

CONTRIBUTING ZONE PLAN MODIFICATION

**THE SHOPS AT CRYSTAL FALLS
NEC GRAND LAKE PARKWAY & CRYSTAL FALLS PARKWAY
LEANDER, WILLIAMSON COUNTY, TEXAS**

Prepared For:

VELAR DEVELOPMENT

3109 Kenai Drive, Suite 109
Cedar Park, TX 78613
(512)-590-4165

Prepared By:

KIMLEY-HORN AND ASSOCIATES, INC.

260 East Davis St Suite 100
McKinney, TX 75069
(469)-221-9588

Firm No. 928
KHA Project No. 069274404

April 10, 2023



TABLE OF CONTENTS

EDWARDS AQUIFER APPLICATION COVER PAGE	SECTION 1
EDWARDS AQUIFER APPLICATION COVER PAGE.....	TCEQ-20705
MODIFICATION OF A PREVIOUSLY APPROVED CONTRIBUTING ZONE PLAN FORM	SECTION 2
MODIFICATION OF PREVIOUSLY APPROVED CONTRIBUTING ZONE PLAN FORM	TCEQ-10259
<i>Original Approval Letter and Approved Modification Letters</i>	Attachment A
<i>Narrative of Proposed Modification</i>	Attachment B
<i>Current Site Plan of the Approved Project</i>	Attachment C
CONTRIBUTING ZONE PLAN APPLICATION	SECTION 3
CONTRIBUTING ZONE PLAN APPLICATION	TCEQ-10257
<i>Road Map</i>	Attachment A
<i>USGS Quadrangle Map</i>	Attachment B
<i>Project Narrative</i>	Attachment C
<i>Factors Affecting Surface Water Quality</i>	Attachment D
<i>Volume and Character of Stormwater</i>	Attachment E
<i>Suitability Letter from Authorized Agent</i>	Attachment F
<i>Alternative Secondary Containment Methods</i>	Attachment G
<i>AST Containment Structure Drawings</i>	Attachment H
<i>20% or Less Impervious Cover Waiver</i>	Attachment I
<i>BMPs for Upgradient Stormwater</i>	Attachment J
<i>BMPs for On-site Stormwater</i>	Attachment K
<i>BMPs for Surface Streams</i>	Attachment L
<i>Construction Plans</i>	Attachment M
<i>Inspection, Maintenance, Repair and Retrofit Plan</i>	Attachment N
<i>Pilot-Scale Field Testing Plan</i>	Attachment O
<i>Measures for Minimizing Surface Stream Contamination</i>	Attachment P
ADDITIONAL FORMS	SECTION 4
STORM WATER POLLUTION PREVENTION PLAN.....	SWPPP
COPY OF NOTICE OF INTENT	NOI
AGENT AUTHORIZATION FORM	TCEQ-0599
APPLICATION FEE FORM	TCEQ-0574
<i>Check Payable to the "Texas Commission on Environmental Quality"</i>	
CORE DATA FORM.....	TCEQ-10400

***SECTION 1:
EDWARDS AQUIFER APPLICATION
COVER PAGE***

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
6. If the geologic assessment was completed before October 1, 2004 and the site contains “possibly sensitive” features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

- 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.**
- 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: Cold Springs Sections Two-Six					2. Regulated Entity No.: RN106157183					
3. Customer Name: Pulte Homes of Texas LP					4. Customer No.:					
5. Project Type: (Please circle/check one)	New		<input checked="" type="checkbox"/> Modification			Extension		Exception		
6. Plan Type: (Please circle/check one)	WPAP	<input checked="" type="checkbox"/> CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Measures	Enhanced
7. Land Use: (Please circle/check one)	Residential		<input checked="" type="checkbox"/> Non-residential			8. Site (acres):		3.86		
9. Application Fee:	\$4,000		10. Permanent BMP(s):				Sed/Fil Pond			
11. SCS (Linear Ft.):	0		12. AST/UST (No. Tanks):				0			
13. County:	Williamson		14. Watershed:				Turkey Creek-Brushy Creek			

APPLICATION DISTRIBUTION

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

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

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

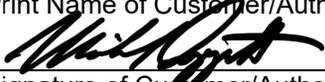
Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	X
Region (1 req.)	—	—	X
County(ies)	—	—	X
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Barton Springs/Edwards Aquifer <input type="checkbox"/> Hays Trinity <input type="checkbox"/> Plum Creek	<input type="checkbox"/> Barton Springs/Edwards Aquifer	NA
City(ies) Jurisdiction	<input type="checkbox"/> Austin <input type="checkbox"/> Buda <input type="checkbox"/> Dripping Springs <input type="checkbox"/> Kyle <input type="checkbox"/> Mountain City <input type="checkbox"/> San Marcos <input type="checkbox"/> Wimberley <input type="checkbox"/> Woodcreek	<input type="checkbox"/> Austin <input type="checkbox"/> Bee Cave <input type="checkbox"/> Pflugerville <input type="checkbox"/> Rollingwood <input type="checkbox"/> Round Rock <input type="checkbox"/> Sunset Valley <input type="checkbox"/> West Lake Hills	<input type="checkbox"/> Austin <input type="checkbox"/> Cedar Park <input type="checkbox"/> Florence <input type="checkbox"/> Georgetown <input type="checkbox"/> Jerrell <input checked="" type="checkbox"/> Leander <input type="checkbox"/> Liberty Hill <input type="checkbox"/> Pflugerville <input type="checkbox"/> Round Rock

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	—	—	—	—	—
Region (1 req.)	—	—	—	—	—
County(ies)	—	—	—	—	—
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Trinity-Glen Rose	<input type="checkbox"/> Edwards Aquifer Authority	<input type="checkbox"/> Kinney	<input type="checkbox"/> EAA Medina	<input type="checkbox"/> EAA Uvalde
City(ies) Jurisdiction	<input type="checkbox"/> Castle Hills <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Helotes <input type="checkbox"/> Hill Country Village <input type="checkbox"/> Hollywood Park <input type="checkbox"/> San Antonio (SAWS) <input type="checkbox"/> Shavano Park	<input type="checkbox"/> Bulverde <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Garden Ridge <input type="checkbox"/> New Braunfels <input type="checkbox"/> Schertz	NA	<input type="checkbox"/> 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.

Michael Doggett

Print Name of Customer/Authorized Agent



4/10/2023

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):

***SECTION 2:
MODIFICATION OF A PREVIOUSLY
APPROVED CONTRIBUTING ZONE
PLAN FORM***

Modification of a Previously Approved Contributing Zone Plan

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Transition Zone and Relating to 30 TAC 213.4(j), Effective June 1, 1999

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

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

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Modification of a Previously Approved Contributing Zone Plan** is hereby submitted for TCEQ review and executive director approval. The request was prepared by:

Print Name of Customer/Agent: Michael Doggett, P.E.

Date: 04/10/2023

Signature of Customer/Agent:



Project Information

- Current Regulated Entity Name: Cold Springs Sections Two-Six
Original Regulated Entity Name: Cold Springs Sections Two-Six
Assigned Regulated Entity Number(s) (RN): RN106157183
Edwards Aquifer Protection Program ID Number(s): 11060801
 The applicant has not changed and the Customer Number (CN) is:
 The applicant or Regulated Entity has changed. A new Core Data Form has been provided.
- Attachment A: Original Approval Letter and Approved Modification Letters.** A copy of the original approval letter and copies of any modification approval letters are attached.
- A modification of a previously approved plan is requested for (check all that apply):

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

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

<i>CZP Modification Summary</i>	<i>Approved Project</i> EAPP. ID No. 11060801	<i>Approved Project</i> EAPP. ID No.	<i>Proposed Modification</i>
Acres	42.25		3.863
Type of Development	Residential		Commercial/Rest
Number of Residential	N/A		N/A
Impervious Cover (acres)	20.33		3.09 new IC 23.42 total IC
Impervious Cover (%)	48.12%		80%
Lots	194		1
Permanent BMPs	Partial Sed/Fil Pond		Partial Sed/Fil Pond
Other			

<i>AST Modification Summary</i>	<i>Approved Project</i>	<i>Proposed Modification</i>	<i>Proposed Modification</i>
Number of ASTs	0		0
Other	N/A		N/A

<i>UST Modification Summary</i>	<i>Approved Project</i>	<i>Proposed Modification</i>	<i>Proposed Modification</i>
Number of USTs	0		0
Other	N/A		N/A

5. **Attachment B: Narrative of Proposed Modification.** A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including previous modifications, and how this proposed modification will change the approved plan.

6. **Attachment C: Current Site Plan of the Approved Project.** A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
- The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
 - The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
 - The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
 - The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
 - The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.
7. Acreage has not been added to or removed from the approved plan.
- Acreage has been added to or removed from the approved plan and is discussed in *Attachment B: Narrative of Proposed Modification*.
8. 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.

**069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION**

ORIGINAL APPROVAL LETTER AND APPROVED MODIFICATION LETTERS

NARRATIVE OF PROPOSED MODIFICATION

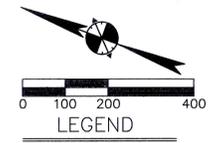
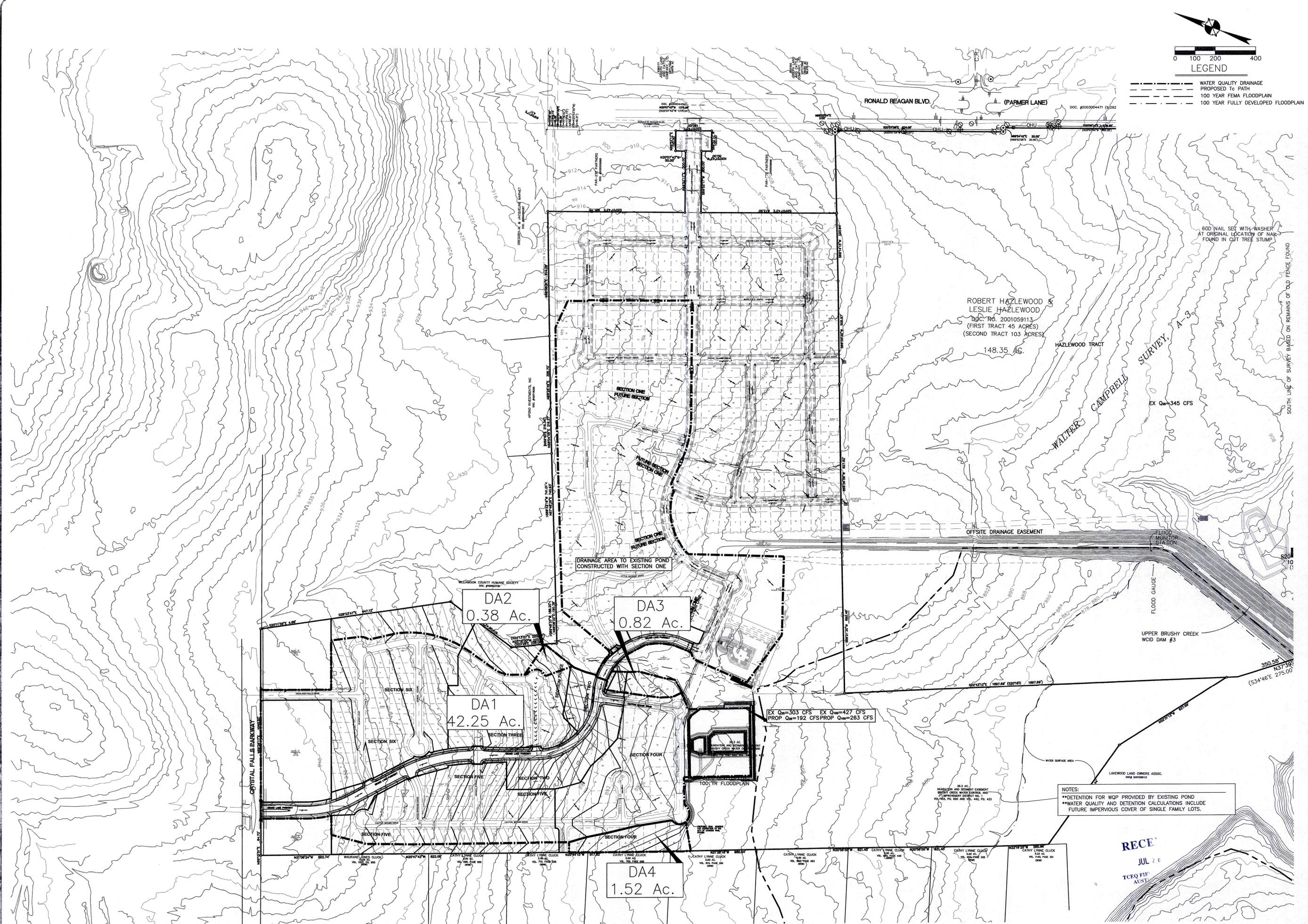
The Shops at Crystal Falls is located at SEC of Crystal Falls Parkway and Grand Lake Parkway, Leander, Texas. The Shops at Crystal Falls will be constructed on one lot with a total site area of 3.86 acres. The site is within the city limits of Leander and the Contributing Zone of the Edwards Aquifer. This site is located in the Bushy Creek Watershed. No portion of the property is within the limits of the 100-year floodplain as shown on FIRM Panel No. 48491C0455F and 48491C060F, dated December 20th, 2019.

A Contributing Zone Plan (EAPP ID No. 11060801) was approved on September 11, 2011. The plan approved the construction of driveways, a water quality pond, and a detention pond to serve a master planned mixed use development of 42.25 acres. The 42.25 acres consists of Cold Springs Section 2-6 and Lots 6 and 11, Block "R" and "S" of the Cold Springs Section Two Plat. The approved plan was designed to remove 21,286 lbs of TSS Load. The existing TSS Load for the site is 20,071 lbs.

The proposed modification to the previously approved Contributing Zone Plan is limited to the development of Lots 11 Block "S", part of the Cold Springs Section 2-6. The Shops at Crystal Falls will consist of 4 mixed use buildings, reserved for retail/restaurant use, parking, drives, utilities, and associated appurtenances. The impervious cover associated with the The Shops at Crystal Falls project will be 3.09 acres. This additional impervious cover will increase the total TSS Load for the 42.25-acre development to 20,385 lbs, which is below the 21,286 lbs limit. The Shops at Crystal Falls will continue to utilize the regional pond to satisfy water quality requirements.

**069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION**

CURRENT SITE PLAN OF THE APPROVED PROJECT



LEGEND

- WATER QUALITY DRAINAGE PROPOSED TO PATH
- 100 YEAR FEMA FLOODPLAIN
- 100 YEAR FULLY DEVELOPED FLOODPLAIN

ROBERT HAZLEWOOD & LESLIE HAZLEWOOD
 DOC. NO. 2001059113
 (FIRST TRACT 45 ACRES)
 (SECOND TRACT 103 ACRES)
 148.35 AC.

HAZLEWOOD TRACT
 WALTER CAMPBELL SURVEY, A-3

DA2
 0.38 Ac.

DA3
 0.82 Ac.

DA1
 42.25 Ac.

DA4
 1.52 Ac.

EX Q₁₀₀=303 CFS EX Q₁₀=427 CFS
 PROP Q₁₀₀=192 CFS PROP Q₁₀=263 CFS

NOTES:
 **DETENTION FOR WQP PROVIDED BY EXISTING POND
 ***WATER QUALITY AND DETENTION CALCULATIONS INCLUDE FUTURE IMPERVIOUS COVER OF SINGLE FAMILY LOTS.

RECEIVED
 JUL 26
 TCEQ FIELD OFFICE
 AUSTIN



***SECTION 3:
CONTRIBUTING ZONE PLAN
APPLICATION***

Contributing Zone Plan Application

Texas Commission on Environmental Quality for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Michael Doggett, P.E.

Date: 04/10/2023

Signature of Customer/Agent:



Regulated Entity Name: Cold Springs Sections Two-Six

Project Information

1. County: Williamson
2. Stream Basin: Bushy Creek
3. Groundwater Conservation District (if applicable): Edwards Aquifer
4. Customer (Applicant):
Contact Person: Venkat Gudapuri
Entity: Velar Development
Mailing Address: 3109 Kenai Drive, Suite 109
City, State: Cedar Park, TX Zip: 78613
Telephone: (512)-590-4165 Fax: _____
Email Address: vgudapuri@gmail.com

5. Agent/Representative (If any):

Contact Person: Michael Doggett, P.E.

Entity: Kimley-Horn and Associates, Inc.

Mailing Address: 260 East Davis St Suite 100

City, State: McKinney, TX

Zip: 75069

Telephone: (469)-221-9588

Fax: _____

Email Address: michael.doggett@kimley-horn.com

6. Project Location:

The project site is located inside the city limits of Leander.

The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.

The project site is not located within any city's limits or ETJ.

7. The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

NEC Grand Lake Parkway & Crystal Falls Parkway

8. **Attachment A - Road Map.** A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.

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

Project site boundaries.

USGS Quadrangle Name(s).

10. **Attachment C - Project Narrative.** A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:

Area of the site

Offsite areas

Impervious cover

Permanent BMP(s)

Proposed site use

Site history

Previous development

Area(s) to be demolished

11. Existing project site conditions are noted below:

Existing commercial site

Existing industrial site

Existing residential site

- Existing paved and/or unpaved roads
- Undeveloped (Cleared)
- Undeveloped (Undisturbed/Not cleared)
- Other: _____

12. The type of project is:

- Residential: # of Lots: _____
- Residential: # of Living Unit Equivalents: _____
- Commercial
- Industrial
- Other: _____

13. Total project area (size of site): 3.86 Acres

Total disturbed area: 3.86 Acres

14. Estimated projected population: N/A

15. The amount and type of impervious cover expected after construction is complete is shown below:

Table 1 - Impervious Cover

<i>Impervious Cover of Proposed Project</i>	<i>Sq. Ft.</i>	<i>Sq. Ft./Acre</i>	<i>Acres</i>
Structures/Rooftops	33,840	÷ 43,560 =	0.78
Parking	72,360	÷ 43,560 =	1.66
Other paved surfaces	26,100	÷ 43,560 =	0.60
Total Impervious Cover	132,300	÷ 43,560 =	3.04

Total Impervious Cover 3.04 ÷ Total Acreage 3.863 X 100 = 78.6% Impervious Cover

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

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

For Road Projects Only

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

N/A

18. Type of project:

- TXDOT road project.
 - County road or roads built to county specifications.
 - City thoroughfare or roads to be dedicated to a municipality.
 - Street or road providing access to private driveways.
19. Type of pavement or road surface to be used:
- Concrete
 - Asphalt concrete pavement
 - Other: _____
20. Right of Way (R.O.W.):
- Length of R.O.W.: _____ feet.
- Width of R.O.W.: _____ feet.
- $L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$
21. Pavement Area:
- Length of R.O.W.: _____ feet.
- Width of R.O.W.: _____ feet.
- $L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$
- Pavement area _____ acres \div R.O.W. area _____ acres $\times 100 = \text{_____ \%}$ impervious cover.
22. A rest stop will be included in this project.
- A rest stop will not be included in this project.
23. Maintenance and repair of existing roadways that do not require approval from the TCEQ Executive Director. Modifications to existing roadways such as widening roads/adding shoulders totaling more than one-half (1/2) the width of one (1) existing lane require prior approval from the TCEQ.

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

26. Wastewater will be disposed of by:

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

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

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

Sewage Collection System (Sewer Lines):

The sewage collection system will convey the wastewater to the Leander Wastewater Treatment Plant. The treatment facility is:

Existing.

Proposed.

N/A

Permanent Aboveground Storage Tanks (ASTs) \geq 500 Gallons

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

N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

<i>AST Number</i>	<i>Size (Gallons)</i>	<i>Substance to be Stored</i>	<i>Tank Material</i>
1			
2			
3			
4			
5			

Total x 1.5 = _____ Gallons

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

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

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

Table 3 - Secondary Containment

<i>Length (L)(Ft.)</i>	<i>Width(W)(Ft.)</i>	<i>Height (H)(Ft.)</i>	<i>L x W x H = (Ft3)</i>	<i>Gallons</i>

Total: _____ Gallons

30. Piping:

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

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

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

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

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

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

Site Plan Requirements

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

34. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 30 '.
35. 100-year floodplain boundaries:
- Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
 - No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): 48491C0455F and 48491C060F Dated December 20th, 2019.
36. The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.
- The layout of the development is shown with existing contours at appropriate, but not greater than ten-foot contour intervals. Finished topographic contours will not differ from the existing topographic configuration and are not shown. Lots, recreation centers, buildings, roads, etc. are shown on the site plan.
37. A drainage plan showing all paths of drainage from the site to surface streams.
38. The drainage patterns and approximate slopes anticipated after major grading activities.
39. Areas of soil disturbance and areas which will not be disturbed.
40. Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
41. Locations where soil stabilization practices are expected to occur.
42. Surface waters (including wetlands).
 N/A
43. Locations where stormwater discharges to surface water.
 There will be no discharges to surface water.
44. Temporary aboveground storage tank facilities.
 Temporary aboveground storage tank facilities will not be located on this site.
45. Permanent aboveground storage tank facilities.
 Permanent aboveground storage tank facilities will not be located on this site.
46. Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

47. Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
- N/A
48. These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.
- The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site. (Phase 1)
- A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____
- N/A
49. Owners must insure that permanent BMPs and measures are constructed and function as designed. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the appropriate regional office within 30 days of site completion.
- N/A
50. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
- The site will be used for low density single-family residential development and has 20% or less impervious cover.
- The site will be used for low density single-family residential development but has more than 20% impervious cover.
- The site will not be used for low density single-family residential development.
51. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing

and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

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

52. **Attachment J - BMPs for Upgradient Stormwater.**

- A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
- No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
- Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

53. **Attachment K - BMPs for On-site Stormwater.**

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

54. **Attachment L - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

N/A

55. **Attachment M - Construction Plans.** Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

N/A

56. **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan.** A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:
- Prepared and certified by the engineer designing the permanent BMPs and measures
 - Signed by the owner or responsible party
 - Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
 - Contains a discussion of record keeping procedures
- N/A
57. **Attachment O - Pilot-Scale Field Testing Plan.** Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
- N/A
58. **Attachment P - Measures for Minimizing Surface Stream Contamination.** A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that result in water quality degradation.
- N/A

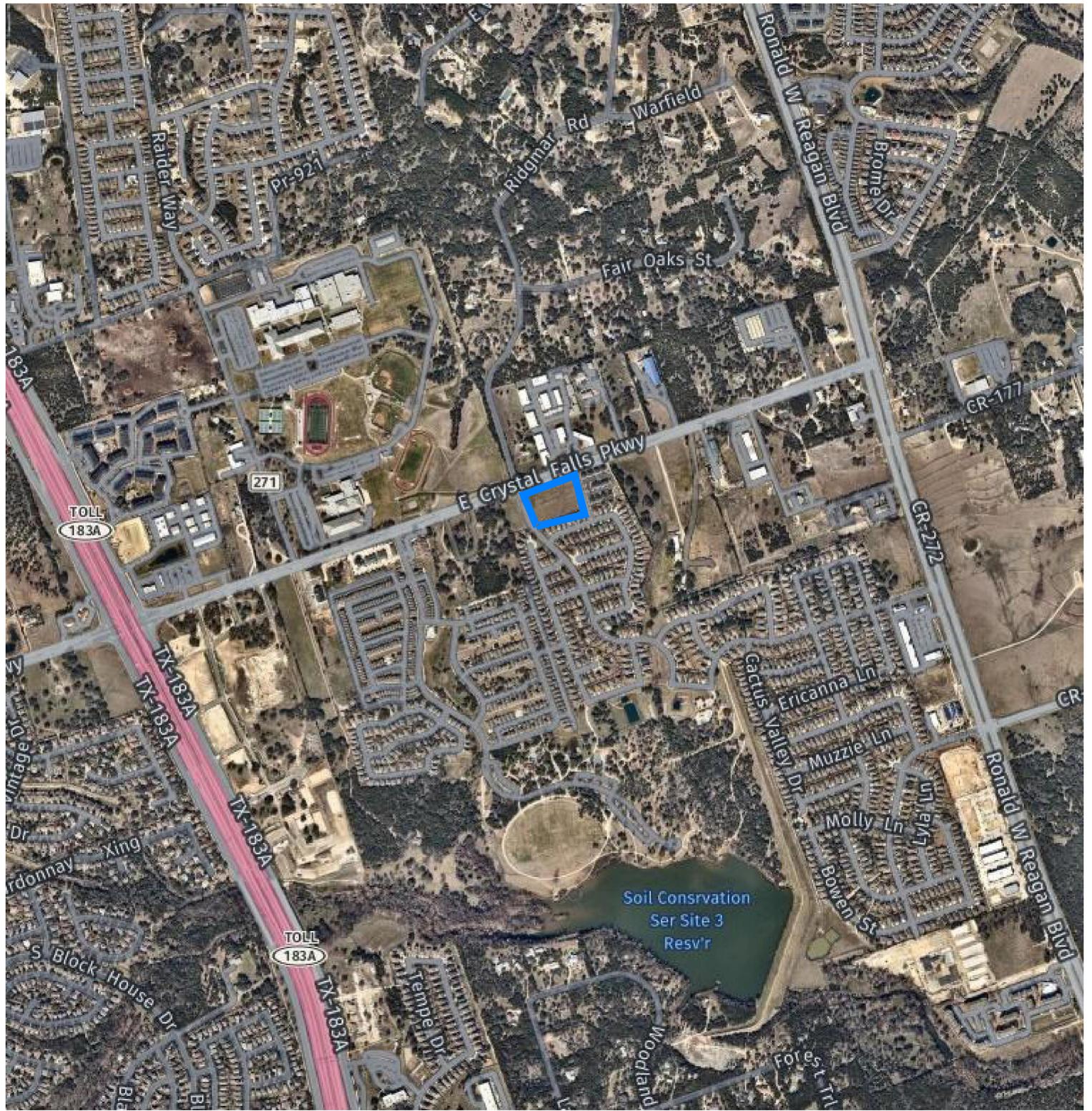
Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

59. The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.
60. A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

Administrative Information

61. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.
62. Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.
63. The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.
- The Temporary Stormwater Section (TCEQ-0602) is included with the application.

