



Water Pollution Abatement Plan (WPAP)

Parkside on the River GTII – Phase 1

CITY OF GEORGETOWN
WILLIAMSON COUNTY, TEXAS

October 03, 2024

HR Green Project No: 2402182

Prepared For:
HM GPII Development, Inc.
1011 North Lamar Boulevard
Austin, Texas 78703

Prepared By:
HR Green Development TX, LLC
5508 Highway 290 West, Suite 150
Austin, Texas 78735
TBPE Firm No. F-16384

10/03/2024



Christine Campbell



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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: Parkside on the River GTII – Phase 1						2. Regulated Entity No.:			
3. Customer Name: HM GPII Development, Inc.						4. Customer No.:			
5. Project Type: (Please circle/check one)	New <input checked="" type="checkbox"/> X		Modification			Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP <input checked="" type="checkbox"/> X	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential <input checked="" type="checkbox"/> X		Non-residential			8. Site (acres):		75.87	
9. Application Fee:	\$6,500		10. Permanent BMP(s):				Batch Detention Pond		
11. SCS (Linear Ft.):	N/A		12. AST/UST (No. Tanks):				N/A		
13. County:	Williamson County		14. Watershed:				South Fork San Gabriel River		

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

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

Christine Campbell

Print Name of Customer/Authorized Agent

Christine Campbell

10/03/2024

Signature of Customer/Authorized Agent

Date

****FOR TCEQ INTERNAL USE ONLY****

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

General Information Form

Texas Commission on Environmental Quality

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

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

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

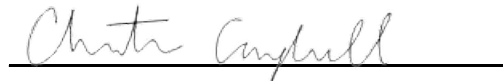
Signature

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

Print Name of Customer/Agent: Christine Campbell, P.E.

Date: 10/03/2024

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Parkside on the River GTII - Phase 1

2. County: Williamson

3. Stream Basin: Brazos River Basin

4. Groundwater Conservation District (If applicable): N/A

5. Edwards Aquifer Zone:

☒ Recharge Zone

☐ Transition Zone

6. Plan Type:

☒ WPAP

☐ SCS

☐ Modification

☐ AST

☐ UST

☐ Exception Request

7. Customer (Applicant):

Contact Person: Blake Magee

Entity: HM GPII Development, Inc.

Mailing Address: 1011 North Lamar Boulevard

City, State: Austin, TX

Zip: 78703

Telephone: 512-481-0303

FAX: _____

Email Address: Blake@blakemageeco.com

8. Agent/Representative (If any):

Contact Person: Christine Campbell

Entity: HR Green Development TX, LLC

Mailing Address: 5508 US Highway 290 West Suite #150

City, State: Austin, TX

Zip: 78735

Telephone: 512-872-6696

FAX: _____

Email Address: christine.campbell@hrgreen.com

9. Project Location:

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

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

Located west of Parkside Parkway. North of Parkside on the River Phase 3 Sections 6A & 6B.

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

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

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

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

☒ Survey staking will be completed by this date: October 01, 2024

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

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
- (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
- (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
- (4) The use of sewage holding tanks as parts of organized collection systems; and
- (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

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

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

- (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and
- (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

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

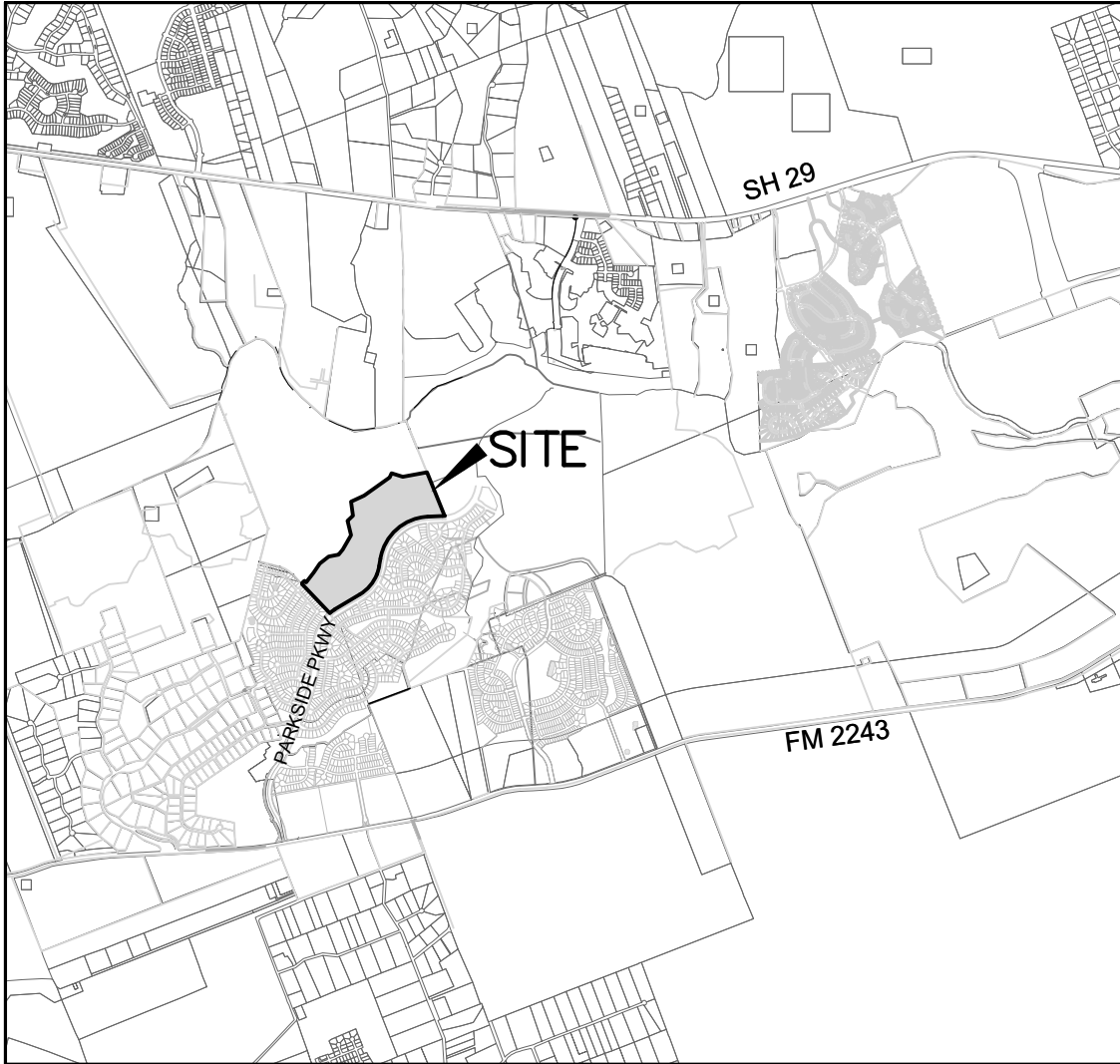
- ☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- ☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- ☐ For a UST Facility Plan or Modification or an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

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

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

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

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



VICINITY MAP

SCALE: 1"=4000'



