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: City of Austin Ullrich Water Treatment						**2. Regulated Entity No.:** RN102137999			
3. Customer Name: City of Austin						**4. Customer No.:** CN600135198			
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):**			141.29 acres (5.26 acres LOC)
9. Application Fee:	$500		**10. Permanent BMP(s):**			Sedimentation Filtration Pond			
11. SCS (Linear Ft.):			**12. AST/UST (No. Tanks):**						
13. County:	Travis		**14. Watershed(s):**			Little Bee Creek & Town Lake			

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	_1_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. Madeleine Brehaut, P.E.
Print Name of Customer/Authorized Agent Madeleine Brehaut 5/27/2025 Signature of Customer/Authorized Agent Date

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

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.

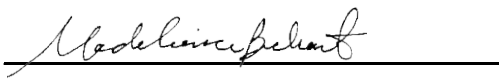
Signature

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: Madeleine Brehaut, P.E.

Date: 5/27/2025

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: City of Austin Ullrich Water Treatment
2. County: Travis
3. Stream Basin: Little Bee Creek & Town Lake
4. Groundwater Conservation District (If applicable): Barton Springs Zone
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

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

7. Customer (Applicant):

   Contact Person: Nick Burnett
   Entity: City of Austin
   Mailing Address: P.O. Box 1088
   City, State: Austin, TX Zip: 78767
   Telephone: 512-978-1746 FAX: _____
   Email Address: Nick.Burnett@austintexas.gov

8. Agent/Representative (If any):

   Contact Person: Madeleine Brehaut, P.E.
   Entity: CDM Smith, Inc.
   Mailing Address: 8310-1 N. Capital of Texas Hwy, Suite 250
   City, State: Austin, TX Zip: 78731
   Telephone: 512-652-5358 FAX: _____
   Email Address: brehautmt@cdmsmith.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.

    Albert H. Ullrich Water Treatment Plant, 1000 Forest View Drive, Austin, TX 78746-4524

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

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

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

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

    ☒ Survey staking will be completed by this date: TCEQ to coordinate site visit with the City

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: Existing Water Treatment Plant

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:

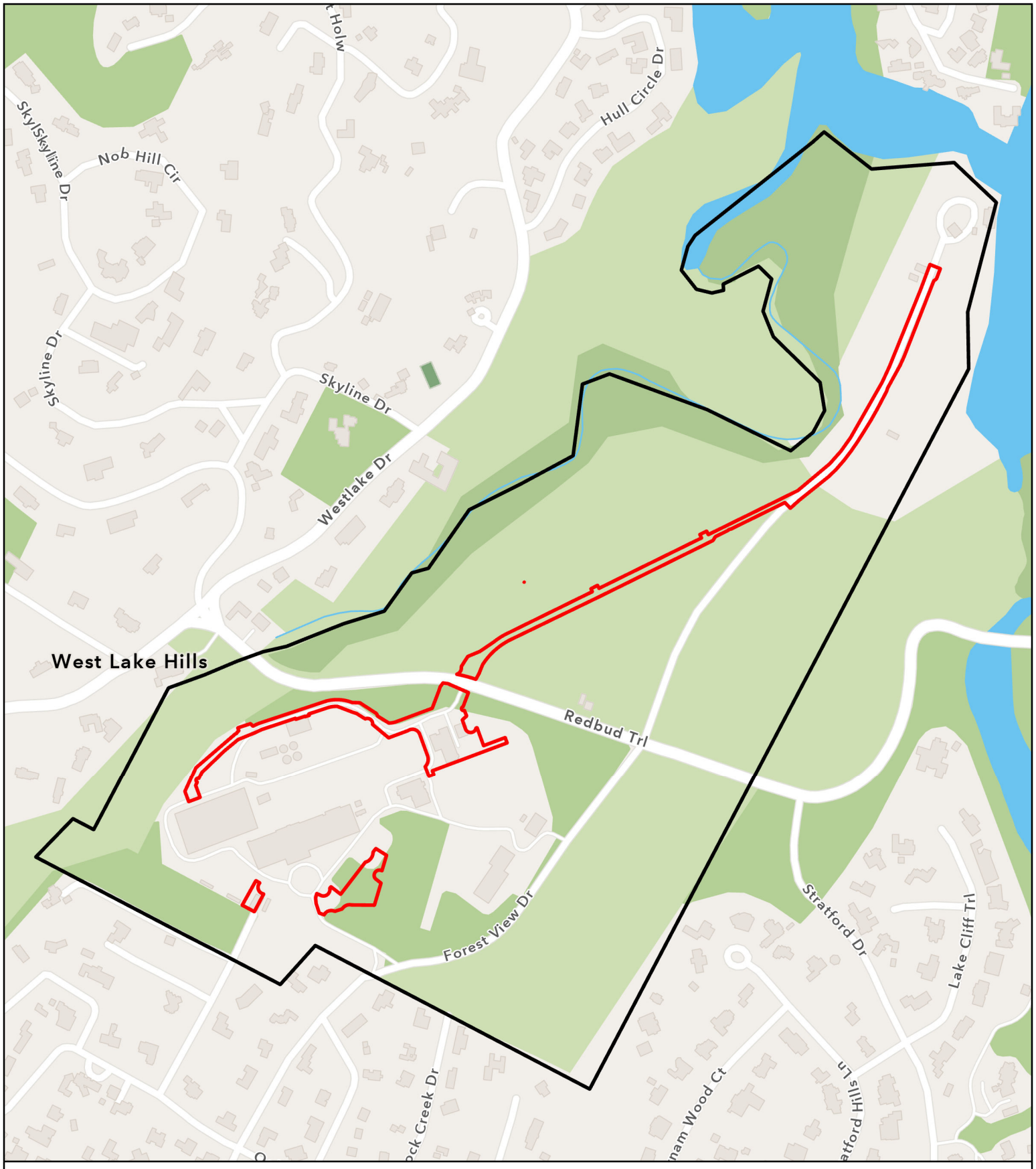
- ☐ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- ☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- ☐ For a UST Facility Plan or Modification or an 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.