ROAD MAP



LEGEND

CONSTRUCTION SITE, 3.86 ACRES

APPENDIX	DATE	04/18/2023
A	DESIGNED BY	GAL
	DRAWN BY	GAL
	CHECKED BY	MTD
	KHA PROJECT NO.	069274404

ROAD MAP

THE SHOPS AT
CRYSTAL FALLS
LEANDER, TEXAS
WILLIAMSON COUNTY



Kimley»Horn

© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
PHONE: 469-301-2580 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928

**069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION**

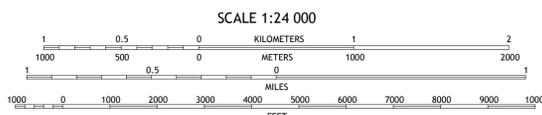
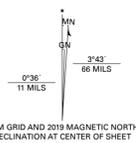
USGS QUADRANGLE MAP



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84). Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 14R
This map is not a legal document. Boundaries may be
generalized for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery.....NAIP, September 2016 - November 2016
Roads.....U.S. Census Bureau, 2015
Names.....GNS, 1979 - 2018
Hydrography.....National Hydrography Dataset, 2002 - 2018
Contours.....National Elevation Dataset, 2002
Boundaries.....Multiple sources; see metadata file 2016 - 2017
Wetlands.....FWS National Wetlands Inventory 1982



ADJOINING QUADRANGLES

1	2	3
4	5	6
7	8	

1 Liberty Hill
2 Leander NE
3 Georgetown
4 Nameless
5 Round Rock
6 Mansfield Dam
7 Jollyville
8 Pflugerville West

ROAD CLASSIFICATION

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

CONTOUR INTERVAL 10 FEET
NORTH AMERICAN DATUM OF 1988

This map was produced to conform with the
National Geospatial Program US Topo Product Standard, 2011.
A metadata file associated with this product is draft version 0.6.18



NSN 7540-01-6396-9628
USGS X 2 4 K 2 2 3 8

PROJECT NARRATIVE

The Shops at Crystal Falls is located at SEC of Crystal Falls Parkway and Grand Lake Parkway, Leander, Texas. The Shops at Crystal Falls will be constructed on one lot with a total site area of 3.86 acres. The site is within the city limits of Leander and the Contributing Zone of the Edwards Aquifer. This site is located in the Bushy Creek Watershed. No portion of the property is within the limits of the 100-year floodplain as shown on FIRM Panel No. 48491C0455F and 48491C060F, dated December 20th, 2019.

A Contributing Zone Plan (EAPP ID No. 11060801) was approved on September 11, 2011. The plan approved the construction of driveways, a water quality pond, and a detention pond to serve a master planned mixed use development of 42.25 acres. The 42.25 acres consists of Cold Springs Section 2-6 and Lots 6 and 11, Block "R" and "S" of the Cold Springs Section Two Plat. The approved plan was designed to remove 21,286 lbs of TSS Load. The existing TSS Load for the site is 20,071 lbs.

The proposed modification to the previously approved Contributing Zone Plan is limited to the development of Lots 11 Block "S", part of the Cold Springs Section 2-6. The Shops at Crystal Falls will consist of 4 mixed use buildings, reserved for retail/restaurant use, parking, drives, utilities, and associated appurtenances. The impervious cover associated with the The Shops at Crystal Falls project will be 3.09 acres. This additional impervious cover will increase the total TSS Load for the 42.25-acre development to 20,385 lbs, which is below the 21,286 lbs limit. The Shops at Crystal Falls will continue to utilize the regional pond to satisfy water quality requirements.

FACTORS AFFECTING SURFACE WATER QUALITY

Surface water quality can be affected by disturbance during construction and by development after construction. Soil disturbance from clearing and grubbing and cut / fill operations can lead to discharge of sediment unless adequate temporary erosion control measures are in place. For this project, the use of silt fence and rock berms will prevent sediment from leaving the site. The existing water quality pond and proposed grassy swale will provide sedimentation during construction. Siltation collected by the control measures will be cleaned from fences, berms, etc. on a routine schedule.

During construction, surface water quality may also be affected by a spill of hydrocarbons or other hazardous substances used in construction. The most likely instances of a spill of hydrocarbons or hazardous substances are:

1. Refueling construction equipment.
2. Performing operator-level maintenance, including adding petroleum, oils, or lubricants.
3. Unscheduled or emergency repairs, such as hydraulic fluid leaks.

Every effort will be taken to be cautious and prevent spills. In the event of a fuel or hazardous substance spill as defined by the Reportable Quantities Table 1 (page 3) of the TCEQ's Small-Business Handbook for Spill Response (RG-285, June 1997), the contractor is required to clean up the spill and notify the TCEQ as required in RG-285. During business hours report spills to the TCEQ's Austin Regional Office at (512) 339-2929, after business hours call 1-800-832-8224, the Environmental Response Hotline or (512) 463-7727, the TCEQ Spill Reporting Hotline, which is also answered 24 hours a day.

After construction is complete, impervious cover for the tract of land is the major reason for degradation of water quality. Impervious cover includes the building foundation, parking lot pavement and concrete sidewalks. Oil and fuel discharge from vehicles is anticipated. A partial sedimentation/filtration pond and grassy swale will mitigate these factors.

VOLUME AND CHARACTER OF STORMWATER

The subject tract is a portion of a greater drainage area designed to flow into a proposed regional filtration pond (11-PICP-005). Runoff will be captured by grated area inlets throughout the site and routed to the detention pond by a storm sewer system. The impervious areas will consist of buildings, parking surfaces, and sidewalks with the pervious areas consisting of landscape and natural areas. The first flush of runoff will contain small amounts of oil, gas, and suspended solids which will be captured and treated by the filtration pond.

Following the construction of The Shops at Crystal Falls, an additional 3.06 acres of impervious cover will drain to the sedimentation filtration pond. The "TSS Removal Calculations" spreadsheet has been updated and included in Attachment K to reflect this change.

**069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION**

**SUITABILITY LETTER FROM AUTHORIZED AGENT
(NOT APPLICABLE)**

**069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION**

**ALTERNATIVE SECONDARY CONTAINMENT
STRUCTURE DESIGN ROAD MAP
(NOT APPLICABLE)**

069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION

AST CONTAINMENT STRUCTURE DRAWINGS

(NOT APPLICABLE)

069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION

20% OR LESS IMPERVIOUS COVER WAIVER
(NOT APPLICABLE)

BMPs FOR UPGRADIENT STORMWATER

(NOT APPLICABLE)

BMPs FOR ON-SITE STORMWATER

A Contributing Zone Plan (EAPP ID No. 11060801) was approved on September 11, 2011. The plan approved the construction of driveways, a water quality pond, and a detention pond to serve a master planned mixed use development of 42.25 acres. The 42.25 acres consists of Cold Springs Section 2-6 and Lots 6 and 11, Block "R" and "S" of the Cold Springs Section Two Plat. The approved plan was designed to remove 21,286 lbs of TSS Load. The existing TSS Load for the site is 20,071 lbs.

The proposed modification to the previously approved Contributing Zone Plan is limited to the development of Lots 11 Block "S", part of the Cold Springs Section 2-6. The Shops at Crystal Falls will consist of 4 mixed use buildings, reserved for retail/restaurant use, parking, drives, utilities, and associated appurtenances. The impervious cover associated with the The Shops at Crystal Falls project will be 3.09 acres. This additional impervious cover will increase the total TSS Load for the 42.25-acre development to 20,385 lbs, which is below the 21,286 lbs limit.

BMPs FOR SURFACE STREAMS

There are no existing streams or sensitive features on site. All permanent BMPs have been designed to remove 80% of the increase in Total Suspended Solids as per current TCEQ requirements.

**069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION**

CONSTRUCTION PLANS

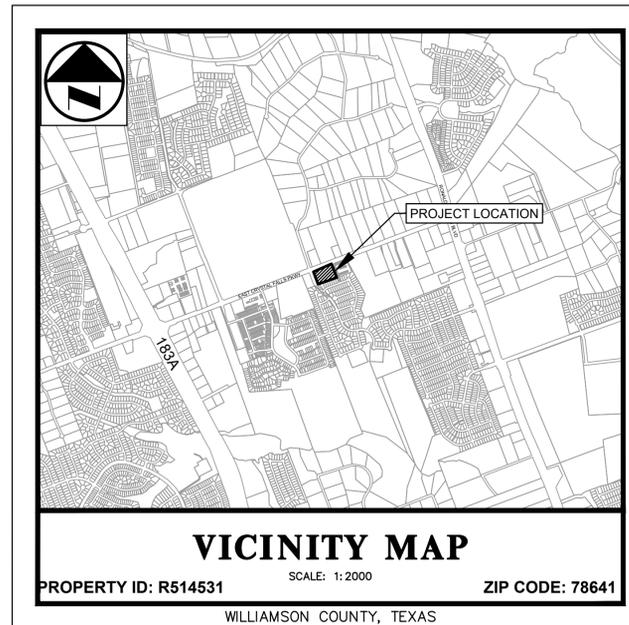
SITE DEVELOPMENT PLANS

FOR

THE SHOPS OF CRYSTAL FALLS

COLD SPRINGS SEC 2, BLOCK S , LOT 11

IN
THE CITY OF LEANDER
WILLIAMSON, TEXAS
CITY PROJECT NO. 23-SD-0094



APPROVED BY:

ROBIN M. GRIFFIN, AICP, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES _____ DATE _____

EMILY TRUMAN, P.E., CFM, CITY ENGINEER _____ DATE _____

GINA ELLISON, P.E., PUBLIC WORKS DIRECTOR _____ DATE _____

MARK TUMMONS, CPRP, PARKS & RECREATION DIRECTOR _____ DATE _____

CHIEF JOSHUA DAVIS, FIRE MARSHAL _____ DATE _____

THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, REGULATORY COMPLIANCE, AND ADEQUACY OF THESE PLANS AND/OR SPECIFICATIONS WHETHER OR NOT THE PLANS AND/OR SPECIFICATIONS WERE REVIEWED BY THE CITY ENGINEER(S).



MARCH 2023

SHEET INDEX	
SHEET NO.	SHEET TITLE
1	COVER SHEET
2	CITY OF LEANDER NOTES
3	KIMLEY-HORN GENERAL NOTES
4	PLAT
5	EXISTING CONDITIONS PLAN
6	EROSION CONTROL PLAN
7	EROSION CONTROL DETAILS
8	GRADING PLAN
9	AS-BUILT WATER QUALITY POND
10	EXISTING DRAINAGE AREA MAP
11	DRAINAGE AREA MAP
12	DRAINAGE CALCULATIONS
13	SITE PLAN
14	PAVING PLAN
15	PAVING DETAILS
16	STORM PLAN
17	STORM PROFILES
18	DETENTION POND PLAN
19	DRAINAGE DETAILS
20	WATER PLAN
21	SANITARY SEWER PLAN
22	UTILITY DETAILS (1 OF 2)
23	UTILITY DETAILS (2 OF 2)

- NOTES:
- THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, REGULATORY COMPLIANCE, AND ADEQUACY OF THESE PLANS AND/OR SPECIFICATIONS WHETHER OR NOT THE PLANS AND/OR SPECIFICATIONS WERE REVIEWED BY THE CITY ENGINEER(S).
 - NO PORTION OF THIS TRACT IS WITHIN THE DESIGNATED FLOOD HAZARD AREA AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAP (FIRM) #48491C0455F AND #48491C060F CITY OF LEANDER, TX BOTH DATED DECEMBER 20, 2019.
 - CONTRACTOR TO NOTIFY DIGTESS PRIOR TO COMMENCING CONSTRUCTION AT 1-800-DIGTESS.
 - THIS SITE IS LOCATED WITHIN EDWARDS AQUIFER CONTRIBUTING ZONE, HOWEVER REGIONAL WATER QUALITY HAS BEEN PROVIDED.
 - A CONTRIBUTING ZONE PLAN (EDWARDS AQUIFER PROTECTION PROGRAM ID NO. 11-07090501; REGULATED ENTITY NO. RN105333553) HAS BEEN APRIVEDFOR THE ENTIRETY OF THE COLD SPRINGS SEC 2.
 - THE CITY OF LEANDER STANDARD CONSTRUCTION NOTES SHALL APPLY AND TAKE PRECEDENCE. FOR INSTANCES WHERE THEY CONFLICT WITH KIMLEY-HORN NOTES OR APPLICABLE TCEQ REQUIREMENTS, THEN THE MORE RESTRICTIVE SHALL APPLY.

SUBMITTAL DATE: 02/06/2023
 ZONING: LC-3-C
 SITE AREA: 3.863 AC
 TOTAL IMPERVIOUS COVER: 132,300 SF (78.6%)
 FUTURE LAND USE: MULTI-USE CORRIDOR
 LEGAL DESCRIPTION:
 S10207 - COLD SPRINGS SEC 2, BLOCK S, LOT 11, ACRES 3.863

REVISION #	DESCRIPTION	APPROVAL

ENGINEER:
 Kimley-Horn and Associates, Inc.
 260 East Davis Street, Suite 100
 McKinney, Texas 75069
 Tel. No. (469) 301-2580
 Contact: Michael T. Doggett, P.E.

DEVELOPER:
 Velar Development
 3109 Kenai Drive, Suite 109
 Cedar Park, TX 78613
 (512) 528-5322
 Venkat Gudapuri

ARCHITECT:
 Mat Design Studio
 601 West New Hope Drive
 Cedar Park, TX 78613
 (469)-951-0614
 Monika Arora

PREPARED BY:

Firm Registration No. F-928
 260 East Davis Street, Suite 100
 McKinney, Texas 75069
 Tel. No. (469) 301-2580

APPROVAL

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

DATE: 02/06/2023 10:19 AM
DRAWN BY: MTD
DESIGNED BY: SHD
SCALE: AS SHOWN
DATE: 02/06/2023
PROJECT: KHA PROJECT 089274404

This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Release of and improper reliance on this document without written authorization and indemnification by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

GENERAL NOTES
REVISED JUNE 22, 2022
ANY CHANGES TO THESE NOTES SHOULD BE CLOUDED ON THE PLAN SET.
CITY CONTACTS:
ENGINEERING MAIN LINE: 512-528-2766
PLANNING DEPARTMENT: 512-528-2750
PUBLIC WORKS MAIN LINE: 512-259-2640
STORMWATER INSPECTIONS: 512-285-0055
UTILITIES MAIN LINE: 512-259-1142
UTILITIES ON-CALL: 512-690-4760
UTILITY LOCATE REQUESTS: locates@leandertx.gov

GENERAL NOTES:

- 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.
- THE CONTRACTOR SHALL CONTACT THE TEXAS EXCAVATION SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED TO, CROSSED, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
- CONTACT THE CITY OF LEANDER PUBLIC WORKS DEPARTMENT FOR EXISTING WATER AND WASTEWATER LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION.
 - LOCATE REQUESTS MUST INCLUDE A COPY OF YOUR 811 TICKET. THE CITY OF LEANDER IS ALLOWED UP TO 48 HOURS TO COMPLY WITH YOUR REQUEST, EXCLUDING WEEKENDS AND DESIGNATED CITY HOLIDAYS.
 - REFRESH ALL LOCATES BEFORE 14 DAYS – LOCATE REFRESH REQUESTS MUST INCLUDE A COPY OF YOUR 811 TICKET. SUBMIT ALL REQUESTS TO LOCATES@LEANDERTX.GOV. TEXAS PIPELINE DAMAGE PREVENTION LAWS REQUIRE THAT A LOCATE REFRESH REQUEST BE SUBMITTED BEFORE 14 DAYS, OR IF LOCATION MARKERS ARE NO LONGER VISIBLE.
 - REPORT PIPELINE DAMAGE IMMEDIATELY – IF YOU WITNESS OR EXPERIENCE PIPELINE EXCAVATION DAMAGE, PLEASE CONTACT THE CITY OF LEANDER BY PHONE AT 512-259-2640.
- ANY CHANGES OR REVISIONS TO THESE PLANS MUST FIRST BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER FOR REVIEW AND WRITTEN APPROVAL PRIOR TO CONSTRUCTION OF THE REVISION.
- A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, SHALL BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO ANY PARTIAL OR COMPLETE ROADWAY CLOSURES. TRAFFIC CONTROL PLANS SHALL BE SITE SPECIFIC AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. LANE CLOSURES ON ARTERIALS AND ANY FULL ROAD CLOSURES REQUIRE MESSAGE BOARDS NOTIFYING THE PUBLIC ONE WEEK PRIOR TO THE CLOSURE.
- NO WORK IS TO BE PERFORMED BETWEEN THE HOURS OF 9:00 P.M. AND 7:00 A.M. THE CITY INSPECTOR RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER ALL WORK PERFORMED WITHOUT INSPECTION FURTHER, THERE IS A NOISE ORDINANCE IN EFFECT FOR CONSTRUCTION ACTIVITY BETWEEN THE HOURS OF 9:00 PM AND 7:00 AM. REQUESTS FOR EXCEPTIONS TO THE ORDINANCE MUST BE MADE TO LEANDER CITY COUNCIL.
- CONTACT THE CITY INSPECTOR 4 DAYS PRIOR TO WORK TO SCHEDULE ANY INSPECTIONS ON WEEKENDS OR CITY HOLIDAYS.
- NO STREET LIGHTS OR SIGNS OF ANY KIND ARE TO BE PLACED WITHIN ANY SIDEWALKS.
- NO BLASTING IS ALLOWED.
- 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.
- THE CONTRACTOR SHALL GIVE THE CITY OF LEANDER 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. CONTACT ASSIGNED CITY INSPECTOR.
- A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CONTRACTOR, DESIGN ENGINEER PERMIT APPLICANT AND THE CITY OF LEANDER REPRESENTATIVES PRIOR TO INSTALLATION OF EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTION MEASURES AND PRIOR TO BEGINNING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE CITY OF LEANDER PLANNING DEPARTMENT PLANNING COORDINATOR AT LEAST THREE (3) DAYS PRIOR TO THE MEETING DATE.
- THE CONTRACTOR AND ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH THE CITY OF LEANDER ACCURATE "RECORD DRAWINGS" FOLLOWING THE COMPLETION OF ALL CONSTRUCTION. THESE "RECORD DRAWINGS" SHALL MEET THE SATISFACTION OF THE ENGINEERING DEPARTMENTS PRIOR TO FINAL ACCEPTANCE
- WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. PRIOR TO ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT EASEMENTS. CLEANUP SHALL BE TO THE SATISFACTION OF THE ENGINEER.
- CONTRACTOR TO LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, CONTROL POINTS AND PROJECT ENGINEERING REFERENCE POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, AT NO ADDITIONAL COST TO OWNER.
- THE CONTRACTOR SHALL PROTECT ALL EXISTING FENCES. IN THE EVENT THAT A FENCE MUST BE REMOVED, THE CONTRACTOR SHALL REPAIR OR SAID FENCE OR PORTION THEREOF WITH THE SAME TYPE OF FENCING TO A QUALITY OF EQUAL OR BETTER THAN THE ORIGINAL FENCE.
- ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE, INFORMATION RELATED MATERIALS MAY BE PURCHASED FROM OSHA, 1033 LA POSADA DR, SUITE 375, AUSTIN, TEXAS 78752-3832
- ALL MATERIALS AND CONSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY COVERED IN THE PROJECT SPECIFICATIONS SHALL CONFORM TO ALL CITY OF LEANDER DETAILS AND CITY OF AUSTIN STANDARD SPECIFICATIONS.
- PROJECT SPECIFICATIONS TAKE PRECEDENCE OVER PLANS AND SPECIAL CONDITIONS GOVERN OVER TECHNICAL SPECIFICATIONS.
- HOT MIX ASPHALTIC CONCRETE PAVEMENT SHALL BE MINIMUM THICKNESS OF 2 INCHES WITH NO RECYCLED ASPHALT SHINGLES CONTENT.
- CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY RISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS OR GRADES NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES GAS, WATER, WASTEWATER, ELECTRICAL, TELEPHONE, CABLE TV AND STREET DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER WITHIN TWENTY-FOUR (24) HOURS.
- THE CONTRACTOR MUST OBTAIN A CONSTRUCTION WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER.
- CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ROADS AND DRIVES ADJACENT TO AND NEAR THE SITE FREE FROM SOIL, SEDIMENT AND DEBRIS. CONTRACTOR WILL NOT REMOVE SOIL, SEDIMENT OR DEBRIS FROM ANY AREA OR VEHICLE BY MEANS OF WATER. ONLY SHOVELING AND SWEEPING WILL BE ALLOWED. CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL FROM THE SITE.
- THE CITY OF LEANDER SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.
- AN ENGINEER'S CONCURRENCE LETTER AND RECORD DRAWINGS SHALL BE SUBMITTED TO THE ENGINEERING DEPARTMENT PRIOR TO THE ISSUANCE OF CERTIFICATE OF COMPLETION OR SUBDIVISION ACCEPTANCE. THE ENGINEER AND CONTRACTOR SHALL VERIFY THAT ALL FINAL REVISIONS AND CHANGES HAVE BEEN MADE TO THE DIGITAL COPY PRIOR TO CITY SUBMITTAL. RECORD CONSTRUCTION DRAWINGS, INCLUDING ROADWAY AND ALL UTILITIES SHALL BE PROVIDED TO THE CITY IN DIGITAL FORMAT AS AUTOCAD *.DWG* FILES, MICROSTATION *.DGN* FILES OR ESNR *.SHP* FILES ON CD ROM. LINE WEIGHTS, LINE TYPES AND TEXT SIZE SHALL BE SUCH THAT IF HALF-SIZE PRINTS (11"x17") WERE PRODUCED, THE PLANS WOULD STILL BE LEGIBLE. ALL REQUIRED DIGITAL FILES SHALL CONTAIN A MINIMUM OF TWO CONTROL POINTS REFERENCED TO THE STATE PLANE GRID COORDINATE SYSTEM – TEXAS CENTRAL ZONE (4203), IN US SURVEY FEET AND SHALL INCLUDE ROTATION

INFORMATION AND SCALE FACTOR REQUIRED TO REDUCE SURFACE COORDINATES TO GRID COORDINATES IN US SURVEY FEET
28. TREES IN EXISTING ROW SHOULD BE PROTECTED OR NOTED IN THE PLANS TO BE REMOVED.

CONSTRUCTION SEQUENCE NOTES:

- INSTALL STABILIZED CONSTRUCTION ENTRANCE, EROSION CONTROLS AND TREE PROTECTION FENCING FOR EACH PHASE PRIOR TO CLEARING AND GRUBBING AND PER APPROVED EROSION AND SEDIMENTATION CONTROL/TREE PROTECTION PLAN.
- THE CONTRACTOR SHALL ARRANGE AND COORDINATE ACCEPTABLE MEETING TIMES FOR AN ON-SITE PRE-CONSTRUCTION MEETING WITH THE OWNER, PROJECT ENGINEER, RELEVANT CONTRACTORS, RELEVANT UTILITY REPRESENTATIVES, AND THE CITY ENGINEER. AT THIS MEETING, THE CITY SHALL VERIFY THAT ALL EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION ARE IN PLACE, THAT CONSTRUCTION DRAWINGS AND THE SWPPP ARE LOCATED ON SITE, AND THAT THE SWPPP PERMITS HAVE BEEN ISSUED, THE CITY MAY THEN ISSUE THE SUBDIVISION IMPROVEMENT PERMIT.
- BEGIN SITE CLEARING.
- CLEAR AND GRUB AND STRIP TOPSOIL, STOCKPILE TOPSOIL FOR LATER USE.
- ROUGH SUBGRADE PREPARATION.
- ROUGH SUBGRADE SITE IN ACCORDANCE WITH PLANS AND SPECIFICATIONS.
- CONSTRUCT WET AND DRY UTILITIES.
- FINAL SUBGRADE PREPARATION.
- INSTALL BASE MATERIALS.
- INSTALL CONCRETE (FOUNDATIONS, CURBS, FLATWORK).
- CONSTRUCT BUILDINGS.
- INSTALL PAVEMENTS.
- TOPSOIL, IRRIGATION, AND LANDSCAPING.
- PROJECT ENGINEER INSPECTS AND SUBMITS THE ENGINEER'S CONCURRENCE LETTER.
- CITY VISITS SITE AND ISSUES CERTIFICATE OF ACCEPTANCE ONLY IF ALL CONSTRUCTION IS IN SUBSTANTIAL CONFORMANCE TO THE PLANS.
- SITE CLEANUP AND REMOVAL OF TEMPORARY BMPS.
- FOLLOWING THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL REMOVE ANY SEDIMENT BUILDUP IN THE WET POND FROM CONSTRUCTION ACTIVITIES.

