFORE IT MUST BE CONSIDERED A RAMP IS 1:20 (5% MAXIMUM).
10. PAVERS OR CERAMIC TILES ARE REQUIRED FOR ALL CURB RAMP INSTALLATIONS.
11. DETECTABLE WARNINGS FOR CURB RAMPS SHALL FOLLOW 2012 TEXAS ACCESSIBILITY STANDARDS CHAPTER 7 AND TECHNICAL MEMORANDUM TM 08-01 AND HAVE TEXTURES CONSISTING OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN., A HEIGHT OF NOMINAL 0.2 IN. AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK, OR DARK ON LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
12. THE CONTRACTOR SHALL VERIFY ALL GRADES CONCERNING ACCESSIBLE ROUTES AND WALKWAYS PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO CONCRETE PLACEMENT ON ALL ACCESSIBLE ROUTES AND WALKWAYS IN ORDER TO VERIFY FORM PLACEMENT, SLOPES AND GRADES.
13. ACCESSIBLE PARKING SPACES SHALL INCLUDE PARKING BUMPERS PER CITY OF AUSTIN STANDARD 439S-1 TO PREVENT CARS BLOCKING THE CURB RAMPS.
14. ACCESSIBLE PARKING SPACES SHALL COMPLY WITH RULE 68.104 OF THE ARCHITECTURAL BARRIERS ELIMINATION.



RETURNED CURB RAMP

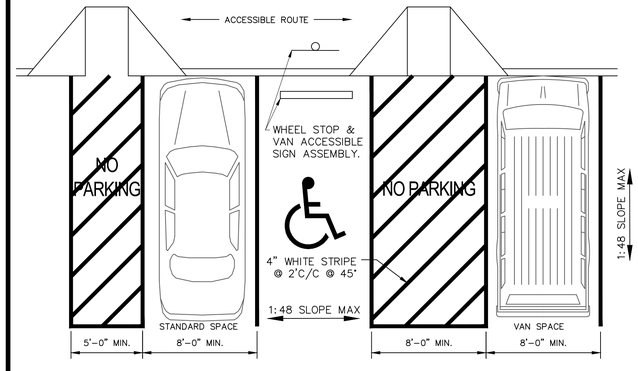


END CURB RAMP

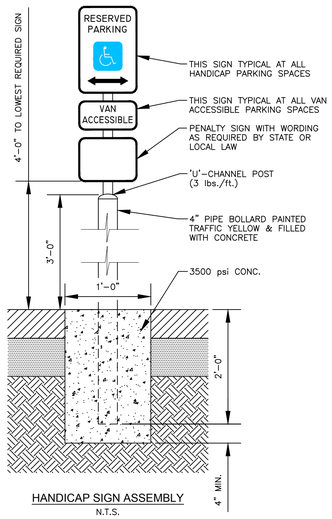


PARALLEL CURB RAMP

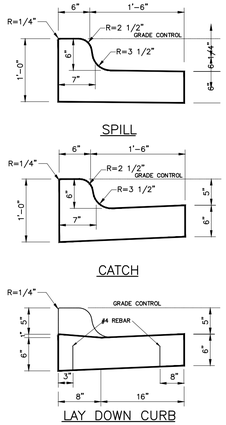
ACCESSIBILITY DETAILS
N.T.S.



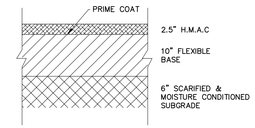
ACCESSIBLE PARKING & CURB RAMPS
SCALE: N.T.S.



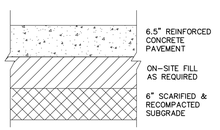
HANDICAP SIGN ASSEMBLY
N.T.S.



1. SUBGRADE: REMOVE ALL VEGETATION, TREE ROOTS, ORGANIC TOPSOIL, EXISTING FOUNDATIONS, AND ANY OTHER UNDESIRABLE MATERIALS FROM THE CONSTRUCTION AREA. THE AREA SHOULD THEN BE PROOF-ROLLED WITH HEAVY PNEUMATIC TIRED EQUIPMENT AND SHALL SERVE TO COMPACT THE SURFACE AND DETECT ANY SOFT OR PUMPING AREAS. ANY DEFECTIVE AREAS SHALL BE UNDERCUT AND REPLACED WITH COMPACTED SELECT FILL. ALL AREAS REQUIRING FILL SHALL UTILIZE SELECT FILL APPROVED BY THE ENGINEER AND PLACED IN 8" LOOSE LIFTS AND COMPACTED AS DETERMINED BY THE GEOTECHNICAL REPORT.
2. FLEXIBLE BASE: BASE MATERIAL SHALL BE CRUSHED LIMESTONE MEETING THE REQUIREMENTS OF TxDOT ITEM 248, GRADE 1 OR 2, TYPE A. THE BASE SHALL BE COMPACTED TO 100% OF THE MAXIMUM DENSITY AS DETERMINED BY TEX-113-E TEST METHOD AND HAVE A MOISTURE CONTENT WITHIN 2% OF OPTIMUM MOISTURE.
3. HOT MIX ASPHALTIC CONCRETE SURFACE COURSE (HMAC): HMAC SHALL ONLY BE USED FOR REPAIR OF EXISTING PAVEMENT. THE SURFACE COURSE SHALL BE PLANT MIXED, HOT LAID TYPE D (FINE GRADED SURFACE COURSE) AND SHALL MEET THE SPECIFICATION REQUIREMENTS AS DETERMINED BY CITY OF AUSTIN ITEM NO. 340. THE MIX SHALL BE DESIGNED FOR A HVEEM STABILITY OF AT LEAST 40 AND SHALL MEET ALL COMPACTION AND TOLERANCE SPECIFICATIONS.
4. CONCRETE PAVEMENT: THE CONCRETE SHALL POSSESS A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS AND HAVE MINIMUM REINFORCING OF #3@18" C/C WITH A WATER/CEMENT RATIO 0.50 OR LESS. IN NO CASE SHALL THE REINFORCEMENT BE CONTINUOUS THROUGH A CONTROL JOINT WITHOUT APPROVAL OF THE ENGINEER. JOINT SPACING SHALL BE A MINIMUMUM OF 15' C/C AND A MAXIMUM OF 20' C/C FOR 6" PAVEMENTS.
5. MOISTURE CONDITIONED SUBGRADE: THE SOIL SUBGRADE AREAS SHOULD BE SCARIFIED TO A DEPTH OF 6 INCHES, MOISTURE CONDITIONED, AND RECOMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. STRATUM I FAT CLAY SOILS SHOULD BE MOISTURE CONDITIONED TO BETWEEN OPTIMUM AND +4 PERCENT OF OPTIMUM MOISTURE CONTENT, OR AS DIRECTED BY THE GEOTECHNICAL REPORT. STRATUM II LEAN SILTY/SANDY SOILS SHOULD BE MOISTURE CONDITIONED TO BETWEEN -3 AND +3 PERCENT OF OPTIMUM MOISTURE CONTENT, OR AS DIRECTED BY THE GEOTECH REPORT. CARE SHOULD BE TAKEN SUCH THAT THE SUBGRADE DOES NOT DRY OUT OR BECOME SATURATED PRIOR TO PAVEMENT CONSTRUCTION. THE PAVEMENT SUBGRADE SHOULD BE THOROUGHLY PROOF-ROLLED WITH A RUBBER-TIRED VEHICLE (FULLY LOADED WATER OR DUMP TRUCK) IMMEDIATELY PRIOR TO PLACEMENT OF BASE MATERIAL.
6. LIME STABILIZED COMPACTED SUBGRADE: REFER TO THE GEOTECHNICAL REPORT FOR LIME STABILIZATION PROCEDURE. COMPACTION SHALL BE A MINIMUM OF 95 PERCENT STANDARD PROCTOR, AT OR ABOVE OPTIMUM MOISTURE.
6. APPLICABILITY OF THESE SPECIFICATIONS: THESE PAVEMENT SPECIFICATIONS SHALL BE USED BY THE CONTRACTOR FOR THE CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THESE SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT, THE GEOTECHNICAL REPORT SHALL BE FOLLOWED EXCEPT FOR THE CONCRETE MIX DESIGN.

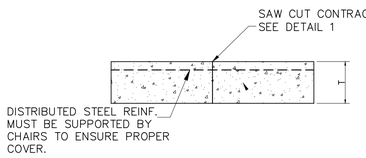


H.M.A.C. PAVEMENT SECTION DI-1
N.T.S.

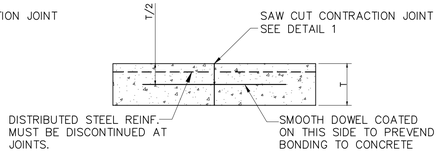


RIGID PAVEMENT SECTION DI-2
(HEAVY DUTY)

PAVEMENT DETAILS
N.T.S.

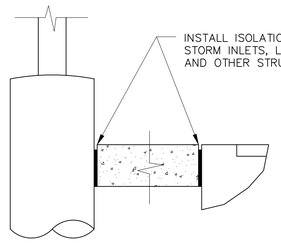


CONTRACTION/CONSTRUCTION JOINT
LIGHT DUTY LOAD

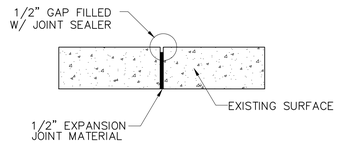


CONTRACTION/CONSTRUCTION JOINT
HEAVY DUTY LOAD

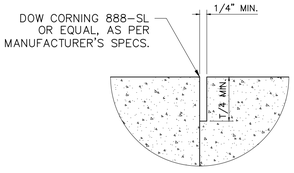
T (IN.)	DOWEL SIZE	DOWEL LENGTH	DOWEL SPACING
5"	3/4"	12"	12"
6"	7/8"	14"	12"
7"	1"	14"	12"
8"	1"	14"	12"
9"	1 1/8"	16"	12"
10"	1 1/4"	16"	12"



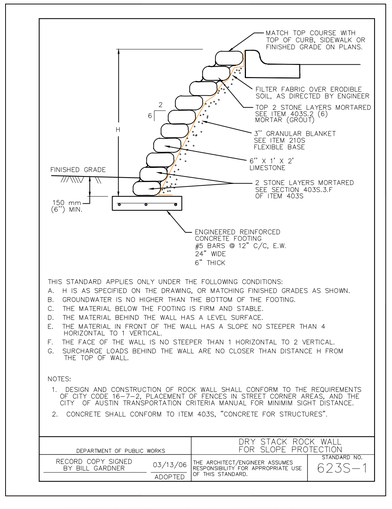
EXPANSION/ISOLATION JOINT



EXPANSION/ISOLATION JOINT



DETAIL 1



THIS STANDARD APPLIES ONLY UNDER THE FOLLOWING CONDITIONS:

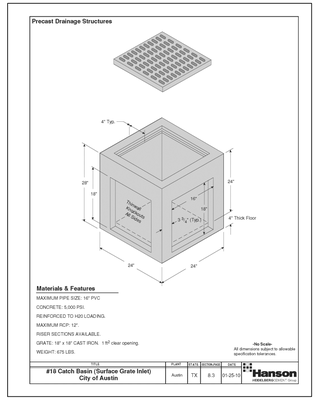
A. H IS AS SPECIFIED ON THE DRAWING, OR MATCHING FINISHED GRADES AS SHOWN.
B. GROUNDWATER IS NO HIGHER THAN THE BOTTOM OF THE FOOTING.
C. THE MATERIAL BELOW THE FOOTING IS FIRM AND STABLE.
D. THE MATERIAL BEHIND THE WALL HAS A LEVEL SURFACE.
E. THE MATERIAL IN FRONT OF THE WALL HAS A SLOPE NO STEEPER THAN 4 HORIZONTAL TO 1 VERTICAL.
F. THE FACE OF THE WALL IS NO STEEPER THAN 1 HORIZONTAL TO 2 VERTICAL.
G. SURCHARGE LOADS BEHIND THE WALL ARE NO CLOSER THAN DISTANCE H FROM THE TOP OF WALL.

NOTES:

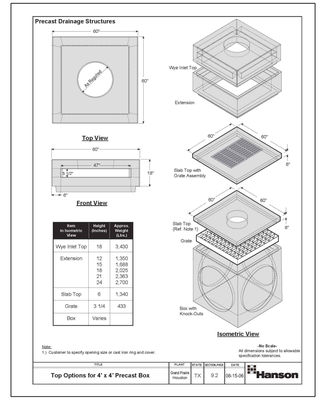
1. DESIGN AND CONSTRUCTION OF ROCK WALL SHALL CONFORM TO THE REQUIREMENTS OF CITY CODE 16-7-2, PLACEMENT OF FENCES IN STREET CORNER AREAS, AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL FOR MINIMM SIGHT DISTANCE.
2. CONCRETE SHALL CONFORM TO ITEM 403S, "CONCRETE FOR STRUCTURES".

DEPARTMENT OF PUBLIC WORKS	DRY STACK ROCK WALL FOR SLOPE PROTECTION	
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 623S-1

DRY STACK RETAINING WALL WHERE SHOWN
SCALE: N.T.S.



STANDARD GRATE INLET 24"x24"
SCALE: N.T.S.



STANDARD GRATE INLET 48"x48"
SCALE: N.T.S.

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NO	DATE	DESCRIPTION

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ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303096
AUSTIN, TEXAS 78703
512-357-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

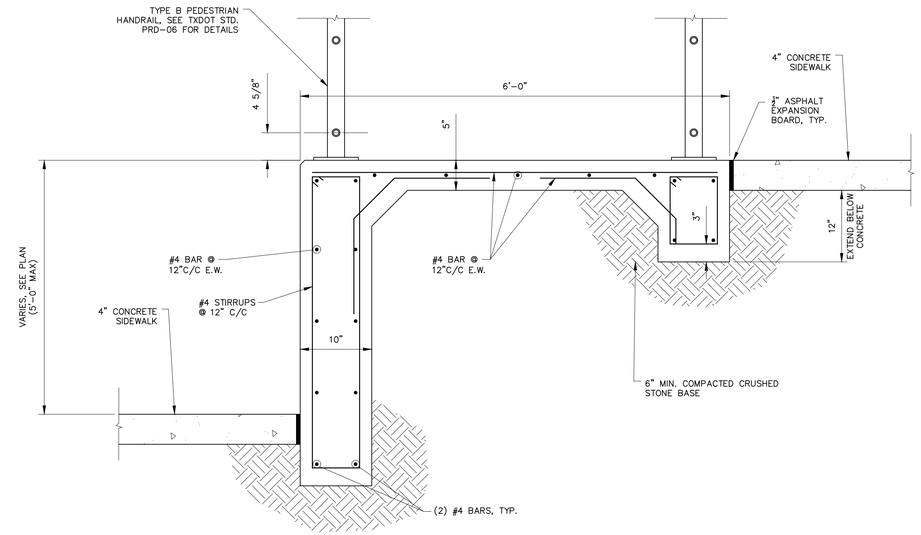
STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

Thrower Design
LAND PLANNERS
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456

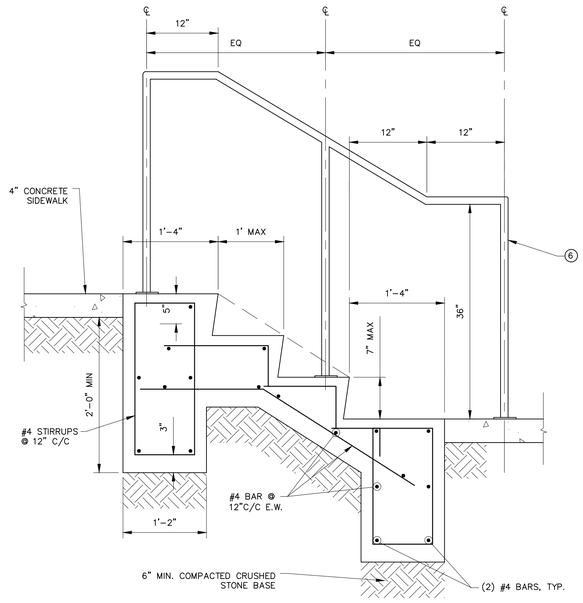
UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

CONSTRUCTION DETAILS

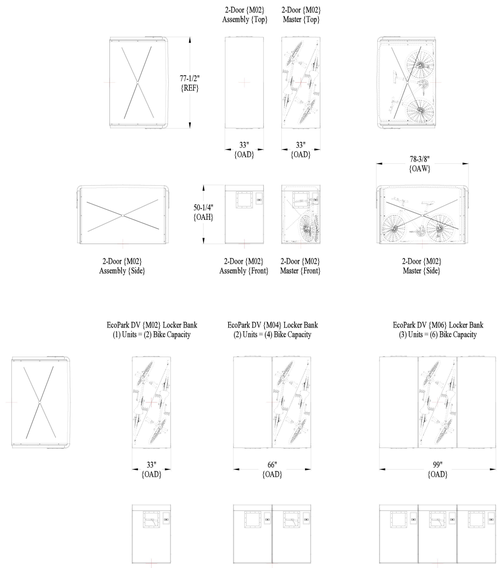
SP-2024-0345C



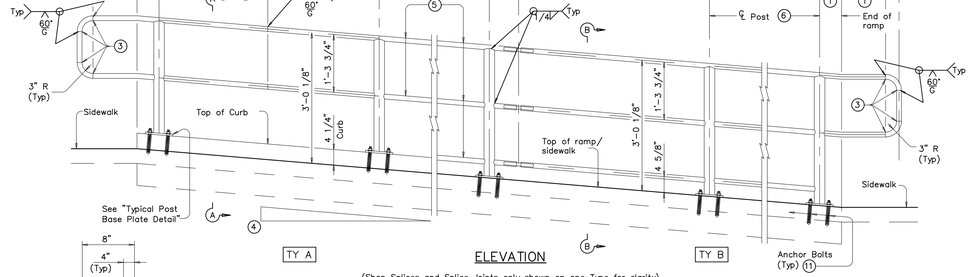
TYPICAL ACCESSIBLE RAMP CROSS SECTION
WITH TYPE B PEDESTRIAN HANDRAIL
N.T.S.



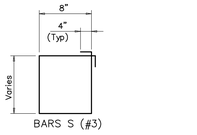
TYPICAL HANDRAIL AND EXTERIOR STAIR DETAIL
N.T.S.



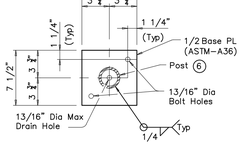
CYCLESAFE ECOPARK LOCKER SYSTEM
N.T.S.



ELEVATION
(Shop Splices and Splice Joints only shown on one Type for clarity)

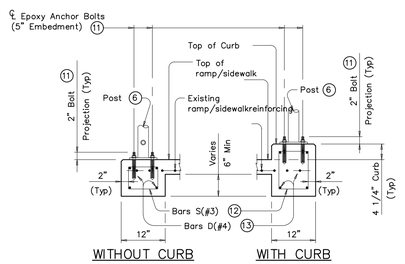


BARS S (#3)

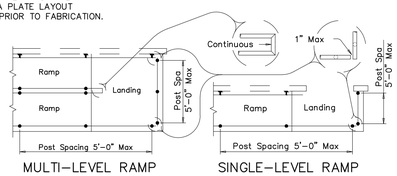


TYPICAL POST
BASE PLATE DETAIL

CONTRACTOR HAS THE OPTION OF UTILIZING 9X9 EMBED PLATES AT THEIR DISCRETION INSTEAD OF BOLTED BASE PLATES FOR THE HAND RAIL. IF EMBED PLATES ARE USED, A PLATE LAYOUT SUBMITTAL WILL BE REQUIRED PRIOR TO FABRICATION.

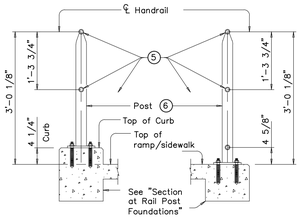


SECTION AT RAIL POST FOUNDATIONS



PLAN SHOWING RAIL AT RAMP CONDITIONS

RECOMMENDED USAGE ⑨⑩	
Dropoff Height/ Condition	Recommended Rail Options
<.30" dropoff	TY A, TY B, TY C, or TY D



SECTION A–A (Showing Handrail Ty A)
SECTION B–B (Showing Handrail Ty B)

KEY NOTES
Parallel to ground.
(1) One shop splice per panel is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.
(2) Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.
(3) See Ramp Details located elsewhere in plans for ramp slope and dimensions. Maximum ramp slope will not exceed 8.3 percent. Level landing required for each 30" rise if grade exceeds 5 percent.
(4) 1" Dia Extra Heavy Pipe (1.315" O.D., 0.179" wall thickness). Parallel to ramp/sidewalk. Provide holes as needed in 1" Dia pipe for galvanizing drainage and venting.
(5) 2 1/2" Dia Standard Pipe (2.875" O.D., 0.203" wall thickness). Plumb all posts. See "Post Mount Detail" for crimping and trimming post to fit Dia of top rail. Provide holes as needed in post for galvanizing drainage and venting.
(6) See "Handrail Fabrication Details" for Splice Joints.
(7) C L 5/8" Dia Round Bar Eq Spa at 4 1/2" Max. Plumb
(8) all pickets.
(9) When needed for accessibility (grade > 5 percent) or as needed for pedestrian safety.
(10) Not to be used on bridges.
(11) See "General Notes" for anchor bolt information.
(12) Bars S(#3) spaced at 12" Max (Spaced 3" from outside edge of overall length of Ramp/Sidewalk).
(13) Provide 1 1/2" end cover to Bars D(#4) from outside edge of overall length of Ramp/Sidewalk.

GENERAL NOTES:
1. Designed according to ADAAG, Texas Accessibility Standards, Uniform Building Code, and AASHTO LRFD Specifications.
2. Handrail anchorage details shown on this standard may require modification for select structure types. See appropriate detailselsewhere in plans for these modifications.
3. Pipe will conform to ASTM–A53 Grade B, A500 Grade B or A501. Steel plates and steel bars will conform to ASTM–A36.
4. Galvanize all steel components except reinforcing steel unless noted otherwise.
5. All reinforcing steel must be Grade 60.
   Bar laps, where required, will be as follows:
   Uncoated ~ #4 = 1'–5"
   Epoxy coated ~ #4 = 2'–1"
6. When the plans require painted steel, follow the requirements for painting galvanized steel in TxDOT Item 446, "Cleaning and Painting Steel". Sleeve Members will receive galvanization and only get field painted after installation unless directed otherwise by Engineer.
7. Epoxy Anchor bolts for wall mount and post base plate will be 5/8" Dia ASTM A36 threaded rods with one hex nut and one hardened steel washer at each bolt. 5/8" Dia threaded rod embedment depth for wall mounts is 3 1/2" and embedment depth for post base plate is 5". Embed threaded rods into concrete with a Type III (Class C) epoxy meeting the requirements of DMS–6100, "Epoxies and Adhesives". Mix and dispense adhesive with the manufacturer's static mixing nozzle/dual cartridge system. Core drill holes (percussion drilling not permitted).
8. At the contractor's option the post base plate anchor bolts may be cast with the Ramp/Sidewalk (See Cast–in–Place Anchor Bolt Options).
9. Optional cast–in–place anchor bolts will be 5/8" Dia ASTM A307 rade A bolts (or A36 threaded rods with one tack welded hex nut each) with one hex nut and one hardened steel washer at each bolt. Embedment depth of cast–in–place bolt will be 8" for post base plate.
10. Handrails and any wall or other surface adjacent to them will be free of any sharp or abrasive elements.
11. Submit shop drawings to the Engineer unless otherwise noted.
12. For curved handrail applications, fabricate the handrail to the curve if radius is less than 600 ft. Shop drawings are required when rail is fabricated to the curve.
13. For all handrails, erection drawings will be submitted to the Engineer for approval to ensure proper installation. Drawings will show handrail mount locations with bolts setting, spacing, ramp slope, and/or splice joint locations, and handrail lengths with identification showing where each handrail goes on the layout.
14. All exposed edges will be rounded or chamfered to approximately 1/8" by grinding.

PEDESTRIAN HANDRAIL DETAILS – TY. A AND TY. B
COMBINED FROM TXDOT STD. PRD–06

REV	DESCRIPTION	DATE
A	RELEASE FOR REFERENCE	12/08/17

CYCLESAFE {ECOPARK} BICYCLE LOCKER SYSTEM

DRAWN BY	BOB SLYH
CHECKED	12/07/17
APPROVED	12/08/17

CycleSafe
5211 CASCADE ROAD - SUITE 210
GRAND RAPIDS, MI 49546
www.cyclesafe.com

SCALE 1:1 | DV {STANDARD} LOCKER {M02} THRU {M06} DOORS | VIEWS 2D

AMC DESIGN GROUP
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TEXAS REGISTERED ENGINEERING FIRM F-1708

STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

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LAND PLANNERS
(512) 476-4456
AUSTIN, TEXAS 78704
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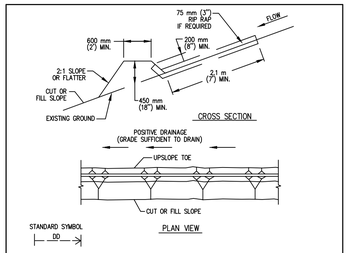
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

CONSTRUCTION DETAILS 2 of 2

17 OF 26

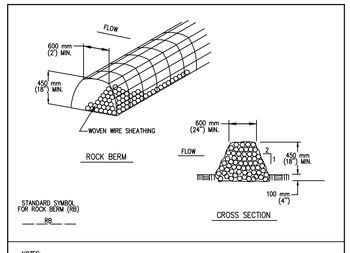
SP-2024-0345C



GENERAL NOTES :

1. ALL DIKES SHALL BE MACHINE COMPACTED.
2. ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. a. DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL HAVE ITS OUTLET FLOW DIRECTED TO AN UNDISTURBED STABILIZED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE.
   b. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE, SUCH AS A ROCK BERM, BRUSH BERM, STONE OUTLET STRUCTURE, SEDIMENT TRAP OR SEDIMENT BASIN OR TO AN AREA PROTECTED BY ANY OF THESE PRACTICES.
4. UNLESS OTHERWISE SPECIFIED, EROSION STABILIZATION SHALL BE OPEN GRADED ROCK 75 TO 125 mm (3 TO 5 inches) IN DIAMETER EMBEDDED IN SOIL SURFACE.
5. INSPECTION SHALL BE CONDUCTED WEEKLY OR AFTER EACH RAINFALL EVENT.

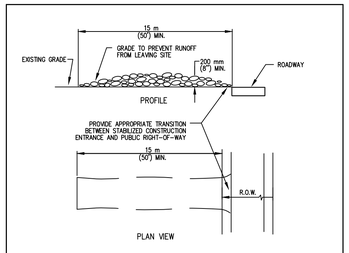
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	DIVERSION DIKE	
RECORD COPY SIGNED BY J. PATRICK MURPHY 3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 622S-1



NOTES:

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

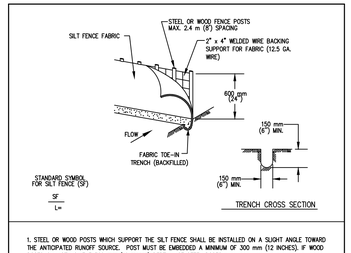
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
RECORD COPY SIGNED BY MORGAN BYARS 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



NOTES:

1. STONE SIZE: 75–125 mm (3–5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
RECORD COPY SIGNED BY J. PATRICK MURPHY 5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 inches) DEPTH, USE STEEL POSTS.

2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

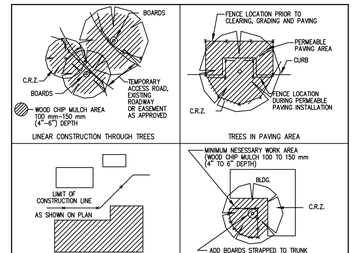
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.

5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

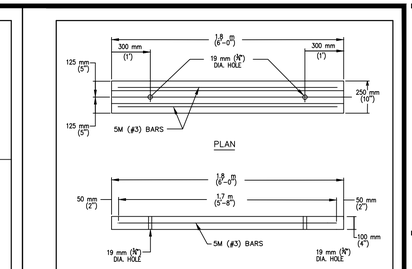
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	
RECORD COPY SIGNED BY MORGAN BYARS 09/01/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1

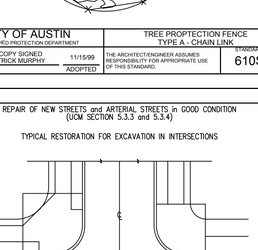


CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE LOCATIONS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-1

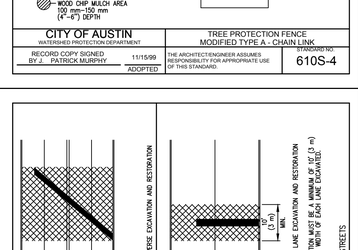


ALL CONCRETE SHALL BE CLASS "A" IN ACCORDANCE WITH ITEM 403S.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PARKING LOT BUMPER CURB	
RECORD COPY SIGNED BY BILL GARDNER 3/15/05 APPROVED ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 439S-1

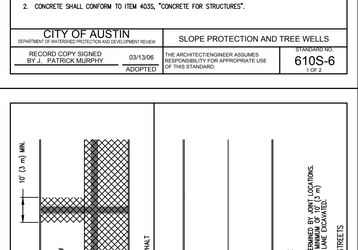


CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROPTECTION FENCE TYPE A - CHAIN LINK	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-2



*AS NEEDED TO PROVIDE MINIMUM NECESSARY WORK SPACE. IF LESS THAN 1.5 m (5'), THEN ADD BOARDS STRAPPED TO TRUNK.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE MODIFIED TYPE A - CHAIN LINK	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-4



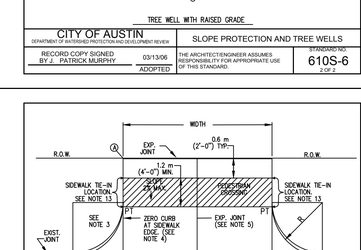
THIS STANDARD APPLIES ONLY UNDER THE FOLLOWING CONDITIONS:

A. H AND Z ARE SPECIFIED ON THE DRAWING.
B. GROUNDWATER IS NO HIGHER THAN THE BOTTOM OF THE FOOTING.
C. THE MATERIAL BELOW THE FOOTING IS FIRM AND STABLE.
D. THE MATERIAL BEHIND THE WALL HAS A LEVEL SURFACE.
E. THE MATERIAL IN FRONT OF THE WALL HAS A SLOPE NO STEEPER THAN 4 HORIZONTAL TO 1 VERTICAL.
F. THE FACE OF THE WALL IS NO STEEPER THAN 1 HORIZONTAL TO 2 VERTICAL.
G. SURCHARGE LOADS BEHIND THE WALL ARE NO CLOSER THAN DISTANCE H FROM THE TOP OF WALL.

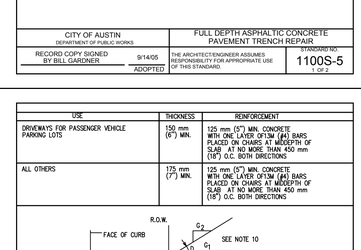
NOTES:

1. DESIGN AND CONSTRUCTION OF ROCK WALL SHALL CONFORM TO THE REQUIREMENTS OF CITY CODE 16–7–2, PLACEMENT OF FENCES IN STREET CORNER AREAS, AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL FOR MINIMUM SIGHT DISTANCE.
2. CONCRETE SHALL CONFORM TO ITEM 403S, "CONCRETE FOR STRUCTURES".

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	SLOPE PROTECTION AND TREE WELLS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-6 1 OF 2



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	SLOPE PROTECTION AND TREE WELLS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-6 2 OF 2



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FULL DEPTH ASPHALTIC CONCRETE PAVEMENT TRENCH REPAIR	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-5 1 OF 2

NOTES:

1. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
   b) MIN. 3" (75 mm) HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.
   SEE ITEM 340S, SECTION 340S.4.
2. THE COMBINED THICKNESS OF THE REPLACEMENT AC SURFACE AND BASE LAYERS SHALL MATCH THE THICKNESS OF EXISTING FULL DEPTH AC LAYER. HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 6" (150 mm) OF TYPE A OR B HMA. A BASE LAYER TYPE THAT MATCHES THE NEW HMA SURFACE LAYER (SEE NOTE 1) MAY BE USED, IF THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
3. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
4. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(3)(K)(5), FOR ALL NON–METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S RE–QUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FULL DEPTH ASPHALTIC CONCRETE PAVEMENT TRENCH REPAIR	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-5 2 OF 2

TRENCH REPAIRS WITHIN PORTLAND CEMENT CONCRETE PAVEMENTS NOTE:
IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, THEN THE ENTIRE CONCRETE SLAB FROM JOINT TO JOINT AND JOINT TO EDGE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE DIRECTOR.

TRENCH REPAIRS WITHIN ASPHALTIC CONCRETE PAVEMENTS NOTES:

1. IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, DEFINED FROM CURB RETURN TO CURB RETURN, THE ENTIRE QUADRANT OF THE EXISTING SURFACE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
2. A QUADRANT IS DEFINED AS THE CROSS–HATCHED AREA IN THE ABOVE DETAIL.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-7 1 OF 3

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-7 2 OF 3

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-7 3 OF 3

NOTE: ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT Ⓐ ABOVE POINT Ⓑ IS, TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (¼" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN 02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 1 OF 2

USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 5M (#5) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 5M (#5) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS

DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE STD.	MAX
31500	0%	3%
500–1500	3%	6%
< 500	6%	15%

NOTES:

1. ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
2. DRIVEWAY WIDTHS AND RADII DIMENSIONS, ONE/TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY–OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL SECTION 5 "DRIVEWAYS".
3. THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITIONED INTO THE SIDEWALK TIE–IN LOCATION BEGINNING AT THE RADIUS PC LINE.
4. "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
5. PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
6. IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
7. IF THE BASE IS OVER EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
8. TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET) WHICHEVER IS LESS.
9. DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
10. WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "22 IS GREATER THAN 15%.
11. USE 12 MM (½") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE, AND AT MIDWIDTH, SEE NOTE 5.
12. SEE TRANSPORTATION CRITERIA MANUAL SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
13. THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
14. WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN 02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 2 OF 2

GENERAL NOTES

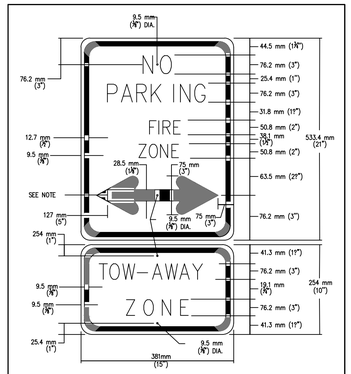
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE CHANCE OF SKIMMER BECOMING STUCK.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. ADJUSTMENT MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. FOR MORE INFORMATION AND AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

SKIMMER DETAIL FOR TEMP. SEDIMENT TRAP

DRAWN BY: C. R. EVANS 12/02

FAIRCLOTH SKIMMER® DISCHARGE SYSTEM WITH EMBANKMENT

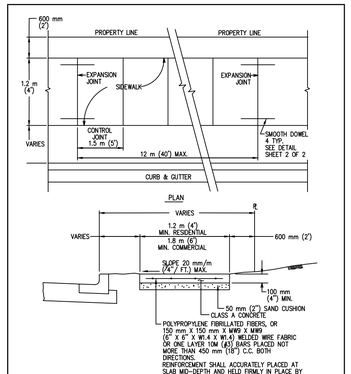
A. P. FAIRCLOTH, III, RPE, INC.
FAIRCLOTH SKIMMER® SYSTEMS
WILMINGTON, (910) 762–1144
FAX (910) 762–1844
EM



LETTERING, ARROW AND BORDER: RED TRANSPARENT BACKGROUND = SILVER REFLECTIVE SHEETING

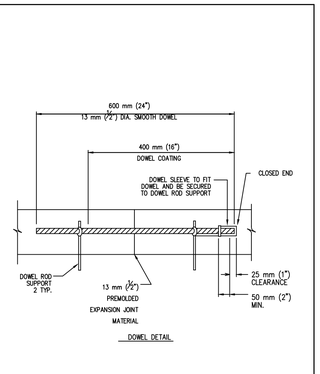
NOTE – ARROW MAY BE LEFT, RIGHT, OR DOUBLE

CITY OF AUSTIN FIRE DEPARTMENT		RESTRICTED ZONE SIGNS, TYPE II	
RECORD COPY SIGNED BY CARL D. WREN — ADOPTED 9/14/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 901S-6



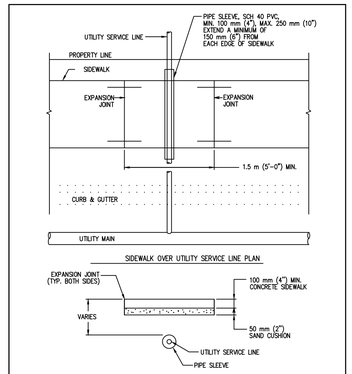
POLYPROPYLENE FIBRILLATED FIBERS, OR 150 mm X 150 mm X WWR X WWR (6" X 6" X W1.4 X W1.4) WELDED WIRE FABRIC OR ONE LAYER 10M (#3) BARS PLACED NOT MORE THAN 450 mm (18") C.C. BOTH DIRECTIONS.
REINFORCEMENT SHALL ACCURATELY PLACED AT SLAB MID-DEPTH AND HELD RIGIDLY IN PLACE BY MEANS OF BAR SUPPORTS OF ADEQUATE STRENGTH AND NUMBER THAT WILL PREVENT DISPLACEMENT AND KEEP THE STEEL AT ITS PROPER POSITION DURING THE PLACEMENT OF THE P.C. CONCRETE. IN NO INSTANCE SHALL THE STEEL BE PLACED DIRECTLY ON THE SUBGRADE OR SAND CUSHION LAYER.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-1 1 OF 3



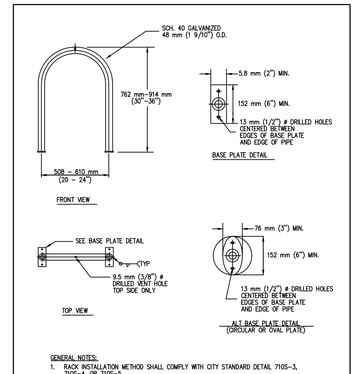
DOWEL DETAIL

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-1 2 OF 3



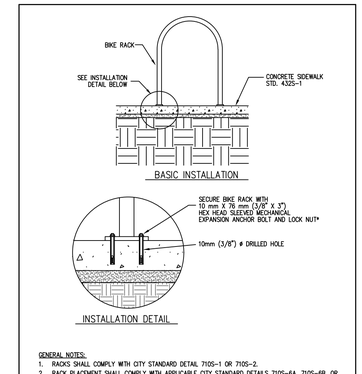
NOTES:
1. THIS STANDARD APPLIES TO THE INSTALLATION OF NEW UTILITIES OR UTILITIES BEING REPLACED BY A NEW LINE.
2. NO JOINTS IN UTILITY SERVICE PIPE TO BE LOCATED INSIDE PVC PIPE SLEEVE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-1 3 OF 3



GENERAL NOTES:
1. RACK INSTALLATION METHOD SHALL COMPLY WITH CITY STANDARD DETAIL 710S–3, 710S–4, OR 710S–5.
2. RACK PLACEMENT SHALL COMPLY WITH APPLICABLE CITY STANDARD DETAILS 710S–6A, 710S–6B, OR 710S–6C AND IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25–6–477 OR ITS SUCCESSOR.
3. BASE PLATES TO BE 6.35 mm (1/4") PLATES, ASTM A–36 1010–1018 LOW CARBON PRIME STEEL

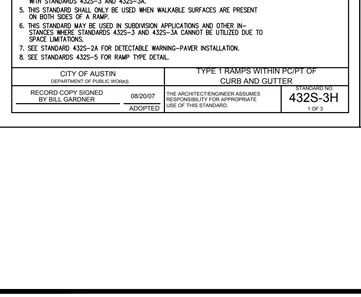
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		CLASS III STYLE BICYCLE PARKING	
RECORD COPY SIGNED BY COUNG TRAN — ADOPTED 09/26/12	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 710S-1 1 OF 1



GENERAL NOTES:
1. RACKS SHALL COMPLY WITH CITY STANDARD DETAIL 710S–1 OR 710S–2.
2. RACK PLACEMENT SHALL COMPLY WITH APPLICABLE CITY STANDARD DETAILS 710S–6A, 710S–6B, OR 710S–6C AND IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25–6–477 OR ITS SUCCESSOR.

*TO PREVENT THEFT OF BICYCLE RACK OR BIKES, EXPOSED BOLTS MUST BE DEFORMED AND NUTS RE–TIGHTENED TO PREVENT THEM FROM BEING EASILY UNTIGHTENED. NUTS SHOULD BE TESTED TO ENSURE THAT THEY CANNOT BE EASILY REMOVED AFTER DEFORMATION.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		BICYCLE RACK INSTALLATION IN CONCRETE SIDEWALK-ALTERNATE 1	
RECORD COPY SIGNED BY COUNG TRAN — ADOPTED 09/26/12	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 710S-4 1 OF 1

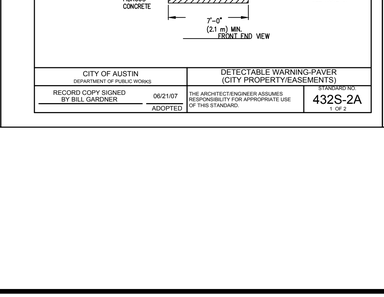


GENERAL NOTES:
1. RACK MUST COMPLY WITH CITY STANDARD DETAIL 710S–1 OR 710S–2.
2. RACK INSTALLATION MUST COMPLY WITH CITY STANDARD DETAIL 710S–3, 710S–4, OR 710S–5.
3. BIKE RACKS MUST BE PLACED IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25–6–477 OR ITS SUCCESSOR.
4. BIKE RACKS MUST BE LOCATED WITHIN 7.32m (24') OF EITHER THE MAIN BUILDING ENTRY OR THE ENTRY TO THE PRIMARY LOCAL USE.
5. BIKE RACKS MUST BE PLACED PERPENDICULAR TO THE CURB WITH THE CENTERLINE OF THE RACK IN LINE WITH ANY ADJACENT TREES OR LIGHT POLES.
6. THE MINIMUM CLEARANCE BETWEEN BICYCLE RACK AND ANY PUBLIC OR PRIVATE UTILITY APPURTENANCE MUST BE 0.9m (3').
7. BIKE RACKS MAY NOT BE MOUNTED ON TOP OF VAULTS OR STORM DRAIN INLETS.

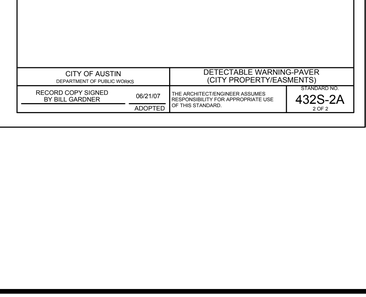
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		FURNISHING LOCATION IN 12' WIDE OR LESS SIDEWALKS - BICYCLE RACK SITTING	
RECORD COPY SIGNED BY COUNG TRAN — ADOPTED 09/26/12	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 710S-6C 1 OF 1

NOTES:
TREES/TREE WELLS SHALL NOT CONFLICT WITH EXISTING OR PROPOSED WATER OR WASTEWATER LINES OR APPURTENANCES AND SHALL NOT BE INSTALLED WITHIN A MINIMUM HORIZONTAL DISTANCE OF FIVE FEET (5') FROM THE OUSIDE EDGE OF ANY PUBLIC OR PRIVATE UTILITY LINE OR APPURTENANCE TO THE OUTSIDE EDGE OF THE TREE.

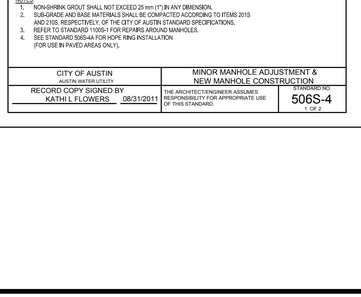
ALL TREES/SHRUBS INSTALLED WITHIN A HORIZONTAL SEPARATION DISTANCE OF TEN FEET (10') MAXIMUM TO FIVE FEET (5') MINIMUM FROM EXISTING OR PROPOSED WATER OR WASTEWATER LINES OR APPURTENANCES, SHALL INCLUDE DEEP ROOT UB 48–2 ROOT BARRIER, OR APPROVED EQUAL, TO BE INSTALLED VERTICALLY, 48" FROM TOP OF GROUND, 2' FROM THE OUTER DIAMETER OF THE UTILITY PIPE/APPURTENANCE, AND 8' TO 3' FROM THE OUTSIDE EDGE OF THE TREE/SHRUB.



DETAIL FOR DEEP ROOT (TM) ROOT BARRIER
UB 48–2 (OR LONGER)
SCALE: N.T.S.

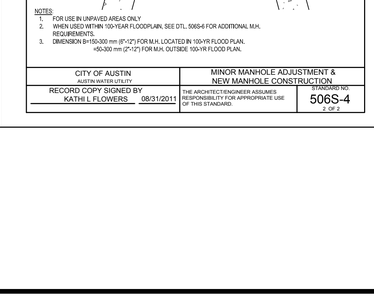


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION		CURB AND GUTTER SECTION	
RECORD COPY SIGNED BY LINO RIVERA — ADOPTED 9/29/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 430S-1



SEE STANDARD 430S-1 FOR TYPICAL CURB AND GUTTER SECTIONS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION		CURB EXPANSION JOINT DOWEL DETAIL	
RECORD COPY SIGNED BY LINO RIVERA — ADOPTED 9/29/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 430S-3



NOTE:
USE 800 mm (32") FRAME AND COVER.

MINIMUM MANHOLE DIA.	MINIMUM PIPE SIZE
1.2 m (4')	450 TO 600 mm (18 TO 24")
1.5 m (5')	750 mm TO 1.1 m (30 TO 42")
1.8 m (6')	1.2 TO 1.4 m (48 TO 54")
2.1 m (7')	1.5 TO 1.7 m (60 TO 66")

SIZE TO BE USED IS DEPENDENT ON DRAIN ANGLES.

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW		PRE-CAST CONCRETE STORM DRAIN MANHOLE	
RECORD COPY SIGNED BY GEORGE E. OSWALD — ADOPTED 2/14/02	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-3 1 OF 2



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW		PRE-CAST CONCRETE STORM DRAIN MANHOLE	
RECORD COPY SIGNED BY GEORGE E. OSWALD — ADOPTED 2/14/02	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-3 2 OF 2

NOTES:
1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION WITHIN RIGHT–OF–WAY OR EASEMENT ONLY
2. CURB RAMPS WILL BE CONSTRUCTED PERPENDICULAR TO ROADWAY CENTERLINE AND SHALL ALIGN WITH THOSE LOCATED ACROSS THE ROADWAY.
3. THE CURB, GUTTER AND RAMP SYSTEM SHALL BE CONFIGURED TO MAINTAIN ALL RUNOFF FROM A 25 YEAR FREQUENCY STORM WITHIN THE RIGHT–OF–WAY (DRAINAGE CRITERIA MANUAL SECTION 1.2.2.B). WHEN THERE IS AN ELEVATION DIFFERENCE BET–WEEN THE BOTTOM OF RAMPS (IE. ELEVATION AT THE GUTTER) WITH–IN A QUADRANT OF AN INTERSECTION, THE LOWER ELEVATION RAMP SHALL BE CONSTRUCTED WITH A POSITIVE RAMP SLOPE OF 1:12 IN ACCORDANCE WITH STANDARDS 432S–5, 432S–5A AND 432S–5B.
4. PRIORITY SHALL BE GIVEN TO THE INSTALLATION OF RAMPS IN CONFORMANCE WITH STANDARDS 432S–3 AND 432S–3A.
5. THIS STANDARD SHALL ONLY BE USED WHEN WALKABLE SURFACES ARE PRESENT ON BOTH SIDES OF A RAMP.
6. THIS STANDARD MAY BE USED IN SUBDIVISION APPLICATIONS AND OTHER IN–STANCES WHERE STANDARDS 432S–3 AND 432S–3A CANNOT BE UTILIZED DUE TO SPACE LIMITATIONS.
7. SEE STANDARD 432S–2A FOR DETECTABLE WARNING–PAVER INSTALLATION.
8. SEE STANDARDS 432S–5 FOR RAMP TYPE DETAIL.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE 1 RAMPS WITHIN PC/PT OF CURB AND GUTTER	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 08/20/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-3H 1 OF 3

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		DETECTABLE WARNING-PAVER (CITY PROPERTY/EASEMENTS)	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 06/21/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-2A 1 OF 2

GENERAL NOTES:
1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION ON CITY PROPERTY AND EASEMENT AREAS ONLY.
2. PAVERS ARE REQUIRED FOR ALL CURB RAMP INSTALLATIONS.
3. PAVERS WILL HAVE DETECTABLE WARNING THAT CONSISTS OF RAISED TRUNCATED DOMES WITH A DIAMETER OF 0.9" (23 mm), A NOMINAL HEIGHT OF 0.2" (5 mm) AND A NOMINAL CENTER TO CENTER SPACING OF 2.35" (60 mm) AND SHALL CONSTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT–ON–DARK OR DARK–ON–LIGHT (Ref. ADAAG SECTION 4.29.2). MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. PAVER PATTERN SHALL BE BASKET WEAVE, UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
4. TYPICAL SIDEWALK WIDTHS AND CURB RADII ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE TRANSPORTATION CRITERIA MANUAL FOR SIDEWALK WIDTHS, CURB RADII AND CURB BASIS.
5. THE PERMISSIBLE CONSTRUCTION JOINT BETWEEN THE PAVERS AND THE ADJOINING SURFACE SHALL BE LIMITED TO 1/4" (6 mm) JOINT SIZE. GAPS LARGER THAN ¼" (6 mm) MUST BE APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. ALL JOINTS BETWEEN BRICKS AND ADJOINING SURFACE SHALL BE MORTAR FILLED UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
6. MORTAR SHALL CONFORM TO STD. SPECIFICATION ITEM SECTION 403S.3.5. MORTAR AND GROUT. ALL OTHER CONCRETE SHALL CONFORM TO STD. SPECIFICATION ITEM 403S, CONCRETE FOR STRUCTURES, UNLESS OTHERWISE NOTED.
7. CURB RAMPS WITH RETURNED CURB MAY ONLY BE USED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK DIAGONALLY ACROSS THE RAMP.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		DETECTABLE WARNING-PAVER (CITY PROPERTY/EASEMENTS)	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 06/21/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-2A 2 OF 2

Ⓐ VERTICAL FACE = ALLOWABLE THROAT OR CHIMNEY HEIGHT
= NEW CONSTRUCTION = 525mm = (21") Max.
= EXISTING CONSTRUCTION = 675mm (27") Max.

NOTES:
1. NON–SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION.
2. SUB–GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S–1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HOPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS — 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-4 1 OF 2

NOTES:
1. FOR USE IN UNPAVED AREAS ONLY
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAN, =50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAN.

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS — 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-4 2 OF 2

AMC DESIGN GROUP
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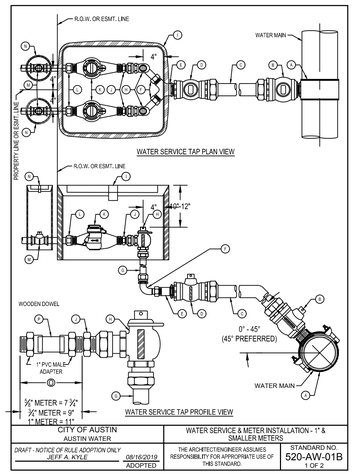
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

STANDARD DETAILS

19 OF 26

SP-2024-0345C



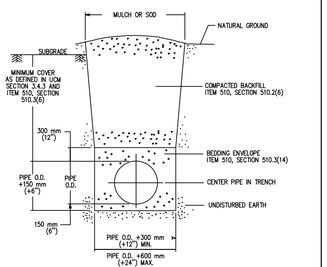
CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
DRAFT - NOTICE OF RULE ADOPTION ONLY JEFF A. KYLE 08/16/2019 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 1 OF 2

MATERIALS LIST:
- A. 2" SERVICE CLAMP, SPL WW-264
- B. 2" CORPORATION STOP, SPL WW-68
- C. 2" HDPE WATER SERVICE TUBING, SPL WW-45
- D. 2" BALL VALVE, SPL WW-69
- E. SINGLE SERVICE: 2" MIP X 1" COPPER FLARE FITTING, SPL WW-68 OR DOUBLE SERVICE: 2" MIP X 1" COPPER FLARE NYE, SPL WW-68
- F. 1" SWIVEL NUT x 1" COMPRESSION 90° BEND, SPL WW-68
- G. 1" HDPE WATER SERVICE TUBING, SPL WW-45
- H. 1" ANGLE METER STOP, SPL WW-68
- I. METER BOX AND LID, SPL WW-145A
  FOR DUAL 1" METERS: USE TWO SINGLE METER BOXES

MATERIALS TO BE INSTALLED BY PLUMBER:
- J. BRASS METER BUSHING - SIZE AS NEEDED TO CONNECT ANGLE METER STOP TO METER
- K. WATER METER PURCHASED FROM AUSTIN WATER
- L. BRASS WATER METER COUPLING MALE IPT x SWIVEL COUPLING NUT:
  ¾" AND ¾" METERS: 8.9" LONG x ¾" DIA.
  1" METERS: 8.9" LONG x 1" DIA.
- M. PROPERTY OWNER'S CUT OFF VALVE, SPL WW-276
- N. PROPERTY OWNER'S CUT OFF VALVE BOX AND LID
- O. TEMPORARY METER SPACER (REQUIRED TO ASSURE METER WILL FIT APPROPRIATELY)
- P. 1" WOODEN DOWEL (SHOW ADDRESS ON DOWEL USING WATERPROOF MARKER)

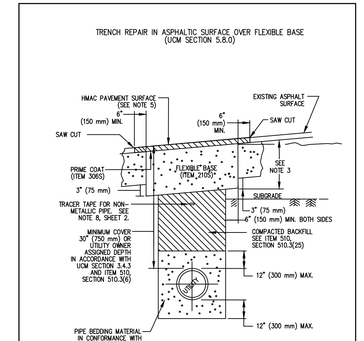
NOTES:
1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL POLYETHYLENE FILM, SPL WW-27D.
2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
3. TOP OF METER BOXES SHOULD BE 4" ABOVE GROUND.
4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS. BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
5. METER BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.
6. BALL VALVE "D" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 36" BELOW FINAL GRADE.
7. METER SIZES TO BE SHOWN ON PLANS.
8. METER BOX CUT OUTS SHALL NOT EXCEED TWO TIMES THE PIPE DIAMETER.
9. INSTALL METALLIC TRACER TAPE, SPL WW-037, MINIMUM 1' ABOVE TUBING FROM SERVICE CLAMP "A" TO BALL VALVE "D".
10. TUBING SHALL BE PLACED IN A STRAIGHT ALIGNMENT AND ALLOWED TO RELAX AND "SNAKE" LOOSELY IN THE TRENCH. TUBING BEHIND CURB AND GUTTER SHALL BE INSTALLED WITH A MINIMUM 2" DEPTH OF COVER.
11. 1" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 2". 2" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 5". BRASS FITTINGS SHALL NOT BE CONNECTED TO A BENT SECTION OF TUBING.
12. SOLID, TUBULAR STAINLESS STEEL INSERT STIFFENERS FOR HDPE TUBING SHALL BE USED AT ALL COMPRESSION FITTINGS. INSERT STIFFENERS SHALL BE FROM THE SAME MANUFACTURER AS THE COMPRESSION FITTING USED.
13. FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED SOLID PURPLE, SPL WW-45A. ALL APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL METER BOX LIDS SHALL BE PURPLE AND HAVE **"RECLAIMED WATER"** CAST INTO THEM, SPL WW-145A.

CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
DRAFT - NOTICE OF RULE ADOPTION ONLY JEFF A. KYLE 08/16/2019 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 2 OF 2



REFERENCES:
1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510,
   SECTION 510.2(6), "SELECT BACKFILL OR BORROW";
   SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER";
   SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

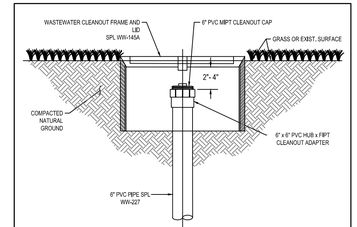
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 1 OF 5

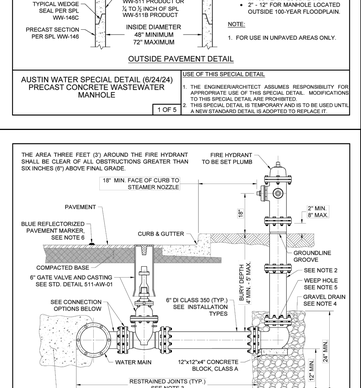
NOTES:
1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" (300 mm) WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
3. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3" (75 mm.), BUT IN NO CASE LESS THAN 12" (300 mm).
4. DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" (250 mm) OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
5. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
   b) MIN. 3" (75 mm) HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.
   SEE ITEM 340S, SECTION 340S.4.
6. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
7. TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 3075).
8. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(6)(K)(5), FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE, AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S RE-QUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 2 OF 5

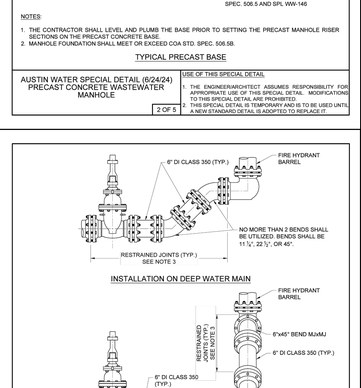


NOTE:
1. WASTEWATER CLEANOUT FRAME AND LID SHALL NOT BE PLACED IN PAVED AREAS, INCLUDING SIDEWALKS, DRIVEWAYS, OR PARKING LOTS, AND MUST BE LOCATED A MINIMUM OF 6' FROM ALL PAVED AREAS.

CITY OF AUSTIN AUSTIN WATER	WASTEWATER CLEANOUT FRAME AND LID	
DRAFT - NOTICE OF RULE ADOPTION ONLY JEFF A. KYLE 08/16/2019 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-03 1 OF 1



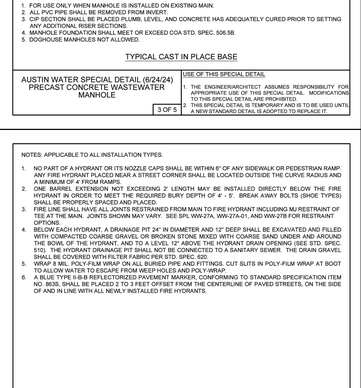
CITY OF AUSTIN AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
1 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	



NOTES:
1. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED COA STD. SPEC. 506.5B.

TYPICAL PRECAST BASE

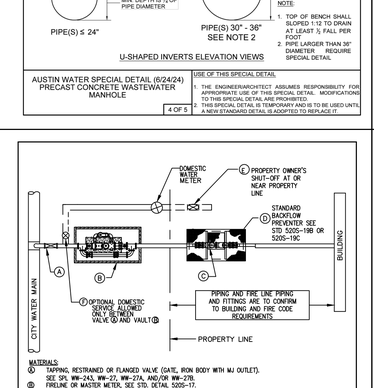
AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
2 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	



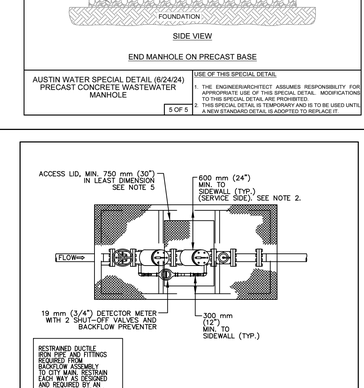
NOTES:
1. FOR USE ONLY WHEN MANHOLE IS INSTALLED ON EXISTING MAIN.
2. ALL PVC PIPE SHALL BE REMOVED FROM INVERT.
3. CIP SECTION SHALL BE PLACED PLUMB, LEVEL, AND CONCRETE HAS ADEQUATELY CURED PRIOR TO SETTING ANY ADDITIONAL RISER SECTIONS.
4. MANHOLE FOUNDATION SHALL MEET OR EXCEED COA STD. SPEC. 506.5B.
5. DOGHOUSE MANHOLES NOT ALLOWED.

TYPICAL CAST IN PLACE BASE

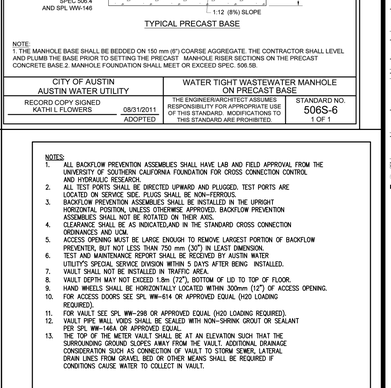
AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
3 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	



AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
4 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	

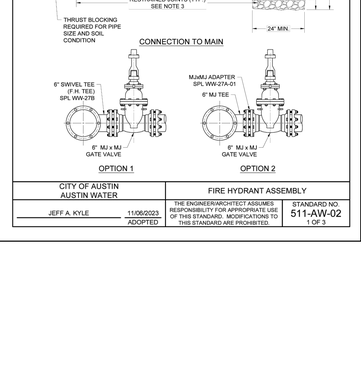


AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
5 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	

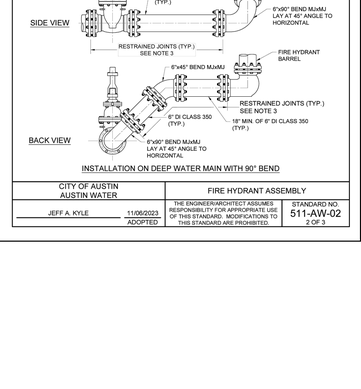


NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.2. MANHOLE FOUNDATION SHALL MEET OR EXCEED SPEC. 506.5B.

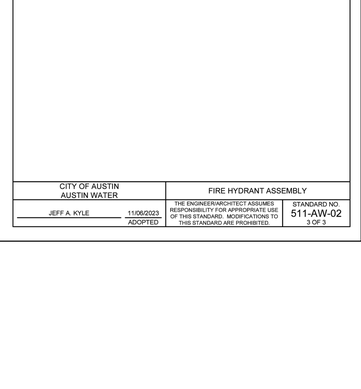
CITY OF AUSTIN AUSTIN WATER UTILITY	WATER TIGHT WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED KATHI L FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-6 1 OF 1



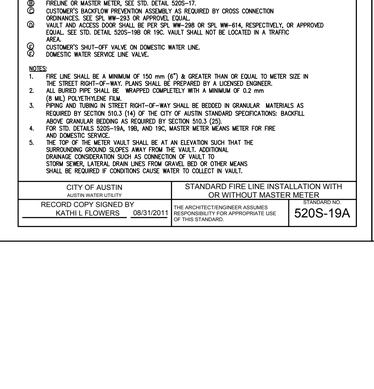
CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 1 OF 3

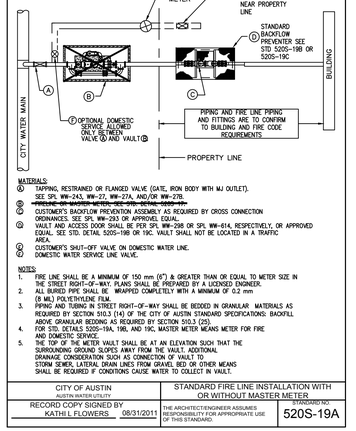


CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 2 OF 3



CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 3 OF 3


DOMESTIC WATER METER
PROPERTY OWNER'S SHUT-OFF AT OR NEAR PROPERTY LINE
STANDARD BACKFLOW PREVENTER SEE STD 520S-19B OR 520S-19C
CITY WATER MAIN
OPTIONAL DOMESTIC SERVICE ALLOWED ONLY BETWEEN VALVE Ⓓ AND VAULT Ⓑ
PIPING AND FIRE LINE PIPING AND FITTINGS ARE TO CONFIRM TO BUILDING AND FIRE CODE REQUIREMENTS
BUILDING
PROPERTY LINE
MATERIALS:
Ⓐ TAPPING, RESTRAINED OR FLANGED VALVE (GATE, IRON BODY WITH WJ OUTLET). SEE SPL WW-243, WW-27, WW-27A, AND/OR WW-27B.
Ⓑ FIRELINE OR MASTER METER, SEE STD. DETAIL 520S-12.
Ⓒ CUSTOMER'S BACKFLOW PREVENTION ASSEMBLY AS REQUIRED BY CROSS CONNECTION ORDINANCES. SEE SPL WW-293 OR APPROVED EQUAL.
Ⓓ VAULT AND ACCESS DOOR SHALL BE PER SPL WW-298 OR SPL WW-614, RESPECTIVELY, OR APPROVED EQUAL. SEE STD. DETAIL 520S-19B OR 19C. VAULT SHALL NOT BE LOCATED IN A TRAFFIC AREA.
Ⓔ CUSTOMER'S SHUT-OFF VALVE ON DOMESTIC WATER LINE.
Ⓕ DOMESTIC WATER SERVICE LINE VALVE.
NOTES:
1. FIRE LINE SHALL BE A MINIMUM OF 150 mm (6") & GREATER THAN OR EQUAL TO METER SIZE IN THE STREET RIGHT-OF-WAY. PLANS SHALL BE PREPARED BY A LICENSED ENGINEER.
2. ALL BURIED PIPE SHALL BE WRAPPED COMPLETELY WITH A MINIMUM OF 0.2 mm (8 MIL) POLYETHYLENE FILM.
3. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS. BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
4. FOR STD. DETAILS 520S-19A, 19B, AND 19C, MASTER METER MEANS METER FOR FIRE AND DOMESTIC SERVICE.
5. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES



MATERIALS:

(A) TAPPING, RESTRAINED OR FLANGED VALVE (GATE, IRON BODY WITH WJ OUTLET). SEE SPL WW-243, WW-27, WW-27A, AND/OR WW-27B.

~~(B) VAULT, SEE WATER METER SETTING STANDARDS~~

(C) CUSTOMER'S BACKFLOW PREVENTION ASSEMBLY AS REQUIRED BY CROSS CONNECTION ORDINANCES. SEE SPL WW-293 OR APPROVED EQUAL.

(D) VAULT AND ACCESS DOOR SHALL BE PER SPL WW-298 OR SPL WW-614, RESPECTIVELY, OR APPROVED EQUAL. SEE STD. DETAIL 520S-199 OR 19C. VAULT SHALL NOT BE LOCATED IN A TRAFFIC AREA.

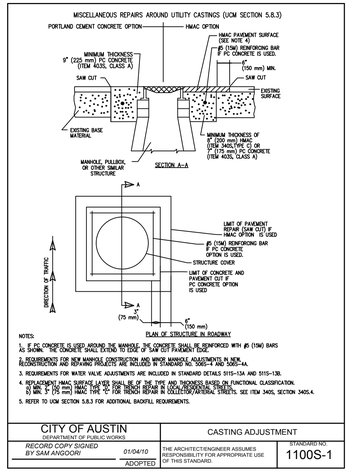
(E) CUSTOMER'S SHUT-OFF VALVE ON DOMESTIC WATER LINE.

(F) DOMESTIC WATER SERVICE LINE VALVE.

NOTES:

1. FIRE LINE SHALL BE A MINIMUM OF 150 mm (6") & GREATER THAN OR EQUAL TO METER SIZE IN THE STREET RIGHT-OF-WAY. PLANS SHALL BE PREPARED BY A LICENSED ENGINEER.
2. ALL BURIED PIPE SHALL BE WRAPPED COMPLETELY WITH A MINIMUM OF 0.2 mm (8 MIL) POLYETHYLENE FILM.
3. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS: BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (2D).
4. FOR STD. DETAILS 520S-198, 199, AND 19C, MASTER METER MEANS METER FOR FIRE AND DOMESTIC SERVICE.
5. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT. ADDITIONAL DRAINAGE CONSIDERATION SUCH AS CONNECTION OF VAULT TO STORM SEWER, LATERAL DRAIN LINES FROM GRAVEL BED OR OTHER MEANS SHALL BE REQUIRED IF CONDITIONS CAUSE WATER TO COLLECT IN VAULT.

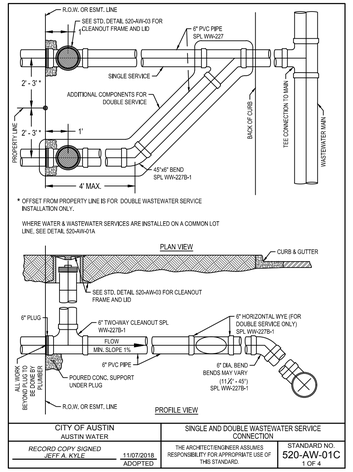
CITY OF AUSTIN AUSTIN WATER UTILITY	STANDARD FIRE LINE INSTALLATION WITH OR WITHOUT MASTER METER	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2015 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-19A



NOTES:

1. IF PC CONCRETE IS USED AROUND THE MANHOLE, CUT AND REMOVE PAVEMENT AS SHOWN. THE CONCRETE SHALL EXTEND TO EDGE OF SAW CUT FOR PAVEMENT REPAIR. REINFORCEMENT FOR REPAIRS WILL CONSIST OF #5 (15M) BARS @ 18" (450 mm) CENTERS EACH WAY AND INCLUDED IN STANDARD NO. 520S-7 AND 520S-4A.
2. REQUIREMENTS FOR WATER VALVE ADJUSTMENTS ARE INCLUDED IN STANDARD DETAILS 511S-11A AND 511S-13B.
3. REPLACEMENT HMAC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE C FOR RESIDENTIAL STREETS.
   b) MIN. 1" (25 mm) HMAC TYPE C FOR BENCH REPAIR IN COLLECTOR/MATERIAL STREETS. SEE ITEM 340S, SECTION 340S.4.
4. REFER TO UCM SECTION 5.8.3 FOR ADDITIONAL BACKFILL REQUIREMENTS.

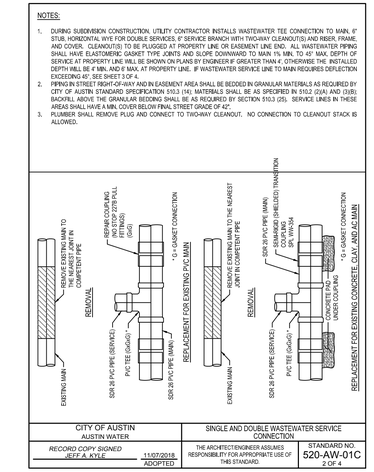
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CASTING ADJUSTMENT	
RECORD COPY SIGNED BY SAM ANGOORN 01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-1



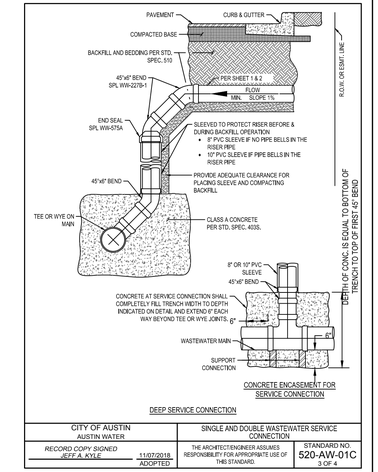
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 1 OF 4

NOTES:

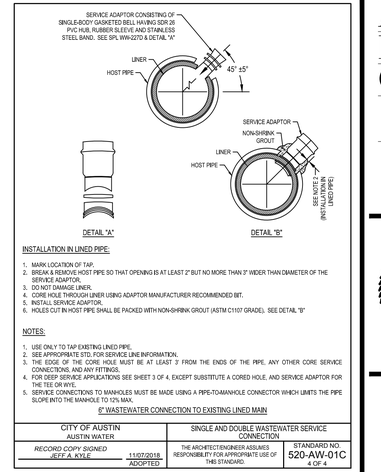
1. DURING SUBDIVISION CONSTRUCTION, UTILITY CONTRACTOR INSTALLS WASTEWATER TEE CONNECTION TO MAIN, 6" STUB, HORIZONTAL WYE FOR DOUBLE SERVICES, 6" SERVICE BRANCH WITH TWO-WAY CLEANOUT(S) AND RISER, FRAME, AND COVER. CLEANOUT(S) TO BE PLUGGED AT PROPERTY LINE OR EASEMENT LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% MIN. TO 45° MAX. DEPTH OF SERVICE AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4'. OTHERWISE THE INSTALLED DEPTH WILL BE 4' MIN. AND 6' MAX. AT PROPERTY LINE. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, SEE SHEET 5 OF 4.
2. PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATION 510.3 (14). MATERIALS SHALL BE AS SPECIFIED IN 510.2 (2A) AND (3B). BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (2). SERVICE LINES IN THESE AREAS SHALL HAVE A MIN. COVER BELOW FINAL STREET GRADE OF 42".
3. PLUMBER SHALL REMOVE PLUG AND CONNECT TO TWO-WAY CLEANOUT. NO CONNECTION TO CLEANOUT STACK IS ALLOWED.



