WILDSPRING PHASE 2

CONTRIBUTING ZONE PLAN MODIFICATION

PREPARED BY:
PAPE-DAWSON CONSULTING ENGINEERS, LLC.
TBPE FIRM REGISTRATION #470
10801 N MoPac Expy., Bldg. 3, Suite 200
AUSTIN, TEXAS 78759



March 2025

PAPE-DAWSON ENGINEERS

Transportation | Water Resources | Land Development | Surveying | Environmental

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10801 N MoPac Expy., Bldg. 3, Suite 200
AUSTIN, TEXAS 78759

March 2025

PAPE-DAWSON ENGINEERS

March 3, 2025

Ms. Lori Wilson
Texas Commission on Environmental Quality
Region 11
12100 Park 35 Circle, Bldg. A
Austin, Texas 78753

Re: Wildspring Phase 2
Contributing Zone Plan Modification Application

Dear Ms. Wilson:

Please find attached an electronic copy of the Wildspring Phase 2 Contributing Zone Plan (CZP) Modification Application. This plan has been prepared in accordance with the Texas Administrative Code (30 TAC 213) and current policies for development over the Edwards Aquifer Contributing Zone.

This CZP Modification Application applies to an approximately 37.25-acre site as identified by the project limits. Please review the plan information for the items it is intended to address. If acceptable, please provide a written approval of the plan in order that construction may begin at the earliest opportunity.

If you have questions or require additional information, please call our office.

Sincerely,
Pape-Dawson Consulting Engineers, LLC.
Texas Board of Professional Engineers, Firm Registration # 470

Aimee Chavez, P.E.
Associate Vice President

H:\Projects\514\80\01\301 Construction Documents\Documents\Reports\CZP\CZP_Cover Letter.docx

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.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.
4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Wildspring Phase 2					**2. Regulated Entity No.: 111642690**			
3. Customer Name: Toll Southwest LLC.					**4. Customer No.: 605682475**			
5. Project Type: **(Please circle/check one)**	New	Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential	Non-residential				**8. Site (acres):**		37.25
9. Application Fee:	$4,000	**10. Permanent BMP(s):**				VFS, Batch Detention		
11. SCS (Linear Ft.):	N/A	**12. AST/UST (No. Tanks):**				N/A		
13. County:	Williamson	**14. Watershed:**				Turkey Creek-Brushy Creek		

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	_X_
Region (1 req.)	___	___	_X_
County(ies)	___	___	_X_
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs _X_Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell _X_ Leander ___Liberty Hill ___Pflugerville ___Round Rock

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Aimee Chavez, P.E.
Print Name of Customer/Authorized Agent
Aimee Cl 3/7/25
Signature of Customer/Authorized Agent Date

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

MODIFICATION TO A PREVIOUSLY APPROVED PLAN

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: Aimee Chavez, P.E.

Date: 3/7/25

Signature of Customer/Agent:

Aimee Cg

Project Information

1. Current Regulated Entity Name: Wildspring Phase 2
   Original Regulated Entity Name: Wildspring Phase 2
   Assigned Regulated Entity Number(s) (RN): 111642690
   Edwards Aquifer Protection Program ID Number(s): 11003580
   ☒ The applicant has not changed and the Customer Number (CN) is: 605682475
   ☐ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. ☒ **Attachment A: Original Approval Letter and Approved Modification Letters.** A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):

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

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

CZP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	37.25	37.25
Type of Development	Single-family Residential	Single-family Residential
Number of Residential Lots	0	115
Impervious Cover (acres)	0	23.40
Impervious Cover (%)	0	42.4
Permanent BMPs	N/A	Batch Detention
Other	_____	VFS

AST Modification Summary	***Approved Project***	***Proposed Modification***
Number of ASTs	_____	_____
Other	_____	_____

UST Modification Summary	***Approved Project***	***Proposed Modification***
Number of USTs	_____	_____
Other	_____	_____

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 Projec**t. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - ☐ The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - ☐ 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.

ATTACHMENT A

Brooke Paup, *Chairwoman*
Bobby Janecka, *Commissioner*
Catarina R. Gonzales, *Commissioner*
Kelly Keel, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 24, 2025

Mr. Kyle Ninness
Toll Southwest LLC
1320 Arrow Point Dr., Ste. 401
Cedar Park, Texas 78613

Re: Approval of a Contributing Zone Plan (CZP)
Wildspring Phase 2 Clearing Plan; Located Northwest of Intersection of CR 177 and CR 175; Leander, Williamson County, Texas
Edwards Aquifer Protection Program ID No. 11004257; Regulated Entity No. RN111642690

Dear Mr. Ninness:

The Texas Commission on Environmental Quality (TCEQ) has completed its review on the application for the above-referenced project submitted to the Edwards Aquifer Protection Program (EAPP) by Pape-Dawson Consulting Engineers, LLC on behalf of the applicant, Toll Southwest LLC, on December 6, 2024. Final review of the application was completed after additional material was received on January 16, 2025.

As presented to the TCEQ, the application was prepared in general compliance with the requirements of 30 Texas Administrative Codes (TAC) Chapter §213. The permanent best management practices (BMPs) and measures represented in the application were prepared by a Texas licensed professional engineer (PE). All construction plans and design information were sealed, signed, and dated by a Texas licensed PE. Therefore, the application for the construction of the proposed project and methods to protect the Edwards Aquifer are **approved,** subject to applicable state rules and the conditions in this letter.

This approval expires two years from the date of this letter*, unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been officially requested. This approval or extension will expire, and no extension will be granted if more than 50 percent of the project has not been completed within ten years from the date of this letter.*

The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this contributing zone plan or modification to a plan. A motion for reconsideration must be filed in accordance with 30 TAC §50.139.

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 37.25 acres. The project will include the clearing of land. No impervious cover or wastewater will be generated by this project.

PERMANENT POLLUTION ABATEMENT MEASURES

No permanent BMPs or measures are required for the proposed project.

STANDARD CONDITIONS

1. The plan holder (applicant) must comply with all provisions of 30 TAC Chapter §213 and all technical specifications in the approved plan. The plan holder should also acquire and comply with additional and separate approvals, permits, registrations or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, Dam Safety, Underground Injection Control) as required based on the specifics of the plan.
2. In addition to the rules of the Commission, the plan holder must also comply with state and local ordinances and regulations providing for the protection of water quality as applicable.

Prior to Commencement of Construction:

3. The plan holder of any approved contributing zone plan must notify the EAPP and obtain approval from the executive director prior to initiating any modification to the activities described in the referenced application following the date of the approval.
4. The plan holder must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the EAPP no later than 48 hours prior to commencement of the regulated activity. Notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person.
5. Temporary erosion and sedimentation (E&S) controls as described in the referenced application, must be installed prior to construction, and maintained during construction. Temporary E&S controls may be removed when vegetation is established, and the construction area is stabilized. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

During Construction:

6. The application must indicate the placement of permanent aboveground storage tanks facilities for static hydrocarbons and hazardous substances with cumulative storage capacity of 500 gallons or more. Subsequent permanent storage tanks on this project site require a modification to be submitted and approved prior to installation.
7. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
8. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge must be filtered through appropriately selected BMPs.
9. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th

day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

The holder of the approved contributing zone plan is responsible for compliance with Chapter §213 subchapter B and any condition of the approved plan through all phases of plan implementation. Failure to comply with any condition within this approval letter is a violation of Chapter §213 subchapter B and is subject to administrative rule or orders and penalties as provided under §213.25 of this title (relating to Enforcement). Such violations may also be subject to civil penalties and injunction. Upon legal transfer of this property, the new owner is required to comply with all terms of the approved contributing zone plan.

This action is taken as delegated by the executive director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Colin Gearing of the Edwards Aquifer Protection Program at 512-239-7015 or the regional office at 512-339-2929.

Sincerely,

Monica Reyes

Monica Reyes, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

MR/cmg

cc: Ms. Aimee Chavez, P.E., Pape-Dawson Consulting Engineers, LLC

ATTACHMENT B

WILDSPRING PHASE 2
Contributing Zone Plan Modification Application

PROJECT NARRATIVE

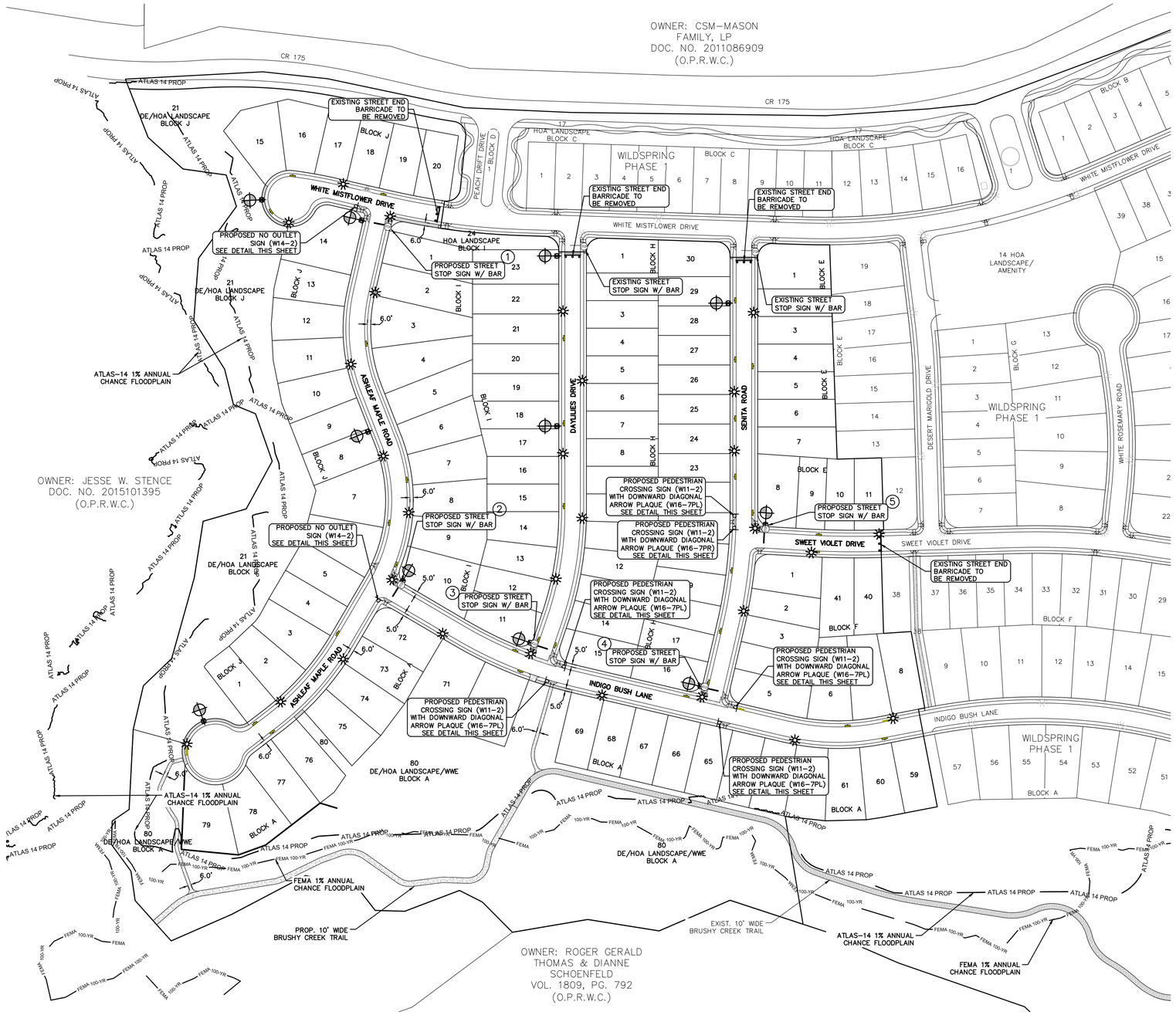
On January 24th, 2025 the Texas Commission on Environmental Quality approved the Wildspring Phase 2 Clearing Plan Contributing Zone Plan Application. The letter approved the clearing of 37.25-acres of land and 0 acres of impervious cover.

The Wildspring Phase 2 CZP Modification proposes 115 single-family lots, and associated clearing, grading, excavation, installation of utilities and drainage improvements, construction of streets, sidewalks, homes and associated driveways, miscellaneous improvements, one (1) batch detention pond and one (1) vegetative filter strip within the 37.25-acre phase boundary. The site is located 0.4-miles northwest of the intersection of CR 175 and CR 177 and is within the city limits of Leander, Texas and is entirely over the Edwards Aquifer Contributing Zone.

In the originally approved CZP application for the Wildspring Phase 2 Clearing Plan (EAPP ID No.11004257), no impervious was proposed. Existing on-site impervious cover (0.69-acres) was overtreated by an existing batch detention pond approved with the Wildspring Phase 1 Contributing Zone Plan (EAPP ID No.11004319) Under this modification, 14.14-acres of impervious cover are to be treated by one (1) proposed batch detention pond, one (1) existing batch detention pond, and one (1) proposed vegetative filter strip. The batch detention ponds and vegetative filter strip were designed and built in accordance with the Texas Commission on Environmental Quality's (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site.

Since this project is located entirely over the Edwards Aquifer Contributing Zone a Geologic Assessment was not conducted and is not required by 30 TAC 213 regulations. Therefore, no naturally occurring sensitive features are known to exist on-site. 30 TAC 213 (f)(2) only applies to projects over the Edwards Aquifer Recharge Zone.

ATTACHMENT C



SCALE: 1"= 100'

0' 100' 200' 300'

LEGEND

- CURB INLET
- CONCRETE VALLEY GUTTER
- PROPOSED STREET LIGHT
- EXISTING STREET LIGHT
- PROPOSED CURB RAMP
- PROPOSED SIDEWALK BY DEVELOPER
- PROPOSED SIDEWALK BY HOME BUILDER
- EXISTING STREET END BARRICADE
- PROPOSED STOP SIGN & STOP BAR
- FIRE HYDRANT
- MISC. SIGN
- IRRIGATION SLEEVES
- ELECTRICAL CONDUIT

NOTES:

1. ALL SIDEWALKS SHALL BE 5' IN WIDTH ALONG ALL LOCAL RESIDENTIAL ROADWAYS EXCEPT WHERE INDICATED.
2. ALL SIDEWALKS SHALL MEET ADA REQUIREMENTS.

STREET SIGN LEGEND

1. WHITE MISTFLOWER DRIVE & ASHLEAF MAPLE ROAD
2. ASHLEAF MAPLE ROAD & INDIGO BUSH LANE
3. DAYLILIES DRIVE & INDIGO BUSH LANE
4. SENITA ROAD & INDIGO BUSH LANE
5. SENITA ROAD & SWEET VIOLET DRIVE









CITY OF LEANDER APPROVAL

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
SIGNAGE, STREET LIGHT AND STRIPING PLAN

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 69 OF 80

PICP-25-XXXX

Date: Feb 18, 2025, 2:25pm User ID: andrewdook
File: H:\Projects\514-80\01\301 Construction Documents\Civil\SG51480-01.dwg

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.

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: Aimee Chavez, P.E.

Date: 3/7/25

Signature of Customer/Agent:

Aimee Chavez

Regulated Entity Name: Wildspring Phase 2

Project Information

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

   Contact Person: Kyle Ninness
   Entity: Toll Southwest LLC
   Mailing Address: 1320 Arrow Point Dr., Suite 401
   City, State: Cedar Park, Texas Zip: 78613
   Telephone: (817) 329-7973 Fax: _____
   Email Address: kninness@tollbrothers.com

5. Agent/Representative (If any):

Contact Person: Aimee Chavez, P.E.
Entity: Pape-Dawson Consulting Engineers, LLC.
Mailing Address: 10801 N MoPac Expy., Bldg. 3, Suite 200
City, State: Austin, TX Zip: 78759
Telephone: (512) 454-8711 Fax: (512) 459-8867
Email Address: achavez@pape-dawson.com

6. Project Location:

☒ The project site is located inside the city limits of Leander, Texas.
☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
☐ The project site is not located within any city's limits or ETJ.

7. ☒ 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.

From TCEQ's office, turn right on Park 35 Cir toward I-35. Travel approximately 13.5 miles north on I-35 N. Exit for RM 1431 W/University Blvd and turn left onto RM 1431, travelling west for 4.2 miles. Turnright onto CR 175/Sam Bass Road and travel north for 2.7 miles. The project site is located northwest of the intersection of CR 175 and CR 177, in Leander, Texas.

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: 115
- ☐ Residential: # of Living Unit Equivalents: _____
- ☐ Commercial
- ☐ Industrial
- ☐ Other: _____

13. Total project area (size of site): 37.25 Acres

    Total disturbed area: 30.81 Acres

14. Estimated projected population: 0

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

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	***Sq. Ft.***	***Sq. Ft./Acre***	***Acres***
Structures/Rooftops	436,900	÷ 43,560 =	10.03
Parking	0	÷ 43,560 =	0
Other paved surfaces	179,085	÷ 43,560 =	4.11
Total Impervious Cover	615,985	÷ 43,560 =	14.14

Total Impervious Cover 14.14 **÷ Total Acreage** 37.25 **X 100 =** 37.96**% Impervious Cover**

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

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

For Road Projects Only

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

☒ N/A

18. Type of project:

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

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

☐ Concrete
☐ Asphaltic concrete pavement
☐ Other: _____

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

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

21. Pavement Area:

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

☒ N/A

26. Wastewater will be disposed of by:

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

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

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

☒ Sewage Collection System (Sewer Lines):

The sewage collection system will convey the wastewater to the Brushy Creek East Regional Wastewater (name) Treatment Plant. The treatment facility is:

☒ Existing.
☐ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

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

☒N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

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

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

Total x 1.5 = _____ Gallons

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

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

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

Table 3 - Secondary Containment

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

Total: _____ Gallons

30. Piping:

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

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

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

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

☐ Dispenser clearly labeled

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

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

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

Site Plan Requirements

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

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

    Site Plan Scale: 1" = 400'.

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): FEMA DFIRM (Digital Flood Insurance Rate Map for Williamson County, Texas) Panel Number 48491C04605 dated December 20, 2019.

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

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

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

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

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

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

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

42. ☒ Surface waters (including wetlands).

☐ N/A

43. ☒ Locations where stormwater discharges to surface water.

☐ There will be no discharges to surface water.

44. ☒ Temporary aboveground storage tank facilities.

☐ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

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

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

☐ N/A

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

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

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

☐ N/A

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

☐ N/A

50. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to

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

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

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

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

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

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

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

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

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

☐ N/A

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

☐ N/A

56. ☒ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

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

☐ N/A

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

☒ N/A

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

☐ N/A

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

59. ☒ The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an

owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

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

Administrative Information

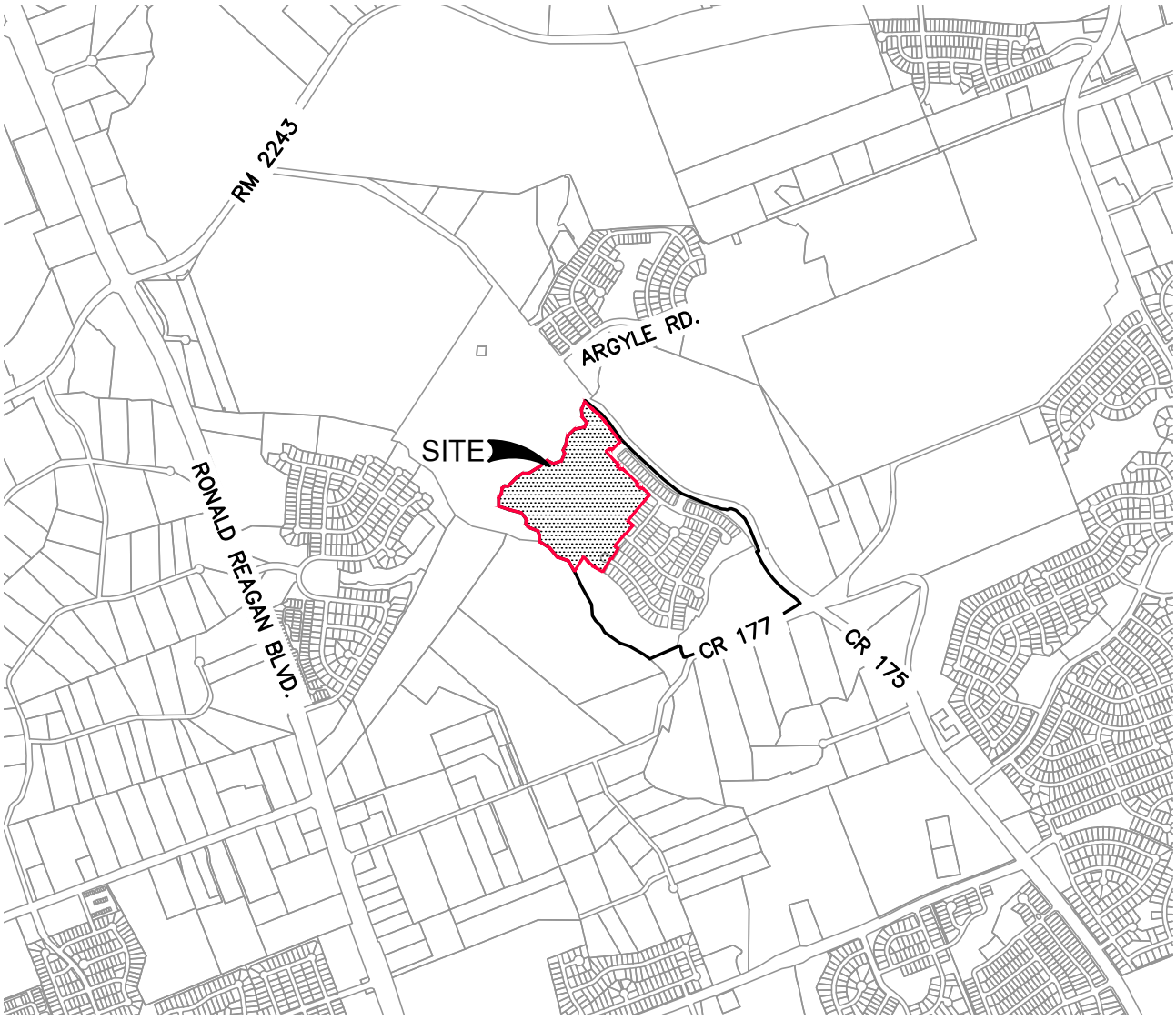
61. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.

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.

ATTACHMENT A



SCALE: 1"= 2,000'

2,000' 0' 1,000' 2,000'

JOB NO. 51480-01
DATE NOVEMBER 2024
DESIGNER
CHECKED AC DRAWN CK
SHEET 1 of 1

WILDSPRING PHASE 2

LEANDER TEXAS
ATTACHMENT A - ROAD MAP

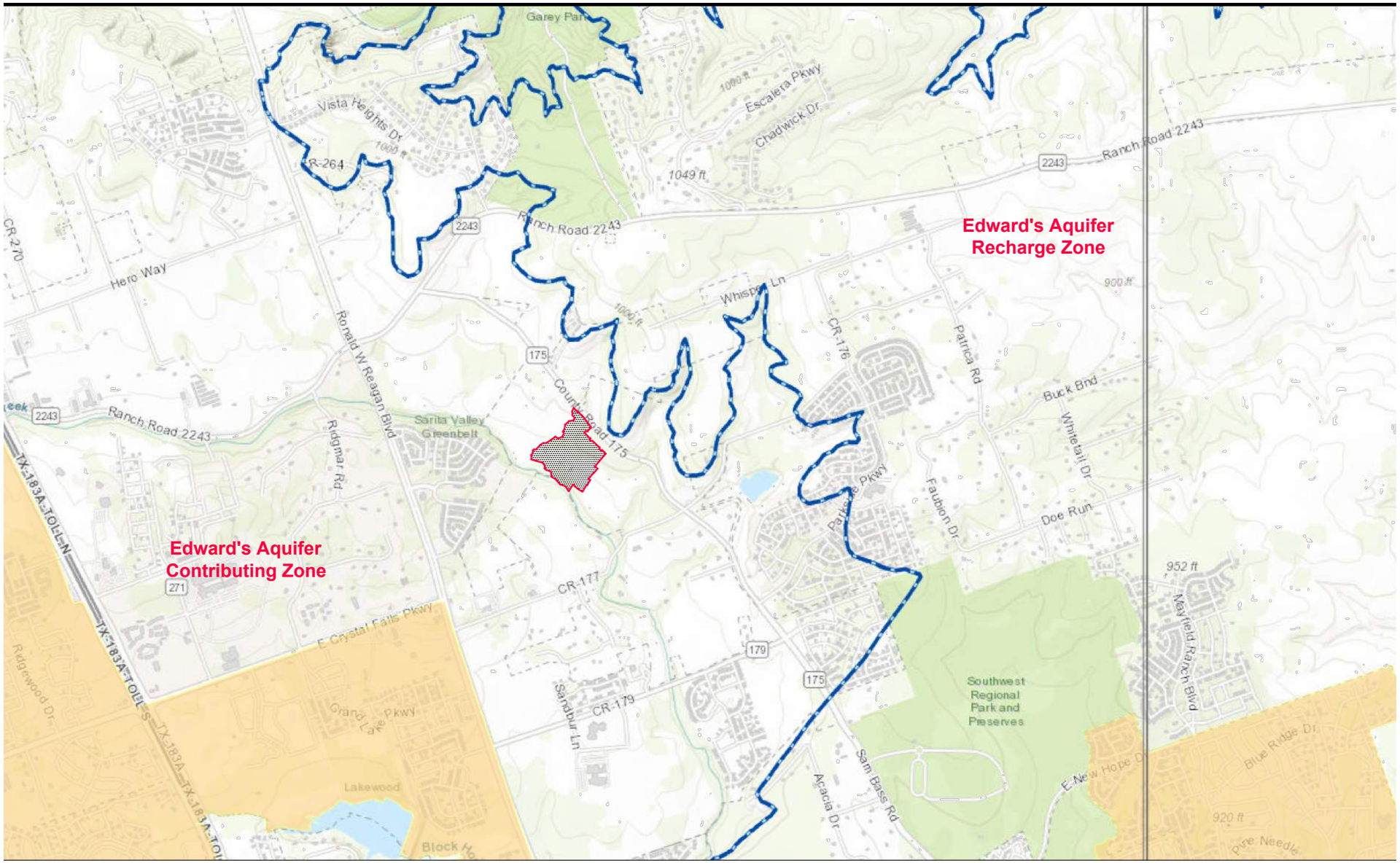
PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

Date: Feb 19, 2025, 5:00pm User ID: CKrause
File: H:\Projects\514\80\01\301 Construction Documents\Documents\Reports\C2P\2. C2P Application\CAD Exhibits\241022 Road Map.dwg

ATTACHMENT B

SCALE: 1"= 2,000'

2,000' 0' 1,000' 2,000'



PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING PHASE 2
LEANDER, TEXAS
ATTACHMENT B - USGS QUAD MAP

JOB NO. 51480-01
DATE NOVEMBER 2024
DESIGNER
CHECKED AC
DRAWN CK

SHEET 1 of 1

Date: Nov 15, 2024, 4:12pm User ID: CKrause
File: H:\Projects\514_80\01\393 Clearing Plan\Documents\Reports\CZP\2. CZP Application\CAD Exhibits\241022 USGS Quad Map.dwg

ATTACHMENT C

WILDSPRING PHASE 2
Contributing Zone Plan Modification Application

PROJECT NARRATIVE

On January 24th, 2025 the Texas Commission on Environmental Quality approved the Wildspring Phase 2 Clearing Plan Contributing Zone Plan Application. The letter approved the clearing of 37.25-acres of land and 0 acres of impervious cover.

The Wildspring Phase 2 CZP Modification proposes 115 single-family lots, and associated clearing, grading, excavation, installation of utilities and drainage improvements, construction of streets, sidewalks, homes and associated driveways, miscellaneous improvements, one (1) batch detention pond and one (1) vegetative filter strip within the 37.25-acre phase boundary. The site is located 0.4-miles northwest of the intersection of CR 175 and CR 177 and is within the city limits of Leander, Texas and is entirely over the Edwards Aquifer Contributing Zone.

In the originally approved CZP application for the Wildspring Phase 2 Clearing Plan (EAPP ID No.11004257), no impervious was proposed. Existing on-site impervious cover (0.69-acres) was overtreated by an existing batch detention pond approved with the Wildspring Phase 1 Contributing Zone Plan (EAPP ID No.11004319) Under this modification, 14.14-acres of impervious cover are to be treated by one (1) proposed batch detention pond, one (1) existing batch detention pond, and one (1) proposed vegetative filter strip. The batch detention ponds and vegetative filter strip were designed and built in accordance with the Texas Commission on Environmental Quality's (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site.

Since this project is located entirely over the Edwards Aquifer Contributing Zone a Geologic Assessment was not conducted and is not required by 30 TAC 213 regulations. Therefore, no naturally occurring sensitive features are known to exist on-site. 30 TAC 213 (f)(2) only applies to projects over the Edwards Aquifer Recharge Zone.

ATTACHMENT D

FACTORS AFFECTING SURFACE WATER QUALITY

Potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site include:

- Soil erosion due to the clearing of the site for roads, residential homes, and drainage structures;
- Oil, grease, fuel, and hydraulic fluid contamination from construction equipment and vehicle drippings;
- Hydrocarbons from asphalt paving operations;
- Miscellaneous trash and litter from construction workers and material wrappings;
- Construction debris;
- Concrete truck washout; and
- Potential overflow/spills from portable toilets.

Potential sources of pollution that may be reasonably be expected to affect the quality of stormwater discharges from the site after development include:

- Oil, grease, fuel, and hydraulic fluid contamination from vehicle and maintenance equipment drippings;
- Dirt and dust which may fall off vehicles; and
- Miscellaneous trash and litter.

ATTACHMENT E

VOLUME AND CHARACTER OF STORMWATER

Stormwater runoff will increase as a result of this development. On-site drainage generally flows from the northeast to the southwest. The Wildspring Phase 2 flows drain to the Brushy Creek Watershed. The peak flow runoff during the 100-year storm event for pre-construction activities is 405.8 cfs. The peak flow runoff during the 100-year storm event for post-construction activities is 602.0 cfs. Values are based on the frequency-based storm precipitation distribution using NOAA Atlas 14 values. Stormwater runoff from the development can be characterized as overland, shallow-concentrated, and channelized flow from a proposed single-family residential development.

ATTACHMENT J

BMPs FOR UPGRADIENT STORMWATER

Any portion of stormwater that originates upgradient of the site shall be controlled by on-site silt fences. Two (2) batch detention ponds - one existing and one proposed - and one (1) vegetative filter strip are proposed as the Permanent Best Management Practices (PBMPs) that will directly treat and provide overtreatment for the additional impervious cover proposed with Wildspring Phase 2. These PBMPs were designed in accordance with the Texas Commission on Environmental Quality (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site.

ATTACHMENT K

BMPs FOR ON-SITE STORMWATER

Two (2) batch detention ponds - one existing and one proposed – and one (1) vegetative filter strip are proposed as the Permanent Best Management Practices (PBMPs) for this development. There are three (3) uncaptured watersheds, contributing approximately 2.15 acres of impervious cover for uncaptured portions of streets, homes, and sidewalk that will be treated via overtreatment provided by the batch detention ponds and vegetative filter strip.

The PBMPs have been designed in accordance with the Texas Commission on Environmental Quality's (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Please see the Treatment Summary Table attached for more detail.

ATTACHMENT L

BMPs FOR SURFACE STREAMS

Two (2) batch detention ponds - one existing and one proposed - and one (1) vegetative filter strip are proposed as the Permanent Best Management Practices (PBMPs) for this development.

The PBMPs have been designed in accordance with the Texas Commission on Environmental Quality's (TCEQ) Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Runoff from impervious cover areas will be treated by the proposed water quality basins prior to discharge downstream into the Brushy Creek Watershed.

ATTACHMENT M

REVIEWED BY:

Robin M. Griffin, AICP, Executive Director of Development Services
City of Leander, Texas

Emily Truman, P.E., CFM, City Engineer
City of Leander, Texas

Ashlea Boyle, Director of Parks and Recreation
City of Leander, Texas

Chief Joshua Davis, Fire Marshal
City of Leander, Texas

ENGINEER/ SURVEYOR:

PAPE-DAWSON CONSULTING ENGINEERS, LLC.
10801 N MOPAC EXPY., BLDG. 3, SUITE 200
AUSTIN, TEXAS 78759
(512) 454-8711

OWNER/DEVELOPER:

TOLL SOUTHWEST LLC.
1320 ARROW POINT DR., SUITE 401
CEDAR PARK, TEXAS 78613
(303) 263-7132

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

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

SUBMITTED BY:

I, AIMEE CHAVEZ, P.E. # 123240, DO HEREBY CERTIFY THAT THE ENGINEERING WORK BEING SUBMITTED HEREIN COMPLIES WITH ALL THE PROVISION OF THE TEXAS ENGINEERING PRACTICE ACT, INCLUDING 131.152 (e). I HEREBY ACKNOWLEDGE THAT ANY MISREPRESENTATION REGARDING THIS CERTIFICATION CONSTITUTES A VIOLATION OF THE ACT, AND MAY RESULT IN CRIMINAL, CIVIL AND/OR ADMINISTRATIVE PENALTIES AGAINST ME, AS AUTHORIZED BY THE ACT.

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

2/18/25

PAPE-DAWSON CONSULTING ENGINEERS, LLC. DATE
AIMEE CHAVEZ, P.E. #123240
ASSOCIATE VICE PRESIDENT

Revision #	Description	Approval

WILDSPRING
PHASE 2

PUBLIC IMPROVEMENT CONSTRUCTION PLANS
LEANDER, TEXAS

PICP-25-XXXX

FILING DATE: 2/18/25

FLOODPLAIN DEVELOPMENT PERMIT:
FDP-25-XXXX

NOTES:
1. DISTURBED ACREAGE OF THIS SITE IS 30.81 ACRES.
2. THE FOLLOWING INFRASTRUCTURE IS TO BE OWNED AND MAINTAINED BY THE CITY OF LEANDER: WATER, WASTEWATER, STORM SEWER, STREETS, AND SIDEWALKS. WATER QUALITY & DETENTION INFRASTRUCTURE OWNED AND MAINTAINED BY HOA.

LOCATION MAP
1: 2000

LEGAL DESCRIPTION:
A 37.247 ACRE TRACT OF LAND SITUATED IN THE MILTON HICKS SURVEY, ABSTRACT NO. 287, BEING OUT OF THE REMNANT PORTION OF A CALLED 111.569 ACRE TRACT OF LAND CONVEYED IN SPECIAL WARRANTY DEED TO TOLL SOUTHWEST, LLC., RECORDED IN DOCUMENT NO. 2021194501 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS.

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Sheet Number	Sheet Title
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2	CONSTRUCTION NOTES 1 OF 2
3	CONSTRUCTION NOTES 2 OF 2
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5	FINAL PLAT 1 OF 5
6	FINAL PLAT 2 OF 5
7	FINAL PLAT 3 OF 5
8	FINAL PLAT 4 OF 5
9	FINAL PLAT 5 OF 5
10	EXISTING CONDITIONS & DEMOLITION PLAN
11	EROSION AND SEDIMENTATION CONTROL PLAN 1 OF 4
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14	EROSION AND SEDIMENTATION CONTROL PLAN 4 OF 4
15	TREE PRESERVATION PLAN 1 OF 4
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18	TREE PRESERVATION PLAN 4 OF 4
19	TREE MITIGATION PLAN 1 OF 4
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21	TREE MITIGATION PLAN 3 OF 4
22	TREE MITIGATION PLAN 4 OF 4
23	WHITE MISTFLOWER DRIVE
24	ASHLEAF MAPLE ROAD 1 OF 2
25	ASHLEAF MAPLE ROAD 2 OF 2
26	INDIGO BUSH LANE 1 OF 2
27	INDIGO BUSH LANE 2 OF 2
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29	SENITA ROAD
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45	STORM DRAIN PROFILES SD-1A 2 OF 2 & SD-1B
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PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

CITY OF LEANDER APPROVAL

PICP-25-XXXX

PD JOB NO. 51480-01 WILDSPRING PHASE 2

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GENERAL NOTES

DATED: JULY 22, 2024

1. CONTRACTORS SHALL HAVE AN APPROVED SET OF PLANS WITH APPROVED REVISIONS ON SITE AT ALL TIMES. FAILURE TO HAVE APPROVED PLANS ON SITE MAY RESULT IN ISSUANCE OF WORK STOPPAGE.

2. CONTACT 811 SYSTEM FOR EXISTING WATER AND WASTEWATER LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION.
   a. REFRESH ALL LOCATES BEFORE 14 DAYS -LOCATE REFRESH REQUESTS MUST INCLUDE A COPY OF YOUR 811 TICKET. TEXAS PIPELINE DAMAGE PREVENTION LAWS REQUIRE THAT A LOCATE REFRESH REQUEST BE SUBMITTED BEFORE 14 DAYS, OR IF LOCATION MARKERS ARE NO LONGER VISIBLE.
   b. REPORT PIPELINE DAMAGE IMMEDIATELY -IF YOU WITNESS OR EXPERIENCE PIPELINE EXCAVATION DAMAGE, PLEASE CONTACT THE CITY OF LEANDER BY PHONE AT 512-259-2640.

3. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR 48 HOURS BEFORE:
   a. BEGINNING EACH PHASE OF CONSTRUCTION. CONTACT ASSIGNED CITY INSPECTOR.
   b. ANY TESTING. CONTRACTOR SHALL PROVIDE QUALITY TESTING FOR ALL INFRASTRUCTURES TO BE ACCEPTED AND MAINTAINED BY THE CITY OF LEANDER AFTER COMPLETION.
   c. 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.
   d. CONNECTING TO THE EXISTING WATER LINES.
   e. 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.

4. ALL RESPONSIBILITILY FOR THE ACCURACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD WHO PREPARED THEM. IN REVIEWNG THESE PLANS, THE CITY MUST RELY ON THE ADEQUACY OF THE WORK OF THE ENGINEER OF RECORD.

5. EXCESS SOIL SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE. NOTIFY THE CITY OF LEANDER IF THE DISPOSAL SITE IS INSIDE THE CITY'S JURISDICTIONAL BOUNDARIES.

6. BURNING IS PROHIBITED.

7. NO WORK IS TO BE PERFORMED BETWEEN THE HOURS OF 9:00 P.M. AND 7:00 A.M. OR WEEKENDS. THE CITY INSPECTOR RESERVES THE RIGHT TO REQUIRE THE CONTRACTOR TO UNCOVER ALL WORK PERFORMED WITHOUT INSPECTION.

8. CONTACT THE CITY INSPECTOR 4 DAYS PRIOR TO WORK FOR APPROVAL TO SCHEDULE ANY INSPECTIONS ON WEEKENDS OR CITY HOLIDAYS.

9. NO BLASTING IS ALLOWED.

10. 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. ALL CHANGES AND REVISIONS SHALL USE REVISION CLOUDS TO HIGHLIGHT ALL REVISIONS AND CHANGES WITH EACH SUBMITTAL. REVISION TRIANGLE MARKERS AND NUMBERS SHALL BE USED TO MARK REVISIONS. ALL CLOUDS AND TRIANGLE MARKERS FROM PREVIOUS REVISIONS MUST BE REMOVED. REVISION INFORMATION SHALL BE UPDATED ON COVER SHEET AND AFFECTED PLAN SHEET TITLE BLOCK.

11. 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.

12. THE CONTRACTOR WILL REIMBURSE THE CITY FOR ALL REPAIR AND/OR COST INCURRED AS A RESULT OF ANY DAMAGE TO ANY PUBLIC INFRASTRUCTURE WITHIN CITY EASEMENT OR PUBLIC RIGHT-OF-WAY, REGARDLESS OF THESE PLANS.

13. 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 OF RECORD AND CITY.

14. 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 THE PROPERTY OWNER.

15. 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 AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 1033 LA POSADA DR. SUITE 375, AUSTIN, TEXAS 78752-3832.

16. ALL MANHOLE FRAMES/COVERS AND WATER VALVE/METER BOXES MUST BE ADJUSTED TO FINISHED GRADE AT THE OWNER'S EXPENSE BY THE CONTRACTOR FOR CITY CONSTRUCTION INSPECTOR INSPECTION. ALL UTILITY ADJUSTMENTS SHALL BE COMPLETED PRIOR TO FINAL PAVING. CONTRACTOR SHALL BACKFILL AROUND MANHOLES AND VALVE BOXES WITH CLASS A CONCRETE.

17. 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.

18. PROJECT SPECIFICATIONS TAKE PRECEDENCE OVER PLANS AND SPECIAL CONDITIONS GOVERN OVER TECHNICAL SPECIFICATIONS.

19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT.

20. 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.

21. THE 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. THE CONTRACTOR WILL BE RESPONSIBLE FOR DUST CONTROL FROM THE SITE. THE CONTRACTOR SHALL KEEP THE SITE AREA CLEAN AND MAINTAINED AT ALL TIMES, TO THE SATISFACTION OF THE CITY. SUBDIVISION (OR SITE) WILL NOT BE ACCEPTED (OR CERTIFICATE OF OCCUPANCY ISSUED) UNTIL THE SITE HAS BEEN CLEANED TO THE SATISFACTION OF THE CITY.