EROSION CONTROL NOTES:

- THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTIVE FENCING PRIOR TO ANY WORK (CLEARING, GRUBBING OR EXCAVATION). CONTACT STORMWATER INSPECTOR FOR ON SITE INSPECTION PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAIN EVENTS TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
- THE TEMPORARY SPOILS DISPOSAL SITE IS TO BE SHOWN IN THE EROSION CONTROL MAP.
- ANY ON-SITE SPOILS DISPOSAL SHALL BE REMOVED PRIOR TO ACCEPTANCE UNLESS SPECIFICALLY SHOWN ON THE PLANS. THE DEPTH OF SPOIL SHALL NOT EXCEED 10 FEET IN ANY AREA.
- ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE RESTORED WITH A MINIMUM OF 6 INCHES OF TOPSOIL AND COMPOST BLEND. TOPSOIL ON SINGLE FAMILY LOTS MAY BE INSTALLED WITH HOME CONSTRUCTION. THE TOPSOIL AND COMPOST BLEND SHALL CONSIST OF 75% TOPSOIL AND 25% COMPOST.
- SEEDING FOR REESTABLISHING VEGETATION SHALL COMPLY WITH THE AUSTIN GROW GREEN GUIDE OR WILLIAMSON COUNTY'S PROTOCOL FOR SUSTAINABLE ROADSIDES (SPEC 164--WC001 SEEDING FOR EROSION CONTROL). RESEEDING VARIETIES OF BERMUUDA SHALL NOT BE USED.
- STABILIZED CONSTRUCTION ENTRANCE IS REQUIRED AT ALL POINTS WHERE CONSTRUCTION TRAFFIC IS EXITING THE PROJECT ONTO EXISTING PAVEMENT. LINEAR CONSTRUCTION PROJECTS MAY REQUIRE SPECIAL CONSIDERATION. ROADWAYS SHALL REMAIN CLEAR OF SILT AND MUD.
- TEMPORARY STOP SIGNS SHOULD BE INSTALLED AT ALL CONSTRUCTION ENTRANCES WHERE A STOP CONDITION DOES NOT ALREADY EXIST.
- IN THE EVENT OF INCLEMENT WEATHER THAT MAY RESULT IN A FLOODING SITUATION, THE CONTRACTOR SHALL REMOVE INLET PROTECTION MEASURES UNTIL SUCH TIME AS THE WEATHER EVENT HAS PASSED.

WATER AND WASTEWATER NOTES:

- PRESSURE TAPS SHALL BE IN ACCORDANCE WITH CITY OF LEANDER STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, ETC. AND SHALL FURNISH, INSTALL AND AIR TEST THE SLEEVE AND VALVE. A CITY OF LEANDER INSPECTOR MUST BE PRESENT WHEN THE CONTRACTOR MAKES A TAP, AND/OR ASSOCIATED TESTS. A MINIMUM OF TWO (2) WORKING DAYS NOTICE IS REQUIRED. "SIZE ON SIZE" TAPS WILL NOT BE PERMITTED UNLESS MADE BY THE USE OF AN APPROVED FULL CIRCLE GASKETED TAPPING SLEEVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES A MINIMUM OF 24 HOURS PRIOR TO THE BRANCH BEING PLACED INTO SERVICE. BLOCKING SHALL BE INSPECTED PRIOR TO BACKFILL.
- FIRE HYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A BLACK POLY WRAP BAG AND TAPED INTO PLACE. THE POLY WRAP SHALL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED INTO SERVICE.
- CURVILINEAR WASTEWATER DESIGN LAYOUT IS NOT PERMITTED.
- THRUST BLOCKING OR RESTRAINTS SHALL BE IN ACCORDANCE WITH THE CITY OF LEANDER STANDARD SPECIFICATIONS AND REQUIRED AT ALL FITTINGS PER DETAIL OR MANUFACTURER'S RECOMMENDATION. ALL FITTINGS SHALL HAVE BOTH THRUST BLOCKING AND RESTRAINTS.
- MANDREL TESTING WILL BE REQUIRED ON ALL WASTEWATER PIPE. PER TCEQ, THIS TEST MUST BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
- ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AND ORGANIZATION ACCREDITED BY ANSI
- DURING PERIODS OF EXTENDED DRY WEATHER, TRENCH BACKFILL MUST BE COMPACTED BY FLOODING THE TRENCHES AS DIRECTED BY THE CITY ENGINEER.
- ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY STAMPED AS FOLLOWS:
WATER SERVICE "W" ON TOP OF CURB
WASTEWATER SERVICE "S" ON TOP OF CURB
VALVE "V" ON TOP OF CURB
- TOOLS FOR STAMPING THE CURBS SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF STAMPING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF STAMPING SHALL BE SPECIFIED BY THE ENGINEER AND ACCEPTED BY THE CITY OF LEANDER
- ALL PLASTIC PIPES FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 200 PSI.
- NO PIPE OR FITTING WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.
- TYPICAL DEPTH OF COVER FOR ALL WASTEWATER LINES SHALL BE 48" MINIMUM, WATER LINES SHALL BE 36" MINIMUM UNDER BOTH PAVEMENT AND NATURAL GROUND. STORM SEWER SHALL BE 24" MINIMUM UNDER NATURAL GROUND
- THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY AWWA FORMULAS.
- ALL WATER MAINS, DISTRIBUTION LINES AND SERVICE LINES SHALL BE INSTALLED IN ENCASEMENT PIPE UNDERNEATH EXISTING STREETS AND OTHER PAVED SURFACES UNLESS APPROVED WITH PLANS.
- ALL MECHANICAL RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
- ALL DEAD-END WATER MAINS SHALL HAVE THRUST RESTRAINTS INSTALLED ON THE LAST THREE PIPE LENGTHS (STANDARD 20' LAYING LENGTH), AT MINIMUM, AND THRUST BLOCKS INSTALLED ON THE PLUG. ADDITIONAL THRUST RESTRAINTS MAY BE REQUIRED BASED UPON THE MANUFACTURER'S RECOMMENDATIONS AND/OR CALCULATIONS BY THE ENGINEER OF RECORD.
- WHERE WATER LINES CROSS WASTEWATER LINES AND THERE IS LESS THAN 9 FEET CLEARANCE BETWEEN LINES, THE WASTEWATER LINE SHALL BE PLACED SO THAT THE WASTEWATER PIPE SECTION IS CENTERED ON THE WATER LINE AND CONSTRUCTED IN ACCORDANCE WITH TCEQ CHAPTERS 217.53(b) AND 290.44(a).
- PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AWWA C900-16 MIN. 235 PSI PRESSURE RATING). WATER SERVICES (2" OR LESS) SHALL BE POLYETHYLENE TUBING (BLACK, 200PSI, SDR-(9)), DUCTILE IRON PIPE (AWWA C115/C151, MIN. PRESSURE CLASS 250) MAY BE USED FOR WATER MAINS WITH THE EXPRESS APPROVAL OF CITY OF LEANDER ENGINEERING.
- PIPE FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AWWA C900-16), GREEN AND MARKED FOR SEWER. PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS SHALL BE PVC (ASTM D2241, D3034 MAX. SDR-26 OR P5115 F679) OR FIBERGLASS WITH PIPE STIFFNESS OF 72 PSI PER COA SPL WW-509.
- ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON PIPE (AWWA C115/C151 PRESSURE CLASS 350).

- INTERIOR SURFACES OF ALL DUCTILE IRON PIPE OR RECLAIMED WATER PIPE SHALL BE CEMENT-MORTAR LINED AND SEAL COATED AS REQUIRED BY AWWA C104.
- ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-MIL POLYETHYLENE.
- THE CONTRACTOR SHALL CONTACT THE ENGINEERING DEPARTMENT INSPECTOR AT 528-2700 AT LEAST 48 HOURS PRIOR TO CONNECTING TO THE EXISTING WATER LINES.
- ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE ALLOWED.
- EXISTING MANHOLES MODIFIED BY CONSTRUCTION ACTIVITY SHALL BE TESTED FOR LEAKAGE BY VACUUM. ANY EXISTING MANHOLE WHICH FAILS TO PASS THE VACUUM TEST SHALL BE CLOSELY EXAMINED BY THE INSPECTOR AND THE CONTRACTOR TO DETERMINE IF THE MANHOLE CAN BE REPAIRED. THEREAFTER, THE CONTRACTOR SHALL EITHER REPAIR OR REMOVE AND REPLACE THE MANHOLE AS DIRECTED.
- PIPE CONNECTIONS TO EXISTING MANHOLES AND JUNCTION BOXES SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF AUSTIN SPECIFICATION 506.5.F.
- LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE COORDINATED WITH THE PUBLIC WORKS DEPARTMENT.
- THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL CONSTRUCTED POTABLE WATER LINES AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIAL), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY CITY OF LEANDER PERSONNEL. WATER SAMPLES WILL BE COLLECTED BY THE CITY OF LEANDER TO VERIFY EACH TREATED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PPM. WHERE MEANS OF FLUSHING IS NECESSARY, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FLUSHING DEVICES AND REMOVE SAID DEVICES PRIOR TO FINAL ACCEPTANCE BY THE CITY OF LEANDER.
- SAMPLING TAPS SHALL BE BROUGHT UP TO 3 FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE FOR CITY PERSONNEL. AT THE CONTRACTORS' REQUEST, AND IN HIS PRESENCE, SAMPLES FOR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY THE CITY OF LEANDER NOT LESS THAN 24 HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF THE CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY.
- TESTING SHALL BE PERFORMED FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE PIPE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED. THE OWNER'S CONTRACTOR SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES AND LABOR NECESSARY TO PERFORM THE TESTS. THE CONTRACTOR SHALL NOTIFY THE CITY OF LEANDER ENGINEERING DEPARTMENT NO LESS THAN 48 HOURS PRIOR TO PERFORMING STERILIZATION, QUALITY TESTS, OR PRESSURE TESTS. A CITY OF LEANDER INSPECTOR SHALL BE PRESENT FOR ALL TESTS AND SHALL BE PAID FOR BY THE OWNER/CONTRACTOR. THESE SERVICES ARE PAID FOR AT THE TIME OF CONSTRUCTION PLAN SUBMITTAL.
- THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVE UNLESS AUTHORIZED BY THE CITY OF LEANDER.
- ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
- ALL WATER VALVE COVERS ARE TO BE PAINTED BLUE.
- ALL WATER METER BOXES SHALL BE:
 - SINGLE, 1" METER AND BELOW DFV37F-12-1CA, OR EQUAL
 - DUAL, 1" METERS AND BELOW DFV37F-12-1CA, OR EQUAL
 - 1.5" SINGLE METER DFV65C-14-1CA, OR EQUAL
 - 2" SINGLE METER DFV1730F-12-1CA, OR EQUAL
 - SAND, AS DESCRIBED IN AUSTIN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE USED AS BEDDING FOR WATER AND WASTEWATER LINES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, PEA GRAVEL AND IN LIEU OF SAND, A NATURALLY OCCURRING OR MANUFACTURED STONE MATERIALS ACCORDING TO ASTM C33 FOR STONE QUALITY AND MEETING THE FOLLOWING GRADATION SPECIFICATION:
SIEVE SIZE PERCENT RETAINED BY WEIGHT
1/2" 0
3/8" 0-2
#4 40-85
#10 95-100
- THE CONTRACTOR IS HEREBY NOTIFIED THAT CONNECTING TO, SHUTTING DOWN, OR TERMINATING EXISTING UTILITY LINES MAY HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS AND POSSIBLY BETWEEN 12 AM AND 6 AM.
- ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS, 30 TAC CHAPTER 213 AND 30 TAC CHAPTER 217, AS APPLICABLE. WHENEVER TCEQ AND CITY OF LEANDER SPECIFICATION CONFLICT, THE MORE STRINGENT SHALL APPLY.
- MANHOLES SHALL BE COATED PER CITY OF AUSTIN SPL WW-511 (RAVEN 405 OR SPRAYWALL).
- DENSITY TESTING FOR TRENCH BACKFILL LOCATED WITHIN THE LIMITS OF THE PAVED AREA IS TO BE DONE IN 12" LIFTS EVERY 500' AND AT LEAST ONCE PER LINE SEGMENT
- ALL GRAVITY WASTEWATER MAINS TO BE TESTED BY CAMERA AND PAID FOR BY THE CONTRACTOR. CAMERA TESTING FOR WASTEWATER LINES IN ROADWAY SHALL OCCUR BEFORE PAVING. CONTRACTOR SHALL PROVIDE THE CITY WITH A DVD COPY OF THE FULL CAMERA INSPECTION.
- RECLAIMED AND RECYCLED WATER LINE SHALL BE CONSTRUCTED OF "PURPLE PIPE." ALL RECLAIMED AND RECYCLED WATER VALVE COVERS SHALL BE SQUARE AND PAINTED PURPLE.

STREET AND DRAINAGE NOTES:

- ALL SIDEWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT. THE CITY OF LEANDER HAS NOT REVIEWED THESE PLANS FOR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT, OR ANY OTHER ACCESSIBILITY LEGISLATION, AND DOES NOT WARRANT OR APPROVE THESE PLANS FOR ANY ACCESSIBILITY DOCUMENTS.
- PRIOR TO ACCEPTANCE THE ENGINEER SHALL SUBMIT DOCUMENTATION THAT THE IMPROVEMENTS WERE INSPECTED BY TDLR OR A REGISTERED ACCESSIBILITY SPECIALIST (RAS) AND ARE IN COMPLIANCE WITH THE REQUIREMENTS OF THE TABA.
- CONTRACTOR SHALL PROVIDE QUALITY TESTING FOR ALL INFRASTRUCTURES TO BE ACCEPTED AND MAINTAINED BY THE CITY OF LEANDER AFTER COMPLETION. THE CONTRACTOR SHALL NOTIFY THE CITY OF LEANDER ENGINEERING DEPARTMENT AT 528-2700 NO LESS THAN 48 HOURS PRIOR TO ANY TESTING.
- BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 6" OF TOP OF CURB. MATERIAL USED SHALL BE PRISMAR OR EQUIVALENT WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 6" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE.
- A MINIMUM OF 6" OF TOPSOIL SHALL BE PLACED BETWEEN THE CURB AND RIGHT-OF-WAY AND IN ALL DRAINAGE CHANNELS EXCEPT CHANNELS CUT IN STABLE ROCK.
- DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, INCLUDING GAS, ELECTRIC TELEPHONE, CABLE TV, ETC., SHALL BE A MINIMUM OF 36" BELOW SUBGRADE.
- STREET RIGHT-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/2" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OF-WAY AT 1/2" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY OF LEANDER PUBLIC WORKS DEPARTMENT.
- BARRICADES BUILT TO THE CITY OF LEANDER STANDARDS SHALL BE ERECTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
- ALL REINFORCED CONCRETE PIPE SHALL BE MINIMUM CLASS III OF TONGUE AND GROOVE OR O-RING JOINT DESIGN.
- THE CONTRACTOR IS TO NOTIFY THE ENGINEERING INSPECTOR 48 HOURS PRIOR TO THE FOLLOWING TESTING: PROOF ROLLING SUB-GRADE AND EVERY LIFT OF ROADWAY EMBANKMENT, IN-PLACE DENSITY TESTING OF EVERY BASE COURSE, AND ASPHALT CORES. ALL OF THIS TESTING MUST BE WITNESSED BY A CITY OF LEANDER REPRESENTATIVE.
- THE CONTRACTOR MUST PROVIDE A PNEUMATIC TRUCK PNEU-TXDOT SPEC FOR PROOF ROLLING.
- AT INTERSECTIONS WHICH HAVE VALLEY DRAINAGE, THE CROWNS OF THE INTERSECTING STREETS WILL CULMINATE IN A DISTANCE OF 40 FEET FROM INTERSECTING CURB LINE UNLESS OTHERWISE NOTED.
- AT THE INTERSECTION OF TWO 44' STREETS OR LARGER, THE CROWNS OF THE INTERSECTING STREETS WILL CULMINATE IN A DISTANCE OF 40 FEET FROM INTERSECTING CURB LINE UNLESS OTHERWISE NOTED.
- A CURB LAYDOWN IS REQUIRED AT ALL POINTS WHERE THE PROPOSED SIDEWALK INTERSECTS THE CURB.
- ALL STRIPING, WITH THE EXCEPTION OF STOP BARS, CROSS WALKS, WORDS AND ARROWS, IS TO BE TYPE II (WATER BASED). STOP BARS, CROSS WALKS, WORDS AND ARROWS REQUIRE TYPE I THERMOPLASTIC.
- MANHOLE FRAMES, COVERS, VALVES, CLEAN-OUTS, ETC. SHALL BE RAISED TO GRADE PRIOR TO FINAL PAVEMENT CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY THE LEANDER ENGINEERING DEPARTMENT AT 528-2700 AT LEAST 48 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET ROW. THE METHOD OF PLACEMENT AND COMPACTION OF BACKFILL IN THE CITY'S ROW MUST BE APPROVED PRIOR TO THE START OF BACKFILL OPERATIONS.
- A STOP BAR SHALL BE PLACED AT ALL STOP SIGN LOCATIONS.
- A MINIMUM OF SEVEN DAYS OF CURE SHALL BE REQUIRED FOR ALL CURBS PRIOR TO THE INTRODUCTION OF PUBLIC VEHICULAR TRAFFIC TO ANY STREETS.

- THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISIONS OF THE CONSTRUCTION PLANS.
- GEOTECHNICAL INVESTIGATION INFORMATION AND PAVEMENT RECOMMENDATIONS WERE PROVIDED BY TERRADRYE. PAVEMENT RECOMMENDATIONS SHOWN ON SHEET 14.

TRENCH SAFETY NOTES:

- TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT ARE DESCRIBED IN ITEM 509S "TRENCH SAFETY SYSTEMS" OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND SHALL BE IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATION SAFETY AND HEALTH ADMINISTRATION REGULATIONS.
GRADING NOTES:
 - POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE AREAS WITHIN THE SCOPE OF THIS PROJECT. CONTRACTOR SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING OF WATER.
 - THE CONTRACTOR SHALL CONSTRUCT EARTHEN EMBANKMENTS WITH SLOPES NO STEEPER THAN 3:1 AND COMPACT SOIL TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
 - AREAS OF SOIL DISTURBANCE ARE LIMITED TO GRADING AND IMPROVEMENTS SHOWN. ALL OTHER AREAS WILL NOT BE DISTURBED.

BENCHMARK NOTES:

- [PROVIDE LOCATION DESCRIPTION]

THE CITY OF LEANDER STANDARD CONSTRUCTION NOTES SHALL APPLY AND TAKE PRECEDENCE. FOR INSTANCES WHERE THEY CONFLICT WITH KIMLEY-HORN GENERAL NOTES OR APPLICABLE TCEQ REQUIREMENTS, THEN THE MORE RESTRICTIVE SHALL APPLY.

KHA PROJECT 089274404		DATE 02/06/2023	SCALE AS SHOWN	DESIGNED BY MTD	DRAWN BY SHD	CHECKED BY GAL	MTD
THE SHOPS OF CRYSTAL FALLS		LEANDER, TEXAS		CITY OF LEANDER STATE OF TEXAS			
CITY OF LEANDER NOTES		REVISIONS		DATE			
SHEET NUMBER 2 OF 23		BY		DATE			

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
2610 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
PHONE: 469-301-2560 FAX: 972-239-3820
WWW.KIMLEY-HORN.COM TX F-928

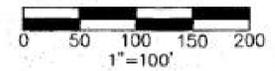
Michael T. Doggett
MICHAEL T. DOGETT
REGISTERED PROFESSIONAL ENGINEER
LICENSED
3/30/2023

FINAL SUBDIVISION PLAT OF COLD SPRINGS, SECTION TWO

SUBDIVISION OF 53.030 ACRES OUT OF THE
WALTER CAMPBELL SURVEY, ABSTRACT NO. 3
SITUATED IN WILLIAMSON COUNTY, TEXAS

WILLIAMSON COUNTY HUMANE SOCIETY
(27.380 ACRES)
DOC. #199963739
O.P.R.W.C.

NOTE: IRON RODS SET WITH
A PLASTIC CAP AS SHOWN
HEREON, HAVE AN ORANGE
CAP THAT LOOKS AS FOLLOWS:



LEGEND

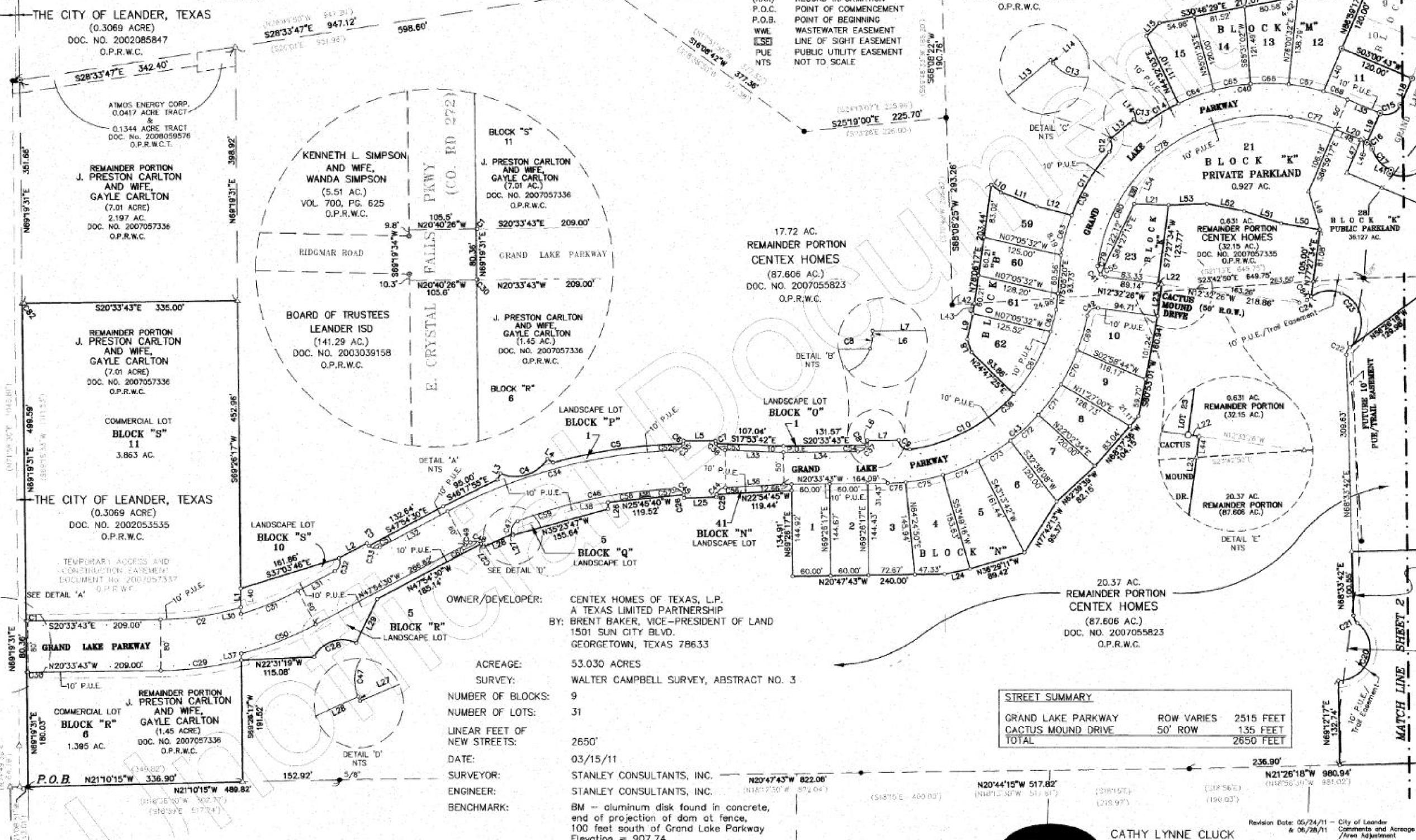
- 1/2" IRON ROD FOUND
- 1/2" IRON ROD SET WITH CAP (STANLEY CONSULTANTS, INC.)
- ◉ 1/2" IRON ROD FOUND WITH CAP
- ▲ 50D NAIL FOUND
- △ CALCULATED CORNER (UNLESS OTHERWISE NOTED)
- (XXX) RECORD INFORMATION
- P.O.C. POINT OF COMMENCEMENT
- P.O.B. POINT OF BEGINNING
- WWE WASTEWATER EASEMENT
- [LSE] LINE OF SIGHT EASEMENT
- PUE PUBLIC UTILITY EASEMENT
- NTS NOT TO SCALE

- O.P.R.W.C. OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY
- P.R.W.C. PLAT RECORDS WILLIAMSON COUNTY
- O.R.W.C. OFFICIAL RECORDS WILLIAMSON COUNTY
- D.R.W.C. DEED RECORDS WILLIAMSON COUNTY
- SIDEWALK LOCATION

COLD SPRINGS, SECTION ONE

9.03 AC.
REMAINDER PORTION
CENTEX HOMES
(32.15 AC.)
DOC. NO. 2007057335
O.P.R.W.C.

CABINET EE, SLIDES 155-158
DOC. NO. 2008012705
P.R.W.C.
DOC. NO. 2008035399
DOC. NO. 2008035400
O.P.R.W.C.