Project Limits

Property Boundary

0 500 1,000 Feet

N

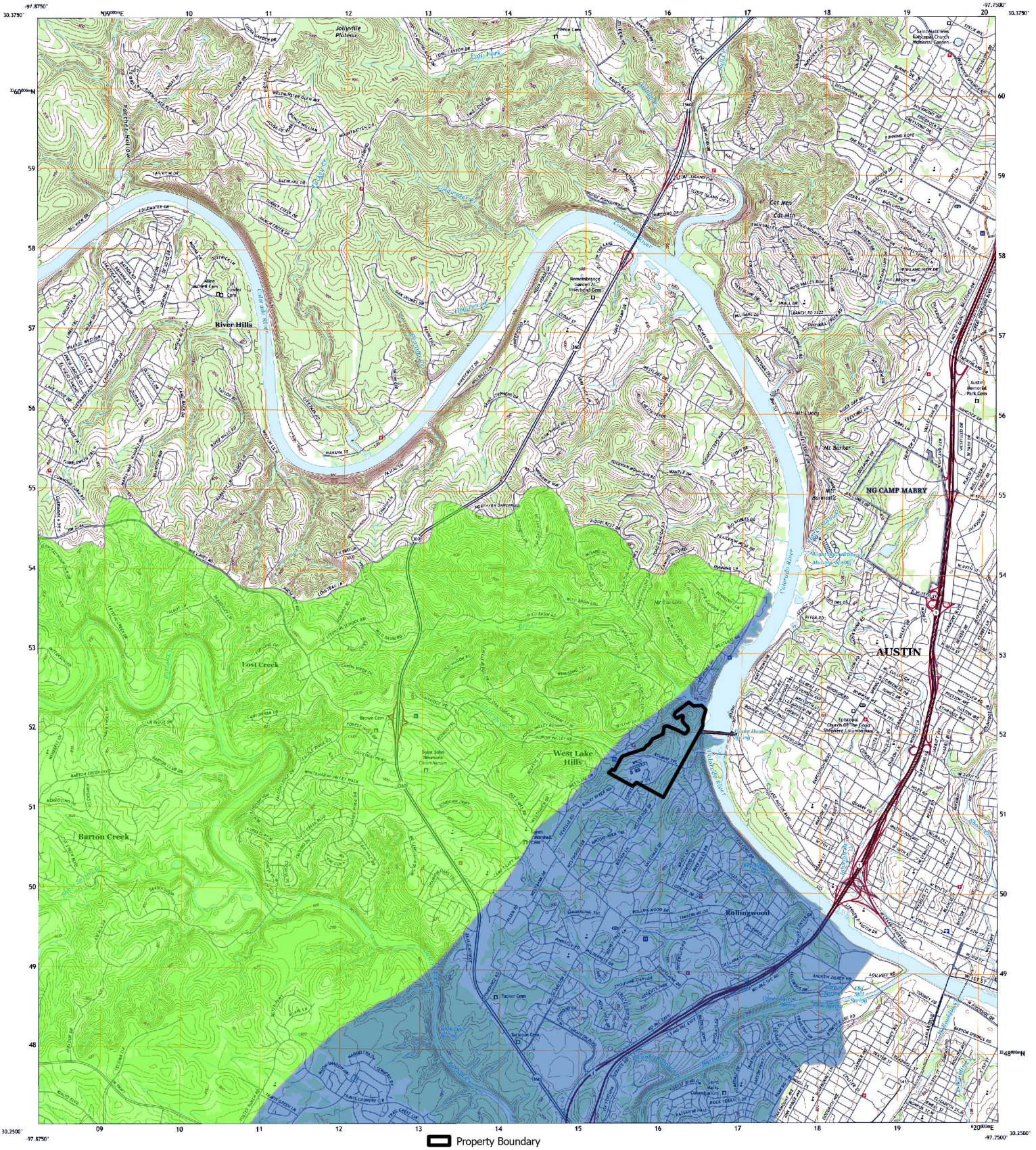
Ullrich WTP
Austin, TX
Road Map

CDM Smith

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

The National Map
US Topo

AUSTIN WEST QUADRANGLE
TEXAS - TRAVIS COUNTY
7.5-MINUTE SERIES



SCALE 1:24 000

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

CONTOUR INTERVAL 20 FEET
NORTH AMERICAN VERTICAL DATUM OF 1988

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

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

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

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015 - 2019
Names.....GNIS, 1979 - 2022
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2019
Boundaries.....Multiple sources; see metadata file 2019 - 2021

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

UTM GRID AND 2019 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

U.S. National Grid 100,000-m Square ID
PU

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

QUADRANGLE LOCATION

ADJOINING QUADRANGLES
1 Mansfield Dam
2 Jollyville
3 Pflugerville West
4 Bee Cave
5 Austin East
6 Signal Hill
7 Oak Hill
8 Montopolis

AUSTIN WEST, TX
2022

ISBN
NSN
NSN REF NO

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

The Albert H. Ullrich Water Treatment Plant (Ullrich WTP), operated by the City of Austin, was originally constructed and commissioned in 1969 as a 30 million gallons per day (mgd) lime-softening facility. To meet growing demand, the facility underwent major expansions beginning in 1985, ultimately increasing its treatment capacity to 100 mgd by 2001. A subsequent expansion, completed in 2006, further boosted capacity to 167 mgd, allowing the plant to treat raw water sourced from Lake Austin reliably and efficiently. This expansion included construction of a sedimentation/filtration water quality pond on the east side of the site adjacent to the existing chlorine handling building. Although much of the site's runoff discharges the developed area untreated, this water quality pond was oversized to provide additional capture volume for the areas not draining to stormwater treatment features.

Currently, the Ullrich WTP uses chlorine and anhydrous ammonia gas for potable water disinfection. To improve operational safety and regulatory compliance, the City of Austin has initiated the Ullrich WTP Inherently Safer Disinfection Conversion Project, which involves the following modifications to the process facilities:

- Decommission and demolish the existing elemental chlorine disinfection system
- Decommission and demolish the existing anhydrous ammonia gas disinfection system
- Construction of a temporary bulk sodium hypochlorite storage and feed system
- Construction of a new on-site generation of sodium hypochlorite (OSGSH) system
- Construction of interim liquid ammonium sulfate (LAS) feed system
- Construction of LAS bulk chemical storage and feed system located within existing buildings
- Removal and replacement of existing sodium hexametaphosphate chemical metering pumps
- Construction of chemical yard piping systems
- Related electrical and instrumentation work, including SCADA system and SCADA top end programming and modifications.

The Ullrich WTP site consists of 141.29 acres of developed area in the site's center and undeveloped wooded land along the property boundaries. The limits of construction for this project consist of 5.26 acres within the already developed area. The site improvements are primarily associated with upgrades the existing chemical handling building and installing chemical yard piping. Yard piping will include the temporary and permanent chemical piping associated with the disinfection system upgrades feeding

sodium hypochlorite to the three existing raw water lines: south 72-inch raw water steel cylinder concrete pipe (S 72" RW-SCCP), 48-inch raw steel pipe (48" RW-STL), and the north 72-inch raw water steel pipe (N 72" RW-STL). At-grade site improvements include:

- Removal and revegetation of the existing loading area on the north face of the chlorine handling building.
- Removal of an existing standby generator and installation of two new transformer pads to service the rehab of the chloring handling building.
- Relocation of the dumpster pad and dumpsters.
- Areas of backfill against existing retaining wall to provide sufficient cover for penetrating chemical pipes.
- Replacement of 52 feet of security fence along the N72" RW-STL pipe.
- Installation of access ramp adjacent to existing chemical injection vault 1C.
- Installation of new 6 chemical pull boxes, 8 chemical junction boxes, and 6 chemical injection vaults.
- Replacement of existing sidewalk, pavement, and curb and gutter along chemical piping routes and adjacent to chlorine handling building.