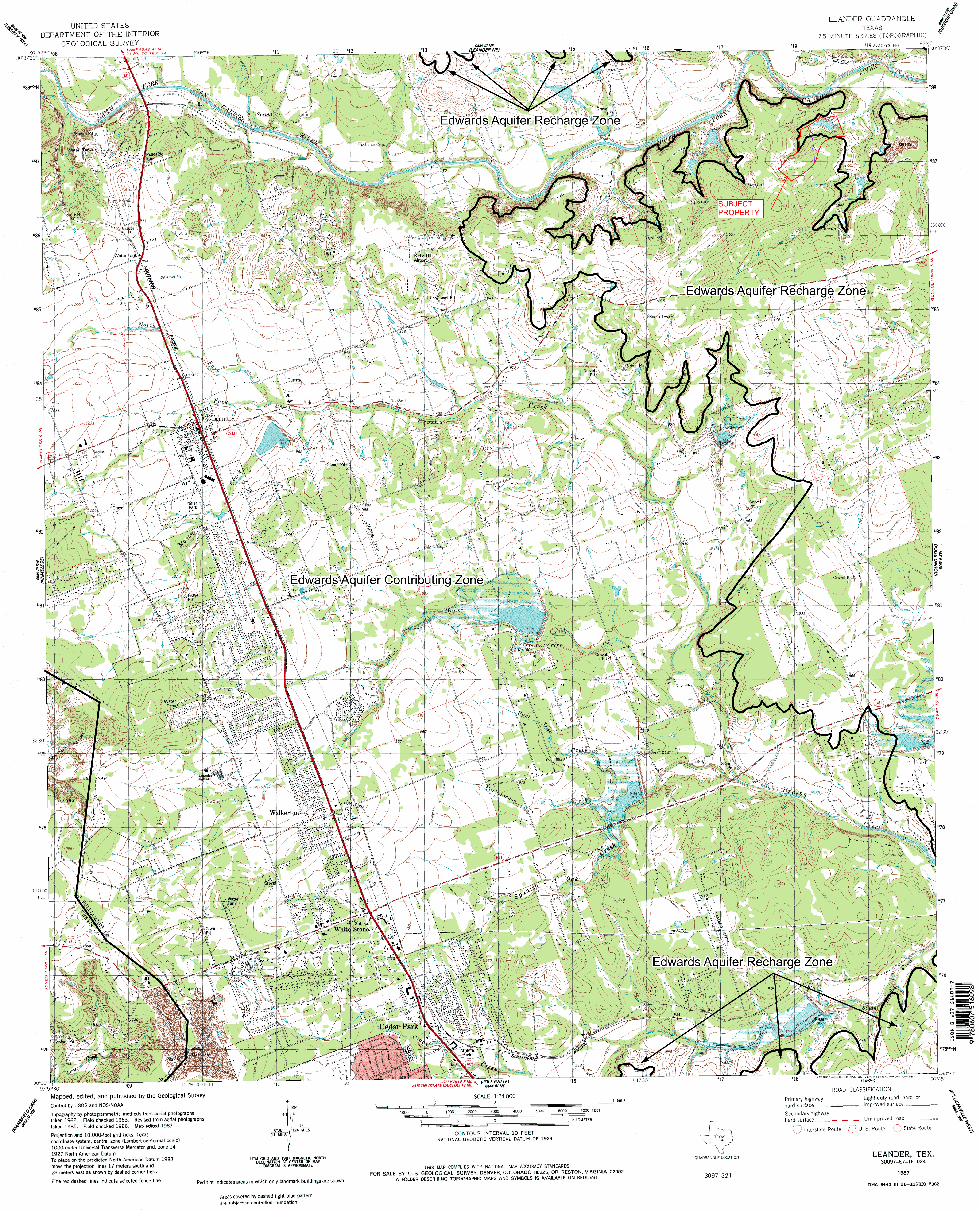
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DEVELOPMENT TX

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AUSTIN, TX 78735
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HRGREEN.COM

TBPE NO: 16384
TBPLS NO: 10194101

**PARKSIDE ON THE RIVER
GTII - PHASE 1
LOCATION MAP**



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LEANDER QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)


Mapped, edited, and published by the Geological Survey
Control by USGS and NOS/NOAA
Topography by photogrammetric methods from aerial photographs
taken 1962. Field checked 1963. Revised from aerial photographs
taken 1985. Field checked 1986. Map edited 1987
Projection and 10,000-foot grid ticks: Texas
coordinate system, central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983
move the projection lines 17 meters south and
28 meters east as shown by dashed corner ticks
Fine red dashed lines indicate selected fence line

Red tint indicates areas in which only landmark buildings are shown

Areas covered by dashed light-blue pattern
are subject to controlled inundation

SCALE 1:24 000
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route
LEANDER, TEX.
30097-E7-TF-024
1987
DMA 6445 III 86-SERIES V882



Texas Commission on Environmental Quality
Edwards Aquifer Protection Program

Regulatory Zones

30 TAC Chapter 213- Edwards Aquifer
Effective May 1985

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

ATTACHMENT C – PROJECT NARRATIVE

The Parkside on the River GTII – Phase 1 development is a proposed single-family residential development tract, including associated right-of-way, drainage, and utilities located in the City of Georgetown and Williamson County. The project site is located within the Edwards Aquifer Recharge Zone, the Edwards Aquifer Contributing Zone, and within the San Gabriel River watershed. The overall project site encompasses a 75.87-acre tract of land located west of Parkside Parkway and north of Parkside on the River Phase 3 Sections 6A & 6B. There will be roughly 41.8-acres of disturbed land.

The project site is primarily undeveloped wooded land with grass. Runoff flows northeast towards the creek before reaching the South Fork San Gabriel River. No portion of the project site is located within the 100-year floodplain as defined by FEMA FIRM Panel No. 48491C0460F, dated December 20, 2019.

The proposed development results in an impervious cover of approximately 20.9% and will have the associated runoff treated by one proposed batch detention pond and the existing batch detention pond approved with Parkside on the River Phase 3 Sections 6A & 6B. Of the 75.87 acres of the proposed Parkside on the River GTII – Phase 1 property, there is approximately 15.86 acres of impervious cover. Based on the 80% TSS removal requirement by TCEQ, we need to provide 13,805 lbs of TSS removal for the proposed development. As shown in the calculations, the batch detention ponds satisfy the TSS removal requirement. The 85% TSS removal requirement by the City of Georgetown is also satisfied by the batch detention ponds.

The fully-developed conditions for the overall area propose approximately 61.60 acres of post-development impervious cover, of which approximately 0.16 acres are existing from Parkside on the River Phase 3 Sections 4, 7A & 7B, 0.52 acres are existing from Parkside on the River Phase 3 Section 5, 11.99 acres are existing from Parkside on the River Phase 3 Sections 6A & 6B, 0.09 acres from Parkside on the River Sections 9A & 10A, 0.13 acres from Parkside on the River Sections 9B & 10B, 15.86 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 32.85 acres of future impervious cover from future Parkside on the River developments. Based on the 80% TSS removal requirement by TCEQ we need to provide 53,617 lbs of TSS removal in the fully-developed case. As shown in the calculations, the proposed batch detention pond and the existing Parkside on the River Phase 3 Sections 6A & 6B batch detention pond (BDP-04) satisfy this requirement. The 85% TSS removal requirement by the City of Georgetown is also satisfied for the batch detention ponds. In the fully-developed condition, the proposed batch detention pond (BDP-01) will treat a total of approximately 45.19 acres of impervious cover (0.13 acres from Sections 9B & 10B, 13.64 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 31.42 acres of future impervious cover from future Parkside on the River developments) and provide 45,725 lbs of TSS removal. In the fully-developed condition, the existing Parkside on the River Phase 3 Sections 6A & 6B batch detention pond (BDP-04) will treat a total of approximately 16.41 acres of impervious cover (0.16 acres from Parkside on the River Phase 3 Sections 4, 7A & 7B, 0.52 acres from Parkside on the River Phase 3 Section 5, 11.99 acres from Parkside on the River Phase 3 Sections 6A & 6B, 0.09 acres from Parkside on the River Sections 9A & 10A, 2.22 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 1.43 acres of future impervious cover from future Parkside on the River developments) and provide 15,176 lbs of TSS removal.

Refer to the construction plans for the water quality calculations and batch detention pond design. Refer to the attached Parkside on the River Phase 3 Sections 6A & 6B plans for the existing batch detention pond design. Refer to the table below for the proposed sedimentation treatment breakdown provided.

A tree demolition schedule is included in the construction plans.