OWNER/DEVELOPER: CENTEX HOMES OF TEXAS, L.P.
A TEXAS LIMITED PARTNERSHIP
BY: BRENT BAKER, VICE-PRESIDENT OF LAND
1501 SUN CITY BLVD.
GEORGETOWN, TEXAS 78633

ACREAGE: 53.030 ACRES
SURVEY: WALTER CAMPBELL SURVEY, ABSTRACT NO. 3

NUMBER OF BLOCKS: 9
NUMBER OF LOTS: 31
LINEAR FEET OF NEW STREETS: 2650'
DATE: 03/15/11
SURVEYOR: STANLEY CONSULTANTS, INC.
ENGINEER: STANLEY CONSULTANTS, INC.
BENCHMARK: BM - aluminum disk found in concrete, end of projection of dam at fence, 100 feet south of Grand Lake Parkway Elevation = 907.74

TBM - cotton gin spindle in 13" post oak - tag # 8318 Lot 5/6 Block F, northwest corner of Mary Ella Drive and Grand Lake Parkway Elevation = 921.56

STREET SUMMARY		
GRAND LAKE PARKWAY	ROW VARIES	2515 FEET
CACTUS MOUND DRIVE	50' ROW	135 FEET
TOTAL		2650 FEET

THE CITY OF LEANDER, TEXAS
(0.3631 ACRE)
DOC. NO. 2003044988
O.P.R.W.C.

REMAINDER PORTION
WAURANE JONES CLUCK
10.59 AC.
VOL. 1827, PG. 950
O.R.W.C.

CATHY LYNNE CLUCK
5.00 AC.
VOL. 769, PAGE 688
D.R.W.C.

CATHY LYNNE CLUCK
5.00 AC.
VOL. 769, PAGE 688
D.R.W.C.



6836 Austin Center Blvd., Suite 150, Austin, Texas 78731
Texas Board of Professional Engineers Registered Firm No. 174
www.stanleyconsultants.com (512) 457-6600

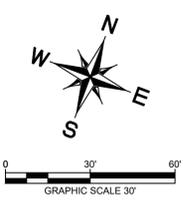
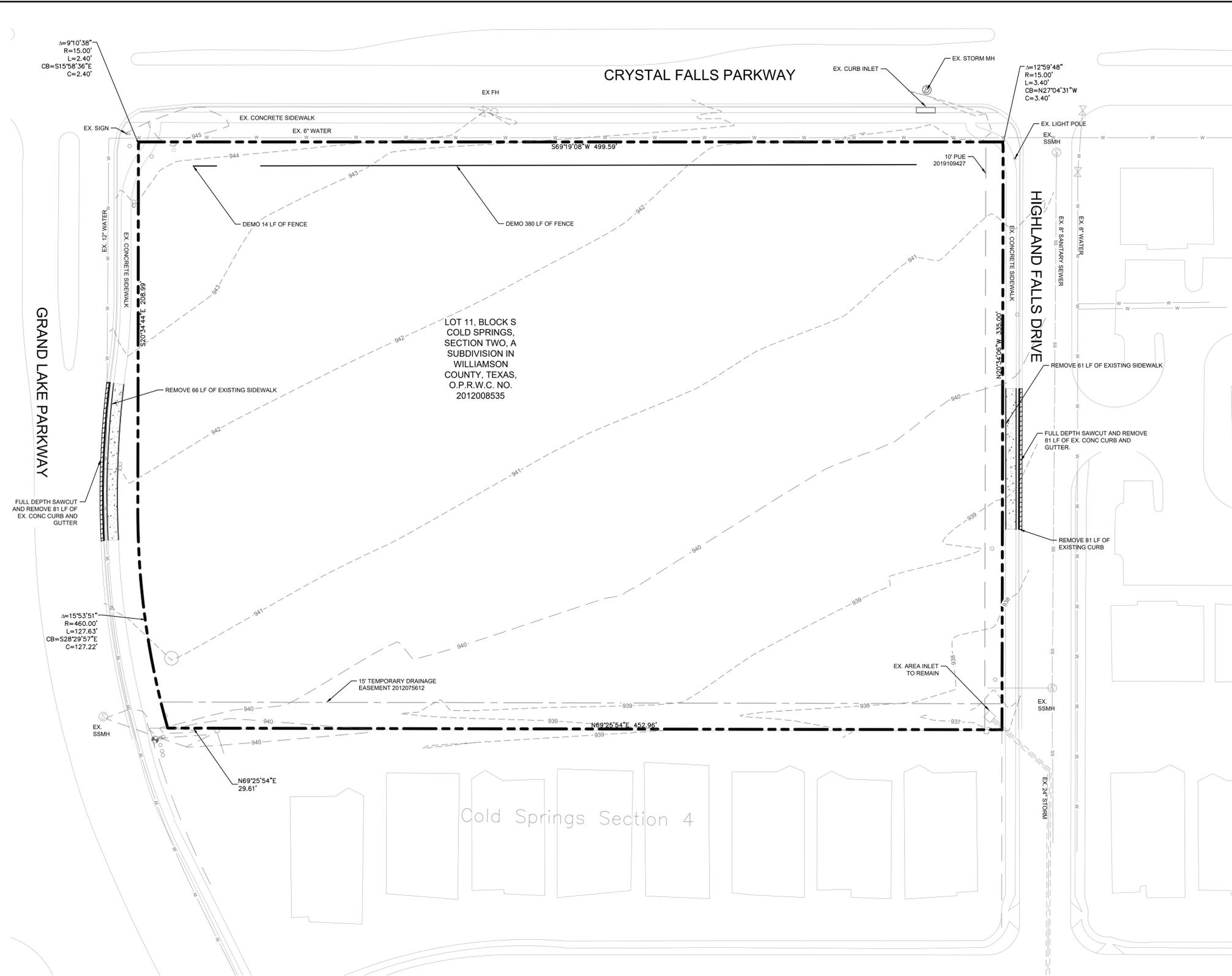
- Revision Date: 05/24/11 - City of Leander Comments and Acreage /Area Adjustment
- 06/28/11 - Final City Comments
- 07/26/11 - Final City Comments
- 08/15/11 - Add Commercial Lots
- 09/16/11 - Final City Comments
- 09/21/11 - Revise Lot 31, Block "S"

Scale: 1"=100'	Date: 03/15/11
Block: Y: 19032-38-10-CARLTON	
Drawn by: LMR	
File: COLD SPRINGS-SECT 2-SH1.dwg	
Approved by: LMR	
Project No.: 19032.50.30	

SHEET
1
OF 5

CITY OF LEADER, TEXAS
 PROJECT NO. 2023-01-001
 SHEET NO. 5 OF 23
 DATE: 02/06/2023
 DRAWN BY: J. HORN
 CHECKED BY: M. T. DOGGETT
 PROJECT: THE SHOPS OF CRYSTAL FALLS

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Release of and improper reliance on this document without written authorization and delineation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

	PROPOSED FIRE LANE
	DEMOLISH SIDEWALK
	PROPOSED BUILDING
	BARRIER FREE RAMP (BFR)
	ACCESSIBLE PARKING SYMBOL
	NUMBER OF PARKING SPACES
	TYPICAL SIDEWALK
	BARRIER FREE RAMP
	SIDEWALK
	BUILDING LINE/SETBACK
	EXISTING
	PROPOSED

- NOTES:**
1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
 2. LOCATIONS OF PUBLIC AND PRIVATE UTILITIES SHOWN ARE APPROXIMATE AND MAY NOT BE COMPLETE. CONTRACTOR SHALL CALL 713-223-4867 AT LEAST 48 HOURS PRIOR TO COMMENCING DEMOLITION OR CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL CONTACT ANY OTHER UTILITY COMPANIES WHO DO NOT SUBSCRIBE TO THE TEXAS ONE CALL PROGRAM FOR LINE MARKINGS. THE CONTRACTOR BEAR SOLE RESPONSIBILITY FOR VERIFYING LOCATIONS OF EXISTING UTILITIES, SHOWN OR NOT SHOWN, AND FOR ANY DAMAGES DONE TO THESE FACILITIES.
 3. ALL EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME THE DRAWINGS ARE PREPARED AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK. IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGE DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED BY THE CONTRACTOR AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
 4. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER. NO CONSIDERATION WILL BE GIVEN TO CHANGE ORDERS FOR WHICH THE OWNER AND ENGINEER WERE NOT CONTACTED PRIOR TO CONSTRUCTION OF THE AFFECTED ITEM.
 5. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, ETC., TO THE BEST PRACTICES AND APPROVED BY THE OWNER.
 6. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PER THE PLANS.
 7. DAMAGE TO ALL EXISTING CONDITIONS TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
 8. ALL DEMOLITION WORK OR CONSTRUCTION VEHICLE TRAFFIC WITHIN 10 FEET OF THE CANOPY OF ANY TREE TO BE SAVED SHALL BE CLOSELY COORDINATED WITH TREE PRESERVATION ACTIVITIES.
 9. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS FOR EXCAVATION AND TRENCHING PROCEDURES. CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, ETC. AS NECESSARY FOR THESE OPERATIONS, AND SHALL COMPLY WITH ALL OSHA PERFORMANCE CRITERIA.
 10. CONTRACTOR TO REMOVE FULL DEPTH OF PAVEMENT (ASPHALT AND CONCRETE), REFERENCE SURVEY FOR LIMITS OF PAVEMENT.
 11. CONTRACTOR TO EPOXY ALL EXPOSED REBAR.
 12. CONTRACTOR IS RESPONSIBLE FOR MANAGING STORM WATER RUNOFF WITHIN THE PROJECT AREA DURING CONSTRUCTION, INCLUDING PROVIDING MEASURES FOR TEMPORARY CONVEYANCE OF FLOW WHICH MAY CONSIST OF DIVERSION SWALES OR PUMPING OF WATER TO EXISTING STORM OUTFALL LOCATIONS FROM PROJECT AREA TO MATCH EXISTING DRAINAGE PATTERNS PER THE EXISTING CONDITIONS DRAINAGE AREA MAP.

NO.	REVISIONS	DATE	BY

Kimley»Horn

© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
 260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2560 FAX: 972-239-8320
 WWW.KIMLEY-HORN.COM TX F-928

Michael T. Doggett

MICHAEL T. DOGGETT
 LICENSED PROFESSIONAL ENGINEER
 3/30/2023

KHA PROJECT	069274404	DATE	02/06/2023	SCALE	AS SHOWN	DESIGNED BY	MTD	DRAWN BY	JAL	CHECKED BY	MTD
-------------	-----------	------	------------	-------	----------	-------------	-----	----------	-----	------------	-----

THE SHOPS OF CRYSTAL FALLS

LEADER, TEXAS



Know what's below.
Call before you dig.

APPROVAL

EXISTING CONDITIONS PLAN

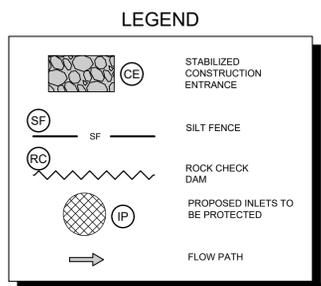
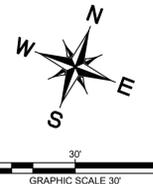
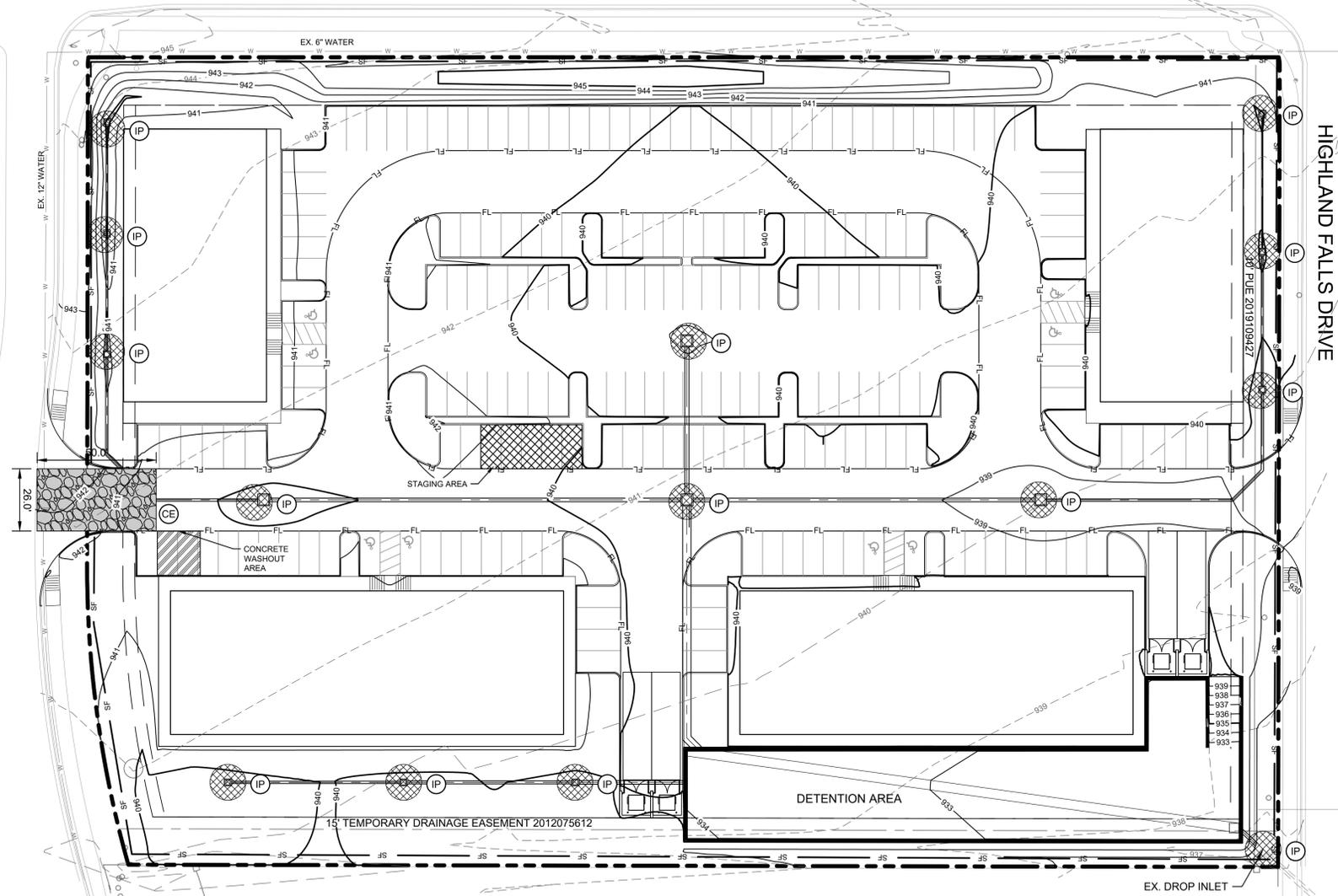
SHEET NUMBER
5 OF 23

PROJECT: 069274404
 SHEET: 02/06/2023
 DATE: 02/06/2023
 SCALE: AS SHOWN
 DESIGNED BY: MTD
 DRAWN BY: MTD
 CHECKED BY: MTD

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and permission by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

GRAND LAKE PARKWAY

CRYSTAL FALLS PARKWAY



EROSION CONTROL NOTES

- CONTRACTOR IS SOLELY RESPONSIBLE FOR IMPLEMENTATION, MAINTENANCE, AND EFFECTIVENESS OF ALL SWPPP CONTROLS - CONTROLS SHOWN ON THIS SITE MAP ARE SUGGESTED CONTROLS ONLY.
- CONTRACTOR SHALL RECORD INSTALLATION, MAINTENANCE OR MODIFICATION, AND REMOVAL DATES FOR EACH BMP EMPLOYED (WHETHER CALLED OUT ON ORIGINAL SWPPP OR NOT) DIRECTLY ON THE SITE MAP.
- THE CITY OF LEANDER ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD OR MODIFY EROSION/SEDIMENT CONTROLS ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURE DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(D) OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
- TEMPORARY AND PERMANENT STABILIZATION PRACTICES AND BMP'S SHALL BE INSTALLED AT THE EARLIEST POSSIBLE TIME DURING THE CONSTRUCTION SEQUENCE. AS AN EXAMPLE, PERIMETER SILT FENCE SHALL BE INSTALLED BEFORE COMMENCEMENT OF ANY GRADING ACTIVITIES. OTHER BMP'S SHALL BE INSTALLED AS SOON AS PRACTICABLE AND SHALL BE MAINTAINED UNTIL FINAL SITE STABILIZATION IS ATTAINED. CONTRACTOR SHALL ALSO REFERENCE CIVIL AND LANDSCAPE PLANS SINCE PERMANENT STABILIZATION IS PROVIDED BY LANDSCAPING, THE BUILDING(S), AND SITE PAVING.
- BMP'S HAVE BEEN LOCATED AS INDICATED ON THIS PLAN IN ACCORDANCE WITH GENERALLY ACCEPTED ENGINEERING PRACTICES IN ORDER TO MINIMIZE SEDIMENT TRANSFER. FOR EXAMPLE, SILT FENCES LOCATED AT TOE OF SLOPE AND INLET PROTECTION FOR INLETS RECEIVING SEDIMENT FROM SITE RUN-OFF.
- ADDITIONAL EROSION AND SEDIMENTATION CONTROLS MAY BE REQUIRED BY THE CITY DURING CONSTRUCTION.
- REFERENCE EROSION CONTROL NOTES AND DETAILS ON SHEET 7.
- 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 1.4.4.3, SECTION 5.1]. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY [ECM 1.4.4.D.4].
- ALL DISTURBED AREAS TO BE RE-VEGETATED PER CITY OF LEANDER

Cold Springs Section 4

Kimley»Horn
 © 2023 KIMLEY-HORN AND ASSOCIATES, INC.
 260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2560 FAX: 972-239-8320
 WWW.KIMLEY-HORN.COM TX F-928



KHA PROJECT	069274404	DATE	02/06/2023	SCALE	AS SHOWN	DESIGNED BY	MTD	DRAWN BY	MTD	CHECKED BY	MTD
-------------	-----------	------	------------	-------	----------	-------------	-----	----------	-----	------------	-----

THE SHOPS OF
CRYSTAL FALLS
LEANDER, TEXAS



EROSION CONTROL PLAN

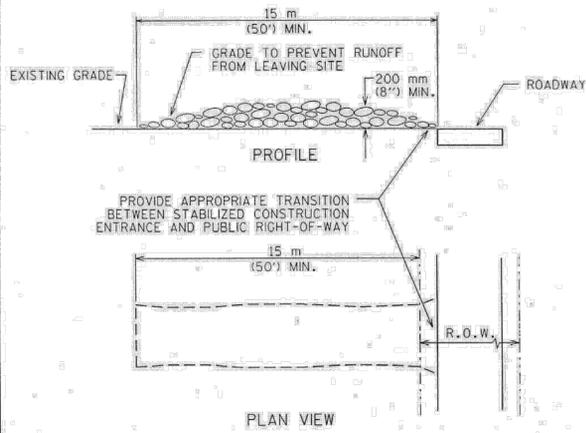


Know what's below.
Call before you dig.

APPROVAL

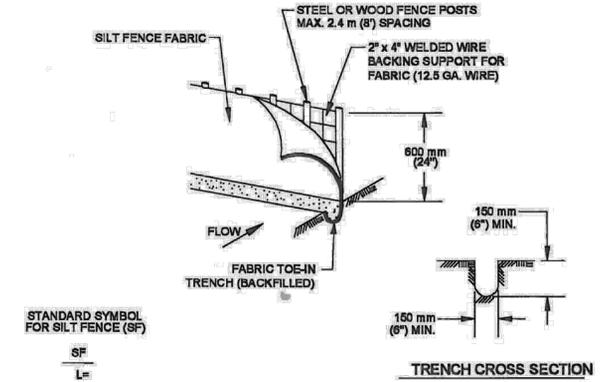
SHEET NUMBER
6 OF 23

NO.	REVISIONS	DATE	BY



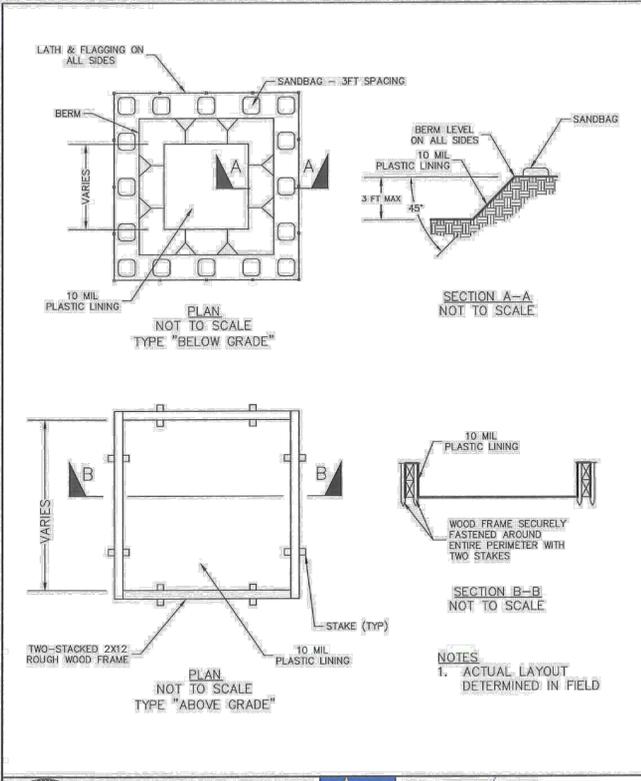
- NOTES:**
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
 2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
 3. THICKNESS: NOT LESS THAN 200 mm (8").
 4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
 5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT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

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	STANDARD NO. 641S-1
<i>Leon Paula</i> 5/23/10 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	



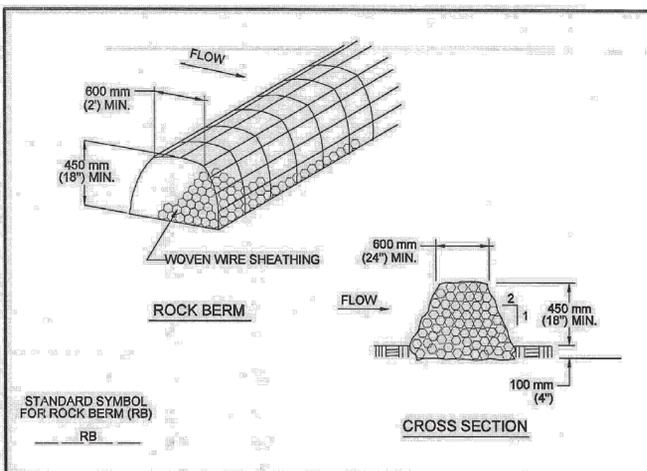
1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 INCHES) DEPTH, USE STEEL POSTS.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED 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 160 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 160 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	STANDARD NO. 642S-1
<i>Wayne S. Watts</i> 9/1/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	



City of Leander, Texas
309-1
CONCRETE WASHOUT

Wayne S. Watts
01/30/15



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

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	STANDARD NO. 639S-1
<i>Wayne S. Watts</i> 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	

NO.	REVISIONS	DATE	BY

Kimley»Horn
© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
PHONE: 469-301-2560 FAX: 972-239-9320
WWW.KIMLEY-HORN.COM TX F-928

Michael T. Doggett
MICHAEL T. DOGGETT
36822
LICENSED PROFESSIONAL ENGINEER
3/30/2023

KHA PROJECT 069274404	DATE 02/06/2023	SCALE AS SHOWN	DESIGNED BY MTD	DRAWN BY GAL	CHECKED BY MTD
--------------------------	--------------------	-------------------	--------------------	-----------------	-------------------

**THE SHOPS OF
CRYSTAL FALLS**

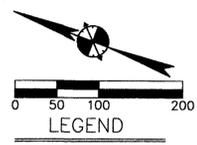
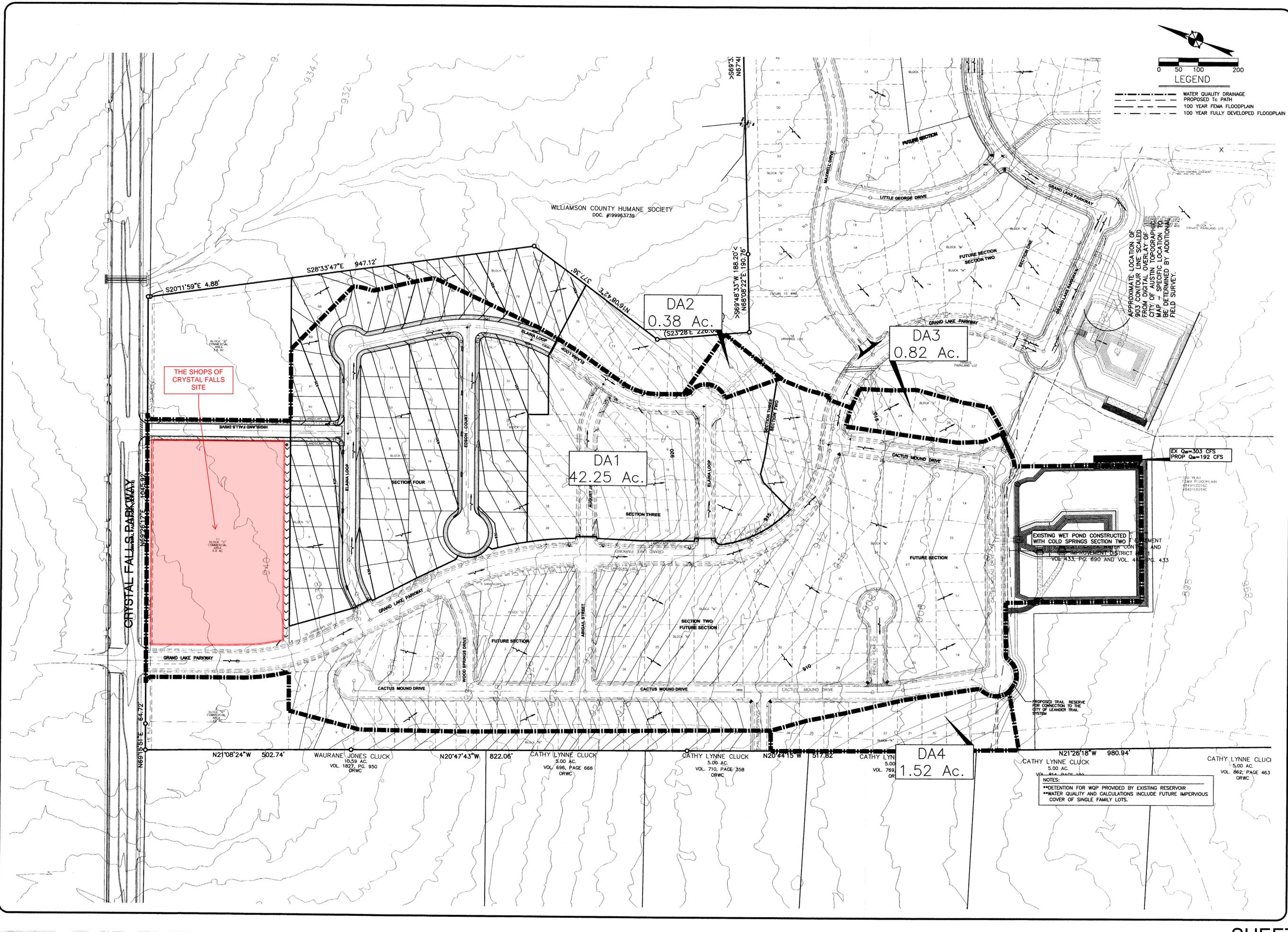
LEANDER, TEXAS

CITY OF LEANDER
STATE OF TEXAS

**EROSION CONTROL
DETAILS**

City: 1099-
WMS: 2/28/2023 10:09 AM
LAST SAVED: 2/28/2023 10:09 AM
DRAWN BY: KIMLEY-HORN AND ASSOCIATES, INC.
PROJECT: EROSION CONTROL, CRYSTAL FALLS, TEXAS

P:\10502 of Cold Springs Section 4\CADD\CONSTRUCTION\1050207DRA.dwg, 9/26/2012 11:28:35 AM, HP DesignJet 1655CM by HP, pgs. 11



LEGEND
--- WATER QUALITY DRAINAGE
--- PROPOSED Tc PATH
--- 100 YEAR FEMA FLOODPLAIN
--- 100 YEAR FULLY DEVELOPED FLOODPLAIN

APPROXIMATE LOCATION OF 903 CONTOUR LINE SCALED FROM DIGITAL OVERLAY OF SECTION TOPOGRAPHIC MAP. SPECIFIC LOCATION TO BE DETERMINED BY ADDITIONAL FIELD SURVEY.