At-grade site improvements are minimal and will result in a permanent net loss of impervious cover. Although some drainage areas will increase impervious cover, the quantity is negligible. The existing on-site water quality pond has sufficient water quality capture volume to accommodate these small changes to site impervious cover. Only three areas of permanent regrading are proposed, all of which are located along the existing retaining wall running along the northern side of the site. Existing drainage paths will not be modified due to permanent improvements.

Recharge and Transition Zone Exception Request Form

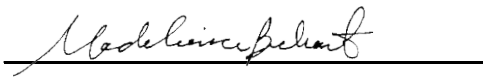
Texas Commission on Environmental Quality
30 TAC §213.9 Effective June 1, 1999

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 **Recharge and Transition Zone Exception Request Form** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Madeleine Brehaut, P.E.
Date: 5/27/2025
Signature of Customer/Agent:



Regulated Entity Name: City of Austin Ullrich Water Treatment

Exception Request

1. ☒ **Attachment A - Nature of Exception**. A narrative description of the nature of each exception requested is attached. All provisions of 30 TAC §213 Subchapter A for which an exception is being requested have been identified in the description.
2. ☒ **Attachment B - Documentation of Equivalent Water Quality Protection**. Documentation demonstrating equivalent water quality protection for the Edwards Aquifer is attached.

Administrative Information

3. ☒ 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.
4. ☒ The applicant understands that no exception will be granted for a prohibited activity in Chapter 213.
5. ☒ The applicant understands that prior approval under this section must be obtained from the executive director for the exception to be authorized.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

The construction activities associated with the Albert H Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project will be located in previously developed areas, result in an impervious cover reduction, and not change the existing site drainage patterns. Much of the proposed improvements are within the drainage basin of the existing on-site water quality pond. The improvements outside of the pond's drainage basin consist of chemical injection vaults, junction boxes, and pull boxes along the existing raw water lines associated with the disinfection system upgrades. The resulting impervious cover increases from these improvements are minimal. Temporary erosion control measures implemented prior to construction in these areas will provide water quality protection of downstream receiving water bodies.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

The project improvements will net a loss of impervious cover on the site. A summary is provided below:

Additional Impervious Cover = 1,228 sf
Removal of Impervious Cover = 1,633 sf
Net Change in Impervious Cover = -405 sf

Of the areas listed above, a portion drains to the existing water quality pond while the rest discharges to sheet flow, as summarized below:

Change in Impervious Cover Draining to Existing Water Quality Pond = -1,099 sf = -0.03 ac
Change in Impervious Cover Draining to Sheet Flow: = 694 sf = 0.02 ac

Water quality impacts are measured using stormwater runoff volume and total suspended solids (TSS) load expected from changes to site impervious cover. The volume of on-site generated stormwater runoff is determined from the size of the drainage area, average annual rainfall, and impervious cover. The required TSS load removal resulting from proposed improvements is determined from precipitation depth and change in impervious cover. Both stormwater runoff and TSS load will reduce due to the improvements proposed with this project. The changes to these values are provided below.

$Pv = DA \times Pd \times Rv$

Where: Pv = annual runoff volume (cubic feet)
DA = drainage area (sq ft)
Pd = average annual precipitation depth (in)
Rv = runoff coefficient = $0.546(IC)^2 + 0.328\ (IC) + 0.030$

<u>Annual Runoff Volume Draining to Existing Water Quality Pond</u>

Runoff Coefficients (Rv): $Rv = 0.546\ (0.03)^2 + 0.328\ (0.03) + 0.030 = 0.052$
Change in Annual Runoff Volume: $Pv = 1{,}099 \times 32/12 \times 0.052 = 153$ cf/yr (reduction)

<u>Annual Runoff Volume Draining to Sheet Flow</u>

Runoff Coefficients (Rv): $Rv = 0.546\ (0.02)^2 + 0.328\ (0.02) + 0.030 =$ <u>0.044</u>
Change in Annual Runoff Volume: $Pv = 694 \times 32/12 \times 0.044 = 81$ cf/yr (addition)

Net Change in On-Site Annual Runoff Volume

(81 - 153) = - 71 cf/yr (reduction)

Required TSS Load Reduction

L=27.2*(An*P)

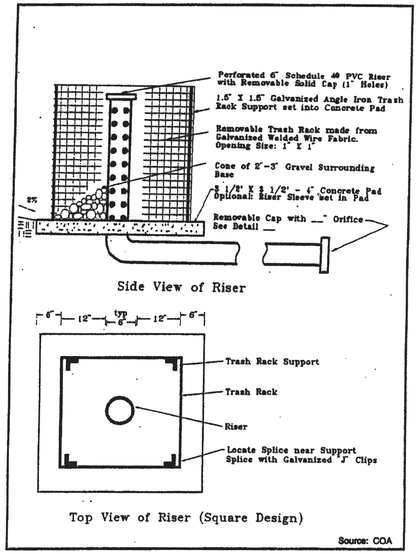
P=Precipitation (inches)

An=Net Increase in Impervious Area (acres)

Total Required Load Reduction

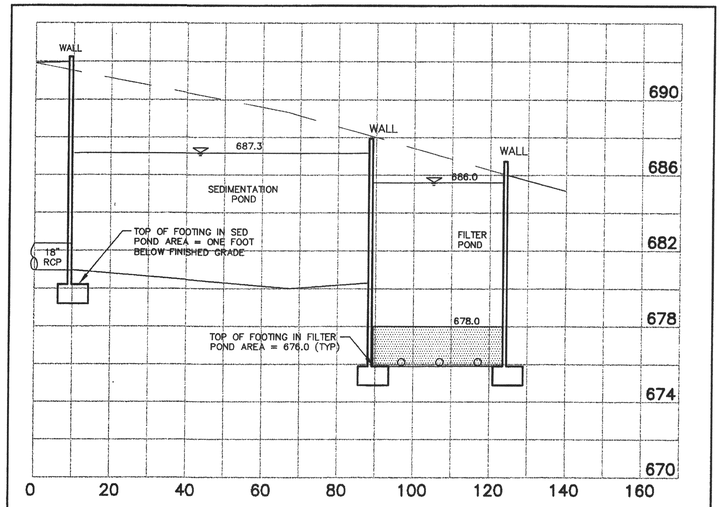
L = 27.2*((-405/43560*32)) = - 8 lbs/yr TSS

The proposed improvements will result in a net reduction in annual runoff volume and required load reduction. Even though there is a net impervious cover reduction, the site can provide equivalent water quality protection for areas draining to sheet flow due to the existing on-site water quality pond. The as-built for the existing water quality pond has been provided as an attachment. The provided capture volume in the water quality pond exceeds the required volume by 2,618 cf. Additional volume in the water quality pond is sufficient to provide equivalent water quality protection for the minimal improved areas draining to sheet flow.