The associated combination of roadway, drainage, water quality, water, and wastewater improvements will be designed and built to serve this residential development.

PARKSIDE ON THE RIVER GTII - PHASE 1 - TSS REMOVAL SUMMARY - FULLY-DEVELOPED																		
DRAINAGE AREA	BMP TYPE	MAX TSS REMOVAL EFFICIENCY	BASIN AREA	PRE-DEVELOPMENT I.C.	PROPOSED I.C.							POST-DEVELOPMENT I.C.		TCEQ REQUIRED 80% TSS LOAD REMOVAL	CITY OF GEORGETOWN REQUIRED 85% POND TSS LOAD REMOVAL	PROVIDED TSS LOAD REMOVAL	VOLUME REQUIRED	VOLUME PROVIDED
					SECTIONS 4, 7A & 7B	SECTION 5	SECTIONS 6A & 6B	SECTIONS 9A & 10A	SECTIONS 9B & 10B	GTII PH 1	FUTURE							
			AC	AC	AC	AC	AC	AC	AC	AC	AC	AC	%	LB	LB	LB	CF	CF
BDP-01	BATCH DETENTION POND	91%	149.38	0.00	0.00	0.00	0.00	0.00	0.13	13.64	31.42	45.19	30%	39,333	41,792	45,725	506,427	583,283
BDP-04 (EX)	BATCH DETENTION POND	91%	33.21	0.00	0.16	0.52	11.99	0.09	0.00	2.22	1.43	16.41	49%	14,283	15,176	15,176	87,130	95,617
TOTAL:			182.59	0.00	0.16	0.52	11.99	0.09	0.13	15.86	32.85	61.60	34%	53,617		60,901		

1 - FOR THE GEORGETOWN TSS REMOVAL REQUIREMENT, WE CONSIDER 85% OF TSS REMOVAL FOR THE DRAINAGE AREA THAT DRAINS TOWARD THE BATCH DETENTION PONDS.



**Narrative Description of Site-Specific Geology for the
47- and 314-acre Parcels of the Parkside on the River
Property Located in Georgetown, Williamson
County, Texas**

Prepared for:

HM PARKSIDE DEVELOPMENT, INC

Prepared by:

CAMBRIAN ENVIRONMENTAL

June 19th, 2020

**NARRATIVE DESCRIPTION OF SITE-SPECIFIC GEOLOGY FOR THE 47- AND 314-
ACRE PARCELS OF THE PARKSIDE ON THE RIVER PROPERTY LOCATED IN
GEORGETOWN, WILLIAMSON COUNTY, TEXAS**

Prepared for:

HM Parkside Development, Inc.
Blake Magee Co.
1011 North Lamar Blvd.
Austin, Texas 78703

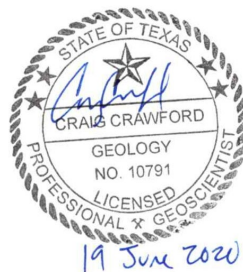
Prepared by:

Craig Crawford, P.G.
TX Geoscience License #10791

Cambrian Environmental
4422 Pack Saddle Pass
Suite 204
Austin, Texas 78745

TX Geoscience Firm Registration #50484

As a licensed professional geoscientist I attest that the
contents of this report are complete and accurate to the
best of my knowledge.



Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Geologist: Craig Crawford, PG

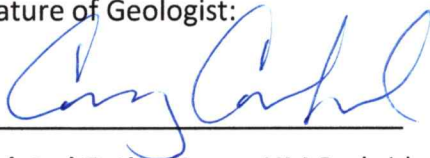
Telephone: 512.705.5541

Date: 19 June 2020

Fax: _____

Representing: Cambrian Environmental (TBPG Firm # 50484) (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: HM Parkside Development, Inc.(Parkside on the River 47 and 314-acre tracts)

Project Information

1. Date(s) Geologic Assessment was performed: April 21st through May 20th, 2020

2. Type of Project:

- ☒ WPAP
☐ SCS

- ☐ AST
☐ UST

3. Location of Project:

- ☒ Recharge Zone
☐ Transition Zone
☐ Contributing Zone within the Transition Zone



4. ☒ **Attachment A - Geologic Assessment Table.** Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.
5. ☒ Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Brackett (BkG)	C	< 2
Denton (DnB)	D	< 3.5
Eckrant (EeB,ErE,ErG)	D	< 2
Oakalla (Oc)	B	> 5
Sunev (SuB)	B	> 5

** Soil Group Definitions (Abbreviated)*

- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column.** A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
7. ☒ **Attachment C – Site Geology.** A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
8. ☒ **Attachment D – Site Geologic Map(s).** The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'
 Applicant's Site Plan Scale: 1" = _____'
 Site Geologic Map Scale: 1" = 100/200'
 Site Soils Map Scale (if more than 1 soil type): 1" = 1250'
9. Method of collecting positional data:
 - ☒ Global Positioning System (GPS) technology.
 - ☐ Other method(s). Please describe method of data collection: _____
10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

12. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
- ☐ Geologic or manmade features were not discovered on the project site during the field investigation.
13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
- ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
- ☐ The wells are not in use and have been properly abandoned.
- ☐ The wells are not in use and will be properly abandoned.
- ☐ The wells are in use and comply with 16 TAC Chapter 76.
- ☒ There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

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



NARRATIVE DESCRIPTION OF SITE-SPECIFIC GEOLOGY FOR THE 47- AND 314-ACRE PARCELS OF THE PARKSIDE ON THE RIVER PROPERTY LOCATED IN GEORGETOWN, WILLIAMSON COUNTY, TEXAS

INTRODUCTION

This narrative Geologic Assessment accompanies the Texas Commission on Environmental Quality (TCEQ) Geologic Assessment Form TCEQ-0585 completed for 47-acre and 314-acre parcels located on the Parkside on the River property in Georgetown, Williamson County, Texas (see Figure 1). The project area is located on the north side of Leander Road (FM 2243), approximately 5.25 miles west of the intersection with Interstate Highway (IH) 35. The 47-acre parcel is located adjacent to Leander Road, and the 314-acre parcel is located further north adjacent to the South Fork of the San Gabriel River.

METHODOLOGY

A Cambrian Environmental Registered Professional Geoscientist (Texas License #10791) and several karst technicians conducted a field survey for a TCEQ Geologic Assessment on various dates between April 21st and May 20th 2020. The pedestrian survey was completed by walking parallel transects spaced approximately 50 feet apart as directed by the TCEQ in the Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (Rev. 10-01-04). Closer spacing was used where vegetation inhibited clear observation. The project site was thoroughly examined for the presence of potential karst features, including depressions, holes, and animal burrows. A number of techniques can be used for this effort, including probing with a digging implement to determine the thickness and consistency of fill material and feeling for the presence of air flow, which may indicate the presence of a sub-surface void space. Other techniques include making observations of any notable characteristics of the feature site such as the presence of various types of vegetation or a semi-circular burrow mound produced by the activities of small mammals. As part of this evaluation and assessment, a number of features were further investigated by way of hand excavation in order to better determine feature type and sensitivity.

RESULTS

Soils

Soils mapped within the project area consist of the Brackett-Rock outcrop-Real complex (BkG), Denton silty clay (DnB), Eckrant extremely stony clay (EeB), Eckrant-Rock outcrop (ErE, ErG), Oakalla (Oc), and Sunev silty clay (SuB) series soils¹ (see Figure 2). The Oakalla and Sunev series soils are within the “B” classification of the hydrologic soil groups. Type “B” soils have a moderate rate of infiltration rate (moderate runoff potential) when thoroughly wet. The Brackett-Rock outcrop-Real complex is within the “C” classification of the hydrologic soil groups. Type “C” have a slow infiltration rate (high runoff potential) when thoroughly wet. The Denton and Eckrant series soils are within the “D” classification of the hydrologic soil groups. Type “D” soils have a very slow infiltration rate (very high runoff potential) when thoroughly wet.