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 2 OF 4



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 3 OF 4



INSTALLATION IN LINED PIPE:

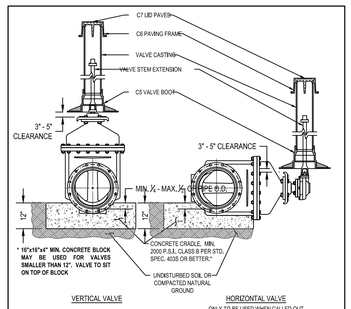
1. MARK LOCATION OF TAP.
2. BREAK A REMOVABLE HOST PIPE SO THAT OPENING IS AT LEAST 2" BUT NO MORE THAN 3" WIDER THAN DIAMETER OF THE SERVICE ADAPTOR.
3. DO NOT DAMAGE LINER.
4. CORE HOLE THROUGH LINER USING ADAPTOR MANUFACTURER RECOMMENDED BIT.
5. INSTALL SERVICE ADAPTOR.
6. HOLES CUT IN HOST PIPE SHALL BE PACKED WITH NON-SHRINK GROUT (ASTM C1107 GRADE). SEE DETAIL "B"

NOTES:

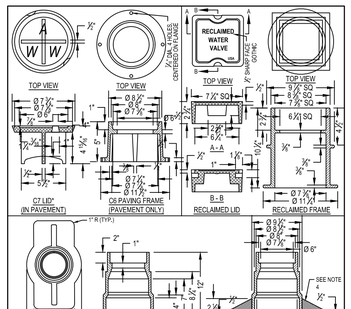
1. USE ONLY TO TAP EXISTING LINED PIPE.
2. SEE APPROPRIATE STD. FOR SERVICE LINE INFORMATION.
3. THE EDGE OF THE CORE HOLE MUST BE AT LEAST 3" FROM THE ENDS OF THE PIPE, ANY OTHER CORE SERVICE CONNECTIONS, AND ANY FITTINGS.
4. FOR DEEP SERVICE APPLICATIONS SEE SHEET 3 OF 4, EXCEPT SUBSTITUTE A CORED HOLE, AND SERVICE ADAPTOR FOR THE TEE OR WYE.
5. SERVICE CONNECTIONS TO MANHOLES MUST BE MADE USING A PIPE-TO-MANHOLE CONNECTOR WHICH LIMITS THE PIPE SLOPE INTO THE MANHOLE TO 12% MAX.

6" SEWER CONNECTION TO EXISTING LINED MAIN

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 4 OF 4

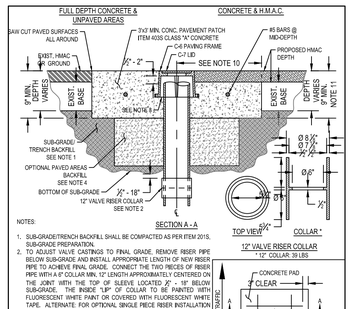


CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5W 1 OF 3



NOTE: ALL MANHOLES NOT LOCATED IN PAVED AREAS SHALL HAVE BOLTED COVERS AS PER SPEC. 506.

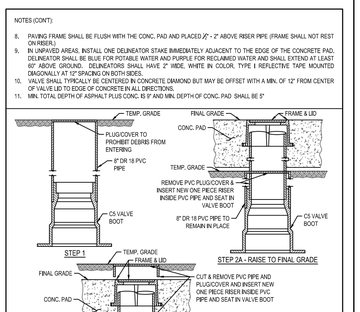
CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5W 2 OF 3



NOTES:

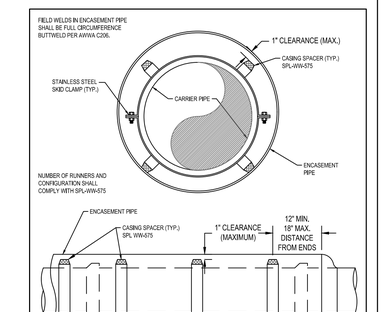
(1) ALL CORNERS AND EDGES SHALL HAVE A 1.5 mm (1/16") MINIMUM RADIUS.
(2) LIDS SHALL BE CAST WITH TWO 25 mm (1") DIA. STEEL PICK BARS.
(3) LID WEIGHTS SHALL BE: 779 N (175 LBS.) FOR DUCTILE IRON
WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
(4) MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 40,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M–306.
(5) FILLETS SHALL BE 6 mm (1/4") RADIUS UNLESS OTHERWISE SPECIFIED.
(6) MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
(7) BOLTS SHALL BE 16 mm x 44 mm (5/8" x 1–3/4" x 11 N.C.) STAINLESS STEEL HEX HEAD (TYPE 316).

CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5W 3 OF 3



FIRE WATER LEAD-IN

(N.T.S.)



UTILITY TRENCH DETAIL
IN NEW PAVEMENT AREA

(PRIVATE)



SIZE	A (INCHES)	B (INCHES)	MANDREL O.D. (INCHES)	PIPE O.D. (INCHES)	WALL THICKNESS (INCHES)
4" SDR 26	3.5	5.0	3.923	4.215	0.241
6" SDR 26	5.5	7.5	6.283	6.625	0.353
8" SDR 26	6.5	9.0	8.283	8.500	0.453
12" SDR 26	9.0	12.0	12.401	12.500	0.625
18" SDR 26	13.0	17.5	18.418	18.700	0.598

NOTES:

1. AFTER WELDING IS COMPLETED, TRUE ROUND OUTSIDE DIAMETER SHALL BE WITHIN THE FOLLOWING LENGTH OF 18" TO 810.0".
2. MANDREL OD MUST BE EQUAL TO 95% OF THE ID OF THE PIPE.
3. ADJUSTABLE MANDREL NOT ACCEPTABLE.

PIPE MANDREL DETAIL

NOTES:

1. WELD SOCKET ½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT. (SCH. 80 FOR LENGTHS OVER 10').
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

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

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

NOTES:

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

WEIGHTS:

C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 21 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE ½"
2 PICK BAR SLOTS REQUIRED

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

NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED 2" - 18" BELOW SUB-GRADE. THE INSIDE 1/8" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE. NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 403S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

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

NOTES (CONT):

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

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED

Texas Commission on Environmental Quality
Organized Sewage Collection System
General Construction Notes

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

1. This Organized Sewage Collection System (SCS) must be constructed in accordance with 30 Texas Administrative Code (TAC) §213.5(c), the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules and any local government standard specifications.

2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the SCS plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.

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

4. Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.

5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. These controls must remain in place until the disturbed areas have been permanently stabilized.

6. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the TCEQ of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing and the applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the

executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.

7. Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of 6 inches.

8. Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.

9. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.

   The diameter of the manholes must be a minimum of four feet and the manhole for entry must have a minimum clear opening diameter of 30 inches. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC §217.55 are included on Plan Sheet __ of __.

   It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.

10. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).

11. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe manufacturer: _____.

    If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: _____.

    Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.

12. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.

If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet __ of __. (For potential future laterals).

The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet __ of __ and marked after backfilling as shown in the detail on Plan Sheet __ of __.

13. Trenching, bedding and backfill must conform with 30 TAC §217.54. The bedding and backfill for flexible pipe must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C.

14. Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout unless it can be certified as conforming with the provisions of 30 TAC §213.5(c)(3)(E).

15. All sewer lines must be tested in accordance with 30 TAC §217.57. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Testing method will be:
    (a) For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test. A test must conform to the following requirements:
        (1) *Low Pressure Air Test.*
            (A) A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(ii) of this paragraph.
            (B) For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this subsection.
                (i) A pipe must be pressurized to 3.5 pounds per square inch (psi) greater than the pressure exerted by groundwater above the pipe.
                (ii) Once the pressure is stabilized, the minimum time allowable for the pressure to drop from 3.5 psi gauge to 2.5 psi gauge is computed from the following equation:

Equation C.3 $$T = \frac{0.085 \times D \times K}{Q}$$

Where:

T = time for pressure to drop 1.0 pound per square inch gauge in seconds
K = 0.000419 X D X L, but not less than 1.0
D = average inside pipe diameter in inches

L = length of line of same size being tested, in feet
Q = rate of loss, 0.0015 cubic feet per minute per square foot internal surface

(C) Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table C.3:

Pipe Diameter *(inches)*	**Minimum Time** *(seconds)*	**Maximum Length for Minimum Time** *(feet)*	**Time for Longer Length** *(seconds/foot)*
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

(D) An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.
(E) If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
(F) Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.
(G) A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.

(2) *Infiltration/Exfiltration Test.*
(A) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch of diameter per mile of pipe per 24 hours at a minimum test head of 2.0 feet above the crown of a pipe at an upstream manhole.
(B) An owner shall use an infiltration test in lieu of an exfiltration test when pipes are installed below the groundwater level.
(C) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever is greater.
(D) For construction within a 25-year flood plain, the infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subparagraph (C) of this paragraph.
(E) If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce

the infiltration or exfiltration to an amount within the limits specified. An owner shall retest a pipe following a remediation action.

(b) If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:
(1) For a collection pipe with inside diameter less than 27 inches, deflection measurement requires a rigid mandrel.
(A) *Mandrel Sizing.*
(i) A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.
(ii) If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID controlled pipe.
(iii) All dimensions must meet the appropriate standard.
(B) *Mandrel Design.*
(i) A rigid mandrel must be constructed of a metal or a rigid plastic material that can withstand 200 psi without being deformed.
(ii) A mandrel must have nine or more odd number of runners or legs.
(iii) A barrel section length must equal at least 75% of the inside diameter of a pipe.
(iv) Each size mandrel must use a separate proving ring.
(C) *Method Options.*
(i) An adjustable or flexible mandrel is prohibited.
(ii) A test may not use television inspection as a substitute for a deflection test.
(iii) If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis.
(2) For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection.
(3) A deflection test method must be accurate to within plus or minus 0.2% deflection.
(4) An owner shall not conduct a deflection test until at least 30 days after the final backfill.
(5) Gravity collection system pipe deflection must not exceed five percent (5%).
(6) If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least 30 days.

16. All manholes must be tested to meet or exceed the requirements of 30 TAC §217.58.
(a) All manholes must pass a leakage test.
(b) An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.
(1) Hydrostatic Testing.

(A) The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour.
(B) To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water, and maintain the test for at least one hour.
(C) A test for concrete manholes may use a 24-hour wetting period before testing to allow saturation of the concrete.
(2) Vacuum Testing.
(A) To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole.
(B) No grout must be placed in horizontal joints before testing.
(C) Stub-outs, manhole boots, and pipe ps plugs must be secured to prevent movement while a vacuum is drawn.
(D) An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole.
(E) A test head must be placed at the inside of the top of a cone section, and the seal inflated in accordance with the manufacturer's recommendations.
(F) There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test.
(G) A test does not begin until after the vacuum pump is off.
(H) A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.

17. All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system.

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

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

AMC DESIGN GROUP
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TEXAS REGISTERED ENGINEERING FIRM F-1705

STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

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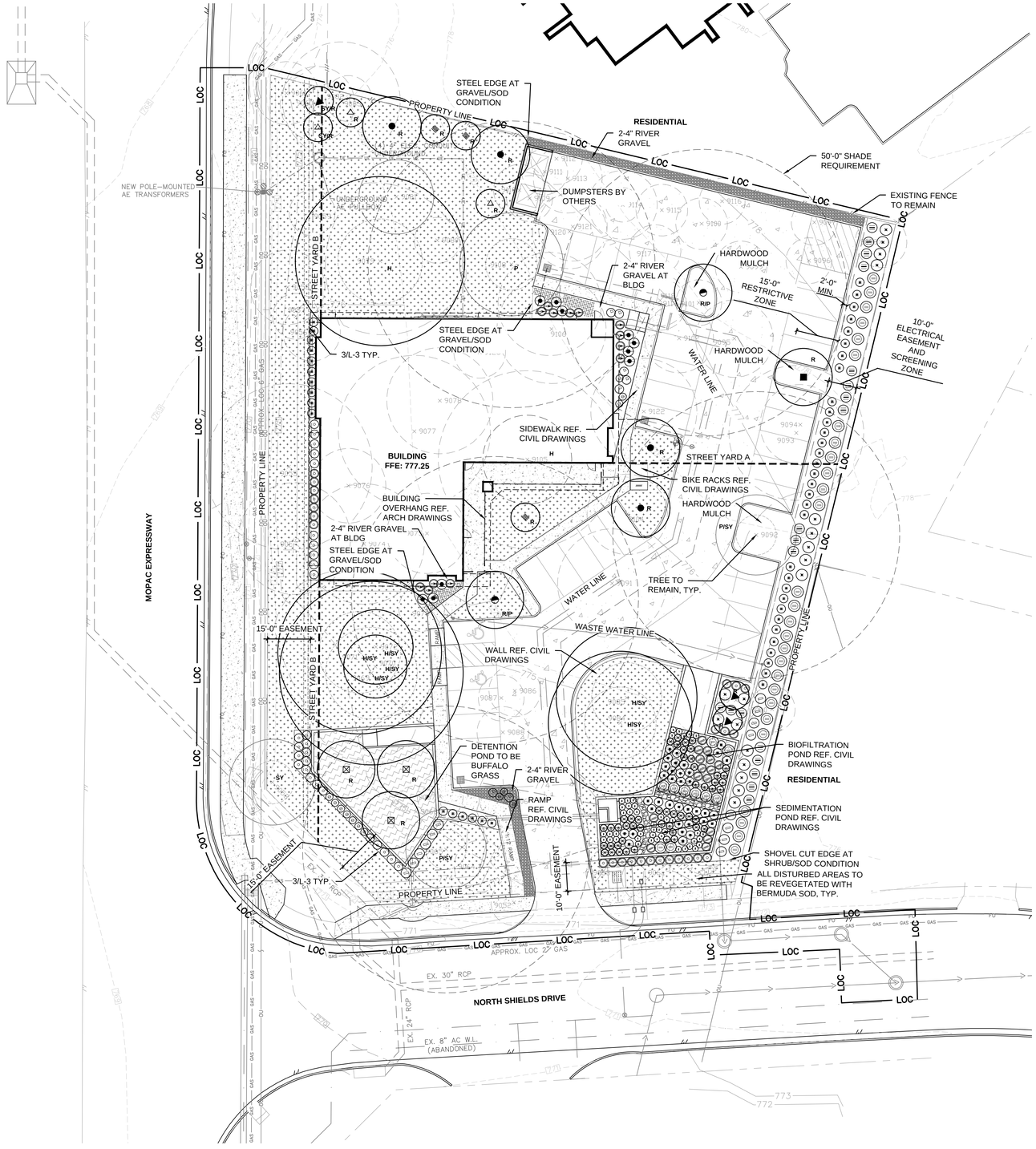
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

TCEQ SCS NOTES

22 OF 26

SP-2024-0345C



PROPOSED TREE LEGEND					
SYMBOL	TOTAL	REPLACEMENT (R)	STREETYARD (SY)	PARKING LOT (P)	SPECIES & SIZE
●	4	4	0	0	LIVE OAK *Quercus virginiana* MIN. 3" CAL.
⊠	3	3	0	0	MEXICAN SYCAMORE *Platanus mexicana* MIN. 3" CAL.
◓	2	1	0	1	CHINQUIPIN OAK *Quercus muhlenbergii* MIN. 3" CAL.
■	1	1	0	0	TEXAS PISTACHE *Pistacia texana* MIN. 3" CAL.
◈	3	3	0	0	WAX MYRTLE *Myrica cerifera* MIN. 3" CAL.
▲	3	2	1	0	YAUPON HOLLY *Ilex vomitoria* MIN. 3" CAL.
△	3	2	1	0	TEXAS REDBUD *Cercis canadensis var. 'Texensis'* MIN. 3" CAL.
SUBTOTAL:	19	16	2	1	

PROPOSED SHRUB LEGEND		
SYMBOL	QTY	SPECIES
⊖	14	TEXAS SAGE (Large Shrub) *Leucophyllum frutescens* 5 GAL.; MIN. 24" HT., PLANT MIN. 42" O.C.
⊕	25	DWARF WAX MYRTLE (Large Shrub) *Myrica pusilla* 5 GAL.; MIN. 30" HT., PLANT MIN. 42" O.C.
⊙	27	GULF MUHLY (Medium Shrub) *Muhlenbergia capillaris* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
⊛	13	SPINELESS PRICKLY PEAR (Medium Shrub) *Opuntia ellisiana* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
⊗	48	DWARF YAUPON HOLLY (Medium Shrub) *Ilex vomitoria 'nana'* 3 GAL.; MIN. 12" HT., PLANT MIN. 18" O.C.
✶	18	ESPERANZA *Tecoma stans* 5 GAL.; MIN. 24" HT., PLANT MIN. 42" O.C.
⊜	19	EVERGREEN SUMAC *Rhus virens* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
⊚	27	LM - LINDHEIMER'S MUHLY *Muhlenbergia lindheimer* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
◉	10	TC - TURKS CAP *Malvaviscus arboreus var. drummondii* 5 GAL.; MIN. 12" HT., PLANT MIN. 24" O.C.
⊷	13	DP - DWARF PALMETTO *Sabal minor* 5 GAL.; MIN. 18" HT., PLANT MIN. 36" O.C.
⊹	7	DP - NEW GOLD LANTANA *Lantana x hybrida 'New Gold'* 3 GAL.; MIN. 12" HT., PLANT MIN. 12" O.C.
	22	SO - INLAND SEA OATS *Chasmanthium latifolium* 3 GAL.; MIN. 12" HT., PLANT MIN. 18" O.C.

PROPOSED POND PLANTING LEGEND		
SYMBOL	QTY	SPECIES
⊚	10	LM - LINDHEIMER'S MUHLY *Muhlenbergia lindheimer* 2 @ 1 GALLON, 8 @ 5 GALLON
⊙	18	SG - SWITCH GRASS *Panicum virgatum* 11 @ 1 GALLON, 7 @ 5 GALLON
⊛	17	IG - INDIAN GRASS *Sorghastrum nutans* 8 @ 1 GALLON, 9 @ 3 GALLON
⊕	19	OG - SIDEOATS GRAMA GRASS *Bouteloua curtipendula* 1 GALLON
⊗	31	EG - EASTERN GRAMA GRASS *Tripsacum dactyloides* 1 GALLON
⊘	15	BB - BIG BLUESTEM *Andropogon gerardii* 1 GALLON
⊙	44	LB - LITTLE BLUESTEM *Andropogon scoparius* 1 GALLON
SUBTOTAL:	154	(Reference Sheet L-3 for calculations)

GENERAL NOTES:

1. REQUIREMENT FOR STREETYARD B CANNOT BE MET DUE TO AUSTIN ENERGY UTILITY EASEMENT. POCKETS OF NATIVE LARGE SHRUBS HAVE BEEN SUBSTITUTED IN PLACE OF TREES AS ALTERNATE COMPLIANCE.
2. AUSTIN ENERGY PROHIBITS TREES WITHIN AE EASEMENT. ALL SPACE AVAILABLE FOR PROPOSED TREES HAVE BEEN PLANTED.
3. 3 MEXICAN SYCAMORES ARE PROVIDED IN THE DETENTION POND AS ALTERNATIVE COMPLIANCE TO SATISFY SUBCHAPTER E 2.2.4.

LEGEND	
▭	STREET YARD
H	HERITAGE TREE

DETENTION POND LEGEND	
▨	BG - BUFFALO GRASS Bouteluoadactyloides 1 GALLON

CIRCLE V
Landscape Architecture, LLC
P.O. Box 170822 Austin, Texas 78717
816.565.1021 circlevla.com

PROJECT NUMBER: **CV2417**

CLIENT: **AMC DESIGN GROUP INC.**

PROJECT:

UPTOWN FRONTAGE

2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

ISSUES AND REVISIONS:

NO.	DATE	ISSUE

REGISTERED LANDSCAPE ARCHITECT
JAIME S. SIKS
3096
STATE OF TEXAS

06-13-2025

ISSUE FOR PERMIT

SHEET TITLE:
L-1
LANDSCAPE PLAN

SHEET NUMBER:
23 of 26

SP-2024-0345C

Payment into Tree Fund	
Inches remaining:	348
$200/in	$69,550.00

Urban Forestry Accounting Summary	
Surveyed	
Total Appendix F tree inches surveyed	898.5
Heritage tree inches surveyed	171.5
Non-Appendix F tree inches surveyed	0
Invasive tree inches surveyed	77.5
Removed	
Total Appendix F inches removed	660.0
Heritage tree inches removed	0
Total Non-Appendix F inches removed	0
Invasive inches removed	9
Total Dead, Diseased, or Imminent Hazard (DDI) inches removed	77.5
DDI Appendix F inches removed	77.5
DDI Heritage tree inches removed	31
DDI Non-Appendix F inches removed	0
DDI Invasive inches removed	9
Mitigation	
Total mitigation replacement inches planted	46.5
Total replacement inches planted on site (private trees)	46.5
Total replacement ROW inches planted	0
Private inches owed to Urban Forest Replenishment Fund	0
Public inches owed to UFRF	0
Total non-mitigation inches planted on site	0

LANDSCAPE CALCULATIONS

STREET YARD A — North Shields Drive	REQUIRED		PROVIDED	
TOTAL SITE AREA			49,404	
TOTAL STREET YARD AREA			22,225	
STREET YARD LANDSCAPE (20%)	4,445		4,445	20%
TREES (STREET YARD A)	15		16	
EXISTING TREES CREDIT				
2" DIA. - 8" DIA.	0	x 1	0	
6" DIA. OR GREATER	8	x 4	16	
PROPOSED STREETYARD TREES			0	

STREET YARD B — MoPac Expressway	REQUIRED		PROVIDED	
TOTAL SITE AREA			49,404	
TOTAL STREET YARD AREA			4,393	
STREET YARD LANDSCAPE (20%)	879		879	20%
TREES (STREET YARD B)	8		4	
EXISTING TREES CREDIT				
2" DIA. - 8" DIA.	0	x 1	0	
6" DIA. OR GREATER	1	x 2	2	
PROPOSED STREETYARD TREES			2	

	REQUIRED				PROVIDED
REPLACEMENT TREES					
(ALL NUMBERS REPRESENT QTY OF INCHES	399				51
TOTAL TO BE MITIGATED:					
HERITAGE TREES, 24"+	0	(at 300%)	=	0	
19" AND GREATER, APDX-F TREES	137.5	(at 100%)	=	138	
8" TO 18.9", APDX-F TREES	522.5	(at 50%)	=	261	
INVASIVE OR DEAD	77.5	(at 0%)	=	0	
TOTAL TO BE REPLACED:					
NUMBER AND SIZE OF REPLACEMENT TREE	0	TREES AT 1.5 CAL.	=	0	
NUMBER AND SIZE OF REPLACEMENT TREE	17	TREES AT 3 CAL.	=	51	
SIGNIFICANT SHADE TREES (75% OF TOTAL)	299			51	100%

ISLANDS, MEDIANS AND PENINSULAS	REQUIRED			PROVIDED	
STREET YARD AREA	120	S.F.	>	120	S.F.
NON-STREET YARD AREA	100	S.F.	>	100	S.F.

BUFFERING POINTS - North Shields Drive	REQUIRED	PROVIDED (TOTAL)
	87 POINTS	96 POINTS

	SIZE	QUANTITY		POINTS	PROVIDED
EXISTING TREES	6" OR GREATER	1	x	9 POINTS	9 POINTS
LARGE TREES	3" CAL. MIN.	0	x	9 POINTS	0 POINTS
SMALL TREES	2" CAL. MIN.	0	x	6 POINTS	0 POINTS
LARGE SHRUBS	3 GAL. MIN.	29	x	3 POINTS	87 POINTS
MEDIUM SHRUBS	3 GAL. MIN.	0	x	1 POINT	0 POINTS
SMALL SHRUBS	1 GAL. MIN.	0	x	1 POINT	0 POINTS
DECORATIVE WALL (3' MIN.)		0	x	3 PTS/FT.	0 POINTS
BERM (3' MIN. AT <4:1 SLOPE)		0	x	1 PTS/FT.	0 POINTS

BUFFERING POINTS - MoPac Expressway	REQUIRED	PROVIDED (TOTAL)
	62 POINTS	117 POINTS

	SIZE	QUANTITY		POINTS	PROVIDED
EXISTING TREES	6" OR GREATER	4	x	9 POINTS	36 POINTS
LARGE TREES	3" CAL. MIN.	0	x	9 POINTS	0 POINTS
SMALL TREES	2" CAL. MIN.	0	x	6 POINTS	0 POINTS
LARGE SHRUBS	5 GAL. MIN.	0	x	3 POINTS	0 POINTS
MEDIUM SHRUBS	3 GAL. MIN.	27	x	1 POINT	81 POINTS
SMALL SHRUBS	1 GAL. MIN.	0	x	1 POINT	0 POINTS
DECORATIVE WALL (3' MIN.)		0	x	3 PTS/FT.	0 POINTS
BERM (3' MIN. AT <4:1 SLOPE)		0	x	1 PTS/FT.	0 POINTS

GENERAL NOTES:

1. REQUIREMENT FOR STREETYARD B CANNOT BE MET DUE TO AUSTIN ENERGY UTILITY EASEMENT. POCKETS OF NATIVE LARGE SHRUBS HAVE BEEN SUBSTITUTED IN PLACE OF TREES AS ALTERNATE COMPLIANCE.
2. AUSTIN ENERGY PROHIBITS TREES WITHIN AE EASEMENT. ALL SPACE AVAILABLE FOR PROPOSED TREES HAVE BEEN PLANTED.
3. 3 MEXICAN SYCAMORES ARE PROVIDED IN THE DETENTION POND AS ALTERNATIVE COMPLIANCE TO SATISFY SUBCHAPTER E 2.2.4.

TREE LIST / MITIGATION CALCULATIONS

												Trees Removed						Trees Preserved					
												Heritage	Tree Type Categories					Heritage	Tree Type Categories				
X Trees Removed	Tag#	SPECIES	CAL 1	CAL 2	CAL 3	CAL 4	CAL 5	CAL 6	CAL 7	CAL 8	(=)	HERITAGE 24"+	19+ and Appendix F	19+ and NOT Appendix F	4-18.9" and Appendix F	4-18.9" and NOT Appendix F	INVASIVE OR DEAD	HERITAGE 24"+	19+ and Appendix F	19+ and NOT Appendix F	4-18.9" and Appendix F	4-18.9" and NOT Appendix F	INVASIVE OR DEAD
X	9052	Ashe Juniper Cedar	8								8				8								
	9053	Cedar Elm	15								15										15		
X	9054	Ashe Juniper Cedar	14	11							19.5		19.5										
X	9055	Ashe Juniper Cedar	10	9	8	8	7	6			29		29										
X	9056	Ashe Juniper Cedar	10								10				10								
X	9057	Ashe Juniper Cedar	8								8				8								
X	9058	Ashe Juniper Cedar	9	8							13				13								
X	9059	Ashe Juniper Cedar	8								8				8								
X	9060	Ashe Juniper Cedar	9	8							13				13								
X	9061	Ashe Juniper Cedar	11								11				11								
X	9062	Ashe Juniper Cedar	9								9				9								
X	9063	Ashe Juniper Cedar	10								10				10								
X	9064	Ashe Juniper Cedar	9								9				9								
	9065	Cedar Elm	14								14										14		
X	9066	Ashe Juniper Cedar	8	7							12				12								
X	9067	Ashe Juniper Cedar	8								8				8								
X	9068	Ashe Juniper Cedar	9								9				9								
	9069	Live Oak	20.5	12	11						32							32					
	9070	Live Oak	11								11										11		
	9071	Live Oak	28.5								28.5							28.5					
	9072	Live Oak	13								13										13		
X	9073	Ashe Juniper Cedar	8								8				8								
X	9074	Ashe Juniper Cedar	21								21		21										
X	9075	Ashe Juniper Cedar	14								14				14								
X	9076	Ashe Juniper Cedar	13								13				13								
X	9077	Ashe Juniper Cedar	14	11	7	7					27		27										
X	9078	Ashe Juniper Cedar	10	9	8						19				19								
	9079	Live Oak	29.5								30							29.5					
X	9080	Ashe Juniper Cedar	8								8				8								
	9081	Ashe Juniper Cedar	9	8							13										13		
X	9082	Ashe Juniper Cedar	10	9	7	7					22		22										
X	9083	Ashe Juniper Cedar	8								8				8								
	9084	Live Oak	25								25							25					
	9085	Live Oak	24.5								25							24.5					
X	9086	Ashe Juniper Cedar	9								9				9								
X	9087	Cedar Elm	8								8				8								
X	9088	Cedar Elm	9								9				9								
X	9089	Ashe Juniper Cedar	8								8				8								
X	9090	Ashe Juniper Cedar	8								8				8								
X	9091	Ashe Juniper Cedar	10	6	6	6					19		19										
	9092	Cedar Elm	14								14										14		
X	9093	Live Oak	23.5								23.5					23.5							
X	9094	Live Oak	14								14					14							
X	9095	Ashe Juniper Cedar	10	7							14				14								
X	9096	Ashe Juniper Cedar	8								8				8								
X	9097	Ashe Juniper Cedar	8								8				8								
X	9098	Ashe Juniper Cedar	9								9				9								
X	9099	Ashe Juniper Cedar	9								9				9								
X	9100	Ashe Juniper Cedar	9								9				9								
X	9101	Ashe Juniper Cedar	8								8				8								
X	9102	Ashe Juniper Cedar	12								12				12								
X	9103	Chinaberry	9								9					9							
X	9104	Ashe Juniper Cedar	8	6	6						14				14								
X	9105	Live Oak	31								31					31							
X	9106	Live Oak	19								19				19								
X	9107	Live Oak	18								18				18								
	9108	Live Oak	13	10							18										18		
X	9109	Ashe Juniper Cedar	8								8				8								
X	9110	Ashe Juniper Cedar	9								9				9								
X	9111	Ashe Juniper Cedar	8								8				8								
X	9112	Ashe Juniper Cedar	9								9				9								
X	9113	Ashe Juniper Cedar	12								12				12								
X	9114	Ashe Juniper Cedar	8	8							12				12								
X	9115	Ashe Juniper Cedar	9								9				9								
X	9116	Ashe Juniper Cedar	8								8				8								
X	9117	Ashe Juniper Cedar	9								9				9								
X	9118	Ashe Juniper Cedar	9								9				9								
X	9119	Ashe Juniper Cedar	9								9				9								
X	9120	Ashe Juniper Cedar	13								13				13								
X	9121	Live Oak	12								12				12								
X	9122	Ashe Juniper Cedar	10	9	8						18.5				18.5								
X	9123	Ashe Juniper Cedar	9								9				9								
		TOTAL									972.5												
		Total cal. inch removed per category:										0	137.5	0	522.5	0	77.5	139.5	0	0	96	0	0
		Grand Total Cal. Inches:										660.0						237.5					
		Grand Total Cal. Inches:										897.5											
		Minimum Replacement replace @ %										300%	100%	50%	50%	25%	0%						
		Subtotal Replacement Inches:										0.0	137.5	0.0	261.3	0.0	0.0						
		Total Replacement: (cal. inches)										398.8											

CIRCLE V
Landscape Architecture, LLC
P.O. Box 170822 Austin, Texas 78717
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PROJECT NUMBER: **CV2417**

CLIENT: **AMC DESIGN GROUP INC.**

PROJECT:

UPTOWN FRONTAGE

2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

ISSUES AND REVISIONS:

NO.	DATE	ISSUE

REGISTERED LANDSCAPE ARCHITECT — JAIME S. SIMS — 3096 — STATE OF TEXAS

06-13-2025

ISSUE FOR PERMIT

SHEET TITLE:
L-2
LANDSCAPE TREE MITIGATION AND CALCULATIONS

SHEET NUMBER:
24 of 26

SP-2024-0345C

SEDIMENTATION AND BIO-FILTRATION POND PLANTING CALCULATIONS

SEDIMENTATION POND PLANTING CALCULATIONS

SURFACE AREA OF SEDIMENTATION BASIN = 761 S.F.
TOTAL PLANTINGS REQUIRED (MIN 10% OF SA) = 76 PLANTS REQUIRED

PLANT LIST
LM 2 - LINDHEIMER'S MUHLY @ 1 GAL.
SG 11 - SWITCH GRASS @ 1 GAL.
IG 8 - INDIAN GRASS @ 1 GAL.
OG 10 - SIDEOATS GRAMA GRASS @ 1 GAL.
EG 21 - EASTERN GRAMA GRASS @ 1 GAL.
BB 5 - BIG BLUESTEM @ 1 GAL.
LB 38 - LITTLE BLUESTEM @ 1 GAL.

TOTAL = 95 PLANTS

BIO-FILTRATION PLANTING CALCULATIONS

SURFACE AREA OF BIO-FILTRATION BASIN = 535 S.F.
TOTAL PLANTINGS REQUIRED (MIN 20% OF SA) = 107 PLANTS REQUIRED

PLANT LIST
LM 8 - LINDHEIMER'S MUHLY @ 5 GAL. (EQUAL TO 32 PLANTS)
SG 7 - SWITCH GRASS @ 5 GAL. (EQUAL TO 28 PLANTS)
IG 9 - INDIAN GRASS @ 3 GAL. (EQUAL TO 18 PLANTS)
OG 9 - SIDEOATS GRAMA GRASS @ 1 GAL.
EG 10 - EASTERN GRAMA GRASS @ 1 GAL.
BB 10 - BIG BLUESTEM @ 1 GAL.
LB 6 - LITTLE BLUESTEM @ 1 GAL.

TOTAL = 113 PLANTS

PLANT NOTES
1. CONTAINERIZED PLANTS SHALL BE PLACED BASED ON MATURE SIZE TO ALLOW ROOM FOR GROWTH AND AVOID OVERCROWDING CONDITIONS THAT WILL CAUSE PLANT MORTALITY OR IMPENETRABLE BARRIERS FOR MAINTENANCE PERSONNEL.
2. CONTIGUOUS AREAS OF SOD SHOULD BE PLANTED END TO END, ALLOWING NO BARE SOIL.
3. AT THE TIME OF PLANTING, AN 18" INCH GAP SHOULD BE PROVIDED BETWEEN THE VEGETATIVE BASE (STEMS) OF THE CONTAINERIZED PLANTS AND TURF/GRASS GROUNDCOVER TO ALLOW ROOM FOR GROWTH AND AVOID OVERCROWDING.
4. PLANTS MUST BE ARRANGED CAREFULLY SO THEY SERVE THEIR INTENDED FUNCTIONS.
5. NO PLANTS FROM THE CITY OF AUSTIN'S "NO PLANTING" LIST (ECM 1.6.7.5.C) WILL BE PLANTED IN THE POND.

I, JAIME SIMS, A REGISTERED LANDSCAPE ARCHITECT, CERTIFY THAT THESE PLANS MEET THE REQUIREMENTS OF CHAP 25-5 OF THE LAND DEVELOPMENT CODE.

NOTE: ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ARCHITECT AND ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ARCHITECT AND ENGINEER.

CITY OF AUSTIN TREE AND NATURAL AREA PROTECTION NOTES:

A. DURATION OF TREE PROTECTION

1. INSTALLATION

TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION, AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PROJECT.

2. REMOVAL

TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. ANY PREMATURE REMOVAL OR FAILURE OF TREE PROTECTION CAN LEAD TO CRITICAL ROOT ZONE IMPACTS AS DESCRIBED IN ECM 3.5.2 AND MAY REQUIRE REMEDIAL TREE CARE. IT IS THE PERMIT HOLDER'S RESPONSIBILITY TO AVOID DAMAGE TO PRESERVED TREES WHERE TREE PROTECTION HAS BEEN REMOVED OR NOT INSTALLED.

B. FENCING SPECIFICATIONS

1. MATERIAL REQUIREMENTS

FENCING IS THE PRIMARY METHOD OF TREE PROTECTION. FENCING IS INTENDED TO PREVENT ACCESS TO THE CRITICAL ROOT ZONE. TREE FENCING SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET. FENCING SHALL BE INSTALLED ON STEEL T-POSTS WITH A MAXIMUM SPACING OF 10 FEET BETWEEN THE POSTS. MORE ROBUST OR EXISTING PERMANENT FENCING MAY BE APPROVED AS AN ALTERNATIVE TO CHAIN-LINK FENCING. PLASTIC FENCING MATERIAL SHALL NOT BE USED AS TREE PROTECTION.

2. LOCATION OF FENCING

FENCING SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE OF ALL PRESERVED TREES OR ANY NATURAL AREAS DESIGNATED FOR PRESERVATION. FENCING MUST BE CONTINUOUS AND CREATE A CLOSED, INACCESSIBLE AREA OF ROOT ZONE PROTECTION.

3. MAINTENANCE OF FENCED AREAS

FENCING SHALL NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THERE SHALL BE MINIMAL SLACK OR SAGGING IN THE FENCE. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER.

4. EXCEPTIONS TO FENCING REQUIREMENTS

ANY SECTION OF THE CRITICAL ROOT ZONE NOT PROTECTED BY FENCING OR COVERED BY EXISTING HARDSCAPE REQUIRES MULCH (SEE ECM 3.6.1.C). EXCEPTIONS TO THE CRZ FENCING REQUIREMENT SHALL BE JUSTIFIED BY SITE-SPECIFIC CONSIDERATIONS. SOME EXCEPTIONS ARE FOR AREAS:

i. THAT HAVE BEEN APPROVED FOR IMPACTS, SUCH AS THE FOOTPRINT OF A BUILDING;

ii. COVERED BY EXISTING HARDSCAPE, SUCH AS A PATIO OR DRIVEWAY (NOTE: IF HARDSCAPE IS REMOVED THE EXPOSED SOIL BENEATH BECOMES SUBJECT TO TREE PROTECTION REQUIREMENTS);

iii. REQUIRED FOR ACCESS TO THE WORK AREA; AND

iv. APPROVED FOR USE AS A STAGING AREA.

WITHIN THE HALF CRZ, FENCING REQUIREMENTS WILL ONLY BE MODIFIED FOR EXISTING HARDSCAPE OR TO ALLOW AN ACCESS PATH ADJACENT TO APPROVED STRUCTURES (SEE ECM 3.6.1.C.3). CRZ FENCING MODIFICATIONS SHALL BE SHOWN ON THE DEVELOPMENT PLANS OR APPROVED BY THE INSPECTOR.

C. MULCH SPECIFICATIONS

1. MATERIAL REQUIREMENTS

MULCH IS REQUIRED IN ANY SECTION OF THE CRITICAL ROOT ZONE THAT IS NOT PROTECTED BY FENCING OR UNDER EXISTING HARDSCAPE AND HAS NOT BEEN APPROVED FOR IMPACTS (SUCH AS BUILDING FOOTPRINT OR DRIVEWAY). MULCH USED FOR TREE PROTECTION SHALL BE ANY NATURAL WOOD TYPE. ROUGH SINGLE GRIND MULCH, WHICH RESISTS COMPACTION BETTER THAN DOUBLE GRIND AND IS USUALLY LESS EXPENSIVE IS PREFERRED BUT ANY NATURAL WOOD TYPE IS ACCEPTABLE. DYED MULCH OR MULCH MADE FROM NON-BIOLOGICAL MATERIAL SUCH AS RUBBER OR STONE SHALL NOT BE USED AS TREE PROTECTION.

2. DEPTH OF MULCH

MULCH SHALL BE INSTALLED TO A MINIMUM DEPTH OF 8 INCHES. MULCH MAY NEED TO BE PERIODICALLY REPLENISHED DEPENDING ON THE DURATION OF THE PROJECT. SINCE EXCESSIVE MULCH IS HARMFUL TO TREES, MULCH SHALL NOT BE INSTALLED TO A DEPTH GREATER THAN 12 INCHES. MULCH USED FOR TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT. MULCH SHALL NEVER BE PILED AGAINST TREE TRUNKS.

3. MULCH WITHIN THE HALF CRZ

WHEN MULCH IS USED AS ALTERNATIVE PROTECTION WITHIN THE HALF CRITICAL ROOT ZONE IT SHALL BE TOPPED BY DECKING TO PROVIDE ADDITIONAL PROTECTION AGAINST COMPACTION.

4. EXCEPTIONS TO MULCH REQUIREMENTS

MULCH IS NOT REQUIRED WITHIN FENCED SECTIONS OF THE CRITICAL ROOT ZONE WHERE EXISTING TURF OR GROUND COVER IS PRESENT AND UNDISTURBED. SECTIONS OF BARE OR DISTURBED DIRT WITHIN THE FENCED CRZ SHALL BE COVERED BY A THREE-INCH LAYER OF MULCH.

D. TRUNK AND BRANCH WRAPPING

1. TRUNK WRAP

WRAPPING IS NOT REQUIRED OR RECOMMENDED FOR MOST PRESERVED TREES. WHEN NECESSARY, TRUNK WRAP SHALL BE INSTALLED TO PROTECT THE FIRST 8 FEET OF TREE HEIGHT WHENEVER PROTECTIVE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OR WHEN FENCING CANNOT BE PLACED AROUND THE TREE. THIS WILL USUALLY ONLY BE THE CASE WHEN EXISTING HARDSCAPE PROVIDES HALF CRITICAL ROOT ZONE PROTECTION OR A STRUCTURE HAS BEEN APPROVED FOR CONSTRUCTION WITHIN THE HALF CRZ USING AN EXISTING HISTORICAL FOOTPRINT. THESE CIRCUMSTANCES CAN RESULT IN FENCING CLOSER TO THE TRUNK THAN WOULD OTHERWISE BE ALLOWED. BECAUSE TREES VARY IN FORM, 8 FEET IS A GENERAL GUIDELINE RATHER THAN AN ABSOLUTE STANDARD. MORE OR LESS HEIGHT OF PROTECTION MAY BE APPROPRIATE.

2. BRANCH WRAP

BRANCH WRAP MAY BE REQUIRED WHEN A MAJOR LIMB IS OVER AN ACCESS ROUTE OR CLOSE TO A PROPOSED STRUCTURE. PROXIMITY OF SCAFFOLDING OR OTHER NECESSARY CONSTRUCTION EQUIPMENT NEEDS TO BE CONSIDERED.

3. MATERIAL REQUIREMENTS

DIMENSIONAL LUMBER, SUCH AS 2X4S, SHALL BE ORIENTED PARALLEL TO AND CONTINUOUSLY AROUND THE TRUNK OR BRANCH AND SECURED IN PLACE BY TIGHTENING WIRES RUN AROUND THE OUTSIDE OF THE LUMBER. WRAPPING SHALL NEVER BE SECURED DIRECTLY TO THE TREE BY SCREWS OR OTHER MEANS. WRAPPING SHALL BE LOOSENED AND RETIGHTENED EVERY SIX MONTHS TO PREVENT THE TREE FROM BEING DAMAGED AS IT GROWS OUTWARDS.

E. PROTECTION FOR NATURAL AREAS

NATURAL AREAS INDICATED FOR PRESERVATION ON PLANS SHALL BE PROTECTED BY FENCING THAT MEETS THE STANDARDS FOR TREE FENCING IN THIS SECTION. ALTERNATIVE PROTECTION ALLOWED FOR TREES IS NOT ACCEPTABLE FOR NATURAL AREA PRESERVATION. FENCING SHALL BE INSTALLED AT THE LIMIT OF CONSTRUCTION LINE SHOWN ON PLANS.

CITY OF AUSTIN STANDARD PLAN NOTES:

BEFORE CONSTRUCTION:

1. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED PER ECM 3.6.1.
2. TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION. REFER TO ECM 3.6.1.A. FENCING FOR TREE PROTECTION SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET AND SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE EXCEPT AS ALLOWED IN ECM 3.6.1.B.4.
3. UNFENCED SECTIONS OF THE CRITICAL ROOT ZONE SHALL BE COVERED WITH MULCH AT A MINIMUM DEPTH OF 8 INCHES AND A MAXIMUM DEPTH OF 12 INCHES PER ECM 3.6.1.C. WHERE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OF A PRESERVED TREE, TRUNK WRAPPING SHALL BE INSTALLED PER ECM 3.6.1.D.
4. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED SO AS NOT TO CAUSE IMPACTS THAT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.3.D.

DURING CONSTRUCTION:

1. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT DOES NOT EXCEED PRESERVATION CRITERIA FOR THE TREES TO REMAIN. REFER TO ECM 3.5.2 A.
2. FENCING MAY NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER. REFER TO ECM 3.6.1.B.3.
3. PRUNING SHALL BE IN COMPLIANCE WITH THE CURRENT ANSI A300 STANDARD FOR TREE CARE.

AFTER CONSTRUCTION:

1. TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. REFER TO ECM 3.6.1.A.
2. LANDSCAPE INSTALLATION WITHIN THE CRZ OF PRESERVED TREES, INCLUDING IRRIGATION, SOIL AND PLANTINGS, SHALL NOT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.2.
3. DOCUMENTATION OF TREE WORK PERFORMED MUST BE PROVIDED TO INSPECTOR PER ECM APPENDIX P-6. THIS LIST IS NOT EXHAUSTIVE. REFER TO APPROPRIATE ECM SECTIONS FOR FULL REQUIREMENTS.

SITE DEVELOPMENT PERMIT - IRRIGATION NOTES

AUTOMATIC IRRIGATION SYSTEMS SHALL COMPLY WITH TCEQ CHAPTER 344, AS WELL AS THE FOLLOWING REQUIREMENTS:

1.THESE REQUIREMENTS SHALL BE NOTED ON THE SITE DEVELOPMENT PERMIT AND SHALL BE IMPLEMENTED AS PART OF THE LANDSCAPE INSPECTION:

A. THE SYSTEM MUST PROVIDE A MOISTURE LEVEL ADEQUATE TO SUSTAIN GROWTH OF THE PLANT MATERIALS;

B. THE SYSTEM DOES NOT INCLUDE SPRAY IRRIGATION ON AREAS LESS THAN TEN (10) FEET WIDE (SUCH AS MEDIANS, BUFFER STRIPS, AND PARKING LOT ISLANDS);

C. CIRCUIT REMOTE CONTROL VALVES HAVE ADJUSTABLE FLOW CONTROLS;

D. SERVICEABLE IN-HEAD CHECK VALVES AREA ADJACENT TO PAVED AREAS WHERE ELEVATION DIFFERENCES MAY CAUSE LOW HEAD DRAINAGE;

E. A MASTER VALVE INSTALLED ON THE DISCHARGE SIDE OF THE BACKFLOW PREVENTER;

F. ABOVE-GROUND IRRIGATION EMISSION DEVICES ARE SET BACK AT LEAST SIX (6) INCHES FROM IMPERVIOUS SURFACES;

G. AN AUTOMATIC RAIN SHUT-OFF DEVICE SHUTS OFF THE IRRIGATION SYSTEM AUTOMATICALLY AFTER MORE THAN A ONE-HALF INCH (") RAINFALL; AND

H. NEWLY PLANTED TREES SHALL HAVE PERMANENT IRRIGATION CONSISTING OF DRIP OR BUBBLERS.

2.THE IRRIGATION INSTALLER SHALL DEVELOP AND PROVIDE AN AS-BUILT DESIGN PLAN TO THE CITY AT THE TIME THE FINAL IRRIGATION INSPECTION IS PERFORMED; A UNLESS FISCAL SECURITY IS PROVIDED TO THE CITY FOR THE INSTALLATION OF THE SYSTEM, IT MUST BE OPERATIONAL AT THE TIME OF THE FINAL LANDSCAPE INSPECTION.

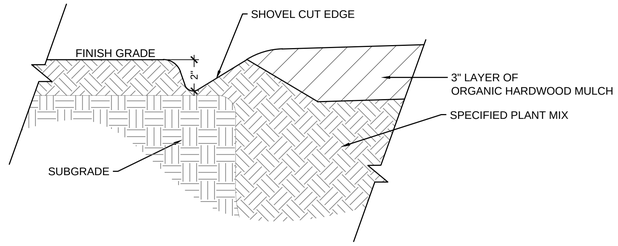
3.THE IRRIGATION INSTALLER SHALL ALSO PROVIDE EXHIBITS TO BE PERMANENTLY INSTALLED INSIDE OR ATTACHED TO THE IRRIGATION CONTROLLER, INCLUDING: A.A LAMINATED COPY OF THE WATER BUDGET CONTAINING ZONE NUMBERS, PRECIPITATION RATE, GALLONS PER MINUTE AND THE LOCATION OF THE ISOLATION VALVE; AND AN AS BUILT PLAN.

4.THE IRRIGATION INSTALLER SHALL PROVIDE A REPORT TO THE CITY ON A FORM PROVIDED BY AUSTIN WATER CERTIFYING COMPLIANCE WITH SUBSECTION 1. WHEN THE FINAL PLUMBING INSPECTION IS PERFORMED BY THE CITY.

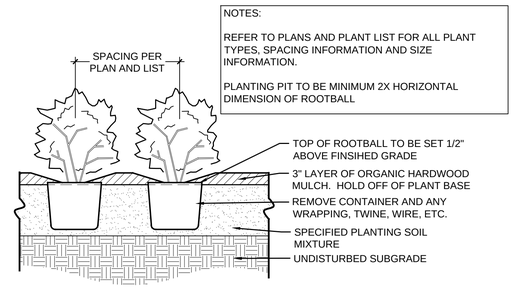
5. SUPPLEMENTAL IRRIGATION IS REQUIRED FOR NEWLY PLANTED, REQUIRED LANDSCAPE PLANTS PER LDC 25-8-1008, ECM 2.4.6, AND ECM APPENDIX O.

DROUGHT NOTES:

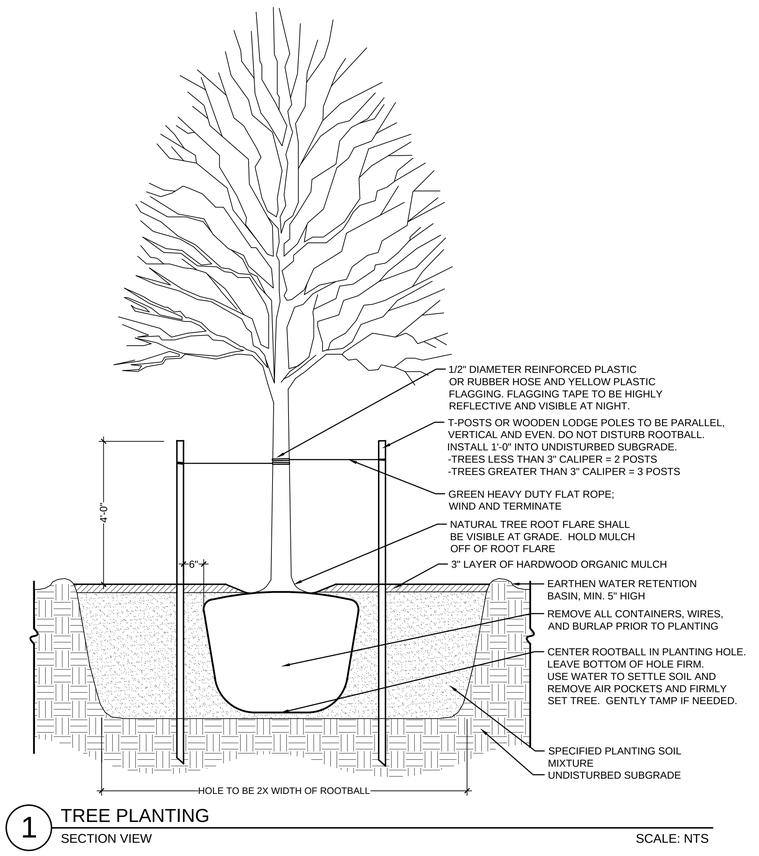
1. IF ESTABLISHING VEGETATION DURING ANY STAGE OF DROUGHT, SECTION 6-4-30 MAY REQUIRE A VARIANCE. CONTACT AUSTIN WATER CONSERVATION STAFF AT WATERUSECOMPVAR@AUTINTEXAS.GOV OR CALL (512) 974-2199.
2. FINISHED ELEVATION FOR PARKING-LOT ISLANDS, MEDIANS, PENINSULAS, AND SIMILAR LANDSCAPE AREAS MUST BE AT LEAST SIX (6) BELOW THE FINISHED CURB ELEVATION TO ALLOW FOR PLACEMENT OF SIX (6) INCHES OF TOPSOIL PER ECM 1.4.7
3. ALL LANDSCAPED AREAS ARE TO BE PROTECTED BY 6-INCH WHEEL CURBS, WHEELSTOPS OR OTHER APPROVED BARRIERS
4. AS PER ECM 2.4.7. [LDC 25-2-1004(A), ECM 2.4.7(A)]
5. THE OWNER WILL CONTINUOUSLY MAINTAIN THE REQUIRED LANDSCAPING IN ACCORDANCE WITH LDC 25-2-984.



3 SHOVEL CUT EDGE
SECTION VIEW — SCALE: NTS



2 SHRUB PLANTING
SECTION VIEW — SCALE: NTS



1 TREE PLANTING
SECTION VIEW — SCALE: NTS

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PROJECT:

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ISSUES AND REVISIONS:

NO.	DATE	ISSUE

REGISTERED LANDSCAPE ARCHITECT — JAIME S. SIMS — 3096 — STATE OF TEXAS

06-13-2025

ISSUE FOR PERMIT

SHEET TITLE:
L-3
LANDSCAPE DETAILS AND NOTES

SHEET NUMBER:
25 of 26

SP-2024-0345C

SUBCHAPTER E DESIGN STANDARDS:

ARTICLE 3.2 - GLAZING & FACADE RELIEF REQUIREMENTS

PRIMARY FACADE:

SOUTH	ACTUAL:		REQUIRED:
GROSS WALL AREA	1036.37 SF		
GLAZING AND ARTICULATION (BELOW 10')	484.29 SF	(46.7%)	40%

SECONDARY FACADE:

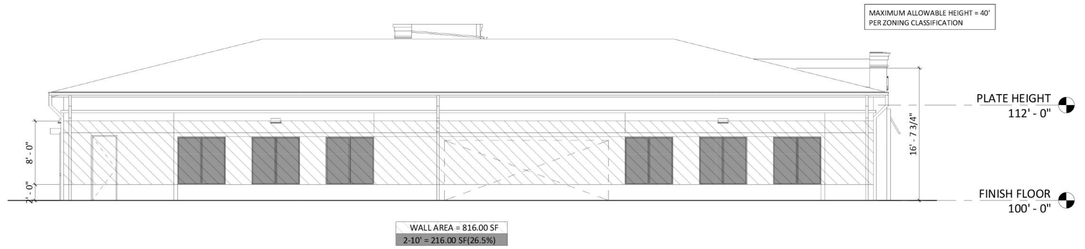
WEST	ACTUAL:		REQUIRED:
GROSS WALL AREA	730.67 SF		
GLAZING AND ARTICULATION (BETWEEN 2'-10')	254.00 SF	(34.8%)	25%

EAST	ACTUAL:		REQUIRED:
GROSS WALL AREA	730.67 SF		
GLAZING AND ARTICULATION (BETWEEN 2'-10')	288.38 SF	(39.5%)	25%

EXEMPT FACADE: NORTH FACADE

SUBCHAPTER E, SECTION 3.2.2 -

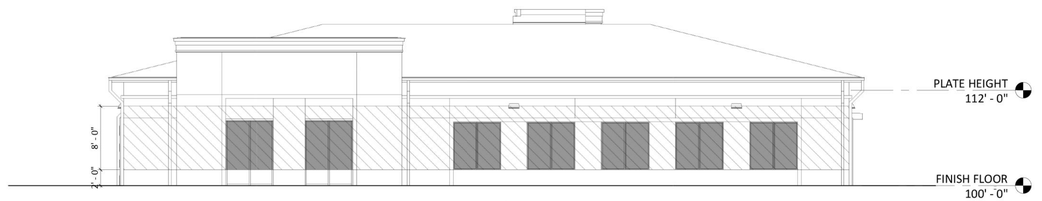
ONE FAÇADE SHALL BE EXEMPT FROM GLAZING AND FAÇADE RELIEF REQUIREMENTS. THE EXEMPT FAÇADE CANNOT FACE A PUBLIC STREET OR INTERNAL CIRCULATION ROUTE.



4 **NORTH ELEVATION - CALCS**
1/8" = 1'-0"



3 **EAST ELEVATION - CALCS**
1/8" = 1'-0"



2 **WEST ELEVATION - CALCS**
1/8" = 1'-0"

NORTH SHIELDS DRIVE - PRIMARY FACADE



1 **SOUTH ELEVATION - CALCS**
1/8" = 1'-0"

FRAMEWORKARCHS.COM

FRAMEWORK | ARCHITECTS
1824 E OLTORF ST., SUITE 350 | AUSTIN TX, 78741

UPTOWN FRONTAGE
SHELL MEDICAL OFFICE BUILDING
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

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THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF ARCHITECT:
JEREMY KOOMLER
06.10.2025
100% B&P
ELEVATIONS AND SUBCHAPTER E

SHEET: XXXX

PROJECT NO: 23024
DATE: 06.10.2025
PROJECT MGR: JK

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 3030036
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

Thrower Design
P.O. BOX 41957 AUSTIN, TEXAS 78704 • (512) 476-4456
LAND PLANNERS

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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE
OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

ARCHITECTURAL ELEVATIONS

SP-2024-0345C

Attachment G

G.0 Inspection, Maintenance, Repair and Retrofit Plan

G.1.1 The owner is required to inspect the water quality controls at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of the water quality controls and appurtenances shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches 6 inches.

G.1.2 Sediment Removal
Remove sediment from the inlet structure and sedimentation chamber when sediment buildup fills the 20% volume allocated for sediment accumulation, or when the proper functioning of inlet and outlet structures is impaired. Sediment should be cleared from the inlet structure at least every year, and from the sedimentation basin at least every 5 years. Silt accumulated on the surface of the filter media should be removed when it has reached a depth of about 0.5 feet or the drainage time has increased to more than 48 hours.

G.1.3 Cleaning of the Underdrain
The underdrain shall be cleaned using mechanical equipment or fire hoses to remove the sediment buildup within the pipes. Cleanouts will be installed as per the construction plans to accommodate the cleaning of every drain line. This cleaning shall be on an as needed basis to maintain design drawdown time.

G.1.4 Vegetation Inspection
Inspection of the vegetation shall be biweekly during the first growing season by inspecting vegetation until 95% vegetative cover is established. Semi-Annually remove and replace dead or diseased vegetation that is considered beyond treatment. Treat all diseased trees and shrubs mechanically or by hand depending on the insect or disease infestation. In late winter trim bunch grasses, mow turf grasses and harvest other types of vegetation according to the recommendations in the planting specifications. Adhere to Section 1.6.2.F of the City of Austin *Environmental Criteria Manual*. In the spring remove previous mulch layer and apply new mulch layer by hand once every two to three years.

G.1.5 Media Maintenance
Check for accumulated sediments on a monthly basis. Remove as needed. Remove debris and accumulated on a quarterly basis. Replace soil media in void areas caused by settlement and repair eroded areas. Remulch by hand any void areas. Semi-annually: lightly scarify soil with hand cultivator. If standing water remains for greater than 96 hours, remove top layer of sediment, mulch and potentially vegetation and de-compact soil by scarification and replace mulch and disturbed vegetation.

G.1.6 Debris and Litter Removal
Debris and litter will accumulate near the sedimentation basin outlet device and should be removed during regular mowing operations and inspections. Particular attention should be paid to floating debris that can eventually clog the control device or riser.

G.1.7 Mowing
Grass areas in and around sedimentation basins must be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

G.2.0 Engineer's Certification of this Inspection, Maintenance, Repair and Retrofit Plan

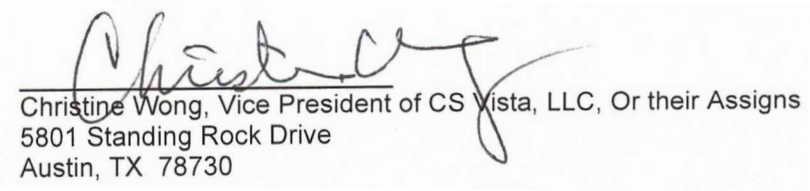
Chris McComb, P.E.
AMC Design Group, Inc.
PO Box 303086
Austin, TX 78703
512-512-2911



06/19/2025

G.3.0 Responsible Party

The person responsible for maintenance of water quality controls:



Christine Wong, Vice President of CS Vista, LLC, Or their Assigns
5801 Standing Rock Drive
Austin, TX 78730

Sewage Collection System Application

For

Uptown Frontage Commercial Site Development

2900 North Shields Drive
Austin, Texas 78727

Submitted to:
Texas Commission on Environmental Quality
Austin Regional Office

June 19, 2025



This report is released under the authority of
Christopher McComb, P.E., on June 19, 2025

AMC Design Group, Inc.
P.O. Box 303086
Austin, Texas 78703

Tel 512.385.2911
Texas Engineering Firm Registration No. F-1708

Sewage Collection System Application
Table of Contents

Section 1	Application Cover Page (TCEQ-20705) Core Data Form (TCEQ-10400) Agent Authorization Form (TCEQ-0599) Application Fee Form (TCEQ-0574)
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Section 3	Geologic Assessment (TCEQ-0585) Form 0585 Attachments
Section 4	Organized Sewage Collection System Plan Application Form (TCEQ-0582) Form 0582 Attachments
Section 5	Temporary Stormwater Section (TCEQ-0602) Form 0602 Attachments

Section 1

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: Uptown Frontage						**2. Regulated Entity No.:**			
3. Customer Name: CS Vista, 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):**		1.134 acres	
9. Application Fee:	$4,650.00		**10. Permanent BMP(s):**			Yes			
11. SCS (Linear Ft.):	87		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Travis		**14. Watershed:**			Walnut 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.)	___	_1_	___
Region (1 req.)	___	_1_	___
County(ies)	___	_1_	___
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	_1_Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge ___New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Christopher B. McComb, P.E.
Print Name of Customer/Authorized Agent
 6-19-25
Signature of Customer/Authorized Agent Date

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

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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)	06/29/2025

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

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

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
CS Vista, 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)*
803034388	32067381106	83-0783504	

11. Type of Customer:

☐ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☒ Other: limited liability company

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 ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:	5801 Standing Rock Drive						
	City	Austin	**State**	TX	**ZIP**	78730	**ZIP + 4**

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	christine@texas2020.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(512) 573-5030		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

Uptown Frontage

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	2900 North Shields Drive							
	City	Austin	**State**	TX	**ZIP**	78727	**ZIP + 4**	
24. County	Travis							

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

25. Description to Physical Location:	Property is located approximately 0.5 miles north of Parmer Lane on the MOPAC northbound frontage road, also known as Burnet Road, at the intersection of North Shields Drive and Burnet Road.

26. Nearest City	State	Nearest ZIP Code
Austin	TX	78727

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

27. Latitude (N) In Decimal:	30.428		28. Longitude (W) In Decimal:	-97.701	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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)
6512		621111	

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

Commercial building for medical offices.

34. Mailing Address:	**2900 North Shields Drive**							
	City	**Austin**	**State**	**TX**	**ZIP**	**78727**	**ZIP + 4**	
35. E-Mail Address:	**christine@texas2020.com**							

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(512) 573-5030		( ) -

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

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

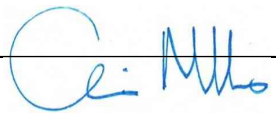
SECTION IV: Preparer Information

40. Name:	Christopher B McComb, P.E.	**41. Title:**	Engineer

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512 **)** 385-2911		**( )** -	chris@amcdesigngroup.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:	AMC Design Group, Inc.	**Job Title:**	President	
Name *(In Print):*	Christopher B. McComb, P.E.		**Phone:**	**(** 512 **)** 385- **2911**
Signature:			**Date:**	6/19/2025

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

I, Christine Wong
Print Name

Vice President of CS Vista, LLC

have authorized Chris McComb, P.E.
Print Name of Agent/Engineer

of AMC Design Group, Inc.
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Christine W

Applicant's Signature

6/17/2025

Date

THE STATE OF TEXAS §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared Christine Wong known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 17 day of June, 2025.

Zachary H Kasper

NOTARY PUBLIC

Zachary H Kasper

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: May 20, 2028

NOTARY PUBLIC STATE OF TEXAS

ZACHARY H KASPER
Notary ID #134902251
My Commission Expires
May 20, 2028

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Uptown Frontage
Regulated Entity Location: 2900 North Shields Drive, Austin, TX 78727
Name of Customer: CS Vista, LLC
Contact Person: Chris McComb, P.E. (Agent) Phone: 512-385-2911
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:

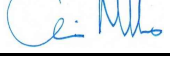
☒ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ 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	1.134 Acres	$ 4,000.00
Sewage Collection System	87 L.F.	$ 650.00
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: 

Date: 6/16/25

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

Section 2

General Information Form

Texas Commission on Environmental Quality

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

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

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

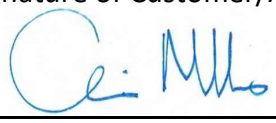
Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 6/19/25

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Uptown Frontage
2. County: Travis
3. Stream Basin: Walnut Creek
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

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

7. Customer (Applicant):

Contact Person: Christine Wong
Entity: CS Vista, LLC
Mailing Address: 5801 Standing Rock Drive
City, State: Austin, TX Zip: 78730
Telephone: 512-573-5030 FAX: _____
Email Address: christine@texas2020.com

8. Agent/Representative (If any):

Contact Person: Christopher McComb, P.E.
Entity: AMC Design Group, Inc.
Mailing Address: PO Box 303086
City, State: Austin, TX Zip: 78703
Telephone: 512-385-2911 FAX: _____
Email Address: chris@amcdesigngroup.com

9. Project Location:

☒ The project site is located inside the city limits of Austin.
☐ 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.

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

The property is located at 2900 North Shields Drive, which is on the NB frontage of Burnet Road (MOPAC frontage road), south of Scofield Ridge Parkway and north of Parmer Lane in Austin, Texas.

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

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

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

13. ☒ **The TCEQ must be able to inspect the project site or the application will be returned**. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment. The site is fenced and has a padlock on the gate. Please contact applicant or engineer/agent listed above for the site to be unlocked.

☐ Survey staking will be completed by this date: _____

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

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

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

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

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

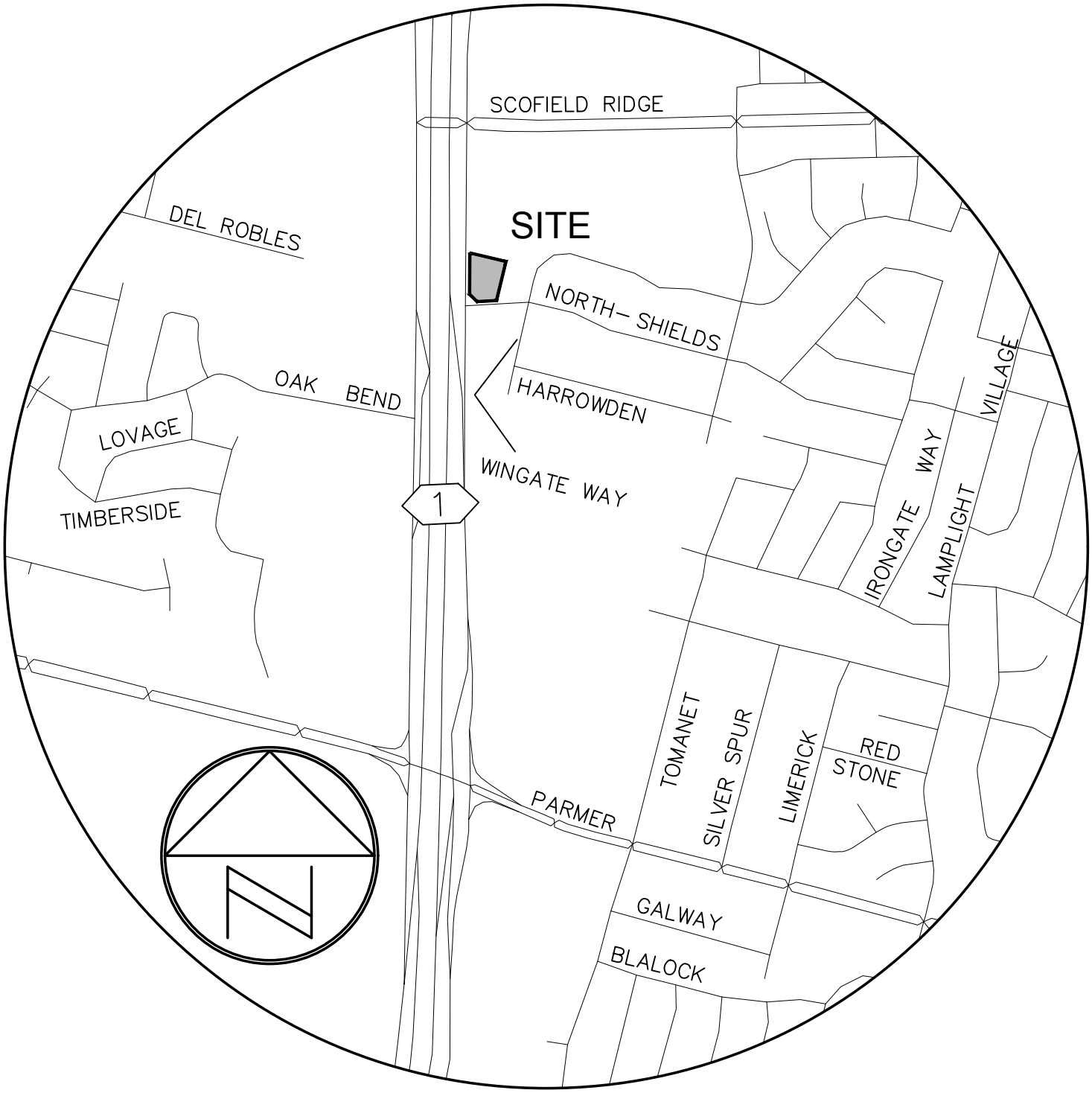
20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies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

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

Attachment A

A.0 Road/Location Map

2900 NORTH SHIELDS DRIVE, AUSTIN TX 78727



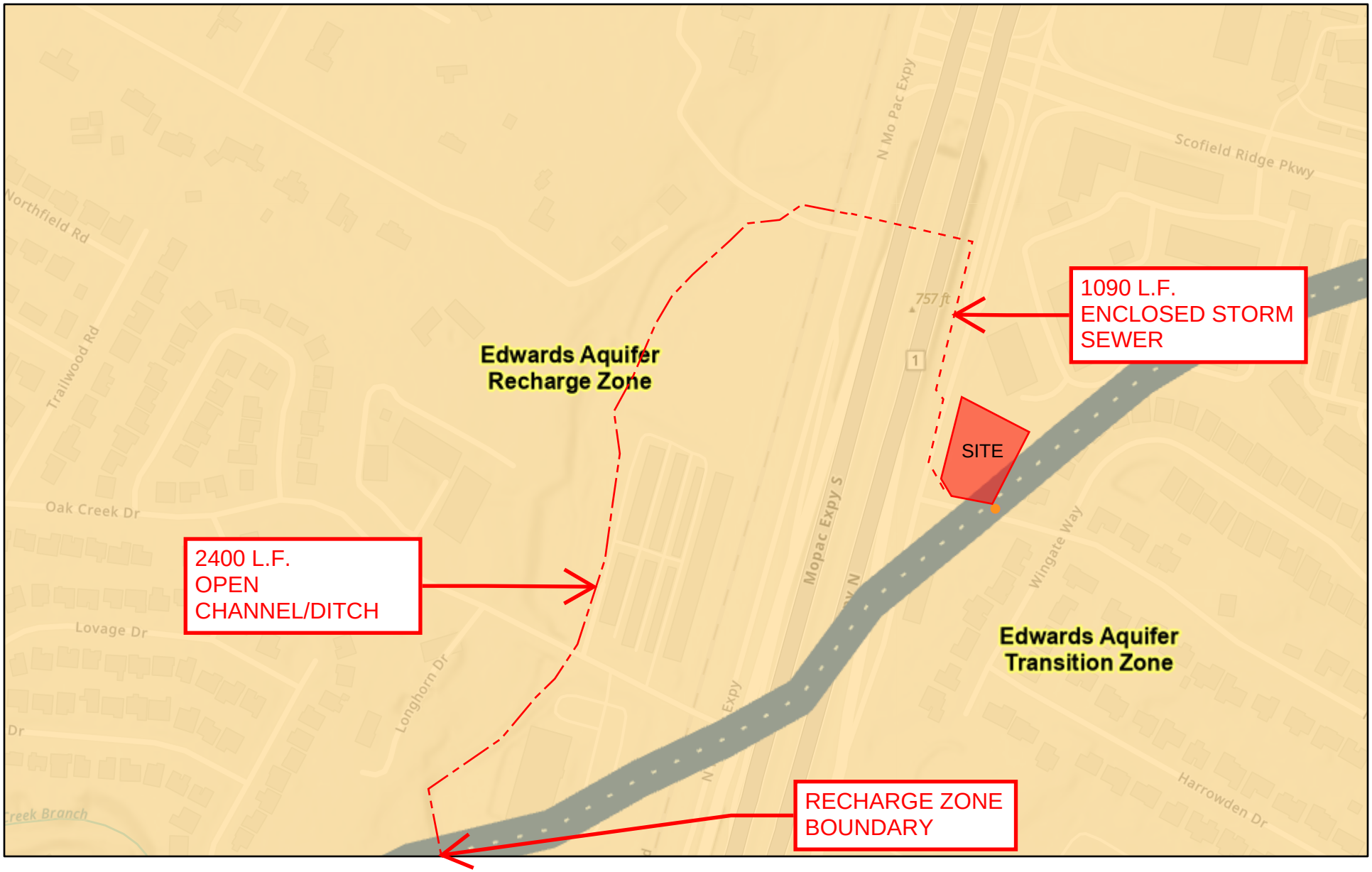
LOCATION MAP

N.T.S.