22. TREES IN EXISTING ROW SHOULD BE PROTECTED OR NOTED IN THE PLANS TO BE REMOVED.

CONSTRUCTION SEQUENCE

NOTE: BELOW IS GENERAL SEQUENCE OF CONSTRUCTION. THE ENGINEER OF RECORD SHALL UPDATE BELOW WITH NOTES SPECIFIC TO THE PROJECT.

1. REACH OUT TO THE CITY FOR PRE-CONSTRUCTION MEETING AND CONSTRUCTION PERMIT.
2. SET-UP E/S CONTROLS AND TREE PROTECTION AND REACH OUT TO CITY FOR INSPECTION.
3. SET UP TEMPORARY TRAFFIC CONTROLS.
4. CONSTRUCT THE DRAINAGE PONDS AND STORM WATER FEATURES.
5. ROUGH GRADE STREETS. NO DEVELOPMENT OF EMBANKMENT WILL BE PERMITTED AT THIS TIME, EXCEPT AS REQUIRED FOR UTILITY CONSTRUCTION. GEOTECHNICAL ENGINEER TO VERIFY SUBGRADE AND REQUIRED BASE THICKNESS.
6. DELIVER WATER & WASTEWATER CUT SHEETS TO CITY OF LEANDER.
7. INSTALL ALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT.
8. DELIVER STORM SEWER CUT SHEETS TO CITY OF LEANDER.
9. BEGIN INSTALLATION OF STORM SEWER LINES. UPON COMPLETION, RESTORE AS MUCH DISTURBED AREA AS POSSIBLE, PARTICULARLY CHANNELS AND LARGE OPEN AREAS. INSTALL INLET PROTECTION AS PER PLANS.
10. DELIVER FINAL GRADE CUT SHEETS TO CITY OF LEANDER.
11. REGRADE STREETS TO SUBGRADE.
12. INSURE THAT ALL UNDERGROUND UTILITY CROSSINGS ARE COMPLETED. LAY FIRST COURSE BASE MATERIAL ON ALL STREETS.
13. INSTALL CURB AND GUTTER.
14. LAY FINAL BASE COURSE ON ALL STREETS.
15. LAY ASPHALT.
16. COMPLETE ALL ROUGH GRADING AND UNDERGROUND INSTALLATIONS WITHIN THE R.O.W.
17. COMPLETE FINAL GRADING AND INSTALL SIDEWALK IN R.O.W. ALONG AREAS DESIGNATED. RESTORE CONSTRUCTION SPOILS & STAGING AREA TO NATURAL GRADE.
18. REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROL, INCLUDING CONSTRUCTION SPOILS AREA.
19. COMPLETE ANY NECESSARY FINAL DRESS UP OF AREAS DISTURBED.
20. 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.
21. REQUEST FINAL WALKTHROUGH AND CONDUCT WALKTHROUGH WITH ENGINEER OF RECORD AND CITY DEPARTMENT.
22. ENGINEER OF RECORD IS RESPONSIBLE TO PREPARE AND SUBMIT CLOSEOUT DOCUMENTS FOR PROJECT CLOSEOUT.

EROSION CONTROL NOTES

1. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES AND SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
2. THE TEMPORARY SPOILS DISPOSAL SITE IS TO BE SHOWN IN THE EROSION CONTROL MAP.
3. 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.
4. 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.
5. 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 BERMUDA SHALL NOT BE USED.
6. 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.
7. TEMPORARY STOP SIGNS SHOULD BE INSTALLED AT ALL CONSTRUCTION ENTRANCES WHERE A STOP CONDITION DOES NOT ALREADY EXIST.
8. 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 GENERAL NOTES

1. 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.
2. 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

3. OPEN UTILITIES SHALL NOT BE PERMITTED ACROSS THE EXISTING PAVED SURFACES. WATER AND WASTEWATER LINES ACROSS THE EXISTING PAVED SURFACES SHALL BE BORED AND INSTALLED IN STEEL ENCASEMENT PIPES. BELL RESTRAINTS SHALL BE PROVIDED AT JOINTS.
4. INTERIOR SURFACES OF ALL DUCTILE IRON POTABLE OR RECLAIMED WATER PIPE SHALL BE CEMENT-MORTAR LINED AND SEAL COATED AS REQUIRED BY AWWA C104.
5. 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 MATERIAL CONFORMING 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

6. DENSITY TESTING FOR TRENCH BACKFILL SHALL BE DONE IN MAXIMUM 12" LIFTS.

WATER NOTES

1. 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.
2. CITY PERSONNEL WILL OPERATE OR AUTHORIZE THE CONTRACTOR TO OPERATE ALL WATER VALVES THAT WILL PASS THROUGH THE CITY'S POTABLE WATER. THE CONTRACTOR MAY BE FINED $500 OR MORE, INCLUDING ADDITIONAL THEFT OF WATER FINES, IF A WATER VALVE IS OPERATED IN AN UNAUTHORIZED MANNER, REGARDLESS OF WHO OPERATED THE VALVE.
3. 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 AND 6 AM AFTER COORDINATING WITH CITY CONSTRUCTION INSPECTORS AND INFORMING AFFECTED PROPERTIES.
4. PRESSURE TAPS OR HOT TAPS SHALL BE IN ACCORDANCE WITH CITY OF LEANDER STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION 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 SHALL NOT BE PERMITTED UNLESS MADE BY THE USE OF AN APPROVED FULL-CIRCLE GASKETED TAPPING SLEEVE. CONCRETE THRUST BLOCKS SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES A MINIMUM OF 24 HOURS PRIOR TO THE BRANCH BEING PLACED INTO SERVICE. THRUST BLOCKS SHALL BE INSPECTED PRIOR TO BACKFILL.
5. 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.
6. THRUST BLOCKS OR RESTRAINTS SHALL BE IN ACCORDANCE WITH THE CITY OF LEANDER STANDARD SPECIFICATIONS AND REQUIRED AT ALL FITTINGS PER DETAIL MANUFACTURER'S RECOMMENDATION. ALL FITTINGS SHALL HAVE BOTH THRUST BLOCKS AND RESTRAINTS.
7. ALL DEAD END WATER MAINS SHALL HAVE 'FIRE HYDRANT ASSEMBLY' OR 'BLOW-O VALVE AND THRUST BLOCK' OR 'BLOW-OFF VALVE AND THRUST RESTRAINTS'. THRUST RESTRAINTS SHALL BE INSTALLED ON THE MINIMUM LAST THREE PIPE LENGTHS (STANDARD 20' LAYING LENGTH). ADDITIONALL THRUST RESTRAINTS MAY BE REQUIRED BASED UPON THE MANUFACTURERS RECOMMENDATION AND/OR ENGINEER'S DESIGN.
8. PIPE MATERIAL FOR PUBLIC WATER MAINS SHALL BE PVC (AWWA C900-DR14 MIN. 3 PSI PRESSURE RATING). WATER SERVICES (2' OR LESS) SHALL BE POLYETHYLENE TUBING (BLACK, 200PSI, AND SDR-(9)). COPPER PIPES AND FITTINGS ARE NOT ALLOWED IN THE PUBLIC RIGHT OF WAY. ALL PLASTIC PIPES FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW).
9. ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON PIPE (AWWA C115/C151 PRESSURE CLASS 350).
10. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-MIL POLYETHYLENE.
11. LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE COORDINATED WITH THE PUBLIC WORKS DEPARTMENT.
12. ALL WATER METER BOXES SHALL BE:

a.	SINGLE, 1" METER AND BELOW	DFW37F-12-1CA, OR EQUAL
b.	DUAL, 1" METERS AND BELOW	DFW39F-12-1CA, OR EQUAL
c.	1.5" SINGLE METER	DFW65C-14-1CA, OR EQUAL
d.	2" SINGLE METER	DFW1730F-12-1CA, OR EQUAL

13. ALL WATER VALVE COVERS ARE TO BE PAINTED BLUE.

WASTEWATER NOTES

1. CURVILINEAR WASTEWATER DESIGN LAYOUT IS NOT PERMITTED.
2. MANDREL TESTING SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
3. MANHOLES SHALL BE COATED PER CITY OF AUSTIN SPL WW-511 (RAVEN 405 OR SPRAYWALL). PENETRATIONS TO EXISTING WASTEWATER MANHOLES REQUIRE THE CONTRACTOR TO RECOAT THE ENTIRE MANHOLE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATIONS SECTION NO. 506.5.
4. RECLAIMED AND RECYCLED WATER LINE SHALL BE CONSTRUCTED OF "PURPLE PIPE." ALL RECLAIMED AND RECYCLED WATER VALVE COVERS SHALL BE SQUARE AND PAINTED PURPLE.
5. FORCE MAIN PIPES NEED TO HAVE SWEEPING WYES FOR JOINTS.

CITY OF LEANDER CONTACTS

ENGINEERING MAIN LINE:	512-528-2721
PLANNING DEPARTMENT:	512-528-2750
PUBLIC WORKS MAIN LINE:	512-259-2640
STORM WATER INSPECTIONS:	512-285-0055
UTILITIES MAIN LINE:	512-259-1142
UTILITIES ON-CALL:	512-690-4760

CITY OF LEANDER APPROVAL

NO. | REVISION | DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
CONSTRUCTION NOTES 1 OF 2

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
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Date: Feb 18, 2025, 1:52pm User ID: andrewdobk
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PICP-25-XXXX

STREET AND DRAINAGE NOTES

1. THE CITY OF LEANDER HAS NOT REVIEWED THESE PLANS FOR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA). IT IS THE RESPONSIBILITY OF THE OWNER TO PROVIDE COMPLIANCE WITH ALL LEGISTATION RELATED TO ACCESSIBILITY WITHIN THE LIMITS OF CONSTRUCTION SHOWN IN THESE PLANS. ALL SIDEWALKS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND TEXAS ACCESSIBILITY STANDARS (TAS).
2. 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 PRIMARILY GRANULAR 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.
3. 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.
4. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, INCLUDING GAS, ELECTRIC TELEPHONE, CABLE TV, ETC., SHALL BE A MINIMUM OF 36" BELOW SUBGRADE.
5. STREET RIGHT-OF-WAY SHALL BE GRADED AT A SLOPE OF ¼" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED.
6. ALL DRAINAGE PIPE IN PUBLIC RIGHT OF WAY OR EASEMENTS SHALL BE REINFORCED CONCRETE PIPE MINIMUM CLASS III OF TONGUE AND GROOVE OR O-RING JOINT DESIGN. CORRUGATED METAL PIPE IS NOT ALLOWED IN PUBLIC RIGHT OR WAY OR EASEMENTS.
7. THE CONTRACTOR MUST PROVIDE A PNEUMATIC TRUCK PER TXDOT SPEC FOR PROOF ROLLING.
8. 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.
9. MANHOLE FRAMES, COVERS, VALVES, CLEAN-OUTS, ETC. SHALL BE RAISED TO GRADE PRIOR TO FINAL PAVEMENT CONSTRUCTION.
10. A STOP BAR SHALL BE PLACED AT ALL STOP SIGN LOCATIONS.
11. 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 APPROVED CONSTRUCTION PLANS.
12. GEOTECHNICAL INVESTIGATION INFORMATION AND PAVEMENT RECOMMENDATIONS WERE PROVIDED BY MLA LABS, INC. PAVEMENT RECOMMENDATIONS ARE AS FOLLOWS:

STREET	CLASSIFICATION	SUBGRADE	FLEX BASE	HMAC "TYPE D"
WHITE MISTFLOWER DRIVE	LOCAL	12.0"	14.0"	2.0"
ASHLEAF MAPLE ROAD	LOCAL	12.0"	14.0"	2.0"
INDIGO BUSH LANE	LOCAL	12.0"	14.0"	2.0"
DAYLILIES DRIVE	LOCAL	12.0"	14.0"	2.0"
SENITA DRIVE	LOCAL	12.0"	14.0"	2.0"
SWEET VIOLET DRIVE	LOCAL	12.0"	14.0"	2.0"

13. A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CITY OF AUSTIN TRANSPORATION CRITERIA MANUAL, CITY OF LEANDER STANDARD DETAILS AND TEXAS DEPARTMENT OF TRANSPORTATION CRITERIA, SHALL BE SUBMITTED TO THE CITY OF LEANDER FOR REVIEW AND APPROVAL PRIOR TO ANY PARTIAL OR COMPLETE ROADWAY CLOSURES. TRAFFIC CONTROL PLANS MUST BE SITE SPECIFIC AND SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
14. ALL LANE CLOSURES SHALL OCCUR ONLY BETWEEN THE HOURS OF 9 AM AND 4 PM UNLESS OTHERWISE NOTED ON THE PLANS. ANY NIGHT TIME LANE CLOSURES REQUIRE APPROVAL OF THE CITY ENGINEER AND SHALL OCCUR BETWEEN THE HOURS OF 8 PM AND 6 AM. LANE CLOSURES OBSERVED BY THE CITY DURING PEAK HOURS OF 6 AM TO 9 AM OR 4 PM TO 8 PM WILL BE SUBJECT TO A FINE AND/OR SUBSEQUENT ISSUANCE OF WORK STOPPAGE.
15. TEMPORARY ROCK CRUSHING IS NOT ALLOWED. ALL SOURCES OF FLEXIBLE BASE MATERIAL ARE REQUIRED TO BE APPROVED BY THE CITY. PRIOR TO BASE PLACEMENT ALL CURRENT TRIAXIAL TEST REPORTS FOR PROPOSED STOCK PILES ARE TO BE SUBMITTED TO THE CITY CONSTRUCTION INSPECTOR FOR REVIEW AND APPROVAL.
16. AT ROAD INTERSECTIONS THAT HAVE A VALLEY GUTTER, THE CROWN TO THE INTERSECTING ROAD WILL BE CULMINATED AT A DISTANCE OF 40 FEET FROM THE INTERSECTING CURB LINE UNLESS OTHERWISE NOTED.
17. NO PONDING OF WATER SHALL BE ALLOWED TO COLLECT ON OR NEAR THE INTERSECTION OF PRIVATE DRIVEWAYS AND PUBLIC STREETS. RECONSTRUCTION OF THE DRIVEWAY APPROACH SHALL BE AT THE CONTRACTOR'S EXPENSE.
18. ALL DRIVEWAY APPROACHES SHALL HAVE A UNIFORM TWO PERCENT SLOPE WITHIN THE PUBLIC RIGHT OF WAY UNLESS APPROVED IN WRITING BY THE ENGINEERING DEPARTMENT.
19. IMPROVEMENTS THAT INCLUDE RECONSTRUCTION OF AN EXISTING TYPE II DRIVEWAY SHALL BE DONE IN A MANNER WHICH RETAINS OPERATIONS OF NOT LESS THAN HALF OF THE DRVIEWAY TO REMAIN OPEN AT ALL TIMES. FULL CLOSURE OF SUCH DRIVEWAY CAN BE CONSIDERED WITH WRITTEN AUTHORIZATION OBTAINED BY THE CONTRACTOR FROM ALL PROPERTY OWNERS AND ACCESS EASEMENT RIGHT HOLDERS ALLOWING THE FULL CLOSURE OF THE DRIVEWAY.
20. CONTRACTOR MUST CLEAR FIVE (5) FEET BEYOND ALL PUBLIC RIGHT OF WAY TO PREVENT FUTURE VEGETATIVE GROWTH INTO THE SIDEWALK AREAS.
21. SLOPE OF NATURAL GROUND ADJACENT TO THE PUBLIC RIGHT OF WAY SHALL NOT EXCEED 3:1 SLOPE. IF A 3:1 SLOPE IS NOT POSSIBLE, SLOPE PROTECTION OR RETAINING WALL MUST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL PRIOR TO FINAL ACCEPTANCE.
22. THERE SHALL BE NO WATER, WASTEWATER OR DRAINAGE APPURTENANCES, INCLUDING BUT NOT LIMITED TO VALVES, FITTINGS, METERS, CLEAN-OUTS, MANHOLES, OR VAULTS IN ANY DRIVEWAY, SIDEWALK, TRAFFIC OR PEDESTRIAN AREA.
23. PUBLIC SIDEWALKS SHALL NOT USE CURB INLETS AS PARTIAL WALKING SURFACE. SIDEWALKS SHALL NOT USE TRAFFIC CONTROL BOXES, METERS, CHECK VALVE VAULTS, COMMUNICATION VAULTS, OR OTHER BURIED OR PARTIALLY BURIED INFRASTRUCTURE AS A VEHICULAR OR PEDESTRIAN SURFACE.
24. ALL WET UTILITIES SHALL BE INSTALLED AND ALL DENSITIES MUST HAVE PASSED INSPECTION(S) PRIOR TO THE INSTALLATION OF DRY UTILITIES.
25. DRY UTILITIES SHALL BE INSTALLED AFTER SUBGRADE IS CUT AND BEFORE THE FIRST COURSE OF SLOPE. NO TRENCHING COMPACTED BASE. IF NECESSARY DRY UTILITIES INSTALLED AFTER FIRST COURSE BASE SHALL BE BORED ACROSS THE FULL WIDTH OF THE PUBLIC RIGHT-OF-WAY.
26. A MINIMUM OF SEVEN (7) DAYS OF CURE TIME IS REQUIRED FOR HMAC PRIOR TO THE INTRODUCTION OF VEHICULAR TRAFFIC TO ALL STREETS.

TRENCH SAFETY NOTES

1. 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

1. 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.
2. 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.
3. AREAS OF SOIL DISTURBANCE ARE LIMITED TO GRADING AND IMPROVEMENTS SHOWN. ALL OTHER AREAS WILL NOT BE DISTURBED.

BENCHMARK NOTES

STARTING BENCHMARK
1/2" IRON ROD w/ CAP MARKED "LSI"
GRID N: 10186208.85
GRID E: 3096312.67
NAD83 - 2011 ADJUSTMENT (ZONE 4203)

Texas Commission on Environmental Quality
Contributing Zone Plan
General Construction Notes

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any ground disturbance or construction activities. This notice must include:
   - the name of the approved project;
   - the activity start date; and
   - the contact information of the prime contractor.
2. All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan (CZP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on-site.
3. No hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.
4. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.
5. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.
6. Sediment must be removed from the sediment traps or sedimentation basins when it occupies 50% of the basin's design capacity.
7. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.
8. All excavated material that will be stored on-site must have proper E&S controls.
9. If portions of the site will have a cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.
10. The following records should be maintained and made available to the TCEQ upon request:
    - the dates when major grading activities occur;
    - the dates when construction activities temporarily or permanently cease on a portion of the site; and
    - the dates when stabilization measures are initiated.
11. The holder of any approved CZP must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    A. any physical or operational modification of any best management practices (BMPs) or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;
    B. any change in the nature or character of the regulated activity from that which was originally approved;
    C. any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer; or
    D. any development of land previously identified as undeveloped in the approved contributing zone plan.

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

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

TCEQ-0592A (Rev. July 15, 2015) Page 1 of 2

TCEQ-0592A (Rev. July 15, 2015) Page 2 of 2

ADDITIONAL TCEQ NOTES

30TAC §290.44(E)(4)(B)(V): WHERE CEMENT STABILIZED SAND BEDDING IS REQUIRED, THE CEMENT STABILIZED SAND SHALL HAVE A MINIMUM OF 10% CEMENT PER CUBIC YARD OF CEMENT STABILIZED SAND MIXTURE, BASED ON LOOSE DRY WEIGHT VOLUME (AT LEAST 2.5 BAGS OF CEMENT PER CUBIC YARD OF MIXTURE). THE CEMENT STABILIZED SAND BEDDING SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER MAIN OR LATERAL. THE USE OF BROWN COLORING IN CEMENT STABILIZED SAND FOR WASTEWATER MAIN OR LATERAL BEDDING IS RECOMMENDED FOR THE IDENTIFICATION OF PRESSURE RATED WASTEWATER MAINS DURING FUTURE CONSTRUCTION.

A LEAKAGE TEST IS REQUIRED FOR ALL GRAVITY LINES. FOR LINE THAT IS NOT HORIZONTALLY CURVED, A HYDROSTATIC TEST AND/OR A LOW PRESSURE AIR TEST MUST BE PERFORMED ON ALL PROPOSED GRAVITY SANITARY SEWER COLLECTION PIPING. THESE TESTS MUST COMPLY WITH SECTION 317.2(A)(4) OF THE TCEQ'S RULES. ALL SECTIONS OF HORIZONTALLY CURVED LINE MUST BE SUBJECTED TO A HYDROSTATIC LEAKAGE TEST CONFORMING TO THE REQUIREMENTS OF SECTION 317.2.(A)(4)(A) OF THE DESIGN CRITERIA, WITH A MAXIMUM ALLOWABLE LEAKAGE OF 10 GALLONS/INCH DIAMETER/MILE/DAY.

ALL MANHOLES MUST BE TESTED FOR LEAKAGE. THE CONTRACTOR SHALL USE EITHER A HYDROSTATIC TEST OR A VACUUM TEST. HYDROSTATIC TEST MUST CONFORM TO SECTION 317.2(C)(5)(H) OF THE TCEQ'S RULES. VACUUM TESTING MUST CONFORM TO THE FOLLOWING REQUIREMENTS:

EACH MANHOLE SHALL BE TESTED IMMEDIATELY AFTER ASSEMBLY AND PRIOR TO BACKFILLING. MANHOLES WHICH HAVE BEEN BACKFILLED SHALL EITHER BE EXCAVATED TO EXPOSE THE ENTIRE EXTERIOR PRIOR TO VACUUM TESTING OR THE MANHOLE SHALL BE TESTED FOR LEAKAGE BY MEANS OF A HYDROSTATIC TEST.

ALL LIFT HOLES AND EXTERIOR JOINTS SHALL BE PLUGGED WITH AN APPROVED NON-SHRINK GROUT.

NO GROUT SHALL BE PLACED IN HORIZONTAL JOINTS BEFORE TESTING.

ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED, TAKING CARE TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE.

STUBOUTS, MANHOLE BOOTS AND PIPE PLUGS SHALL BE SECURED TO PREVENT MOVEMENT WHILE THE VACUUM IS DRAWN.

A MINIMUM 60-INCH/LB TORQUE WRENCH SHALL BE USED TO TIGHTEN THE EXTERNAL CLAMPS THAT SECURE THE TEST COVER TO THE TOP OF THE MANHOLE.

THE TEST HEAD SHALL BE PLACED AT THE INSIDE OF THE TOP OF THE CONE SECTION AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

A VACUUM OF 10 INCHES OF MERCURY SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. WITH THE VALVES CLOSED, THE TIME SHALL BE MEASURED FOR THE VACUUM TO DROP TO 9 INCHES OF MERCURY. THE MANHOLE SHALL PASS IF THE TIME IS GREATER THAN 2 MINUTES. IF THE MANHOLE FAILS THE INITIAL TEST, NECESSARY REPAIRS SHALL BE MADE WITH A NON-SHRINK GROUT WHILE THE VACUUM IS STILL BEING DRAWN. IF THE MANHOLE FAILS A SECOND TIME, REPAIRS SHOULD AGAIN BE MADE AND THE MANHOLE SHALL BE TESTED BY MEANS OF A HYDROSTATIC TEST WHICH COMPLIES WITH SECTION 317.2(C)(5)(H) OF THE TCEQ'S RULES. IF ANY MANHOLE FAILS THE HYDROSTATIC TEST, AFTER FAILING THE VACUUM TEST TWICE, THE CONTRACTOR SHOULD CONSIDER REPLACING THAT MANHOLE. IF THE CONTRACTOR CHOOSES TO ATTEMPT TO REPAIR THAT MANHOLE, THE MANHOLE MUST BE RETESTED BY MEANS OF THE HYDROSTATIC TEST OUTLINED IN SECTION 317.2(C)(5)(H) OF THE TCEQ'S RULES, UNTIL IT PASSES.

THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER AT LEAST 48 HOURS PRIOR TO THE COMMENCEMENT OF TESTING. THE ENGINEER OR HIS/HER REPRESENTATIVE SHALL OVERSEE SAID TESTING.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL SEPARATION DISTANCES BETWEEN THE WATERLINES AND WASTEWATER LINES ARE AS PROVIDED FOR IN 30TAC SECTION 217.53 OF THE DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS.

CITY OF LEANDER APPROVAL

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER
Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
CONSTRUCTION NOTES 2 OF 2

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 3 OF 80

PICP-25-XXXX

Date: Feb 18, 2025, 1:52pm User ID: andrewdock
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OWNER: CSM–MASON FAMILY, LP DOC. NO. 2011086909 (O.P.R.W.C.)

OWNER: JESSE W. STENCE DOC. NO. 2015101395 (O.P.R.W.C.)

MATCHLINE – SEE SHEET 12 OF 80

MATCHLINE – SEE SHEET 13 OF 80

NOTES:

1. TEMPORARY STABILIZATION IS REQUIRED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS. SILT FENCE AND MULCHING SHALL BE USED ALONG ALL ROW AND THE DOWNHILL SLOPE OF ALL SINGLE–FAMILY LOTS. ANY BARE SOIL AREAS REMAINING WITHIN SINGLE FAMILY LOTS ARE TO BE WATERED FOR DUST CONTROL. ADDITIONAL MEASURES, INCLUDING BUT NOT LIMITED TO MULCH BERMS, EROSION CONTROL BLANKETS, ETC., MAY BE REQUIRED FOR STEEPER SLOPES, ERODIBLE SOILS AND HIGH FLOW AREAS AS DETERMINED BY THE INSPECTOR.
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8. ALL ROCK BERMS SHALL BE REMOVED BY THE CONTRACTOR.

SCALE: 1" = 40'

0' 40' 80' 120'

LEGEND

- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- TP — TP — TREE PROTECTION
- ENGINEERED VEGETATIVE FILTER STRIP
- STABILIZED CONSTRUCTION ENTRANCE
- ROCK RIP–RAP
- ROCK BERM
- IP — INLET PROTECTION
- 780 — PROPOSED CONTOUR LINE
- 785 — EXISTING CONTOUR LINE
- FLOW ARROW
- SIGNIFICANT TREES PRESERVED
- SIGNIFICANT TREES REMOVED
- HERITAGE TREES PRESERVED
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KEY MAP

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER
Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
EROSION AND SEDIMENTATION CONTROL PLAN 1 OF 4

CITY JOB No. PICP-25-XXXX
JOB NO. 51480–01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 11 OF 80

Date: Feb 18, 2025, 1:54pm User ID: andrewdok
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OWNER: CSM-MASON FAMILY, LP
DOC. NO. 2011086909
(O.P.R.W.C.)

CR 175

WILDSPRING PHASE 1

WHITE MISTFLOWER DRIVE

DAYLILIES DRIVE

SENITA ROAD

BLOCK C

BLOCK E

BLOCK H

17 HOA LANDSCAPE BLOCK C

71 LF TREE PROTECTION

82 LF TREE PROTECTION

73 LF TREE PROTECTION

224 LF SILT FENCE

STABILIZED CONSTRUCTION ENTRANCE

MATCHLINE – SEE SHEET 13 OF 80

MATCHLINE – SEE SHEET 14 OF 80

NOTES:

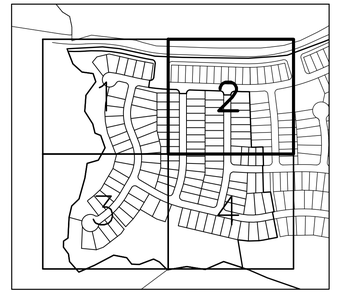
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KEY MAP

CITY OF LEANDER APPROVAL

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS

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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
EROSION AND SEDIMENTATION CONTROL PLAN 2 OF 4

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
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SHEET 12 OF 80

PICP-25-XXXX

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MATCHLINE – SEE SHEET 11 OF 80

MATCHLINE – SEE SHEET 14 OF 80

OWNER: JESSE W. STENCE DOC. NO. 2015101395 (O.P.R.W.C.)

OWNER: JESSE W. STENCE DOC. NO. 2015101395 (O.P.R.W.C.)

DE/HOA LANDSCAPE BLOCK J

DE/HOA LANDSCAPE/WWE BLOCK A

INDIGO BUSH LANE

ASHEM MAPLE ROAD

BLOCK A

BLOCK J

1,378 LF SILT FILTER

1,378 LF SILT FENCE

99 LF TREE PROTECTION

163 LF TREE PROTECTION

93 LF TREE PROTECTION

203 LF TREE PROTECTION

61 LF TREE PROTECTION

205 LF TREE PROTECTION

304 LF TREE PROTECTION

80 LF TREE PROTECTION

108 LF TREE PROTECTION

295 LF TREE PROTECTION

861 LF SILT FENCE

RETAINING WALL

RETAINING WALL

±117 SF OF 6" ROCK RIP-RAP @ 12" DEPTH PER COA DETAIL 508S-17

±117 SF OF 9" ROCK RIP-RAP @ 18" DEPTH PER COA DETAIL 508S-17

±117 SF OF 9" ROCK RIP-RAP @ 18" DEPTH PER COA DETAIL 508S-17

ATLAS-14 1% ANNUAL CHANCE FLOODPLAIN

FEMA 1% ANNUAL CHANCE FLOODPLAIN

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KEY MAP

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NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
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Aimee Chavez 2/18/25

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WILDSPRING
PHASE 2
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CITY JOB No. PICP-25-XXXX
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DATE FEBRUARY 2025
DESIGNER AD/BA
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SHEET 13 OF 80

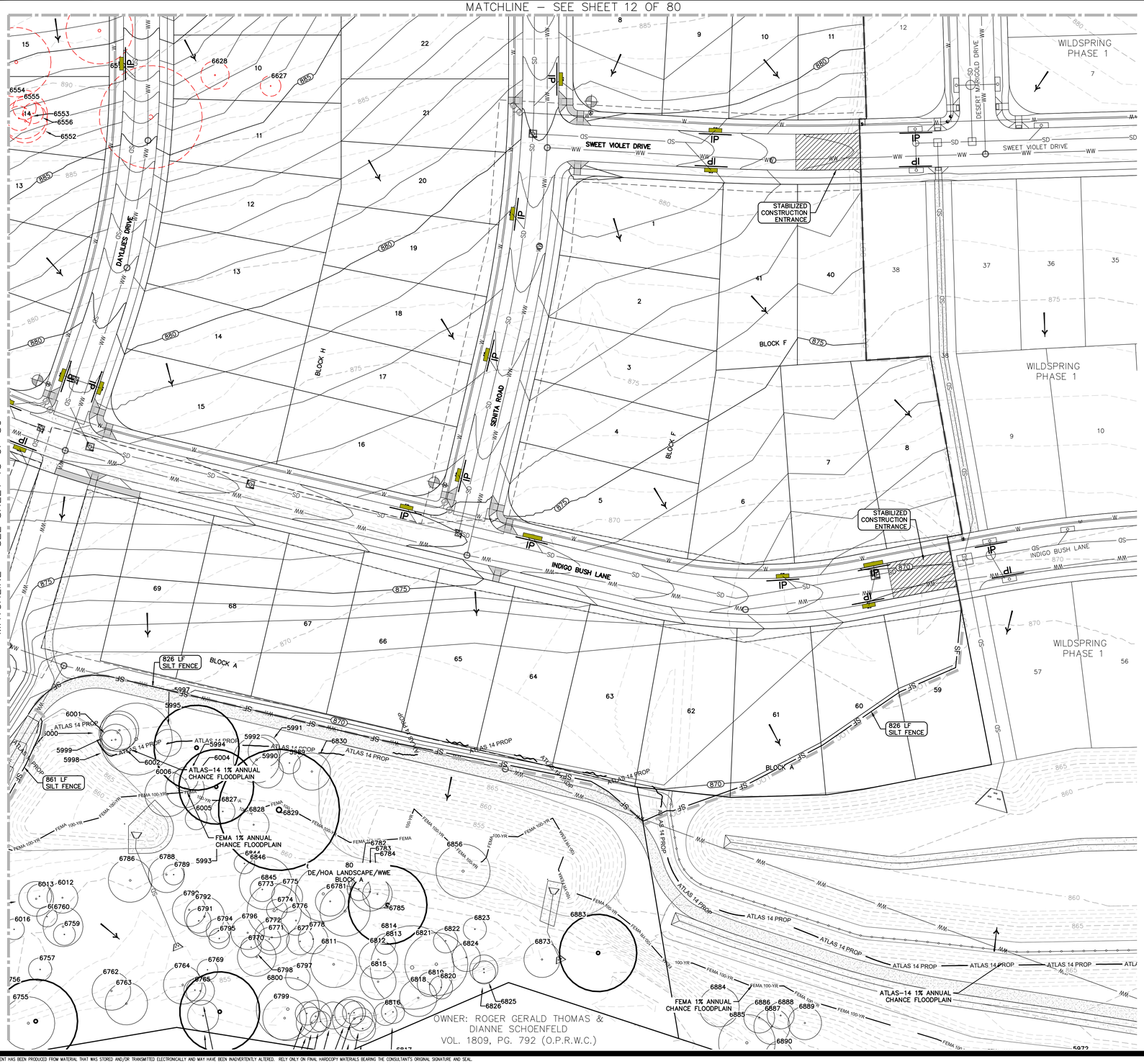
PICP-25-XXXX

Date: Feb 18, 2025, 1:55pm User ID: andrewdoak
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MATCHLINE – SEE SHEET 12 OF 80

MATCHLINE – SEE SHEET 13 OF 80



NOTES:

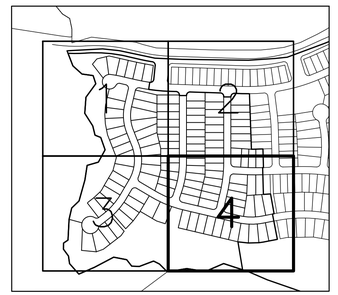
1. TEMPORARY STABILIZATION IS REQUIRED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS. SILT FENCE AND MULCHING SHALL BE USED ALONG ALL ROW AND THE DOWNHILL SLOPE OF ALL SINGLE-FAMILY LOTS. ANY BARE SOIL AREAS REMAINING WITHIN SINGLE FAMILY LOTS ARE TO BE WATERED FOR DUST CONTROL. ADDITIONAL MEASURES, INCLUDING BUT NOT LIMITED TO MULCH BERMS, EROSION CONTROL BLANKETS, ETC., MAY BE REQUIRED FOR STEEPER SLOPES, ERODIBLE SOILS AND HIGH FLOW AREAS AS DETERMINED BY THE INSPECTOR.
2. STABILIZATION EFFORTS DESCRIBED BY NOTE 1 ABOVE IS TEMPORARY UNTIL SINGLE FAMILY HOME CONSTRUCTION IS COMPLETED.
3. TEMPORARY EROSION AND SEDIMENTATION CONTROLS APPROVED FOR THESE IMPROVEMENTS ARE TO BE KEPT IN PLACE DURING CONSTRUCTION UNDER THIS APPLICATION.
4. THE CITY OF LEANDER ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD OR MODIFY EROSION/SEDIMENT CONTROLS ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
5. OWNER AND CONTRACTOR TO VERIFY TREE PROTECTION AND LIMITS OF CLEARING BEFORE COMMENCING CONSTRUCTION.
6. ON-SITE EROSION CONTROL MEASURES TO BE ESTABLISHED AND MAINTAINED AROUND TEMPORARY/PERMANENT SPOILS LOCATIONS, CONCRETE WASHOUT AND CONTRACTOR STAGING AREAS.
7. ANY INLET PROTECTION LABEL WITH A "*" INDICATES THE USE OF THE SUMP INLET PROTECTION. REFERENCE SHEET 70 FOR DETAIL.
8. ALL ROCK BERMS SHALL BE REMOVED BY THE CONTRACTOR.

SCALE: 1"= 40'

0' 40' 80' 120'

LEGEND

- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- TP — TP — TP — TREE PROTECTION
- ENGINEERED VEGETATIVE FILTER STRIP
- STABILIZED CONSTRUCTION ENTRANCE
- ROCK RIP-RAP
- ROCK BERM
- IP — INLET PROTECTION
- 785 — PROPOSED CONTOUR LINE
- 785 — EXISTING CONTOUR LINE
- FLOW ARROW
- SIGNIFICANT TREES PRESERVED
- SIGNIFICANT TREES REMOVED
- HERITAGE TREES PRESERVED
- HERITAGE TREES REMOVED



KEY MAP

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

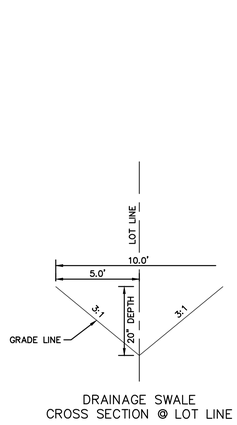
WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
EROSION AND SEDIMENTATION CONTROL PLAN 4 OF 4

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 14 OF 80

Date: Feb 18, 2025, 1:56pm User ID: andrewdobk
File: H:\Projects\514\400\01.301 Construction Documents\Civil\EC51480-01.dwg

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DRAINAGE SWALE
CROSS SECTION @ LOT LINE

SCALE: 1"= 40'

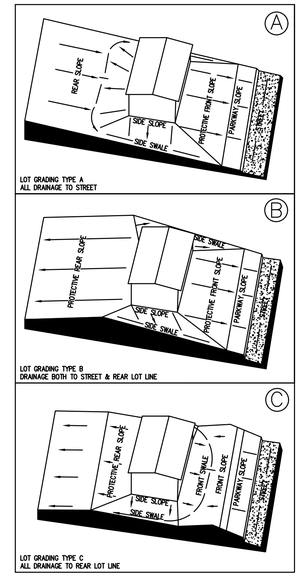
0' 40' 80' 120'

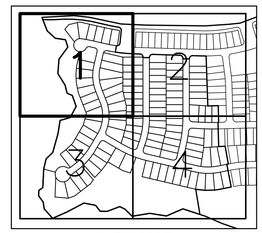
LEGEND

- LOC — LIMITS OF CONSTRUCTION
- (735) — PROPOSED CONTOURS
- 735 — EXISTING CONTOURS
- BOUNDARY LINE
- PROPOSED SWALE (SEE DETAIL THIS SHEET)
- VEGETATIVE FILTER STRIP
- MFFE 761.75 — MINIMUM FINISHED FLOOR ELEVATION
- (A) — TYPE 'A' LOT GRADING PER FHA–HUD REQUIREMENTS
- (B) — TYPE 'B' LOT GRADING PER FHA–HUD REQUIREMENTS
- (C) — TYPE 'C' LOT GRADING PER FHA–HUD REQUIREMENTS

NOTES

1. ALL RETAINING WALLS ARE TO BE BUILT FROM WITHIN THE SINGLE FAMILY LOTS.





KEY MAP

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123240
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10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

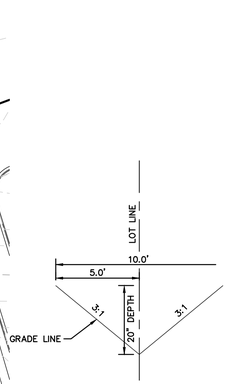
WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
GRADING PLAN 1 OF 4

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 31 OF 80

Date: Feb 18, 2025, 2:05pm User ID: andrewdob
File: H:\Projects\51480\01\301 Construction Documents\Civil\GR51480-01.dwg

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DRAINAGE SWALE
CROSS SECTION @ LOT LINE

SCALE: 1"= 40'

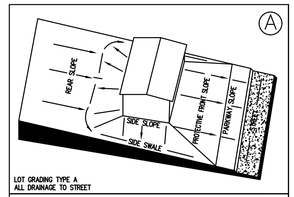
0' 40' 80' 120'

LEGEND

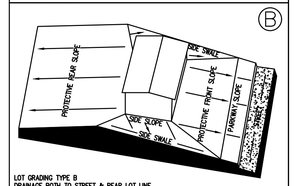
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- Ⓑ — TYPE 'B' LOT GRADING PER FHA–HUD REQUIREMENTS
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NOTES

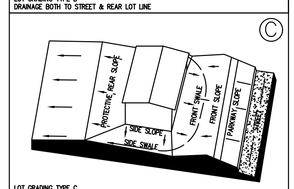
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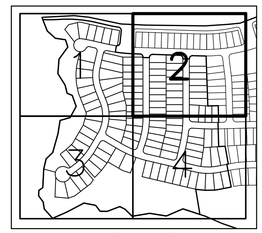
LOT GRADING TYPE A
ALL DRAINAGE TO STREET



LOT GRADING TYPE B
DRAINAGE BOTH TO STREET & REAR LOT LINE



LOT GRADING TYPE C
ALL DRAINAGE TO REAR LOT LINE



KEY MAP

CITY OF LEANDER APPROVAL

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
GRADING PLAN 2 OF 4

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 32 OF 80

PICP-25-XXXX

Date: Feb 18, 2025, 2:05pm User ID: andrewdoak
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MATCHLINE – SEE SHEET 31 OF 80

MATCHLINE – SEE SHEET 34 OF 80

OWNER: JESSE W. STENCE DOC. NO. 2015101395 (O.P.R.W.C.)

OWNER: JESSE W. STENCE DOC. NO. 2015101395 (O.P.R.W.C.)