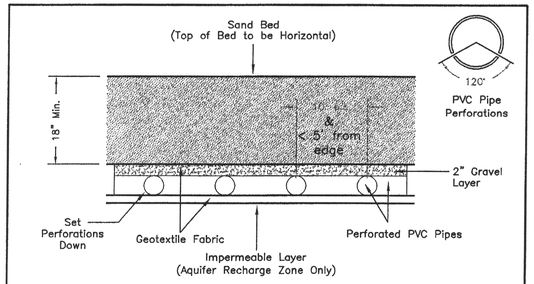


RISER PIPE AND TRASH RACK

NTS



POND SECTION A–A



FILTER MEDIA DETAIL

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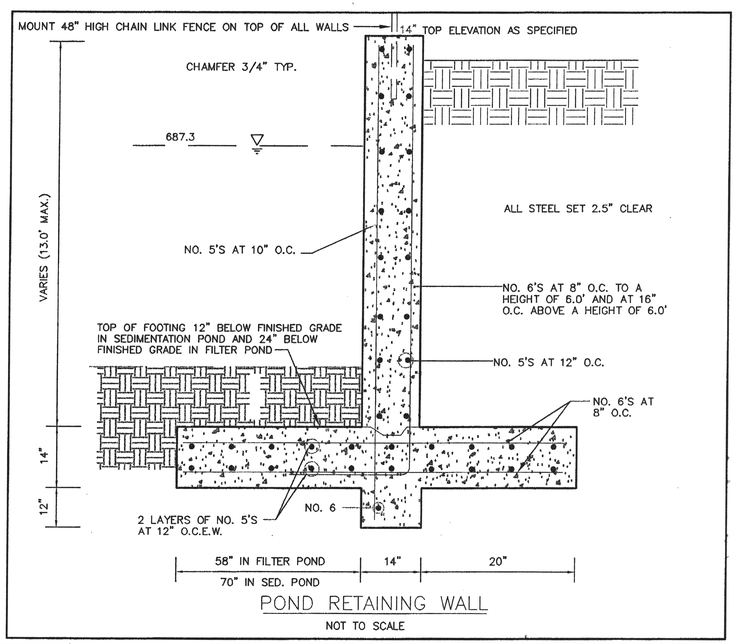


POND RETAINING WALL

NOT TO SCALE

TABLE 1-9
DRAINAGE MATTING SPECIFICATIONS

Property	Test Method	Unit	Specification
Material	Nonwoven geotextile fabric		
Unit Weight		Oz/Sq. Yd.	20
Flow Rate (fabric)		GPM/Ft²	180 (min..)
Permeability	ASTM D-2434	Cm/Sec	12.4×10^{-2}
Grab Strength (fabric)	ASTM D-1682	Lb.	Dry Lg. 90 Dry Wd: 70 Wet Lg. 95 Wet Wd: 70
Puncture Strength (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

Source: City of Austin

TABLE 1-7
GEOTEXTILE FABRIC SPECIFICATIONS

Property	Test Method	Unit	Specification
Material	Nonwoven geotextile fabric		
Unit Weight		Oz./Sq. Yd.	8 (min)
Filtration Rate		In/Sec	0.08 (min)
Puncture Strength	ASTM D-751 (Modified)	Lb.	125 (min)
Mullen Burst Strength	ASTM D-751	Psi	400 (min)
Tensile Strength	ASTM D-1682	Lb.	200 (min)
Equiv. Opening Size	US Standard Sieve	No.	80 (min)

APPENDIX R-2
FULL SEDIMENTATION/FILTRATION POND CALCULATIONS FOR DEVELOPMENT PERMITS

DRAINAGE AREA DATA

Drainage Area to Control	7.75	ac.
Drainage Area Impervious Cover	64	%
Capture Depth(CD)(0.5"+((IC-20)/100))	0.94	in.

WATER QUALITY CONTROL CALCULATIONS

Pond # _____
The Water Quality Control is to be FULL

	Sedimentation/Filtration	
Site Area Draining to Pond	1.87	ac.
Total Area Draining to the pond	1.87	ac.
Design Peak Flow Rate (Q100)	17.7	cfs.

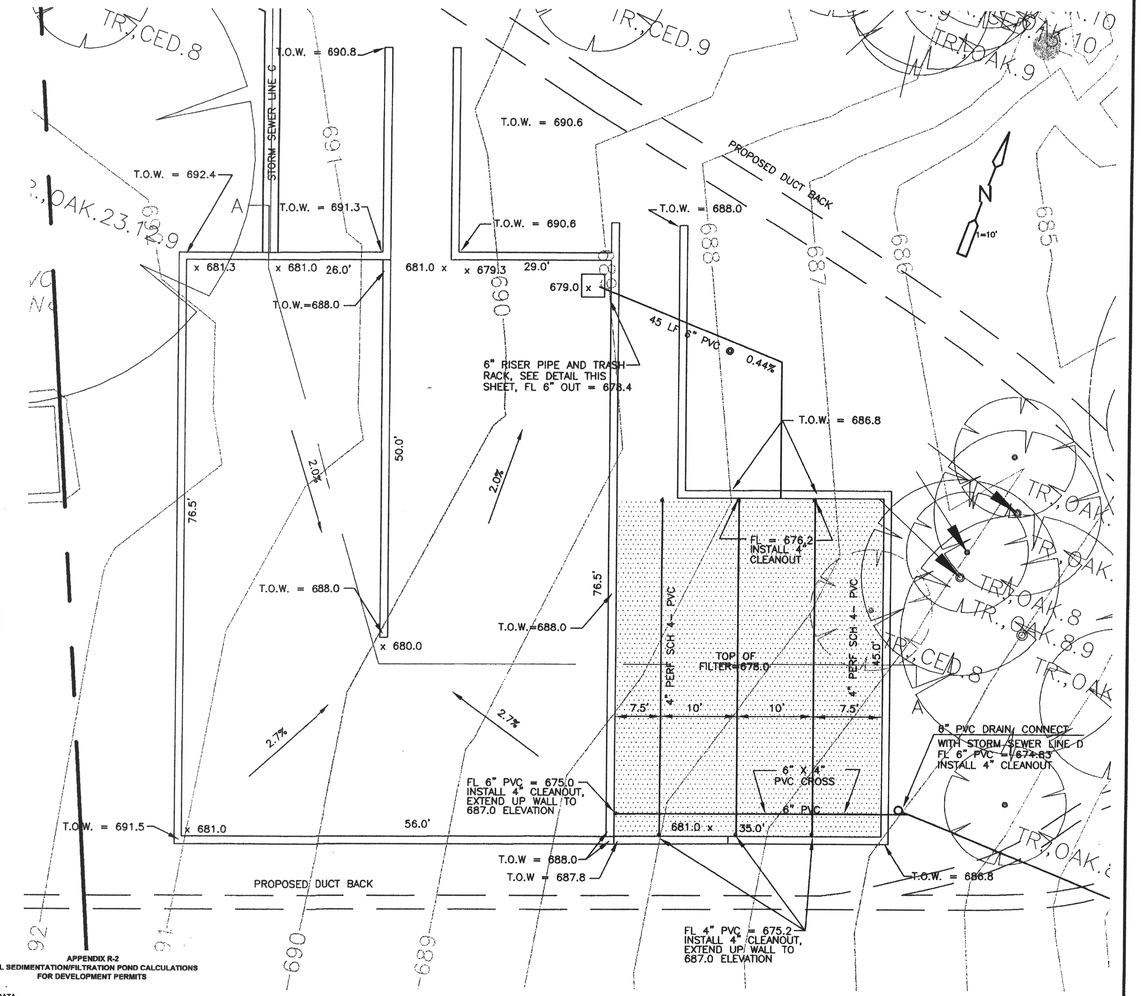
	Required	Provided
Water Quality Volume (CD*area)	26,444	29,062 cf.
Sedimentation Pond Area (WQV/10)	2,644	4,234 sf.
Sedimentation Pond Volume (> WQ2)	26,444	29,062 cf.
Filtration Pond Area (WQV/15)	1,469	1,575 sf.
Filtration Pond Volume (>.20% WQV)	5,288	12,600 cf.

