Organized Sewage Collection System Plan Checklist

- **Edwards Aquifer Application Cover Page (TCEQ-20705)** ✓
- **General Information Form (TCEQ-0587)** ✓

  Attachment A - Road Map
  Attachment B - USGS / Edwards Recharge Zone Map
  Attachment C - Project Description

- **Geologic Assessment Form (TCEQ-0585)** ✓

  Attachment A - Geologic Assessment Table (TCEQ-0585-Table)
  Attachment B - Stratigraphic Column
  Attachment C - Site Geology
  Attachment D - Site Geologic Map(s)

- **Organized Sewage Collection System Plan (TCEQ-0582)** ✓

  Attachment A - SCS Engineering Design Report
  Attachment B - Justification and Calculations for Deviation in Straight Alignment Without Manholes
  Attachment C - Justification for Variance from Maximum Manhole Spacing
  Attachment D – Calculations for Slopes for Flows Greater Than 10.0 Feet Per Second
  Site Plan
  Final Plan and Profile Sheets

- **Lift Station / Force Main System Application (TCEQ-0624) if applicable** N/A

  Attachment A - Engineering Design Report
  Site Plan
  Final Plan and Profile Sheets

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

  Attachment A - Spill Response Actions
  Attachment B - Potential Sources of Contamination
  Attachment C - Sequence of Major Activities
  Attachment D - Temporary Best Management Practices and Measures
  Attachment E - Request to Temporarily Seal a Feature (if requested)
  Attachment F - Structural Practices
  Attachment G - Drainage Area Map
  Attachment H - Temporary Sediment Pond(s) Plans and Calculations
  Attachment I - Inspection and Maintenance for BMPs
  Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices

- **Agent Authorization Form (TCEQ-0599), if application submitted by agent** ✓
- **Application Fee Form (TCEQ-0574)** ✓

- **Check Payable to the "Texas Commission on Environmental Quality"**
- **Core Data Form (TCEQ-10400)** ✓

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: Silver Creek Expansion						**2. Regulated Entity No.:** 104609276			
3. Customer Name: ZMT CRYSTAL LLC						**4. Customer No.:** T.B.D.			
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):**		1.741 AC	
9. Application Fee:	$650		**10. Permanent BMP(s):**			Partial sedimentation/filtration			
11. SCS (Linear Ft.):	310.00		**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.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
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	(X) 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.

Hunter Shadburne

Print Name of Customer/Authorized Agent



03/05/2025

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.

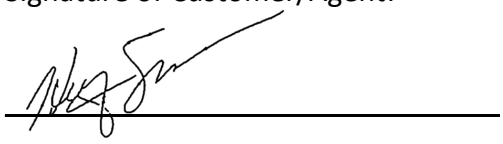
Signature

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: **Hunter Shadburne**

Date: 03/05/2025

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Silver Creek Expansion
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: Zane Alam
   Entity: ZMT CRYSTAL, LLC.
   Mailing Address: 805 Beardsley Ln
   City, State: Austin, TX Zip: 78759
   Telephone: 847-630-2623 FAX: _____
   Email Address: mtuhee2@gmail.com

8. Agent/Representative (If any):

   Contact Person: Hunter Shadburne
   Entity: Austin Civil Engineering, Inc.
   Mailing Address: 9501B Menchaca Rd #220
   City, State: Austin, Tx Zip: 78748
   Telephone: 512-744-5213 FAX: _____
   Email Address: TeamH@austincivil.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.

    4101 W Parmer Ln, Austin, TX. 78727

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: T.B.D.

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.

NORTH
SCALE: N.T.S.



EXHIBIT

ROAD MAP

4101 W PARMER LN - SITE PLAN

4101 W PARMER LN

AUSTIN, TX. 78727

N.T.S.

AUSTIN CIVIL ENGINEERING, INC.

TBPE FIRM # F-001018

9501 B MANCHACA RD, SUITE. 220

AUSTIN, TX 78748

PH: (512) 306-0018

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PFLUGERVILLE WEST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

Edwards Aquifer Transition Zone

Edwards Aquifer Recharge Zone

PROJECT SITE

ROUND ROCK

AUSTIN

Pflugerville

Mapped, edited, and published by the Geological Survey

Control by USGS and NOS/NOAA

Topography by photogrammetric methods from aerial photographs
taken 1967. Field checked 1968. Revised from aerial photographs
taken 1985. Field checked 1986. Map edited 1987

Projection and 10,000-foot grid ticks: Texas
coordinate system, central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983
move the projection lines 18 meters south and
28 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence lines

Red tint indicates areas in which only landmark buildings are shown

UTM GRID AND 1987 MAGNETIC NORTH
DECLINATION AT CENTER OF MAP
DIAGRAM IS APPROXIMATE

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

3097–243

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

PFLUGERVILLE WEST, TEX.
30097–D6–TF–024
1987
DMA 6444 I NW–SERIES V882

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1987

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program

Regulatory Zones

30 TAC Chapter 213- Edwards Aquifer
Effective March 1990

This map was produced by the Groundwater Planning and Assessment Team of the Texas Commission on Environmental Quality to detail the boundaries of the regulatory zones of the Edwards Aquifer Protection Program, as described in Texas Administrative Code Title 30, Part 1, §213.3. No other claims are made to the accuracy or completeness of the data or to its suitability for a particular use. For more information about the Edwards Aquifer Protection Program, please contact the TCEQ Regional Offices in San Antonio or Austin. Printed June 2006.

General Information Form

Attachment C: Project Description

The site is 1.741 acres and is described as Lot 6 Blk T Milwood Sec 6 Resub of Lot 37 according to the plat recorded in document Nº 199900219 of the Official Public Records of Travis County. The property was developed according to the site plan known as Silver Creek Shopping Center II approved for the city of Austin. The tract is located within the City of Austin Full Purpose Jurisdiction. The associated site plan was approved on August 05, 2005, Case Number: SP-05-1262C. The new site plan proposes a 3,546 sf (41.25'x85.96') two story addition, Additional parking spots, fire lane, water lines and wastewater line to service the new proposed building and new patio. Zoning and intensity have not changed, and the new building will be used for offices and a small restaurant.

We propose to demolish an approximate of 8,450 S.F. of parking and drives and the construction of 3,546 S.F. of building, 6,931 S.F. of drives and parking area, and 1,101 S.F. of driveway. The total proposed impervious cover for the site is 1.224 (70.32%). The total limits of construction for the project are 0.61 acres.

Representative slopes on the tract range from 2% to 8%, sloping from north to south. The lot to be developed receives runoff from offsite drainage areas identified as Offsite Dev. DA 1 (0.368acres), Offsite Dev. DA 2 (0.295acres) and Offsite Dev. DA 3 (0.066acres) with 68.02%, 44.96% and 0.00% impervious cover respectively. The total offsite drainage is 8.21 CFS of runoff for a return period of 100 yr.

The runoffs of the existing developed drain via sheet flow from Northwest to Southeast to discharge into an existing Inlet and 10' culvert and then discharges in the existing Partial Sedimentation/filtration pond. The offsite runoffs from adjacent properties and Parmer Lane majority come from north and are routed through the site for discharges into the existing Partial Sedimentation/filtration pond.

The existing Partial Sedimentation- Filtration Pond will be used as the BMP for this site. This pond will treat 1.22 acres of the developed on-site area and 0.729 off-site area. The total water quality volume required for this area is 6,737 cubic feet. The proposed BMP will overtreat according to TCEQ requirements, providing a water quality volume of 8,724 cubic feet.

Kathleen Hartnett White, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 25, 2005

Mr. Brad Laughlin
Silver Creek II, L.P.
2615 Harris Blvd.
Austin, Texas 78703

Re: Edwards Aquifer, Travis County
NAME OF PROJECT: Silver Creek Shopping Center; 4101 West Parmer Lane; Austin, Texas
TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program ID No. 05050601

Dear Mr. Laughlin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the Austin Regional Office by Griffin Engineering Group, Inc. on behalf of Silver Creek II, L.P. on May 6, 2005. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer protection plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 1.74 acres. It will include the construction of one retail building, along with associated parking and drives. The impervious cover will be 1.13 acres (64.9 percent). Project wastewater will be disposed of by conveyance to the existing Walnut Creek Wastewater Treatment Plant owned by the City of Austin.

PERMANENT POLLUTION ABATEMENT MEASURES

A sedimentation/filtration basin (water quality pond) will be constructed to treat stormwater runoff. The individual treatment measures will consist of a 850 square foot sedimentation chamber, and a 870 square foot sand filtration chamber. The total water quality volume provided in the basin will be 10,082 cubic feet. The entire water quality pond will have a clay liner. The approved measures meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

GEOLOGY

According to the geologic assessment included with the application, the Edwards Limestone underlies the site. There were no sensitive features identified on the site. The Austin Regional Office site investigation of July 20, 2005, revealed that the site is generally as described by the geologic assessment.

SPECIAL CONDITIONS

I. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 4 below.

II. Intentional discharges of sediment laden stormwater during construction are not allowed. If dewatering excavated areas and/or areas of accumulated stormwater becomes necessary, the discharge shall be filtered through appropriately selected temporary best management practices. These may include vegetative filter strips, sediment traps, rock berms, silt fence rings, etc.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the Austin Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the

county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

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

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

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

6. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. The water quality pond shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

7. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

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

9. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the Austin Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

10. No wells exist on the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

11. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.

12. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

13. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

14. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the Austin Regional Office within 30 days of site completion.

15. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

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

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

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

If you have any questions or require additional information, please contact Ms. Heather L. Beatty, P.G., of the Edwards Aquifer Protection Program of the Austin Regional Office at (512) 339-2929.

Sincerely,

For Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/hlb

Enclosures: Deed Recordation Affidavit, TCEQ-0625
Change in Responsibility for Maintenance on Permanent BMPs, TCEQ-10263

cc: Mr. Greg Griffin, P.E., Griffin Engineering Group, Inc.
The Honorable Samuel T. Biscoe, County Judge, Travis County
Mr. Joseph G. Pantalion, P.E., Director, Watershed Protection & Development Review Department, City of Austin
Central Records, TCEQ Information Resources Division, Austin

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: M. Kevin Denson Telephone: 512-442-1122

Date: August 16, 2024 Fax: 512-442-1181

Representing: Terracon Consultants, Inc. (Name of Company and TBPG or TBPE registration number)

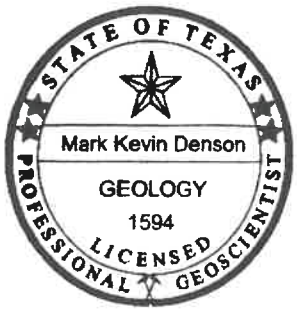
Signature of Geologist:



Regulated Entity Name: Shopping Center, 4101 Parmer Lane, Austin, Travis County, Texas

Project Information

1. Date(s) Geologic Assessment was performed: August 8, 2024
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 (TcA)	D	0-1
Eckrant very stony clay (TaD)	D	0-1

** 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" = _'
   Site Geologic Map Scale: 1" = 20'
   Site Soils Map Scale (if more than 1 soil type): 1" = 125 '

9. Method of collecting positional data:

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

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.

11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

12. ☐ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☒ Geologic or manmade features were not discovered on the project site during the field investigation.

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.

14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

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

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

Administrative Information

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

Attachment A

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Shopping Center, 4101 Parmer Lane, Austin, Travis County, Texas																
LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
NONE IDENTIFIED																				

* DATUM NAD27

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Natural Resource Conservation Commission's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

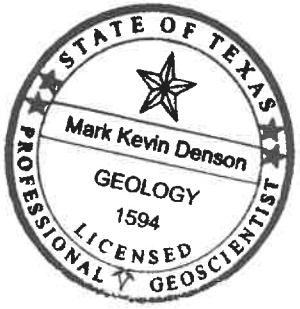
My signature certifies that I am qualified as a geologist as defined by 30 TAC 213

Mark Kevin Denson

Date 8/16/2024

TNRCC-0585-Table (Rev. 5-1-02)

Sheet 1 of 1



Attachment B
Stratigraphic Column
Shopping Center
4101 Parmer Lane
Austin, Travis County, Texas

HYDROGEOLOGIC SUBDIVISION	FORMATION	THICKNESS (feet)	LITHOLOGY
Edwards Aquifer	Edwards Limestone	50	Mudstone to packstone, crystalline limestone, wackestone

Source: Senger, Collins and Kreitler, 1990

8/16/2024

STATE OF TEXAS
Mark Kevin Denson
GEOLOGY
1594
LICENSED
PROFESSIONAL GEOSCIENTIST

ATTACHMENT C
SITE-SPECIFIC GEOLOGY

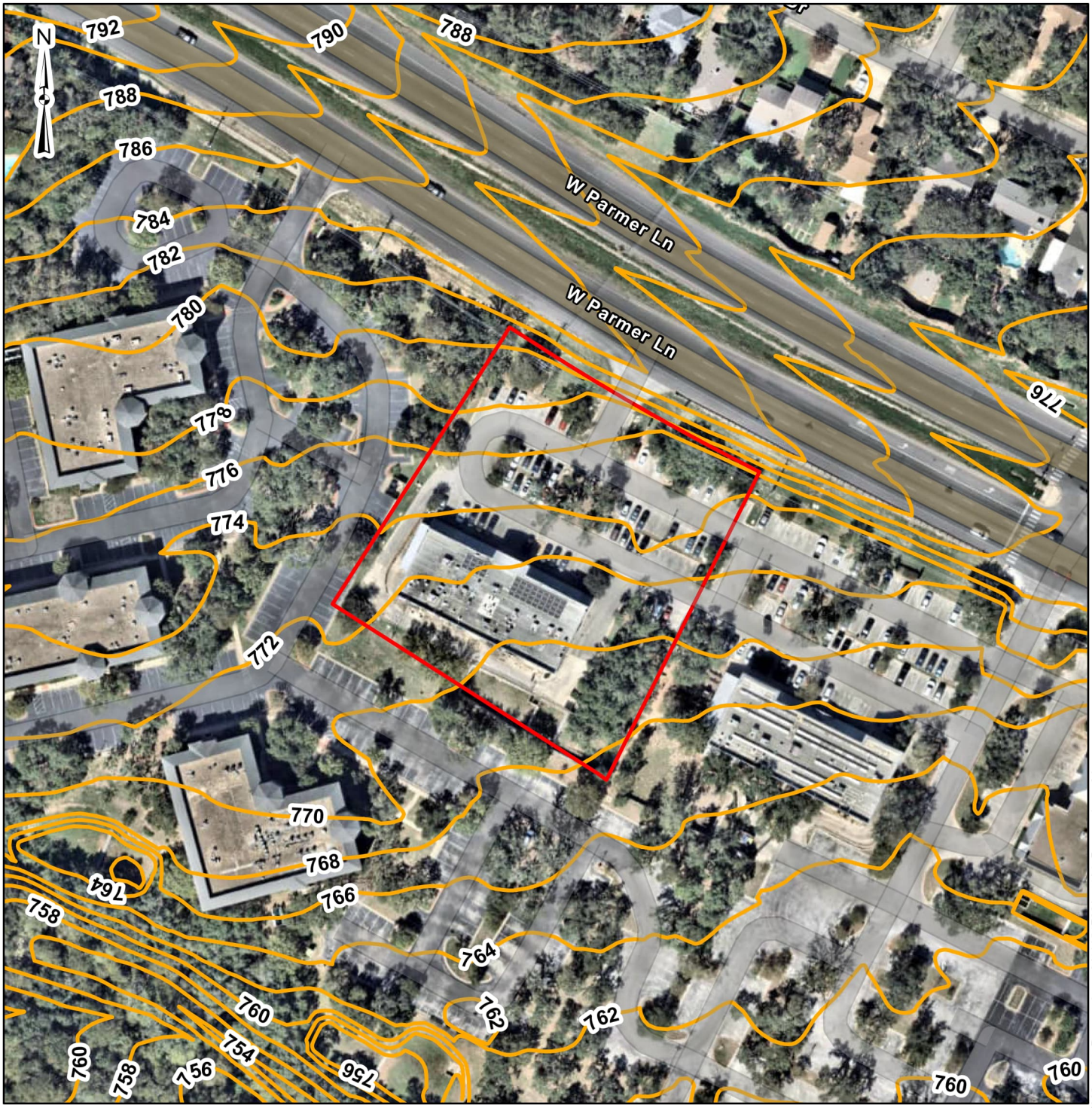
The Geologic Assessment (GA) of the Shopping Center site was performed by Kevin Denson, P.G., of Terracon on August 8, 2024. The approximate 1.741-acre property is located at 4101 Parmer Lane in Austin, Travis County, Texas. The site is developed with an existing shopping center and associated driveways and parking areas.

Exhibit 1 (attached) is a site location map depicting the site in relation to the surrounding area. The areas immediately surrounding the site are a mix of residential, commercial, and undeveloped properties. The site is characterized as gently to steeply sloping to the south and east. Site elevation ranges from about 781 to 767 feet above mean sea level (msl).

The surficial geologic unit present at the site has been identified as the Edwards Limestone. The Edwards consists of massive to thin bedded limestones and dolostones. The formation is characterized by honeycomb textures, collapse breccias and cavern systems, which account for most of the significant porosity within the strata that compose most of the aquifer. Exposure of the geologic unit at the site is typically obscured by soil. Table 1 (attached) is a stratigraphic column prepared for the site. Figure 3 (attached) is a geologic map of the site.

The site is located entirely within the recharge zone boundary of the Edwards Aquifer, and the recharge zone boundary is located approximately 2,500 feet southeast of the site. No faulting was observed on the site and the nearest mapped fault is located approximately 900 feet west-northwest of the site. The fault, which trends toward the northeast, is associated with the Balcones Fault zone which represents the dominant structural trend in the vicinity of the site. The completed Geologic Assessment form is attached.

Based on the lack of significant sensitive recharge features observed on the site, the potential for fluid movement to the Edwards aquifer beneath the project is considered low.



Approximate Project Boundary

COA 2-ft Topography

0 62.5 125 250 Feet

DATA SOURCES:
nearmap, Williamson County TX, Maxar, Esri Community Maps Contributors, Austin Community College, City of Austin, County of Williamson, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Project No.:	96247380
Date:	Aug 2024
Drawn By:	RC
Reviewed By:	KD

terracon

5307 Industrial Oaks Blvd. - #160 Austin, TX 78735

PH. (512) 442-1122 terracon.com

Site Specific Topography

4101 Parmer Lane - GA

4101 Parmer Lane, Austin, Travis County, Texas

Exhibit

1.0

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Approximate Project Boundary

Eckrant and Speck soils, 0 to 2 percent slopes (TcA)

Eckrant very stony clay, 5 to 18 percent slopes (TaD)

0 62.5 125 250 Feet

DATA SOURCES:
nearmap, Williamson County TX, Maxar, Esri Community Maps Contributors, Austin Community College, City of Austin, County of Williamson, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Project No.:	96247380
Date:	Aug 2024
Drawn By:	RC
Reviewed By:	KD

Terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

USDA Site Soil Map

4101 Parmer Lane - GA

4101 Parmer Lane, Austin, Travis County, Texas

Exhibit

2.0

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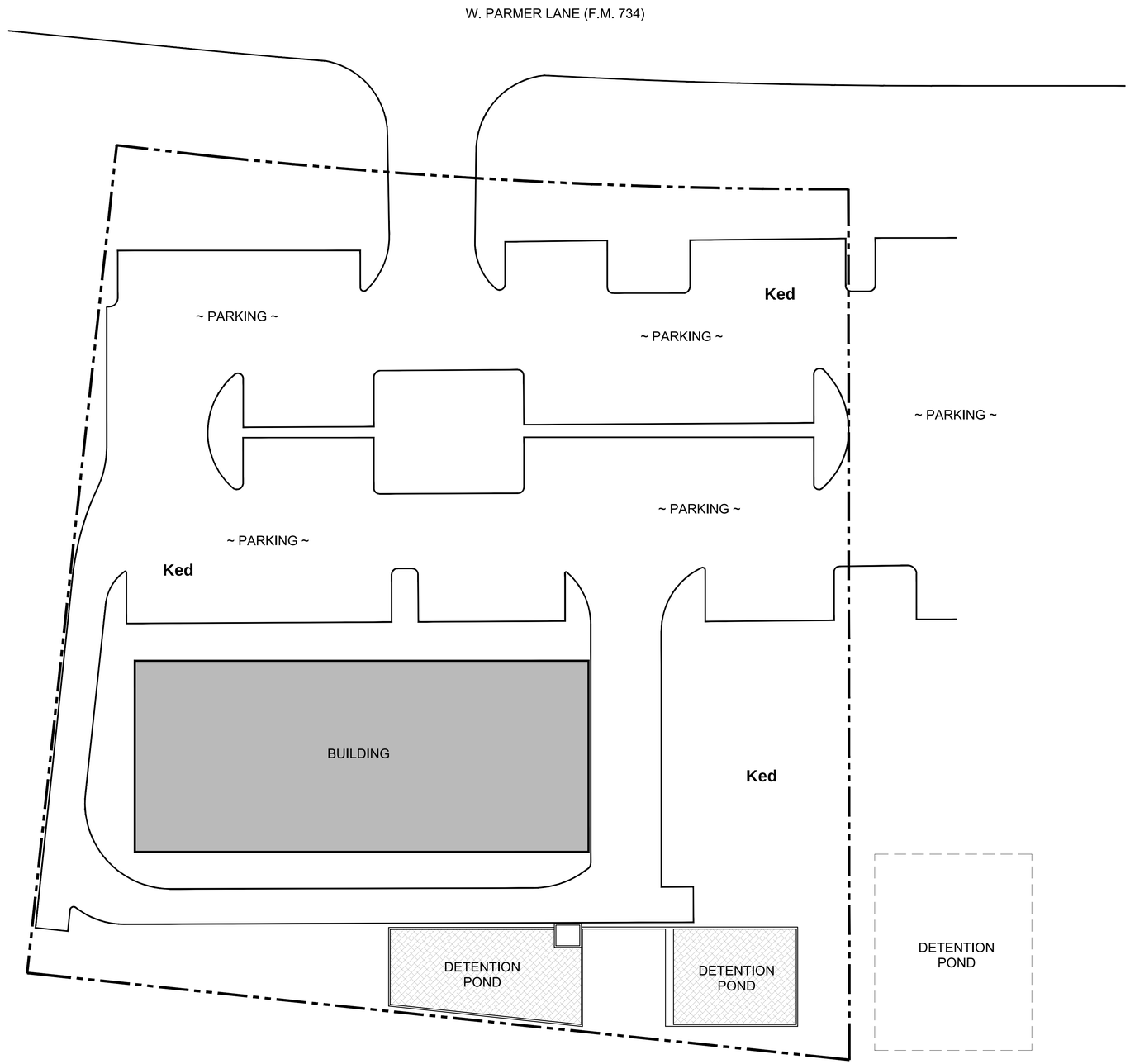




20 0 10 20

APPROXIMATE SCALE IN FEET

STATE OF TEXAS
Mark Kevin Denson
GEOLOGY
1594
LICENSED
PROFESSIONAL GEOSCIENTIST

LEGEND

Site Boundary

Ked Edwards Formation

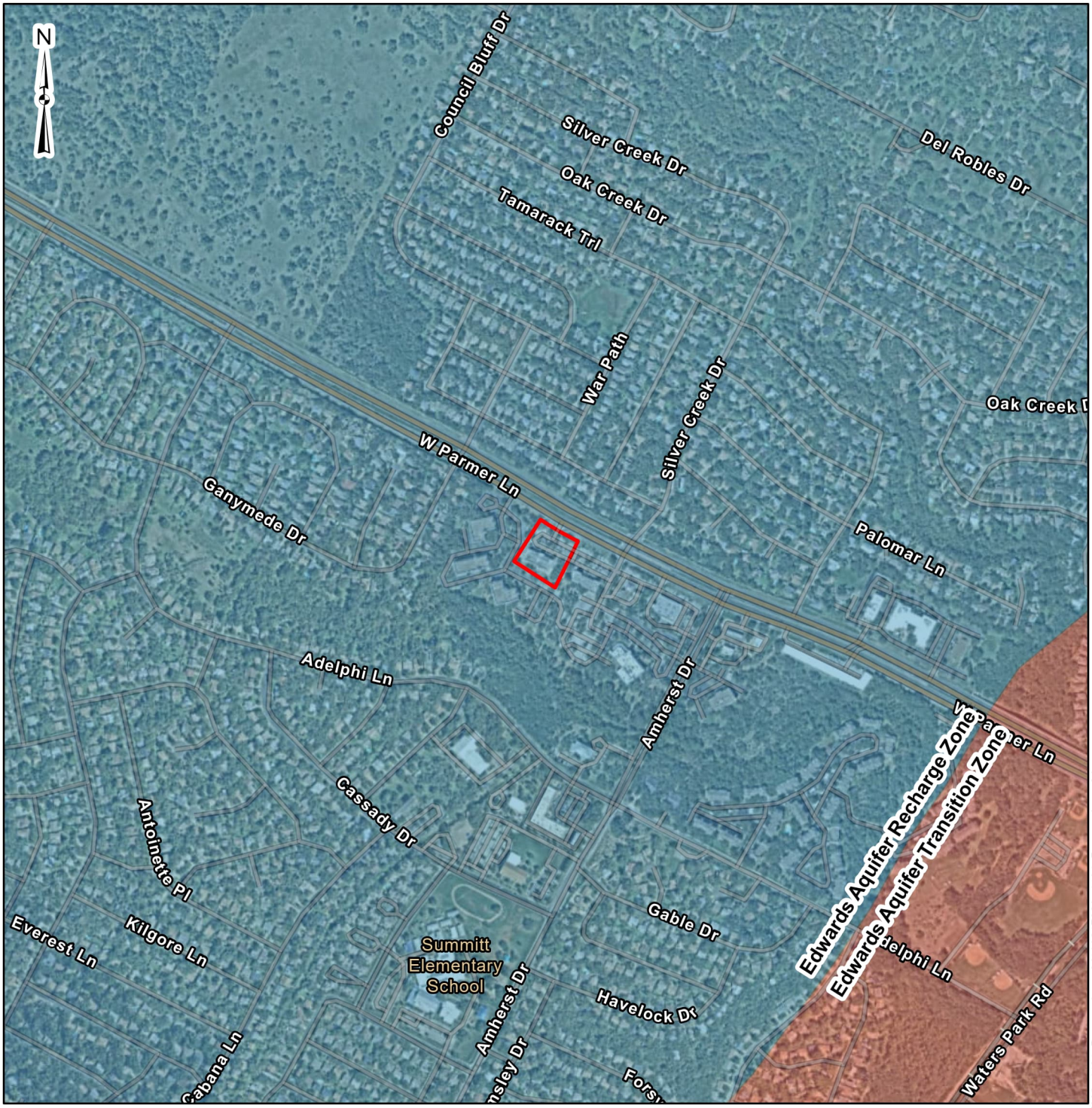
Project Mngr:	KD
Drawn By:	ATX Drafting
Checked By:	KD
Approved By:	KD
Project No.	96247380
Scale:	AS SHOWN
File No.	96247380
Date:	Jul 26, 2024

Terracon
Consulting Engineers and Scientists
5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735
PH. (512) 442-1122 FAX (512) 442-1181

SITE GEOLOGIC MAP

Shopping Center
4101 W. Parmer Lane
Austin, Travis County, Texas

EXHIBIT 3



Approximate Project Boundary

TCEQ Edwards Aquifer Zone Data

Edwards Aquifer Recharge Zone

Edwards Aquifer Transition Zone

Miles

0 0.13 0.25 0.5

DATA SOURCES:
nearmap, Williamson County TX, Maxar, Esri Community Maps Contributors, Austin Community College, City of Austin, County of Williamson, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS

Project No.:	96247380
Date:	Aug 2024
Drawn By:	RC
Reviewed By:	KD

Terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

Edwards Aquifer Zones

4101 Parmer Lane - GA

4101 Parmer Lane, Austin, Travis County, Texas

Exhibit

4.0

N:\GIS\Projects\2024\96247380_4101_Parmer_LaneGA\Maps\96247380_4101_Parmer_LaneGA_4101_Parmer_LaneGA.aprx

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: Silver Creek Expansion

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: Zane Alam
   Entity: ZMT CRYSTAL, LLC.
   Mailing Address: 805 Beardsley Ln
   City, State: Austin, Tx Zip: 78759
   Telephone: 847-630-2623 Fax: _____
   Email Address: mtuhee2@gmail.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: Hunter Shadburne
   Texas Licensed Professional Engineer's Number: 74382
   Entity: Austin Civil Engineering
   Mailing Address: 9501B Menchaca Rd #220
   City, State:Austin, Tx Zip: 78748
   Telephone:956-756-4419 Fax:737-471-1451
   Email Address:TeamH@austincivil.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	11,088 gallons/day
_____% Industrial	_____ gallons/day
_____% Commingled	_____ gallons/day

   Total gallons/day: 11,088

6. Existing and anticipated infiltration/inflow is 30 gallons/day. This will be addressed by: This is incluided in the above 11,088 gal/day.

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 07/27/2005. A copy of the approval letter is attached.
   ☐ The WPAP application for this development was submitted to the TCEQ on _/__/__, 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)*
6	310.10	SDR 26 PVC	ASTM D2241

Total Linear Feet: 310.10

(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 Walnut Creek WWTP (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?*
1	11 Of 29	0+18.51	MH
1	11 Of 29	1+54.29	MH
1	11 Of 29	3+16.87	MH
	Of		
	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.

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]**	of
Manhole, showing inverts comply with 30 TAC §217.55(l)(2) **[Required]**	11 of 29
Alternate method of joining lateral to existing SCS line for potential future connections **[Required]**	of
Typical trench cross-sections **[Required]**	21 of 29
Bolted manholes **[Required]**	of
Sewer Service lateral standard details **[Required]**	21 of 29
Clean-out at end of line **[Required, if used]**	of
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]**	of

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: TBD

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:

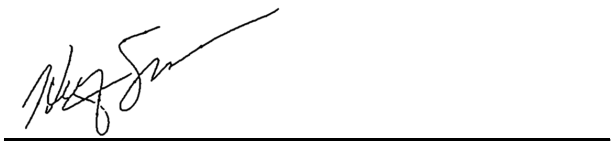
Print Name of Licensed Professional Engineer: 74382

Date: 03/05/2025

Place engineer's seal here:



Signature of Licensed Professional Engineer:



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)

AUSTIN CIVIL ENGINEERING

February 24, 2025

Austin Water Utility
Utility Development Services Division
625 East 10th Street, Suite 715
Austin, Texas 78701

ENGINEERING CALCULATIONS

Project Name: Silver Creek Expansion
Project Address: 4101 W Parmer Ln, Austin, TX 78727

WATER & WW FLOW CALCUALTIONS: THE OFFICES AT WILLIAM CANNON

Waste Water Flow per COA UCM 2.9.4 Water Flow per COA UCM 2.9.2

LUE	10.1	units		1 LUE = 3.5 persons		Pop	35.35	persons
WASTE WATER FLOW			Qpd = [(18+0.5 x (0.0206 x F)) / (4+0.5 x (0.0206 x F))] x F					
			F = (70 gal/person/day) x (pop/1440min/day)					
			Qpw = Inflow / Infilt + Qpd					
			Inflow / Infiltration:	750	gal/day/acre			
Peak Dry Weather Flow			**Peak Wet Weather Flow**			**Minimum Sewer Line Capacity**		
F	1.72	gpm	Area	0.010	acre	Qpdmin (65% Qcap > Qpd)		
							11.9	gpm
						Qpwmin (85% Qcap > Qpw)		
							9.1	gpm
Qpd	7.7	gpm	Qpw	7.7	gpm	Qmin	11.9	gpm
DOMESTIC WATER FLOW								
Avg. Day Demand =	200	gal/person/day				Q avg	4.9	gpm
Peak Day Demand =	530	gal/person/day				Q peak day	13.0	gpm
Peak Hour Demand =	900	gal/person/day				Q peak hr	22.1	gpm

Hunter Shadburne
Austin Civil Engineering, Inc.

AUSTIN CIVIL ENGINEERING

ENGINEERING REPORT

for

SILVER CREEK EXPANSION

February 24, 2025

Prepared for:
Concur
7811 Parliament Pl
Austin, TX 78759

Prepared By:
Austin Civil Engineering, Inc.
TBPE Firm No. F-1018
9501B Menchaca Road, Suite. 220
Austin, TX 78748
512-306-0018 ph
512-306-0048 fx

AUSTIN CIVIL ENGINEERING

ENGINEERING REPORT FOR:
Silver Creek Expansion
4101 W Parmer Ln,
Austin, TX 78727

Please accept this Engineering Report on behalf of Austin Civil Engineering, Inc. for **Silver Creek Expansion** Site Plan project. This site plan consists of 1.741 acres located at 4101 W Parmer Ln, Austin Tx. The legal description is lot 6, block T of the resubdivision of lot 37, block T Milwood Section Six, a Subdivision of record in document N° 199900219 of the official public records of Travis County. **(See Exhibits: Plat)**.

Site:
The property was developed according to the site plan known as Silver Creek Shopping Center II approved for the city of Austin. The tract is located within the City of Austin Full Purpose Jurisdiction. The associated site plan was approved on August 05, 2005, Case Number: SP-05-1262C. **(See Aerial Map).**

The new site plan proposes a 3,546 sf (41.25'x86') two story addition, Additional parking spots, fire lane, water lines and wastewater line to service the new proposed building and new patio. Zoning and intensity have not changed, the detention ponds have been sized to account for the fully developed conditions. **(See Site plan).**

Zoning:
This property is subject to zoning regulations established by the Planning & Zoning Department of Austin City and classified with a GR-CO lot.

The Community Commercial District (GR) is specifically designed for offices or other commercial use that serves neighborhood and community needs and that generally is accessible from major traffic ways. This Zoning permits 75% of Maximum Building Coverage and 60 ft of Maximum Height.

The purpose of the Conditional Overlay Combining District (CO) combining district is to modify use and site development regulations to address the specific circumstances presented by a site. Use and site development regulations imposed by a CO combining district must be more restrictive than the restrictions otherwise applicable to the property.

The lots across W Parmer Ln and adjacent to the subject site are zoned Single Family Residence (SF-2), limited Office (LO) and Community Commercial (GR-CO). No change in zoning is proposed for this project. The proposed development for this project is permitted within this district. (**See City Limits and Zoning Map)**.

AUSTIN CIVIL ENGINEERING

Drainage:
The existing elevation ranges from 768 ft to 779 ft according to the previously approved grading plan and contour data from the COA property profile tool. **(See Exhibits: Contours Exhibit).**

The existing topography is mostly mildly sloping. The runoffs of the existing developed drain via sheet flow from Northwest to Southeast to discharge into an existing Inlet and 10' curb inlet, and then discharges in the existing Partial Sedimentation/filtration pond.

The offsite runoffs from adjacent properties and Parmer Lane majority coming from north and routed through the site for discharges into the existing Partial Sedimentation/filtration pond. **(See Existing and proposed development Drainage)**.

Water Quality:
Water Quality for this addition will be provided by an existing Sedimentation/filtration Pond as built according to the site plan known as Silver Creek Shopping Center II, approved on August 05, 2005, Case Number: SP-05-1262C. A Variance request is being submitted for this site plan for § 25-8-213 - Water Quality Control Standards as the goal of this project is to keep using the existing sedimentation/filtration basin. We have prepared updated the water quality calculations to account for the new site modifications and the existing water quality basin has enough capacity to treat the contributing flows.

Watershed and Detention:
The property is located within the Walnut Creek Watershed classified by the City of Austin Watershed Regulation areas as Suburban. (**See Watershed Map attached**).

Therefore, the maximum impervious cover allowed is 80% of the net area of the site according to the Watershed Protection Ordinance.

The detention pond is sized to hold stormwater runoff rates below the predeveloped runoff for all storm events 2, 10, 25 and 100-year based on NOAA ATLAS 14 stormwater precipitation. **(See Existing and proposed development Drainage).**

Edwards Aquifer:
This property is located inside the Edwards Aquifer Recharge zone. Previously approval was obtained for a water pollution abatement plan, and along with this new site plan a WPAP-Mod will be processed, to indicate all changes to the TCEQ department. (**See Edwards Aquifer Map**).

Floodplain:
According to the FEMA Map 48453C0265K, dated January 6, 2016, there are **no** FEMA-designated special flood hazard areas on any portion of the site. **(See FEMA Map)**.

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Erosion/ Sedimentation Control:

Erosion and Sedimentation controls will be provided by a silt fence running along the boundaries of the property, stabilized construction entrance, trees will be protected by fences, a triangular sedimentation dike will be added along the proposed access roads.

Water/Wastewater:

Water supply for this project is being provided by Austin Water via an existing 12" D.I. waterline located to the north of the property.

Wastewater services will be provided by Austin Water via an existing 6" PVC wastewater line located at the back of the existing building.

(See Existing utility plan and Water/Wastewater exhibit).

Access:

The site will have access from Parmer Lane via the existing 30' driveway. As mentioned in easement document 1999073783, The respective Owners of Tracts One through Nine and their heirs, successors, assigns, agents, employees, contractors, guests, and invitees, shall each have nonexclusive right of vehicular and pedestrian ingress and egress over and across the other Tracts in order to gain access to facilities located on the other Tracts and to the public rights-of-way adjacent to the property.

16. Joint access will be provided to Lots 1, 3, 4, 7 and 8, from Parmer Lane.

(See sheet 03 of plat).

Certification:

I hereby certify that this report complies with the development ordinance, as amended, and the information contained hereon is true and correct to the best of my knowledge.

If you have any questions regarding this site plan submittal, please do not hesitate to contact our office. Thank you for your expeditious review of this project.

Respectfully,

Hunter Shadburne
Austin Civil Engineering, Inc

AUSTIN CIVIL ENGINEERING

DRAINAGE REPORT

for

SILVER CREEK EXPANSION

February 24, 2025

Prepared for:
Concur
7811 Parliament Pl
Austin, TX 78759

Prepared By:
Austin Civil Engineering, Inc.
TBPE Firm No. F-1018
9501B Menchaca Road, Suite. 220
Austin, TX 78748
512-306-0018 ph
512-306-0048 fx

AUSTIN CIVIL ENGINEERING

METHODOLOGY

HYDROLOGY MODEL:

Existing and developed hydrology models were created in HEC-HMS, v.4.12. A 24-hour frequency storm was applied to the meteorological models for the 2, 10, 25, and 100-year storm events. The model was run over a 24-hour period with a computational time interval of 5 minutes. Subbasins utilized an SCS Curve Number Loss Method and SCS Unit Hydrograph Transform Method. See below for specific model input data.

A. Meteorological Model

Frequency storms with the following parameters were used to model storm events:

HEC-HMS Meteorological Model Parameters

Probability	*2-yr = 50%, 10-yr = 10%, 25-100-yr = Other*
Input Type	*Partial Duration*
Output Type	*Annual Duration (only applicable for 2-10-yr)*
Intensity Duration	*5 Minutes*
Storm Duration	*1 Day*
Intensity Position	*50%*
Storm Area	*(Blank if less than 10 mi²)*
Curve	*Uniform for all subbasins*

Partial-duration precipitation depths are per the Depth-Duration-Frequency Estimates for Austin, Texas, according to NOAA Atlas 14, Volume 11, Version 2. See the table below:

Precipitation Depths (in) per Recurrence Interval

Duration	***2-YR***	***10-YR***	***25-YR***	***100-YR***
5-min	*0.52*	*0.79*	*0.96*	*1.26*
15-min	*1.05*	*1.57*	*1.92*	*2.52*
60-min	*1.94*	*2.91*	*3.58*	*4.70*
2-hr	*2.39*	*3.72*	*4.68*	*6.40*
3-hr	*2.65*	*4.23*	*5.4*	*7.56*
6-hr	*3.11*	*5.08*	*6.57*	*9.41*
12-hr	*3.57*	*5.86*	*7.6*	*10.9*
24-hr	*4.06*	*6.65*	*8.59*	*12.23*

B. Land Use & Curve Numbers

In existing conditions, the soils are primarily hydrologic soil group D, as per the USDA Web Soil Survey. The soils map and data have been included in Appendix B.

The curve numbers were selected from Urban Hydrology for Small Watersheds[1] based on hydrologic soil groups and aerial maps. See table below. Curve numbers were assessed independently from impervious cover.

Runoff Curve Numbers

Cover Type	*Hydrologic Condition*	*Hydrologic Soil Group*	*Curve Number*
Pasture	*Good*	*D*	*80*
Woods-grass combination	*Good*	*D*	*79*
Meadow	*Good*	*D*	*78*

Existing impervious cover was determined from the topographic survey. Proposed impervious cover was estimated from the proposed layout. Impervious cover was calculated as a percent of the total drainage basin. Curve number and impervious cover percent were loss inputs for subbasins in the model.

C. Time of Concentration

All time of concentration calculations were generated using SCS methodology provided in Urban Hydrology for Small Watersheds[2] for sheet, shallow concentrated, and channel flow. A maximum of 100 feet was used for sheet flow calculations. Lag times were calculated as 60 percent of the time of concentration. Lag times were transformed inputs for subbasins in the model.

D. Reservoir

The detention pond was modeled using outflow structures with an elevation-discharge method. Initial conditions were elevations set to the bottom of pond elevation for detention facilities. The model assumed no tailwater conditions.