¹ United States Department of Agriculture, Natural Resource Conservation Service. Online Web Soil Survey, Williamson County, Texas. <http://websoilsurvey.sc.egov.usda.gov/>

Geology

The mapped bedrock lithology underlying the majority of the project area consists of the Edwards Limestone (Ked), with the Comanche Peak Limestone (Kc) present in some of the lower elevation areas. The Comanche Peak Limestone serves as the lower confining unit of the Edwards Aquifer. Quaternary alluvial deposits (Qal) are present on the lower elevation portions of the property adjacent to the South Fork of the San Gabriel River. The tract is located almost entirely within the Edwards Aquifer Recharge Zone, but some Contributing Zone areas are present in one of the drainages and as topography drops off the cliff into the floodplain of the San Gabriel River (see Figure 3). Based on topographic and geologic maps, the Edwards outcrop present on this property is likely no more than 50 to 60 feet thick in the areas of highest elevation. The geology of the property has been mapped most recently at a useful scale by Collins (2005) and we find his interpretation of the geology to be generally accurate.² Bedrock outcrops were common in some areas, while other areas seemed to have relatively thick soil cover. No faults are mapped within the project limits, and none were observed during the pedestrian survey.

Recharge into the aquifer primarily occurs in areas where the Edwards Group and upper confining units are exposed at the surface. Most recharge is from direct infiltration via precipitation and streamflow loss. Recharge occurs predominantly along secondary porosity features such as faults, fractures, and karst features (caves, solution cavities, sinkholes, etc.); and these types of karst features are commonly formed along joints, fractures, and bedding plane surfaces formed within the Edwards Group Limestone.

Site Hydrogeologic Assessment

Ten sensitive features were identified during the pedestrian survey and include features F-1, F-3, F-5, F-6, F-11a, F-11b, F-11c, F-12, F-13, and F-14. Recharge to the aquifer has the greatest potential to occur in the vicinity of these features. Other areas of the property had a very low density of discovered features and thick soil cover, and the potential for recharge to occur is thought to be low in these areas. Additionally, should any karst features be discovered during the construction phase of the project, they should be reported to TCEQ to determine the appropriate mitigation measures.

Feature Descriptions

- F-1** The feature consists of a sinkhole that measures approximately 13 feet by 15 feet by at least 3 feet deep. The feature is lined with limestone cobbles and organic debris. The feature is partially rimmed by weathered and vuggy limestone bedrock, and cedar elm and persimmon trees are growing around the rim. A secondary small depression that measures approximately 12 inches by 6 inches by 8 inches deep is located about 30 feet to the west of the sinkhole and is lined with cobbles. This feature appears to have been partially excavated in the past. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.
- F-2** The feature consists of a fractured rock outcrop lined with soil, cobbles, and organic debris; and one dead tree stump was present and lying adjacent to the feature. The outcrop measures approximately 8 feet in diameter by 1 foot deep. Hand excavation of the feature did not reveal any

² E.W. Collins, 2005, Geologic Map of the West Half of the Taylor Texas 30x60 Quadrangle: Central Texas Urban Corridor Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander, Bureau of Economic Geology, University of Texas at Austin. Scale 1:100,000

significant extensions, or provide evidence that the feature is karst in origin. One area was excavated on the east side of the feature, and a decomposed tree stump was discovered underneath about 6 inches of leaf litter and compact clayey soil. Another area was excavated on the west side, and a large active tree root was discovered and had a compact clayey soil floor. The feature appears to be fractured surface float slabs of limestone that have been altered by tree root uplift and the burrowing activities of small mammals. The feature is ranked as “non-sensitive”.

- F-3** The feature consists of a solution cavity that measures approximately 3 feet by 2 feet by 2 feet deep. The feature is rimmed by intact bedrock, and is lined with organic debris and limestone cobbles. A small depression partially rimmed by bedrock is located about 10 feet west of the solution cavity. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.
- F-4** The feature consists of a large closed depression that measures approximately 27 feet by 15 feet by 2 feet deep in the center. Within the depression are actively growing trees and grapevine, and a couple of areas had been modified by the activities of burrowing mammals. The feature is lined by relatively thick clayey soil, and organic debris. Although the depression is of a significant size, no obvious signs of karst origin or extensions were observed. The feature is ranked as “non-sensitive”.
- F-5** The feature consists of a cave entrance within a sinkhole. The feature was not entered and the extent is unknown but appears to lead to cave passage, and the entrance opening measures approximately 3.5 feet in diameter by 6 feet deep. The sinkhole surrounding the entrance opening measures approximately 10 feet in diameter. The sinkhole and opening are surrounded by large limestone slabs and cobbles, and persimmon trees. The feature appears to have been partially excavated in the past, and the floor appears to be lined with dark clay soil. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 75-foot radius protective buffer around this feature.
- F-6** The feature consists of a sinkhole that measures approximately 3 feet by 4 feet by 2 feet deep. The feature is lined with loose limestone cobbles, and soil and organic debris. The feature was partially excavated and the infill was loose cobbles and non-compact soil, and many surface harvestmen and a rattlesnake were present in the feature during the excavation (indicating that there is at least some subsurface extent). A shovel was able to be pushed into the feature 3 to 4 feet under the rock ledge that comprises the opening. Due to the loose and unconsolidated nature of the infill removed from the feature, it appears to drain well and is therefore ranked “sensitive”. Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.
- F-7** The feature consists of closed depression that measures approximately 3 feet in diameter by 1.5 feet deep. The feature is lined with limestone cobbles, clayey soil, and organic debris. The origin of the feature appears to be related by tree root uplift and displacement, and the stump of an expired tree is lying adjacent to the feature. The feature is ranked as “non-sensitive”.
- F-8** The feature consists of an animal burrow under a limestone slab, and the feature does not appear to be of karst origin and no significant extensions were observed. The feature measures approximately

1 foot by 1.5 feet by 2 feet deep, and is lined by compact clay and organic debris. The feature is ranked as “non-sensitive”.

- F-9** The feature consists of a depression that is located underneath an exposure of limestone on a hillside. The feature measures approximately 6 feet wide by 1 foot tall, and extends for about 3 feet under the limestone outcrop. The feature is lined with compact clayey soil and organic debris. Some minor hand excavation was conducted at this feature, and no significant extensions were found. The feature does not appear to be karst in origin; and is likely due to hillside relief, and weathering and erosional processes. The feature is ranked as “non-sensitive”.
- F-10** The feature consists of a non-karst closed depression that measures approximately 4 feet by 6 feet by 1.5 feet deep. The feature has a thick reddish-brown clay floor. The feature does not appear to be karst in origin. The feature is ranked as “non-sensitive”.
- F-11a** The feature consists of a solution-enlarged fracture with a trend of almost due north-south. The feature is 2.5 feet long by 4 inches wide and 2.5 feet deep. The feature is formed in and rimmed on both sides by intact bedrock. The interior of the fracture was coated in a layer of green moss, indicating that humid air may discharge from the subsurface. However, no airflow was detected at the time of the field survey. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.
- F-11b** The feature is located approximately 10 feet north of F-11, and consists of a sinkhole that measures approximately 2 feet by 4 feet by 2.5 feet deep. The feature is lined with loose limestone cobbles, organic debris, and soil. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.
- F-11c** The feature consists of a solution enlarged fracture that measures approximately 7 feet long by 8 inches wide by 2 feet deep. The feature is lined with loose limestone cobbles, organic debris, and soil. This feature is located approximately 18 feet north of F-11b, and this feature may be related to F-11a and F-11b. The fracture has a trend of approximately N15°W. Similar to feature F-11a, the interior of the fracture was coated in a layer of green moss, indicating that humid air may discharge from the subsurface, however no airflow was detected at the time of the field survey. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.
- F-12** The feature consists of a solution-enlarged fracture that measures approximately 8 feet long by 1 foot wide by 2 feet deep. The feature is lined with loose soil and organic debris, and is rimmed on both sides by bedrock. The fracture has a trend of N20°E. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.
- F-13** The feature consists of a solution-enlarged fracture that measures approximately 4 feet long by 6 inches wide by 1 foot deep. The feature is rimmed on both sides of the fracture by intact bedrock, and is lined by loose soil and organic debris. Two small depressions, both approximately 1 foot in diameter, are located just a few feet from the fracture. The fracture has a trend of approximately N15°E. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 50-foot radius protective buffer around this feature.