Sedimentation Pond Drawdown Time (+.24 hr.)	24	hr.
Riser Orifice Size	4.9	sl.
Water Quality Elevation	687.3	ft. msl
Elevation of Splitter/Overflow Weir (>WQ elev)	687.3	ft. msl
Length of Splitter Wall	N/A	ft.
Required Head to Pass the Design Flow	N/A	ft.
Sedimentation Pond Freeboard Provided to Pass Design Flow	0.7	ft.

TABLE 1-6
CLAY LINER SPECIFICATIONS

Property	Test Method	Unit	Specification
Permeability	ASTM D-2434	Cm/Sec	1×10^{-6}
Plasticity Index of Clay	ASTM D-423 & D-424	%	Not less than 15
Liquid Limit of Clay	ASTM D-2216	%	Not less than 30
Clay Particles Passing	ASTD D-422	%	Not less than 30
Clay Compaction	ASTM D-2216	%	95% of Standard Proctor Density

Source: City of Austin



POND LAYOUT PLAN

1"=10'

SEDIMENTATION POND
Physical Characteristics

Contour (ft)	Area (sq ft)	Avg Area (sq ft)	Volume (cu ft)	Cut Vol (cu ft)	Ac-Ft
676.00	0	466	466	0	0.00
680.00	951	2266	2266	466	0.01
681.00	3600	3907	3907	2731	0.06
682.00	4214	4221	4221	6638	0.15
683.00	4228	4231	4231	10859	0.25
684.00	4234	4234	4234	15090	0.35
685.00	4234	4234	4234	19324	0.44
686.00	4234	4234	4234	23558	0.54
687.00	4234	4234	1270	27792	0.64
687.30	4234			29062	0.67

FILTRATION POND
Physical Characteristics

Contour (ft)	Area (sq ft)	Avg Area (sq ft)	Volume (cu ft)	Cut Vol (cu ft)	Ac-Ft
676.00	1575			0	0.00
678.00	1575	1575	1575	1575	0.04
680.00	1575	1575	1575	3150	0.07
681.00	1575	1575	1575	4725	0.11
682.00	1575	1575	1575	6300	0.14
683.00	1575	1575	1575	7875	0.18
684.00	1575	1575	1575	9450	0.22
685.00	1575	1575	1575	11025	0.25
688.00	1575	1575	1575	12600	0.29

I CERTIFY THAT THESE ENGINEERING DOCUMENTS ARE COMPLETE, ACCURATE AND ADEQUATE FOR THE INTENDED PURPOSES, INCLUDING CONSTRUCTION, BUT ARE NOT AUTHORIZED FOR CONSTRUCTION PRIOR TO FORMAL CITY APPROVAL.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN APPROVING THESE PLANS, THE CITY OF AUSTIN MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

REVIEWED BY:

AXIOM-BLAIR ENGINEERING
2711 West Anderson Lane, Suite 210 Austin, Texas 78757
Phone (512) 451-7100 Fax (512) 451-7120

STATE OF TEXAS
ALAN D. RHAMES
72089
REGISTERED PROFESSIONAL ENGINEER
07-31-03

SITE PLAN RELEASE Sheet 63 of 75
FILE NO: SPC-03-0005C EXPIRATION DATE: 7-22-06
CASE MANAGER: Wilder APPLICATION DATE: 3-19-03
APPROVED ADMINISTRATIVELY ON: 10-23-03
APPROVED BY PLATTING AND ZONING COMMISSION ON: 7-22-03
APPROVED BY CITY COUNCIL ON: _____
under Section 147 of Chapter 25 of the Austin City Code.
Director, Watershed Protection and Development Review Department
DATE OF RELEASE: 10-23-03 Zoning: P
Rev. 1 _____ Correction 1 _____
Rev. 2 _____ Correction 2 _____
Rev. 3 _____ Correction 3 _____

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: A.RHAMES
DRAWN BY: D. TURNER
SHEET CHK'D BY: A. RHAMES
CROSS CHK'D BY: N. FINDEISEN
APPROVED BY: _____
DATE: JULY 2003

CDM Camp Dresser & McKee Inc.
consulting engineering construction operations

CITY OF AUSTIN, TEXAS
ALBERT H. ULLRICH WATER TREATMENT PLANT
160 MGD PLANT EXPANSION - CONTRACT 3

WATER QUALITY POND PLAN AND DETAILS

PROJECT No 38079
FILE NAME: C-CS-POND2

DRAWING No
CN-9
SHEET 62 OF 75

SPC-03-0005C

C-CS-POND2-1
XREFS: XC-ST-PL101, XC-ST-PU01, XC-PG-PU801, XS-sl-PU01, XS-LB-PU01, XS-SE-PU01, XC-CS-PU01, XE-ST-EP203, 72-dbgn, XC-PG-PU201, C-CS-PR101, XC-CS-PS101, XC-CS-ES101, XA-CS-ES101, XAS-LB-PL-GR01, XC-GN-PS101, XP-CL-PL100, XC-PG-PL101-1

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

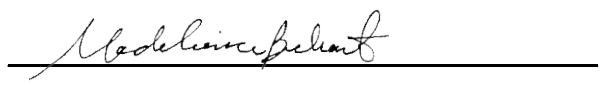
Signature

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

Print Name of Customer/Agent: Madeleine Brehaut, P.E.