[1] *Natural Resources Conservation Service, Conservation Engineering Division. 1986. Urban Hydrology for Small Watersheds. Technical Release 55. U.S. Department of Agriculture. https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1044171.pdf*

EXISTING CONDITIONS:

OVERVIEW

In the existing conditions, a portion of off-site drainage is flowing through the site. In general, the site drains from the north and towards the south. (**See Existing Hydrology Map attached)**

EXISTING DRAINAGE BASIN MODEL

HEC-HMS Input Summary

HEC-HMS Input Summary						
BASINS	**Area (ac)**	**Area (mi^2)**	**IC Area (ac)**	**% IC**	**CN**	**T_L (min)**
EXISTING HYDROLOGY						
PRE-DEV DA 1	0.643	0.001004	0.463	72.06%	5.0	3.0
PRE-DEV DA 2	0.317	0.000496	0.266	83.81%	5.0	3.0
PRE-DEV DA 3	0.455	0.000692	0.417	94.19%	5.0	3.0
PRE-DEV DA 4	0.33	0.000520	0.006	1.81%	6.4	3.8
OFF-S PRE DA 1	0.368	0.000575	0.250	67.27%	6.1	3.7
OFF-S PRE DA 2	0.295	0.000461	0.113	43.24%	6.8	4.1
OFF-S PRE DA 3	0.066	0.000103	0.000	0.00%	5.0	3.0

Results

HYDROLOGIC ELEMENT	**PEAK DISCHARGE PER 24-HOUR STORM EVENT (cfs)**			
	2-YR	**10-YR**	**25-YR**	**100-YR**
PRE-DEV DA 1	3.06	4.85	6.03	8.03
PRE-DEV DA 2	1.59	2.47	3.04	4.01
PRE-DEV DA 3	2.31	3.52	4.31	5.66
PRE-DEV DA 4	1	1.91	2.53	3.55
OFF-S PRE DA 1	1.6	2.56	3.19	4.26
OFF-S PRE DA 2	1.09	1.84	2.34	3.18
OFF-S PRE DA 3	0.22	0.42	0.55	0.77
PRE-DEV POA-1	**8.87**	**12.58**	**14.63**	**16.89**

DEVELOPED CONDITIONS:

OVERVIEW

In the developed conditions the existing offsite and developed onsite runoff will be routed via sheet flow to a proposed pond inflow structure to discharge into a proposed detention pond and developed flow rates will not exceed the existing flow rates. See the attached Developed Drainage Area plan sheet within the plan set. Modifications were made to the splitter box and the pond outlet structure to account for the increased flows from the new NOAA ATLAS 14 runoff amounts.
(**See the Developed Hydrology Map attached)**

DEVELOPED DRAINAGE BASIN MODEL

HEC-HMS Input Summary

_HEC-HMS Input Summary						
BASINS	**Area (ac)**	**Area (mi^2)**	**IC Area (ac)**	**% IC**	**CN**	**T_L (min)**
DEVELOPED HYDROLOGY						
DEV DA 1	0.643	0.001004	0.52	80.19	80	3.0
DEV DA 2	0.317	0.000496	0.26	83.06	80	3.0
DEV DA 3	0.455	0.000711	0.44	97.69	80	3.0
DEV DA 4	0.322	0.000503	0.02	5.68	80	3.8
OFF-S DEV-DA 1	0.368	0.000575	0.25	68.02	80	3.7
OFF-S DEV-DA 2	0.295	0.000461	0.13	44.96	80	4.1
OFF-S DEV-DA 3	0.066	0.000103	0.00	4.52	80	3.0

Results

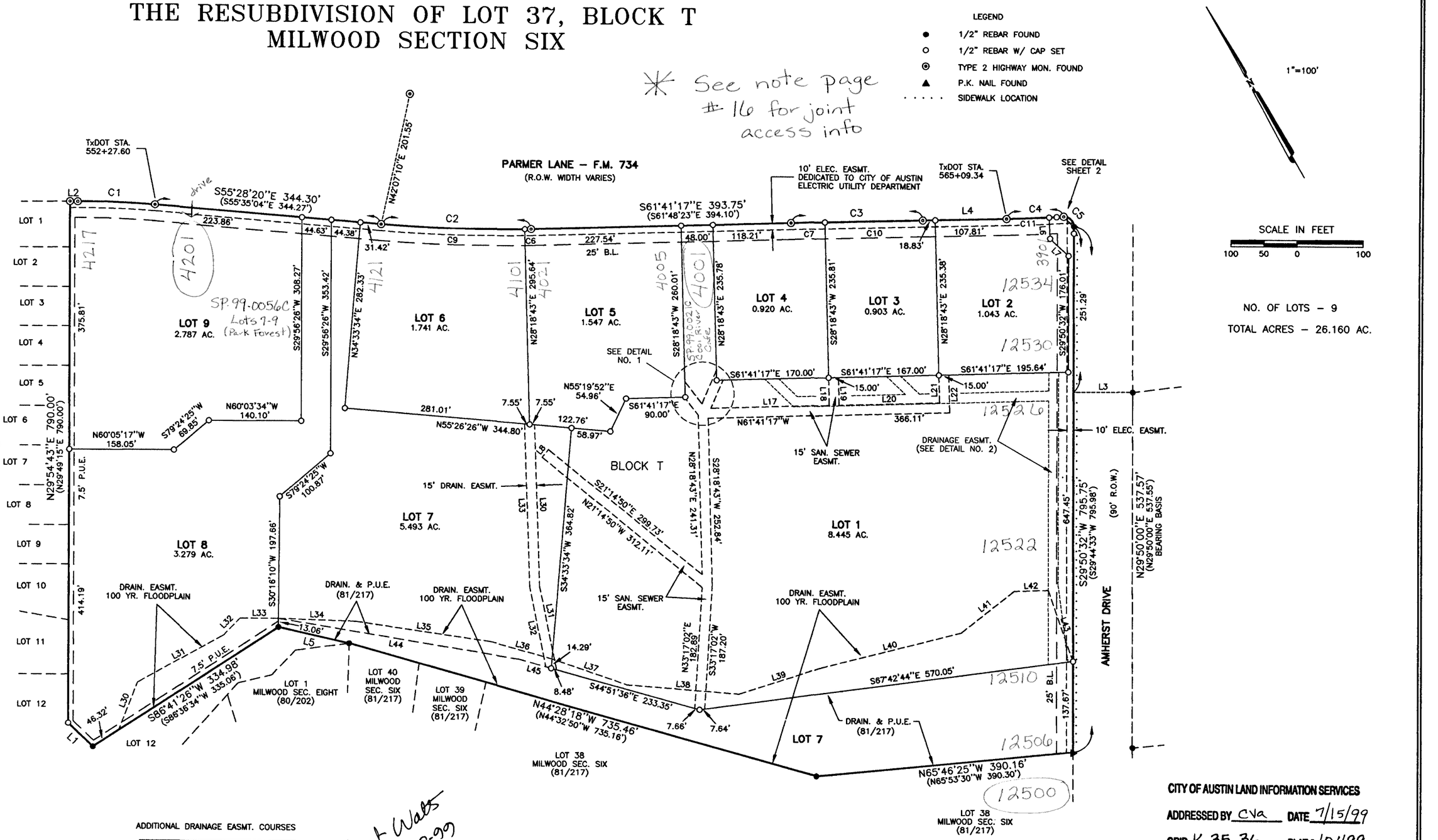
HYDROLOGIC ELEMENT	**PEAK DISCHARGE PER 24-HOUR STORM EVENT (cfs)**			
	2-YR	**10-YR**	**25-YR**	**100-YR**
DEV DA 1	3.17	4.95	6.11	8.10
DEV DA 2	1.58	2.46	3.03	4.01
DEV DA 3	2.41	3.65	4.45	5.83
DEV DA 4	0.99	1.87	2.46	3.45
OFF-S DEV-DA 1	1.60	2.56	3.19	4.26
OFF-S DEV-DA 2	1.10	1.84	2.34	3.18
OFF-S DEV-DA 3	0.22	0.42	0.55	0.77
DEV POA-1	**8.86**	**12.22**	**14.13**	**16.03**

AUSTIN CIVIL ENGINEERING

Attachments:

1. Plat
2. Aerial Map
3. Site plan
4. City Limits and Zoning Map
5. Contours Exhibit
6. Existing Drainage Maps
7. Developed Drainage Maps
8. Watershed Map
9. TCEQ-Edward's Aquifer Map
10. FEMA Floodplain Map
11. Existing utility plan and Water/Wastewater exhibit

THE RESUBDIVISION OF LOT 37, BLOCK T
MILWOOD SECTION SIX



ADDITIONAL DRAINAGE EASMT. COURSES

NUMBER	DIRECTION	DISTANCE
L30	N51°04'59"E	78.14'
L31	S89°20'28"E	148.96'
L32	N74°32'16"E	35.93'
L33	S60°03'42"E	58.10'
L34	S58°17'07"E	116.71'
L35	S51°50'22"E	207.36'
L36	S44°48'57"E	96.20'
L37	S41°26'03"E	120.56'
L38	S55°31'54"E	169.14'
L39	S77°53'51"E	132.61'
L40	S74°24'22"E	217.23'
L41	N81°44'40"E	101.96'
L42	S62°00'13"E	51.54'
L43	S10°27'26"W	113.39'
L44	S50°47'25"E	369.53'
L45	S44°51'36"E	50.62'

Robert Watts 3-12-99

STATE OF TEXAS REGISTERED ROBERT C. WATTS JR. 4995 PROFESSIONAL LAND SURVEYOR

Chaparral
Professional Land Surveying, Inc.
Surveying and Mapping
510 South Congress Ave., Suite B-100
Austin, Texas 78704
512-476-7103

CITY OF AUSTIN LAND INFORMATION SERVICES
ADDRESSED BY CVa DATE 7/15/99
GRID K 35,36 PLAT # 10499
ADDRESS QUESTIONS, CALL 512-499-2797

GRIFFIN ENGINEERING GROUP, INC.
11711 NORTH LAMAR, AUSTIN, TEXAS 78753 (512) 836-3113

PROJECT NO.: 106-97002
DRAWING NO.: 106-0204
PLOT DATE: 03/12/99
PLOT SCALE: 1"=100'
DRAWN BY: COD

SHEET 01 OF 03

PHOTOGRAPHIC MYLAR

A0010499

THE RESUBDIVISION OF LOT 37, BLOCK T
MILWOOD SECTION SIX

Know All Men by These Presents:

That Real Alchemy I, L.P., acting herein by and thorough Paul R. Guernsey, Vice President of Energy Alchemy, Inc., General Partner of Real Alchemy 1, Inc., being the owners of Lot 37, Block T, Milwood Section Six, a subdivision of record in Volume 81, Page 217 of the Plat Records of Travis County, Texas, conveyed by Deed of record in Volume 13242 Page 1939 of the Real Property Records of Travis County, Texas, do hereby Subdivide 26.160 acres, being all of Lot 37, said subdivision having been approved for resubdivision pursuant to the public notification and hearing provision of Chapter 212.015, of the Local Government Code, do hereby resubdivide 26.160 acres to be known as

THE RESUBDIVISION OF LOT 37, BLOCK T, MILWOOD SECTION SIX

in accordance with the map or plat shown hereon, subject to any and all easements and restrictions heretofore granted and not released.

Paul R Guernsey 6/17/99

Paul R, Guernsey, Vice President — Date
Energy Alchemy, Inc., General Partner
Real Alchemy, I, L.P.
4504 Winewood Court
Colleyville, Texas 76034

STATE OF TEXAS
COUNTY OF TARRANT

Before me, the undersigned authority, on this day personally appeared Paul R. Guernsey, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose therein expressed and in the capacity as therein stated.

GIVEN UNDER MY HAND THIS THE 17th DAY OF June, 1999.

Carla Russo
Notary Public in and for the State of Texas

My Commission Expires: 2-8-2000

CARLA RUSSO
NOTARY PUBLIC
State of Texas
Comm. Exp. 02-08-2000

APPROVED FOR ACCEPTANCE:

Jenni H. Williamson for 7-8-99

ALICE GLASCO, DIRECTOR — DATE
DEPT. OF DEVELOPMENT, REVIEW AND INSPECTION

ACCEPTED AND AUTHORIZED FOR RECORD BY THE PLANNING COMMISSION OF THE CITY OF AUSTIN ON THE 29th DAY OF JUNE, 19 99 A.D.

Ray Vrudhula
RAY VRUDHULA, SECRETARY

BETTY [illegible], CHAIRPERSON

THE STATE OF TEXAS
COUNTY OF TRAVIS

I, DANA DEBEAUVOIR, CLERK OF TRAVIS COUNTY, TEXAS, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE 13th DAY OF July A.D. 1999 AT 2:18 O'CLOCK P M., AND DULY RECORDED ON THE 13th DAY OF July, A.D. 1999 AT 2:18 O'CLOCK P M., IN THE PLAT RECORDS OF SAID COUNTY AND STATE, IN DOCUMENT NO. 199900219

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THE 13th DAY OF July, 1999 A.D.

DANA DEBEAUVOIR, COUNTY CLERK, TRAVIS COUNTY, TEXAS
BY _____ DEPUTY Y. GUERRA

FILED FOR RECORD, AT 2:18 O'CLOCK P M., THIS 13th DAY OF July 1999 A.D.

DANA DEBEAUVOIR, COUNTY CLERK, TRAVIS COUNTY, TEXAS
BY _____ DEPUTY Y. GUERRA

PLAT NOTES:

1. No lot in this subdivision shall be occupied until connection is made to the City of Austin water and wastewater system.

2. Water and Wastewater Systems serving this subdivision shall be designed and installed in accordance with the City of Austin and State Health Department plans and specifications. Plans and Specifications shall be presented to the City of Austin, Water and Wastewater Department for review.

3. Public sidewalks, built to City of Austin standards, are required along the following streets, as shown by a dotted line of the face of the plat: The subdivision side of Amherst Drive. Failure to construct the required sidewalks may result in the withholding of Certificate of Occupancy, building permit, or utility connections by the governing body or utility company, LDC Section 13-5-91.

4. All building setbacks shall be in accordance with the City of Austin Zoning Ordinance.

5. 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.

6. There are no slopes in excess of fifteen percent (15%) within the limits of this subdivision.

7. The Electric Utility has the right to prune and/or remove trees, shrubbery and other obstructions to the extent necessary to keep the easements clear. The Utility will perform all tree work in compliance with Chapter 13-7, Article II of the City of Austin Land Development Code.

8. The owner/developer of this subdivision/lot shall provide the City of Austin Electric Utility Department 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 13-7 of the City of Austin Land Development Code.

9. The owner shall be responsible for installation of any temporary erosion control, revegetation and tree protection. In addition, the owner shall be responsible for any tree pruning and tree removal that is within ten feet of the centerline of the overhead electrical facilities designed to provide electric service to this project. Austin Energy work shall be included within the limits of construction for this project.

10. All signs shall comply with the Austin Sign Ordinance.

11. Erosion/Sedimentation controls are required for all construction on each lot, including single-family and duplex construction, pursuant to Section 13-7-14, LDC. This Electric Utility work shall also be included within the limits of construction for this project.

12. This subdivision plat was approved and recorded before the construction and acceptance of streets and other subdivision improvements. Pursuant to the terms and the conditions of a Subdivision Improvements Agreement between the subdivider and the City of Austin, dated July 6th 1999, the subdivider is responsible for the construction of all streets and facilities needed to serve the lots within this subdivision. This responsibility may be assigned in accordance with the terms of the agreement.

For the Subdivision Improvements Agreement pertaining to this subdivision, see separate instrument recorded in Document No. 1999065536, in the Deed Records of Travis County, Texas. The owner of this subdivision, and his or her successors and assigns assumes responsibility for the plans for construction of subdivision improvements which comply with applicable codes and requirements of the City of Austin. The owner understands and acknowledges that plat vacation or replatting may be required, at the owner's sole expense, if plans to construct this subdivision do not comply with such codes and requirements.

13. This subdivision is located in the Walnut Creek Suburban Watershed and is classified as suburban, and shall be developed, constructed and maintained in conformance with the terms and conditions of Chapter 13-2, Article V, and 13-7, Article 1 of the City Land Development Code (as applicable).

14. All restrictions and notes from the previous existing subdivision, Millwood Section Six, shall apply to this resubdivision plat.

15. Development of these lots are hereby restricted to uses other than residential uses.

16. Joint access will be provided to Lots 1, 3, 4, 7 and 8, from Parmer Lane.

17. Off-street loading and unloading facilities shall be provided on all commercial and industrial lots.

18. All finished floor elevations shall be 1.0 foot minimum above the 100 year frequency flood level. The following minimum finished floor elevations are hereby set for the affected lots:

LOT	BLOCK	FF
1	T	752.00
7	T	758.00
8	T	765.00

19. 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 established by region detention plans approved by the City of Austin, except that runoff in excess of the amount established for the regional detention system shall be detained by the use of onsite ponding or other approved methods.

20. No fill shall be placed or allowed to remain on these lots except by separate permit.

21. No buildings, fences, landscaping or other obstructions are permitted in drainage easements except as approved by the City of Austin or Travis County.

22. All drainage easements on private property shall be maintained by the property owner or assigns.

23. Property owners shall provide for access to drainage easements as may be necessary and shall not prohibit access by governmental authorities.

PROJECT NO.: 106-97002
DRAWING NO.: 106-0204
PLOT DATE: 05/10/99
PLOT SCALE: 1"=100'
DRAWN BY: COD

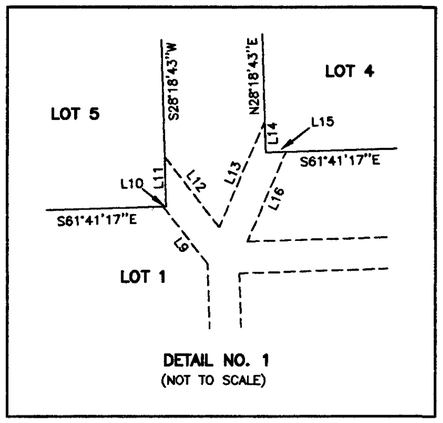
SHEET 03 OF 03

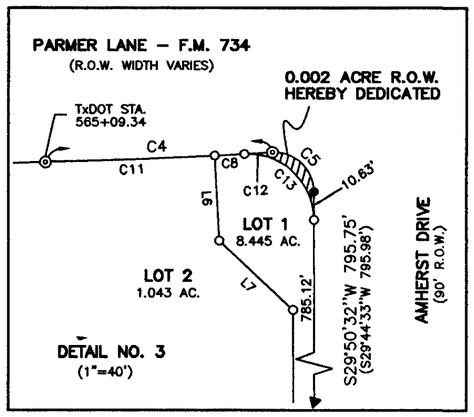
8/12/2016

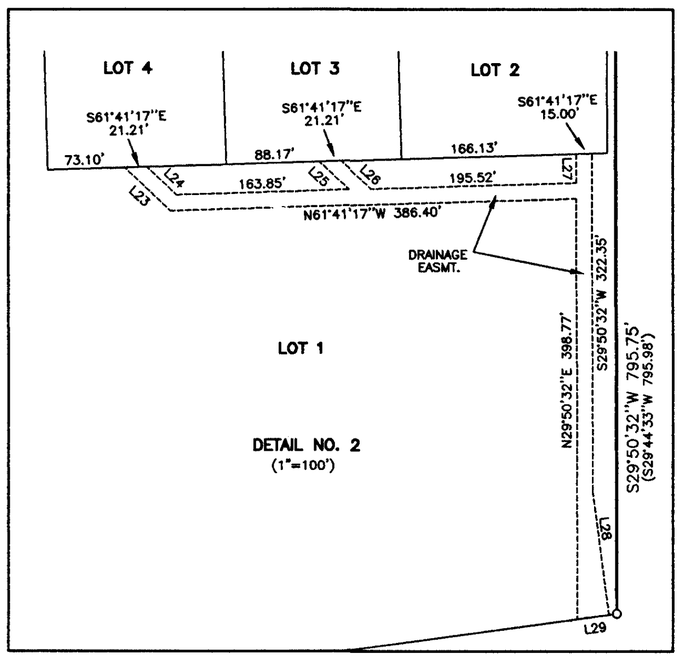
PHOTOGRAPHIC MYLAR

4400 1044

THE RESUBDIVISION OF LOT 37, BLOCK T MILWOOD SECTION SIX







NUMBER	DIRECTION	DISTANCE	(RECORD)
L1	N16°21'16"W	52.00'	(N16°39'00"W 52.00')
L2	S60°34'25"E	10.02'	(S60°34'59"E 10.00')
L3	S60°09'28"E	90.18'	
L4	S61°22'26"E	126.64'	(S61°30'22"E 126.66')
L5	N47°30'55"W	109.99'	(N47°36'20"W 109.94')
L6	S26°55'30"W	32.23'	
L7	S16°47'49"E	38.58'	

NUMBER	DELTA	BEARING	RADIUS	ARC	CHORD	(RECORD)
C1	04°59'44"	S58°00'17"E	1357.88	118.39	118.35	(S58°05'01"E 118.43')
C2	06°13'41"	S58°36'21"E	2090.84	227.28	227.16	(S58°41'44"E 226.94')
C3	00°18'01"	S61°36'10"E	38161.76	199.96	199.96	(S61°39'22"E 200.00')
C4	02°15'22"	S62°31'17"E	2194.90	86.43	86.42	(S62°38'04"E 86.45')
C5	92°38'45"	S16°36'37"E	15.00	24.25	21.70	(S17°00'37"E 21.85')
C6	00°09'40"	S61°33'50"E	2090.84	9.46	9.46	
C7	00°04'40"	S61°42'50"E	38161.76	51.79	51.79	
C8	00°17'43"	S63°13'22"E	2194.90	11.31	11.31	
C9	05°58'04"	S58°28'35"E	2090.84	217.82	217.72	
C10	00°13'21"	S61°33'50"E	38161.76	148.17	148.17	
C11	01°40'54"	S62°14'03"E	2194.90	64.42	64.42	
C12	00°16'45"	S63°30'35"E	2194.90	10.69	10.69	
C13	93°12'45"	S16°45'50"E	25.00	40.67	36.33	

NUMBER	DIRECTION	DISTANCE
L8	N68°45'10"E	15.00'
L9	N08°00'03"W	34.23'
L10	S61°41'17"E	1.38'
L11	N28°18'43"E	23.45'
L12	S08°00'03"E	42.10'
L13	N53°18'09"E	54.60'
L14	S28°18'43"W	14.77'
L15	S61°41'17"E	9.66'
L16	S53°18'09"W	46.17'
L17	S61°41'17"E	179.84'
L18	N28°18'43"E	41.85'
L19	S28°18'43"W	41.85'
L20	S61°41'17"E	152.00'
L21	N28°18'43"E	41.85'
L22	S28°18'43"W	56.85'
L23	N16°41'17"W	60.10'
L24	N16°41'17"W	38.89'
L25	S16°41'17"E	38.89'
L26	S16°41'17"E	38.89'
L27	N29°50'32"E	27.51'
L28	S22°26'02"W	116.33'
L29	N67°42'44"W	30.26'
L30	S27°56'21"W	243.88'
L31	S18°11'21"W	129.37'
L32	N18°11'21"E	123.02'
L33	N27°56'21"E	246.90'

SURVEYOR'S CERTIFICATION

I, ROBERT C. WATTS, 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 13 OF THE AUSTIN CITY CODE OF 1981 AS AMENDED, IS TRUE AND CORRECT, AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE BY ME OR MADE UNDER MY SUPERVISION, MADE ON THE GROUND IN DECEMBER, 1997.

Robert Watts

ROBERT C. WATTS, JR., R.P.L.S. 4995

3-10-99

STATE OF TEXAS REGISTERED ROBERT C. WATTS JR. 4995 PROFESSIONAL LAND SURVEYOR

SURVEYING BY:
CHAPARRAL PROFESSIONAL LAND SURVEYING
510 SOUTH CONGRESS, SUITE B-100
AUSTIN, TEXAS 78704
512-476-7103

ENGINEER'S CERTIFICATION

I, GREGORY GRIFFIN, 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 13 OF THE AUSTIN CITY CODE OF 1981, AS AMENDED, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

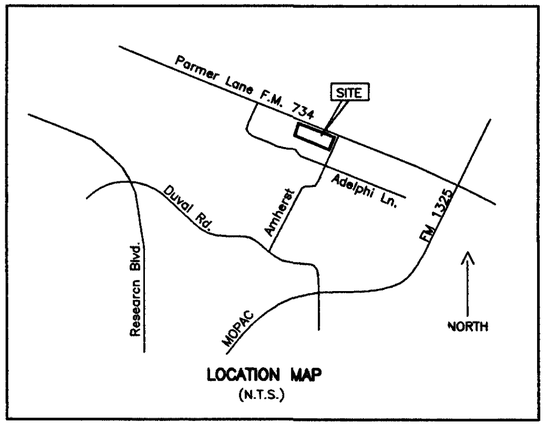
THE 100 YEAR FLOOD PLAIN WILL BE CONTAINED WITHIN THE DRAINAGE EASEMENTS SHOWN HEREON. A PORTION OF THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100 YEAR FLOOD PLAIN OF THE 100 YEAR FLOOD PLAIN AS DEPICTED ON FIRM PANEL 48453C0155 E, DATED JUNE 16, 1993 FOR TRAVIS COUNTY AND INCORPORATED AREAS.

3/9/99

GREGORY GRIFFIN, P.E. 64151

STATE OF TEXAS GREGORY GRIFFIN 64151 REGISTERED PROFESSIONAL ENGINEER

ENGINEERING BY:
GRIFFIN ENGINEERING GROUP, INC.
11711 NORTH LAMAR BLVD.
AUSTIN, TEXAS 78753
512-836-3113

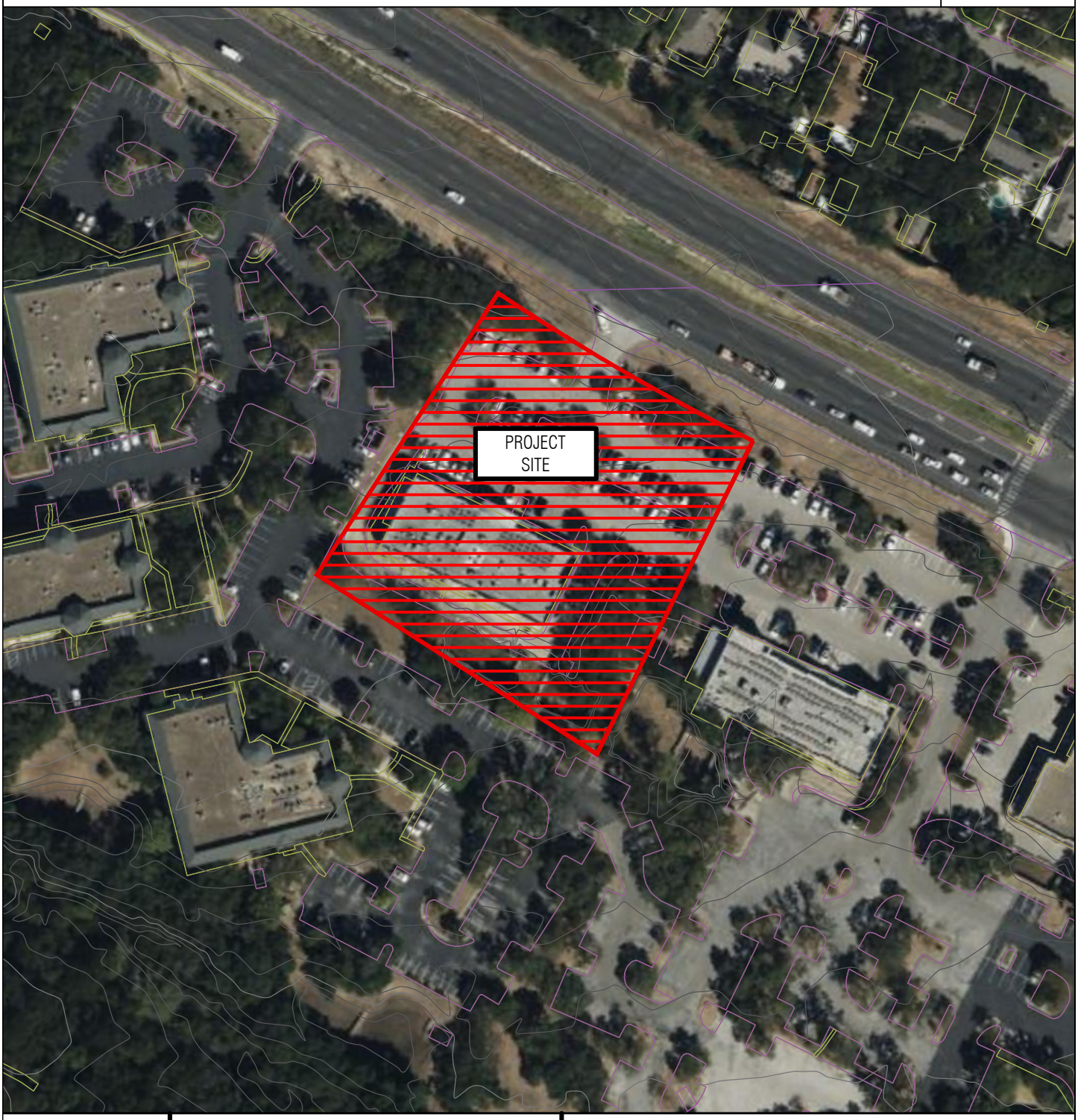


PROJECT NO.:	106-97002
DRAWING NO.:	106-0204
PLOT DATE:	03/10/99
PLOT SCALE:	1"=100'
DRAWN BY:	RCW
SHEET	02 OF 03

PHOTOGRAPHIC MYLAR

C8-99-0004.0A

NORTH
SCALE: N.T.S.



EXHIBIT

AERIAL
MAP

JOHN ZIRIH - 4101 W PARMER LANE

4101 W PARMER LN,
AUSTIN, TX 78727

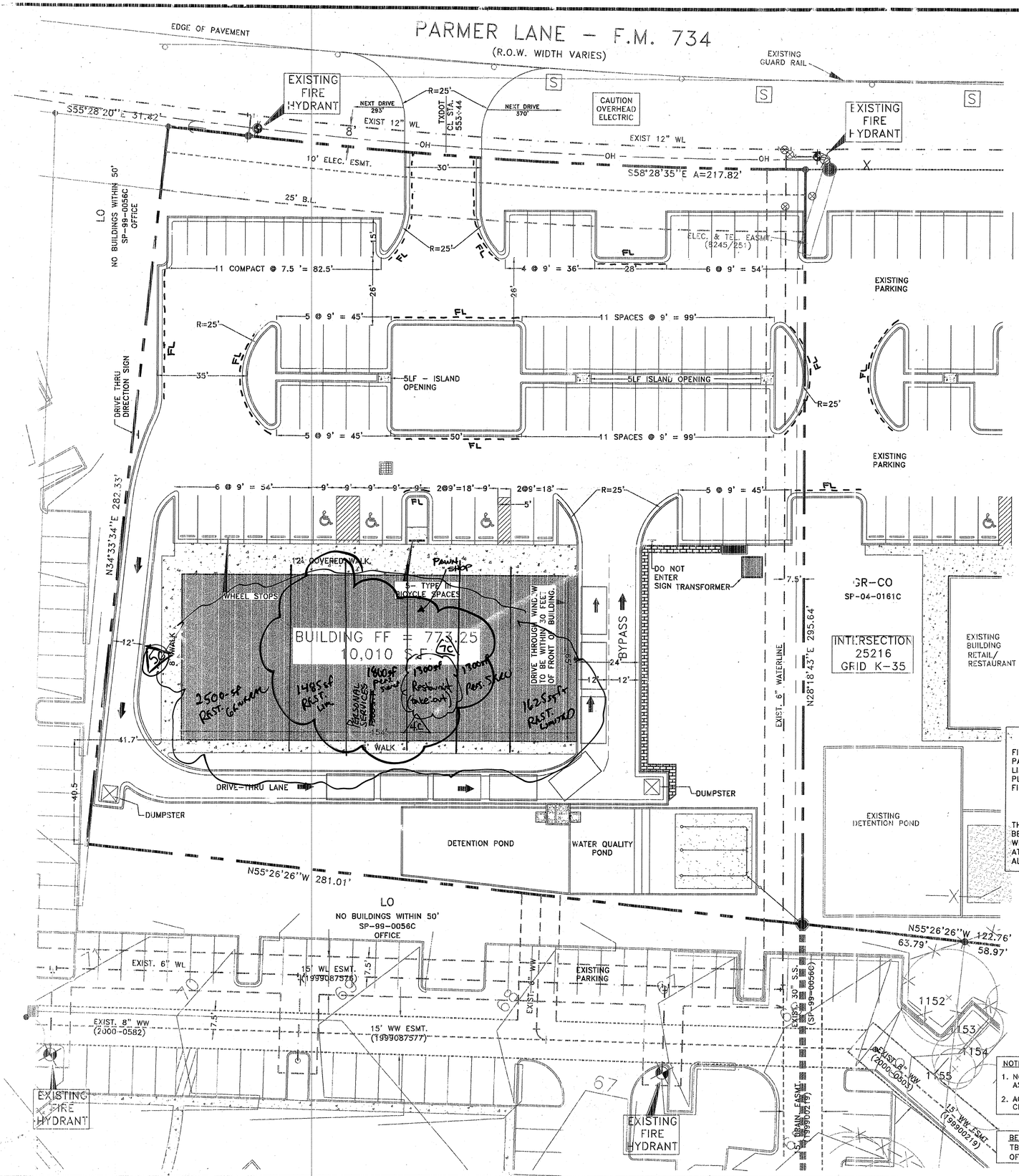
N.T.S.

AUSTIN CIVIL ENGINEERING, INC.

TBPE FIRM # F-001018
9501 B MANCHACA RD, SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

PARMER LANE – F.M. 734

(R.O.W. WIDTH VARIES)



SCALE: 1' = 20'

SITE PARKING DATA

LAND USE	AREA	RATIO	PARKING REQUIRED
RESTAURANT (GENERAL	2,500 S.F.	(1:100)	25
RESTAURANT (FAST FOOD)	1,625 S.F.	(1:100)	16
RESTAURANT (GENERAL)	1,485 S.F.	(1:100)	15
PERSONAL SERVICES	1,300 S.F.	(1:275)	5
GENERAL RETAIL SERVICE	1,800 S.F.	(1:275)	7
RESTAURANT (TAKEOUT)	1,300 S.F.	(1:275)	5
TOTAL	10,010 S.F.		71

PARKING SPACES PROVIDED: HANDICAPPED = 3 SPACES
REGULAR = 58 SPACES
COMPACT = 11 SPACES
72 TOTAL SPACES

BICYCLE PARKING PROVIDED: = 5 TYPE III SPACES
LOADING SPACES REQUIRED: = 0

TOTAL SITE DATA

PROJECT ADDRESS:	4101 WEST PARMER LANE
OWNER:	SILVERCREEK CENTER II, LP 2615 HARRIS BOULEVARD AUSTIN, TX 78703
LEGAL DESCRIPTION:	LOT 6, BLOCK T, RESUBDIVISION OF LOT 37, BLOCK T – MILWOOD SECTION 6 (C8-99-0004.0A) DOC. #1999002219
PERMANENT ZONING:	GR-CO
TOTAL SITE AREA	1.741 ACRES (75,838 SQ. FT.)
IMPERVIOUS COVER DATA:	EXISTING – 0 S.F. PROPOSED – 1.13 ACRES (49,128 S.F.)
IMPERVIOUS COVER %:	EXISTING – 0% PROPOSED – 64.9%
TOTAL BUILDING COVERAGE:	EXISTING – 0 S.F. (0%) PROPOSED – 11,858 S.F. (15.6%)
TOTAL F.A.R.:	EXISTING – 0 PROPOSED – 0.132:1
WATERSHED:	WALNUT (SUBURBAN)
FOUNDATION TYPE:	CONCRETE
BUILDING HEIGHT:	32 FEET
LIMITS OF CONSTRUCTION:	1.95 AC.

EACH COMPACT CAR SPACE SHALL BE LABELED "COMPACT ONLY"

FIRE ZONE NOTE

FIRE ZONES ARE ESTABLISHED ON THIS SITE BY PAINTING THE CURB OR PAVEMENT LINES RED IN THE AREAS DEPICTED ON THE PLAN SHEET. THE FIRE ZONES ARE NOTED AS SUCH:

F.L.

THE WORDS "FIRE ZONE/TOW AWAY ZONE" WILL BE STENCILLED IN WHITE LETTERS AT LEAST THREE INCHES HIGH AT 35 FOOT INTERVALS ALONG THE CURBS OR PAVEMENT.

NOTE:

1. NO SIDEWALK REQUIREMENTS ON PARMER LANE AS PER PLAT
2. ACCESSIBLE ROUTE NOT PROVIDED DUE TO GRADE CHANGE BETWEEN SITE AND PARMER LANE PAVEMENT

BENCHMARK INFO:

TBM= SQUARE CUT ON TOP OF CURB ON EAST SIDE OF LOT 5. ELEV.= 767.31'

AUSTIN FIRE DEPARTMENT APP 2/16/05 AUG 03 2005 APPROVED

SITE PLAN RELEASE

Sheet 2 of 15

FILE NUMBER: SP-05-1262C EXPIRATION DATE: 8/5/08
CASE MANAGER: N. HOLTER APPLICATION DATE: 5/19/05
APPROVED ADMINISTRATIVELY ON: 8/5/05
APPROVED BY PLANNING COMMISSION ON: N/A
APPROVED BY CITY COUNCIL ON: N/A
Under Section 112 of Chapter 25.5 of the Austin City Code.
Signing for Director, Watershed Protection & Development Review Department
DATE OF RELEASE 8/5/05 Zoning: GR-CO
Rev. 1 _____ Correction 1: 12/20/05
Rev. 2 _____ Correction 4: 6/22/06
Rev. 2 _____ Correction 5: 8/03/06

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

FILING DATE: 5/19/05

SP-05-1262C

DATE: JUNE 2005
DESIGNED:
DRAWN:
CHECKED:
JOB NO:

SILVER CREEK II
SHOPPING CENTER
4101 WEST PARMER LANE

LAND USE PLAN

STATE OF TEXAS GREGORY GRIFFIN 64151 REGISTERED PROFESSIONAL ENGINEER 7/18/05

GRIFFIN ENGINEERING GROUP INC.
1,711 NORTH LAMAR BLVD., AUSTIN, TEXAS 78753 (512) 836-3113

SHEET NUMBER 2 of 16

4 Add change in tenant use & revise parking table.

Property Profile

City Limits and Zoning Map





Legend

Zoning 1

Zoning

- GR
- LO
- SF

Zoning Text

Notes

0 150 300 ft

5/27/2024

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. This product has been produced by the City of Austin for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

Property Profile





Legend

Property

Addresses

Jurisdiction

FULL PURPOSE

Planimetrics Survey 2

Contours Year 2021

2 Ft Contours

10 Ft Contours

10 Ft Contours

Notes

0 150 300 ft

5/24/2024

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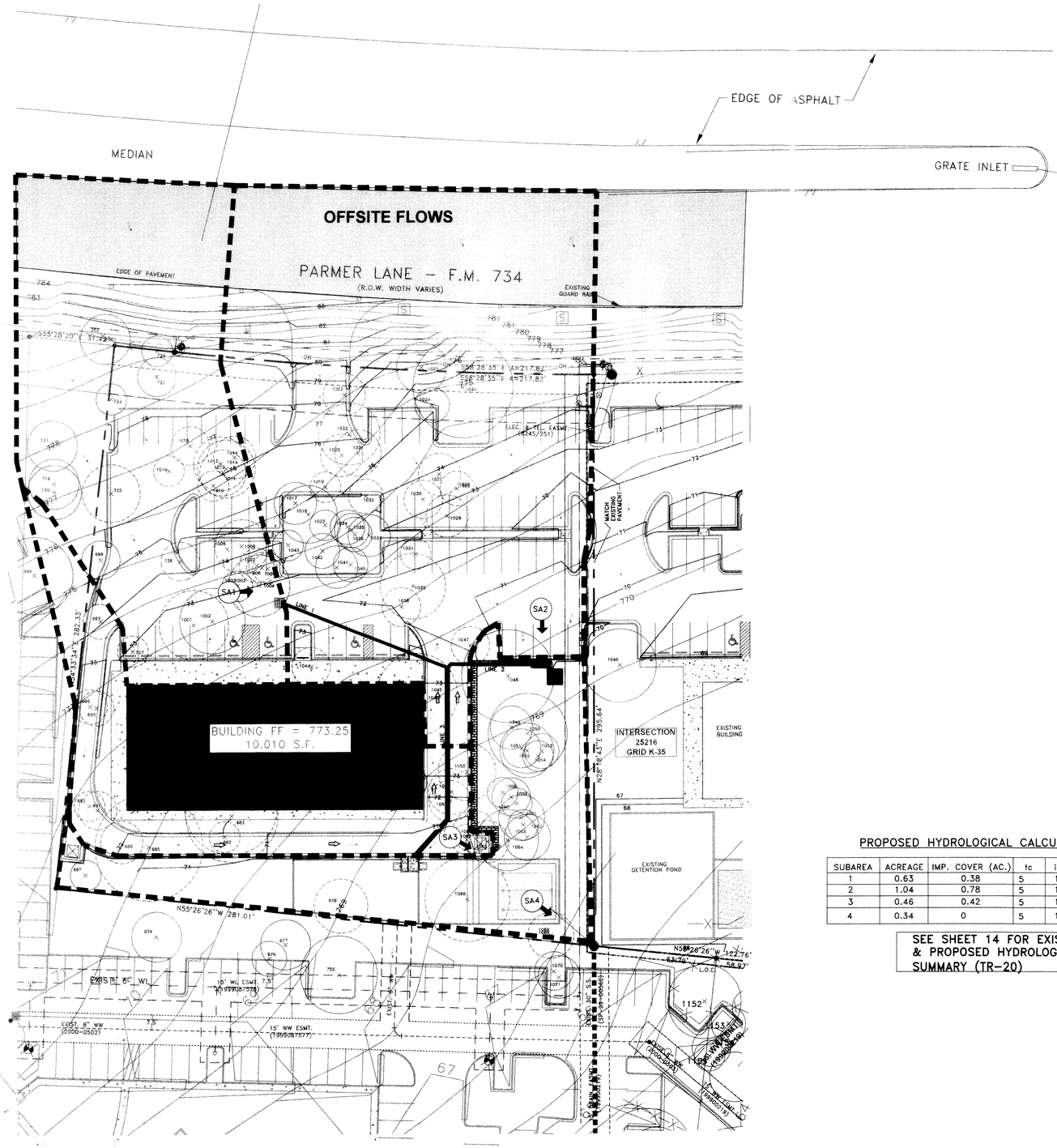

SCALE: 1' = 30'

TREE LIST

673	CED ELM 10	699	LO 12 14	*1009	LO 8 10	*1029	LO 11	1050 LO 11 10 9
674	OAK 13	701	CED ELM 13	*1010	LO 8	*1030	CE 10	1051 LO 10
676	CED ELM 8	702	CED ELM 13	*1011	LO 12	*1031	CE 8	1052 LO 11 5
677	CED ELM 6 10	719	LO 7 9	*1012	LO 15	*1032	CE 9	1053 LO 9
*678	HB 14	720	LO 9 9	*1013	LO 14	1033	LO 8	1054 LO 8
*679	CED ELM 11	721	CED ELM 13	*1014	LO 11	1034	LO 9	*1055 LO 10 10
*680	CED ELM 9	722	LO 8	*1015	CE 10	1035	LO 9	*1056 LO 12
*681	CED ELM 9	723	CED ELM 10	*1016	CE 8	1036	LO 9	*1057 LO 11
*682	CED ELM 8	724	CED ELM 8	1017	LO 11	1037	LO 11	1058 LO 8
*683	LO 24	*725	CED ELM 15	1018	LO 15	*1038	CE 10	1059 LO 10
*684	LO 24	*726	LO 11	*1019	CE 8	* 1039	LO 8 13	1060 LO 8
*685	LO 28	*727	CED ELM 8	*1020	CE 8 6	1040	LO 9	1061 LO 7 8
*686	CED ELM 11	755	LO 20	*1021	CE 12	1041	LO 11	1062 LO 8
687	CED ELM 8	*1001	LO 18	*1022	LO 16	1042	LO 9	1063 LO 12
*691	CED ELM 10	*1002	LO 12 10	*1023	CE 11	1043	LO 8	1064 LO 11 10
*692	CED ELM 8	*1003	LO 8	1024	CE 9	*1044	CE 10	*1065 LO 11
*693	CED ELM 9	*1004	LO 8 12	1025	LO 13	*1045	LO 21	*1066 LO 11
*694	CED ELM 11	*1005	LO 8	1026	LO 12 20	1046	LO 19	*1067 LO 8
*695	CED ELM 9	*1006	ELM 8	*1027	LO 11	*1047	CE 10	*1068 RO 22
*696	CED ELM 9	*1007	LO 9	*1028	LO 9	1048	LO 24	*1069 LO 12
*697	CED ELM 9	*1008	CE 10			1049	LO 11	1070 CE 10
698	CED ELM 10							1071 CE 11

*TREE TO REMOVE

PROPOSED HYDROLOGICAL CALCULATIONS

SUBAREA	ACREAGE	IMP. COVER (AC.)	tc	I100	C100	Q100
1	0.63	0.38	5	11.9	0.73	5.46
2	1.04	0.78	5	11.9	0.82	10.11
3	0.46	0.42	5	11.9	0.95	5.20
4	0.34	0	5	11.9	0.36	1.46

SEE SHEET 14 FOR EXISTING & PROPOSED HYDROLOGIC SUMMARY (TR-20)

SITE PLAN RELEASE — Sheet 8 of 16

FILE NUMBER: SP-05-1262C EXPIRATION DATE: 8/5/08
CASE MANAGER: N. HOLTER APPLICATION DATE: 5/19/05
APPROVED ADMINISTRATIVELY ON: 8/5/05
APPROVED BY PLANNING COMMISSION ON: N/A
APPROVED BY CITY COUNCIL ON: N/A
under Section 112 of Chapter 25-5 of the Austin City Code.
Signing for Director, Watershed Protection & Development Review Department
DATE OF RELEASE 8/5/05 Zoning: GR-CO
Rev. 1 Correction 1
Rev. 2 Correction 2
Rev. 2 Correction 2

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

DATE: JUNE 2005
DESIGNED:
DRAWN:
CHECKED:
JOB NO:

SILVER CREEK II
SHOPPING CENTER
4101 WEST PARMER LANE
SITE DRAINAGE PLAN

STATE OF TEXAS GREGORY GRIFFIN 64151 REGISTERED PROFESSIONAL ENGINEER

GRIFFIN
ENGINEERING GROUP INC.
11711 NORTH LAMAR BLVD., AUSTIN, TEXAS 78753 (512) 836-3113

SHEET NUMBER
8 of 16

Property Profile

Watershed Map





Legend

Environmental 3

Austin Watershed Regulation Areas

Suburban

Watershed

Walnut Creek

Notes

0 150 300 ft

5/27/2024

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Edwards Aquifer Viewer Custom Print



5/27/2024, 4:08:17 PM

Edwards Aquifer Label

City/Place

TX Counties

7.5 Minute Quad Grid

TCEQ_EDWARDS_OFFICIAL_MAPS

1:2,257

0 0.01 0.03 0.06 mi

0 0.03 0.05 0.1 km

Williamson County TX, Maxar, Microsoft, TCEQ

Web AppBuilder for ArcGIS

TCEQ | Williamson County TX, Maxar, Microsoft |

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) Report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS Report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study Report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures**. Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study Report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Texas State Plane Central Zone (FIPS zone 4203). The **horizontal datum** was NAD 83, GRS 1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum**. For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, Maryland 20910-3282
(301) 713-3242

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713- 3242**, or visit its website at http://www.ngs.noaa.gov.