INDIGO BUSH LANE

ASHLEAF MAPLE ROAD

BLOCK J

BLOCK A

21 DE/HOA LANDSCAPE BLOCK J

80 DE/HOA LANDSCAPE/WWE BLOCK A

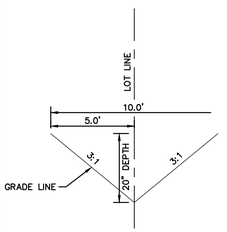
ATLAS–14 1% ANNUAL CHANCE FLOODPLAIN

FEMA 1% ANNUAL CHANCE FLOODPLAIN

ATLAS 14 PROP

FEMA 100-YR

DRAINAGE SWALE CROSS SECTION @ LOT LINE



SCALE: 1"= 40'

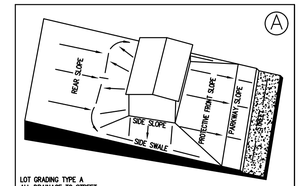
0' 40' 80' 120'

LEGEND

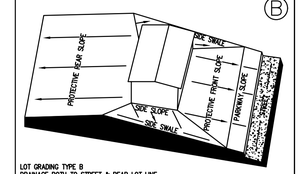
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NOTES

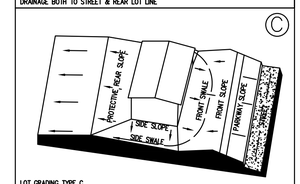
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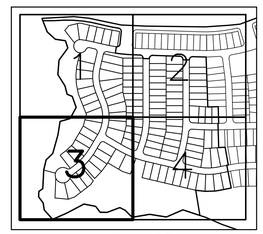
LOT GRADING TYPE A
ALL DRAINAGE TO STREET



LOT GRADING TYPE B
DRAINAGE BOTH TO STREET & REAR LOT LINE



LOT GRADING TYPE C
ALL DRAINAGE TO REAR LOT LINE



KEY MAP

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS

AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
GRADING PLAN 3 OF 4

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 33 OF 80

Date: Feb 18, 2025, 2:05pm User ID: andrewdok
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MATCHLINE – SEE SHEET 32 OF 80

MATCHLINE – SEE SHEET 33 OF 80

SWEET VIOLET DRIVE

DESERT MARIGOLD

DAYLILIES DRIVE

SENITA ROAD

INDIGO BUSH LANE

BLOCK A

BLOCK F

BLOCK H

WILDSPRING PHASE 1

ATLAS-14 1% ANNUAL CHANCE FLOODPLAIN

FEMA 1% ANNUAL CHANCE FLOODPLAIN

80 DE/HOA LANDSCAPE/WWE BLOCK A

OWNER: ROGER GERALD THOMAS & DIANNE SCHOENFELD
VOL. 1809, PG. 792 (O.P.R.W.C.)

SCALE: 1"= 40'

0' 40' 80' 120'

LOT LINE
10.0'
5.0'
1:1
3:1
20" DEPTH
GRADE LINE

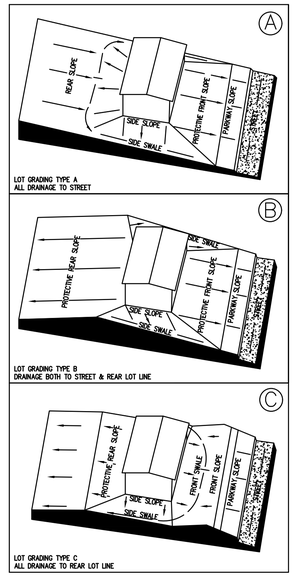
DRAINAGE SWALE
CROSS SECTION @ LOT LINE

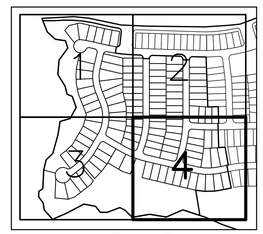
LEGEND

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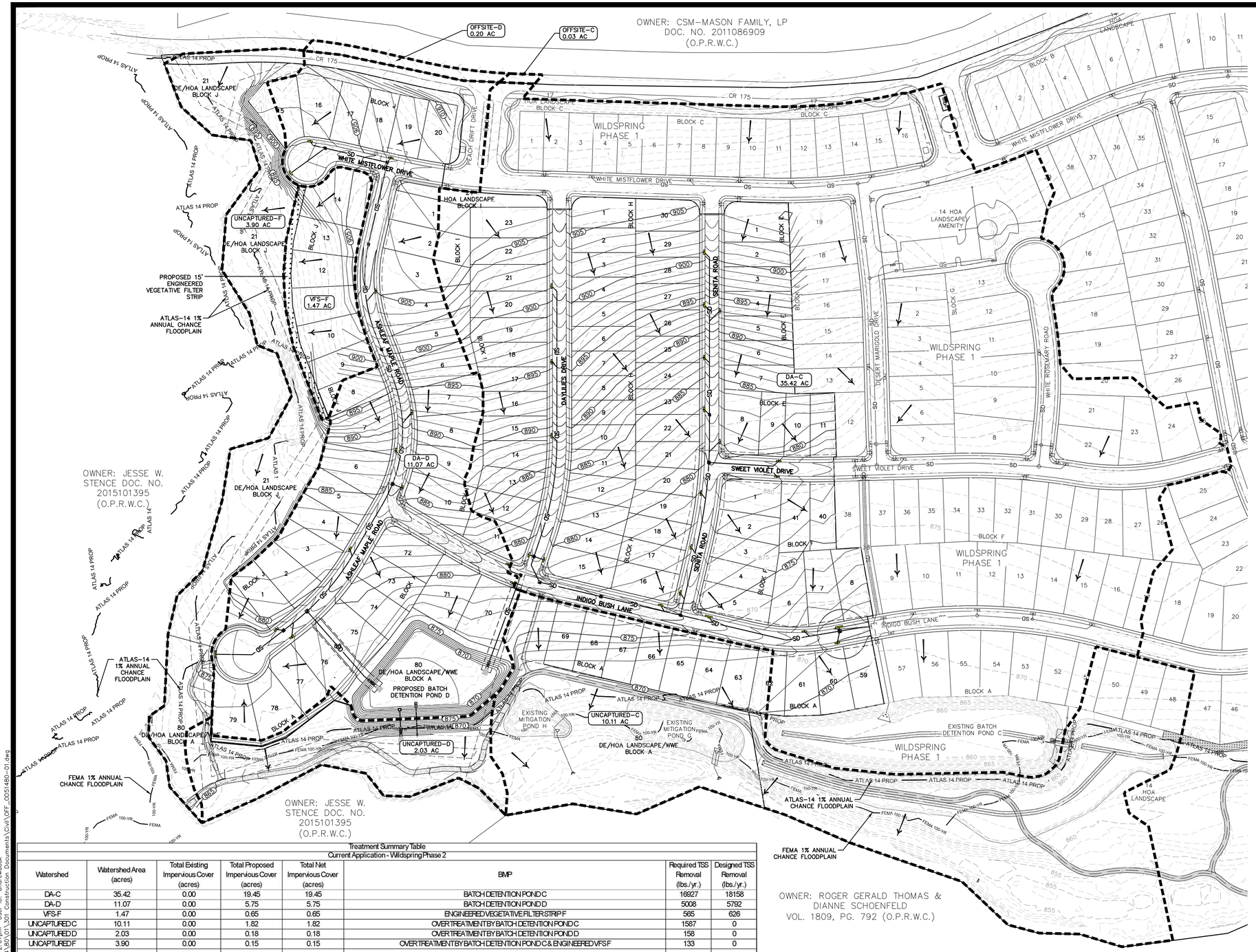
PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
GRADING PLAN 4 OF 4

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 34 OF 80

Date: Feb 18, 2025, 2:06pm User ID: andrewdok
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SCALE: 1"= 100'

0' 100' 200' 300'

LEGEND

- SD — STORM DRAIN LINE
- SD — SD MANHOLE
- SD INLET
- DRAINAGE FLOW ARROW
- WATER QUALITY DRAINAGE AREA
- 01 DRAINAGE AREA
- ENGINEERED VEGETATIVE FILTER STRIP
- PROPOSED CONTOUR LINE
- EXISTING CONTOUR LINE

Treatment Summary Table
Current Application - Wildspring Phase 2

Watershed	Watershed Area (acres)	Total Existing Impervious Cover (acres)	Total Proposed Impervious Cover (acres)	Total Net Impervious Cover (acres)	BMP	Required TSS Removal (lbs./yr.)	Designed TSS Removal (lbs./yr.)
DA-C	35.42	0.00	19.45	19.45	BATCH DETENTION POND C	16927	18158
DA-D	11.07	0.00	5.75	5.75	BATCH DETENTION POND D	5008	5792
VFS-F	1.47	0.00	0.65	0.65	ENGINEERED VEGETATIVE FILTER STRIP F	565	626
UNCAPTURED C	10.11	0.00	1.82	1.82	OVER TREATMENT BY BATCH DETENTION POND C	1587	0
UNCAPTURED D	2.03	0.00	0.18	0.18	OVER TREATMENT BY BATCH DETENTION POND D	158	0
UNCAPTURED F	3.90	0.00	0.15	0.15	OVER TREATMENT BY BATCH DETENTION POND C & ENGINEERED VFS F	133	0
OFFSITE C	0.03	0.02	0.05	0.03	CAPTURED OFFSITE - BATCH DETENTION BASIN C (NO ADDITIONAL IMPERVIOUS COVER PROPOSED)	26	0
OFFSITE D	0.20	0.09	0.29	0.20	CAPTURED OFFSITE - BATCH DETENTION BASIN D (NO ADDITIONAL IMPERVIOUS COVER PROPOSED)	172	0
Total	64.24	0.11	28.35	28.24		24576	24576

CITY OF LEANDER APPROVAL

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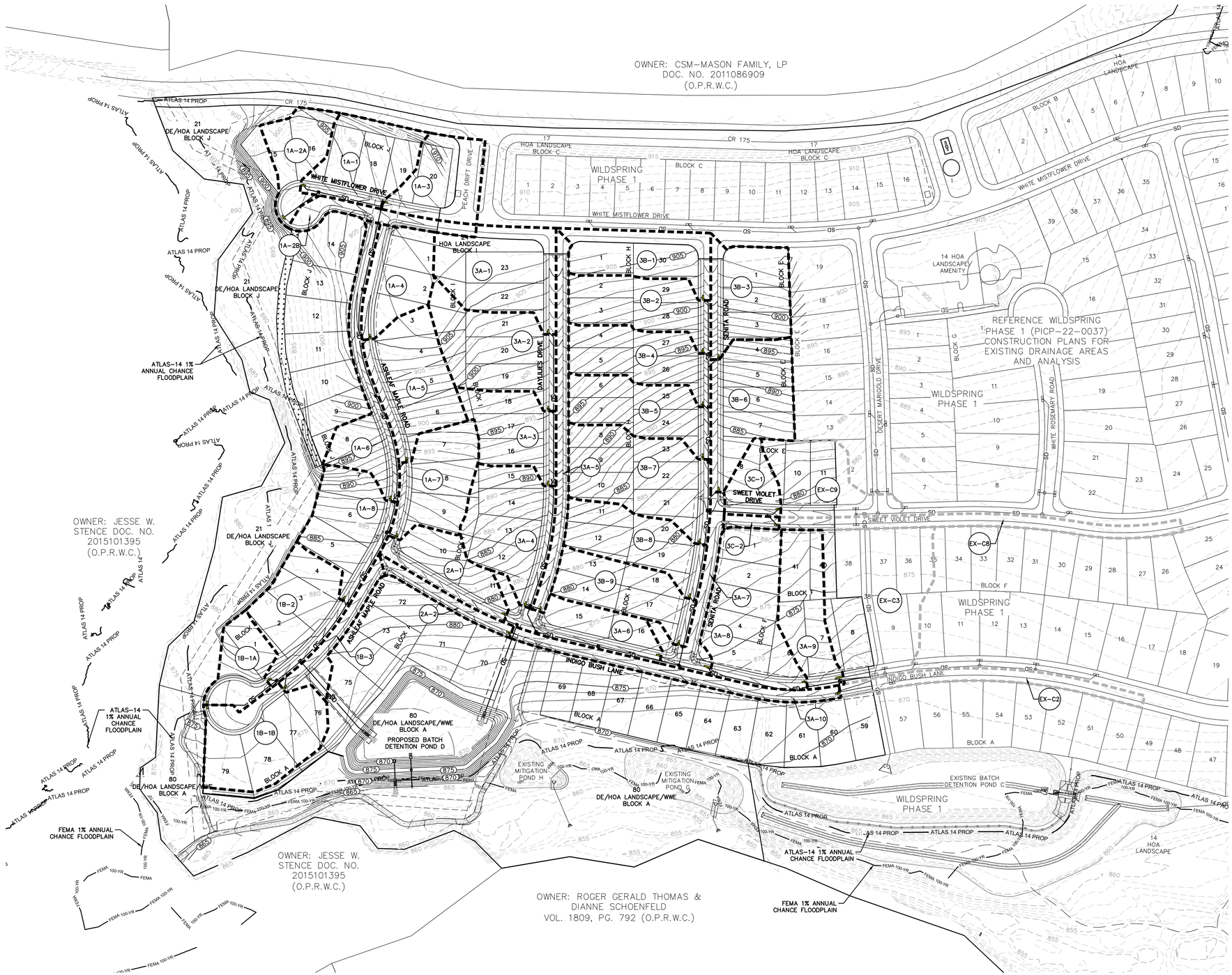
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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
WATER QUALITY DRAINAGE MAP

CITY JOB No. PICP-25-XXXX
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CHECKED AC DRAWN CK
SHEET 37 OF 80

Date: Feb 18, 2025, 2:07pm User ID: andrewdook
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SCALE: 1"= 100'

0' 100' 200' 300'

LEGEND

- SD — STORM DRAIN LINE
- SD — SD MANHOLE
- SD INLET
- DRAINAGE FLOW ARROW
- DRAINAGE AREA BOUNDARY
- EXISTING DRAINAGE AREA
- 01 DRAINAGE AREA
- 750 PROPOSED CONTOUR LINE
- 786 EXISTING CONTOUR LINE

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TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN DRAINAGE MAP

CITY OF LEANDER APPROVAL

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SHEET 38 OF 80

PICP-25-XXXX

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STREET FLOW AND INLET CALCULATIONS																											
25 YEAR STORM																											
						STREET CAPACITY								INLET ON GRADE CAPACITY										SUMP INLET CAPACITY			
						Street	Crown	Curb	Gutter			Crown	Ponded												CURB (with Depression)		
Inlet	Inlet	Drainage	Q 25	Q pass	Q total	Width F-F	Type	Height	Slope	a	Yo	Height	Width	Eo	S'w	Sx	Se	LT	L	E	Qi	Qpass	Pass to Inlet	Qtotal	Length		d (ft)
No.	Type	Area	(cfs)	(cfs)	(cfs)	(ft)		(ft)	(%)	(ft)	(ft)	(ft)	(ft)									(cfs)	#	(cfs)	(ft)	d (ft)	(d ≤ h + a)
ULTIMATE CONDITION DRAINAGE AREAS																											
SD-1A-1	G-1	0.69	4.27	0.00	4.27	28	P	0.50	1.20%	0.42	0.38	0.50	7.26	0.46	0.28	0.04	0.16	10.33	10	1.00	6.13	0.00	-	-	-	-	-
SD-1A-2A	-	0.45	2.77	0.00	2.77	28	P	0.50	1.20%	0.42	0.33	0.50	5.91	0.54	0.28	0.04	0.19	7.96	10	1.00	4.76	0.00	-	-	-	-	-
SD-1A-2B	-	0.26	2.28	0.00	2.28	28	P	0.50	1.98%	0.42	0.29	0.50	4.87	0.63	0.28	0.04	0.21	7.95	10	1.00	3.37	0.00	-	-	-	-	-
SD-1A-2	S-1	0.71	4.82	0.00	4.82	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.82	10	0.30	0.30
SD-1A-3	G-1	0.58	4.17	0.00	4.17	28	P	0.50	1.20%	0.42	0.38	0.50	7.18	0.47	0.28	0.04	0.17	10.18	10	1.00	5.76	0.00	-	-	-	-	-
SD-1A-4	G-1	0.55	3.49	0.00	3.49	28	P	0.50	0.50%	0.42	0.42	0.50	8.23	0.42	0.28	0.04	0.15	7.66	10	1.00	5.21	0.00	-	-	-	-	-
SD-1A-5	G-1	0.83	5.21	0.00	5.21	28	P	0.50	6.80%	0.42	0.31	0.50	5.33	0.59	0.28	0.04	0.20	16.83	10	0.80	5.30	0.00	-	-	-	-	-
SD-1A-6	G-1	0.59	4.00	0.00	4.00	28	P	0.50	4.30%	0.42	0.30	0.50	5.25	0.59	0.28	0.04	0.20	13.05	10	0.93	4.86	0.00	-	-	-	-	-
SD-1A-7	G-1	0.67	4.13	0.00	4.13	28	P	0.50	2.00%	0.42	0.35	0.50	6.31	0.52	0.28	0.04	0.18	11.25	10	0.98	6.66	0.00	-	-	-	-	-
SD-1A-8	G-1	0.71	5.22	0.00	5.22	28	P	0.50	2.25%	0.42	0.37	0.50	6.86	0.48	0.28	0.04	0.17	13.28	10	0.92	6.67	0.00	-	-	-	-	-
SD-1B-1A	-	0.39	2.40	0.00	2.40	28	P	0.50	1.07%	0.42	0.32	0.50	5.68	0.56	0.28	0.04	0.19	7.14	15	1.00	5.47	0.00	-	-	-	-	-
SD-1B-1B	-	0.92	5.54	0.00	5.54	28	P	0.50	0.50%	0.42	0.48	0.50	11.47	0.31	0.28	0.04	0.12	10.55	15	1.00	8.29	0.00	-				
SD-1B-1	S-1	1.31	8.01	0.00	8.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.01	15	0.34	0.34
SD-1B-2	G-1	0.71	4.32	0.00	4.32	28	P	0.50	1.85%	0.42	0.36	0.50	6.56	0.50	0.28	0.04	0.18	11.37	10	0.98	6.72	0.00	-	-	-	-	-
SD-1B-3	G-1	0.26	1.85	0.00	1.85	28	P	0.50	1.85%	0.42	0.27	0.50	4.53	0.66	0.28	0.04	0.22	6.96	10	1.00	2.76	0.00	-	-	-	-	-
SD-2A-1	G-1	0.51	3.67	0.00	3.67	28	P	0.50	1.00%	0.42	0.38	0.50	7.05	0.47	0.28	0.04	0.17	9.07	10	1.00	6.54	0.00	-	-	-	-	-
SD-2A-2	G-1	0.17	1.36	0.00	1.36	28	P	0.50	1.00%	0.42	0.27	0.50	4.54	0.66	0.28	0.04	0.22	5.10	10	1.00	2.02	0.00	-	-	-	-	-
SD-3A-1	G-1	0.91	4.03	0.00	4.03	28	P	0.50	3.64%	0.42	0.31	0.50	5.46	0.58	0.28	0.04	0.20	12.64	10	0.94	5.06	0.00	-	-	-	-	-
SD-3A-2	G-1	0.89	4.17	0.00	4.17	28	P	0.50	3.64%	0.42	0.32	0.50	5.54	0.57	0.28	0.04	0.20	12.89	10	0.93	5.65	0.00	-	-	-	-	-
SD-3A-3	G-1	0.59	3.87	0.00	3.87	28	P	0.50	6.27%	0.42	0.28	0.50	4.78	0.63	0.28	0.04	0.21	13.94	10	0.90	5.26	0.00	-	-	-	-	-
SD-3A-4	G-1	0.88	5.72	0.00	5.72	28	P	0.50	1.63%	0.42	0.40	0.50	7.80	0.43	0.28	0.04	0.16	13.16	10	0.92	7.50	0.00	-	-	-	-	-
SD-3A-5	G-1	0.44	3.20	0.00	3.20	28	P	0.50	1.63%	0.42	0.33	0.50	5.88	0.54	0.28	0.04	0.19	9.26	10	1.00	4.58	0.00	-	-	-	-	-
SD-3A-6	G-1	0.54	3.94	0.00	3.94	28	P	0.50	1.10%	0.42	0.38	0.50	7.12	0.47	0.28	0.04	0.17	9.65	10	1.00	7.62	0.00	-	-	-	-	-
SD-3A-7	G-1	0.32	2.66	0.00	2.66	28	P	0.50	1.73%	0.42	0.31	0.50	5.36	0.58	0.28	0.04	0.20	8.44	15	1.00	11.24	0.00	-	-	-	-	-
SD-3A-8	G-1	1.06	7.08	0.00	7.08	28	P	0.50	1.73%	0.42	0.43	0.50	8.66	0.40	0.28	0.04	0.15	15.25	10	0.85	8.13	0.00	-	-	-	-	-
SD-3A-9	G-1	0.63	3.91	0.00	3.91	28	P	0.50	1.20%	0.42	0.37	0.50	6.95	0.48	0.28	0.04	0.17	9.79	15	1.00	9.86	0.00	-	-	-	-	-
SD-3A-10	G-1	0.38	3.09	0.00	3.09	28	P	0.50	1.20%	0.42	0.35	0.50	6.21	0.52	0.28	0.04	0.18	8.50	10	1.00	4.53	0.00	-	-	-	-	-
SD-3B-1	G-1	0.65	3.80	0.00	3.80	28	P	0.50	2.70%	0.42	0.32	0.50	5.68	0.56	0.28	0.04	0.19	11.43	10	0.98	4.97	0.00	-	-	-	-	-
SD-3B-2	G-1	0.68	4.36	0.00	4.36	28	P	0.50	7.49%	0.42	0.29	0.50	4.84	0.63	0.28	0.04	0.21	15.52	10	0.84	4.98	0.00	-	-	-	-	-
SD-3B-3	G-1	0.71	4.60	0.00	4.60	28	P	0.50	7.49%	0.42	0.29	0.50	4.95	0.62	0.28	0.04	0.21	16.02	10	0.83	4.86	0.00	-	-	-	-	-
SD-3B-4	G-1	0.68	4.72	0.00	4.72	28	P	0.50	5.30%	0.42	0.31	0.50	5.38	0.58	0.28	0.04	0.20	15.03	10	0.86	6.03	0.00	-	-	-	-	-
SD-3B-5	G-1	0.69	4.89	0.00	4.89	28	P	0.50	2.70%	0.42	0.35	0.50	6.37	0.51	0.28	0.04	0.18	13.27	10	0.92	7.09	0.00	-	-	-	-	-
SD-3B-6	G-1	0.87	5.92	0.00	5.92	28	P	0.50	2.70%	0.42	0.37	0.50	6.98	0.48	0.28	0.04	0.17	14.89	10	0.87	7.21	0.00	-	-	-	-	-
SD-3B-7	G-1	1.05	7.62	0.00	7.62	28	P	0.50	2.00%	0.42	0.43	0.50	8.67	0.40	0.28	0.04	0.15	16.44	10	0.81	8.58	0.00	-	-	-	-	-
SD-3B-8	G-1	0.69	4.59	0.00	4.59	28	P	0.50	1.50%	0.42	0.38	0.50	7.12	0.47	0.28	0.04	0.17	11.30	10	0.98	8.44	0.00	-	-	-	-	-
SD-3B-9	G-1	0.65	4.40	0.00	4.40	28	P	0.50	1.50%	0.42	0.37	0.50	6.97	0.48	0.28	0.04	0.17	11.01	10	0.99	7.57	0.00	-	-	-	-	-
SD-3C-1	G-1	0.28	2.18	0.00	2.18	28	P	0.50	2.53%	0.42	0.27	0.50	4.55	0.66	0.28	0.04	0.22	8.21	10	1.00	3.23	0.00	-	-	-	-	-
SD-3C-2	G-1	0.06	0.55	0.00	0.55	28	P	0.50	2.53%	0.42	0.17	0.50	2.66	0.89	0.28	0.04	0.29	3.92	10	1.00	0.81	0.00	-	-	-	-	-
SD-EX-C2	S-1	0.35	3.07	0.00	3.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.07	10	0.22	0.22
SD-EX-C3	S-1	1.34	8.15	0.00	8.15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.15	10	0.43	0.43
SD-EX-C8	S-1	0.46	4.01	0.00	4.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.01	10	0.27	0.27
SD-EX-C9	S-1	0.64	4.60	0.00	4.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.60	10	0.29	0.29

STREET FLOW AND INLET CALCULATIONS																											
100 YEAR STORM																											
						STREET CAPACITY								INLET ON GRADE CAPACITY										SUMP INLET CAPACITY			
						Street	Crown	Curb	Gutter			Crown	Ponded												CURB (with Depression)		
Inlet	Inlet	Drainage	Q 100	Q pass	Q total	Width F-F	Type	Height	Slope	a	Yo	Height	Width (-)	Eo	S'w	Sx	Se	LT	L	E	Qi	Qpass	Pass to Inlet	Qtotal	Length		d (ft)
No.	Type	Area	(cfs)	(cfs)	(cfs)	(ft)		(ft)	(%)	(ft)	(ft)	(ft)	(ft)									(cfs)	#	(cfs)	(ft)	d (ft)	(d ≤ h + a)
ULTIMATE CONDITION DRAINAGE AREAS																											
SD-1A-1	G-1	0.69	6.36	0.47	6.83	28	P	0.50	1.20%	0.42	0.45	0.50	9.51	0.37	0.28	0.04	0.14	13.96	10	0.90	6.13	0.71	SD-1A-2A	-	-	-	-
SD-1A-2A	-	0.45	4.14	0.71	4.84	28	P	0.50	1.20%	0.42	0.40	0.50	7.75	0.44	0.28	0.04	0.16	11.17	10	0.98	4.76	0.08	SD-1A-2	-	-	-	-
SD-1A-2B	-	0.26	3.37	0.00	3.37	28	P	0.50	1.98%	0.42	0.33	0.50	5.76	0.55	0.28	0.04	0.19	9.96	10	1.00	3.37	0.00	-	-	-	-	-
SD-1A-2	S-1	0.71	7.15	0.71	7.86	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.86	10	0.42	0.42
SD-1A-3	G-1	0.58	6.23	0.00	6.23	28	P	0.50	1.20%	0.42	0.44	0.50	8.96	0.39	0.28	0.04	0.14	13.12	10	0.92	5.76	0.47	SD-1A-1	-	-	-	-
SD-1A-4	G-1	0.55	5.21	0.00	5.21	28	P	0.50	0.50%	0.42	0.47	0.50	10.81	0.33	0.28	0.04	0.13	10.06	10	1.00	5.21	0.00	-	-	-	-	-
SD-1A-5	G-1	0.83	7.78	0.00	7.78	28	P	0.50	6.80%	0.42	0.35	0.50	6.37	0.51	0.28	0.04	0.18	21.28	10	0.68	5.30	2.48	SD-1A-7	-	-	-	-
SD-1A-6	G-1	0.59	5.98	0.00	5.98	28	P	0.50	4.30%	0.42	0.35	0.50	6.27	0.52	0.28	0.04	0.18	16.51	10	0.81	4.86	1.12	SD-1A-8	-	-	-	-
SD-1A-7	G-1	0.67	6.13	2.48	8.61	28	P	0.50	2.00%	0.42	0.45	0.50	9.36	0.37	0.28	0.04	0.14	17.82	10	0.77	6.66	1.96	SD-2A-1	-	-	-	-
SD-1A-8	G-1	0.71	7.76	1.12	8.88	28	P	0.50	2.25%	0.42	0.44	0.50	9.19	0.38	0.28	0.04	0.14	18.57	10	0.75	6.67	2.21	SD-1B-2	-	-	-	-
SD-1B-1A	-	0.39	3.56	1.90	5.47	28	P	0.50	1.07%	0.42	0.42	0.50	8.57	0.40	0.28	0.04	0.15	11.80	15	1.00	5.47	0.00	-	-	-	-	-
SD-1B-1B	-	0.92	8.29	0.00	8.29	28	P	0.50	0.50%	0.42	0.55	0.50	FULL	0.26	0.28	0.04	0.11	13.46	15	1.00	8.29	0.00	-	-	-	-	-
SD-1B-1	S-1	1.31	11.90	1.90	13.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13.81	15	0.49	0.49
SD-1B-2	G-1	0.71	6.42	2.21	8.62	28	P	0.50	1.85%	0.42	0.45	0.50	9.62	0.36	0.28	0.04	0.14	17.60	10	0.78	6.72	1.90	SD-1B-1A	-	-	-	-
SD-1B-3	G-1	0.26	2.76	0.00	2.76	28	P	0.50	1.85%	0.42	0.31	0.50	5.36	0.58	0.28	0.04	0.20	8.74	10	1.00	2.76	0.00	-	-	-	-	-
SD-2A-1	G-1	0.51	5.47	1.96	7.42	28	P	0.50	1.00%	0.42	0.48	0.50	10.87	0.33	0.28	0.04	0.13	14.40	10	0.88	6.54	0.88	SD-3A-6	-	-	-	-
SD-2A-2	G-1	0.17	2.02	0.00	2.02	28	P	0.50	1.00%	0.42	0.31	0.50	5.35	0.58	0.28	0.04	0.20	6.37	10	1.00	2.02	0.00	-	-	-	-	-
SD-3A-1	G-1	0.91	6.16	0.00	6.16	28	P	0.50	3.64%	0.42	0.36	0.50	6.62	0.50	0.28	0.04	0.17	16.22	10	0.82	5.06	1.10	SD-3A-2	-	-	-	-
SD-3A-2	G-1	0.89	6.29	1.10	7.39	28	P	0.50	3.64%	0.42	0.38	0.50	7.23	0.46	0.28	0.04	0.17	18.11	10	0.76	5.65	1.74	SD-3A-3	-	-	-	-
SD-3A-3	G-1	0.59	5.76	1.74	7.50	28	P	0.50	6.27%	0.42	0.35	0.50	6.39	0.51	0.28	0.04	0.18	20.47	10	0.70	5.26	2.24	SD-3A-4	-	-	-	-
SD-3A-4	G-1	0.88	8.53	2.24	10.77	28	P	0.50	1.63%	0.42	0.50	0.50	12.68	0.29	0.28	0.04	0.12	20.65	10	0.70	7.50	3.27	SD-3A-6	-	-	-	-
SD-3A-5	G-1	0.44	4.73	0.00	4.73	28	P	0.50	1.63%	0.42	0.38	0.50	7.07	0.47	0.28	0.04	0.17	11.70	10	0.97	4.58	0.15	SD-3A-6	-	-	-	-
SD-3A-6	G-1	0.54	5.84	4.30	10.13	28	P	0.50	1.10%	0.42	0.52	0.50	FULL	0.26	0.28	0.04	0.11	18.56	10	0.75	7.62	2.51	SD-3A-7	-	-	-	-
SD-3A-7	G-1	0.32	3.95	9.62	13.57	28	P	0.50	1.73%	0.42	0.53	0.50	FULL	0.26	0.28	0.04	0.11	24.03	15	0.83	11.24	2.33	SD-3A-8	-	-	-	-
SD-3A-8	G-1	1.06	10.56	2.33	12.89	28	P	0.50	1.73%	0.42	0.52	0.50	FULL	0.26	0.28	0.04	0.11	23.52	10	0.63	8.13	4.76	SD-3A-9	-	-	-	-
SD-3A-9	G-1	0.63	5.84	4.76	10.60	28	P	0.50	1.20%	0.42	0.52	0.50	FULL	0.26	0.28	0.04	0.11	19.41	15	0.93	9.86	0.74	SD-EX-C3	-	-	-	-
SD-3A-10	G-1	0.38	4.58	0.00	4.58	28	P	0.50	1.20%	0.42	0.39	0.50	7.52	0.45	0.28	0.04	0.16	10.78	10	0.99	4.53	0.04	SD-EX-C2	-	-	-	-
SD-3B-1	G-1	0.65	5.66	0.00	5.66	28	P	0.50	2.70%	0.42	0.37	0.50	6.83	0.48	0.28	0.04	0.17	14.48	10	0.88	4.97	0.69	SD-3B-2	-	-	-	-
SD-3B-2	G-1	0.68	6.48	0.69	7.17	28	P	0.50	7.49%	0.42	0.34	0.50	6.00	0.54	0.28	0.04	0.19	20.69	10	0.70	4.98	2.18	SD-3B-4	-	-	-	-
SD-3B-3	G-1	0.71	6.87	0.00	6.87	28	P	0.50	7.49%	0.42	0.33	0.50	5.89	0.54	0.28	0.04	0.19	20.19	10	0.71	4.86	2.01	SD-3B-6	-	-	-	-
SD-3B-4	G-1	0.68	7.02	2.18	9.20	28	P	0.50	5.30%	0.42	0.39	0.50	7.35	0.46	0.28	0.04	0.16	22.37	10	0.66	6.03	3.17	SD-3B-5	-	-	-	-
SD-3B-5	G-1	0.69	7.28	3.17	10.45	28	P	0.50	2.70%	0.42	0.45	0.50	9.64	0.36	0.28	0.04	0.14	21.38	10	0.68	7.09	3.36	SD-3B-7	-	-	-	-
SD-3B-6	G-1	0.87	8.82	2.01	10.83	28	P	0.50	2.70%	0.42	0.46	0.50	9.88	0.36	0.28	0.04	0.14	21.92	10	0.67	7.21	3.62	SD-3A-7	-	-	-	-
SD-3B-7	G-1	1.05	11.35	3.36	14.71	28	P	0.50	2.00%	0.42	0.53	0.50	FULL	0.26	0.28	0.04	0.11	25.96	10	0.58	8.58	6.13	SD-3B-8	-	-	-	-
SD-3B-8	G-1	0.69	6.83	6.13	12.96	28	P	0.50	1.50%	0.42	0.53	0.50	FULL	0.26	0.28	0.04	0.11	22.58	10	0.65	8.44	4.52	SD-3B-9	-	-	-	-
SD-3B-9	G-1	0.65	6.54	4.52	11.06	28	P	0.50	1.50%	0.42	0.51	0.50	FULL	0.26	0.28	0.04	0.11	21.13	10	0.68	7.57	3.49	SD-3A-7	-	-	-	-
SD-3C-1	G-1	0.28	3.24	0.00	3.24	28	P	0.50	2.53%	0.42	0.31	0.50	5.37	0.58	0.28	0.04	0.20	10.28	10	1.00	3.23	0.00	-	-	-	-	-
SD-3C-2	G-1	0.06	0.81	0.00	0.81	28	P	0.50	2.53%	0.42	0.20	0.50	3.08	0.83	0.28	0.04	0.27	4.79	10	1.00	0.81	0.00	-	-	-	-	-
SD-EX-C2	S-1	0.35	4.52	0.04	4.56	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.56	10	0.29	0.29
SD-EX-C3	S-1	1.34	12.15	0.74	12.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.89	10	0.58	0.58
SD-EX-C8	S-1	0.46	5.92	0.00	5.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.92	10	0.35	0.35
SD-EX-C9	S-1	0.64	6.84	0.00	6.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.84	10	0.38	0.38

DRAINAGE AREA	INLET NUMBER	AREA (acres)	COMPOSITE C C_{25}	COMPOSITE C C_{100}	$A \cdot C_{25}$	$A \cdot C_{100}$	Cumulative Tc (min)	INTENSITY I 25yr (in/hr)	INTENSITY I 100yr (in/hr)	DISCHARGE Q 25 (cfs)	DISCHARGE Q 100 (cfs)
ULTIMATE CONDITION DRAINAGE AREAS											
1A-1	SD-1A-1	0.69	0.66	0.74	0.46	0.51	9.24	9.37	12.43	4.27	6.36
1A-2A	SD-1A-2A	0.45	0.63	0.71	0.28	0.31	7.82	9.93	13.16	2.77	4.14
1A-2B	SD-1A-2B	0.26	0.77	0.86	0.20	0.22	5.00	11.30	15.00	2.28	3.37
1A-2	SD-1A-2	0.71	0.69	0.77	0.49	0.54	7.82	9.93	13.16	4.82	7.15
1A-3	SD-1A-3	0.58	0.64	0.72	0.37	0.42	5.00	11.30	15.00	4.17	6.23
1A-4	SD-1A-4	0.55	0.64	0.73	0.35	0.40	8.01	9.85	13.06	3.49	5.21
1A-5	SD-1A-5	0.83	0.66	0.74	0.55	0.61	8.76	9.55	12.66	5.21	7.78
1A-6	SD-1A-6	0.59	0.64	0.73	0.38	0.43	6.47	10.54	13.97	4.00	5.98
1A-7	SD-1A-7	0.67	0.67	0.75	0.45	0.50	9.79	9.18	12.17	4.13	6.13
1A-8	SD-1A-8	0.71	0.68	0.76	0.48	0.54	5.78	10.88	14.44	5.22	7.76
1B-1A	SD-1B-1A	0.39	0.67	0.75	0.27	0.30	10.22	9.03	11.97	2.40	3.56
1B-1B	SD-1B-1B	0.92	0.64	0.72	0.59	0.66	8.99	9.47	12.55	5.54	8.29
1B-1	SD-1B-1	1.31	0.68	0.76	0.89	0.99	10.22	9.03	11.97	8.01	11.90
1B-2	SD-1B-2	0.71	0.68	0.76	0.48	0.54	10.23	9.03	11.96	4.32	6.42
1B-3	SD-1B-3	0.26	0.67	0.75	0.17	0.19	5.96	10.79	14.31	1.85	2.76
2A-1	SD-2A-1	0.51	0.67	0.75	0.34	0.38	6.02	10.76	14.27	3.67	5.47
2A-2	SD-2A-2	0.17	0.75	0.83	0.13	0.14	6.27	10.64	14.10	1.36	2.02
3A-1	SD-3A-1	0.91	0.51	0.59	0.46	0.54	11.31	8.68	11.51	4.03	6.16
3A-2	SD-3A-2	0.89	0.57	0.65	0.50	0.57	12.69	8.28	10.98	4.17	6.29
3A-3	SD-3A-3	0.59	0.66	0.74	0.39	0.43	7.61	10.02	13.28	3.87	5.76
3A-4	SD-3A-4	0.88	0.65	0.73	0.57	0.64	7.50	10.07	13.35	5.72	8.53
3A-5	SD-3A-5	0.44	0.74	0.83	0.33	0.36	8.11	9.81	13.00	3.20	4.73
3A-6	SD-3A-6	0.54	0.70	0.78	0.38	0.42	6.80	10.38	13.76	3.94	5.84
3A-7	SD-3A-7	0.32	0.73	0.81	0.24	0.26	5.00	11.30	15.00	2.66	3.95
3A-8	SD-3A-8	1.06	0.64	0.72	0.68	0.77	6.80	10.38	13.76	7.08	10.56
3A-9	SD-3A-9	0.63	0.63	0.71	0.40	0.45	7.91	9.89	13.12	3.91	5.84
3A-10	SD-3A-10	0.38	0.74	0.83	0.28	0.32	5.75	10.90	14.45	3.09	4.58
3B-1	SD-3B-1	0.65	0.66	0.74	0.43	0.48	10.53	8.93	11.83	3.80	5.66
3B-2	SD-3B-2	0.68	0.67	0.75	0.45	0.51	8.68	9.59	12.71	4.36	6.48
3B-3	SD-3B-3	0.71	0.64	0.72	0.45	0.51	7.37	10.13	13.42	4.60	6.87
3B-4	SD-3B-4	0.68	0.67	0.75	0.46	0.51	6.89	10.34	13.71	4.72	7.02
3B-5	SD-3B-5	0.69	0.67	0.75	0.46	0.52	6.29	10.62	14.09	4.89	7.28
3B-6	SD-3B-6	0.87	0.65	0.74	0.57	0.64	6.66	10.45	13.85	5.92	8.82
3B-7	SD-3B-7	1.05	0.67	0.75	0.70	0.79	5.80	10.87	14.42	7.62	11.35
3B-8	SD-3B-8	0.69	0.67	0.75	0.46	0.51	7.56	10.04	13.31	4.59	6.83
3B-9	SD-3B-9	0.65	0.68	0.76	0.44	0.49	7.68	9.99	13.24	4.40	6.54
3C-1	SD-3C-1	0.28	0.70	0.78	0.19	0.22	5.00	11.30	15.00	2.18	3.24
3C-2	SD-3C-2	0.06	0.74	0.83	0.05	0.05	5.00	11.30	15.00



SCALE: 1"= 40'

0' 40' 80' 120'

LEGEND

- WATER LINE
- WASTEWATER LINE & MH
- WASTEWATER FORCE MAIN
- STORM DRAIN LINE & MH
- CURB INLET
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WW SERVICE
- DOUBLE WW SERVICE
- GATE VALVE
- FIRE HYDRANT
- EXISTING GATE VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING WASTEWATER LINE
- EXISTING STORM DRAIN LINE
- EXISTING CONTOUR LINE
- PROPOSED CONTOUR LINE

NOTES

1. ALL CURVILINEAR PIPE IS REQUIRED TO MEET ASTM C76.

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN LAYOUT 1 OF 4

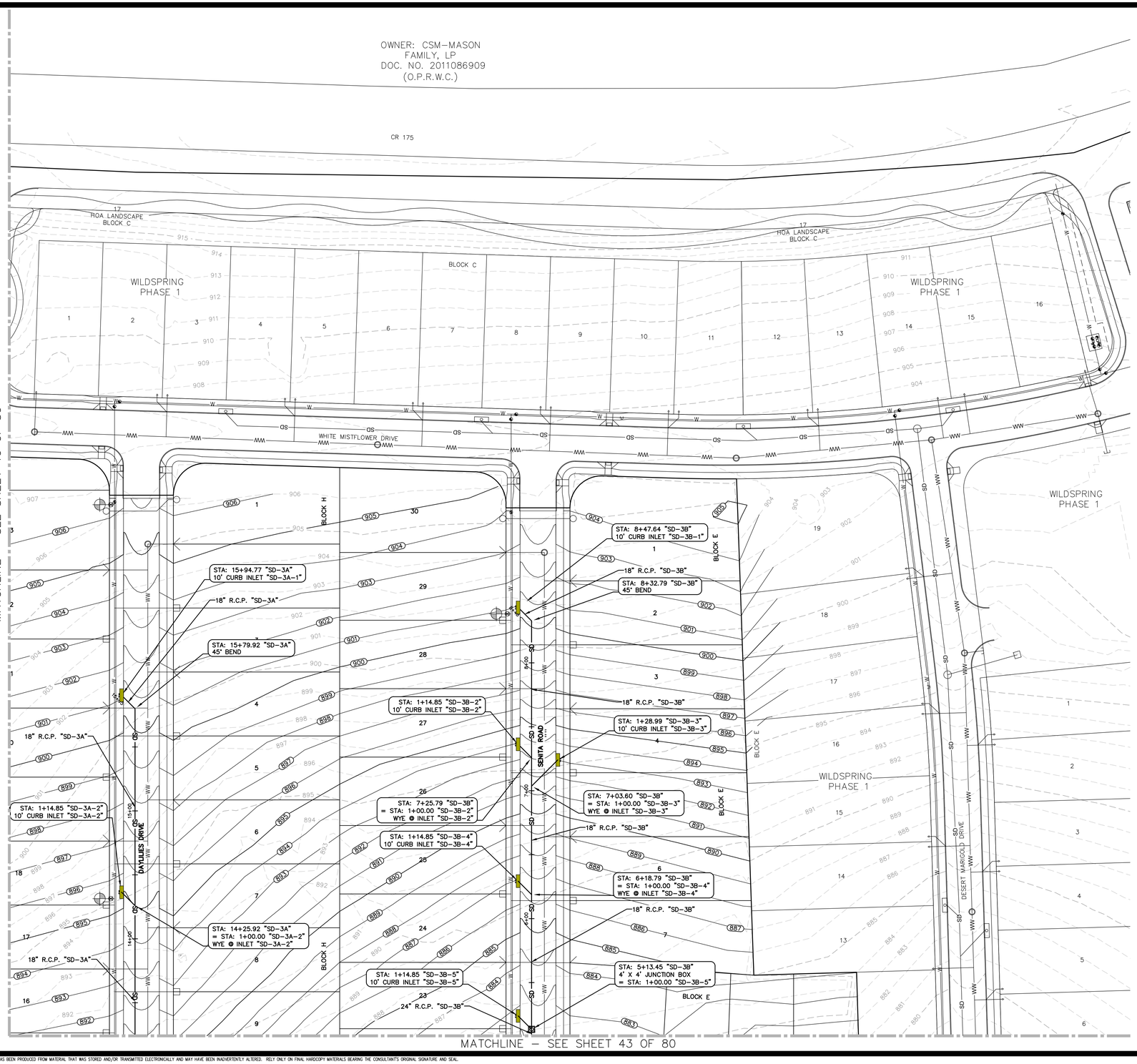
CITY OF LEANDER APPROVAL

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 40 OF 80

PICP-25-XXXX

Date: Feb 18, 2025, 2:59pm User ID: andrewdoak
File: H:\Projects\51480\01\301_Construction Documents\Civil\SD51480-01.dwg

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SCALE: 1"= 40'

0' 40' 80' 120'

LEGEND

- W — WATER LINE
- WASTEWATER LINE & MH
- FM — WASTEWATER FORCE MAIN
- SD — STORM DRAIN LINE & MH
- CURB INLET
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WW SERVICE
- DOUBLE WW SERVICE
- GATE VALVE
- FIRE HYDRANT
- EXISTING GATE VALVE
- EXISTING FIRE HYDRANT
- W — EXISTING WATER LINE
- WW — EXISTING WASTEWATER LINE
- SD — EXISTING STORM DRAIN LINE
- 786 — EXISTING CONTOUR LINE
- 786 — PROPOSED CONTOUR LINE

NOTES

1. ALL CURVILINEAR PIPE IS REQUIRED TO MEET ASTM C76.

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN LAYOUT 2 OF 4

CITY OF LEANDER APPROVAL

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 41 OF 80

PICP-25-XXXX

Date: Feb 18, 2025, 2:09pm User ID: andrewdrook
File: H:\Projects\514\80\01\300 Construction Documents\Civil\SD51480-01.dwg

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MATCHLINE – SEE SHEET 40 OF 80

MATCHLINE – SEE SHEET 43 OF 80

OWNER: JESSE W. STENCE DOC. NO. 2015101395 (O.P.R.W.C.)