Date: 5/27/2025

Signature of Customer/Agent:



Regulated Entity Name: City of Austin Ullrich Water Treatment

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: Little Bee Creek & Town Lake

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.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

No hazardous substances or hydrocarbons will be stored or used in excess on the construction site. Reportable contaminant quantities will be determined and based on 30 TAC §327. In the event of any spill of hydrocarbon products or hazardous substances of reportable quantities the following spill response actions will be taken:

1. The nature and extent of the spill will be assessed, and measures will be taken to protect self and all personnel.
2. City of Austin Fire Department will be notified of the nature and extent of the spill via telephone (911 or 512-974-0130).
3. TCEQ Spill Reporting 24-hour Hotline will be notified of the nature and extent of the spill via telephone (800-832-8224).
4. The source of the spill will be stopped and confined before spill response cleanup activities take place.
5. Spills will be reported prior to any spill response activities.
6. Absorbent materials will be used to contain small scale spill incidents immediately.
7. Absorbent containment booms will be used to contain the discharge of larger scale spill incidents immediately.
8. Any spill response action will follow applicable OSHA health and safety regulations.
9. Any water materials generated by spill response actions will be properly stored and disposed in accordance with local, state, and federal regulations.
10. The City of Austin Watershed Protection Department is the responsible party and may be contacted at 505 Barton Springs Road, Suite 11, Austin, Texas 78704 or 512-974-2550.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

Potential sources of contamination related to this project include:

- Sediment from spoil piles transported during stormwater events
- Accidental leakage of fuels from vehicles or equipment during construction activities
- Accidental leakage of disinfection chemicals during construction or start-up activities

All necessary actions to minimize impacts of contamination will be taken before, during, and after the proposed project and in coordination with Attachment A, Spill Response Actions. Other than potential incidental leaks as noted above, all additional runoff will be from natural sources.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

The sequence for the construction of the proposed project improvements at Albert H. Ullrich Water Treatment Plant site are planned as follows:

- Following issuance of notice-to-proceed, Contractor installs silt fencing, mulch sock, tree protection, inlet protection, and stabilized construction entrances.
- Contractor clears site areas and prepares site for construction (5.26 acres).
- Contractor locates existing utilities prior to construction.
- Contractor installs temporary bulk sodium hypochlorite storage, feed system, and associated chemical yard piping and chemical injection vaults, junction boxes, and pull boxes. All temporary electrical and mechanical appurtenances required for temporary system shall be installed.
- Contractor shall decommission and demolish existing elemental chlorine and anhydrous ammonia gas disinfection systems. Existing chemical yard piping shall be demolished or abandoned in place as specified in plans. Existing Chlorine Handling Building shall be rehabilitated for permanent use. Adjacent paving changes shall be installed to service permanent upgrades.
- Contractor shall construct new on-site generation of sodium hypochlorite (OSGSH) system and associated chemical yard piping and chemical injection vaults. All permanent electrical and mechanical appurtenances required for permanent system shall be installed.
- Contractor shall perform successful start-up of permanent disinfection system.
- Contractor shall decommission and demolish temporary sodium hypochlorite storage and feed system.
- Contractor completes site construction and initiates site clean-up (5.26 acres).
- Contractor inspects and maintains temporary erosion and sedimentation controls throughout the term of the project.
- Contractor restores disturbed soil areas with loaming and hydro-seeding.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

Temporary erosion and sedimentation control measures will include:

- Silt fencing;
- Rock Berm;
- Mulch Sock;
- Tree protection;
- Inlet protection;
- Stabilized Construction Entrance (SCE);

Silt fencing shall be placed downgradient from the proposed site areas to control and filter any stormwater that may be generated from the proposed project site. Silt fencing shall also be placed around the perimeter of any storm drain inlets located on or downgradient of the proposed project area. No significant runoff from upgradient stormwater flows is anticipated due to the silt fencing. The silt fencing will further serve to control any stormwater generated by the proposed project site before it is allowed to discharge as stormwater-sediment flow from the site. Silt fencing is shown on the project drawings submitted with this application.

Rock berms shall be placed downgradient of proposed site areas to control and filter any concentrated stormwater that may be generated from the proposed project site.

Mulch socks shall be placed at the base of slopes downgradient of the proposed site area to control and filter any overland stormwater that may be generated from the proposed project site.

Tree protection will be placed around the critical root zone (CRZ) of protected trees on the proposed project site. This control measure will prevent erosion near the roots and protect the roots from being damaged by construction activities.

Inlet protection will be placed around any inlets that may contribute to a stormwater system. This control measure will control any stormwater generated by the proposed project site before it is allowed to discharge as stormwater-sediment flow from the site.

A stabilized construction entrance will be installed at the entrance of the construction area to minimize the tracking of sediments from the project site. All access to the construction site will use this SCE.

The area will remain vegetated where possible.

These temporary erosion and sedimentation control measures are indicated on the site drawings and will be put in place before the start of construction and shall remain in place for the duration of site construction activities.

City of Austin

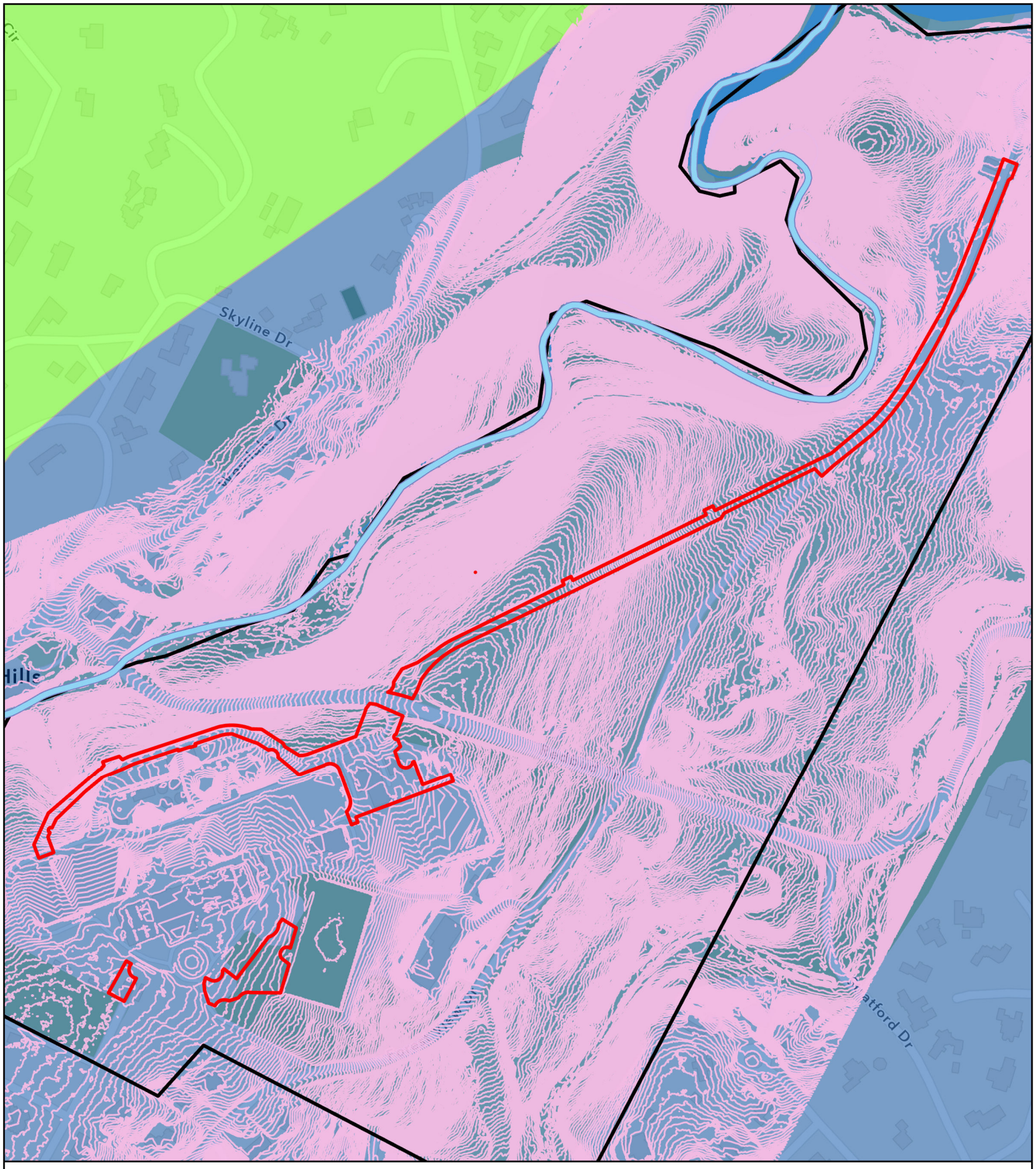
Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