Base map information shown on this FIRM was provided in digital format by the City of Austin and CAPCOG. The projection used in the preparation of the FIRMs was Texas State Plane Central Zone (FIPSZONE 4203) and the horizontal datum was NAD83, GRS1980 spheroid.

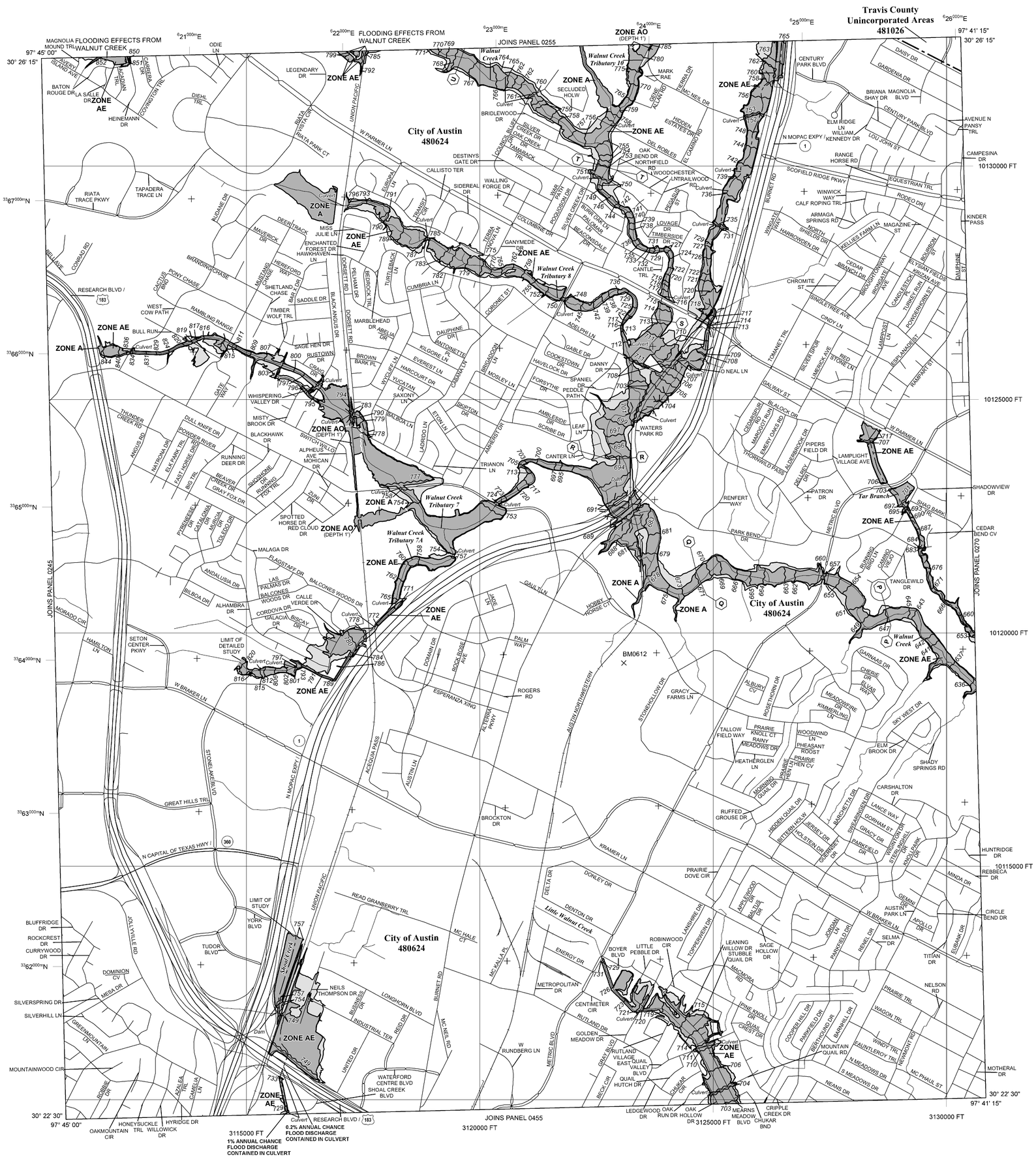
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables for multiple streams in the Flood Insurance Study Report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

For information on available products associated with this FIRM visit the **Map Service Center (MSC)** website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the MSC website.

If you have **questions about this map,** how to order products, or the National Flood Insurance Program in general, please call the **FEMA Map Information eXchange (FMIX)** at **1-877-FEMA-MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/business/nfip.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Areas formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

	1% Annual Chance Floodplain Boundary
	0.2% Annual Chance Floodplain Boundary
	Floodway boundary
	Zone D boundary
	CBRS and OPA boundary
	Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths, or flood velocities.
513	Base Flood Elevation line and value; elevation in feet*
(EL 987)	Base Flood Elevation value where uniform within zone; elevation in feet*

*Referenced to the North American Vertical Datum of 1988

A — A	Cross section line
23 — 23	Transect line
	Culvert
	Bridge
45° 02' 08", 93° 02' 12"	Geographic coordinates referenced to the North American Datum of 1983 (NAD 83) Western Hemisphere
3100000 FT	5000-foot ticks: Texas State Plane Central Zone (FIPS Zone 4203), Lambert Conformal Conic projection
33 89 000m N	1000-meter Universal Transverse Mercator grid values, zone 14
DX5510 ×	Bench mark (see explanation in Notes to Users section of this FIRM panel)
• FT1,000	River Station

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
June 16, 1993

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
June 5, 1997, January 19, 2000, April 15, 2002, September 26, 2008, August 18, 2014
January 6, 2016 - to update corporate limits, to change Special Flood Hazard Areas, to reflect updated topographic information, to incorporate previously issued Letters of Map Revision

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0265K

FIRM
FLOOD INSURANCE RATE MAP
TRAVIS COUNTY, TEXAS
AND INCORPORATED AREAS

PANEL 265 OF 730
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

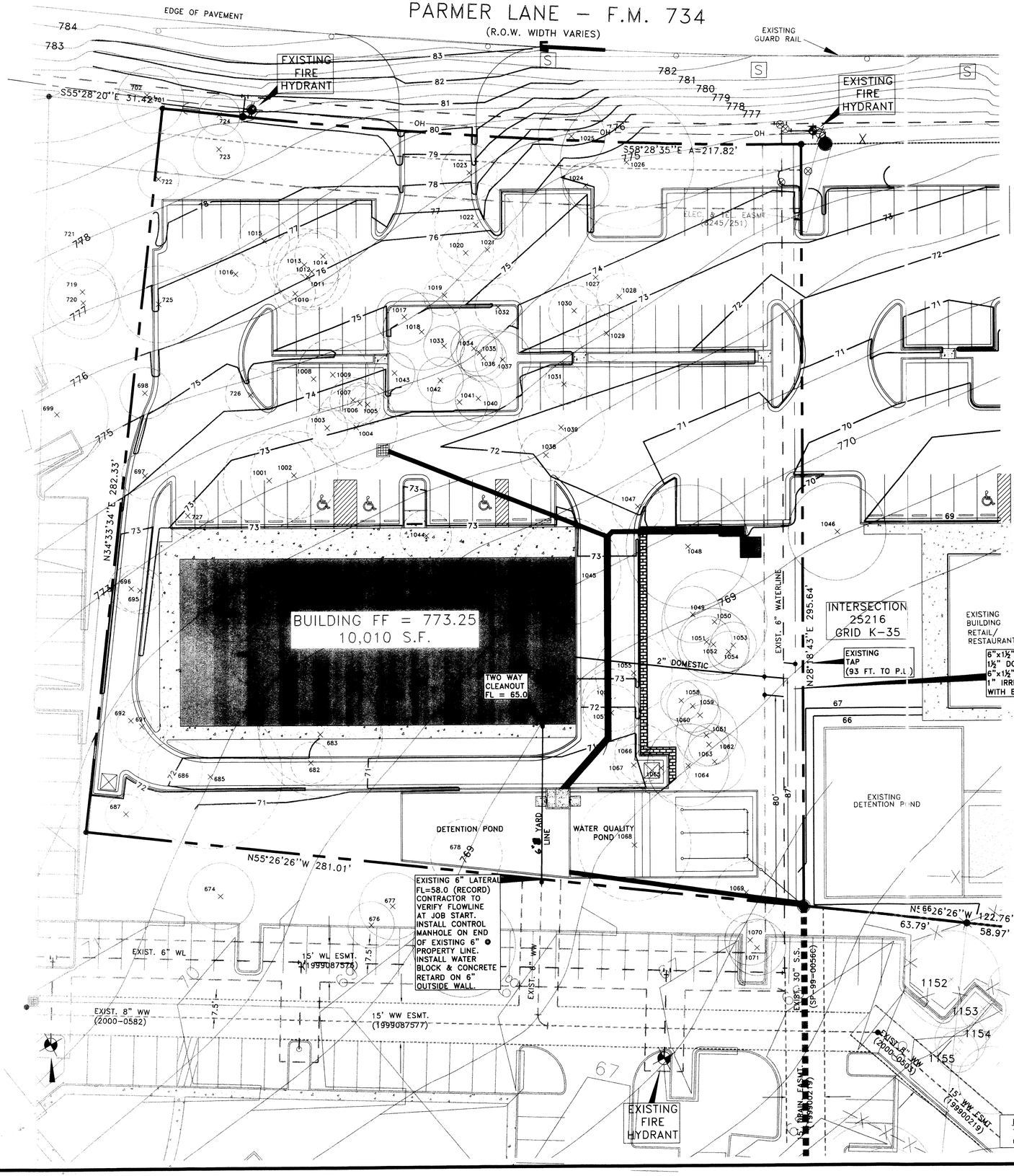
CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
AUSTIN, CITY OF	480624	0265	K
TRAVIS COUNTY	481026	0265	K

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
48453C0265K
MAP REVISED
JANUARY 6, 2016

Federal Emergency Management Agency



SCALE: 1' = 20'

TREE LIST

673	CED ELM 10	699	LO 12 14	*1009	LO 8 10	*1029	LO 11
674	OAK 13	701	CED ELM 13	*1010	LO 8	*1030	CE 10
676	CED ELM 9	702	CED ELM 13	*1011	LO 12	*1031	CE 8
677	CED ELM 8 10	719	LO 7 9	*1012	LO 15	*1032	CE 9
*678	HB 14	720	LO 9 9	*1013	LO 14	1033	LO 8
*679	CED ELM 11	721	CED ELM 13	*1014	LO 11	1034	LO 9
*680	CED ELM 9	722	LO 8	*1015	CE 10	1035	LO 9
*681	CED ELM 9	723	CED ELM 10	*1016	CE 8	1036	LO 9
*682	CED ELM 8	724	CED ELM 8	1017	LO 11	*1038	CE 10
*683	LO 24	*725	CED ELM 15	1018	LO 15	* 1039	LO 8 13
*684	LO 24	*726	LO 11	*1019	CE 8	1040	LO 9
*685	LO 28	*727	CED ELM 8	*1020	CE 8 6	1041	LO 11
*686	CED ELM 11	755	LO 20	*1021	CE 12	1042	LO 9
687	CED ELM 8	*1001	LO 18	*1022	LO 16	1043	LO 8
*691	CED ELM 10	*1002	LO 12 10	*1023	CE 11	*1044	CE 10
*692	CED ELM 8	*1003	LO 8	1024	CE 9	*1045	LO 21
*693	CED ELM 9	*1004	LO 8 12	1025	LO 13	*1046	LO 19
*694	CED ELM 11	*1005	LO 8	1026	LO 12 20	*1047	CE 10
*695	CED ELM 9	*1006	ELM 8	*1027	LO 11	*1048	LO 24
*696	CED ELM 9	*1007	LO 9	*1028	LO 9	1049	LO 11
*697	CED ELM 9	*1008	CE 10				
698	CED ELM 10						

1050	LO 11 10 9		
1051	LO 10		
1052	LO 11 5		
1053	LO 9		
1054	LO 8		
*1055	LO 10 10		
*1056	LO 12		
*1057	LO 11		
1058	LO 8		
1059	LO 10		
1060	LO 8		
1061	LO 7 8		
1062	LO 8		
1063	LO 12		
1064	LO 11 10		
*1065	LO 11		
*1066	LO 11		
*1067	LO 8		
*1068	RO 22		
*1069	LO 12		
1070	CE 10		
1071	CE 11		

*TREE TO REMOVE

GENERAL NOTES

1. UPON THE COMPLETION OF THE PROPOSED SITE IMPROVEMENTS AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE DEVELOPMENT REVIEW AND INSPECTIONS DEPT., THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED FACILITY WAS CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
2. THE CONTRACTOR SHALL NOTIFY THE ENVIRONMENTAL AND CONSERVATION SERVICES DEPARTMENT (ECSD) AT 974-2550 AT LEAST 24 HOURS PRIOR TO BEGINNING CLEARING OPERATIONS.
3. THE CONTRACTOR SHALL CALL TEXAS EXCAVATION SAFETY SYSTEM AT 1-800-344-8377 FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET RIGHT-OF-WAY.
4. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A CONCRETE PERMIT IS REQUIRED.
5. PURSUANT TO 15.12.131 OF THE CITY CODE, THE CONTRACTOR MAY NOT BLOCK, DIRECT, IMPEDE OR RE-ROUTE PEDESTRIAN AND VEHICULAR TRAFFIC, NOR PLACE A BARRICADE OR OTHER TRAFFIC CONTROL DEVICE IN A RIGHT-OF-WAY WITHOUT FIRST OBTAINING A TEMPORARY USE OF RIGHT-OF-WAY PERMIT FROM THE DEPT. OF PUBLIC WORKS AND TRANSPORTATION.
6. THE ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO REQUEST ADDITIONAL/MODIFY EROSION-SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN LDC 25-8.

SEQUENCE OF CONSTRUCTION

1. INSTALL TEMPORARY EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTION AS INDICATED ON THE TREE PROTECTION/EROSION CONTROL PLAN SHEET.
2. A PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTION DIVISION IS TO BE SCHEDULED AT LEAST THREE (3) DAYS IN ADVANCE OF COMMENCEMENT OF CONSTRUCTION ACTIVITY. CALL ECSD AT 974-2278.
3. ROUGH-CUT THE PROPOSED WATER QUALITY & DETENTION PONDS. EITHER 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 EROSIONAND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL FINAL RESTORATION IS ACHIEVED.
4. GRADE THE SITE AS INDICATED ON THE SITE GRADING AND WATER QUALITY POND AND DETENTION POND PLAN.
5. CONSTRUCT THE PROPOSED PAVEMENT AND PARKING AREAS, BUILDING AND ALL OTHER ANCILLARY CONSTRUCTION. COMPLETE THE PROPOSED SEDIMENTATION-FILTRATION AND DETENTION PONDS.
6. PERFORM PERMANENT RESTORATION PROCEDURES AS NOTED.
7. PROJECT ENGINEER INSPECTS JOB AND WRITES CONCURRENCE LETTER TO THE CITY. FINAL INSPECTION IS SCHEDULED UPON RECEIPT OF LETTER.
8. REMOVE ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND TREE PROTECTION FENCING.

REVIEWED
AUG 03 2005
Austin Water Utility

Domestic
METER REQUIREMENT FOR PROJECT
TYPE Positive Displacement
SIZE 1½" GPM 50

Irrigation
METER REQUIREMENT FOR PROJECT
TYPE Positive Displacement
SIZE 1" GPM 25

TEXAS WATER CODE 13.502 SUBMETERING IS REQUIRED ON THIS PROJECT.

Meter Notice:
Meters 1-1/2 inches and larger must be purchased and ordered 90 days in advance of installation.

SITE PLAN RELEASE

Sheet 7 of 16

FILE NUMBER: SP-05-1262C EXPIRATION DATE: 8/5/08
CASE MANAGER: N. HOLTER APPLICATION DATE: 5/19/05
APPROVED ADMINISTRATIVELY ON: 8/5/05
APPROVED BY PLANNING COMMISSION ON: N/A
APPROVED BY CITY COUNCIL ON: N/A
under Section 114 of Chapter 25-5 of the Austin City Code.
Signing for Director, Watershed Protection & Development Review Department
DATE OF RELEASE 8/5/05 Zoning: GR-CO
Rev. 1 _____ Correction 1 _____
Rev. 2 _____ Correction 2 _____
Rev. 2 _____ Correction 2 _____

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

DATE: JUNE 2005
DESIGNED:
DRAWN:
CHECKED:
JOB NO:

SILVER CREEK II
SHOPPING CENTER
4101 WEST PARMER LANE
WATER & WASTEWATER PLAN

STATE OF TEXAS
GREGORY L. GRIFFIN
103813
REGISTERED
PROFESSIONAL ENGINEER

GRIFFIN
ENGINEERING GROUP INC.
11711 NORTH LAMAR BLVD., AUSTIN, TEXAS 78753 (512) 836-3113

SHEET NUMBER
7 of 16

FILING DATE: 5/19/05

SP-05-1262C

MATCH:J36

MATCH:K36

MATCH:L36

MATCH:J35

MATCH:L35

MATCH:J34

MATCH:K34

MATCH:L34

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, Private Gravity Main
- In Service, Private Siphon Main
- Proposed for Aband., Private Gravity Main
- Proposed for Aband., Private Siphon Main
- In Service, Private Force Main
- Proposed, Private Gravity Main
- Proposed for Aband., Private Force Main
- Proposed, Private Force Main
- In Service, Private Overflow Main
- Proposed, Private Overflow Main
- Proposed for Aband., Private Overflow Main
- In Service, Private Siphon Main
- Proposed, Private Siphon Main
- Proposed for Aband., Private Siphon Main
- Abandoned, Private Main

Sludge Lines

- Abandoned
- In Service
- Proposed
- Proposed for Abandonment
- Disposal Pond
- Levee
- Weir
- Grade Break
- Project Separator

- Connection
- Backflow Preventer
- Flow Meter
- Onsite Sewage Facility
- Alternative WW Collection
- Diversion Chamber
- Junction Box
- Mixing Chamber

- 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
- Wastewater/Treatment Plant
- Lift Station

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

K35

Produced by GIS Services

MATCH:J36 MATCH:K36 MATCH:L36

MATCH:J35 MATCH:L35

MATCH:J34 MATCH:K34 MATCH:L34

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

City of Austin
Water Distribution System

Last Update:
2/10/2023

Map Sheet
K35

Produced by GIS Services

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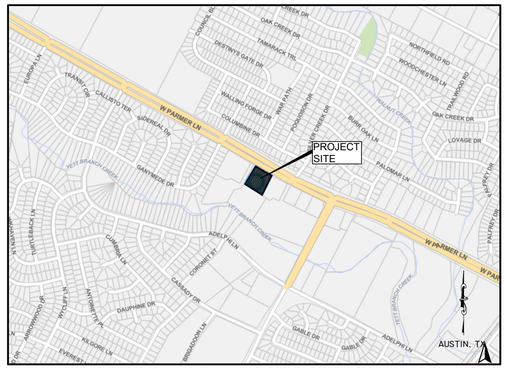
SITE PLANS FOR SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2, AUSTIN TX. 78727

CASE NUMBER: SP-2024-0312C

INITIAL SUBMITTAL DATE: 10/30/2024

VICINITY MAP



MAPSCO #: 465M CITY GRID #: K35
NORTHWEST A PRESSURE ZONE 93.51 PSI

SHEET INDEX

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2. GENERAL NOTES
3. AUSTIN WATER GENERAL INFORMATION AND CONSTRUCTION NOTES
4. PLAT 1 OF 3
5. PLAT 2 OF 3
6. PLAT 3 OF 3
7. EXISTING CONDITIONS AND TOPOGRAPHIC SURVEY
8. DEMOLITION PLAN
9. SITE PLAN
10. GRADING PLAN
11. UTILITY PLAN
12. PRE-DEVELOPED DRAINAGE AREA MAP
13. DEVELOPED DRAINAGE AREA MAP
14. WATER QUALITY POND DRAINAGE AREA
15. DETENTION POND (FOR REFERENCE ONLY)
16. WATER QUALITY AND DETENTION POND
17. DETENTION POND DETAILS
18. E&S CONTROL PLAN
19. DETAILS: SITE
20. DETAILS: EROSION AND SEDIMENTATION CONTROL
21. DETAILS: UTILITY
22. LANDSCAPE PLAN
23. LANDSCAPE & IRRIGATION SPECIFICATIONS
24. ELEVATIONS
25. TCEQ CONSTRUCTION NOTES
26. DECELERATION LANE PLAN
27. DECELERATION LANE SIGNING AND PAVEMENT MARKINGS
28. DECELERATION LANE SIGNING AND PAVEMENT MARKINGS DETAIL
29. TRAFFIC CONTROL PLAN DETAILS

PROJECT DATA

PROJECT ADDRESS: 4101 W PARMER LN BLDG 2. AUSTIN TEXAS 78727

ZONING: GR-CO

LEGAL DESCRIPTION: LOT 6, BLOCK T, THE RESUBDIVISION OF LOT 37, BLOCK T, MILWOOD SECTION 6. DOC. No. I99900219

GENERAL NOTES

- THIS SITE IS LOCATED IN THE WALNUT CREEK WATERSHED AND IS CLASSIFIED AS SUBURBAN WATERSHED, WHICH SHALL BE DEVELOPED, CONSTRUCTED AND MAINTAINED IN CONFORMANCE WITH THE TERMS AND CONDITIONS OF THE CITY OF AUSTIN WATERSHED DEVELOPMENT ORDINANCE.
- ACCORDING TO THE F.E.M.A. MAP No. 48453C0265 K, DATED JANUARY 6, 2016, FOR TRAVIS COUNTY, TEXAS. THE SUBJECT PROPERTY SHOWN HEREON LIES OUTSIDE THE 100 YEAR FLOOD PLAIN HAZARD AREA, AND IS LOCATED IN ZONE X. THIS STATEMENT IS FOR INSURANCE PURPOSES ONLY AND IS NOT A GUARANTEE THAT THE PROPERTY WILL OR WILL NOT FLOOD.
- THIS SITE IS LOCATED WITHIN THE EDWARD'S AQUIFER RECHARGE ZONE.
- ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF AUSTIN MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
- ENGINEER HAS RESEARCHED CODES, ORDINANCES AND OTHER REQUIREMENTS OF LOCAL, STATE AND FEDERAL JURISDICTION INCLUDING FIRE DEPARTMENTS OF CITY AND COUNTY. THE PROPOSED SITE PLAN IS IN COMPLIANCE WITH THESE REQUIREMENTS.
- WATER SERVICE WILL BE PROVIDED BY THE CITY OF AUSTIN.
- WASTEWATER SERVICE WILL BE PROVIDED BY THE CITY OF AUSTIN.
- " CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO CONSTRUCTION ".
- THE PLAN IS COMPLETE, ACCURATE AND IN COMPLIANCE WITH CHAPTER 25-8 SUBCHAPTER A OF THE LAND DEVELOPMENT CODE.
- 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.
- RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.
- THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS HAS BEEN BASED UPON RECORD INFORMATION ONLY AND MAY NOT MATCH LOCATIONS AS CONSTRUCTED (THE SURVEYOR/ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES, ONLY THE VISIBLE ABOVE GROUND UTILITY STRUCTURES.) THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 811, OR THE OWNER OF EACH INDIVIDUAL UTILITY, FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF UTILITY CROSSING PRIOR TO BEGINNING CONSTRUCTION.
- THE SIZE AND LOCATION OF UTILITY STRUCTURES, (IF SHOWN), MAY BE EXAGGERATED FOR GRAPHICAL CLARITY.
- CONTRACTOR SHALL RESTORE ALL SIGNS AND PAVEMENT MARKINGS TO EXISTING CONDITIONS FOLLOWING THE COMPLETION OF EACH PHASE OF CONSTRUCTION. CONTRACTORS SHALL REFER TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) FOR SIGN AND MARKING DIMENSIONS AND COLORS.
- APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN INDICATES COMPLIANCE WITH THE 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.
- RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS
- COMPLIANCE WITH THE UNIVERSAL RECYCLING ORDINANCE IS MANDATORY FOR MULTI-FAMILY COMPLEXES, BUSINESSES AND OFFICE BUILDINGS
- STORM WATER FACILITIES FOR THIS PROJECT ARE PRIVATELY MAINTAINED.
- 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].
- RELATED PROJECTS: SP-05-1262C - SILVER CREEK CENTER II
- 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
- THE WATER QUALITY/DETENTION FOR THIS SITE PLAN WAS CONSTRUCTED WITH THE "SILVER CREEK II" CONSTRUCTION PLANS SP-05-1262C
- PRIOR TO THE RELEASE OF A CERTIFICATE OF OCCUPANCY, THE WATER QUALITY POND ON WHICH THIS PROJECT RELIES SHALL BE MAINTAINED AS REQUIRED BY THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL SECTION 1.6.3
- 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.

OWNER

ZMT CRYSTAL, LLC.
805 BEARDSLEY LN
AUSTIN, TX 78746
(512)-354-5561

UTILITIES

AUSTIN WATER UTILITY
CITY OF AUSTIN
PERMITTING AND DEVELOPMENT CENTER
6310 WILHELMINA DELCO DR.
AUSTIN, TEXAS 78752
PHONE: (512) 972-1000 (OPTION #3)

TELEPHONE
AT&T
712 EAST HUNTLAND DRIVE, ROOM 229
AUSTIN, TEXAS 78752
PHONE: (512) 870-4708

ELECTRIC
AUSTIN ENERGY
2412 KRAMER LN. BLDG C
AUSTIN, TEXAS 78758
PHONE: (512) 505-7145

ONE-CALL
UTILITY LOCATING SERVICE
CONTRACTOR TO CALL BEFORE DIGGING !! PHONE: 1(800) DIG-TESS = 1(800) 344-8377

CONSULTANTS

CIVIL ENGINEER
AUSTIN CIVIL ENGINEERING, INC.
9501B MENCHACA RD, STE. 220
AUSTIN, TX 78748
PHONE: (512) 306-0018

LANDSCAPE ARCHITECT
BLAIR LANDSCAPE ARCHITECTURE, LLC.
WILLIAM S. BLAIR
2028 E BEN WHITE BLVD.
AUSTIN, TEXAS 78741
INFO@BLAIRLA.COM
WWW.BLAIRLA.COM

ARCHITECT
CONCUR CONSTRUCTION, LLC.
13740 RESEARCH BLVD STE: M5
AUSTIN, TEXAS 78750
PHONE: (512) 512-0761

SURVEYOR
ATS
4910 WEST HWY 290
AUSTIN, TEXAS 78735
PHONE: (512) 328-6995

AUSTIN FIRE DEPARTMENT - PROJECT INFORMATION TABLE	
FIRE DESIGN CODE	2021 INTERNATIONAL FIRE CODE EDITION WITH CITY OF AUSTIN LOCAL AMENDMENTS.
FIRE FLOW DEMAND @ 20 PSI (GPM)	2250 GPM
INTENDED USE	BUSINESS GROUP B
CONSTRUCTION CLASSIFICATION	TYPE V-B
BUILDING FIRE AREA (S.F.)	3,546 S.F. & 3,546 S.F.
AUTOMATIC FIRE SPRINKLER SYSTEM TYPE (IF APPLICABLE)	NON SPRINKLED
REDUCED FIRE FLOW DEMAND @ 20 PSI FOR HAVING A SPRINKLER SYSTEM (GPM) (IF APPLICABLE)	N/A
AFD FIRE HYDRANT FLOW TEST DATE	T.B.D.
AFD FIRE HYDRANT FLOW TEST LOCATION	T.B.D.
CITY OF AUSTIN PIPELINE ORDINANCE APPLIES TO THIS PROJECT	NO
HIGH-RISE	No
INTERNATIONAL WILDLAND-URBAN INTERFACE CODE	N/A
ALTERNATIVE METHOD OF COMPLIANCE AMOC (IF APPLICABLE)	N/A

STATE OF TEXAS

COUNTY OF TRAVIS

I, HUNTER SHADBURNE, P.E., DO HEREBY CERTIFY THAT THE ENGINEERING WORK BEING SUBMITTED HEREIN COMPLIES WITH THE TEXAS ENGINEERING PRACTICE ACT, INCLUDING SECTION 131.152(e). I HEREBY ACKNOWLEDGE THAT ANY MISREPRESENTATION REGARDING THIS CERTIFICATION CONSTITUTES A VIOLATION OF THE ACT, AND MAY RESULT IN CRIMINAL, CIVIL AND/OR ADMINISTRATIVE PENALTIES AGAINST ME, AS AUTHORIZED BY THE ACT.



03/05/2025
HUNTER SHADBURNE, P.E. DATE

DCM WAIVER NOTE:
ON X/X/2025 THIS PROJECT RECEIVED APPROVAL FROM THE WATERSHED PROTECTION DEPARTMENT OF A WAIVER TO SECTION Ordinance No. 20221027-045, PART 18 AND 1.6.7 OF THE COA ENVIRONMENTAL CRITERIA MANUAL. WAIVER HAS BEEN APPROVED DUE TO KEEP THE EXISTING DESIGN OF THE WATER QUALITY/DETENTION POND. THE PLAN AND PROFILE ARE PROVIDED ON SHEETS 15 & 16 AND A DETAIL IS PROVIDED ON SHEET 17.

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

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

NUMBER	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET NO.'S	TOTAL # SHEETS IN PLAN SET	NET CHANGE IMP. COVER (SQ. FT.)	TOTAL SITE IMP. COVER (SQ. FT.)/%	CITY OF AUSTIN APPROVAL-DATE

ACCEPTED FOR CONSTRUCTION:

REVIEWED BY:

DEVELOPMENT SERVICES DEPARTMENT DATE

AUSTIN WATER UTILITY DATE

AUSTIN FIRE DEPARTMENT DATE

INDUSTRIAL WASTE DATE

SITE PLAN APPROVAL SHEET 1 OF 29
FILE NUMBER: SP-2024-0312C APPLICATION DATE: 10/30/2024
APPROVED BY COMMISSION ON: _____ UNDER SECTION 112 (or 142) OF CHAPTER 25-5 OF THE CITY OF AUSTIN CODE.
EXPIRATION DATE (25-5-81, LDC) _____
CASE MANAGER _____
PROJECT EXPIRATION DATE (ORD.#970905-A): _____ DWPZ____DDZ 100%

Director, Development Services Department
RELEASE FOR GENERAL COMPLIANCE: _____ ZONING: GR-CO
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.

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

REVISIONS

REV.	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015 DATE: 03/05/2025
CAD: TEAM H CHK'D BY:
ENGINEER: HS CHK'D BY:
SCALE: N.T.S

COVER SHEET

SITE CIVIL PLAN

01

of 29

SITE PLAN RELEASE NOTES

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 PLANNING AND DEVELOPMENT REVIEW DEPARTMENT.
2. ALL SIGNS MUST COMPLY WITH THE REQUIREMENTS OF THE SIGN AND LAND DEVELOPMENT CODE.
3. A DRIVEWAY PERMIT IS REQUIRED PRIOR TO CONSTRUCTION OF ALL APPROACHES.
4. THE OWNER IS RESPONSIBLE FOR ALL COST OF RELOCATION OR DAMAGE TO UTILITIES.
5. ADDITIONAL ELECTRIC EASEMENTS MAY BE REQUIRED AT A LATER DATE.
6. PARKING DIMENSIONAL AND DESIGN REGULATIONS:

PARKING WILL CONFORM TO THE FOLLOWING MINIMUM DIMENSIONAL STANDARDS IN DESIGNING PARKING AREAS:

IF ANGLE OF PARKING IS	WIDTH OF PARKING SPACE	DEPTH OF PARKING SPACE	WIDTH OF AISLE
STANDARD 61° TO 90°	8.5'	17.5'	25'

7. ALL BEARINGS, DISTANCES AND EASEMENTS SHALL MATCH THOSE ON THE SUBDIVISION PLAT.
8. APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.
9. WATER AND WASTEWATER SERVICE WILL BE PROVIDED BY THE CITY OF AUSTIN
10. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A CONCRETE PERMIT IS REQUIRED.
11. ALL EXISTING STRUCTURES TO BE REMOVED WILL REQUIRE A DEMOLITION PERMIT FROM THE CITY OF AUSTIN PLANNING AND DEVELOPMENT REVIEW DEPARTMENT.
12. A DEVELOPMENT PERMIT MUST BE ISSUED PRIOR TO AN APPLICATION FOR BUILDING PERMIT FOR NON-CONSOLIDATED OR PLANNING COMMISSION APPROVED SITE PLANS.

GENERAL NOTES

EXCEPT AS NOTED OTHERWISE.

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION", CITY OF AUSTIN.
2. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED, REVEGETATED, AND GRADED TO DRAIN.
3. ALL DEBRIS AND EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE IN A MANNER NOT TO INCONVENIENCE THE SITE PRIOR TO ACCEPTANCE OF THE PROJECT.
4. ALL FILL MATERIAL PROVIDED SHALL BE APPROVED BY THE ENGINEER OR OWNER PRIOR TO PLACING AND COMPACTING. THE PLASTICITY INDEX MUST BE LESS THAN 15.
5. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.
6. ALL REINFORCING STEEL SHALL BE ASTM A615, GRADE 60.
7. LAP ALL BAR SPLICES 24 BAR DIAMETERS OR 24 INCHES.
8. ALL CONCRETE SURFACES SHALL RECEIVE A HEAVY BROOM FINISH.
9. CONCRETE RIP RAP TO BE A MINIMUM 4 1/2 " THICK CONCRETE WITH #3'S @ 12" O.C.E.W. OR FIBER MESH CONCRETE.
10. PROVIDE CONCRETE EXPANSION JOINTS AT 40 FEET O.C. ON ALL RIP RAP.
11. PROVIDE A MINIMUM CLEARANCE OF 2" BETWEEN OUTSIDE OF STEEL AND FACE OF CONCRETE.
12. ALL CONCRETE WORK SHALL CONFORM TO ALL APPLICABLE REQUIREMENTS OF ACI 301-72.
13. ALL EXPOSED CORNERS FOR CONCRETE WORK SHALL BE HAND TOOLED.
14. THE INFORMATION CONTAINED ON THESE DRAWINGS IN REGARDS TO EXISTING UTILITIES, TOPOGRAPHY, AND SURFACE CONDITIONS IS PROVIDED SOLELY AS THE BEST INFORMATION AVAILABLE AT THIS TIME. ITS ACCURACY IS NOT GUARANTEED AND ITS USE IN NO WAY RELIEVES THE CONTRACTOR OF ANY RESPONSIBILITY FOR LOSSES DUE TO ANY INACCURACIES.
15. ALL REQUIRED RELOCATION'S OR ALTERATIONS OF TELEPHONE POLES, UNDERGROUND CONDUIT, POWER POLES, AND ANY OTHER FACILITIES SHALL BE DONE BY THE CONTRACTOR. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE HIS WORK WITH THAT OF OTHER CONTRACTORS AND UTILITY COMPANIES SO AS NOT TO DELAY THE PROJECT.
16. THE CONTRACTOR SHALL NOTIFY THE CITY BUILDING INSPECTOR BEFORE BEGINNING ANY UTILITY CONSTRUCTION IN PUBLIC R.O.W. OR PUBLIC EASEMENT. NO PIPE SHALL BE LAID UNTIL THE ASSIGNED INSPECTOR HAS MET WITH THE CONTRACTOR OR HIS REPRESENTATIVE AT THE PROJECT SITE.
17. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES FOR EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
18. ALL TRASH COLLECTION FOR THIS SITE WILL BE PERFORMED BY PRIVATE CONTRACTOR HIRED BY THE CONTRACTOR.
19. THE GEOTECHNICAL REPORT FOR THE SITE SHALL GOVERN ALL CONSTRUCTION MATERIALS AND METHODS RELATED TO: PAVEMENT, BASE, FILL AND EXCAVATION, AND COMPACTION AND TREATMENT OF ON SITE SOILS.
20. 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.
21. PURSUANT TO 15-12-131 OF THE CITY CODE, THE CONTRACTOR MAY NOT BLOCK, DIRECT, IMPEDE OR REROUTE PEDESTRIAN AND VEHICULAR TRAFFIC NOR PLACE A BARRICADE OR OTHER TRAFFIC CONTROL DEVICE IN A RIGHT-OF-WAY, WITHOUT FIRST OBTAINING A TEMPORARY USE OF RIGHT-OF-WAY PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.

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

1. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF AUSTIN STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING) AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT. 4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER THAT WILL ENSURE THAT SOIL DOES NOT WASH INTO TREE DRIP LINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE) , FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY ARBORIST;
   C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT.
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED;
   B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZED ROOT DAMAGE).
   C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEEN THE FENCE AND THE BUILDING.
   D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITY ARBORIST AT 974-1876 TO DISCUSS ALTERNATIVES.
   SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE PERMITTED.
7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.).
13. ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

EROSION & SEDIMENTATION CONTROL

1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN EROSION AND SEDIMENTATION CONTROL ORDINANCE.
2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROPRIATE GRASS, GRASS MIXTURE OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY THE CITY OF AUSTIN FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY ENGINEER, THEY ARE WARRANTED.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER AND THE CITY ENVIRONMENTAL INSPECTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.

SPECIAL NOTES:

1. LSS IS DEFINED AS "LIME STABILIZED SUBGRADE".
2. REFER TO THE GEOTECHNICAL RECOMMENDATIONS ON PAVEMENT DESIGN.
3. MANHOLE FRAMES, COVERS, AND WATER VALVE COVERS WILL BE RAISED TO FINISHED PAVEMENT GRADE AT THE OWNER'S EXPENSE BY A QUALIFIED CONTRACTOR. ALL UTILITY ADJUSTMENTS SHALL BE COMPLETED PRIOR TO FINAL PAVING CONSTRUCTION.
4. FOR LIMITATIONS OF WORKING HOURS, CONTRACTOR IS REFERRED TO THE CITY OF AUSTIN'S CODE OF ORDINANCES, TITLE X CHAPTER 10-5.
5. ALL SPOILS MATERIAL MUST BE KEPT ON-SITE UNLESS WRITTEN AUTHORIZATION IS PROVIDED BY THE DEVELOPER.
6. IF WATER FLOW FEATURES ARE ENCOUNTERED DURING TRENCHING. IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT THE ENVIRONMENTAL INSPECTOR FOR FUTURE ACTION.

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

ZMT CRYSTAL, LLC.	(512)-354-5561
OWNER	PHONE #
805 BEARDSLEY LN. AUSTIN, TX 78746	
OWNER ADDRESS	
OSCAR HERRERA, P.E.	(956)-756-4419
OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS	PHONE #
CONTRACTOR TO BE SELECTED	(512)-____-____
PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE	PHONE #
CONTRACTOR TO BE SELECTED	(512)-____-____
PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE	PHONE#

7. THIS SITE PLAN IS SUBJECT TO THE CODES IN EFFECT AS OF THE DATE APPROVED PER CH 245, ORIGINAL APPLICATION 9/22/1983.
8. ANY TEMPORARY SPOILS STOCKPILE MUST BE LOCATED WITHIN THE PROPOSED PARKING AREAS OUTSIDE OF ANY TREE PROTECTIONS. ALL EXCESS MATERIAL WILL BE DISPOSED OF OFF SITE. CONTRACTOR SHALL NOT DISPOSE OF SURPLUS MATERIAL FROM THE SITE WITHOUT NOTIFYING THE INSPECTOR 48 HOURS PRIOR TO THE REMOVAL. THIS NOTIFICATION SHALL INCLUDE THE DISPOSAL LOCATION.
9. ALL SLOPES GREATER THAN 3 TO 1 SHALL BE STABILIZED BY MORTARED ROCK RIP RAP OR OTHER APPROVED METHODS.
10. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF ANY AND ALL EXISTING BUILDINGS/STRUCTURES ON SITE AND UTILITY RELOCATION WORK.
11. PROVIDE CURB AND GUTTER AS NOTED ON THE PLANS.
12. ALL SANITARY SEWER 18" IN DIAMETER AND LARGER SHALL BE CLASS III RCP W/ O-RING GASKETS UNLESS NOTED OTHERWISE. IT IS RECOMMENDED THAT THE STORM SEWER LOCATED UNDER ENTRANCE BE AT LEAST CLASS IV OR AS APPROVED BY ENGINEER. NO ALTERNATES WILL BE ACCEPTED WITHOUT THE WRITTEN APPROVAL OF THE PROJECT ENGINEER. ALL STORM SEWER PIPE 12" AND SMALLER SHALL BE MINIMUM POLYETHYLENE PIPE WITH GASKETS. ALL STORM SEWER PIPE AND FITTINGS MUST BE FACTORY MADE. NO FIELD FITTINGS WILL BE ALLOWED.
13. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
14. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.
15. THE CONTRACTOR AND THE ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH THE CITY OF AUSTIN ACCURATE "AS BUILT" DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS BUILT" DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE PUBLIC WORKS DEPARTMENT PRIOR TO FINAL ACCEPTANCE.
16. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND ANY TEMPORARY EASEMENTS. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. CLEANUP AND REVEGETATION SHALL BE TO THE SATISFACTION OF THE ENGINEER AND THE CITY.
17. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE PROPER AUTHORITIES.
18. AVAILABLE BENCHMARKS THAT MAY BE UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT ARE DESCRIBED AS FOLLOWS:

19. THE NAME AND PHONE NUMBER OF THE OWNERS REPRESENTATIVE WHO IS RESPONSIBLE FOR PLAN ALTERATIONS. OSCAR HERRERA, P.E.: (956) 756-4419.
20. THE NAME AND PHONE NUMBER OF THE DESIGNATED REPRESENTATIVE FOR THE OWNER/DEVELOPER WHO WILL HAVE THE AUTHORITY TO MAKE APPROPRIATE CHANGES TO THE SEDIMENTATION/EROSION CONTROL PLAN IF IT IS DISCOVERED TO BE INADEQUATE: CONTRACTOR TO BE SELECTED.
21. THE IDENTITY OF THE PERSON OR FIRM WHO WILL BE RESPONSIBLE FOR THE EROSION/SEDIMENTATION CONTROL MAINTENANCE & TREE, NATURAL AREA PROTECTION MAINTENANCE. CONTRACTOR TO BE SELECTED.
22. THIS SITE IS LOCATED IN THE BOGGY CREEK WATERSHED AND IS CLASSIFIED AS URBAN WATERSHED, WHICH SHALL BE DEVELOPED, CONSTRUCTED AND MAINTAINED IN CONFORMANCE WITH THE TERMS AND CONDITIONS OF THE CITY OF AUSTIN WATERSHED DEVELOPMENT ORDINANCE.
23. THIS SITE IS NOT LOCATED WITHIN THE EDWARD'S AQUIFER RECHARGE ZONES.
24. ACCORDING TO THE F.E.M.A. MAP No. 48453C0265 K, DATED JANUARY 22, 2020, FOR TRAVIS COUNTY, TEXAS, THE SUBJECT PROPERTY SHOWN HEREON LIES OUTSIDE THE 100 YEAR FLOOD PLAIN HAZARD AREA, AND IS LOCATED IN ZONE X. THIS STATEMENT IS FOR INSURANCE PURPOSES ONLY AND IS NOT A GUARANTEE THAT THE PROPERTY WILL OR WILL NOT FLOOD.
25. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE DRAINAGE UTILITY DEPARTMENT AT 974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.
26. 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.
27. THE PRIMARY CONTRACTOR IS RESPONSIBLE FOR KEEPING THE STATE ROADWAY FREE OF MUD, ROCKS, AND OTHER DEBRIS. IF THE HIGHWAY BECOMES UNSAFE FOR TRAFFIC FOR TRAFFIC BECAUSE OF DEBRIS FROM THE CONSTRUCTION SITE. THE CONTRACTOR MUST CLEAN THE ROADWAY IMMEDIATELY AND SUSPEND WORK IF NECESSARY.
28. GENERAL CONTRACTOR MUST PROVIDE ON SITE PARKING DURING ALL PHASES OF CONSTRUCTION. PARKING WILL NOT BE ALLOWED WITHIN THE RIGHT OF WAY OF STATE MAINTAINED ROADWAYS.
29. ALL DAMAGE CAUSED DIRECTLY OR INDIRECTLY TO THE STREET SURFACE, SIDEWALK, DRIVEWAY, CURB & GUTTER, OR SUBSURFACE OUTSIDE OF THE PAVEMENT CUT AREA SHALL BE REGARDED AS PART OF THE STREET CUT REPAIR. THIS INCLUDES ANY SCRAPES, GOUACHES, CUTS, CRACKING, DEPRESSION, AND/OR ANY OTHER DAMAGE CAUSED BY THE CONTRACTOR DURING THE EXECUTION OF THE WORK. THESE REPAIRS WILL BE INCLUDED IN THE TOTAL AREA OF RESTORATION. THESE AREAS SHALL BE SAW CUT IN STRAIGHT, NEAT LINES, PARALLEL TO THE EXCAVATION OR UTILITY TRENCH AND TO THE NEXT EXISTING JOINT FOR SIDEWALKS AND CURB & GUTTER. ALL SUCH REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSES AND SHALL MEET ALL CITY TESTING REQUIREMENTS, STANDARDS, AND SPECIFICATIONS.