- F-14** The feature consists of a sinkhole that measures approximately 5 feet by 10 feet by at least 2 feet deep. The feature is lined with loose limestone cobbles, soil, and organic debris; and has trees growing in the middle of it. The feature is also rimmed by intact bedrock. No obvious openings were present, but with excavation work this feature could potentially lead to cave passage. The feature is ranked as “sensitive” and Cambrian recommends a minimum of a 75-foot radius protective buffer around this feature.
- F-15** The feature consists of a rock joint along the cliffside that measures approximately 5 feet long by 6 inches wide by 2 feet deep. The feature does not appear to be of karst origin, and is likely due to natural weathering and erosional processes occurring on the edge of the cliff. The feature is ranked as “non-sensitive”. (*Note* on Figure 3b, this feature is shown to be located within an outcrop of Comanche Peak Limestone. However, based on observations in the field, this feature is actually within the Edwards Limestone. The discrepancy appears to be due to a slight accuracy or projection issue with the geologic GIS layer).

City of Georgetown Salamander Ordinance

No springs or streams were identified within the interior of the property during the pedestrian survey, and therefore no occupied site protection, or spring buffer protection measures will be required for the property. A number of drainages are present on the property, but they appear to only flow during heavy rain when there is high runoff potential. None of these drainages had any water present during the course of the field work, even after a couple of precipitation events. Portions of the northern 314-acre parcel are directly adjacent to the South Fork of the San Gabriel River, and the 100-year floodplain is present in these lower elevation areas, and stream buffer protection measures may be required in these areas.

All regulated activities within the recharge zone must follow water quality best management practices, and development of the property will need to comply with the water quality protection measures as outlined in Section 8 of the Ordinance.

Stratigraphic Column

*Area shaded gray represents the lithology directly underlying the project site

Period	Map Symbol	Formation
Upper Cretaceous	Kbu	Buda Limestone (~20 feet)
	Kdr	Del Rio Clay (60 feet)
Lower Cretaceous	Kgt	Georgetown Limestone (100 feet)
	Ked	Edwards Limestone (max 110 feet, likely no more than 60 feet on this property)
	Kcp	Comanche Peak Limestone (~40 feet)
	Kw	Walnut Formation (~130 feet)

Edwards Aquifer Units

GEOLOGIC ASSESSMENT TABLE									PROJECT NAME: Parkside on the River 47 and 314-acre Tracts												
LOCATION			FEATURE CHARACTERISTICS										EVALUATION		PHYSICAL SETTING						
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12	
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	Q	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY	CATCHMENT AREA (ACRES)		TOPOGRAPHY		
						X	Y	Z		10							<40	≥40	<1.6	≥1.6	
F-1	30.596112	-97.773806	SH	20	Ked	13	15	3+					C,O	30	50		X	X		Hilltop	
F-2	30.596271	-97.773948	O	5	Ked	8	8	1					C,F,O	20	25	X		X		Hilltop	
F-3	30.596148	-97.774189	SC	20	Ked	3	2	2					C,O	25	45		X	X		Hilltop	
F-4	30.596193	-97.774101	CD	5	Ked	27	15	2					F,V	15	20	X		X		Hilltop	
F-5	30.595973	-97.774929	C	30	Ked	10	10	6+					C,F,O	25	55		X	X		Hilltop	
F-6	30.59609	-97.776054	SH	20	Ked	3	4	2					C,O	25	45		X	X		Hilltop	
F-7	30.597515	-97.776776	CD	5	Ked	3	3	1.5					C,F,O	20	25	X		X		Hilltop	
F-8	30.618055	-97.768393	O	5	Ked	1	1.5	2					F,O	20	25	X		X		Hilltop	
F-9	30.613784	-97.769623	O	5	Ked	6	1	3					F,O	20	25	X		X		Hillside	
F-10	30.615276	-97.771736	CD	5	Ked	4	6	1.5					F	10	15	X		X		Hilltop	
F-11a	30.616956	-97.773649	SF	20	Ked	2.5	0.3	2.5	N-S				N	30	50		X	X		Hilltop	
F-11b	30.616982	-97.773641	SH	20	Ked	2	4	2.5					C,O	30	50	X		X		Hilltop	
F-11c	30.61703	-97.773662	SF	20	Ked	7	0.6	2	N15W				C,O	30	50		X	X		Hilltop	
F-12	30.61678	-97.773998	SF	20	Ked	8	1	2	N20E	10			F,O	30	60		X	X		Hilltop	
F-13	30.618588	-97.773987	SF	20	Ked	4	0.5	1	N15E	10			F,O	30	60		X	X		Hilltop	
F-14	30.618588	-97.773987	SH	20	Ked	5	10	2+					C,F,O	30	50		X	X		Hilltop	
F-15	30.619871	-97.775274	O	5	Ked	5	0.5	2					F,O	20	25	X		X		Cliff	

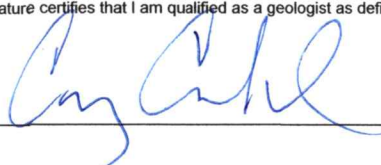
* DATUM: WGS84

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

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

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

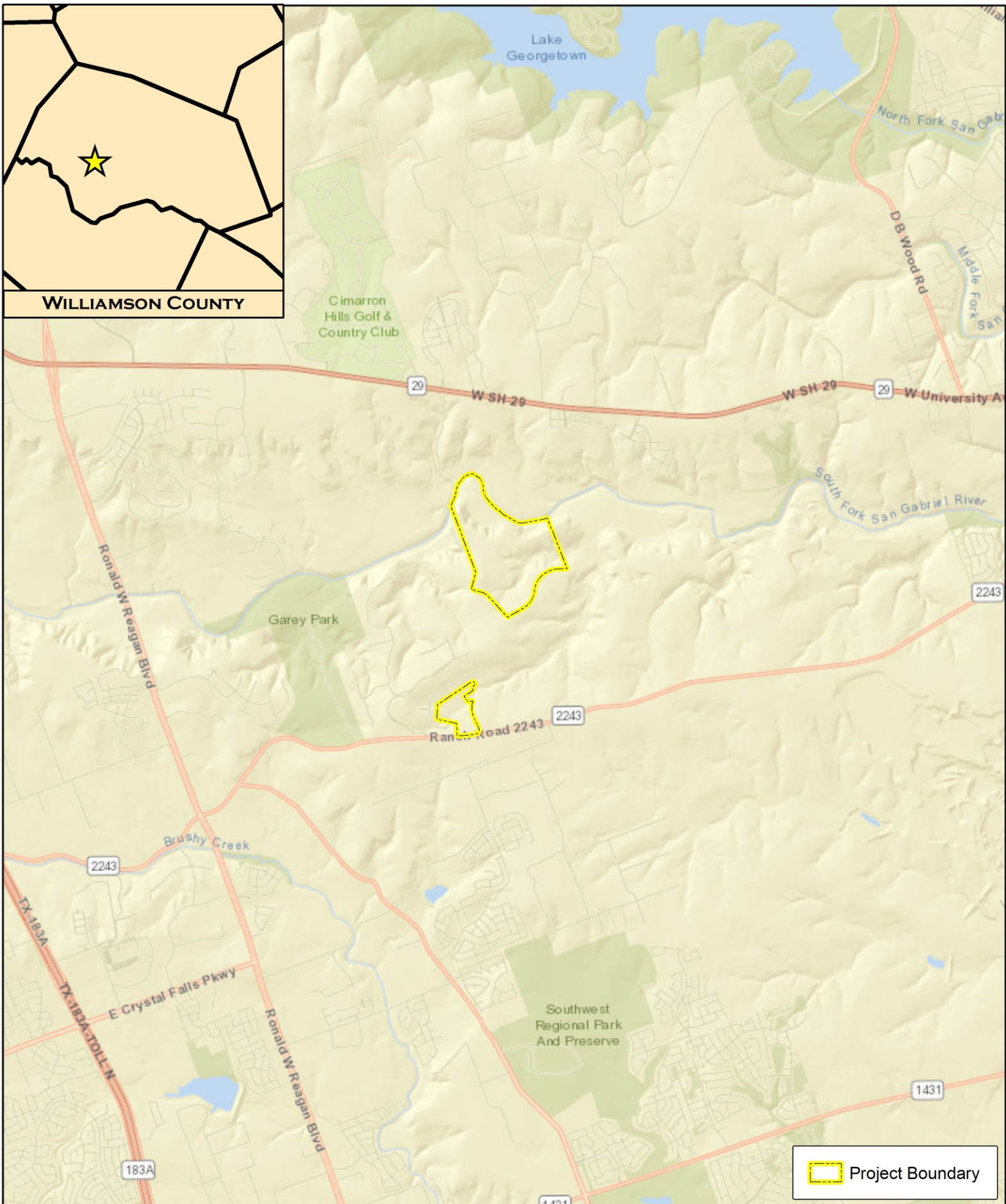
I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.