Structural Practices that will be used to limit the runoff discharge of sediments and pollutants from exposed areas of the proposed project include the following practices:

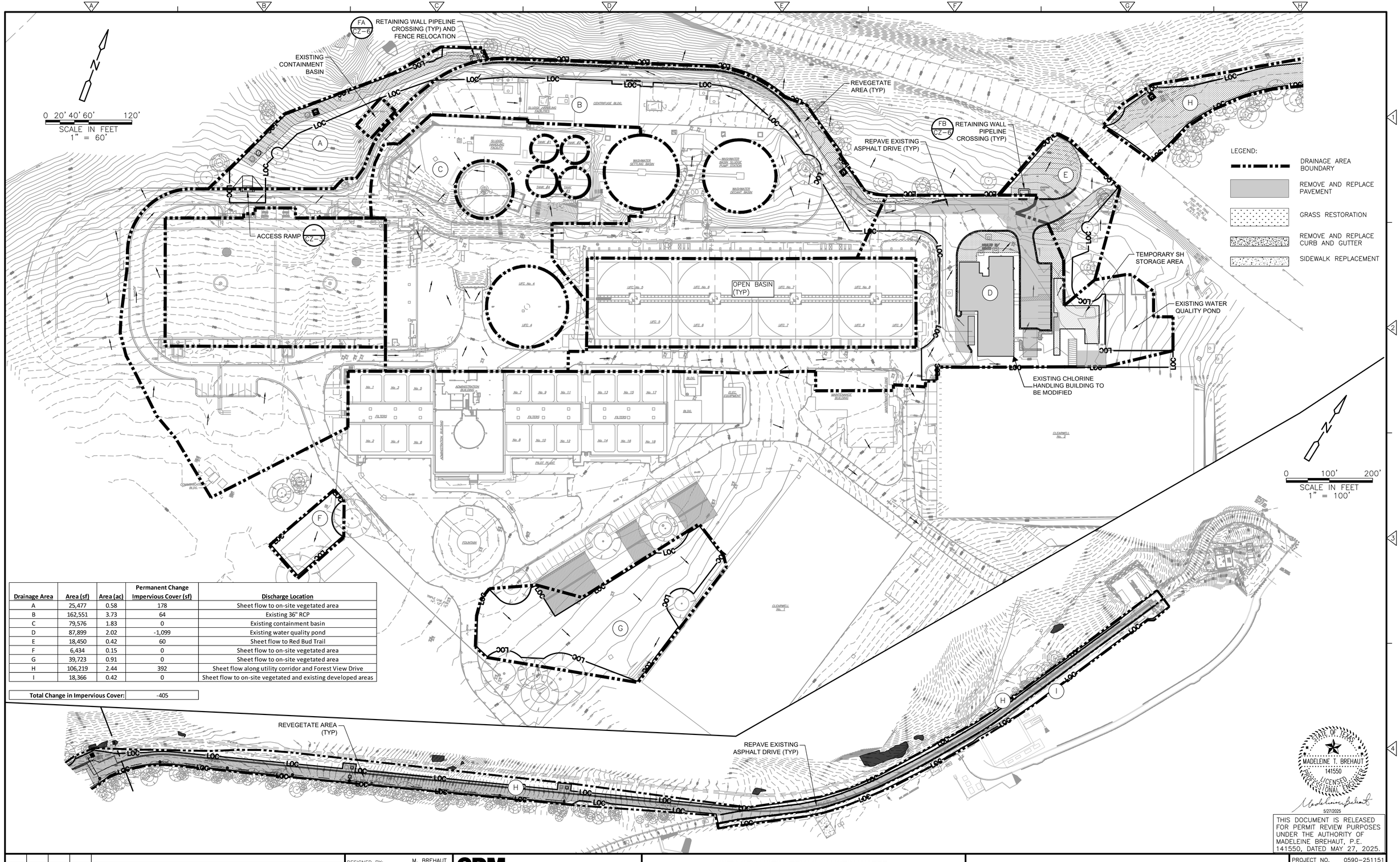
- Silt fencing;
- Rock berm;
- Stabilized Construction Entrance (SCE)

These practices are described in Attachment D, Temporary BMPs and Measures. No structural facilities, such as sedimentation ponds, will be constructed or used during construction activities.