OWNER: JESSE W. STENCE DOC. NO. 2015101395 (O.P.R.W.C.)

24" R.C.P. "SD-1A"

STA: 1+14.59 "SD-1A-6" 10' CURB INLET "SD-1A-6"

STA: 7+41.92 "SD-1A" = STA: 1+00.00 "SD-1A-5" WYE @ INLET "SD-1A-5"

STA: 6+74.84 "SD-1A" = STA: 1+00.00 "SD-1A-6" WYE @ INLET "SD-1A-6"

24" R.C.P. "SD-1A"

STA: 6+16.55 "SD-1A" 5' X 5' JUNCTION BOX = STA: 1+00.00 "SD-1A-7"

STA: 1+20.50 "SD-1A-7" 10' CURB INLET "SD-1A-7"

30" R.C.P. "SD-1A"

STA: 5+70.73 "SD-1A" PC

30" R.C.P. "SD-1A"

STA: 1+14.85 "SD-1A-8" 10' CURB INLET "SD-1A-8"

STA: 4+47.96 "SD-1A" = STA: 1+00.00 "SD-1A-8" WYE @ INLET "SD-1A-8"

STA: 4+51.43 "SD-1A" PT

STA: 3+34.46 "SD-2A" 10' CURB INLET "SD-2A-1"

STA: 3+03.47 "SD-1A" 6' X 6' JUNCTION BOX W/ DROP = STA: 1+00.00 "SD-1B"

30" R.C.P. "SD-1B"

STA: 1+36.21 "SD-1B" = STA: 1+00.00 "SD-1B-3" WYE @ INLET "SD-1B-3"

STA: 1+41.42 "SD-1B" PT

STA: 1+61.84 "SD-1B" 5' X 5' JUNCTION BOX = STA: 1+00.00 "SD-1B-2"

STA: 1+14.85 "SD-1B-2" 10' CURB INLET "SD-1B-2"

24" R.C.P. "SD-1B"

24" R.C.P. "SD-1B"

STA: 3+16.55 "SD-1B" 15' CURB INLET "SD-1B-1"

STA: 1+29.03 "SD-1B-3" 10' CURB INLET "SD-1B-3"

STA: 2+42.68 "SD-1B" 45° BEND

STA: 1+27.72 "SD-1A" 9.43° BEND

42" R.C.P. "SD-1A"

STA: 1+00.00 "SD-1A" 42" SLOPED HEADWALL FOR "SD-1A"

25' DRAINAGE EASEMENT

42" R.C.P. "SD-1A"

18" R.C.P. "SD-2A"

20' DRAINAGE EASEMENT

STA: 1+00.00 "SD-2A" 18" SLOPED HEADWALL FOR "SD-2A"

21 DE/HOA LANDSCAPE BLOCK J

80 DE/HOA LANDSCAPE/WWE BLOCK A

80 DE/HOA LANDSCAPE/WWE BLOCK A

INDIGO BUSH LANE

ASHLEAF MAPLE ROAD

BLOCK A

BLOCK A

ATLAS 14 PROP

ATLAS-14 1% ANNUAL CHANCE FLOODPLAIN

FEMA 1% ANNUAL CHANCE FLOODPLAIN

FEMA 100-YR

SCALE: 1"= 40'

0' 40' 80' 120'

LEGEND

- W — WATER LINE
- WASTEWATER LINE & MH
- FM — WASTEWATER FORCE MAIN
- SD — STORM DRAIN LINE & MH
- CURB INLET
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WW SERVICE
- DOUBLE WW SERVICE
- GATE VALVE
- FIRE HYDRANT
- EXISTING GATE VALVE
- EXISTING FIRE HYDRANT
- W — EXISTING WATER LINE
- WW — EXISTING WASTEWATER LINE
- SD — EXISTING STORM DRAIN LINE
- 786 — EXISTING CONTOUR LINE
- 786 — PROPOSED CONTOUR LINE

NOTES

1. ALL CURVILINEAR PIPE IS REQUIRED TO MEET ASTM C76.

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS

AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
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TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN LAYOUT 3 OF 4

CITY OF LEANDER APPROVAL

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 42 OF 80

Date: Feb 18, 2025, 2:09pm User ID: andrewbock
File: N:\Projects\51480\001\301 Construction Documents\Civil\51480-01.dwg

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.

MATCHLINE – SEE SHEET 41 OF 80

MATCHLINE – SEE SHEET 42 OF 80

STA: 1+14.86 "SD–3A–3"
10' CURB INLET "SD–3A–3"

18" R.C.P. "SD–3A"

STA: 12+76.42 "SD–3A"
PT

STA: 12+75.91 "SD–3A"
= STA: 1+00.00 "SD–3A–3"
WYE @ INLET "SD–3A–3"

24" R.C.P. "SD–3B"

STA: 4+62.63 "SD–3B"
PT

STA: 1+29.35 "SD–3B–6"
10' CURB INLET "SD–3B–6"

STA: 2+18.65 "SD–3C"
= STA: 1+00.00 "SD–3C–2"
WYE @ INLET "SD–3C–2"

STA: 2+45.83 "SD–3C"
10' CURB INLET "SD–3C–1"

18" R.C.P. "SD–3C"

STA: 2+31.06 "SD–3C"
45° BEND

STA: 4+37.92 "SD–3B"
= STA: 1+00.00 "SD–3B–6"
WYE @ INLET "SD–3B–6"

SWEET VIOLET DRIVE

DESERT MARIGOLD DRIVE

WILDSPRING PHASE 1

DAYLILIES DRIVE

STA: 4+16.15 "SD–3B"
5' X 5' JUNCTION BOX
= STA: 1+00.00 "SD–3C"

STA: 1+29.28 "SD–3C–2"
10' CURB INLET "SD–3C–2"

36" R.C.P. "SD–3B"

STA: 1+14.85 "SD–3B–7"
10' CURB INLET "SD–3B–7"

STA: 10+82.63 "SD–3A"
PC

STA: 3+34.46 "SD–2A"
10' CURB INLET "SD–2A–1"

STA: 3+41.96 "SD–3B"
= STA: 1+00.00 "SD–3B–7"
WYE @ INLET "SD–3B–7"

STA: 1+10.50 "SD–3A–4"
10' CURB INLET "SD–3A–4"

STA: 10+35.13 "SD–3A"
4' X 4' JUNCTION BOX
= STA: 1+00.00 "SD–3A–4"
= STA: 1+00.00 "SD–3A–5"

STA: 1+20.50 "SD–3A–5"
10' CURB INLET "SD–3A–5"

STA: 1+14.85 "SD–3B–8"
10' CURB INLET "SD–3B–8"

STA: 2+51.71 "SD–3B"
PC

STA: 2+29.50 "SD–3B"
= STA: 1+00.00 "SD–3B–8"
WYE @ INLET "SD–3B–8"

STA: 3+01.55 "SD–3A"
CONNECT TO EX. 48" STM STUB
CONSTRUCTED W/ WILDSPRING
PHASE 1 (PICP–22–0037)

48" R.C.P. "SD–3A"

STA: 1+08.69 "SD–3A–9"
15' CURB INLET "SD–3A–9"

STA: 1+14.85 "SD–3B–9"
10' CURB INLET "SD–3B–9"

STA: 10+16.84 "SD–3A"
45° BEND

STA: 8+50.00 "SD–3A"
5' X 5' JUNCTION BOX

STA: 2+98.00 "SD–2A"
4' X 4' JUNCTION BOX

30" R.C.P. "SD–3A"

STA: 1+14.85 "SD–3A–6"
10' CURB INLET "SD–3A–6"

STA: 1+14.11 "SD–3A–8"
10' CURB INLET "SD–3A–8"

STA: 1+33.50 "SD–3B"
= STA: 1+00.00 "SD–3B–9"
WYE @ INLET "SD–3B–9"

STA: 4+62.82 "SD–3A"
45° BEND

STA: 1+14.85 "SD–3A–7"
15' CURB INLET "SD–3A–7"

SENTA ROAD

INDIGO BUSH LANE

STA: 9+77.90 "SD–3A"
5' X 5' JUNCTION BOX

STA: 3+19.29 "SD–2A"
45° BEND

STA: 2+67.28 "SD–2A"
= STA: 1+00.00 "SD–2A–2"
WYE @ INLET "SD–2A–2"

STA: 7+17.44 "SD–3A"
= STA: 1+00.00 "SD–3A–6"
WYE @ INLET "SD–3A–6"

STA: 1+14.36 "SD–2A–2"
10' CURB INLET "SD–2A–2"

20' DRAINAGE EASEMENT

18" R.C.P. "SD–2A"

STA: 6+83.94 "SD–3A"
6' X 6' JUNCTION BOX
= STA: 1+00.00 "SD–3B"

STA: 6+16.94 "SD–3A"
= STA: 1+00.00 "SD–3A–7"
WYE @ INLET "SD–3A–7"

STA: 4+15.27 "SD–3A"
= STA: 1+00.00 "SD–3A–8"
WYE @ INLET "SD–3A–8"

STA: 3+53.12 "SD–3A"
6' X 6' JUNCTION BOX
= STA: 1+00.00 "SD–3A–9"
= STA: 1+00.00 "SD–3A–10"

STA: 1+24.17 "SD–3A–10"
10' CURB INLET "SD–3A–10"

BLOCK A

BLOCK F

BLOCK H

ATLAS 14 PROP

ATLAS–14 1% ANNUAL CHANCE FLOODPLAIN

FEMA 1% ANNUAL CHANCE FLOODPLAIN

FEMA 100-YR

FEMA 100-YR (WSEL=XX.XX)

80
DE/HOA LANDSCAPE/WWE
BLOCK A

OWNER: ROGER GERALD THOMAS &
DIANNE SCHOENFELD
VOL. 1809, PG. 792 (O.P.R.W.C.)

SCALE: 1"= 40'

0' 40' 80' 120'

LEGEND

- W — WATER LINE
- WASTEWATER LINE & MH
- FM — WASTEWATER FORCE MAIN
- SD — STORM DRAIN LINE & MH
- CURB INLET
- SINGLE WATER SERVICE
- DOUBLE WATER SERVICE
- SINGLE WW SERVICE
- DOUBLE WW SERVICE
- GATE VALVE
- FIRE HYDRANT
- EXISTING GATE VALVE
- EXISTING FIRE HYDRANT
- W — EXISTING WATER LINE
- WW — EXISTING WASTEWATER LINE
- SD — EXISTING STORM DRAIN LINE
- 786 — EXISTING CONTOUR LINE
- 786 — PROPOSED CONTOUR LINE

NOTES

1. ALL CURVILINEAR PIPE IS REQUIRED TO MEET ASTM C76.

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS

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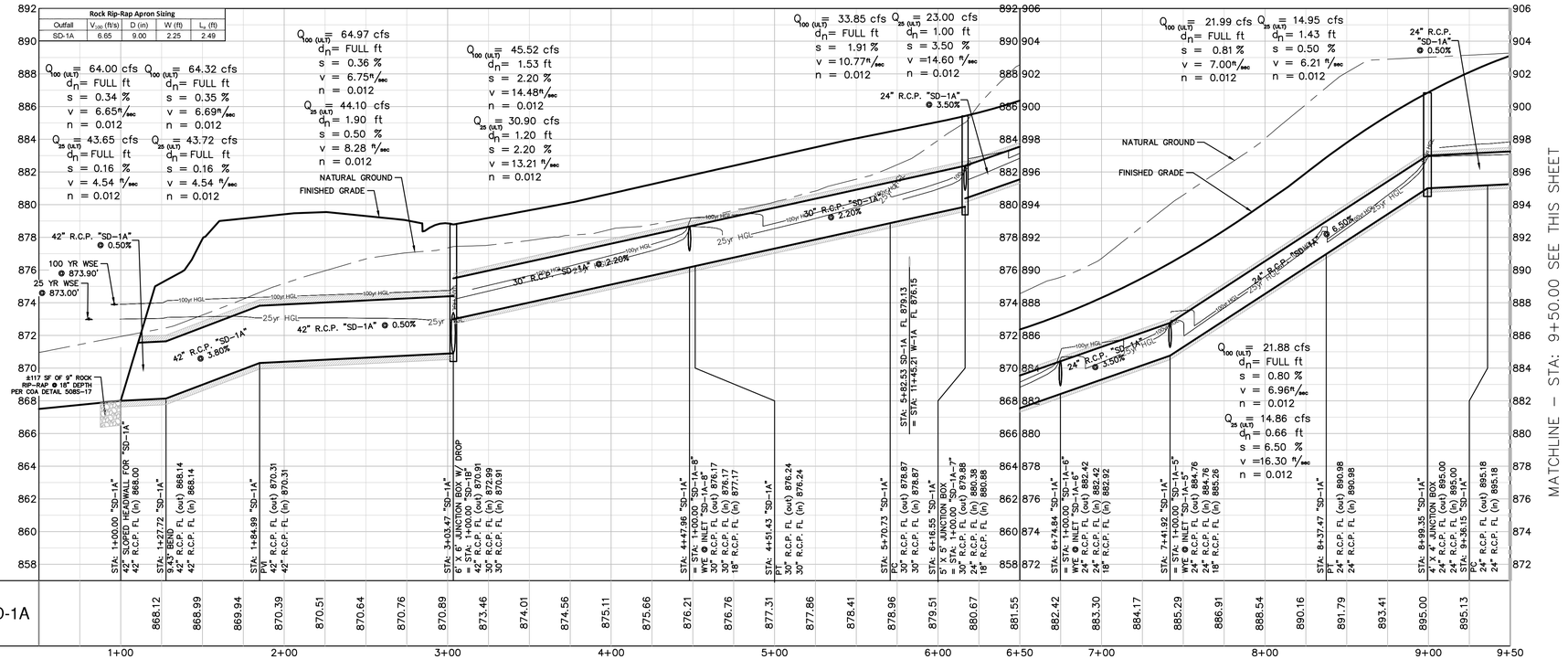
WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN LAYOUT 4 OF 4

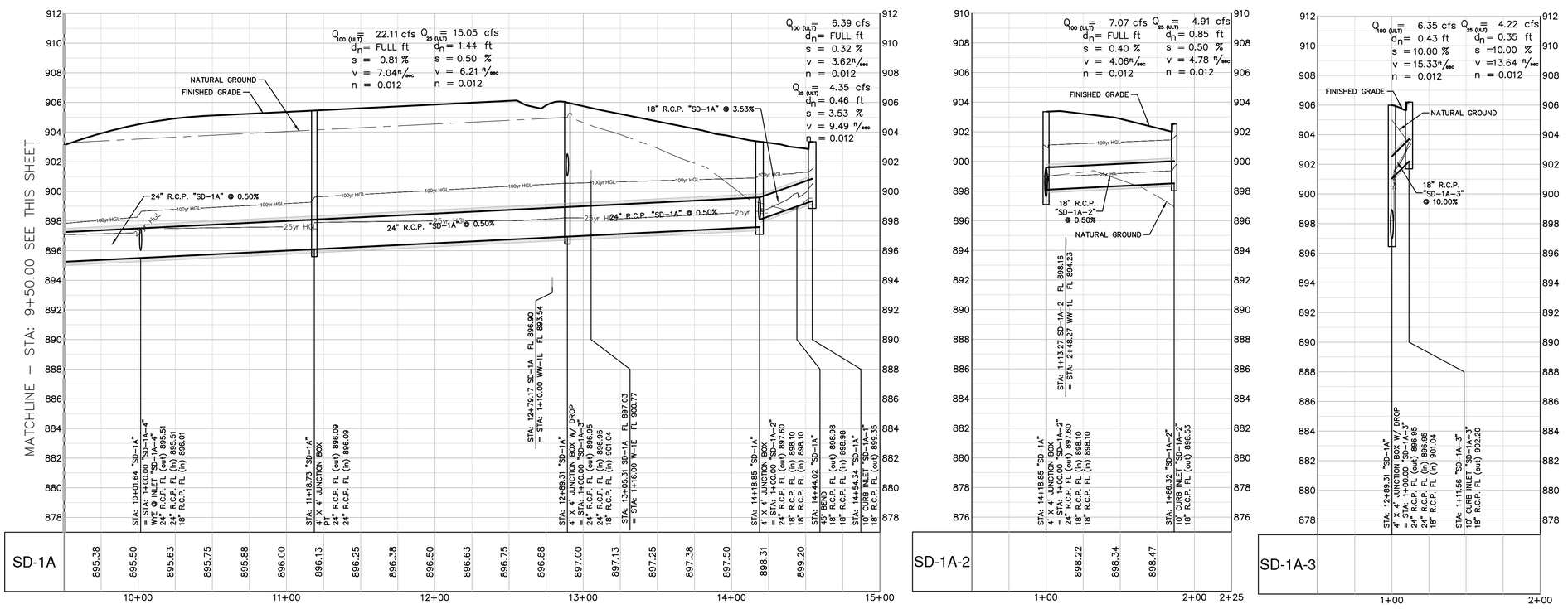
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JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
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SHEET 43 OF 80

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Rock Rip-Rap Apron Sizing				
Outfall	V_{100} (ft/s)	D (in)	W (ft)	L_a (ft)
SD-1A	6.65	9.00	2.25	2.49





PROFILE SCALES:
1" = 40' HORIZONTAL
1" = 4' VERTICAL

PROFILE LEGEND:
NATURAL GROUND
FINISHED GRADE
SUBGRADE
PROPOSED STORM DRAIN
25-YR HGL
100-YR HGL

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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN PROFILES
SD-1A 1 OF 2

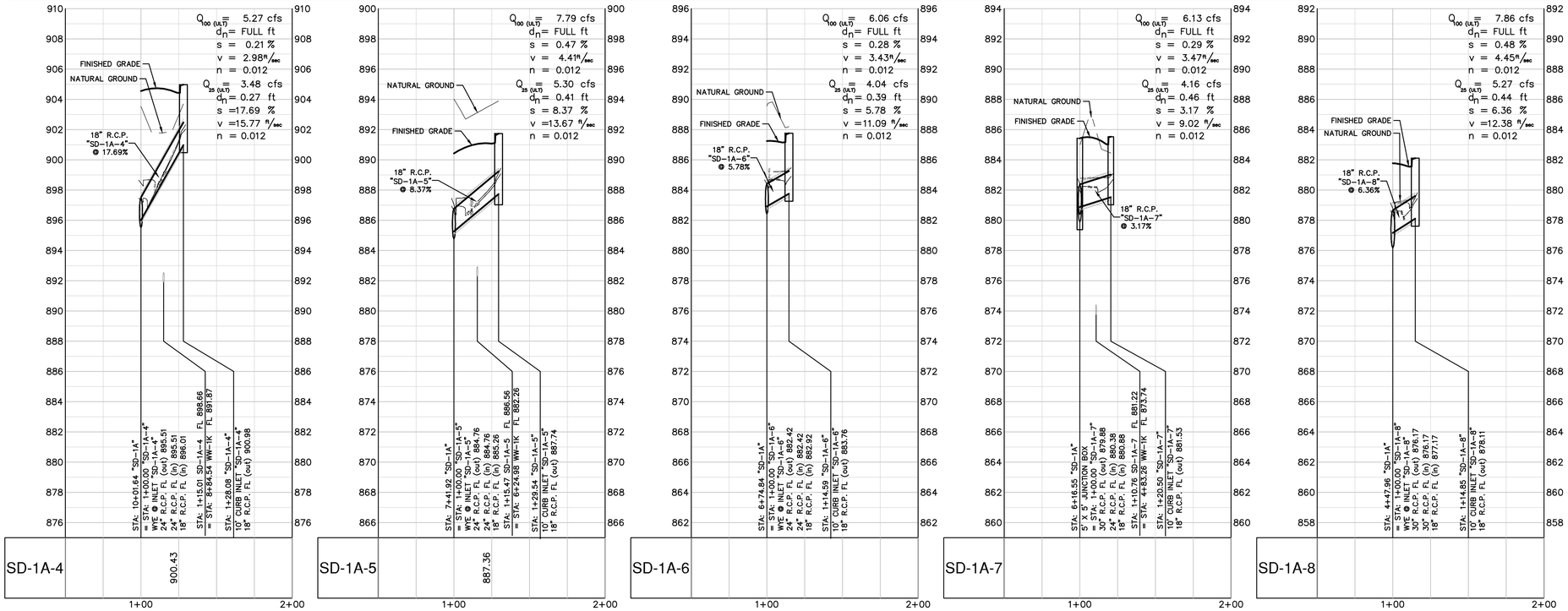
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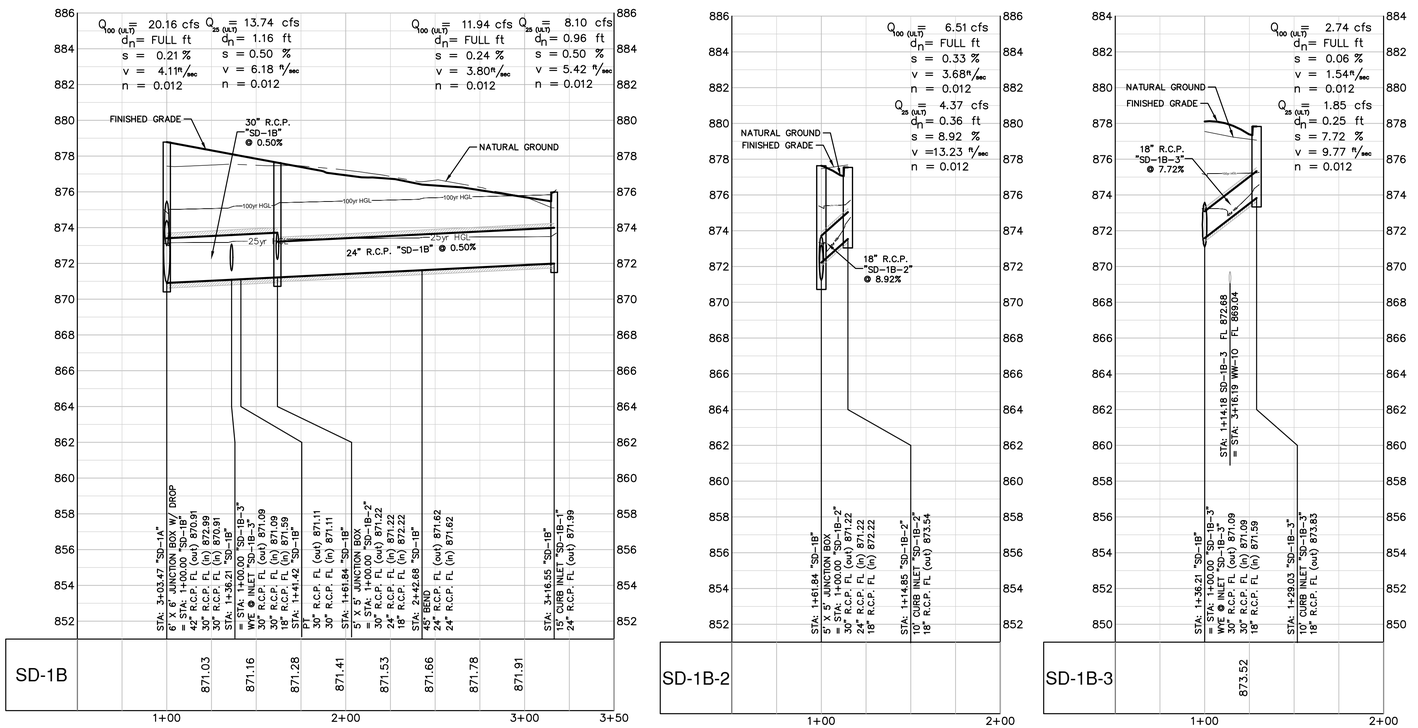
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1" = 4' VERTICAL

PROFILE LEGEND:
NATURAL GROUND
FINISHED GRADE
SUBGRADE
PROPOSED STORM DRAIN
25-YR HGL
100-YR HGL

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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN PROFILES
SD-1A 2 OF 2 & SD-1B

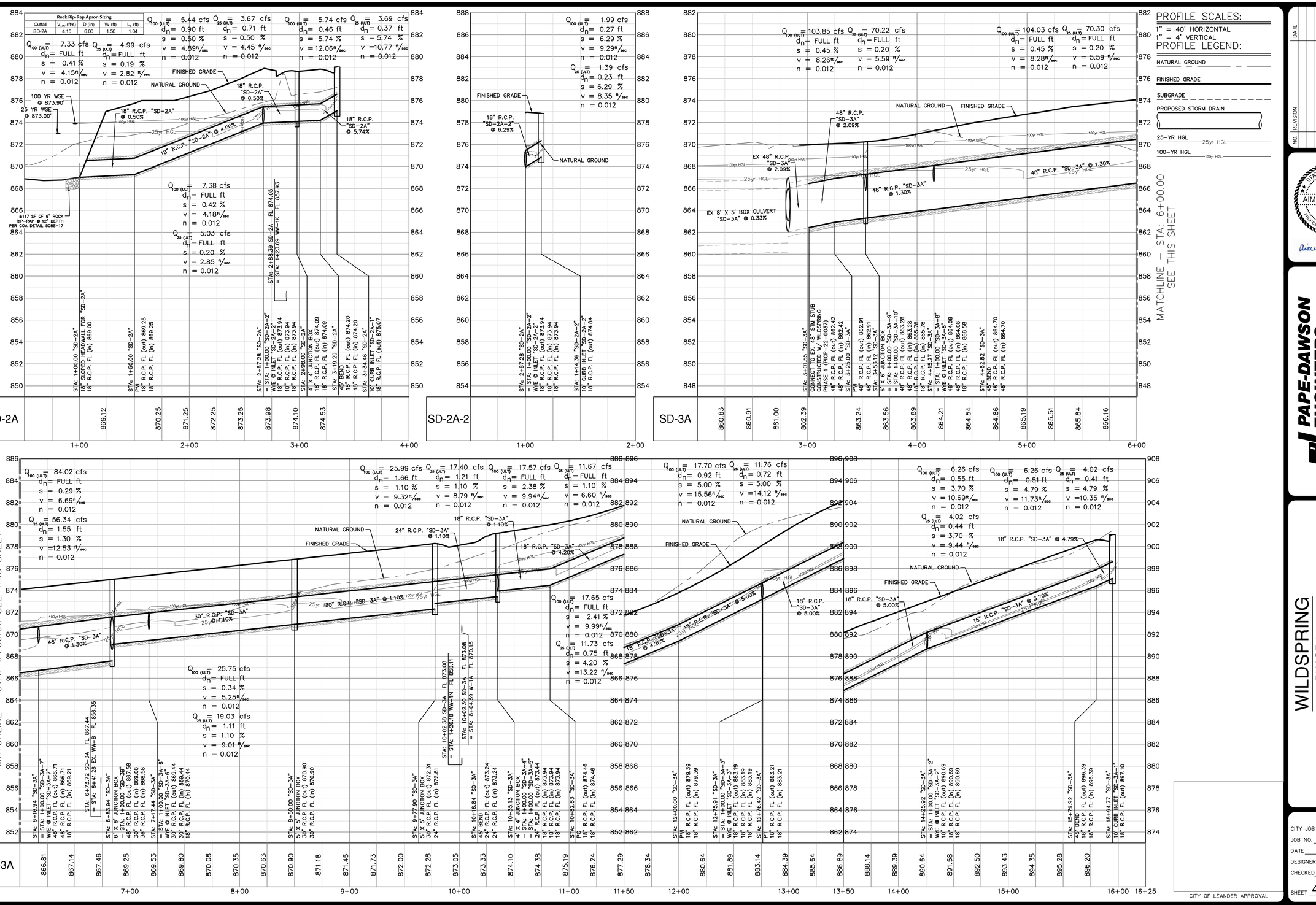
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JOB NO. 51480-01
DATE FEBRUARY 2025
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DATE | NO. | REVISION

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Aimee Chavez 2/18/25

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN PROFILES
SD-2A & SD-3A 1 OF 2

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
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CITY OF LEANDER APPROVAL

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PROFILE SCALES:

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

PROFILE LEGEND:

NATURAL GROUND
FINISHED GRADE
SUBGRADE
PROPOSED STORM DRAIN
25-YR HGL
100-YR HGL

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123249
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN PROFILES
SD-3A 2 OF 2

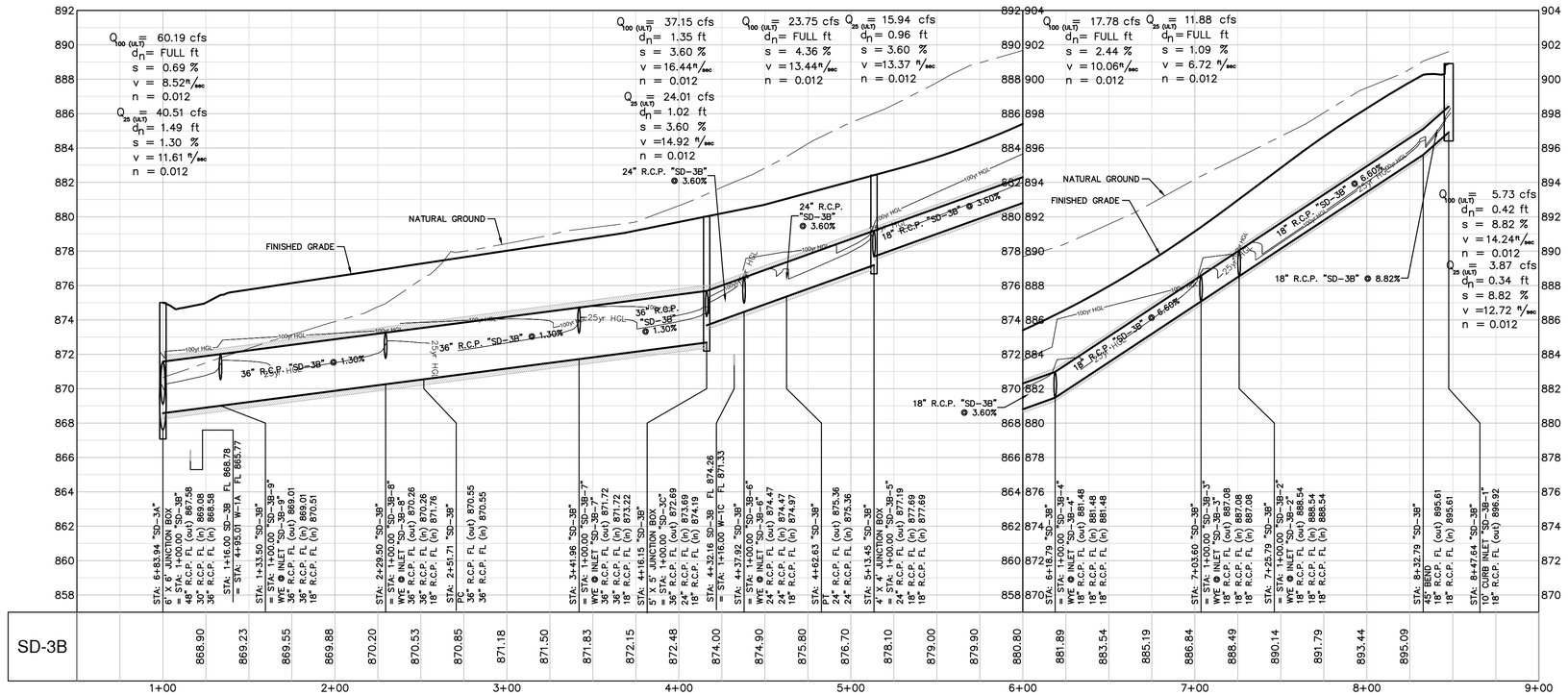
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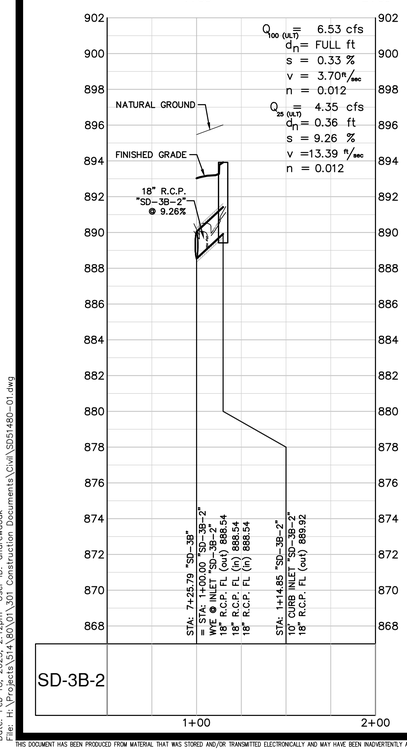
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DATE FEBRUARY 2025
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SHEET 47 OF 80

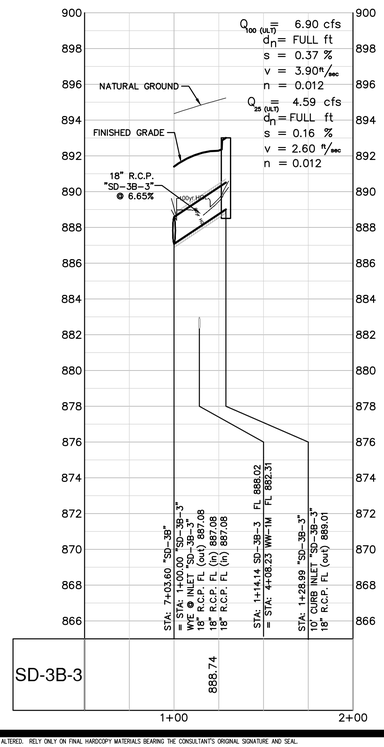
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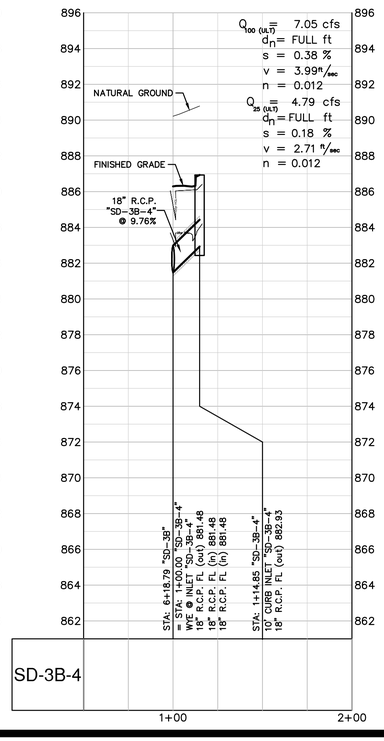
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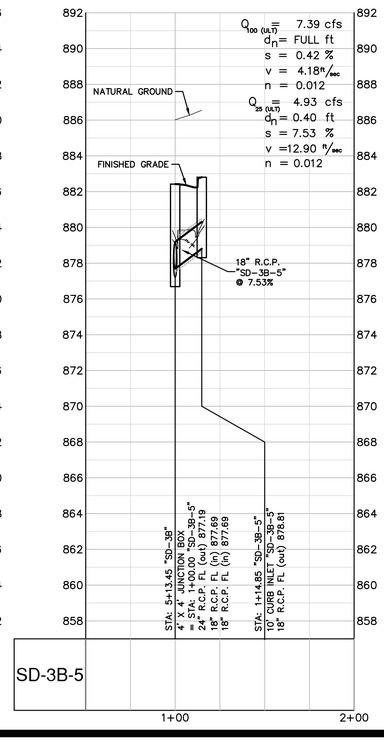
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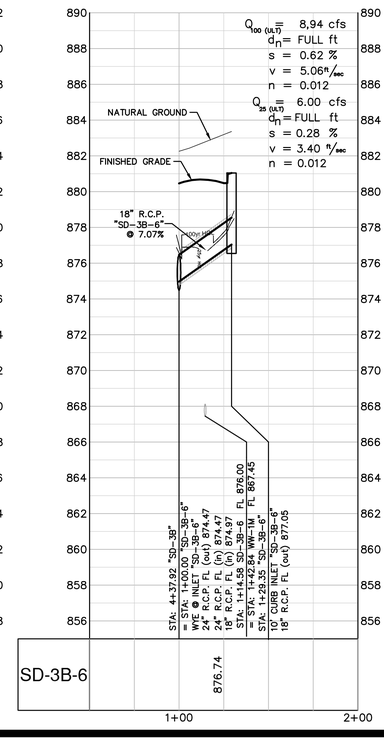