Date 19 June 2020

Sheet 1 of 1





1:60,000
Coordinate System: WGS
1984 UTM Zone 14N, Meter
0 1,250 5,000 7,500 10,000 Feet

Figure 1 – Site Location Map



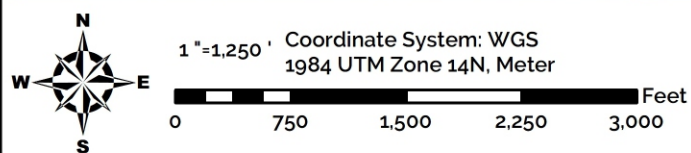
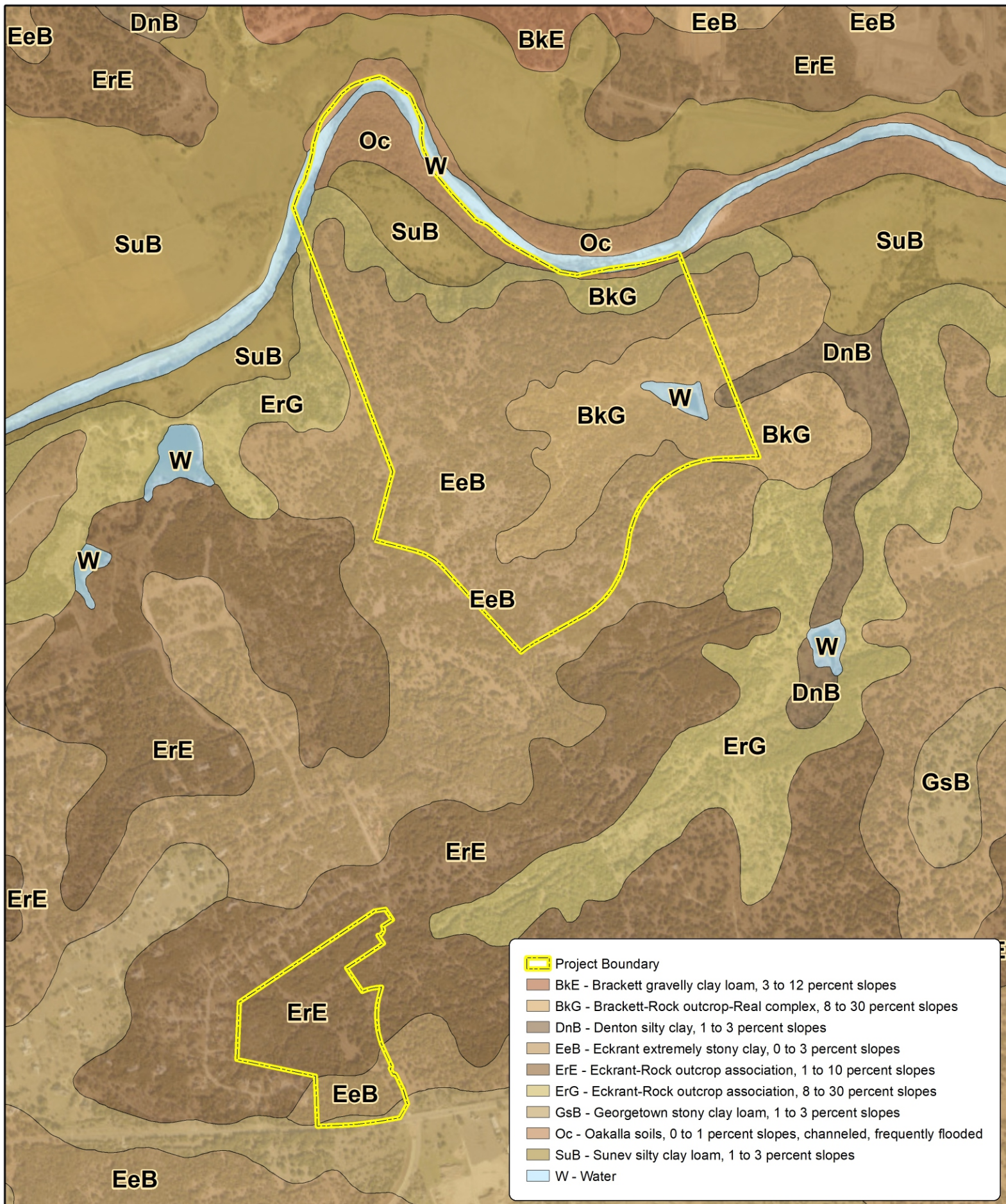