EXISTING WET POND CONSTRUCTED WITH COLD SPRINGS SECTION TWO IMPROVEMENT DISTRICT VOL. 433, PG. 690 AND VOL. 433, PG. 433

NOTES:
**DETENTION FOR WQP PROVIDED BY EXISTING RESERVOIR
**WATER QUALITY AND CALCULATIONS INCLUDE FUTURE IMPERVIOUS COVER OF SINGLE FAMILY LOTS.

Austin, Texas
Tel (512) 814-4466
www.civilgroup.com
Texas Registered Firm No. F-12377
Civil Group
C O O K S T A I N M O N D F L E M I N G
PLANNING, ENGINEERING & CONSTRUCTION SERVICES



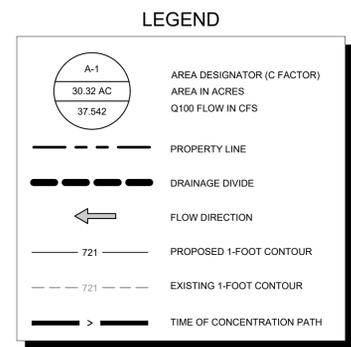
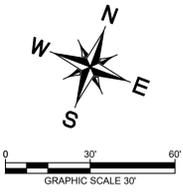
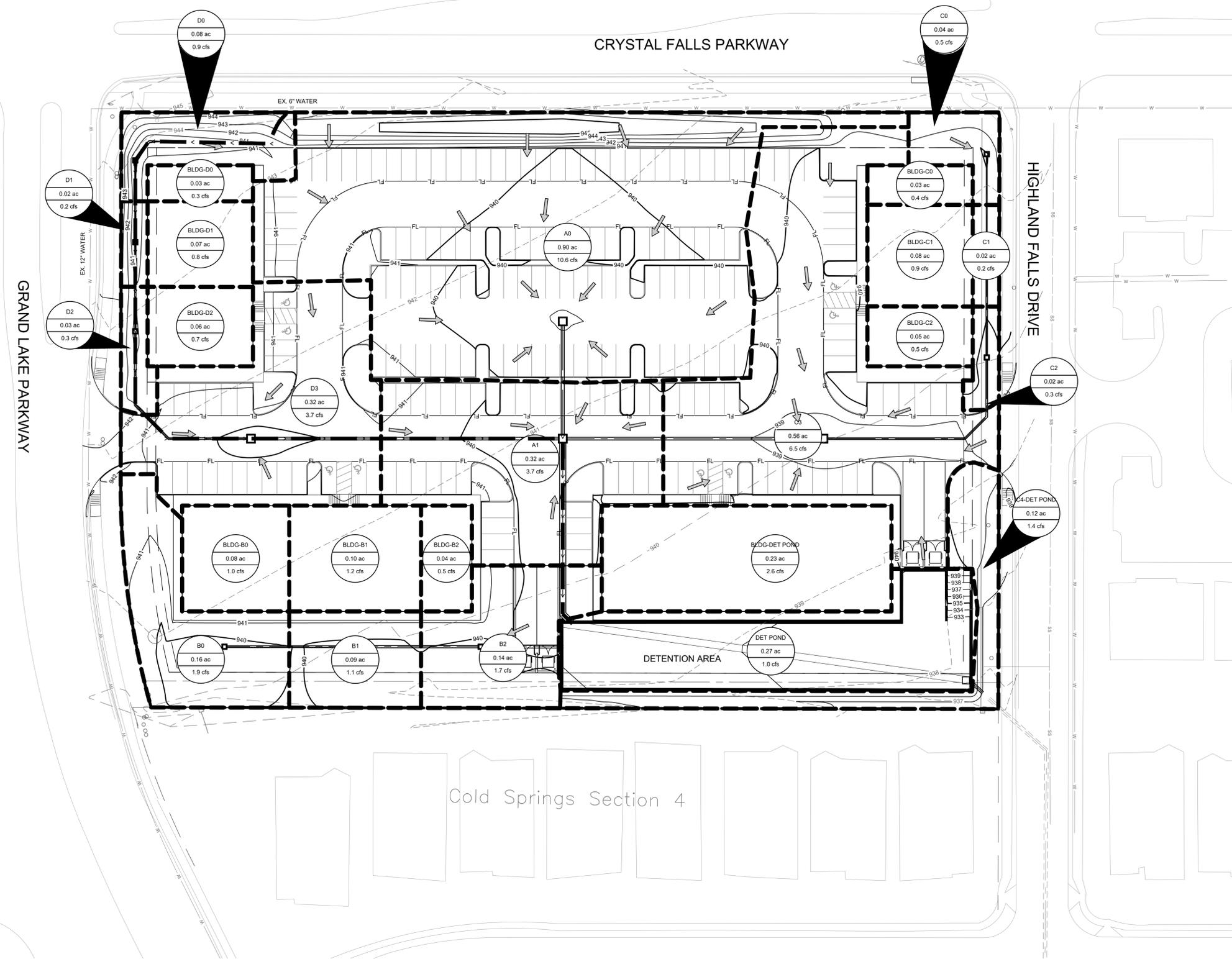
COLD SPRINGS SECTION FOUR
WATER QUALITY DRAINAGE AREA MAP

CENTEX HOMES
A CENTEX COMPANY
12301B RIATA TRACE PKWY., BLDG. 2
AUSTIN, TEXAS 78727

Project No.:
10502.07

PROJECT: 068274404 - 02/06/2023
 SHEET: 11 OF 23
 DATE: 02/06/2023
 TIME: 10:00 AM
 DRAWN BY: KIMLEY-HORN AND ASSOCIATES, INC.
 CHECKED BY: MTD

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Release and improper reliance on this document without written authorization and delineation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



DRAINAGE AREA TABLE						
DRAINAGE AREA NO.	AREA (ac)	RUNOFF COEFFICIENT "C"	TIME OF CONCENTRATION (minutes)	RAINFALL INTENSITY "I"100 (in/hr)	TOTAL FLOW Q100 (cfs)	COLLECTION POINT
A0	0.90	0.98	10	12.00	10.6	GRATE INLET
A1	0.32	0.97	10	12.00	3.7	GRATE INLET
B0	0.16	0.97	10	12.00	1.9	AREA DRAIN
B1	0.09	0.97	10	12.00	1.1	AREA DRAIN
B2	0.14	0.97	10	12.00	1.7	AREA DRAIN
BLDG-B0	0.08	0.97	10	12.00	1.0	AREA DRAIN
BLDG-B1	0.10	0.97	10	12.00	1.2	AREA DRAIN
BLDG-B2	0.04	0.97	10	12.00	0.5	AREA DRAIN
BLDG-C0	0.03	0.97	10	12.00	0.4	AREA DRAIN
BLDG-C1	0.08	0.97	10	12.00	0.9	AREA DRAIN
BLDG-C2	0.05	0.97	10	12.00	0.5	AREA DRAIN
BLDG-D0	0.03	0.97	10	12.00	0.3	AREA DRAIN
BLDG-D1	0.07	0.97	10	12.00	0.8	AREA DRAIN
BLDG-D2	0.06	0.97	10	12.00	0.7	AREA DRAIN
BLDG-DET POND	0.23	0.97	10	12.00	2.6	DET POND
C0	0.04	0.97	10	12.00	0.5	AREA DRAIN
C1	0.02	0.97	10	12.00	0.2	AREA DRAIN
C2	0.02	0.97	10	12.00	0.3	AREA DRAIN
C3	0.56	0.97	10	12.00	6.5	GRATE INLET
C4-DET POND	0.12	0.97	10	12.00	1.4	DET POND
D0	0.08	0.97	10	12.00	0.9	AREA DRAIN
D1	0.02	0.97	10	12.00	0.2	AREA DRAIN
D2	0.03	0.97	10	12.00	0.3	AREA DRAIN
D3	0.32	0.97	10	12.00	3.7	GRATE INLET
DET POND	0.27	0.30	10	12.00	1.0	OUTLET STRUCTURE

Lag Time Summary Table (Post-Project)

TIME OF CONCENTRATION & LAG TIME POST-PROJECT WATERSHED CONDITIONS TR-55 Methodology																								
SHEET FLOW					SHALLOW CONCENTRATED FLOW					OPEN CHANNEL FLOW (PIPE)					TOTAL									
Tc = (0.007(nL)^0.8)/(P^2*0.5)(s^0.4) 2-year/24-hr Rainfall Depth (in.) for 4.06					Tc = L / 60*V					Tc = L / 60*V V = (1.49/n)*R^(2/3)*s^(1/2)														
Basin	Length (ft)	Elev ₁	Elev ₂	Slope (ft/ft)	Manning's "n"	T _{c1} (min)	Length (ft)	Elev ₁	Elev ₂	Slope (ft/ft)	Condition	V _{avg} (ft/s)	T _{c2} (min)	Length (ft)	Manning's "n"	Pipe Dia. (ft)	Area (ft ²)	Perimeter (ft)	Hyd. R (ft)	Slope (ft/ft)	V _{avg} (ft/s)	T _{c3} (min)	T _{cTOTAL} (min)	T _{lag} (min)
DA-A	100	944.1	939.3	0.0482	0.240	8.9	7	939.320	939.190	0.0188	Unpaved	2.20	0.1	499	0.013	1.65534	2.15	5.20	0.41	0.0125	7.11	1.2	10.1	6.1

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

APPROVAL

DATE: _____

REVISIONS: _____

NO. _____

Kimley-Horn

© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
 260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2560 FAX: 972-239-8820
 WWW.KIMLEY-HORN.COM TX F-928

3/30/2023

**THE SHOPS OF
CRYSTAL FALLS**

LEANDER, TEXAS

DRAINAGE AREA MAP

SHEET NUMBER
11 OF 23

COMPUTATION SHEET
HYDRAULIC COMPUTATIONS FOR STORM DRAINS

STORM DRAIN HYDRAULIC CALCULATIONS TABLE

FROM	TO	PIPE LENGTH Feet	DRAINAGE AREA		RUNOFF COEFF.	INCR. MENTAL	TOTAL "CA"	TIME OF CONCENTRATION			25-YEAR INTENSITY (IN/HR)	100-YEAR INTENSITY (IN/HR)	Q25 (CFS)	Q100 (CFS)	INLET BY PASS (CFS)	Q (CFS)	PIPE SIZE (IN)	n	HGL		HEADLOSS CALCULATIONS										DESIGN INVERT ELEV. FROM (FT)	TO (FT)	T/C ELEV. (FT)	COMMENTS
			INCREMENTAL NO.	AREA				TOTAL AREA	"C"	"CA"									INLET (MN)	TRAVEL (MN)	TOTAL (MN)	DS Elev.	US Elev.	V1(IN) f/ft	V2(OUT) f/ft	V1*2/2g (FT)	V2*2/2g (FT)	Kj	Kv1*2/2G (FT)	Hk (FT)				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
LINE A																																		
1+07.27	1+73.79	66.52	A0	0.900	0.900	0.97	0.873	0.873	10.00	0.00	10.00	9.11	12.07	7.95	10.54	0.00	10.54	21	0.010	0.0026	936.12	936.30	0.00	4.38	0.00	0.30	1.25	0.00	0.37	936.67	933.99	935.65	938.90	GRATE INLET
0+07.81	1+07.27	99.46	A1, LAT A1, LAT A2	1.730	2.630	0.97	1.678	2.551	10.00	0.25	10.25	9.02	11.95	15.14	20.06	0.00	30.60	42	0.010	0.0025	935.61	935.85	4.38	5.91	0.30	0.54	0.50	0.15	0.27	936.12	933.74	933.99	938.34	GRATE INLET A1
0+00.00	0+07.81	7.81			2.630	0.97		2.551	10.00	0.53	10.53	8.93	11.83	-	-	0.00	30.18	42	0.010	0.0025	937.11	937.13	5.91	5.83	0.54	0.53	0.35	0.19	0.18	935.61	933.72	933.74	939.80	45° BEND
LINE B																																		
1+19.15	1+92.89	73.74	B0, BLDG-B0	0.240	0.240	0.97	0.233	0.233	10.00	0.00	10.00	9.11	12.07	2.12	2.81	0.00	2.81	12	0.010	0.0037	937.90	938.17	0.00	3.58	0.00	0.20	1.25	0.00	0.25	938.42	935.66	936.04	939.04	AREA DRAIN
0+47.00	1+19.15	72.15	B1, BLDG-B1	0.190	0.430	0.97	0.184	0.417	10.00	0.34	10.34	8.99	11.91	1.66	2.20	0.00	5.01	15	0.010	0.0036	937.52	937.77	3.58	4.08	0.20	0.26	0.50	0.10	0.13	937.90	935.05	935.41	939.34	AREA DRAIN
0+00.00	0+47.00	47.00	B2, BLDG-B2	0.180	0.610	0.97	0.175	0.592	10.00	0.64	10.64	8.89	23.00	1.55	4.02	0.00	9.02	18	0.010	0.0044	937.11	937.32	4.08	5.10	0.26	0.40	0.50	0.13	0.20	937.52	934.56	934.80	939.42	AREA DRAIN
LINE C																																		
0+00.00	0+12.76	12.76	LINE A, LINE B, LAT A1, LAT A2, BLDG-DET POND, DET POND, C4 - DET POND	3.860	3.860	0.97	3.744	3.744	10.00	0.00	10.00	9.11	12.07	7.48	11.47	0.00	11.47	18	0.010	0.0071	933.62	933.71	0.00	6.49	0.00	0.65	1.25	0.00	0.82	934.53	931.62	932.00	938.11	OUTLET STRUCTURE
LAT A1																																		
3+43.69	3+90.15	46.46	D0, BLDG-D0	0.110	0.110	0.97	0.107	0.107	10.00	0.00	10.00	9.11	12.07	0.97	1.29	0.00	1.29	8	0.010	0.0067	938.13	938.44	0.00	3.69	0.00	0.21	1.25	0.00	0.26	938.70	936.77	937.03	939.70	AREA DRAIN
2+93.25	3+43.69	50.44	D1, BLDG-D1	0.090	0.200	0.97	0.087	0.194	10.00	0.21	10.21	9.03	11.97	0.79	1.05	0.00	2.33	10	0.010	0.0067	937.65	937.99	3.69	4.28	0.21	0.28	0.50	0.11	0.14	938.13	936.60	936.88	939.88	AREA DRAIN
2+51.27	2+93.25	41.98	D2, BLDG-D2	0.090	0.290	0.97	0.087	0.281	10.00	0.41	10.41	8.97	11.89	0.78	1.04	0.00	3.37	12	0.010	0.0053	937.28	937.50	4.28	4.29	0.28	0.29	0.50	0.14	0.14	937.65	935.91	936.14	940.64	AREA DRAIN
2+24.50	2+51.27	26.77			0.290	0.97		0.281	10.00	0.57	10.57	8.91	11.82	-	-	0.00	3.32	12	0.010	0.0052	937.04	937.18	4.29	4.23	0.29	0.28	0.35	0.10	0.10	937.28	935.75	935.91	942.01	45° BEND
1+77.58	2+24.50	46.62			0.290	0.97		0.281	10.00	0.67	10.67	8.88	11.77	-	-	0.00	3.31	12	0.010	0.0051	936.70	936.94	4.23	4.22	0.28	0.28	0.35	0.10	0.10	937.04	935.49	935.75	940.50	45° BEND
0+00.00	1+77.58	177.58	D3	0.320	0.610	0.97	0.310	0.592	10.00	0.86	10.86	8.82	11.69	2.74	3.63	0.00	6.94	18	0.010	0.0026	936.12	936.58	4.22	3.93	0.28	0.24	0.50	0.14	0.12	936.70	933.97	934.99	939.65	GRATE INLET
LAT A2																																		
3+37.92	3+95.56	57.64	C0, BLDG-C0	0.070	0.070	0.97	0.068	0.068	10.00	0.00	10.00	9.11	12.07	0.62	0.82	0.00	0.82	6	0.010	0.0126	938.12	938.85	0.00	4.17	0.00	0.27	1.25	0.00	0.34	939.19	937.46	937.88	940.21	AREA DRAIN
2+80.29	3+37.92	57.63	C1, BLDG-C1	0.100	0.170	0.97	0.097	0.165	10.00	0.23	10.23	9.03	11.97	0.88	1.16	0.00	1.98	10	0.010	0.0048	937.74	938.02	4.17	3.63	0.27	0.20	0.50	0.14	0.10	938.12	936.71	937.13	939.88	AREA DRAIN
2+46.66	2+80.29	33.63	C2, BLDG-C2	0.070	0.240	0.97	0.068	0.233	10.00	0.49	10.49	8.94	11.85	0.61	0.80	0.00	2.78	12	0.010	0.0036	937.52	937.64	3.63	3.55	0.20	0.20	0.50	0.10	0.10	937.74	936.29	936.54	939.01	AREA DRAIN
2+29.06	2+46.66	17.60			0.240	0.97		0.233	10.00	0.65	10.65	8.89	11.78	-	-	0.00	2.74	12	0.010	0.0035	937.36	937.42	3.55	3.49	0.20	0.19	0.35	0.07	0.10	937.52	936.16	936.29	939.34	45° BEND
1+48.52	2+29.06	80.54			0.240	0.97		0.233	10.00	0.74	10.74	8.86	11.74	-	-	0.00	2.73	12	0.010	0.0035	936.98	937.26	3.49	3.48	0.19	0.19	0.35	0.07	0.10	937.36	935.58	936.16	939.00	45° BEND
0+00.00	1+48.52	148.52	C3	0.560	0.800	0.97	0.543	0.776	10.00	1.12	11.12	8.74	11.58	4.75	6.29	0.00	9.03	18	0.010	0.0044	936.12	936.77	3.48	5.11	0.19	0.41	0.50	0.09	0.20	936.98	933.99	935.08	938.34	GRATE INLET

On: 02/06/2023 10:23 AM
 User: KIMLEY-HORN AND ASSOCIATES, INC.
 Project: THE SHOPS OF CRYSTAL FALLS
 Drawing: DRAINAGE CALCULATIONS
 The document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

NO.	REVISIONS	DATE	BY


 © 2023 KIMLEY-HORN AND ASSOCIATES, INC.
 260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-1266 FAX: 972-239-8320
 WWW.KIMLEY-HORN.COM TX F-928


 MICHAEL T. DOGGETT
 LICENSED PROFESSIONAL ENGINEER
 3/30/2023

KHA PROJECT	069274404
DATE	02/06/2023
SCALE	AS SHOWN
DESIGNED BY	MTD
DRAWN BY	GAL
CHECKED BY	MTD


 THE SHOPS OF
 CRYSTAL FALLS
 LEANDER, TEXAS

DRAINAGE
 CALCULATIONS
 SHEET NUMBER
12 OF 23

11/15/2023 10:58 AM
 3/20/23 2:29 PM
 KIMBLEY-HORN AND ASSOCIATES, INC.
 2610 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2560 FAX: 972-239-3820
 WWW.KIMBLEY-HORN.COM TX F-928

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Release of and improper reliance on this document without written authorization and delineation by Kimbley-Horn and Associates, Inc. shall be without liability to Kimbley-Horn and Associates, Inc.