Attachment B

B.0 USGS/EDWARDS RECHARGE ZONE MAP

2900 North Shields Drive



6/17/2025, 3:25:02 PM

- ArcGIS World Geocoding Service
- TCEQ_EDWARDS_OFFICIAL_MAPS
- 7.5 Minute Quad Grid
- TX Counties
- City/Place
- Edwards Aquifer Boundary central line
- Edwards Aquifer Boundary
- Edwards Aquifer Label
- World_Hillshade

1:4,800

0 195 390 780 ft

0 55 110 220 m

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, TCEQ, Sources: Esri, Maxar,

Attachment C

C.0 Project Description

This project description incorporates all requirements for the Uptown Frontage project, a small commercial Water Pollution Abatement Plan submittal. The owner's intentions for the proposed development of the land encompassed within the 1.134 acre site include the construction of a new single story medical office building totaling 7180 s.f. The construction shall be on Lot 1, Block A of the Uptown Frontage Subdivision recorded as Document No. 202400141 of the Official Public Records of Travis County, Texas. Construction on the property will include new pavement totaling 16,992 s.f. for 36 parking spaces, proposed site utility improvements, drainage improvements, a proposed public wastewater extension, and related site construction. The property is undeveloped and undisturbed and located in Travis County. The existing site has 0.0 percent impervious cover. After the addition of these improvements, the site will be developed to 50.1 percent impervious cover.

The property is bounded by North Shields on the south, MOPAC Expressway (Burnet Road) on the west, multi-family to the north, and residential property to the east. R.O.W. was dedicated with a recent subdivision plat so no additional R.O.W. is required for this development. The property exists totally within the Walnut Creek Watershed and the Edwards Aquifer Recharge Zone. Refer to the construction documents, Drainage Plan and Calculations, for all drainage calculations and maps.

The property is irregular in shape with a high point located at the northeast corner of the tract, and drainage within the property flows to the southwest towards the North Shields and MOPAC frontage road right of ways. This study includes a 1.13-acre drainage area with negligible off-site drainage since the multi-family property to the north is fully developed with their own on-site stormwater management. The off-site area is shown as subbasin OS-1. The junction where drainage area reaches the southwest property corner is the analysis point for the drainage study. Drainage in the North Shields R.O.W. is captured in an existing curb inlet adjacent to the site. Drainage in the MOPAC frontage road (TxDOT R.O.W.) sheet flows across the pavement to the west, then drains into a roadside ditch then to an existing area inlet approximately 75 feet west of the northwest property corner. Once developed, the improvements in the proposed drainage areas will drain via sheet flow and on-site storm sewers to the proposed stormwater management ponds which include an on-site partial sedimentation/bio-filtration pond and on-site detention. Adjacent storm sewers were installed as part of the north MOPAC extension, and design included the site area of this property. The outfall from the proposed detention pond will tie into the existing storm sewer immediately adjacent to the pond.

The drainage area of the water quality pond is 0.79 acres and the pond will provide treatment for all of the site's developed area. Drainage from the proposed water quality pond will be tied into the on-site storm sewer and then drain to the existing public storm sewer located along the southwest property line. From there the runoff flows in a concrete storm sewer approximately 1090 l.f. north then northwest across the MOPAC (Burnet Road) ROW to an open channel, then southwest a total of 2400 l.f. to the boundary of the Recharge Zone.

Section 3

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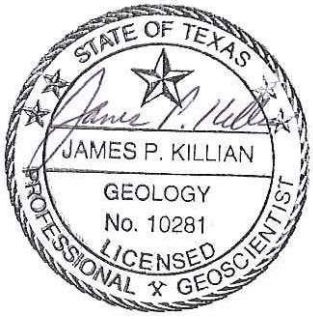
GEOLOGIC ASSESSMENT
APPROXIMATELY 1.15-ACRE CS VISTA COMMERCIAL TRACT
MOPAC SERVICE ROAD AND NORTH SHIELDS DRIVE
AUSTIN, TRAVIS COUNTY, TEXAS
HJN 23317 GA

PREPARED FOR:

THROWER DESIGN
AUSTIN, TEXAS

PREPARED BY:

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



JANUARY 2024

1507 S Interstate 35 • Austin, Texas 78741-2502 • 512.328.2430 • www.horizon-esi.com
A Branch of LJA Environmental Services, LLC • TBPG Firm No. 50679

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TABLE OF CONTENTS

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II. ATTACHMENTS:

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B STRATIGRAPHIC COLUMN
C DESCRIPTION OF SITE GEOLOGY
D SITE GEOLOGIC MAP
E SUPPORTING INFORMATION
F ADDITIONAL SITE MAPS
G SITE PHOTOGRAPHS

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

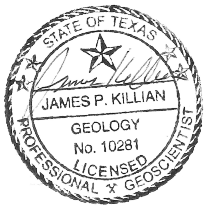
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

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

Date: 2 January 2024 Fax: 512-328-1804

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

Signature of Geologist:



Regulated Entity Name: Approximately 1.15-acre CS Vista Commercial Tract; MoPac Service Road and North Shields Drive, Austin, Travis County, Texas

Project Information

1. Date(s) Geologic Assessment was performed: 6 December 2023
2. Type of Project:
   - ☒ WPAP
   - ☒ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Eckrant and Speck soils, 0-2% slopes (TcA)	D	0.67

Soil Name	Group*	Thickness(feet)

** Soil Group Definitions (Abbreviated)*

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

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

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

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

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

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

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

   Applicant's Site Plan Scale: 1" = 300'
   Site Geologic Map Scale: 1" = 300'
   Site Soils Map Scale (if more than 1 soil type): 1" = 300'

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.
   ☐ Other method(s). Please describe method of data collection: _____

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

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

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

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

Administrative Information

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

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ATTACHMENT A

GEOLOGIC ASSESSMENT TABLE

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

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ATTACHMENT B

STRATIGRAPHIC COLUMN

Geologic Unit	Hydrologic Unit	Approx. Thickness at Project Site (ft)	Elevation (ft msl)	Depth (ft)
			778	0
Buda Limestone (Kbu)	Edwards Aquifer	26		
			752	26
Del Rio Clay & Georgetown Formation, undivided (Kdg)	Edwards Aquifer	130		
			622	156

Note: Unit elevation and thickness given with respect to a ground surface elevation of 778 feet near the northeastern edge of the subject site.

Horizon™ Environmental Services

Date:	12/08/2023
Drawn:	TED
HJN NO:	23317.001 GA

Attachment B
Stratigraphic Column
CS Vista Commercial Tract
Austin, Travis County, Texas

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

S:\Sectors\Environmental\HES_Filing_Master\Projects\2023\23317--CS_Vista_Commercial_Tract\Graphics\23317-001GA_05A_Strat.mxd

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Environmental Services

ATTACHMENT C

DESCRIPTION OF SITE GEOLOGY

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

A geologic assessment of approximately 1.15 acres located at MoPac Service Road and North Shields Drive, Austin, Travis County, Texas, was conducted pursuant to Texas rules for regulated activities in the Edwards Aquifer Recharge Zone (30 TAC 213). The subject site consists of undeveloped woodlands. Assessment findings were used to develop recommendations for site construction measures intended to be protective of water resources at the subject site and adjacent areas.

The entire subject site is located within the Edwards Aquifer Recharge Zone (EARZ), as defined by the Texas Commission on Environmental Quality (TCEQ). The EARZ occurs where surface water enters the subsurface through exposed limestone bedrock containing faults, fractures, sinkholes, and caves.

The subject site is completely underlain by Buda Limestone (Kbu) (UT-BEG, 1995), which has an estimated maximum thickness of about 26 feet thick.

No naturally occurring geologic features or man-made features were identified at this site. Further information pertaining to the subject site is presented in the following Attachments D, E, and F. Photographs of the subject site are presented in Attachment G.

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ATTACHMENT D

SITE GEOLOGIC MAP



Legend

- Buda Limestone (Kbu)
- Subject Site

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

Horizon™ Environmental Services

Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	Nearmap, 2023; UT-BEG, 1995

Attachment D

Site Geologic Map
CS Vista Commercial Tract
Austin, Travis County, Texas

N

0 150 300
Feet

S:\Sectors\Environmental\HES_Filing_Master\Projects\2023\23317--CS_Vista_Commercial_Tract\Graphics\23317-001GA_06A_SGM.mxd

Horizon
Environmental Services

ATTACHMENT E

SUPPORTING INFORMATION

1.0 INTRODUCTION AND METHODOLOGY

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

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

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

2.0 ENVIRONMENTAL SETTING

2.1 LOCATION AND GENERAL DESCRIPTION

The subject site consists of approximately 1.15 acres of woodlands located adjacent to the northeastern corner of the intersection of MoPac Service Road and North Shields Drive in Travis County, Texas (Appendix F, Figure 1).

2.2 LAND USE

The subject site is reportedly vacant land. No habitable structures were observed on the site. MoPac Service Road borders the site to the west and North Shields Drive forms the southern border of the site. Surrounding lands are generally used for rural residences, single-family residences, multi-family residences, farming, and raising livestock.

2.3 TOPOGRAPHY AND SURFACE WATER

The subject site is situated on gently sloping terrain within the Walnut Creek-Colorado River watershed (Appendix F, Figures 2 and 3). Surface elevations on the subject site vary from a minimum of approximately 774 feet above mean sea level (amsl) near the southern property

boundary along North Shields Drive to a maximum of approximately 778 feet amsl near the northeastern property corner (USGS, 1987). Drainage on the site occurs primarily by overland sheet flow from northeast to southwest towards an unnamed tributary of Walnut Creek.

2.4 EDWARDS AQUIFER ZONE

The subject site is found within the Edwards Aquifer Recharge Zone (TCEQ, 2023) (Attachment F, Figure 2).

2.5 SURFACE SOILS

One soil unit is mapped within the subject site (NRCS, 2023) (Appendix F, Figure 4). The soil unit is described in further detail below.

Eckrant and Speck soils, 0 to 2% slopes (TcA) is a gently sloping soil found on uplands. The underlaying material is indurated limestone. The soil is well-drained with a moderately slow permeability and a very low available water capacity. Runoff is medium. This soil is primarily used for rangeland.

2.6 WATER WELLS

A review of TCEQ and Texas Water Development Board (TWDB) records revealed no water wells on the subject site and 8 wells within 0.5 miles of the subject site (TCEQ, 2023; TWDB, 2023). According to the TWDB records, all the off-site wells are reportedly completed within the Edwards Aquifer and Trinity Aquifer at total depths ranging from 15 to 510 feet below surface. Horizon observed no wells on the subject site.

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

2.7 GEOLOGY

Literature Review

The subject site is underlain by Buda Limestone (Kbu) (UT-BEG, 1995). Buda Limestone is fine-grained, bioclastic, commonly glauconitic, pyritiferous, hard, massive, poorly bedded to nodular, thinner bedded and argillaceous near upper contact, light gray to pale orange; and weathers dark gray to brown. Burrows are filled with chalky marl and abundant pelecypods. Thickness is up to 45 feet, locally absent to north.

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

The subject site is located within the Balcones Fault Zone. Available geologic reports indicate the nearest mapped fault is located approximately 0.25 miles to the west, trending from southwest to northeast (TWSC, 2023).

Field Assessment

No geologic or man-made features were identified within the subject site. The Site Geologic Map is provided as Attachment D.

3.0 CONCLUSIONS AND RECOMMENDATIONS

No geologic or man-made features were identified at the subject site that would require protection or mitigation pursuant to TCEQ rules for protection of the Edwards Aquifer (30 TAC 213). The site generally appears well-suited to development prospectuses. It should be noted that soil and drainage erosion would increase with ground disturbance. Native grasses and the cobbly content of the soil aid to prevent erosion. Soil and sedimentation fencing should be placed in all appropriate areas prior to any site disturbing activities.

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

4.0 REFERENCES

(CAPCOG) Capital Area Council of Governments. 10-foot contours, CAPCOG Center for Regional Development, Austin, Texas. 2018.

(COA) City of Austin. *Property Profile*. City of Austin Property Profile web map application. <http://www.austintexas.gov/gis/propertyprofile/>. Accessed 6 December 2023.

(Nearmap) Nearmap US, Inc. Nearmap Vertical™ digital orthographic photograph, <https://go.nearmap.com>. Imagery date 28 September 2023.

(NRCS) US Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey, <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>. Soil map data layer updated 12 September 2019. Accessed 4 December 2023.

(OSM) OpenStreetMap contributors. OpenStreetMap, <http://www.openstreetmap .org>. Available under the Open Database License (www.opendatacommons.org/ licenses/odbl). Accessed 7 December 2023.

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

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

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

_____. Edwards Aquifer Protection Program. Edwards Aquifer Viewer, <http://www.tceq. state.tx.us/field/eapp/viewer.html>. Accessed 6 December 2023.

(TWDB) Texas Water Development Board. Water Information Integration and Dissemination System. TWDB Groundwater Database, <https://www3.twdb.texas.gov/apps/water datainteractive/groundwaterdataviewer>. Accessed 6 December 2023.

(TWSC) United States Geological Survey, Texas Water Science Center. Geologic Database of Texas, <https://txpub.usgs.gov/txgeology/>. Updated 1 February 2014; Accessed 4 December 2023.

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

(USGS) US Geological Survey. 7.5-minute series topographic maps, Pflugerville West, Texas, quadrangle. 1987.

ATTACHMENT F

ADDITIONAL SITE MAPS



Horizon Environmental Services

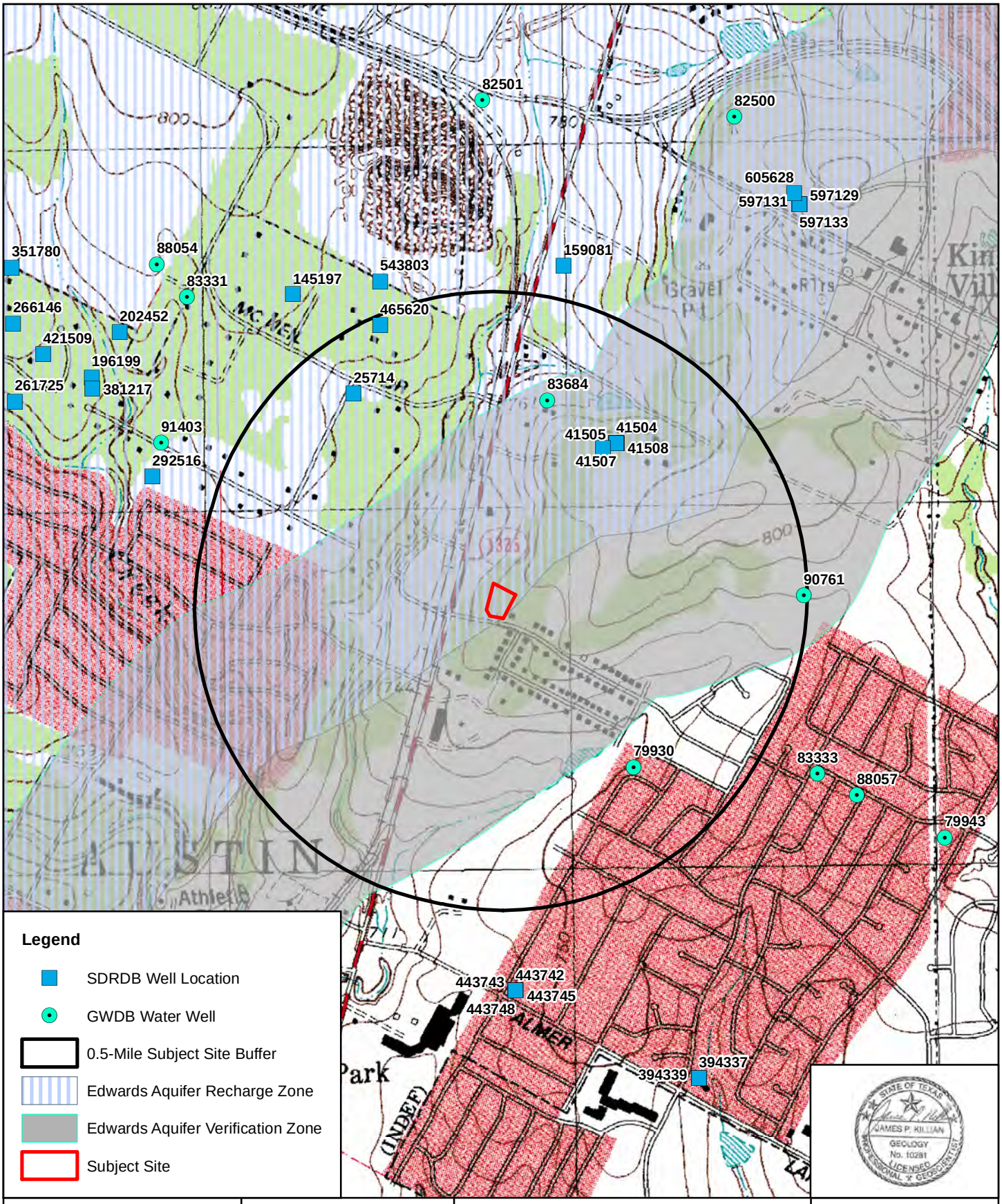
Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	OSM, 2023

Attachment F, Figure 1

Vicinity Map
CS Vista Commercial Tract
Austin, Travis County, Texas

0 1,000 2,000
Feet

S:\Sectors\Environmental\HES_Filing_Master\Projects\2023\23317--CS_Vista_Commercial_Tract\Graphics\23317-001GA_01A_Vicinity.mxd



Horizon Environmental Services

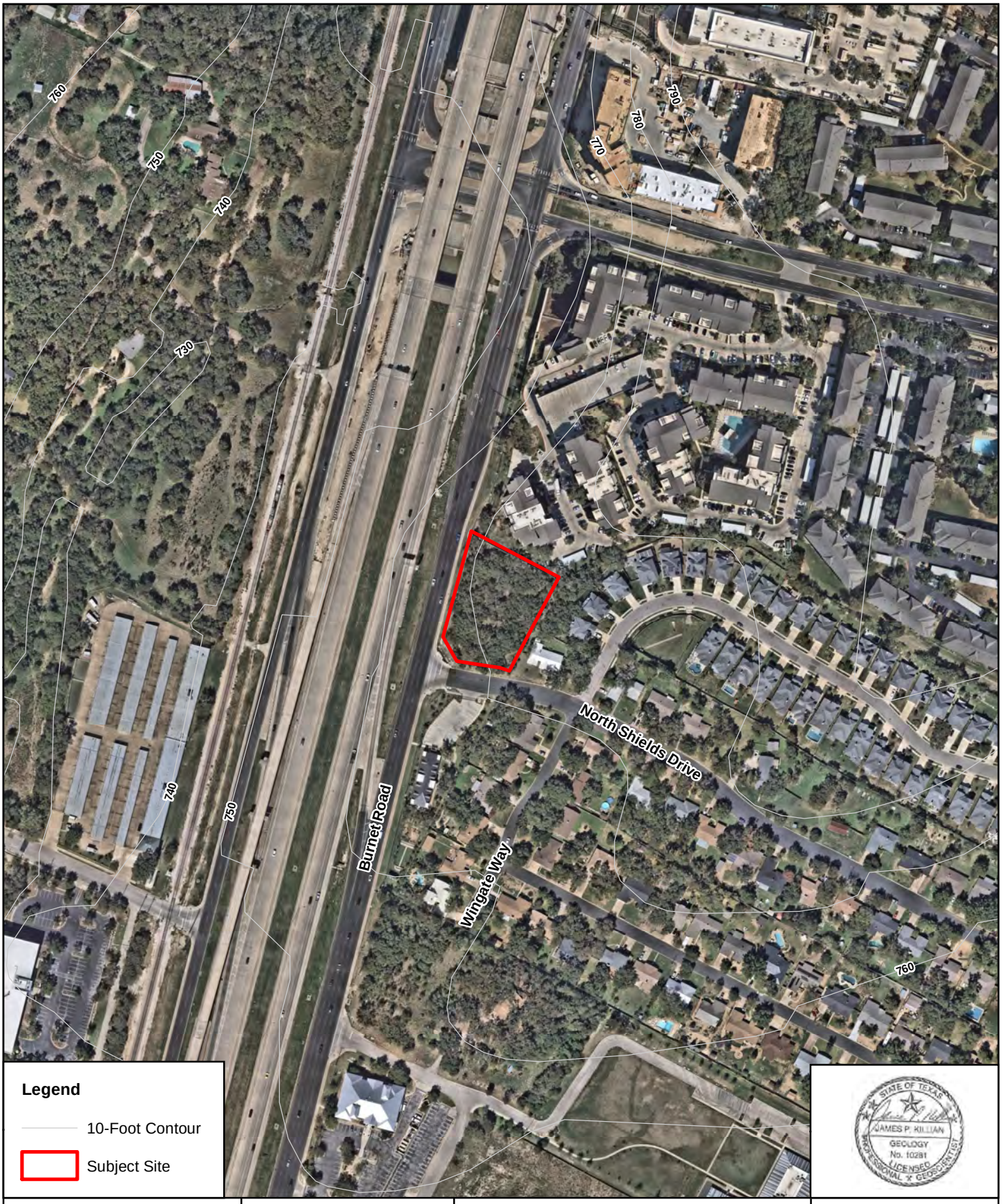
Date:	12/07/2023
Drawn:	TED
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Source:	TCEQ, 2023; TWDB, 2023; USGS, 1987

Attachment F, Figure 2

Topography and Hydrogeology Map
CS Vista Commercial Tract
Austin, Travis County, Texas

0 600 1,200
Feet

S:\Sectors\Environmental\HES_Filing_Master\Projects\2023\23317--CS_Vista_Commercial_Tract\Graphics\23317-001GA_01A_Vicinity.mxd



Legend

10-Foot Contour

Subject Site

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

Horizon™ Environmental Services

Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	CAPCOG, 2018; Nearmap, 2023

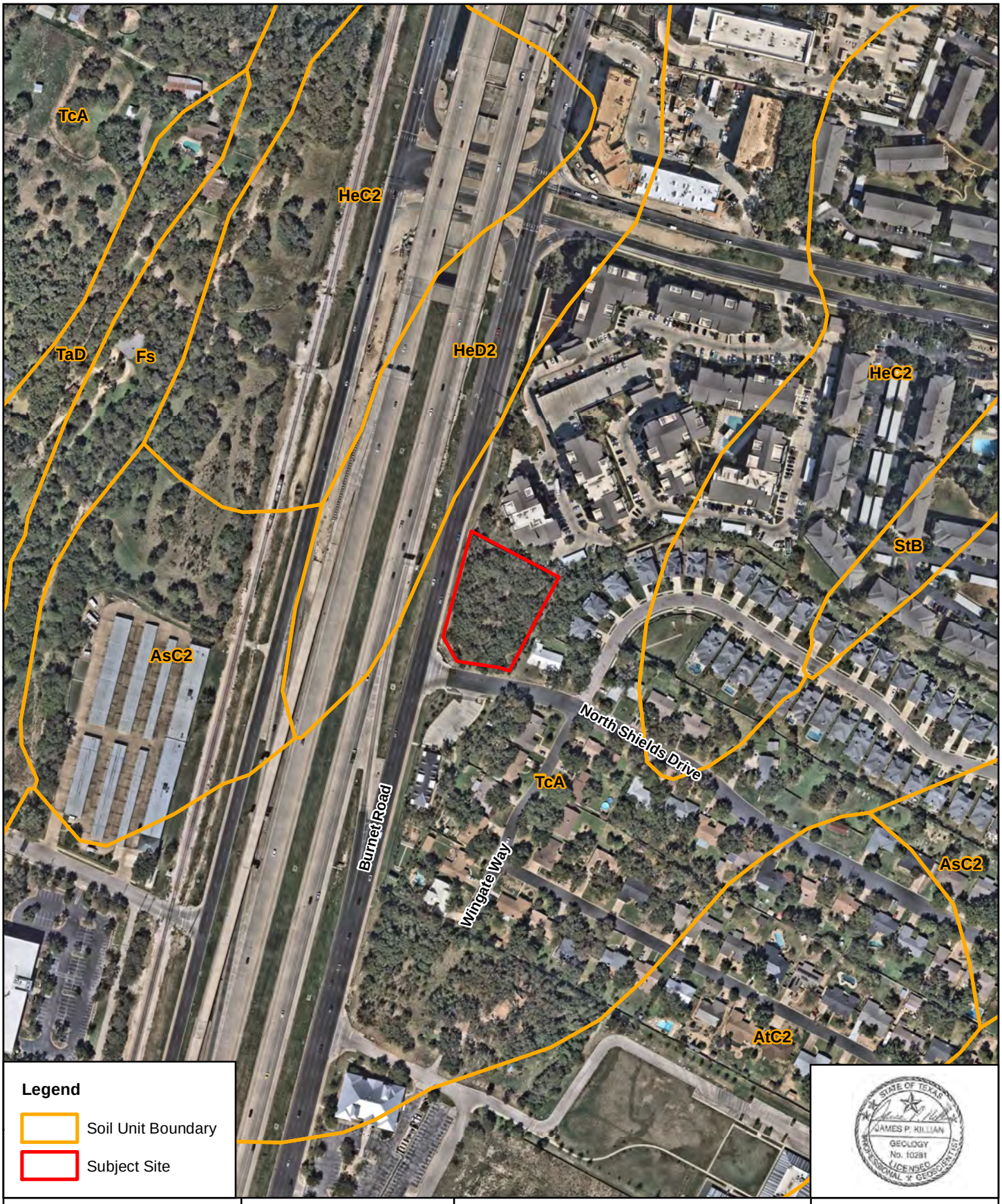
Attachment F, Figure 3

Site Topography Map
CS Vista Commercial Tract
Austin, Travis County, Texas

N

0 150 300
Feet

S:\Sectors\Environmental\HES_Filing_Master\Projects\2023\23317--CS_Vista_Commercial_Tract\Graphics\23317-001GA_03A_Topo.mxd



Legend

- Soil Unit Boundary
- Subject Site

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

Horizon™ Environmental Services

Date:	12/07/2023
Drawn:	TED
HJN NO:	23317.001 GA
Source:	Nearmap, 2023; NRCS, 2019

Attachment F, Figure 4

Site Soil Map
CS Vista Commercial Tract
Austin, Travis County, Texas

N

0 150 300
Feet

S:\Sectors\Environmental\HES_Filing_Master\Projects\2023\23317--CS_Vista_Commercial_Tract\Graphics\23317-001GA_04A_Soil.mxd

Horizon
Environmental Services

ATTACHMENT G

SITE PHOTOGRAPHS

Horizon
Environmental Services



PHOTO 1
View of general site conditions, facing north



PHOTO 2
View of general site conditions, facing east

Section 4

Organized Sewage Collection System Application

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(c), 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.

Regulated Entity Name: Uptown Frontage

1. ☒ **Attachment A – SCS Engineering Design Report**. This Engineering Design Report is provided to fulfill the requirements of 30 TAC Chapter 217, including 217.10 of Subchapter A, §§217.51 – 217.70 of Subchapter C, and Subchapter D as applicable, and is required to be submitted with this SCS Application Form.

Customer Information

2. The entity and contact person responsible for providing the required engineering certification of testing for this sewage collection system upon completion (including private service connections) and every five years thereafter to the appropriate TCEQ region office pursuant to 30 TAC §213.5(c) is:

   Contact Person: Christine Wong
   Entity: CS Vista, LLC
   Mailing Address: 5801 Standing Rock Drive
   City, State: Austin, TX Zip: 78730
   Telephone: 512-573-5030 Fax: _____
   Email Address: christine@texas2020.com
   The appropriate regional office must be informed of any changes in this information within 30 days of the change.

3. The engineer responsible for the design of this sewage collection system is:

   Contact Person: Chris McComb, P.E.
   Texas Licensed Professional Engineer's Number: 80442
   Entity: AMC Design Group, Inc.
   Mailing Address: PO Box 303086
   City, State:Austin, TX Zip: 78703
   Telephone:512-385-2911 Fax:_____
   Email Address:chris@amcdesigngroup.com

Project Information

4. Anticipated type of development to be served (estimated future population to be served, plus adequate allowance for institutional and commercial flows):

   ☐ Residential: Number of single-family lots: _____
   ☐ Multi-family: Number of residential units: _____
   ☒ Commercial
   ☐ Industrial
   ☐ Off-site system (not associated with any development)
   ☐ Other: _____

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

100% Domestic	588 gallons/day
_____% Industrial	_____ gallons/day
_____% Commingled	_____ gallons/day

   Total gallons/day: _____

6. Existing and anticipated infiltration/inflow is 850.5 gallons/day. This will be addressed by: inclusion in the Peak Wet Weather Flow design.

7. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.

   ☐ The WPAP application for this development was approved by letter dated _____. A copy of the approval letter is attached.
   ☒ The WPAP application for this development was submitted to the TCEQ on concurrently with this application, but has not been approved.
   ☐ A WPAP application is required for an associated project, but it has not been submitted.
   ☐ There is no associated project requiring a WPAP application.

8. Pipe description:

Table 1 - Pipe Description

Pipe Diameter(Inches)	*Linear Feet (1)*	*Pipe Material (2)*	*Specifications (3)*
8	66	SDR-26 PVC	ASTM D3034
6	21	SDR-26 PVC	ASTM D3034

Total Linear Feet: 87

(1) Linear feet - Include stub-outs and double service connections. Do not include private service laterals.
(2) Pipe Material - If PVC, state SDR value.
(3) Specifications - ASTM / ANSI / AWWA specification and class numbers should be included.

9. The sewage collection system will convey the wastewater to the Austin Water Utility Walnut Creek Regional Plant (name) Treatment Plant. The treatment facility is:

   ☒ Existing
   ☐ Proposed

10. All components of this sewage collection system will comply with:

   ☒ The City of Austin standard specifications.
   ☐ Other. Specifications are attached.

11. ☒ No force main(s) and/or lift station(s) are associated with this sewage collection system.

   ☐ A force main(s) and/or lift station(s) is associated with this sewage collection system and the **Lift Station/Force Main System Application** form (TCEQ-0624) is included with this application.

Alignment

12. ☒ There are no deviations from uniform grade in this sewage collection system without manholes and with open cut construction.

13. ☒ There are no deviations from straight alignment in this sewage collection system without manholes.

   ☐ **Attachment B - Justification and Calculations for Deviation in Straight Alignment without Manholes**. A justification for deviations from straight alignment in this sewage collection system without manholes with documentation from pipe manufacturer allowing pipe curvature is attached.

   ☐ For curved sewer lines, all curved sewer line notes (TCEQ-0596) are included on the construction plans for the wastewater collection system.

Manholes and Cleanouts

14. ☒ Manholes or clean-outs exist at the end of each sewer line(s). These locations are listed below: (Please attach additional sheet if necessary)

Table 2 - Manholes and Cleanouts

Line	*Shown on Sheet*	*Station*	*Manhole or Clean-out?*
A	15 Of 26	1+00	MH
A	15 Of 26	1+25.39	MH
A	15 Of 26	1+66.29	MH
A	15 Of 26	1+86.79	Cleanout
	Of		
	Of		
	Of		

Line	*Shown on Sheet*	*Station*	*Manhole or Clean-out?*
	Of		
	Of		
	Of		

15. ☒ Manholes are installed at all Points of Curvature and Points of Termination of a sewer line.

16. ☒ The maximum spacing between manholes on this project for each pipe diameter is no greater than:

Pipe Diameter (inches)	Max. Manhole Spacing (feet)
6 - 15	500
16 - 30	800
36 - 48	1000
≥54	2000

☐ **Attachment C – Justification for Variance from Maximum Manhole Spacing**. The maximum spacing between manholes on this project (for each pipe diameter used) is greater than listed in the table above. A justification for any variance from the maximum spacing is attached, and must include a letter from the entity which will operate and maintain the system stating that it has the capability to maintain lines with manhole spacing greater than the allowed spacing.

17. ☐ All manholes will be monolithic, cast-in-place concrete.

☒ The use of pre-cast manholes is requested for this project. The manufacturer's specifications and construction drawings, showing the method of sealing the joints, are attached. Refer to Sheet 20 of 26, specifically City of Austin Std. 506S-6 for joint wrap connections (City of Austin Standard Product List WW 146-A)

Site Plan Requirements

Items 18 - 25 must be included on the Site Plan.

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

Site Plan Scale: 1" = 20'.

19. ☒ The Site Plan must include the sewage collection system general layout, including manholes with station numbers, and sewer pipe stub outs (if any). Site plan must be overlain by topographic contour lines, using a contour interval of not greater than ten feet and showing the area within both the five-year floodplain and the 100-year floodplain of any drainage way.

20. Lateral stub-outs:

☒ The location of all lateral stub-outs are shown and labeled.
☐ No lateral stub-outs will be installed during the construction of this sewer collection system.

21. Location of existing and proposed water lines:

☒ The entire water distribution system for this project is shown and labeled.
☐ If not shown on the Site Plan, a Utility Plan is provided showing the entire water and sewer systems.
☐ There will be no water lines associated with this project.

22. 100-year floodplain:

☒ After construction is complete, no part of this project will be in or cross a 100-year floodplain, either naturally occurring or manmade. (Do not include streets or concrete-lined channels constructed above of sewer lines.)
☐ After construction is complete, all sections located within the 100-year floodplain will have water-tight manholes. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Table 3 - 100-Year Floodplain

Line	*Sheet*	*Station*
	of	to
	of	to
	of	to
	of	to

23. 5-year floodplain:

☒ After construction is complete, no part of this project will be in or cross a 5-year floodplain, either naturally occurring or man-made. (Do not include streets or concrete-lined channels constructed above sewer lines.)
☐ After construction is complete, all sections located within the 5-year floodplain will be encased in concrete or capped with concrete. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Table 4 - 5-Year Floodplain

Line	*Sheet*	*Station*
	of	to
	of	to
	of	to
	of	to

24. ☒ Legal boundaries of the site are shown.

25. ☒ The ***final plans and technical specifications*** are submitted for the TCEQ's review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

Items 26 - 33 must be included on the Plan and Profile sheets.

26. ☐ All existing or proposed water line crossings and any parallel water lines within 9 feet of sewer lines are listed in the table below. These lines must have the type of pressure rated pipe to be installed shown on the plan and profile sheets. Any request for a variance from the required pressure rated piping at crossings must include a variance approval from 30 TAC Chapter 290.

☒ There will be no water line crossings.
☐ There will be no water lines within 9 feet of proposed sewer lines.

Table 5 - Water Line Crossings

Line	*Station or Closest Point*	*Crossing or Parallel*	*Horizontal Separation Distance*	*Vertical Separation Distance*

27. Vented Manholes:

☒ **No part** of this sewer line is within the 100-year floodplain and vented manholes are not required by 30 TAC Chapter 217.
☐ **A portion** of this sewer line is within the 100-year floodplain and vented manholes will be provided at less than 1500 foot intervals. These water-tight manholes are listed in the table below and labeled on the appropriate profile sheets.
☐ **A portion** of this sewer line is within the 100-year floodplain and an alternative means of venting shall be provided at less than 1500 feet intervals. A description of the alternative means is described on the following page.
☐ **A portion** of this sewer line is within the 100-year floodplain; however, there is no interval longer than 1500 feet located within. No vented manholes will be used.

Table 6 - Vented Manholes

Line	*Manhole*	*Station*	*Sheet*

Line	*Manhole*	*Station*	*Sheet*

28. Drop manholes:

☒ There are no drop manholes associated with this project.
☐ Sewer lines which enter new or existing manholes or "manhole structures" higher than 24 inches above the manhole invert are listed in the table below and labeled on the appropriate profile sheets. These lines meet the requirements of 30 TAC §217.55(l)(2)(H).

Table 7 - Drop Manholes

Line	*Manhole*	*Station*	*Sheet*

29. Sewer line stub-outs (For proposed extensions):

☐ The placement and markings of all sewer line stub-outs are shown and labeled.
☒ No sewer line stub-outs are to be installed during the construction of this sewage collection system.

30. Lateral stub-outs (For proposed private service connections):

☒ The placement and markings of all lateral stub-outs are shown and labeled.
☐ No lateral stub-outs are to be installed during the construction of this sewage collection system.

31. Minimum flow velocity (From Appendix A)

☒ Assuming pipes are flowing full; all slopes are designed to produce flows equal to or greater than 2.0 feet per second for this system/line.

32. Maximum flow velocity/slopes (From Appendix A)

☒ Assuming pipes are flowing full, all slopes are designed to produce maximum flows of less than or equal to 10 feet per second for this system/line.
☐ **Attachment D – Calculations for Slopes for Flows Greater Than 10.0 Feet per Second.** Assuming pipes are flowing full, some slopes produce flows which are greater than 10 feet per second. These locations are listed in the table below. Calculations are attached.

Table 8 - Flows Greater Than 10 Feet per Second

Line	*Profile Sheet*	*Station to Station*	*FPS*	*% Slope*	*Erosion/Shock Protection*

33. Assuming pipes are flowing full, where flows are ≥ 10 feet per second, the provisions noted below have been made to protect against pipe displacement by erosion and/or shock under 30 TAC §217.53(l)(2)(B).

☐ Concrete encasement shown on appropriate Plan and Profile sheets for the locations listed in the table above.
☐ Steel-reinforced, anchored concrete baffles/retards placed every 50 feet shown on appropriate Plan and Profile sheets for the locations listed in the table above.
☒ N/A

Administrative Information

34. ☒ The final plans and technical specifications are submitted for TCEQ review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

35. ☒ Standard details are shown on the detail sheets, which are dated, signed, and sealed by the Texas Licensed Professional Engineer, as listed in the table below:

Table 9 - Standard Details

Standard Details	*Shown on Sheet*
Lateral stub-out marking **[Required]**	15 of 26
Manhole, showing inverts comply with 30 TAC §217.55(l)(2) **[Required]**	20 of 26
Alternate method of joining lateral to existing SCS line for potential future connections **[Required]**	of
Typical trench cross-sections **[Required]**	20 of 26
Bolted manholes **[Required]**	21 of 26
Sewer Service lateral standard details **[Required]**	21 of 26
Clean-out at end of line **[Required, if used]**	21 of 26
Baffles or concrete encasement for shock/erosion protection **[Required, if flow velocity of any section of pipe >10 fps]**	of
Detail showing Wastewater Line/Water Line Crossing **[Required, if crossings are proposed]**	of
Mandrel detail or specifications showing compliance with 30 TAC §217.57(b) and (c) **[Required, if Flexible Pipe is used]**	21 of 26

Standard Details	*Shown on Sheet*
Drop manholes **[Required, if a pipe entering a manhole is more than 24 inches above manhole invert]**	of

36. ☒ All organized sewage collection system general construction notes (TCEQ-0596) are included on the construction plans for this sewage collection system.

37. ☐ All proposed sewer lines will be sufficiently surveyed/staked to allow an assessment prior to TCEQ executive director approval. If the alignments of the proposed sewer lines are not walkable on that date, the application will be deemed incomplete and returned.

    ☒ Survey staking was completed on this date: The proposed lines are located within a public street R.O.W. Staking is not possible.

38. ☒ 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.

39. ☒ Any modification of this SCS application will require TCEQ approval, prior to construction, and may require submission of a revised application, with appropriate fees.

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 **Organized Sewage Collection System Application** is hereby submitted for TCEQ review and executive director approval. The system was designed in accordance with the requirements of 30 TAC §213.5(c) and 30 TAC §217 and prepared by:

Print Name of Licensed Professional Engineer: Christopher B. McComb, P.E.

Date: 6/19/2025

Place engineer's seal here:

Signature of Licensed Professional Engineer:



06/19/2025

Appendix A-Flow Velocity Table

Flow Velocity (Flowing Full) All gravity sewer lines on the Edwards Aquifer Recharge Zone shall be designed and constructed with hydraulic slopes sufficient to give a velocity when flowing full of not less than 2.0 feet per second, and not greater than 10 feet per second. The grades shown in the following table are based on Manning's formula and an n factor of 0.013 and shall be the minimum and maximum acceptable slopes unless provisions are made otherwise.

Table 10 - Slope Velocity

Pipe Diameter(Inches)	*% Slope required for minimum flow velocity of 2.0 fps*	*% Slope which produces flow velocity of 10.0 fps*
6	0.50	12.35
8	0.33	8.40
10	0.25	6.23
12	0.20	4.88
15	0.15	3.62
18	0.11	2.83
21	0.09	2.30
24	0.08	1.93
27	0.06	1.65
30	0.055	1.43
33	0.05	1.26
36	0.045	1.12
39	0.04	1.01
>39	*	*

**For lines larger than 39 inches in diameter, the slope may be determined by Manning's formula (as shown below) to maintain a minimum velocity greater than 2.0 feet per second when flowing full and a maximum velocity less than 10 feet per second when flowing full.*

$$v = \frac{1.49}{n} \times R_h^{0.67} \times \sqrt{S}$$

Figure 1 - Manning's Formula

Where:

v = velocity (ft/sec)
n = Manning's roughness coefficient (0.013)
Rh = hydraulic radius (ft)
S = slope (ft/ft)

Attachment A

A.0 Wastewater Engineer's Report

AMC Design Group, Inc.
P.O. Box 303086
Austin, Texas 78703

Tel 512.385.2911

Thursday, June 19, 2025

Monica Reyes
Texas Commission on Environmental Quality
Austin Regional Office
12100 Park 35 Circle, Bldg. A, Room 179
Austin, TX 78753

Re: Uptown Frontage
Wastewater Service Extension Engineer's Report

Ms. Reyes:

AMC Design Group, Inc. is pleased to present this Engineering Report concerning the wastewater service extension for the Uptown Frontage development. The proposed site development consists of 1.134 acres (+/-) and is located at 2900 North Shields Drive, the northeast corner of North Shields Drive and Burnet Road in Austin, Texas. This project is within the City of Austin Full Purpose Jurisdiction. Please refer to the General Information Form for a location map of this project. Of the total acreage, approximately 3.9 acres are to be developed. This project is made up of a single subdivided lot. This report will cover findings concerning existing system capacity, proposed system demand, wastewater options for the property and the development scenario impact on the existing system.

1. Water

1.1. Introduction

The property is located within the Northwest A-1 pressure zone as provided by the City of Austin Water Utility, Austin Water.

1.2. Existing Water System Description

The existing property is vacant and does not have a water service. Austin Water currently has a water main along the Burnet Road and North Shields Drive frontage, and those mains are adequately sized for the future build out of this property. Please refer to Figure 1 for a copy of Grid L-36, Austin Water Utility Service Area Map.

2. Development Scenario and System Demand

The Uptown Frontage development project plans to construct a 7,180 s.f. medical office building. Please refer to Sheet 8 of the attached construction plans that shows the proposed site plan for this development. The site is currently vacant and undeveloped.

This development use must be converted to living unit equivalents (LUE) in order to determine future water & wastewater system demands. These have been calculated as follows:

Table 1

USE	Density	Unit	LUE rate per unit	Total LUE's
Office	7180	s.f.	1/3000	2.4

Source: City of Austin Water and Wastewater Utility LUE Criteria, February 7, 1986

3. Wastewater System

3.1. Existing System & Proposed Development

Austin Water will serve the Uptown Frontage development project. This property lies within the Walnut wastewater drainage basin and is part of the city's centralized wastewater system. Wastewater service is adjacent to the site running in North Shields Road in a 8-inch PVC gravity main. Access to the existing main is blocked by an existing concrete storm sewer, so a wastewater extension is required to tie into the main downstream. Please refer to the Austin Water Utility Wastewater System Map, Grid L-36, which is Figure 2 in the Attachments for more information. An 8-inch gravity main extension is proposed from existing infrastructure to serve the Uptown Frontage development project. This gravity main will be constructed to have velocities between 2 feet per second, and 10 feet per second. There will be three manholes constructed as part of this extension. The manholes will have sealed and bolted manhole covers, so odor will not be a problem. Please refer to the proposed Utility Plan, Sheet 15 of the attached Construction Plans for more information.

3.2. Proposed Demand

Wastewater demand is divided into Peak Dry Weather Flow (PDWF), and Peak Wet Weather Flow (PWWF). PDWF is calculated by using Equation 2.9.3.A.4 as found in the City of Austin *Utility Criteria Manual*. This equation is based on the variable 'F', which is defined as 70 gallons/person/day * population/1440. Population is defined as 3.5 people times the Living Unit Equivalent (LUE). Based on 2.4 LUE's from Table 1, the 'F' variable is calculated as 0.4083, and the average wastewater demand is calculated as 588 gallons per day (GPD) with a Peak Dry Weather Flow of 1.6 gallons per minute (g.p.m.).

External contributions of Infiltration and Inflow are calculated by multiplying 750 gallons per acre of developed area. For the proposed plan, 1.134 acres are included in the proposed development. Total I&I for this project is calculated as 850.5 GPD, or 0.6 g.p.m. PWWF is calculated by adding the PDWF and the total I&I. PWWF for the total build-out of this project is 2.2 g.p.m.

The calculated full flow velocity of the pipe segment is 3.5 f.p.s. based on the Manning's equation with Manning Coefficient value of 0.013.

3.3. Service Extension Cost Estimate

An engineering cost estimate for all of the wastewater system improvements is included as Table 2.

Table 2

Uptown Frontage
Wastewater Estimated Quantities

Item	Description	Unit	Estimated Quantity	Unit Price	Total Amount
1	8" PVC (0'-8')	L.F.	87	$ 220.00	$19,140.00
2	Erosion Control	L.S.	1	$ 4,500.00	$ 4,500.00
3	Manholes	Ea.	3	$ 9,900.00	$29,700.00
4	Street Repair	L.S.	1	$6,000.00	$ 6,000.00
5	Total				**$59,340.00**

3.4 Structural Analysis

According to 30 TAC §217.53(k)(4), the following structural requirements must be met to waive the structural analysis.

(A) open trench design; **This condition is met.**
(B) flexible pipe with a pipe stiffness of 46 psi or greater; Actual is 255 psi. **This condition is met.**
(C) buried 17 feet or less; Actual is less than 8 feet. **This condition is met.**
(D) diameter of 12 inches or less; Actual is 8 inches. **This condition is met.**
(E) modulus of soil reaction for the in-situ soil of 200 psi or greater; Actual is greater than 400 psi. **This condition is met.**
(F) no effects on a pipe due to live loads; **This condition is met.**
(G) a unit weight of soil of 120 pounds per cubic foot or less; or
(H) a pipe trench width of 36 inches or greater. Trench width will be 36 inches. **This condition is met.**

All of these conditions are met with this project, so the structural analysis required by 30 TAC §217.53(k)(2) may be waived.

3.5 Odor Control

All manholes shall have bolted and gasketed covers so there will be no odor control issues for this project pertaining to 30 TAC §217.53(h).

3.6 Project Safety

The following procedures will be followed to ensure project safety on the job:

1. The contractor shall call the 'one call' system for existing utility locations prior to any excavation in advance of construction.
2. The contractor shall verify the locations of all utilities to be extended, tied to, or altered.
3. All construction operations shall be accomplished in accordance with applicable regulations of the U.S. Occupational Safety and Health Administration. The contractor shall hire an engineer to prepare an excavation safety system plan in accordance with the following specification: https://library.municode.com/TX/Austin/codes/standard_specifications_manual?nodeId=AUSTIN_TX_STANDARD_SPECIFICATIONS_TECHNICAL_MANUAL_SERIES_500PIAP_ITEM_NO._509SEXSASY9-26-12

3.7 Floodplain

The existing sewer main is located within the public right of way of North Shields Drive and is outside of any regulated city or FEMA floodplain as per FIRM Panel 48453C 0265K dated January 16, 2016 for Travis County, Texas. No floodplain waiver is required.

4. Conclusions

As mentioned previously, this Engineer's Report is being submitted at the request of the Texas Commission on Environmental Quality to show proposed wastewater connections for the Uptown Frontage Development project. If there are any questions concerning this report, please do not hesitate to call.

Sincerely,

AMC Design Group, Inc.
Texas Registered Engineering Firm F-1708

Christopher McComb, P.E.
President



This report is released under the authority of
Christopher McComb, P.E., on June 19, 2025.

List of Figures

Figure 1 –Austin Water Water Service Map Grid L-36
Figure 2 - Austin Water Wastewater Service Map Grid L-36

MATCH:K37 MATCH:L37 MATCH:M37

MATCH:K36 MATCH:M36

MATCH:K35 MATCH:L35 MATCH:M35

N

1:2400

0 200 400

Feet

Water Mains
- In Service, City Maintained Main
- Proposed for Aband., City Maintained Main
- In Service, City Maintained Lead Line
- Proposed for Aband., City Maintained Lead Line
- Proposed, City Maintained Main
- Proposed, City Maintained Lead Line
- Abandoned, City Maintained Main
- In Service, Private Maintained Main
- Proposed for Aband., Private Maintained Main
- In Service, Private Maintained Lead Line
- Proposed for Aband., Private Maintained Lead Line
- Proposed, Private Maintained Main
- Proposed, Private Maintained Lead Line
- Abandoned, Private Maintained Main

- Hydrant
- Proposed Hydrant
- Project Separator
- Backflow Preventer
- Water Meter
- Drain Manhole
- Inspection Manhole
- Inspection Manhole with Valve
- Water Flow Meter
- Water Connection

Fittings
- Water Connector
- Water Fireline
- Water Plug
- Water Reducer

Separators
- Attribute Change
- Maintained By Change
- Material Change

Operating Valves
- Closed
- Open

Zone Valves
- Pressure Boundary Valve
- Check Valve
- Double Check Valve
- Pressure Sustaining Valve
- Pressure Reducing Valve

Control Valves
- Auto Air Release Valve
- Combo Air Release Valve
- Manual Air Release Valve
- Vacuum Release Valve
- Drain Valve
- Flush Valve
- Hydrant PRV

Facilities
- TP Water Treatment Plant
- PS Pump Station
- B Booster Station
- R Reservoir
- Sampling Port
- Scada Sensor
- Raw Water Intake
- h Hydro Tank
- W Water Well

Grid Maps
= Current Sheet

This product is 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 boundaries. This product has been produced by the Austin Water Utility for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

City of Austin
Water Distribution System

Last Update:
2/10/2023

Map Sheet
L36

Produced by GIS Services

MATCH:K37 MATCH:L37 MATCH:M37

MATCH:K36 MATCH:M36

MATCH:K35 MATCH:L35 MATCH:M35

N

1:2400

0 200 400

Feet

Wastewater Mains

- In Service, City Gravity Main
- Proposed for Aband., City Gravity Main
- In Service, City Force Main
- Proposed for Aband., City Force Main
- In Service, City Overflow Main
- Proposed for Aband., City Overflow Main
- In Service, City Siphon Main
- Proposed for Aband., City Siphon Main
- In Service, City Siphon Overflow Main
- Proposed for Aband., City Siphon Overflow Main
- Proposed, City Gravity Main
- Proposed, City Force Main
- Proposed, City Overflow Main
- Proposed, City Siphon Main
- Proposed, City Siphon Overflow Main
- Abandoned, City Main
- In Service, Private Gravity Main
- Proposed for Aband., Private Gravity Main
- In Service, Private Force Main
- Proposed for Aband., Private Force Main
- In Service, Private Overflow Main
- Proposed for Aband., Private Overflow Main
- In Service, Private Siphon Main
- Proposed for Aband., Private Siphon Main
- In Service, Private Siphon Overflow Main
- Proposed for Aband., Private Siphon Overflow Main
- Proposed, Private Gravity Main
- Proposed, Private Force Main
- Proposed, Private Overflow Main
- Proposed, Private Siphon Main
- Proposed, Private Siphon Overflow Main
- Abandoned, Private Main

Sludge Lines

- Abandoned
- In Service
- Proposed
- Proposed for Abandonment

- Connection
- Backflow Preventer
- Flow Meter
- OSSF Onsite Sewage Facility
- Disposal Pond
- Levee
- Weir
- Grade Break
- Project Separator

- General Valve, Open
- General Valve, Closed
- Auto Air Release Valve

Manholes

- Abandoned/Removed
- In Service, Standard
- Proposed, Standard
- In Service, Odor Control
- Proposed, Odor Control

- In Service, Split
- Proposed, Split
- In Service, Metered
- Proposed, Metered
- In Service, Tunnel Shaft
- Proposed, Tunnel Shaft
- In Service, Mini
- Proposed, Mini
- In Service, Cleanout
- Proposed, Cleanout

Fittings

- Connector
- End of Line
- Reducer
- Discharge Point
- Preproposed Manhole

Separators

- Attribute Change
- Maintained By Change
- Material Change

Facilities

- Alternative Pump
- Discharge Outfall
- Grinder Pump
- RecycleTank
- Sump Pump
- WastewaterTreatment Plant
- Lift Station

ALTWW Alternative WW Collection

Diversion Chamber

Junction Box

Mixing Chamber

Grid Maps
= Current Sheet

This product is 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 boundaries. This product has been produced by the Austin Water Utility for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

City of Austin Wastewater Collection System

Last Update: 1/27/2023

Map Sheet

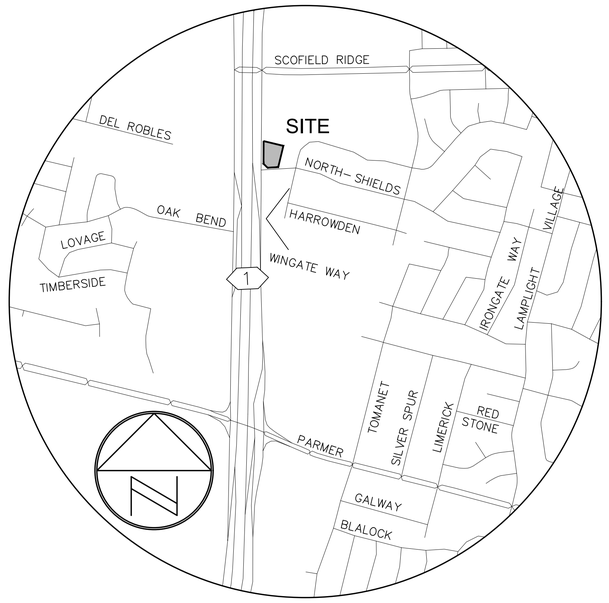
L36

Produced by GIS Services

UPTOWN FRONTAGE

SITE PLAN

2900 NORTH SHIELDS DRIVE,
AUSTIN TX 78727



LOCATION MAP
N.T.S.

THIS NOTE IS BEING PLACED ON THE PLAN SET IN PLACE OF A TEMPORARY TRAFFIC CONTROL STRATEGY WITH THE FULL UNDERSTANDING THAT, AT A MINIMUM OF 6 WEEKS PRIOR TO THE START OF CONSTRUCTION, A TEMPORARY TRAFFIC CONTROL PLAN MUST BE REVIEWED AND APPROVED BY THE RIGHT OF WAY MANAGEMENT DIVISION. THE OWNER/ REPRESENTATIVE FURTHER RECOGNIZES THAT A REVIEW FEE, AS PRESCRIBED BY THE MOST CURRENT VERSION OF THE CITY'S FEE ORDINANCE, SHALL BE PAID EACH TIME A PLAN OR PLAN REVISION IS SUBMITTED TO RIGHT OF WAY MANAGEMENT DIVISION FOR REVIEW.
THE FOLLOWING MUST BE TAKEN INTO CONSIDERATION WHEN DEVELOPING FUTURE TRAFFIC CONTROL STRATEGIES:

- PEDESTRIAN AND BICYCLE TRAFFIC ACCESS MUST BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE AUTHORIZED BY RIGHT OF WAY MANAGEMENT.
- NO LONG-TERM LANE CLOSURES WILL BE AUTHORIZED, UNLESS RIGHT OF WAY MANAGEMENT DETERMINES THAT ADEQUATE ACCOMMODATIONS HAVE BEEN MADE TO MINIMIZE TRAFFIC IMPACT.
- PROJECT SHOULD BE PHASED SO THAT UTILITY INSTALLATION MINIMALLY IMPACTS EXISTING OR TEMPORARY PEDESTRIAN FACILITIES.

OWNER/DEVELOPER

CS VISTA, LLC
5801 STANDING ROCK DRIVE
AUSTIN, TX 78730

OWNER'S REP FOR PLAN ALTERATIONS

LAND PLANNER	THROWER DESIGN P.O. BOX 41957 AUSTIN, TEXAS 78704 512-476-4456
CIVIL ENGINEER	AMC DESIGN GROUP INC. P.O. BOX 303086 AUSTIN, TEXAS 78703 512-385-2911
LANDSCAPE ARCHITECT	CIRCLE V LANDSCAPING P.O. BOX 170822 AUSTIN, TEXAS 78717 512-537-2384
SURVEYOR	EARLY LAND SURVEYING, LLC P.O. BOX 92588 AUSTIN, TEXAS 78709 512-202-8631

LEGAL DESCRIPTION

1.134 ACRES
LOT 1, BLOCK A, UPTOWN FRONTAGE SUBDIVISION, A SUBDIVISION OF RECORD IN DOCUMENT NO. 202400141 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.

RELATED CASE NO.

SUBDIVISION C8-2024-0032.0A

LOCATION INFO

GRID #: L36
MAPSCO #: 466E

WATERSHED STATUS

THIS SITE IS LOCATED IN THE WALNUT CREEK WATERSHED, WHICH IS CLASSIFIED AS SUBURBAN.

THIS SITE IS LOCATED OVER THE EDWARD'S AQUIFER RECHARGE ZONE.

FLOODPLAIN INFORMATION

NO PORTION OF THIS SITE IS WITHIN THE 100 YEAR FLOODPLAIN AS PER FEMA FIRM PANEL 48453C0265K DATED JANUARY 16, 2016, FOR TRAVIS COUNTY, TEXAS.

GENERAL NOTES

1. REFER TO SHEET 2 FOR ALL CITY AND GENERAL CONSTRUCTION NOTES.
2. ALL DETENTION BASINS, WATER QUALITY PONDS, AND APPURTENANCES WHICH RECEIVE STORMWATER RUNOFF FROM COMMERCIAL OR MULTI-FAMILY DEVELOPMENT SHALL BE MAINTAINED BY THE RECORD OWNER IN ACCORDANCE WITH THE MAINTENANCE STANDARDS IN THE DRAINAGE AND ENVIRONMENTAL CRITERIA MANUALS.
3. THE DISTURBED AREAS WITHIN THIS PROJECT SHALL BE REVEGETATED AND ALL PERMANENT EROSION/ SEDIMENTATION CONTROLS COMPLETED PRIOR TO THE RELEASE OF FISCAL SURETY FOR THAT PHASE. TEMPORARY EROSION/SEDIMENTATION CONTROLS SHALL BE ADJUSTED AS NEEDED PRIOR TO THIS RELEASE TO ENSURE THAT SUBSEQUENT PHASE DISTURBED AREAS ARE ADEQUATELY COVERED. ANY AREA WITHIN THE LIMIT OF DISTURBANCE OF THE PROJECT WHICH IS NOT ADEQUATELY REVEGETATED SHALL BE BROUGHT INTO COMPLIANCE PRIOR TO THE RELEASE OF THE FINAL PHASE.
4. THIS SITE PLAN IS SUBJECT TO SUBCHAPTER E OF THE LAND DEVELOPMENT CODE (COMMERCIAL DESIGN STANDARDS).
5. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATIONS ONLY. APPROVAL BY OTHER GOVERNMENTAL ENTITIES MAY BE REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR DETERMINING WHAT ADDITIONAL APPROVALS MAY BE NECESSARY.
6. RETAINING WALLS OVER FOUR FEET IN HEIGHT, MEASURED FROM THE BOTTOM OF THE FOOTING TO THE TOP OF THE WALL, SHALL BE ENGINEERED AND WILL REQUIRE A SEPARATE PERMIT (UNIFORM BUILDING CODE 106.2.5).
7. DEVELOPMENT OF STRUCTURES THAT REQUIRE A BUILDING PERMIT WITHIN THIS SITE PLAN, OR REVISIONS THEREOF, ARE REQUIRED TO COMPLY WITH THE CITY OF AUSTIN STREET IMPACT FEE ORDINANCES, AS APPLICABLE, AND MUST BE PAID UPON COMPLETION OF THE BUILDING PERMIT PLAN REVIEW FOR EACH BUILDING.
REFERENCE: LDC 25-6-662
8. THIS PROJECT IS SUBJECT TO THE VOID AND WATER FLOW MITIGATION RULE (COA ECM 1.12.0 AND COA ITEM NO. 658S OF THE SSM) PROVISION THAT ALL TRENCHING GREATER THAN 5 FEET DEEP MUST BE INSPECTED BY A GEOLOGIST (TEXAS P.G.) OR A GEOLOGIST'S REPRESENTATIVE.
9. IF AT ANY TIME DURING CONSTRUCTION OF THIS PROJECT AN UNDERGROUND STORAGE TANK (UST) IS FOUND, CONSTRUCTION IN THAT AREA MUST STOP UNTIL A CITY OF AUSTIN UST CONSTRUCTION PERMIT IS APPLIED FOR AND APPROVED. ANY UST REMOVAL WORK MUST BE CONDUCTED BY A UST CONTRACTOR THAT IS REGISTERED WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). CONTACT ELIZABETH SIMMONS AT ELIZABETH.SIMMONS@AUSTINTEXAS.GOV IF YOU HAVE ANY QUESTIONS. [COA TITLE 6]
10. THIS PROJECT IS SUBJECT TO THE VOID AND WATER FLOW MITIGATION RULE (COA ECM 1.12.0 AND COA ITEM NO. 658S OF THE SSM) PROVISION THAT ALL TRENCHING/DISTURBANCE GREATER THAN 5 FEET DEEP MUST BE INSPECTED BY A GEOLOGIST (TEXAS P.G.) OR A GEOLOGIST'S REPRESENTATIVE.

CITY OF AUSTIN REVISIONS/CORRECTIONS TABLE

Correction/ Revision No.	Description	Revise (R) Replacement (RP) Add (A) Void (V) Sheet No.'s	Total # Sheets in Plan Set	Net Change Imp. Cover (SF)	Total Site Imp. Cover (SF and %)	City of Austin Signature	City of Austin Approval Date

Know what's below.
Call before you dig.

811

SUBMITTAL DATE: 9/4/24
SUBMITTED FOR APPROVAL BY:

CHRIS MCCOMB, P.E.

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

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SHEET 2	CONSTRUCTION NOTES
SHEET 3	AUSTIN WATER UTILITY NOTES
SHEET 4	PLAT
SHEET 5	SURVEY
SHEET 6	EROSION CONTROL NOTES
SHEET 7	EROSION/SEDIMENTATION CONTROL PLAN
SHEET 8	SITE PLAN
SHEET 9	GRADING PLAN
SHEET 10	EXISTING & PROPOSED DRAINAGE PLAN
SHEET 11	STORM SEWER PLAN
SHEET 12	POND PLAN
SHEET 13	POND DETAILS
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SHEET 23	LANDSCAPE PLAN 1 OF 3
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SHEET 26	BUILDING ELEVATIONS

APPROVALS

INDUSTRIAL WASTE (DATE)

CITY OF AUSTIN FIRE DEPARTMENT (DATE)

AUSTIN WATER (DATE)

DEVELOPMENT SERVICES DEPARTMENT (DATE)

AUSTIN FIRE DEPARTMENT - PROJECT INFORMATION TABLE

FIRE DESIGN CODE	2021 IFC W/COA LOCAL AMENDMENTS
FIRE FLOW DEMAND @ 20 PSI (GPM)	2250 G.P.M.
OCCUPANCY CLASSIFICATION	B
CONSTRUCTION CLASSIFICATION	V-B
BUILDING FIRE AREA (SF):	7180
AUTOMATIC FIRE SPRINKLER SYSTEM TYPE: (IF APPLICABLE)	NFPA 13
REDUCED FIRE FLOW DEMAND @ 20 PSI FOR HAVING A SPRINKLER SYSTEM (GPM) (IF APPLICABLE)	1000
AFD FIRE HYDRANT FLOW TEST DATE:	4/20/24
AFD FIRE HYDRANT FLOW TEST LOCATION:	13100 BURNET
CITY OF AUSTIN PIPELINE ORDINANCE	NO
HIGH-RISE	NO
INT'L WILDLAND URBAN INTERFACE CODE	NO
ALTERNATIVE METHOD OF COMPLIANCE (AMoC:)	N/A
IF APPLICABLE TO YOUR PROJECT	

BUILDING PERMITS ARE THE RESPONSIBILITY OF THE OWNER. ALL BUILDING PERMITS MUST BE OBTAINED PRIOR TO SITE PLAN EXPIRATION.

SECTION 608.2 OF THE LOCAL AMENDMENTS TO THE UNIFORM PLUMBING CODE REQUIRES A PRESSURE REDUCING VALVE IF THE LOCAL STATIC PRESSURE IS ABOVE 65 PSI. THE PRV SET AT 65 PSI MUST BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE WATER METER.

A PRV IS/IS NOT REQUIRED FOR THIS PROJECT.

SITE PLAN APPROVAL

CASE NUMBER SP-2024-0345C APPLICATION DATE SEPTEMBER 4, 2024
APPROVED ON _____ ☐ADMINISTRATIVELY ☐BY COMMISSION
UNDER SECTION ☐112 ☐142 OF CHAPTER 25-5 OF THE CITY OF AUSTIN CODE
EXPIRATION DATE (LDC 25-5-81) _____ CASE MANAGER KATE CASTLES

_____
DEVELOPMENT SERVICES DEPARTMENT

RELEASED FOR GENERAL COMPLIANCE_____ZONING LO

APPROVAL STAMPS:

Rev. 1 _____ Correction 1 _____
Rev. 2 _____ Correction 2 _____
Rev. 3 _____ Correction 3 _____

FINAL PLAT MUST BE RECORDED BY THE PROJECT EXPIRATION DATE, IF APPLICABLE. SUBSEQUENT SITE PLANS WHICH DO NOT COMPLY WITH THE CODE CURRENT AT THE TIME OF FILING, AND ALL REQUIRED BUILDING PERMITS AND/OR A NOTICE OF CONSTRUCTION (IF A BUILDING PERMIT IS NOT REQUIRED), MUST ALSO BE APPROVED PRIOR TO THE PROJECT EXPIRATION DATE.

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1706

STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

Thrower Design
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456
LAND PLANNERS

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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

COVER SHEET

1 OF 26

SP-2024-0345C

BASIC REQUIREMENTS

DESCRIPTION OF PROJECT
A. THE PORTION OF WORK WITHIN THESE DOCUMENTS INCLUDES SITE WORK, SITE UTILITIES AND DRAINAGE IMPROVEMENTS REQUIRED TO COMPLETE THE WORK WITHIN THE LIMITS OF CONSTRUCTION SHOWN.

SITE INVESTIGATION
A. ALL INFORMATION OBTAINED BY THE OWNER REGARDING SITE CONDITIONS; TOPOGRAPHY; EXISTING CONSTRUCTION OF SITE FACILITIES; AND SUBSURFACE INVESTIGATIONS, INCLUDING TEST BORING LOGS ARE AVAILABLE FOR EXAMINATION AT THE OFFICE OF THE ENGINEER.

EXISTING UTILITIES
A. APPROXIMATE LOCATIONS OF MAJOR UTILITIES AND STRUCTURES ARE SHOWN ON THE DRAWINGS, THERE MAY BE SOME DISCREPANCIES AND OMISSIONS IN THE LOCATIONS AND SIZE OF UTILITIES AND STRUCTURES SHOWN.
B. NOTIFY ALL UTILITY OFFICES THAT ARE AFFECTED BY THE CONSTRUCTION OPERATION AT LEAST 48 HOURS IN ADVANCE.

CUTTING AND PATCHING
A. EMPLOY A SKILLED AND EXPERIENCED INSTALLER TO PERFORM CUTTING AND PATCHING NEW WORK; RESTORE WORK WITH NEW PRODUCTS.
B. SUBMIT WRITTEN REQUEST IN ADVANCE OF CUTTING OR ALTERING EXISTING STRUCTURES OR UTILITIES.
C. FIT WORK TIGHT TO ADJACENT ELEMENTS AND MAINTAIN INTEGRITY OF EXISTING WORK.

PROGRESS MEETINGS
A. SCHEDULE AND ADMINISTER MEETINGS AT THE SITE THROUGHOUT PROGRESS OF THE WORK AT MINIMUM MONTHLY INTERVALS.
B. PRESIDE AT MEETINGS, RECORD MINUTES, AND DISTRIBUTE TYPED COPIES WITHIN TWO DAYS TO THOSE AFFECTED BY DECISIONS MADE.

SUBMITTAL PROCEDURES
A. SUBMITTAL FORM TO IDENTIFY PROJECT, CONTRACTOR, SUBCONTRACTOR OR SUPPLIER, AND PERTINENT CONTRACT DOCUMENT REFERENCE.
B. APPLY CONTRACTOR'S STAMP, SIGNED OR INITIALLED, CERTIFYING THAT REVIEW, VERIFICATION OF PRODUCTS REQUIRED, FIELD DIMENSIONS, ADJACENT CONSTRUCTION WORK, AND COORDINATION OF INFORMATION IS IN ACCORDANCE WITH THE REQUIREMENTS OF THE WORK AND CONTRACT DOCUMENTS.
C. IDENTIFY VARIATIONS FROM CONTRACT DOCUMENTS AND PRODUCT OR SYSTEM LIMITATIONS WHICH MAY BE DETRIMENTAL TO SUCCESSFUL PERFORMANCE OF COMPLETED WORK.
D. REVISE AND RESUBMIT AS REQUIRED; IDENTIFY ALL CHANGES MADE SINCE PREVIOUS SUBMITTAL.

CONSTRUCTION PROGRESS SCHEDULE
A. SUBMIT INITIAL PROGRESS SCHEDULE IN DUPLICATE WITHIN 10 DAYS AFTER DATE OF CONTRACT.
B. SUBMIT REVISED SCHEDULES WITH EACH APPLICATION FOR PAYMENT, IDENTIFYING CHANGES SINCE PREVIOUS VERSION. INDICATE ESTIMATE PERCENTAGE OF COMPLETION FOR EACH ITEM OF WORK AT EACH SUBMISSION.
C. SUBMIT HORIZONTAL BAR CHART WITH SEPARATE LINE FOR EACH MAJOR SECTION OF WORK OR OPERATION, IDENTIFYING FIRST WORK DAY OF EACH WEEK.