Figure 2 – Site Soils Map



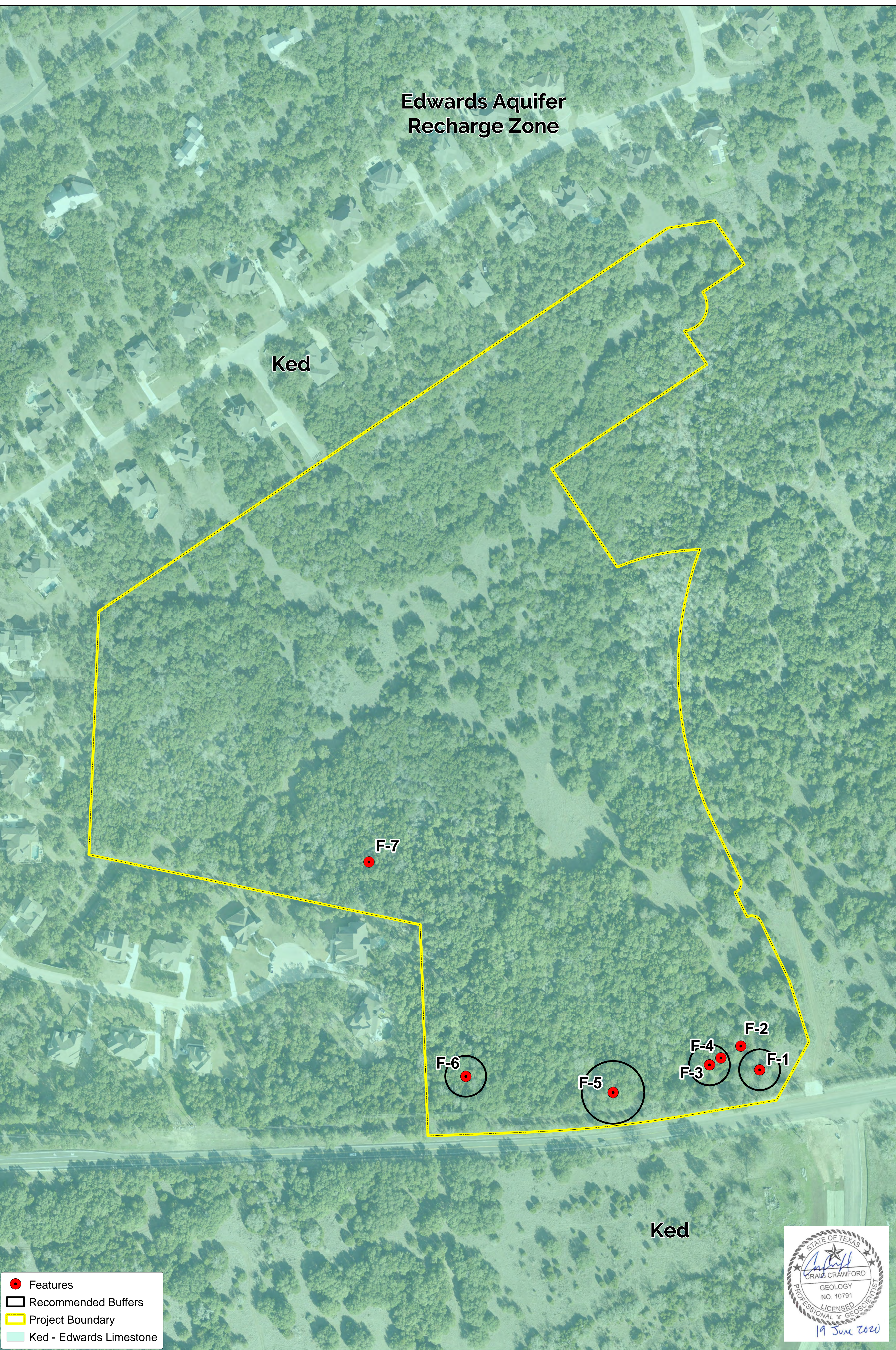
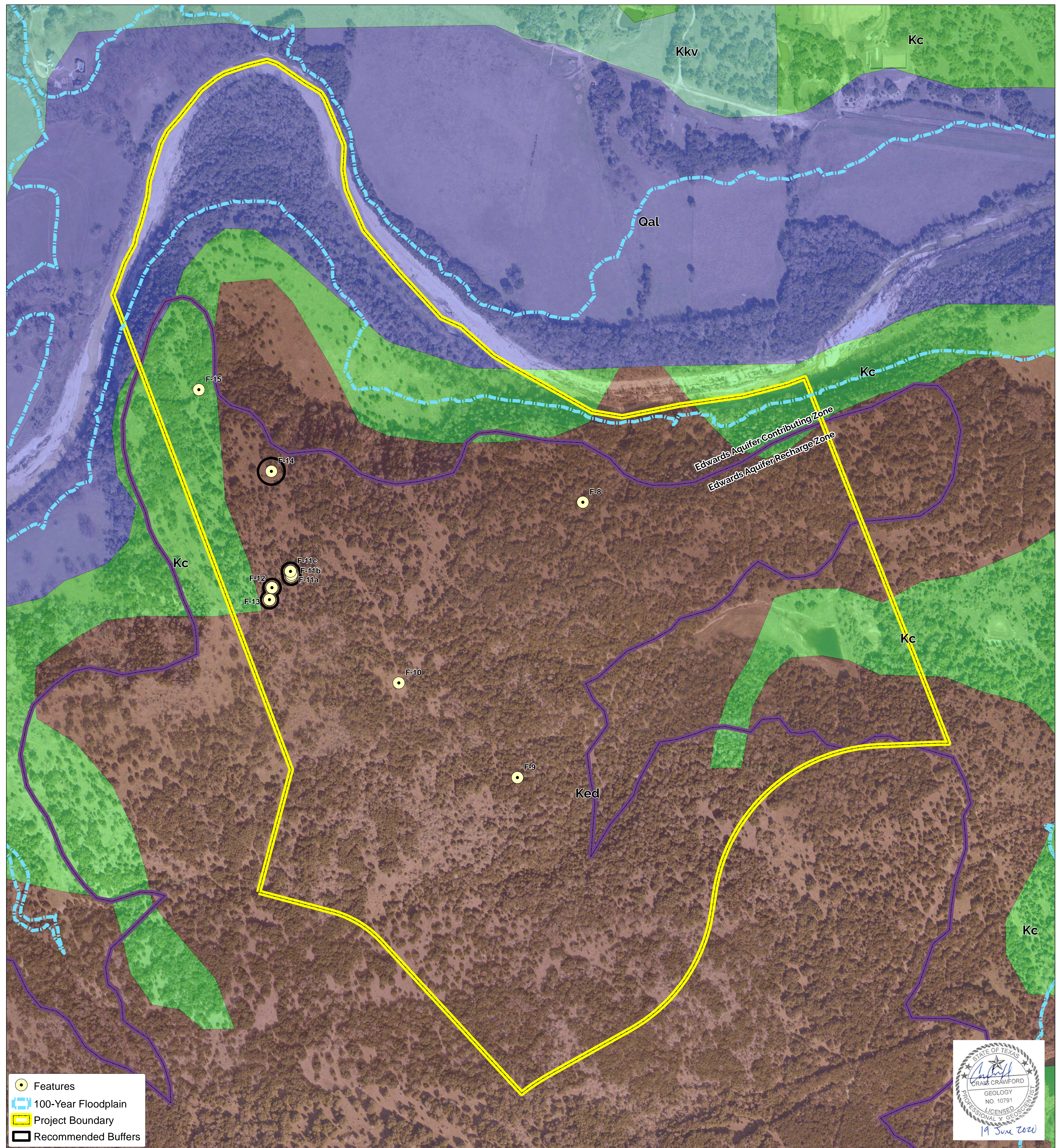


Figure 3a – Site Geologic Map





- Features
- 100-Year Floodplain
- Project Boundary
- Recommended Buffers

1"=200'

0 250 500 750 1,000 Feet

Coordinate System: WGS 1984 UTM Zone 14N, Meter

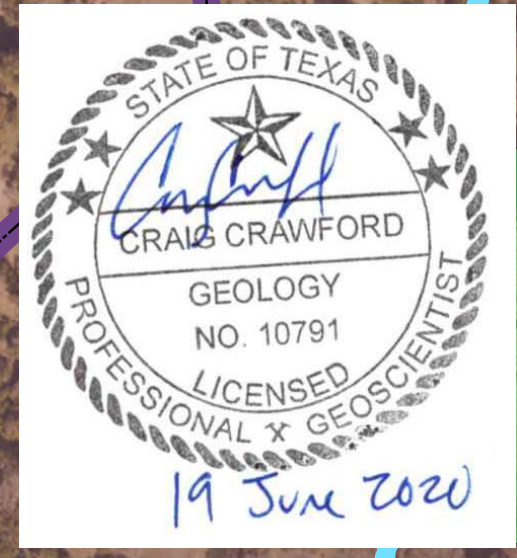
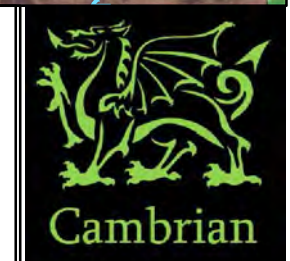


Figure 3b – Site Geologic Map



Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Christine Campbell, P.E.