GRAND LAKE PARKWAY

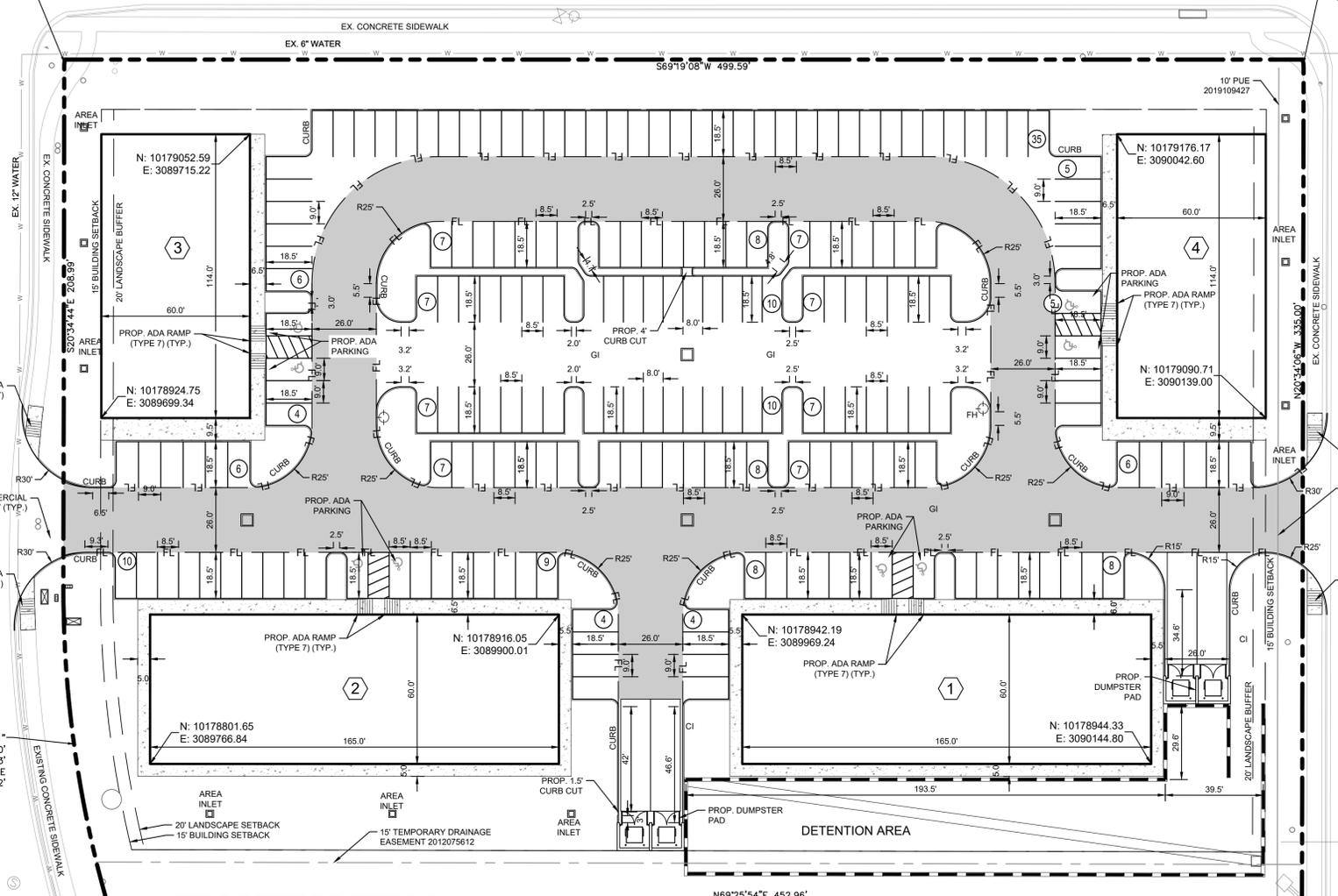
CRYSTAL FALLS PARKWAY

HIGHLAND FALLS DRIVE

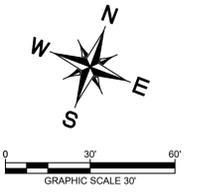
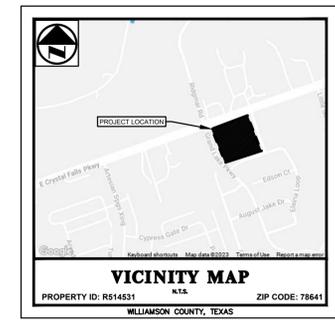
$\Delta=91^{\circ}0'38"$
 $R=15.00'$
 $L=2.40'$
 $CB=S15^{\circ}58'36"E$
 $C=2.40'$

$\Delta=12^{\circ}59'48"$
 $R=15.00'$
 $L=3.40'$
 $CB=N27^{\circ}04'31"W$
 $C=3.40'$

$\Delta=15^{\circ}53'51"$
 $R=460.00'$
 $L=127.63'$
 $CB=S28^{\circ}29'57"E$
 $C=127.22'$



Cold Springs Section 4



LEGEND

- FL PROPOSED FIRE LANE
- FL PROP. SIDEWALK
- PROPOSED BUILDING
- PROPOSED CONTOUR - MAJOR
- PROPOSED CONTOUR - MINOR
- EXISTING CONTOUR - MAJOR
- EXISTING CONTOUR - MINOR
- BARRIER FREE RAMP (BFR)
- ACCESSIBLE PARKING SYMBOL
- NUMBER OF PARKING SPACES
- WATER METER (AND VAULT)
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECTION
- SANITARY SEWER MANHOLE
- TRANSFORMER PAD
- CURB INLET
- GRATE INLET
- JUNCTION BOX OR WYE INLET
- HEADWALL
- TYPICAL
- SSE SANITARY SEWER EASEMENT
- WE WATER EASEMENT
- DE DRAINAGE EASEMENT
- BFR BARRIER FREE RAMP
- SW SIDEWALK
- BL BUILDING LINE/SETBACK
- CI CURB INLET
- GI GRATE INLET
- WI WYE INLET
- JB JUNCTION BOX
- MH MANHOLE
- EX EXISTING
- PROP. PROPOSED

- NOTES:
- ALL SITE UTILITY LINES ARE PROPOSED TO BE LOCATED UNDERGROUND.
 - EXTERIOR LIGHTING SHALL BE SHIELDED SUCH THAT THE LIGHT SOURCE IS NOT DIRECTLY VISIBLE FROM THE PUBLIC ROW OR ADJACENT RESIDENTIAL DISTRICTS OR USES AT THE PROPERTY LINE. UNSHIELDED "WALL PACK" LIGHTING IS NOT PROPOSED.
 - AL CLAWSON DISPOSAL, INC. SHALL BE THE SOLE PROVIDER OF WASTE HAULING FOR THIS SITE AFTER CONSTRUCTION.
 - AIR CONDITIONING UNITS ARE NOT PROPOSED FORWARD THE FRONT WALL OF THE BUILDING.
 - GARBAGE DUMPSTERS ARE LOCATED NO CLOSER TO A ROADWAY THAN THE FRONT WALL OF THE PRINCIPAL STRUCTURE LOCATED CLOSEST TO THE ROADWAY. GARBAGE DUMPSTERS ARE SCREENED BY A WALL COMPRISED OF MASONRY COMPATIBLE WITH THE STRUCTURE (OR WOODCORE) AT LEAST AS HIGH AS THE CONTAINER. THE OPEN SIDE TO THE DUMPSTER OR OTHER TRASH RECEPTACLE IS A GATE CONSTRUCTED OF SOLID WOOD OR METAL. THE DUMPSTER IS ORIENTED FOR PICKUP BY A FRONT LOAD GARBAGE TRUCK.
 - FOR 90 GALLON ROLL OUT CONTAINER STORED OUTSIDE, IT IS REQUIRED TO BE ENCLOSED BY PRIVACY FENCE.
 - FIRE LANE STRIPING: FIRE APPARATUS ACCESS ROADS SHALL BE CONTINUOUSLY MARKED BY PAINTED LINES OF RED TRAFFIC PAINT SIX INCHES (6") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE. THE WORDS "FIRE LANE TOW AWAY ZONE" OR "FIRE ZONE TOW AWAY ZONE" SHALL APPEAR IN FOUR INCH (4") WHITE LETTERS AT 25 FEET INTERVALS OR LESS, ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANES. WHERE A CURB IS AVAILABLE, THE STRIPING SHALL BE ON THE VERTICAL FACE OF THE CURB.
 - FIRE LANE SIGNS: SIGNS SHALL READ "FIRE LANE TOW AWAY ZONE" OR "FIRE TOW AWAY ZONE" AND SHALL BE 12" WIDE AND 18" HIGH. SIGNS SHALL BE PAINTED ON A WHITE BACKGROUND WITH LETTERS AND BORDERS IN RED, USING NOT LESS THAN 2" LETTERING. SIGNS SHALL BE PERMANENTLY AFFIXED TO A STATIONARY POST AND THE BOTTOM OF THE SIGN SHALL BE SIX FEET, SIX INCHES (6'6") ABOVE FINISHED GRADE. SIGNS SHALL BE SPACED NOT MORE THAN THIRTY-FIVE FEET (35') APART. SIGNS MAY BE INSTALLED ON PERMANENT BUILDINGS OR WALLS OR AS APPROVED BY THE FIRE CODE OFFICIAL.
 - ALL PROPERTIES THAT HAVE FRONTAGE ONTO AN ARTERIAL STREET ARE REQUIRED TO COMPLY WITH THE TxDOT ACCESS POINT SPACING STANDARDS.
 - PROPERTIES ZONED WITH AN LC USE HAVE LIMITED HOURS OF OPERATION FOR THE GENERAL PUBLIC TO BETWEEN 5:00 AM AND 10:00 PM, SUNDAY THROUGH THURSDAY, AND 5:00 AM TO 11:00 PM FRI. AND SAT.
 - FOR COMMERCIAL PROJECTS, HANDICAP PARKING SPACES ARE PROVIDED AT A RATIO OF NOT LESS THAN ONE HANDICAP SPACE FOR EVERY 25 PARKING SPACES FOR THE FIRST 100 PARKING SPACES PLUS ONE HANDICAP PARKING SPACE FOR EVERY 50 PARKING SPACES FOR THE SECOND 100 PARKING SPACES PLUS ONE HANDICAP SPACE FOR EVERY 100 PARKING SPACES FOR THE NEXT 500 PARKING SPACES; OR 2% OF THE TOTAL FOR 501 TO 1,000 PARKING SPACES; OR 20 HANDICAP PARKING SPACES PLUS ONE FOR EACH 100 OVER 1,000 FOR PARKING AREAS HAVING MORE THAN 1,000 PARKING SPACES. ONE OUT OF EVERY 8 HANDICAP PARKING SPACES IS REQUIRED TO BE VAN ACCESSIBLE AND AT LEAST ONE VAN ACCESSIBLE HANDICAP SPACE IS REQUIRED [A VAN ACCESSIBLE SPACE HAS AN 8-FOOT WIDE AISLE INSTEAD OF A 5-FOOT WIDE AISLE]. HANDICAP PARKING SPACES ARE IDENTIFIED BY A SIGN WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
 - ALL RADII ARE ASSUMED TO BE 2' UNLESS OTHERWISE NOTED.

SITE DATA SUMMARY TABLE

LOT AREA	3,863 AC
ZONING	LC
GROSS BUILDING FOOTPRINT AREA	33,480 SF
IMPERVIOUS COVER PROPOSED	78.60%

BUILDING No.	1	2	3	4	Totals
BUILDING HEIGHT (FT)	32	32	32	32	
PROPOSED USES	RET/REST	RET/REST	RET/REST	RET/REST	
BUILDING AREA BY USE:					
- RETAIL (SF)	7171	7171	4954	4954	24250
- PARKING REQUIRED (RET 1/225)	31.9	31.9	22.0	22.0	107.8
- RESTAURANT (SF)	2729	2729	1886	1886	9230
- PARKING REQUIRED (REST 1/100)	27.29	27.29	18.86	18.86	92.3
TOTAL BUILDING AREA (SF)	9900	9900	6840	6840	33480
TOTAL PARKING REQUIRED PER BUILDING	60	60	41	41	202
TOTAL PARKING REQUIRED FOR SITE	202				
TOTAL PARKING PROVIDED	202				
TOTAL ADA PARKING REQUIRED	7				
TOTAL ADA PARKING PROVIDED	8				
TOTAL STANDARD PARKING PROVIDED	174				
TOTAL COMPACT PARKING PROVIDED	20				



APPROVAL

Kimbley-Horn
 2023 KIMBLEY-HORN AND ASSOCIATES, INC.
 2610 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2560 FAX: 972-239-3820
 WWW.KIMBLEY-HORN.COM TX F-928



KHA PROJECT	069274404
DATE	02/06/2023
SCALE	AS SHOWN
DESIGNED BY	MTD
DRAWN BY	GAL
CHECKED BY	MTD

THE SHOPS OF
 CRYSTAL FALLS
 LEANDER, TEXAS



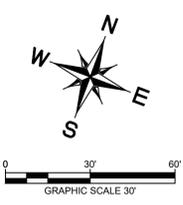
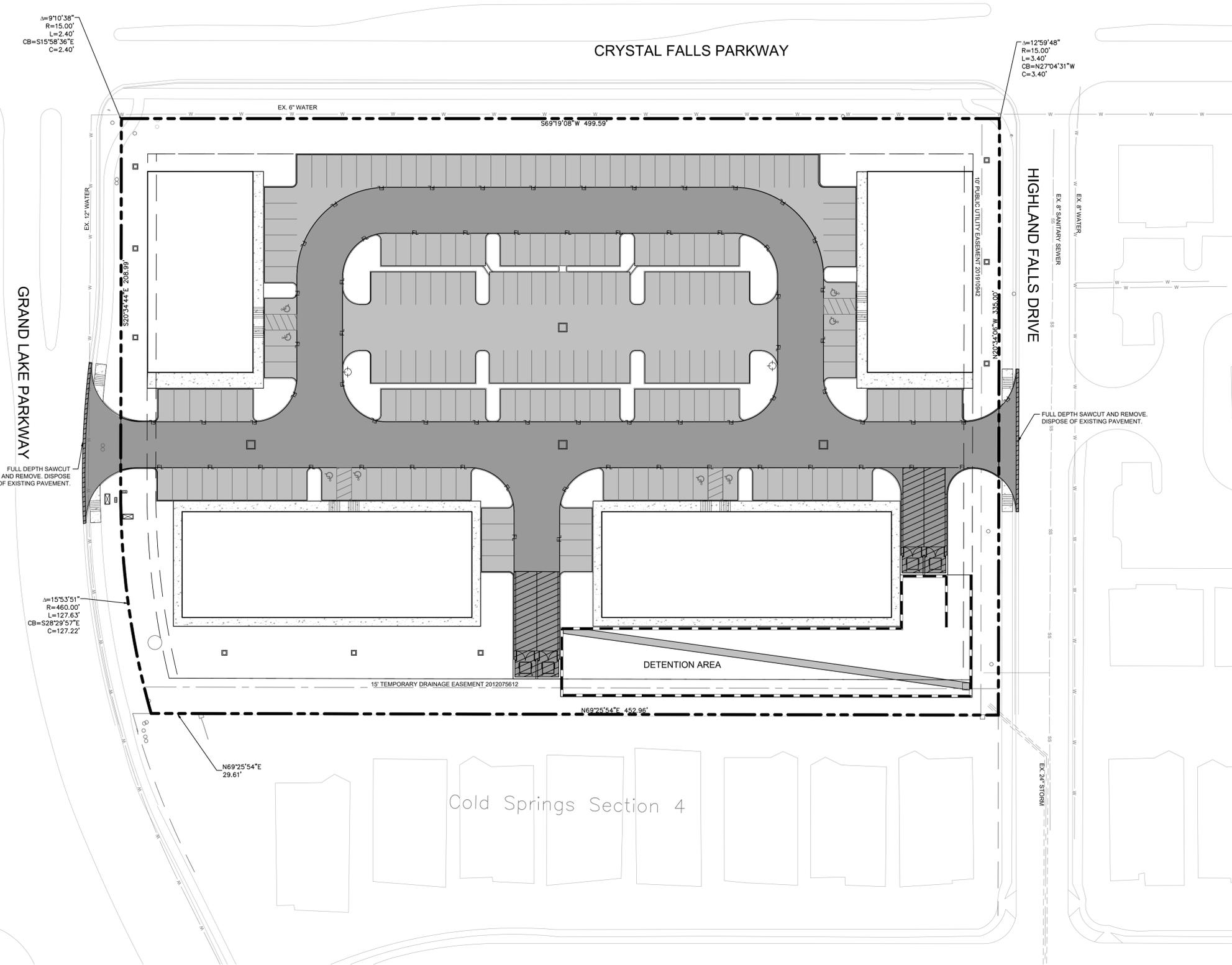
SITE PLAN

SHEET NUMBER
 13 OF 23

NO.	REVISIONS	DATE

SHEET NO. 14 OF 23
 DATE: 02/06/2023
 PROJECT: THE SHOPS OF CRYSTAL FALLS
 DRAWN BY: MTD
 CHECKED BY: MTD
 SCALE: AS SHOWN
 DATE: 02/06/2023
 PROJECT: 069274404
 KHA PROJECT
 069274404
 DATE: 02/06/2023
 SCALE: AS SHOWN
 DESIGNED BY: MTD
 DRAWN BY: MTD
 CHECKED BY: MTD

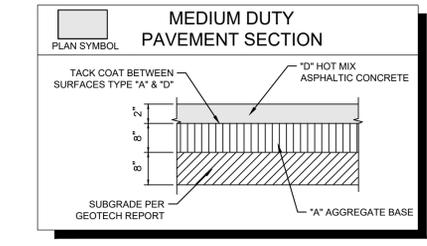
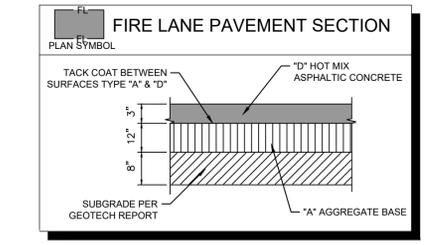
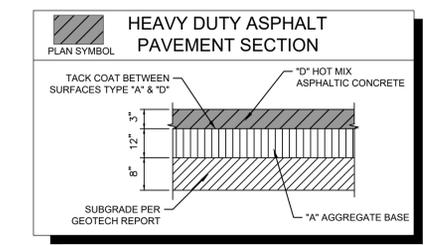
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and delineation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

	PROPOSED SIDEWALK		HANDICAP ACCESSIBLE PARKING SYMBOL
	TYPICAL		SANITARY SEWER EASEMENT
	PROPOSED FIRE LANE PAVEMENT		WATER EASEMENT
	PROPOSED HEAVY DUTY PAVEMENT		DRAINAGE EASEMENT
	PROPOSED MEDIUM DUTY PAVEMENT		BARRIER FREE RAMP
	PROPOSED BUILDING		SIDEWALK
	ADA CROSSWALK		BUILDING LINE/SETBACK
			CURB INLET
			GRATE INLET
			WYE INLET
			JUNCTION BOX
			MANHOLE
			EXISTING
			PROPOSED
			BARRIER FREE RAMP SYMBOL (REF TxDOT DETAILS)

REFER TO GEOTECH REPORT NO. A231006 BY TERRADYNE, DATED 02/13/2023. *CRUSHED CONCRETE CANNOT BE USED AS FLEXBASE



APPROVAL

DATE

REVISIONS

No.

BY

DATE

Kimley»Horn

© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
 260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2660 FAX: 972-239-9320
 WWW.KIMLEY-HORN.COM TX F-928

MICHAEL T. DOGGETT
 3/30/2023

THE SHOPS OF CRYSTAL FALLS
 LEANDER, TEXAS

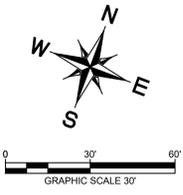
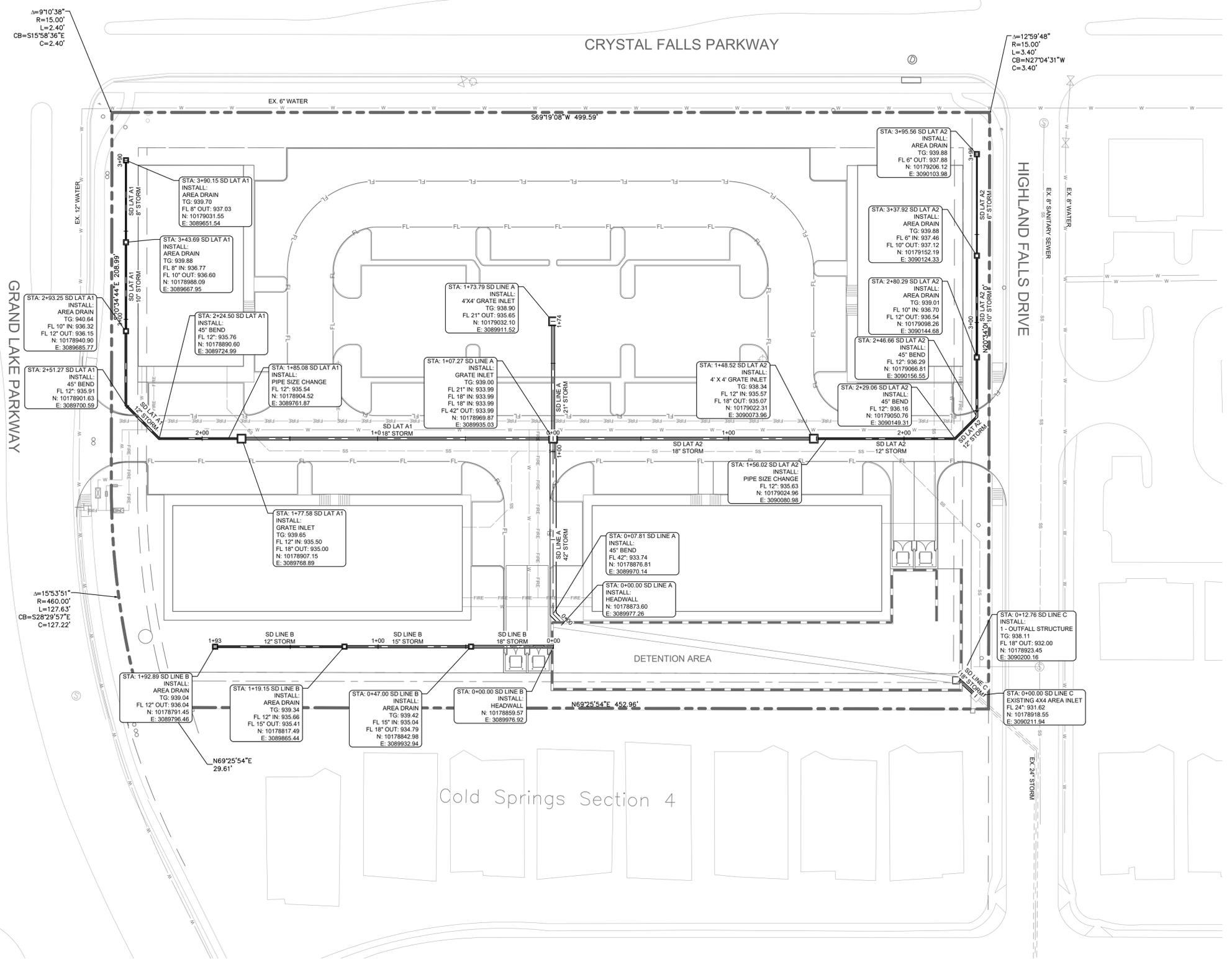
CITY OF LEANDER
 STATE OF TEXAS

PAVING PLAN

SHEET NUMBER
14 OF 23

PROJECT: 069274404 - 02/06/2023
 SHEET: 16 OF 23
 DATE: 02/06/2023
 TIME: 10:00 AM
 DRAWN BY: MTD
 CHECKED BY: MTD
 SCALE: AS SHOWN

This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and permission by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

	PROPOSED STORM LINE
	PROPOSED SANITARY SEWER LINE
	PROPOSED WATER LINE
	EXISTING SANITARY SEWER LINE
	EXISTING WATER LINE
	EXISTING STORM LINE
	PROPOSED CURB INLET
	PROPOSED GRATE INLET
	PROPOSED JUNCTION BOX OR WYE INLET
	PROPOSED HEADWALL

*REFERENCE STRUCTURE LABELS FOR DETAILS

NO.	REVISIONS	DATE	BY

Kimley»Horn
 2023 KIMLEY-HORN AND ASSOCIATES, INC.
 260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2560 FAX: 972-239-9820
 WWW.KIMLEY-HORN.COM TX F-928

Michael T. Doggett
 MICHAEL T. DOGGETT
 LICENSED PROFESSIONAL ENGINEER
 3/30/2023

KHA PROJECT	DATE	SCALE	DESIGNED BY	DRAWN BY	CHECKED BY
069274404	02/06/2023	AS SHOWN	MTD	MTD	MTD

THE SHOPS OF CRYSTAL FALLS
 LEANDER, TEXAS

CITY OF LEANDER
 STATE OF TEXAS

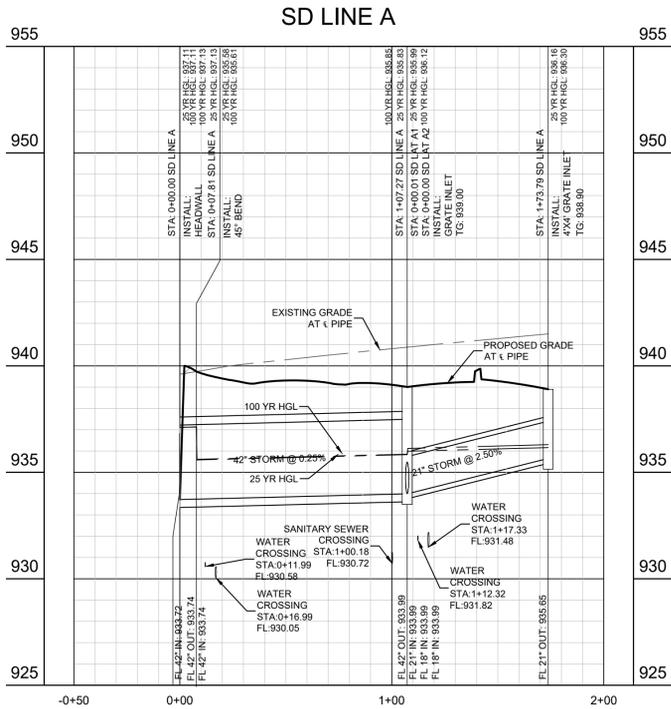


Know what's below.
 Call before you dig.