SHOP DRAWINGS
A. SUBMIT NUMBER OF COPIES WHICH THE CONTRACTOR REQUIRES, PLUS TWO COPIES WHICH WILL BE RETAINED BY THE ENGINEER.
B. INCLUDE AS A MINIMUM DIMENSIONS, SIZE, LOCATION OF CONNECTIONS TO OTHER WORK, WEIGHT OF EQUIPMENT, AND SUPPORTING CALCULATIONS.

PRODUCT DATA
A. SUBMIT NUMBER OF COPIES WHICH THE CONTRACTOR REQUIRES, PLUS TWO COPIES WHICH WILL BE RETAINED BY THE ENGINEER.
B. MARK EACH COPY TO IDENTIFY APPLICABLE PRODUCTS, MODELS, OPTIONS, AND OTHER DATA. SUPPLEMENT MANUFACTURER'S STANDARD DATA TO PROVIDE INFORMATION UNIQUE TO THIS PROJECT.

MANUFACTURERS' INSTRUCTIONS AND CERTIFICATIONS
A. SUBMIT AS NOTED IN INDIVIDUAL SPECIFICATION SECTIONS.

QUALITY ASSURANCE
A. MAINTAIN QUALITY CONTROL OVER SUPPLIERS, MANUFACTURERS, PRODUCTS, SERVICES, SITE CONDITIONS, AND WORKMANSHIP TO PRODUCE WORK OF SPECIFIED QUALITY.
B. COMPLY FULLY WITH MANUFACTURER'S INSTRUCTIONS.
C. COMPLY WITH SPECIFIED STANDARDS AS A MINIMUM QUALITY FOR THE WORK EXCEPT WHEN MORE STRINGENT TOLERANCES, CODES, OR SPECIFIED REQUIREMENTS INDICATE HIGHER STANDARDS OR MORE PRECISE WORKMANSHIP.

REFERENCES
A. CONFORM TO REFERENCE STANDARD BY DATE OF ISSUE CURRENT AS OF DATE OF CONTRACT.
B. SHOULD SPECIFIED REFERENCE STANDARD CONFLICT WITH CONTRACT DOCUMENTS, REQUEST CLARIFICATION FROM ENGINEER BEFORE PROCEEDING.

MANUFACTURERS' FIELD SERVICES
A. REPRESENTATIVE SHALL SUBMIT WRITTEN REPORT TO ENGINEER LISTING OBSERVATIONS AND RECOMMENDATIONS.

TESTING LABORATORY SERVICES
A. OWNER WILL SELECT A TESTING LABORATORY TO PERFORM INSPECTIONS, TESTS, AND OTHER SERVICES REQUIRED BY INDIVIDUAL SPECIFICATION SECTIONS.
B. ALL COSTS FOR LABORATORY TESTING OF EARTHWORK AND CONCRETE SHALL BE PAID FOR BY THE OWNER. THE CONTRACTOR SHALL BEAR THE COSTS FOR ALL TESTS REQUIRED TO BE REPEATED.
C. SERVICES WILL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING AUTHORITIES AND WITH SPECIFIED STANDARDS.
D. CONTRACTOR SHALL COOPERATE WITH TESTING LABORATORY PERSONNEL; FURNISH TOOLS, SAMPLES OF MATERIALS, DESIGN MIX, EQUIPMENT, STORAGE AND ASSISTANCE AS REQUESTED.
E. NOTIFY ENGINEER/TESTING LABORATORY 48 HOURS PRIOR TO EXPECTED TIME FOR OPERATIONS REQUIRING TESTING SERVICES.
F. MAKE ARRANGEMENTS WITH TESTING LABORATORY AND PAY FOR ADDITIONAL SAMPLES AND TESTS FOR CONTRACTOR'S CONVENIENCE.
G. FURNISH AND DELIVER SAMPLES/CYLINDERS TO LAB FOR TESTING.

TEMPORARY ELECTRIC POWER AND LIGHTING
A. PROVIDE AND PAY FOR POWER SERVICES REQUIRED FROM SOURCE.
B. PROVIDE POWER OUTLETS FOR CONSTRUCTION OPERATIONS, BRANCH WIRING, DISTRIBUTION BOXES, AND FLEXIBLE POWER CORDS AS REQUIRED.

TEMPORARY WATER
A. PROVIDE WATER, AS NEEDED, FOR OWN USE.
B. PROVIDE AN ADEQUATE SUPPLY OF POTABLE DRINKING WATER FOR USE BY EMPLOYEES AND ENGINEER'S EMPLOYEES.

SANITARY FACILITIES
A. PROVIDE AND MAINTAIN REQUIRED SANITARY FACILITIES AND ENCLOSURES.
B. MAINTAIN CLEAN AND SANITARY CONDITION.

WATER FOR TESTING
A. PROVIDE THE NECESSARY WATER REQUIRED FOR TESTING EQUIPMENT PRIOR TO ACCEPTANCE OF THE WORK, UNLESS OTHERWISE SPECIFICALLY STATED IN THE SPECIFICATIONS FOR THE EQUIPMENT, SYSTEM, OR FACILITY.

TEMPORARY TELEPHONE SERVICE
A. PROVIDE ON-SITE TELEPHONE SERVICE FOR CONTRACTOR'S AND ENGINEER'S USE DURING THE PERIOD OF CONSTRUCTION OF THE CONTRACT.

TEMPORARY WATER CONTROL
A. MAINTAIN EXCAVATIONS AND TRENCHES FREE OF WATER. PROVIDE AND OPERATE PUMPING EQUIPMENT OF A CAPACITY TO CONTROL WATER FLOW.
B. PROVIDE DEWATERING SYSTEM AND PUMPING TO MAINTAIN EXCAVATIONS DRY AND FREE OF WATER INFLOW ON A 24 HOURS BASIS.
C. PROVIDE PIPING TO HANDLE PUMPING OUTFLOW TO DISCHARGE IN A MANNER TO AVOID EROSION OR DEPOSIT OF SILT.

TEMPORARY ACCESS ROADS AND PARKING
A. CONSTRUCT AND MAINTAIN TEMPORARY CONSTRUCTION ACCESS ROADS, PARKING AREAS, AND DETOURS AS ARE REQUIRED TO EXECUTE THE WORK.

TEMPORARY HEATING AND VENTILATING
A. PROVIDE ADEQUATE HEAT AND VENTILATION TO ALL PARTS OF THE WORK.
B. SEE REQUIREMENTS OF SPECIFICATIONS FOR MINIMUM TEMPERATURE TO BE MAINTAINED FOR VARIOUS TRADES.
C. VENTILATE ENCLOSED AREAS.
D. DO NOT USE PERMANENT SYSTEMS TO PROVIDE TEMPORARY HEATING OR VENTILATION.

PROTECTION OF FINISHED WORK
A. PROTECT INSTALLED WORK AND PROVIDE SPECIAL PROTECTION WHERE SPECIFIED IN INDIVIDUAL SPECIFICATION SECTIONS.

PROGRESS CLEANING
A. MAINTAIN AREAS FREE OF WASTE MATERIALS, DEBRIS, AND RUBBISH. MAINTAIN SITE IN A CLEAN AND ORDERLY CONDITION.

FIELD OFFICES AND SHEDS
A. OFFICE: WEATHER TIGHT, SECURE, WITH LIGHTING, ELECTRICAL OUTLETS, HEATING, COOLING AND VENTILATING EQUIPMENT, AND EQUIPPED WITH STURDY FURNITURE, DRAWING DISPLAY TABLE, AND TELEPHONE.
B. PROVIDE SPACE FOR PROJECT MEETINGS WITH TABLE AND CHAIRS.
C. SHEDS: WEATHER TIGHT, SECURE, AND VENTILATED.

BASIC REQUIREMENTS (CON'T.)

REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS
A. REMOVE TEMPORARY EROSION CONTROL CONSTRUCTION, ABOVE GRADE OR BURIED UTILITIES, EQUIPMENT, FACILITIES, AND MATERIALS, PRIOR TO SUBSTANTIAL COMPLETION INSPECTION.
B. REMOVE AND REPAIR DAMAGE CAUSED BY INSTALLATION OR USE OF TEMPORARY WORK.

PRODUCTS
A. PRODUCTS: NEW MATERIAL, MACHINERY, COMPONENTS, EQUIPMENT, AND SYSTEMS FORMING WORK, BUT DOES NOT INCLUDE MACHINERY OR EQUIPMENT USED FOR PREPARATION, FABRICATION, OR ERECTION OF WORK.
B. USE INTERCHANGEABLE COMPONENTS OF THE SAME MANUFACTURE FOR SIMILAR COMPONENTS.

TRANSPORTATION, HANDLING, STORAGE, AND PROTECTION
A. TRANSPORT, HANDLE, STORE AND PROTECT PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

SUBSTITUTIONS
A. ONLY WITH SUBMITTAL OF THE BID WILL ENGINEER CONSIDER REQUESTS FROM CONTRACTOR FOR SUBSTITUTIONS. SUBSEQUENTLY, SUBSTITUTIONS WILL BE CONSIDERED ONLY WHEN A PRODUCT BECOMES UNAVAILABLE DUE TO NO FAULT OF CONTRACTOR.
B. DOCUMENT EACH REQUEST WITH COMPLETE DATA SUBSTANTIATING COMPLIANCE OF PROPOSED SUBSTITUTION WITH CONTRACT DOCUMENTS.

SYSTEMS DEMONSTRATION
A. PRIOR TO FINAL INSPECTION, DEMONSTRATE OPERATION OF EACH SYSTEM TO ENGINEER AND OWNER.
B. INSTRUCT OWNER'S PERSONNEL IN OPERATION, ADJUSTMENT, AND MAINTENANCE OF EQUIPMENT AND SYSTEMS, USING THE OPERATION AND MAINTENANCE DATA AS THE BASIS OF INSTRUCTION.

CONTRACT CLOSEOUT PROCEDURES
A. SUBMIT WRITTEN CERTIFICATION THAT CONTRACT DOCUMENTS HAVE BEEN REVIEWED, WORK HAS BEEN INSPECTED, AND WORK IS COMPLETE IN ACCORDANCE WITH CONTRACT DOCUMENTS AND READY FOR ENGINEERS INSPECTION.
B. SUBMIT FINAL APPLICATION FOR PAYMENT IDENTIFYING TOTAL ADJUSTED CONTRACT PRICE, PREVIOUS PAYMENTS, AND AMOUNT REMAINING DUE.

FINAL CLEANING
A. EXECUTE FINAL CLEANING PRIOR TO FINAL INSPECTION.
B. CLEAN INTERIOR AND EXTERIOR SURFACES EXPOSED TO VIEW.
C. CLEAN DEBRIS, WASTE AND SURPLUS SUPPLIES, RUBBISH, AND CONSTRUCTION FACILITIES FROM SITE.

PROJECT RECORD DOCUMENT
A. MAINTAIN ON SITE IN THE OFFICE, ONE SET OF CONTRACT DOCUMENTS, SHOP DRAWINGS, AND PRODUCT SUBMITTALS TO BE UTILIZED FOR RECORD DOCUMENTS.
B. RECORD ACTUAL REVISIONS TO THE WORK CONCURRENT WITH CONSTRUCTION PROGRESS.
C. SPECIFICATION, RECORD DOCUMENTS, AND SHOP DRAWINGS: LEGIBLY MARK EACH ITEM TO RECORD ACTUAL CONSTRUCTION OR PRODUCT INSTALLED.
D. SUBMIT DOCUMENTS TO ENGINEER WITH FINAL APPLICATION FOR PAYMENT.

OPERATION AND MAINTENANCE DATA
A. SUBMIT 2 SETS PRIOR TO FINAL INSPECTION, BOUND IN 8-1/2 X 11 INCH TEXT PAGES WITH DURABLE PLASTIC COVERS.
B. PREPARE BINDER COVER WITH PRINTED TITLE "OPERATION AND MAINTENANCE MANUAL", AND TITLE OF PROJECT.
C. INTERNALLY SUBDIVIDE THE BINDER CONTENTS WITH PERMANENT PAGE DIVIDERS, LOGICALLY ORGANIZED, WITH TABS CLEARLY PRINTED UNDER REINFORCED LAMINATED PLASTIC TABS.
D. CONTENTS:
1.1. DIRECTORY LISTING NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF ENGINEER, CONTRACTOR, SUBCONTRACTORS, AND MAJOR EQUIPMENT SUPPLIERS.
1.2. OPERATION AND MAINTENANCE INSTRUCTIONS, ARRANGED BY SYSTEM.
1.3. CERTIFICATES.
1.4. SHOP DRAWINGS.
1.5. PRODUCT DATA.
1.6. WARRANTIES.

WARRANTIES
A. PROVIDE DUPLICATE NOTARIZED COPIES.
B. EXECUTE AND ASSEMBLE DOCUMENTS FROM SUBCONTRACTORS, SUPPLIERS, AND MANUFACTURERS.
C. SUBMIT PRIOR TO FINAL APPLICATION FOR PAYMENT.
D. UNLESS NOTED IN THE CONTRACT DOCUMENTS, PROVIDE A WARRANTY LASTING 12 MONTHS FROM SUBSTANTIAL COMPLETION.

SPARE PARTS AND MAINTENANCE MATERIALS
A. PROVIDE PRODUCTS, SPARE PARTS, MAINTENANCE AND EXTRA MATERIALS IN QUANTITIES SPECIFIED IN INDIVIDUAL SPECIFICATION SECTIONS.
B. DELIVER TO PROJECT SITE AND PLACE IN LOCATIONS AS DIRECTED; OBTAIN RECEIPT PRIOR TO FINAL PAYMENT.

Q TABLE

APPENDIX Q2

Impervious cover allowed at 80 % X GROSS SITE AREA = 1.134 ac.

ALLOWABLE IMPERVIOUS COVER BREAKDOWN BY SLOPE CATEGORY

Total acreage 15 - 25% = 0 Acres X 10% = 0 ac.

PROPOSED TOTAL IMPERVIOUS COVER

Total Proposed Impervious Cover = 0.569 ac. 50.10%

PROPOSED IMPERVIOUS COVER ON SLOPES

		IMPERVIOUS COVER		
		BUILDING/AND OTHER IMPERVIOUS COVER	% OF CATEGORY	DRIVEWAYS ROADWAYS
SLOPE CATEGORIES	ACRES	ACRES		ACRES
0-15%	1.108	0.569	50.10%	0.000
15-25%	0.008	0.000	0.00%	0.000
25-35%	0.001	0.000	0.00%	0.000
Over 35%	0.017	0.000	0.00%	0.000
Total Site Area	1.134			

CITY OF AUSTIN GENERAL CONSTRUCTION NOTES

1. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
2. CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET R.O.W.
3. CONTRACTOR SHALL NOTIFY THE CITY OF AUSTIN - SITE & SUBDIVISION DIVISION TO SUBMIT REQUIRED DOCUMENTATION, PAY CONSTRUCTION INSPECTION FEES, AND TO SCHEDULE THE REQUIRED SITE AND SUBDIVISION PRE-CONSTRUCTION MEETING. THIS MEETING MUST BE HELD PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN THE R.O.W. OR PUBLIC EASEMENTS. PLEASE VISIT HTTP://AUSTINTEXAS.GOV/PAGE/COMMERCIAL-SITE-AND-SUBDIVISION-INSPECTIONS FOR A LIST OF SUBMITTAL REQUIREMENTS, INFORMATION CONCERNING FEES, AND CONTACT INFORMATION.
4. FOR SLOPES OR TRENCHES GREATER THAN FIVE FEET IN DEPTH, A NOTE MUST BE ADDED STATING: "ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION." (OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 EAST 6TH STREET, AUSTIN TEXAS.).
5. ALL SITE WORK MUST ALSO COMPLY WITH ENVIRONMENTAL REQUIREMENTS.
6. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS AND PRIOR TO THE FOLLOWING, THE ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE, FILTRATION AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS:

-RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE DEVELOPMENT SERVICES DEPARTMENT (INSIDE THE CITY LIMITS); OR
-INSTALLATION OF AN ELECTRIC OR WATER METER (IN THE FIVE-MILE ETJ)

DEVELOPER INFORMATION:

DEVELOPER: CS VISTA, LLC
5801 STANDING ROCK DRIVE
AUSTIN, TX 78730

OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

CIVIL ENGINEER: AMC DESIGN GROUP, INC.
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911

FIRM RESPONSIBLE FOR E/S CONTROL AND WQC MAINTENANCE:
CONTRACTOR

FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:
CONTRACTOR

FIRE DEPARTMENT NOTES

CONSTRUCTION DOCUMENTS RELATED TO SITE PLAN AND BUILDING PERMIT APPROVALS SHALL ADDRESS GENERAL EMERGENCY ACCESS PROVISIONS AND CONSTRUCTION SEQUENCING THAT AFFECTS FIRE OR LIFE SAFETY. ONE ASPECT OF MEETING THIS REQUIREMENT IS TO INCLUDE IN THE SITE PLAN SUBMITTAL GENERAL CONSTRUCTION NOTES WHICH SHOULD INCLUDE, BUT NEED NOT BE LIMITED TO THE FOLLOWING:

1. THE AUSTIN FIRE DEPARTMENT REQUIRES FINAL ASPHALT OR CONCRETE PAVEMENT ON REQUIRED ACCESS ROADS PRIOR TO THE START OF COMBUSTIBLE CONSTRUCTION. ANY OTHER METHOD OF PROVIDING "ALL-WEATHER DRIVING CAPABILITIES" SHALL BE REQUIRED TO BE DOCUMENTED AND APPROVED AS AN ALTERNATE METHOD OF CONSTRUCTION IN ACCORDANCE WITH THE APPLICABLE RULES FOR TEMPORARY ROADS OUTLINED IN THE CITY OF AUSTIN FIRE PROTECTION CRITERIA MANUAL.
2. FIRE HYDRANTS SHALL BE INSTALLED WITH THE CENTER OF THE FOUR (4) INCH OPENING (STEAMER) LOCATED AT LEAST 18 INCHES ABOVE FINISHED GRADE. THE STEAMER OPENING OF FIRE HYDRANTS SHALL FACE THE APPROVED FIRE ACCESS DRIVEWAY OR PUBLIC STREET AND SET BACK FROM THE CURB LINE(S) AN APPROVED DISTANCE, TYPICALLY THREE (3) TO SIX (6) FEET. THE AREA WITHIN THREE (3) FEET IN ALL DIRECTIONS FROM ANY FIRE HYDRANT SHALL BE FREE OF OBSTRUCTIONS, AND THE AREA BETWEEN THE STEAMER OPENING AND THE STREET OR DRIVEWAY GIVING EMERGENCY VEHICLE ACCESS SHALL BE FREE OF OBSTRUCTIONS.
3. TIMING OF INSTALLATIONS: WHEN FIRE PROTECTION FACILITIES ARE INSTALLED BY THE CONTRACTOR, SUCH FACILITIES SHALL INCLUDE SURFACE ACCESS ROADS. EMERGENCY ACCESS ROADS OR DRIVES SHALL BE INSTALLED AND MADE SERVICEABLE PRIOR TO AND DURING THE TIME OF CONSTRUCTION. WHEN THE FIRE DEPARTMENT APPROVES AN ALTERNATE METHOD OF PROTECTION, THIS REQUIREMENT MAY BE MODIFIED AS DOCUMENTED IN THE APPROVAL OF THE ALTERNATE METHOD.
4. ALL EMERGENCY ACCESS ROADWAYS AND FIRE LANES, INCLUDING PERVIOUS/DECORATIVE PAVING, SHALL BE ENGINEERED AND INSTALLED AS REQUIRED TO SUPPORT THE AXLE LOADS OF EMERGENCY VEHICLES. A LOAD CAPACITY SUFFICIENT TO MEET THE REQUIREMENTS FOR HS-20 LOADING (16 KIPS/WHEEL) AND A TOTAL VEHICLE LIVE LOAD OF 80,000 POUNDS IS CONSIDERED COMPLIANT WITH THIS REQUIREMENT.
5. FIRE LANES DESIGNATED ON SITE PLANS SHALL BE REGISTERED WITH THE CITY OF AUSTIN FIRE DEPARTMENT AND INSPECTED FOR FINAL APPROVAL.
6. THE MINIMUM VERTICAL CLEARANCE REQUIRED FOR EMERGENCY VEHICLE ACCESS ROADS OR DRIVES IS 14 FEET FOR THE FULL WIDTH OF THE ROADWAY OR DRIVEWAY.

AUSTIN ENERGY NOTES

1. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH CHAPTER 25-8, SUBCHAPTER B OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
2. THE OWNER/DEVELOPER OF THIS SUBDIVISION/LOT SHALL PROVIDE AUSTIN ENERGY WITH ANY EASEMENT AND/OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE BUILDING, AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH CHAPTER 25-8 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
3. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
4. THE OWNER OF THE PROPERTY IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, CITY OF AUSTIN RULES AND REGULATIONS AND TEXAS STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICE UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
5. ANY RELOCATION OF ELECTRIC FACILITIES SHALL BE AT OWNER'S EXPENSE.

AMERICANS WITH DISABILITIES ACT

THE CITY OF AUSTIN HAS REVIEWED THIS PLAN FOR COMPLIANCE WITH CITY DEVELOPMENT REGULATIONS ONLY. THE APPLICANT, PROPERTY OWNER, AND OCCUPANT OF THE PREMISES ARE RESPONSIBLE FOR DETERMINING WHETHER THE PLAN COMPLIES WITH ALL OTHER LAWS, REGULATIONS, AND RESTRICTIONS WHICH MAY BE APPLICABLE TO THE PROPERTY AND ITS USE.

ORDINANCE REQUIREMENTS

1. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE RELEASED SITE PLAN. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE SITE PLAN AMENDMENT AND APPROVAL OF THE DEVELOPMENT SERVICES DEPARTMENT.
2. APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.
3. ALL SIGNS MUST COMPLY WITH REQUIREMENTS OF THE LAND DEVELOPMENT CODE (CHAPTER 25-10).
4. ADDITIONAL ELECTRIC EASEMENTS MAY BE REQUIRED AT A LATER DATE.
5. WATER AND WASTEWATER SERVICE WILL BE PROVIDED BY THE CITY OF AUSTIN [OR IDENTIFY THE SERVICE PROVIDER IF OTHER THAN THE CITY OF AUSTIN].
6. ALL EXISTING STRUCTURES SHOWN TO BE REMOVED WILL REQUIRE A DEMOLITION PERMIT FROM THE CITY OF AUSTIN DEVELOPMENT SERVICES DEPT.
7. A DEVELOPMENT PERMIT MUST BE ISSUED PRIOR TO AN APPLICATION FOR BUILDING PERMIT FOR NON-CONSOLIDATED OR PLANNING COMMISSION APPROVED SITE PLANS.
8. NO CERTIFICATE OF OCCUPANCY MAY BE ISSUED FOR THE PROPOSED RESIDENTIAL CONDOMINIUM PROJECT UNTIL THE OWNER OR OWNERS OF THE PROPERTY HAVE COMPLIED WITH CHAPTER 81 AND 82 OF THE PROPERTY CODE OF THE STATE OF TEXAS OR ANY OTHER STATUTES ENACTED BY THE STATE CONCERNING CONDOMINIUMS.
9. FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.
10. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL CONSTRUCTION NOTES

TCEQ-0592 (Rev. July 15, 2015)

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
   - THE NAME OF THE APPROVED PROJECT;
   - THE ACTIVITY START DATE; AND
   - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.

5. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
6. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
7. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
8. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
9. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.
10. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
    - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
    - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION
    - OF THE SITE; AND
    - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
    A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVER

GENERAL NOTES

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN DOES NOT REMOVE THESE RESPONSIBILITIES.

"REVIEWED BY AUSTIN WATER" APPLIES ONLY TO AW PUBLIC FACILITIES. ALL OTHER WATER AND WASTEWATER FACILITIES INSIDE PRIVATE PROPERTY ARE UNDER THE JURISDICTION OF BUILDING INSPECTIONS.

USE OF ELECTRONIC FILES GENERAL DISCLAIMER:

USE OF THE ATTACHED FILES IN ANY MANNER INDICATES YOUR ACCEPTANCE OF TERMS AND CONDITIONS AS SET FORTH BELOW. IF YOU DO NOT AGREE TO ALL OF THE TERMS AND CONDITIONS, PLEASE CONTACT AUSTIN WATER PIPELINE ENGINEERING, PROJECT COORDINATOR PRIOR TO USE OF THE REFERENCED INFORMATION. PLEASE BE ADVISED THAT THE ATTACHED FILES ARE IN A FORMAT THAT CAN BE ALTERED BY THE USER. DUE TO THIS FACT, ANY REUSE OF THE DATA WILL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE CITY OF AUSTIN AND USER SHALL INDEMNIFY AND HOLD HARMLESS THE CITY OF AUSTIN FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING FROM USING THE DIGITAL FILE. IN ADDITION, IT IS THE RESPONSIBILITY OF THE USER TO COMPARE ALL DATA WITH THE PDF VERSION OF THIS DRAWING. IN THE EVENT THERE IS A CONFLICT BETWEEN THE PDF VERSION DRAWING AND THE ELECTRONIC FILE, THE PDF VERSION DRAWING SHALL PREVAIL.

AUSTIN FIRE DEPARTMENT
FIRE PREVENTION DIVISION
6310 Wilhelmina Delco Dr., Austin, Texas 78752
afd.hydrants@austintexas.gov

Hydrant Flow Test Report

TEST DATE	**04/20/2024**	FIRE BOX	**2801**	COMPANY	**PREVENTION**
TIME	**1535** HRS	MAP GRID ID	**L36**	AFD STAFF	**SANTIAGO, JESUS**

RESIDUAL HYDRANT

RESIDUAL HYDRANT #	**248409**	MAIN SIZE (in.)	**12**

BLK #	DIRECTION	STREET NAME	TYPE
13100		**BURNET**	**RD**

STATIC PRESSURE (PSI)	**106**	RESIDUAL PRESSURE (PSI)	**102**

FLOW HYDRANT

FLOW HYDRANT #	**613593**	MAIN SIZE (in.)	**12**

BLK #	DIRECTION	STREET NAME	TYPE
13100		**BURNET**	**RD**

STATIC PRESSURE (PSI)	**102**	RESIDUAL PRESSURE (PSI)	**90**

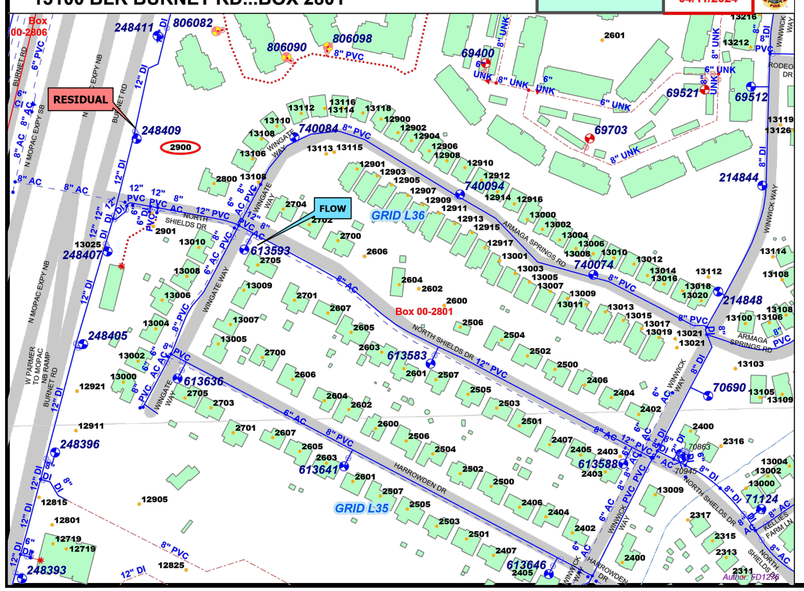
Comments	dc = discharge coefficient straight 2½" butt = 0.9 w/ 45° elbow = 0.75	**0.9**
	FLOW RATE (GPM) =	**1592**

NOTE: This information represents the water supply characteristics in the immediate area on the date and time tested. The City of Austin does not guarantee this data will be representative of the water supply characteristics at any time in the future. It is the requesting party's responsibility to ensure that this test information is appropriate to the location of the project in question and that any differences in elevation between the test location and project are accounted for and included in the hydraulic calculations.

HFTR #17722983

13100 BLK BURNET RD...BOX 2801

REF# 17696340 — 04/11/2024



AUTOMATED METERING INFRASTRUCTURE: EFFECTIVE MARCH 2022, NEW WATER METERS INSTALLED SHALL BE IN CONFORMANCE WITH AW'S AUTOMATED METERING INFRASTRUCTURE TECHNOLOGY, AND WITH THE APPLICABLE STANDARD PRODUCT LIST. APPLICANTS FILING A SITE PLAN OR SUBDIVISION PLAN WILL BE REQUIRED TO COORDINATE WITH THE AUSTIN WATER PLAN REVIEWER FOR DETAILS ON APPROVAL AND INSTALLATION.

PRIOR TO THE HANDLING AND DISPOSAL OF ASBESTOS PIPE, THE CONTRACTOR'S WORK PLANS WILL BE REVIEWED AND COORDINATED THROUGH AUSTIN WATER'S ASBESTOS PROGRAM MANAGER WHO CAN BE REACHED AT 512-972-0915. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE A TRAINED, CERTIFIED AND LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH THE FEDERAL, STATE AND LOCAL REGULATIONS.

MODIFICATIONS TO AUSTIN WATER SIGNED AND STAMPED SHEETS ARE NOT PERMITTED. ALL DESIGN MODIFICATIONS WILL NEED TO BE SUBMITTED VIA THE ABC PORTAL FOR A PLAN CORRECTION OR REVISION. ALL UNETHICAL ENGINEERING PRACTICES, INCLUDING MODIFYING CITY STAMPED PLAN SHEETS, SHALL BE REPORTED TO THE TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS (PELS).
REFERENCE: TEXAS ENGINEERING PRACTICE ACT AND RULES, SUBCHAPTER C: PROFESSIONAL CONDUCT AND ETHICS

Additional Review Acknowledgement

Onsite Water Reuse & AW Reclaimed Information

Does this development have a total gross floor building area of 250,000 square feet or more?

☐YES
☒NO

Distance to nearest existing AW reclaimed main?

☐250' or less
☐251' to 500'
☒Greater than 500'

Automated Metering Information

Is this project within the current service area of AW's Data Collection Units (DCUs)?

☒YES
☐NO

Does this project require a dedicated easement for DCU infrastructure?

☐YES
☒NO

AULCC Requirement

DOES THIS PROJECT REQUIRE AN AULCC REVIEW?

☐YES
☒NO

IF YES, PLEASE PROVIDE UCC#

SERVICE EXTENSION REQUESTS

WATER SER NO. ____

NOT REQUIRED

WASTEWATER SER NO.____

NOT REQUIRED

AW INFRASTRUCTURE INFORMATION

PROPOSED PRODUCT TYPE (TO BE INSTALLED)	LENGTH OF PIPE (L.F.)	SIZE OF PIPE (INCH)	NO. OF SERVICES
WATER MAIN	10	8	2
WASTEWATER MAIN	NA	NA	1
RECLAIMED WATER MAIN	NA	NA	NA
WATER SERVICE	12.5	2	2
WASTEWATER SERVICE	6.7	6	1
RECLAIMED WATER SERVICE	NA	NA	NA

EXPAND OR REDUCE TABLE AS NEEDED*
THE INFORMATION INCLUDED IN THIS TABLE ARE APPROXIMATE VALUES ESTIMATED BASED ON GENERAL ENGINEERING GUIDELINES

CITY OF AUSTIN
WATER AND WASTEWATER UTILITY
SPECIAL SERVICES DIVISION
(512) 972-1060
THIS PROJECT HAS 1 PRIVATE HYDRANTS LOCATED WITHIN THE PROPERTY. THE PROPERTY OWNER IS REQUIRED TO COMPLY WITH AUSTIN FIRE CODE. FAILURE TO COMPLY MAY RESULT IN CIVIL AND/OR CRIMINAL REMEDIES AVAILABLE TO THE CITY. THE PERFORMANCE OF THIS OBLIGATION SHALL ALWAYS REST WITH THE OWNER OF RECORD. FIRE HYDRANTS ON PRIVATE PROPERTY ARE REQUIRED TO BE SERVICED, MAINTAINED AND FLOWED ANNUALLY, USING A CONTRACTOR REGISTERED WITH THE CITY TO PROVIDE THE SERVICE.

PROJECT INFORMATION[1]

FIRE, DOMESTIC AND IRRIGATION DEMAND DATA	
GRID NUMBER:	L-36
MAPSCO NUMBER:	466E
AW INTERSECTION NUMBER:	8123
BUILDING SIZE IN SQUARE FEET:	7180
BUILDING TYPE PER IFC:	V-B
BUILDING HEIGHT:	1-STORY
AVAILABLE FIRE FLOW CALCS AT 20 PSI:	8346
REQUIRED BUILDING FIRE FLOW PER IFC TABLE B105.1(2):	2250
REDUCED FIRE FLOW PER 75% FIRE SPRINKLER REDUCTION PER IFC TABLE B105.2:	563
MINIMUM FIRE FLOW (SEE NOTE #2 BELOW):	1000
DOMESTIC WATER DEMAND IN GPM:	49
WATER SUPPLY FIXTURE UNITS (WSFU): FLUSH TANKS OR FLUSHOMETERS	125
AUSTIN WATER PRESSURE ZONE:	NORTHWEST A NWA1
STATIC WATER PRESSURE IN PSI:	86.6 - 106.1 PSI
STATIC PRESSURE AT HIGHEST LOT SERVED IN PSI:	N/A
STATIC PRESSURE AT LOWEST LOT SERVED IN PSI:	N/A
MAXIMUM IRRIGATION DEMAND:	25
FIRE LINE VELOCITY:	5.0 FPS
DOMESTIC LINE VELOCITY:	N/A
LIVING UNIT EQUIVALENTS (LUEs):	N/A

NOTES: LOTS WITH 65 PSI OR GREATER REQUIRE A PRV TO BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE DOMESTIC WATER METER.

1. WITH THE EXCEPTION OF PROVIDING THE REQUIRED INFORMATION, DO NOT REVISE THESE TABLES IN ANYWAY.
2. MIN FIRE FLOW: DESIGN ENGINEER MUST INDICATE VALUES WHICH COMPLY WITH IFC TABLES B105.1(2) OR B105.2 (REQUIRED OR REDUCED FIRE FLOWS). MIN FIRE FLOW VALUE SHALL BE NO LESS THAN 1000 GPM FOR NFPA 13 SYSTEMS OR 1500 GPM FOR NFPA 13R SYSTEMS (FOOTNOTES A AND B FOR TABLE B105.2).
3. IF DEMAND, OTHER THAN MINIMUM FIRE FLOW, IS UTILIZED IN FIRE LINE VELOCITY DETERMINATION, ENGINEERING JUSTIFICATION SHALL BE SHOWN ON THIS SHEET WITH APPLICABLE DATA AND CALCULATIONS.

METER NOTICE:

METER 1.5 INCHES AND LARGER MUST BE PURCHASED AND ORDERED 90 DAYS IN ADVANCE OF INSTALLATION.

DOMESTIC
METER REQUIREMENT FOR PROJECT ADDRESS: 2900 N. SHIELDS
TYPE: P.D.
SIZE 1" GPM 3-50
SERVICE UNITS 2.5

IRRIGATION
METER REQUIREMENT FOR PROJECT ADDRESS: 2900 N. SHIELDS
TYPE: P.D.
SIZE 3/4" GPM 2-30
SERVICE UNITS 1.5

~~RECLAIM~~
~~METER REQUIREMENT FOR PROJECT~~
~~TYPE: TURBINE~~
~~SIZE GPM~~
~~SERVICE UNITS~~

INSPECTION NOTES

PLEASE CONTACT DEVELOPMENT SERVICES DEPARTMENT, SITE AND SUBDIVISION INSPECTION AT sitesubintake@austintexas.gov FOR ARRANGEMENTS FOR PAYMENT OF INSPECTION FEES AND JOB ASSIGNMENT FOR INSPECTION OF THE PUBLIC UTILITIES TO THIS SITE. INSPECTION FEES MUST BE PAID BEFORE ANY PRE-CONSTRUCTION MEETING CAN BE HELD.

STANDARD CONSTRUCTION NOTES REVISED FEBRUARY 7, 2025

1. THE CITY STANDARD CONSTRUCTION SPECIFICATIONS CURRENT AT THE TIME OF BIDDING SHALL COVER MATERIALS AND METHODS USED TO DO THIS WORK.
2. CONTRACTOR MUST OBTAIN A ROW PERMIT FROM AUSTIN TRANSPORTATION AND PUBLIC WORKS DEPARTMENT, RIGHT OF WAY MANAGEMENT DIVISION BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR ALLEY. ACTIVITY WITHIN RIGHT-OF-WAY SHALL COMPLY WITH APPROVED TRAFFIC CONTROL PLAN (TCP).
3. AT LEAST 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION ACTIVITY IN PUBLIC ROW OR PUBLIC EASEMENT, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE CITY OF AUSTIN INSPECTION GROUP (AUSTIN TRANSPORTATION AND PUBLIC WORKS DEPARTMENT (TPW), OR DEVELOPMENT SERVICES). SEE CURRENT NOTIFICATION REQUIREMENTS AT WWW.AUSTINTEXAS.GOV.
4. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. THE CITY OF AUSTIN WATER AND WASTEWATER MAINTENANCE RESPONSIBILITY ENDS AT R.O.W./EASEMENT LINES.
5. NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND WASTEWATER SERVICES.
6. MINIMUM TRENCH SAFETY MEASURES SHALL BE PROVIDED, AS REQUIRED BY OSHA, CITY SPECIFICATION 509S, AND CITY/COUNTY CONSTRUCTION INSPECTORS.
7. PRESSURE TAPS WILL ONLY BE ALLOWED ON A CASE BY CASE BASIS, AS DETERMINED BY THE DIRECTOR'S DESIGNEE. NORMALLY PRESSURE TAPS 4 INCHES AND LARGER SHALL BE ALLOWED IN THE FOLLOWING CASES: A) A TEST SHUT OUT INDICATES AN ADEQUATE SHUT OUT TO PERFORM THE WORK IS NOT FEASIBLE B) MORE THAN 30 CUSTOMERS OR A SINGLE CRITICAL CUSTOMER (AS DEFINED BY AUSTIN WATER) WOULD BE IMPACTED BY THE SHUT OUT OR C) THE EXISTING WATER LINE WARRANTS IT.
8. WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEMS 510.3 (27)-(29). FORCE MAIN PRESSURE TESTING SHALL BE CONDUCTED AND FALL UNDER THE SPECIFICATIONS AS WATER LINES (PRESSURE PIPE) OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
9. ALL MATERIAL USED ON THIS PROJECT MUST BE LISTED ON THE STANDARD PRODUCTS LISTING. ANY MATERIAL NOT LISTED HAS TO GO THROUGH THE REVIEW OF THE STANDARDS COMMITTEE FOR REVIEW AND APPROVAL PRIOR TO START OF PROJECT. TESTING AND EVALUATION OF PRODUCTS ARE REQUIRED BEFORE APPROVAL WILL BE GIVEN ANY CONSIDERATION.
10. WHEN WATER SERVICES ARE DAMAGED AND THE SERVICE MATERIAL IS POLYETHYLENE (PE), THE LINE SHALL BE REPAIRED ONLY BY HEAT FUSION WELD, AT BRASS FITTINGS, OR THE FULL LENGTH SHALL BE REPLACED PER CURRENT STANDARD DETAIL(S). WHEN POLYBUTYLENE (PB) TUBING IS DAMAGED OR TAMPERED WITH IN ANY WAY, THE FULL LENGTH OF SERVICE LINE SHALL BE REPLACED. (NOTE: FULL LENGTH IS FROM THE CORPORATION STOP TO THE METER.) REPAIR COUPLINGS ARE NOT ALLOWED FOR ANY WATER OR WASTEWATER SERVICE LINE REPAIR, RECONNECT, OR REPLACEMENT.
11. WHEN AN EXISTING WATERLINE SHUT OUT IS NECESSARY AND POSSIBLE, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTOR WHO WILL THEN NOTIFY AUSTIN WATER DISPATCH AND THE AFFECTED CUSTOMERS A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE.
12. THE INSPECTOR SHALL NOTIFY AUSTIN WATER AT 972-1000 AT A MINIMUM OF 72 HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METERS.
13. PROJECT-SPECIFIC SHOP DRAWINGS SHALL BE SUBMITTED FOR AW APPROVAL FOR PRE-CAST CIRCULAR VERTICAL MANHOLE SECTIONS LARGER THAN 48" DIAMETER. THE SHOP DRAWINGS SHALL INCLUDE THE FLOWLINE ELEVATION OF ALL CONNECTING PIPES; ELEVATIONS OF TRANSITIONS FROM LARGE DIAMETER SECTIONS TO 48" DIAMETER SECTIONS; TOP OF MANHOLE AND SURROUNDING GROUND ELEVATIONS; AND DETAILS OF SPECIAL CONSTRUCTION CONSIDERATIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
14. WHEN CONCRETE MANHOLES LARGER THAN 48 INCH DIAMETER ARE USED, DRAWINGS THAT ARE SEALED BY A PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR BASE SLABS, FLAT TOP LIDS (IF USED), AND FLAT TYPE CONCRETE PIECES USED TO TRANSITION FROM LARGER TO SMALLER DIAMETER MANHOLE SECTIONS.
15. ALL FIRE HYDRANTS AND VALVES THAT ARE TO BE ABANDONED SHALL BE REMOVED, SALVAGED AND RETURNED TO AUSTIN WATER. NOTICE SHOULD BE GIVEN 48 HOURS PRIOR, TO PIPELINE OPERATIONS DISTRIBUTION SYSTEM -VALVES AND HYDRANT SERVICES SUPERVISOR AT AWDSM-ASSET-RECOVERY@CITYOFAUSTIN.ONMICROSOFT.COM.
16. ALL EXISTING WATER METERS IDENTIFIED TO BE RELOCATED OR ABANDONED AT THE DEVELOPMENT SHALL BE REMOVED FROM THE METER BOX PRIOR TO CONSTRUCTION AND GIVEN IMMEDIATELY TO THE CITY OF AUSTIN INSPECTOR.
17. THE ENGINEER SHALL CALL OUT THE SIZE, TYPE AND USE (DOMESTIC, IRRIGATION OR RECLAIM) OF ALL EXISTING WATER METERS TO BE RELOCATED OR REPURPOSED. WATER METER NUMBERS WILL NOT BE REQUIRED TO BE PLACED ON THE PLAN SHEET. A SEPARATE UTILITY PERMITTING OFFICE FORM CAN BE USED TO PROVIDE RELEVANT DATA FOR THE EXISTING INFORMATION ON EXISTING METERS TO RECEIVE APPROPRIATE CREDITS. THIS FORM SHALL BE DIRECTLY SUBMITTED TO UTILITY PERMITTING OFFICE FOR REVIEW AND PROCESSING.
18. NO CONNECTION MAY BE MADE BETWEEN THE PRIVATE PLUMBING AND AUSTIN WATER INFRASTRUCTURE UNTIL A CITY APPROVED WATER METER HAS BEEN INSTALLED.
19. METER BOXES AND CLEAN OUTS SHALL NOT BE LOCATED WITHIN PAVED AREAS SUCH AS DRIVEWAYS AND SIDEWALKS.
20. NO SOIL COMPACTION EQUIPMENT SHALL COME WITHIN 24-INCHES FROM THE TOP OF THE WATER OR WASTEWATER PIPE. BETWEEN 24-36 INCHES FROM TOP OF THE PIPE, ONLY LIGHT SOIL COMPACTION EQUIPMENT (E.G., RAMMERS OR "WHACKER PACKERS", VIBRATING PLATE COMPACTORS, WALK-BEHIND HAND-GUIDED ROLLERS) OR SMOOTH ROLLER COMPACTION EQUIPMENT WEIGHING LESS THAN 5,000 LBS. WILL BE ALLOWED. WHERE SOIL COMPACTION EQUIPMENT WILL BE 36-INCHES OR GREATER FROM THE TOP OF THE PIPE, HS20 LOADS SHALL NOT BE EXCEEDED. PIPE DEPTHS SHALL BE VERIFIED THROUGH POTHOLING, LEVEL A SUE OR BY MH INVERT DATA.
21. THE DESIGN AND CONSTRUCTION OF RETAINING WALLS, BRIDGES, CULVERTS, HEADWALLS, JUNCTION STRUCTURES, SCREENING WALLS, AND STORMWATER DRAINAGE PIPE WITHIN THE VICINITY OF AW UTILITIES SHALL BE IN COMPLIANCE WITH SECTION 13 OF THE COA'S TRANSPORTATION CRITERIA MANUAL.
22. THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 510.3(22) AND SPL WW-27A, WW-27A-01, WW-27A-02 AND WW-27F.
23. ALL WATERLINE BRANCH CONNECTIONS SHALL HAVE AN MJ GATE VALVE POSITIVELY RESTRAINED TO THE MJ TEE BY USING A SWIVEL TEE, FOSTER ADAPTOR, OR SWIVEL X SOLID HYDRANT ADAPTOR (WITH SWIVEL GLAND).

VERSION 2.0
STANDARD NO.
1 OF 1

CITY OF AUSTIN
AUSTIN WATER
October 2021

AUSTIN WATER GENERAL INFORMATION AND CONSTRUCTION NOTES FOR COMMERCIAL SITES AND SUBDIVISION PLANS

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303036
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

STATE OF TEXAS — CHRIS McCOMB — 80442 — LICENSED PROFESSIONAL ENGINEER — 6/13/25

Thrauer Design
LAND PLANNERS
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456

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NO	DATE	DESCRIPTION

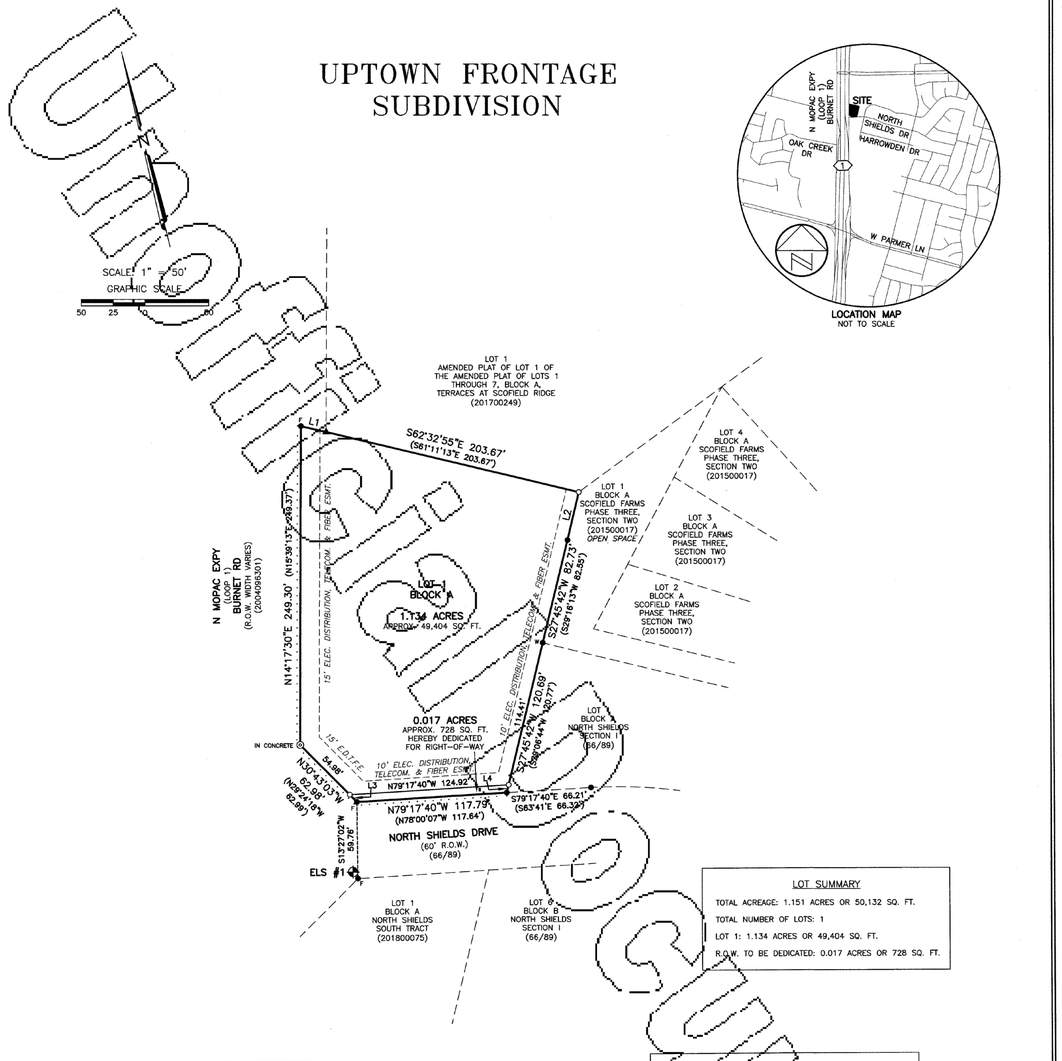
UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

AUSTIN WATER INFORMATION SHEET VER. 2.0

SP-2024-0345C

$74.00 08/20/2024 202400141

UPTOWN FRONTAGE SUBDIVISION



LOT SUMMARY

TOTAL ACREAGE: 1.151 ACRES OR 50,132 SQ. FT.

TOTAL NUMBER OF LOTS: 1

LOT 1: 1.134 ACRES OR 49,404 SQ. FT.

R.O.W. TO BE DEDICATED: 0.017 ACRES OR 728 SQ. FT.

BENCHMARK INFORMATION:

ELS #1: MAG NAIL WITH WASHER SET IN INLET AT THE SOUTHEAST INTERSECTION OF LOOP 1 (N MOPAC EXPRESSWAY) AND NORTH SHIELDS DRIVE AND APPROX. 31' SOUTH OF A STORMSEWER MANHOLE LOCATED IN NORTH SHIELDS DRIVE.

ELEVATION = 770.65'

VERTICAL DATUM: NAVD 88 (GEOID 12B)

LEGEND

●	1/2" REBAR FOUND (OR AS NOTED)
F●	1/2" REBAR WITH "FOREST" CAP FOUND
W●	1/2" REBAR WITH "WATSON" CAP FOUND
○	1/2" REBAR WITH "EARLY BOUNDARY" CAP SET
◎	TXDOT TYPE II DISK IN CONCRETE FOUND
▲	MAG NAIL WASHER WITH "RL SURVEYING" FOUND ON TOP OF COLUMN
⊕	CONTROL POINT/BENCHMARK LOCATION
. . . .	SIDEWALK LOCATION
E.D.T.F.E.	ELECTRIC DISTRIBUTION, TELECOM. & FIBER EASEMENT
( )	RECORD INFORMATION

LINE TABLE			
LINE	BEARING	DISTANCE	(RECORD)
L1	S62°32'55"E	20.38'	(S61°06'26"E 20.44')
L2	S27°17'35"W	38.62'	(S28°39'17"W 38.62')
L3	N30°43'03"W	8.00'	
L4	S27°45'42"W	6.28'	

JOE BEN EARLY, JR. 6016 REGISTERED PROFESSIONAL LAND SURVEYOR

7/16/2024

C8-2024-0032.0A

EARLY LAND SURVEYING
A LIMITED LIABILITY COMPANY
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631
TBPELS FIRM NO. 10194487

PROJECT NO.: 1013-018
DRAWING NO.: 1013-018-PL1
PLOT DATE: 7/16/24
PLOT SCALE: 1" = 50'
DRAWN BY: JBE
SHEET 01 OF 02

202400141

UPTOWN FRONTAGE SUBDIVISION

STATE OF TEXAS
COUNTY OF TRAVIS

KNOW ALL MEN BY THESE PRESENTS:

THAT CS VISTA, LLC, ACTING BY AND THROUGH CHRISTINE WONG, BEING THE OWNER OF THAT CERTAIN 1.15 ACRE TRACT OF LAND OUT OF THE FRANCISCO GARCIA SURVEY NO. 60, ABSTRACT NO. 312 SITUATED IN TRAVIS COUNTY, TEXAS, AS CONVEYED BY DEED AS RECORDED IN DOCUMENT NO. 2018108050 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS; DOES HEREBY SUBDIVIDE 1.15 ACRES OF LAND IN ACCORDANCE WITH THE ATTACHED MAP OR PLAT SHOWN HEREON, PURSUANT TO CHAPTER 212 OF THE TEXAS LOCAL GOVERNMENT CODE, TO BE KNOWN AS:

UPTOWN FRONTAGE SUBDIVISION

AND DO HEREBY DEDICATE TO THE PUBLIC, THE USE OF THE STREETS AND EASEMENTS SHOWN HEREON, SUBJECT TO ANY EASEMENTS AND/OR RESTRICTIONS HERETOFORE GRANTED AND NOT RELEASED.

WITNESS MY HAND THIS THE 14th DAY OF August 2024 A.D.

BY: Christine Wong

CS VISTA, LLC
5801 STANDING ROCK DRIVE
AUSTIN, TX 78730

BY: _____ DATE 8/14/24

PRINTED NAME: Christine Wong
Vice President
CS Vista, LLC

STATE OF TEXAS
COUNTY OF TRAVIS

BEFORE ME, THE UNDERSIGNED AUTHORITY, A NOTARY PUBLIC IN AND FOR THE STATE OF TEXAS ON THIS DAY DID PERSONALLY APPEAR Christine Wong, KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND HAS ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN EXPRESSED AND IN THE CAPACITY THEREIN STATED.

WITNESS MY HAND AND SEALED IN MY OFFICE, THIS THE 14 DAY OF August 2024 AD.

NOTARY PUBLIC, STATE OF TEXAS

Yahaira Camacho Lopez — PRINTED NAME

My Commission Expires 10-20-2026 — MY COMMISSION EXPIRES

Notary ID 132234639

SURVEYOR'S CERTIFICATION

I, JOE BEN EARLY, JR., AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF SURVEYING AND HEREBY CERTIFY THAT THIS PLAT COMPLIES WITH THE SURVEYING RELATED PORTIONS OF TITLE 25 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, AND WAS PREPARED FROM AN ACTUAL ON THE GROUND SURVEY OF THE PROPERTY MADE UNDER MY DIRECTION AND SUPERVISION ON THE GROUND ON APRIL 19, 2024.

7/16/2024

JOE BEN EARLY, JR., R.P.L.S. 6016

SURVEYING BY:
EARLY LAND SURVEYING, LLC
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631

STATE OF TEXAS — JOE BEN EARLY, JR. — 6016 — REGISTERED PROFESSIONAL LAND SURVEYOR

ENGINEER'S CERTIFICATION:

I, CHRIS MCCOMB, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF ENGINEERING AND HEREBY CERTIFY THAT THIS PLAT IS FEASIBLE FROM AN ENGINEERING STANDPOINT AND COMPLIES WITH THE ENGINEERING RELATED PORTIONS OF TITLE 25 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

NO PORTION OF THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100 YEAR FLOODPLAIN ACCORDING TO DATA FROM THE FEDERAL INSURANCE ADMINISTRATION FIRM PANEL NO. 48453C0285K, DATED 01/16/2016, FOR TRAVIS COUNTY AND INCORPORATED AREAS.

7/25/24

CHRIS MCCOMB
PROFESSIONAL ENGINEER NO. 80442
STATE OF TEXAS

STATE OF TEXAS — CHRIS McCOMB — 80442 — LICENSED PROFESSIONAL ENGINEER

ENGINEERING BY:

AMC DESIGN GROUP, INC.
REGISTERED ENGINEERING FIRM F-1708
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911

THIS SUBDIVISION IS LOCATED WITHIN THE FULL-PURPOSE JURISDICTION OF THE CITY OF AUSTIN, TEXAS.

AS OF THIS 20 DAY OF AUGUST, 2024 A.D.

APPROVED, ACCEPTED AND AUTHORIZED FOR RECORD BY THE DIRECTOR, DEVELOPMENT SERVICES DEPARTMENT, CITY OF AUSTIN, COUNTY OF TRAVIS, THIS THE

20 DAY OF AUGUST, 2024 AD.

ANGELA GALLEGOS FOR:
JOSE ROIG, DIRECTOR
DEVELOPMENT SERVICES DEPARTMENT

SUBDIVISION NOTES

1. NO LOT SHALL BE OCCUPIED UNTIL THE STRUCTURE IS CONNECTED TO THE CITY OF AUSTIN WATER AND WASTEWATER UTILITY SYSTEM.
2. PRIOR TO CONSTRUCTION, EXCEPT DETACHED SINGLE FAMILY, ON ANY LOT IN THIS SUBDIVISION, A SITE DEVELOPMENT PERMIT MUST BE OBTAINED FROM THE CITY OF AUSTIN.
3. PRIOR TO CONSTRUCTION ON LOTS IN THIS SUBDIVISION, DRAINAGE PLANS WILL BE SUBMITTED TO THE CITY OF AUSTIN FOR REVIEW. RAINFALL RUN-OFF SHALL BE HELD TO THE AMOUNT EXISTING AT UNDEVELOPED STATUS BY PONDING OR OTHER APPROVED METHODS.
4. NO BUILDINGS, FENCES, LANDSCAPING OR OTHER OBSTRUCTIONS ARE PERMITTED IN DRAINAGE EASEMENTS EXCEPT AS APPROVED BY THE CITY OF AUSTIN. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS/HER ASSIGNS.
5. ALL STREETS, DRAINAGE, SIDEWALKS, EROSION CONTROL AND WATER AND WASTEWATER LINES SHALL BE CONSTRUCTED AND INSTALLED TO APPLICABLE CITY OF AUSTIN STANDARDS.
6. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE PROPERTY OWNER OR HIS/HER ASSIGNS.
7. PROPERTY OWNER SHALL PROVIDE FOR ACCESS TO DRAINAGE EASEMENTS AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY GOVERNMENTAL AUTHORITIES.
8. THE WATER AND WASTEWATER UTILITY SYSTEM SERVING THIS SUBDIVISION MUST BE IN ACCORDANCE WITH THE CITY OF AUSTIN UTILITY DESIGN CRITERIA. THE WATER AND WASTEWATER UTILITY PLAN MUST BE REVIEWED AND APPROVED BY THE AUSTIN WATER UTILITY. ALL WATER AND WASTEWATER CONSTRUCTION MUST BE INSPECTED BY THE CITY OF AUSTIN. THE LANDOWNER MUST PAY THE CITY INSPECTION FEE WITH THE UTILITY CONSTRUCTION.
9. BUILDING SETBACK LINES SHALL BE IN CONFORMANCE WITH CITY OF AUSTIN ZONING ORDINANCE REQUIREMENTS.
10. AUSTIN ENERGY HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. AUSTIN ENERGY WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH CHAPTER 25-8, SUBCHAPTER B OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
11. THE OWNER/DEVELOPER OF THIS SUBDIVISION/LOT SHALL PROVIDE AUSTIN ENERGY WITH ANY EASEMENT AND/OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS TO CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH CHAPTER 25-8 OF THE CITY OF AUSTIN LAND DEVELOPMENT CODE.
12. THE OWNER SHALL BE RESPONSIBLE FOR INSTALLATION OF TEMPORARY EROSION CONTROL, REVEGETATION AND TREE PROTECTION. IN ADDITION, THE OWNER SHALL BE RESPONSIBLE FOR ANY INITIAL TREE PRUNING AND TREE REMOVAL THAT IS WITHIN TEN FEET OF THE CENTER LINE OF THE PROPOSED OVERHEAD ELECTRICAL FACILITIES DESIGNED TO PROVIDE ELECTRIC SERVICE TO THIS PROJECT. THE OWNER SHALL INCLUDE AUSTIN ENERGY'S WORK WITHIN THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
13. THE OWNER OF THE PROPERTY IS RESPONSIBLE FOR MAINTAINING CLEARANCES REQUIRED BY THE NATIONAL ELECTRIC SAFETY CODE, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, CITY OF AUSTIN RULES AND REGULATIONS AND TEXAS STATE LAWS PERTAINING TO CLEARANCES WHEN WORKING IN CLOSE PROXIMITY TO OVERHEAD POWER LINES AND EQUIPMENT. AUSTIN ENERGY WILL NOT RENDER ELECTRIC SERVICE UNLESS REQUIRED CLEARANCES ARE MAINTAINED. ALL COSTS INCURRED BECAUSE OF FAILURE TO COMPLY WITH THE REQUIRED CLEARANCES WILL BE CHARGED TO THE OWNER.
14. PUBLIC SIDEWALKS, BUILT TO CITY OF AUSTIN STANDARDS, ARE REQUIRED ALONG NORTH SHIELDS DR AND BURNET RD/LOOP 1 AS SHOWN BY A DOTTED LINE ON THE FACE OF THE PLAT. THE SIDEWALKS ALONG BURNET RD/LOOP 1 ARE SUBJECT TO THE APPROVAL OF THE TEXAS DEPARTMENT OF TRANSPORTATION AT THE SITE PLAN PHASE. THE REQUIRED SIDEWALKS SHALL BE IN PLACE PRIOR TO THE LOT BEING OCCUPIED. FAILURE TO CONSTRUCT THE REQUIRED SIDEWALKS MAY RESULT IN THE WITHHOLDING OF CERTIFICATES OF OCCUPANCY, BUILDING PERMITS, OR UTILITY CONNECTIONS BY THE GOVERNING BODY OR UTILITY COMPANY.
15. EROSION SEDIMENTATION CONTROLS ARE REQUIRED FOR ALL CONSTRUCTION ON EACH LOT, PURSUANT TO THE LAND DEVELOPMENT CODE AND THE ENVIRONMENTAL CRITERIA MANUAL.
16. THE OWNER OF THIS SUBDIVISION AND THE OWNER'S SUCCESSORS AND ASSIGNS ARE RESPONSIBLE FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS THAT COMPLY WITH CITY OF AUSTIN REGULATIONS. THE OWNER UNDERSTANDS THAT PLAT VACATION OR REPLATTING MAY BE REQUIRED, AT THE OWNER'S EXPENSE, IF PLANS TO CONSTRUCT THIS SUBDIVISION DO NOT COMPLY WITH THE REGULATIONS. APPROVAL OF THIS SUBDIVISION DOES NOT GUARANTEE FUTURE APPROVAL OF VARIANCES TO THE CITY OF AUSTIN REGULATIONS THAT MAY BE REQUIRED AT LATER STAGES OF DEVELOPMENT.
17. THE WATER AND/OR WASTEWATER EASEMENTS INDICATED ON THIS PLAT ARE FOR THE PURPOSE OF CONSTRUCTION, OPERATION, MAINTENANCE, REPAIR, REPLACEMENT, UPGRADE, DECOMMISSIONING AND REMOVAL OF WATER AND/OR WASTEWATER FACILITIES AND APPURTENANCES. NO INFRASTRUCTURE NOR OBJECTS, INCLUDING BUT NOT LIMITED TO, BUILDINGS, RETAINING WALLS, TREES OR OTHER STRUCTURES ARE PERMITTED IN WATER AND/OR WASTEWATER EASEMENTS EXCEPT AS APPROVED BY THE CITY OF AUSTIN.
18. BY APPROVING THIS PLAT, THE CITY OF AUSTIN ASSUMES NO OBLIGATION TO CONSTRUCT ANY INFRASTRUCTURE IN CONNECTION WITH THIS SUBDIVISION. ANY SUBDIVISION INFRASTRUCTURE REQUIRED FOR THE DEVELOPMENT OF THE LOTS IN THIS SUBDIVISION IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR THE OWNERS OF THE LOTS. FAILURE TO CONSTRUCT ANY REQUIRED INFRASTRUCTURE TO CITY STANDARDS MAY BE JUST CAUSE FOR THE CITY TO DENY APPLICATIONS FOR CERTAIN DEVELOPMENT PERMITS INCLUDING BUILDING PERMITS, SITE PLAN APPROVALS, AND/OR CERTIFICATES OF OCCUPANCY.
19. WATER QUALITY CONTROLS ARE REQUIRED FOR ALL DEVELOPMENT PURSUANT TO THE LAND DEVELOPMENT CODE.
20. ANY RELOCATION OF ELECTRIC FACILITIES SHALL BE AT THE LANDOWNER'S/DEVELOPER'S EXPENSE.
21. DEVELOPMENT OF STRUCTURES THAT REQUIRE A BUILDING PERMIT ON THIS PLAT WILL BE SUBJECT TO THE CITY OF AUSTIN STREET IMPACT FEE AS APPLICABLE PRIOR TO ACQUIRING THE BUILDING PERMIT.
22. NO STRUCTURE SHALL BE OCCUPIED UNTIL THE WATER QUALITY CONTROL AND DETENTION FACILITY HAVE BEEN CONSTRUCTED, INSPECTED, AND ACCEPTED BY THE CITY OF AUSTIN.
23. PARKLAND DEDICATION IS REQUIRED PER CITY CODE §25-1-601, AS AMENDED, PRIOR TO APPROVAL OF A SITE PLAN IN THIS SUBDIVISION FOR ANY APPLICABLE USES.
24. THIS SINGLE LOT SUBDIVISION SHALL HAVE INDEPENDENT SEWER TAP(S), INDEPENDENT WATER METER(S), AND ITS PRIVATE WATER AND SEWER SERVICE LINES SHALL BE POSITIONED OR LOCATED IN A MANNER THAT WILL NOT CROSS LOT LINES.
25. THIS PARCEL IS LOCATED WITHIN THE EDWARDS AQUIFER RECHARGE ZONE AS DEFINED BY CITY OF AUSTIN LAND DEVELOPMENT CODE.
26. PARKLAND DEDICATION IS REQUIRED PER CITY CODE §25-1-601, AS AMENDED, PRIOR TO APPROVAL OF A SITE PLAN IN THIS SUBDIVISION FOR ANY APPLICABLE USES.

STATE OF TEXAS
COUNTY OF TRAVIS

I, DYANA LIMON-MERCADO, CLERK OF TRAVIS COUNTY, TEXAS, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING AND ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE 20th DAY OF August, 2024 A.D., AT 4:21 O'CLOCK P M., DULY RECORDED ON THE 20th DAY OF August 2024 A.D., AT 4:21 O'CLOCK P M., OF SAID COUNTY AND STATE IN DOCUMENT NUMBER 202400141 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY.

WITNESS MY HAND AND SEAL OF THE OFFICE OF THE COUNTY CLERK, THIS THE 20th DAY OF August 2024 A.D.

DEPUTY, COUNTY CLERK TRAVIS COUNTY, TEXAS — A. MACEDO

C8-2024-0032.0A

EARLY LAND SURVEYING
A LIMITED LIABILITY COMPANY
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631
TBPELS FIRM NO. 10194487

PROJECT NO.: 1013-018
DRAWING NO.: 1013-018-PL1
PLOT DATE: 7/16/24
PLOT SCALE: 1" = 50'
DRAWN BY: JBE
SHEET 02 OF 02

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303086
AUSTIN, TEXAS 78703
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P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456
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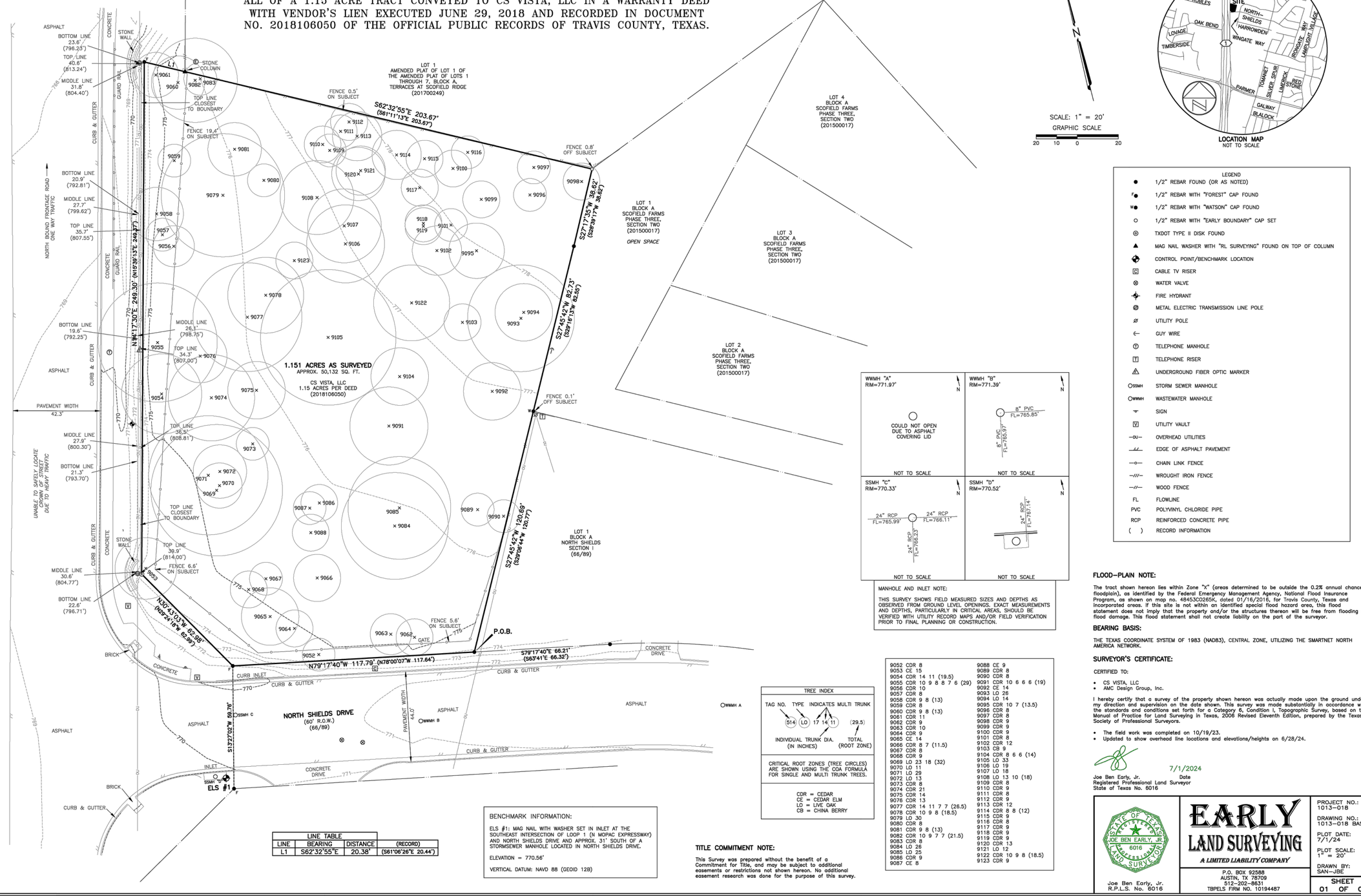
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

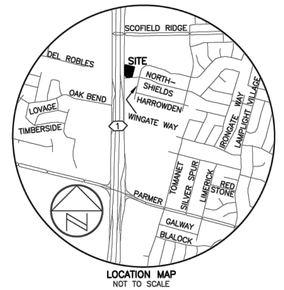
FINAL PLAT

SP-2024-0345C

A SURVEY OF 1.151 ACRES (APPROXIMATELY 50,132 SQ. FT.), IN THE FRANCISCO GARCIA SURVEY NO. 60, ABSTRACT NO. 312 IN TRAVIS COUNTY, TEXAS, BEING ALL OF A 1.15 ACRE TRACT CONVEYED TO CS VISTA, LLC IN A WARRANTY DEED WITH VENDOR'S LIEN EXECUTED JUNE 29, 2018 AND RECORDED IN DOCUMENT NO. 2018106050 OF THE OFFICIAL PUBLIC RECORDS OF TRAVIS COUNTY, TEXAS.