PROFILE SCALES:

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

PROFILE LEGEND:

NATURAL GROUND

FINISHED GRADE

SUBGRADE

PROPOSED STORM DRAIN

25-YR HGL

100-YR HGL

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123249
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS

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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN PROFILES
SD-3B 1 OF 2

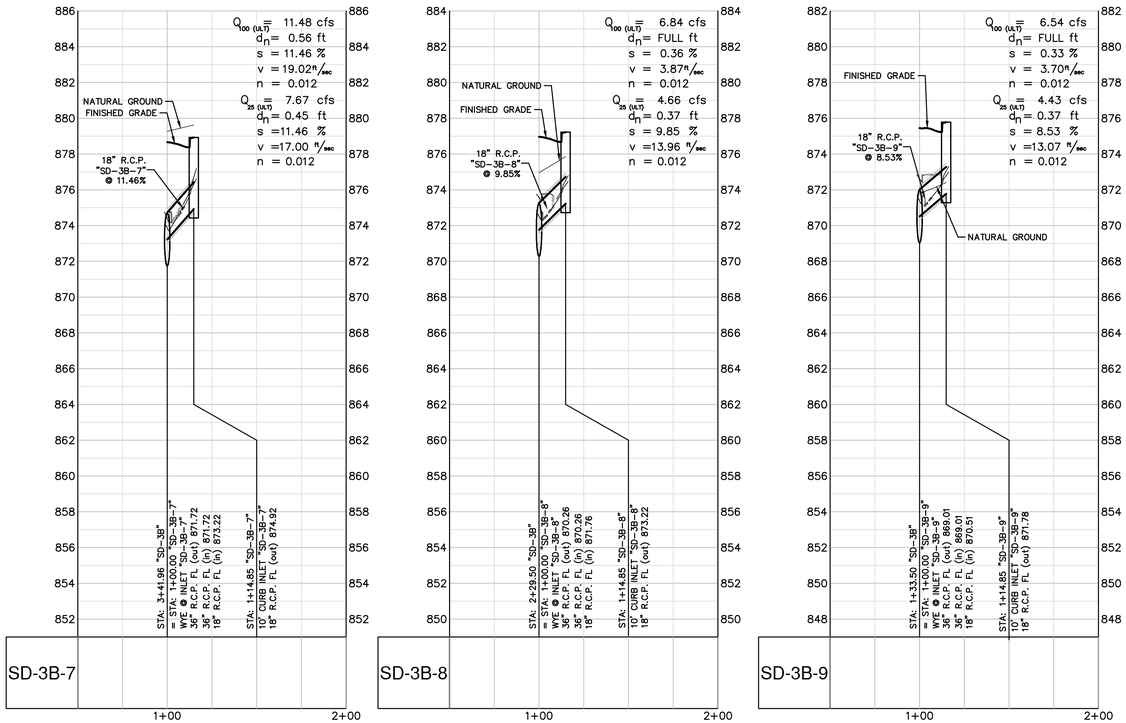
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SHEET 48 OF 80

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PROFILE LEGEND:

NATURAL GROUND

FINISHED GRADE

SUBGRADE

PROPOSED STORM DRAIN

25-YR HGL (25yr HGL)

100-YR HGL (100yr HGL)

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123249
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PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
STORM DRAIN PROFILES
SD-3B 2 OF 2 & SD-3C

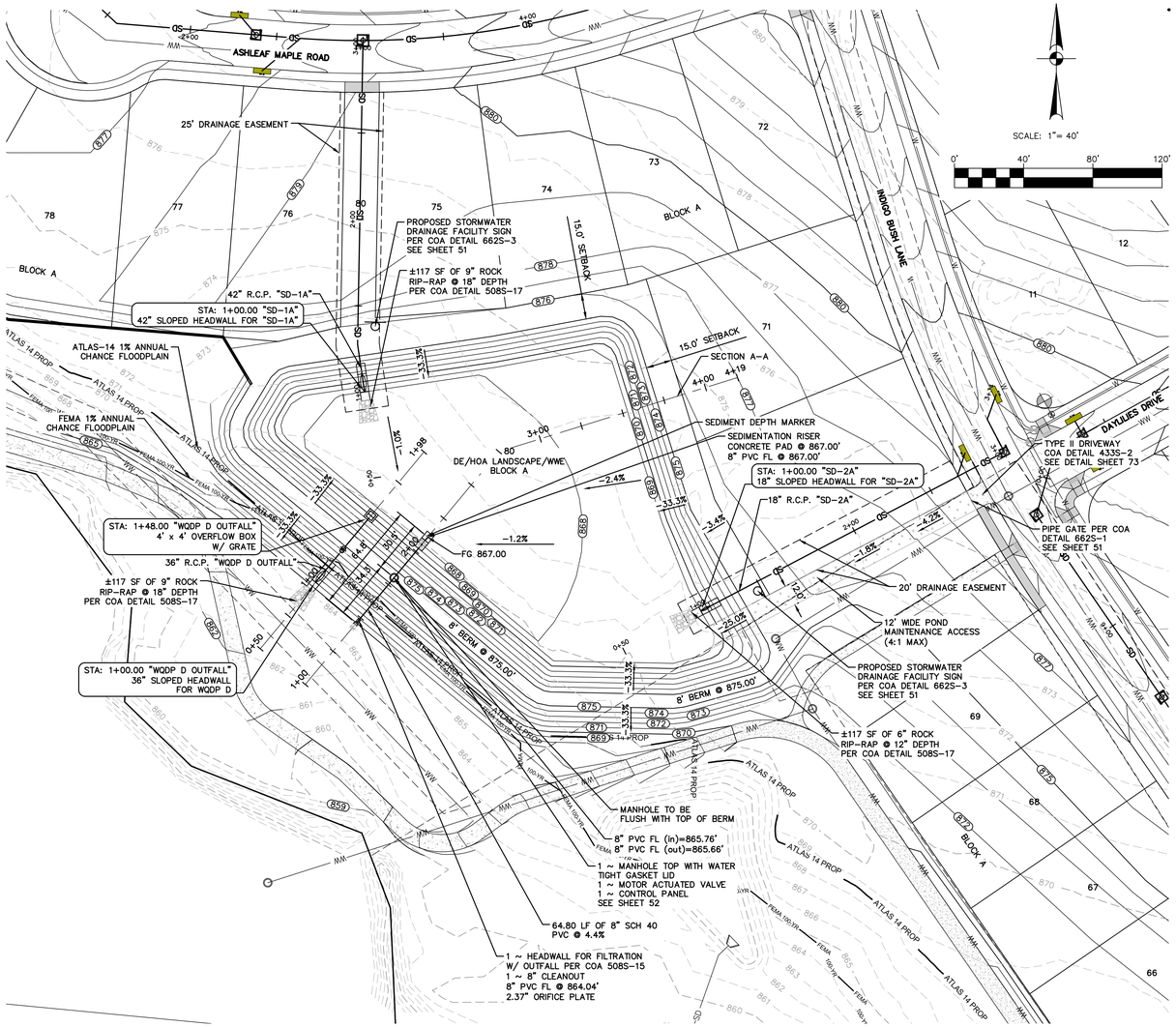
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DATE FEBRUARY 2025
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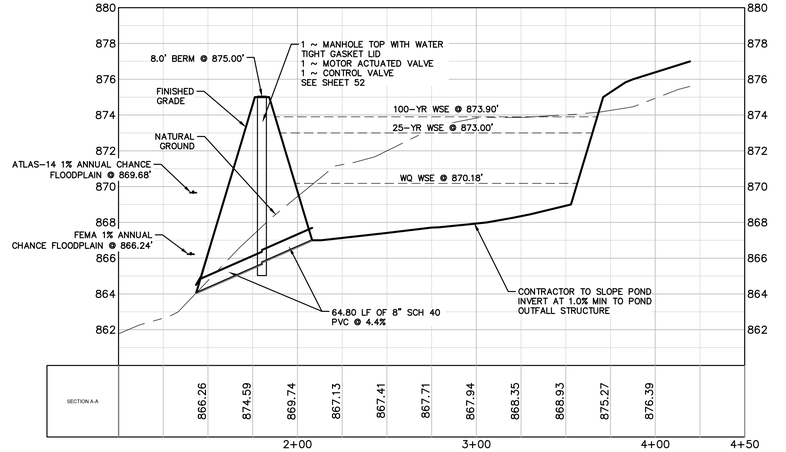
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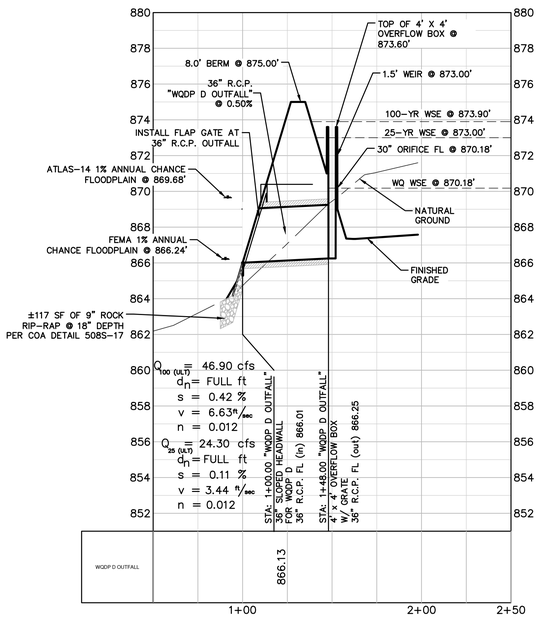
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Rock Rip-Rap Apron Sizing				
Outfall	V_{100} (ft/s)	D (in)	W (ft)	L_t (ft)
WQDP D	6.63	9.00	2.25	2.49

Rock Rip-Rap Apron Sizing				
Outfall	V_{100} (ft/s)	D (in)	W (ft)	L_t (ft)
SD-1A	6.65	9.00	2.25	2.49

Rock Rip-Rap Apron Sizing				
Outfall	V_{100} (ft/s)	D (in)	W (ft)	L_t (ft)
SD-2A	4.15	6.00	1.50	1.04

ORIFICE DRAWDOWN: WQPD D						
Contour Elevation (ft)	Contour Area (ft^2)	Average End Area Method		Orifice Discharge (ft^3/s)	Incremental Drawdown Time (hr)	Total Drawdown Time (hr)
		Incremental Volume (ft^3)	Total Volume (ft^3)			
870.18	28,948.94					
870.00	28,538.73	5,174	5,174	0.36	3.99	3.99
869.10	26,535.26	24,783	29,957	0.34	20.06	24.06
868.00	14,078.40	22,338	52,295	0.31	20.14	44.20
867.00	25.00	26,338	58,937	0.27	27.05	53.35

Orifice Diameter (in)	2.37
Orifice FL Elev	864.04
Orifice Centroid Elev	864.14
Orifice Area (A_o) ft^2	0.03
Orifice Coefficient	0.60

Total Drawdown Time	53.4	hours
Total Hold + Drawdown Time	65.4	hours
Orifice Discharge Rate (Average)	0.31	cfs

Batch Detention Pond D Elevation-Area-Storage Table							
Stage	Water Quality Pond D						
	Water Quality Pond Area	Water Quality Pond Area	Incremental Height	Incremental Volume Avg. End Area	Cumulative Volume	Cumulative Volume	Comments
(ft. msl)	(sf)	(ac)	(ft)	(cf)	(cf)	(ac-ft)	
867.00	25	0.0000	---	---	---	---	
868.00	14,078	0.3232	1.00	7,052	7,052	0.16	
869.00	26,313	0.6041	1.00	20,196	27,247	0.63	
870.00	28,539	0.6552	0.90	24,783	54,673	1.26	
870.18	28,949	0.6646	0.18	5,174	59,847	1.37	WQ WSE
871.00	30,818	0.7075	0.82	24,504	84,351	1.94	
872.00	33,170	0.7615	1.00	31,994	116,345	2.67	
873.00	35,590	0.8170	1.00	34,380	150,725	3.46	25 YR WSE
873.90	37,819	0.8682	0.90	33,034	183,759	4.22	100 YR WSE
874.00	38,067	0.8739	0.10	3,794	187,554	4.31	
875.00	40,613	0.9324	1.00	39,340	226,894	5.21	

BATCH DETENTION POND D UNDERDRAIN SIZING CALCULATIONS								
DRAIN LINE ID	WATER QUALITY VOLUME WQV (cf)	AVERAGE DRAWDOWN FLOWRATE FROM ORIFICE (VALVE) Q (cfs)	PIPE DIAMETER D (in)	MANNINGS N n	PIPE SLOPE S (ft/ft)	FULL FLOW CAPACITY Qcap	K	FRICTION SLOPE S_f (ft/ft)
POND DRAIN D	59,847	0.31	8	0.010	0.0440	3.30	15.71	0.0004

WILDSPRING PHASE 2 WATER QUALITY VOLUME SUMMARY		
Pond	Required Water Quality Volume (cu.ft.)	Provided Water Quality Volume (cu.ft.)
Batch Detention Pond D	59,732	59,847

CITY OF LEANDER APPROVAL

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WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
WATER QUALITY AND DETENTION POND

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 50 OF 80

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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: WILDSPRING PHASE 2
Date Prepared: 2/13/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 — Pages 3-27 to 3-30

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

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Williamson	
Total project area included in plan * =	64.24	acres
Predevelopment impervious area within the limits of the plan * =	0.11	acres
Total post-development impervious area within the limits of the plan* =	28.34	acres
Total post-development impervious cover fraction * =	0.44	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	24576	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 2

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

Drainage Basin/Outfall Area No. = POND D

Total drainage basin/outfall area =	11.07	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	5.75	acres
Post-development impervious fraction within drainage basin/outfall area =	0.52	
$L_{M\ THIS\ BASIN}$ =	5008	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Extended Detention — Batch Detention
Removal efficiency = 91 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

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

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

A_C =	11.07	acres
A_I =	5.75	acres
A_P =	5.32	acres
L_R =	5881	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 5782 lbs.

F = 0.98

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 — Pages 3-34 to 3-36

Rainfall Depth =	3.33	inches
Post Development Runoff Coefficient =	0.37	
On-site Water Quality Volume =	49329	cubic feet

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

Off-site area draining to BMP =	0.03	acres
Off-site impervious cover draining to BMP =	0.05	acres
Impervious fraction of off-site area =	1.51	
Off-site Runoff Coefficient =	1.23	
Off-site Water Quality Volume =	447	cubic feet
Storage for Sediment =	9955	
Total Capture Volume (required water quality volume(s) x 1.20) =	59732	cubic feet

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

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

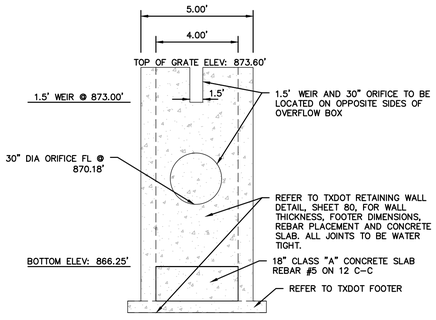
Required Water Quality Volume for retention basin = NA cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	0.1	in/hr	Enter determined permeability rate or assumed value of 0.1
Irrigation area =	NA	square feet	
	NA	acres	

8. Extended Detention Basin System Designed as Required in RG-348 — Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin = 59732 cubic feet

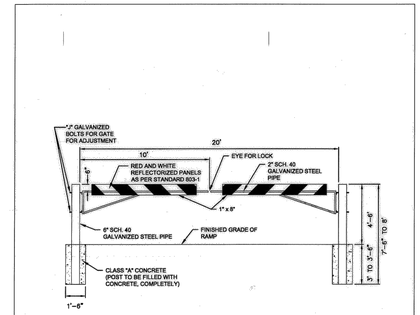


4' X 4' OVERFLOW BOX W/ GRATE
N.T.S.



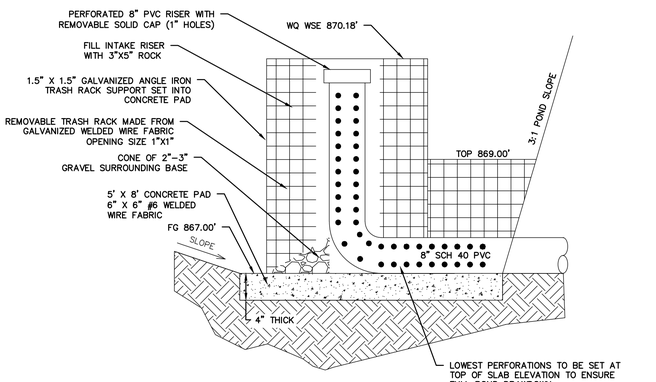
HEIGHT	24"
LENGTH	18"
THICKNESS	0.08"
SUBSTRATE	ALUMINUM ALLOY, 6061-T-6, OR TYPE IV 5052-H38 (ASTM B-209)
COLOR	LETTERING AND BORDER BLACK

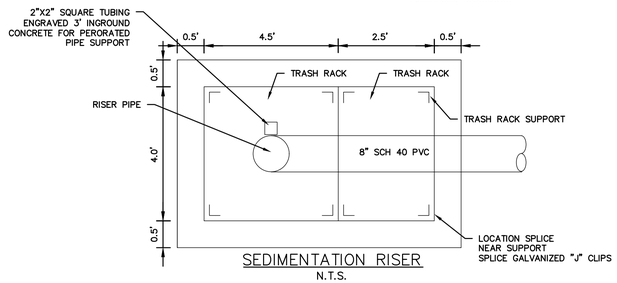
CITY OF AUSTIN, DEPARTMENT OF PUBLIC WORKS	STORM WATER FACILITY SIGN	
E. J. Rourk, P.E. 1/4/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 662S-3



NOTE:
RAMP BARRICADE SUBSIDIARY TO ITEM 403-G CONCRETE STRUCTURES

CITY OF AUSTIN, DEPARTMENT OF PUBLIC WORKS	POND PIPE GATE AT RAMP DETAIL
E. J. Rourk, P.E. 1/4/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. — STANDARD NO. 662S-1

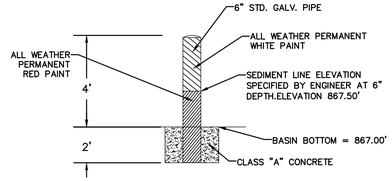




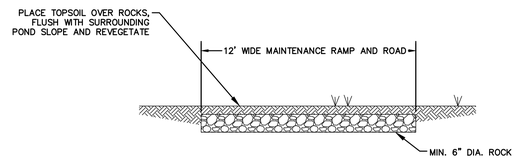
SEDIMENTATION RISER
N.T.S.

HOLE FREQUENCY OF PERFORATED RISER PIPE

RISER PIPE DIAMETER = 8"
HEIGHT OF RISER PIPE = 4.00'
DIAMETER OF PERFORATIONS = 1"
NUMBER OF PERFORATIONS PER ROW = 4"
VERTICAL SPACING BETWEEN ROWS (ON CENTER) = 4"



SEDIMENT DEPTH MARKER DETAIL



POND MAINTENANCE ACCESS SECTION
NTS

CITY OF LEANDER APPROVAL

PICP-25-XXXX

DATE | NO. | REVISION

STATE OF TEXAS — AIMEE CHAVEZ — 123240 — LICENSED PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

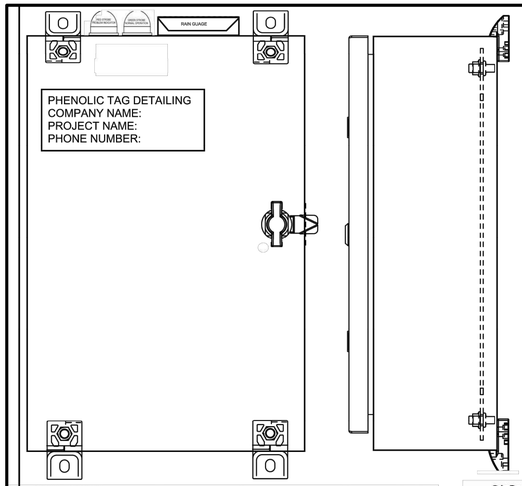
PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

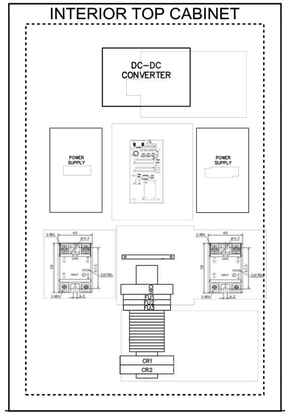
WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
WATER QUALITY AND DETENTION
POND DETAILS 1 OF 2

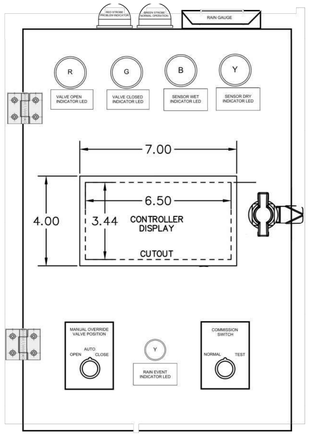
CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 51 OF 80

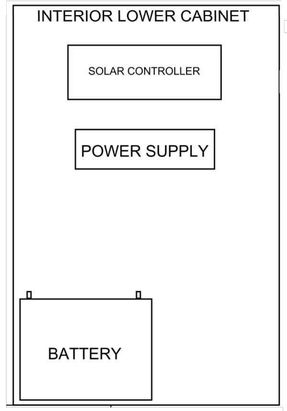
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File: K:\Projects\51480101\301 Construction Documents\Civil\PD51480-01.dwg

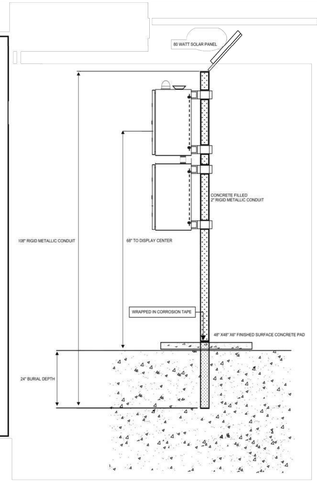
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CONTROLLER NOTES:
1. CLEARLY VISIBLE ALARM SYSTEM TO BE PROVIDED TO INDICATE SYSTEM MALFUNCTION.
2. SIGN TO BE POSTED WITH PHONE NUMBERS OF THE OWNER AND APPROPRIATE TCEQ REGIONAL OFFICE.
3. CONTRACTOR TO PROVIDE ELECTRICAL PLANS FOR BATCH DETENTION POND CONTROLLER AND VERIFY COMPONENT SPECIFICATIONS.

Batch Detention Pond Controller Information

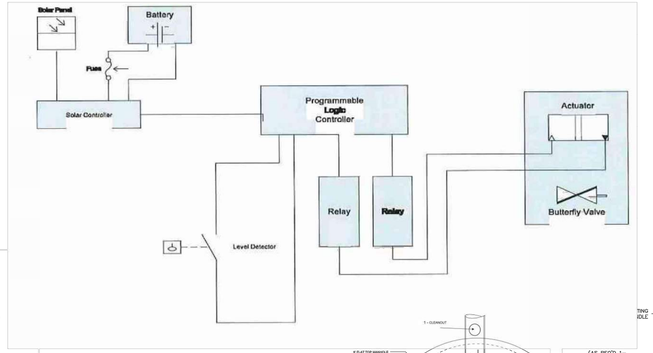
Component	Description	Voltage
Power System	Solar Charged 12 VDC Battery (Model MK Powered 8GU1) (Or approved equal)	
Logic Controller	IDEC FLIC-H12RCE (Or approved equal)	12
Parts Enclosure	Southwest Photovoltaic Model 8BG-1 (15.75" wide x 9.75" deep x 11.75" tall) (Or approved equal)	
Nature of Event Sensing	Anchor Scientific Float Switch(Or approved equal)	
Valve Type	Eccentric Plug Valve with over torque sensors and mechanical hand crank for physical override if necessary. Able to withstand 100 psi minimum. (Or approved equal)	
Actuator	EPI 12 VDC. Able to withstand 100 psi minimum. (Or approved equal)	12
Power Consumption (actuator, controller, relay, PLC)	242.58 W, 46.5 W-hours	

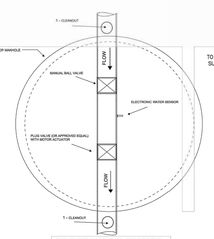
Design Requirements

• The valve is closed between storm events.
• Controller opens the valve and releases the captured runoff after a 12-hour detention time, and closes the valve after the basin has drained.
• Batch ponds are limited to drainage areas less than 100 acres.
• Controller consists of a level sensor in the basin, a valve (with a default closed position), an actuator, and associated control logic. The controller detects water filling the basin from the level sensor and initiates a 12-hour detention time. At the end of the required detention time, the controller opens the valve and drains the basin. Subsequent rainfall events that occur prior to the basin draining should cause the valve to remain open and allow the additional stormwater runoff to pass through the basin. Once the basin is drained the controller closes the valve. The drawdown time of the basin should not exceed 48 hours for a single storm event after the 12 hour required detention time. All cables should be protected by conduit and buried to prevent damage during maintenance activities.
• The system is solar powered, and the voltage of the controller and actuator is _____ and _____ respectively.
• Identify model of controller and provide a general overview of cycles.
• The system should be programmed to have the valve remain open for two hours after the level sensor indicates the basin is empty. Test sequence, be able to deal with low battery/power outages, an on/off/reset switch, manual open/close switches (maintenance/spill), clearly visible external indicator to indicate a cycle is in progress without opening the box.
• Provide a general description of the lockable parts enclosure.
• Provide a block diagram of site specific controller circuit.
• Identify the type of sensor used to indicate the water level in the basin.
• Identify the model of valve proposed, size, type, pressures, and over-torque sensors. A manual override should be provided.
• Operate at 0˚ - 130˚F temperature/weather
• Reliability at 40,000 hours (approximately 4.6 years)
• Safety precautions to include alarm system clearly visible to indicate system malfunction, with sign posted with phone number of owner and appropriate TCEQ regional office.
• Power consumption to include total wattage and W-hours of actuator, controller, and relay.
• Hazardous Material Threat (HMT) Operations to include if a spill does occur in the basin, all components of the controller must be inspected and checked for proper operations within 7 days.

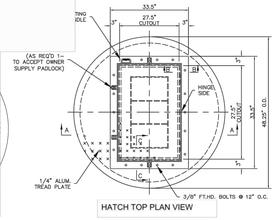
Inspection Requirements

• Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s). Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately.
• The logic controller should be inspected as part of the twice yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

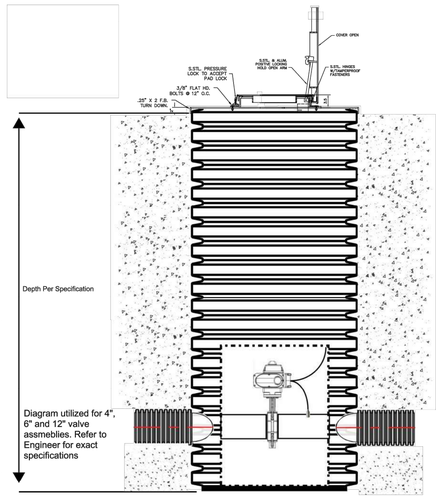




MANHOLE TOP PLAN VIEW
NTS



HATCH TOP PLAN VIEW



EXTERIOR AND INTERIOR LAYOUT

ENTRUSTSYSTEMS@GMAIL.COM
BARRY MERRELL
512-708-0202
BARRY@MERRELLSERVICES.COM

ENTRUST SYSTEMS
POWERED BY MERRELL SERVICES

SHEET 1 OF 1 | DRAWING- BATCH MAX BR1

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER
2/18/25

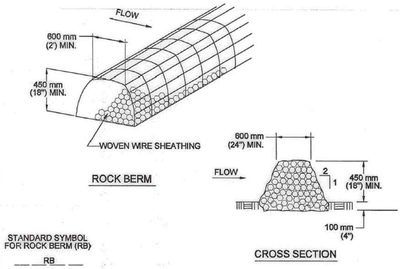
PAPE-DAWSON ENGINEERS
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10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
WATER QUALITY AND DETENTION POND DETAILS 2 OF 2

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 52 OF 80

Date: Feb 18, 2025, 2:14pm User ID: andrewdbak
File: H:\Projects\514\80\01\301 Construction Documents\Civil\P051480-01.dwg

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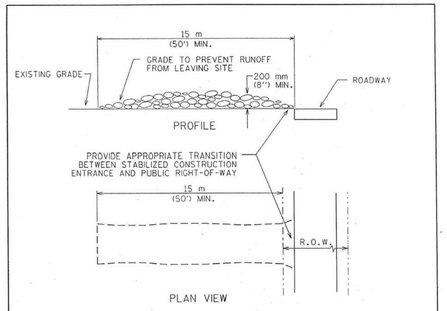
STANDARD SYMBOL FOR ROCK BERM (RB)

RB

NOTES:

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

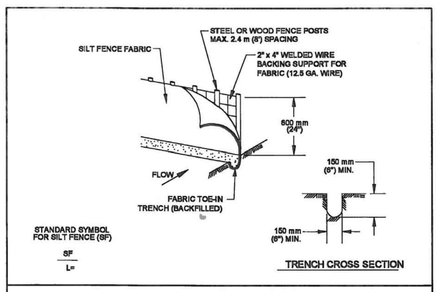
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	ROCK BERM	
Wayne S. Hayes P.E. 8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



NOTES:

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

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
Leon Barba 5/23/06 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



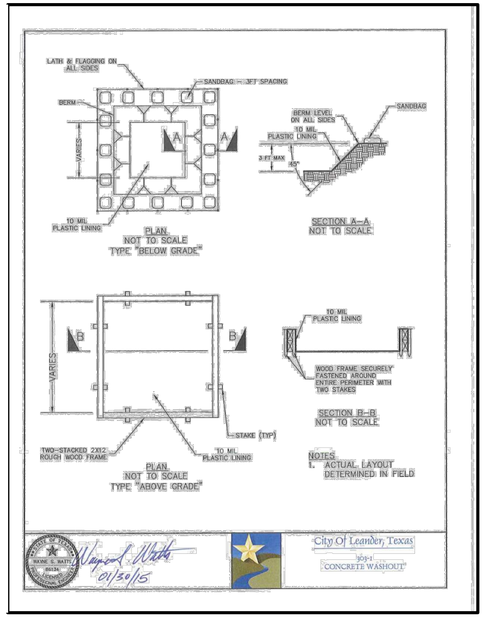
STANDARD SYMBOL FOR SILT FENCE (SF)

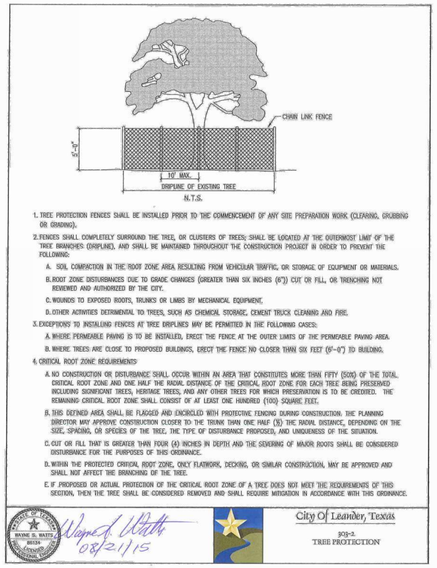
SF

L=

1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 Inches) DEPTH, USE STEEL POSTS.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 Inches) DEEP AND 150 mm (6 Inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 Inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	
Wayne S. Hayes 9/1/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1



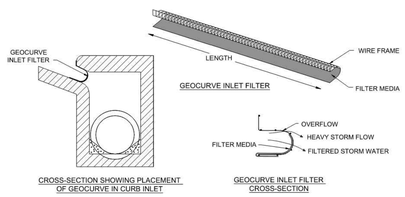


1. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING).
2. FENCES SHALL COMPLETELY SURROUND THE TREE, OR CLUSTERS OF TREES. SHALL BE LOCATED AT THE OUTERMOST LIMIT OF THE TREE BRANCHES (DRIPLINE), AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC, OR STORAGE OF EQUIPMENT OR MATERIALS.
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN SIX INCHES (6")) CUT OR FILL, OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY.
   C. WOUNDS TO EXPOSED ROOTS, TRUNKS OR LIMBS BY MECHANICAL EQUIPMENT,
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES, SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING AND FIRE.
3. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIPLINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
   B. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN SIX FEET (6'-0") TO BUILDING.
4. CRITICAL ROOT ZONE REQUIREMENTS:
   A. NO CONSTRUCTION OR DISTURBANCE SHALL OCCUR WITHIN AN AREA THAT CONSTITUTES MORE THAN FIFTY (50%) OF THE TOTAL CRITICAL ROOT ZONE AND ONE HALF THE RADIAL DISTANCE OF THE CRITICAL ROOT ZONE FOR EACH TREE BEING PRESERVED INCLUDING SIGNIFICANT TREES, HERITAGE TREES, AND ANY OTHER TREES FOR WHICH PRESERVATION IS TO BE CREDITED. THE REMAINING CRITICAL ROOT ZONE SHALL CONSIST OF AT LEAST ONE HUNDRED (100) SQUARE FEET.
   B. THIS DEFINED AREA SHALL BE FLAGGED AND ENCIRCLED WITH PROTECTIVE FENCING DURING CONSTRUCTION. THE PLANNING DIRECTOR MAY APPROVE CONSTRUCTION CLOSER TO THE TRUNK THAN ONE HALF (½) THE RADIAL DISTANCE, DEPENDING ON THE SIZE, SPACING, OR SPECIES OF THE TREE, THE TYPE OF DISTURBANCE PROPOSED, AND UNIQUENESS OF THE SITUATION.
   C. CUT OR FILL THAT IS GREATER THAN FOUR (4) INCHES IN DEPTH AND THE SEVERING OF MAJOR ROOTS SHALL BE CONSIDERED DISTURBANCE FOR THE PURPOSES OF THIS ORDINANCE.
   D. WITHIN THE PROTECTED CRITICAL ROOT ZONE, ONLY FLATWORK, DECKING, OR SIMILAR CONSTRUCTION, MAY BE APPROVED AND SHALL NOT AFFECT THE BRANCHING OF THE TREE.
   E. IF PROPOSED OR ACTUAL PROTECTION OF THE CRITICAL ROOT ZONE OF A TREE DOES NOT MEET THE REQUIREMENTS OF THIS SECTION, THEN THE TREE SHALL BE CONSIDERED REMOVED AND SHALL REQUIRE MITIGATION IN ACCORDANCE WITH THIS ORDINANCE.

WAYNE S. WAITS 86536 LICENSED PROFESSIONAL ENGINEER
08/21/15
City Of Leander, Texas
303-2.
TREE PROTECTION

GeoSolutions, Inc. — Product Data Sheet
GeoCurve Inlet Filter

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



FILTER MEDIA PROPERTIES: Mono-filament Woven Filter Fabric

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

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

iii. The average depth of flow across the filter strip must not exceed 0.1 feet for a vegetative filter strip used as a stand alone BMP.

$L = 10Q_{2\text{-yr, 3-hr}}$
L = minimum width of a flow spreader (ft) perpendicular to flow
$Q_{2\text{-yr, 3-hr}}$ = Peak flow-rate from the 1-yr, 3-hr storm event (See App. 2.4)

(7) *Surface Characteristics*: The filter area, after final grading, should have a uniform and even slope and be capable of maintaining an even sheet flow across the entire filter surface. The filter area must be free of gullies, rills and flow concentrations. The strip must be sodded or if seed is used it must be accompanied by the appropriate soil blanket or matting per 3.2.11.

(8) *Soil Requirements*: A minimum of 6-inches of topsoil is required. The topsoil must contain 10-20% compost, a clay content less than 20 percent and be free of stones, stumps, roots or other similar objects larger than one (1) inch. If on-site soils do not meet these specifications, topsoil per the above specs must be added. Sandy loam is not an approved soil and caliche is not considered a soil.

(9) *Infiltration Berm*: Required at the downgradient end of a filter strip with a slope greater than 2%. The required depth of the infiltration berm is the lesser of $L*s/3$ or 1-foot where "L" is the minimum dimension in the direction of flow and "s" is the average slope of the filter area. Berm side slopes should be no steeper than 3:1, and berm top-width should be 4-8 inches.

(10) *Terrace Slope Option*: Required to consist of an overall slope less than 20%, riser slopes may be steeper than 20%, treads should be greater than 4 feet in length with a slope less than 15%. Risers must be stable and capable of functioning as flow spreaders.

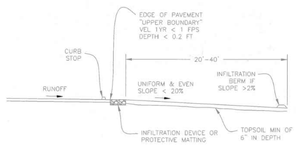
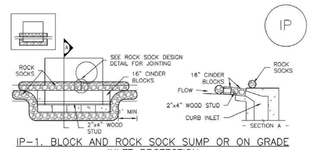


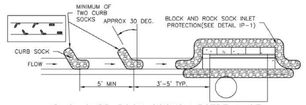
Figure 4-15: Engineered Vegetative Filter Strip



IP-1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

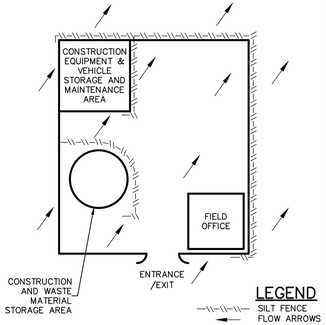
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.
2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.



CONSTRUCTION STAGING AREA
NOT-TO-SCALE

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED PROFESSIONAL ENGINEER
Aimee Chavez 2/18/25

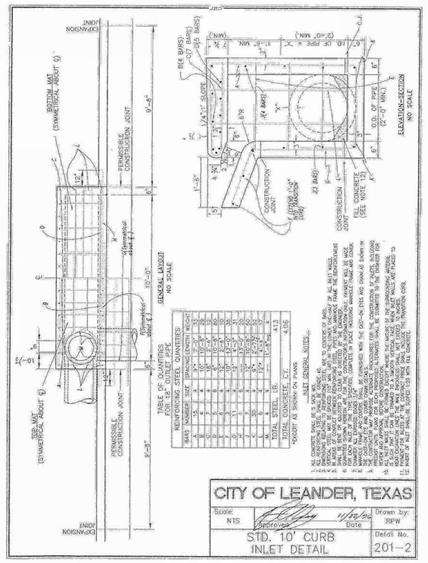
PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
EROSION AND SEDIMENTATION CONTROL DETAILS

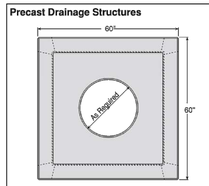
CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 70 OF 80

Date: Feb 18, 2025, 2:26pm User ID: andrewdock
File: N:\Projects\51480\01\300 Construction Documents\Civil\07514801-01.dwg

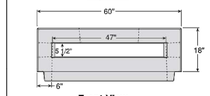
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Precast Drainage Structures

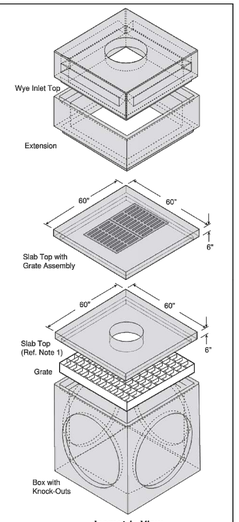


Top View



Front View

Item in Isometric View	Height (Inches)	Approx. Weight (Lbs.)
Wye Inlet Top	18	3,430
Extension	12 15 18 21 24	1,350 1,688 2,025 2,363 2,700
Slab Top	6	1,340
Grate	3 1/4	433
Box	Varies	



Isometric View

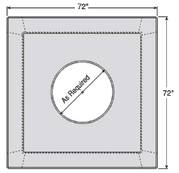
Note:
1.) Customer to specify opening size or cast iron ring and cover.

-No Scale-
All dimensions subject to allowable specification tolerances.

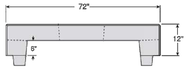
TITLE	PLANT	STATE	SECTION/PAGE	DATE
Top Options for 4' x 4' Precast Box	Grand Prairie Houston	TX	9.2	Feb 2016

FORTERRA

Precast Drainage Structures

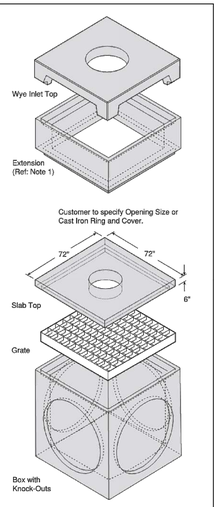


Top View



Front View

Item in Isometric View	Height (Inches)	Approx. Weight (Lbs.)
Wye Inlet Top	12"	
Slab Top	6	4,400
Grate	4 1/2	850
Box	Varies	



Isometric View

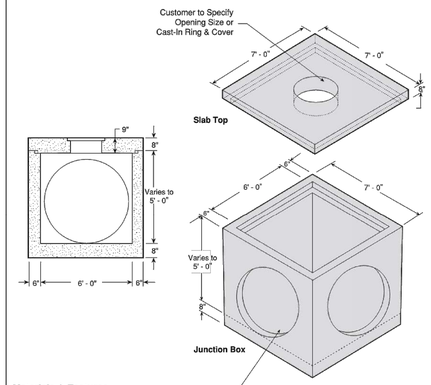
Note:
1.) For information on extensions contact your Forterra Representative.