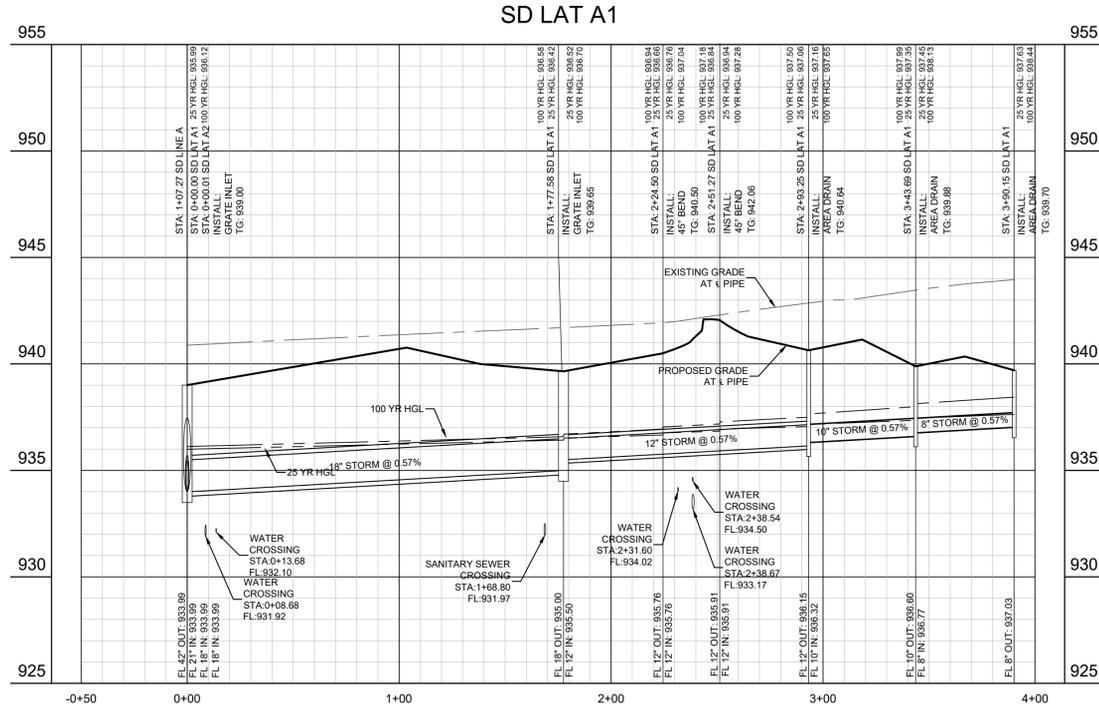
APPROVAL

STORM PLAN

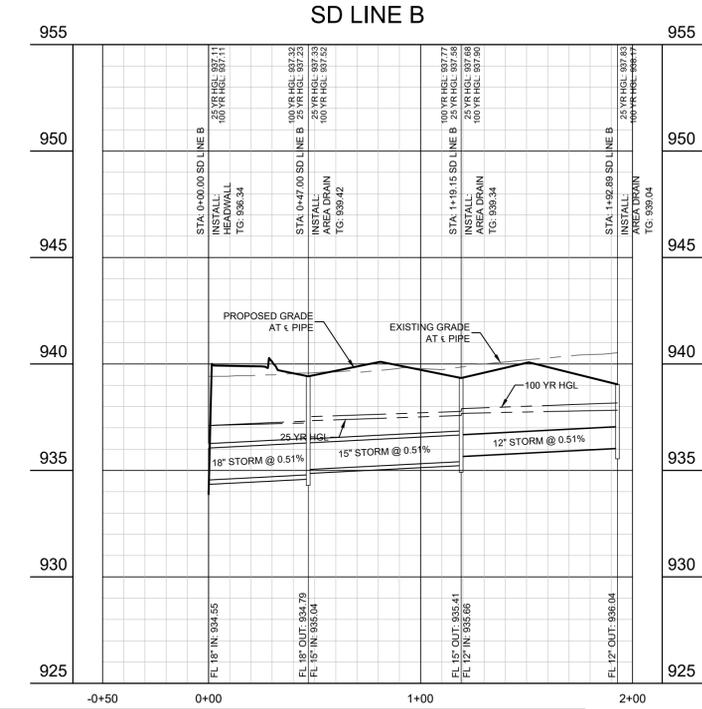
SHEET NUMBER
16 OF 23



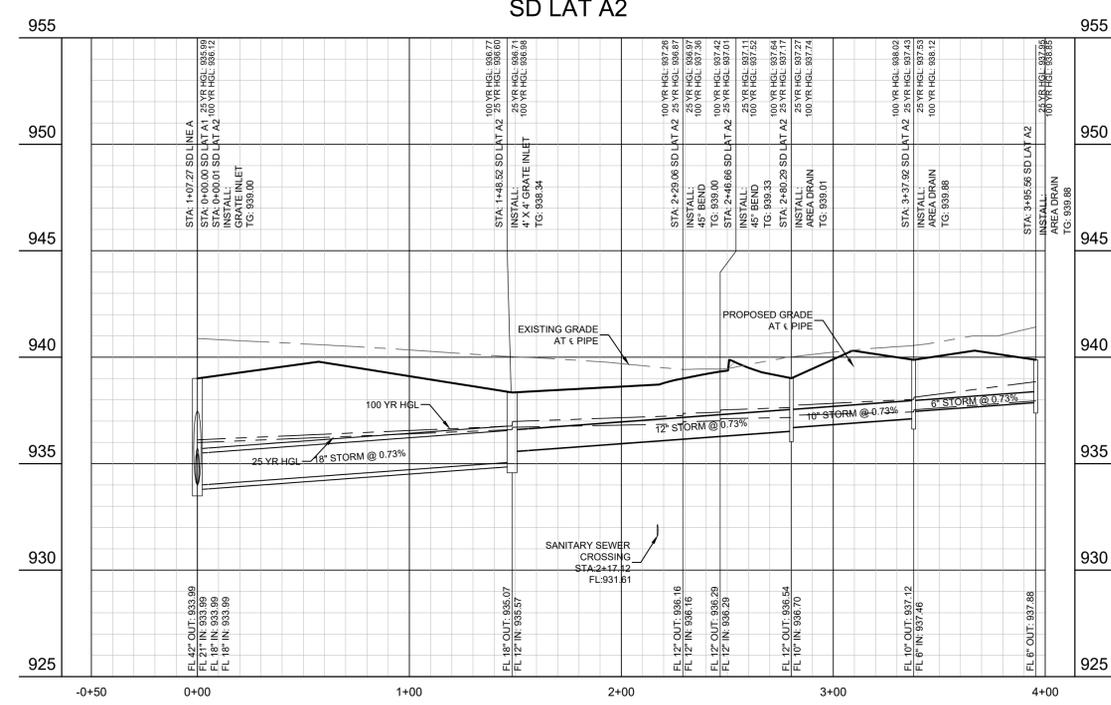
0+00.00	0+07.81	0+07.81	1+07.27	1+07.27	1+73.79
Q100=	30.18	30.60	10.54	10.54	10.54
Qcap=	65.40	65.40	32.57	32.57	32.57
Vp=	6.83	5.91	4.38	4.38	4.38
sf=	0.003	0.003	0.003	0.003	0.003
n=	0.010	0.010	0.010	0.010	0.010



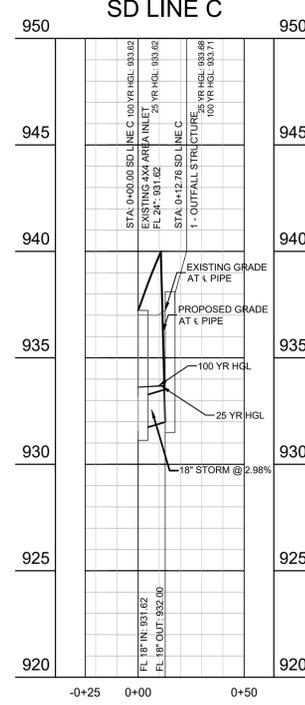
0+00.00	0+00.00	0+00.00	1+77.58	1+77.58	2+24.50	2+24.50	2+51.27	2+51.27	2+93.25	2+93.25	3+43.69	3+43.69	3+90.15
Q100=	-	6.94	10.31	10.31	3.31	3.31	3.30	3.30	3.37	3.37	2.33	2.33	1.29
Qcap=	#VALUE!	3.93	3.93	3.93	4.22	4.22	4.23	4.23	4.29	4.29	4.28	4.28	3.69
Vp=	-	3.93	3.93	3.93	4.22	4.22	4.23	4.23	4.29	4.29	4.28	4.28	3.69
sf=	-	0.003	0.003	0.003	0.005	0.005	0.005	0.005	0.007	0.007	0.007	0.007	0.004
n=	-	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010



0+00.00	0+47.00	0+47.00	1+19.15	1+19.15	1+92.89
Q100=	9.02	9.02	5.01	5.01	2.81
Qcap=	9.75	9.75	6.00	6.00	3.31
Vp=	5.10	5.10	4.08	4.08	3.58
sf=	0.004	0.004	0.004	0.004	0.004
n=	0.010	0.010	0.010	0.010	0.010



0+00.00	0+00.00	0+00.00	1+48.52	1+48.52	2+29.06	2+29.06	2+46.66	2+46.66	2+80.29	2+80.29	3+37.92	3+37.92	3+95.56
Q100=	-	9.03	11.67	11.67	2.74	2.74	3.96	3.96	2.78	2.78	1.98	1.98	0.82
Qcap=	-	6.11	6.11	6.11	3.48	3.48	3.55	3.55	4.17	4.17	3.33	3.33	4.17
Vp=	-	5.11	5.11	5.11	3.48	3.48	3.55	3.55	4.17	4.17	3.33	3.33	4.17
sf=	-	0.004	0.004	0.004	0.003	0.003	0.004	0.004	0.005	0.005	0.013	0.013	0.010
n=	-	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010



0+00.00	0+12.76
Q100=	11.47
Qcap=	23.57
Vp=	6.49
sf=	0.007
n=	0.010

PROFILE SCALE
1" = 40' HORIZONTAL
1" = 4' VERTICAL

FILL TO BE COMPACTED TO 95% STD PROCTOR DENSITY OR PER GEOTECH RECOMMENDATION

This document, together with the concepts and design presented herein, is intended only for the specific purpose and client for which it was prepared. Release of and improper reliance on this document without written authorization and delineation by Kimley-Horn and Associates, Inc. shall be held liable to Kimley-Horn and Associates, Inc.

KHA PROJECT	069274404
DATE	02/06/2023
SCALE	AS SHOWN
DESIGNED BY	MTD
DRAWN BY	GAL
CHECKED BY	MTD

THE SHOPS OF
CRYSTAL FALLS
LEANDER, TEXAS



STORM PROFILES

SLOT OPENING DETAILS				
Area (ft ²)	A1	A2	A3	A4
Width (ft)	0.39	0.41	0.55	0.44
Height (ft)	0.50	0.50	0.25	0.50

ORIFICE FLOW DISCHARGE RATE						
100 YR	25 YR	10 YR	2 YR	Q _{A1-W51}	Q _{A1-W52}	Q _{A1-W53}
Orifice Flow Discharge (cfs)				3.10	5.20	7.48
Q _{total} (cfs)				3.10	5.20	7.48

	OUTLET STRUCTURE DETAILS			
	STM Event 1	STM Event 2	STM Event 3	STM Event 4
WTR Surface Elev.	934.94	935.84	936.29	937.11
Elevation Difference	2.94	0.90	0.46	0.82
Q _{MAXALLOWABLE} (cfs)	3.1	5.2	7.48	11.47
100 YR H _{effective} (ft)				H _{A4-W54} 0.57
25 YR H _{effective} (ft)				H _{A3-W54} 1.15
10 YR H _{effective} (ft)				H _{A2-W54} 1.92
2 YR H _{effective} (ft)				H _{A1-W54} 4.86

LEGEND

- PROPOSED STORM LINE
- EXISTING STORM LINE
- PROPOSED CURB INLET
- PROPOSED GRATE INLET
- PROPOSED JUNCTION BOX OR WYE INLET
- PROPOSED HEADWALL
- PROPOSED VARIABLE HEIGHT RETAINING WALL
- PROPOSED CONTOURS
- EXISTING CONTOURS
- FLOW PATH

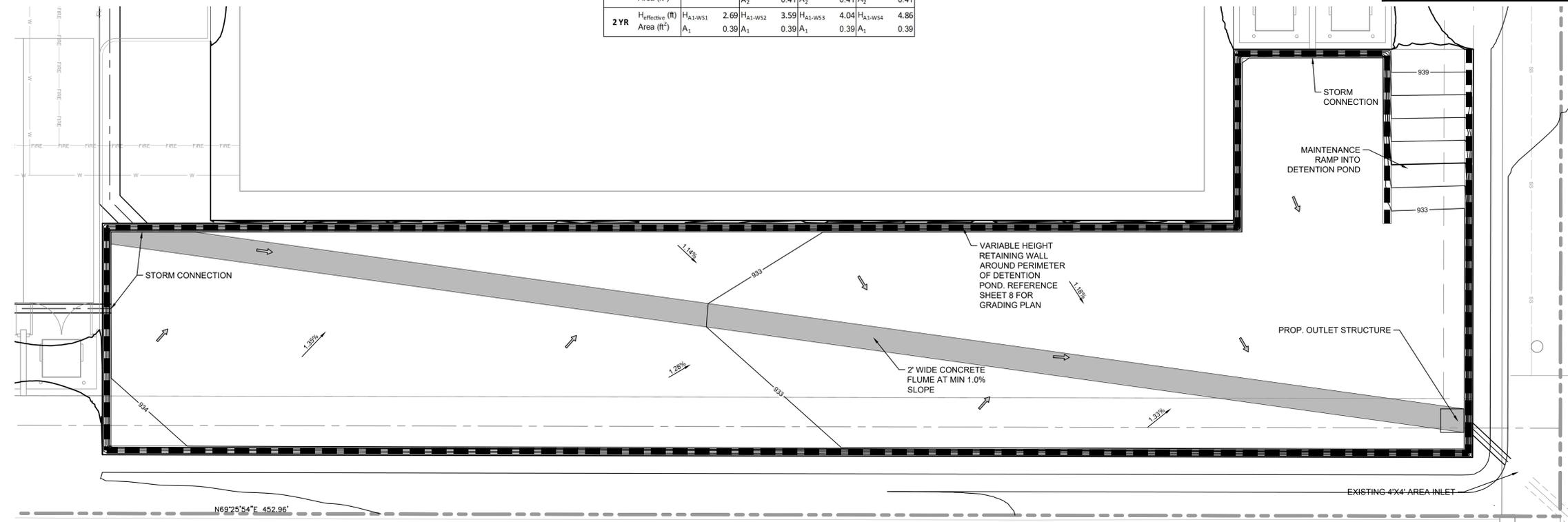
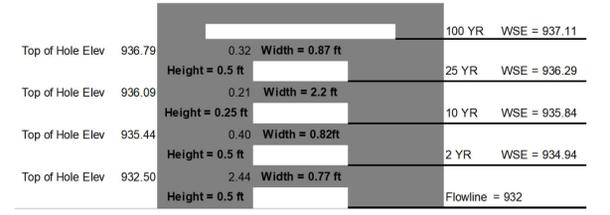
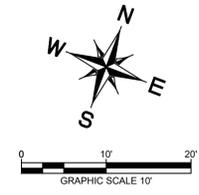


Table	Storm Event	Q _{max}	WSE	STORAGE (cu-ft)	STORAGE (ac-ft)
1	100	11.47	937.11	40,007	0.92
2	25	7.48	936.29	31,921	0.73
3	10	5.20	935.84	27,421	0.63
4	2	3.10	934.94	18,742	0.43

Select County: **WILLIAMSON**
 Enter C Value: **0.97**
 Enter Total Area: **3.860**
 Starting Flow Line: **932.00**
 Number of Storm Events: **4**

Allowable Release Summary						
Condition	A (ac)	T _c (min)	C	Q ₂ (cfs)	Q ₁₀ (cfs)	Q ₁₀₀ (cfs)
EX-A	3.860	20.00	0.36	3.10	5.20	11.47
Allowable Release				3.10	5.20	7.48

DETENTION POND CALCULATIONS Table 1									
MIN	I-100YR	C	TOTAL AREA (ac)	Storm Event			iSWM Rainfall Data		
				100 Year	Existing Flow Rate	11.47 cfs	b	c	d
5	15.00	0.97	3.860	56.16	16848	3441	13407	106.00	9.460
10	12.07	0.97	3.860	45.19	27112	6882	20230	0.7320	0.7320
15	10.21	0.97	3.860	38.22	34400	8603	25797		
20	8.91	0.97	3.860	33.36	40028	10323	29705		
30	7.19	0.97	3.860	26.93	48479	13764	34715		
40	6.10	0.97	3.860	22.83	54788	17205	37583		
50	5.33	0.97	3.860	19.95	59849	20646	39203		
60	4.76	0.97	3.860	17.80	64094	24087	40007		
120	3.01	0.97	3.860	11.29	81267	44733	36534		
180	2.28	0.97	3.860	8.54	92246	65379	26867		
360	1.40	0.97	3.860	5.24	113151	127317	-14166		
720	0.85	0.97	3.860	3.18	137541	251193	-113652		
1440	0.51	0.97	3.860	1.93	169409	499945	-332336		
				Detention Storage Required (cubic feet) =	40,007				
				Detention Storage Required (acre feet) =	0.92				
				100 Year Water Surface Elevation =	937.11				

DETENTION POND CALCULATIONS Table 2									
MIN	I-25YR	C	TOTAL AREA (ac)	Storm Event			iSWM Rainfall Data		
				25 Year	Existing Flow Rate	7.48 cfs	b	c	d
5	11.30	0.97	3.860	42.33	12698	2244	10454	89.00	0.7590
10	9.11	0.97	3.860	34.09	20455	4488	15967		
15	7.70	0.97	3.860	28.81	25933	5610	20323		
20	6.71	0.97	3.860	25.11	30133	6732	23401		
30	5.40	0.97	3.860	20.21	36370	8976	27394		
40	4.56	0.97	3.860	17.07	40963	11220	29743		
50	3.97	0.97	3.860	14.87	44604	13464	31140		
60	3.53	0.97	3.860	13.23	47629	15708	31921		
120	2.21	0.97	3.860	8.28	59593	29172	30421		
180	1.66	0.97	3.860	6.21	67038	42636	24402		
360	1.00	0.97	3.860	3.74	80871	83028	-2157		
720	0.60	0.97	3.860	2.24	96583	163812	-67229		
1440	0.35	0.97	3.860	1.33	114749	325380	-210631		
				Detention Storage Required (cubic feet) =	31,921				
				Detention Storage Required (acre feet) =	0.73				
				25 Year Water Surface Elevation =	936.29				

DETENTION POND CALCULATIONS Table 3									
MIN	I-10YR	C	TOTAL AREA (ac)	Storm Event			iSWM Rainfall Data		
				10 Year	Existing Flow Rate	5.2 cfs	b	c	d
5	9.19	0.97	3.860	34.41	10323	1560	8763	77.000	11.270
10	7.40	0.97	3.860	27.72	16630	3120	13510	0.7750	0.8050
15	6.25	0.97	3.860	23.41	21068	3900	17168		
20	5.44	0.97	3.860	20.38	24455	4680	19775		
30	4.37	0.97	3.860	16.36	29451	6240	23211		
40	3.68	0.97	3.860	13.79	33099	7800	25299		
50	3.20	0.97	3.860	11.99	35970	9360	26610		
60	2.84	0.97	3.860	10.65	38341	10920	27421		
120	1.77	0.97	3.860	6.61	47589	20280	27309		
180	1.32	0.97	3.860	4.93	53248	29640	23608		
360	0.79	0.97	3.860	2.94	63601	57720	5981		
720	0.46	0.97	3.860	1.74	75165	113880	-38715		
1440	0.27	0.97	3.860	1.02	88345	226200	-137855		
				Detention Storage Required (cubic feet) =	27,421				
				Detention Storage Required (acre feet) =	0.63				
				10 Year Water Surface Elevation =	935.84				

DETENTION POND CALCULATIONS Table 4									
MIN	I-2YR	C	TOTAL AREA (ac)	Storm Event			iSWM Rainfall Data		
				2 Year	Existing Flow Rate	3.1 cfs	b	c	d
5	6.14	0.97	3.860	22.99	6898	930	5968	58.000	11.270
10	4.95	0.97	3.860	18.53	11120	1860	9260	0.8050	0.8050
15	4.18	0.97	3.860	15.64	14072	2325	11747		
20	3.63	0.97	3.860	13.59	16308	2790	13518		
30	2.90	0.97	3.860	10.87	19565	3720	15845		
40	2.44	0.97	3.860	9.13	21906	4650	17256		
50	2.11	0.97	3.860	7.91	23723	5580	18143		
60	1.87	0.97	3.860	7.00	25206	6510	18696		
120	1.14	0.97	3.860	4.28	30832	12090	18742		
180	0.84	0.97	3.860	3.16	34157	17670	16467		
360	0.50	0.97	3.860	1.86	40053	34410	5643		
720	0.29	0.97	3.860	1.07	46418	67890	-21472		
1440	0.17	0.97	3.860	0.62	53468	134850	-81382		
				Detention Storage Required (cubic feet) =	18,742				
				Detention Storage Required (acre feet) =	0.43				
				2 Year Water Surface Elevation =	934.94				

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

APPROVAL

Kimley»Horn
 © 2023 KIMLEY-HORN AND ASSOCIATES, INC.
 260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
 PHONE: 469-301-2560 FAX: 972-239-8320
 WWW.KIMLEY-HORN.COM TX F-928

Michael T. Doggett
 LICENSED PROFESSIONAL ENGINEER
 3/30/2023

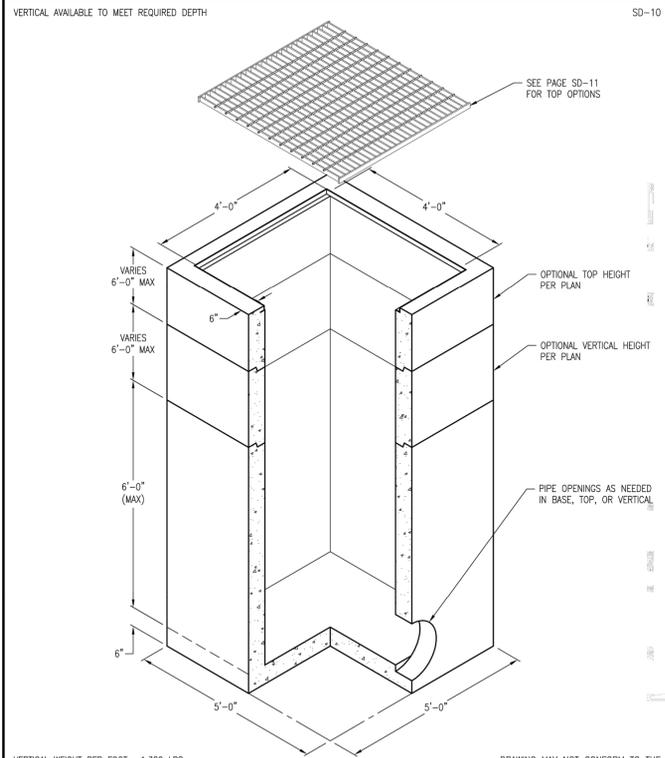
THE SHOPS OF
 CRYSTAL FALLS
 LEANDER, TEXAS



DETENTION POND PLAN

PROJECT: 20230227_Kimley-Horn-811-Plan-01.dwg
 DATE: 02/06/2023
 TIME: 10:00 AM
 USER: KIMLEY-HORN
 PLOT: 02/06/2023 10:00 AM
 PLOTNAME: 20230227_Kimley-Horn-811-Plan-01.dwg

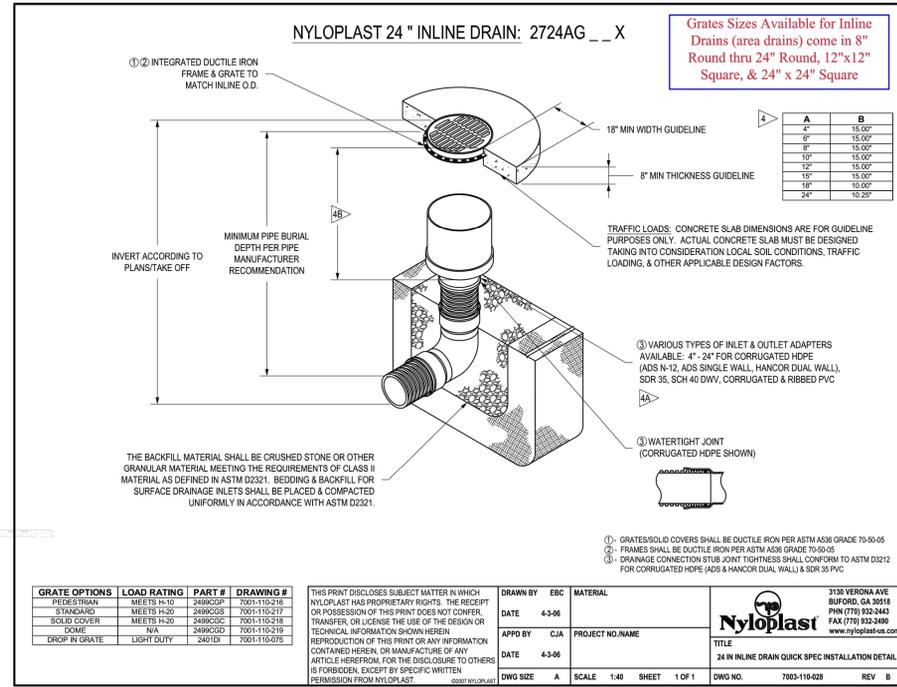
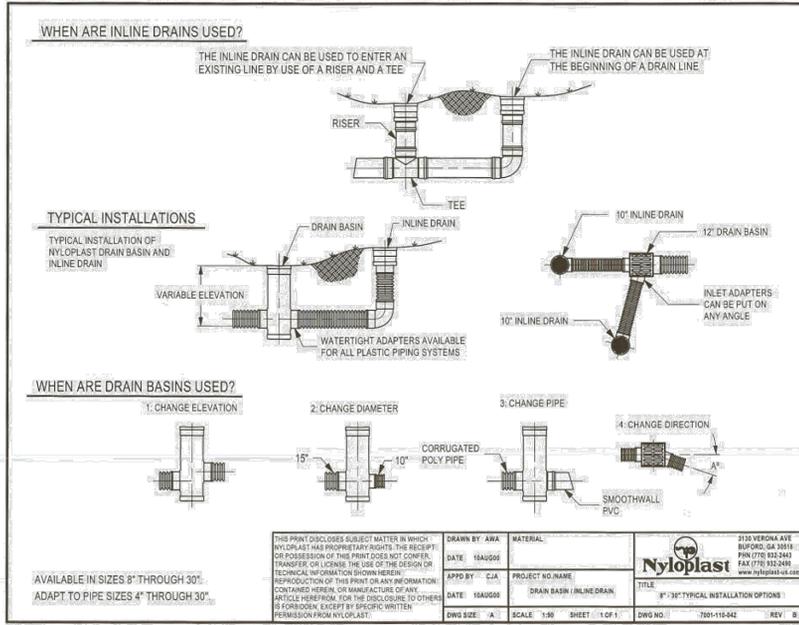
This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and delineation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



VERTICAL WEIGHT PER FOOT: 1,380 LBS.
FLOOR WEIGHT: 1,910 LBS.