LEGEND

- ● 1/2" REBAR FOUND (OR AS NOTED)
- F● 1/2" REBAR WITH "FOREST" CAP FOUND
- W● 1/2" REBAR WITH "WATSON" CAP FOUND
- ○ 1/2" REBAR WITH "EARLY BOUNDARY" CAP SET
- ◎ TXDOT TYPE II DISK FOUND
- ▲ MAG NAIL WASHER WITH "RL SURVEYING" FOUND ON TOP OF COLUMN
- CONTROL POINT/BENCHMARK LOCATION
- C CABLE TV RISER
- ⊗ WATER VALVE
- FIRE HYDRANT
- METAL ELECTRIC TRANSMISSION LINE POLE
- UTILITY POLE
- ← GUY WIRE
- T TELEPHONE MANHOLE
- T TELEPHONE RISER
- UNDERGROUND FIBER OPTIC MARKER
- SSMH STORM SEWER MANHOLE
- WWMH WASTEWATER MANHOLE
- SIGN
- V UTILITY VAULT
- —OU— OVERHEAD UTILITIES
- EDGE OF ASPHALT PAVEMENT
- —o— CHAIN LINK FENCE
- —/// WROUGHT IRON FENCE
- —// WOOD FENCE
- FL FLOWLINE
- PVC POLYVINYL CHLORIDE PIPE
- RCP REINFORCED CONCRETE PIPE
- ( ) RECORD INFORMATION

MANHOLE AND INLET NOTE:

THIS SURVEY SHOWS FIELD MEASURED SIZES AND DEPTHS AS OBSERVED FROM GROUND LEVEL OPENINGS. EXACT MEASUREMENTS AND DEPTHS, PARTICULARLY IN CRITICAL AREAS, SHOULD BE VERIFIED WITH UTILITY RECORD MAPS AND/OR FIELD VERIFICATION PRIOR TO FINAL PLANNING OR CONSTRUCTION.

TREE INDEX

TAG NO. TYPE INDICATES MULTI TRUNK
(514) (LO) 17 14 11 (29.5)
INDIVIDUAL TRUNK DIA. (IN INCHES) TOTAL (ROOT ZONE)

CRITICAL ROOT ZONES (TREE CIRCLES) ARE SHOWN USING THE COA FORMULA FOR SINGLE AND MULTI TRUNK TREES.

CDR = CEDAR
CE = CEDAR ELM
LO = LIVE OAK
CB = CHINA BERRY

9052 CDR 8
9053 CE 15
9054 CDR 14 11 (19.5)
9055 CDR 10 9 8 8 7 6 (29)
9056 CDR 10
9057 CDR 8
9058 CDR 9 8 (13)
9059 CDR 8
9060 CDR 9 8 (13)
9061 CDR 11
9062 CDR 9
9063 CDR 10
9064 CDR 9
9065 CE 14
9066 CDR 8 7 (11.5)
9067 CDR 8
9068 CDR 9
9069 LO 23 18 (32)
9070 LO 11
9071 LO 29
9072 LO 13
9073 CDR 8
9074 CDR 21
9075 CDR 14
9076 CDR 13
9077 CDR 14 11 7 7 (26.5)
9078 CDR 10 9 8 (18.5)
9079 LO 30
9080 CDR 8
9081 CDR 9 8 (13)
9082 CDR 10 9 7 7 (21.5)
9083 CDR 8
9084 LO 26
9085 LO 25
9086 CDR 9
9087 CE 8
9088 CE 9
9089 CDR 8
9090 CDR 8
9091 CDR 10 6 6 6 (19)
9092 CE 14
9093 LO 26
9094 LO 14
9095 CDR 10 7 (13.5)
9096 CDR 8
9097 CDR 8
9098 CDR 9
9099 CDR 9
9100 CDR 9
9101 CDR 8
9102 CDR 12
9103 CB 9
9104 CDR 8 6 6 (14)
9105 LO 33
9106 LO 19
9107 LO 18
9108 LO 13 10 (18)
9109 CDR 8
9110 CDR 9
9111 CDR 8
9112 CDR 9
9113 CDR 12
9114 CDR 8 8 (12)
9115 CDR 9
9116 CDR 8
9117 CDR 9
9118 CDR 9
9119 CDR 9
9120 CDR 13
9121 LO 12
9122 CDR 10 9 8 (18.5)
9123 CDR 9

BENCHMARK INFORMATION:

ELS #1: MAG NAIL WITH WASHER SET IN INLET AT THE SOUTHEAST INTERSECTION OF LOOP 1 (N MOPAC EXPRESSWAY) AND NORTH SHIELDS DRIVE AND APPROX. 31' SOUTH OF A STORMSEWER MANHOLE LOCATED IN NORTH SHIELDS DRIVE.

ELEVATION = 770.56'

VERTICAL DATUM: NAVD 88 (GEOID 12B)

TITLE COMMITMENT NOTE:

This Survey was prepared without the benefit of a Commitment for Title, and may be subject to additional easements or restrictions not shown hereon. No additional easement research was done for the purpose of this survey.

FLOOD–PLAIN NOTE:

The tract shown hereon lies within Zone "X" (areas determined to be outside the 0.2% annual chance floodplain), as identified by the Federal Emergency Management Agency, National Flood Insurance Program, as shown on map no. 48453C0265K, dated 01/16/2018, for Travis County, Texas and incorporated areas. If this site is not within an identified special flood hazard area, this flood statement does not imply that the property and/or the structures thereon will be free from flooding or flood damage. This flood statement shall not create liability on the part of the surveyor.

BEARING BASIS:

THE TEXAS COORDINATE SYSTEM OF 1983 (NAD83), CENTRAL ZONE, UTILIZING THE SMARTNET NORTH AMERICA NETWORK.

SURVEYOR'S CERTIFICATE:

CERTIFIED TO:

- CS VISTA, LLC
- AMC Design Group, Inc.

I hereby certify that a survey of the property shown hereon was actually made upon the ground under my direction and supervision on the date shown. This survey was made substantially in accordance with the standards and conditions set forth for a Category 6, Condition I, Topographic Survey, based on the Manual of Practice for Land Surveying in Texas, 2006 Revised Eleventh Edition, prepared by the Texas Society of Professional Surveyors.

- The field work was completed on 10/19/23.
- Updated to show overhead line locations and elevations/heights on 6/28/24.

7/1/2024
Joe Ben Early, Jr. Date
Registered Professional Land Surveyor
State of Texas No. 6016

STATE OF TEXAS · REGISTERED · JOE BEN EARLY, JR. · 6016 · LAND SURVEYOR

Joe Ben Early, Jr.
R.P.L.S. No. 6016

EARLY LAND SURVEYING
A LIMITED LIABILITY COMPANY
P.O. BOX 92588
AUSTIN, TX 78709
512-202-8631
TBPELS FIRM NO. 10194487

PROJECT NO.: 1013-018
DRAWING NO.: 1013-018 BASE
PLOT DATE: 7/1/24
PLOT SCALE: 1" = 20'
DRAWN BY: SAN-JBE
SHEET 01 OF 01

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303036
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

Thrower Design
P.O. BOX 41957 AUSTIN, TEXAS 78704 · (512) 476-4456
LAND PLANNERS

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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

SURVEY

5 OF 26

SP-2024-0345C

APPENDIX P-1
EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE COA ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR ALL TPDES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF AUSTIN ENVIRONMENTAL INSPECTOR AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE BASIC ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY COA EV PLAN REVIEWERS AS WELL AS COA EV INSPECTORS.
   -- PLAN SHEETS SUBMITTED TO THE CITY OF AUSTIN MUST SHOW THE FOLLOWING:
   DIRECTION OF FLOW DURING GRADING OPERATIONS.
   LOCATION, DESCRIPTION, AND CALCULATIONS FOR OFF-SITE FLOW DIVERSION STRUCTURES.
   AREAS THAT WILL NOT BE DISTURBED; NATURAL FEATURES TO BE PRESERVED.
   DELINEATION OF CONTRIBUTING DRAINAGE AREA TO EACH PROPOSED BMP (E.G., SILT FENCE, SEDIMENT BASIN, ETC.).
   LOCATION AND TYPE OF E&S BMPS FOR EACH PHASE OF DISTURBANCE.
   CALCULATIONS FOR BMPS AS REQUIRED.
   LOCATION AND DESCRIPTION OF TEMPORARY STABILIZATION MEASURES.
   LOCATION OF ON-SITE SPOILS, DESCRIPTION OF HANDLING AND DISPOSAL OF BORROW MATERIALS, AND DESCRIPTION OF ON-SITE PERMANENT SPOILS DISPOSAL AREAS, INCLUDING SIZE, DEPTH OF FILL AND REVEGETATION PROCEDURES.
   DESCRIBE SEQUENCE OF CONSTRUCTION AS IT PERTAINS TO ESC INCLUDING THE FOLLOWING ELEMENTS:
1. INSTALLATION SEQUENCE OF CONTROLS (E.G. PERIMETER CONTROLS, THEN SEDIMENT BASINS, THEN TEMPORARY STABILIZATION, THEN PERMANENT, ETC.)
2. PROJECT PHASING IF REQUIRED (LOC GREATER THAN 25 ACRES)
3. SEQUENCE OF GRADING OPERATIONS AND NOTATION OF TEMPORARY STABILIZATION MEASURES TO BE USED
4. SCHEDULE FOR CONVERTING TEMPORARY BASINS TO PERMANENT WQ CONTROLS
5. SCHEDULE FOR REMOVAL OF TEMPORARY CONTROLS
6. ANTICIPATED MAINTENANCE SCHEDULE FOR TEMPORARY CONTROLS
   – CATEGORIZE EACH BMP UNDER ONE OF THE FOLLOWING AREAS OF BMP ACTIVITY AS DESCRIBED BELOW:
   3.1 MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL
   3.2 CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT
   3.3 STABILIZE SOILS
   3.4 PROTECT SLOPES
   3.5 PROTECT STORM DRAIN INLETS
   3.6 ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS
   3.7 RETAIN SEDIMENT ON-SITE AND CONTROL DEWATERING PRACTICES
   3.8 ESTABLISH STABILIZED CONSTRUCTION EXITS
   3.9 ANY ADDITIONAL BMPS
   -- NOTE THE LOCATION OF EACH BMP ON YOUR SITE MAP(S).
   -- FOR ANY STRUCTURAL BMPS, YOU SHOULD PROVIDE DESIGN SPECIFICATIONS AND DETAILS AND REFER TO THEM.
   -- FOR MORE INFORMATION, SEE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL 1.4.
3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT, 512-974-2278, OR BY EMAIL AT ENVIRONMENTAL-INSPECTIONS@AUSTINTEXAS.GOV, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. COA APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY COA EV INSPECTOR AT THIS TIME.
5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST OR CITY ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED COA STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.
6. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC – IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER – INSPECTOR (CESSW OR CESSW – IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION (CISEC OR CISEC – IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (½) INCH OR GREATER RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES OR ONE-THIRD (⅓) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.
7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
8. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF AUSTIN ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION. IN ADDITION, IF THE PROJECT SITE IS LOCATED WITHIN THE EDWARDS AQUIFER, THE PROJECT MANAGER MUST NOTIFY THE TRAVIS COUNTY BALCONES CANYONLANDS CONSERVATION PRESERVE (BCCP) BY EMAIL AT BCCP@TRAVISCOUNTYTX.GOV. CONSTRUCTION ACTIVITIES WITHIN 50 FEET OF THE VOID MUST STOP.
9. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW.
   A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A
   MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE STANDARD SPECIFICATION ITEM
   NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.
   - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 601S.
   - AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF STANDARD SPECIFICATION 601S BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.
   - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:

TEMPORARY VEGETATIVE STABILIZATION

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN (SECALE CEREALE) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT UTILIZE ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) OR PERENNIAL RYEGRASS (LOLIUM PERENNE). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEMS 604S OR 609S.
   A. FERTILIZER SHALL BE APPLIED ONLY IF WARRANTED BY A SOIL TEST AND SHALL CONFORM TO ITEM NO. 606S, FERTILIZER. FERTILIZATION SHOULD NOT OCCUR WHEN RAINFALL IS EXPECTED OR DURING SLOW PLANT GROWTH OR DORMANCY. CHEMICAL FERTILIZER MAY NOT BE APPLIED IN THE CRITICAL WATER QUALITY ZONE.
   B. HYDROMULCH SHALL COMPLY WITH TABLE 1, BELOW.
   C. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.
   D. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATIONS 604S OR 609S.

Table 1: Hydromulching for Temporary Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
100% or any blend of wood, cellulose, straw and/or cotton plant material (except no mulch shall exceed 30% paper)	70% or greater Wood/Straw 30% or less paper or natural fibers	0-3 months	Moderate slopes: from flat to 3:1	1500 to 2000 lbs per acre

PERMANENT VEGETATIVE STABILIZATION

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEMS 604S OR 609S.
   A. FERTILIZER FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.
   B. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.
   C. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDBED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE CHAPTER 6-4 (WATER CONSERVATION), AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE AUSTIN WATER UTILITY AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.
   D. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SF.
   E. E. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, ITEMS 604S OR 609S.

Table 2: Hydromulching for Permanent Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
Bonded Fiber Matrix (BFM)	80% Organic deflorated fibers 10% Tackifier	6 months	On slopes up to 2:1 and erosive soil conditions	2500 to 4000 lbs per acre (see manufacturer's recommendations)
Fiber Reinforced Matrix (FRM)	65% Organic deflorated fibers 25% Reinforcing Fibers or less 10% Tackifier	up to 12 months	On slopes up to 1:1 and erosive soil conditions	3000 to 4500 lbs per acre (see manufacturer's recommendations)

10. DEVELOPER INFORMATION:
    DEVELOPER: CS VISTA, LLC
    5801 STANDING ROCK DRIVE
    AUSTIN, TX 78730
    OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:
    CIVIL ENGINEER: AMC DESIGN GROUP, INC.
    P.O. BOX 341555
    AUSTIN, TEXAS 78734
    512-385-2911
    FIRM RESPONSIBLE FOR E/S CONTROL/WQC/TREE & NATURAL AREA PROTECTION MAINTENANCE:
    CONTRACTOR
11. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE DEVELOPMENT SERVICES DEPARTMENT AT 512-974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.

APPENDIX P-2
CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. BEFORE CONSTRUCTION
   - ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED PER ECM 3.6.1.
   - TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION. REFER TO ECM 3.6.1.A.
   - FENCING FOR TREE PROTECTION SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET AND SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE EXCEPT AS ALLOWED IN ECM 3.6.1.B.4.
   - UNFENCED SECTIONS OF THE CRITICAL ROOT ZONE SHALL BE COVERED WITH MULCH AT A MINIMUM DEPTH OF 8 INCHES AND A MAXIMUM DEPTH OF 12 INCHES PER ECM 3.6.1.C.
   - WHERE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OF A PRESERVED TREE, TRUNK WRAPPING SHALL BE INSTALLED PER ECM 3.6.1.D.
   - EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED SO AS NOT TO CAUSE IMPACTS THAT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.3.D.
2. DURING CONSTRUCTION
   - TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT DOES NOT EXCEED PRESERVATION CRITERIA FOR THE TREES TO REMAIN. REFER TO ECM 3.5.2 A.
   - FENCING MAY NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER. REFER TO ECM 3.6.1.B.3.
   - PRUNING SHALL BE IN COMPLIANCE WITH THE CURRENT ANSI A300 STANDARD FOR TREE CARE.
3. AFTER CONSTRUCTION
   - TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. REFER TO ECM 3.6.1.A.
   - LANDSCAPE INSTALLATION WITHIN THE CRZ OF PRESERVED TREES, INCLUDING IRRIGATION, SOIL AND PLANTINGS, SHALL NOT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.2.
   - DOCUMENTATION OF TREE WORK PERFORMED MUST BE PROVIDED TO INSPECTOR PER ECM APPENDIX P-6.
   - THIS LIST IS NOT EXHAUSTIVE.
   - REFER TO APPROPRIATE ECM SECTIONS FOR FULL REQUIREMENTS.

SPECIAL CONSTRUCTION TECHNIQUES
ECM 3.5.4(D)

PRIOR TO EXCAVATION WITHIN TREE DRIPLINES OR THE REMOVAL OF TREES ADJACENT TO OTHER TREES THAT ARE TO REMAIN, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE ROOT DAMAGE.

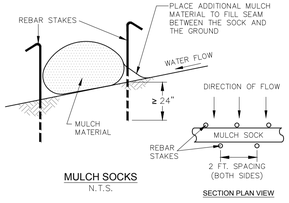
IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DURING CONSTRUCTION WITH FENCING AND WHERE HEAVY VEHICULAR TRAFFIC IS ANTICIPATED, COVER THOSE AREAS WITH A MINIMUM OF 12 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. IN AREAS WITH HIGH SOIL PLASTICITY GEOTEXTILE FABRIC, PER STANDARD SPECIFICATION 620S, SHOULD BE PLACED UNDER THE MULCH TO PREVENT EXCESSIVE MIXING OF THE SOIL AND MULCH. ADDITIONALLY, MATERIAL SUCH AS PLYWOOD AND METAL SHEETS, COULD BE REQUIRED BY THE CITY ARBORIST TO MINIMIZE ROOT IMPACTS FROM HEAVY EQUIPMENT. ONCE THE PROJECT IS COMPLETED, ALL MATERIALS SHOULD BE REMOVED, AND THE MULCH SHOULD BE REDUCED TO A DEPTH OF 3 INCHES.

PERFORM ALL GRADING WITHIN CRITICAL ROOT ZONE AREAS BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE.

WATER ALL TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.

WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.

MULCH SOCK DETAIL



MULCH SOCKS
N.T.S.

SECTION PLAN VIEW

APPENDIX P-4
STANDARD SEQUENCE OF CONSTRUCTION

1. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION, INITIATE TREE MITIGATION MEASURES AND CONDUCT "PRE – CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE).
2. THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE DEVELOPMENT SERVICES DEPARTMENT, ENVIRONMENTAL INSPECTION, AT 512-974-2278, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRECONSTRUCTION MEETING.
3. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REVISED, IF NEEDED, TO COMPLY WITH CITY INSPECTORS' DIRECTIVES, AND REVISED CONSTRUCTION SCHEDULE RELATIVE TO THE WATER QUALITY PLAN REQUIREMENTS AND THE EROSION PLAN.
4. ROUGH GRADE THE TEMPORARY SEDIMENT TRAP AT 100% PROPOSED CAPACITY IN THE LOCATION SHOWN. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF EMBANKMENT OR EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. THE OUTLET SYSTEM SHALL BE PROTECTED FROM EROSION AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL INSTALLATION OF THE PERMANENT WATER QUALITY POND(S). ONCE THE TEMPORARY SEDIMENT TRAP IS INSTALLED, THE DETENTION POND AND STORM SEWER OUTFALL CAN BE CONSTRUCTED NEXT. AFTER THE DETENTION POND WALLS ARE CONSTRUCTED THEN THE WATER QUALITY POND WALLS CAN BE CONSTRUCTED.
5. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.
6. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
7. PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIOR TO/CONCURRENTLY WITH REVEGETATION OF SITE.
8. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
9. UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE BEARING THE ENGINEER'S SEAL, SIGNATURE, AND DATE TO THE DEVELOPMENT SERVICES DEPARTMENT, INCLUDING THAT CONSTRUCTION, INCLUDING REVEGETATION, IS COMPLETE AND IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
10. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
11. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY INSPECTOR AND WITH APPROVAL FROM THE CITY INSPECTOR, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WATER QUALITY PONDS OR CONTROLS.

APPENDIX P-6
REMEDIAL TREE CARE NOTES
AERATION & SUPPLEMENTAL NUTRIENT REQUIREMENTS FOR TREES WITHIN CONSTRUCTION AREAS

AS A COMPONENT OF AN EFFECTIVE REMEDIAL TREE CARE PROGRAM PER ENVIRONMENTAL CRITERIA MANUAL SECTION 3.5.4, PRESERVED TREES WITHIN THE LIMITS OF CONSTRUCTION MAY REQUIRE SOIL AERATION AND SUPPLEMENTAL NUTRIENTS. SOIL AND/OR FOLIAR ANALYSIS SHOULD BE USED TO DETERMINE THE NEED FOR SUPPLEMENTAL NUTRIENTS. THE CITY ARBORIST MAY REQUIRE THESE ANALYSES AS PART OF A COMPREHENSIVE TREE CARE PLAN. SOIL PH SHALL BE CONSIDERED WHEN DETERMINING THE FERTILIZATION COMPOSITION AS SOIL PH INFLUENCES THE TREE'S ABILITY TO UPTAKE NUTRIENTS FROM THE SOIL. IF ANALYSES INDICATE THE NEED FOR SUPPLEMENTAL NUTRIENTS, THEN HUMATE/NUTRIENT SOLUTIONS WITH MYCORRHIZAE COMPONENTS ARE HIGHLY RECOMMENDED. IN ADDITION, SOIL ANALYSIS MAY BE NEEDED TO DETERMINE IF ORGANIC MATERIAL OR BENEFICIAL MICROORGANISMS ARE NEEDED TO IMPROVE SOIL HEALTH. MATERIALS AND METHODS ARE TO BE APPROVED BY THE CITY ARBORIST (512-974-1876) PRIOR TO APPLICATION. THE OWNER OR GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND ENSURE COORDINATION WITH THE CITY ARBORIST.

PRE-CONSTRUCTION TREATMENT SHOULD BE APPLIED IN THE APPROPRIATE SEASON, IDEALLY THE SEASON PRECEDING THE PROPOSED CONSTRUCTION. MINIMALLY, AREAS TO BE TREATED INCLUDE THE ENTIRE CRITICAL ROOT ZONE OF TREES AS DEPICTED ON THE CITY APPROVED PLANS. TREATMENT SHOULD INCLUDE, BUT NOT LIMITED TO, FERTILIZATION, SOIL TREATMENT, MULCHING, AND PROPER PRUNING.

POST-CONSTRUCTION TREATMENT SHOULD OCCUR DURING FINAL REVEGETATION OR AS DETERMINED BY A QUALIFIED ARBORIST AFTER CONSTRUCTION. CONSTRUCTION ACTIVITIES OFTEN RESULT IN A REDUCTION IN SOIL MACRO AND MICRO PORES AND AN INCREASE IN SOIL BULK DENSITY. TO AMELIORATE THE DEGRADED SOIL CONDITIONS, AERATION VIA WATER AND/OR AIR INJECTED INTO THE SOIL IS NEEDED OR BY OTHER METHODS AS APPROVED BY THE CITY ARBORIST. THE PROPOSED NUTRIENT MIX SPECIFICATIONS AND SOIL AND/OR FOLIAR ANALYSIS RESULTS NEED TO BE PROVIDED TO AND APPROVED BY THE CITY ARBORIST PRIOR TO APPLICATION (FAX # 512-974-3010). CONSTRUCTION WHICH WILL BE COMPLETED IN LESS THAN 90 DAYS MAY USE MATERIALS AT ½ RECOMMENDED RATES. ALTERNATIVE ORGANIC FERTILIZER MATERIALS ARE ACCEPTABLE WHEN APPROVED BY THE CITY ARBORIST. WITHIN 7 DAYS AFTER FERTILIZATION IS PERFORMED, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF THE WORK PERFORMED TO THE CITY ARBORIST, DEVELOPMENT SERVICES DEPARTMENT. P.O. BOX 1088, AUSTIN, TX 78767. THIS NOTE SHOULD BE REFERENCED AS ITEM #1 IN THE SEQUENCE OF CONSTRUCTION.

MULCH SOCK SPECIFICATIONS

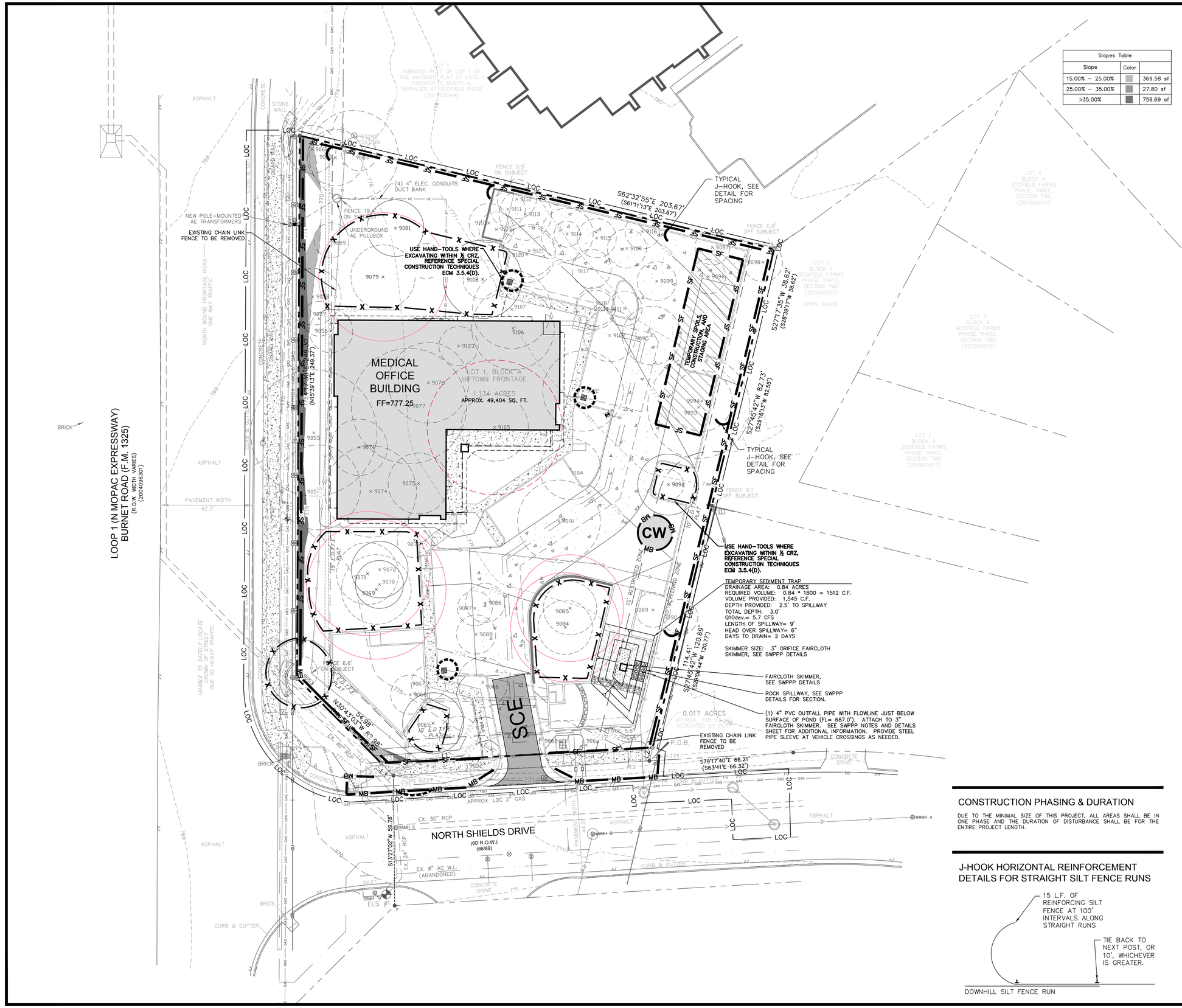
APPLICATION

FILTREXX SILTSOXXTM ARE TO BE INSTALLED DOWN SLOPE OF ANY DISTURBED AREA REQUIRING EROSION AND SEDIMENT CONTROL AND FILTRATION OF SOLUBLE POLLUTANTS FROM RUNOFF. SILTSOXXTM ARE EFFECTIVE WHEN INSTALLED PERPENDICULAR TO SHEET FLOW. ACCEPTABLE APPLICATIONS INCLUDE:

- SITE PERIMETERS AND INTERMEDIATE SHEET FLOW TREATMENT APPLICATIONS.
- ABOVE AND BELOW DISTURBED AREAS SUBJECT TO SHEET RUNOFF, INTERRILL AND RILL EROSION.
- ABOVE AND BELOW EXPOSED AND ERODABLE SLOPES MEETING THE SLOPE CRITERIA BELOW.
- ON COMPACTED SOILS WHERE TRENCHING OF SILT FENCE IS DIFFICULT OR IMPOSSIBLE.
- AROUND SENSITIVE TREES WHERE TRENCHING OF SILT FENCE IS NOT BENEFICIAL FOR TREE SURVIVAL OR MAY UNNECESSARILY DISTURB ESTABLISHED VEGETATION
- ON PAVED SURFACES WHERE TRENCHING OF SILT FENCE IS IMPOSSIBLE.

INSTALLATION

1. SILTSOXXTM USED FOR PERIMETER CONTROL OF SEDIMENT AND SOLUBLE POLLUTANTS IN STORM RUNOFF SHALL MEET FILTREXX SOXXTM MATERIAL SPECIFICATIONS AND USE CERTIFIED FILTREXX FILTERMEDIATM..
2. FILTERINGSTM USED FOR SOLIDS SEPARATION AND FILTRATION OF SOLUBLE POLLUTANTS FROM CONTAMINATED WATER SUCH AS CONCRETE WASH OUTS SHALL MEET FILTREXX FILTERSOXXTM MATERIAL SPECIFICATIONS AND USE CERTIFIED FILTREXX FILTERMEDIATM.
3. CONTRACTOR IS REQUIRED TO BE FILTREXX CERTIFIEDTM AS DETERMINED BY FILTREXX INTERNATIONAL, LLC (440-926-2607 OR VISIT WEBSITE AT WWW.FILTREXX.COM). CERTIFICATION SHALL BE CONSIDERED CUR



Slopes Table		
Slope	Color	
15.00% – 25.00%		369.58 sf
25.00% – 35.00%		27.80 sf
>35.00%		756.69 sf

SCALE: 1" = 20'
SCALE IN FEET
20 10 0 20

LEGEND

- SITE BOUNDARY
- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- X — TREE PROTECTION
- MB — ORGANIC FILTER BERM (MULCH SOCK)
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- INLET PROTECTION
- CW — CONCRETE WASHOUT
- HERITAGE TREE TO REMAIN W/ 1/2 C.R.Z.
- TREE TO REMAIN W/ 1/2 C.R.Z.
- TREE TO BE REMOVED
- HERITAGE TREE TO BE REMOVED

TREE LIST

DATE OF TREE SURVEY: 10/19/2023

TAG NO. TYPE INDICATES MULTI TRUNK (514 LO 17 14 11) (29.5)

CDR = CEDAR
CE = CEDAR ELM
LO = LIVE OAK
CB = CHINA BERRY
^^ DENOTES MEASUREMENT BY CITY ARBORIST

INDIVIDUAL TRUNK DIA. (IN INCHES) — TOTAL (ROOT ZONE)

9052 CDR 8
9053 CE 15
9054 CDR 14 11 (19.5)
9055 CDR 10 9 8 8 7 6 (29)
9056 CDR 10
9057 CDR 8
9058 CDR 9 8 (13)
9059 CDR 8
9060 CDR 9 8 (13)
9061 CDR 11
9062 CDR 9
9063 CDR 10
9064 CDR 9
9065 CE 14
9066 CDR 8 7 (11.5)
9067 CDR 8
9068 CDR 9
9069 LO 20.5,12,11 (32)^^
9070 LO 11
9071 LO 28.5^^
9072 LO 13
9073 CDR 8
9074 CDR 21
9075 CDR 14
9076 CDR 13
9077 CDR 14 11 7 7 (26.5)
9078 CDR 10 9 8 (18.5)
9079 LO 29.5^^
9080 CDR 8
9081 CDR 9 8 (13)
9082 CDR 10 9 7 7 (21.5)
9083 CDR 8
9084 LO 25^^
9085 LO 24.5^^
9086 CDR 9
9087 CE 8
9088 CE 9
9089 CDR 8
9090 CDR 8
9091 CDR 10 6 6 6 (19)
9092 CE 14
9093 LO 23.5^^
9094 LO 14
9095 CDR 10 7 (13.5)
9096 CDR 8
9097 CDR 8
9098 CDR 9
9099 CDR 9
9100 CDR 9
9101 CDR 8
9102 CDR 12
9103 CB 9
9104 CDR 8 6 6 (14)
9105 LO 31^^
9106 LO 19
9107 LO 18
9108 LO 13 10 (18)
9109 CDR 8
9110 CDR 9
9111 CDR 8
9112 CDR 9
9113 CDR 12
9114 CDR 8 8 (12)
9115 CDR 9
9116 CDR 8
9117 CDR 9
9118 CDR 9
9119 CDR 9
9120 CDR 13
9121 LO 12
9122 CDR 10 9 8 (18.5)
9123 CDR 9

NOTES

1. A PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
2. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLAINCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS. [LDC 25-8-183]
3. STORM INLET PROTECTION IS TO BE PROVIDED DOWN STREAM OF PROJECT.
4. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
5. THERE WILL BE NO ON-SITE FUEL STORAGE.
6. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREA NEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP, OR REVEGETATION MATTING. [ECM 1.4.4.B.3, SECTION 5, I.]
7. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY. [ECM 1.4.4.D.4]
8. INTERNAL EROSION CONTROLS MAY BE SUBSTITUTED FOR MULCH SOCKS AS NECESSARY TO ALLOW FLEXIBILITY DURING CONSTRUCTION PHASES.
9. CONTRACTOR SHALL COORDINATE WORK AS NEEDED WITHIN TREE PROTECTION AREAS WITH THE ENVIRONMENTAL INSPECTOR.
10. REFER TO SHEET 2 FOR Q2 TABLE.
11. TOTAL LINEAR FOOTAGE OF PROPOSED SILT FENCE: 1,022
12. CONTRACTOR RESPONSIBLE FOR REMOVAL OF SEDIMENT TRANSPORTED FROM THE LIMITS OF CONSTRUCTION TO OFFSITE DETENTION/WATER QUALITY POND(S).
13. PER LDC 25-8-323(C), FOR AREAS ON THE SITE THAT ARE TO REMAIN PERVIOUS AFTER DEVELOPMENT, ANY SOILS THAT ARE COMPACTED DURING SITE GRADING AND CONSTRUCTION OPERATIONS MUST BE DECOMPACTED IN COMPLIANCE WITH THE ECM AND IN COMPLIANCE WITH SSM 661S.
14. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO HAVE A MINIMUM OF SIX (6) INCHES OF TOPSOIL. TOPSOIL SHALL MEET THE DEFINITION IN STANDARD SPECIFICATION 601S.3. IN AREAS WHERE NO TOPSOIL EXISTS, OR WHERE TOPSOIL IS NEEDED FOR VEGETATIVE ESTABLISHMENT, THE SUBGRADE SHALL BE LOOSENED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST TWO (2) INCHES PRIOR TO PLACEMENT OF SIX (6) INCHES OF TOPSOIL. [ECM 1.4.7, APPENDIX P-1]
15. PERMANENT VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE PER ECM APPENDIX P-1, UNLESS OTHERWISE INDICATED ON THE PLAN.
16. FOR PARKING-LOT ISLANDS, MEDIANS, PENINSULAS, AND SIMILAR LANDSCAPE AREAS THAT ARE TO RECEIVE PARKING-LOT STORMWATER RUNOFF, FINISHED ELEVATION MUST BE AT LEAST SIX (6) INCHES BELOW THE FINISHED CURB ELEVATION TO ALLOW FOR PLACEMENT OF SIX (6) INCHES OF TOPSOIL [ECM 1.4.7].

CONSTRUCTION PHASING & DURATION

DUE TO THE MINIMAL SIZE OF THIS PROJECT, ALL AREAS SHALL BE IN ONE PHASE AND THE DURATION OF DISTURBANCE SHALL BE FOR THE ENTIRE PROJECT LENGTH.

J-HOOK HORIZONTAL REINFORCEMENT DETAILS FOR STRAIGHT SILT FENCE RUNS

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

Thrower Design
P.O. BOX 41957 · AUSTIN, TEXAS 78704 · (512) 476-4456
LAND PLANNERS

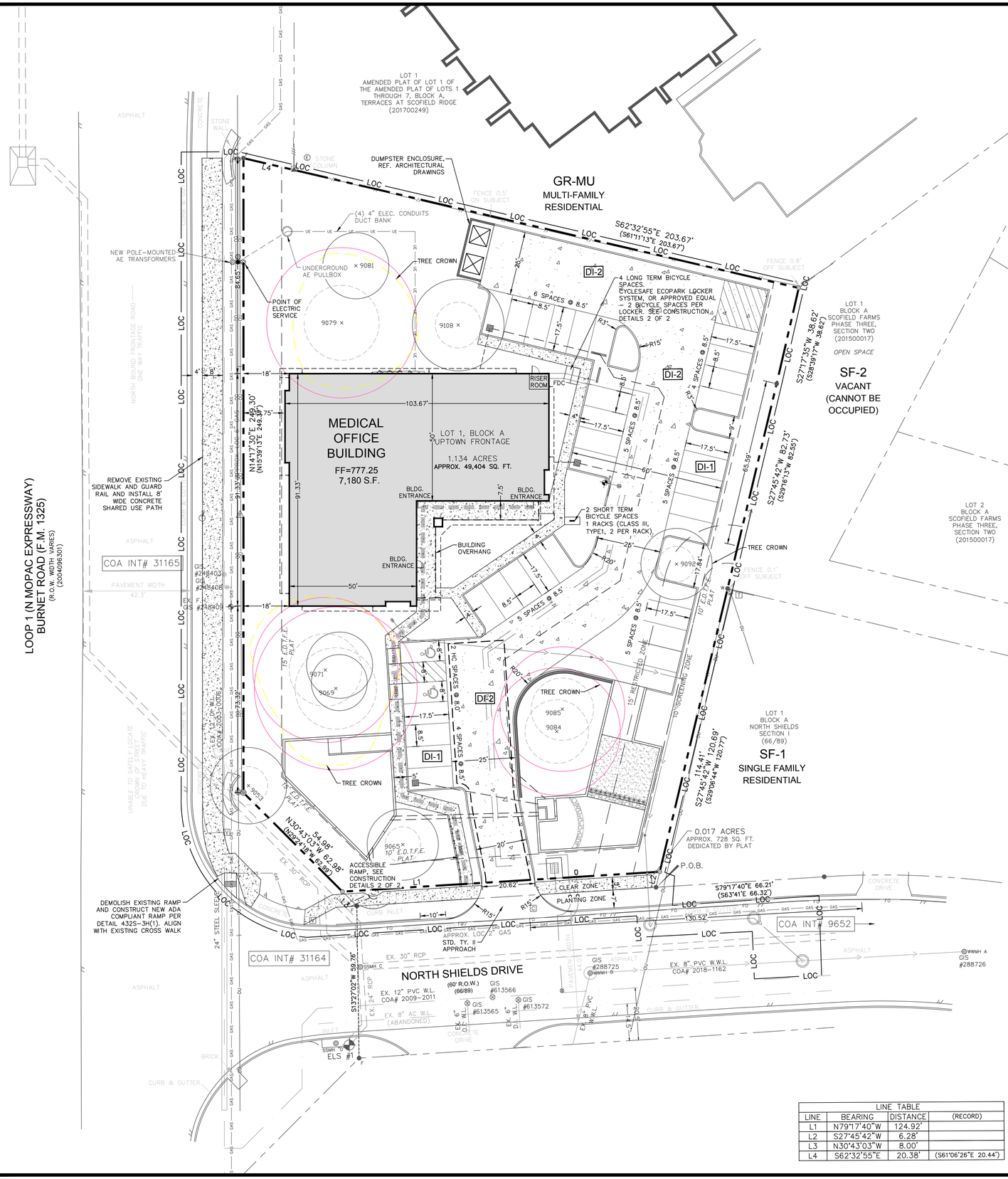
NO	DATE	DESCRIPTION

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UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

EROSION/ SEDIMENTATION CONTROL PLAN

SP-2024-0345C



LINE TABLE			
LINE	BEARING	DISTANCE	(RECORD)
L1	N79°17'40"W	124.92'	
L2	S27°45'42"W	6.28'	
L3	N30°43'03"W	8.00'	
L4	S62°32'55"E	20.38'	(S61°06'26"E 20.44')

LEGEND

LOC	LIMITS OF CONSTRUCTION
	FIRELANE STRIPING
	ACCESSIBLE ROUTE (SEE NOTES)
	DUMPSTER
DI-X	PAVEMENT TYPE

NOTES

SITE NOTES:

1. PARKING SURFACE TO BE ASPHALT AND CONCRETE FOR FIRE LANES AND DUMPSTER PADS, LABELED DI-1 AND DI-2. SEE CONSTRUCTION DETAILS.
2. FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF OR DAMAGE TO UTILITIES.
3. COORDINATE ALL CONSTRUCTION IN PRIVATE RIGHT-OF-WAY WITH OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
4. ALL DEMOLISHED MATERIALS ARE TO BE MOVED TO AN OFF-SITE LOCATION BY DEMOLITION CONTRACTOR.
5. THERE ARE NO OTHER STRUCTURES OR BUILDINGS WITHIN 50' OF THE LIMITS OF CONSTRUCTION OTHER THAN THOSE SHOWN.
6. ESTABLISH FIRE ZONES AS SHOWN ON SITE BY PAINTING GUTTER RED, STENCIL THE WORDS "FIRE ZONE/TOW-AWAY ZONE" IN WHITE LETTERS AT LEAST 3 INCHES HIGH AT 35' INTERVALS ALONG THE CURB OR PAVEMENT AS NOTED ON THE SITE PLAN.
7. GUARDRAILS ARE REQUIRED ON ALL STRUCTURES WHERE THE VERTICAL GRADE DIFFERENCE IS GREATER THAN 30 INCHES ACCORDING TO THE UNIFORM BUILDING CODE. REFER TO ARCHITECTURAL PLANS FOR GUARDRAIL DESIGN AND LAYOUT.

ACCESSIBILITY NOTES:

1. WHEN MORE THAN ONE BUILDING OR FACILITY IS LOCATED ON A SITE, AT LEAST ONE ACCESSIBLE ROUTE MUST BE PROVIDED BETWEEN ACCESSIBLE ELEMENTS, FACILITIES AND BUILDINGS.
2. SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP.
3. ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50.
4. GROUND SURFACES ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM AND SLIP RESISTANT.
5. THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 IN.THE MAXIMUM HORIZONTAL PROJECTION IS 30 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:12 AND 1:15, AND 40 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:16 AND 1:20.
6. DETECTABLE WARNINGS FOR CURB RAMPS SHALL FOLLOW TDLR TECHNICAL MEMORANDUM TM 08-01 AND HAVE TEXTURES CONSISTING OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN., A HEIGHT OF NOMINCAL 0.2 IN. AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK, OR DARK ON LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
7. ACCESSIBLE PARKING SPACES MUST BE LOCATED ON A SURFACE WITH SLOPE NOT EXCEEDING 1:50.
8. ACCESSIBLE PARKING SPACES MUST BE LOCATED ON THE SHORTEST POSSIBLE ACCESSIBLE ROUTE OF TRAVEL TO AN ACCESSIBLE BUILDING ENTRANCE. IN FACILITIES WITH MULTIPLE ACCESSIBLE BUILDING ENTRANCES WITH ADJACENT PARKING, ACCESSIBLE PARKING SPACES MUST BE DISPERSED AND LOCATED NEAR THE ACCESSIBLE ENTRANCES.
9. EVERY ACCESSIBLE PARKING SPACE MUST BE IDENTIFIED BY A SIGN, CENTERED AT THE HEAD OF THE PARKING SPACE. THE SIGN MUST INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND STATE "RESERVED" OR EQUIVALENT LANGUAGE. CHARACTERS AND SYMBOLS ON SUCH SIGNS MUST BE LOCATED 60" MINIMUM ABOVE THE GROUND SO THAT THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE. SEE SIGN DETAIL ON CONSTRUCTION DETAILS SHEET.
10. AT EVERY PRIMARY PUBLIC ENTRANCE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL, THERE MUST BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS MUST INDICATE THE DIRECTION TO AN ACCESSIBLE BUILDING ENTRANCE.
11. THE CONTRACTOR SHALL VERIFY ALL GRADES CONCERNING ACCESSIBLE ROUTES AND WALKWAYS PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO CONCRETE PLACEMENT ON ALL ACCESSIBLE ROUTES AND WALKWAYS IN ORDER TO VERIFY FORM PLACEMENT, SLOPES AND GRADES.
12. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATIONS ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS SUCH AS THE 2010 STANDARDS FOR ACCESSIBLE DESIGN OR THE 2012 TEXAS ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.

COMPATIBILITY STANDARD NOTES

1. ALL EXTERIOR LIGHTING WILL BE HOODED OR SHIELDED FROM THE VIEW OF ADJACENT RESIDENTIAL PROPERTY.
2. THE USE OF HIGHLY REFLECTIVE SURFACES, SUCH AS REFLECTIVE GLASS AND REFLECTIVE METAL ROOFS, WHOSE PITCH IS MORE THAN A RUN OF SEVEN (7) TO A RISE OF TWELVE (12), WILL BE PROHIBITED.
3. THE NOISE LEVEL OF MECHANICAL EQUIPMENT WILL NOT EXCEED 70 DBA AT THE PROPERTY LINE ADJACENT TO RESIDENTIAL USES.
4. ALL ON-SITE AMENITIES, EXCEPT MULTI-USE TRAILS, ARE LOCATED MORE THAN 25 FEET FROM A RESIDENTIAL PROPERTY.
5. VEHICLE LIGHTS, GROUND FLOOR AND ROOFTOP MECHANICAL EQUIPMENT, OUTDOOR STORAGE, REFUSE RECEPTACLES AND COLLECTION AREAS, AND COMMON AREAS FOR AMENITIES WILL BE SCREENED AND WILL NOT BE VISIBLE AT THE PROPERTY LINE ADJACENT TO RESIDENTIAL USES.

THIS PROJECT COMPLIES WITH THE FOLLOWING BICYCLE/PEDESTRIAN IMPROVEMENT OPTIONS:

1. INTERNAL UTILITY LINES LOCATED IN DRIVE AISLES/INT. CIRC. ROUTE.
2. SHADED SIDEWALKS ARE PROVIDED ALONG 100% OF ALL PUBLICLY VISIBLE BUILDING FACADES.
3. REDUCED DRIVEWAYS.

COMMERCIAL DESIGN NOTES:

1. COMPLIANCE WITH BUILDING DESIGN STANDARDS, ARTICLE 3 OF SUBCHAPTER E, IS REQUIRED, AND IS TO BE REVIEWED FOR COMPLIANCE DURING BUILDING CODE REVIEW.
2. ALL EXTERIOR LIGHTING WILL BE FULL CUT-OFF AND FULLY SHIELDED IN COMPLIANCE WITH SUBCHAPTER E2.5 AND WILL BE REVIEWED DURING BUILDING PLAN REVIEW. ANY CHANGE OR SUBSTITUTION OF LAMP/LIGHT FIXTURES SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL IN ACCORDANCE WITH SECTION 2.5.2.E.
3. SCREENING FOR SOLID WASTE COLLECTION AND LOADING AREAS SHALL BE THE SAME AS, OR EQUAL QUALITY TO, PRINCIPLE BUILDING MATERIALS.

SITE CALCS

LIMITS OF CONSTRUCTION =		1.429 ACRES =	62,227	S.F.
SITE AREA		1.134 ACRES =	49,404	S.F.
IMPERVIOUS COVER SUMMARY				
ALLOWABLE IMPERVIOUS COVER	ALLOWABLE			
ZONING (LO)	70%	0.794 ACRES =	34,583	S.F.
EXISTING IMPERVIOUS COVER			-	S.F. 0.0%
PROPOSED IMPERVIOUS COVER				
BUILDING			7,777	S.F.
PARKING, DRIVES & WALKS			16,992	
			24,769	S.F. 50.1%
USE				
MEDICAL OFFICE				
BUILDING SUMMARY	ALLOWABLE			
BUILDING SIZE (G.F.A. IN SF) =			7,180	S.F.
BUILDING COVERAGE (SF) =			7,777	S.F.
	50%		15.7%	
BUILDING F.A.R. =	7:1		0.15	
BUILDING HEIGHT (FT)	40		16' 7 3/4"	
BUILDING STORIES	3		1	
FOUNDATION-SLAB ON GRADE				
PARKING SUMMARY				
PER APPENDIX A	UNITS	RATIO		
MEDICAL OFFICE	1.0	1/200	36	SPACES
REQUIRED HC PARKING			2	SPACES
PROVIDED PARKING				
STANDARD SPACES			34	
HANDICAP SPACES			2	
		TOTAL	36	SPACES
BICYCLE SPACES - TYPE III				
REQUIRED @ 10% OR 2 MIN.			4	SPACES
PROVIDED (CLASS III, TYPE I)				
SHORT TERM			2	SPACES
LONG TERM			4	SPACES
TOTAL			6	SPACES

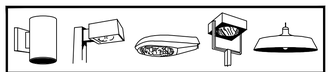


FIGURE 34
(REFERENCE SITE PLAN NOTE ON THIS SHEET)

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6/13/25

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LAND PLANNERS
P.O. BOX 41957 · AUSTIN, TEXAS 78704 · (512) 476-4456

NO	DATE	DESCRIPTION

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UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

SITE PLAN

SP-2024-0345C



SCALE: 1" = 20'

SCALE IN FEET

20 10 0 20

LEGEND

740.0	PROPOSED GRADING
✱740.0	SPOT ELEVATION
FF	FINISH FLOOR

NOTES

1. ALL EARTHWORK TO BE DONE IN ACCORDANCE WITH THE DIVISION 2 SPECIFICATIONS IN THE PROJECT MANUAL.
2. ANY UNSUITABLE SOIL TO BE REMOVED AND INSPECTED BY A QUALIFIED SOILS TECHNICIAN AND BACK FILLED TO THE REQUIRED ELEVATION WITH APPROVED FILL MATERIAL. ALL FILL TO BE PLACED IN LOOSE LIFTS NOT TO EXCEED EIGHT INCHES IN THICKNESS.
3. SUBMIT TO ENGINEER FOR APPROVAL THE FOLLOWING: SAMPLES OF ALL IMPORTED MATERIAL, SAMPLES OF ALL ON-SITE MATERIAL TO BE USED AS SELECT OR COMMON FILL. SUBMITTAL MUST INCLUDE CERTIFICATION FROM A QUALIFIED TESTING LABORATORY THAT IMPORTED MATERIALS CONFORM TO THE REQUIREMENTS AS DETERMINED BY THE GEOTECHNICAL REPORT AND THESE NOTES.
4. PRIOR TO BEGINNING ANY EXCAVATION OR FILL, STRIP THE TOPSOIL TO A DEPTH OF AT LEAST 6 INCHES OR TO A DEPTH SUFFICIENT TO REMOVE ALL ORGANIC OR EXPANSIVE SURFACE CLAYS AS NOTED IN THE GEOTECHNICAL REPORT. STOCKPILE THIS SOIL FOR FUTURE USE IN PREDETERMINED AREAS FOR USE IN LANDSCAPING AND NONSTRUCTURAL FILL.
5. ONCE FINAL SUBGRADE ELEVATIONS HAVE BEEN ACHIEVED, INCLUDING THE OVER-EXCAVATION REQUIRED FOR BUILDING PADS, THE EXPOSED SUBGRADE SHOULD BE CAREFULLY PROOFROLLED WITH A 20-TON PNEUMATIC ROLLER OR A FULLY LOADED DUMP TRUCK TO DETECT WEAK ZONES IN THE SUBGRADE. WEAK AREAS DETECTED AS WELL AS ZONES CONTAINING DEBRIS OR ORGANICS AND VOIDS RESULTING FROM REMOVAL OF TREE ROOTS, BOULDERS, ETC. SHOULD BE REMOVED AND REPLACED WITH SOILS EXHIBITING SIMILAR CLASSIFICATION, MOISTURE CONTENT AND DENSITY AS THE ADJACENT IN-SITU SOILS.
6. PROPER SITE DRAINAGE SHOULD BE MAINTAINED DURING CONSTRUCTION SO THAT PONDING OF SURFACE RUNOFF DOES NOT OCCUR AND CAUSES CONSTRUCTION DELAYS AND/OR INHIBIT SITE ACCESS.
7. FILL SHOULD NOT CONTAIN ROCK GREATER THAN THREE INCHES IN DIAMETER, MORE THAN 1% (DRY WEIGHT) OF ORGANIC MATTER OR DETRIMENTAL MATERIAL AND SHALL HAVE A P.I. OF LESS THAN 20. IF THIS SPECIFICATION CONFLICTS WITH THE GEOTECHNICAL REPORT, THE MORE STRINGENT REQUIREMENT APPLIES.
8. IMPORTED PAVING FILL SHOULD BE TYPE B SOIL (CL, SC, OR GC) PER TxDOT ITEM 132 OR CLASS B BORROW PER CITY OF AUSTIN ITEM 130S, WITH A MAXIMUM PI OF 30 AND NO ROCKS LARGER THAN 3 INCHES IN MAXIMUM DIMENSION. IMPORTED PAVING FILL SHOULD BE COMPACTED TO THE DENSITY AND MOISTURE REQUIREMENTS GIVEN IN THE GEOTECHNICAL REPORT.
9. EXCAVATED ON-SITE SOILS, IF FREE OF ORGANICS, DEBRIS AND ROCKS LARGER THAN 4 INCHES, MAY BE CONSIDERED FOR USE AS FILL IN PAVEMENT, UTILITY OR OTHER GENERAL EMBANKMENT AREAS. CLAYEY SOILS WITH PIs EXCEEDING OR EQUALLING 25 SHOULD BE MOISTURE CONDITIONED TO BETWEEN OPTIMUM AND +4 PERCENT OF OPTIMUM. CLAYEY SOILS WITH PIs LESS THAN 25 SHOULD BE MOISTURE CONDITIONED TO BETWEEN -3 AND +3 PERCENT OF OPTIMUM.
10. CONTRACTOR SHALL CONTROL DUST BY WATER OR OTHER MEANS ON AND NEAR THE LIMITS OF CONSTRUCTION IF DUST IS CAUSED BY CONTRACTOR'S OPERATIONS DURING PERFORMANCE OF THE WORK OR IF RESULTING FROM CONDITIONS IN WHICH THE CONTRACTOR LEAVES THE SITE.
11. CONTRACTOR SHALL CALL THE ONE CALL SYSTEM OR THE TEXAS EXCAVATION SAFETY SYSTEM, 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR HIGHWAY RIGHT OF WAY.
12. ALL DETAILS NOT SHOWN BUT ARE COVERED BY CITY STANDARD DETAILS AND SPECIFICATIONS SHALL CONFORM TO CITY OF AUSTIN STANDARDS. DIMENSIONS AND LIMITS OF THESE ITEMS ARE NOTED ON THE DRAWINGS.
13. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS THAT ARE REQUIRED TO COMPLY WITH SECTIONS 15-12-161 THROUGH 15-12-181 OF THE CITY CODE REGARDING EXCAVATION IN PUBLIC RIGHT-OF-WAY.
14. ADEQUATE BARRIERS BETWEEN ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, SUCH AS 6" CONCRETE CURB AREA REQUIRED. IF A STANDARD 6" CURB AND GUTTER ARE NOT PROVIDED FOR ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, COMPLY WITH ECM, SECTION 2.4.7, PROTECTION OF LANDSCAPE AREA.
15. THIS GRADING PLAN WAS PREPARED PRIOR TO THE DEVELOPMENT OF THE FINAL ARCHITECTURAL AND STRUCTURAL DRAWINGS. THEREFORE, MINOR FIELD ADJUSTMENTS MAY BE NECESSARY BETWEEN THE PAVEMENT AND BUILDINGS IN ORDER TO COMPLY WITH TEXAS ACCESSIBILITY STANDARDS.
16. THE CONTRACTOR SHALL VERIFY ALL GRADES CONCERNING ACCESSIBLE ROUTES AND WALKWAYS PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO CONCRETE PLACEMENT ON ALL ACCESSIBLE ROUTES AND WALKWAYS IN ORDER TO VERIFY FORM PLACEMENT, SLOPES AND GRADES.
17. CONTRACTOR SHALL, AT THEIR EXPENSE, RAISE EXISTING CASTINGS OF VALVES, MANHOLES, ELECTRIC VAULTS, AND OTHER STRUCTURES TO MEET THE PROPOSED GRADES.
18. DRY STACK ROCK WALLS SHOWN ON THIS PLAN SHALL CONFORM TO THE DETAIL PROVIDED ON THE CONSTRUCTION DETAILS SHEET OF THIS PLAN SET. MATCH THE TOP COURSE WITH THE TOP OF CURB, SIDEWALK OR FINISHED GRADE AS SHOWN, OR AS NOTED ON THE GRADING PLAN. THE FOOTING SHALL BE LOCATED A MINIMUM OF 6 INCHES BELOW FINISHED GRADE ON THE LOW SIDE.
19. FINISH GRADE INCLUDING FINISHED LANDSCAPE ELEVATION SHALL NOT BE CLOSER THAN 6" FROM FINISHED FLOOR.
20. WHEN STAIRS ARE SHOWN ON THE GRADING PLAN, HANDRAILS WILL BE REQUIRED PER THE CURRENT VERSION OF THE BUILDING CODE. DETAILS OF THESE HANDRAILS ARE SHOWN IN THE CONSTRUCTION DETAILS.

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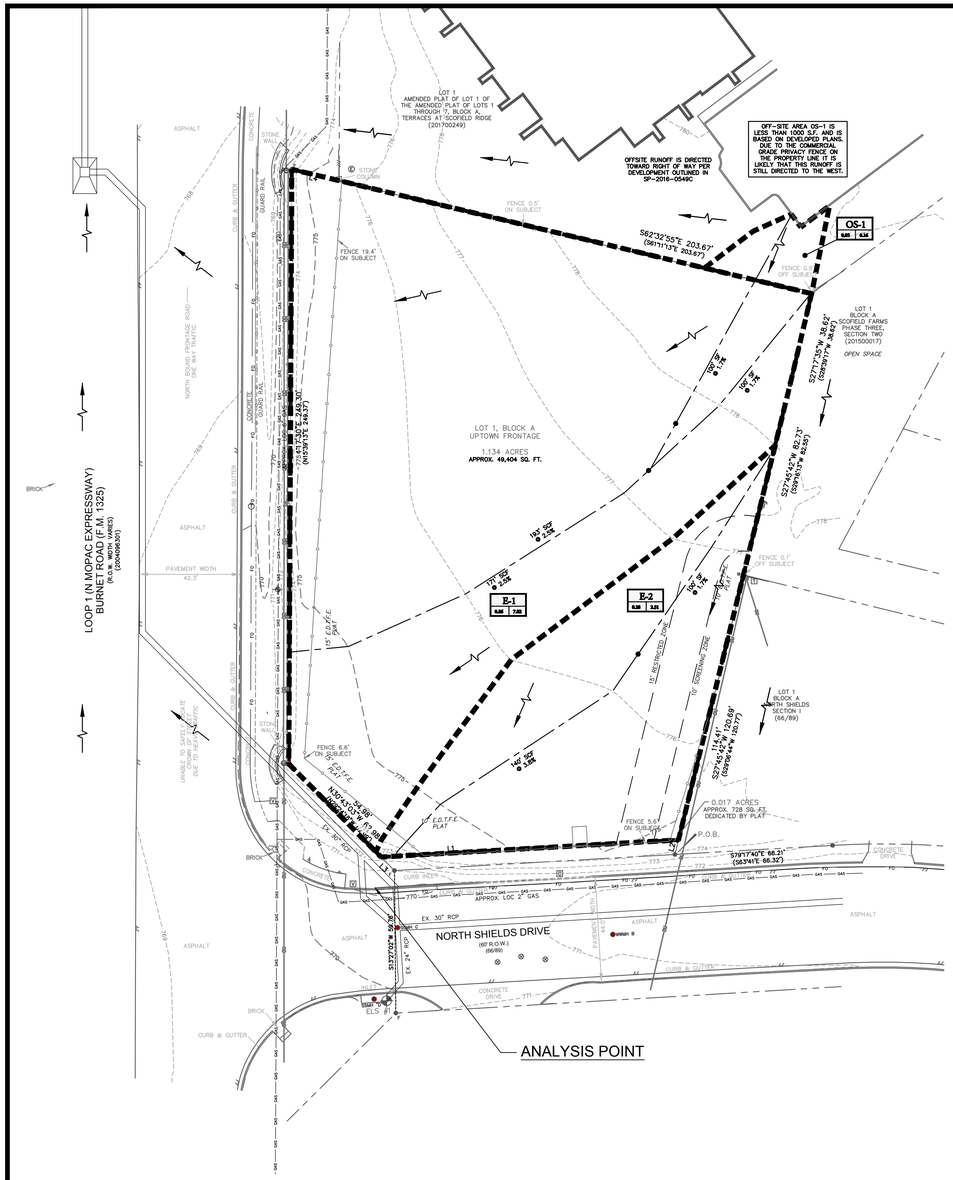
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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

GRADING PLAN

SP-2024-0345C



EXISTING DRAINAGE PLAN

SCALE: 1"=30'

PROPOSED DRAINAGE PLAN

SCALE: 1"=30'

SCALE: 1" = 30'

SCALE IN FEET

30 15 0 30

LEGEND

A / 1.0 | 1.0	EXISTING / PROPOSED DRAINAGE SUB AREA AREA ACREAGE 100 YR. FLOW, C.F.S.
	SUB AREA BOUNDARY
	FLOW DIRECTION
TcA	SOIL CLASSIFICATION (CLASS D SOILS)
	Tc TRAVEL PATH
	EXISTING STORMSEWER
	PROPOSED STORMSEWER
SF	SHEET FLOW
SCF	SHALLOW CONCENTRATED FLOW

NOTES

1. THE SITE DRAINAGE ANALYSIS WAS DESIGNED USING HEC-HMS AND THE ATLAS 14 FREQUENCY STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
2. THE STORM SEWER ANALYSIS WAS DESIGNED USING THE MODIFIED RATIONAL METHOD USING THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
3. REFER TO THE DRAINAGE CALCULATIONS AND THE ENGINEER'S REPORT FOR DETAILED INFORMATION ON ALL DRAINAGE CALCULATIONS.
4. AREAS SHOWN AS 'SUB AREAS' ARE ONLY USED FOR CALCULATING DRAINAGE CONDUITS AND INLETS. REFER TO DRAINAGE STUDY FOR IN DEPTH DRAINAGE INFORMATION.
5. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY OR FINAL INSPECTION RELEASE BY THE CITY, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
6. CONTRACTOR SHALL CALL THE TEXAS EXCAVATION SAFETY SYSTEM 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR STREET RIGHT OF WAY.

PROJECT: **UPTOWN FRONTAGE** DATE: 02/07/24
FIRM: AMC Design Group, Inc.

SUBAREA ID: **OS-1** **DEVELOPED CONDITIONS** ENGR: CBM

LAND USE DESCRIPTION	FRACTION		SOIL TYPE A	B	C	D	U	SCS CN	FRACTION SCS CN
Pasture grassland, fair condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	49	69	79	84	81.5	84	0.0
Pasture grassland, good condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	0.0
Pasture grassland, poor condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	68	79	86	89	87.5	89	0.0
Open Space lawns, parks, etc. good condition	1.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	80.0
Woods Grazed, fair	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	36	60	73	79	76	79	0.0
Woods Protected from grazing, good	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	30	55	70	77	73.5	77	0.0
Residential Districts 2 acre	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	46	65	77	82	79.5	82	0.0
Impervious Areas Gravel	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	76	85	89	91	90	91	0.0
Impervious Areas paved parking, roofs, driveways	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	98	98	98	98	98	98	0.0
	1.00							TOTAL OF PRODUCTS=	80.0
								USE CN=	80

NOTES:
Soil in drainage area is TcA.

PROJECT: **UPTOWN FRONTAGE** DATE: 02/07/24
FIRM: AMC Design Group, Inc.

SUBAREA ID: **E-1/E-2** **EXISTING CONDITIONS** ENGR: CBM

LAND USE DESCRIPTION	FRACTION		SOIL TYPE A	B	C	D	U	SCS CN	FRACTION SCS CN
Pasture grassland, fair condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	49	69	79	84	81.5	84	0.0
Pasture grassland, good condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	0.0
Pasture grassland, poor condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	68	79	86	89	87.5	89	0.0
Open Space lawns, parks, etc. good condition	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	39	61	74	80	77	80	0.0
Woods Grazed, fair	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	36	60	73	79	76	79	0.0
Woods Protected from grazing, good	1.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	30	55	70	77	73.5	77	77.0
Residential Districts 2 acre	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	46	65	77	82	79.5	82	0.0
Impervious Areas Gravel	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	76	85	89	91	90	91	0.0
Impervious Areas paved parking, roofs, driveways	0.00	% AREA	0.00	0.00	0.00	1.00	0.00		
		CN	98	98	98	98	98	98	0.0
	1.00							TOTAL OF PRODUCTS=	77.0
								USE CN=	77

NOTES:
Soil in drainage area is TcA.

TIME OF CONCENTRATION

BASIN	SHEET FLOW - DCM Eq. 2-4 (OVERTON & MEADOWS, 1976) 2yr., 24 HR. RAINFALL DEPTH (IN.)					SHALLOW CONCENTRATED FLOW - DCM Eq. 2-5&2-6					TOTALS	
	LENGTH (FT)	SLOPE (FT/FT)		MANNING'S n VALUE	Tc (HR.)	Tc= L/60*V LENGTH (FT)	SLOPE (FT/FT)	PAVED YES OR NO	VELOCITY (FPS)	Tc (HR.)	Tc TOTAL (HR.)	(MIN.)
E-1	100	0.017	4.06	0.24	0.23	171	0.025	N	2.55	0.02		
				Subtotal	0.23				Subtotal	0.02	0.24	14.6
E-2	100	0.017	4.06	0.24	0.23	140	0.038	N	3.15	0.01		
				Subtotal	0.23				Subtotal	0.01	0.24	14.3
P-1	23	0.024	4.06	0.24	0.06	11	0.024	Y	3.15	0.00		
	77	0.024	4.06	0.02	0.02	187	0.013	PIPE	10.00	0.01		
				Subtotal	0.06				Subtotal	0.01	0.10	6.0
P-2	60	0.045	4.06	0.24	0.10	0	0.045	N	3.42	0.00		
				Subtotal	0.10				Subtotal	0.00	0.10	6.1
OS-1 Pre dev.	100	0.017	4.06	0.24	0.23	193	0.025	N	2.55	0.02		
				Subtotal	0.23				Subtotal	0.02	0.25	14.8
OS-1 Post dev.	37	0.024	4.06	0.24	0.09	30	0.016	Y	2.57	0.00		
	63	0.024	4.06	0.02	0.02	187	0.013	PIPE	10.00	0.01		
				Subtotal	0.11				Subtotal	0.01	0.12	6.9

EXISTING DRAINAGE CONDITIONS - ATLAS 14 RAINFALL DISTRIBUTION

DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (COMPOSITE)	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
E-1	0.86	0.24	77.0	1.75	3.54	4.79	6.89
E-2	0.28	0.24	77.0	0.58	1.16	1.57	2.26
OS-1	0.02	0.25	80.0	0.06	0.10	0.12	0.17
ANALYSIS POINT							
JUNCTION 1				2.39	4.81	6.48	9.31

PROPOSED DRAINAGE CONDITIONS

DRAINAGE AREA	AREA ACRES	Tc HOUR	DEVELOPED I.C. %	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
P-1	0.77	0.10	70.5	3.32	5.31	6.64	8.90
P-2	0.36	0.10	7.2	1.02	2.02	2.68	3.80
OS-1	0.02	0.25	60.0	0.06	0.10	0.12	0.17
JUNCTION 1 INCLUDING DETENTION POND ROUTING *CITY OF AUSTIN ATLAS 14 FREQUENCY STORM				2.88	4.66	5.74	7.51

OS-1 IS A NEGLIGABLE SUBAREA OF PERVIOUS AREA FROM A FULLY DEVELOPED SITE. IF IT IS EVER RE-DEVELOPED IT WILL BE REQUIRED TO BE CONTAINED AND DIRECTED TO THAT PROJECT'S SWM.

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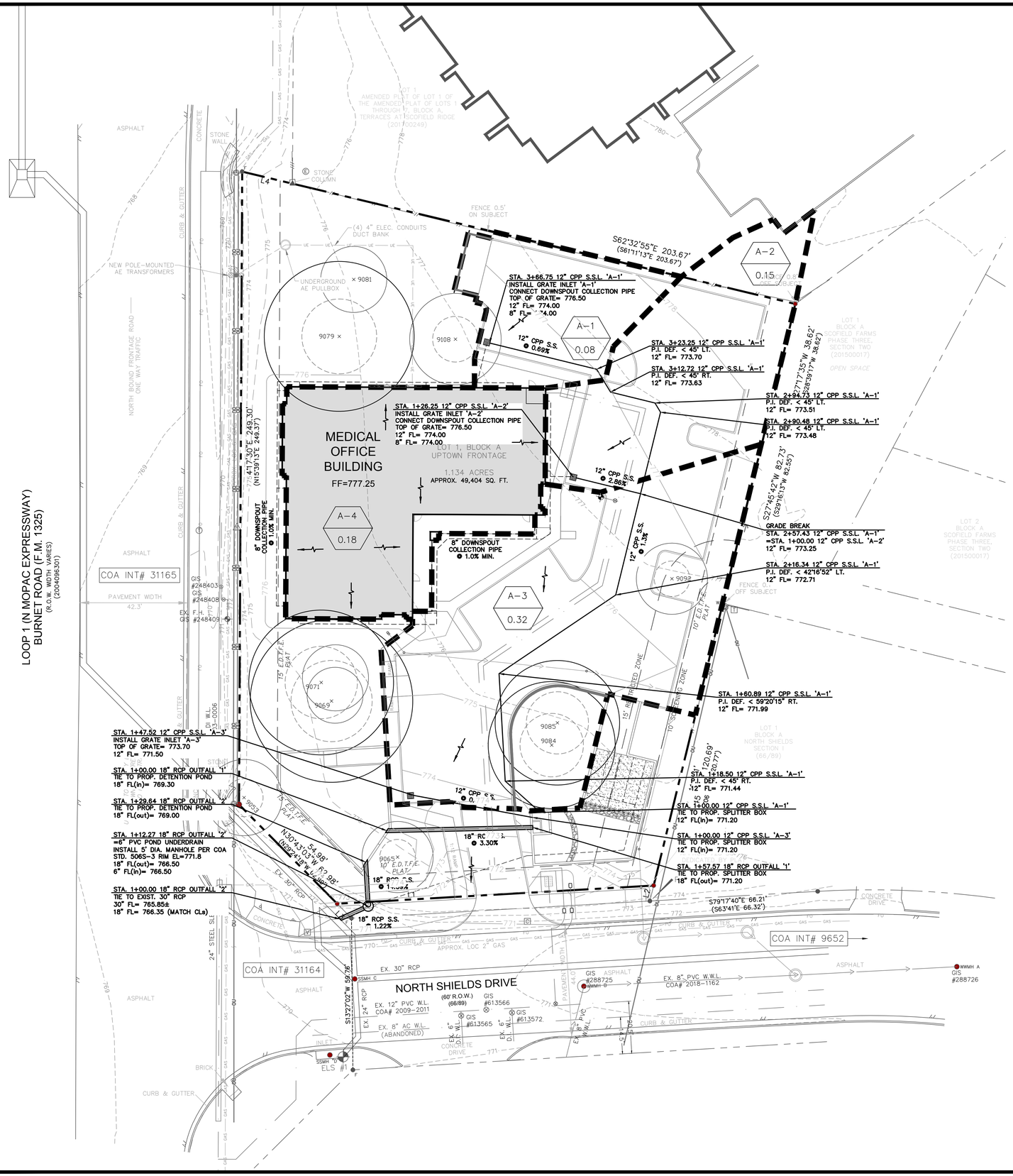
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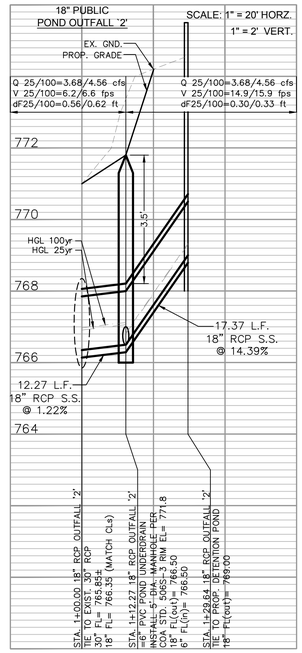
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

OVERALL DRAINAGE PLAN

SP-2024-0345C





SCALE: 1" = 20'
SCALE IN FEET
20 10 0 20

LEGEND

A / 0.0	DRAINAGE SUB AREA / SUB AREA ACREAGE
	SUB AREA BOUNDARY
	FLOW DIRECTION
RCP	REINFORCED CONCRETE PIPE
	EXISTING STORMSEWER
	PROPOSED STORMSEWER

NOTES

1. THE SITE DRAINAGE ANALYSIS WAS DESIGNED USING HEC-HMS AND THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
2. THE STORM SEWER ANALYSIS WAS DESIGNED USING THE MODIFIED RATIONAL METHOD USING THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
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6. CONTRACTOR SHALL CALL THE TEXAS EXCAVATION SAFETY SYSTEM 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR STREET RIGHT OF WAY.