FIRE DEPARTMENT

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 ALTERNATIVE METHOD OF CONSTRUCTION IN ACCORDANCE WITH 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 (16KIPS/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 VEHICLES ACCESS ROADS OR DRIVES IS 14 FEET FOR THE FULL WIDTH OF THE ROADWAY OR DRIVEWAY.

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 A 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 GROUPING 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:

I. 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 60 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 SOIL
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 SWP

GENERAL NOTES

ALL RESPONSIBILITY FOR THE ADEQUECY 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 JURISDICATION 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.

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

FIRE FLOW TEST DATA

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

Hydrant Flow Test Report

TEST DATE	02/05/2025	FIRE BOX	2806	COMPANY	PREVENTION
TIME	1120 HRS	MAP GRID ID	K35	AFD STAFF	TWYMAN, MICHAEL

RESIDUAL HYDRANT

RESIDUAL HYDRANT #	214894	MAIN SIZE (in.)	12

BLK #	DIRECTION	STREET NAME	TYPE
4000	W	PARMER	LN

STATIC PRESSURE (PSI)	88	RESIDUAL PRESSURE (PSI)	84

FLOW HYDRANT

FLOW HYDRANT #	214882	MAIN SIZE (in.)	12

BLK #	DIRECTION	STREET NAME	TYPE
4000	W	PARMER	LN

STATIC PRESSURE (PSI)	92	RESIDUAL PRESSURE (PSI)	82

Comments	dc = discharge coefficient straight 2½" butt = 0.9 w/ 45° elbow = 0.75	0.75
	FLOW RATE (GPM) =	1267

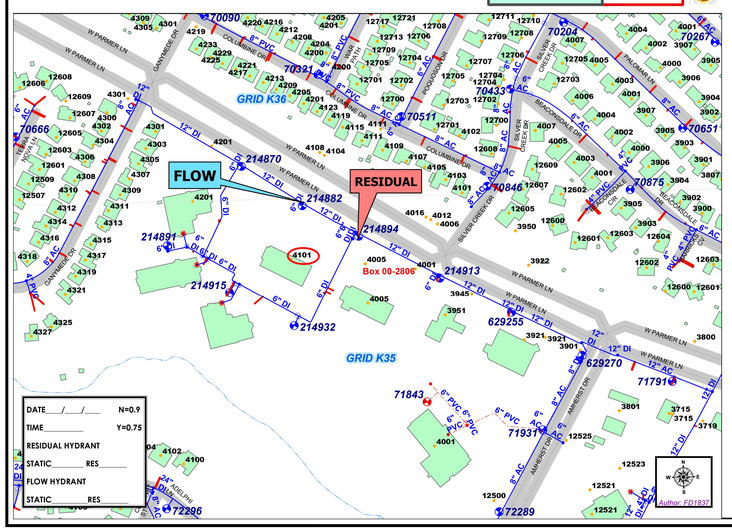
NOTE: This information represents the water supply characteristics in the immediate area on the date and time tested. The City of Austin does not guarantee this data will be representative of the water supply characteristics at any time in the future. It is the requesting party's responsibility to ensure 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 #18389171

FIRE FLOW MAP

4000 BLK W. PARMER LN...BOX 2806

REF# 18354671 01/28/2025



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' ☒ Greather 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

Does this project require an AULCC review?
☐ YES ☒ NO

IF YES, PLEASE PROVIDE UCC# _____

AW INFRASTRUCTURE INFORMATION

PROPOSED PRODUCT TYPE (TO BE INSTALLED)	LENGTH OF PIPE (L.F.)	SIZE OF PIPE (INCH)	NO. OF SERVICES
WATER MAIN			
WASTEWATER MAIN			
RECLAIMED WATER MAIN			
WATER SERVICE (FIRE)			
WATER SERVICE (DOMESTIC)	42.0	2	1
WATER SERVICE (IRRIGATION)			
WASTEWATER SERVICE	305.0	6	1
RECLAIMED WATER SERVICE			

PROJECT INFORMATION[1]

FIRE, DOMESTIC AND IRRIGATION DEMAND DATA	
GRID NUMBER:	K 35
MAPSCO NUMBER:	465 M
AW INTERSECTION NUMBER:	25211
PROP. BUILDING SIZE IN SQUARE FEET:	3,546
EX. BUILDING SIZE IN SQUARE FEET:	10,010
PROP. BUILDING TYPE PER IFC:	V-B
EX. BUILDING TYPE PER IFC:	II-B
PROP. BUILDING HEIGHT:	20'
EX. BUILDING HEIGHT:	32'
AVAILABLE FIRE FLOW CALCS AT 20 PSI:	5851 GPM
REQUIRED BUILDING FIRE FLOW PER IFC TABLE B105.1(2):	2250 GPM
REDUCED FIRE FLOW PER 75% FIRE SPRINKLER REDUCTION PER IFC TABLE B105.2:	1558.5 GPM
MINIMUM FIRE FLOW (SEE NOTE #2 BELOW):	1500 GPM
DOMESTIC WATER DEMAND IN GPM:	25 GPM
WATER SUPPLY FIXTURE UNITS (WSFU) FLUSH TANKS OR FLUSHOMETERS (CIRCLE APPLICABLE ITEM):	43
AUSTIN WATER PRESSURE ZONE:	NORTHWEST A (970'-1015')
STATIC WATER PRESSURE IN PSI:	95.24
STATIC PRESSURE AT THE HIGHEST LOT SERVED IN PSI:	82.25
STATIC PRESSURE AT THE LOWEST LOT SERVED IN PSI:	101.73
MAXIMUM IRRIGATION DEMAND:	N/A
FIRE LINE VELOCITY: 8"SIZE OF FIRE LINE	N/A
DOMESTIC LINE VELOCITY: 2" SIZE OF DOMESTIC LINE	2.390 FPS
LIVING UNIT EQUIVALENTS (LUEs)	11

NOTE: 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.

Meter(s) Requirement for Project:

Address: 4101 W PARMER LN AUSTIN, TEXAS 78727

Proposed Use: DOMESTIC METER

Type: POSITIVE DISPLACEMENT

Size: 3/4" GPM Range: 25

Service Units: 1

Irrigation Meter(s) Requirement for Project:

Address: 4101 W PARMER LN AUSTIN, TEXAS 78727

Existing Use: IRRIGATION METER

Type: POSITIVE DISPLACEMENT

Size: 1" GPM Range: 25

Service Units: 1

Reclaimed Meter(s) Requirement for Project:

Address:

Proposed Use:

Type:

Size: GPM Range:

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 October 1, 2021

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 DEPT, 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 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, DEVELOPMENT SERVICES, OR PUBLIC WORKS). 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. ALL MATERIALS TESTS ORDERED BY THE OWNER FOR QUALITY ASSURANCE PURPOSES, SHALL BE CONDUCTED BY AN INDEPENDENT LABORATORY AND FUNDED BY THE OWNER IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 1804S.04.
8. PRESSURE TAPS SHALL 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.
9. 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 AT THE PRESSURES SHOWN ON THE APPROVED PLANS.
10. 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.
11. 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.
12. 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.
13. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTOR SO THAT HE CAN NOTIFY THE AUSTIN WATER AT 972-0000 AT A MINIMUM OF 72 HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METERS. THE CONTRACTOR SHALL CAREFULLY REMOVE ALL METERS AND METERS BOXES THAT ARE INDICATED TO BE RELOCATED OR SALVAGED. THE CONTRACTOR SHALL INSTALL THE REMOVED METER OR CITY PROVIDED METER AT THE NEW LOCATION INDICATED ON THE CONSTRUCTION PLANS.
14. THE CONTRACTOR SHALL VERIFY ALL VERTICAL AND HORIZONTAL LOCATIONS OF EXISTING UTILITIES, BELOW GROUND AND OVERHEAD, PRIOR TO STARTING ONSITE UTILITY WORK.
15. ALL WATER, WASTEWATER, AND RECLAIMED MAINS SHALL BE INSTALLED IN ACCORDANCE WITH THE SEPARATION DISTANCES INDICATED ON THE PLANS, PER UTILITY CRITERIA MANUAL AND TCEQ CHAPTERS 210, 217, AND 290.
16. 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.
17. 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.
18. 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 512-972-1280.
19. 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.
20. THE ENGINEER SHALL CALL OUT THE SIZE, TYPE AND USE (DOMESTIC OR IRRIGATION) 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 AUSTIN WATER TAPS OFFICE FORM WILL BE USED TO PROVIDE RELEVANT DATA FOR THE EXISTING INFORMATION ON EXISTING METERS TO RECEIVE APPROPRIATE CREDITS. THIS FORM SHALL BE DIRECTLY SUBMITTED TO AUSTIN WATER TAPS OFFICE FOR REVIEW AND PROCESSING.
21. NO CONNECTION MAY BE MADE BETWEEN THE PRIVATE PLUMBING AND AUSTIN WATER INFRASTRUCTURE UNTIL A CITY APPROVED WATER METER HAS BEEN INSTALLED.
22. METER BOXES AND CLEAN OUTS SHALL NOT BE LOCATED WITHIN PAVED AREAS SUCH AS DRIVEWAYS AND SIDEWALKS.

AW EXPIRATION STAMP

CITY APPROVAL STAMP

SP-2024-0312C

CITY OF AUSTIN
AUSTIN WATER
October 2021

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

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018





03/05/2025

SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

REVISIONS	
DESCRIPTION	APPROVED BY
REV. DATE	

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE: N.T.S	

AUSTIN WATER GENERAL INFORMATION AND CONSTRUCTION NOTES

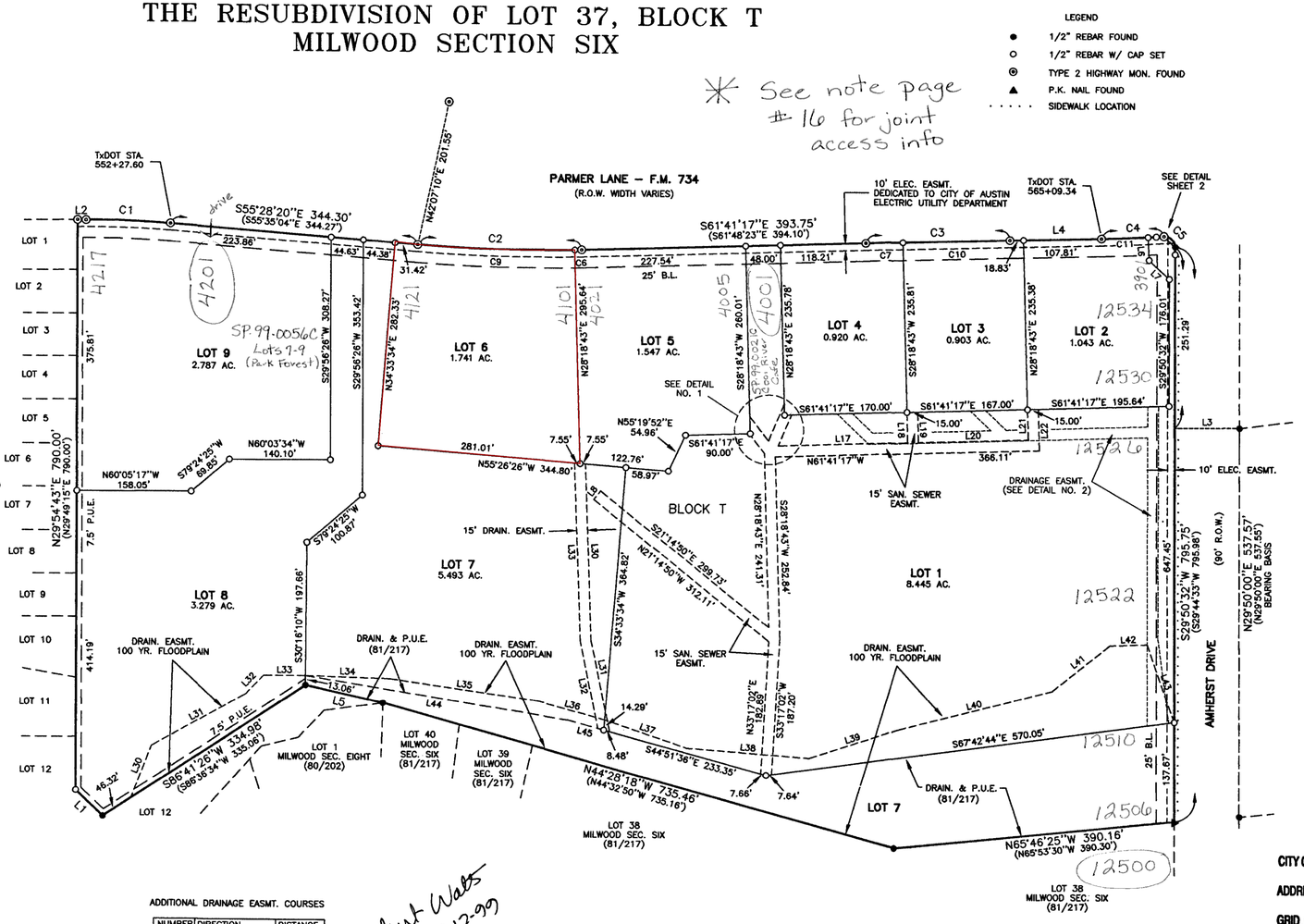
SITE CIVIL PLAN

03

of 29

1 OF 3

THE RESUBDIVISION OF LOT 37, BLOCK T
MILWOOD SECTION SIX



ADDITIONAL DRAINAGE EASMT. COURSES

NUMBER	DIRECTION	DISTANCE
L30	N51°04'59"E	78.14'
L31	S89°20'28"E	148.96'
L32	N74°32'16"E	35.93'
L33	S60°03'42"E	58.10'
L34	S58°17'07"E	116.71'
L35	S51°50'22"E	207.36'
L36	S44°48'57"E	96.20'
L37	S41°26'03"E	120.56'
L38	S55°31'54"E	189.14'
L39	S77°53'51"E	132.61'
L40	S74°24'22"E	217.23'
L41	N81°44'40"E	101.96'
L42	S62°00'13"E	51.54'
L43	S10°27'26"W	113.39'
L44	S50°47'25"E	369.53'
L45	S44°51'36"E	50.62'

Robert Watts 3-12-99

STATE OF TEXAS REGISTERED ROBERT C. WATTS JR. 4998 PROFESSIONAL LAND SURVEYOR

CITY OF AUSTIN LAND INFORMATION SERVICES
ADDRESSED BY CVa DATE 7/15/99
GRID K 35,36 PLAT # 10499
ADDRESS QUESTIONS, CALL 512-499-2797

Chaparral
Professional Land Surveying, Inc.
Surveying and Mapping
510 South Congress Ave., Suite B-100
Austin, Texas 78704
512-476-7103

GRIFFIN ENGINEERING GROUP, INC.
11711 NORTH LAMAR, AUSTIN, TEXAS 78753 (512) 836-3113

PROJECT NO.: 106-97002
DRAWING NO.: 106-0204
PLOT DATE: 03/12/99
PLOT SCALE: 1"=100'
DRAWN BY: COD
SHEET 01 OF 03

PHOTOGRAPHIC MYLAR

AMD 10499

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE 220
AUSTIN, TX 78748
PH: (512) 306-0018

SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

REV. DATE	DESCRIPTION	APPROVED BY
	REVISIONS	

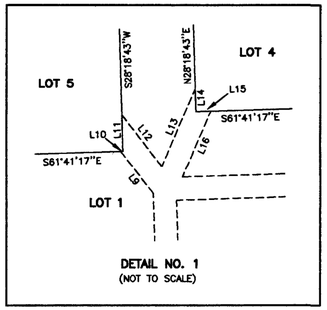
JOB: 24-015 DATE: 03/05/2025
CAD: TEAM H CHK'D BY:
ENGINEER: HS CHK'D BY:
SCALE: N.T.S.

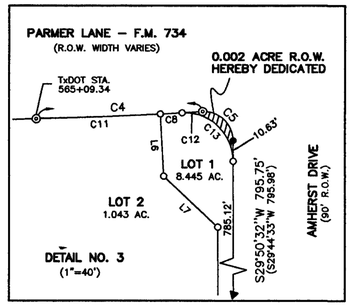
PLAT 1 OF 3

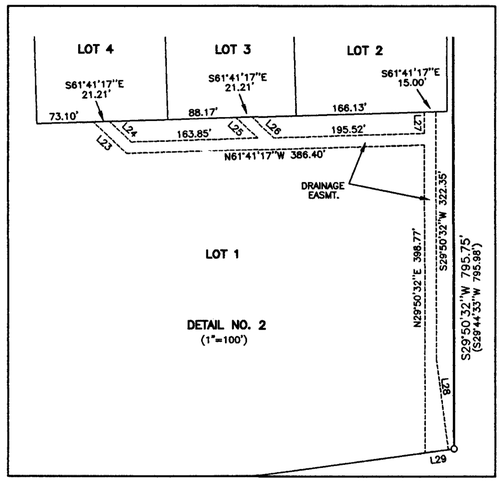
SITE CIVIL PLAN

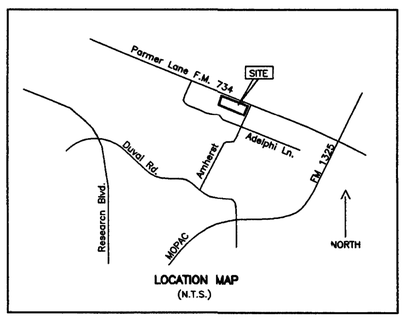
04 of 29

199200 249









THE RESUBDIVISION OF LOT 37, BLOCK T MILWOOD SECTION SIX

NUMBER	DIRECTION	DISTANCE	(RECORD)
L1	N16°21'16"W	52.00'	(N16°39'00"W 52.00')
L2	S60°34'25"E	10.02'	(S60°34'59"E 10.00')
L3	S60°09'28"E	90.18'	
L4	S61°22'26"E	126.64'	(S61°30'22"E 126.66')
L5	N47°30'55"W	109.99'	(N47°36'20"W 109.94')
L6	S26°55'30"W	32.23'	
L7	S16°47'49"E	38.58'	

NUMBER	DELTA	BEARING	RADIUS	ARC	CHORD	(RECORD)
C1	04°59'44"	S58°00'17"E	1357.88	118.39	118.35	(S58°05'01"E 118.43')
C2	06°13'41"	S58°36'21"E	2090.84	227.28	227.16	(S58°41'44"E 226.94')
C3	00°18'01"	S61°36'10"E	38161.76	199.96	199.96	(S61°39'22"E 200.00')
C4	02°15'22"	S62°31'17"E	2194.90	86.43	86.42	(S62°38'04"E 86.45')
C5	92°38'45"	S16°36'37"E	15.00	24.25	21.70	(S17°00'37"E 21.85')
C6	00°09'40"	S61°33'50"E	2090.84	9.46	9.46	
C7	00°04'40"	S61°42'50"E	38161.76	51.79	51.79	
C8	00°17'43"	S63°13'22"E	2194.90	11.31	11.31	
C9	05°58'04"	S58°28'35"E	2090.84	217.82	217.72	
C10	00°13'21"	S61°33'50"E	38161.76	148.17	148.17	
C11	01°40'54"	S62°14'03"E	2194.90	64.42	64.42	
C12	00°16'45"	S63°30'35"E	2194.90	10.69	10.69	
C13	93°12'45"	S16°45'50"E	25.00	40.67	36.33	

NUMBER	DIRECTION	DISTANCE
L8	N68°45'10"E	15.00'
L9	N08°00'03"W	34.23'
L10	S61°41'17"E	1.38'
L11	N28°18'43"E	23.45'
L12	S08°00'03"E	42.10'
L13	N53°18'09"E	54.60'
L14	S28°18'43"W	14.77'
L15	S61°41'17"E	9.66'
L16	S53°18'09"W	46.17'
L17	S61°41'17"E	179.84'
L18	N28°18'43"E	41.85'
L19	S28°18'43"W	41.85'
L20	S61°41'17"E	152.00'
L21	N28°18'43"E	41.85'
L22	S28°18'43"W	56.85'
L23	N16°41'17"W	60.10'
L24	N16°41'17"W	38.89'
L25	S16°41'17"E	38.89'
L26	S16°41'17"E	38.89'
L27	N29°50'32"E	27.51'
L28	S22°26'02"W	116.33'
L29	N67°42'44"W	30.26'
L30	S27°56'21"W	243.88'
L31	S18°11'21"W	129.37'
L32	N18°11'21"E	123.02'
L33	N27°56'21"E	246.90'

SURVEYOR'S CERTIFICATION

I, ROBERT C. WATTS, 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 13 OF THE AUSTIN CITY CODE OF 1981 AS AMENDED, IS TRUE AND CORRECT, AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY MADE BY ME OR MADE UNDER MY SUPERVISION, MADE ON THE GROUND IN DECEMBER, 1997.

Robert Watts 3-10-99

ROBERT C. WATTS, JR., R.P.L.S. 4995

SURVEYING BY:
CHAPARRAL PROFESSIONAL LAND SURVEYING
510 SOUTH CONGRESS, SUITE B-100
AUSTIN, TEXAS 78704
512-476-7103

STATE OF TEXAS · REGISTERED · ROBERT C. WATTS JR. · 4995 · PROFESSIONAL · LAND SURVEYOR

ENGINEER'S CERTIFICATION

I, GREGORY GRIFFIN, 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 13 OF THE AUSTIN CITY CODE OF 1981, AS AMENDED, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

THE 100 YEAR FLOOD PLAIN WILL BE CONTAINED WITHIN THE DRAINAGE EASEMENTS SHOWN HEREON. A PORTION OF THIS TRACT IS WITHIN THE BOUNDARIES OF THE 100 YEAR FLOOD PLAIN OF THE 100 YEAR FLOOD PLAIN AS DEPICTED ON FIRM PANEL 48453C0155 E, DATED JUNE 16, 1993 FOR TRAVIS COUNTY AND INCORPORATED AREAS.

3/9/99

GREGORY GRIFFIN, P.E. 64151

ENGINEERING BY:
GRIFFIN ENGINEERING GROUP, INC.
11711 NORTH LAMAR BLVD.
AUSTIN, TEXAS 78753
512-836-3113

STATE OF TEXAS · REGISTERED · GREGORY GRIFFIN · 64151 · PROFESSIONAL ENGINEER

PROJECT NO.: 106-97002
DRAWING NO.: 106-0204
PLOT DATE: 03/10/99
PLOT SCALE: 1"=100'
DRAWN BY: RCW
SHEET 02 OF 03

ADD 10499

C8-99-0004.0A

PHOTOGRAPHIC MYLAR

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE 220
AUSTIN, TX 78748
PH: (512) 306-0018

SILVER CREEK EXPANSION
4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

REVISIONS
REV. DATE | DESCRIPTION | APPROVED BY

JOB: 24-015 | DATE: 03/05/2025
CAD: TEAM H | CHK'D BY:
ENGINEER: HS | CHK'D BY:
SCALE: N.T.S.

CITY APPROVAL STAMP

SP-2024-0312C

PLAT 2 OF 3

SITE CIVIL PLAN
05
of 29

199900219

THE RESUBDIVISION OF LOT 37, BLOCK T MILWOOD SECTION SIX

Know All Men by These Presents:

That Real Alchemy I, L.P., acting herein by and thorough Paul R. Guernsey, Vice President of Energy Alchemy, Inc., General Partner of Real Alchemy 1, Inc., being the owners of Lot 37, Block T, Milwood Section Six, a subdivision of record in Volume 81, Page 217 of the Plat Records of Travis County, Texas, conveyed by Deed of record in Volume 13242 Page 1939 of the Real Property Records of Travis County, Texas, do hereby Subdivide 26.160 acres, being all of Lot 37, said subdivision having been approved for resubdivision pursuant to the public notification and hearing provision of Chapter 212.015, of the Local Government Code, do hereby resubdivide 26.160 acres to be known as

THE RESUBDIVISION OF LOT 37, BLOCK T, MILWOOD SECTION SIX

in accordance with the map or plat shown hereon, subject to any and all easements and restrictions heretofore granted and not released.

Paul R Guernsey 6/17/99

Paul R, Guernsey, Vice President — Date
Energy Alchemy, Inc., General Partner
Real Alchemy, I, L.P.
4504 Winewood Court
Colleyville, Texas 76034

STATE OF TEXAS
COUNTY OF TARRANT

Before me, the undersigned authority, on this day personally appeared Paul R. Guernsey, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purpose therein expressed and in the capacity as therein stated.

GIVEN UNDER MY HAND THIS THE 17th DAY OF June, 1999.

Carla Russo
Notary Public in and for the State of Texas

My Commission Expires: 2-8-2000

CARLA RUSSO
NOTARY PUBLIC
State of Texas
Comm. Exp. 02-08-2000

APPROVED FOR ACCEPTANCE:

Alice Glasco for 7-8-99
ALICE GLASCO, DIRECTOR — DATE
DEPT. OF DEVELOPMENT, REVIEW AND INSPECTION

ACCEPTED AND AUTHORIZED FOR RECORD BY THE PLANNING COMMISSION OF THE CITY OF AUSTIN ON THE 29th DAY OF June, 19 99 A.D.

Ray Vrudhula
RAY VRUDHULA, SECRETARY

Betty Baker
BETTY BAKER, CHAIRPERSON

THE STATE OF TEXAS
COUNTY OF TRAVIS

I, DANA DEBEAUVOIR, CLERK OF TRAVIS COUNTY, TEXAS, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING, WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORD IN MY OFFICE ON THE 13th DAY OF July A.D. 1999 AT 2:18 O'CLOCK P M., AND DULY RECORDED ON THE 13th DAY OF July, A.D. 1999 AT 2:18 O'CLOCK P M., IN THE PLAT RECORDS OF SAID COUNTY AND STATE, IN DOCUMENT NO. 199900219

WITNESS MY HAND AND SEAL OF OFFICE OF THE COUNTY CLERK, THE 13th DAY OF July, 1999 A.D.

DANA DEBEAUVOIR, COUNTY CLERK, TRAVIS COUNTY, TEXAS
BY _____ DEPUTY Y. GUERRA

FILED FOR RECORD, AT 2:18 O'CLOCK P M., THIS 13th DAY OF July 1999 A.D.

DANA DEBEAUVOIR, COUNTY CLERK, TRAVIS COUNTY, TEXAS
BY _____ DEPUTY Y. GUERRA

PHOTOGRAPHIC MYLAR

PLAT NOTES:

1. No lot in this subdivision shall be occupied until connection is made to the City of Austin water and wastewater system.

2. Water and Wastewater Systems serving this subdivision shall be designed and installed in accordance with the City of Austin and State Health Department plans and specifications. Plans and Specifications shall be presented to the City of Austin, Water and Wastewater Department for review.

3. Public sidewalks, built to City of Austin standards, are required along the following streets, as shown by a dotted line of the face of the plat: The subdivision side of Amherst Drive. Failure to construct the required sidewalks may result in the withholding of Certificate of Occupancy, building permit, or utility connections by the governing body or utility company, LDC Section 13-5-91.

4. All building setbacks shall be in accordance with the City of Austin Zoning Ordinance.

5. 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.

6. There are no slopes in excess of fifteen percent (15%) within the limits of this subdivision.

7. The Electric Utility has the right to prune and/or remove trees, shrubbery and other obstructions to the extent necessary to keep the easements clear. The Utility will perform all tree work in compliance with Chapter 13-7, Article II of the City of Austin Land Development Code.

8. The owner/developer of this subdivision/lot shall provide the City of Austin Electric Utility Department 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 13-7 of the City of Austin Land Development Code.

9. The owner shall be responsible for installation of any temporary erosion control, revegetation and tree protection. In addition, the owner shall be responsible for any tree pruning and tree removal that is within ten feet of the centerline of the overhead electrical facilities designed to provide electric service to this project. Austin Energy work shall be included within the limits of construction for this project.

10. All signs shall comply with the Austin Sign Ordinance.

11. Erosion/Sedimentation controls are required for all construction on each lot, including single-family and duplex construction, pursuant to Section 13-7-14, LDC. This Electric Utility work shall also be included within the limits of construction for this project.

12. This subdivision plat was approved and recorded before the construction and acceptance of streets and other subdivision improvements. Pursuant to the terms and the conditions of a Subdivision Improvements Agreement between the subdivider and the City of Austin, dated July 6th 1999, the subdivider is responsible for the construction of all streets and facilities needed to serve the lots within this subdivision. This responsibility may be assigned in accordance with the terms of the agreement.

For the Subdivision Improvements Agreement pertaining to this subdivision, see separate instrument recorded in Document No. 1999066556, in the Deed Records of Travis County, Texas. The owner of this subdivision, and his or her successors and assigns assumes responsibility for the plans for construction of subdivision improvements which comply with applicable codes and requirements of the City of Austin. The owner understands and acknowledges that plat vacation or replatting may be required, at the owner's sole expense, if plans to construct this subdivision do not comply with such codes and requirements.

13. This subdivision is located in the Walnut Creek Suburban Watershed and is classified as suburban, and shall be developed, constructed and maintained in conformance with the terms and conditions of Chapter 13-2, Article V, and 13-7, Article 1 of the City Land Development Code (as applicable).

14. All restrictions and notes from the previous existing subdivision, Millwood Section Six, shall apply to this resubdivision plat.

15. Development of these lots are hereby restricted to uses other than residential uses.

16. Joint access will be provided to Lots 1, 3, 4, 7 and 8, from Parmer Lane.

17. Off-street loading and unloading facilities shall be provided on all commercial and industrial lots.

18. All finished floor elevations shall be 1.0 foot minimum above the 100 year frequency flood level. The following minimum finished floor elevations are hereby set for the affected lots:

LOT	BLOCK	FF
1	T	752.00
7	T	758.00
8	T	765.00

19. 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 established by region detention plans approved by the City of Austin, except that runoff in excess of the amount established for the regional detention system shall be detained by the use of onsite ponding or other approved methods.

20. No fill shall be placed or allowed to remain on these lots except by separate permit.

21. No buildings, fences, landscaping or other obstructions are permitted in drainage easements except as approved by the City of Austin or Travis County.

22. All drainage easements on private property shall be maintained by the property owner or assigns.

23. Property owners shall provide for access to drainage easements as may be necessary and shall not prohibit access by governmental authorities.

PROJECT NO.: 106-97002
DRAWING NO.: 106-0204
PLOT DATE: 05/10/99
PLOT SCALE: 1"=100'
DRAWN BY: COD

SHEET 03 OF 03

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE 220
AUSTIN, TX 78748
PH: (512) 306-0018

SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

REVISIONS

REV.	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015 DATE: 05/05/2025
CAD: TEAM H CHK'D BY:
ENGINEER: HS CHK'D BY:
SCALE: N.T.S.

PLAT 3 OF 3

SITE CIVIL PLAN

06
of 29

AS-BUILT, TREE AND TOPOGRAPHIC SURVEY

ATS Job #240530005s

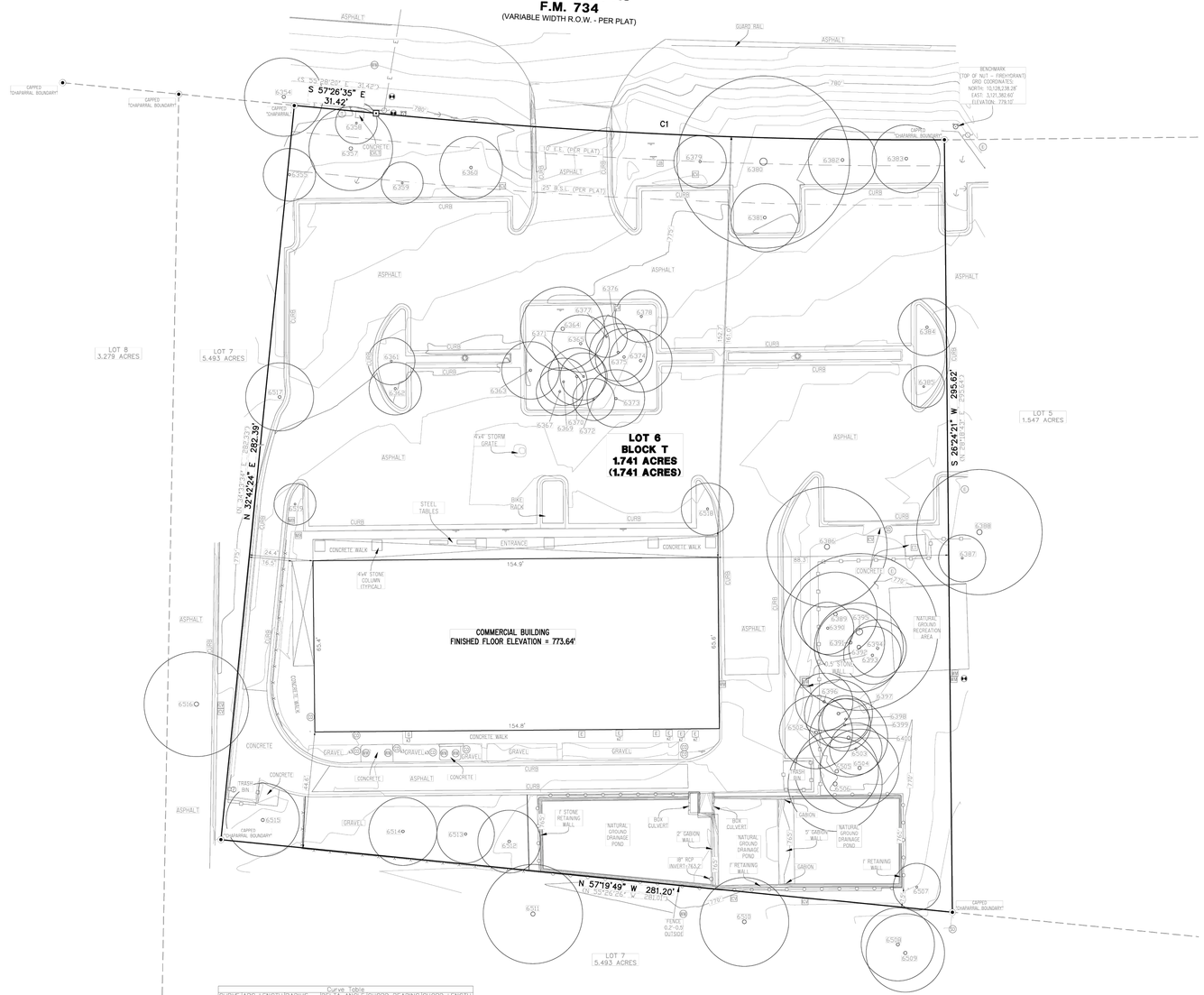
Reference: Concur Construction, LLC Address: 4101 West Parmer Lane, Austin, Texas
Lot 6, Block T, THE RESUBDIVISION OF LOT 37, BLOCK T, MILWOOD SECTION SIX as recorded in Document No. 199900219 (Plat), Official Public Records, Travis County, Texas.

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

LEGEND

●	½" IRON ROD FOUND W/CAP (AS NOTED)
⊡	CONCRETE MONUMENT W/DISK
G	GAS METER
E	ELECTRIC METER
WW	WASTE WATER MANHOLE
SIGN	SIGN
⊘	BOLLARD POST
○—	POWER POLE
—○	GUY WIRE
CO	WASTEWATER CLEANOUT
SD	STORM DRAIN MANHOLE
T	TELEPHONE MANHOLE
	FIRE HYDRANT
	WATER VALVE
E	ELECTRIC MANHOLE
ET	ELECTRIC TRANSFORMER
EB	ELECTRIC JUNCTION BOX
IV	IRRIGATION CONTROL VALVE
WM	WATER METER
	LIGHT STANDARD
——	BUILDING SETBACK
—— ——	EASEMENT
—— — ——	JOINER LINE
x x x	BRAIDED WIRE FENCE
□	METAL FENCE
○	CHAIN LINK FENCE
E	OVERHEAD ELECTRIC LINE
—100'—	CONTOUR LINE
B.S.L.	BUILDING SETBACK LINE
E.E.	ELECTRIC EASEMENT
R.O.W.	RIGHT OF WAY
	COVERED AREA
RCP	REINFORCED CONCRETE PIPE
( )	RECORD INFORMATION

Notes:
1) Surveyor makes no expressed or implied warranties as to the fee ownership of the property shown.
2) Directional control is based on the Texas State Plane Coordinate System, Central Zone (4203).
3) Contours shown hereon were produced by an on the ground survey and are based on the Benchmark shown hereon (NAVD88).
4) This survey was performed without the benefit of a title commitment, therefore, agreements, easements and restrictions may exist that are not shown hereon.



Curve Table					
CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	217.74' (217.82')	2080.84' (2090.84')	5°59'01" (5°58'04")	S 60°19'59" E (S 58°28'35" E)	217.64' (217.72')

Tree Table in Inches		
Tag	Trunk	Comment
6354	15	CEDAR ELM
6355	10	LIVE OAK
6357	16	CEDAR ELM
6358	8	CEDAR ELM
6359	8	DEAD
6360	12	LIVE OAK
6361	9	DEAD
6362	10	LIVE OAK
6363	11	LIVE OAK
6364	16	DEAD
6365	11	LIVE OAK
6367	9	LIVE OAK
6369	9	LIVE OAK
6370	11	LIVE OAK
6371	9	LIVE OAK
6372	8	LIVE OAK
6373	11	LIVE OAK
6374	12	LIVE OAK
6375	11	LIVE OAK
6376	11	LIVE OAK
6377	8	LIVE OAK
6378	10	CEDAR ELM
6379	10	LIVE OAK
6380	33	LIVE OAK (25-15)
6381	13	LIVE OAK (9-8)
6382	13	LIVE OAK (7-6-5)
6383	13	LIVE OAK (7-6-5)
6384	11	LIVE OAK
6385	8	LIVE OAK
6386	23	LIVE OAK
6387	9	LIVE OAK
6388	24	LIVE OAK
6389	16	LIVE OAK
6390	10	LIVE OAK
6391	13	LIVE OAK
6392	17	LIVE OAK (13-7)
6393	11	LIVE OAK
6394	11	LIVE OAK
6395	30	LIVE OAK (24-11)
6396	11	LIVE OAK
6397	13	LIVE OAK
6398	9	LIVE OAK
6399	10	LIVE OAK
6400	15	LIVE OAK (10-9)
6502	14	LIVE OAK (10-7)
6503	10	LIVE OAK
6504	15	LIVE OAK
6505	16	LIVE OAK (13-6)
6506	18	LIVE OAK (14-7)
6507	9	LIVE OAK
6508	14	CEDAR ELM
6509	15	CEDAR ELM
6510	17	PECAN
6511	19	LIVE OAK (14-10)
6512	12	ELM
6513	11	RED OAK
6514	13	ELM (9-8)
6515	14	CEDAR ELM
6516	20	HACKBERRY (15-9)
6517	13	CEDAR ELM
6518	10	OAK (7-6)
6519	8	OAK

GRAPHIC REPRESENTATION OF TREE DRIPLINE:
EXAMPLE: A TRIPLE STEM TREE WITH STEMS 10", 8", 6" SHALL RENDER A GRAPHICAL RADIUS OF 10" + 8" + 6/2 = 21" FROM TREE CENTER PT.
CALCULATES 1.5' CRITICAL ROOT ZONE
EQUALS 1.5' THE DRIPLINE (TREES OVER 19" DIAMETER)
CALCULATES DRIPLINE/CRITICAL ROOT ZONE
EXAMPLE: 14" TREE HAS 14' DRIPLINE

SURVEYOR'S CERTIFICATION:
I, Andrew Jimenez, HEREBY CERTIFY that a survey was made on the ground of the property shown hereon; that there are no visible discrepancies, conflicts, shortages in area, boundary line conflicts, encroachments, overlapping of improvements, easements or right-of-way, except as shown; that said property has access to and from a public roadway; and that this plat is an accurate representation of the property to the best of my knowledge.

02/05/2025
ANDREW JIMENEZ Date
Registered Professional Land Surveyor
No. 6270 - State of Texas

STATE OF TEXAS · REGISTERED · ANDREW JIMENEZ · 6270 · PROFESSIONAL LAND SURVEYOR

Client: Concur Construction, LLC
Date of Field Work: 06/18 thru 21/2024
Field: RBonds
Tech: MLeonardo
Date Drawn: 06/25 & 26/2024; REV. 07/25/2024; REV. 02/05/2025
Path:SERVER6\Surveying\Projects_____ BULK_MNGMQR\ParmerLnW4101\Production\Dwgs\ParmerLnW4101-240530005s-revt.dwg

ATS Engineers Inspectors & Surveyors
www.ats-engineers.com
TBPLS FIRM REG. # 10128000
4810 West Hwy 290, AUSTIN, TEXAS 78735
(512) 328-6986 FAX: (512) 328-6966

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE 220
AUSTIN, TX 78748
PH: (512) 306-0018

SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

REVISIONS:

REV.	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015 DATE: 03/05/2025
CAD: TEAM H CHK'D BY:
ENGINEER: HS CHK'D BY:
SCALE: N.T.S.