-No Scale-
All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECTION/PAGE	DATE
5' x 5' Precast Box	Grand Prairie	TX	9.3	Feb 2016

FORTERRA

Precast Drainage Structures



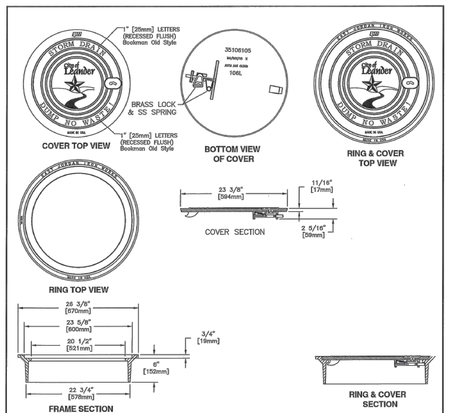
Materials & Features

MAXIMUM PIPE SIZE 48" RCP
CONCRETE: 5,000 PSI
REINFORCING: per ASTM A-615 or A-185
H-20 LOADING
TOP SLAB WEIGHT: 5,600 Lbs.
JUNCTION BOX WEIGHT: 16,600 Lbs. (6' x 6' x 5')
EXTENSION SECTIONS AVAILABLE

-No Scale-
All dimensions subject to allowable specification tolerances.

TITLE	PLANT	STATE	SECTION/PAGE	DATE
6' x 6' Standard Junction Box With Variable Depths	Grand Prairie Houston Waco	TX	9.4	Feb 2016

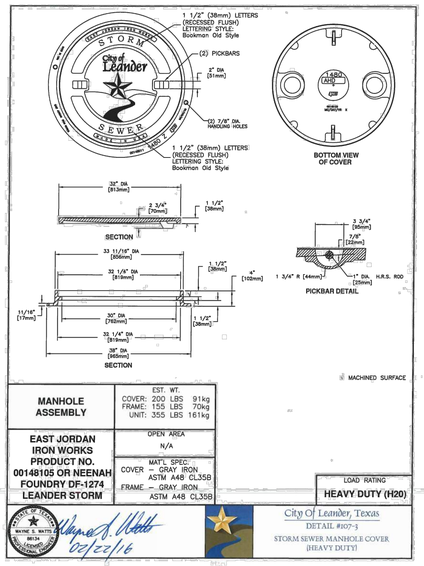
FORTERRA



MANHOLE ASSEMBLY WITH LOCK	EST. WT. COVER: 86 LBS 39kg RING: 95 LBS 43kg TOTAL: 181 LBS 82kg
EAST JORDAN IRON WORKS PRODUCT NO. 35505205 OR APPROVED EQUAL	OPEN AREA N/A MAT'L SPEC. COVER – GRAY IRON ASTM A48 CL35B FRAME – GRAY IRON ASTM A48 CL35B
	LOAD RATING NON-TRAFFIC

MICHAEL WAYNE S. WATTS 89134 LICENSED PROFESSIONAL ENGINEER
02/04/14

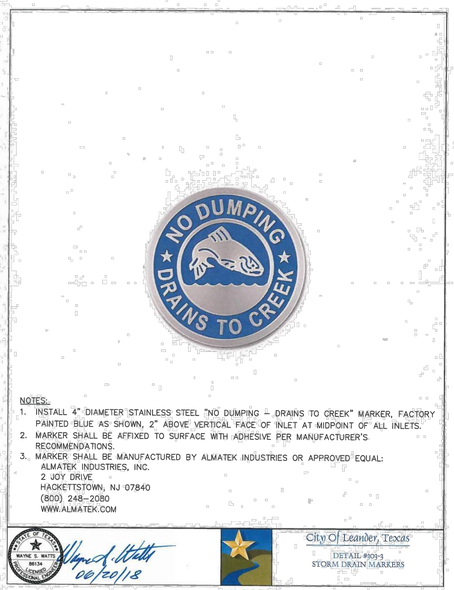
City Of Leander, Texas
DETAIL #107-2
STORM SEWER INLET COVER (LOCKING)



MANHOLE ASSEMBLY	EST. WT. COVER: 200 LBS 91kg FRAME: 155 LBS 70kg UNIT: 355 LBS 161kg
EAST JORDAN IRON WORKS PRODUCT NO. 00148105 OR NEENAH FOUNDRY DF-1274 LEANDER STORM	OPEN AREA N/A MAT'L SPEC. COVER – GRAY IRON ASTM A48 CL35B FRAME – GRAY IRON ASTM A48 CL35B
	LOAD RATING HEAVY DUTY (H20)

MICHAEL WAYNE S. WATTS 89134 LICENSED PROFESSIONAL ENGINEER
02/22/16

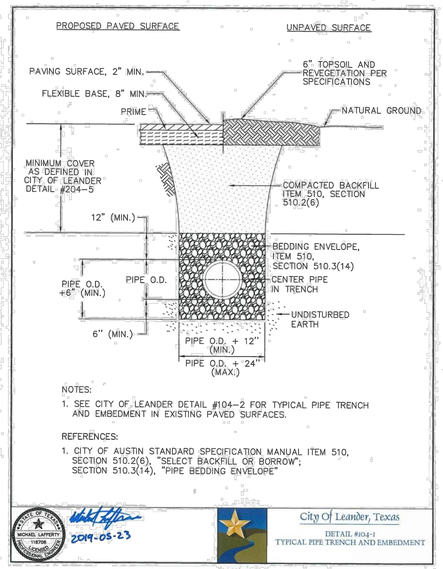
City Of Leander, Texas
DETAIL #107-3
STORM SEWER MANHOLE COVER (HEAVY DUTY)



NOTES:
1. INSTALL 4" DIAMETER STAINLESS STEEL "NO DUMPING – DRAINS TO CREEK" MARKER, FACTORY PAINTED BLUE AS SHOWN, 2" ABOVE VERTICAL FACE OF INLET AT MIDPOINT OF ALL INLETS.
2. MARKER SHALL BE AFFIXED TO SURFACE WITH ADHESIVE PER MANUFACTURER'S RECOMMENDATIONS.
3. MARKER SHALL BE MANUFACTURED BY ALMATEK INDUSTRIES OR APPROVED EQUAL:
ALMATEK INDUSTRIES, INC.
2 JOY DRIVE
HACKETTSTOWN, NJ 07840
(800) 248-2080
WWW.ALMATEK.COM

MICHAEL WAYNE S. WATTS 89134 LICENSED PROFESSIONAL ENGINEER
08/20/13

City Of Leander, Texas
DETAIL #103-3
STORM DRAIN MARKERS



NOTES:
1. SEE CITY OF LEANDER DETAIL #104-2 FOR TYPICAL PIPE TRENCH AND EMBEDMENT IN EXISTING PAVED SURFACES.

REFERENCES:
1. CITY OF AUSTIN STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

MICHAEL LAFFERTY 113778 LICENSED PROFESSIONAL ENGINEER
2014-05-23

City Of Leander, Texas
DETAIL #104-1
TYPICAL PIPE TRENCH AND EMBEDMENT

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123249
LICENSED
PROFESSIONAL ENGINEER
Aimee Chavez 2/18/25

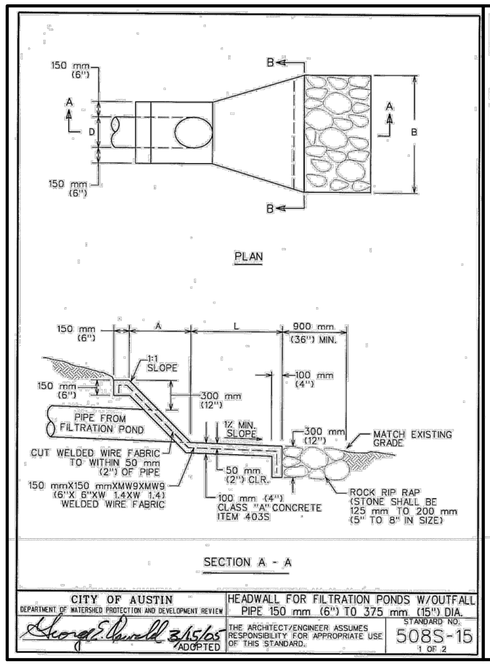
PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
DRAINAGE DETAILS 1 OF 2

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 78 OF 80

Date: Feb 18, 2025, 2:27pm User ID: andrewdok
File: H:\Projects\51480\01 Construction Documents\Civil\D751480-01.dwg

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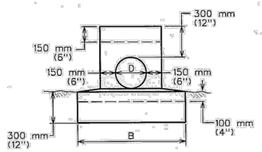
CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

George E. Rawell 3/15/05
ADOPTED

HEADWALL FOR FILTRATION PONDS W/OUTFALL
PIPE 150 mm (6") TO 375 mm (15") DIA.

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

STANDARD NO.
508S-15
1 OF 2



SECTION B - B

A	450 mm (18")	500 mm (20")	550 mm (22")	600 mm (24")	675 mm (27")
B	750 mm (30")	800 mm (32")	850 mm (34")	1.05 m (42")	1.27 m (51")
D	150 mm (6")	200 mm (8")	250 mm (10")	300 mm (12")	375 mm (15")
L	600 mm (24")	600 mm (24")	750 mm (30")	900 mm (36")	1.2 m (48")

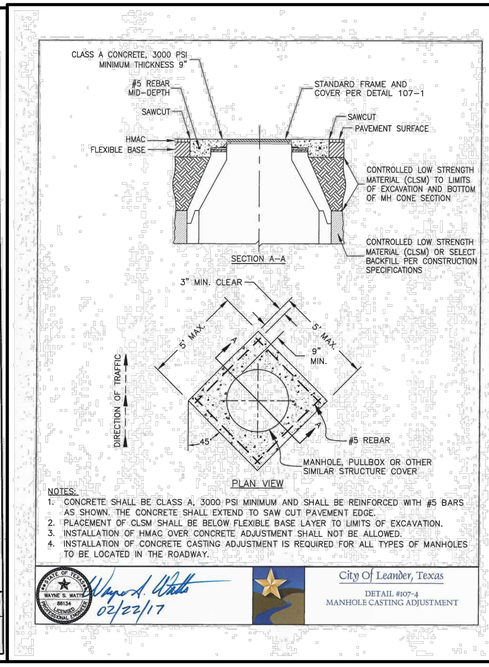
CITY OF AUSTIN
DEPARTMENT OF WATERSHED PROTECTION AND DEVELOPMENT REVIEW

George E. Rawell 3/15/05
ADOPTED

HEADWALL FOR FILTRATION PONDS W/OUTFALL
PIPE 150 mm (6") TO 375 mm (15") DIA.

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

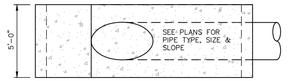
STANDARD NO.
508S-15
2 OF 2



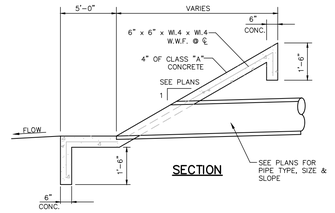
NOTES:
1. CONCRETE SHALL BE CLASS A, 3000 PSI MINIMUM AND SHALL BE REINFORCED WITH #5 BARS AS SHOWN. THE CONCRETE SHALL EXTEND TO SAW CUT PAVEMENT EDGE.
2. PLACEMENT OF CLSM SHALL BE BELOW FLEXIBLE BASE LAYER TO LIMITS OF EXCAVATION.
3. INSTALLATION OF HMAC OVER CONCRETE ADJUSTMENT SHALL NOT BE ALLOWED.
4. INSTALLATION OF CONCRETE CASTING ADJUSTMENT IS REQUIRED FOR ALL TYPES OF MANHOLES TO BE LOCATED IN THE ROADWAY.

WAYNE S. WATTS 88134 LICENSED PROFESSIONAL ENGINEER
02/22/17

City Of Leander, Texas
DETAIL #107-4
MANHOLE CASTING ADJUSTMENT



PLAN VIEW



SECTION

SLOPED CONCRETE HEADWALL
NTS

NO.	REVISION	DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED PROFESSIONAL ENGINEER
Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
DRAINAGE DETAILS 2 OF 2

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 79 OF 80

CITY OF LEANDER APPROVAL

PICP-25-XXXX

Date: Feb 18, 2025, 2:27pm User ID: andrewdok
File: H:\Projects\51480\01\301 Construction Documents\Civil\DT51480-01.dwg

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WILDSPRING

PHASE 1 - CONSTRUCTION PLANS

PROJECT# PICP-22-0037

CITY OF LEANDER, WILLIAMSON COUNTY, TEXAS
FILING DATE: 12/06/2022

APPROVED BY:

ROBIN M. GRIFFIN, AICP, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES — DATE 05/24/2024

EMILY TRUMAN, P.E., CFM, CITY ENGINEER — DATE 5/24/2024

GINA ELLISON, P.E., PUBLIC WORKS DIRECTOR — DATE 5/28/2024

MARK TUMMONS, CPRP, DIRECTOR OF PARKS AND RECREATION — DATE 5/24/24

CHIEF JOSHUA DAVIS, FIRE MARSHAL — DATE 5/28/24

FILING DATE: DECEMBER 6, 2022

PROJECT NUMBER: PICP-22-0037

ZONING: MASON TRACT - C.R. 175 MINOR PLANNED UNIT DEVELOPMENT
P.U.D. (SFC-2-B) & (SFU-2-B) - ORDINANCE NO. 21-091-00

DEVELOPMENT AGREEMENT: CSM MASON FAMILY DATED FEBRUARY 16, 2017 #20170015559

DESCRIPTION OF 111.569 ACRES OF LAND OUT OF THE M. HICKS SURVEY, ABSTRACT NO. 287, WILLIAMSON COUNTY, TEXAS; BEING A PORTION OF A CERTAIN CALLED 121 ACRE FIRST TRACT AND DESCRIBED IN THE DEED TO CAROLYN DAVIS BUSH AND WILLIAM E. BUSH, MARGARET DAVIS CROSLIN AND CHARLES W. CROSLIN, JR OF RECORD IN VOLUME 553, PAGE 233, DEED RECORDS OF WILLIAMSOM COUNTY, TEXAS.

FUTURE LAND USE CATEGORY: NEIGHBORHOOD RESIDENTIAL/ GREENWAY

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).

STORMWATER MANAGEMENT:
ONSITE WATER QUALITY AND DETENTION THROUGH BATCH DETENTION.

FLOODPLAIN:
FLOODPLAIN MODIFICATIONS ARE PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT

PORTIONS OF THIS TRACT ARE WITHIN A FLOOD HAZARD AREA AS SHOWN ON THE FLOOD INSURANCE RATE MAP PANEL #48491C0460F FOR WILLIAMSON CO., EFFECTIVE 12/20/2019

WATERSHED:
THIS PROJECT IS LOCATED IN THE BRUSHY CREEK WATERSHED.

ENVIRONMENTAL:
THIS PROJECT IS LOCATED IN THE EDWARDS AQUIFER CONTRIBUTING ZONE.

TRAFFIC IMPACT ANALYSIS:
SEE REPORT BY COSTELLO, INC. DATED NOVEMBER 2021

TIA PHASE 1 ROADWAY IMPROVEMENTS INCLUDE:

APPROXIMATELY 3,300 LF OF ROADWAY IMPROVEMENTS TO CR 175. IMPROVEMENTS INCLUDE A CONTINUOUS LEFT TURN LANE ADJACENT THE WILDSPRING SUBDIVISION. NO ROADWAY IMPROVEMENTS TO CR 177 ARE REQUIRED FOR THE PHASE 1 DEVELOPMENT. CR 175 IMPROVEMENTS ARE PROPOSED IN PICP-23-0052.

FOR SINGLE-FAMILY RESIDENTIAL SUBDIVISIONS THAT ARE NOT REGISTERED WITH TDLR, PROVIDE DOCUMENTATION FROM A REGISTERED ACCESSIBILITY SPECIALIST (RAS) THAT THE PEDESTRIAN INFRASTRUCTURE WITHIN THE PUBLIC RIGHT-OF-WAY COMPLIES WITH THE TEXAS ACCESSIBILITY STANDARDS

THIS PROJECT WAS REGISTERED WITH TDLR ON 12-29-2022 (PROJECT # TABS2023008504)

PLAT NOTE:

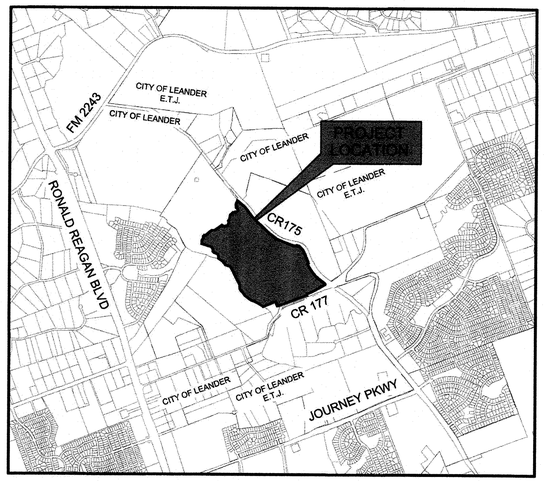
FOR EVERY SIX HUNDRED (600) SQUARE FEET OF AREA IN THE LANDSCAPE LOTS (A-14, C-17, F-38, G-14),TWO (2) SHADE TREES (TOW-INCH CALIPER OR LARGER) AND FOUR (4) SHRUBS (FIVE GALLON CONTAINER SIZE OR LARGER) SHALL BE PLANTED AND MAINTAINED. TWO ORNAMENTAL TREES PER SHADE TREE MAY BE SUBSTITUTED FOR UP TO FIFTY PERCENT OF THE SHADE TREES IF DESIRED. A SIX-FOOT PRIVACY FENCE, BUT NO HIGHER THAT THREE FEET WITHIN TWENTY FIVE FEET OF AN INTERSECTING STREET, SHALL BE CONSTRUCTED WITH THE SUBDIVISION IMPROVEMENTS AT THE COMMON LOT LINE BETWEEN THE LANDSCAPE LOT AND THE SINGLE-FAMILY OR TWO-FAMILY LOTS. THE FENCE IS REQUIRED TO BE CONSTRUCTED OF ONE OR MORE OF THE FOLLOWING MATERIALS: BRICK, STONE, CAST STONE, STUCCO, FACTORY TINTED (NOT PAINTED) SPLIT-FACED CONCRETE MASONRY UNIT, OR OTHER SIMILAR MATERIAL APPROVED BY THE DIRECTOR OF PLANNING. IN ADDITION TO THE MATERIALS LISTED ABOVE, TEXTURED PRE-CAST CONCRETE (E.G. WOODCRETE) IS ALSO PERMITTED WHEN THE PRIVACY FENCE IS ADJACENT TO COLLECTORS. ALL COLUMNS ARE REQUIRED TO HAVE CONCRETE FOOTINGS. THE LANDSCAPE LOT IS REQUIRED TO BE MAINTAINED BY A PRIVATE ASSOCIATION.

A PORTION OF THIS TRACT IS WITHIN A FLOOD HAZARD AREA AS SHOWN ON THE FLOOD INSURANCE RATE MAP PANEL # 48491C0460C FOR WILLIAMSON CO., EFFECTIVE DECEMBER 20, 2019.

DEVELOPER HAS PERFORMED A TRAFFIC IMPACT ANALYSIS (T.I.A) TO ACCESS IMPROVEMENTS ON CR175 THAT WILL BE ADDRESSED AT TIME OF CONSTRUCTION PLAN PERMIT.

REVISIONS/CORRECTIONS

REV NO.	DESCRIPTION	DATE	REVISE (R) ADD (A) VOID (V) SHEET NO.'S	APPROVED BY:	APPROVAL DATE:
1	REVISED BY DRAINAGE PROFILES AND TCEQ INFORMATION, ADDED WTR LINE "D" REVISED TURN LANES, ENTRY, ADDED SERVICE TO WTR LINE "N", REVISED SIDEWALK, PARCELS, ADDED TREE PRESERVATION AND MITIGATION SHEETS	9/17/24	(R) 72, 73, 75, 83, 89, 104, 140-155		



VICINITY MAP
SCALE: 1" = 2000'

PROJECT INFORMATION:

OWNER / DEVELOPER: TOLL BROTHERS
1320 ARROW POINT DR., STE 401, CEDAR PARK, TX 78613
412-780-2312

ENGINEER: PAPE DAWSON ENGINEERS TBPE #470
10801 N MOPAC EXPY, BLDG 3, STE 200
AUSTIN, TX 78759
512-454-8711

SURVEYOR: LANDESIGN SERVICES, INC. TBPELS 10001800
10090 W HIGHWAY 29
LIBERTY HILL, TX 78642
512-238-7901

AGENT: PAPE DAWSON ENGINEERS TBPE #470
10801 N MOPAC EXPY, BLDG 3, STE 200
AUSTIN, TX 78759
512-454-8711

PAPE-DAWSON ENGINEERS

AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

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38	WHITE ROSEMARY CUL DE SAC 4+00 TO 8+00
39	DESERT BLOOM DR & PEACH DRIFT DR
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STATE OF TEXAS
JOHN D. BARCELLONA
97462
LICENSED
PROFESSIONAL ENGINEER

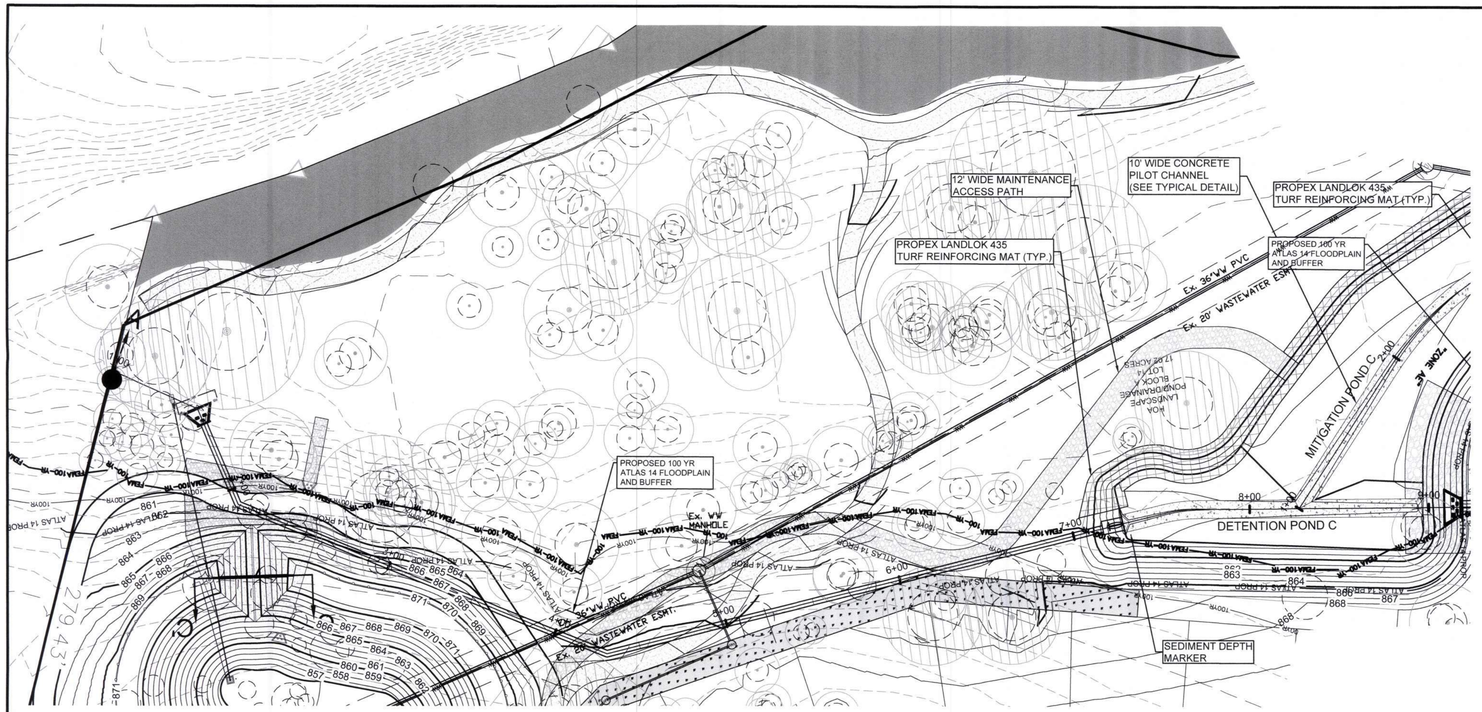
JOHN D. BARCELLONA, P.E. 97462
PAPE DAWSON ENGINEERS TBPE NO. 470

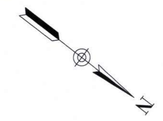
5/7/2024
DATE

ALL PUBLIC IMPROVEMENTS INCLUDING WATER, WASTEWATER, AND STORM SEWER WITHIN DEDICATED RIGHT OF WAY AND PUBLIC UTILITY EASEMENTS TO BE OWNED AND MAINTAINED BY THE CITY OF LEANDER. STORM WATER QUALITY PONDS AND SWQ PONDS TO BE MAINTAINED BY THE HOA.

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

PICP-22-0037 WILDSPRING PH 1 APPROVED 06/07/2024 REV#1 11/25/2024





LEGEND

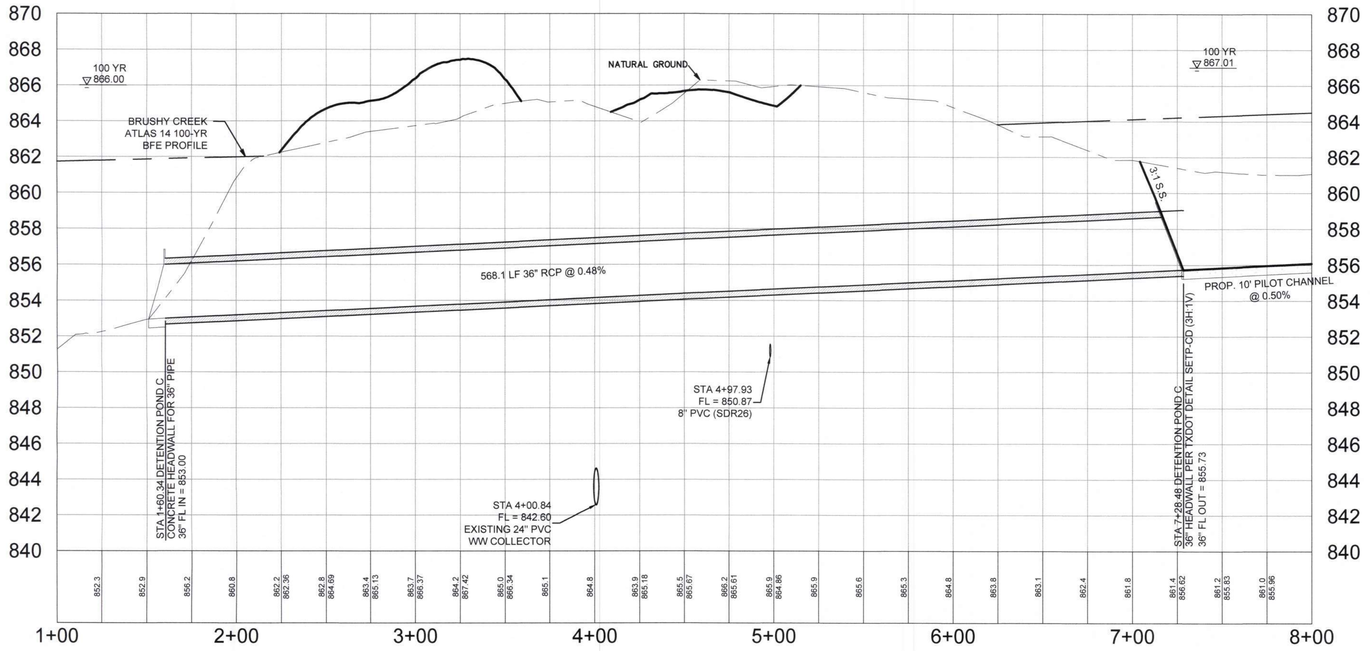
- TREE PROTECTION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED STORM LINE
- CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM JUNCTION BOX
- ROCK RIP RAP

PROFILE SCALE
1" = 40' HORIZ.
1" = 4' VERT.

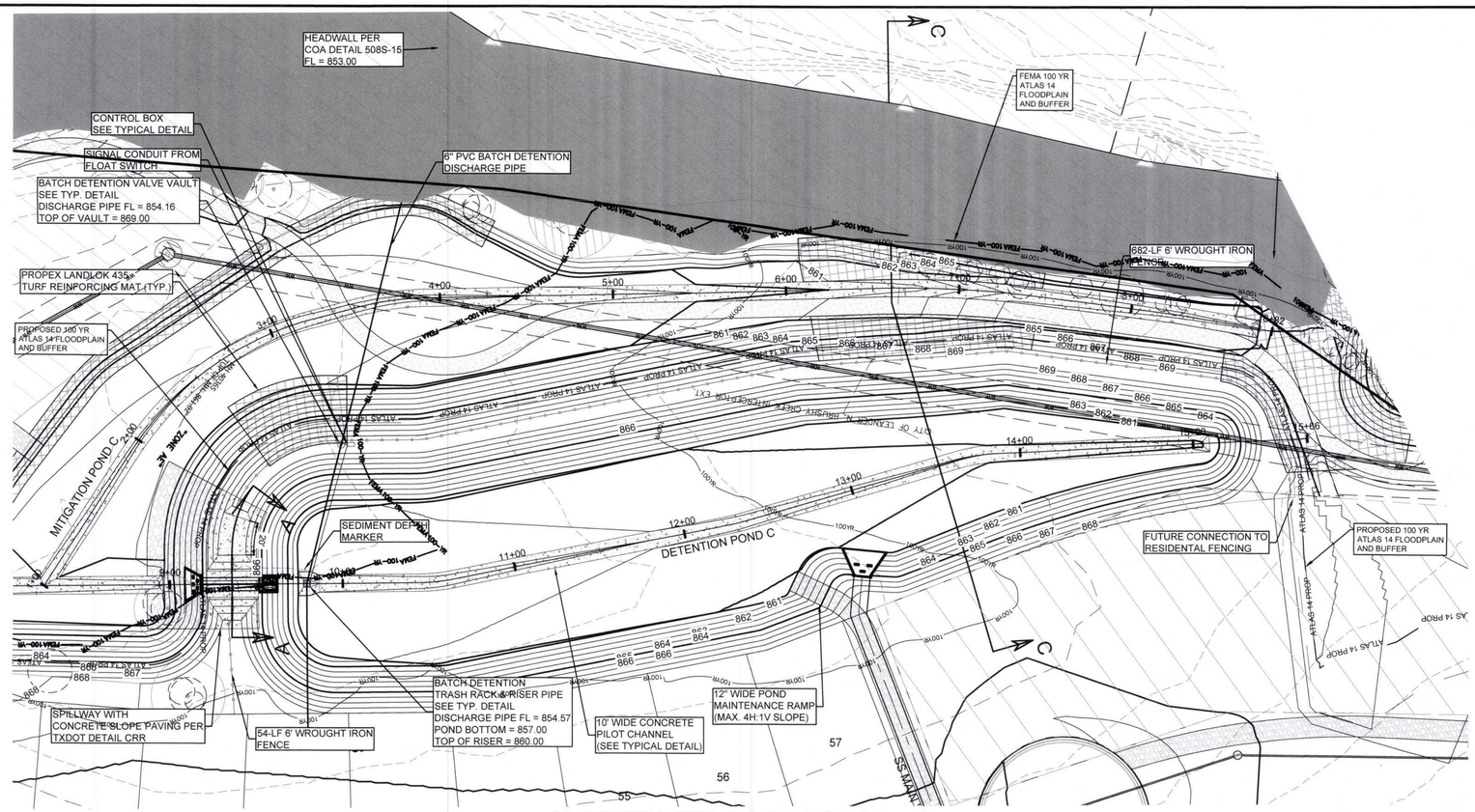
PROFILE LEGEND
- PROPOSED FINISHED GRADE
- EXISTING GRADE (CENTER)

NOTES:
1. ALL FILL AREAS SHALL BE PROOF ROLLED AND BE PLACED IN MAXIMUM 8-INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY AT +/-2 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT PRIOR TO INSTALLATION OF UTILITIES.
2. IF ENCOUNTERED, UNCONTROLLED FILL OR UNSUITABLE MATERIAL (SUCH AS BOULDERS, RUBBLE, DEBRIS, OR ORGANIC MATTER) SHALL BE REMOVED PRIOR TO PLACEMENT OF FILL FOR POND EMBANKMENTS. REFER TO GEOTECHNICAL REPORT BY ALPHA TESTING (REPORT NO. A230175) FOR CONSTRUCTION RECOMMENDATIONS.
3. ALL EXISTING SWALES AND LOW AREAS SHALL BE DE-MUCKED, PROOF ROLLED AND FILLED.
4. ALL PIPE VELOCITIES ARE CONFIRMED LESS THAN 20 FPS.

DETENTION POND C



| | | |



LEGEND

- TREE PROTECTION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED STORM LINE
- CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM JUNCTION BOX
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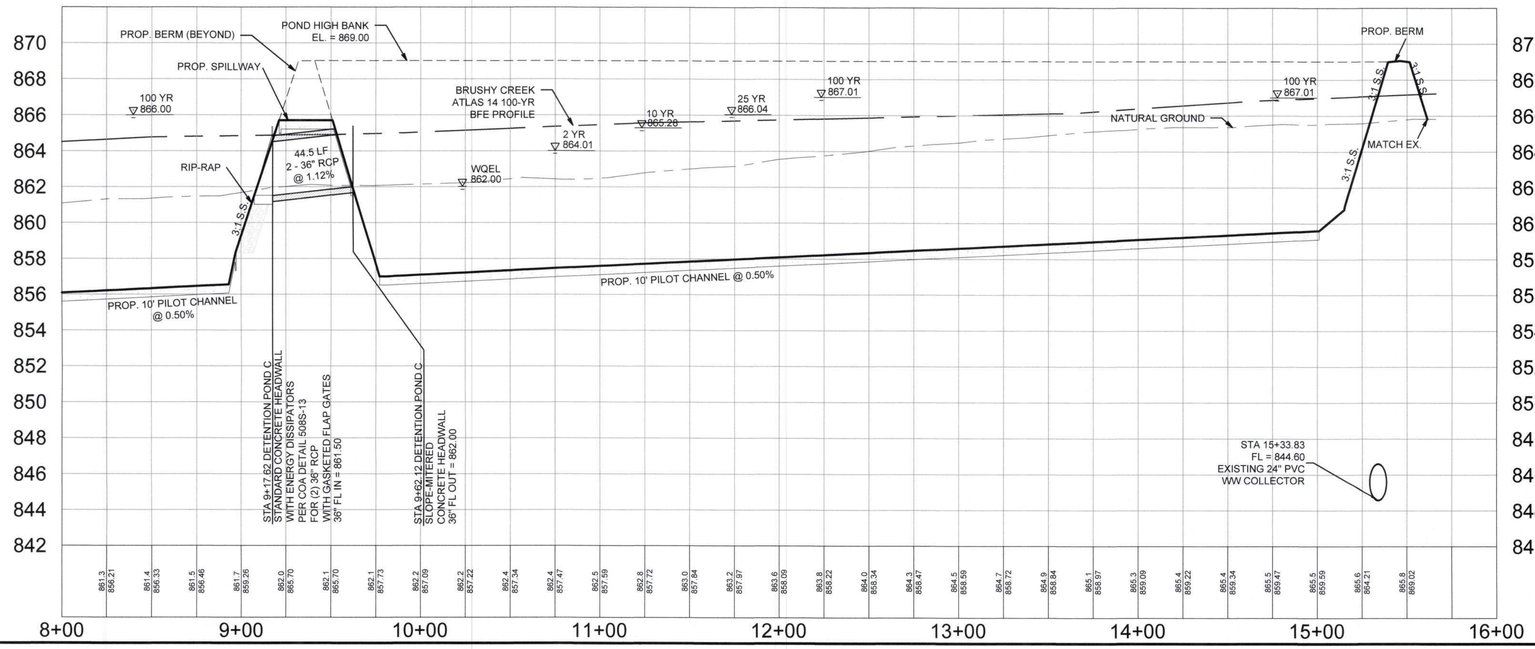
Stage-Storage Table - Pond C

Elevation	Area (sf)	Area (ac)	Volume (cf)	
857.00	0	0.00000	0	
858.00	1,080	0.02479	360	
859.00	13,339	0.30622	6,432	
860.00	32,808	0.75317	28,787	
861.00	43,984	1.00973	67,047	
862.00	**47,641**	**1.09369**	**112,847**	WQV
863.00	51,353	1.17890	162,332	
864.00	55,119	1.26536	215,557	
865.00	58,944	1.35317	272,578	
866.00	62,823	1.44222	333,451	
867.00	66,769	1.53281	398,237	
868.00	70,767	1.62459	466,996	
869.00	74,959	1.72082	539,849	

Elevation-Discharge Table - Pond C

Storm Event	Water Surface Elevation		Discharge (cfs)	
	Phase 1	Ultimate	Phase 1	Ultimate
2-Year	863.25	864.01	13.5-cfs	32.2-cfs
10-Year	864.51	865.28	47.5-cfs	73.8-cfs
25-Year	865.30	866.04	74.6-cfs	109.9-cfs
100-Year	866.40	867.01	137.8-cfs	194.8-cfs

DETENTION POND C



Know what's below. Call before you dig

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PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

NO.	REVISION	DATE	BY

DESIGNED: MRC
DESIGN CHECKED:
DRAWN: MRC
CCGO CHECKED:
SURVEY CHECKED:
QA/QC: DATE:
QA/QC REVISIONS:

WILDSPRING - PHASE 1
CR 175
LEANDER, TEXAS 78641

POND C 10+00 - 15+00

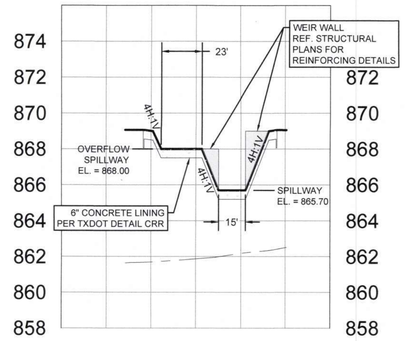
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97462
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5/7/2024

SHEET 63
OF 142 SHEETS

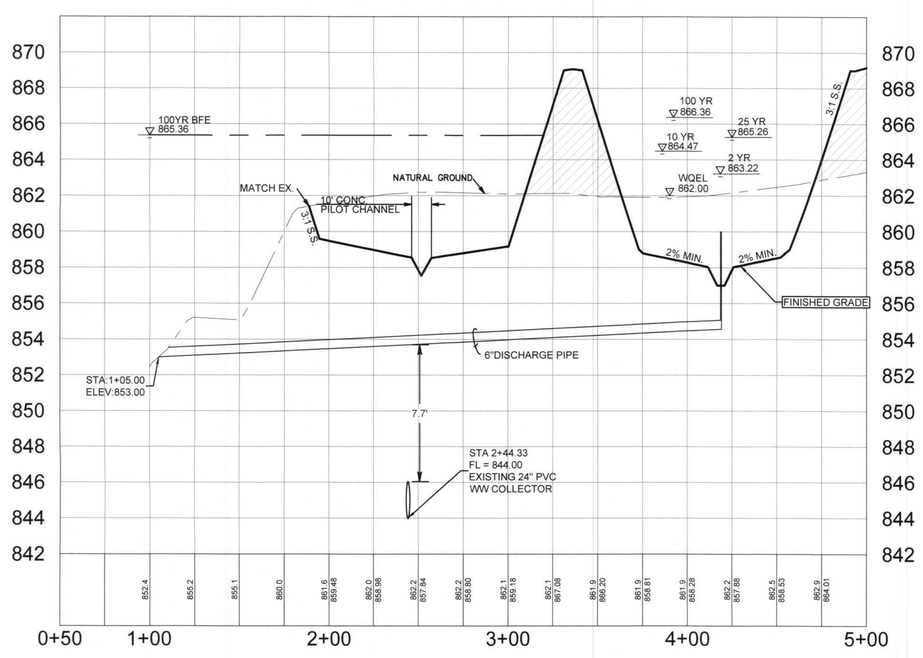
WILDSPRING PHASE 1

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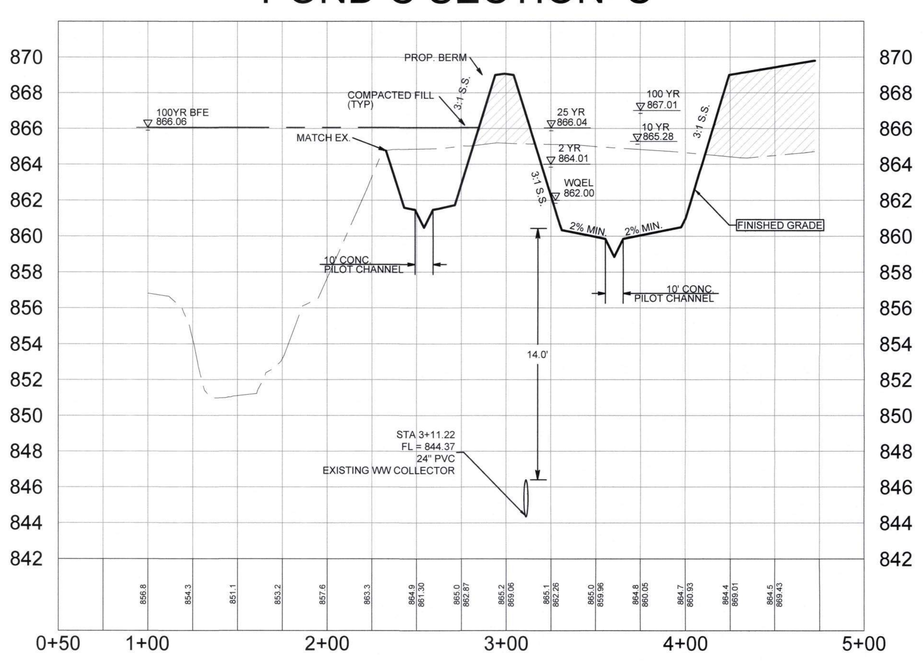
POND C SECTION 'A'