GRATE INLET CALCULATIONS AND SCHEDULE

INLET	Q(100) (cfs)	GRATE SIZE	OPEN AREA (sq. in.)	OPEN AREA W/ 50% CLOGGING	ORIFICE h (ft)	WEIR h (ft)	GRATE ELEVATION	PIPE DIAMETER (in)	PIPE F.L.
A-1	1.1	24" X 24"	490	245	0.02	0.08	776.50	12	774.00
A-2	1.8	24" X 24"	490	245	0.05	0.11	776.50	12	774.00
A-3	3.9	24" X 24"	490	245	0.22	0.17	773.70	12	771.50

NOTES:
1 $h = (1.67Q/A)^2 / 2g$
2 PRECAST CONCRETE INLETS W/ INTEGRATED METAL GRATES BY FORTERRA CONCRETE PRODUCTS

CALCULATION OF STORMWATER RUNOFF

AREA	ACRES	t(c) (min.)	C(2)	I(2)	Q(2)	C(10)	I(10)	Q(10)	C(25)	I(25)	Q(25)	C(100)	I(100)	Q(100)
A-1	0.08	5	0.68	6.27	0.3	0.76	9.43	0.6	0.81	11.62	0.8	0.90	15.32	1.1
A-2	0.15	5	0.59	6.27	0.6	0.66	9.43	0.9	0.71	11.62	1.2	0.79	15.32	1.8
A-3	0.32	5	0.59	6.27	1.2	0.66	9.43	2.0	0.71	11.62	2.6	0.79	15.32	3.9
A-4	0.18	5	0.74	6.27	0.8	0.82	9.43	1.4	0.87	11.62	1.8	0.96	15.32	2.6

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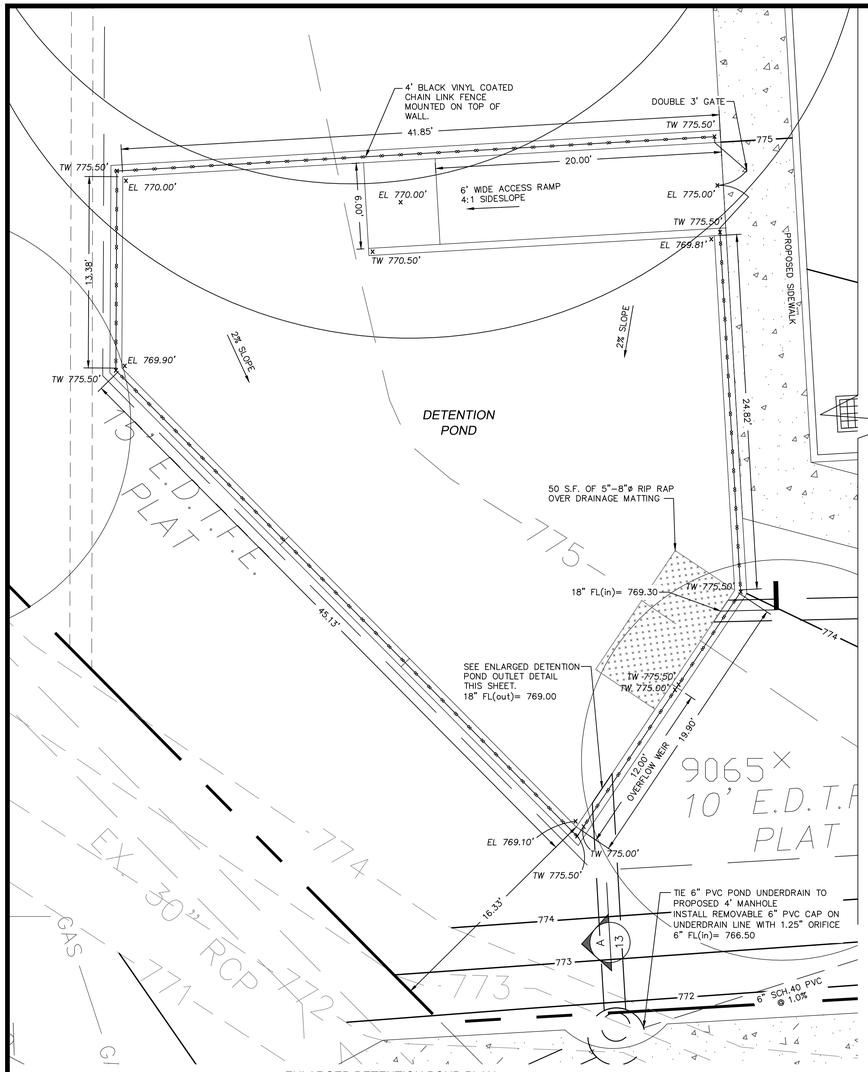
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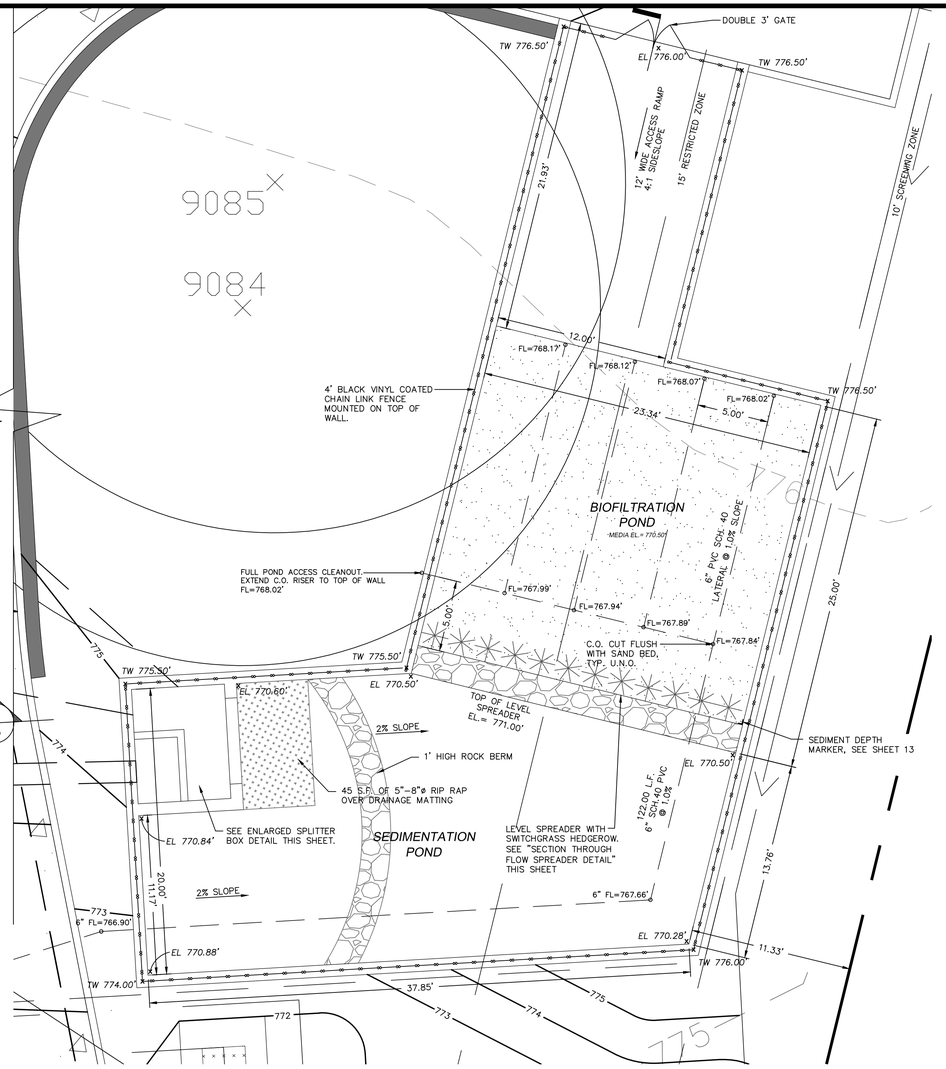
UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

PROPOSED STORM SEWER PLAN

SP-2024-0345C



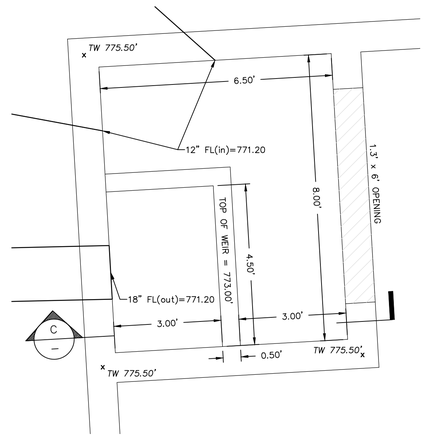
ENLARGED DETENTION POND PLAN
SCALE: 1" = 5'



ENLARGED WATER QUALITY POND PLAN
SCALE: 1" = 5'

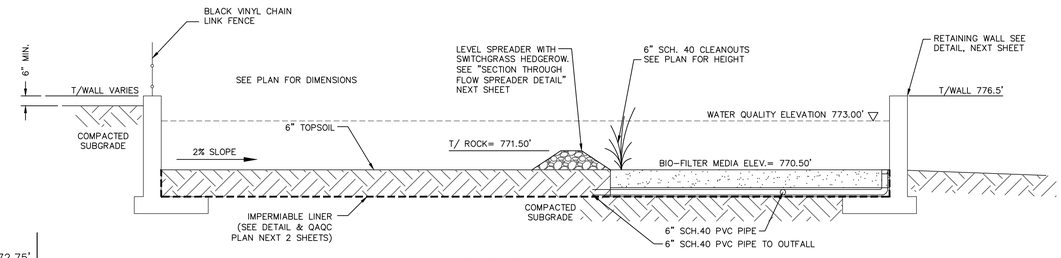
GENERAL NOTES:

1. ALL CONCRETE EDGES WHICH ARE GOING TO REMAIN EXPOSED AT THE END OF CONSTRUCTION TO HAVE A 3/4" CHAMFER.
2. CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION END OF ACI 318.
3. ALL CAST-IN-PLACE CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS.
4. DEFORMED STEEL REINFORCING BARS SHALL BE GRADE 60 AND SHALL CONFORM TO ASTM A-615.
5. MINIMUM REINFORCING STEEL COVERAGES SHALL BE 3" FOR CONCRETE CAST DIRECTLY ON GRADE.
6. REINFORCING STEEL COVERAGES FOR CONCRETE EXPOSED TO EARTH OR WEATHER SHALL HAVE A MINIMUM OF 2" COVERAGE.
7. REINF. DOWELS PROJECTING OUT OF CONSTRUCTION JOINTS SHALL BE STANDARD HOOKS.
8. REINFORCING AND WALL DIMENSIONS ARE FOR BID PURPOSES ONLY. FINAL REINFORCING SCHEDULE TO BE DETERMINED BY OWNER'S STRUCTURAL ENGINEER ONCE A GEOTECHNICAL REPORT IS OBTAINED.
9. ALL HORIZONTAL & VERTICAL CONSTRUCTION JOINTS SHALL HAVE A 4" CENTER BULB WATERSTOP.
10. REFER TO ARCHITECTURAL FOR ALL FENCING LAYOUTS AND DETAILS. PONDS SHALL BE ADEQUATELY PROTECTED FROM THE PUBLIC AS PER THE LAND DEVELOPMENT CODE.
11. POND ACCESS LIDS TO BE 4'x6' DOUBLE LEAF PER SPL WW-614 (H20 LOADING REQUIRED) WITH SLAM LOCK.
12. ALL EARTHEN EMBANKMENTS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH COA STANDARD SPECIFICATIONS.
13. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.
14. BIOFILTRATION MEDIUM SHALL COMPLY WITH ECM 1.6.7.C.4(A).

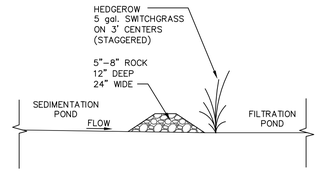


ENLARGED SPLITTER BOX PLAN
SCALE: 1" = 2'

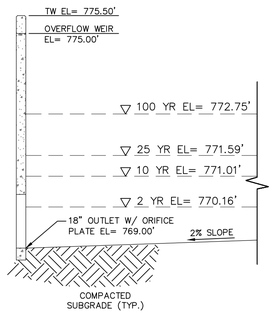
DIMENSION NOTE:
DUE TO IRREGULAR SHAPE OF PONDS, CONTRACTOR MAY OBTAIN STAKEOUT FILE FROM ENGINEER TO AID IN POND LAYOUT.



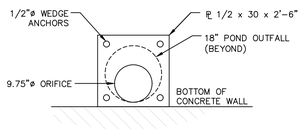
TYPICAL W.Q. POND SECTION
SCALE: N.T.S.



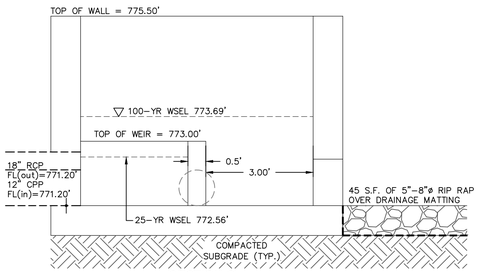
SECTION THRU FLOW SPREADER
SCALE: N.T.S.



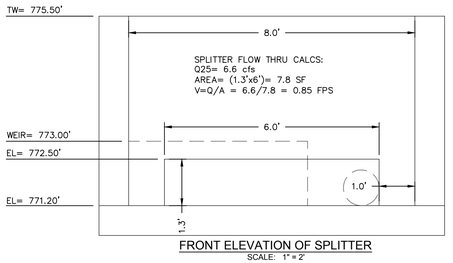
SECTION THROUGH DETENTION POND OUTLET
SCALE: N.T.S.



DETENTION POND OUTFALL ORIFICE PLATE
SCALE: N.T.S.



SECTION C
SCALE: 1" = 2'



FRONT ELEVATION OF SPLITTER
SCALE: 1" = 2'

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STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

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LAND PLANNERS
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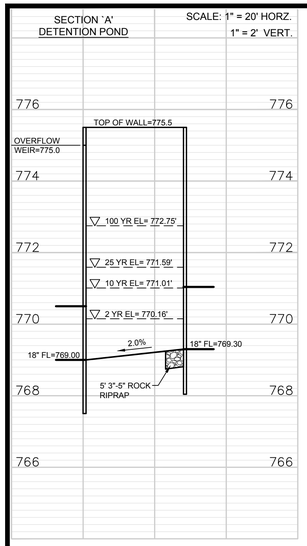
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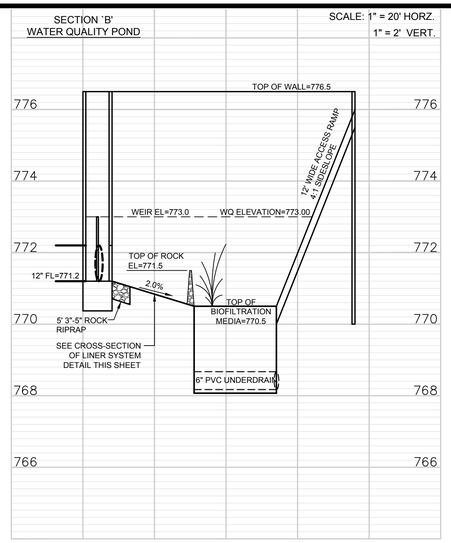
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

PROPOSED POND PLAN

SP-2024-0345C





DISCHARGE CALCULATIONS (BASED ON HEC-HMS & ATLAS 14
INCLUDES ALL DRAINAGE FROM THE DEVELOPED DRAINAGE AREA
ROUTED THROUGH DET. POND (DP) USING HEC-HMS.

2-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 2.76 CFS
Q ROUTED OUT DP: 2.16 CFS
MAXIMUM STAGE: 770.16 FT. MSL

10-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 5.39 CFS
Q ROUTED OUT DP: 3.15 CFS
MAXIMUM STAGE: 771.01 FT. MSL

25-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 6.64 CFS
Q ROUTED OUT DP: 3.68 CFS
MAXIMUM STAGE: 771.59 FT. MSL

100-YEAR STORM
PRE-DEVELOPED Q: - CFS
POST DEVELOPED Q: 9.04 CFS
Q ROUTED OUT DP: 4.56 CFS
MAXIMUM STAGE: 772.75 FT. MSL

POND 'A' STORAGE & DISCHARGE TABLE

ELEVATION FEET MSL	SURFACE (S.F.)	SURFACE (AC.)	STORAGE (C.F.)	STORAGE (AC-FT.)	DISCHARGE CFS
769.50	300	0.0069	0	0	0.00
770.00	1207	0.0277	754	0.0173	2.01
771.00	1227	0.0282	1971	0.0452	3.30
772.00	1247	0.0286	3208	0.0736	4.22
773.00	1267	0.0291	4465	0.1025	4.97
774.00	1287	0.0295	5742	0.1318	5.62
775.00	1387	0.0318	7079	0.1625	6.21

NOTE: POND OUTLET IS DESIGNED AS A SINGLE 9.75" ORIFICE.

$$a = \frac{2A}{C * t * \sqrt{2g}} * \left[\sqrt{h_1} - \sqrt{h_2}\right]$$

Orifice Plate Calculations for Water Quality Pond Outfall
AMC Design Group, Inc.

Project: Uptown Frontage
Date: 6/5/2025

Falling Head Orifice Equation	
Surface Area of Reservoir (s.f.)	1296
Orifice Coefficient (use 0.6 per DCM)	0.6
h1 (ft)	6.50
h2 (ft)	0
t (hrs.)	48
A orifice area (S.F.)	0.007942
Orifice diameter (in.)	1.21

Notes:
t is converted to seconds
A is converted to square inches
The orifice diameter needs to be within 1/16" based on drill bit sizes.



PROVIDE 5X5 CLAY TILE AS SHOWN. ATTACH TO CONCRETE CURB BEHIND AREA INLET WITH EPOXY GROUT.

STORM SEWER INLET SIGN
N.T.S.

WATER QUALITY CALCULATIONS FOR WATER QUALITY POND 'A'
APPENDIX R-6
PARTIAL BIOFILTRATION POND CALCULATIONS
FOR DEVELOPMENT PERMITS

DRAINAGE AREA DATA

DRAINAGE AREA:	0.79 ACRES
D.A. IMPERVIOUS COVER:	70.5%
CAPTURE DEPTH:	1.01 INCHES
SED. BASIN DEPTH:	2.5 FEET
FILTER BASIN DEPTH:	2.5 FEET

THE WATER QUALITY CONTROL IS TO BE PARTIAL BIOFILTRATION

WATER QUALITY CONTROL CALCULATIONS
Q25 PEAK FLOW RATE 6.64 C.F.S.
Q100 PEAK FLOW RATE 8.90 C.F.S.

	REQUIRED	PROVIDED
WATER QUALITY VOLUME:	2862	3051 C.F.
SEDIMENTATION POND AREA	-	761 S.F.
SEDIMENTATION POND VOL. (MIN 20% WQV)	576	1712 C.F.
FILTRATION POND AREA (DCM 1.6.7.c)	416	538 S.F.

WATER QUALITY ELEVATION:	773.00 FT. MSL
ELEVATION OF SPLITTER/OVERFLOW WEIR:	773.00 FT. MSL
LENGTH OF SPLITTER/OVERFLOW WEIR:	6.00 FT.
REQUIRED HEAD TO PASS Q100:	0.69 FT.
POND FREEBOARD PROVIDED:	1.00 FT.
POND FREEBOARD PROVIDED TO PASS Q100:	0.31 FT

BIOLOGICAL ELEMENTS CALCULATIONS:

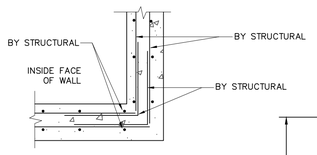
SURFACE AREA OF SED. POND	761 S.F.	
SEDIMENTATION POND PLANTINGS	76	95 PLANTS
FILTRATION POND PLANTINGS	107	113 PLANTS

SEDIMENTATION POND 'A' STORAGE TABLE

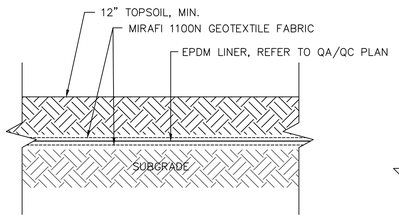
ELEV. FT.MSL	SURFACE (S.F.)	STORAGE (C.F.)
770.50	0	0
771.00	761	190
772.00	761	951
773.00	761	1712
774.00	761	2473

BIOFILTRATION POND 'A' STORAGE TABLE

ELEV. FT.MSL	SURFACE (S.F.)	STORAGE (C.F.)
770.50	535	0
771.00	535	268
772.00	535	803
773.00	535	1338
774.00	535	1874



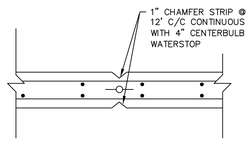
PLAN VIEW OF TYPICAL CORNER
SCALE: 1"=1'-0"



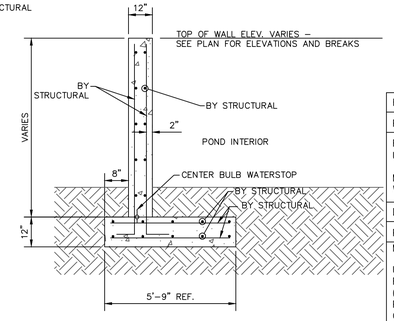
CROSS SECTION OF LINER SYSTEM
N.T.S.

QA/QC FOR CONSTRUCTION OF CONCRETE WATER QUALITY PONDS

REFER TO SHEET 14 FOR QA/QC PLAN.



RETAINING WALL VERTICAL CONTROL JOINT
SCALE: 1" = 1'-0"
THE CONCRETE WALL OF THE PONDS SHALL BE CONSTRUCTED WITH WATER TIGHT JOINTS.



TYPICAL RETAINING WALL FOR DETENTION POND
N.T.S.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: **Uptown Frontage**
Date Prepared: **6/13/2025**

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue 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 =	Travis	
Total project area included in plan * =	1.14	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	0.57	acres
Total post-development impervious cover fraction * =	0.50	
P =	32	inches
$L_{M\,TOTAL\,PROJECT}$ =	495	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 =	0.77	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.57	acres
Post-development impervious fraction within drainage basin/outfall area =	0.74	
$L_{M\,THIS\,BASIN}$ =	496	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: $L_R = (\text{BMP efficiency}) \times P \times (A_C \times 34.6 + A_P \times 0.54)$

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

A_C =	0.77	acres
A_I =	0.57	acres
A_P =	0.20	acres
L_R =	565	lbs

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

Desired $L_{M\,THIS\,BASIN}$ = 496 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 =	0.55	
On-site Water Quality Volume =	2301	cubic feet

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

Off-site area draining to BMP =	0.02	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	0.00	
Off-site Runoff Coefficient =	0.02	
Off-site Water Quality Volume =	2	cubic feet
Storage for Sediment =	461	
Total Capture Volume (required water quality volume(s) x 1.20) =	2763	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.

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

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	2763	cubic feet
Minimum filter basin area =	230	square feet
Maximum sedimentation basin area =	920	square feet For minimum water depth of 2 feet
Minimum sedimentation basin area =	58	square feet For maximum water depth of 8 feet

MAINTENANCE AND CONSTRUCTION REQUIREMENTS
PER C.O.A. E.C.M. 1.6.3

A. MAINTENANCE RESPONSIBILITIES.

PROPER MAINTENANCE IS AS IMPORTANT AS ENGINEERING DESIGN AND CONSTRUCTION IN ORDER TO ENSURE THAT WATER QUALITY CONTROLS, REFERRED TO HEREIN AS STORMWATER CONTROL MEASURES (SCMS), WILL FUNCTION EFFECTIVELY. SECTION 25-8-231 OF THE LAND DEVELOPMENT CODE REQUIRES MAINTENANCE BE PERFORMED ON SCMS WHEN NECESSARY AS DEFINED BY THIS SECTION.

STORMWATER CONTROL MEASURES REQUIRED FOR COMMERCIAL AND MULTI-FAMILY DEVELOPMENT SHALL BE MAINTAINED BY THE PROPERTY OWNER.

B. MAINTENANCE REQUIREMENTS – DESIGN AND CONSTRUCTION.

THE DESIGN OF DRAINAGE FACILITIES (INCLUDING BUT NOT LIMITED TO HEADWALLS, OPEN CHANNELS, STORM SEWERS, AREA INLETS, AND DETENTION, RETENTION AND STORMWATER CONTROL MEASURES AND THEIR APPURTENANCES) SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1.2.4.E OF THE DRAINAGE CRITERIA MANUAL. IN ADDITION, SCMS SHALL COMPLY WITH THE FOLLOWING CONSTRUCTION REQUIREMENTS:

1. SEDIMENT REMOVED DURING CONSTRUCTION OF A DETENTION, RETENTION, OR WATER QUALITY FACILITIES MAY BE DISPOSED OF ON-SITE IF PROPERLY STABILIZED ACCORDING TO THE PRACTICES OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL CRITERIA FOUND IN SECTION 1.4.0 OF THIS MANUAL. AFTER THE CITY OF AUSTIN HAS ACCEPTED A STORMWATER FACILITY DISPOSAL OF SEDIMENT MUST BE AT AN APPROVED LANDFILL.

2. DURING CONSTRUCTION OF SCMS, TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED.

3. IF RUNOFF IS TO ENTER THE SAND FILTRATION CHAMBER OF A WATER QUALITY CONTROL FACILITY PRIOR TO COMPLETION OF SITE CONSTRUCTION AND REVEGETATION, INSPECTION AND MAINTENANCE OF ALL TEMPORARY EROSION/SEDIMENTATION CONTROLS ARE REQUIRED, AS DESCRIBED IN THE ENVIRONMENTAL CRITERIA MANUAL SECTION 1.4.4, TO PREVENT HEAVY SEDIMENT LOADS CAUSED BY HOME CONSTRUCTION FROM CLOGGING THE FILTRATION MEDIA.

4. IN ALL CASES, TREES SHALL BE PRESERVED ACCORDING TO THE REQUIREMENTS OF SECTION 3 OF THE ENVIRONMENTAL CRITERIA MANUAL. THE ACCESS DRIVE AND STAGING AREA SHALL BE DESIGNED TO PRESERVE TREES 8" (INCHES) IN DIAMETER AND GREATER TO THE MAXIMUM EXTENT POSSIBLE. TREES 8" IN DIAMETER AND LARGER SHALL BE SURVEYED AND SHOWN FOR THE PROPOSED ACCESS EASEMENT AT THE TIME OF CONSTRUCTION PLAN PERMITTING.

5. FOR FILTRATION SYSTEMS THE DESIGN MEDIA DEPTH MUST BE VERIFIED, ACCOUNTING FOR CONSOLIDATION. IF INSUFFICIENT DEPTH IS PRESENT, ADDITIONAL MEDIA MUST BE ADDED AND PRE-SOAKED UNTIL THE DESIGN DEPTH IS ACHIEVED. PRE-SOAKING – APPLY 5–10 GALLONS OF WATER PER SQUARE FOOT OF MEDIA AREA WITHIN ONE HOUR.

6. RETAINING WALLS – RETAINING WALLS WITHIN SCMS REQUIRE WATER-TIGHTNESS. WATER-TIGHTNESS IN RETAINING WALLS IS ESSENTIAL TO THE FUNCTION OF THE STRUCTURE. WATERSTOPS SHALL BE PROVIDED DURING CONSTRUCTION OF EXPANSION JOINTS IN RETAINING WALLS PER STANDARD SPECIFICATION 414S, CONCRETE RETAINING WALLS.

7. GROUTED ROCK WALLS – GROUTED ROCK WALLS ARE ACCEPTABLE ONLY IF THE DESIGN INCLUDES AN IMPERMEABLE BARRIER SUCH AS AN APPROVED GEOMEMBRANE LINER OR REINFORCED CONCRETE RETAINING WALL. FREE STANDING DRY STACKED ROCK WALLS ARE NOT ACCEPTABLE IN ANY SCM.

C. MAJOR MAINTENANCE REQUIREMENTS.

1. THE FOLLOWING MAINTENANCE ACTIVITIES SHALL BE PERFORMED ON ALL SCMS, IN ADDITION TO THE REQUIREMENTS LISTED FOR THE INDIVIDUAL SCM TYPES, TO ENSURE PROPER FUNCTION:

A) ACCUMULATED PAPER, TRASH AND DEBRIS SHALL BE REMOVED EVERY SIX (6) MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.

B) STRUCTURAL INTEGRITY SHALL BE MAINTAINED AT ALL TIMES. BASINS AND ALL APPURTENANCES SHALL BE INSPECTED ANNUALLY, OR MORE FREQUENTLY IF SPECIFIED, AND REPAIRS SHALL BE MADE IF NECESSARY. WHEN MAINTENANCE OR REPAIRS ARE PERFORMED, THE SCM SHALL BE RESTORED TO THE ORIGINAL LINES AND GRADES.

C) CORRECTIVE MAINTENANCE SHALL OCCUR:

I. ANY TIME DRAWDOWN OF THE WATER QUALITY VOLUME DOES NOT OCCUR WITHIN NINETY-SIX (96) HOURS (I.E., NO STANDING WATER IS ALLOWED), UNLESS A GREATER MAXIMUM DRAWDOWN TIME IS SPECIFIED IN THE PLANS.

II. FOR DETENTION PONDS ONLY, ANY TIME DRAWDOWN DOES NOT OCCUR WITHIN TWENTY-FOUR (24) HOURS.

D) THE INLET AND OUTLET OF SCMS SHALL BE MAINTAINED UNIMPEDED IN ORDER TO CONVEY FLOW AT ALL TIMES. OBSERVED BLOCKAGES TO THE INLET AND OUTLET, DUE TO VEGETATION, SEDIMENT, DEBRIS, OR ANY OTHER CAUSE, SHALL BE REMOVED.

E) NO UNVEGETATED AREA SHALL EXCEED TEN (10) SQUARE FEET. THIS PERFORMANCE REQUIREMENT APPLIES TO THE ENTIRE POND INCLUDING THE POND BOTTOM, SIDE SLOPES, AND AREAS ADJACENT TO THE POND, AND IS INTENDED TO LIMIT EROSION.

F) INTEGRATED PEST MANAGEMENT SHALL BE PERFORMED AND SHALL ADHERE TO SECTION 1.6.2.F, INTEGRATED PEST MANAGEMENT GUIDELINES (WHERE REQUIRED).

G) THE MINIMUM VEGETATION HEIGHT SHALL BE FOUR (4) INCHES IN THE SCM AND ALL APPURTENANCES, INCLUDING THE TOE OF THE BERM OR WALL OUTSIDE THE SCM, WHERE APPLICABLE.

H) SEDIMENT BUILD-UP SHALL BE REMOVED:

IJ. WHEN THE ACCUMULATION EXCEEDS SIX (6) INCHES IN SPLITTER BOXES, WET WELLS AND BASINS.

II. WHEN SEDIMENT TRAPS ARE FULL.

III. WHEN SEDIMENT, OF ANY AMOUNT, CAUSES STANDING WATER CONDITIONS OR REDUCES BASIN STORAGE BY MORE THAN 10%.

I) WHEN SEDIMENT IS REMOVED, THE FOLLOWING REQUIREMENTS APPLY:

I. IRRIGATION SHALL BE PROVIDED, AS NEEDED, UNTIL VEGETATION IS ESTABLISHED (WELL ROOTED). SEE SECTION 1.6.3.D, IRRIGATION GUIDELINES.

II. THE DESIGN DEPTH OF THE FILTRATION MEDIA SHALL BE VERIFIED. SEE SECTION 1.6.3.B.5.

III. TILLING OF THE FILTRATION MEDIUM IS NOT ALLOWED.

J) FOR SUBSURFACE PONDS MAINTENANCE PLAN REQUIREMENTS, REFER TO ECM SECTION 1.6.2(E).

2. SEDIMENTATION AND FILTRATION SCMS (SECTION 1.6.5).

A. VEGETATION WITHIN THE SCM SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME, EXCEPT AS CALLED FOR IN THE DESIGN.

B. VEGETATION THAT IS MOWED OR CUT SHALL BE REMOVED FROM THE SCM.

3. DETENTION BASINS.

A. VEGETATION WITHIN THE BASIN SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME.

4. BIO-FILTRATION & RAIN GARDENS (SECTIONS 1.6.7.5. C & H)

A. MAINTENANCE CONSIDERATIONS IN DESIGN.
A LACK OF MAINTENANCE CONSIDERATIONS IN THE DESIGN OF A LANDSCAPE COMMONLY RESULTS IN A SITE THAT IS MORE MAINTENANCE INTENSIVE (I.E., COSTLY) THAN NECESSARY AND/OR APPROPRIATE FOR ITS PURPOSE, AND ONE THAT REQUIRES THE ROUTINE USE OF PRACTICES THAT ARE UNDESIRABLE (E.G., EXTENSIVE PESTICIDE USE, INTENSIVE PRUNING OF PLANTS THAT GROW TOO LARGE FOR THE SPACES THEY OCCUPY). THE DESIGNER SHALL INCLUDE MAINTENANCE CONSIDERATIONS AND IPM THROUGHOUT THE PLANNING AND DESIGN PHASE OF A BIOFILTRATION PROJECT. LANDSCAPE SHAPES SHOULD BE DESIGNED TO ALLOW FOR THE ACCESS AND AID THE MANEUVERABILITY OF MAINTENANCE EQUIPMENT (E.G., IF AREAS OF THE POND ARE DESIGNED TO BE MOWN, ACUTE ANGLES SHOULD BE AVOIDED IN TURF AREAS; WIDE ANGLES, GENTLE, SWEEPING CURVES, AND STRAIGHT LINES ARE EASIER TO MOW).

B. ROUTINE MAINTENANCE
ONCE VEGETATION IS ESTABLISHED, BIOFILTRATION SYSTEMS SHOULD REQUIRE LESS MAINTENANCE THAN SAND FILTRATION SYSTEMS BECAUSE THE VEGETATION PROTECTS THE FILTRATION MEDIA FROM SURFACE CRUSTING AND SEDIMENT CLOGGING. PLANT ROOTS ALSO PROVIDE A PATHWAY FOR WATER TO PERMEATE DOWN INTO THE MEDIA, THUS FURTHER ENHANCING THE HYDRAULIC PERFORMANCE OF THE SYSTEM. UNLESS DAMAGED BY UNUSUAL SEDIMENT LOADS, HIGH FLOWS, OR VANDALISM, THE BIOFILTRATION MEDIA SHOULD BE LEFT UNDISTURBED AND ALLOWED TO AGE NATURALLY, AND BIOFILTRATION POND VEGETATION SHALL BE MANAGED SO THAT A DENSE, HEALTHY VEGETATIVE COVER IS PRESERVED. THE FOLLOWING MAINTENANCE ITEMS SHOULD BE PERFORMED DEPENDING ON FREQUENCY AND TIME OF YEAR:

BIWEEKLY DURING FIRST GROWING SEASON: INSPECT VEGETATION UNTIL 95% VEGETATIVE COVER IS ESTABLISHED.

MONTHLY: CHECK FOR ACCUMULATED SEDIMENTS, REMOVE AS NEEDED.

QUARTERLY: REMOVE DEBRIS AND ACCUMULATED SEDIMENT; REPLACE SOIL MEDIA IN VOID AREAS CAUSED BY SETTLEMENT; REPAIR ERODED AREAS; REMULCH BY HAND ANY VOID AREAS.

SEMI-ANNUALLY: REMOVE AND REPLACE DEAD OR DISEASED VEGETATION THAT IS CONSIDERED BEYOND TREATMENT (SEE PLANTING SPECIFICATIONS); TREAT ALL DISEASED TREES AND SHRUBS MECHANICALLY OR BY HAND DEPENDING ON THE INSECT OR DISEASE INFESTATION. IF DRAWDOWN EXCEEDS THE DRAWDOWN TIME ACCORDING TO SECTION 1.6.3.C.1, LIGHTLY SCARIFY SOIL WITH HAND CULTIVATOR; IF STANDING WATER REMAINS FOR GREATER THAN 96 HOURS, REMOVE TOP LAYER OF SEDIMENT, MULCH, AND POTENTIALLY VEGETATION; DC-COMPACT SOIL BY SCARIFICATION, AND REPLACE MULCH AND DISTURBED VEGETATION.

LATE WINTER: TRIM BUNCH GRASSES; MOW TURF GRASSES; HARVEST OTHER TYPES OF VEGETATION ACCORDING TO RECOMMENDATIONS IN THE PLANTING SPECIFICATIONS. ADHERE TO SECTION 1.6.2.F.

SPRING: REMOVE PREVIOUS MULCH LAYER AND APPLY NEW MULCH LAYER BY HAND (OPTION) ONCE EVERY TWO TO THREE YEARS.

C. OTHER ITEMS.A.SIGNAGE SHALL BE USED TO DELINEATE THE BOUNDARIES OF THE BIOFILTRATION AREA THAT ARE MAINTAINED WITH MINIMAL MOWING, NO FERTILIZERS, AND LIMITED USE OF ORGANIC HERBICIDES.

PLANTING AND SOIL SPECIFICATIONS:

1. REFER TO LANDSCAPE PLAN FOR PLANT MATERIALS IN AND AROUND THE BIORETENTION POND.

2. PLANTING SOIL MIXTURE SHALL HAVE A MAXIMUM CLAY CONTENT BETWEEN 3 AND 10%. THE MIXTURE SHALL BE 70–90% SAND, 3–10% CLAY, AND 0–27% SILT PLUS CLAY. THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES.

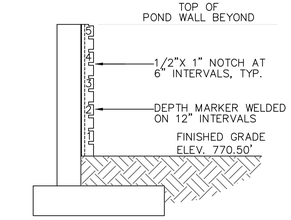
3. NO OTHER MATERIALS OR SUBSTANCES SHOULD BE MIXED OR DUMPED WITHIN THE BIORETENTION THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDERANCE TO THE PLANTING OR MAINTENANCE OPERATIONS.

4. SAND USED IN THE PLANTING SOIL SHALL MEET ASTM C–33 SPECIFICATIONS WITH A GRAIN SIZE OF 0.02–0.04 INCHES.

5. GRAVEL LAYER SHALL BE CLEAN AND WASHED RIVER GRAVEL, ½ – 1.5" DIAMETER.

6. SUPPLIER OF BIO–FILTRATION MEDIA MUST MEET THE REQUIREMENTS OF ECM 1.6.7.5.C.

7. THE FOLLOWING MIXTURE (% BY VOLUME) SHOULD CREATE AN APPROPRIATE BIOFILTRATION MEDIA, SUBJECT TO SPECIFIC CHARACTERISTICS OF THE TOPSOIL AND COMPOST INGREDIENTS:
A. 70–80% CONCRETE SAND
B. 20–30% SCREENED BULK TOPSOIL (CHOCOLATE LOAM IS ACCEPTABLE)



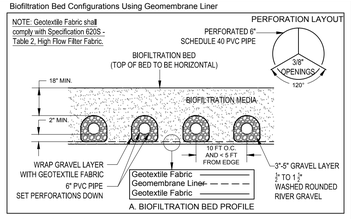
INSTALL L2x2x1/4 ANGLE WITH (2) 1/2" WEDGE ANCHORS TO WALL AT GABION

SEDIMENTATION DEPTH/MARKER
N.T.S.

HIGH FLOW FILTER FABRIC REQUIREMENTS		
PROPERTY	TEST METHOD	REQUIREMENTS
FABRIC WEIGHT	>D 3776	3.0 OUNCES/SQUARE YARD MINIMUM
ULTRAVIOLET (UV) RADIATION STABILITY	D 4355	70% STRENGTH RETAINED MINIMUM, AFTER 500 HOURS IN XENON ARC DEVICE
MULLEN BURST STRENGTH	D 3786	120 POUND PER SQUARE INCH MINIMUM
WATER FLOW RATE	D 4491	275 GALLONS/MINUTE/SQUARE FEET MINIMUM

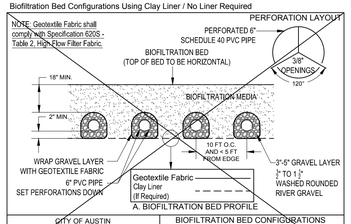
DRAINAGE MATTING SPECIFICATIONS			
PROPERTY	TEST METHOD	UNIT	SPECIFICATION
MATERIAL			NONWOVEN GEOTEXTILE FABRIC (MIRAFI 140NS OR EQ.)
UNIT WEIGHT		OZ/SQ.YD.	20
FLOW RATE (FABRIC)		GPM/FT^2	180 (MIN.)
PERMEABILITY	ASTM D-2434	CM/SEC	12.4X10^{-2}
GRAB STRENGTH (FABRIC)	ASTM D-1682	LB.	DRY LG.90 DRY WD: 70 WET LG.95 WET WD: 70
PUNCTURE STRENGTH (FABRIC)	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

Biofiltration Bed Configurations Using Geomembrane Liner



A. BIOFILTRATION BED PROFILE

Biofiltration Bed Configurations Using Clay Liner / No Liner Required



A. BIOFILTRATION BED PROFILE

CITY OF AUSTIN	BIOFILTRATION BED CONFIGURATIONS USING GEOMEMBRANE/CLAY LINER
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	STANDARD NO.
RECORD COPY SIGNED 12/30/14	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. 661-3
ADOPTED	

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LICENSED PROFESSIONAL ENGINEER
6/13/25

Thrower Design
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456
LAND PLANNERS

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

POND DETAILS

13 OF 26

SP-2024-0345C

ECS SOUTHWEST, LLP
TX Registered Engineering Firm F-8461
Geotechnical • Construction Materials • Environmental • Facilities

August 28, 2024

Ms. Christine Wong
CS Vista, LLC
5801 Standing Rock Drive
Austin, Texas 78730

ECS Project Number 17:6545

Subject: Pond Liner QA/QC Plan
Uptown Frontage Office Building
2900 N. Sheilds Drive
Austin, Texas

Dear Ms. Wong:

As requested, ECS-Southwest, LLP (ECS) has completed a pond liner QA/QC plan for the proposed pond liner at the Uptown Frontage Office project in Austin, Texas. Our services were provided in general accordance with our Change Order No. 1 dated August 23, 2024, authorized by Ms. Christine Wong of CS Vista, LLC on August 26, 2024, via signature of the change order acceptance page.

Project Information

The project is generally located at 2900 N. Shields Drive in Austin, Texas. The *Geologic Map of the Austin Area* indicates that the site is underlain by the Buda Formation (Kbu), which generally consists of very hard limestone. It is understood that the proposed improvements will include the construction of a concrete walled bio-filtration pond with a bottom surface area of 1,450 square feet, and that a pond liner construction QA/QC plan is required. ECS previously completed a geotechnical report (ECS Project No. 17:6545 dated May 17, 2024) for the Uptown Frontage Office Building Development. Based on the information provided, it is understood that the proposed liner will consist of geomembrane construction.

Geomembrane Liner Construction Quality Assurance/Quality Control Plan

Part 1: GENERAL

An impermeable geomembrane liner can be considered for the proposed bio-filtration pond. The liner shall conform to material parameters as outlined herein.

1.01 SECTION INCLUDES

A. Construction and Testing of the Geomembrane Liner for the Pond

1.02 TEST REFERENCES

A.	ASTM D 698	Standard Test Method for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5-½-lb Hammer and 12-inch Drop
B.	ASTM D 1140	Standard Test Method for Amount of Material in Soils Finer Than the No. 200 Sieve
C.	ASTM D 2216	Standard Test Method for Laboratory Determination of Water (moisture) Content of Soil, Rock, and Soil-Aggregate Mixtures
D.	ASTM D 2487	Classification of Soils for Engineering Purposes
E.	ASTM D 4318	Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils
F.	ASTM D 4437	Standard Practice for Non-Destructive Testing (NDT) for Determining the Integrity of Seams Used in Joining Flexible Polymeric Sheet Geomembranes (Air Lance Test)
G.	ASTM D 6913	Standard Test Method for Particle Size Analysis of Soils
H.	ASTM D 6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)
I.	ASTM D 7272	Standard Test Method for Determining the Integrity of Seams Used in Joining Membranes by Pre-manufactured Taped Methods

Part 2: MATERIAL

2.01 SUBGRADE

A. Soils to support the impermeable geomembrane liner shall be imported or on-site material compacted to at least 95% relative compaction as determined by ASTM D-698 Standard Proctor Method. Suitable fill should be classified as a clay according to the Unified Soils Classification System and be free of gravel larger than 0.375 inches in any one direction. Soft areas identified should be recompacted or replaced with suitable fill material. Subgrade materials shall be free of refuse, roots, rocks, material greater than 0.375 inches, and other deleterious materials.

2.02 GEOMEMBRANE LINER

A. The geomembrane liner shall be a Firestone EPDM geomembrane or equivalent. The geomembrane liner used should be resistant to degradation by ultraviolet light and should be at least 30 mils in thickness. The following data for the geomembrane to be used must be submitted to the engineer of record at least 10 working days prior to placement: raw material properties, roll and production quality assurance, and control data. Furthermore, a plan shall be provided to the engineer before the start of construction prepared by the contractor denoting geomembrane panel number and placement locations.

2.03 GEOTEXTILES

A. Geotextiles must be used to protect the geomembrane liner if particles greater than 0.375 inches in size are present in the subgrade or cover soils. Geotextiles used must conform to the following tabulated values:

Property	Minimum value
Unit Weight	8 oz/square yard
Puncture Strength	125 lbs
Mullen Burst Strength	400 psi
Tensile Strength	200 lbs

2.04 PROTECTIVE SOIL COVER

A. A protective soil cover shall be placed over the geomembrane liner system, including topsoil that conforms to COA Landscape criteria. Protective soil materials shall be free of refuse, roots, rocks, material greater than 0.375 inches, and other deleterious materials.

Part 3: EXECUTION

3.01 SUBGRADE PLACEMENT

A. Prior to geomembrane liner placement, the subgrade shall be excavated and removed to the elevations established on the plans. Loose soils/rocks shall be removed from the excavation. Soft areas identified should be recompacted or replaced with suitable fill material. If existing subgrade is soil, the subgrade shall be scarified to a depth of 12 inches, moisture conditioned (as in Item 3.01.D), and recompacted, unless rock is encountered. If rock is encountered, the surface shall be reasonably cleaned of large rocks and other loose material before placement of fill. At least 6 inches of clay fill or approved geotextile fabric must be placed between limestone and the geomembrane liner. Subgrade below the liner should be smooth.
B. Groundwater control during excavation and construction of the geomembrane liner is the responsibility of the contractor. Groundwater control must be provided such that it results in a stable and dry subgrade that is conducive to proper geomembrane liner placement and weld application. Appropriate measures such as perimeter and/or lateral interceptor trenches, sumps, and pumps shall be installed and maintained throughout construction, as needed.
C. Subgrade lift thicknesses shall be no greater than 6 inches in compacted lift thickness and no greater than 8 inches in loose lift thickness.
D. The subgrade below the geomembrane liner shall be compacted to at least 95 percent of the maximum dry density determined by the Standard Proctor Test, ASTM D 698. If the material classifies as a CH in accordance with USCS, the moisture content at the time of compaction shall be between optimum and +4 percentage points above the optimum moisture content. For all other soil materials, the moisture content at the time of compaction shall be between -3 and +3 percentage points above the optimum moisture content. Moisture/density control is not necessary in exposed limestone subgrade areas.
E. Areas that do not meet the moisture or density specifications during initial testing shall be reworked and retested until the material meets the specifications.
F. If material of a size greater than 0.375 inches is present at the finished subgrade surface, either a geotextile must be placed beneath the geomembrane liner, or at least two inches of a clean fine to medium grained sand must be placed beneath the geomembrane liner. The final prepared subgrade surface must be evaluated by the Construction Testing Firm before liner placement.

3.02 GEOTEXTILE PLACEMENT

A. Geotextiles shall be placed without tension with an overlap of at least 12 inches in width or a thermal weld of at least 4 inches width. If welded thermally the geotextile shall be allowed to relax for at least 30 minutes before welding. Geotextiles shall be weighed down to prevent displacement.

3.03 GEOMEMBRANE PLACEMENT

A. The Construction Testing Firm should have a field representative on site at all times during installation of the geomembrane.
B. The contractor should have an individual who is qualified in geomembrane installation on site during geomembrane installation. A qualified person is either a representative of the liner manufacturer or someone who has successfully completed a course presented by the liner manufacturer.
C. Geomembrane rolls must be transported and stored on clean surfaces free of sharp protrusions out of direct sunlight. Geomembrane rolls and accessories must be stored in a climate-controlled location, with a temperature of between 50 and 77 degrees Fahrenheit to protect the accessories against extreme weather conditions. When handling the liner, care should be taken to not tear or stretch the material.
D. Panels to be attached to the concrete side walls should extend at least 3 feet horizontally onto the pond bottom.
E. The geomembrane should be weighed down during installation to prevent displacement.
F. Do not weld or attach the membranes to any fixed structure for at least 30 minutes after placement.
G. All panels placed adjacent to other panels must be seamed during the same day.
H. At the end of each construction day's activities, completed sections of geomembrane that are not otherwise covered shall be covered with a geotextile or equivalent protective layer and weighted down to maintain the integrity of the liner and prevent displacement.

3.04 SEAMING

A. Seaming shall be done without application of tension to the geomembrane, and in accordance with manufacturer specifications.
B. Seaming of adjacent panels should be performed immediately after the relaxation period of 30 minutes.
C. Panels must be installed without tension and wrinkles, and must overlap by at least 4 inches before seaming.
D. Seams should not be made if there is moisture in the seam area, the subgrade soil is soft, it is raining, there is ponded water on the seam, there is fog, there is excessive wind/dust, the temperature is below 40 degrees Fahrenheit, or other contaminants are present on the seam. Moisture in the seam will cause the seam to fail.
E. Seams must be cleaned before seaming to ensure that no contaminants are present and the seam is clean.
F. Panels should be seamed the same day they are placed adjacent to other panels.
G. Panels shall be seamed as instructed by the geomembrane manufacturer.

H. Geomembranes being seamed shall not be moved during or immediately after seaming.
I. Unbonded areas as detected by the Air Lance Test (ASTM D 4437) shall be repaired when detected.

3.05 CONCRETE CONNECTIONS

A. The geomembrane liner should be fastened to the concrete retaining walls surrounding the quality pond in such a manner as to maintain integrity of the liner and prevent flow of water between the liner and the retaining wall. The geomembrane liner must be extended beyond the inflow gabions until either the liner can be extended above the maximum elevation of water for the quality pond or the liner can be fastened watertight to a concrete wall. A 12-inch protective layer of fine sand or at least two layers of geotextile in conjunction with 2 inches of sand should be provided between the inflow gabions and the geomembrane. If the liner will be more than 12 inches below the gabions, general protective fill (2.04) may be used in lieu of fine sand. Protective fill or an equivalent covering should be provided such that the geomembrane liners will not be exposed to sunlight at terminations.
B. The geomembrane liner shall extend below and around all concrete ramps, inflow/outflow headwall structures, aprons, walls, and other miscellaneous structures within the pond interior.
C. Connections to concrete should be performed in accordance with City of Austin Standard Detail 661-4A entitled "Concrete Wall Geomembrane Liner Attachment".
D. Concrete should be clean and smooth where it will be adhered to the geomembrane liner.
E. Neoprene gaskets shall be placed between the geomembrane and concrete and between the geomembrane liner and termination bar at bolted connections.
F. The geomembrane liner shall be secured to the concrete walls using adhesive such as Firestone Water-Block.
G. The opening to the seam between the geomembrane liner and the concrete wall shall not be directly exposed to water. A sealant shall be applied to the edge of the liner at the interface with the concrete. This seal shall be watertight.
H. A non-woven geotextile protective cushion at least 1/8 inch thick shall be placed between the geomembrane liner and the concrete surface in all areas where the liner will not be adhered to the concrete surface and would otherwise be in direct contact with concrete.
I. The top of the geomembrane liner – wall connection shall be located below the topsoil layer required as protective fill for the membrane.

3.06 THROUGH PENETRATIONS

A. Through penetrations of the geomembrane liner, such as those required for pipes, should be prepared in such a way as to maintain the integrity of the liner system.
B. The object requiring a through penetration should be firmly anchored in its final position before carrying out the following procedure.
C. A circular cut shall be made in the geomembrane liner approximately 80% of the size of the object and the geomembrane shall be placed over the object into final position and secured so that it will not move during the preparation of the flashing around the object.
D. Firestone Quickseam Formflash or equivalent shall be placed around the object, extending at least 2 inches above the geomembrane liner, and at least 3 inches in diameter around the

cut. This flashing shall be adhered to the geomembrane and the object using a suitable adhesive.
E. An additional piece of flashing shall be placed over the first, using a suitable adhesive. This piece shall extend at least 9 inches above the geomembrane liner around the object, and at least 2 inches in diameter around the opening.
F. The edges of the flashing shall be sealed with lap sealant. The top of the flashing around the object shall also be clamped with a stainless-steel ring. A layer of geomembrane shall be placed between the ring and the flashing before application and tightening.
G. Alternately, Firestone Quickseam Pipe Boots may be installed per Firestone's specifications. For reference we have included drawings from Firestone detailing through penetration flashing.

3.07 PROTECTIVE COVER

A. A. At least 24 inches of protective fill shall be placed over the geomembrane liner. The protective soil covering may be reduced to 12 inches if heavy equipment is prohibited from entering the pond. A minimum of 4 inches of topsoil meeting COA Landscape criteria should be provided as part of the protective fill. This fill should be free of material larger than 0.375 inches or a geotextile should be placed on top of the liner. The Construction Testing Firm shall have a field representative on site during the placement of protective cover directly on the liner.

Part 4: LINER REPAIR

4.01 REPAIR PROCEDURES

A. Any tear or hole smaller than 0.5 inches in the largest dimension shall be repaired by adding a patch of cover strip at least 6 inches wide and with dimensions at least 3 inches greater than the size of the discontinuity in all directions. The patch shall be circular, oval, or have rounded corners. Prepare the surface of the geomembrane for the patch using the same techniques used to prepare seams.
B. Alternately, holes smaller than 0.25 inches may be repaired using a Firestone 6" diameter QuickSeam Joint Cover, installed per manufacturer instructions.
C. Larger tears or holes may be repaired by adding a patch of geomembrane with dimensions at least 4 inches greater than the discontinuity in all directions and seaming the edges as described previously in Section 3.04. Only cover strip seams will be permitted for repairing larger tears or holes.

Part 5: SAMPLING AND TESTING

5.01 TEST TYPES AND FREQUENCY

A. For subgrade materials, at least one (1) sample shall be obtained per soil type within the exposed subgrade areas for testing of Atterberg Limits (ASTM D 4318), gradation (ASTM D 6913), and Moisture-Density Relationship (ASTM D 698). These samples shall be excavated from exposed areas in the field in sufficient quantities to perform the three laboratory tests itemized above, placed in sample containers, and transported to the laboratory for testing.

The excavated sample areas in the field shall be backfilled with similar subgrade materials, moisture conditioned, and compacted.
B. Additional samples shall be obtained as variations in material are observed.
C. In-place density and moisture content by Nuclear Methods (ASTM D 6938) shall be performed on all subgrade material at a minimum rate of one test per 5,000 square feet per lift (or a minimum of 3 tests per lift).
D. At the beginning of each day when seaming will be performed and after any midday break while seaming is performed, the seaming crew shall complete a test seam of at least 10 feet in length. Peel and Shear tests shall be performed on samples obtained from said test seam in general accordance with ASTM D 7272. Minimum shear strength required is 35 pounds per inch at 200% strain. Minimum peel strength required is 12 pounds per inch in cohesive bond mode.
E. Inspect all field seams for unbonded areas using the Air Lance Test as described in ASTM D4437. Use a minimum air supply of 50 psi, directed through a 0.188 inch nozzle held no more than 2 inches from the seam edge, and directed along the seam edge.
F. Areas detected to be unbonded shall be documented and retested when repaired.

Part 6: DOCUMENTATION

TEST REPORTS AND SUMMARY LETTERS

A. Test reports shall be issued for each test performed (including, but not limited to, all of the tests already mentioned above) and shall indicate compliance or non-compliance with the project specifications.
B. Failures or non-conforming areas shall be corrected, retested, and reported until the material meets the specifications, or the material shall be removed and replaced with material that meets the project specifications.
C. The Construction Testing Firm shall issue Daily Construction Reports indicating, at a minimum, the work performed by the contractor, the type of equipment utilized to perform stated work, the duties performed by the Construction Testing Firm representative (field technician), a summary of test results (may reference a separate report), any non-conforming test results or areas in need of corrective action (may reference a separate report), the technician's name, date of report, and a reviewer's signature.
D. After liner construction and evaluation is complete, a Geomembrane Liner Evaluation Report (GLER) shall be prepared and sealed by the Construction Testing Firm's Professional Engineer licensed in the State of Texas. This GLER letter shall summarize the types of tests performed and whether the results were in general conformance with the project plans and specifications. At a minimum, this letter report shall describe the subgrade preparation, moisture/density control, geomembrane placement including panel number, test frequencies and results, and test locations using the contractor provided drawing that shows proposed panel placement. This letter report shall refer to or include attachments of previous testing reports issued for the clay liner.
E. A Professional Surveyor registered in the State of Texas shall survey data points of his or her selection before, during, and after pond liner construction. After liner construction is complete, the Professional Surveyor registered in the State of Texas shall prepare and seal a letter documenting the surveying services and the thickness of the sum of the prepared subgrade, liner, and protective cover. This letter shall include a drawing indicating survey

point locations and the elevations at each point prior to and after subgrade, liner, and protective cover construction.
F. Any requests for information or changes to design and/or construction items shall be prepared by the Earthwork Contractor in the form of a Request for Information (RFI) and issued to the General Contractor, with copies to the Developer, the Civil Engineer, the Construction Testing Firm, and the City of Austin.

Closing

We appreciate the opportunity to be of service and look forward to the opportunity to work with you in the future. Should you have any questions, comments, or concerns regarding this letter report, please contact the undersigned.

Respectfully,

ECS-SOUTHWEST, LLP

Tyler Denney, P.E.
Department Manager
tdenney@ecslimited.com

STATE OF TEXAS
TYLER D. DENNEY
142015
LICENSED
PROFESSIONAL ENGINEER

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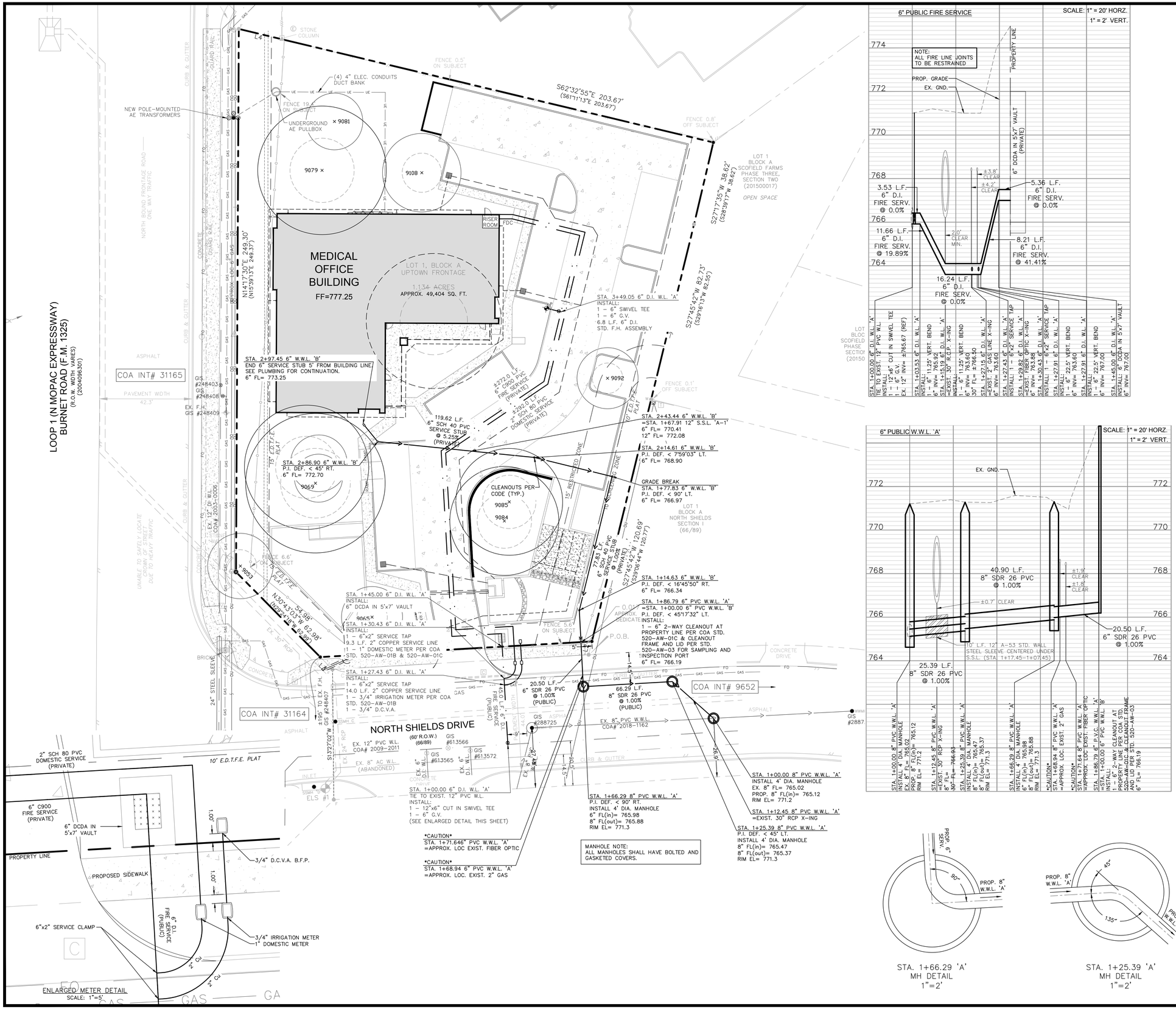
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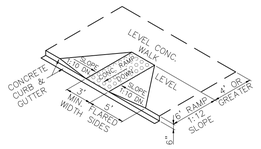
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AUSTIN, TEXAS 78727

POND QAQC PLAN

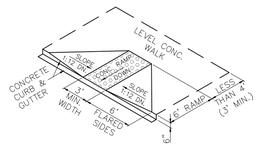
14 OF 26

SP-2024-0345C


LOOP 1 (N MOPAC EXPRESSWAY)
BURNET ROAD (F.M. 1325)
(R.O.W. WIDTH VARIES)
(2004096301)
COA INT# 31165
PAVEMENT WIDTH
42.3'
ASPHALT
CURB & GUTTER
GRAVEL RAIL
NORTH BOUND FRONTAGE ROAD
ONE WAY TRAFFIC
EX. F.H.
GIS #248409
GIS #248403
GIS #248408
EX. 12" D.I. W.L.
COA# 2003-0006
UNABLE TO SAFELY LOCATE
DOWN OF STREET
DUE TO HEAVY TRAFFIC
STONE COLUMN
FENCE 0.5' ON SUBJECT
(4) 4" ELEC. CONDUITS DUCT BANK
NEW POLE-MOUNTED AE TRANSFORMERS
UNDERGROUND AE PULLBOX
FENCE 1.9' ON SUBJECT
FENCE 0.8' OFF SUBJECT
S62°32'55"E 203.67'
(S61°11'13"E 203.67')
LOT 1
BLOCK A
SCOFIELD FARMS
PHASE THREE,
SECTION TWO
(201500017)
OPEN SPACE
S27°17'35"W 38.62'
(S28°39'17"W 38.62')
S27°45'42"W 82.73'
(S29°16'13"W 82.35')
N14°17'30"E 249.30'
(N15°39'13"E 246.37')
MEDICAL
OFFICE
BUILDING
FF=777.25
LOT 1, BLOCK A
UPTOWN FRONTAGE
1.134 ACRES
APPROX. 49,404 SQ. FT.
RISER ROOM
FDC
9079
9108
9092
9069
9085
9084
9065
9053
STA. 2+97.45 6" W.W.L. 'B'
END 6" SERVICE STUB 5' FROM BUILDING LINE.
SEE PLUMBING FOR CONTINUATION.
6" FL= 773.25
STA. 3+49.05 6" D.I. W.L. 'A'
INSTALL:
1 - 6" SWIVEL TEE
1 - 6" G.V.
6.8 L.F. 6" D.I.
STD. F.H. ASSEMBLY
±272.0 L.F. 6" C900 PVC FIRE SERVICE (PRIVATE)
±292.0 L.F. 2" SCH 80 PVC DOMESTIC SERVICE (PRIVATE)
119.62 L.F. 6" SCH 40 PVC SERVICE STUB @ 5.25% (PRIVATE)
STA. 2+43.44 6" W.W.L. 'B'
=STA. 1+67.91 12" S.S.L. 'A-1'
6" FL= 770.41
12" FL= 772.08
STA. 2+14.61 6" W.W.L. 'B'
P.I. DEF. < 7°59'03" LT.
6" FL= 768.90
GRADE BREAK
STA. 1+77.83 6" W.W.L. 'B'
P.I. DEF. < 90° LT.
6" FL= 766.97
LOT 1
BLOCK A
NORTH SHIELDS
SECTION I
(66/89)
STA. 2+86.90 6" W.W.L. 'B'
P.I. DEF. < 45° RT.
6" FL= 772.70
CLEANOUTS PER CODE (TYP.)
15' RESTRICTED ZONE
77.83 L.F. 6" SCH 40 PVC SERVICE STUB @ 1.00% (PRIVATE)
S27°45'42"W 120.69'
(S29°06'44"W 120.77')
STA. 1+14.63 6" W.W.L. 'B'
P.I. DEF. < 16°45'50" RT.
6" FL= 766.34
STA. 1+86.79 6" PVC W.W.L. 'A'
=STA. 1+00.00 6" PVC W.W.L. 'B'
P.I. DEF. < 45°17'32" LT.
INSTALL:
1 - 6" 2-WAY CLEANOUT AT PROPERTY LINE PER COA STD. 520-AW-01C & CLEANOUT FRAME AND LID PER STD. 520-AW-03 FOR SAMPLING AND INSPECTION PORT
6" FL= 766.19
STA. 1+45.00 6" D.I. W.L. 'A'
INSTALL:
6" DCDA IN 5'x7' VAULT
STA. 1+30.43 6" D.I. W.L. 'A'
INSTALL:
1 - 6"x2" SERVICE TAP
9.3 L.F. 2" COPPER SERVICE LINE
1 - 1" DOMESTIC METER PER COA STD. 520-AW-01B & 520-AW-01C
STA. 1+27.43 6" D.I. W.L. 'A'
INSTALL:
1 - 6"x2" SERVICE TAP
14.0 L.F. 2" COPPER SERVICE LINE
1 - 3/4" IRRIGATION METER PER COA STD. 520-AW-01B
1 - 3/4" D.C.V.A.
N30°43'03"W 54.98'
(N29°06'44"W 52.98')
N30°43'03"W 62.98'
(N29°06'44"W 60.98')
S32°07'02"W 135' TO EX. F.H. GIS #28407
EX. 30" RCP
EX. 24" RCP
EX. 12" PVC W.L.
COA# 2009-2011
EX. 8" AC W.L. (ABANDONED)
NORTH SHIELDS DRIVE
(60' R.O.W.) (66/89)
GIS #613566
GIS #613565
GIS #613572
EX. 6" D.I. W.L.
EX. 6" FIRE SERVICE (PUBLIC)
EX. 8" D.I. W.L.



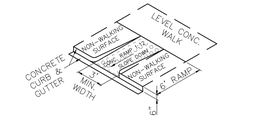
TYPICAL CURB RAMP



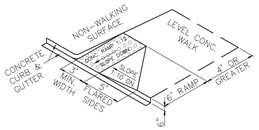
CONFINED CURB RAMP

NOTES:

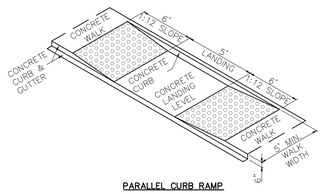
1. THESE DIMENSIONS REFLECT 6" TYPICAL CURB HEIGHT. ADJUST RAMP LENGTH & FLARED SIDES TO ACCOMMODATE ACTUAL CURB HEIGHT.
2. THE SLOPES SHOWN ARE THE MAXIMUM PERMITTED. SLOPES OF ADJOINING SURFACES SHALL NOT EXCEED 1:20.
3. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT OBSTRUCTION BY PARKED VEHICLES UTILIZING WHEEL STOPS SET 2'-6" FROM CURB.
4. BUILT UP CURB RAMPS SHALL NOT PROJECT INTO VEHICULAR TRAFFIC LANES, NOR INTO ACCESS AISLES.
5. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
6. MAXIMUM SLOPE OF A CURB RAMP SYSTEM SHALL BE 1:12 (8.33% MAXIMUM).
7. MAXIMUM SLOPE OF THE CURB RAMP'S "FLARED SIDES" SHALL BE 1:10 (1.0%).
8. SLOPE AND CROSSLOPE OF A SIDEWALK LEADING INTO A CURB RAMP SYSTEM SHALL BE A MAXIMUM OF 1:48 (2% MAXIMUM).
9. MAXIMUM SLOPE OF A HANDICAPPED ACCESSIBLE ROUTE ALONG A SIDEWALK LEADING INTO A CURB RAMP, BEFORE IT MUST BE CONSIDERED A RAMP IS 1:20 (5% MAXIMUM).
10. PAVERS OR CERAMIC TILES ARE REQUIRED FOR ALL CURB RAMP INSTALLATIONS.
11. DETECTABLE WARNINGS FOR CURB RAMPS SHALL FOLLOW 2012 TEXAS ACCESSIBILITY STANDARDS CHAPTER 7 AND TECHNICAL MEMORANDUM TM 08-01 AND HAVE TEXTURES CONSISTING OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN., A HEIGHT OF NOMINAL 0.2 IN. AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT ON DARK, OR DARK ON LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
12. THE CONTRACTOR SHALL VERIFY ALL GRADES CONCERNING ACCESSIBLE ROUTES AND WALKWAYS PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO CONCRETE PLACEMENT ON ALL ACCESSIBLE ROUTES AND WALKWAYS IN ORDER TO VERIFY FORM PLACEMENT, SLOPES AND GRADES.
13. ACCESSIBLE PARKING SPACES SHALL INCLUDE PARKING BUMPERS PER CITY OF AUSTIN STANDARD 439S-1 TO PREVENT CARS BLOCKING THE CURB RAMPS.
14. ACCESSIBLE PARKING SPACES SHALL COMPLY WITH RULE 68.104 OF THE ARCHITECTURAL BARRIERS ELIMINATION.



RETURNED CURB RAMP

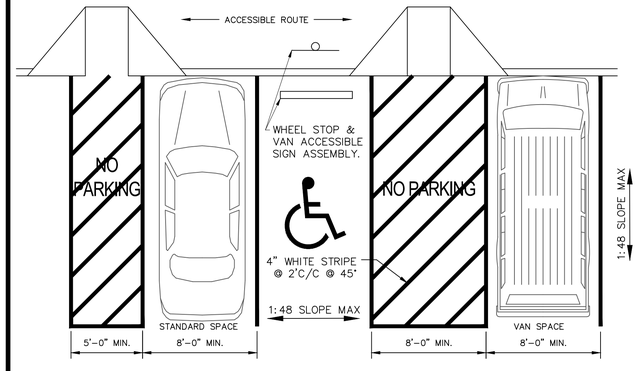


END CURB RAMP

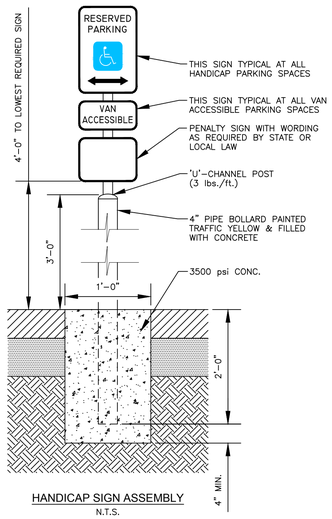


PARALLEL CURB RAMP

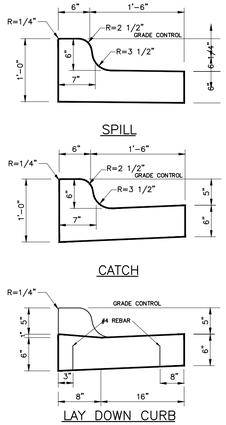
ACCESSIBILITY DETAILS
N.T.S.