EXISTING CONDITIONS AND TOPOGRAPHIC SURVEY

SITE CIVIL PLAN

07
of 29

PARMER LANE
ALSO KNOWN AS
F.M. 734
(VARIABLE WIDTH R.O.W. - PER PLAT)

LAND USE: OFFICE
ZONING: LO

LAND USE: COMMERCIAL
ZONING: GR-CO

LAND USE: OFFICE
ZONING: LO

10' E.E. (PER PLAT)
10' B.L. (PER ZONING)
15' WL EASEMENT (1999087576)
15' WW EASEMENT (1999087577)
15' DRAIN. EASMT. (PER PLAT)

LOT 8
3.279 ACRES

LOT 7
5.401 ACRES

LOT 6
BLOCK 'T'
1.741 ACRES
(1.741 ACRES)

LOT 5
1.547 ACRES

COMMERCIAL BUILDING
FINISHED FLOOR ELEVATION = 773.64'

RELOCATE EXISTING GUY WIRE
REMOVE AND RELOCATE EXISTING IRRIGATION CONTROL VALVE
DEMO EXISTING CURB AND GUTTER
BEGIN DEMOLITION OF EXISTING CURB AND GUTTER
MATCH EXISTING GRADE AT EDGE OF ASPHALT PAVEMENT
REMOVE AND RELOCATE EXISTING IRRIGATION CONTROL VALVE
DEMO EXISTING ASPHALT PAVEMENT
DEMOLITION WITHIN THE CRZ OF TREES WILL BE DONE WITH HAND TOOLS AND LIGHT EQUIPMENT.
TREE FENCE
REMOVE EXISTING STRIPES
END DEMOLITION OF EXISTING CURB AND GUTTER
REMOVE AND RELOCATE EXISTING LIGHT STANDARD
TREE PROTECTION
BEGIN DEMO EXISTING CURB AND GUTTER
END DEMO EXISTING CURB AND GUTTER
EX. WATER METER
EX. 1" IRRIGATION WATER METER WITH BACKFLOW PREVENTER
BEGIN DEMO EXISTING CURB AND GUTTER
BEGIN DEMOLITION OF EXISTING CURB AND GUTTER

EX. 36" WASTEWATER LINE
MATERIAL: FRPM
ID#: 176889
PROJECT #: 2001-0011
EX. WASTEWATER MANHOLE
ID#: 124757
PROJECT #: 2001-0011
TOP 784.90
FL_{OUT} =757.67
FL_{IN} =759.17
EX. 6" WATER LINE
ID#: 321892
MATERIAL: D.I.
EX. 12" WATER LINE
ID#: 387417
MATERIAL: D.I.
EX. G.V.
ID#: 25210
EX. F.H.
ID#: 214882
EX. 12" WATER LINE
ID#: 387417
MATERIAL: D.I.
EX. 6" WATER LINE
ID#: 321972
MATERIAL: D.I.
EX. 6" STM PIPE
COA ID#: 1148728
(PRIVATE)
EX. 30" STM DRAIN PLUG
COA ID#: 550090
(PRIVATE)
EX. 18" STM PIPE
COA ID#: 1138698
(PRIVATE)
EX. STM MANHOLE
COA ID#: 1145549
(PRIVATE)
EX. 91" of 18" R.C.P.
@3.3% SLOPE
COA ID#: 1145545
(PRIVATE)
EX. 30" STM PIPE
COA ID#: 1145547
(PRIVATE)
EX. 6" WATER LINE
ID#: 273434
MATERIAL: D.I.
EX. F.H.
ID#: 214915
EX. F.H.
ID#: 214894

BENCHMARK
(TOP OF NUT – FIREHYDRANT)
GRID COORDINATES (NAD83 CENTRAL ZONE)
EAST: 3,121,382.60'
ELEVATION: 779.10'

S 57°26'35" E
31.42'
S 57°26'35" E 282.39'
(S 57°26'24" E 282.33')
N 32°34'24" E 282.39'
(N 32°34'36" E 282.33')
S 25°27'00" E 295.62'
(S 25°26'48" E 295.64')
N 57°19'49" W 281.20'
(N 55°26'26" W 281.01')

24" FL_{OUT} = 67.72
18" FL_{OUT} = 68.22
12" FL_{OUT} =68.72
10 LF CURB INLET GUTTER = 70.5
18" FL_{OUT} = 68.71
TOP 72.0
12" FLOUT = 70.8
0.5' STONE WALL
1' STONE RETAINING WALL
2' GABION WALL
5' GABION WALL
BOX CULVERT
18" RCP
INVERT=763.2'
NATURAL GROUND DRAINAGE POND
NATURAL GROUND RECREATION AREA
RETAINING WALL
GABION
TRASH BIN
BIKE RACK
STEEL TABLES
CONCRETE WALK
4'x4' STONE COLUMN (TYPICAL)
ENTRANCE
FENCE 0.2' ± OFF PROP. LINE
CAPPED "CHAPARRAL BOUNDARY"

NOTES:

- IF DISTURBED AREA IS NOT TO BE WORKED 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]
- ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS [LDC 25-8-182]
- 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.
- THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY. [ECM 1.4.4.D.4]
- CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY SEDIMENT TRANSPORTED FROM THE LOC TO THE OFFSITE DETENTION / WATER QUALITY POND(S).
- NO OVER BUILD/EXCAVATION WILL BE PERMITTED.
- 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.
- FINISHED ELEVATION FOR PARKING-LOT ISLANDS, MEDIANS, PENINSULAS, AND SIMILAR LANDSCAPE AREAS 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].
- ONLY RUBBER-TIRED EQUIPMENT IS ALLOWED WITHIN THE CWQZ AND FLOODPLAIN. NO TRACK EQUIPMENT IS ALLOWED.
- ALL EQUIPMENT AND SPOILS ARE TO BE REMOVED FROM THE CREEK, THE CWQZ, AND 100-YEAR FLOODPLAIN NIGHTLY.
- IF PRUNING IS NECESSARY DURING DEMOLITION, IT SHOULD TAKE PLACE PRIOR TO THE START OF THE DEMOLITION PROCESS. IT MUST BE PERFORMED BY A QUALIFIED ARBORIST AND NO MORE THAN 25% IS PERMITTED.
- STRAPPING 2X4 OR THICKER LUMBER (TO MATCH HEIGHT OF BUILDING) SECURELY AROUND TREE TRUNK, BUTTRESS ROOTS, AND ROOT FLARE, IS REQUIRED IF FENCING CANNOT GO AROUND THE ENTIRE HALF CRZ.
- TREE PROTECTION FENCING IS REQUIRED FOR ALL TREES WITHIN THE LIMITS OF DESTRUCTION ON SITE BEFORE DEMOLITION OCCURS. WHERE FENCING CANNOT BE PLACED TO PROTECT THE EXTENT OF THE CRZ WITH NATURAL GROUND COVER, PROVIDE AN 8" LAYER OF ORGANIC HARDWOOD MULCH OUTSIDE OF THE FENCING.

NORTH
SCALE: 1" = 20'
0 10 20 40

LEGEND

PROPOSED	DESCRIPTION
●	BOLLARD
	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX WL—	EXISTING WATER LINE
—EX WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
	EASEMENT
○	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
	GAS METER
	GAS VALVE
—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
E	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8	PROPOSED SPOT GARDE
602	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
9'	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE
	DEMOLITION HATCH

12" MULCH LOG NOTE:

MULCH LOG SHOULD BE MADE FROM 100% NATURAL FABRIC WRAP AND FILLED WITH ORGANIC MATERIAL SO THAT IT IS BIODEGRADABLE.

A PRE-CONSTRUCTION MEETING WITH ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.

SEE TREE LIST SHEET 18

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CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

STATE OF TEXAS
ANDREW PINTER SHADBURNE
94382
REGISTERED PROFESSIONAL ENGINEER
03/05/2025

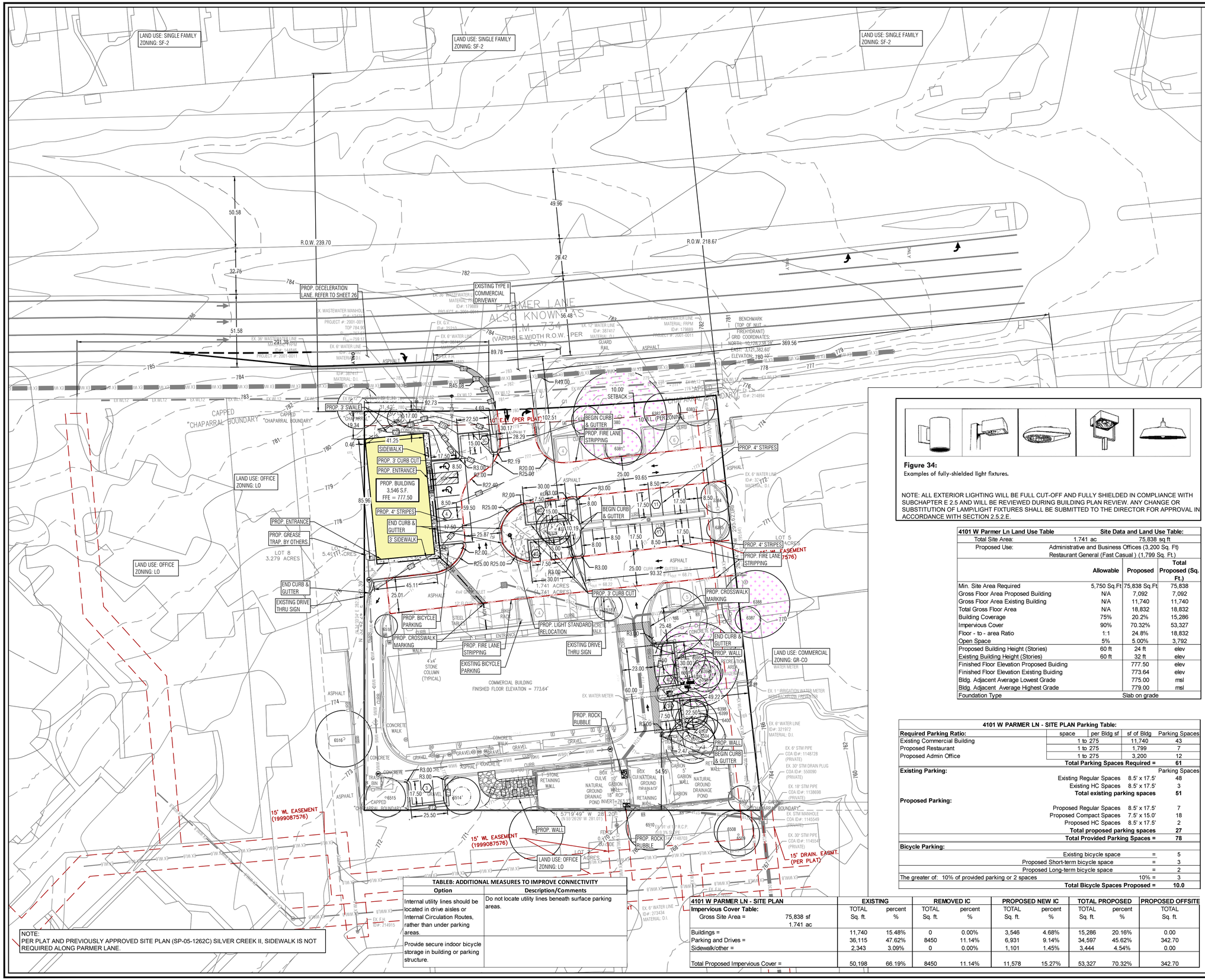
SILVER CREEK EXPANSION
4101 W PARMER LN
AUSTIN, TX. 78727

REV	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

DEMOLITION PLAN

SITE CIVIL PLAN
08
of 29



NOTE:
PER PLAT AND PREVIOUSLY APPROVED SITE PLAN (SP-05-1262C) SILVER CREEK II, SIDEWALK IS NOT REQUIRED ALONG PARMER LANE.

TABLE8: ADDITIONAL MEASURES TO IMPROVE CONNECTIVITY

Option	Description/Comments
Internal utility lines should be located in drive aisles or Internal Circulation Routes, rather than under parking areas.	Do not locate utility lines beneath surface parking areas.
Provide secure indoor bicycle storage in building or parking structure.	

Figure 34:
Examples of fully-shielded light fixtures.

NOTE: ALL EXTERIOR LIGHTING WILL BE FULL CUT-OFF AND FULLY SHIELDED IN COMPLIANCE WITH SUBCHAPTER E 2.5 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.

4101 W Parmer Ln Land Use Table	Site Data and Land Use Table:		
Total Site Area:	1.741 ac	75,838 sq ft	
Proposed Use:	Administrative and Business Offices (3,200 Sq. Ft) Restaurant General (Fast Casual) (1,799 Sq. Ft.)		
	Allowable	Proposed	Total Proposed (Sq. Ft.)
Min. Site Area Required	5,750 Sq.Ft	75,838 Sq.Ft	75,838
Gross Floor Area Proposed Building	N/A	7,092	7,092
Gross Floor Area Existing Building	N/A	11,740	11,740
Total Gross Floor Area	N/A	18,832	18,832
Building Coverage	75%	20.2%	15,286
Impervious Cover	90%	70.32%	53,327
Floor - to - area Ratio	1:1	24.8%	18,832
Open Space	5%	5.00%	3,792
Proposed Building Height (Stories)	60 ft	24 ft	elev
Existing Building Height (Stories)	60 ft	32 ft	elev
Finished Floor Elevation Proposed Buiding		777.50	elev
Finished Floor Elevation Existing Buiding		773.64	elev
Bldg. Adjacent Average Lowest Grade		775.00	msl
Bldg. Adjacent Average Highest Grade		779.00	msl
Foundation Type		Slab on grade	

4101 W PARMER LN - SITE PLAN Parking Table:

	space	per Bldg sf	sf of Bldg	Parking Spaces
Required Parking Ratio:				
Existing Commercial Building	1 to	275	11,740	43
Proposed Restaurant	1 to	275	1,799	7
Proposed Admin Office	1 to	275	3,200	12
			Total Parking Spaces Required =	**61**
Existing Parking:				Parking Spaces
			Existing Regular Spaces 8.5' x 17.5'	48
			Existing HC Spaces 8.5' x 17.5'	3
			Total existing parking spaces	**51**
Proposed Parking:				
			Proposed Regular Spaces 8.5' x 17.5'	7
			Proposed Compact Spaces 7.5' x 15.0'	18
			Proposed HC Spaces 8.5' x 17.5'	2
			Total proposed parking spaces	**27**
			Total Provided Parking Spaces =	**78**
Bicycle Parking:				
			Existing bicycle space =	5
			Proposed Short-term bicycle space =	3
			Proposed Long-term bicycle space =	2
The greater of: 10% of provided parking or 2 spaces			10% =	3
			Total Bicycle Spaces Proposed =	**10.0**

4101 W PARMER LN - SITE PLAN	EXISTING		REMOVED IC		PROPOSED NEW IC		TOTAL PROPOSED		PROPOSED OFFSITE
Impervious Cover Table:	TOTAL Sq. ft.	percent %	TOTAL Sq. ft.	percent %	TOTAL Sq. ft.	percent %	TOTAL Sq. ft.	percent %	TOTAL Sq. ft.
Gross Site Area = 75,838 sf / 1.741 ac									
Buildings =	11,740	15.48%	0	0.00%	3,546	4.68%	15,286	20.16%	0.00
Parking and Drives =	36,115	47.62%	8450	11.14%	6,931	9.14%	34,597	45.62%	342.70
Sidewalk/other =	2,343	3.09%	0	0.00%	1,101	1.45%	3,444	4.54%	0.00
Total Proposed Impervious Cover =	50,198	66.19%	8450	11.14%	11,578	15.27%	53,327	70.32%	342.70

LEGEND

PROPOSED	DESCRIPTION
●	BOLLARD
▲	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX WL—	EXISTING WATER LINE
—EX WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
	EASEMENT
O	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
	GAS METER
	GAS VALVE
—○—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8 →	PROPOSED SPOT GARDE
100	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
— tf —	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE

a) 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**.

b) APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.

c) ALL EXISTING STRUCTURES SHOWN TO BE REMOVED WILL REQUIRE A DEMOLITION PERMIT FROM THE CITY OF AUSTIN DEVELOPMENT SERVICES DEPT.

d) FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.

e) FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED.

NOTE: EACH COMPACT PARKING SPACE/AISLE WILL BE SIGNED "SMALL CAR ONLY."

SEE TREE LIST SHEET 18

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CITY APPROVAL STAMP

SP-2024-0312C

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TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

THE STATE OF TEXAS
ANDREW PRATER SHADBURNE
94382
REGISTERED
PROFESSIONAL ENGINEER
03/05/2025

SILVER CREEK EXPANSION
4101 W PARMER LN
AUSTIN, TX. 78727

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JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

SITE PLAN

SITE CIVIL PLAN

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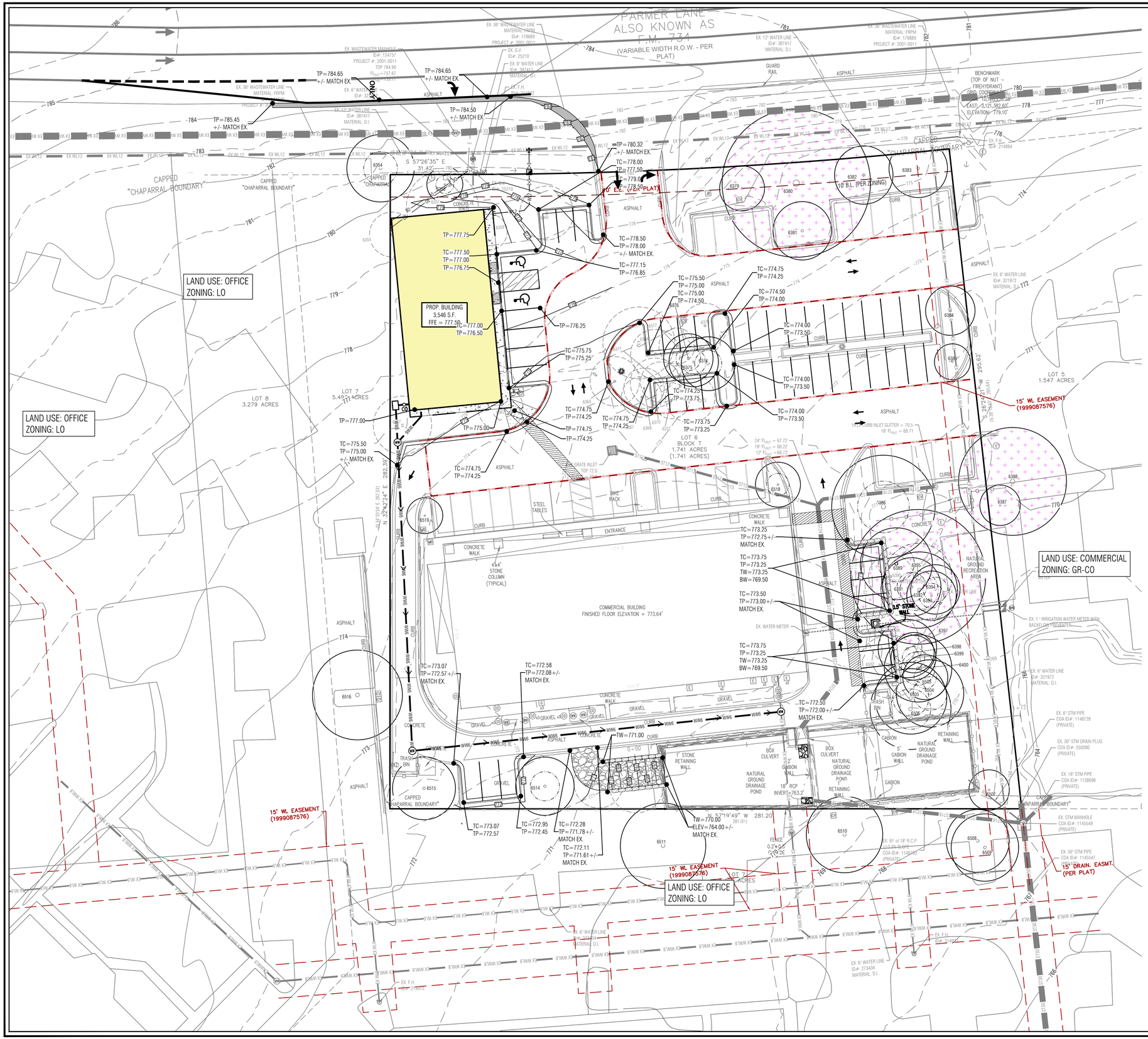
of 29



LEGEND

PROPOSED	DESCRIPTION
•	BOLLARD
	SIGN POST
—OE—	OVER HEAD ELEC. LINE
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	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
	GAS METER
	GAS VALVE
—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
	ELECTRIC METER
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10	9' X 18.5' PARKING SPACE
528.8 →	PROPOSED SPOT GARDE
—602—	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
—SF—	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
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SCALE:	

GRADING PLAN

SITE CIVIL PLAN

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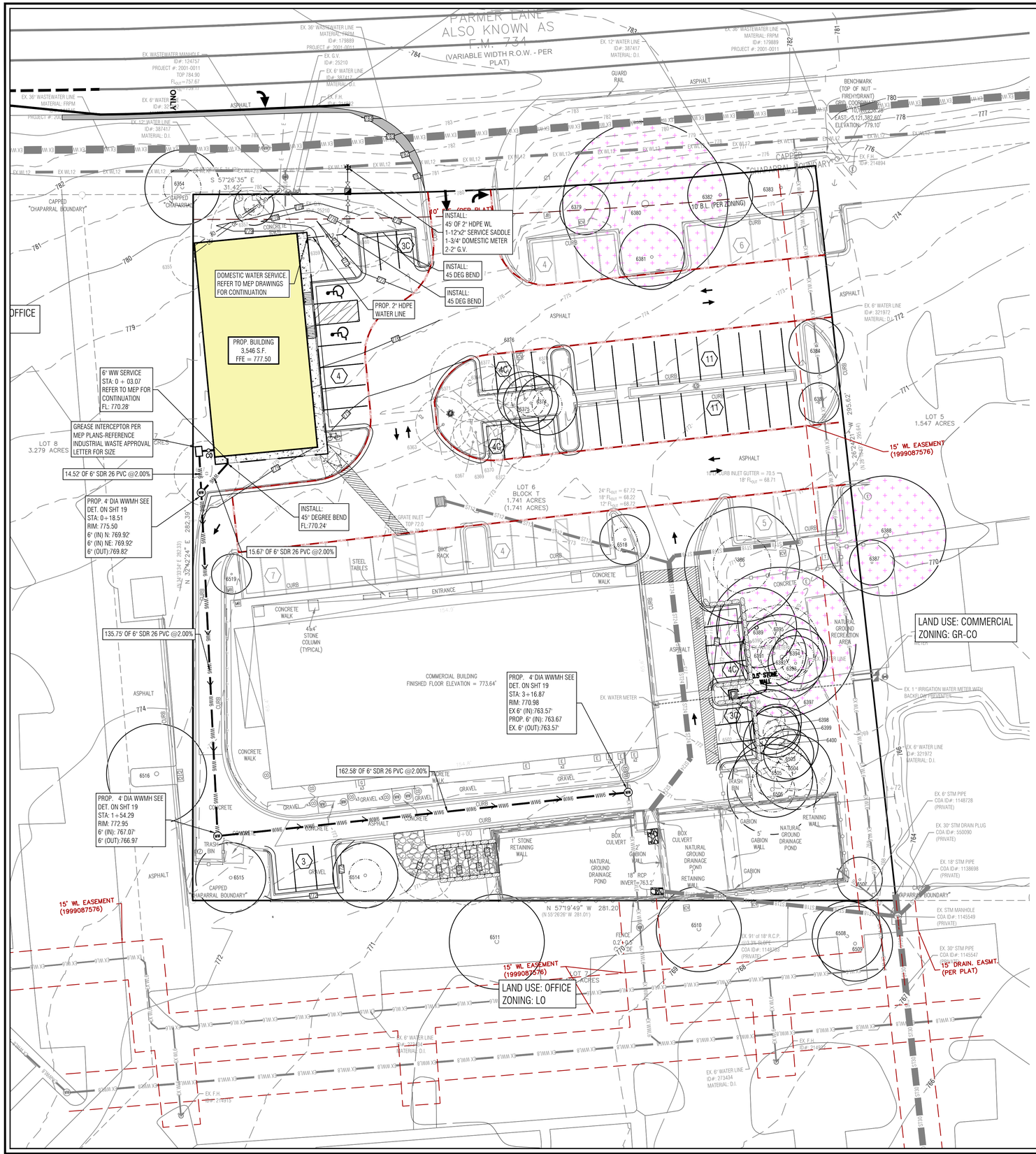
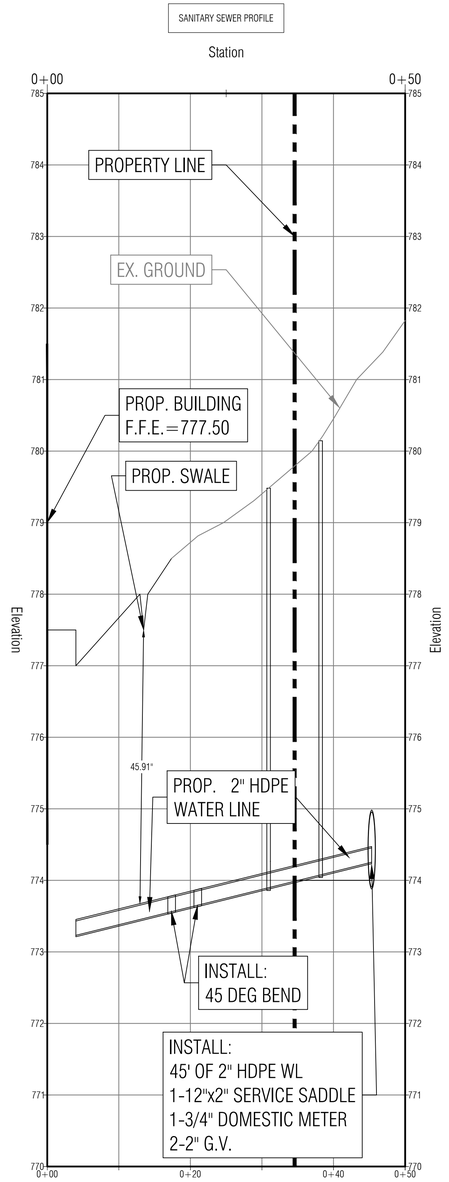
of 29



SANITARY SEWER PROFILE





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PROPOSED	DESCRIPTION
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	SIGN POST
—OE—	OVER HEAD ELEC. LINE
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WW	WASTEWATER MANHOLE
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CO	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
E	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8	PROPOSED SPOT GARDE
502	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
SF	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
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	TREE TO BE SAVED
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UTILITY PLAN

SITE CIVIL PLAN

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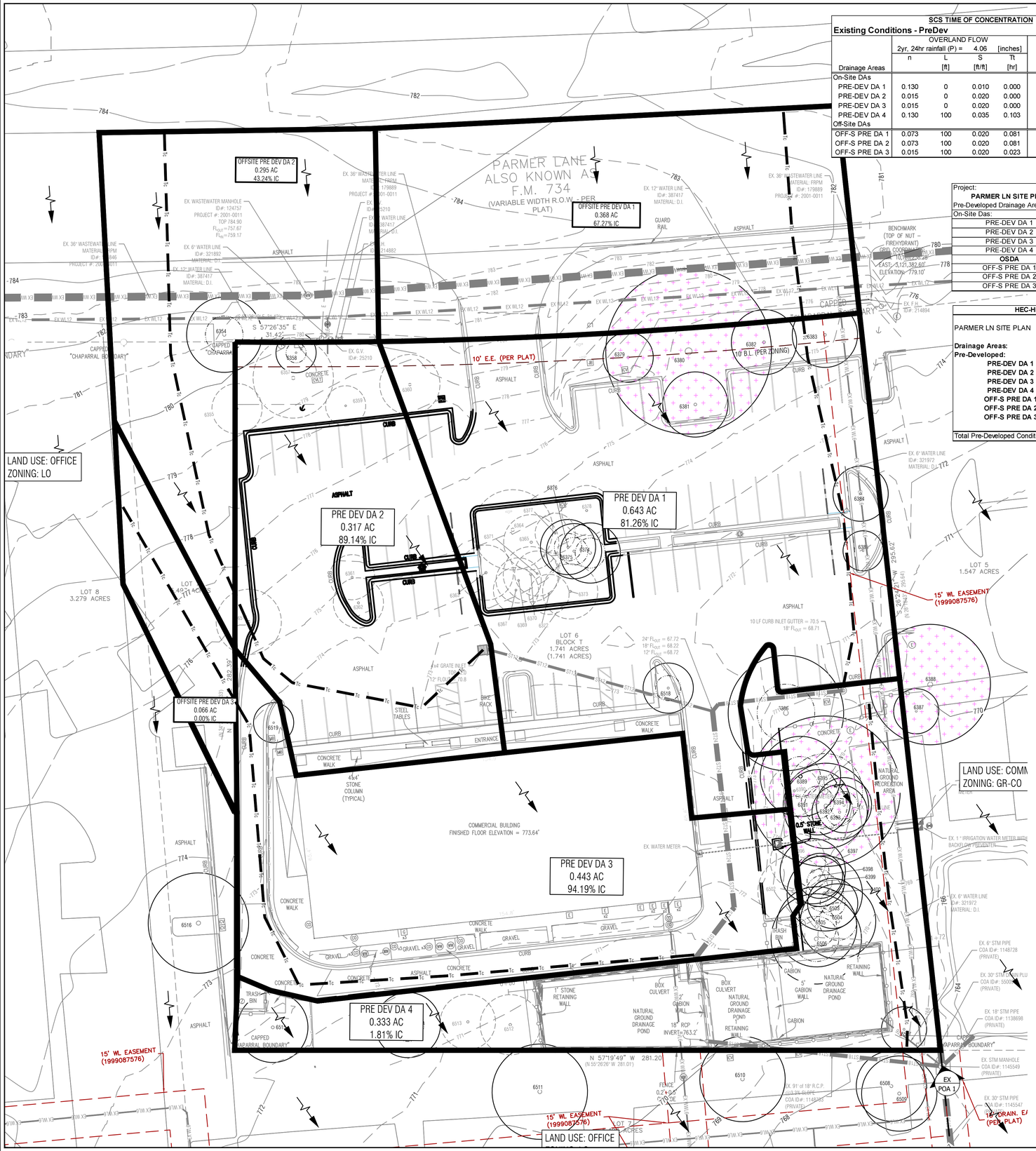
of 29



SCS TIME OF CONCENTRATION

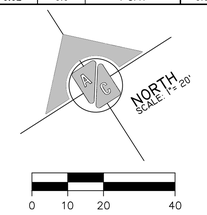
Existing Conditions - PreDev

Note: If Tc under 5 min then use 5 min as minimum and Tlag as 3 min

Drainage Areas	OVERLAND FLOW 2yr, 24hr rainfall (P) = 4.06 [inches] n	L [ft]	S [ft/ft]	Tt [hr]	Shallow Concentrated Unpaved L [ft]	s [ft/ft]	Tt [hr]	Shallow Concentrated Paved L [ft]	s [ft/ft]	Tt [hr]	CONCENTRATED S.S. OR CHANNEL L [ft]	V [fps]	Tt [hr]	CONCENTRATED FLOW MAIN CHANNEL L [ft]	V [fps]	Tt [hr]	TOTAL Tc [hr]	LAG TIME (0.6 * Tc) [hr]	LAG TIME [min]	Downstream Element	Tc min
On-Site DAs																					
PRE-DEV DA 1	0.130	0	0.010	0.000	16.00	0.020	0.002	132	0.035	0.010	156	4	0.011	0	0.0	0.000	0.02	**0.01**	3.0	POA1	5.00
PRE-DEV DA 2	0.015	0	0.020	0.000	0.00	0.000	0.000	117	0.035	0.009	200	4	0.014	0	0.0	0.000	0.02	**0.01**	3.0	POA1	5.00
PRE-DEV DA 3	0.015	0	0.020	0.000	0.00	0.000	0.000	225	0.035	0.016	0	0	0.000	0	0.0	0.000	0.02	**0.01**	3.0	POA1	5.00
PRE-DEV DA 4	0.130	100	0.035	0.103	37.00	0.035	0.003	0	0.035	0.000	0	0	0.000	0	0.0	0.000	0.11	**0.06**	3.8	POA1	6.41
Off-Site DAs																					
OFF-S PRE DA 1	0.073	100	0.020	0.081	0.00	0.020	0.000	131	0.035	0.010	156	4	0.011	0	0.0	0.000	0.10	**0.06**	3.7	POA1	6.11
OFF-S PRE DA 2	0.073	100	0.020	0.081	98.00	0.035	0.009	117	0.035	0.009	200	4	0.014	0	0.0	0.000	0.11	**0.07**	4.1	POA1	6.78
OFF-S PRE DA 3	0.015	100	0.020	0.023	0.00	0.035	0.000	225	0.035	0.016	0	0	0.000	0	0.0	0.000	0.04	**0.02**	3.0	POA1	5.00

Project: **PARMER LN SITE PLAN** Pre-Developed Drainage Areas:	A(sf)	A(ac)	A(Sq.Mi)	Aimp(sf)	Aper(sf)	Aimp(ac)	%Imp	%Per	Tc(min)	CN
On-Site Das:										
PRE-DEV DA 1	27,990	0.643	0.001004	20,170	7,820	0.46	72.06%	27.94%	5.0	80
PRE-DEV DA 2	13,829	0.317	0.000496	11,590	2,239	0.27	83.81%	16.19%	5.0	80
PRE-DEV DA 3	19,296	0.443	0.000692	18,175	1,121	0.42	94.19%	5.81%	5.0	80
PRE-DEV DA 4	14,496	0.333	0.000520	263	14,233	0.01	1.81%	98.19%	6.4	80
OSDA	**A(sf)**	**A(ac)**	**A(Sq.Mi)**	**Aimp(sf)**	**Aper(sf)**	**Aimp(ac)**	**%Imp**	**%Per**	**Tc(min)**	CN
OFF-S PRE DA 1	16,024	0.368	0.000575	10778.85	5,245	0.25	67.27%	33%	6.1	80
OFF-S PRE DA 2	12,861	0.295	0.000461	5561.00	7,300	0.13	43.24%	57%	6.8	80
OFF-S PRE DA 3	2,870	0.066	0.000103	129.79	2,740	0.00	4.52%	95%	5.0	80

HEC-HMS STORMWATER RUNOFF SUMMARY							ATLAS 14			
PARMER LN SITE PLAN	Area (acres)	Area (sq.mi)	I.C (acres)	I.C (%)	Tc (min)	T lag (min)	2-year Q (cfs)	10-year Q (cfs)	25-year Q (cfs)	100-year Q (cfs)
Drainage Areas:										
Pre-Developed:										
PRE-DEV DA 1	0.643	0.001004	0.463	72.06%	5.0	3.0	3.06	4.85	6.03	8.03
PRE-DEV DA 2	0.317	0.000496	0.266	83.81%	5.0	3.0	1.59	2.47	3.04	4.01
PRE-DEV DA 3	0.443	0.000692	0.417	94.19%	5.0	3.0	2.31	3.52	4.31	5.66
PRE-DEV DA 4	0.333	0.000520	0.006	1.81%	6.4	3.8	1	1.91	2.53	3.55
OFF-S PRE DA 1	0.368	0.000575	0.247	67.27%	6.1	3.7	1.6	2.56	3.19	4.26
OFF-S PRE DA 2	0.295	0.000461	0.128	43.24%	6.8	4.1	1.09	1.84	2.34	3.18
OFF-S PRE DA 3	0.066	0.000103	0.003	4.52%	5.0	3.0	0.22	0.42	0.55	0.77
			Pre-Developed Q at POA1:				8.87	12.58	14.63	16.89
Total Pre-Developed Conditions	2.46	0.003851	1.152	46.75%						



LEGEND

PROPOSED	DESCRIPTION
•	BOLLARD
	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX WL—	EXISTING WATER LINE
—EX WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
- - - - - - -	EASEMENT
○	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
GM	GAS METER
GV	GAS VALVE
—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
E	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8	PROPOSED SPOT GARDE
100	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
SF	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

STATE OF TEXAS
ANDREW HUNTER SHADBURNE
94382
REGISTERED PROFESSIONAL ENGINEER
03/05/2025

SILVER CREEK EXPANSION

4101 W PARMER LN
AUSTIN, TX. 78727

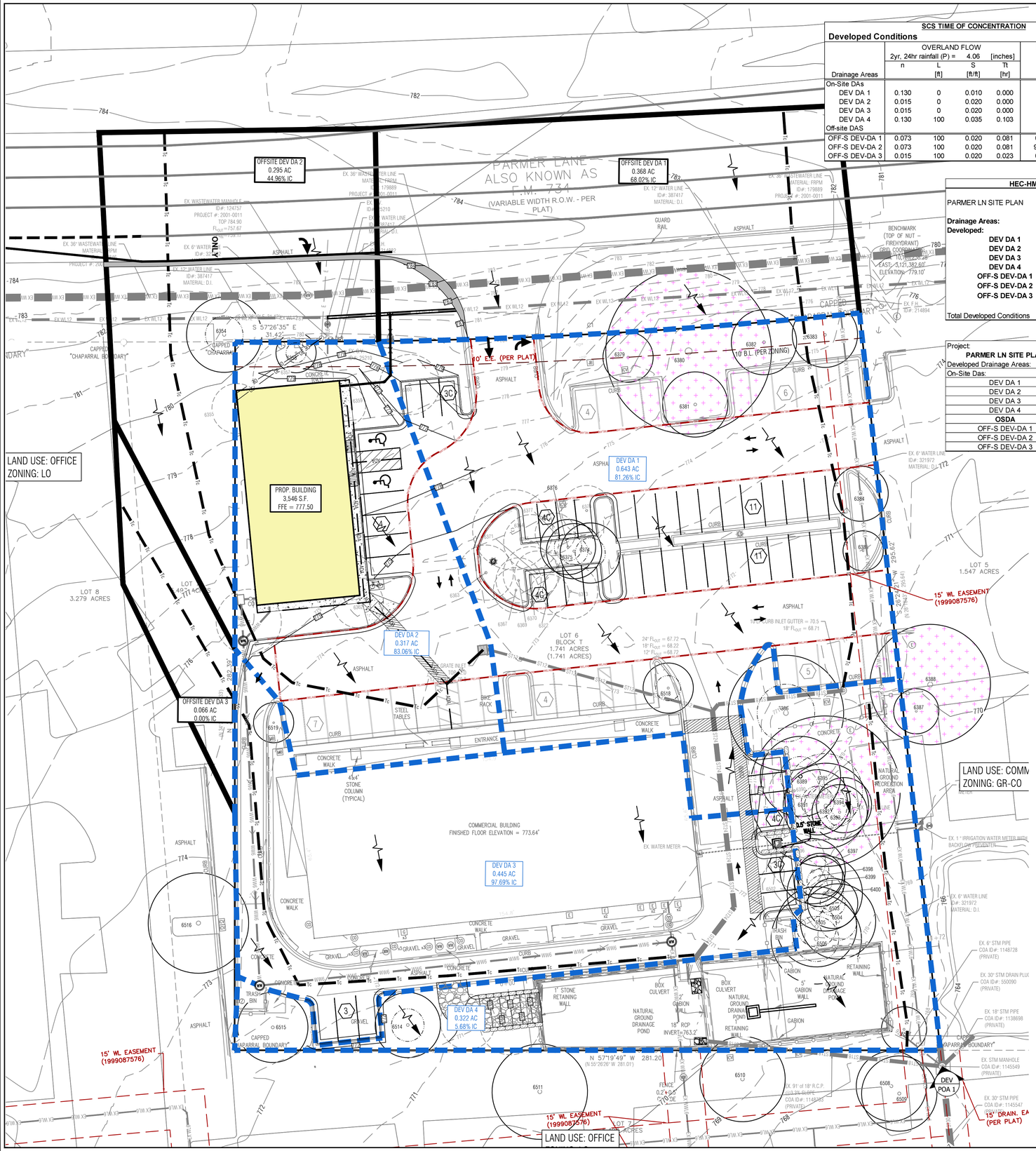
REVISIONS			
REV.	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

PRE-DEVELOPED DA MAP

SITE CIVIL PLAN

12 of 29



Developed Conditions

SCS TIME OF CONCENTRATION

Note: If Tc under 5 min then use 5 min as minimum and Tlag as 3 min

Drainage Areas	OVERLAND FLOW 2yr, 24hr rainfall (P) = 4.06 [inches] n	L [ft]	S [ft/ft]	Tt [hr]	Shallow Concentrated Unpaved L [ft]	s (ft/ft)	Tt [hr]	Shallow Concentrated Paved L [ft]	s (ft/ft)	Tt [hr]	CONCENTRATED S.S. OR CHANNEL L [ft]	V [fps]	Tt [hr]	CONCENTRATED FLOW MAIN CHANNEL L [ft]	V [fps]	Tt [hr]	TOTAL Tc [hr]	LAG TIME (0.6 * Tc) [hr]	LAG TIME [min]	Downstream Element	Tc min
On-Site DAs																					
DEV DA 1	0.130	0	0.010	0.000	16	0.020	0.002	132	0.035	0.010	156	4	0.011	0	0.0	0.000	0.02	**0.01**	3.0	POA 1	5.00
DEV DA 2	0.015	0	0.020	0.000	0	0.000	0.000	117	0.035	0.009	200	4	0.014	0	0.0	0.000	0.02	**0.01**	3.0	POA 1	5.00
DEV DA 3	0.015	0	0.020	0.000	0	0.000	0.000	225	0.035	0.016	0	4	0.000	0	0.0	0.000	0.02	**0.01**	3.0	POA 1	5.00
DEV DA 4	0.130	100	0.035	0.103	37	0.035	0.003	0	0.063	0.000	0	4	0.000	0	0.0	0.000	0.11	**0.06**	3.8	POA 1	6.41
Off-site DAS																					
OFF-S DEV-DA 1	0.073	100	0.020	0.081	0.00	0.020	0.000	131	0.035	0.010	156	4	0.011	0	5.0	0.000	0.10	**0.06**	3.7	POA 1	6.11
OFF-S DEV-DA 2	0.073	100	0.020	0.081	98.00	0.035	0.009	117	0.035	0.009	200	4	0.014	0	5.0	0.000	0.11	**0.07**	4.1	POA 1	6.78
OFF-S DEV-DA 3	0.015	100	0.020	0.023	0.00	0.035	0.000	225	0.035	0.016	0	4	0.000	0	5.0	0.000	0.04	**0.02**	3.0	POA 1	5.00