Ullrich WTP
Austin, TX
Drainage

CDM Smith



Drainage Area	Area (sf)	Area (ac)	Permanent Change Impervious Cover (sf)	Discharge Location
A	25,477	0.58	178	Sheet flow to on-site vegetated area
B	162,551	3.73	64	Existing 36" RCP
C	79,576	1.83	0	Existing containment basin
D	87,899	2.02	-1,099	Existing water quality pond
E	18,450	0.42	60	Sheet flow to Red Bud Trail
F	6,434	0.15	0	Sheet flow to on-site vegetated area
G	39,723	0.91	0	Sheet flow to on-site vegetated area
H	106,219	2.44	392	Sheet flow along utility corridor and Forest View Drive
I	18,366	0.42	0	Sheet flow to on-site vegetated and existing developed areas

Total Change in Impervious Cover:	-405

STATE OF TEXAS
MADELEINE T. BREHAUT
141550
LICENSED
PROFESSIONAL ENGINEER
5/27/2025

THIS DOCUMENT IS RELEASED FOR PERMIT REVIEW PURPOSES UNDER THE AUTHORITY OF MADELEINE BREHAUT, P.E. 141550, DATED MAY 27, 2025.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: M. BREHAUT
DRAWN BY: D. SANDEFUR
SHEET CHK'D BY: M. BREHAUT
CROSS CHK'D BY: A. RHAMES
APPROVED BY: M. BREHAUT
DATE: MAY 2025

CDM Smith
8310-1 N Capital of Texas Hwy, Suite 250
Austin, TX 78731
Tel: (512) 346-1100
TBPE Firm Registration No. F-3043

CITY OF AUSTIN, TEXAS - AUSTIN WATER
CIP ID - 5535.008
ALBERT H. ULLRICH WATER TREATMENT PLANT
INHERENTLY SAFER DISINFECTION CONVERSION PROJECT

CIVIL
SITE AREA DRAINAGE MAP

PROJECT NO. 0590-251151
FILE NAME: C007STP.DWG
SHEET NO. C-7

ISSUED FOR PERMIT REVIEW

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

Silt fencing, rock berms, mulch sock, and the stabilized construction entrance shall be inspected once per week and following every significant rainfall event (of at least 0.1 inch or greater). If such inspections reveal that additional measurements are needed to prevent movement of sedimentation to offsite areas, the Contractor shall promptly install additional erosion control devices as may be required.

Silt fences shall be maintained and repaired as follows:

- Remove accumulated sediment once build up reaches 6 inches
- Replace torn or damaged filter fabric
- Make any other repairs or adjustments, as needed, to ensure the silt fencing is functioning properly

Rock berms shall be maintained and repaired as follows:

- Remove accumulated sediment once build up reaches 6 inches
- Repair any loose wire sheathing or reshape as needed
- Make any other repairs or adjustments, as needed, to ensure the rock berm is functioning properly

Mulch socks shall be maintained and repaired as follows:

- Remove accumulated sediment once build up reaches one third of the exposed height of the mulch sock
- Replace torn or damaged filter fabric or gaps between joints of adjacent ends of the socks so that no water flows under or around the sock
- Make any other repairs or adjustments, as needed, to ensure the mulch sock is functioning properly

Inlet protection shall be maintained and repaired as follows:

- Repair any damaged fabric, or patch with a two (2) foot minimum overlap
- Replace any damaged sandbags
- Remove accumulated sediment once build up reaches 3 inches
- Check placement of device to prevent gaps between device and curb

The stabilized construction entrance will also be inspected following precipitation events and stone will be replaced if silt accumulation is found to hinder the role of this BMP to minimize the off-site tracking of sediment.

Note that the inspections of the temporary BMPs will be documents in an inspection report. The inspection reports will document maintenance activities, sediment removal, and modifications to the sediment and erosion controls as necessary.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

Temporary soil stabilization practices will include minimizing soil disturbance during construction and hydroseeding of temporary vegetation in disturbed areas. These temporary soil stabilization practices will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. These interim measures will be inspected, maintained, and will remain in place for the duration of the construction phase of the project. These control measures will be planned and implemented in accordance with the Edwards Aquifer Technical Guidance Manual and the City of Austin Environmental Criteria Manual.

Permanent soil stabilization and site restoration will occur prior to project completion. Permanent soil stabilization measures will include the loaming, hydroseeding, and re-vegetation of the disturbed areas using a native grass mix that is properly monitored and managed until long-term vegetation stabilization has occurred. This permanent soil stabilization will act as a linear vegetation filter strip in the long term.

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.

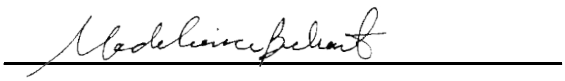
Signature

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: Madeleine Brehaut, P.E.

Date: 5/27/2025

Signature of Customer/Agent



Regulated Entity Name: City of Austin Ullrich Water Treatment

Permanent Best Management Practices (BMPs)

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

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

   ☒ N/A

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

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

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

☒ N/A

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

   ☒ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☐ N/A

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

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

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

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

☐ Design calculations (TSS removal calculations)

☐ TCEQ construction notes

☐ All geologic features

☐ All proposed structural BMP(s) plans and specifications

☒ N/A

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

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

    ☒ N/A

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

    ☒ N/A

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

    ☐ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☒ N/A

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

    ☒ N/A

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

The existing site follows a ridge splitting two watersheds. No offsite upgradient stormwater will flow across areas where proposed improvements will occur. The site will be maintained during construction to limit runoff to surface streams – see the Temporary Stormwater Section for methods and measures.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

Much of the proposed improvements are within the drainage basin of the existing on-site water quality pond. The improvements outside of the pond's drainage basin will result in negligible increases in stormwater flows. The on-site stormwater will be filtered by silt fence, mulch socks, rock berms, hay bales, and inlet protection down gradient of proposed improvements prior to exiting the site. Disturbed areas will be revegetated and stabilized once construction activities are complete.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

The existing water quality pond will continue to serve as the permanent BMP for the site and treat contaminants flowing from its drainage basin. Temporary erosion control measures implemented prior to construction will provide protection to existing surface waters where improvements are proposed outside of the pond's drainage basin.

City of Austin

Albert H. Ullrich Water Treatment Plant Inherently Safer Disinfection Conversion Project

Exception Request

There is a potential for stormwater from the proposed construction area to reach the Little Bee Creek and Town Lake after flowing off-site. Revegetation of all disturbed areas outside of the proposed pond, along with erosion and sediment controls implemented prior to construction will provide protection to all downstream receiving watersheds. These measures will provide sufficient reduction in erosion, runoff velocities, and TSS loading to surface streams.

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

I Nick Burnett,
Print Name

Project Manager,
Title - Owner/President/Other

of Capital Delivery Services,
Corporation/Partnership/Entity Name

have authorized Madeleine Brehaut, P.E.
Print Name of Agent/Engineer

of CDM Smith, 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:

Applicant's Signature

5/29/2025
Date

THE STATE OF Texas §

County of Travis §

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

GIVEN under my hand and seal of office on this 29 day of May, 2025.

DIANA JUSTICE
My Notary ID # 132338601
Expires January 30, 2028

Diana Justice
NOTARY PUBLIC

Diana Justice
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: January 30, 2028

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: City of Austin Ullrich Water Treatment
Regulated Entity Location: 1000 Forest View Drive, Austin, TX 78746-4524
Name of Customer: City of Austin
Contact Person: Madeleine Brehaut, P.E. Phone: 512-652-5358
Customer Reference Number (if issued):CN CN600135198
Regulated Entity Reference Number (if issued):RN RN102137999
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	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	1 Each	$ 500
Extension of Time	Each	$

Signature: Madeleine Brehaut Date: 5/27/2025

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150