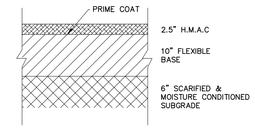
ACCESSIBLE PARKING & CURB RAMPS
SCALE: N.T.S.



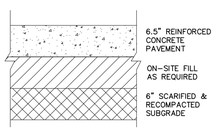
HANDICAP SIGN ASSEMBLY
N.T.S.



1. SUBGRADE: REMOVE ALL VEGETATION, TREE ROOTS, ORGANIC TOPSOIL, EXISTING FOUNDATIONS, AND ANY OTHER UNDESIRABLE MATERIALS FROM THE CONSTRUCTION AREA. THE AREA SHOULD THEN BE PROOF-ROLLED WITH HEAVY PNEUMATIC TIRED EQUIPMENT AND SHALL SERVE TO COMPACT THE SURFACE AND DETECT ANY SOFT OR PUMPING AREAS. ANY DEFECTIVE AREAS SHALL BE UNDERCUT AND REPLACED WITH COMPACTED SELECT FILL. ALL AREAS REQUIRING FILL SHALL UTILIZE SELECT FILL APPROVED BY THE ENGINEER AND PLACED IN 8" LOOSE LIFTS AND COMPACTED AS DETERMINED BY THE GEOTECHNICAL REPORT.
2. FLEXIBLE BASE: BASE MATERIAL SHALL BE CRUSHED LIMESTONE MEETING THE REQUIREMENTS OF TxDOT ITEM 248, GRADE 1 OR 2, TYPE A. THE BASE SHALL BE COMPACTED TO 100% OF THE MAXIMUM DENSITY AS DETERMINED BY TEX-113-E TEST METHOD AND HAVE A MOISTURE CONTENT WITHIN 2% OF OPTIMUM MOISTURE.
3. HOT MIX ASPHALTIC CONCRETE SURFACE COURSE (HMAC): HMAC SHALL ONLY BE USED FOR REPAIR OF EXISTING PAVEMENT. THE SURFACE COURSE SHALL BE PLANT MIXED, HOT LAID TYPE D (FINE GRADED SURFACE COURSE) AND SHALL MEET THE SPECIFICATION REQUIREMENTS AS DETERMINED BY CITY OF AUSTIN ITEM NO. 340. THE MIX SHALL BE DESIGNED FOR A HVEEM STABILITY OF AT LEAST 40 AND SHALL MEET ALL COMPACTION AND TOLERANCE SPECIFICATIONS.
4. CONCRETE PAVEMENT: THE CONCRETE SHALL POSSESS A MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS AND HAVE MINIMUM REINFORCING OF #3@18" C/C WITH A WATER/CEMENT RATIO 0.50 OR LESS. IN NO CASE SHALL THE REINFORCEMENT BE CONTINUOUS THROUGH A CONTROL JOINT WITHOUT APPROVAL OF THE ENGINEER. JOINT SPACING SHALL BE A MINIMUMUM OF 15' C/C AND A MAXIMUM OF 20' C/C FOR 6" PAVEMENTS.
5. MOISTURE CONDITIONED SUBGRADE: THE SOIL SUBGRADE AREAS SHOULD BE SCARIFIED TO A DEPTH OF 6 INCHES, MOISTURE CONDITIONED, AND RECOMPACTED TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698. STRATUM I FAT CLAY SOILS SHOULD BE MOISTURE CONDITIONED TO BETWEEN OPTIMUM AND +4 PERCENT OF OPTIMUM MOISTURE CONTENT, OR AS DIRECTED BY THE GEOTECHNICAL REPORT. STRATUM II LEAN SILTY/SANDY SOILS SHOULD BE MOISTURE CONDITIONED TO BETWEEN -3 AND +3 PERCENT OF OPTIMUM MOISTURE CONTENT, OR AS DIRECTED BY THE GEOTECH REPORT. CARE SHOULD BE TAKEN SUCH THAT THE SUBGRADE DOES NOT DRY OUT OR BECOME SATURATED PRIOR TO PAVEMENT CONSTRUCTION. THE PAVEMENT SUBGRADE SHOULD BE THOROUGHLY PROOF-ROLLED WITH A RUBBER-TIRED VEHICLE (FULLY LOADED WATER OR DUMP TRUCK) IMMEDIATELY PRIOR TO PLACEMENT OF BASE MATERIAL.
6. LIME STABILIZED COMPACTED SUBGRADE: REFER TO THE GEOTECHNICAL REPORT FOR LIME STABILIZATION PROCEDURE. COMPACTION SHALL BE A MINIMUM OF 95 PERCENT STANDARD PROCTOR, AT OR ABOVE OPTIMUM MOISTURE.
6. APPLICABILITY OF THESE SPECIFICATIONS: THESE PAVEMENT SPECIFICATIONS SHALL BE USED BY THE CONTRACTOR FOR THE CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT THERE IS A DISCREPANCY BETWEEN THESE SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT, THE GEOTECHNICAL REPORT SHALL BE FOLLOWED EXCEPT FOR THE CONCRETE MIX DESIGN.

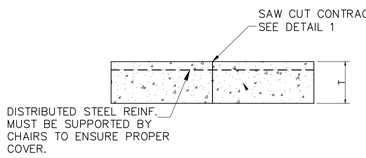


H.M.A.C. PAVEMENT SECTION DI-1
N.T.S.

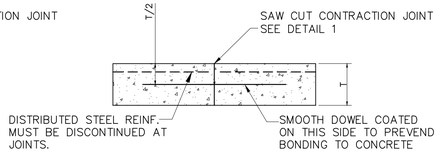


RIGID PAVEMENT SECTION DI-2
(HEAVY DUTY)

PAVEMENT DETAILS
N.T.S.

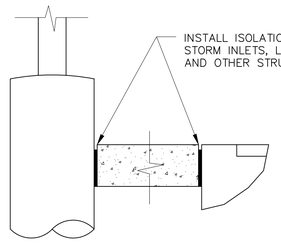


CONTRACTION/CONSTRUCTION JOINT
LIGHT DUTY LOAD

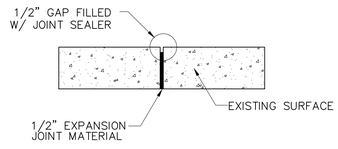


CONTRACTION/CONSTRUCTION JOINT
HEAVY DUTY LOAD

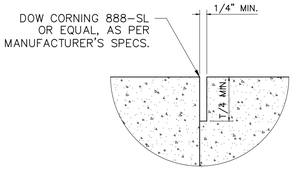
T (IN.)	DOWEL SIZE	DOWEL LENGTH	DOWEL SPACING
5"	3/4"	12"	12"
6"	7/8"	14"	12"
7"	1"	14"	12"
8"	1"	14"	12"
9"	1 1/8"	16"	12"
10"	1 1/4"	16"	12"



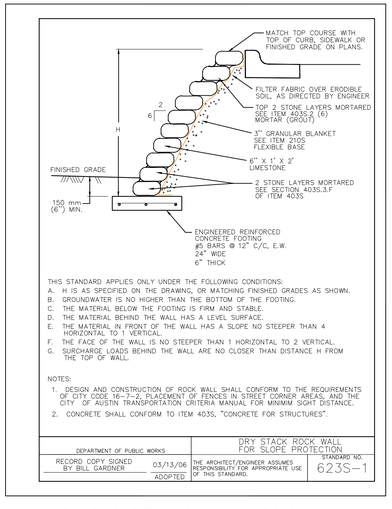
EXPANSION/ISOLATION JOINT



EXPANSION/ISOLATION JOINT



DETAIL 1



THIS STANDARD APPLIES ONLY UNDER THE FOLLOWING CONDITIONS:

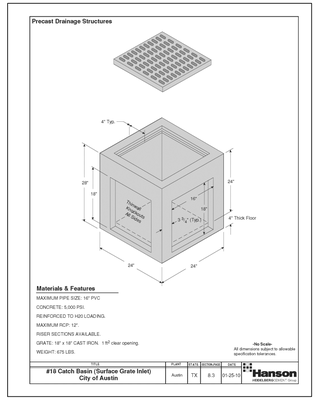
A. H IS AS SPECIFIED ON THE DRAWING, OR MATCHING FINISHED GRADES AS SHOWN.
B. GROUNDWATER IS NO HIGHER THAN THE BOTTOM OF THE FOOTING.
C. THE MATERIAL BELOW THE FOOTING IS FIRM AND STABLE.
D. THE MATERIAL BEHIND THE WALL HAS A LEVEL SURFACE.
E. THE MATERIAL IN FRONT OF THE WALL HAS A SLOPE NO STEEPER THAN 4 HORIZONTAL TO 1 VERTICAL.
F. THE FACE OF THE WALL IS NO STEEPER THAN 1 HORIZONTAL TO 2 VERTICAL.
G. SURCHARGE LOADS BEHIND THE WALL ARE NO CLOSER THAN DISTANCE H FROM THE TOP OF WALL.

NOTES:

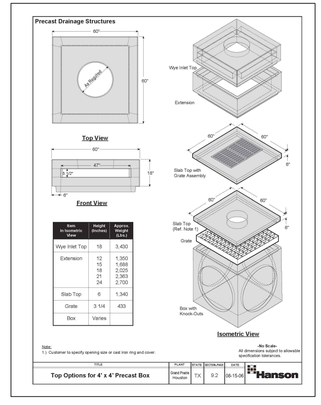
1. DESIGN AND CONSTRUCTION OF ROCK WALL SHALL CONFORM TO THE REQUIREMENTS OF CITY CODE 16-7-2, PLACEMENT OF FENCES IN STREET CORNER AREAS, AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL FOR MINIMM SIGHT DISTANCE.
2. CONCRETE SHALL CONFORM TO ITEM 403S, "CONCRETE FOR STRUCTURES".

DEPARTMENT OF PUBLIC WORKS	DRY STACK ROCK WALL FOR SLOPE PROTECTION	
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 623S-1

DRY STACK RETAINING WALL WHERE SHOWN
SCALE: N.T.S.



STANDARD GRATE INLET 24"x24"
SCALE: N.T.S.



STANDARD GRATE INLET 48"x48"
SCALE: N.T.S.

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NO	DATE	DESCRIPTION

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303096
AUSTIN, TEXAS 78703
512-357-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

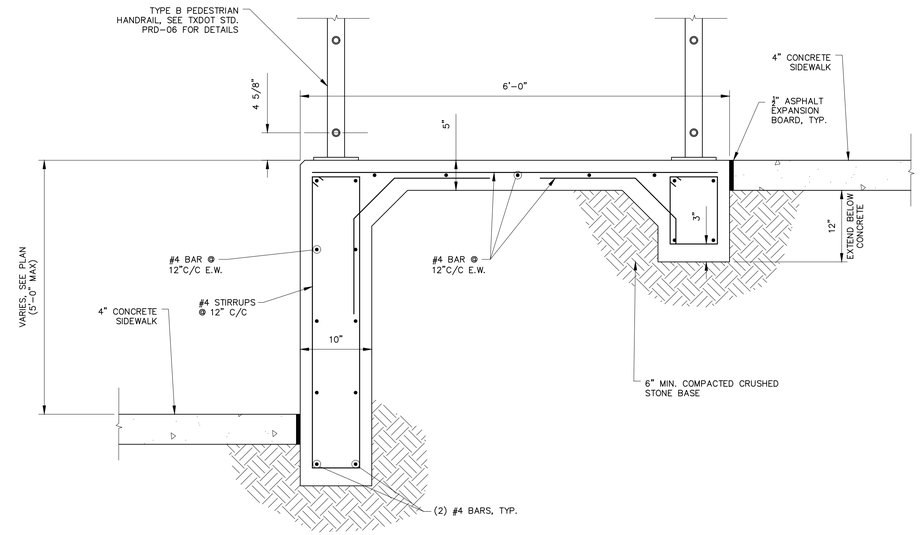
STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

Thrower Design
LAND PLANNERS
P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456

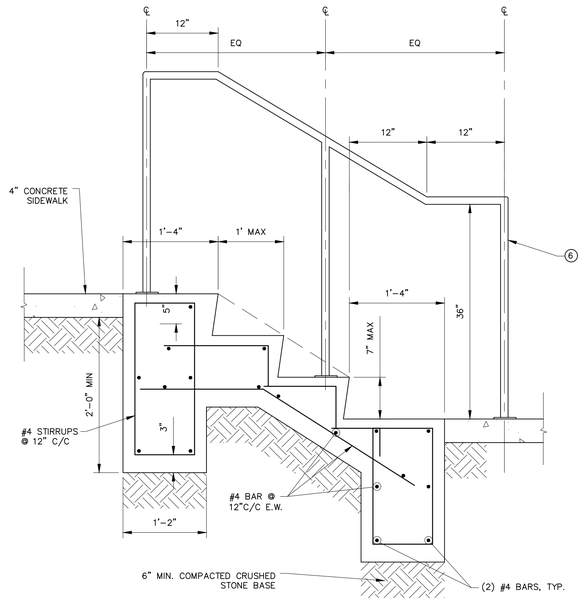
UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

CONSTRUCTION DETAILS

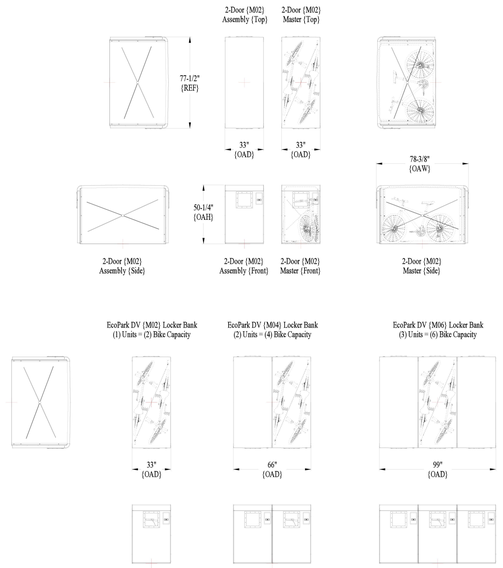
SP-2024-0345C



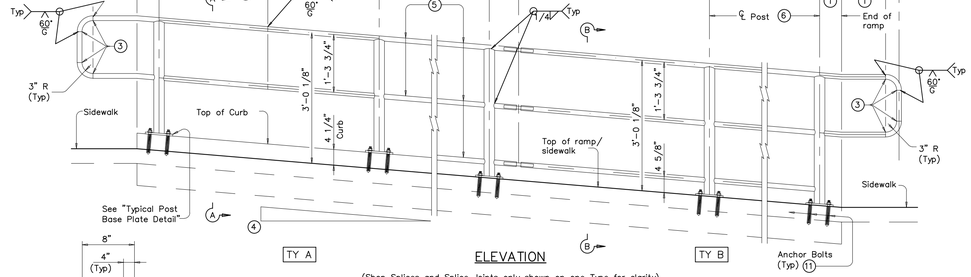
TYPICAL ACCESSIBLE RAMP CROSS SECTION
WITH TYPE B PEDESTRIAN HANDRAIL
N.T.S.



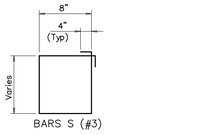
TYPICAL HANDRAIL AND EXTERIOR STAIR DETAIL
N.T.S.



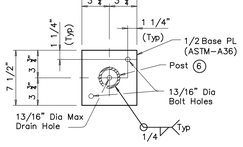
CYCLESAFE ECOPARK LOCKER SYSTEM
N.T.S.



ELEVATION
(Shop Splices and Splice Joints only shown on one Type for clarity)

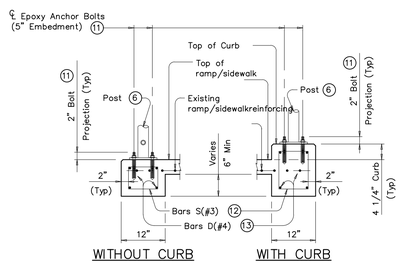


BARS S (#3)

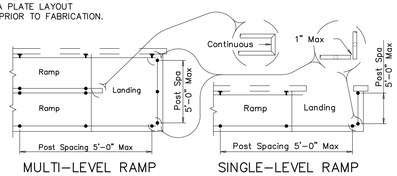


TYPICAL POST
BASE PLATE DETAIL

CONTRACTOR HAS THE OPTION OF UTILIZING 9X9 EMBED PLATES AT THEIR DISCRETION INSTEAD OF BOLTED BASE PLATES FOR THE HAND RAIL. IF EMBED PLATES ARE USED, A PLATE LAYOUT SUBMITTAL WILL BE REQUIRED PRIOR TO FABRICATION.

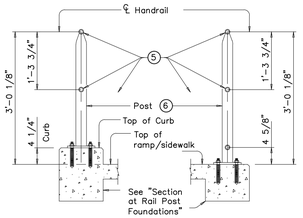


SECTION AT RAIL POST FOUNDATIONS



PLAN SHOWING RAIL AT RAMP CONDITIONS

RECOMMENDED USAGE ⑨⑩	
Dropoff Height/ Condition	Recommended Rail Options
<.30" dropoff	TY A, TY B, TY C, or TY D



SECTION A–A (Showing Handrail Ty A)
SECTION B–B (Showing Handrail Ty B)

KEY NOTES
Parallel to ground.
(1) One shop splice per panel is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.
(2) Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove or single vee groove. Grind smooth.
(3) See Ramp Details located elsewhere in plans for ramp slope and dimensions. Maximum ramp slope will not exceed 8.3 percent. Level landing required for each 30" rise if grade exceeds 5 percent.
(4) 1" Dia Extra Heavy Pipe (1.315" O.D., 0.179" wall thickness). Parallel to ramp/sidewalk. Provide holes as needed in 1" Dia pipe for galvanizing drainage and venting.
(5) 2 1/2" Dia Standard Pipe (2.875" O.D., 0.203" wall thickness). Plumb all posts. See "Post Mount Detail" for crimping and trimming post to fit Dia of top rail. Provide holes as needed in post for galvanizing drainage and venting.
(6) See "Handrail Fabrication Details" for Splice Joints.
(7) C L 5/8" Dia Round Bar Eq Spa at 4 1/2" Max. Plumb
(8) all pickets.
(9) When needed for accessibility (grade > 5 percent) or as needed for pedestrian safety.
(10) Not to be used on bridges.
(11) See "General Notes" for anchor bolt information.
(12) Bars S(#3) spaced at 12" Max (Spaced 3" from outside edge of overall length of Ramp/Sidewalk).
(13) Provide 1 1/2" end cover to Bars D(#4) from outside edge of overall length of Ramp/Sidewalk.

GENERAL NOTES:
1. Designed according to ADAAG, Texas Accessibility Standards, Uniform Building Code, and AASHTO LRFD Specifications.
2. Handrail anchorage details shown on this standard may require modification for select structure types. See appropriate detailselsewhere in plans for these modifications.
3. Pipe will conform to ASTM–A53 Grade B, A500 Grade B or A501. Steel plates and steel bars will conform to ASTM–A36.
4. Galvanize all steel components except reinforcing steel unless noted otherwise.
5. All reinforcing steel must be Grade 60.
   Bar laps, where required, will be as follows:
   Uncoated ~ #4 = 1'–5"
   Epoxy coated ~ #4 = 2'–1"
6. When the plans require painted steel, follow the requirements for painting galvanized steel in TxDOT Item 446, "Cleaning and Painting Steel". Sleeve Members will receive galvanization and only get field painted after installation unless directed otherwise by Engineer.
7. Epoxy Anchor bolts for wall mount and post base plate will be 5/8" Dia ASTM A36 threaded rods with one hex nut and one hardened steel washer at each bolt. 5/8" Dia threaded rod embedment depth for wall mounts is 3 1/2" and embedment depth for post base plate is 5". Embed threaded rods into concrete with a Type III (Class C) epoxy meeting the requirements of DMS–6100, "Epoxies and Adhesives". Mix and dispense adhesive with the manufacturer's static mixing nozzle/dual cartridge system. Core drill holes (percussion drilling not permitted).
8. At the contractor's option the post base plate anchor bolts may be cast with the Ramp/Sidewalk (See Cast–in–Place Anchor Bolt Options).
9. Optional cast–in–place anchor bolts will be 5/8" Dia ASTM A307 rade A bolts (or A36 threaded rods with one tack welded hex nut each) with one hex nut and one hardened steel washer at each bolt. Embedment depth of cast–in–place bolt will be 8" for post base plate.
10. Handrails and any wall or other surface adjacent to them will be free of any sharp or abrasive elements.
11. Submit shop drawings to the Engineer unless otherwise noted.
12. For curved handrail applications, fabricate the handrail to the curve if radius is less than 600 ft. Shop drawings are required when rail is fabricated to the curve.
13. For all handrails, erection drawings will be submitted to the Engineer for approval to ensure proper installation. Drawings will show handrail mount locations with bolts setting, spacing, ramp slope, and/or splice joint locations, and handrail lengths with identification showing where each handrail goes on the layout.
14. All exposed edges will be rounded or chamfered to approximately 1/8" by grinding.

PEDESTRIAN HANDRAIL DETAILS – TY. A AND TY. B
COMBINED FROM TXDOT STD. PRD–06

REV	DESCRIPTION	DATE
A	RELEASE FOR REFERENCE	12/08/17

CYCLESAFE {ECOPARK} BICYCLE LOCKER SYSTEM

DRAWN BY	BOB SLYH
CHECKED	12/07/17
APPROVED	12/08/17

CycleSafe
5211 CASCADE ROAD - SUITE 210
GRAND RAPIDS, MI 49546
www.cyclesafe.com

SCALE 1:1 | DV {STANDARD} LOCKER {M02} THRU {M06} DOORS | VIEWS 2D

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 3030096
AUSTIN, TEXAS 78703
512-335-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

Thrower Design
LAND PLANNERS
(512) 476-4456
AUSTIN, TEXAS 78704
P.O. BOX 41957

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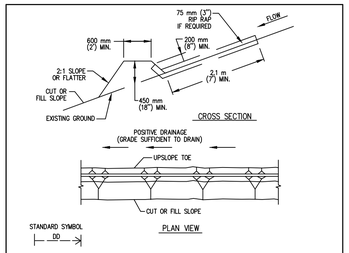
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

CONSTRUCTION DETAILS 2 of 2

17 OF 26

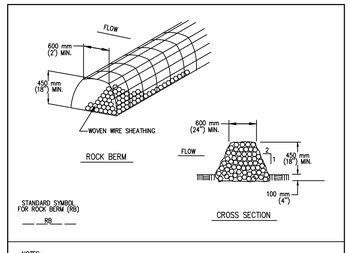
SP-2024-0345C



GENERAL NOTES :

1. ALL DIKES SHALL BE MACHINE COMPACTED.
2. ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. a. DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL HAVE ITS OUTLET FLOW DIRECTED TO AN UNDISTURBED STABILIZED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE.
   b. DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE, SUCH AS A ROCK BERM, BRUSH BERM, STONE OUTLET STRUCTURE, SEDIMENT TRAP OR SEDIMENT BASIN OR TO AN AREA PROTECTED BY ANY OF THESE PRACTICES.
4. UNLESS OTHERWISE SPECIFIED, EROSION STABILIZATION SHALL BE OPEN GRADED ROCK 75 TO 125 mm (3 TO 5 inches) IN DIAMETER EMBEDDED IN SOIL SURFACE.
5. INSPECTION SHALL BE CONDUCTED WEEKLY OR AFTER EACH RAINFALL EVENT.

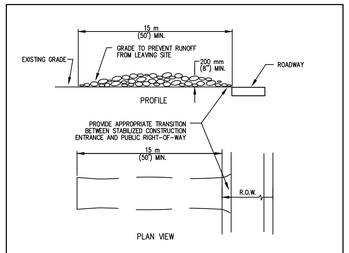
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	DIVERSION DIKE	
RECORD COPY SIGNED BY J. PATRICK MURPHY 3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 622S-1



NOTES:

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

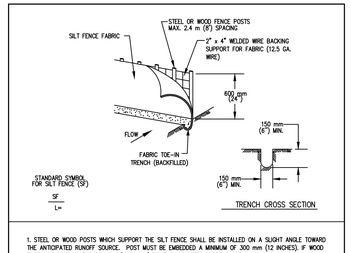
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
RECORD COPY SIGNED BY MORGAN BYARS 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



NOTES:

1. STONE SIZE: 75–125 mm (3–5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
RECORD COPY SIGNED BY J. PATRICK MURPHY 5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 inches) DEPTH, USE STEEL POSTS.

2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

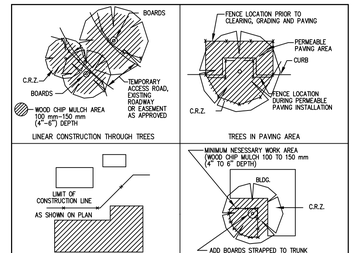
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.

5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

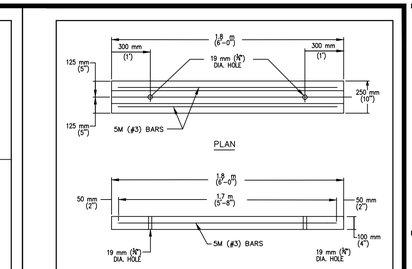
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	
RECORD COPY SIGNED BY MORGAN BYARS 09/01/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1

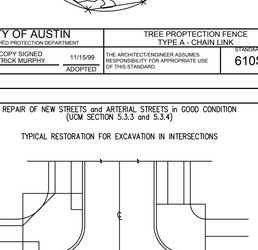


CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE LOCATIONS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-1

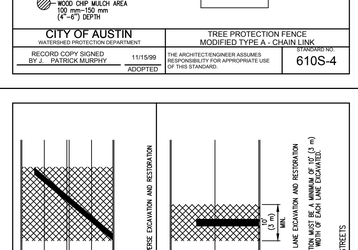


ALL CONCRETE SHALL BE CLASS "A" IN ACCORDANCE WITH ITEM 403S.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PARKING LOT BUMPER CURB	
RECORD COPY SIGNED BY BILL GARDNER 3/15/05 APPROVED ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 439S-1

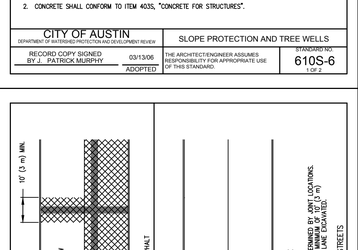


CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROPTECTION FENCE TYPE A - CHAIN LINK	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-2



*AS NEEDED TO PROVIDE MINIMUM NECESSARY WORK SPACE. IF LESS THAN 1.5 m (5'), THEN ADD BOARDS STRAPPED TO TRUNK.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	TREE PROTECTION FENCE MODIFIED TYPE A - CHAIN LINK	
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/15/99 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-4



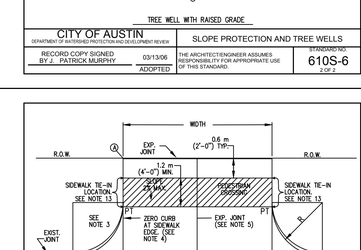
THIS STANDARD APPLIES ONLY UNDER THE FOLLOWING CONDITIONS:

A. H AND Z ARE SPECIFIED ON THE DRAWING.
B. GROUNDWATER IS NO HIGHER THAN THE BOTTOM OF THE FOOTING.
C. THE MATERIAL BELOW THE FOOTING IS FIRM AND STABLE.
D. THE MATERIAL BEHIND THE WALL HAS A LEVEL SURFACE.
E. THE MATERIAL IN FRONT OF THE WALL HAS A SLOPE NO STEEPER THAN 4 HORIZONTAL TO 1 VERTICAL.
F. THE FACE OF THE WALL IS NO STEEPER THAN 1 HORIZONTAL TO 2 VERTICAL.
G. SURCHARGE LOADS BEHIND THE WALL ARE NO CLOSER THAN DISTANCE H FROM THE TOP OF WALL.

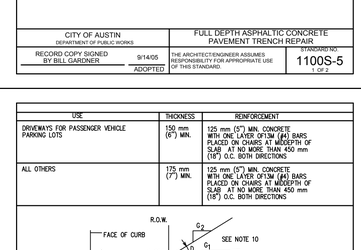
NOTES:

1. DESIGN AND CONSTRUCTION OF ROCK WALL SHALL CONFORM TO THE REQUIREMENTS OF CITY CODE 16–7–2, PLACEMENT OF FENCES IN STREET CORNER AREAS, AND THE CITY OF AUSTIN TRANSPORTATION CRITERIA MANUAL FOR MINIMUM SIGHT DISTANCE.
2. CONCRETE SHALL CONFORM TO ITEM 403S, "CONCRETE FOR STRUCTURES".

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	SLOPE PROTECTION AND TREE WELLS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-6 1 OF 2



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW	SLOPE PROTECTION AND TREE WELLS	
RECORD COPY SIGNED BY J. PATRICK MURPHY 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 610S-6 2 OF 2



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FULL DEPTH ASPHALTIC CONCRETE PAVEMENT TRENCH REPAIR	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-5 1 OF 2

NOTES:

1. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
   b) MIN. 3" (75 mm) HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.
   SEE ITEM 340S, SECTION 340S.4.
2. THE COMBINED THICKNESS OF THE REPLACEMENT AC SURFACE AND BASE LAYERS SHALL MATCH THE THICKNESS OF EXISTING FULL DEPTH AC LAYER. HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 6" (150 mm) OF TYPE A OR B HMA. A BASE LAYER TYPE THAT MATCHES THE NEW HMA SURFACE LAYER (SEE NOTE 1) MAY BE USED, IF THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
3. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
4. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(3)(K)(5), FOR ALL NON–METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S RE–QUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FULL DEPTH ASPHALTIC CONCRETE PAVEMENT TRENCH REPAIR	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-5 2 OF 2

TRENCH REPAIRS WITHIN PORTLAND CEMENT CONCRETE PAVEMENTS NOTE:
IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, THEN THE ENTIRE CONCRETE SLAB FROM JOINT TO JOINT AND JOINT TO EDGE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE DIRECTOR.

TRENCH REPAIRS WITHIN ASPHALTIC CONCRETE PAVEMENTS NOTES:

1. IF ANY PART OF THE TRENCH REPAIR FALLS WITHIN AN INTERSECTION, DEFINED FROM CURB RETURN TO CURB RETURN, THE ENTIRE QUADRANT OF THE EXISTING SURFACE SHALL BE REPLACED, UNLESS OTHERWISE DIRECTED IN WRITING BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
2. A QUADRANT IS DEFINED AS THE CROSS–HATCHED AREA IN THE ABOVE DETAIL.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-7 1 OF 3

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-7 2 OF 3

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	
RECORD COPY SIGNED BY BILL GARDNER 9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-7 3 OF 3

NOTE: ALL DRIVEWAYS SHALL BE SLOPED TOWARDS THE STREET FROM THE R.O.W. LINE. ELEVATION OF POINT Ⓐ ABOVE POINT Ⓑ IS, TYPICALLY A MINIMUM OF 150 mm (6") PLUS 20 mm/m (¼" RISE/FOOT) OVER DISTANCE "X" IN METERS (FEET).

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN 02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 1 OF 2

USE	THICKNESS	REINFORCEMENT
DRIVEWAYS FOR PASSENGER VEHICLE PARKING LOTS	150 mm (6") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 5M (#5) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS
ALL OTHERS	175 mm (7") MIN.	125 mm (5") MIN. CONCRETE WITH ONE LAYER OF 5M (#5) BARS PLACED ON CHAIRS AT MIDDEPTH OF SLAB AT NO MORE THAN 450 mm (18") O.C. BOTH DIRECTIONS

DRIVEWAY VOLUME (ADT)	D=GRADE CHANGE STD.	MAX
31500	0%	3%
500–1500	3%	6%
< 500	6%	15%

NOTES:

1. ALL TYPE II DRIVEWAYS SHALL HAVE RADIUS ENDS.
2. DRIVEWAY WIDTHS AND RADII DIMENSIONS, ONE/TWO WAY TRAVEL REQUIREMENTS, AND GEOMETRIC LAY–OUT ARE HIGHLY VARIABLE, SUBJECT TO SITE SPECIFIC CONDITIONS AND REQUIREMENTS. SEE TRANSPORTATION CRITERIA MANUAL SECTION 5 "DRIVEWAYS".
3. THE DRIVEWAY EDGE SHALL BE SMOOTHLY TRANSITIONED INTO THE SIDEWALK TIE–IN LOCATION BEGINNING AT THE RADIUS PC LINE.
4. "ZERO" CURB AT PT OR SIDEWALK EDGE, WHICHEVER IS ENCOUNTERED FIRST.
5. PLACE AN EXPANSION JOINT DOWN THE CENTER OF DRIVEWAY ALL DRIVEWAYS.
6. IF DIMENSION IS LESS THAN 1.5 METERS (5 FEET), REMOVE CURB AND GUTTER TO EXISTING JOINT AND POUR MONOLITHICALLY WITH DRIVEWAY.
7. IF THE BASE IS OVER EXCAVATED WHERE THE CURB AND GUTTER WERE REMOVED, BACKFILL WITH CONCRETE MONOLITHICALLY WITH THE DRIVEWAY.
8. TYPE II DRIVEWAYS ARE TO BE LOCATED NO CLOSER TO THE CORNER OF INTERSECTING RIGHT OF WAY THAN 60% OF PARCEL FRONTAGE AT 30 METERS (100 FEET) WHICHEVER IS LESS.
9. DRIVEWAY SHALL NOT BE CONSTRUCTED WITHIN THE CURB RETURN OF A STREET INTERSECTION.
10. WHILE THE PROPERTY OWNER REMAINS RESPONSIBLE FOR GRADE BREAKS WITHIN PRIVATE PROPERTY, THE FIRE DEPARTMENT SHALL BE CONSULTED WHERE THE DRIVEWAY IS ESSENTIAL TO EMERGENCY VEHICLE ACCESS AND "22 IS GREATER THAN 15%.
11. USE 12 MM (½") ASPHALT BOARD OR OTHER APPROVED MATERIAL FOR CURB AND GUTTER EXPANSION JOINTS. SIDEWALK, AT THE R.O.W. LINE, AND AT MIDWIDTH, SEE NOTE 5.
12. SEE TRANSPORTATION CRITERIA MANUAL SECTION 5 FOR OTHER DRIVEWAY REQUIREMENTS.
13. THE SIDEWALK, REGARDLESS OF ITS LOCATION WITH RESPECT TO THE CURB OR PROPERTY LINE, SHALL BE CONNECTED TO THE DRIVEWAY AT THESE LOCATIONS.
14. WATER METER BOXES AND WASTEWATER CLEAN OUTS ARE PROHIBITED FROM BEING LOCATED IN DRIVEWAY AREAS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE II DRIVEWAY	
RECORD COPY SIGNED BY CUONG TRAN 02/24/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 433S-2 2 OF 2

GENERAL NOTES

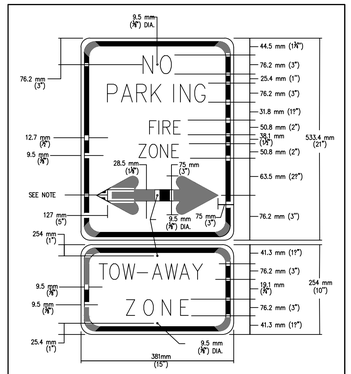
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE CHANCE OF SKIMMER BECOMING STUCK.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. ADJUSTMENT MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. FOR MORE INFORMATION AND AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

SKIMMER DETAIL FOR TEMP. SEDIMENT TRAP

DRAWN BY: C. R. EVANS 12/02

FAIRCLOTH SKIMMER® DISCHARGE SYSTEM WITH EMBANKMENT

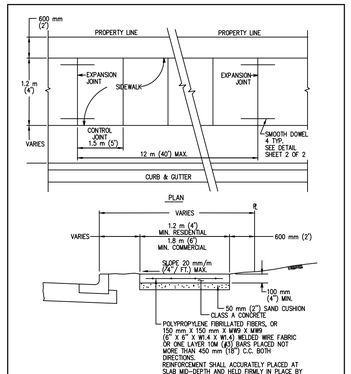
A. P. FAIRCLOTH, III, RPE, INC.
FAIRCLOTH SKIMMER® SYSTEMS
WILMINGTON, (910) 762–1144
FAX (910) 762–1844
EM



LETTERING, ARROW AND BORDER: RED TRANSPARENT BACKGROUND = SILVER REFLECTIVE SHEETING

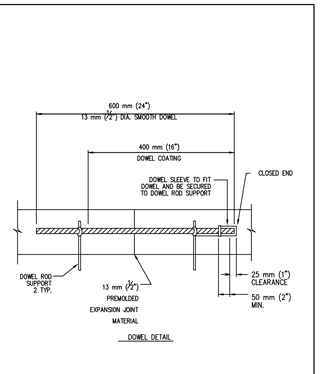
NOTE – ARROW MAY BE LEFT, RIGHT, OR DOUBLE

CITY OF AUSTIN FIRE DEPARTMENT		RESTRICTED ZONE SIGNS, TYPE II	
RECORD COPY SIGNED BY CARL D. WREN — ADOPTED 9/14/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 901S-6



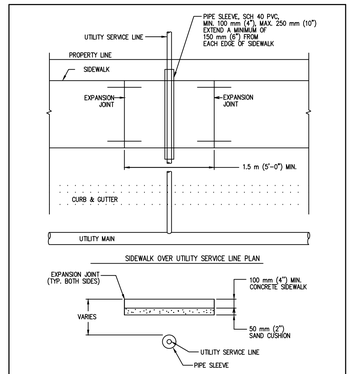
POLYPROPYLENE FIBRILLATED FIBERS, OR 150 mm X 150 mm X WWR X WWR (6" X 6" X W1.4 X W1.4) WELDED WIRE FABRIC OR ONE LAYER 10M (#3) BARS PLACED NOT MORE THAN 450 mm (18") C.C. BOTH DIRECTIONS.
REINFORCEMENT SHALL ACCURATELY PLACED AT SLAB MID-DEPTH AND HELD RIGIDLY IN PLACE BY MEANS OF BAR SUPPORTS OF ADEQUATE STRENGTH AND NUMBER THAT WILL PREVENT DISPLACEMENT AND KEEP THE STEEL AT ITS PROPER POSITION DURING THE PLACEMENT OF THE P.C. CONCRETE. IN NO INSTANCE SHALL THE STEEL BE PLACED DIRECTLY ON THE SUBGRADE OR SAND CUSHION LAYER.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-1 1 OF 3



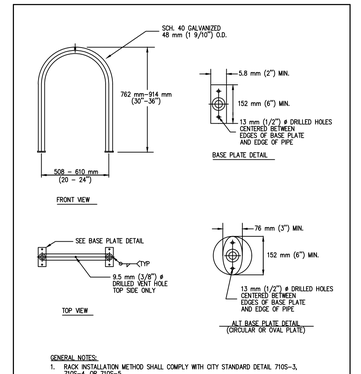
DOWEL DETAIL

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-1 2 OF 3



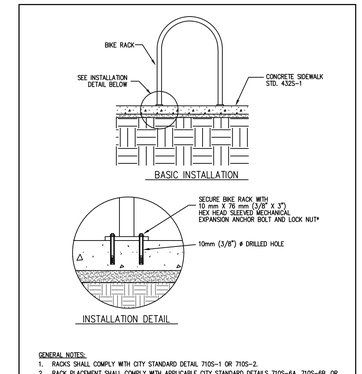
NOTES:
1. THIS STANDARD APPLIES TO THE INSTALLATION OF NEW UTILITIES OR UTILITIES BEING REPLACED BY A NEW LINE.
2. NO JOINTS IN UTILITY SERVICE PIPE TO BE LOCATED INSIDE PVC PIPE SLEEVE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-1 3 OF 3



GENERAL NOTES:
1. RACK INSTALLATION METHOD SHALL COMPLY WITH CITY STANDARD DETAIL 710S–3, 710S–4, OR 710S–5.
2. RACK PLACEMENT SHALL COMPLY WITH APPLICABLE CITY STANDARD DETAILS 710S–6A, 710S–6B, OR 710S–6C AND IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25–6–477 OR ITS SUCCESSOR.
3. BASE PLATES TO BE 6.35 mm (1/4") PLATES, ASTM A–36 1010–1018 LOW CARBON PRIME STEEL

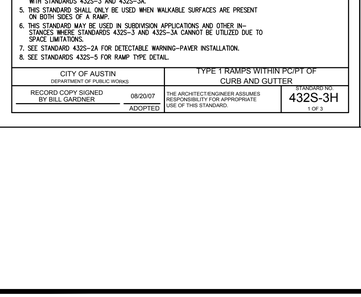
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		CLASS III STYLE BICYCLE PARKING	
RECORD COPY SIGNED BY COUNG TRAN — ADOPTED 09/26/12	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 710S-1 1 OF 1



GENERAL NOTES:
1. RACKS SHALL COMPLY WITH CITY STANDARD DETAIL 710S–1 OR 710S–2.
2. RACK PLACEMENT SHALL COMPLY WITH APPLICABLE CITY STANDARD DETAILS 710S–6A, 710S–6B, OR 710S–6C AND IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25–6–477 OR ITS SUCCESSOR.

*TO PREVENT THEFT OF BICYCLE RACK OR BIKES, EXPOSED BOLTS MUST BE DEFORMED AND NUTS RE–TIGHTENED TO PREVENT THEM FROM BEING EASILY UNTIGHTENED. NUTS SHOULD BE TESTED TO ENSURE THAT THEY CANNOT BE EASILY REMOVED AFTER DEFORMATION.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		BICYCLE RACK INSTALLATION IN CONCRETE SIDEWALK-ALTERNATE 1	
RECORD COPY SIGNED BY COUNG TRAN — ADOPTED 09/26/12	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 710S-4 1 OF 1

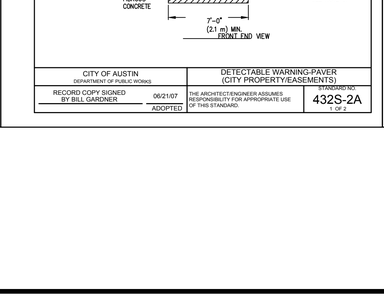


GENERAL NOTES:
1. RACK MUST COMPLY WITH CITY STANDARD DETAIL 710S–1 OR 710S–2.
2. RACK INSTALLATION MUST COMPLY WITH CITY STANDARD DETAIL 710S–3, 710S–4, OR 710S–5.
3. BIKE RACKS MUST BE PLACED IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25–6–477 OR ITS SUCCESSOR.
4. BIKE RACKS MUST BE LOCATED WITHIN 7.32m (24') OF EITHER THE MAIN BUILDING ENTRY OR THE ENTRY TO THE PRIMARY LOCAL USE.
5. BIKE RACKS MUST BE PLACED PERPENDICULAR TO THE CURB WITH THE CENTERLINE OF THE RACK IN LINE WITH ANY ADJACENT TREES OR LIGHT POLES.
6. THE MINIMUM CLEARANCE BETWEEN BICYCLE RACK AND ANY PUBLIC OR PRIVATE UTILITY APPURTENANCE MUST BE 0.9m (3').
7. BIKE RACKS MAY NOT BE MOUNTED ON TOP OF VAULTS OR STORM DRAIN INLETS.

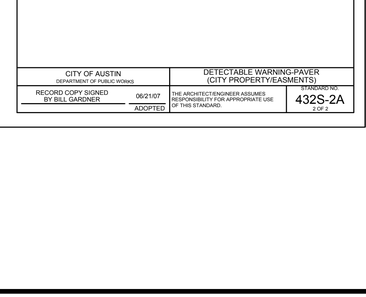
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		FURNISHING LOCATION IN 12' WIDE OR LESS SIDEWALKS - BICYCLE RACK SITTING	
RECORD COPY SIGNED BY COUNG TRAN — ADOPTED 09/26/12	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 710S-6C 1 OF 1

NOTES:
TREES/TREE WELLS SHALL NOT CONFLICT WITH EXISTING OR PROPOSED WATER OR WASTEWATER LINES OR APPURTENANCES AND SHALL NOT BE INSTALLED WITHIN A MINIMUM HORIZONTAL DISTANCE OF FIVE FEET (5') FROM THE OUSIDE EDGE OF ANY PUBLIC OR PRIVATE UTILITY LINE OR APPURTENANCE TO THE OUTSIDE EDGE OF THE TREE.

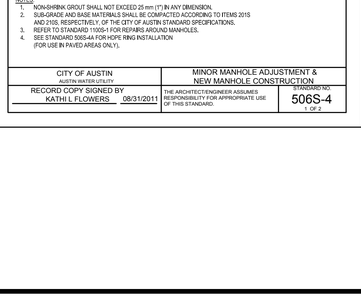
ALL TREES/SHRUBS INSTALLED WITHIN A HORIZONTAL SEPARATION DISTANCE OF TEN FEET (10') MAXIMUM TO FIVE FEET (5') MINIMUM FROM EXISTING OR PROPOSED WATER OR WASTEWATER LINES OR APPURTENANCES, SHALL INCLUDE DEEP ROOT UB 48–2 ROOT BARRIER, OR APPROVED EQUAL, TO BE INSTALLED VERTICALLY, 48" FROM TOP OF GROUND, 2' FROM THE OUTER DIAMETER OF THE UTILITY PIPE/APPURTENANCE, AND 8' TO 3' FROM THE OUTSIDE EDGE OF THE TREE/SHRUB.



DETAIL FOR DEEP ROOT (TM) ROOT BARRIER
UB 48–2 (OR LONGER)
SCALE: N.T.S.

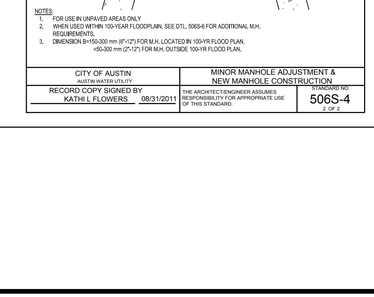


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION		CURB AND GUTTER SECTION	
RECORD COPY SIGNED BY LINO RIVERA — ADOPTED 9/29/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 430S-1



SEE STANDARD 430S-1 FOR TYPICAL CURB AND GUTTER SECTIONS.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION		CURB EXPANSION JOINT DOWEL DETAIL	
RECORD COPY SIGNED BY LINO RIVERA — ADOPTED 9/29/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 430S-3



NOTE:
USE 800 mm (32") FRAME AND COVER.

MINIMUM MANHOLE DIA.	MINIMUM PIPE SIZE
1.2 m (4')	450 TO 600 mm (18 TO 24")
1.5 m (5')	750 mm TO 1.1 m (30 TO 42")
1.8 m (6')	1.2 TO 1.4 m (48 TO 54")
2.1 m (7')	1.5 TO 1.7 m (60 TO 66")

SIZE TO BE USED IS DEPENDENT ON DRAIN ANGLES.

CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW		PRE-CAST CONCRETE STORM DRAIN MANHOLE	
RECORD COPY SIGNED BY GEORGE E. OSWALD — ADOPTED 2/14/02	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-3 1 OF 2



CITY OF AUSTIN DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW		PRE-CAST CONCRETE STORM DRAIN MANHOLE	
RECORD COPY SIGNED BY GEORGE E. OSWALD — ADOPTED 2/14/02	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-3 2 OF 2

NOTES:
1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION WITHIN RIGHT–OF–WAY OR EASEMENT ONLY
2. CURB RAMPS WILL BE CONSTRUCTED PERPENDICULAR TO ROADWAY CENTERLINE AND SHALL ALIGN WITH THOSE LOCATED ACROSS THE ROADWAY.
3. THE CURB, GUTTER AND RAMP SYSTEM SHALL BE CONFIGURED TO MAINTAIN ALL RUNOFF FROM A 25 YEAR FREQUENCY STORM WITHIN THE RIGHT–OF–WAY (DRAINAGE CRITERIA MANUAL SECTION 1.2.2.B). WHEN THERE IS AN ELEVATION DIFFERENCE BET–WEEN THE BOTTOM OF RAMPS (IE. ELEVATION AT THE GUTTER) WITH–IN A QUADRANT OF AN INTERSECTION, THE LOWER ELEVATION RAMP SHALL BE CONSTRUCTED WITH A POSITIVE RAMP SLOPE OF 1:12 IN ACCORDANCE WITH STANDARDS 432S–5, 432S–5A AND 432S–5B.
4. PRIORITY SHALL BE GIVEN TO THE INSTALLATION OF RAMPS IN CONFORMANCE WITH STANDARDS 432S–3 AND 432S–3A.
5. THIS STANDARD SHALL ONLY BE USED WHEN WALKABLE SURFACES ARE PRESENT ON BOTH SIDES OF A RAMP.
6. THIS STANDARD MAY BE USED IN SUBDIVISION APPLICATIONS AND OTHER IN–STANCES WHERE STANDARDS 432S–3 AND 432S–3A CANNOT BE UTILIZED DUE TO SPACE LIMITATIONS.
7. SEE STANDARD 432S–2A FOR DETECTABLE WARNING–PAVER INSTALLATION.
8. SEE STANDARDS 432S–5 FOR RAMP TYPE DETAIL.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE 1 RAMPS WITHIN PC/PT OF CURB AND GUTTER	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 08/20/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-3H 1 OF 3

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		DETECTABLE WARNING-PAVER (CITY PROPERTY/EASEMENTS)	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 06/21/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-2A 1 OF 2

GENERAL NOTES:
1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION ON CITY PROPERTY AND EASEMENT AREAS ONLY.
2. PAVERS ARE REQUIRED FOR ALL CURB RAMP INSTALLATIONS.
3. PAVERS WILL HAVE DETECTABLE WARNING THAT CONSISTS OF RAISED TRUNCATED DOMES WITH A DIAMETER OF 0.9" (23 mm), A NOMINAL HEIGHT OF 0.2" (5 mm) AND A NOMINAL CENTER TO CENTER SPACING OF 2.35" (60 mm) AND SHALL CONSTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT–ON–DARK OR DARK–ON–LIGHT (Ref. ADAAG SECTION 4.29.2). MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. PAVER PATTERN SHALL BE BASKET WEAVE, UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
4. TYPICAL SIDEWALK WIDTHS AND CURB RADII ARE SHOWN FOR ILLUSTRATION ONLY. REFER TO THE TRANSPORTATION CRITERIA MANUAL FOR SIDEWALK WIDTHS, CURB RADII AND CURB BASIS.
5. THE PERMISSIBLE CONSTRUCTION JOINT BETWEEN THE PAVERS AND THE ADJOINING SURFACE SHALL BE LIMITED TO 1/4" (6 mm) JOINT SIZE. GAPS LARGER THAN ¼" (6 mm) MUST BE APPROVED BY THE ENGINEER OR DESIGNATED REPRESENTATIVE. ALL JOINTS BETWEEN BRICKS AND ADJOINING SURFACE SHALL BE MORTAR FILLED UNLESS DIRECTED OTHERWISE BY THE ENGINEER OR DESIGNATED REPRESENTATIVE.
6. MORTAR SHALL CONFORM TO STD. SPECIFICATION ITEM SECTION 403S.3.5. MORTAR AND GROUT. ALL OTHER CONCRETE SHALL CONFORM TO STD. SPECIFICATION ITEM 403S, CONCRETE FOR STRUCTURES, UNLESS OTHERWISE NOTED.
7. CURB RAMPS WITH RETURNED CURB MAY ONLY BE USED WHERE PEDESTRIANS WOULD NOT NORMALLY WALK DIAGONALLY ACROSS THE RAMP.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		DETECTABLE WARNING-PAVER (CITY PROPERTY/EASEMENTS)	
RECORD COPY SIGNED BY BILL GARDNER — ADOPTED 06/21/07	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 432S-2A 2 OF 2

Ⓐ VERTICAL FACE = ALLOWABLE THROAT OR CHIMNEY HEIGHT
= NEW CONSTRUCTION = 525mm = (21") Max.
= EXISTING CONSTRUCTION = 675mm (27") Max.

NOTES:
1. NON–SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION.
2. SUB–GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S–1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HOPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS — 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-4 1 OF 2

NOTES:
1. FOR USE IN UNPAVED AREAS ONLY
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAN, =50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAN.

CITY OF AUSTIN AUSTIN WATER UTILITY		MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
RECORD COPY SIGNED BY KATHI L FLOWERS — 08/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.		STANDARD NO. 506S-4 2 OF 2

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-335-2911
TEXAS REGISTERED ENGINEERING FIRM F-1708

STATE OF TEXAS — CHRIS McCOMB — 80442 — LICENSED PROFESSIONAL ENGINEER — 6/13/25

Thrower Design (512) 476-4456
P.O. BOX 41957 · AUSTIN, TEXAS 78704
LAND PLANNERS

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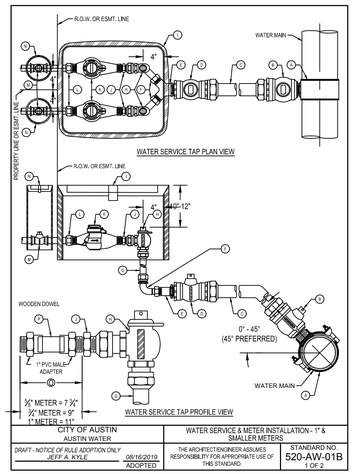
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

STANDARD DETAILS

19 OF 26

SP-2024-0345C



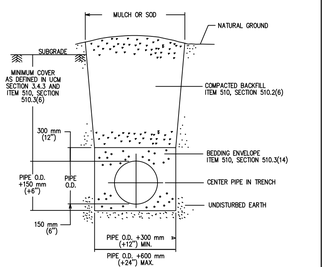
CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
DRAFT - NOTICE OF RULE ADOPTION ONLY JEFF A. KYLE 08/16/2019 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 1 OF 2

MATERIALS LIST:
- A. 2" SERVICE CLAMP, SPL WW-264
- B. 2" CORPORATION STOP, SPL WW-68
- C. 2" HDPE WATER SERVICE TUBING, SPL WW-45
- D. 2" BALL VALVE, SPL WW-69
- E. SINGLE SERVICE: 2" MIP X 1" COPPER FLARE FITTING, SPL WW-68 OR DOUBLE SERVICE: 2" MIP X 1" COPPER FLARE NYE, SPL WW-68
- F. 1" SWIVEL NUT x 1" COMPRESSION 90° BEND, SPL WW-68
- G. 1" HDPE WATER SERVICE TUBING, SPL WW-45
- H. 1" ANGLE METER STOP, SPL WW-68
- I. METER BOX AND LID, SPL WW-145A
  FOR DUAL 1" METERS: USE TWO SINGLE METER BOXES

MATERIALS TO BE INSTALLED BY PLUMBER:
- J. BRASS METER BUSHING - SIZE AS NEEDED TO CONNECT ANGLE METER STOP TO METER
- K. WATER METER PURCHASED FROM AUSTIN WATER
- L. BRASS WATER METER COUPLING MALE IPT x SWIVEL COUPLING NUT:
  ¾" AND ¾" METERS: 8.9" LONG x ¾" DIA.
  1" METERS: 8.9" LONG x 1" DIA.
- M. PROPERTY OWNER'S CUT OFF VALVE, SPL WW-276
- N. PROPERTY OWNER'S CUT OFF VALVE BOX AND LID
- O. TEMPORARY METER SPACER (REQUIRED TO ASSURE METER WILL FIT APPROPRIATELY)
- P. 1" WOODEN DOWEL (SHOW ADDRESS ON DOWEL USING WATERPROOF MARKER)

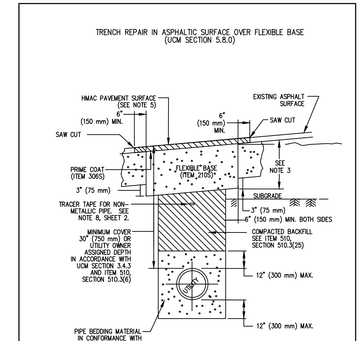
NOTES:
1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL POLYETHYLENE FILM, SPL WW-27D.
2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
3. TOP OF METER BOXES SHOULD BE 4" ABOVE GROUND.
4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS. BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
5. METER BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.
6. BALL VALVE "D" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 36" BELOW FINAL GRADE.
7. METER SIZES TO BE SHOWN ON PLANS.
8. METER BOX CUT OUTS SHALL NOT EXCEED TWO TIMES THE PIPE DIAMETER.
9. INSTALL METALLIC TRACER TAPE, SPL WW-037, MINIMUM 1' ABOVE TUBING FROM SERVICE CLAMP "A" TO BALL VALVE "D".
10. TUBING SHALL BE PLACED IN A STRAIGHT ALIGNMENT AND ALLOWED TO RELAX AND "SNAKE" LOOSELY IN THE TRENCH. TUBING BEHIND CURB AND GUTTER SHALL BE INSTALLED WITH A MINIMUM 2" DEPTH OF COVER.
11. 1" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 2". 2" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 5". BRASS FITTINGS SHALL NOT BE CONNECTED TO A BENT SECTION OF TUBING.
12. SOLID, TUBULAR STAINLESS STEEL INSERT STIFFENERS FOR HDPE TUBING SHALL BE USED AT ALL COMPRESSION FITTINGS. INSERT STIFFENERS SHALL BE FROM THE SAME MANUFACTURER AS THE COMPRESSION FITTING USED.
13. FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED SOLID PURPLE, SPL WW-45A. ALL APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL METER BOX LIDS SHALL BE PURPLE AND HAVE **"RECLAIMED WATER"** CAST INTO THEM, SPL WW-145A.

CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
DRAFT - NOTICE OF RULE ADOPTION ONLY JEFF A. KYLE 08/16/2019 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 2 OF 2



REFERENCES:
1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510,
   SECTION 510.2(6), "SELECT BACKFILL OR BORROW";
   SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER";
   SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

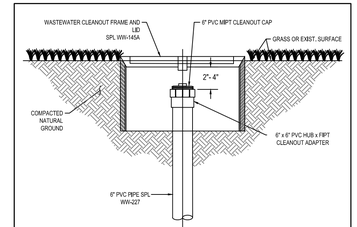
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
RECORD COPY SIGNED BY BILL GARDNER 03/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 1 OF 5

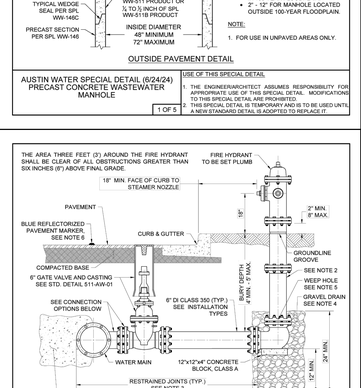
NOTES:
1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" (300 mm) WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
3. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3" (75 mm.), BUT IN NO CASE LESS THAN 12" (300 mm).
4. DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" (250 mm) OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
5. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
   b) MIN. 3" (75 mm) HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.
   SEE ITEM 340S, SECTION 340S.4.
6. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
7. TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 3075).
8. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(6)(K)(5), FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE, AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S RE-QUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-2 2 OF 5

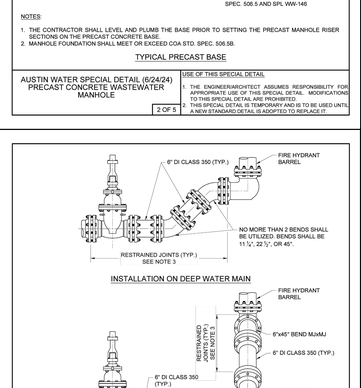


NOTE:
1. WASTEWATER CLEANOUT FRAME AND LID SHALL NOT BE PLACED IN PAVED AREAS, INCLUDING SIDEWALKS, DRIVEWAYS, OR PARKING LOTS, AND MUST BE LOCATED A MINIMUM OF 6' FROM ALL PAVED AREAS.

CITY OF AUSTIN AUSTIN WATER	WASTEWATER CLEANOUT FRAME AND LID	
DRAFT - NOTICE OF RULE ADOPTION ONLY JEFF A. KYLE 08/16/2019 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-03 1 OF 1



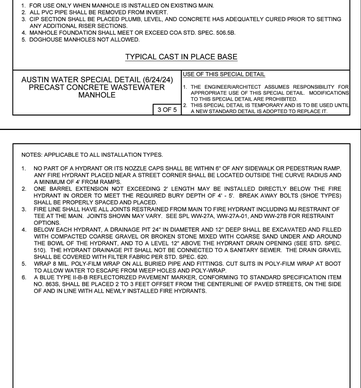
CITY OF AUSTIN AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
1 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	



NOTES:
1. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED COA STD. SPEC. 506.5B.

TYPICAL PRECAST BASE

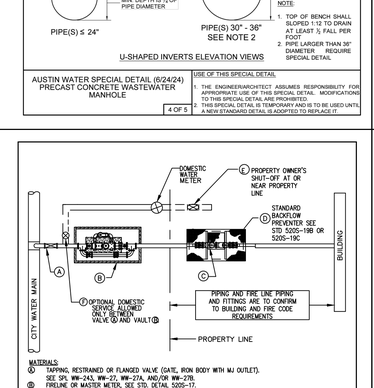
AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
2 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	



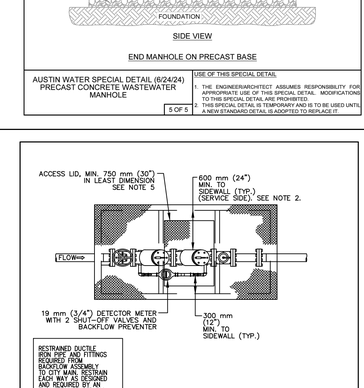
NOTES:
1. FOR USE ONLY WHEN MANHOLE IS INSTALLED ON EXISTING MAIN.
2. ALL PVC PIPE SHALL BE REMOVED FROM INVERT.
3. CIP SECTION SHALL BE PLACED PLUMB, LEVEL, AND CONCRETE HAS ADEQUATELY CURED PRIOR TO SETTING ANY ADDITIONAL RISER SECTIONS.
4. MANHOLE FOUNDATION SHALL MEET OR EXCEED COA STD. SPEC. 506.5B.
5. DOGHOUSE MANHOLES NOT ALLOWED.

TYPICAL CAST IN PLACE BASE

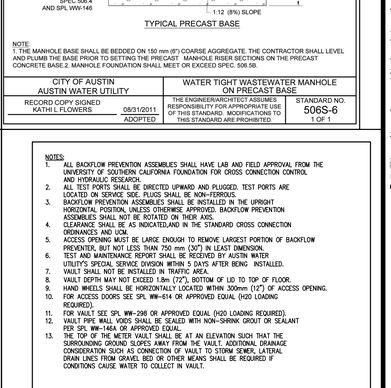
AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
3 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	



AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
4 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	

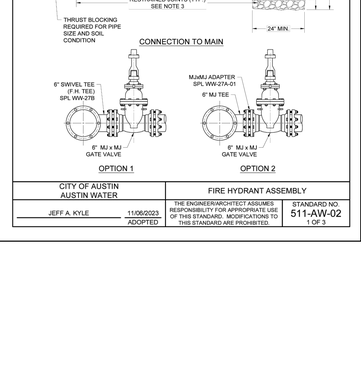


AUSTIN WATER SPECIAL DETAIL (6/24/24) PRECAST CONCRETE WASTEWATER MANHOLE	USE OF THIS SPECIAL DETAIL	
5 OF 5	1. THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS SPECIAL DETAIL. MODIFICATIONS TO THIS SPECIAL DETAIL ARE PROHIBITED. 2. THIS SPECIAL DETAIL IS TEMPORARY AND IS TO BE USED UNTIL A NEW STANDARD DETAIL IS ADOPTED TO REPLACE IT.	

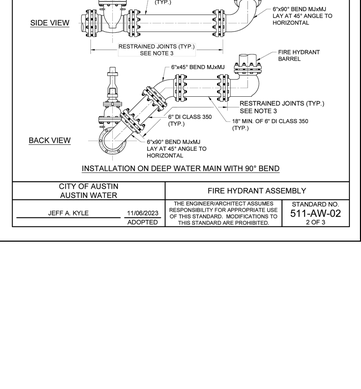


NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.2. MANHOLE FOUNDATION SHALL MEET OR EXCEED SPEC. 506.5B.

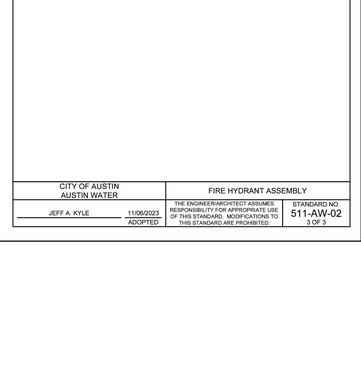
CITY OF AUSTIN AUSTIN WATER UTILITY	WATER TIGHT WASTEWATER MANHOLE ON PRECAST BASE	
RECORD COPY SIGNED KATHI L FLOWERS 08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 506S-6 1 OF 1



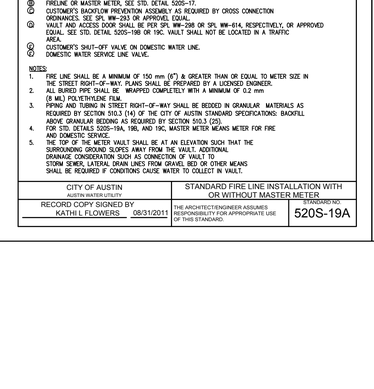
CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 1 OF 3

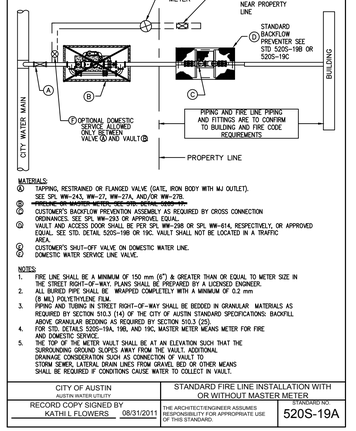


CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 2 OF 3



CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	
JEFF A. KYLE 11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD NO. 511-AW-02 3 OF 3


DOMESTIC WATER METER
PROPERTY OWNER'S SHUT-OFF AT OR NEAR PROPERTY LINE
STANDARD BACKFLOW PREVENTER SEE STD 520S-19B OR 520S-19C
CITY WATER MAIN
OPTIONAL DOMESTIC SERVICE ALLOWED ONLY BETWEEN VALVE Ⓓ AND VAULT Ⓑ
PIPING AND FIRE LINE PIPING AND FITTINGS ARE TO CONFIRM TO BUILDING AND FIRE CODE REQUIREMENTS
BUILDING
PROPERTY LINE
MATERIALS:
Ⓐ TAPPING, RESTRAINED OR FLANGED VALVE (GATE, IRON BODY WITH WJ OUTLET). SEE SPL WW-243, WW-27, WW-27A, AND/OR WW-27B.
Ⓑ FIRELINE OR MASTER METER, SEE STD. DETAIL 520S-12.
Ⓒ CUSTOMER'S BACKFLOW PREVENTION ASSEMBLY AS REQUIRED BY CROSS CONNECTION ORDINANCES. SEE SPL WW-293 OR APPROVED EQUAL.
Ⓓ VAULT AND ACCESS DOOR SHALL BE PER SPL WW-298 OR SPL WW-614, RESPECTIVELY, OR APPROVED EQUAL. SEE STD. DETAIL 520S-19B OR 19C. VAULT SHALL NOT BE LOCATED IN A TRAFFIC AREA.
Ⓔ CUSTOMER'S SHUT-OFF VALVE ON DOMESTIC WATER LINE.
Ⓕ DOMESTIC WATER SERVICE LINE VALVE.
NOTES:
1. FIRE LINE SHALL BE A MINIMUM OF 150 mm (6") & GREATER THAN OR EQUAL TO METER SIZE IN THE STREET RIGHT-OF-WAY. PLANS SHALL BE PREPARED BY A LICENSED ENGINEER.
2. ALL BURIED PIPE SHALL BE WRAPPED COMPLETELY WITH A MINIMUM OF 0.2 mm (8 MIL) POLYETHYLENE FILM.
3. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS. BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
4. FOR STD. DETAILS 520S-19A, 19B, AND 19C, MASTER METER MEANS METER FOR FIRE AND DOMESTIC SERVICE.
5. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES



MATERIALS:

(A) TAPPING, RESTRAINED OR FLANGED VALVE (GATE, IRON BODY WITH WJ OUTLET). SEE SPL WW-243, WW-27, WW-27A, AND/OR WW-27B.

~~(B) VAULT, SEE WATER METER SETTING STANDARDS~~

(C) CUSTOMER'S BACKFLOW PREVENTION ASSEMBLY AS REQUIRED BY CROSS CONNECTION ORDINANCES. SEE SPL WW-293 OR APPROVED EQUAL.

(D) VAULT AND ACCESS DOOR SHALL BE PER SPL WW-298 OR SPL WW-614, RESPECTIVELY, OR APPROVED EQUAL. SEE STD. DETAIL 520S-199 OR 19C. VAULT SHALL NOT BE LOCATED IN A TRAFFIC AREA.

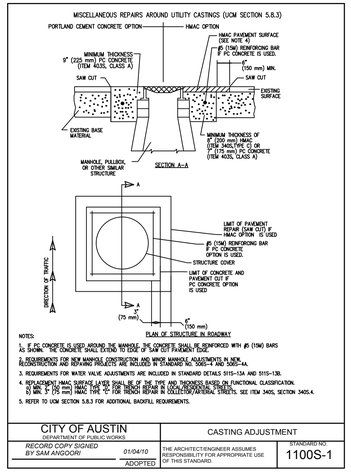
(E) CUSTOMER'S SHUT-OFF VALVE ON DOMESTIC WATER LINE.

(F) DOMESTIC WATER SERVICE LINE VALVE.

NOTES:

1. FIRE LINE SHALL BE A MINIMUM OF 150 mm (6") & GREATER THAN OR EQUAL TO METER SIZE IN THE STREET RIGHT-OF-WAY. PLANS SHALL BE PREPARED BY A LICENSED ENGINEER.
2. ALL BURIED PIPE SHALL BE WRAPPED COMPLETELY WITH A MINIMUM OF 0.2 mm (8 MIL) POLYETHYLENE FILM.
3. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS: BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (2D).
4. FOR STD. DETAILS 520S-198, 199, AND 19C, MASTER METER MEANS METER FOR FIRE AND DOMESTIC SERVICE.
5. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT. ADDITIONAL DRAINAGE CONSIDERATION SUCH AS CONNECTION OF VAULT TO STORM SEWER, LATERAL DRAIN LINES FROM GRAVEL BED OR OTHER MEANS SHALL BE REQUIRED IF CONDITIONS CAUSE WATER TO COLLECT IN VAULT.

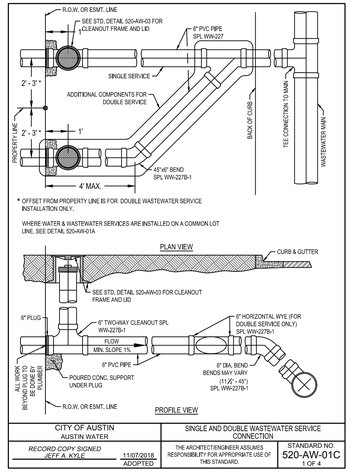
CITY OF AUSTIN AUSTIN WATER UTILITY	STANDARD FIRE LINE INSTALLATION WITH OR WITHOUT MASTER METER	
RECORD COPY SIGNED BY KATHI L FLOWERS 08/31/2015 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520S-19A



NOTES:

1. IF PC CONCRETE IS USED AROUND THE MANHOLE, CUT AND REMOVE PAVEMENT AS SHOWN. THE CONCRETE SHALL EXTEND TO EDGE OF SAW CUT FOR PAVEMENT REPAIR. REINFORCEMENT FOR REPAIRS WILL CONSIST OF #5 (15M) BARS @ 18" (450 mm) CENTERS EACH WAY AND INCLUDED IN STANDARD NO. 520S-7 AND 520S-4A.
2. REQUIREMENTS FOR WATER VALVE ADJUSTMENTS ARE INCLUDED IN STANDARD DETAILS 511S-11A AND 511S-13B.
3. REPLACEMENT HMAC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
   a) MIN. 2" (50 mm) HMAC TYPE C FOR RESIDENTIAL STREETS.
   b) MIN. 1" (25 mm) HMAC TYPE C FOR BENCH REPAIR IN COLLECTOR/MATERIAL STREETS. SEE ITEM 340S, SECTION 340S.4.
4. REFER TO UCM SECTION 5.8.3 FOR ADDITIONAL BACKFILL REQUIREMENTS.