HEC-HMS STORMWATER RUNOFF SUMMARY

PARMER LN SITE PLAN	Area (acres)	Area (sq.mi)	I.C (acres)	I.C (%)	Tc (min)	T lag (min)	ATLAS 14 2-year Q (cfs)	10-year Q (cfs)	25-year Q (cfs)	100-year Q (cfs)
Drainage Areas:										
Developed:										
DEV DA 1	0.643	0.001004	0.52	80.19%	5.0	3.0	3.17	4.95	6.11	8.10
DEV DA 2	0.317	0.000496	0.26	83.06%	5.0	3.0	1.58	2.46	3.03	4.01
DEV DA 3	0.455	0.000711	0.44	97.69%	5.0	3.0	2.41	3.65	4.45	5.83
DEV DA 4	0.322	0.000503	0.02	5.68%	6.4	3.8	0.99	1.87	2.46	3.45
OFF-S DEV-DA 1	0.368	0.000575	0.25	68.02%	6.1	3.7	1.60	2.56	3.19	4.26
OFF-S DEV-DA 2	0.295	0.000461	0.13	44.96%	6.8	4.1	1.10	1.84	2.34	3.18
OFF-S DEV-DA 3	0.066	0.000103	0.00	4.52%	5.0	3.0	0.22	0.42	0.55	0.77
			Developed Q at POA1:				8.86	12.22	14.13	16.03
Total Developed Conditions	2.47	0.003853	1.63	66.01%						

Project: **PARMER LN SITE PLAN**

Developed Drainage Areas:	A(sf)	A(ac)	A(Sq.Mi)	Aimp(sf)	Aper(sf)	Aimp(ac)	%Imp	%Per	Tc(min)	CN
On-Site Das:										
DEV DA 1	27,990	0.643	0.001004	22,446	5,545	0.52	80.19%	19.81%	5.0	80
DEV DA 2	13,829	0.317	0.000496	11,486	2,343	0.26	83.06%	16.94%	5.0	80
DEV DA 3	19,826	0.455	0.000711	19,368	458	0.44	97.69%	2.31%	5.0	80
DEV DA 4	14,012	0.322	0.000503	796	13,216	0.02	5.68%	94.32%	6.4	80
OSDA	**A(sf)**	**A(ac)**	**A(Sq.Mi)**	**Aimp(sf)**	**Aper(sf)**	**Aimp(ac)**	**%Imp**	**%Per**	**Tc(min)**	**CN**
OFF-S DEV-DA 1	16,024	0.368	0.000575	10900.05	5,124	0.25	68.02%	32%	6.1	80
OFF-S DEV-DA 2	12,861	0.295	0.000461	5782.66	7,079	0.13	44.96%	55%	6.8	80
OFF-S DEV-DA 3	2,870	0.066	0.000103	129.79	2,740	0.00	4.52%	95%	5.0	80

DETENTION POND
PARMER LN SITE PLAN

Detention Pond Stage (ft)	Area (sf)	Area (ac)	Storage (cubic feet)	Cumulative Storage	Cumulative ac-ft
763.20	0	0.0000	0	0	0
764.00	93	0.0021	25	25	0.001
765.00	488	0.0112	265	289	0.007
766.00	854	0.0196	662	952	0.022
767.00	1149	0.0264	998	1,949	0.045
768.00	1376	0.0316	1,261	3,210	0.074
768.95	1558	0.0358	1,393	4,603	0.106
769.00	3868	0.0888	134	4,737	0.109
770.00	3970	0.0911	2,613	7,349	0.169

Δ Peak Flows Q (cfs) at POA 1

Storm Event	2-YR	10-YR	25-YR	100-YR
EX POA 1	8.87	12.58	14.63	16.89
DEV POA 1	8.86	12.25	14.17	16.10
Δ	-0.01	-0.3	-0.5	-0.8

PARMER LN SITE PLAN

Summary Routing table (Stage / Storage / Discharge) — **POA 1**

Storm Event	Pre-Dev flows (allowable) Q - cfs	Developed flows (to det. pond) Q - cfs	Routed flows (leaving pond) Q - cfs	Dev (Routed) Qa - cfs	Pond Elevation Stage ft.	Storage CFT
				POA 1		
2-yr	8.9	10.08	8.02	**8.86**	766.01	**871**
10-yr	12.6	15.88	10.70	**12.22**	767.65	**2,614**
25-yr	14.6	19.68	12.14	**14.13**	768.73	**4,355**
100-yr	16.9	26.15	13.40	**16.03**	769.79	**7,841**

LEGEND

PROPOSED	DESCRIPTION
•	BOLLARD
	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX. WL—	EXISTING WATER LINE
—EX. WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
	EASEMENT
○	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
	GAS METER
	GAS VALVE
—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8	PROPOSED SPOT GARDE
—C02—	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
9'	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE

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

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

STATE OF TEXAS
ANDREW HUNTER SHADBURNE
94382
REGISTERED PROFESSIONAL ENGINEER
03/05/2025

SILVER CREEK EXPANSION
4101 W PARMER LN
AUSTIN, TX. 78727

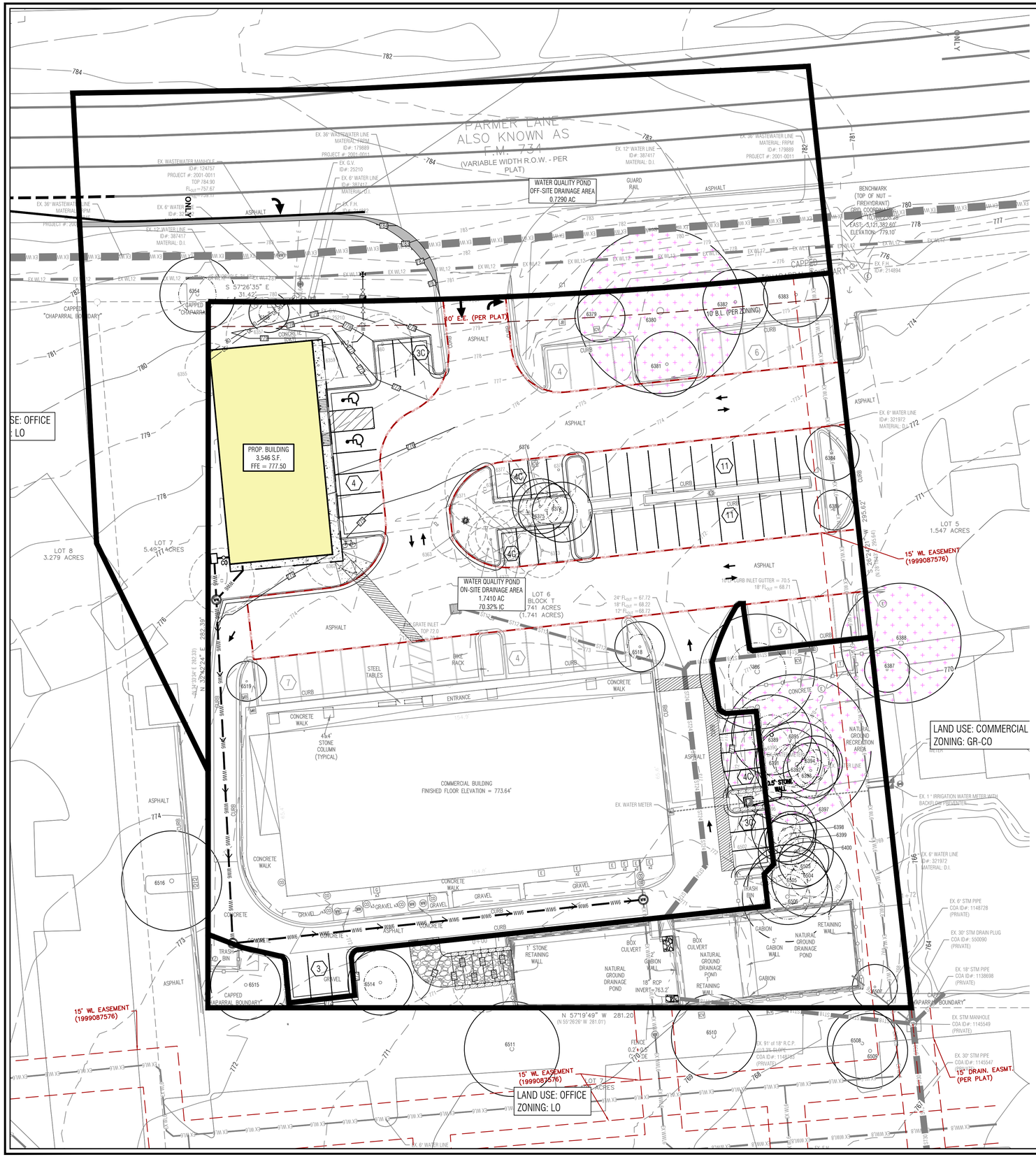
REVISIONS: DESCRIPTION	REV. DATE	APPROVED BY

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

DEVELOPED DA MAP

SITE CIVIL PLAN

13 of 29



NORTH
SCALE: 1" = 20'

0 10 20 40

LEGEND

PROPOSED	DESCRIPTION
•	BOLLARD
⊥	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX. WL—	EXISTING WATER LINE
—EX. WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
	EASEMENT
○	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
	GAS METER
	GAS VALVE
—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
E	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8	PROPOSED SPOT GARDE
502	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
LOC	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
SF	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE

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REV.	DATE	DESCRIPTION	APPROVED BY

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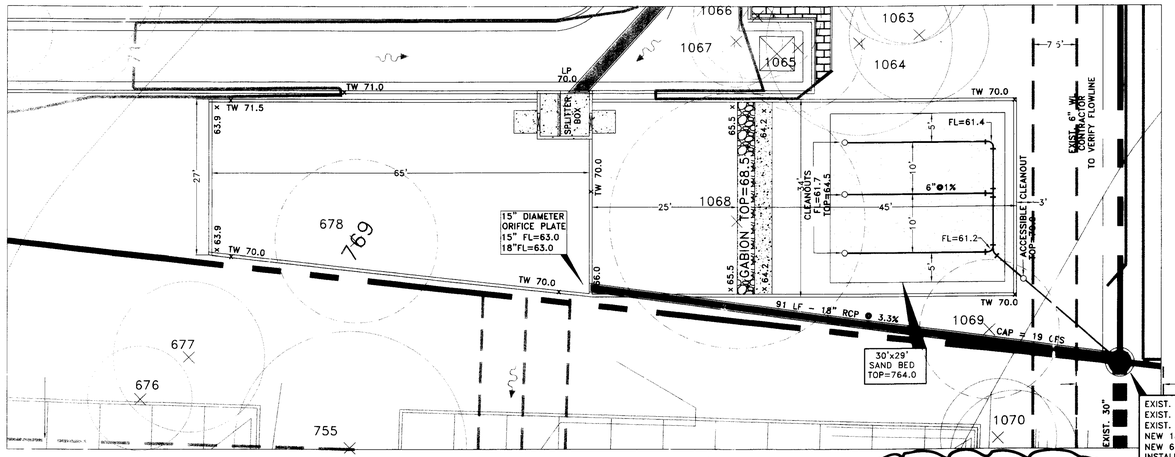
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

WATER QUALITY DRAINAGE AREA

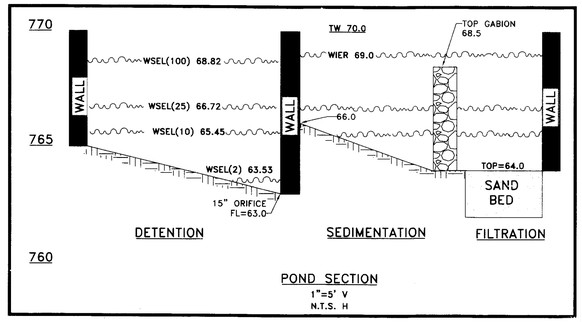
SITE CIVIL PLAN

14 of 29



DETENTION AND WATER QUALITY POND PLAN

SCALE: 1" = 10'



POND SECTION

1"=5' V

N.T.S. H

UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS AND PRIOR TO THE RELEASE OF 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.

POND NOTES

1. POND BOTTOMS TO RECEIVE SOLID SOD.
2. 4-FT. CHAIN LINK FENCE TO BE PLACED AROUND THE POND AND SPLITTER BOX PERIMETER
3. GEOMEMBRANE LINER REQUIRED UNDER FILTRATION AND SEDIMENTATION PONDS

WATER QUALITY POND

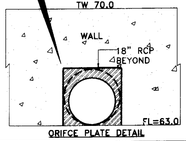
SEDIMENTATION POND

ELEV.	AREA	STORAGE
69	[illegible]	850
68	850	850
67	850	850
[illegible]	850	212
65.5	0	
	TOTAL	2762

FILTRATION POND

ELEV.	AREA	STORAGE
69	1530	1530
68	1530	1530
67	1530	1530
66	1530	1530
65	1530	1200
64	870	
	TOTAL	7[illegible]0

2.5'x2.5'-¾" GALVANIZED METAL PLATE WITH 15" DIAMETER HOLE ANCHORED TO WALL



ORIFICE PLATE DETAIL

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 X 10⁻²
GRAB STRENGTH (FABRIC)	ASTM D-1682	Lb.	Dry Lg.90 Dry Wd.70 Wet Lg.95 Wet Wd.70
PUNCTURE STRENGTH (FABRIC)	CGE Cm-02315	Lb.	42 (MIN.)
MULLEN BURST STRENGTH	ASTM D-751	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

GEOTEXTILE FABRIC SPECIFICATIONS

PROPERTY	TEST METHOD	UNIT	SPECIFICATION
MATERIAL			NON-WOVEN GEOTEXTILE
UNIT WEIGHT		Oz/Sq.Yd.	8 (MIN.)
FILTRATION RATE		INCH/SECOND	0.08 (min.)
GRAB STRENGTH	ASTM D-1682	Lb.	400 (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.	300 (MIN.)
EQUIV. OPENING SIZE	US STANDARD SIEVE	No.	80(MIN.)

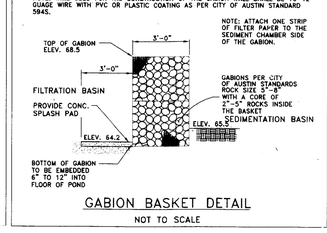
SAND SPECIFICATIONS

ECM 1.6.5. DESIGN GUIDELINES FOR SEDIMENTATION/FILTRATION SYSTEMS – THE TOP LAYER OF SAND SHALL BE TWELVE (12) TO EIGHTEEN (18) INCHES OF 0.02-0.04 INCH DIAMETER SAND WHICH CORRESPONDS WITH ASTM C-33 CONCRETE SAND (SMALLER SAND SIZE IS NOT ACCEPTABLE).

GRAVEL SPECIFICATIONS – 0.5-INCH – 1.5-INCH WASHED ROUNDED RIVER GRAVEL

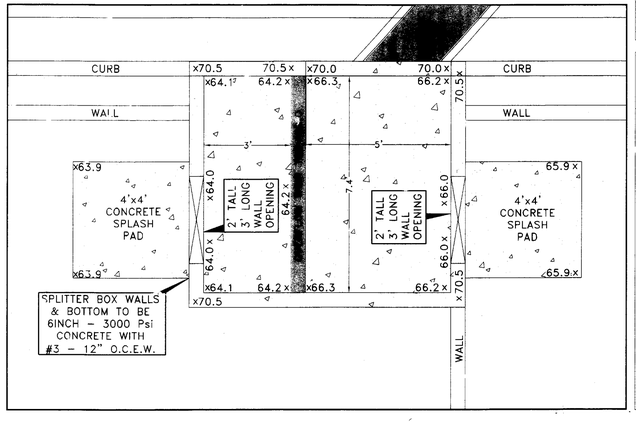
NOTE: WIRE USED FOR THE CONSTRUCTION OF THE GABION WALL SHALL BE 10-12 GUAGE WIRE WITH PVC OR PLASTIC COATING AS PER CITY OF AUSTIN STANDARD 5945.

NOTE: ATTACH ONE STRIP OF FILTER PAPER TO THE SEDIMENT CHAMBER SIDE OF THE GABION.



GABION BASKET DETAIL

NOT TO SCALE



SPLITTER BOX DETAIL

SCALE: 1" = 2'

APPENDIX R-3
PARTIAL SEDIMENTATION/FILTRATION POND CALCULATIONS FOR DEVELOPMENT PERMITS

DRAINAGE AREA DATA

DRAINAGE AREA TO CONTROL	2.47 ACRES
DRAINAGE AREA IMPERVIOUS COVER	64.0%
CAPTURE DEPTH	0.94 INCH

WATER QUALITY CONTROL CALCULATIONS

POND #1
THE WATER QUALITY CONTROL IS TO BE PARTIAL SEDIMENTATION/FILTRATION

SITE AREA DRAINING TO POND	2.47 ACRES
TOTAL AREA DRAINING TO THE POND	2.47 ACRES
DESIGN PEAK FLOW RATE	22.3 CFS
(0.76) (11.9) (2.47)	

	REQUIRED	PROVIDED
WATER QUALITY VOLUME (CD* AREA)	8428	10,082
SEDIMENTATION POND AREA	843	850
SEDIMENTATION POND VOLUME (>20% WQV)	1685	2,762
FILTRATION POND AREA (WQV/10)	842	870
FILTRATION POND VOLUME	6742	7,320

WATER QUALITY VOLUME ELEVATION	769.0 FT. MSL
ELEVATION OF SPLITTER/OVERFLOW WEIR (>WQ ELEV.)	769.0 FT. MSL
HEIGHT OF GABION WALL (WQ ELEV. - 0.5')	768.5 FT. MSL
LENGTH OF SPLITTER WEIR	7.4 FT.
REQUIRED HEAD TO PASS THE DESIGN FLOW	1.0 FT.
SEDIMENTATION POND FREEBOARD PROVIDED TO PASS DESIGN FLOW	N/A (WALL)

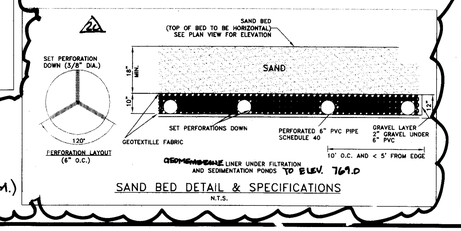
GEOMEMBRANE SPECIFICATIONS

30 MIL MINIMUM
ULTRAVIOLET RESISTANT
INSTALLED TO MANUFACTURERS SPECIFICATIONS (FIRESTONE PONDGUARD EPDM.)

CLAY LINER SPECIFICATIONS

PROPERTY	UNIT	SPECIFICATIONS
PERMEABILITY	cm/sec	1×10^{-4}
PLATICITY INDEX	%	NOT LESS THAN 15
LIQUID LIMIT	%	NOT LESS THAN 30
CLAY PARTICLES PASSING	%	NOT LESS THAN 30
REQUIRED COMPACTION	%	95% OF STD. PROCTOR DENSITY

*From Design Guidelines for Water Quality Control Basins



SAND BED DETAIL & SPECIFICATIONS

N.T.S.

SITE PLAN RELEASE Sheet 9 of 16

FILE NUMBER: SP-05-1262C EXPIRATION DATE: 8/5/08
CASE MANAGER: N. HOLTER APPLICATION DATE: 5/19/05
APPROVED ADMINISTRATIVELY ON: 8/5/05
APPROVED BY PLANNING COMMISSION ON: N/A
APPROVED BY CITY COUNCIL ON: N/A
Under Section 25-5 of the Austin City Code.
Director, Watershed Protection & Development Review Department
DATE OF RELEASE 8/5/05 Zoning: GR-CO
Rev. 1 Correction 1 KA 2.15.06
Rev. 2 Correction 2
Rev. 3 Correction 3
RELEASE OF THIS INFORMATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

FILING DATE: 5/19/05

SP-05-1262C

DETENTION POND DETAILS
SILVER CREEK II SHOPPING CENTER
COA PERMIT #: SP-05-1262C
(FOR REFERENCE ONLY)

CITY APPROVAL STAMP

SP-2024-0312C

DATE: JUNE 2005
DESIGNED:
DRAWN:
CHECKED:
JOB NO.:

SILVER CREEK II
SHOPPING CENTER
4101 WEST PARMER LANE
WATER QUALITY/DETENTION PONDS
PLAN AND DETAILS

GRIFFIN
ENGINEERING GROUP INC.
11711 NORTH LAMAR BLVD., AUSTIN, TEXAS 78753 (512) 836-3113

SHEET NUMBER
9 of 16

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

THE STATE OF TEXAS
ANDREW TRINTER SHADBURNE
94382
LICENSED
PROFESSIONAL ENGINEER
03/05/2025

THE STATE OF TEXAS
GREGORY GRIFFIN
64151
REGISTERED
PROFESSIONAL ENGINEER

SILVER CREEK EXPANSION

4101 W PARMER LN
AUSTIN, TX. 78727

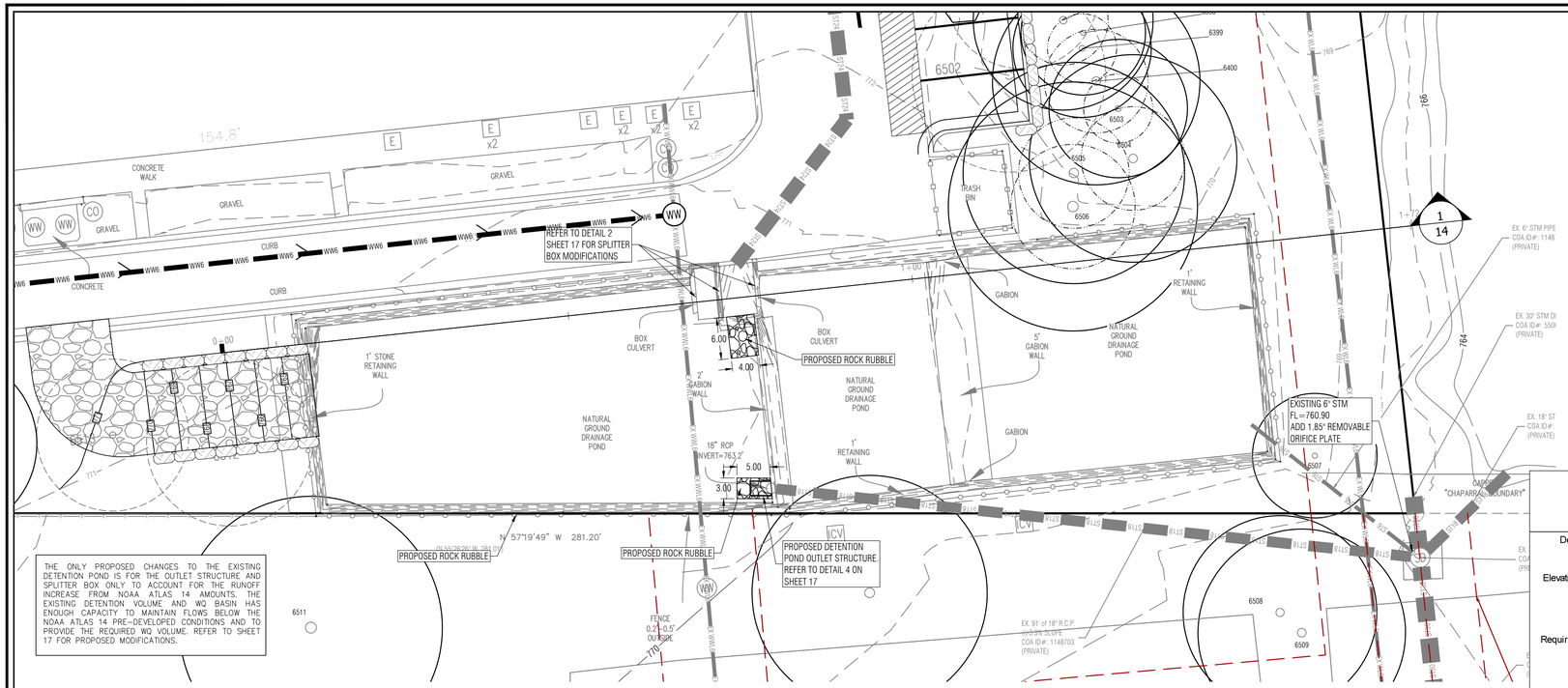
REVISIONS			APPROVED BY
REV.	DATE	DESCRIPTION	

JOB: 24-015 DATE: 03/05/2025
CAD: TEAM H CHK'D BY:
ENGINEER: HS CHK'D BY:
SCALE:

DETENTION POND (FOR REFERENCE ONLY)

SITE CIVIL PLAN

15 of 29



PARMER LN SITE PLAN

Summary Routing table (Stage / Storage / Discharge) — **POA 1**

Storm Event	Pre-Dev flows (allowable) Q - cfs	Developed flows (to det. pond) Q - cfs	Routed flows (leaving pond) Q - cfs	Dev (Routed) Qa - cfs	Pond Elevation Stage ft.	Storage CFT
				POA 1		
2-yr	8.9	10.08	8.02	**8.86**	766.01	**871**
10-yr	12.6	15.88	10.70	**12.22**	767.65	**2,614**
25-yr	14.6	19.68	12.14	**14.13**	768.73	**4,356**
100-yr	16.9	26.15	13.40	**16.03**	769.79	**7,841**

DETENTION POND
PARMER LN SITE PLAN

Detention Pond

Stage (ft)	Area (sf)	Area (ac)	Storage (cubic feet)	Cumulative Storage	Cumulative ac-ft
763.20	0	0.0000	0	0	0
764.00	93	0.0021	25	25	0.001
765.00	488	0.0112	265	289	0.007
766.00	854	0.0196	662	952	0.022
767.00	1149	0.0264	998	1,949	0.045
768.00	1376	0.0316	1,261	3,210	0.074
768.95	1558	0.0358	1,393	4,603	0.106
769.00	3868	0.0888	134	4,737	0.109
770.00	3970	0.0911	2,613	7,349	0.169

Δ Peak Flows Q (cfs) at POA 1

Storm Event	2-YR	10-YR	25-YR	100-YR
EX POA 1	8.87	12.58	14.63	16.89
DEV POA 1	8.86	12.22	14.13	16.03
Δ	-0.01	-0.4	-0.5	-0.9

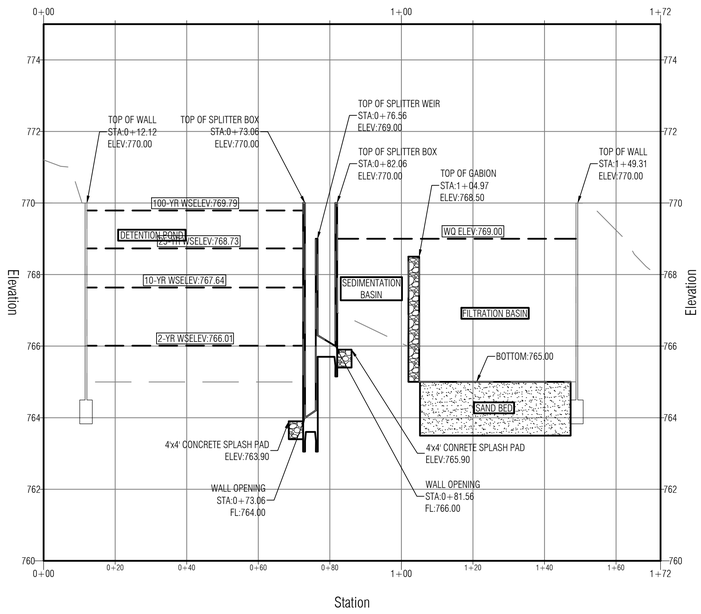
WATER QUALITY SPLITTER BOX CALCULATIONS

$H = (Q_{100}/(C*L))^{2/3}$ $H = ((Q_{25}/CA)^2)/2g$

Design Peak Flow Rate =	Q_{DEV100} = 26.15 cfs		Q_{DEV25} = 19.68 cfs
Water Quality Elevation =	769.00 MSL	Orifice FL in Spitter Box =	766.00 MSL
Elevation of Overflow Weir(>= WQelev) =	769.00 MSL	1 opening height =	2.00 foot
		width =	5.0 foot
Length of Overflow Weir (L) =	12.40 feet	Orifice area (A) =	10.0 sq feet
Weir Coefficient (C) =	3.0	Orifice centerline =	767.00 MSL
Required Head to Pass Design Flow (H) =	0.79 feet	Orifice Coefficient (C) =	0.60
		Head on orifice (H) =	0.17 feet
High Water (100-yr) Elevation =	**769.79 MSL**	Low water (25-yr) Elevation =	**767.17 MSL**
Top of Splitter Box Wall =	770.00 MSL	Max. Velocity (fps)=	1.97 fps
Water Quality Pond **Freeboard** Provided =	**0.21** feet		

MSL = Mean Sea Level

DETENTION POND PROFILE VIEW



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" 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.

8.AS-BUILT SURVEYS - AS-BUILT SURVEYS OF ALL FLOOD DETENTION BASINS AND WATER QUALITY SCMS SHALL BE SUBMITTED TO THE CITY UPON COMPLETION OF FINAL GRADE. SURVEYS SHALL BE CONDUCTED BY A LICENSED SURVEYOR OR THE ENGINEER OF RECORD AND INCLUDE REPRESENTATIVE SURVEY POINTS WITH ELEVATIONS TAKEN AT TOP OF WALL, BOTTOM OF WALL, CENTER OF BASIN, INLETS, OUTFALLS, OVERFLOW STRUCTURES, AND SIDE SLOPES. ADDITIONAL SURVEY POINTS MAY BE REQUESTED AT THE DISCRETION OF THE CITY INSPECTOR TO ENSURE BASIN INTEGRITY. WATER QUALITY BASINS WITH A DRAINAGE AREA OF LESS THAN TWO (2) ACRES AS WELL AS VEGETATED FILTER STRIPS DO NOT REQUIRE SUBMITTAL OF AS-BUILT SURVEYS UNLESS DEEMED NECESSARY BY THE CITY INSPECTOR.

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.

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:
i.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.

DCM WAIVER NOTE:
ON X/X/2025 THIS PROJECT RECEIVED APPROVAL FROM THE WATERSHED PROTECTION DEPARTMENT OF A WAIVER TO SECTION Ordinance No. 20221027-045, PART 18 AND 1.6.7 OF THE COA ENVIRONMENTAL CRITERIA MANUAL. WAIVER HAS BEEN APPROVED DUE TO KEEP THE EXISTING DESIGN OF THE WATER QUALITY/DETENTION POND. THE PLAN AND PROFILE ARE PROVIDED ON SHEETS 15 & 16 AND A DETAIL IS PROVIDED ON SHEET 17.

Parmer Lane - Site Plan
APPENDIX R-3
PARTIAL SEDIMENTATION/FILTRATION POND CALCULATIONS FOR DEVELOPMENT PERMITS

DRAINAGE AREA DATA

On-Site Drainage Area to Control =	1.741 acres	
On-Site Drainage Area Impervious Cover (IC) =	1.22 acres	70.32 % I.C.
On-Site Capture Depth, CD = 0.5"+((IC-20)/100) =	1.00 inches	
Off-Site Drainage Area to Control =	0.729 acres	
Off-Site Capture Depth (0.15 inches min.)	0.15 inches	
Total Site Drainage Area to Control=	2.470 acres	

WATER QUALITY CONTROL CALCULATIONS
The Water Quality Control is to be **PARTIAL SEDIMENTATION FILTRATION**

25-year Peak Flow Rate to control (Q_{25}) =	19.68 cfs
100-year Peak Flow Rate to control (Q_{100}) =	26.15 cfs

	Required	Provided
Water Quality Volume (WQV = CD*OSDA*3630 + 0.15*OFFSDA*3630)	**6,737** cf.	**8,724** cubic feet
Maximum Ponding Depth above Sand Bed (H)		**4.00** feet
Sedimentation Pond Surface Area (As = WQV(1/Ds-1/10))	**1,011** sq feet	**1,309** sq feet
Sedimentation Pond Vol. (min. = 20% WQV)	**1,347** cf.	**3,032** cubic feet
Filtration Basin Area	**723** sq feet	**1,423** sq feet
Filtration Pond Volume	n/a cf.	**5,692** cubic feet
Water Quality Elevation	769.00 ft msl	769.00 ft msl
Elev. of Splitter Weir (>= WQelev)	WQ elevation	769.00 ft msl
Height of Gabion Wall (WQelev-0.5')	WQ elevation - 0.5 ft	768.5 ft msl
Length of Splitter Weir		12.4 feet
Required Head to Pass Q_{100}	maximum 1.0 ft	**0.79** feet
Water Quality Pond Freeboard Provided Above $Q_{100\ Head}$	minimum 0.25 ft	0.21 feet
48 Hour Drawdown Time Orifice Opening diameter (inches)	1.85 in	1.85 in

Sedimentation Pond Stage (msl)	Area (sq ft)	Storage (cf)	Cumulative Storage(cf)	**Filtration Pond** Stage (msl)	Area (sq ft)	Storage (cf)	Cumulative Storage(cf)
765.00	758	0	0	765.00	1,423	0	0
766.00	758	758	758	766.00	1,423	1,423	1,423
766.50	758	379	1,137	766.50	1,423	712	2,135
767.00	758	379	1,516	767.00	1,423	712	2,846
768.00	758	758	2,274	768.00	1,423	1,423	4,269
769.00	**758**	**758**	**3,032**	**769.00**	**1,423**	**1,423**	**5,692**
770.00	758	758	3,790	770.00	1,423	1,423	7,115
Total Storage =		3,032		Total Storage =		5,692	
Sedimentation Pond =		35% of WQV		Filtration Pond =		65% of WQV	

Falling head orifice equation:

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

Surface Area (sq. ft.)	2732
Orifice coefficient (use 0.6 per DCM)	0.6
h_1 (ft)	8.1
h_2 (ft)	0
t (hrs.)	48
A_o orifice area (sq. ft.)	0.019
Orifice diameter (in.)	1.85



LEGEND

PROPOSED	DESCRIPTION
•	BOLLARD
	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX WL—	EXISTING WATER LINE
—EX WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
	EASEMENT
○	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
	GAS METER
	GAS VALVE
—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
E	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8	PROPOSED SPOT GARDE
602	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
SF	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE

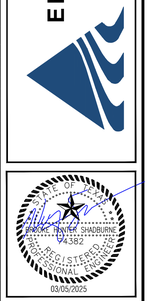
SEE TREE LIST SHEET 18

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

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018



SILVER CREEK EXPANSION

4101 W PARMER LN
AUSTIN, TX. 78727

REV. DATE	DESCRIPTION	APPROVED BY

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

WATER QUALITY AND DETENTION POND

SITE CIVIL PLAN

16

of 29

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Silver Creek Expansion
Date Prepared: February 11, 2025

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 * =	1.741	acres
Predevelopment impervious area within the limits of the plan * =	0.0000	acres
Total post-development impervious area within the limits of the plan* =	1.2242	acres
Total post-development impervious cover fraction * =	0.70	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	1066	lbs.
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 =	1.7410	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	1.2242	acres
Post-development impervious fraction within drainage basin/outfall area =	0.70	
$L_{M\ THIS\ BASIN}$ =	1066	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	Sand Filter	
Removal efficiency =	89	percent

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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 34.6 + A_P \times 0.54)$

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 =	1.4030	acres
A_I =	1.2242	acres
A_P =	0.1788	acres
L_R =	1209	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	1066	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 =	0.71	
On-site Water Quality Volume =	5443	cubic feet

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

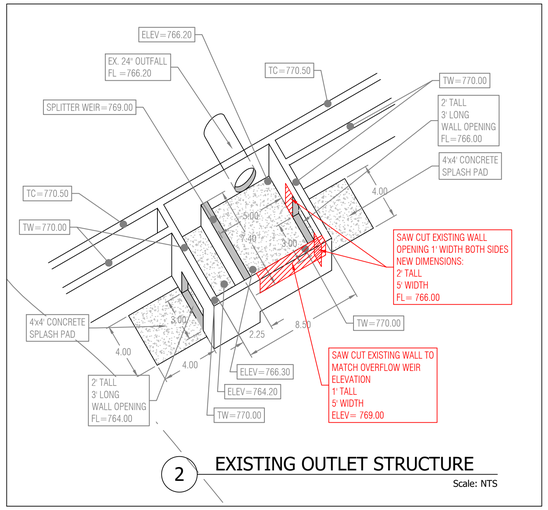
Off-site area draining to BMP =	0.68	acres
Off-site Impervious cover draining to BMP =	0.36	acres
Impervious fraction of off-site area =	0.53	
Off-site Runoff Coefficient =	0.37	
Off-site Water Quality Volume =	1386	cubic feet
Storage for Sediment =	1366	
Total Capture Volume (required water quality volume(s) x 1.20) =	8195	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.

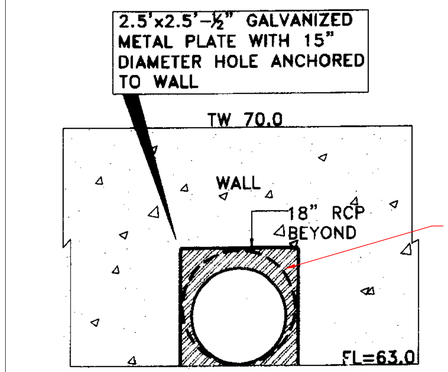
9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9B. Partial Sedimentation and Filtration System

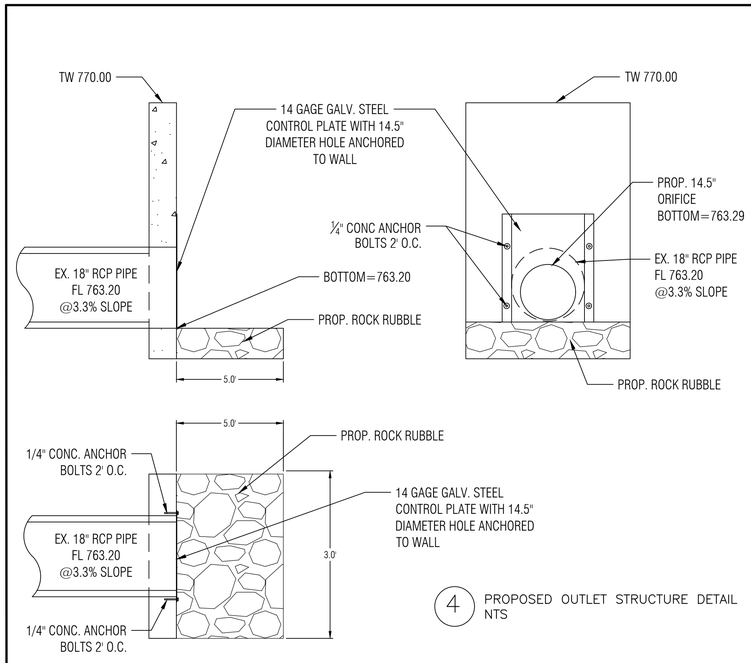
Water Quality Volume for combined basins =	8195	cubic feet	
Minimum filter basin area =	544	square feet	**For minimum water depth of 2 feet**
Maximum sedimentation basin area =	2177	square feet	**For maximum water depth of 8 feet**
Minimum sedimentation basin area =	136	square feet	



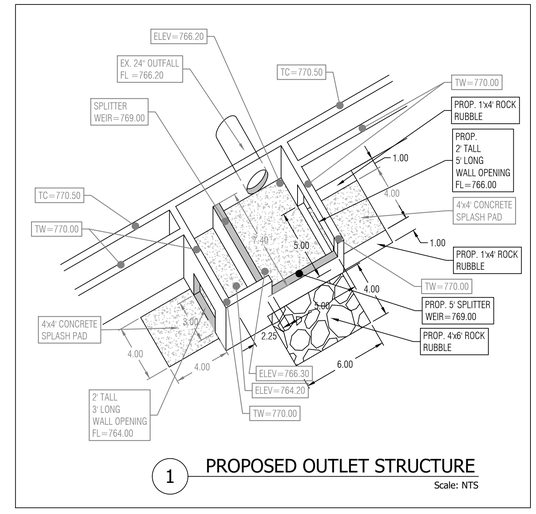
2 EXISTING OUTLET STRUCTURE
Scale: NTS



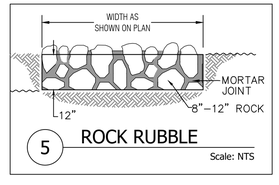
3 EXISTING OUTLET STRUCTURE DETAIL
Scale: NTS



4 PROPOSED OUTLET STRUCTURE DETAIL
NTS



1 PROPOSED OUTLET STRUCTURE
Scale: NTS



5 ROCK RUBBLE
Scale: NTS

SEE TREE LIST SHEET 18

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

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

STATE OF TEXAS — ANDRE HUNTER SHADBURNE — 94382 — REGISTERED PROFESSIONAL ENGINEER
03/05/2025

SILVER CREEK EXPANSION
4101 W PARMER LN
AUSTIN, TX. 78727

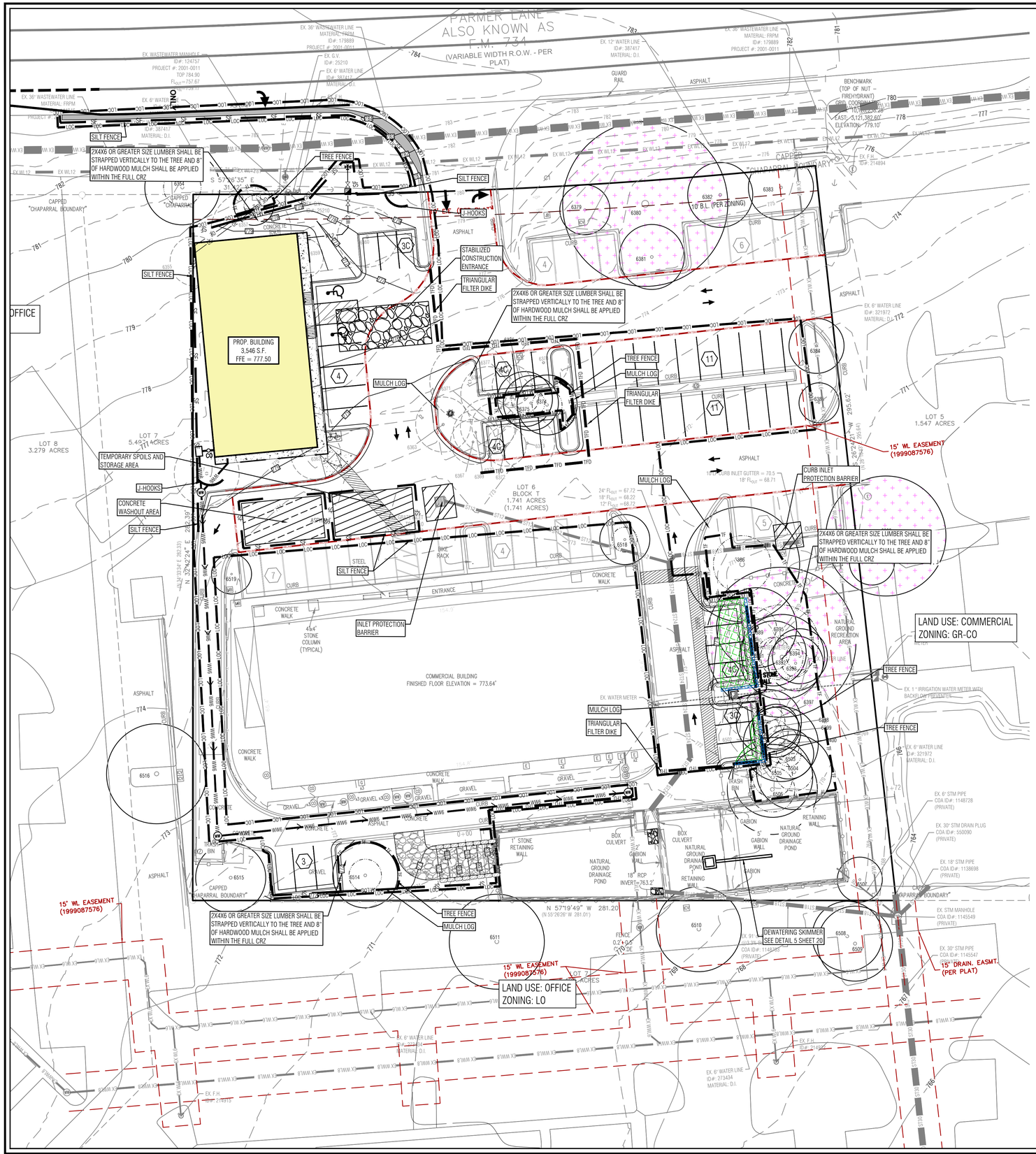
REVISIONS:

REV.	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015		DATE: 03/05/2025	
CAD: TEAM H		CHK'D BY:	
ENGINEER: HS		CHK'D BY:	
SCALE:			

DETAILS: WATER QUALITY AND DETENTION POND

SITE CIVIL PLAN: 17 of 29



TREE SURVEY LIST - DATE: JUNE 27, 2024					
TAG #	SPECIES	CALIPER	STEM SIZES	NOTES	REMOVED
6354	CEDAR ELM	15			
6355	LIVE OAK	10			X
6357	CEDAR ELM	16			X
6358	CEDAR ELM	8			
6359	DEAD LIVE OAK	0		8 CALIPER DDI	X
6360	LIVE OAK	12			X
6361	DEAD LIVE OAK	0		9 CALIPER DDI	X
6362	LIVE OAK	10			X
6363	LIVE OAK	11			X
6364	DEAD LIVE OAK	0		16 CALIPER DDI	X
6365	LIVE OAK	11			X
6367	LIVE OAK	9			X
6369	LIVE OAK	9			X
6370	LIVE OAK	11			X
6371	LIVE OAK	9			X
6372	LIVE OAK	8			X
6373	LIVE OAK	11			X
6374	LIVE OAK	12			
6375	LIVE OAK	11			
6376	LIVE OAK	11			
6377	LIVE OAK	8			X
6378	CEDAR ELM	10			X
6379	LIVE OAK	10			
6380	LIVE OAK	33	25 15	MULTI TRUNK (HERITAGE)	
6381	LIVE OAK	13	9 8	MULTI TRUNK	
6382	LIVE OAK	13	7 6 5	MULTI TRUNK	
6383	LIVE OAK	13	7 6 5	MULTI TRUNK	
6384	LIVE OAK	11			
6385	LIVE OAK	8			
6386	LIVE OAK	23			
6387	LIVE OAK	9			
6388	LIVE OAK	24		HERITAGE	
6389	LIVE OAK	16			
6390	LIVE OAK	10			X
6391	LIVE OAK	13			
6392	LIVE OAK	17	13 7	MULTI TRUNK	
6393	LIVE OAK	11			
6394	LIVE OAK	11			
6395	LIVE OAK	30	24 11	MULTI TRUNK (HERITAGE)	
6396	LIVE OAK	11			X
6397	LIVE OAK	13			
6398	LIVE OAK	9			
6399	LIVE OAK	10			
6400	LIVE OAK	15	10 9	MULTI TRUNK	
6502	LIVE OAK	14	10 7	MULTI TRUNK	X
6503	LIVE OAK	10			
6504	LIVE OAK	15			
6505	LIVE OAK	16	13 6	MULTI TRUNK	
6506	LIVE OAK	18	14 7	MULTI TRUNK	
6507	LIVE OAK	9			
6508	CEDAR ELM	14			
6509	CEDAR ELM	15			
6510	PECAN	17			
6511	LIVE OAK	19	14 10	MULTI TRUNK	
6512	ELM	12			X
6513	RED OAK	11			X
6514	ELM	13	9 8	MULTI TRUNK	
6515	CEDAR ELM	14			
6516	HACKBERRY	20	15 9	MULTI TRUNK	
6517	CEDAR ELM	13			X
6518	OAK	10	7 6	MULTI TRUNK	
6519	OAK	8			
	TOTAL INCHES:	773			
	TOTAL TREES	59			

- 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.]
- CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(D), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR, SILT FENCE TYPE AND INSTALLATION SHALL COMPLY WITH ECM 1.4.2(G)
- ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN-COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS.
- THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY.
- A PRE-CONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
- 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.
- FINISHED ELEVATION FOR PARKING-LOT ISLANDS, MEDIANS, PENINSULAS, AND SIMILAR LANDSCAPE AREAS 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].