POND C SECTION 'B'



POND C SECTION 'C'



Know what's below. Call before you dig

APPROVED
RMG

NO.	REVISION	DATE	BY

DESIGNED: MRC
DESIGN CHECKED:
DRAWN: MRC
COGO CHECKED:
SURVEY CHECKED:
QA/QC: DATE:
QA/QC REVISIONS:

PAPE-DAWSON ENGINEERS
AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING - PHASE 1
C.R. 175
LEANDER, TEXAS 78641

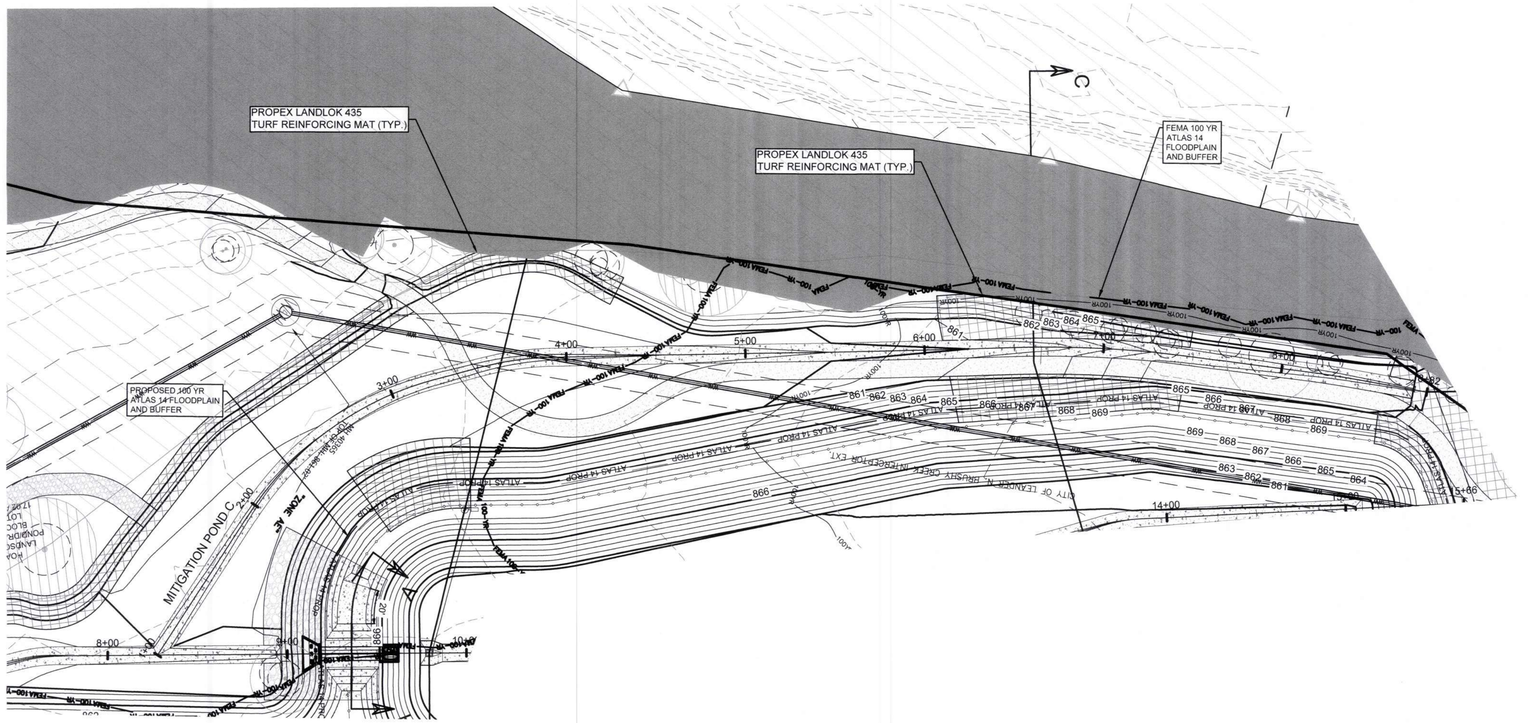
POND C CROSS SECTIONS A, B, AND C

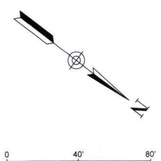
STATE OF TEXAS
JOHN D. BARCELLONA
97462
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PROFESSIONAL ENGINEER
5/7/2024

SHEET 64
OF 142 SHEETS

WILDSPRING PHASE 1

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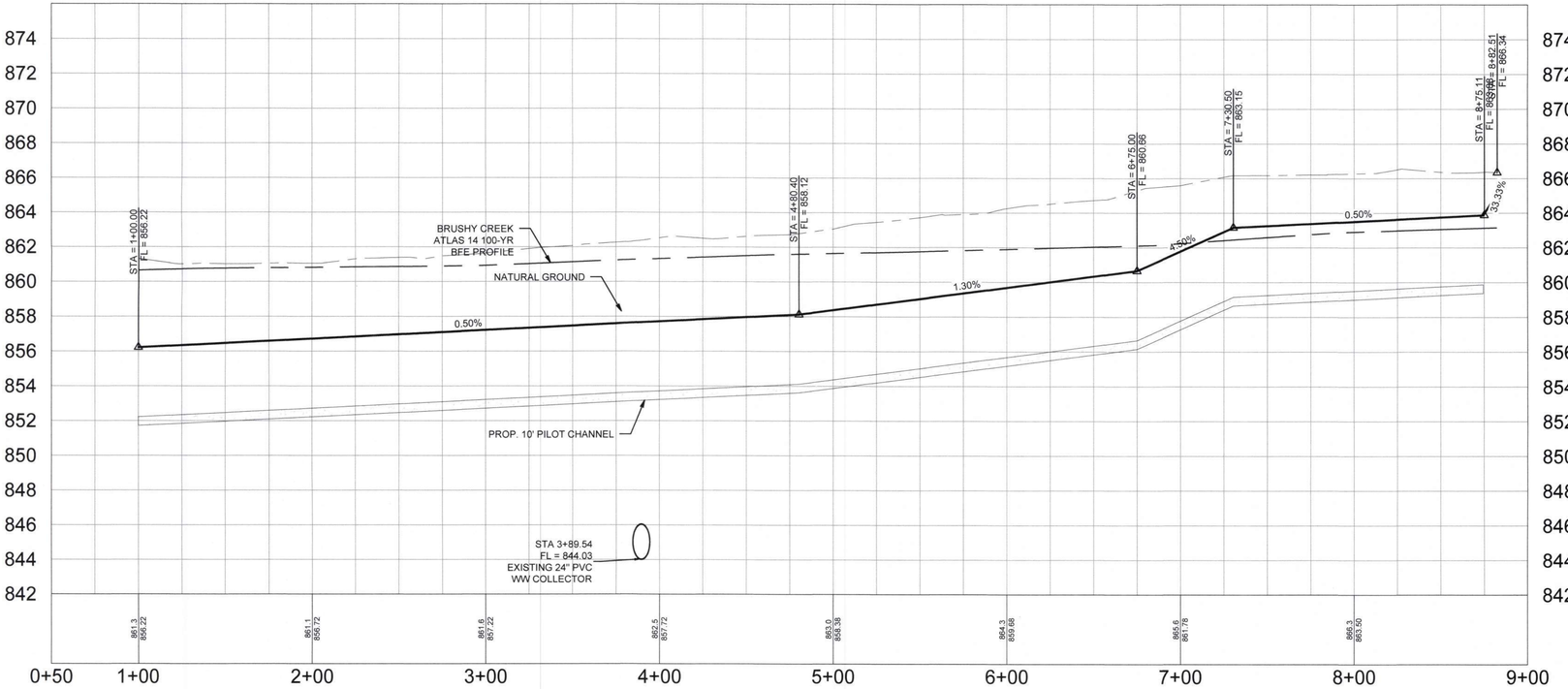
LEGEND

- TREE PROTECTION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED STORM LINE
- CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED STORM JUNCTION BOX
- ROCK RIP RAP

PROFILE SCALE
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- EXISTING GRADE (CENTER)

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Know what's below. Call before you dig

APPROVED
RMG

NO.	REVISION	DATE	BY

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DESIGN CHECKED:
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C.R. 175
LEANDER, TEXAS 78641

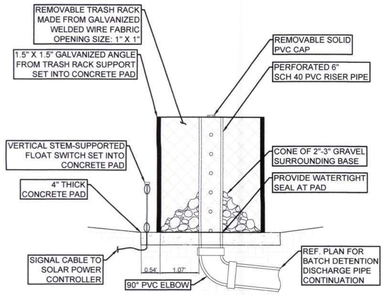
MITIGATION POND C P&P

STATE OF TEXAS
JOHN D. BARCELLONA
97462
LICENSED
PROFESSIONAL ENGINEER
5/7/2024

SHEET 65
OF 142 SHEETS

WILDSPRING PHASE 1

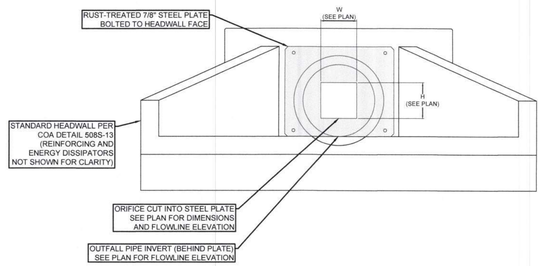
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* FLOAT SWITCH TO BE STEM-MOUNTED VERTICAL LEVEL SENSOR SUCH AS GRAINGER MODEL C3975-1000 OR APPROVED EQUAL.

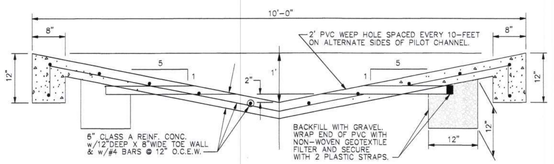
BATCH DETENTION TRASH RACK & RISER PIPE DETAIL

N.T.S.



POND OUTLET PIPE AND HEADWALL WITH RESTRICTOR PLATE DETAIL

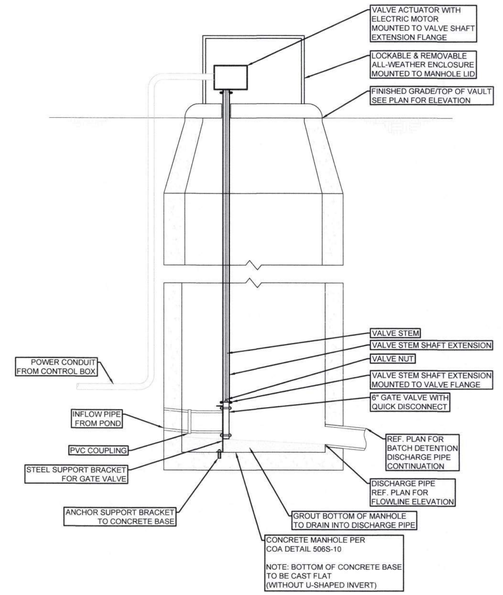
N.T.S.



NOTE: PROVIDE EXPANSION JOINTS A MAXIMUM OF EVERY 60-FEET.

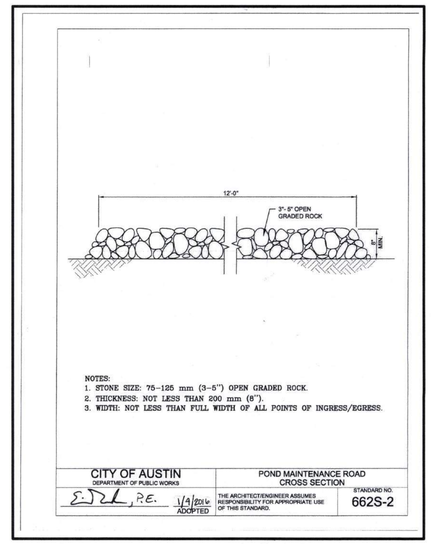
10' WIDE CONRETE PILOT CHANNEL

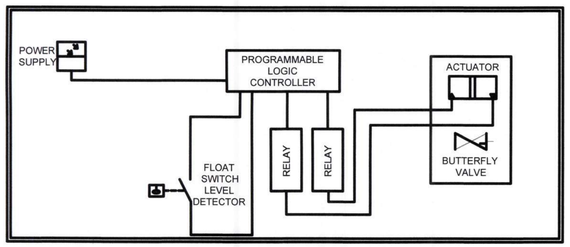
N.T.S.



BATCH DETENTION VALVE VAULT DETAIL

N.T.S.





ACTUATOR VALVE POWER & CONTROLLER CIRCUIT BLOCK DIAGRAM

NOTES:

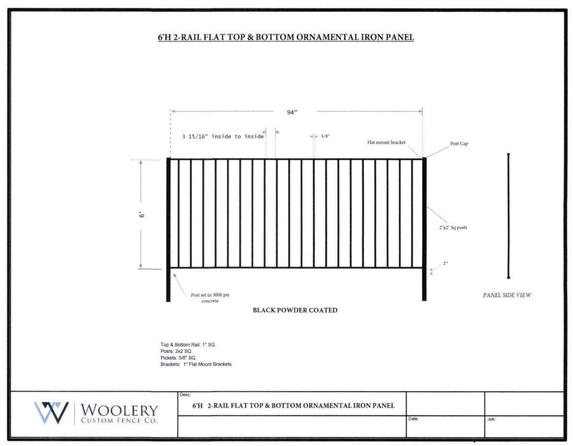
1. BATCH DETENTION POND SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RG-348 MANUAL (ADDENDUM).
2. THE BATCH DETENTION POND AND RISER PIPE / TRASH RACK WILL FUNCTION AS THE DEWATERING OUTLET AND SHALL BE BE INSTALLED AND FUNCTIONAL PRIOR TO ANY GENERAL GRADING AND UTILITY WORK.
3. SYSTEM POWER SHALL BE PROVIDED BY ON-SITE ELECTRICAL SUPPLY SYSTEM. REFER TO ELECTRICAL PLANS FOR CONDUIT AND POWER SUPPLY INFORMATION.
4. ACTUATOR SHALL BE ELECTRONIC QUARTER-TURN WITH MANUAL OVERRIDE AND POSITION INDICATOR.
5. ACTUATOR SHALL BE "AVID 12V ACTUATOR, EPI-6" OR EQUIVALENT.
6. ACTUATOR VALVE TO BE SET AT "NORMALLY OPEN" POSITION.
7. LOGIC CONTROLLER SHALL BE SET TO CLOSE VALVE IMMEDIATELY UPON RAINFALL DETECTION (I.E. FLOAT SWITCH ACTIVATION) AND OPEN VALVE 12 HOURS AFTER CLOSING. VALVE TO REMAIN OPEN UNTIL 2 HRS FOLLOWING BASIN EMPTY SIGNAL (I.E. FLOAT SWITCH RETURNED TO BASELINE).
8. LOGIC CONTROLLER SHALL HAVE TEST SEQUENCE, ON/OFF/RESET SWITCH AND THE PROGRAMMING SHALL BE FIELD UPLOADABLE.
9. ALL WIRING SHALL BE INSTALLED IN CONDUIT AND BURIED. CONTACT ENGINEER FOR ADDITIONAL CONTROLLER SCHEMATICS.
10. VALVE CONTROLS SHALL BE ENCLOSED WITHIN A POLE-MOUNTED, NEMA 3R, LOCKABLE PARTS CABINET HAVING 304 STAINLESS STEEL CONSTRUCTION. THE CABINET DOOR OPENING SHALL BE DOUBLE-FLANGED, WITH A KEYHOLE AND COVER AS AN INTEGRAL PART OF THE DOOR. THE CABINET SHALL HAVE PROVISIONS TO PROP THE DOOR OPEN AT APPROXIMATELY 90° AND 120° POSITIONS.
11. CONTRACTOR TO INSTALL LIBERTY ALARM MODEL ALM-2W OR EQUIVALENT AT CONTROLLER PANEL.
12. ATTACH ALARM RESPONSE SIGN TO CONTROLLER POLE. REFERENCE ALARM RESPONSE SIGN DETAIL THIS SHEET.
13. DETENTION PONDS, WATER QUALITY PONDS, POND OUTLET STRUCTURES, BERMS, IMPROVED CHANNELS OR OTHER IMPROVEMENTS ASSOCIATED WITH THE DRAINAGE IMPROVEMENTS VISIBLE FROM A ROW ARE REQUIRED TO BE STAMPED AND TINTED TO RESEMBLE BRICK OR STONE. TINTING SHALL BE DEFINED AS ADDING COLOR TO THE CONCRETE MIX PRIOR TO POURING THAT IS AN EARTH TONE.
14. POND FENCING SHALL BE CONSTRUCTED OF WROUGHT IRON OR DECORATIVE TUBULAR MATERIAL SUCH AS PRODUCT SHOWN ON THE PROVIDED POND FENCING DETAIL OR APPROVED EQUAL.

ALARM RESPONSE SIGN

N.T.S.

POND SEDIMENT DEPTH MARKER

N.T.S.



POND FENCING

N.T.S.

811 Know what's below. Call before you dig

APPROVED RMG

NO.	REVISION	DATE	BY

DESIGNED: MRC
DESIGN CHECKED:
DRAWN: MRC
COGO CHECKED:
SURVEY CHECKED:
QA/QC: DATE:
QA/QC REVISIONS:

PAPE-DAWSON ENGINEERS

AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING, PHASE 1
C.R. 175
LEANDER, TEXAS 78641

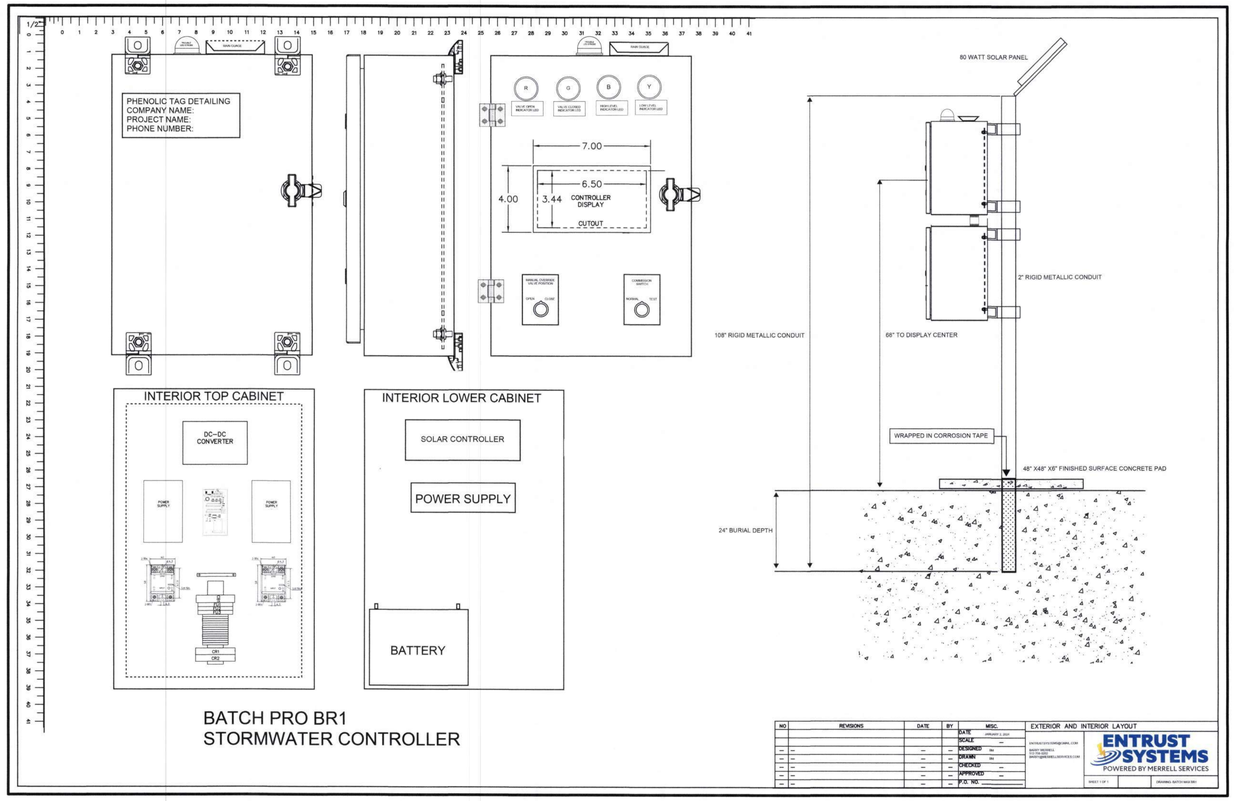
POND DETAILS 1 OF 2

STATE OF TEXAS
JOHN D. BARCELLONA
97462
LICENSED
PROFESSIONAL ENGINEER
5/7/2024

SHEET 68
OF 142 SHEETS

WILDSPRING PHASE 1

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NO	REVISIONS	DATE	BY

MISC.	
DATE	JANUARY 2, 2024
SCALE	---
DESIGNED	MA
DRAWN	MA
CHECKED	---
APPROVED	---
P.O. NO.	

DESIGNED: MRC
DESIGN CHECKED:
DRAWN: MRC
COGO CHECKED:
SURVEY CHECKED:
QA/QC: _____ DATE:
QA/QC REVISIONS:

NO	REVISION	DATE	BY

PAPE-DAWSON ENGINEERS

AUSTIN | SAN ANTONIO | HOUSTON | FORT WORTH | DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 | AUSTIN, TX 78759 | 512.454.8711
TBPE FIRM REGISTRATION #470 | TBPLS FIRM REGISTRATION #10028801

WILDSPRING - PHASE 1
C.R. 175
LEANDER, TEXAS 78641

POND DETAILS 2 OF 2

STATE OF TEXAS
JOHN D. BARCELLONA
97462
LICENSED
PROFESSIONAL ENGINEER
5/7/2024

SHEET 69
OF 142 SHEETS

WILDSPRING PHASE 1

Know what's below. Call before you dig

APPROVED
RMG

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Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: WILDSPRING PHASE 2
Date Prepared: 1/6/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

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

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Williamson	
Total project area included in plan * =	64.24	acres
Predevelopment impervious area within the limits of the plan * =	0.11	acres
Total post-development impervious area within the limits of the plan* =	28.34	acres
Total post-development impervious cover fraction * =	0.44	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	24576	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 3



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

Drainage Basin/Outfall Area No. = VFS F

Total drainage basin/outfall area =	1.47	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	0.65	acres
Post-development impervious fraction within drainage basin/outfall area =	0.44	
$L_{M\ THIS\ BASIN}$ =	565	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Vegetated Filter Strips
Removal efficiency = 85 percent

Batch Detention
Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

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

where:

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

A_C =	1.47	acres
A_I =	0.65	acres
A_P =	0.82	acres
L_R =	623	lbs

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

Desired $L_{M\ THIS\ BASN}$ = 626 lbs.

F = 1.00

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	4.00	inches
Post Development Runoff Coefficient =	0.33	
On-site Water Quality Volume =	6982	cubic feet

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

Off-site area draining to BMP =	0.03	acres
Off-site Impervious cover draining to BMP =	0.05	acres
Impervious fraction of off-site area =	1.51	
Off-site Runoff Coefficient =	1.23	
Off-site Water Quality Volume =	538	cubic feet
Storage for Sediment =	1504	
Total Capture Volume (required water quality volume(s) x 1.20) =	9024	cubic feet

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

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: WILDSPRING PHASE 2
Date Prepared: 2/13/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
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1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

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

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Williamson	
Total project area included in plan * =	64.24	acres
Predevelopment impervious area within the limits of the plan * =	0.11	acres
Total post-development impervious area within the limits of the plan* =	28.34	acres
Total post-development impervious cover fraction * =	0.44	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	24576	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 2

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

Drainage Basin/Outfall Area No. = POND D

Total drainage basin/outfall area =	11.07	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	5.75	acres
Post-development impervious fraction within drainage basin/outfall area =	0.52	
$L_{M\ THIS\ BASN}$ =	5008	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Extended Detention Batch Detention
Removal efficiency = 91 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

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

where:

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

A_C =	11.07	acres
A_I =	5.75	acres
A_P =	5.32	acres
L_R =	5881	lbs

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

Desired $L_{M\ THIS\ BASN}$ = 5792 lbs.

F = 0.98

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	3.33	inches
Post Development Runoff Coefficient =	0.37	
On-site Water Quality Volume =	49329	cubic feet

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

Off-site area draining to BMP =	0.03	acres
Off-site Impervious cover draining to BMP =	0.05	acres
Impervious fraction of off-site area =	1.51	
Off-site Runoff Coefficient =	1.23	
Off-site Water Quality Volume =	447	cubic feet
Storage for Sediment =	9955	
Total Capture Volume (required water quality volume(s) x 1.20) =	59732	cubic feet

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

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: WILDSPRING PHASE 2
Date Prepared: 1/6/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
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1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

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

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Williamson	
Total project area included in plan * =	64.24	acres
Predevelopment impervious area within the limits of the plan * =	0.11	acres
Total post-development impervious area within the limits of the plan * =	28.34	acres
Total post-development impervious cover fraction * =	0.44	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	24576	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 2

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

Drainage Basin/Outfall Area No. = POND C

Total drainage basin/outfall area =	35.42	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	19.45	acres
Post-development impervious fraction within drainage basin/outfall area =	0.55	
$L_{M\ THIS\ BASIN}$ =	16927	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Extended Detention Batch Detention
Removal efficiency = 91 percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

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

where:

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

A_C =	35.42	acres
A_I =	19.45	acres
A_P =	15.97	acres
L_R =	19845	lbs

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

Desired $L_{M\ THIS\ BASIN}$ = 18158 lbs.

F = 0.91

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	1.80	inches
Post Development Runoff Coefficient =	0.39	
On-site Water Quality Volume =	89366	cubic feet

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

Off-site area draining to BMP =	0.03	acres
Off-site Impervious cover draining to BMP =	0.05	acres
Impervious fraction of off-site area =	1.51	
Off-site Runoff Coefficient =	1.23	
Off-site Water Quality Volume =	242	cubic feet
Storage for Sediment =	17922	
Total Capture Volume (required water quality volume(s) x 1.20) =	107529	cubic feet

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

ATTACHMENT N

MAINTENANCE PROCEDURES FOR PERMANENT BMPs

Note: Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 3.5.

A written record will be kept of inspection results and maintenance performed.

3.5.20 Batch Detention Basin

Batch detention basins may have somewhat higher maintenance requirements than an extended detention basin since they are active stormwater controls. The maintenance activities are identical to those of extended detention basins with the addition of maintenance and inspections of the automatic controller and the valve at the outlet.

- *Inspections*. Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s) as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately.

- *Mowing*. The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

- *Litter and Debris Removal*. Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

- *Erosion control*. The basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

- *Nuisance Control*. Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

- *Structural Repairs and Replacement*. With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. An example of this type of repair can include patching of cracked concrete, sealing of voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

- *Sediment Removal*. A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

- *Logic Controller*. The Logic Controller should be inspected as part of the twice yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

3.5.8 Vegetative Filter Strips

Once a vegetated area is well established, little additional maintenance is generally necessary. The key to establishing a viable vegetated feature is the care and maintenance it receives in the first few months after it is planted. Once established, all vegetated BMPs require some basic maintenance to insure the health of the plants including:

- *Pest Management*. An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

- *Seasonal Mowing and Lawn Care*. If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetated filter strip areas. Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the site can help assure a dense and healthy vegetative cover.

- *Inspection*. Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

- *Debris and Litter Removal*. Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.

- *Sediment Removal*. Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels. Inspections should be performed at least twice a year and after each rainfall event, with at least one biannual inspection to occur during or immediately after a rainfall event.

- *Grass Reseeding and Mulching*. A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the vegetation is initially established. Inspections should be performed twice a year and after each rainfall event, with at least one biannual inspection to occur during or immediately after a rainfall event.

Other recommended maintenance guidelines include:

- *Inspections.* BPM facilities should be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. During each inspection, erosion areas inside and downstream of the BPM must be identified and repaired or revegetated immediately.

- *Sediment Removal.* Remove sediment from the facility when sediment depth reaches 3 inches or when the sediment interferes with the health of vegetation or ability of the facility to meet required drawdown times. Sediment removal should be performed at least every 2 years.

- *Drain Time.* When the drain time exceeds 72 hours as observed in the observation well, the filter media should be removed and replaced with more permeable material.

- *Vegetation.* All dead and diseased vegetation considered beyond treatment shall be removed and replaced during semi-annual inspections. Diseased trees and shrubs should be treated during inspections. Remulch any bare areas by hand whenever needed. Replace mulch annually in the spring, or more frequently if needed, in landscaped areas of the basin where grass or groundcover is not planted. Grass areas in and around bioretention facilities 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.

- *Debris and Litter Removal.* Debris and litter will accumulate in the facility and should be removed during regular mowing operations and inspections.

  Filter Undrain. Clean underdrain piping network to remove any sediment buildup every 5 years, or as needed to maintain design drawdown time.

WILDSPRING PHASE 2
Contributing Zone Plan Modification Application

Toll Southwest LLC

Signature

2/20/25

Date

Kyle Ninness
Director of Land Development

ATTACHMENT P

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

At any points where discharge from the site is concentrated and erosive velocities exist, appropriately-sized energy dissipators will be provided to reduce velocities to non-erosive levels.

TEMPORARY STORMWATER SECTION

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Aimee Chavez, P.E.

Date: 3/7/25

Signature of Customer/Agent:

Aimee Chavez

Regulated Entity Name: Wildspring Phase 2

Project Information

Potential Sources of Contamination

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

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

   ☒ The following fuels and/or hazardous substances will be stored on the site: oil and petroleum products/substances

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

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

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

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

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

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

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

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

Sequence of Construction

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

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

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

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

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

ATTACHMENT A

SPILL RESPONSE ACTIONS

In the event of an accidental leak or spill:

- Spill must be contained and cleaned up immediately.
- Spills will not be merely buried or washed with water.
- Contractor shall take action to contain spill. Contractor may use sand or other absorbent material stockpiled on site to absorb spill. Absorbent material should be spread over the spill area to absorb the spilled product.
- In the event of an uncontained discharge the contractor shall utilize onsite equipment to construct berms downgradient of the spill with sand or other absorbent material to contain and absorb the spilled product.
- Spill containment/absorbent materials along with impacted media must be collected and stored in such a way so as not to continue to affect additional media (soil/water). Once the spill has been contained, collected material should be placed on poly or plastic sheeting until removed from the site. The impacted media and cleanup materials should be covered with plastic sheeting and the edges weighed down with paving bricks or other similarly dense objects as the material is being accumulated. This will prevent the impacted media and cleanup materials from becoming airborne in windy conditions or impacting runoff during a rain event. The stockpiled materials should not be located within an area of concentrated runoff such as along a curb line or within a swale.
- Contaminated soils and cleanup materials will be sampled for waste characterization. When the analysis results are known the contaminated soils and cleanup materials will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.
- The contractor will be required to notify the owner, who will in turn contact TCEQ to notify them in the event of a significant hazardous/reportable quantity spill. Additional notifications as required by the type and amount of spill will be conducted by owner or owner's representative.

In the event of an accidental significant or hazardous spill:

- The contractor will be required to report significant or hazardous spills in reportable quantities as soon as possible and within 24 hours to:
  - **the National Response Center at (800) 424-8802**
  - **the Edwards Aquifer Authority at (210) 222-2204**
  - **the TCEQ Regional Office (512) 339-2929 (if during business hours: 8 AM to 5 PM) or**
  - **the State Emergency Response Center (800) 832-8224 (if after hours)**

- Contaminated soils will be sampled for waste characterization. When the analysis results are known the contaminated soils will be removed from the site and disposed in a permitted landfill in accordance with applicable regulations.

Additional guidance can be obtained from TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) Section 1.4.16. and on TCEQ's website, https://www.tceq.texas.gov/response/spills. Contractor shall review this section and the TCEQ website.

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION

Potential Source

- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle dripping.

Preventative Measure

- Vehicle maintenance when possible will be performed within the construction staging area.
- Construction vehicles and equipment shall be checked regularly for leaks and repaired immediately.

Potential Source

- Accidental leaks or spills of oil, petroleum products and substances listed under 40 CFR parts 110, 117, and 302 used or stored temporarily on site.

Preventative Measure

- Contractor to incorporate into regular safety meetings, a discussion of spill prevention and appropriate disposal procedures.
- Contractor's superintendent or representative overseer shall enforce proper spill prevention and control measures.
- Hazardous materials and wastes shall be stored in covered containers and protected from vandalism.
- A stockpile of spill cleanup materials shall be stored on site where it will be readily accessible.

Potential Source

- Miscellaneous trash and litter from construction workers and material wrappings.

Preventive Measure

- Trash containers will be placed throughout the site to encourage proper trash disposal.

Potential Source
- Construction debris.

Preventive Measure
- Construction debris will be monitored daily by contractor. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case by case basis.

Potential Source
- Spills/Overflow of waste from portable toilets

Preventative Measure
- Portable toilets will be placed away from high traffic vehicular areas and storm drain inlets.
- Portable toilets will be placed on a level ground surface.
- Portable toilets will be inspected regularly for leaks and will be serviced and sanitized at time intervals that will maintain sanitary conditions.

ATTACHMENT C

WILDSPRING PHASE 2
Contributing Zone Plan Modification Application

SEQUENCE OF MAJOR ACTIVITIES

The sequence of major activities which disturb soil during construction on this site are listed below.

1) Set erosion controls: 3,763 LF of silt fence & 3,076 LF of tree protection
2) Rough grade streets – 5.17 acres
3) Pond excavation – 0.93 acres
4) Trench utilities – 12,021 LF
5) Install water, wastewater, and storm – 12,021 LF
6) Install base for streets – 3.62 acres
7) Pave streets – 2.99 acres
8) Pond completion – 0.93 acres
9) Site cleanup – 30.81 acres
10) Remove erosion control: 3,763 LF of silt fence & 3.076 LF of tree protection

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

Please see the Erosion Control sheets included in the Construction Plans Section for TBMP layout and the responses below for more details.

Site preparation, which is the initiation of all activity on the project, will disturb the largest amount of soil. On-site control measures have been installed with the Wildspring Phase 2 Clearing Plan. Before any work can begin on the Wildspring Phase 2 Public Improvement Construction Plans, the grading contractor will be responsible for modifying all on-site control measures to match the Erosion Control sheets included in the Construction Plans Section. The methodology for pollution prevention of on-site stormwater will include: (1) erection of silt fences along the downgradient boundary of construction activities for temporary erosion and sedimentation controls, (2) installation of mulch log downgradient from areas of concentrated stormwater flow for temporary erosion control, (3) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, (4) installation of construction staging area(s).

Prior to the initiation of construction, all previously installed control measures will be repaired or reestablished for their designed or intended purpose. This work, which is the remainder of all activity on the project, may also disturb additional soil. The construction contractor will be responsible for the installation of all remaining on-site control measures that includes installation of the concrete truck washout pit(s), as construction phasing warrants.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter the aquifer, surface streams and/or sensitive features that may exist downstream of the site.

As the site is located entirely over the Edwards Aquifer Contributing Zone within the Transition Zone, a Geologic Assessment was not conducted and is not required by 30 TAC 213 regulations. Therefore, no naturally-occurring sensitive features are known to exist on the site. 30 TAC 213.5(f)(2) only applies to projects located on the Edwards Aquifer Recharge Zone. A combination of TBMPs including silt fence

and rock berm are proposed to capture sediment from onsite stormwater runoff and preserve the quality of Brushy Creek.

Temporary measures are intended to provide a method of slowing the flow of runoff from the construction site in order to allow sediment and suspended solids to settle out of the runoff. By containing the sediment and solids within the site, they will not enter the aquifer, surface streams and/or sensitive features that may exist downstream of the site.

ATTACHMENT F

STRUCTURAL PRACTICES

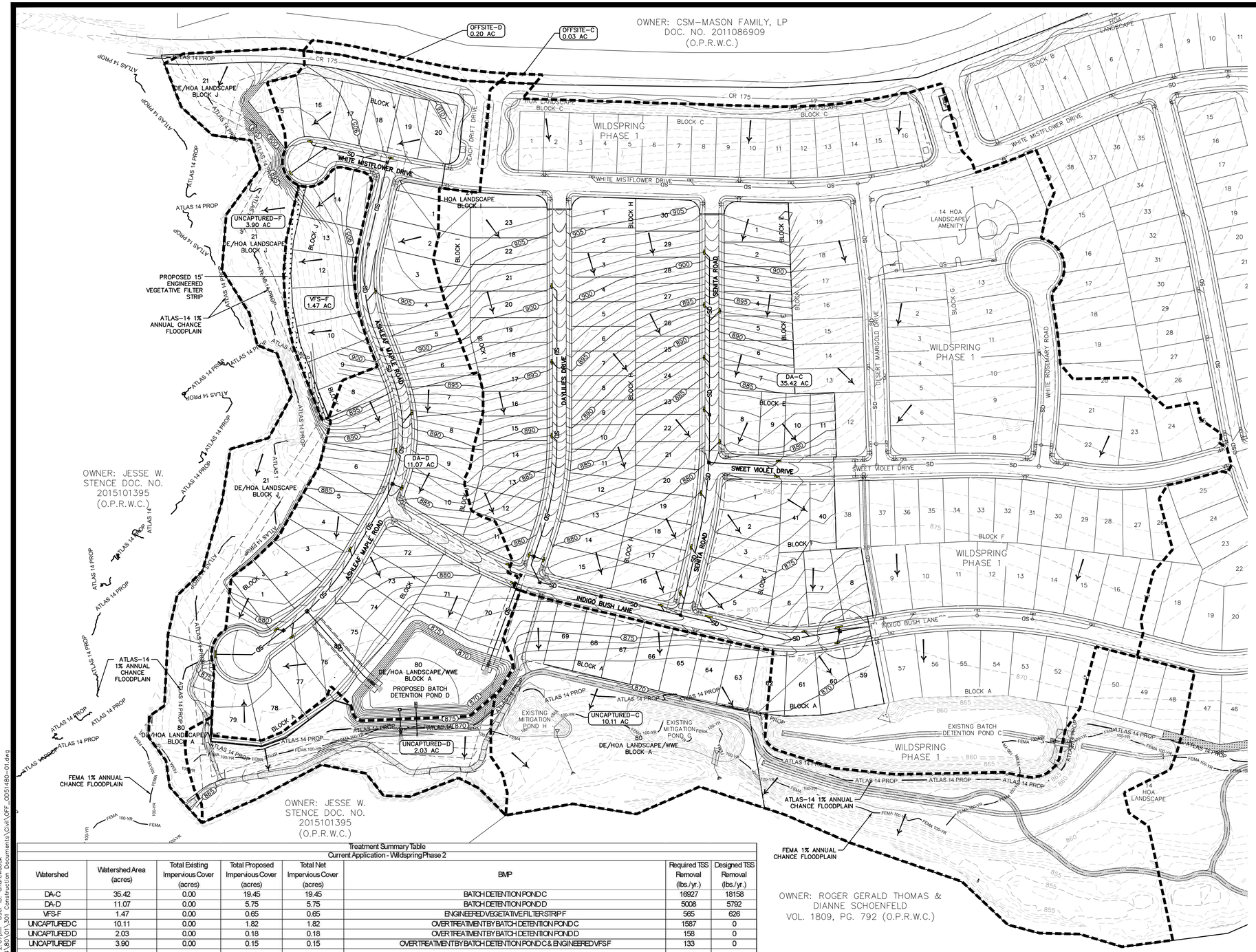
The following structural measures will be installed prior to the initiation of site preparation activities:

- Erection of silt fences along the downgradient boundary of construction activities and rock berms for secondary protection, as located on the Erosion Control Plan sheets and illustrated on the Construction Details - Erosion Control sheet.
- Installation of stabilized construction entrance/exit(s) and construction staging area(s), as located on the Erosion Control Plan sheets and illustrated on the Construction Details - Erosion Control sheet.