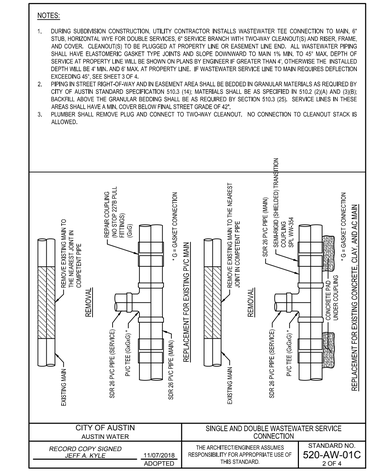
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CASTING ADJUSTMENT	
RECORD COPY SIGNED BY SAM ANGOORN 01/04/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 1100S-1



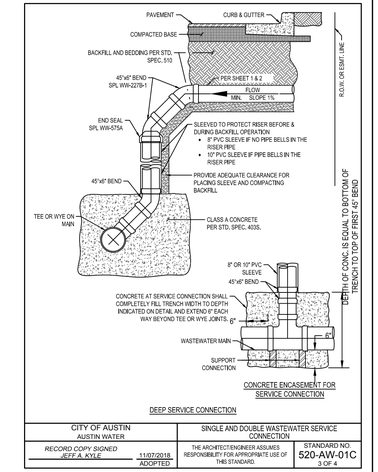
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 1 OF 4

NOTES:

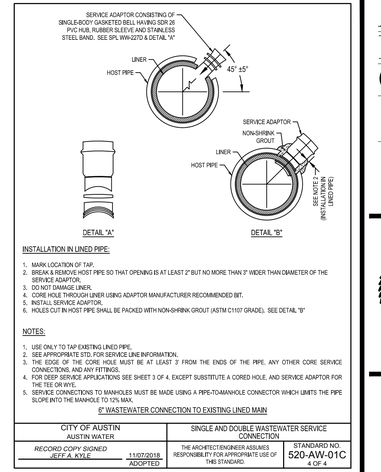
1. DURING SUBDIVISION CONSTRUCTION, UTILITY CONTRACTOR INSTALLS WASTEWATER TEE CONNECTION TO MAIN, 6" STUB, HORIZONTAL WYE FOR DOUBLE SERVICES, 6" SERVICE BRANCH WITH TWO-WAY CLEANOUT(S) AND RISER, FRAME, AND COVER. CLEANOUT(S) TO BE PLUGGED AT PROPERTY LINE OR EASEMENT LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% MIN. TO 45° MAX. DEPTH OF SERVICE AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4'. OTHERWISE THE INSTALLED DEPTH WILL BE 4' MIN. AND 6' MAX. AT PROPERTY LINE. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, SEE SHEET 5 OF 4.
2. PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATION 510.3 (14). MATERIALS SHALL BE AS SPECIFIED IN 510.2 (2A) AND (3B). BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (2). SERVICE LINES IN THESE AREAS SHALL HAVE A MIN. COVER BELOW FINAL STREET GRADE OF 42".
3. PLUMBER SHALL REMOVE PLUG AND CONNECT TO TWO-WAY CLEANOUT. NO CONNECTION TO CLEANOUT STACK IS ALLOWED.



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 2 OF 4



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2018 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 3 OF 4



INSTALLATION IN LINED PIPE:

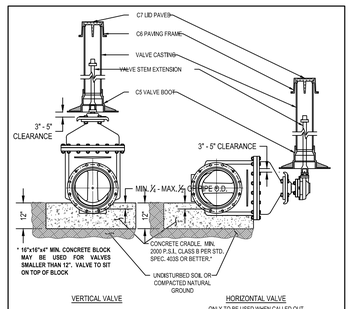
1. MARK LOCATION OF TAP.
2. BREAK A REMOVABLE HOST PIPE SO THAT OPENING IS AT LEAST 2" BUT NO MORE THAN 3" WIDER THAN DIAMETER OF THE SERVICE ADAPTOR.
3. DO NOT DAMAGE LINER.
4. CORE HOLE THROUGH LINER USING ADAPTOR MANUFACTURER RECOMMENDED BIT.
5. INSTALL SERVICE ADAPTOR.
6. HOLES CUT IN HOST PIPE SHALL BE PACKED WITH NON-SHRINK GROUT (ASTM C1107 GRADE). SEE DETAIL "B"

NOTES:

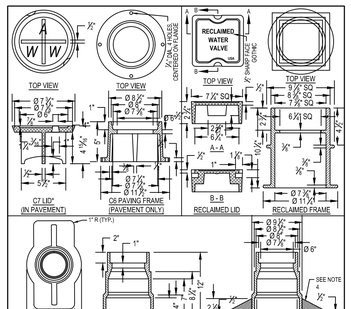
1. USE ONLY TO TAP EXISTING LINED PIPE.
2. SEE APPROPRIATE STD. FOR SERVICE LINE INFORMATION.
3. THE EDGE OF THE CORE HOLE MUST BE AT LEAST 3" FROM THE ENDS OF THE PIPE, ANY OTHER CORE SERVICE CONNECTIONS, AND ANY FITTINGS.
4. FOR DEEP SERVICE APPLICATIONS SEE SHEET 3 OF 4, EXCEPT SUBSTITUTE A CORED HOLE, AND SERVICE ADAPTOR FOR THE TEE OR WYE.
5. SERVICE CONNECTIONS TO MANHOLES MUST BE MADE USING A PIPE-TO-MANHOLE CONNECTOR WHICH LIMITS THE PIPE SLOPE INTO THE MANHOLE TO 12% MAX.

6" SEWER CONNECTION TO EXISTING LINED MAIN

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
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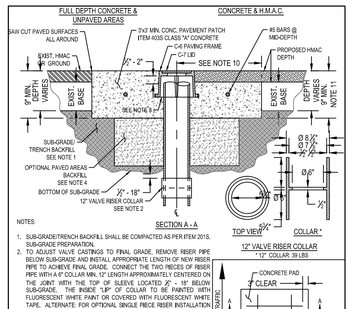


CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5W 1 OF 3



NOTE: ALL MANHOLES NOT LOCATED IN PAVED AREAS SHALL HAVE BOLTED COVERS AS PER SPEC. 506.

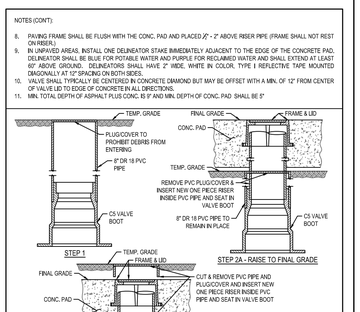
CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
RECORD COPY SIGNED BY KATHI L FLOWERS 09/23/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 503S-5W 2 OF 3



NOTES:

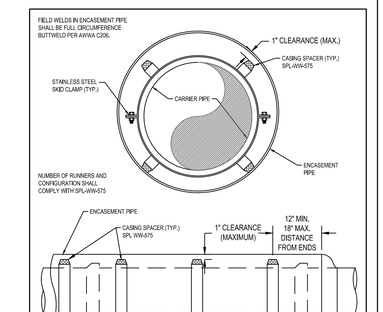
(1) ALL CORNERS AND EDGES SHALL HAVE A 1.5 mm (1/16") MINIMUM RADIUS.
(2) LIDS SHALL BE CAST WITH TWO 25 mm (1") DIA. STEEL PICK BARS.
(3) LID WEIGHTS SHALL BE: 779 N (175 LBS.) FOR DUCTILE IRON
WEIGHT SHALL BE CAST ON BOTH TOP AND BOTTOM OF LID.
(4) MANUFACTURER SHALL PROVIDE INDEPENDENT TESTING LABORATORY REPORT ON 40,000 POUND PROOF LOAD TEST CONDUCTED ACCORDING TO AASHTO M–306.
(5) FILLETS SHALL BE 6 mm (1/4") RADIUS UNLESS OTHERWISE SPECIFIED.
(6) MANUFACTURER SHALL REMOVE EXCESS IRON AND MACHINE FINISH SEATING SURFACES TO NOTED DIMENSIONS.
(7) BOLTS SHALL BE 16 mm x 44 mm (5/8" x 1–3/4" x 11 N.C.) STAINLESS STEEL HEX HEAD (TYPE 316).

CITY OF AUSTIN AUSTIN WATER UTILITY	BOLTED MANHOLE RING AND 813 mm 32" COVER	
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FIRE WATER LEAD-IN

(N.T.S.)



UTILITY TRENCH DETAIL
IN NEW PAVEMENT AREA

(PRIVATE)



SIZE	A (INCHES)	B (INCHES)	MANDREL O.D. (INCHES)	PIPE O.D. (INCHES)	WALL THICKNESS (INCHES)
4" SDR 26	3.5	5.0	3.923	4.215	0.241
6" SDR 26	5.5	7.5	6.283	6.625	0.353
8" SDR 26	6.5	9.0	8.283	8.500	0.453
12" SDR 26	9.0	12.0	12.401	12.500	0.625
18" SDR 26	13.0	17.5	18.418	18.700	0.598

NOTES:

1. AFTER WELDING IS COMPLETED, TRUE ROUND OUTSIDE DIAMETER SHALL BE WITHIN THE FOLLOWING LENGTH OF 18" TO 810.0".
2. MANDREL OD MUST BE EQUAL TO 95% OF THE ID OF THE PIPE.
3. ADJUSTABLE MANDREL NOT ACCEPTABLE.

PIPE MANDREL DETAIL

NOTES:

1. WELD SOCKET ½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT. (SCH. 80 FOR LENGTHS OVER 10').
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

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

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

NOTES:

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

WEIGHTS:

C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 21 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* LETTERING SHALL BE ½"
2 PICK BAR SLOTS REQUIRED

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
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NOTES:

1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED 2" - 18" BELOW SUB-GRADE. THE INSIDE 1/8" OF COLLAR TO BE PAINTED WITH FLUORESCENT WHITE PAINT OR COVERED WITH FLUORESCENT WHITE TAPE. ALTERNATE FOR OPTIONAL SINGLE PIECE RISER INSTALLATION SEE SHEET 4 OF 4.
3. CLEAN VALVE BOX OF ALL DEBRIS DOWN TO THE NUT OF THE VALVE. NUT SHALL OPERATE WITH NO OBSTRUCTION.
4. WHERE CASTINGS TO BE REMOVED REQUIRE EXCAVATION GREATER THAN 20" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 403S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 406S.7.
6. NO MORE THAN 2 SECTIONS OF PIPE SHALL BE USED FROM VALVE TO FINAL GRADE.
7. BELL AND SPIGOT IS ACCEPTABLE FOR DEPTH OVER 18'.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
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NOTES (CONT):

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

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED

Texas Commission on Environmental Quality
Organized Sewage Collection System
General Construction Notes

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

1. This Organized Sewage Collection System (SCS) must be constructed in accordance with 30 Texas Administrative Code (TAC) §213.5(c), the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules and any local government standard specifications.

2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the SCS plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.

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

4. Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.

5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. These controls must remain in place until the disturbed areas have been permanently stabilized.

6. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The applicant must immediately notify the appropriate regional office of the TCEQ of the feature discovered. A geologist's assessment of the location and extent of the feature discovered must be reported to that regional office in writing and the applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the

executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.

7. Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of 6 inches.

8. Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.

9. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.

   The diameter of the manholes must be a minimum of four feet and the manhole for entry must have a minimum clear opening diameter of 30 inches. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC §217.55 are included on Plan Sheet __ of __.

   It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. The inclusion of steps in a manhole is prohibited.

10. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).

11. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe manufacturer: _____.

    If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: _____.

    Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.

12. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions. The location of such stub outs must be marked on the ground such that their location can be easily determined at the time of connection of the extensions. Such stub outs must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new stub-outs must be constructed sufficiently to extend beyond the end of the street pavement. All stub-outs must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with stub outs must be connected using a manufactured saddle and in accordance with accepted plumbing techniques.

If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet __ of __. (For potential future laterals).

The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet __ of __ and marked after backfilling as shown in the detail on Plan Sheet __ of __.

13. Trenching, bedding and backfill must conform with 30 TAC §217.54. The bedding and backfill for flexible pipe must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C.

14. Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout unless it can be certified as conforming with the provisions of 30 TAC §213.5(c)(3)(E).

15. All sewer lines must be tested in accordance with 30 TAC §217.57. The engineer must retain copies of all test results which must be made available to the executive director upon request. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Testing method will be:
    (a) For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test. A test must conform to the following requirements:
        (1) *Low Pressure Air Test.*
            (A) A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(ii) of this paragraph.
            (B) For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this subsection.
                (i) A pipe must be pressurized to 3.5 pounds per square inch (psi) greater than the pressure exerted by groundwater above the pipe.
                (ii) Once the pressure is stabilized, the minimum time allowable for the pressure to drop from 3.5 psi gauge to 2.5 psi gauge is computed from the following equation:

Equation C.3 $$T = \frac{0.085 \times D \times K}{Q}$$

Where:

T = time for pressure to drop 1.0 pound per square inch gauge in seconds
K = 0.000419 X D X L, but not less than 1.0
D = average inside pipe diameter in inches

L = length of line of same size being tested, in feet
Q = rate of loss, 0.0015 cubic feet per minute per square foot internal surface

(C) Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table C.3:

Pipe Diameter *(inches)*	**Minimum Time** *(seconds)*	**Maximum Length for Minimum Time** *(feet)*	**Time for Longer Length** *(seconds/foot)*
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

(D) An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.
(E) If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
(F) Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.
(G) A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.

(2) *Infiltration/Exfiltration Test.*
(A) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch of diameter per mile of pipe per 24 hours at a minimum test head of 2.0 feet above the crown of a pipe at an upstream manhole.
(B) An owner shall use an infiltration test in lieu of an exfiltration test when pipes are installed below the groundwater level.
(C) The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever is greater.
(D) For construction within a 25-year flood plain, the infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subparagraph (C) of this paragraph.
(E) If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce

the infiltration or exfiltration to an amount within the limits specified. An owner shall retest a pipe following a remediation action.

(b) If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:
(1) For a collection pipe with inside diameter less than 27 inches, deflection measurement requires a rigid mandrel.
(A) *Mandrel Sizing.*
(i) A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.
(ii) If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe. In this case, the ID of the pipe, for the purpose of determining the OD of the mandrel, must equal be the average outside diameter minus two minimum wall thicknesses for OD controlled pipe and the average inside diameter for ID controlled pipe.
(iii) All dimensions must meet the appropriate standard.
(B) *Mandrel Design.*
(i) A rigid mandrel must be constructed of a metal or a rigid plastic material that can withstand 200 psi without being deformed.
(ii) A mandrel must have nine or more odd number of runners or legs.
(iii) A barrel section length must equal at least 75% of the inside diameter of a pipe.
(iv) Each size mandrel must use a separate proving ring.
(C) *Method Options.*
(i) An adjustable or flexible mandrel is prohibited.
(ii) A test may not use television inspection as a substitute for a deflection test.
(iii) If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis.
(2) For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection.
(3) A deflection test method must be accurate to within plus or minus 0.2% deflection.
(4) An owner shall not conduct a deflection test until at least 30 days after the final backfill.
(5) Gravity collection system pipe deflection must not exceed five percent (5%).
(6) If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least 30 days.

16. All manholes must be tested to meet or exceed the requirements of 30 TAC §217.58.
(a) All manholes must pass a leakage test.
(b) An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.
(1) Hydrostatic Testing.

(A) The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour.
(B) To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water, and maintain the test for at least one hour.
(C) A test for concrete manholes may use a 24-hour wetting period before testing to allow saturation of the concrete.
(2) Vacuum Testing.
(A) To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole.
(B) No grout must be placed in horizontal joints before testing.
(C) Stub-outs, manhole boots, and pipe ps plugs must be secured to prevent movement while a vacuum is drawn.
(D) An owner shall use a minimum 60 inch/lb torque wrench to tighten the external clamps that secure a test cover to the top of a manhole.
(E) A test head must be placed at the inside of the top of a cone section, and the seal inflated in accordance with the manufacturer's recommendations.
(F) There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test.
(G) A test does not begin until after the vacuum pump is off.
(H) A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.

17. All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section. The owner of the collection system must maintain such certifications for five years and forward copies to the appropriate regional office upon request. Connections may only be made to an approved sewage collection system.

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

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

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 300086
AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM F-1705

STATE OF TEXAS
CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
6/13/25

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P.O. BOX 41957 AUSTIN, TEXAS 78704 (512) 476-4456

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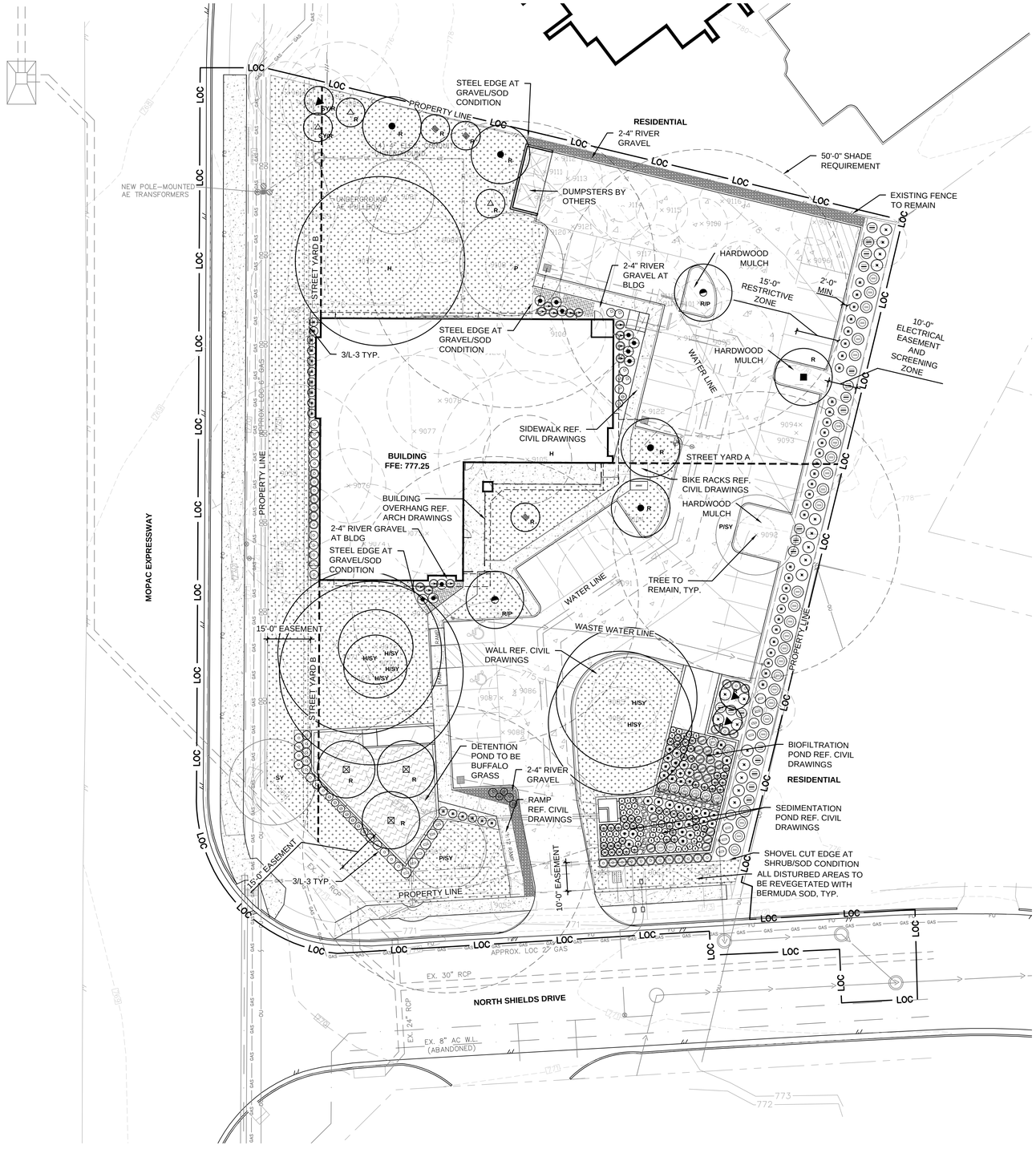
NO	DATE	DESCRIPTION

UPTOWN FRONTAGE OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

TCEQ SCS NOTES

22 OF 26

SP-2024-0345C



PROPOSED TREE LEGEND					
SYMBOL	TOTAL	REPLACEMENT (R)	STREETYARD (SY)	PARKING LOT (P)	SPECIES & SIZE
●	4	4	0	0	LIVE OAK *Quercus virginiana* MIN. 3" CAL.
⊠	3	3	0	0	MEXICAN SYCAMORE *Platanus mexicana* MIN. 3" CAL.
◓	2	1	0	1	CHINQUIPIN OAK *Quercus muhlenbergii* MIN. 3" CAL.
■	1	1	0	0	TEXAS PISTACHE *Pistacia texana* MIN. 3" CAL.
◈	3	3	0	0	WAX MYRTLE *Myrica cerifera* MIN. 3" CAL.
▲	3	2	1	0	YAUPON HOLLY *Ilex vomitoria* MIN. 3" CAL.
△	3	2	1	0	TEXAS REDBUD *Cercis canadensis var. 'Texensis'* MIN. 3" CAL.
SUBTOTAL:	19	16	2	1	

PROPOSED SHRUB LEGEND		
SYMBOL	QTY	SPECIES
⊖	14	TEXAS SAGE (Large Shrub) *Leucophyllum frutescens* 5 GAL.; MIN. 24" HT., PLANT MIN. 42" O.C.
⊕	25	DWARF WAX MYRTLE (Large Shrub) *Myrica pusilla* 5 GAL.; MIN. 30" HT., PLANT MIN. 42" O.C.
⊙	27	GULF MUHLY (Medium Shrub) *Muhlenbergia capillaris* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
⊛	13	SPINELESS PRICKLY PEAR (Medium Shrub) *Opuntia ellisiana* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
⊗	48	DWARF YAUPON HOLLY (Medium Shrub) *Ilex vomitoria 'nana'* 3 GAL.; MIN. 12" HT., PLANT MIN. 18" O.C.
✶	18	ESPERANZA *Tecoma stans* 5 GAL.; MIN. 24" HT., PLANT MIN. 42" O.C.
⊜	19	EVERGREEN SUMAC *Rhus virens* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
⊚	27	LM - LINDHEIMER'S MUHLY *Muhlenbergia lindheimer* 5 GAL.; MIN. 18" HT., PLANT MIN. 24" O.C.
◉	10	TC - TURKS CAP *Malvaviscus arboreus var. drummondii* 5 GAL.; MIN. 12" HT., PLANT MIN. 24" O.C.
⊷	13	DP - DWARF PALMETTO *Sabal minor* 5 GAL.; MIN. 18" HT., PLANT MIN. 36" O.C.
⊹	7	DP - NEW GOLD LANTANA *Lantana x hybrida 'New Gold'* 3 GAL.; MIN. 12" HT., PLANT MIN. 12" O.C.
	22	SO - INLAND SEA OATS *Chasmanthium latifolium* 3 GAL.; MIN. 12" HT., PLANT MIN. 18" O.C.

PROPOSED POND PLANTING LEGEND		
SYMBOL	QTY	SPECIES
⊚	10	LM - LINDHEIMER'S MUHLY *Muhlenbergia lindheimer* 2 @ 1 GALLON, 8 @ 5 GALLON
⊙	18	SG - SWITCH GRASS *Panicum virgatum* 11 @ 1 GALLON, 7 @ 5 GALLON
⊛	17	IG - INDIAN GRASS *Sorghastrum nutans* 8 @ 1 GALLON, 9 @ 3 GALLON
⊕	19	OG - SIDEOATS GRAMA GRASS *Bouteloua curtipendula* 1 GALLON
⊗	31	EG - EASTERN GRAMA GRASS *Tripsacum dactyloides* 1 GALLON
⊘	15	BB - BIG BLUESTEM *Andropogon gerardii* 1 GALLON
⊙	44	LB - LITTLE BLUESTEM *Andropogon scoparius* 1 GALLON
SUBTOTAL:	154	(Reference Sheet L-3 for calculations)

GENERAL NOTES:

1. REQUIREMENT FOR STREETYARD B CANNOT BE MET DUE TO AUSTIN ENERGY UTILITY EASEMENT. POCKETS OF NATIVE LARGE SHRUBS HAVE BEEN SUBSTITUTED IN PLACE OF TREES AS ALTERNATE COMPLIANCE.
2. AUSTIN ENERGY PROHIBITS TREES WITHIN AE EASEMENT. ALL SPACE AVAILABLE FOR PROPOSED TREES HAVE BEEN PLANTED.
3. 3 MEXICAN SYCAMORES ARE PROVIDED IN THE DETENTION POND AS ALTERNATIVE COMPLIANCE TO SATISFY SUBCHAPTER E 2.2.4.

LEGEND	
▭	STREET YARD
H	HERITAGE TREE

DETENTION POND LEGEND	
▨	BG - BUFFALO GRASS Bouteluoadactyloides 1 GALLON

CIRCLE V
Landscape Architecture, LLC
P.O. Box 170822 Austin, Texas 78717
816.565.1021 circlevla.com

PROJECT NUMBER: **CV2417**

CLIENT: **AMC DESIGN GROUP INC.**

PROJECT:

UPTOWN FRONTAGE

2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

ISSUES AND REVISIONS:

NO.	DATE	ISSUE

REGISTERED LANDSCAPE ARCHITECT
JAIME S. SIKS
3096
STATE OF TEXAS

06-13-2025

ISSUE FOR PERMIT

SHEET TITLE:
L-1
LANDSCAPE PLAN

SHEET NUMBER:
23 of 26

SP-2024-0345C

Payment into Tree Fund	
Inches remaining:	348
$200/in	$69,550.00

Urban Forestry Accounting Summary	
Surveyed	
Total Appendix F tree inches surveyed	898.5
Heritage tree inches surveyed	171.5
Non-Appendix F tree inches surveyed	0
Invasive tree inches surveyed	77.5
Removed	
Total Appendix F inches removed	660.0
Heritage tree inches removed	0
Total Non-Appendix F inches removed	0
Invasive inches removed	9
Total Dead, Diseased, or Imminent Hazard (DDI) inches removed	77.5
DDI Appendix F inches removed	77.5
DDI Heritage tree inches removed	31
DDI Non-Appendix F inches removed	0
DDI Invasive inches removed	9
Mitigation	
Total mitigation replacement inches planted	46.5
Total replacement inches planted on site (private trees)	46.5
Total replacement ROW inches planted	0
Private inches owed to Urban Forest Replenishment Fund	0
Public inches owed to UFRF	0
Total non-mitigation inches planted on site	0

LANDSCAPE CALCULATIONS

STREET YARD A — North Shields Drive	REQUIRED		PROVIDED	
TOTAL SITE AREA			49,404	
TOTAL STREET YARD AREA			22,225	
STREET YARD LANDSCAPE (20%)	4,445		4,445	20%
TREES (STREET YARD A)	15		16	
EXISTING TREES CREDIT				
2" DIA. - 8" DIA.	0	x 1	0	
6" DIA. OR GREATER	8	x 4	16	
PROPOSED STREETYARD TREES			0	

STREET YARD B — MoPac Expressway	REQUIRED		PROVIDED	
TOTAL SITE AREA			49,404	
TOTAL STREET YARD AREA			4,393	
STREET YARD LANDSCAPE (20%)	879		879	20%
TREES (STREET YARD B)	8		4	
EXISTING TREES CREDIT				
2" DIA. - 8" DIA.	0	x 1	0	
6" DIA. OR GREATER	1	x 2	2	
PROPOSED STREETYARD TREES			2	

	REQUIRED				PROVIDED
REPLACEMENT TREES					
(ALL NUMBERS REPRESENT QTY OF INCHES	399				51
TOTAL TO BE MITIGATED:					
HERITAGE TREES, 24"+	0	(at 300%)	=	0	
19" AND GREATER, APDX-F TREES	137.5	(at 100%)	=	138	
8" TO 18.9", APDX-F TREES	522.5	(at 50%)	=	261	
INVASIVE OR DEAD	77.5	(at 0%)	=	0	
TOTAL TO BE REPLACED:					
NUMBER AND SIZE OF REPLACEMENT TREE	0	TREES AT 1.5 CAL.	=	0	
NUMBER AND SIZE OF REPLACEMENT TREE	17	TREES AT 3 CAL.	=	51	
SIGNIFICANT SHADE TREES (75% OF TOTAL)	299			51	100%

ISLANDS, MEDIANS AND PENINSULAS	REQUIRED			PROVIDED	
STREET YARD AREA	120	S.F.	>	120	S.F.
NON-STREET YARD AREA	100	S.F.	>	100	S.F.

BUFFERING POINTS - North Shields Drive	REQUIRED	PROVIDED (TOTAL)
	87 POINTS	96 POINTS

	SIZE	QUANTITY		POINTS	PROVIDED
EXISTING TREES	6" OR GREATER	1	x	9 POINTS	9 POINTS
LARGE TREES	3" CAL. MIN.	0	x	9 POINTS	0 POINTS
SMALL TREES	2" CAL. MIN.	0	x	6 POINTS	0 POINTS
LARGE SHRUBS	3 GAL. MIN.	29	x	3 POINTS	87 POINTS
MEDIUM SHRUBS	3 GAL. MIN.	0	x	1 POINT	0 POINTS
SMALL SHRUBS	1 GAL. MIN.	0	x	1 POINT	0 POINTS
DECORATIVE WALL (3' MIN.)		0	x	3 PTS/FT.	0 POINTS
BERM (3' MIN. AT <4:1 SLOPE)		0	x	1 PTS/FT.	0 POINTS

BUFFERING POINTS - MoPac Expressway	REQUIRED	PROVIDED (TOTAL)
	62 POINTS	117 POINTS

	SIZE	QUANTITY		POINTS	PROVIDED
EXISTING TREES	6" OR GREATER	4	x	9 POINTS	36 POINTS
LARGE TREES	3" CAL. MIN.	0	x	9 POINTS	0 POINTS
SMALL TREES	2" CAL. MIN.	0	x	6 POINTS	0 POINTS
LARGE SHRUBS	5 GAL. MIN.	0	x	3 POINTS	0 POINTS
MEDIUM SHRUBS	3 GAL. MIN.	27	x	1 POINT	81 POINTS
SMALL SHRUBS	1 GAL. MIN.	0	x	1 POINT	0 POINTS
DECORATIVE WALL (3' MIN.)		0	x	3 PTS/FT.	0 POINTS
BERM (3' MIN. AT <4:1 SLOPE)		0	x	1 PTS/FT.	0 POINTS

GENERAL NOTES:

1. REQUIREMENT FOR STREETYARD B CANNOT BE MET DUE TO AUSTIN ENERGY UTILITY EASEMENT. POCKETS OF NATIVE LARGE SHRUBS HAVE BEEN SUBSTITUTED IN PLACE OF TREES AS ALTERNATE COMPLIANCE.
2. AUSTIN ENERGY PROHIBITS TREES WITHIN AE EASEMENT. ALL SPACE AVAILABLE FOR PROPOSED TREES HAVE BEEN PLANTED.
3. 3 MEXICAN SYCAMORES ARE PROVIDED IN THE DETENTION POND AS ALTERNATIVE COMPLIANCE TO SATISFY SUBCHAPTER E 2.2.4.

TREE LIST / MITIGATION CALCULATIONS

												Trees Removed						Trees Preserved					
												Heritage	Tree Type Categories					Heritage	Tree Type Categories				
X Trees Removed	Tag#	SPECIES	CAL 1	CAL 2	CAL 3	CAL 4	CAL 5	CAL 6	CAL 7	CAL 8	(=)	HERITAGE 24"+	19+ and Appendix F	19+ and NOT Appendix F	4-18.9" and Appendix F	4-18.9" and NOT Appendix F	INVASIVE OR DEAD	HERITAGE 24"+	19+ and Appendix F	19+ and NOT Appendix F	4-18.9" and Appendix F	4-18.9" and NOT Appendix F	INVASIVE OR DEAD
X	9052	Ashe Juniper Cedar	8								8				8								
	9053	Cedar Elm	15								15										15		
X	9054	Ashe Juniper Cedar	14	11							19.5		19.5										
X	9055	Ashe Juniper Cedar	10	9	8	8	7	6			29		29										
X	9056	Ashe Juniper Cedar	10								10				10								
X	9057	Ashe Juniper Cedar	8								8				8								
X	9058	Ashe Juniper Cedar	9	8							13				13								
X	9059	Ashe Juniper Cedar	8								8				8								
X	9060	Ashe Juniper Cedar	9	8							13				13								
X	9061	Ashe Juniper Cedar	11								11				11								
X	9062	Ashe Juniper Cedar	9								9				9								
X	9063	Ashe Juniper Cedar	10								10				10								
X	9064	Ashe Juniper Cedar	9								9				9								
	9065	Cedar Elm	14								14										14		
X	9066	Ashe Juniper Cedar	8	7							12				12								
X	9067	Ashe Juniper Cedar	8								8				8								
X	9068	Ashe Juniper Cedar	9								9				9								
	9069	Live Oak	20.5	12	11						32							32					
	9070	Live Oak	11								11										11		
	9071	Live Oak	28.5								28.5							28.5					
	9072	Live Oak	13								13										13		
X	9073	Ashe Juniper Cedar	8								8				8								
X	9074	Ashe Juniper Cedar	21								21		21										
X	9075	Ashe Juniper Cedar	14								14				14								
X	9076	Ashe Juniper Cedar	13								13				13								
X	9077	Ashe Juniper Cedar	14	11	7	7					27		27										
X	9078	Ashe Juniper Cedar	10	9	8						19				19								
	9079	Live Oak	29.5								30							29.5					
X	9080	Ashe Juniper Cedar	8								8				8								
	9081	Ashe Juniper Cedar	9	8							13										13		
X	9082	Ashe Juniper Cedar	10	9	7	7					22		22										
X	9083	Ashe Juniper Cedar	8								8				8								
	9084	Live Oak	25								25							25					
	9085	Live Oak	24.5								25							24.5					
X	9086	Ashe Juniper Cedar	9								9				9								
X	9087	Cedar Elm	8								8				8								
X	9088	Cedar Elm	9								9				9								
X	9089	Ashe Juniper Cedar	8								8				8								
X	9090	Ashe Juniper Cedar	8								8				8								
X	9091	Ashe Juniper Cedar	10	6	6	6					19		19										
	9092	Cedar Elm	14								14										14		
X	9093	Live Oak	23.5								23.5					23.5							
X	9094	Live Oak	14								14					14							
X	9095	Ashe Juniper Cedar	10	7							14				14								
X	9096	Ashe Juniper Cedar	8								8				8								
X	9097	Ashe Juniper Cedar	8								8				8								
X	9098	Ashe Juniper Cedar	9								9				9								
X	9099	Ashe Juniper Cedar	9								9				9								
X	9100	Ashe Juniper Cedar	9								9				9								
X	9101	Ashe Juniper Cedar	8								8				8								
X	9102	Ashe Juniper Cedar	12								12				12								
X	9103	Chinaberry	9								9					9							
X	9104	Ashe Juniper Cedar	8	6	6						14				14								
X	9105	Live Oak	31								31					31							
X	9106	Live Oak	19								19				19								
X	9107	Live Oak	18								18				18								
	9108	Live Oak	13	10							18										18		
X	9109	Ashe Juniper Cedar	8								8				8								
X	9110	Ashe Juniper Cedar	9								9				9								
X	9111	Ashe Juniper Cedar	8								8				8								
X	9112	Ashe Juniper Cedar	9								9				9								
X	9113	Ashe Juniper Cedar	12								12				12								
X	9114	Ashe Juniper Cedar	8	8							12				12								
X	9115	Ashe Juniper Cedar	9								9				9								
X	9116	Ashe Juniper Cedar	8								8				8								
X	9117	Ashe Juniper Cedar	9								9				9								
X	9118	Ashe Juniper Cedar	9								9				9								
X	9119	Ashe Juniper Cedar	9								9				9								
X	9120	Ashe Juniper Cedar	13								13				13								
X	9121	Live Oak	12								12				12								
X	9122	Ashe Juniper Cedar	10	9	8						18.5				18.5								
X	9123	Ashe Juniper Cedar	9								9				9								
		TOTAL									972.5												
		Total cal. inch removed per category:										0	137.5	0	522.5	0	77.5	139.5	0	0	96	0	0
		Grand Total Cal. Inches:										660.0						237.5					
		Grand Total Cal. Inches:										897.5											
		Minimum Replacement replace @ %										300%	100%	50%	50%	25%	0%						
		Subtotal Replacement Inches:										0.0	137.5	0.0	261.3	0.0	0.0						
		Total Replacement: (cal. inches)										398.8											

CIRCLE V
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P.O. Box 170822 Austin, Texas 78717
816.565.1021 circlevla.com

PROJECT NUMBER: **CV2417**

CLIENT: **AMC DESIGN GROUP INC.**

PROJECT:

UPTOWN FRONTAGE

2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

ISSUES AND REVISIONS:

NO.	DATE	ISSUE

REGISTERED LANDSCAPE ARCHITECT — JAIME S. SIMS — 3096 — STATE OF TEXAS

06-13-2025

ISSUE FOR PERMIT

SHEET TITLE:
L-2
LANDSCAPE TREE MITIGATION AND CALCULATIONS

SHEET NUMBER:
24 of 26

SP-2024-0345C

SEDIMENTATION AND BIO-FILTRATION POND PLANTING CALCULATIONS

SEDIMENTATION POND PLANTING CALCULATIONS

SURFACE AREA OF SEDIMENTATION BASIN = 761 S.F.
TOTAL PLANTINGS REQUIRED (MIN 10% OF SA) = 76 PLANTS REQUIRED

PLANT LIST
LM 2 - LINDHEIMER'S MUHLY @ 1 GAL.
SG 11 - SWITCH GRASS @ 1 GAL.
IG 8 - INDIAN GRASS @ 1 GAL.
OG 10 - SIDEOATS GRAMA GRASS @ 1 GAL.
EG 21 - EASTERN GRAMA GRASS @ 1 GAL.
BB 5 - BIG BLUESTEM @ 1 GAL.
LB 38 - LITTLE BLUESTEM @ 1 GAL.

TOTAL = 95 PLANTS

BIO-FILTRATION PLANTING CALCULATIONS

SURFACE AREA OF BIO-FILTRATION BASIN = 535 S.F.
TOTAL PLANTINGS REQUIRED (MIN 20% OF SA) = 107 PLANTS REQUIRED

PLANT LIST
LM 8 - LINDHEIMER'S MUHLY @ 5 GAL. (EQUAL TO 32 PLANTS)
SG 7 - SWITCH GRASS @ 5 GAL. (EQUAL TO 28 PLANTS)
IG 9 - INDIAN GRASS @ 3 GAL. (EQUAL TO 18 PLANTS)
OG 9 - SIDEOATS GRAMA GRASS @ 1 GAL.
EG 10 - EASTERN GRAMA GRASS @ 1 GAL.
BB 10 - BIG BLUESTEM @ 1 GAL.
LB 6 - LITTLE BLUESTEM @ 1 GAL.

TOTAL = 113 PLANTS

PLANT NOTES
1. CONTAINERIZED PLANTS SHALL BE PLACED BASED ON MATURE SIZE TO ALLOW ROOM FOR GROWTH AND AVOID OVERCROWDING CONDITIONS THAT WILL CAUSE PLANT MORTALITY OR IMPENETRABLE BARRIERS FOR MAINTENANCE PERSONNEL.
2. CONTIGUOUS AREAS OF SOD SHOULD BE PLANTED END TO END, ALLOWING NO BARE SOIL.
3. AT THE TIME OF PLANTING, AN 18" INCH GAP SHOULD BE PROVIDED BETWEEN THE VEGETATIVE BASE (STEMS) OF THE CONTAINERIZED PLANTS AND TURF/GRASS GROUNDCOVER TO ALLOW ROOM FOR GROWTH AND AVOID OVERCROWDING.
4. PLANTS MUST BE ARRANGED CAREFULLY SO THEY SERVE THEIR INTENDED FUNCTIONS.
5. NO PLANTS FROM THE CITY OF AUSTIN'S "NO PLANTING" LIST (ECM 1.6.7.5.C) WILL BE PLANTED IN THE POND.

I, JAIME SIMS, A REGISTERED LANDSCAPE ARCHITECT, CERTIFY THAT THESE PLANS MEET THE REQUIREMENTS OF CHAP 25-5 OF THE LAND DEVELOPMENT CODE.

NOTE: ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ARCHITECT AND ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ARCHITECT AND ENGINEER.

CITY OF AUSTIN TREE AND NATURAL AREA PROTECTION NOTES:

A. DURATION OF TREE PROTECTION

1. INSTALLATION

TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION, AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PROJECT.

2. REMOVAL

TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. ANY PREMATURE REMOVAL OR FAILURE OF TREE PROTECTION CAN LEAD TO CRITICAL ROOT ZONE IMPACTS AS DESCRIBED IN ECM 3.5.2 AND MAY REQUIRE REMEDIAL TREE CARE. IT IS THE PERMIT HOLDER'S RESPONSIBILITY TO AVOID DAMAGE TO PRESERVED TREES WHERE TREE PROTECTION HAS BEEN REMOVED OR NOT INSTALLED.

B. FENCING SPECIFICATIONS

1. MATERIAL REQUIREMENTS

FENCING IS THE PRIMARY METHOD OF TREE PROTECTION. FENCING IS INTENDED TO PREVENT ACCESS TO THE CRITICAL ROOT ZONE. TREE FENCING SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET. FENCING SHALL BE INSTALLED ON STEEL T-POSTS WITH A MAXIMUM SPACING OF 10 FEET BETWEEN THE POSTS. MORE ROBUST OR EXISTING PERMANENT FENCING MAY BE APPROVED AS AN ALTERNATIVE TO CHAIN-LINK FENCING. PLASTIC FENCING MATERIAL SHALL NOT BE USED AS TREE PROTECTION.

2. LOCATION OF FENCING

FENCING SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE OF ALL PRESERVED TREES OR ANY NATURAL AREAS DESIGNATED FOR PRESERVATION. FENCING MUST BE CONTINUOUS AND CREATE A CLOSED, INACCESSIBLE AREA OF ROOT ZONE PROTECTION.

3. MAINTENANCE OF FENCED AREAS

FENCING SHALL NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THERE SHALL BE MINIMAL SLACK OR SAGGING IN THE FENCE. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER.

4. EXCEPTIONS TO FENCING REQUIREMENTS

ANY SECTION OF THE CRITICAL ROOT ZONE NOT PROTECTED BY FENCING OR COVERED BY EXISTING HARDSCAPE REQUIRES MULCH (SEE ECM 3.6.1.C). EXCEPTIONS TO THE CRZ FENCING REQUIREMENT SHALL BE JUSTIFIED BY SITE-SPECIFIC CONSIDERATIONS. SOME EXCEPTIONS ARE FOR AREAS:

i. THAT HAVE BEEN APPROVED FOR IMPACTS, SUCH AS THE FOOTPRINT OF A BUILDING;

ii. COVERED BY EXISTING HARDSCAPE, SUCH AS A PATIO OR DRIVEWAY (NOTE: IF HARDSCAPE IS REMOVED THE EXPOSED SOIL BENEATH BECOMES SUBJECT TO TREE PROTECTION REQUIREMENTS);

iii. REQUIRED FOR ACCESS TO THE WORK AREA; AND

iv. APPROVED FOR USE AS A STAGING AREA.

WITHIN THE HALF CRZ, FENCING REQUIREMENTS WILL ONLY BE MODIFIED FOR EXISTING HARDSCAPE OR TO ALLOW AN ACCESS PATH ADJACENT TO APPROVED STRUCTURES (SEE ECM 3.6.1.C.3). CRZ FENCING MODIFICATIONS SHALL BE SHOWN ON THE DEVELOPMENT PLANS OR APPROVED BY THE INSPECTOR.

C. MULCH SPECIFICATIONS

1. MATERIAL REQUIREMENTS

MULCH IS REQUIRED IN ANY SECTION OF THE CRITICAL ROOT ZONE THAT IS NOT PROTECTED BY FENCING OR UNDER EXISTING HARDSCAPE AND HAS NOT BEEN APPROVED FOR IMPACTS (SUCH AS BUILDING FOOTPRINT OR DRIVEWAY). MULCH USED FOR TREE PROTECTION SHALL BE ANY NATURAL WOOD TYPE. ROUGH SINGLE GRIND MULCH, WHICH RESISTS COMPACTION BETTER THAN DOUBLE GRIND AND IS USUALLY LESS EXPENSIVE IS PREFERRED BUT ANY NATURAL WOOD TYPE IS ACCEPTABLE. DYED MULCH OR MULCH MADE FROM NON-BIOLOGICAL MATERIAL SUCH AS RUBBER OR STONE SHALL NOT BE USED AS TREE PROTECTION.

2. DEPTH OF MULCH

MULCH SHALL BE INSTALLED TO A MINIMUM DEPTH OF 8 INCHES. MULCH MAY NEED TO BE PERIODICALLY REPLENISHED DEPENDING ON THE DURATION OF THE PROJECT. SINCE EXCESSIVE MULCH IS HARMFUL TO TREES, MULCH SHALL NOT BE INSTALLED TO A DEPTH GREATER THAN 12 INCHES. MULCH USED FOR TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT. MULCH SHALL NEVER BE PILED AGAINST TREE TRUNKS.

3. MULCH WITHIN THE HALF CRZ

WHEN MULCH IS USED AS ALTERNATIVE PROTECTION WITHIN THE HALF CRITICAL ROOT ZONE IT SHALL BE TOPPED BY DECKING TO PROVIDE ADDITIONAL PROTECTION AGAINST COMPACTION.

4. EXCEPTIONS TO MULCH REQUIREMENTS

MULCH IS NOT REQUIRED WITHIN FENCED SECTIONS OF THE CRITICAL ROOT ZONE WHERE EXISTING TURF OR GROUND COVER IS PRESENT AND UNDISTURBED. SECTIONS OF BARE OR DISTURBED DIRT WITHIN THE FENCED CRZ SHALL BE COVERED BY A THREE-INCH LAYER OF MULCH.

D. TRUNK AND BRANCH WRAPPING

1. TRUNK WRAP

WRAPPING IS NOT REQUIRED OR RECOMMENDED FOR MOST PRESERVED TREES. WHEN NECESSARY, TRUNK WRAP SHALL BE INSTALLED TO PROTECT THE FIRST 8 FEET OF TREE HEIGHT WHENEVER PROTECTIVE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OR WHEN FENCING CANNOT BE PLACED AROUND THE TREE. THIS WILL USUALLY ONLY BE THE CASE WHEN EXISTING HARDSCAPE PROVIDES HALF CRITICAL ROOT ZONE PROTECTION OR A STRUCTURE HAS BEEN APPROVED FOR CONSTRUCTION WITHIN THE HALF CRZ USING AN EXISTING HISTORICAL FOOTPRINT. THESE CIRCUMSTANCES CAN RESULT IN FENCING CLOSER TO THE TRUNK THAN WOULD OTHERWISE BE ALLOWED. BECAUSE TREES VARY IN FORM, 8 FEET IS A GENERAL GUIDELINE RATHER THAN AN ABSOLUTE STANDARD. MORE OR LESS HEIGHT OF PROTECTION MAY BE APPROPRIATE.

2. BRANCH WRAP

BRANCH WRAP MAY BE REQUIRED WHEN A MAJOR LIMB IS OVER AN ACCESS ROUTE OR CLOSE TO A PROPOSED STRUCTURE. PROXIMITY OF SCAFFOLDING OR OTHER NECESSARY CONSTRUCTION EQUIPMENT NEEDS TO BE CONSIDERED.

3. MATERIAL REQUIREMENTS

DIMENSIONAL LUMBER, SUCH AS 2X4S, SHALL BE ORIENTED PARALLEL TO AND CONTINUOUSLY AROUND THE TRUNK OR BRANCH AND SECURED IN PLACE BY TIGHTENING WIRES RUN AROUND THE OUTSIDE OF THE LUMBER. WRAPPING SHALL NEVER BE SECURED DIRECTLY TO THE TREE BY SCREWS OR OTHER MEANS. WRAPPING SHALL BE LOOSENED AND RETIGHTENED EVERY SIX MONTHS TO PREVENT THE TREE FROM BEING DAMAGED AS IT GROWS OUTWARDS.

E. PROTECTION FOR NATURAL AREAS

NATURAL AREAS INDICATED FOR PRESERVATION ON PLANS SHALL BE PROTECTED BY FENCING THAT MEETS THE STANDARDS FOR TREE FENCING IN THIS SECTION. ALTERNATIVE PROTECTION ALLOWED FOR TREES IS NOT ACCEPTABLE FOR NATURAL AREA PRESERVATION. FENCING SHALL BE INSTALLED AT THE LIMIT OF CONSTRUCTION LINE SHOWN ON PLANS.

CITY OF AUSTIN STANDARD PLAN NOTES:

BEFORE CONSTRUCTION:

1. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED PER ECM 3.6.1.
2. TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION. REFER TO ECM 3.6.1.A. FENCING FOR TREE PROTECTION SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET AND SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE EXCEPT AS ALLOWED IN ECM 3.6.1.B.4.
3. UNFENCED SECTIONS OF THE CRITICAL ROOT ZONE SHALL BE COVERED WITH MULCH AT A MINIMUM DEPTH OF 8 INCHES AND A MAXIMUM DEPTH OF 12 INCHES PER ECM 3.6.1.C. WHERE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OF A PRESERVED TREE, TRUNK WRAPPING SHALL BE INSTALLED PER ECM 3.6.1.D.
4. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED SO AS NOT TO CAUSE IMPACTS THAT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.3.D.

DURING CONSTRUCTION:

1. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT DOES NOT EXCEED PRESERVATION CRITERIA FOR THE TREES TO REMAIN. REFER TO ECM 3.5.2 A.
2. FENCING MAY NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER. REFER TO ECM 3.6.1.B.3.
3. PRUNING SHALL BE IN COMPLIANCE WITH THE CURRENT ANSI A300 STANDARD FOR TREE CARE.

AFTER CONSTRUCTION:

1. TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. REFER TO ECM 3.6.1.A.
2. LANDSCAPE INSTALLATION WITHIN THE CRZ OF PRESERVED TREES, INCLUDING IRRIGATION, SOIL AND PLANTINGS, SHALL NOT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.2.
3. DOCUMENTATION OF TREE WORK PERFORMED MUST BE PROVIDED TO INSPECTOR PER ECM APPENDIX P-6. THIS LIST IS NOT EXHAUSTIVE. REFER TO APPROPRIATE ECM SECTIONS FOR FULL REQUIREMENTS.

SITE DEVELOPMENT PERMIT - IRRIGATION NOTES

AUTOMATIC IRRIGATION SYSTEMS SHALL COMPLY WITH TCEQ CHAPTER 344, AS WELL AS THE FOLLOWING REQUIREMENTS:

1.THESE REQUIREMENTS SHALL BE NOTED ON THE SITE DEVELOPMENT PERMIT AND SHALL BE IMPLEMENTED AS PART OF THE LANDSCAPE INSPECTION:

A. THE SYSTEM MUST PROVIDE A MOISTURE LEVEL ADEQUATE TO SUSTAIN GROWTH OF THE PLANT MATERIALS;

B. THE SYSTEM DOES NOT INCLUDE SPRAY IRRIGATION ON AREAS LESS THAN TEN (10) FEET WIDE (SUCH AS MEDIANS, BUFFER STRIPS, AND PARKING LOT ISLANDS);

C. CIRCUIT REMOTE CONTROL VALVES HAVE ADJUSTABLE FLOW CONTROLS;

D. SERVICEABLE IN-HEAD CHECK VALVES AREA ADJACENT TO PAVED AREAS WHERE ELEVATION DIFFERENCES MAY CAUSE LOW HEAD DRAINAGE;

E. A MASTER VALVE INSTALLED ON THE DISCHARGE SIDE OF THE BACKFLOW PREVENTER;

F. ABOVE-GROUND IRRIGATION EMISSION DEVICES ARE SET BACK AT LEAST SIX (6) INCHES FROM IMPERVIOUS SURFACES;

G. AN AUTOMATIC RAIN SHUT-OFF DEVICE SHUTS OFF THE IRRIGATION SYSTEM AUTOMATICALLY AFTER MORE THAN A ONE-HALF INCH (") RAINFALL; AND

H. NEWLY PLANTED TREES SHALL HAVE PERMANENT IRRIGATION CONSISTING OF DRIP OR BUBBLERS.

2.THE IRRIGATION INSTALLER SHALL DEVELOP AND PROVIDE AN AS-BUILT DESIGN PLAN TO THE CITY AT THE TIME THE FINAL IRRIGATION INSPECTION IS PERFORMED; A UNLESS FISCAL SECURITY IS PROVIDED TO THE CITY FOR THE INSTALLATION OF THE SYSTEM, IT MUST BE OPERATIONAL AT THE TIME OF THE FINAL LANDSCAPE INSPECTION.

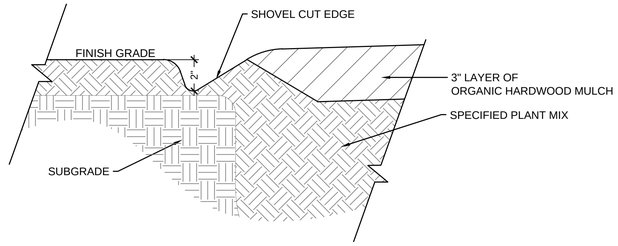
3.THE IRRIGATION INSTALLER SHALL ALSO PROVIDE EXHIBITS TO BE PERMANENTLY INSTALLED INSIDE OR ATTACHED TO THE IRRIGATION CONTROLLER, INCLUDING: A.A LAMINATED COPY OF THE WATER BUDGET CONTAINING ZONE NUMBERS, PRECIPITATION RATE, GALLONS PER MINUTE AND THE LOCATION OF THE ISOLATION VALVE; AND AN AS BUILT PLAN.

4.THE IRRIGATION INSTALLER SHALL PROVIDE A REPORT TO THE CITY ON A FORM PROVIDED BY AUSTIN WATER CERTIFYING COMPLIANCE WITH SUBSECTION 1. WHEN THE FINAL PLUMBING INSPECTION IS PERFORMED BY THE CITY.

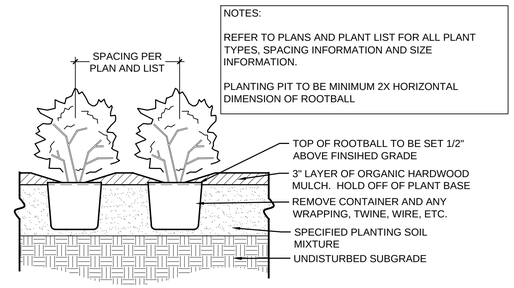
5. SUPPLEMENTAL IRRIGATION IS REQUIRED FOR NEWLY PLANTED, REQUIRED LANDSCAPE PLANTS PER LDC 25-8-1008, ECM 2.4.6, AND ECM APPENDIX O.

DROUGHT NOTES:

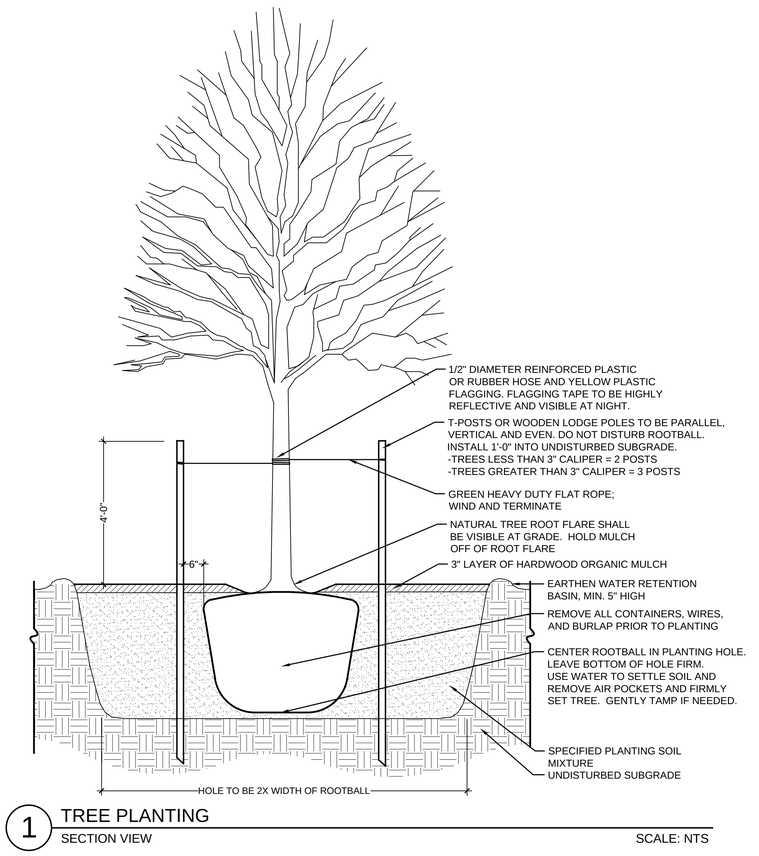
1. IF ESTABLISHING VEGETATION DURING ANY STAGE OF DROUGHT, SECTION 6-4-30 MAY REQUIRE A VARIANCE. CONTACT AUSTIN WATER CONSERVATION STAFF AT WATERUSECOMPVAR@AUTINTEXAS.GOV OR CALL (512) 974-2199.
2. FINISHED ELEVATION FOR PARKING-LOT ISLANDS, MEDIANS, PENINSULAS, AND SIMILAR LANDSCAPE AREAS MUST BE AT LEAST SIX (6) BELOW THE FINISHED CURB ELEVATION TO ALLOW FOR PLACEMENT OF SIX (6) INCHES OF TOPSOIL PER ECM 1.4.7
3. ALL LANDSCAPED AREAS ARE TO BE PROTECTED BY 6-INCH WHEEL CURBS, WHEELSTOPS OR OTHER APPROVED BARRIERS
4. AS PER ECM 2.4.7. [LDC 25-2-1004(A), ECM 2.4.7(A)]
5. THE OWNER WILL CONTINUOUSLY MAINTAIN THE REQUIRED LANDSCAPING IN ACCORDANCE WITH LDC 25-2-984.



3 SHOVEL CUT EDGE
SECTION VIEW — SCALE: NTS



2 SHRUB PLANTING
SECTION VIEW — SCALE: NTS



1 TREE PLANTING
SECTION VIEW — SCALE: NTS

CIRCLE V
Landscape Architecture, LLC
P.O. Box 170822 Austin, Texas 78717
816.565.1021 circlevla.com

PROJECT NUMBER: **CV2417**

CLIENT: **AMC DESIGN GROUP INC.**

PROJECT:

UPTOWN FRONTAGE

2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

ISSUES AND REVISIONS:

NO.	DATE	ISSUE

REGISTERED LANDSCAPE ARCHITECT — JAIME S. SIMS — 3096 — STATE OF TEXAS

06-13-2025

ISSUE FOR PERMIT

SHEET TITLE:
L-3
LANDSCAPE DETAILS AND NOTES

SHEET NUMBER:
25 of 26

SP-2024-0345C

SUBCHAPTER E DESIGN STANDARDS:

ARTICLE 3.2 - GLAZING & FACADE RELIEF REQUIREMENTS

PRIMARY FACADE:

SOUTH	ACTUAL:		REQUIRED:
GROSS WALL AREA	1036.37 SF		
GLAZING AND ARTICULATION (BELOW 10')	484.29 SF	(46.7%)	40%

SECONDARY FACADE:

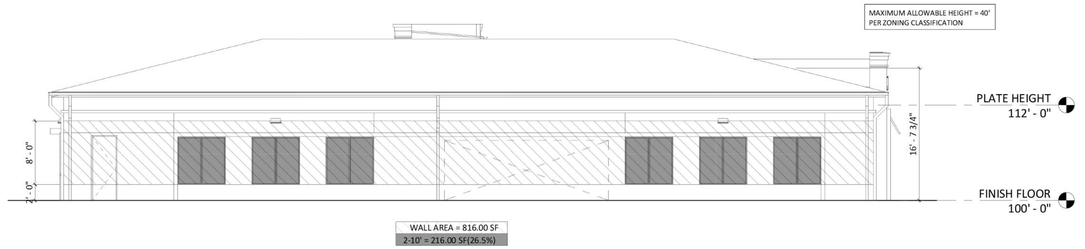
WEST	ACTUAL:		REQUIRED:
GROSS WALL AREA	730.67 SF		
GLAZING AND ARTICULATION (BETWEEN 2'-10')	254.00 SF	(34.8%)	25%

EAST	ACTUAL:		REQUIRED:
GROSS WALL AREA	730.67 SF		
GLAZING AND ARTICULATION (BETWEEN 2'-10')	288.38 SF	(39.5%)	25%

EXEMPT FACADE: NORTH FACADE

SUBCHAPTER E, SECTION 3.2.2 -

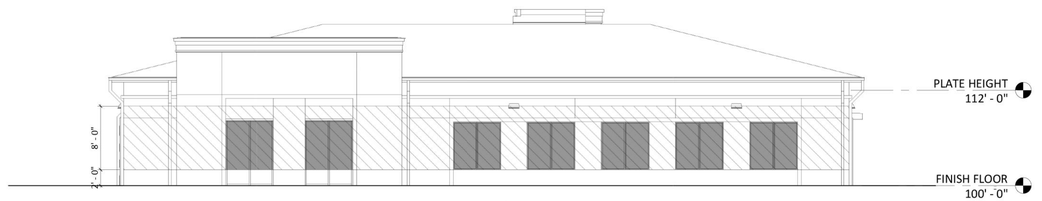
ONE FAÇADE SHALL BE EXEMPT FROM GLAZING AND FAÇADE RELIEF REQUIREMENTS. THE EXEMPT FAÇADE CANNOT FACE A PUBLIC STREET OR INTERNAL CIRCULATION ROUTE.



4 **NORTH ELEVATION - CALCS**
1/8" = 1'-0"



3 **EAST ELEVATION - CALCS**
1/8" = 1'-0"



2 **WEST ELEVATION - CALCS**
1/8" = 1'-0"

NORTH SHIELDS DRIVE - PRIMARY FACADE



1 **SOUTH ELEVATION - CALCS**
1/8" = 1'-0"

FRAMEWORKARCHS.COM

FRAMEWORK | ARCHITECTS
1824 E OLTORF ST., SUITE 350 | AUSTIN TX, 78741

UPTOWN FRONTAGE
SHELL MEDICAL OFFICE BUILDING
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

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NOT FOR REGULATORY APPROVAL, PERMITTING, OR CONSTRUCTION.
THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF ARCHITECT:
JEREMY KOOMLER
06.10.2025
100% B&P
ELEVATIONS AND SUBCHAPTER E

SHEET: XXXX

PROJECT NO: 23024
DATE: 06.10.2025
PROJECT MGR: JK

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AUSTIN, TEXAS 78703
512-385-2911
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LAND PLANNERS

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NO	DATE	DESCRIPTION

UPTOWN FRONTAGE
OFFICE SITE PLAN
2900 NORTH SHIELDS DRIVE
AUSTIN, TEXAS 78727

ARCHITECTURAL ELEVATIONS

SP-2024-0345C

Section 5

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

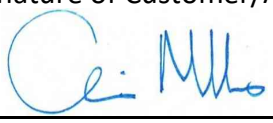
Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 6/19/25

Signature of Customer/Agent:



Regulated Entity Name: CS Vista, LLC

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Tributary of Walnut Creek

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

Attachment A

A.0 Spill Response Actions

A.1 Petroleum Products

A.1.2 All on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.

A.2 Fertilizers

A.2.1 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 stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

A.3 Paints

A.3.1 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 according to manufacturers' instructions or State and local regulations.

A.4 Concrete Trucks

A.4.1 Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site only at specific location shown on the plan.

A.5 In addition to the good housekeeping and material management practices discussed in the previous section of this plan, the following practices will be followed for spill prevention and cleanup:

A.5.1 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.

A.5.2 Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. 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.

A.5.3 All spills will be cleaned up immediately after discovery.

A.5.4 The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

A.5.5 Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of size.

A.5.6 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.

A.5.7 The owner's representative & site construction manager responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the officer trailer on-site.

A.5.8 Notification Requirements and Procedures
Notify TCEQ immediately in the event of:

- Any spill that threatens to enter a storm sewer or watercourse.
- All petroleum spills greater than 5 gallons.
- Any hazardous or unknown material spill, e.g. many solvents, cleaners, etc.
- Any discharge suspected of being in violation of State or Municipal codes, e.g. discharges which are cloudy, foul smelling, colored, contain chemicals or heavy sediment loads.

TCEQ SPILL REPORTING HOTLINE
800-832-8224 (24-HOURS A DAY)

PLEASE DO NOT LEAVE MESSAGES ON VOICE MAILBOXES FOR INCIDENTS THAT NEED IMMEDIATE ATTENTION.

Attachment B

Potential Sources of Contamination

The materials listed below are anticipated to be present on-site during construction:

1. Concrete
2. Detergents
3. Paints (enamel and latex)
4. Tar
5. Fertilizers
6. Petroleum based products
7. Cleaning solvents
8. Wood

Material management practices will be utilized to reduce the risk of spills or other accidental exposure of the materials listed above to stormwater runoff, including the following:

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

The following practices will be used to reduce the risks associated with hazardous materials, if hazardous materials are needed for the work:

1. Products will be kept in original containers unless they are not re-sealable.
2. Original labels and material safety data will be retained.
3. If surplus product must be disposed of, manufacturer or local and state recommended methods for proper disposal will be followed.

Product specific practices and spill prevention practices have been included with this report as Attachment A.

The following are authorized non-stormwater discharges:

1. Discharges from fire fighting activities.
2. Fire hydrant flushing.
3. Water used to wash vehicles and pavement where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed, and if local, state or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, and dust.
4. Water used to control dust.
5. Potable water sources including waterline flushing.
6. Uncontaminated groundwater or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

7. Air conditioning condensate originating from on site vehicles or the construction trailer, if present.

Each and all of these authorized non-stormwater discharges will be directed along the same channels as the stormwater run-off and through the same pollution control devices.

Attachment C

C.0 Sequence of Major Activities

C.1 Construction activities will proceed in the following sequence:

1. Assign an environmental project manager who will be onsite grater than 90% of the time during construction activity and be responsible for the items listed under Section 1.2.3.3 of the Environmental Criteria Manual.

2. Provide 72-hour notification of EV inspector (512-974-2278) prior to pre-construction.

3. Erosion controls are to be installed as indicated on the approved site plan.

4. The Environmental Project Manager must contact the Watershed Protection and Development Review Department to schedule a pre construction coordination meeting to be held on site.

5. Erosion controls will be revised, if needed, to comply with Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.

6. Rough cut water quality ponds, if ponds are required, prior to rough grading site. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of any embankment or excavation that leads to ponding conditions. The outlet system must consist of a low-level outlet and an emergency overflow meeting the requirements of the Drainage Criteria Manual (section 8.3) and/or the Environmental Criteria Manual (Section 1.4.2.K) as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until final restoration is achieved.

7. Temporary controls to be inspected and maintained weekly and prior to anticipated rainfall events, and after rainfall events, as needed.

8. Environmental Project Manager will schedule a mid-construction conference to coordinate changes in the construction schedule and evaluate effectiveness of the erosion control plan after possible construction alterations to the site. Participants shall include the City Inspector, Project Engineer, General Contractor and Environmental Project Manager. The anticipated completion date and final construction sequence and inspection schedule will be coordinated with the appropriate City Inspector.

9. Clear and grub site.

10. Construct building pad and grade site for parking areas.

11. Construct sewer extension to the site.

12. Complete construction of project.

13. Permanent controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.

14. Revegetate disturbed areas, including the removal of any remaining temporary controls, or execute a developers contract for the revegetation along with the engineer's concurrence letter submitted to the City after the engineer inspects the site.

15. A mid-construction conference is required for each phase, if phasing is proposed, with the Watershed Protection and Development Review Department Staff, which will be coordinated based upon completion of buildings, drainage facilities, water quality controls and temporary erosion controls by phase.

Attachment D

D.0 Temporary Best Management Practices and Measures

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

D.1.2 The placement of erosion/sedimentation controls shall be in accordance with the City of Austin Environmental Criteria manual and TCEQ guidelines.

D.1.3 See the Erosion & Sedimentation Control Plan, for all temporary erosion control structure locations.

D.1.4 Significant variation in materials or locations of controls or fences from those shown on the approved plan must be approved by the design engineer, or the city engineer as appropriate.

D.1.5 The contractor is required to inspect the controls and silt fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches 6 inches.

D.1.6 The stabilized construction entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public roadways. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public roadway must be removed immediately.

Attachment F

F.0 Structural Practices

The following structural practices will be followed to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site.

1. Silt fencing on the down slope side of disturbed areas.
2. Silt fencing around all sensitive features as shown on the E&S Plan.
3. Silt fencing around the temporary spoils, construction and staging areas.
4. Rough cutting of the detention pond and water quality pond.
5. Provide the temporary stormwater pumping discharge area as shown on the E&S Plan.

Placement of structural practices in floodplains has been avoided.

Attachment G

G.0 Drainage Area Map

G.1 Refer to the Site Drainage Plan for all drainage information, or the F-0584 Attachments.

Attachment H

H.0 Temporary Sediment Pond Plans and Calculations

H.1 Refer to Sheet 7 of the Construction Plans, The Erosion/Sedimentation Control Plan for the temporary sediment trap layout and calculations.

H.2 Refer to Sheets 6 and 18 of the Construction Plans for temporary sediment trap details.

Attachment I

I.0 Inspection and Maintenance for BMPs

I.1 Temporary erosion and sedimentation controls will be inspected and maintained at weekly intervals, and after significant rainfall events in excess of ½ inch of precipitation to insure that controls are functioning properly. Damaged controls will be repaired or replaced immediately and will be conducted within twenty-four hours of the inspection report.

I.2 Silt accumulation at each control will be removed and properly disposed when the depth of accumulation exceeds six (6) inches.

I.3 Permanent seeding and planting will be inspected for bare spots, washouts and healthy growth.

I.4 The contractor of record will designate a qualified person or persons to perform the following inspections:

1. Disturbed areas and areas used for storage of materials that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants entering the drainage system.

2. Erosion and sediment control measures identified in the plan will be observed to ensure that they are operating correctly. Repairs, if necessary, will be initiated within twenty-four hours of report.

3. Where stormwater discharge locations are accessible, they will be inspected to determine whether erosion control measures are effective in preventing significant impacts to receiving waters.

4. Locations where vehicles enter or exit the site will be inspected for evidence of off-site sediment tracking.

I.5 Based on the results of the weekly inspection, the Site Description Controls of this Pollution Prevention Plan will be revised as appropriate, but in no case later than seven (7) calendar days following the inspection.

I.6 A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with items above will be made retained as part of the storm water pollution plan for at least three (3) years from the date that the site is finally stabilized. The report will be signed by applicable personnel at the conclusion of all construction activities.

I.7 Copies of the forms to be used for the Inspection and Maintenance report are included herein.

Attachment J

J.0 Schedule of Interim and Permanent Soil Stabilization Practices

J.1 All disturbed areas shall be restored as noted below:

a. A minimum of four inches of topsoil shall be placed in all drainage channels (except concrete or rock) and between the curb and right-of-way line.

b. The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows:
   I. From September 15 to March 1, seeding shall be with a combination of 1 pound per 1000 s.f. of unhulled Bermuda and 3 pounds per 1000 s.f. of winter rye with a purity of 95% with 90%.
   II. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 s.f. with a purity of 95% with 85% germination.

c. Fertilizer shall have an analysis of 15-5-10 and shall be applied at the rate of 500 pounds per acre.

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

e. Mulch type used shall be cellulose fiber, applied at a rate of 2000 pounds per acre.

f. Restoration shall be acceptable when the grass has grown at least 1 inch high with 95% coverage, provided no bare spots larger than 16 s.f. exist.