OVERALL EROSION & SEDIMENTATION CONTROL QUANTITIES

SILT FENCE = 471 LF
LIMITS OF CONSTRUCTION = 28,786 SF (0.66 ac)
12" MULCH LOG= 241 LF
TRIANGULAR FILTER DIKE = 283 LF
CONSTRUCTION ENTRANCE = 1 EA
J-HOOKS = 24 LF

LOT 6 BLK T, 4101 W PARMER LN
APPENDIX Q-2. SUBURBAN WATERSHEDS
IMPERVIOUS COVER

1. Impervious Cover Allowed at (80)% x (1.741) Acres = **1.393** Acres

Proposed Impervious Cover

2 Existing Impervious Cover Proposed To Remain = 0.958 Acres
3 Proposed new Impervious Cover = 0.257 Acres
4 Total Proposed Impervious Cover = 1.216 Acres

Allowable Impervious Cover Breakdown by Slope Category

5 Total Acreage With Slopes 15-25% = 0.036 Acres x10% = **0.0036 Acres**

Total Proposed Impervious Cover on Slopes

Slopes		Impervious Cover		
		Buildings/and other impervious cover		Drives / Roadways
		% of Category		
Slope Categories	Acres	Acres		Acres
9. 0-15%	1.640	0.416	25.349	0.800
10. 15-25%	0.036	0.012	34.029	0.024
11. 25-35%	0.038	0.012	32.606	0.000
12. Over 35%	0.027	0.027	100.000	0.000
13. Gross Site Area	1.741			

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CITY APPROVAL STAMP

SP-2024-0312C

NORTH
SCALE 1"= 20'

0 10 20 40

LEGEND

PROPOSED	DESCRIPTION
●	BOLLARD
☀	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX WL—	EXISTING WATER LINE
—EX WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
	EASEMENT
○	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
G	GAS METER
G	GAS VALVE
—○—	METAL FENCE
—×—×—	WIRE FENCE
WW●	WASTEWATER MANHOLE
MH●	MANHOLE
CO ●	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
E	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8	PROPOSED SPOT GARDE
100	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
LOC	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
TFD	TREE FENCE TYP.
SF	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE

LEGEND:
- TREE HARDWOOD MULCH
- OVER EXCAVATION IMPACTED CRZ
- IMPACTED CRZ

AUSTIN CIVIL ENGINEERING, INC.
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PH: (512) 306-0018

STATE OF TEXAS
ANDREW TAYLOR SHADBURNE
94382
REGISTERED PROFESSIONAL ENGINEER
03/05/2025

SILVER CREEK EXPANSION
4101 W PARMER LN
AUSTIN, TX. 78727

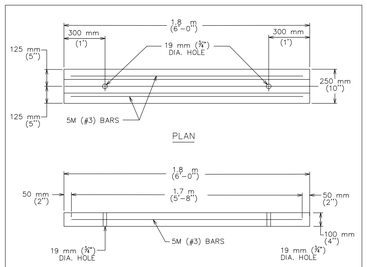
REVISIONS		
REV.	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

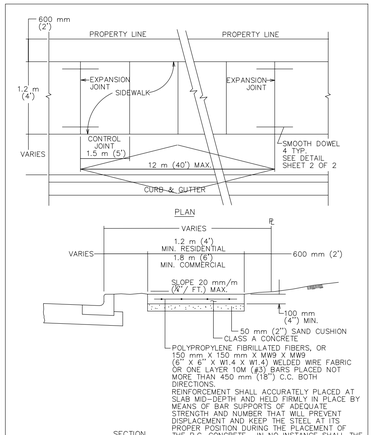
EROSION & SEDIMENTATION CONTROL PLAN

SITE CIVIL PLAN

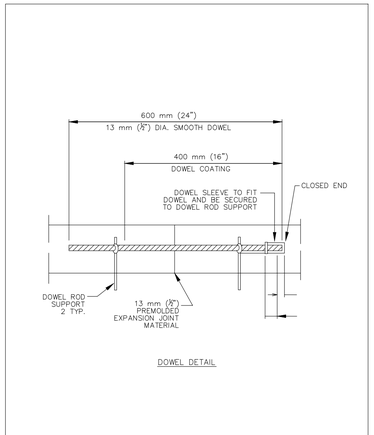
18 of 29



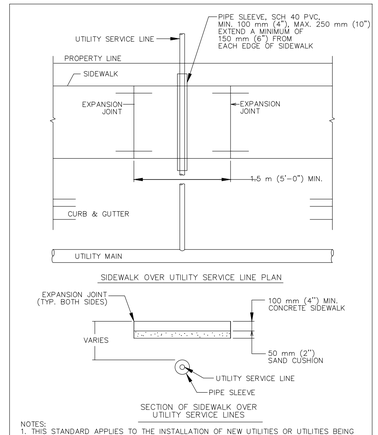
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		PARKING LOT BUMPER CURB	
RECORD COPY SIGNED BY BILL GARDNER	3/15/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 439S-1
APPROVED	ADOPTED		



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 1 OF 3
ADOPTED			

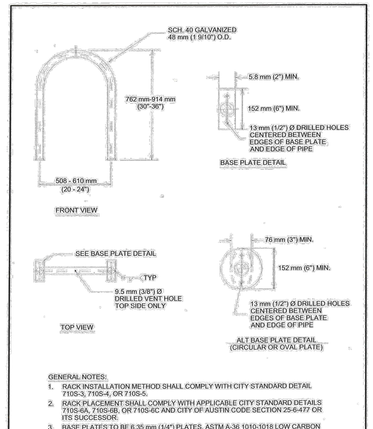


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		SIDEWALK	
RECORD COPY SIGNED BY BILL GARDNER	03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 2 OF 3
ADOPTED			



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	03/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 3 OF 3
ADOPTED			



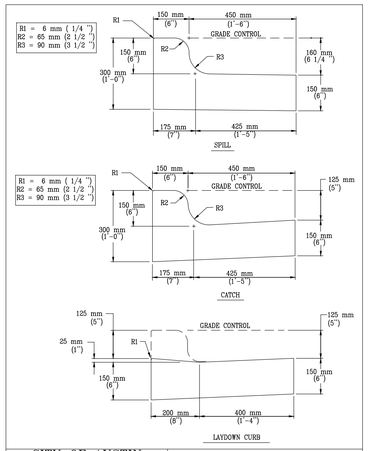
GENERAL NOTES:
1. RACK INSTALLATION METHOD SHALL COMPLY WITH CITY STANDARD DETAIL 710S-3, 710S-4, OR 710S-5.
2. RACK PLACEMENT SHALL COMPLY WITH APPLICABLE CITY STANDARD DETAILS 710S-6A, 710S-6B, OR 710S-6C AND CITY OF AUSTIN CODE SECTION 25-6-477 OR ITS SUCCESSOR.
3. BASE PLATES TO BE 6.35 mm (1/4") PLATES, ASTM A-36 1010-1018 LOW CARBON PRIME STEEL.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CLASS III STYLE BICYCLE PARKING	
1/26/12 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 710S-1 1 OF 1

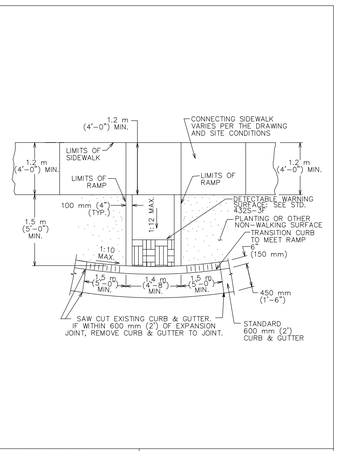
ACCESSIBILITY ROUTE:
- ACCESSIBILITY ROUTE IS PROVIDED ON-SITE FROM H.C. PARKING TO OFFICE.
- SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP.
- ACCESSIBLE ROUTES MUST HAVE A CROSS SLOPE NO GREATER THAN 1:50.
- GROUND SURFACES ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM, AND SLIP RESISTANT.
- MAXIMUM GRADE IN ANY PARKING SPACE IS 2% MAXIMUM GRADE ON ACCESSIBLE WITH MINIMUM 2 % CROSS SLOPE.
- ALL WALKWAYS, RAMPS, HANDICAP PARKING SIGNAGE, ETC. SHALL MEET APPROVED A.D.A. STANDARDS.

FIRE ZONE STRIPING NOTE:
- FIRE ZONES SHALL BE ESTABLISHED BY PAINTING CURBS RED, STENCIL THE WORDS "FIRE LANE/TOW AWAY ZONE" IN WHITE LETTERS 4" HIGH AND AT 30' INTERVALS ALONG THE CURB. IN ADDITION, SIGNS SHALL BE POSTED AT BOTH ENDS OF A FIRE ZONE AND AT INTERVALS OF 50 FEET OR LESS.

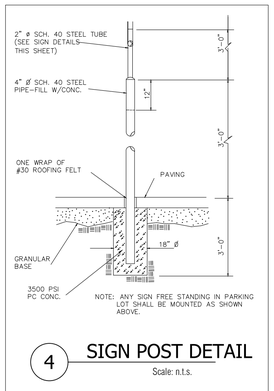
VERTICAL CLEARANCE NOTE:
- FOR FIRE DEPARTMENT ACCESS VERTICAL CLEARANCE SHALL BE A MINIMUM OF 13'-6" FOR ALL DRIVEWAYS AND INTERNAL CIRCULATION AREAS ON THIS SITE. TRIM TREE BRANCHES IF NECESSARY TO ACHIEVE THE REQUIRED CLEARANCE.
- THERE ARE NO SLOPES OVER 15%.



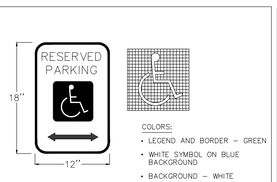
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION		CURB AND GUTTER SECTION	
RECORD COPY SIGNED BY LINO RIVERA	9/29/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 430S-1
ADOPTED			



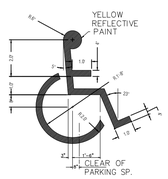
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS		TYPE 1B SIDEWALK CURB RAMP	
RECORD COPY SIGNED BY BILL GARDNER	9/14/05	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-5B
ADOPTED			



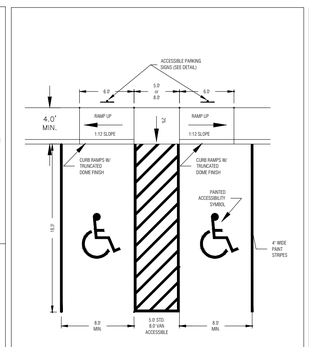
4 SIGN POST DETAIL
Scale: n.t.s.



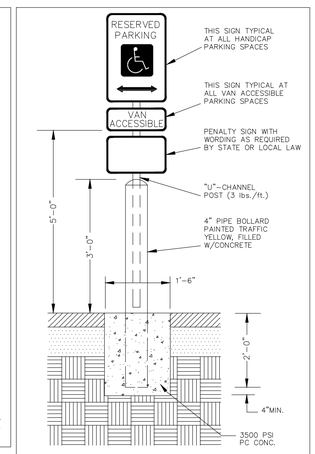
5 HANDICAP SIGN
Scale: NTS



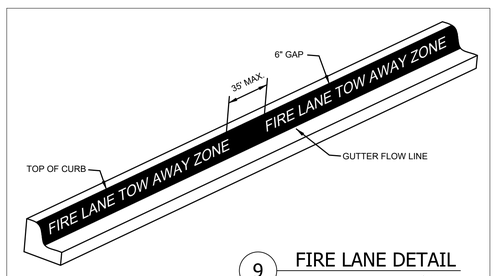
6 INTERNATIONAL HANDICAP SYMBOL
Scale: NTS



7 HANDICAPPED PARKING SPACES
Scale: NTS



8 HANDICAP SIGN ASSEMBLY
Scale: NTS
(OPTIONAL-MOUNT SIGN TO BUILDING IF DIRECTED BY OWNER)



9 FIRE LANE DETAIL
Scale: n.t.s.

NOTE:
ALL WALKWAYS, RAMPS, HANDICAP PARKING SIGNAGE, ETC. SHALL MEET APPROVED A.D.A. STANDARDS.

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE 220
AUSTIN, TX 78748
PH: (512) 306-0018



SILVER CREEK EXPANSION
4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

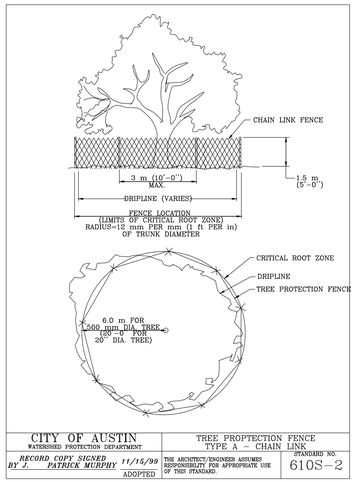
REV.	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE: N.T.S	

DETAILS: SITE

SITE CIVIL PLAN

19 of 29



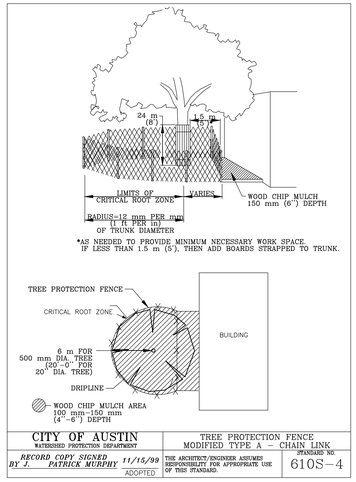
CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT

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



CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT

TREE PROTECTION FENCE
MODIFIED TYPE A – CHAIN LINK

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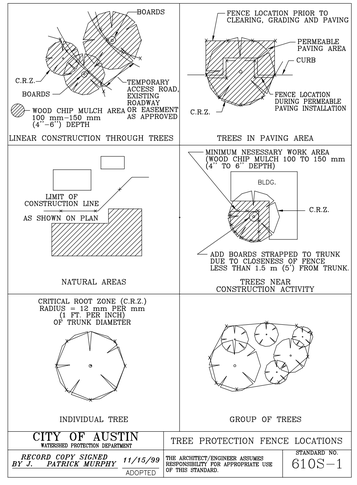
STANDARD NO. 610S-4



CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT

TREE PROTECTION FENCE LOCATIONS

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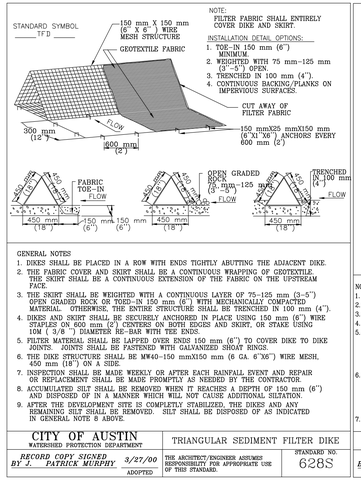
STANDARD NO. 610S-1



GENERAL NOTES

1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 75–125 mm (3–5") OPEN GRADED ROCK OR TOED–IN 150 mm (6") WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED IN 100 mm (4").
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 150 mm (6") WIRE STAPLES ON 600 mm (2') CENTERS ON BOTH EDGES AND SKIRT, OR STAKE USING 10M (3/8 ") DIAMETER RE–BAR WITH TEE ENDS.
5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 150 mm (6") TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
6. THE DIKE STRUCTURE SHALL BE MW40–150 mmX150 mm (6 GA. 6"X6") WIRE MESH, 450 mm (18") ON A SIDE.
7. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6") AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT SITE IS COMPLETLY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN GENERAL NOTE 8 ABOVE.

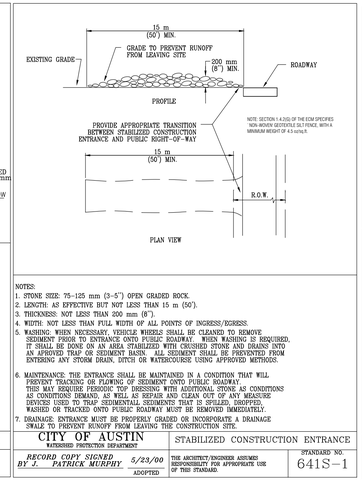
CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT

TRIANGULAR SEDIMENT FILTER 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. 628S



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 APROVED 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 AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENTAL 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.

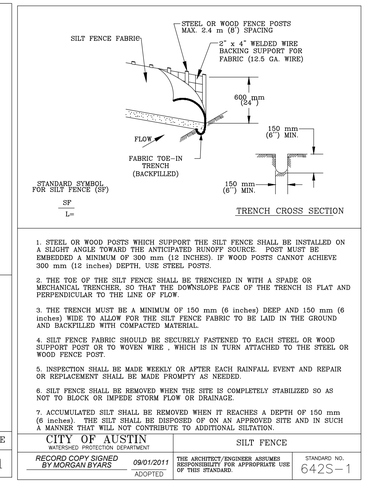
CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT

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 PROMPTY 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.

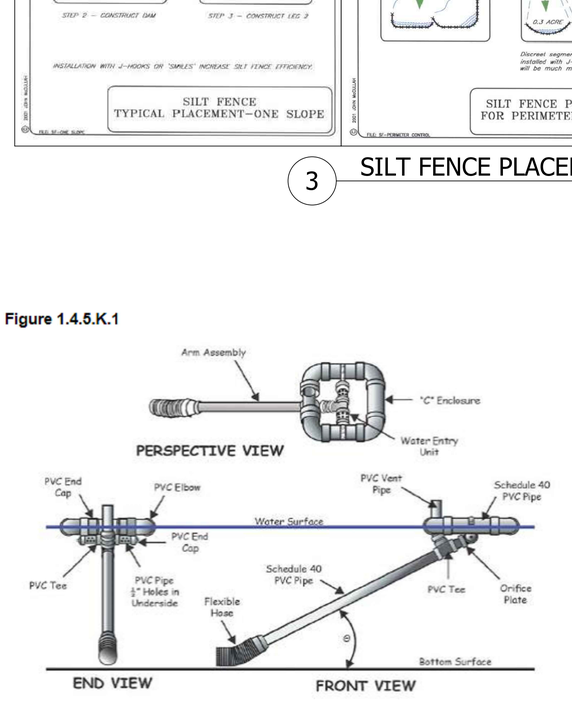
CITY OF AUSTIN — WATERSHED PROTECTION DEPARTMENT

SILT FENCE

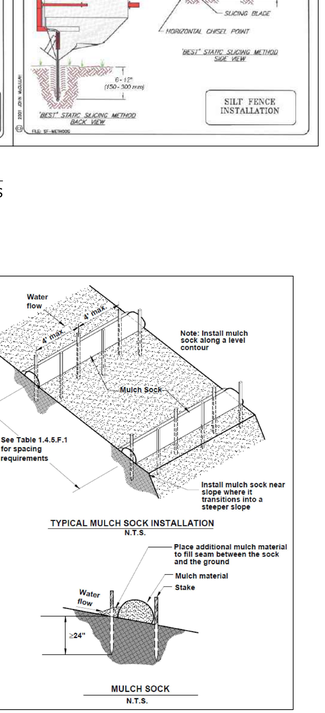
RECORD COPY SIGNED BY MORGAN BYARS 09/01/2011
ADOPTED

THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

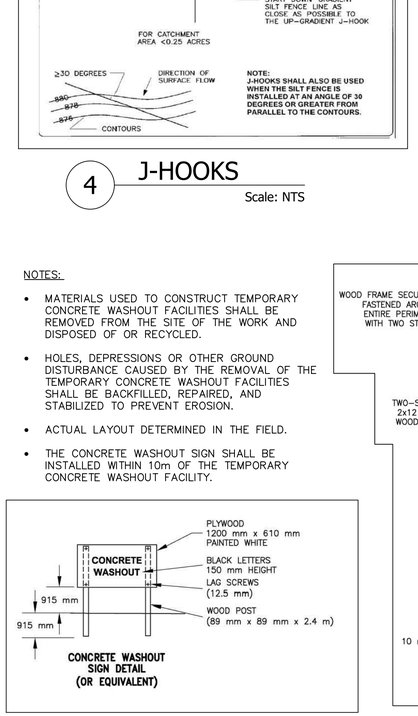
STANDARD NO. 642S-1



3 SILT FENCE PLACEMENT
Scale: NTS



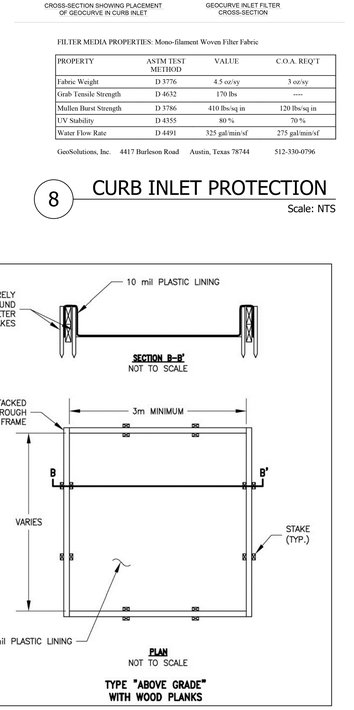
4 J-HOOKS
Scale: NTS



4 J-HOOKS
Scale: NTS

GeoSolutions, Inc. — Product Data Sheet — GeoCurve Inlet Filter

The GeoCurve Inlet Filter is a stormwater filter for placement into a stormwater curb inlet for the purpose of capturing debris and sediment that is transported by stormwater runoff. The device is comprised of a filter media (woven monofilament filter fabric) affixed to the lower portion of a "C" shaped 12 gauge welded wire frame (2" x 4" openings) with an upper retention flange. The device effectively filters stormwater, can easily be removed for maintenance and cleaning and incorporates an overflow window for heavy storm events.

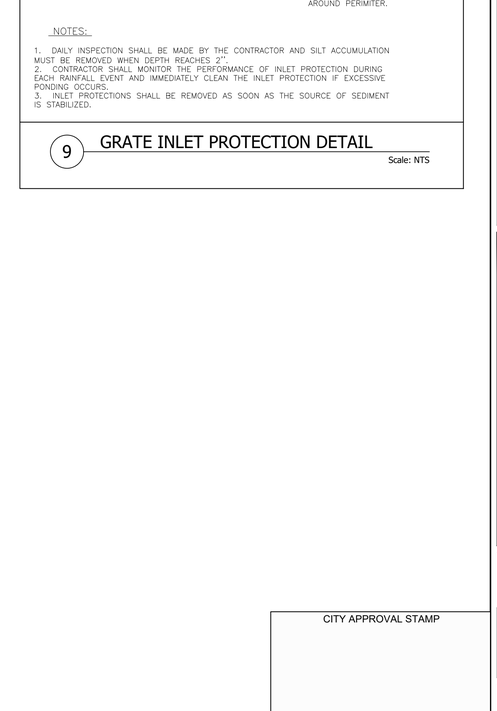


FILTER MEDIA PROPERTIES: Mono-filament Woven Filter Fabric

PROPERTY	ASTM TEST METHOD	VALUE	C.O.A. REQ'T
Fabric Weight	D 3776	4.5 oz/sy	3 oz/sy
Grab Tensile Strength	D 4632	170 lbs	----
Mullen Burst Strength	D 3786	410 lbs/sq in	120 lbs/sq in
UV Stability	D 4355	80 %	70 %
Water Flow Rate	D 4491	325 gal/min/sf	275 gal/min/sf

GeoSolutions, Inc. 4417 Burleson Road Austin, Texas 78744 512-330-0796

8 CURB INLET PROTECTION
Scale: NTS



NOTES:

1. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN DEPTH REACHES 2".
2. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL EVENT AND IMMEDIATELY CLEAN THE INLET PROTECTION IF EXCESSIVE PONDING OCCURS.
3. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT IS STABILIZED.

9 GRATE INLET PROTECTION DETAIL
Scale: NTS

Figure 1.4.5.K.1

5 DEWATERING SKIMMER
Scale: NTS

6 MULCH LOG
Scale:NTS

NOTES:

- MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
- HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.
- ACTUAL LAYOUT DETERMINED IN THE FIELD.
- THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 10m OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

7 CONCRETE WASH OUT AREA
Scale:NTS

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018



SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

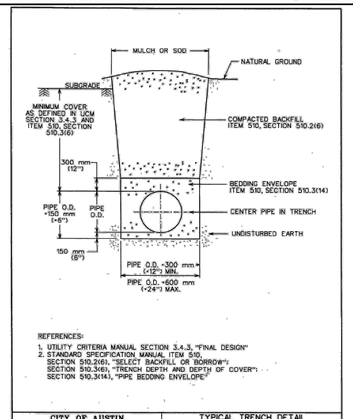
REVISIONS			
REV.	DATE	DESCRIPTION	APPROVED BY

JOB:	24-015	DATE:	03/05/2025
CAD:	TEAM H	CHK'D BY:	
ENGINEER:	HS	CHK'D BY:	
SCALE:	N.T.S		

DETAILS: EROSION AND SEDIMENTATION CONTROL

SITE CIVIL PLAN

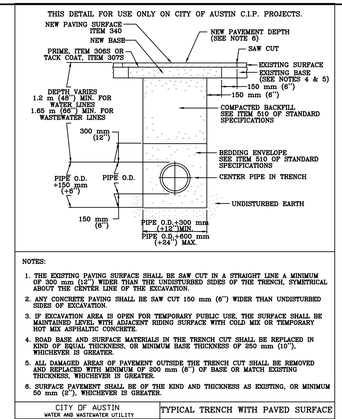
20 of 29



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"

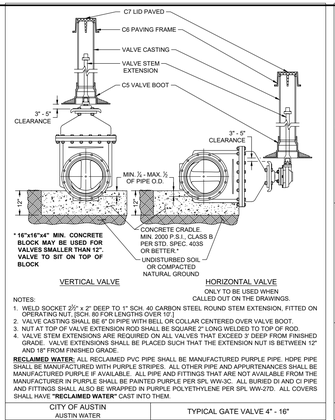
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
RECORD COPY SIGNED BY BILL GARDNER 9/13/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5

THIS DETAIL FOR USE ONLY ON CITY OF AUSTIN C.I.P. PROJECTS.



NOTES:
1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY	TYPICAL TRENCH WITH PAVED SURFACE	
RECORD COPY SIGNED BY KATHI L. FLOWERS 8/19/02 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-3



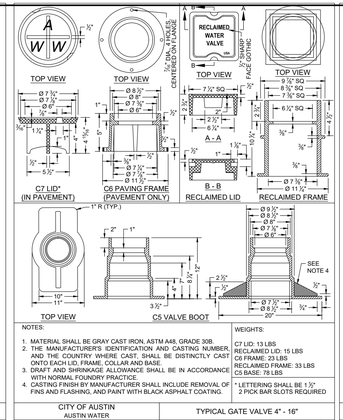
VERTICAL VALVE

HORIZONTAL VALVE
ONLY TO BE USED WHEN CALLED OUT ON THE DRAWINGS.

NOTES:
1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, [SCH. 80 FOR LENGTHS OVER 10'.]
2. VALVE CASTING SHALL BE 6" D 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 7' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FINISHED GRADE.

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

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

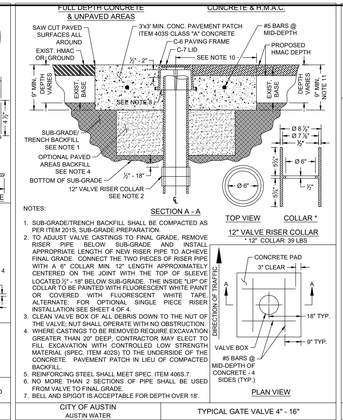


NOTES:
1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4.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

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

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

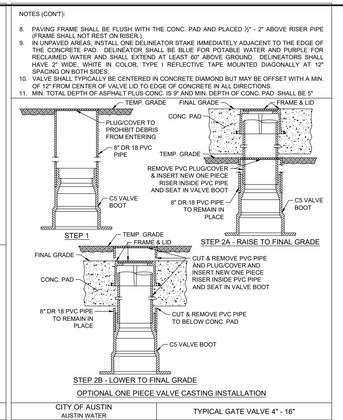
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L. FLOWERS 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 2 OF 4



NOTES:
1. SUB-GRADE/TRENCH BACKFILL SHALL BE COMPACTED AS PER ITEM 201S, SUB-GRADE PREPARATION.
2. TO ADJUST VALVE CASTINGS TO FINAL GRADE, REMOVE RISER PIPE BELOW SUB-GRADE AND INSTALL APPROPRIATE LENGTH OF NEW RISER PIPE TO ACHIEVE FINAL GRADE. CONNECT THE TWO PIECES OF RISER PIPE WITH A 6" COLLAR MIN. 12" LENGTH APPROXIMATELY CENTERED ON THE JOINT WITH THE TOP OF SLEEVE LOCATED ½" - 18" BELOW SUB-GRADE. THE INSIDE 1/3RD 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 24" DEEP, CONTRACTOR MAY ELECT TO FILL EXCAVATION WITH CONTROLLED LOW STRENGTH MATERIAL (SPEC. ITEM 402S) TO THE UNDERSIDE OF THE CONCRETE. PAVEMENT PATCH IN LIEU OF COMPACTED BACKFILL.
5. REINFORCING STEEL SHALL MEET SPEC. ITEM 4065.7.
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'.

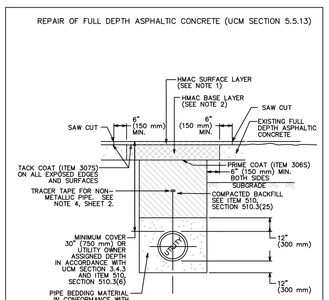
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
RECORD COPY SIGNED BY KATHI L. FLOWERS 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 3 OF 4

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 BY KATHI L. FLOWERS 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 4 OF 4

REPAIR OF FULL DEPTH ASPHALTIC CONCRETE (UCM SECTION 5.5.13)



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.2.
2. THE COMBINED THICKNESS OF THE REPLACEMENT AC SURFACE AND BASE LAYERS SHALL MATCH THE THICKNESS OF EXISTING FULL DEPTH ASPHALTIC CONCRETE PAVEMENT, OR SHALL BE A MINIMUM THICKNESS OF 6" (150 mm), WHICHEVER IS GREATER. IF THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
3. CLASS "J" PG 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(6)(E)(3), 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	
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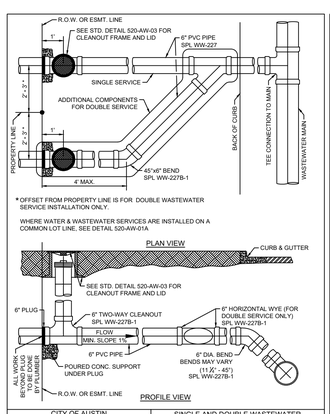
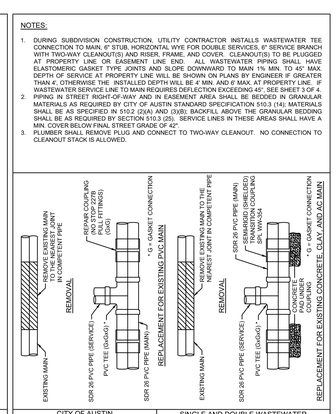


*OFFSET FROM PROPERTY LINE IS FOR DOUBLE WASTEWATER SERVICE INSTALLATION ONLY.

WHERE WATER & WASTEWATER SERVICES ARE INSTALLED ON A COMMON LOT LINE, SEE DETAIL 520-AW-01A

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED BY JEFF A. KYLE 11/07/2016 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 3 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 (2)(A) AND (3)(B); BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (25). 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	
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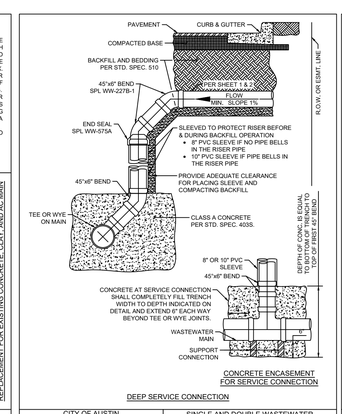

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
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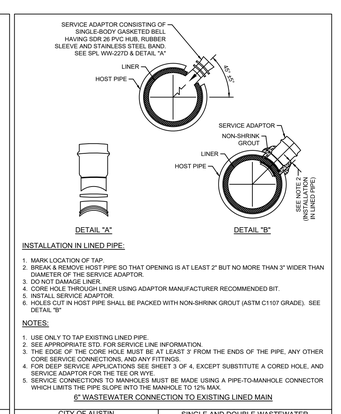
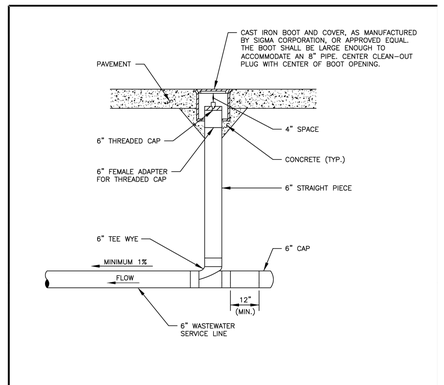


INSTALLATION IN LINED PIPE:
1. MARK LOCATION OF TAP.
2. BREAK & REMOVE HOST PIPE SO THAT OPENING IS AT LEAST 2" BUT NO MORE THAN 3" WIDER THAN DIAMETER OF THE SERVICE ADAPTOR.
3. DO NOT DAMAGE LINER.
4. CORE HOLE THROUGH LINER USING ADAPTOR MANUFACTURER RECOMMENDED BIT.
5. INSTALL SERVICE ADAPTOR.
6. 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 2 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.

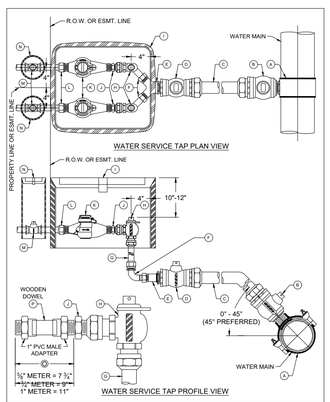
6" WASTEWATER CONNECTION TO EXISTING LINED MAIN

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED BY JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 4 OF 4



NOTES:
1. ALL PIPE TO BE SDR 26.
2. ALL FITTINGS TO BE SDR 26 GASKET FITTINGS.
3. ALL CLEANOUTS IN PAVED AREAS REQUIRE SPECIFIC ENGINEER APPROVAL.

2 WW CLEANOUT PAVED AREA DETAIL



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-65
- D. 2" BALL VALVE, SPL WW-68
- E. SINGLE SERVICE: 2" MIP X 1" COPPER FLARE FITTING, SPL WW-68 OR DOUBLE SERVICE: 2" MIP X 1" COPPER FLARE WYE, SPL WW-68
- F. 1" SWIVEL NUT x 1" COMPRESSION 90° BEND, SPL WW-68
- G. 1" HDPE WATER SERVICE TUBING, SPL WW-65
- 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 1" METERS: 8 ½" LONG x ¾" DIA. 1" METERS: 8 ½" 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-597, 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. TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 3". 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

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018


REGISTERED
PROFESSIONAL
ENGINEER
STATE OF TEXAS
03/05/2025

Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any 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.

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 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.

6. 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.

7. Sediment must be removed from the sediment traps or sedimentation basins not later than

when it occupies 50% of the basin's design capacity.

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

9. 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.

10. 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.

11. 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 diversionary structures;

   B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

   C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

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

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

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 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.

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

STATE OF TEXAS
MARK TAYLOR SABRINE
94382
REGISTERED
PROFESSIONAL ENGINEER
03/05/2025

SILVER CREEK EXPANSION

4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

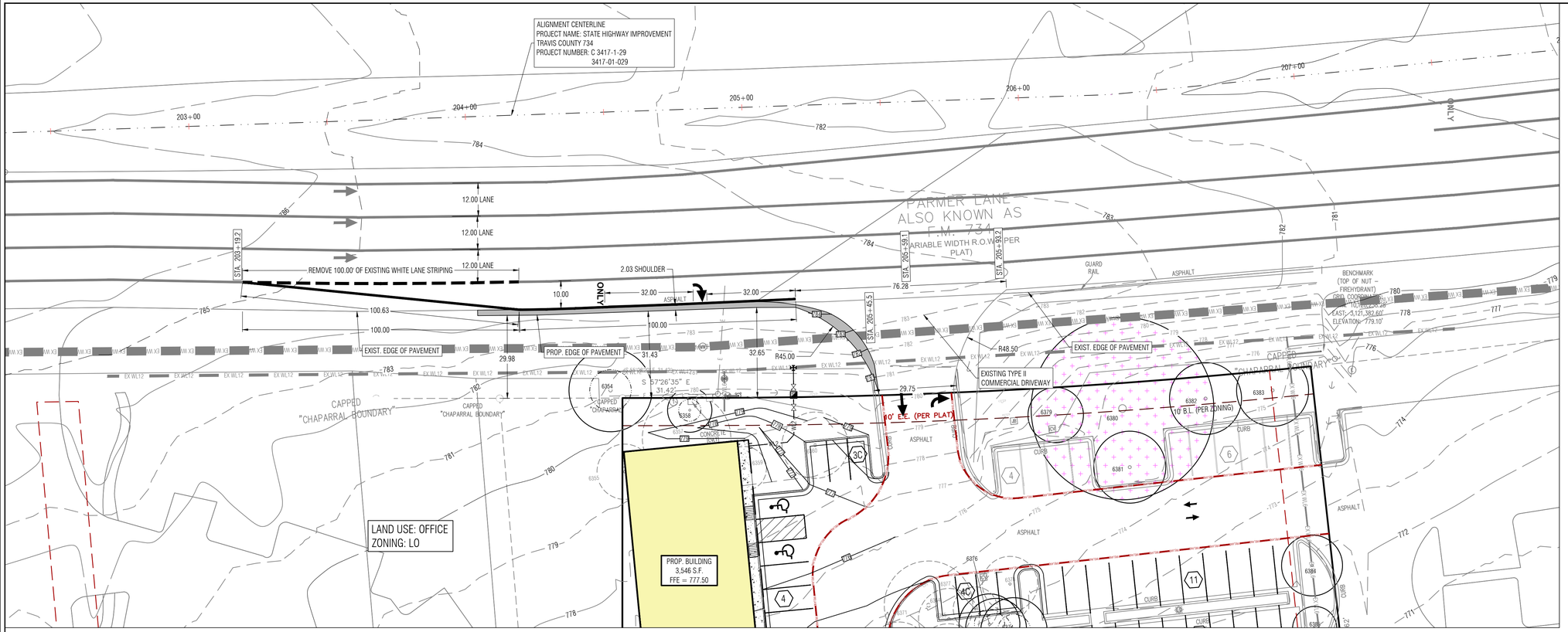
REV.	DATE	DESCRIPTION	APPROVED BY

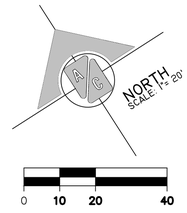
JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE: N.T.S	

TCEQ CONSTRUCTION NOTES

SITE CIVIL PLAN

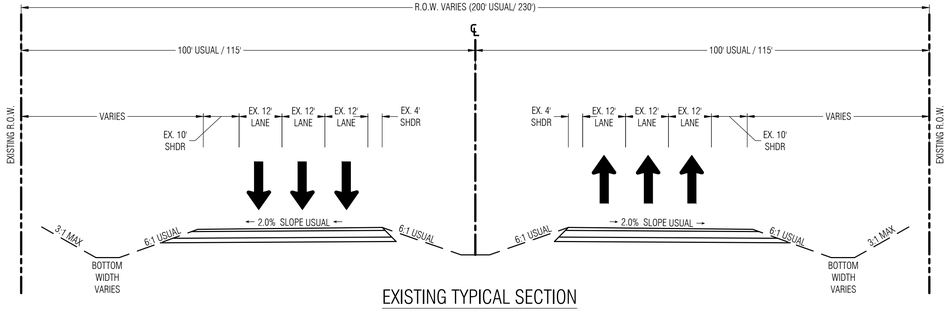
25 of 29





LEGEND

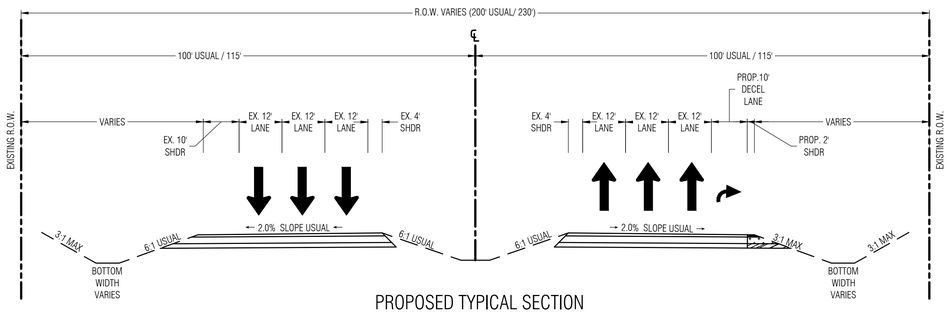
PROPOSED	DESCRIPTION
•	BOLLARD
▲	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
—ST—	STORM SEWER LINE
—WL—	WATER LINE
—WW—	WASTE WATER LINE
—FM—	FORCE MAIN
—EX WL—	EXISTING WATER LINE
—EX WW—	EXISTING WASTEWATER LINE
—GAS—	GAS LINE
	PROPERTY LINE
	EASEMENT
○	FOUND IRON PIN
	POWER POLE
	DOWN GUY
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GATE VALVE
	REDUCER
G	GAS METER
G	GAS VALVE
—○—○—	METAL FENCE
—×—×—	WIRE FENCE
WW	WASTEWATER MANHOLE
MH	MANHOLE
CO	CLEAN OUT
	DRAINAGE INLET
	HANDICAP PARKING
	ELECTRIC PULL BOX
	ELECTRIC METER
T	ELECTRIC TRANSFORMER
	TELEPHONE SERVICE BOX
10	9' X 18.5' PARKING SPACE
528.8 →	PROPOSED SPOT GARDE
100	PROPOSED FINISHED GRADE
	PROPOSED DRAINAGE AREA
—LOC—	LIMITS OF CONSTRUCTION
	SPOILS AND STORAGE AREA
	TREE FENCE TYP.
— SF —	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE



EXISTING TYPICAL SECTION

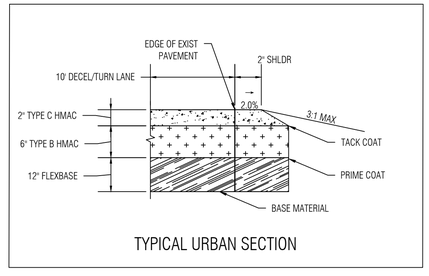
SCALE: N.T.S.