The following structural measures will be installed at the initiation of construction activities or as appropriate based on the construction sequencing:

- Installation of inlet protection, as required and located on the Erosion Control Plan sheets and illustrated on the Construction Details - Erosion Control sheet.
- Installation of concrete truck washout pit(s), as required and located on the Erosion Control Plan sheets and illustrated on the Construction Details – Erosion Control sheet.

ATTACHMENT G



SCALE: 1"= 100'

0' 100' 200' 300'

LEGEND

- SD — STORM DRAIN LINE
- SD — SD MANHOLE
- SD INLET
- DRAINAGE FLOW ARROW
- WATER QUALITY DRAINAGE AREA
- 01 DRAINAGE AREA
- ENGINEERED VEGETATIVE FILTER STRIP
- PROPOSED CONTOUR LINE
- EXISTING CONTOUR LINE

Treatment Summary Table
Current Application - Wildspring Phase 2

Watershed	Watershed Area (acres)	Total Existing Impervious Cover (acres)	Total Proposed Impervious Cover (acres)	Total Net Impervious Cover (acres)	BMP	Required TSS Removal (lbs./yr.)	Designed TSS Removal (lbs./yr.)
DA-C	35.42	0.00	19.45	19.45	BATCH DETENTION POND C	16927	18158
DA-D	11.07	0.00	5.75	5.75	BATCH DETENTION POND D	5008	5792
VFS-F	1.47	0.00	0.65	0.65	ENGINEERED VEGETATIVE FILTER STRIP F	565	626
UNCAPTURED C	10.11	0.00	1.82	1.82	OVER TREATMENT BY BATCH DETENTION POND C	1587	0
UNCAPTURED D	2.03	0.00	0.18	0.18	OVER TREATMENT BY BATCH DETENTION POND D	158	0
UNCAPTURED F	3.90	0.00	0.15	0.15	OVER TREATMENT BY BATCH DETENTION POND C & ENGINEERED VFS F	133	0
OFFSITE C	0.03	0.02	0.05	0.03	CAPTURED OFFSITE - BATCH DETENTION BASIN C (NO ADDITIONAL IMPERVIOUS COVER PROPOSED)	26	0
OFFSITE D	0.20	0.09	0.29	0.20	CAPTURED OFFSITE - BATCH DETENTION BASIN D (NO ADDITIONAL IMPERVIOUS COVER PROPOSED)	172	0
Total	64.24	0.11	28.35	28.24		24576	24576

CITY OF LEANDER APPROVAL

PICP-25-XXXX

NO. REVISION | DATE

STATE OF TEXAS
AIMEE CHAVEZ
123240
LICENSED
PROFESSIONAL ENGINEER

Aimee Chavez 2/18/25

PAPE-DAWSON ENGINEERS
AUSTIN I SAN ANTONIO I HOUSTON I FORT WORTH I DALLAS
10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711
TBPE FIRM REGISTRATION #470 I TBPLS FIRM REGISTRATION #10028801

WILDSPRING
PHASE 2
CITY OF LEANDER, TEXAS
WATER QUALITY DRAINAGE MAP

CITY JOB No. PICP-25-XXXX
JOB NO. 51480-01
DATE FEBRUARY 2025
DESIGNER AD/BA
CHECKED AC DRAWN CK
SHEET 37 OF 80

Date: Feb 18, 2025, 2:07pm User ID: andrewdook
File: H:\Projects\514\80\01\301 Construction Documents\Civil\OFF_0051480-01.dwg

THIS DOCUMENT HAS BEEN PRODUCED FROM MATERIAL THAT WAS STORED AND/OR TRANSMITTED ELECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS BEARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL.

ATTACHMENT H

TEMPORARY SEDIMENTATION POND(S) PLANS AND CALCULATIONS

The proposed water quality detention ponds will be used as temporary sediment traps during site construction for each respective watershed, and the minimum drain time for each temporary basin will be 24 hours. The basins will be converted to permanent basins after completion of the project improvements. Basins will be rough-cut in first sequence of construction.

Prior to final acceptance by the owner, the contractor will remove trash, debris, and accumulated silt from each batch detention basin and re-establish them to proper operating condition. After inspection of the finished batch detention basin, a licensed professional engineer will certify the basin in accordance with TCEQ requirements.

Minimum required volume (Batch Detention Pond D):

16.59 acres disturbed @ 3,600 cf/acre disturbed = 59,732 cf
Volume provided = 59,847 cf

The volume of the proposed basin exceeds required amount.

Minimum required volume (Existing Batch Detention Pond C):

29.87 acres disturbed @ 3,600 cf/acre disturbed = 107,529 cf
Volume provided = 112,847 cf

The volume of the existing basin exceeds required amount.

ATTACHMENT I

INSPECTIONS & MAINTENANCE

Designated and qualified person(s) shall inspect Pollution Control Measures weekly and within 24 hours after a storm event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection will be recorded and maintained as part of Storm Water TPDES data for a period of three years after the Notice of Termination (NOT) has been filed. A copy of the Inspection Report Form is provided in this Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of erosion, (2) storage areas for evidence of leakage from the exposed stored materials, (3) structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess siltation (over 6 inches deep), (4) vehicle exit point for evidence of off-site sediment tracking, (5) vehicle storage areas for signs of leaking equipment or spills, (6) concrete truck rinse-out pit for signs of potential failure, (7) embankment, spillways, and outlet of sediment basin (where applicable) for erosion damage, and (8) sediment basins (where applicable) for evidence that basin has accumulated 50% of its volume in silt. Deficiencies noted during the inspection will be corrected and documented within seven calendar days following the inspection or before the next anticipated storm event if practicable. Temporary sediment basins and permanent basins will be inspected until final stabilization of 70% within the basin watershed is achieved.

BMP inspection and maintenance requirements from Sections 1.3 and 1.4 of TCEQ's Technical Guidance Manual are detailed below.

Temporary Construction Entrance/Exit

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

Silt Fence

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

Rock Berms

- Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made.
- Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.
- Repair any loose wire sheathing.
- The berm should be reshaped as needed during inspection.
- The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
- The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

Inlet Protection

- Inspection should be made weekly and after each rainfall. Repair or replacement should be made promptly as needed by the contractor.
- Remove sediment when buildup reaches a depth of 3 inches. Removed sediment should be deposited in a suitable area and in such a manner that it will not erode.
- Check placement of device to prevent gaps between device and curb.
- Inspect filter fabric and patch or replace if torn or missing. 1-100
- Structures should be removed and the area stabilized only after the remaining drainage area has been properly stabilized.

Concrete Washout Areas

- Incorporate requirements for concrete waste management into material supplier and subcontractor agreements.
- Avoid mixing excess amounts of fresh concrete.

- Perform washout of concrete trucks in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite, except in designated areas.
- Locate washout area at least 50 feet from sensitive features, storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
- Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed properly.

Pollution Prevention Measure	Inspected in Compliance	Corrective Action Required	
		Description (use additional sheet if necessary)	**Date Completed**
Best Management Practices			
Natural vegetation buffer strips			
Temporary vegetation			
Permanent vegetation			
Sediment control basin			
Silt fences			
Rock berms			
Gravel filter bags			
Drain inlet protection			
Other structural controls			
Vehicle exits (off-site tracking)			
Material storage areas (leakage)			
Equipment areas (leaks, spills)			
Concrete washout pit (leaks, failure)			
General site cleanliness			
Trash receptacles			
Evidence of Erosion			
Site preparation			
Roadway or parking lot construction			
Utility construction			
Drainage construction			
Building construction			
Major Observations			
Sediment discharges from site			
BMPs requiring maintenance			
BMPs requiring modification			
Additional BMPs required			

_____ A brief statement describing the qualifications of the inspector is included in this SWP3.

"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 gather and evaluate 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

"I further certify I am an authorized signatory in accordance with the provisions of 30 TAC §305.128."

Inspector's Name _____ Inspector's Signature _____ Date _____

PROJECT MILESTONE DATES

Date when major site grading activities begin:

Construction Activity	Date
Installation of BMPs	

Dates when construction activities temporarily or permanently cease on all or a portion of the project:

Construction Activity	Date

Dates when stabilization measures are initiated:

Stabilization Activity	Date
Removal of BMPs	

ATTACHMENT J

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Interim on-site stabilization measures, which are continuous, will include minimizing soil disturbances by exposing the smallest practical area of land required for the shortest period of time and maximizing use of natural vegetation. As soon as practical, all disturbed soil will be stabilized via permanent revegetation. Details, such as installation, irrigation, and maintenance are provided below.

Installation:

- Final grading must be completed prior to seeding, minimizing all steep slopes. In addition, all necessary erosion structures such as dikes, swales, diversions, should also be installed.
- Seedbed should be well pulverized, loose, and uniform.
- Fertilizer should be applied at the rate of 40 pounds of nitrogen and 40 pounds of phosphorus per acre, which is equivalent to about 1.0 pounds of nitrogen and phosphorus per 1000 square feet. Compost can be used instead of fertilizer and applied at the same time as the seed.

Irrigation:

- Temporary irrigation should be provided according to the schedule described below, or to replace moisture loss to evapotranspiration (ET), whichever is greater. Significant rainfall (on-site rainfall of ½" or greater) may allow watering to be postponed until the next scheduled irrigation.

Time Period	Irrigation Amount and Frequency
Within 2 hours of installation	Irrigate entire root depth, or to germinate seed
During the next 10 business days	Irrigate entire root depth every Monday, Wednesday, and Friday
During the next 30 business days or until Substantial Completion	Irrigate entire root depth a minimum of once per week, or as necessary to ensure vigorous growth
During the next 4 months or until Final Acceptance of the Project	Irrigate entire root depth once every two weeks, or as necessary to ensure vigorous growth

Inspection and Maintenance Guidelines:

- Permanent vegetation should be inspected weekly and after each rain event to locate and repair any erosion.
- Erosion from storms or other damage should be repaired as soon as practical by regrading the area and applying new seed.
- If the vegetated cover is less than 80%, the area should be reseeded.

Stabilization measures will be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and except as provided below, will be initiated no more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased. 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 site. In 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 practicable.

NOTICE OF INTENT

TCEQ Office Use Only
Permit No:
CN:
RN:

Notice of Intent (NOI) for an Authorization for Stormwater Discharges Associated with Construction Activity under TPDES General Permit TXR150000

IMPORTANT INFORMATION

Please read and use the General Information and Instructions prior to filling out each question in the NOI form.

Use the NOI Checklist to ensure all required information is completed correctly. **Incomplete applications delay approval or result in automatic denial.**

Once processed your permit authorization can be viewed by entering the following link into your internet browser: http://www2.tceq.texas.gov/wq_dpa/index.cfm or you can contact TCEQ Stormwater Processing Center at 512-239-3700.

ePERMITS

Effective September 1, 2018, this paper form must be submitted to TCEQ with a completed electronic reporting waiver form (TCEQ-20754).

To submit an NOI electronically, enter the following web address into your internet browser and follow the instructions: https://www3.tceq.texas.gov/steers/index.cfm

APPLICATION FEE AND PAYMENT

The application fee for submitting a paper NOI is $325. The application fee for electronic submittal of a NOI through the TCEQ ePermits system (STEERS) is $225.

Payment of the application fee can be submitted by mail or through the TCEQ ePay system. The payment and the NOI must be mailed to separate addresses. To access the TCEQ ePay system enter the following web address into your internet browser: http://www.tceq.texas.gov/epay.

Provide your payment information for verification of payment:

- If payment was mailed to TCEQ, provide the following:
  - Check/Money Order Number: Click here to enter text
  - Name printed on Check: Click here to enter text
- If payment was made via ePay, provide the following:
  - Voucher Number: Click here to enter text
  - A copy of the payment voucher is attached to this paper NOI form.

RENEWAL (This portion of the NOI is not applicable after June 3, 2018)

Is this NOI for a renewal of an existing authorization? ☐ Yes ☒ No

If Yes, provide the authorization number here: TXR15 Click here to enter text.

NOTE: If an authorization number is not provided, a new number will be assigned.

SECTION 1. OPERATOR (APPLICANT)

a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? CN 605682475

(Refer to Section 1.a) of the Instructions)

b) What is the Legal Name of the entity (applicant) applying for this permit? (The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)

Toll Southwest LLC.

c) What is the contact information for the Operator (Responsible Authority)?

Prefix (Mr. Ms. Miss): Mr.

First and Last Name:Kyle Ninness Suffix: Click here to enter text.

Title: Click here to enter text. Credentials: Click here to enter text.

Phone Number: (817) 329-7973 Fax Number: Click here to enter text.

E-mail: kninness@tollbrothers.com

Mailing Address: 1320 Arrow Point Dr., Suite 401

City, State, and Zip Code: Cedar Park, TX 78613

Mailing Information if outside USA:

Territory: Click here to enter text.

Country Code: Click here to enter text. Postal Code: Click here to enter text.

d) Indicate the type of customer:

☐ Individual	☐ Federal Government
☐ Limited Partnership	☐ County Government
☐ General Partnership	☐ State Government
☐ Trust	☐ City Government
☐ Sole Proprietorship (D.B.A.)	☐ Other Government
☒ Corporation	☐ Other: Click here to enter text.
☐ Estate	

e) Is the applicant an independent operator? ☐ Yes ☒ No

(If a governmental entity, a subsidiary, or part of a larger corporation, check No.)

f) Number of Employees. Select the range applicable to your company.

☐ 0-20
☐ 21-100
☐ 101-250
☐ 251-500
☒ 501 or higher

g) Customer Business Tax and Filing Numbers: (**Required** for Corporations and Limited Partnerships. **Not Required** for Individuals, Government, or Sole Proprietors.)

State Franchise Tax ID Number: 32050842304

Federal Tax ID: 472582910

Texas Secretary of State Charter (filing) Number: 0801775669

DUNS Number (if known): Click here to enter text.

SECTION 2. APPLICATION CONTACT

Is the application contact the same as the applicant identified above?

☐ Yes, go to Section 3

☒ No, complete this section

Prefix (Mr. Ms. Miss):

First and Last Name: Aimee Chavez Suffix:

Title: Associate Vice President Credential: P.E.

Organization Name: Pape-Dawson Consulting Engineers, LLC.

Phone Number: (512) 454-8711 Fax Number: Click here to enter text.

E-mail: achavez@pape-dawson.com

Mailing Address: 10801 N Mopac Expy. #200

Internal Routing (Mail Code, Etc.): Click here to enter text.

City, State, and Zip Code: Austin, TX, 78759

Mailing information if outside USA:

Territory: Click here to enter text.

Country Code: Click here to enter text. Postal Code: Click here to enter text.

SECTION 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) If this is an existing permitted site, what is the Regulated Entity Number (RN) issued to this site? RN 111642690

(Refer to Section 3.a) of the Instructions)

b) Name of project or site (the name known by the community where it's located): Wildspring Phase 2

c) In your own words, briefly describe the type of construction occurring at the regulated site (residential, industrial, commercial, or other): Residential streets, water, wastewater, and drainage public improvements.

d) County or Counties (if located in more than one): Williamson

e) Latitude: 30.576706 Longitude: -97.786439

f) Site Address/Location

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete *Section A*.

If the site does not have a physical address, provide a location description in *Section B*. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

Section A:

Street Number and Name: Click here to enter text

City, State, and Zip Code: Click here to enter text

Section B:

Location Description: NW intersection of CR 175 & CR 177

City (or city nearest to) where the site is located: Leander, Texas

Zip Code where the site is located: 78641

SECTION 4. GENERAL CHARACTERISTICS

a) Is the project or site located on Indian Country Lands?

☐ Yes, do not submit this form. You must obtain authorization through EPA Region 6.

☒ No

b) Is your construction activity associated with a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources?

☐ Yes. Note: The construction stormwater runoff may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization through EPA Region 6.

☒ No

c) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site? **1521**

d) What is the Secondary SIC Code(s), if applicable? 1623

e) What is the total number of acres to be disturbed? 30.81

f) Is the project part of a larger common plan of development or sale?

☒ Yes

☐ No. The total number of acres disturbed, provided in e) above, must be 5 or more. If the total number of acres disturbed is less than 5, do not submit this form. See the requirements in the general permit for small construction sites.

g) What is the estimated start date of the project? September 2025

h) What is the estimated end date of the project? March 2026

i) Will concrete truck washout be performed at the site? ☒ Yes ☐ No

j) What is the name of the first water body(ies) to receive the stormwater runoff or potential runoff from the site? Brushy Creek

k) What is the segment number(s) of the classified water body(ies) that the discharge will eventually reach? 1244

l) Is the discharge into a Municipal Separate Storm Sewer System (MS4)?

☐ Yes ☒ No

If Yes, provide the name of the MS4 operator: Click here to enter text.

Note: The general permit requires you to send a copy of this NOI form to the MS4 operator.

m) Is the discharge or potential discharge from the site within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?

☒ Yes, complete the certification below.

☐ No, go to Section 5

I certify that the copy of the TCEQ-approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) that is included or referenced in the Stormwater Pollution Prevention Plan will be implemented. ☒ Yes

SECTION 5. NOI CERTIFICATION

a) I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000). ☐ Yes

b) I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas. ☐ Yes

c) I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed. ☐ Yes

d) I certify that a Stormwater Pollution Prevention Plan has been developed, will be implemented prior to construction and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the Construction General Permit (TXR150000). ☐ Yes

Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3, provided all obligations are confirmed by at least one operator.

SECTION 6. APPLICANT CERTIFICATION SIGNATURE

Operator Signatory Name: Click here to enter text.

Operator Signatory Title: Click here to enter text.

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 gather and evaluate 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I further certify that I am authorized under 30 Texas Administrative Code §305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature (use blue ink): _____Date: _____

NOTICE OF INTENT CHECKLIST (TXR150000)

Did you complete everything? Use this checklist to be sure!

Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

Confirm each item (or applicable item) in this form is complete. This checklist is for use by the applicant to ensure a complete application is being submitted. **Missing information may result in denial of coverage under the general permit.** (See NOI process description in the General Information and Instructions.)

APPLICATION FEE

If paying by check:

☐ Check was mailed **separately** to the TCEQs Cashier's Office. (See Instructions for Cashier's address and Application address.)

☐ Check number and name on check is provided in this application.

If using ePay:

☐ The voucher number is provided in this application and a copy of the voucher is attached.

RENEWAL

☐ If this application is for renewal of an existing authorization, the authorization number is provided.

OPERATOR INFORMATION

☒ Customer Number (CN) issued by TCEQ Central Registry

☒ Legal name as filed to do business in Texas. (Call TX SOS 512-463-5555 to verify.)

☒ Name and title of responsible authority signing the application.

☒ Phone number and e-mail address

☒ Mailing address is complete & verifiable with USPS. www.usps.com

☒ Type of operator (entity type). Is applicant an independent operator?

☒ Number of employees.

☒ For corporations or limited partnerships – Tax ID and SOS filing numbers.

☒ Application contact and address is complete & verifiable with USPS. http://www.usps.com

REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

☒ Regulated Entity Number (RN) (if site is already regulated by TCEQ)

☒ Site/project name and construction activity description

☒ County

☒ Latitude and longitude http://www.tceq.texas.gov/gis/sqmaview.html

☒ Site Address/Location. Do not use a rural route or post office box.

GENERAL CHARACTERISTICS

☒ Indian Country Lands –the facility is not on Indian Country Lands.

☒ Construction activity related to facility associated to oil, gas, or geothermal resources

☒ Primary SIC Code that best describes the construction activity being conducted at the site. www.osha.gov/oshstats/sicser.html

☒ Estimated starting and ending dates of the project.

☒ Confirmation of concrete truck washout.

☒ Acres disturbed is provided and qualifies for coverage through a NOI.

☒ Common plan of development or sale.

☒ Receiving water body or water bodies.

☒ Segment number or numbers.

☐ MS4 operator.

☒ Edwards Aquifer rule.

CERTIFICATION

☐ Certification statements have been checked indicating Yes.

☐ Signature meets 30 Texas Administrative Code (TAC) §305.44 and is original.

Instructions for Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

By Regular Mail:
TCEQ
Stormwater Processing Center (MC228)
P.O. Box 13087
Austin, Texas 78711-3087

By Overnight or Express Mail:
TCEQ
Stormwater Processing Center (MC228)
12100 Park 35 Circle
Austin, TX

Application Fee:

The application fee of $325 is required to be paid at the time the NOI is submitted. Failure to submit payment at the time the application is filed will cause delays in acknowledgment or denial of coverage under the general permit. Payment of the fee may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

Mailed Payments:

Use the attached General Permit Payment Submittal Form. The application fee is submitted to a different address than the NOI. Read the General Permit Payment Submittal Form for further instructions, including the address to send the payment.

ePAY Electronic Payment: http://www.tceq.texas.gov/epay

When making the payment you must select Water Quality, and then select the fee category "General Permit Construction Storm Water Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

TCEQ Contact List:

Application – status and form questions:	512-239-3700, swpermit@tceq.texas.gov
Technical questions:	512-239-4671, swgp@tceq.texas.gov
Environmental Law Division:	512-239-0600
Records Management - obtain copies of forms:	512-239-0900
Reports from databases (as available):	512-239-DATA (3282)
Cashier's office:	512-239-0357 or 512-239-0187

Notice of Intent Process:

When your NOI is received by the program, the form will be processed as follows:

- **Administrative Review**: Each item on the form will be reviewed for a complete response. In addition, the operator's legal name must be verified with Texas Secretary of State as valid and active (if applicable). The address(es) on the form must be verified with the US Postal service as receiving regular mail delivery. Do not give an overnight/express mailing address.

- **Notice of Deficiency:** If an item is incomplete or not verifiable as indicated above, a notice of deficiency (NOD) will be mailed to the operator. The operator will have 30 days to respond to the NOD. The response will be reviewed for completeness.
- **Acknowledgment of Coverage:** An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.

  or

  Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

For NOIs submitted **electronically** through ePermits, provisional coverage under the general permit begins immediately following confirmation of receipt of the NOI form by the TCEQ.

For **paper** NOIs, provisional coverage under the general permit begins **7 days after a completed NOI is postmarked for delivery** to the TCEQ.

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site http://www.tceq.texas.gov. Search using keyword TXR150000.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated project or site changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted no later than 10 days prior to the change in Operator status.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. After final acknowledgment of coverage under the general permit, the program will assign a Customer Number and Regulated Entity Number, if one has not already been assigned to this customer or site.

For existing customers and sites, you can find the Customer Number and Regulated Entity Number by entering the following web address into your internet browser: http://www15.tceq.texas.gov/crpub/ or you can contact the TCEQ Stormwater Processing Center at 512-239-3700 for assistance. On the website, you can search by your permit number, the Regulated Entity (RN) number, or the Customer Number (CN). If you do not know these numbers, you can select “Advanced Search” to search by permittee name, site address, etc.

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all authorizations as changes occur. For this permit, a Notice of Change form must be submitted to the program area.

INSTRUCTIONS FOR FILLING OUT THE NOI FORM

Renewal of General Permit. Dischargers holding active authorizations under the expired General Permit are required to submit a NOI to continue coverage. The existing permit number is required. If the permit number is not provided or has been terminated, expired, or denied, a new permit number will be issued.

Section 1. OPERATOR (APPLICANT)

a) Customer Number (CN)

TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. **This is not a permit number, registration number, or license number**.

If the applicant is an existing TCEQ customer, the Customer Number is available at the following website: http://www15.tceq.texas.gov/crpub/. If the applicant is not an existing TCEQ customer, leave the space for CN blank.

b) Legal Name of Applicant

Provide the current legal name of the applicant. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, as filed in the county. You may contact the SOS at 512-463-5555, for more information related to filing in Texas. If filed in the county, provide a copy of the legal documents showing the legal name.

c) Contact Information for the Applicant (Responsible Authority)

Provide information for the person signing the application in the Certification section. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. The mailing address must be recognized by the US Postal Service. You may verify the address on the following website: https://tools.usps.com/go/ZipLookupAction!input.action.

The phone number should provide contact to the applicant.

The fax number and e-mail address are optional and should correspond to the applicant.

d) Type of Customer (Entity Type)

Check only one box that identifies the type of entity. Use the descriptions below to identify the appropriate entity type. Note that the selected entity type also indicates the name that must be provided as an applicant for an authorization.

Individual

An individual is a customer who has not established a business, but conducts an activity that needs to be regulated by the TCEQ.

Partnership

A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). If the customer is a 'General Partnership' or 'Joint Venture' filed in the county (not filed with TX SOS), the legal name of each partner forming the 'General Partnership' or 'Joint Venture' must be provided. Each 'legal entity' must apply as a co-applicant.

Trust or Estate

A trust and an estate are fiduciary relationships governing the trustee/executor with respect to the trust/estate property.

Sole Proprietorship (DBA)

A sole proprietorship is a customer that is owned by only one person and has not been incorporated. This business may:

1. be under the person's name
2. have its own name (doing business as or DBA)
3. have any number of employees.

If the customer is a Sole Proprietorship or DBA, the 'legal name' of the individual business 'owner' must be provided. The DBA name is not recognized as the 'legal name' of the entity. The DBA name may be used for the site name (regulated entity).

Corporation

A customer that meets all of these conditions:

1. is a legally incorporated entity under the laws of any state or country
2. is recognized as a corporation by the Texas Secretary of State
3. has proper operating authority to operate in Texas

The corporation's 'legal name' as filed with the Texas Secretary of State must be provided as applicant. An 'assumed' name of a corporation is not recognized as the 'legal name' of the entity.

Government

Federal, state, county, or city government (as appropriate)

The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the applicant. A department name or other description of the organization is not recognized as the 'legal name'.

Other

This may include a utility district, water district, tribal government, college district, council of governments, or river authority. Provide the specific type of government.

e) Independent Entity

Check No if this customer is a subsidiary, part of a larger company, or is a governmental entity. Otherwise, check Yes.

f) Number of Employees

Check one box to show the number of employees for this customer's entire company, at all locations. This is not necessarily the number of employees at the site named in the application.

g) Customer Business Tax and Filing Numbers

These are required for Corporations and Limited Partnerships. These are not required for Individuals, Government, and Sole Proprietors.

State Franchise Tax ID Number

Corporations and limited liability companies that operate in Texas are issued a franchise tax identification number. If this customer is a corporation or limited liability company, enter the Tax ID number.

Federal Tax ID

All businesses, except for some small sole proprietors, individuals, or general partnerships should have a federal taxpayer identification number (TIN). Enter this number here. Use no prefixes, dashes, or hyphens. Sole proprietors, individuals, or general partnerships do not need to provide a federal tax ID.

TX SOS Charter (filing) Number

Corporations and Limited Partnerships required to register with the Texas Secretary of State are issued a charter or filing number. You may obtain further information by calling SOS at 512-463-5555.

DUNS Number

Most businesses have a DUNS (Data Universal Numbering System) number issued by Dun and Bradstreet Corp. If this customer has one, enter it here.

Section 2. APPLICATION CONTACT

Provide the name and contact information for the person that TCEQ can contact for additional information regarding this application.

Section 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) Regulated Entity Number (RN)

The RN is issued by TCEQ's Central Registry to sites where an activity is regulated by TCEQ. This is not a permit number, registration number, or license number. Search TCEQ's Central Registry to see if the site has an assigned RN at http://www15.tceq.texas.gov/crpub/. If this regulated entity has not been assigned an RN, leave this space blank.

If the site of your business is part of a larger business site, an RN may already be assigned for the larger site. Use the RN assigned for the larger site.

If the site is found, provide the assigned RN and provide the information for the site to be authorized through this application. The site information for this authorization may vary from the larger site information.

An example is a chemical plant where a unit is owned or operated by a separate corporation that is accessible by the same physical address of your unit or facility. Other examples include industrial parks identified by one common address but different corporations have control of defined areas within the site. In both cases, an RN would be assigned for the physical address location and the permitted sites would be identified separately under the same RN.

b) Name of the Project or Site

Provide the name of the site or project as known by the public in the area where the site is located. The name you provide on this application will be used in the TCEQ Central Registry as the Regulated Entity name.

c) Description of Activity Regulated

In your own words, briefly describe the primary business that you are doing that requires this authorization. Do not repeat the SIC Code description.

d) County

Provide the name of the county where the site or project is located. If the site or project is located in more than one county, provide the county names as secondary.

e) Latitude and Longitude

Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to: http://www.tceq.texas.gov/gis/sqmaview.html.

f) Site Address/Location

If a site has an address that includes a street number and street name, enter the complete address for the site in *Section A*. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

If a site does not have an address that includes a street number and street name, provide a complete written location description in *Section B.* For example: "The site is located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1."

Provide the city (or nearest city) and zip code of the site location.

Section 4. GENERAL CHARACTERISTICS

a) Indian Country Lands

If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA Region 6, Dallas. Do not submit this form to TCEQ.

b) Construction activity associated with facility associated with exploration, development, or production of oil, gas, or geothermal resources

If your activity is associated with oil and gas exploration, development, or production, you may be under jurisdiction of the Railroad Commission of Texas (RRC) and may need to obtain authorization from EPA Region 6.

Construction activities associated with a facility related to oil, gas or geothermal resources may include the construction of a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a

carbon dioxide geologic storage facility; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel.

Where required by federal law, discharges of stormwater associated with construction activities under the RRC's jurisdiction must be authorized by the EPA and the RRC, as applicable. Activities under RRC jurisdiction include construction of a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources, such as a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility under the jurisdiction of the RRC; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel. The RRC also has jurisdiction over stormwater from land disturbance associated with a site survey that is conducted prior to construction of a facility that would be regulated by the RRC. Under 33 U.S.C. §1342(l)(2) and §1362(24), EPA cannot require a permit for discharges of stormwater from field activities or operations associated with {oil and gas} exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities unless the discharge is contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the facility. Under §3.8 of this title (relating to Water Protection), the RRC prohibits operators from causing or allowing pollution of surface or subsurface water. Operators are encouraged to implement and maintain best management practices (BMPs) to minimize discharges of pollutants, including sediment, in stormwater during construction activities to help ensure protection of surface water quality during storm events.

For more information about the jurisdictions of the RRC and the TCEQ, read the Memorandum of Understanding (MOU) between the RRC and TCEQ at 16 Texas Administrative Code, Part 1, Chapter 3, Rule 3.30, by entering the following link into an internet browser: http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=30 or contact the TCEQ Stormwater Team at 512-239-4671 for additional information.

c) Primary Standard Industrial Classification (SIC) Code

Provide the SIC Code that best describes the construction activity being conducted at this site.

Common SIC Codes related to construction activities include:

- 1521 - Construction of Single Family Homes
- 1522 - Construction of Residential Buildings Other than Single Family Homes
- 1541 - Construction of Industrial Buildings and Warehouses

- 1542 - Construction of Non-residential Buildings, other than Industrial Buildings and Warehouses
- 1611 - Highway and Street Construction, except Highway Construction
- 1622 - Bridge, Tunnel, and Elevated Highway Construction
- 1623 - Water, Sewer, Pipeline and Communications, and Power Line Construction

For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Local Government Assistance Section at 800-447-2827 for assistance.

d) Secondary SIC Code

Secondary SIC Code(s) may be provided. Leave this blank if not applicable. For help with SIC Codes, enter the following link into your internet browser: http://www.osha.gov/pls/imis/sicsearch.html or you can contact the TCEQ Small Business and Environmental Assistance Section at 800-447-2827 for assistance.

e) Total Number of Acres Disturbed

Provide the approximate number of acres that the construction site will disturb. Construction activities that disturb less than one acre, unless they are part of a larger common plan that disturbs more than one acre, do not require permit coverage. Construction activities that disturb between one and five acres, unless they are part of a common plan that disturbs more than five acres, do not require submission of an NOI. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

If you have any questions about this item, please contact the stormwater technical staff by phone at 512-239-4671 or by email at swgp@tceq.texas.gov.

f) Common Plan of Development

Construction activities that disturb less than five acres do not require submission of an NOI unless they are part of a common plan of development or for sale where the area disturbed is five or more acres. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

For more information on what a common plan of development is, refer to the definition of "Common Plan of Development" in the Definitions section of the general permit or enter the following link into your internet browser: www.tceq.texas.gov/permitting/stormwater/common_plan_of_development_steps.html

For further information, go to the TCEQ stormwater construction webpage enter the following link into your internet browser: www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If you have any further questions about the Common Plan of Development you can contact the TCEQ Stormwater Team at 512-239-4671 or the TCEQ Small Business and Environmental Assistance at 800-447-2827.

g) Estimated Start Date of the Project

This is the date that any construction activity or construction support activity is initiated at the site. If renewing the permit provide the original start date of when construction activity for this project began.

h) Estimated End Date of the Project

This is the date that any construction activity or construction support activity will end and final stabilization will be achieved at the site.

i) Will concrete truck washout be performed at the site?

Indicate if you expect that operators of concrete trucks will washout concrete trucks at the construction site.

j) Identify the water body(s) receiving stormwater runoff

The stormwater may be discharged directly to a receiving stream or through a MS4 from your site. It eventually reaches a receiving water body such as a local stream or lake, possibly via a drainage ditch. You must provide the name of the water body that receives the discharge from the site (a local stream or lake).

If your site has more than one outfall you need to include the name of the first water body for each outfall, if they are different.

k) Identify the segment number(s) of the classified water body(s)

Identify the classified segment number(s) receiving a discharge directly or indirectly. Enter the following link into your internet browser to find the segment number of the classified water body where stormwater will flow from the site: www.tceq.texas.gov/waterquality/monitoring/viewer.html or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

You may also find the segment number in TCEQ publication GI-316 by entering the following link into your internet browser: www.tceq.texas.gov/publications/gi/gi-316 or by contacting the TCEQ Water Quality Division at (512) 239-4671 for assistance.

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:

- 0100 (Canadian River Basin)
- 0200 (Red River Basin)
- 0300 (Sulfur River Basin)
- 0400 (Cypress Creek Basin)
- 0500 (Sabine River Basin)

Call the Water Quality Assessments section at 512-239-4671 for further assistance.

l) Discharge into MS4 – Identify the MS4 Operator

The discharge may initially be into a municipal separate storm sewer system (MS4). If the stormwater discharge is into an MS4, provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, county, or utility district, but possibly can be another form of government. Please note that the Construction General Permit requires the Operator to supply the MS4 with a

copy of the NOI submitted to TCEQ. For assistance, you may call the technical staff at 512-239-4671.

m) Discharges to the Edwards Aquifer Recharge Zone and Certification

The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

See maps on the TCEQ website to determine if the site is located within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer by entering the following link into an internet browser: www.tceq.texas.gov/field/eapp/viewer.html or by contacting the TCEQ Water Quality Division at 512-239-4671 for assistance.

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site-specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required before construction can begin.

For questions regarding the Edwards Aquifer Protection Program, contact the appropriate TCEQ Regional Office. For projects in Hays, Travis and Williamson Counties: Austin Regional Office, 12100 Park 35 Circle, Austin, TX 78753, 512-339-2929. For Projects in Bexar, Comal, Kinney, Medina and Uvalde Counties: TCEQ San Antonio Regional Office, 14250 Judson Rd., San Antonio, TX 78233-4480, 210-490-3096.

Section 5. NOI CERTIFICATION

Note: Failure to indicate Yes to all of the certification items may result in denial of coverage under the general permit.

a) Certification of Understanding the Terms and Conditions of Construction General Permit (TXR150000)

Provisional coverage under the Construction General Permit (TXR150000) begins 7 days after the completed paper NOI is postmarked for delivery to the TCEQ. Electronic applications submitted through ePermits have immediate provisional coverage. You must obtain a copy and read the Construction General Permit before submitting your application. You may view and print the Construction General Permit for which you are seeking coverage at the TCEQ web site by entering the following link into an internet browser: www.tceq.texas.gov/goto/construction or you may contact the TCEQ Stormwater processing Center at 512-239-3700 for assistance.

b) Certification of Legal Name

The full legal name of the applicant as authorized to do business in Texas is required. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at 512-463 5555, for more information related to filing in Texas.

c) Understanding of Notice of Termination

A permittee shall terminate coverage under the Construction General Permit through the submittal of a NOT when the operator of the facility changes, final stabilization has

been reached, the discharge becomes authorized under an individual permit, or the construction activity never began at this site.

d) Certification of Stormwater Pollution Prevention Plan

The SWP3 identifies the areas and activities that could produce contaminated runoff at your site and then tells how you will ensure that this contamination is mitigated. For example, in describing your mitigation measures, your site's plan might identify the devices that collect and filter stormwater, tell how those devices are to be maintained, and tell how frequently that maintenance is to be carried out. You must develop this plan in accordance with the TCEQ general permit requirements. This plan must be developed and implemented before you complete this NOI. The SWP3 must be available for a TCEQ investigator to review on request.

Section 6. APPLICANT CERTIFICATION SIGNATURE

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

If you are a corporation:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

If you are a municipality or other government entity:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the TCEQ's Environmental Law Division at 512-239-0600.

30 Texas Administrative Code

§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the

corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

Texas Commission on Environmental Quality
General Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

Instructions:

- Complete items 1 through 5 below:
- Staple your check in the space provided at the bottom of this document.
- *Do not mail this form with your NOI form.*
- *Do not mail this form to the same address as your NOI.*

Mail this form and your check to either of the following:

By Regular U.S. Mail
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, TX 78711-3088

By Overnight or Express Mail
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

Fee Code: GPA General Permit: TXR150000

1. Check or Money Order No: Click here to enter text
2. Amount of Check/Money Order: Click here to enter text
3. Date of Check or Money Order: Click here to enter text
4. Name on Check or Money Order: Click here to enter text
5. NOI Information:

   If the check is for more than one NOI, list each Project or Site (RE) Name and Physical Address exactly as provided on the NOI. **Do not submit a copy of the NOI with this form, as it could cause duplicate permit application entries!**

   If there is not enough space on the form to list all of the projects or sites the authorization will cover, then attach a list of the additional sites.

   Project/Site (RE) Name: Wildspring Phase 2

   Project/Site (RE) Physical Address: Approximately 0.4 miles northwest of the intersection of CR 175 & CR 177.

Staple the check or money order to this form in this space.

AGENT AUTHORIZATION FORM

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

I Kyle Ninness,
Print Name

Director of Land Development,
Title - Owner/President/Other

of Toll Southwest, LLC,
Corporation/Partnership/Entity Name

have authorized ***Aimee Chavez, P.E.***
Print Name of Agent/Engineer

of ***Pape-Dawson Consulting Engineers, LLC.***
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

11/19/24
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Kyle Ninness 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 19th day of November 2024

Cecile H. Allen
NOTARY PUBLIC

Cecile H. Allen
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 4-8-26

CECILE H ALLEN
Notary Public
STATE OF TEXAS
ID# 133696222
My Comm. Exp. Apr. 08, 2026

APPLICATION FEE FORM

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Wildspring Phase 2
Regulated Entity Location: 0.4 miles northwest of the intersection of CR 175 & CR 177
Name of Customer: Toll Southwest LLC.
Contact Person: Kyle Ninness Phone: (817) 329-7973
Customer Reference Number (if issued):CN 605682475
Regulated Entity Reference Number (if issued):RN 111642690

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment**. This payment is being submitted to:

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

☐ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	37.25 Acres	$ 4,000.00
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: Annie Cy Date: 3/7/25

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 605682475		RN 111642690

SECTION II: Customer Information

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

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

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

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

Toll Southwest LLC

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0801775669	32050842304	472582910	

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

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

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

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

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

15. Mailing Address:

1320 Arrow Point Dr.
Suite 401

City	State	ZIP	ZIP + 4
Cedar Park	TX	78613	

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

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(412) 780-2312		( ) -

SECTION III: Regulated Entity Information

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

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

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

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

Wildspring Phase 2

23. Street Address of the Regulated Entity: *(No PO Boxes)*	Not yet assigned							
	City	Leander	**State**	TX	**ZIP**	78641	**ZIP + 4**	
24. County								

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	0.4 miles northwest of the intersection of CR 175 & CR 177

26. Nearest City	**State**	**Nearest ZIP Code**
Leander	TX	78641

27. Latitude (N) In Decimal:	30.57792	**28. Longitude (W) In Decimal:**	-97.78846

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	34	41	-97	47	18

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)
1629		238910	

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

Construction of 115-single family homes.

34. Mailing Address:	**1320 Arrow Point Dr.**							
	Suite 401							
	City	**Cedar Park**	**State**	**TX**	**ZIP**	**78613**	**ZIP + 4**	

35. E-Mail Address:	**kninness@tollbrothers.com**

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(817) 329-7973		**( ) -**

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

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

SECTION IV: Preparer Information

40. Name:	Aimee Chavez, P.E.	**41. Title:**	Associate Vice President

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 454-8711		( ) -	achavez@pape-dawson.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:	Pape-Dawson Consulting Engineers, LLC.	**Job Title:**	Associate Vice President		
Name *(In Print)* **:**	Aimee Chavez, P.E.			**Phone:**	(512) 454-8711
Signature:	Aimee Chy			**Date:**	3/7/25