DRAWING MAY NOT CONFORM TO THE MOST CURRENT SPECIFICATION

<p>Northern California Madera • Morgan Hill • Pleasanton • Santa Rosa • Stockton • Tulare Phone: 925-750-6650 Fax: 925-750-6660</p>	DI-4848	4'-0" X 4'-0" X VARIES (I.D.) DRAINAGE INLET STORM DRAIN
	FILE NAME: SD-10.DWG REVISED: MARCH 2016 www.oldcastleprecast.com	



NO.	REVISIONS	DATE	BY

Kimley»Horn

© 2023 KIMLEY-HORN AND ASSOCIATES, INC.
260 EAST DAVIS STREET, SUITE 100, MCKINNEY, TX 75069
PHONE: 469-301-2560 FAX: 972-239-9320
WWW.KIMLEY-HORN.COM TX F-928

Michael T. Doggett

REGISTERED PROFESSIONAL ENGINEER
MICHAEL T. DOGETT
3/30/2023

KHA PROJECT 069274404	DATE 02/06/2023	SCALE AS SHOWN	DESIGNED BY MTD	DRAWN BY GAL	CHECKED BY MTD
--------------------------	--------------------	-------------------	--------------------	-----------------	-------------------

THE SHOPS OF
CRYSTAL FALLS

LEANDER, TEXAS

DRAINAGE DETAILS

SHEET NUMBER
19 OF 23

On: 10/11/2023 10:54 AM
LAST SAVED: 10/11/2023 10:54 AM
DRAWN BY: KIMLEY-HORN AND ASSOCIATES, INC.
DWG NAME: DRAINAGE DETAILS

This document, together with the concepts and designs presented herein, is an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and delineation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

ATTACHMENT N

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

SUGGESTED MAINTENANCE PLAN AND SCHEDULE FOR PERMANENT BEST MANAGEMENT PLANS

PROJECT NAME: Cold Springs Subdivision

ADDRESS: South side of Crystal Falls Parkway approximately 0.65 miles west of the intersection of Crystal Falls Parkway and Ronald Reagan Blvd

CITY, STATE ZIP: Leander, Texas 78641

Wet Pond Maintenance Specifications

1. During site construction the sediment load to the forebay must be carefully monitored and the sediment shall be removed when 1/3 of the forebay volume is lost.
2. Upon completion of site revegetation, any sediment buildup in the forebay exceeding 5% loss of available volume shall be removed; and if sediment buildup in the main portion of the facility exceeds 10% of the available volume, the main body of the facility shall be maintained for sediment removal.
3. Every 3 months for the first 2 years of operation, the sediment forebay shall be checked and when sediment buildup exceeds 15% of the available volume, it shall be removed.
4. Every 3 months: (1) the turf areas (not native planting) around the pond shall be mowed; (2) accumulated paper, trash, and debris shall be removed; (3) Cattails, cottonwoods, and willows shall not be thinned out.
5. Annually, the basin shall be inspected for side slope erosion and deterioration or damage to structural elements. Any damage shall be repaired. Large areas with dead or missing vegetation shall be replanted.
6. After 2 years of operation, the sediment buildup in the forebay shall be checked every 3 years and sediment removed if more than 1/3 of the forebay volume is lost.
7. Every 6 years, the sediment buildup in the main pool shall be checked and sediment removed if more than 20% of the storage volume is lost.
8. Sediment from this facility must be transported for dewatering to an approved facility.
9. The wet pond is to be inspected twice a year and at least once during and immediately following wet weather for functionality. Inspection shall include check for subsidence, erosion, leakage, cracking, and tree growth. Overflow box, inlet pipes, and outlet pipes shall be checked for clogging and general condition. Walls shall be checked for stability.
10. Debris and litter shall be removed from the wet pond surface as part of any regular mowing operations and inspections.
11. Wet pond walls and structural elements shall be repaired in the event of any shifting, slumping, or damage.
12. Control of insects, weeds, odors, and algae will be implemented where required to prevent public nuisance concerns. The facility shall be evaluated semiannually for these items. Adequate stock of Gambusia Finis shall be maintained for insect control.
13. Vegetation shall be harvested periodically and the clippings removed to provide export of nutrients and prevent the basin from filling with decaying organic matter.
14. Record Keeping: Project superintendent shall have a log for entering site inspections for all regular rainfall events. Results of inspections, including damage and any recommended remedial actions, shall be noted along with inspection personnel data and date of completion of any action. The log shall be made available for review by TNRCC, if requested.

15. Proper disposal of accumulated silt and vegetative matter shall be accomplished following TNRCC and local authority guidelines and specifications.

An amended copy of this document will be provided to the Texas Commission on Environmental Quality within thirty (30) days of any changes in the following information.

Responsible Party: Pulte Homes of Texas
Mailing Address: 12301B Riata Trace Parkway, Bldg. 2
City, State: Austin, Texas Zip: 78727
Telephone: (512) 795-0170 FAX: (512) 532-3342



Signature of Responsible Party

5/12/11

Date

Inspection and Maintenance For BMPs

SAND FILTER SYSTEM

- Inspections. The BMP facilities must be inspected semi-annually (once during or immediately after wet weather) and repairs should be made if necessary.
- Sediment Removal. Remove sediment from inlet structure and sedimentation chamber at least annually, or when depth reaches 6 inches, or proper functioning is impaired; remove sediment from basin at least every 5 years.
- Media Replacement. More extensive maintenance of the filter media is required when the draw-down time begins to exceed the target time of 48 hours. When this occurs, the upper layer of sand should be removed and replaced with new material meeting the original specifications. Any discolored sand should also be removed and replaced. In filters that have been regularly maintained, this should be limited within the top 2 to 3 inches.
- Debris and Litter Removal. Accumulated paper, trash and debris should be removed during regular mowing operations and inspections, or as necessary.
- Filter Underdrain. Clean underdrain piping network to remove any sediment buildup as needed to maintain design drawdown time.
- Mowing. Grass areas in and around basins must be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. When mowing is performed, a mulching mower should be used, or grass clippings should be caught and removed.

Disposal of accumulated silt shall be accomplished following Texas Commission on Environmental Quality guidelines and specifications.

Personnel Responsible for Inspections

The agent that performs the inspections should be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWPPP for the site. The contractor is to provide an inspector with a CPESC, CESSWI, or CISEC certification. Documentation of the inspector's qualifications is to be included in the attached Inspector Qualifications Log.

Inspection Schedule

The primary operator is required to choose one of the two inspections listed below.

- Option 1:** Once every seven calendar days. If this alternative schedule is developed, then the inspection must occur regardless of whether or not there has been a rainfall event since the previous inspection.
- Option 2:** Once every 14 calendar days and within 24 hours of the end of a storm event of two inches or greater.

The inspections may occur on either schedule provided that documentation reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented (e.g., end of "dry" season and beginning of "wet" season).

If option 2 is the chosen frequency of inspections a rain gauge must be properly maintained on site or the storm event information from a weather station that is representative of the site location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, proper documentation of the total rainfall measured for that day must be recorded.

Personnel provided by the permittee must inspect:

- disturbed areas of the construction site that have not been finally stabilized;
- areas used for storage of materials that are exposed to precipitation;
- structural controls (for evidence of, or the potential for, pollutants entering the drainage system);
- sediment and erosion control measures identified in the SWP3 (to ensure they are operating correctly); and
- locations where vehicles enter or exit the site (for evidence of off-site sediment tracking).

Reductions in Inspection Frequency

Where sites have been finally or temporarily stabilized or where runoff is unlikely due to winter conditions (e.g. site is covered with snow, ice, or frozen ground exists), inspections must be conducted at least once every month. In arid, semi-arid, or drought-stricken areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater. A record of the total rainfall measured, as well as the approximate beginning and ending dates of winter or drought conditions resulting in monthly frequency of inspections in the attached Rain Gauge Log.

In the event of flooding or other uncontrollable situations which prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable.

Inspection Report Forms

Use the Inspection Report Forms given as a checklist to ensure that all required areas of the construction site are addressed. There is space to document the inspector's name as well as when the inspections regularly take place. The tables will document that the required area was inspected. (If there were any areas of concern, briefly describe them in this space with a more detailed description in the narrative section. Use the last table to document any discharges found during the inspections).

Describe how effective the installed BMPs are performing. Describe any BMP failures that were noted during the investigation and describe any maintenance required due to the failure. If new BMPs are needed as the construction site changes, the inspector can use the space at the bottom of the section to list BMPs to be implemented before the next inspection.

Describe the inspector's qualifications, how the inspection was conducted, and describe any areas of non-compliance in detail. If an inspection report does not identify any incidents of non-compliance, then it must contain a certifying signature stating that the facility or site is in compliance. The report must be signed by a person and in a manner required by 30 TAC 305.128. There is space at the end of the form to allow for this certifying signature.

Whenever an inspection shows that BMP modifications are needed to better control pollutants in runoff, the changes must be completed within seven calendar days following the inspection. If existing BMPs are modified or if additional BMPs are needed, you must describe your implementation schedule, and wherever possible, make the required BMP changes before the next storm event.

The Inspection Report Form functions as the required report and must be signed in accordance with TCEQ rules at 30 TAC 305.128.

Corrective Action

Personnel Responsible for Corrective Actions

Both Primary and Secondary Operators are responsible for maintaining all necessary Corrective Actions. If an individual is specifically identified as the responsible party for modifying the contact information for that individual should be documented in the attached Inspector Qualifications Log.

Corrective Action Forms

The Temporary BMPs must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions must be completed within seven (7) calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the attached forms and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable. Actions taken as a result of inspections must be properly documented by completing the corrective action forms given.

Schedule of Interim and Permanent Soil Stabilization

Construction practices shall disturb the minimal amount of existing ground cover as required for land clearing, grading, and construction activity for the shortest amount of time possible to minimize the potential of erosion and sedimentation from the site. Existing vegetation shall be maintained and left in place until it is necessary to disturb for construction activity. For this project the following stabilization practices will be implemented:

1. Hydraulic Mulch and Seeding: Disturbed areas subject to erosion shall be stabilized with hydraulic mulch and/or seeded and watered to provide interim stabilization. For areas that are not to be sodded as per the project landscaping plan, a minimum of 85% vegetative cover will be established to provide permanent stabilization.
2. Sodding and Wood Mulch: As per the project landscaping plan, Sodding and wood mulch will be applied to landscaped areas to provide permanent stabilization prior to project completion.

Records of the following shall be maintained:

- a) The dates when major grading activities occur;
- b) The dates when construction activities temporarily or permanently cease on a portion of the site; and
- c) The dates when stabilization measures are initiated.

Stabilization measures must be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in the following, must be initiated no more that fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased:

Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practical.

Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site.

In arid areas (areas with an average rainfall of 0-10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practical.

Maintenance

Below are some maintenance practices to be used to maintain erosion and sediment controls:

- All measures will be maintained in good working order. The operator should correct any damage or deficiencies as soon as practicable after the inspection, but in no case later than seven (7) calendar days after the inspection.
- BMP Maintenance (as applicable)
- Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%. For perimeter controls such as silt fences, berms, etc., the trapped sediment must be removed before it reaches 50% of the above-ground height.
- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- Drainage swale will be inspected and repaired as necessary.
- Inlet control will be inspected and repaired as necessary.
- Check dam will be inspected and repaired as necessary.
- Straw bale dike will be inspected and repaired as necessary.
- Diversion dike will be inspected and any breaches promptly repaired.
- Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and healthy growth.
- If sediment escapes the site, accumulations must be removed at a frequency that minimizes off-site impacts, and prior to the next rain event, if feasible. If the permittee does not own or operate the off-site conveyance, then the permittee must work with the owner or operator of the property to remove the sediment.
- Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

To maintain the above practices, the following will be performed:

- Maintenance and repairs will be conducted before the next anticipated storm event or as necessary to maintain the continued effectiveness of storm water controls. Following an inspection, deficiencies should be corrected no later than seven (7) calendar days after the inspection.

Inspector Qualifications Log*

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
 Training Course _____
 Supervised Experience _____
 Other _____

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
 Training Course _____
 Supervised Experience _____
 Other _____

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
 Training Course _____
 Supervised Experience _____
 Other _____

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
 Training Course _____
 Supervised Experience _____
 Other _____

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
 Training Course _____
 Supervised Experience _____
 Other _____

Inspector Name: _____
Qualifications (Check as appropriate and provide description):
 Training Course _____
 Supervised Experience _____
 Other _____

* The agent that performs the inspections should be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWPPP for the site. The contractor is to provide an inspector with a CPESC, CESSWI, or CISEC certification.

General Information					
Name of Project		Tracking No.		Inspection Date	
Inspector Name, Title & Contact Information					
Present Phase of Construction					
Inspection Location (if multiple inspections are required, specify location where this inspection is being conducted)					
Inspection Frequency Standard Frequency: <input type="checkbox"/> Weekly <input type="checkbox"/> Every 14 days and within 24 hours of a 0.25" rain Increased Frequency: <input type="checkbox"/> Every 7 days and within 24 hours of a 0.25" rain Reduced Frequency: - <input type="checkbox"/> Once per month (for stabilized areas) - <input type="checkbox"/> Once per month and within 24 hours of a 0.25" rain (for arid, semi-arid, or drought-stricken areas during seasonally dry periods or during drought) - <input type="checkbox"/> Once per month (for frozen conditions where earth-disturbing activities are being conducted)					
Was this inspection triggered by a 0.25" storm event? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, how did you determined whether a 0.25" storm event has occurred? <input type="checkbox"/> Rain gauge on site <input type="checkbox"/> Weather station representative of site. Specify weather station source: Total rainfall amount that triggered the inspection (in inches):					
Unsafe Conditions for Inspection Did you determine that any portion of your site was unsafe for inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No If "yes", complete the following: - Describe the conditions that prevented you from conducting the inspection in this location: - Location(s) where conditions were found:					

Condition and Effectiveness of Erosion and Sediment (E&S) Controls				
Type/Location of E&S Control	Repairs or Other Maintenance Needed?	Corrective Action Required?	Date on Which Maintenance or Corrective Action First Identified?	Notes
1.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
8.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
9.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
10.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Condition and Effectiveness of Pollution Prevention (P2) Practices				
Type/Location of P2 Practices	Repairs or Other Maintenance Needed?	Corrective Action Required?	Identification Date	Notes
1.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
2.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
8.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
9.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		
10.	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Stabilization of Exposed Soil			
Stabilization Area	Stabilization Method	Have You Initiated Stabilization?	Notes
1.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date:	
2.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date:	
3.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date:	
4.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date:	
5.		<input type="checkbox"/> YES <input type="checkbox"/> NO If yes, provide date:	

Description of Discharges

Was a stormwater discharge or other discharge occurring from any part of your site at the time of the inspection? Yes No
 If "yes", provide the following information for each point of discharge:

Discharge Location	Observations
1.	Describe the discharge: At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
2.	Describe the discharge: At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:
3.	Describe the discharge: At points of discharge and the channels and banks of surface waters in the immediate vicinity, are there any visible signs of erosion and/or sediment accumulation that can be attributed to your discharge? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe what you see, specify the location(s) where these conditions were found, and indicate whether modification, maintenance, or corrective action is needed to resolve the issue:

Contractor or Subcontractor Certification and Signature

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Contractor or Subcontractor: _____ **Date:** _____

Printed Name and Affiliation: _____

Certification and Signature by Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**Signature of Permittee or
"Duly Authorized Representative":** _____ **Date:** _____

Printed Name and Affiliation: _____

Section A – Initial Report			
(Complete this section <u>within 24 hours</u> of discovering the condition that triggered corrective action)			
Name of Project		Tracking No.	Today's Date
Date Problem First Discovered		Time Problem First Discovered	
Name and Contact Information of Individual Completing this Form			
<p>What site conditions triggered the requirement to conduct corrective action:</p> <p><input type="checkbox"/> A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Part 2 and/or 3</p> <p><input type="checkbox"/> The stormwater controls that have been installed and maintained are not effective enough for the discharge to meet applicable water quality standards</p> <p><input type="checkbox"/> A prohibited discharge has occurred or is occurring</p> <p>Provide a description of the problem:</p> <p>Deadline for completing corrective action (<i>Enter date that is either: (1) no more than 7 calendar days after the date you discovered the problem, or (2) if it is infeasible to complete work within the first 7 days, enter the date that is as soon as practicable following the 7th day</i>):</p> <p>If your estimated date of completion falls after the 7-day deadline, explain (1) why you believe it is infeasible to complete work within 7 days, and (2) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe:</p>			
Section B – Corrective Action Progress			
(Complete this section <u>no later than 7 calendar days</u> after discovering the condition that triggered corrective action)			
Section B.1 – Why the Problem Occurred			
Cause(s) of Problem (Add an additional sheet if necessary)		How This Was Determined and the Date You Determined the Cause	
1.		1.	
2.		2.	
3.		3.	
Section B.2 – Stormwater Control Modifications to be Implemented to Correct the Problem			
List of Stormwater Control Modification(s) Needed to Correct Problem (Add an additional sheet if necessary)	Completion Date	SWPPP Update Necessary?	Notes
1.		<input type="checkbox"/> Yes <input type="checkbox"/> No Date:	
2.		<input type="checkbox"/> Yes <input type="checkbox"/> No Date:	
3.		<input type="checkbox"/> Yes <input type="checkbox"/> No Date:	

Section A – Initial Report
(Complete this section within 24 hours of discovering the condition that triggered corrective action)

Name of Project		Tracking No.	Today's Date
Date Problem First Discovered		Time Problem First Discovered	
Name and Contact Information of Individual Completing this Form			
<p>What site conditions triggered the requirement to conduct corrective action:</p> <input type="checkbox"/> A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Part 2 and/or 3 <input type="checkbox"/> The stormwater controls that have been installed and maintained are not effective enough for the discharge to meet applicable water quality standards <input type="checkbox"/> A prohibited discharge has occurred or is occurring			
Provide a description of the problem:			
Deadline for completing corrective action (<i>Enter date that is either: (1) no more than 7 calendar days after the date you discovered the problem, or (2) if it is infeasible to complete work within the first 7 days, enter the date that is as soon as practicable following the 7th day</i>):			
If your estimated date of completion falls after the 7-day deadline, explain (1) why you believe it is infeasible to complete work within 7 days, and (2) why the date you have established for making the new or modified stormwater control operational is the soonest practicable timeframe:			

Section B – Corrective Action Progress
(Complete this section no later than 7 calendar days after discovering the condition that triggered corrective action)

Section B.1 – Why the Problem Occurred	
Cause(s) of Problem (Add an additional sheet if necessary)	How This Was Determined and the Date You Determined the Cause
1.	1.
2.	2.
3.	3.

Section B.2 – Stormwater Control Modifications to be Implemented to Correct the Problem			
List of Stormwater Control Modification(s) Needed to Correct Problem (Add an additional sheet if necessary)	Completion Date	SWPPP Update Necessary?	Notes
1.		<input type="checkbox"/> Yes <input type="checkbox"/> No Date:	
2.		<input type="checkbox"/> Yes <input type="checkbox"/> No Date:	
3.		<input type="checkbox"/> Yes <input type="checkbox"/> No Date:	

Contractor or Subcontractor Certification and Signature

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature of Contractor or Subcontractor: _____ **Date:** _____

Printed Name and Affiliation: _____

Certification and Signature by Permittee

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

**Signature of Permittee or
"Duly Authorized Representative":** _____ **Date:** _____

Printed Name and Affiliation: _____

069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION

PILOT-SCALE FIELD TESTING PLAN

(NOT APPLICABLE)

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

During construction, standard erosion measures will be used as shown in the construction plans. Runoff from the construction site will be contained by a silt fence until construction is complete. Entry and exit from the site will be through a stabilized construction entrance. The existing detention pond and vegetative filter strip will provide sedimentation during construction.

After completion of the project, temporary erosion and sedimentation measures (silt fence and rock berm) will remain in place until vegetative cover is established. Details concerning the erosion/sedimentation protection plan can be found on the Erosion & Sedimentation Control Plans of the construction drawings.

***SECTION 4:
ADDITIONAL FORMS***

Storm Water Pollution Prevention Plan

SIGNATURE PAGE:

Venkatashwara

Applicant's Signature

04/12/2023

Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Venkatashwara Rao Gudlapuri 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 12 day of 04, 2023.

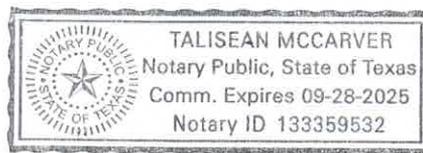
Taliseen Mccarver

NOTARY PUBLIC

Taliseen Mccarver

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 09/28/2025



Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Cold Springs Sections Two-Six
 Regulated Entity Location: NEC Grand Lake Parkway & Crystal Falls Parkway
 Name of Customer: Velar Development Contact Person: Venkat Gudapuri
 Phone: (512)-590-4165 Customer Reference Number (if issued): CN _____
 Regulated Entity Reference Number (if issued): RN RN106157183

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 San Antonio Regional Office
 Mailed to: TCEQ - Cashier Overnight Delivery to: TCEQ - Cashier
 Revenues Section 12100 Park 35 Circle
 Mail Code 214 Building A, 3rd Floor
 P.O. Box 13088 Austin, TX 78753
 Austin, TX 78711-3088 (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	3.86 Acres	\$4,000
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: 04/10/2023 Application Fee Schedule

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

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

Organized Sewage Collection Systems and Modifications

<i>Project</i>	<i>Cost per Linear Foot</i>	<i>Minimum Fee- Maximum Fee</i>
Sewage Collection Systems	\$0.50	\$650 - \$6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

<i>Project</i>	<i>Cost per Tank or Piping System</i>	<i>Minimum Fee- Maximum Fee</i>
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

Exception Requests

<i>Project</i>	<i>Fee</i>
Exception Request	\$500

Extension of Time Requests

<i>Project</i>	<i>Fee</i>
Extension of Time Request	\$150

069274404 - THE SHOPS AT CRYSTAL FALLS
CONTRIBUTING ZONE PLAN MODIFICATION

Check Payable to the "Texas Commission on Environmental Quality"

Core Data Form



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.)		
<input type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input checked="" type="checkbox"/> 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)
		RN 106157183

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		
<input type="checkbox"/> New Customer <input checked="" type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)				
<i>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).</i>				
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)			<i>If new Customer, enter previous Customer below:</i>	
VSprings Properties LLC			Previous Customer	
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0804071781				
11. Type of Customer:	<input checked="" type="checkbox"/> Corporation		<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other			<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:
12. Number of Employees			13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following				
<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator <input checked="" type="checkbox"/> Other: <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant				
15. Mailing Address:	3109 Kenai Drive Suite 109			
	City	Cedar park	State	TX
	ZIP	78613	ZIP + 4	
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)	
			vgudapuri@gmail.com	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)

SECTION III: Regulated Entity Information

21. General Regulated Entity Information <i>(If "New Regulated Entity" is selected, a new permit application is also required.)</i>							
<input type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input checked="" type="checkbox"/> Update to Regulated Entity Information							
<i>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).</i>							
22. Regulated Entity Name <i>(Enter name of the site where the regulated action is taking place.)</i>							
Cold springs Sections Two-Six							
23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>		Southside of Crystal Falls Parkway approx. 0.65 miles west of intersection of Crystal Falls Pkwy & Ronal Reagan					
City	Leander	State	TX	ZIP	78727	ZIP + 4	
24. County	Williamson						

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

25. Description to Physical Location:		SEC of Grand Lake Parkway and Crystal falls parkway					
26. Nearest City				State		Nearest ZIP Code	
Leander				TX		78641	
<i>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).</i>							
27. Latitude (N) In Decimal:		30.567211		28. Longitude (W) In Decimal:		-97.812286	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds		
30	34	2	97	48	44		
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)	
5331				455110			
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>							
Retail, Restuarant							
34. Mailing Address:		12301 B Riata Trace Parkway building 2					
City	Austin	State	TX	ZIP	78727	ZIP + 4	
35. E-Mail Address:		N/A					
36. Telephone Number			37. Extension or Code		38. Fax Number <i>(if applicable)</i>		
(972) 304-2800					() -		

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.

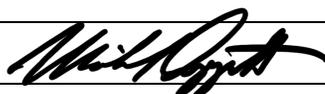
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Michael Doggett	41. Title:	Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(469) 352-2959		() -	michael.doggett@kimley-horn.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:	Kimley-Horn	Job Title:	Project Manager
Name (In Print):	Micheal Doggett	Phone:	(469) 352- 2959
Signature:		Date:	4/10/2023