W PARMER LN



PROPOSED TYPICAL SECTION

SCALE: N.T.S.



TYPICAL URBAN SECTION

a) 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**.

b) APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.

c) ALL EXISTING STRUCTURES SHOWN TO BE REMOVED WILL REQUIRE A DEMOLITION PERMIT FROM THE CITY OF AUSTIN DEVELOPMENT SERVICES DEPT.

d) FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.

e) FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED.

NOTE: EACH COMPACT PARKING SPACE/AISLE WILL BE SIGNED "SMALL CAR ONLY."

SEE TREE LIST SHEET 18

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

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018



SILVER CREEK EXPANSION

4101 W PARMER LN
AUSTIN, TX. 78727

REVISIONS		
REV.	DATE	DESCRIPTION
		APPROVED BY

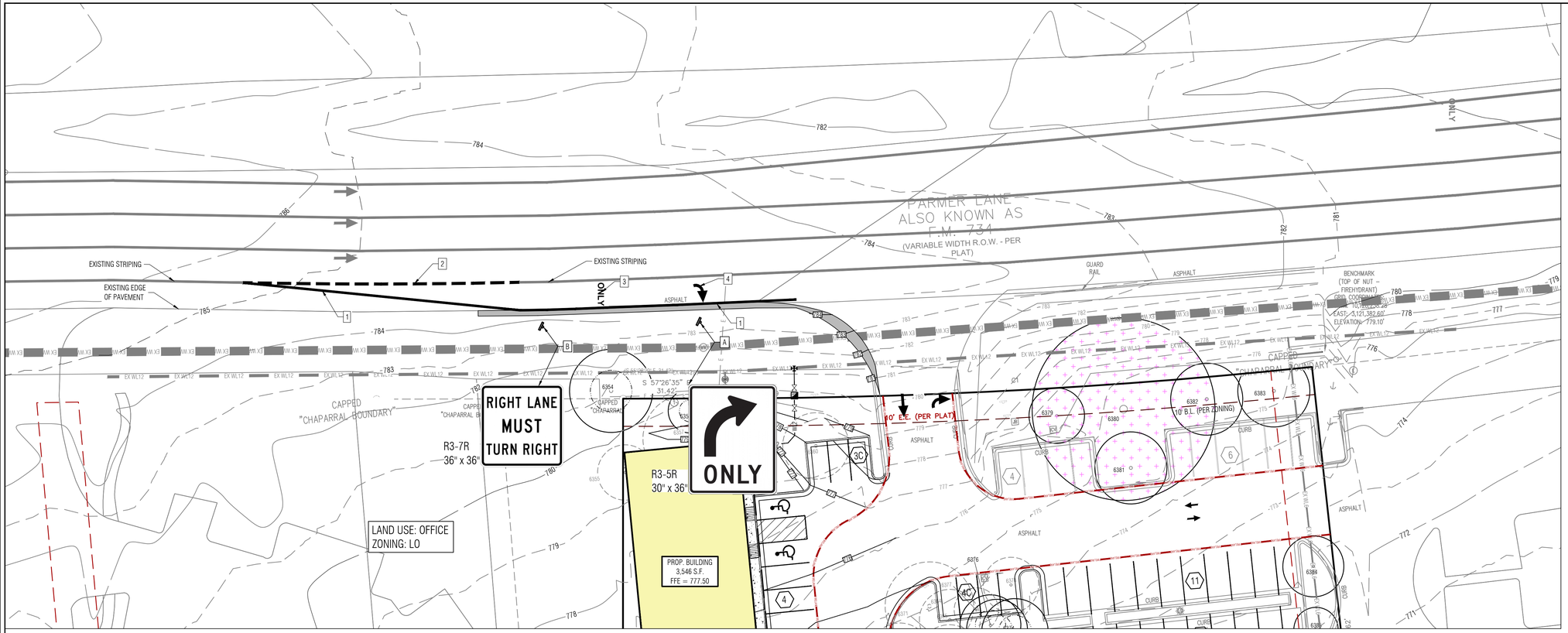
JOB: 24-015		DATE: 03/05/2025
CAD: TEAM H		CHK'D BY:
ENGINEER: HS		CHK'D BY:
SCALE:		

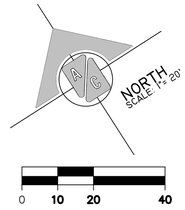
DECELERATION LANE PLAN

SITE CIVIL PLAN

26

of 29





LEGEND

PROPOSED	DESCRIPTION
•	BOLLARD
	SIGN POST
—OE—	OVER HEAD ELEC. LINE
—OT—	OVER HEAD TELEPHONE
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—WL—	WATER LINE
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	REDUCER
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	SPOILS AND STORAGE AREA
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— SF —	SILT FENCE TYP.
	CONSTRUCTION ENTRANCE
	ACCESSIBLE ROUTE
	TREE TO BE SAVED
	TREE TO BE REMOVED
	HERITAGE TREE

SIGNING AND PAVEMENT MARKINGS

SIGNING

LEGEND	DESCRIPTION	UNIT	QUANTITY
A	R3-7R (36"x36")	EA	1
B	R3-5R (30"x36")	EA	1

REFLECTIVE PAVEMENT MARKINGS TY1 & TY11

LEGEND	DESCRIPTION	UNIT	QUANTITY
1	4" WHITE SOLID	LF	265
2	8" WHITE DOTTED	LF	100
3	WHITE WORDS	EA	1
4	WHITE ARROW	EA	3

NOTES:
- ALL SIGNING, STRIPING, AND DELINEATION SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC DEVICES, ALL SIGNING, STRIPING, AND DELINEATION SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL OF UNIFORM TRAFFIC DEVICES
- TYPE 1 PAVEMENT MARKINGS SHALL HAVE THICKNESS OF 90 MILS.
- REMOVAL OF PAVEMENT MARKINGS SHALL BE PER ITEM 677.4 4.3 "BLASTING METHOD" AND THEN SHALL BE COVERED BY BLACK THERMOPLASTIC.

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CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD. SUITE. 220
AUSTIN, TX 78748
PH: (512) 306-0018

THE STATE OF TEXAS
BROOKE PORTER SHADBURNE
94382
REGISTERED PROFESSIONAL ENGINEER
03/05/2025

SILVER CREEK EXPANSION

4101 W PARMER LN
AUSTIN, TX. 78727

REVISIONS:

REV	DATE	DESCRIPTION	APPROVED BY

JOB: 24-015	DATE: 03/05/2025
CAD: TEAM H	CHK'D BY:
ENGINEER: HS	CHK'D BY:
SCALE:	

DECELERATION LANE SIGNING AND PAVEMENT MARKINGS

SITE CIVIL PLAN

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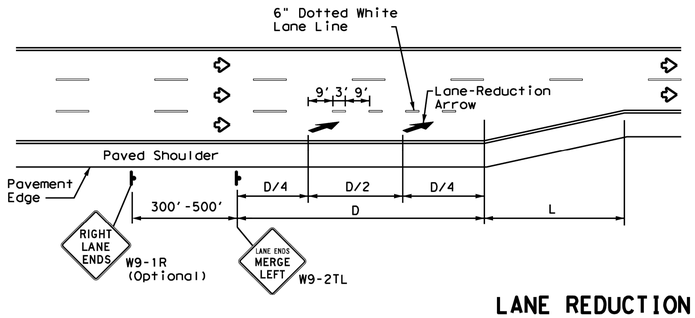


LANE REDUCTION

NOTES

1. Lane reduction pavement markings are used where the number of through lanes is reduced because of narrowing of the roadway or because of a section of on-street parking in what would otherwise be a through lane. For Texas Super 2 Passing Lanes, see TS2(PL) standard sheets.
2. On divided highways, an additional RIGHT LANE ENDS (W9-1R) sign may be installed in the median aligned with the W9-1R sign on the right side of the highway.
3. Lane reduction arrows are required for speeds of 45 mph or greater. An optional third lane reduction arrow may be added based on engineering judgement. If used, the optional third lane reduction arrow should be centered between the first and last lane reduction arrows.
4. For lane reductions on Freeways and Expressways, signing shall conform to the TxDOT Freeway Signing Handbook.

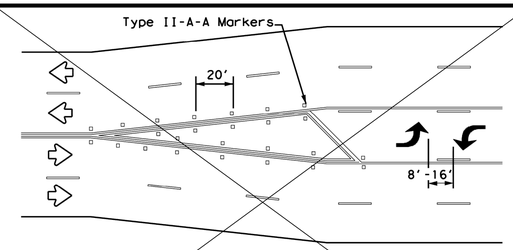
ADVANCED WARNING SIGN DISTANCE (D)		
Posted Speed	D (ft)	L (ft)
30 MPH	460	$L = \frac{WS^2}{60}$
35 MPH	565	
40 MPH	670	
45 MPH	775	L=WS
50 MPH	885	
55 MPH	990	
60 MPH	1,100	
65 MPH	1,200	
70 MPH	1,250	
75 MPH	1,350	

GENERAL NOTES

1. Lane use word and arrow markings shall be used where through lanes approaching an intersection become mandatory turn lanes. Lane use word and arrow markings should be used in auxiliary lanes of substantial length. Lane use arrow markings or word and arrow markings may be used in other lanes and turn bays for emphasis. Details for words and arrows are as shown in the Standard Highway Sign Designs for Texas.
2. When lane-use words and arrow markings are used, two sets of arrows should be used if the length of the bay is greater than 180 feet. When a single lane use arrow or word and arrow marking is used for a short turn lane, it should be located at or near the upstream end of the full-width turn lane.
3. Use raised pavement marker Type I-C with undivided highways, flush medians and two way left turn lanes. Use raised pavement marker Type II-C-R with divided highways and raised medians.
4. Length of turn bays, including taper, deceleration, and storage lengths shall be as shown on the plans or as directed by the Engineer. See Chapter 3 of the Roadway Design Manual for additional information on turning lanes or storage lengths.

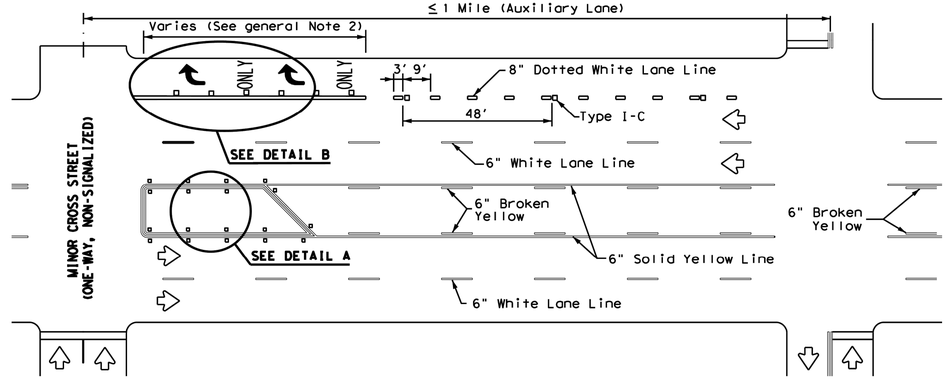
MATERIAL SPECIFICATIONS	
PAVEMENT MARKERS (REFLECTORIZED)	DMS-4200
EPOXY AND ADHESIVES	DMS-6100
BITUMINOUS ADHESIVE FOR PAVEMENT MARKERS	DMS-6130
TRAFFIC PAINT	DMS-8200
HOT APPLIED THERMOPLASTIC	DMS-8220
PERMANENT PREFABRICATED PAVEMENT MARKINGS	DMS-8240

All pavement marking materials shall meet the required Departmental Material Specifications as specified by the plans.

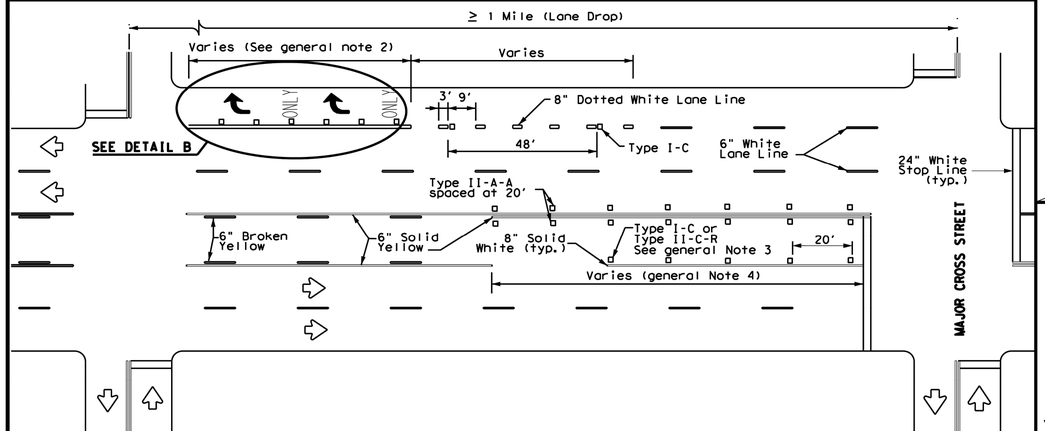


A two-way left-turn (TWLT) lane-use arrow pavement marking should be used at or just downstream from the beginning of a two-way left-turn lane within a corridor. Repeating the marking after each intersection or dedicated turn bay is not required unless stated elsewhere in the plans.

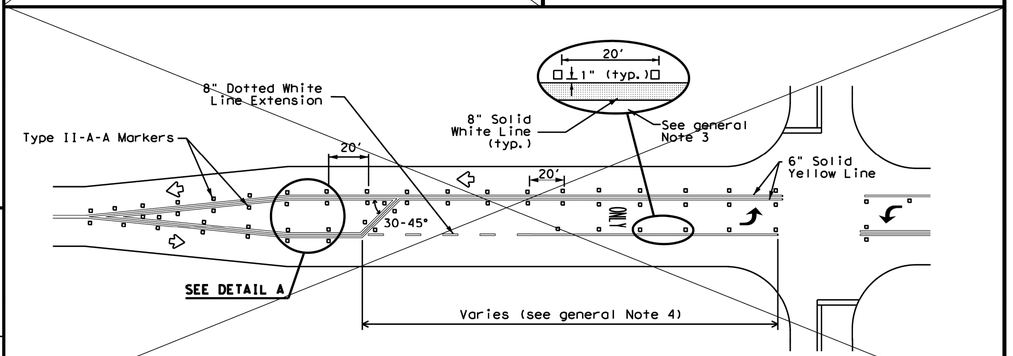
TYPICAL TRANSITION FOR TWLTL AND DIVIDED HIGHWAY



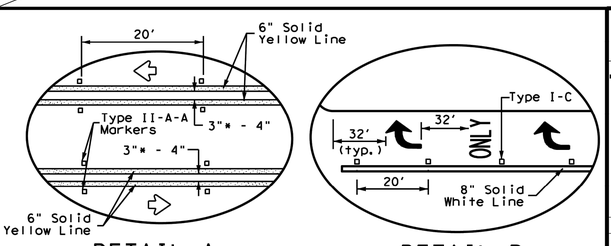
TYPICAL TWLTL AT ONE-WAY STREET AND RIGHT TURN AUXILIARY LANE



TYPICAL TWLTL AT TWO-WAY CROSS STREET AND RIGHT TURN LANE DROP



TYPICAL TWO-LANE ROADWAY INTERSECTION WITH LEFT TURN BAYS



* 2" minimum allowed for restripe projects when approved by the Engineer.

Texas Department of Transportation — Traffic Safety Division Standard

TWO-WAY LEFT TURN LANES, RURAL LEFT TURN BAYS, AND LANE REDUCTION PAVEMENT MARKINGS PM(3)-22

FILE: pm3-22.dgn | DN: | CK: | DW: | CK:
© TxDOT December 2022 | CONT | SECT | JOB | HIGHWAY
REVISIONS
4-98 3-03 6-20
5-00 2-10 12-22
8-00 2-12
DIST | COUNTY | SHEET NO.
22C

DATE:
FILE:

CITY APPROVAL STAMP

SP-2024-0312C

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TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE 220
AUSTIN, TX 78748
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SCALE: N.T.S

DECELERATION LANE SIGNING AND PAVEMENT MARKINGS DETAILS

SITE CIVIL PLAN
28
of 29

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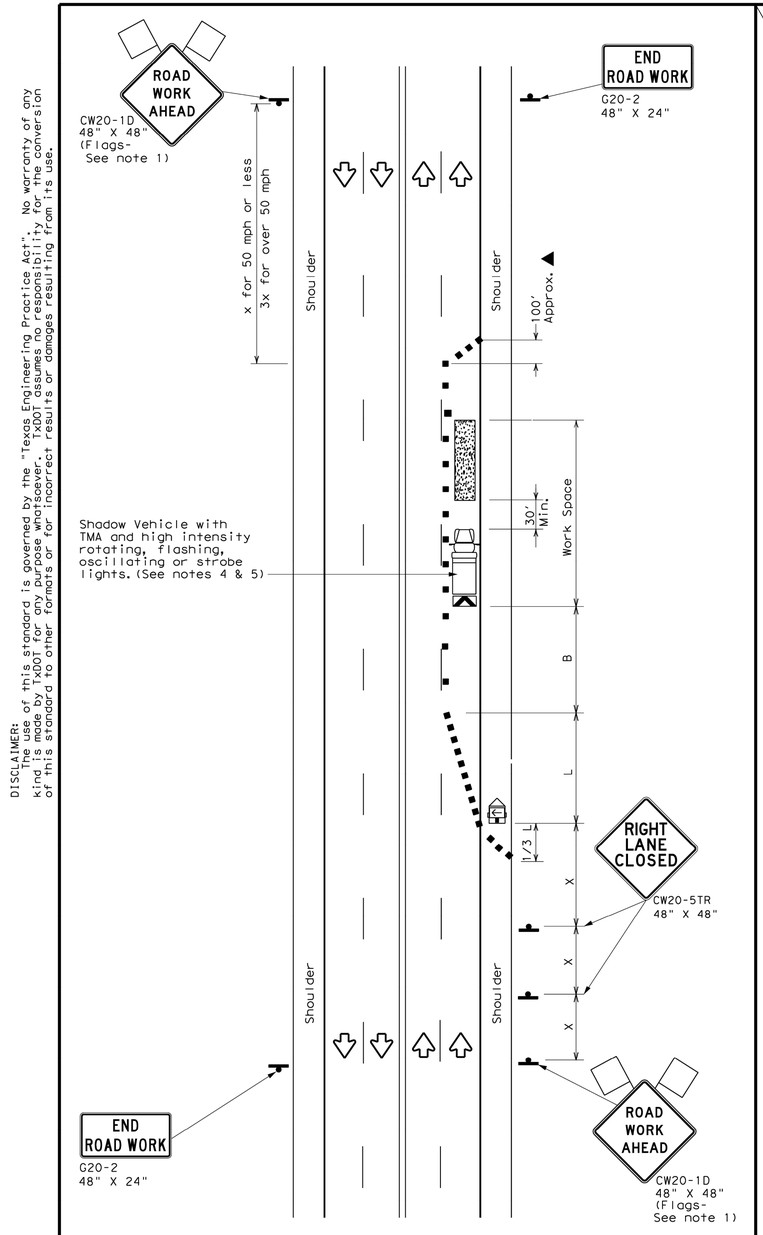
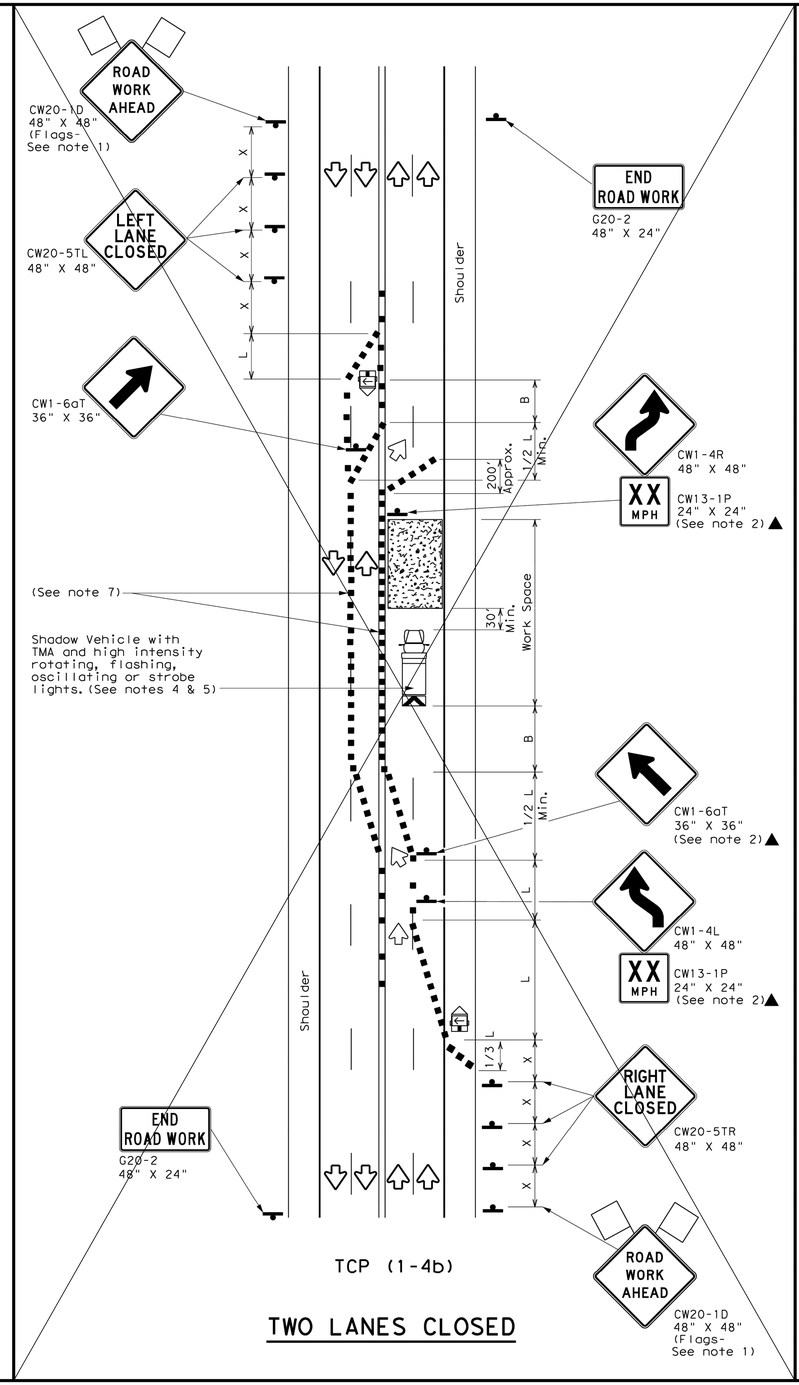


TCP (1-4a)

ONE LANE CLOSED



TCP (1-4b)

TWO LANES CLOSED

LEGEND			
	Type 3 Barricade		Channelizing Devices
	Heavy Work Vehicle		Truck Mounted Attenuator (TMA)
	Trailer Mounted Flashing Arrow Board	M	Portable Changeable Message Sign (PCMS)
	Sign		Traffic Flow
	Flag		Flagger

Posted Speed *	Formula	Minimum Desirable Taper Lengths ** 10' Offset	11' Offset	12' Offset	Suggested Maximum Spacing of Channelizing Devices On a Taper	On a Tangent	Minimum Sign Spacing "X" Distance	Suggested Longitudinal Buffer Space "B"
30	$L = \frac{WS^2}{60}$	150'	165'	180'	30'	60'	120'	90'
35		205'	225'	245'	35'	70'	160'	120'
40		265'	295'	320'	40'	80'	240'	155'
45	L = WS	450'	495'	540'	45'	90'	320'	195'
50		500'	550'	600'	50'	100'	400'	240'
55		550'	605'	660'	55'	110'	500'	295'
60		600'	660'	720'	60'	120'	600'	350'
65		650'	715'	780'	65'	130'	700'	410'
70		700'	770'	840'	70'	140'	800'	475'
75		750'	825'	900'	75'	150'	900'	540'

* Conventional Roads Only
** Taper lengths have been rounded off.
L=Length of Taper(FT) W=Width of Offset(FT) S=Posted Speed(MPH)

TYPICAL USAGE				
MOBILE	SHORT DURATION	SHORT TERM STATIONARY	INTERMEDIATE TERM STATIONARY	LONG TERM STATIONARY
	✓	✓		

GENERAL NOTES

1. Flags attached to signs where shown are REQUIRED.
2. All traffic control devices illustrated are REQUIRED, except those denoted with the triangle symbol may be omitted when stated elsewhere in the plans, or for routine maintenance work, when approved by the Engineer.
3. The CW20-1D "ROAD WORK AHEAD" sign may be repeated if the visibility of the work zone is less than 1500 feet.
4. A Shadow Vehicle with a TMA should be used anytime it can be positioned 30 to 100 feet in advance of the area of crew exposure without adversely affecting the performance or quality of the work. If workers are no longer present but road or work conditions require the traffic control to remain in place, Type 3 Barricades or other channelizing devices may be substituted for the Shadow Vehicle and TMA.
5. Additional Shadow Vehicles with TMAs may be positioned off the paved surface, next to those shown in order to protect wider work spaces.

TCP (1-4a)

6. If this TCP is used for a left lane closure , CW20-5TL "LEFT LANE CLOSED" signs shall be used and channelizing devices shall be placed on the centerline where needed to protect the work space from opposing traffic with the arrow panel placed in the closed lane near the end of the merging taper.

TCP (1-4b)

7. Where traffic is directed over a yellow centerline, channelizing devices which separate two-way traffic should be spaced on tapers at 20' or 15' if posted speeds are 35 mph or slower, and for tangent sections, at 1/2S where S is the speed in mph. This tighter device spacing is intended for the areas of conflicting markings, not the entire work zone.

Texas Department of Transportation — *Traffic Operations Division Standard*

TRAFFIC CONTROL PLAN LANE CLOSURES ON MULTILANE CONVENTIONAL ROADS

TCP(1-4)-18

FILE: tcp1-4-18.dgn	DN:	CK:	DW:	CK:
© TxDOT December 1985	CONT	SECT	JOB	HIGHWAY
REVISIONS 2-94 4-98 / 8-95 2-12 / 1-97 2-18	DIST	COUNTY		SHEET NO.

154

CITY APPROVAL STAMP

SP-2024-0312C

AUSTIN CIVIL ENGINEERING, INC.
TBPE FIRM # F-001018
9501 B MENCHACA RD, SUITE 220
AUSTIN, TX 78748
PH: (512) 306-0018



SILVER CREEK EXPANSION
4101 W PARMER LN BLDG 2
AUSTIN, TX. 78727

REVISIONS
REV. DATE | DESCRIPTION | APPROVED BY

JOB: 24-015 DATE: 03/05/2025
CAD: TEAM H CHK'D BY:
ENGINEER: HS CHK'D BY:
SCALE: N.T.S

TRAFFIC CONTROL PLAN DETAILS

SITE CIVIL PLAN

29 of 29

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.

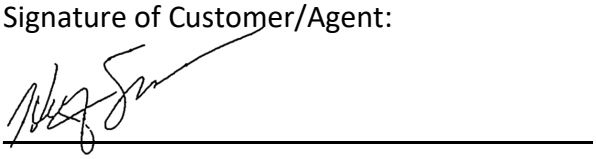
Signature

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: Hunter Shadburne

Date: 03/05/25

Signature of Customer/Agent:



Regulated Entity Name: Silver Creek Expansion

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: Gasoline/Diesel fuel

   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: 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.

PROJECT: Silver Creek Expansion
Address: 4101 W Parmer Ln, Austin, TX 78272
Owner: ZMT Crystal, LLC.

TEMPORARY STORMWATER SECTION

Attachment A

Spill Response Actions

The following is a description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances. The proceeding excerpts are from the City of Austin Watershed Department Clean Water Fact Sheets:

Petroleum Spills Response

Do not flush spills away with water. Instead, contain them immediately, before they reach a storm drain and spread to a creek or lake. Also, do not put yourself or others in danger. Before containment, evaluate what materials have spilled, make a thorough assessment of risk, and determine how to contain the spill safely. If safe containment is possible, immediately stop the spread of liquids using absorbent materials. Keep spill containment and clean up materials appropriate for the type and quantities of hazardous chemicals used or stored at your facility. The Watershed Protection Department provides a list of absorbent material suppliers. Immediately block off nearby drain (sanitary or storm sewer). It is much more costly to decontaminate inside of a storm sewer pipe and /or restore a contaminated creek than it is to purchase spill containment materials.

Always wear appropriate safety equipment such as gloves, coveralls, goggles, and respirators. Access Materials Safety Data Sheets (MSDS) for information about spilled materials. Keep MSDSs readily available for each chemical used or stored at the facility. A MSDS contains information that enables persons responsible for handling, using or encountering chemicals to estimate the likely harm, potential hazards and risks that might arise in emergency situations involving those chemicals. Obtain a MSDS free of charge by calling the manufacturer's phone number from the label on the chemical container.

Never leave spills unattended. Designate someone to make spill notification phone calls. **Immediately notify** the following agencies:

Local: City of Austin Fire Department by dialing 911;

State: The TCEQ requires spills/emergency release situations to be reported per 30 TAC Sections 327.1-327.5 effective May 23, 1996. Report spills to Environmental Release Hotline or the Texas Commission on Environmental Quality (TCEQ) 1-800-832-8224; TCEQ Local office at 339-2929; or TCEQ (24-Hours) at 512/239-2507 or 512/463-7727.

Federal: National Response Center (NRC) 1-800-424-8802 (Notification of the National Response Center does not constitute notice to the state).

Clean up surfaces contaminated by hazardous chemicals only if you are trained, experienced, and qualified. Excavate spills on pervious (e.g. soil) surfaces as quickly as possible to prevent spread of the contamination. Contact the Watershed Protection Department for soil cleanup instructions. Sweep up and containerize dry material spills on impervious surfaces (e.g. pavement) for proper disposal. Absorb liquid spills on impervious surfaces with sorbent materials (e.g. clay sorbent, pads, booms, etc.) and containerize for proper disposal. Do not use wet/dry shop vacuum for gasoline, solvents or other volatile fluids because of explosion hazards.
Post a site-specific spill contingency plan at your facility. This should provide step-by-step instructions in the event of a spill. Practice these steps in a "spill drill." The Watershed Protection Department provides information regarding spill contingency plans and a fact sheet detailing proper spill handling. A phone number is provided at the end of this fact sheet.

Construction Products/Wastes Spills Response

Immediately clean up spills to prevent environmental impacts, especially spreading of the spill to a storm drain and waterway. Never leave spills unattended or flush a spill with water.

Prevent spills, as much as possible, through prevention planning. Inspect vehicles and heavy equipment for leaks and repair promptly. Inspect portable toilets routinely for leaks and keep them in a secured area away from traffic and possible vandalism.

Clean up non-hazardous spills on impervious (paved) surfaces by using a sorbent material (e.g. kitty litter, sand, peat, etc.), and disposed of the waste properly. Contain hazardous or large non-hazardous or large non-hazardous spills, if it is safe, and immediately contact the City of Austin Fire Department by dialing 911.

Excavate or remediate spills on pervious (soil) surfaces as quickly as possible to prevent the spread of the contamination. Any surfaces contaminated by hazardous or toxic materials should be remediated by experienced, qualified individuals to protect the health and safety of yourself and the general public.

Report all spills to the Watershed Protection Department to receive proper clean up instructions, especially for hazardous materials and large volume spills.

A material safety data sheet (MSDS) should be readily available for each hazardous chemical used and stored at the site. A MSDS contains information that enables persons responsible for handling, using or encountering chemicals to estimate the likely harm, potential hazards and risks that might arise in emergency situations involving those chemicals. Obtain a MSDS by calling the manufacturer's phone number from the label on the chemical container.

Collect and dispose of cleaning activity waste properly

Clean without creating any discharge of soaps, detergents, oil or other pollutants to a storm sewer or waterway. Ideally, wash equipment and vehicles at an approved wash

facility over a drain to the sanitary sewer. If any washing must be done on site, use plain water only and make sure the wash water does not create silty runoff.

When cleaning paint equipment outside, contain wastewater in a bucket or other container and dispose of it properly. Dispose of water based or latex paint wastewater in the sanitary sewer (e.g. sink, toilet). Collect and dispose oil based paint wastes, including solvents through a hazardous waste disposal company.

When cleaning paved areas, sweep up debris, pre-treat oil stains and slick spots with dry solvent (make a paste with water, kitty litter and powdered soap), and clean large areas with approved equipment such as vacuum scrubbers that collect the wastewater for proper disposal to a sanitary drain.

The following are excerpts from the TCEQ TPDES SWPPP Worksheet instructions draft 12/02/03:

Reportable Quantities for Regulated Substances

30 Texas Administrative Code §327.4

(a) Hazardous substances. The reportable quantities for hazardous substances shall be:

(1) For spills or discharges onto land--the quantity designated as the Final Reportable Quantity (RQ) in Table 302.4 in 40 CFR §§302.4; or

(2) For spills or discharges into waters in the state--the quantity designated as the Final RQ in Table 302.4 in 40 CFR §§302.4, except where the Final RQ is greater than 100 pounds in which case the RQ shall be 100 pounds.

(b) Oil, petroleum product, and used oil.

(1) The RQ for crude oil and oil other than that defined as petroleum product or used oil shall be:

(A) For spills or discharges onto land--210 gallons (five barrels); or

(B) For spills or discharges directly into water in the state--quantity sufficient to create a sheen.

(2) The RQ for petroleum product and used oil shall be:

(A) Except as noted in subparagraph (B) of this paragraph, for spills or discharges onto land--25 gallons;

(B) For spills or discharges to land from PST exempted facilities--210 gallons (five barrels); or

(C) For spills or discharges directly into water in the state--quantity sufficient to create a sheen.

(c) Industrial solid waste or other substances. The RQ for spills or discharges into water in the state shall be 100 pounds.

Source Note: The provisions of this §§327.4 adopted to be effective May 23, 1996, 21 TexReg 4228.

Attachment B

Potential Sources of Contamination

- Runoff and erosion of sediment and pollutants from exposed soil due to clearing and grubbing, grading, landscaping and other earthwork activities.
- Runoff from the construction equipment storage and maintenance. This may include typical automotive fluids, lubricants and fuels.
- Runoff from construction product staging, storage, and waste. This may include materials that can degrade the quality of receiving waters and make them unsafe for consumption and aquatic life.
- Runoff from paving operations may contain hydrocarbons and polyaromatic hydrocarbons.
- Runoff from lawn and landscape chemicals such as pesticides and herbicides
- Total Suspended Solids (TSS)

Attachment C

Sequence of Major Activities

(Construction may be concurrent with other elements, but must be completed in the order shown below) - See attached plans.

A. Install erosion controls as indicated on approved site plan.
    a. Silt Fence **(802 LF)**
    b. Construction Entrance **(1 EA)**
    c. Install tree protection. **(175 LF)**
    d. Triangular filter dike **(25 LF)**
    e. J-hooks **(75LF)**

B. Contact "the city". Schedule on-site pre-construction coordination meeting.
C. Evaluation of temporary erosion control installation. Review construction schedule with the erosion control plan.
D. Inspect and maintain all controls as per general notes.
E. Demolition and haul off existing asphalt pavement, curb and gutter, specified in construction plans. **[0.23 acres]**
F. Construct proposed elements. **[0.30 acres]**
G. Complete construction and install landscaping. **[0.30 acres]**
H. Re-vegetate disturbed areas or complete a developer's contract for the re-vegetation along with the engineer's concurrence letter. **[0.11 acres]**
I. Project engineer inspects job and writes concurrence letter to the city. Final inspection is scheduled upon receipt of letter.
J. Receive operating permit and city clearance for occupancy.
K. Remove temporary erosion/sedimentation controls upon inspector's approval of adequate re-vegetation.

Attachment D

Temporary Best Management Practices and Measures

- A stabilized construction entrance to trap sediment and prevent it from being tracked offsite.
- The primary temporary erosion and sedimentation control is silt fencing placed on all downstream sides of construction. Silt fence is used to prevent sediment from low volume storm events from entering the drainage ways and receiving waters by capturing the sediment before it is able to leave the site.
- To prevent or reduce the discharge of pollutants to stormwater from concrete waste all concrete washout performed on site will be done within the designated concrete washout area.
- All construction debris and litter shall be collected and disposed of in designated temporary spoils and contractor staging area. Construction waste receptacles will be emptied when full and removed when project is completed.

Attachment E

Request to Temporarily Seal a Feature – This section is not applicable

Attachment F

Structural Practices

- The primary structural practice to divert flows away from exposed soil is the silt fence placed on all downstream sides of construction. Silt fence is used to prevent sediment from low volume storm events from entering the drainage ways and receiving waters.
- The inlet protection barriers will be used as a temporary sedimentation basin to prevent pollutants entering the SCM.
- Curb-and-gutter, when constructed, will also prevent flows from exposed soils.

Attachment G

Drainage Area Map – See attached drainage area map in plan set.

Attachment H

Temporary Sediment Pond(s) Plans and Calculations - This section is not applicable

Attachment I

Inspection and Maintenance for BMPs. Taken from RG-348, Chapter 1.

Stabilized Construction Entrance

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

Silt Fence

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

Concrete Washout Area

1. Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
2. Avoid mixing excess amounts of fresh concrete.
3. Perform washout of concrete trucks in designated areas only.
4. Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
5. Do not allow excess concrete to be dumped onsite, except in designated areas.
6. Locate washout at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
7. Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.

TEMPORARY VEGETATIVE STABILIZATION:

A. 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.

B. 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 Item 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 Specification 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	1,500 to 2,000 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 Item 604S or 609S.

    a) 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 square feet.

    e) When required, native plant seeding shall comply with requirements of the City of Austin Environmental Criteria Manual, Items 604S and 609S.

Table 2: Hydromulching for Permanent Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
Bonded Fiber Matrix (BFM)	80% Organic defibrated fibers			

10% Tackifier	6 months	On slopes up to 2:1 and erosive soil conditions	2,500 to 4,000 lbs per acre (see manufacturers recommendations)	
Fiber Reinforced Matrix (FRM)	65% Organic defibrated fibers 25% Reinforcing Fibers or less 10% Tackifier	Up to 12 months	On slopes up to 1:1 and erosive soil conditions	3,000 to 4,500 lbs per acre (see manufacturers recommendations)

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

I Zane Alam,
Print Name

Owner,
Title - Owner/President/Other

of ZMT CRYSTAL, LLC,
Corporation/Partnership/Entity Name

have authorized Hunter Shadburne, P.E.
Print Name of Agent/Engineer

of Austin Civil Engineering
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

03/04/2025
Date

THE STATE OF Texas §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared ZANE ALAM 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 4TH day of MARCH, 2025.

NOTARY PUBLIC

ALFRED L. BRUNNER
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: OCTOBER 30, 2027

NOTARY PUBLIC STATE OF TEXAS
ALFRED L. BRUNNER
My Notary ID # 134624815
Expires October 30, 2027

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: 4101 W PARMER LN - SITE PLAN
Regulated Entity Location: 4101 W Parmer Ln, Austin, Tx
Name of Customer: ZMT Crystal, LLC
Contact Person: Zane Alam Phone: 512-354-5561
Customer Reference Number (if issued):CN TBD
Regulated Entity Reference Number (if issued):RN 104609276

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	310.00 L.F.	$ 650
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 10/24/2024

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

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 104609276**

SECTION II: Customer Information

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

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

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

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

ZMT CRYSTAL LLC | SILVER CREEK CENTER II LP

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*
803556840	32073550165	845015239	

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

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

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

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

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:	805 Beardsley Ln							
	City	Austin	**State**	TX	**ZIP**	78746	**ZIP + 4**	4933

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	mtuhee2@gmail.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(847) 630-2623		( ) -

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.)*

Silver Creek Expansion

23. Street Address of the Regulated Entity: ***(No PO Boxes)***	4101 W PARMER LN							
	City	Austin	**State**	TX	**ZIP**	78727	**ZIP + 4**	
24. County								

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

25. Description to Physical Location:	

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

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

27. Latitude (N) In Decimal:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	25	32.84	97	43	0.95

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)
8111	5812	541110	722513

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

Professional offices

34. Mailing Address:	**4101 W PARMER LN**							
	City	**Austin**	**State**	**TX**	**ZIP**	**78727**	**ZIP + 4**	
35. E-Mail Address:	**mtuhee2@gmail.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(847) 630-2623		( ) -

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:

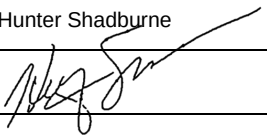
SECTION IV: Preparer Information

40. Name:	Hunter Shadburne	**41. Title:**	PE

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
512-744-5213		( ) -	TeamH@austincivil.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:	Austin Civil Engineering, Inc.	**Job Title:**	President, Licensed Engineer
Name *(In Print):*	Hunter Shadburne	**Phone:**	512-744-5213
Signature:		**Date:**	02/24/2025