Date: 10/03/2024

Signature of Customer/Agent:

Christine Campbell

Regulated Entity Name: Parkside on the River GTII - Phase 1

Regulated Entity Information

1. The type of project is:

- ☒ Residential: Number of Lots: 143
- ☐ Residential: Number of Living Unit Equivalents: _____
- ☐ Commercial
- ☐ Industrial
- ☐ Other: _____

2. Total site acreage (size of property): 75.87

3. Estimated projected population: 143 units * 3.5 people / unit = 500.5 people

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	457,600	$\div 43,560 =$	10.51
Parking	-	$\div 43,560 =$	-
Other paved surfaces	233,057	$\div 43,560 =$	5.35
Total Impervious Cover	690,657	$\div 43,560 =$	15.86

Total Impervious Cover 15.86 \div Total Acreage 75.87 X 100 = 20.9% Impervious Cover

5. ☒ **Attachment A - Factors Affecting Surface Water Quality.** A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
6. ☒ Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

7. Type of project:

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

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

- ☐ Concrete
- ☐ Asphaltic concrete pavement
- ☐ Other: _____

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

Width of R.O.W.: _____ feet.

$L \times W =$ _____ $\text{Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} =$ _____ acres.

10. Length of pavement area: _____ feet.

Width of pavement area: _____ feet.

$L \times W =$ _____ $\text{Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} =$ _____ acres.

Pavement area _____ acres \div R.O.W. area _____ acres $\times 100 =$ _____ % impervious cover.

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

<u>100%</u> Domestic	<u>35,750</u> Gallons/day
<u> </u> % Industrial	<u> </u> Gallons/day
<u> </u> % Commingled	<u> </u> Gallons/day
TOTAL gallons/day <u>35,750</u>	

15. Wastewater will be disposed of by:

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

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

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

☒ Sewage Collection System (Sewer Lines):

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

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

☐ The SCS was previously submitted on .

☒ The SCS was submitted with this application.

☐ The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

☒ The sewage collection system will convey the wastewater to the Dove Springs (name) Treatment Plant. The treatment facility is:

☒ Existing.

☐ Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 40'.

18. 100-year floodplain boundaries:

☒ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.

☐ No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA FIRM Panel No. 48491C0460F, 12/20/2019

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

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

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

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

☐ The wells are not in use and have been properly abandoned.

☐ The wells are not in use and will be properly abandoned.

☐ The wells are in use and comply with 16 TAC §76.

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

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

☒ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.

☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.

☐ **Attachment D - Exception to the Required Geologic Assessment.** A request and justification for an exception to a portion of the Geologic Assessment is attached.

- 22. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.
- 23. ☒ Areas of soil disturbance and areas which will not be disturbed.
- 24. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
- 25. ☒ Locations where soil stabilization practices are expected to occur.
- 26. ☐ Surface waters (including wetlands).
☒ N/A
- 27. ☐ Locations where stormwater discharges to surface water or sensitive features are to occur.
☒ There will be no discharges to surface water or sensitive features.
- 28. ☒ Legal boundaries of the site are shown.

Administrative Information

- 29. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

ATTACHMENT A – FACTORS AFFECTING WATER QUALITY

Potential sources of pollution that may be expected to affect the quality of the storm water discharges from the construction site include the following:

- Soil erosion due to the clearing of the site for wastewater improvements.
- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
- Hydrocarbons from asphalt paving operations.
- Miscellaneous trash and litter from construction.

Potential sources of pollution that may be expected to affect the quality of the storm water discharges from the site after construction is completed include the following:

- Oil, grease, fuel and hydraulic fluid contamination from vehicle drippings.
- Dirt and dust from vehicles.
- Trash and litter.

ATTACHMENT B – VOLUME AND CHARACTER OF STORMWATER

The project site is primarily undeveloped wooded land with grass. Runoff flows northeast towards the creek before reaching the South Fork San Gabriel River. No portion of the project site is located within the 100-year floodplain as defined by FEMA FIRM Panel No. 48491C0460F, dated December 20, 2019.

The proposed development results in an impervious cover of approximately 20.9% and will have the associated runoff treated by one proposed batch detention pond and the existing batch detention pond approved with Parkside on the River Phase 3 Sections 6A & 6B. Of the 75.87 acres of the proposed Parkside on the River GTII – Phase 1 property, there is approximately 15.86 acres of impervious cover. Based on the 80% TSS removal requirement by TCEQ, we need to provide 13,805 lbs of TSS removal for the proposed development. As shown in the calculations, the batch detention ponds satisfy the TSS removal requirement. The 85% TSS removal requirement by the City of Georgetown is also satisfied by the batch detention ponds.

The fully-developed conditions for the overall area propose approximately 61.60 acres of post-development impervious cover, of which approximately 0.16 acres are existing from Parkside on the River Phase 3 Sections 4, 7A & 7B, 0.52 acres are existing from Parkside on the River Phase 3 Section 5, 11.99 acres are existing from Parkside on the River Phase 3 Sections 6A & 6B, 0.09 acres from Parkside on the River Sections 9A & 10A, 0.13 acres from Parkside on the River Sections 9B & 10B, 15.86 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 32.85 acres of future impervious cover from future Parkside on the River developments. Based on the 80% TSS removal requirement by TCEQ we need to provide 53,617 lbs of TSS removal in the fully-developed case. As shown in the calculations, the proposed batch detention pond and the existing Parkside on the River Phase 3 Sections 6A & 6B batch detention pond (BDP-04) satisfy this requirement. The 85% TSS removal requirement by the City of Georgetown is also satisfied for the batch detention ponds. In the fully-developed condition, the proposed batch detention pond (BDP-01) will treat a total of approximately 45.19 acres of impervious cover (0.13 acres from Sections 9B & 10B, 13.64 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 31.42 acres of future impervious cover from future Parkside on the River developments) and provide 45,725 lbs of TSS removal. In the fully-developed condition, the existing Parkside on the River Phase 3 Sections 6A & 6B batch detention pond (BDP-04) will treat a total of approximately 16.41 acres of impervious cover (0.16 acres from Parkside on the River Phase 3 Sections 4, 7A & 7B, 0.52 acres from Parkside on the River Phase 3 Section 5, 11.99 acres from Parkside on the River Phase 3 Sections 6A & 6B, 0.09 acres from Parkside on the River Sections 9A & 10A, 2.22 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 1.43 acres of future impervious cover from future Parkside on the River developments) and provide 15,176 lbs of TSS removal.

Refer to the construction plans for the water quality calculations and batch detention pond design. Refer to the attached Parkside on the River Phase 3 Sections 6A & 6B plans for the existing batch detention pond design. Refer to the table below for the proposed sedimentation treatment breakdown provided.



Detailed existing and proposed flow data for the points of interest are provided on the drainage plan as part of the construction documents submitted with this application. Storm drainage will be captured in the proposed inlets and drain to the batch detention ponds.

PARKSIDE ON THE RIVER GTII - PHASE 1 - TSS REMOVAL SUMMARY - FULLY-DEVELOPED																		
DRAINAGE AREA	BMP TYPE	MAX TSS REMOVAL EFFICIENCY	BASIN AREA	PRE-DEVELOPMENT I.C.	PROPOSED I.C.							POST-DEVELOPMENT I.C.		TCEQ REQUIRED 80% TSS LOAD REMOVAL	CITY OF GEORGETOWN REQUIRED 85% POND TSS LOAD REMOVAL	PROVIDED TSS LOAD REMOVAL	VOLUME REQUIRED	VOLUME PROVIDED
					SECTIONS 4, 7A & 7B	SECTION 5	SECTIONS 6A & 6B	SECTIONS 9A & 10A	SECTIONS 9B & 10B	GTII PH 1	FUTURE	AC	%					
			AC	AC	AC	AC	AC	AC	AC	AC	AC	AC		LB	LB	LB	CF	CF
BDP-01	BATCH DETENTION POND	91%	149.38	0.00	0.00	0.00	0.00	0.00	0.13	13.64	31.42	45.19	30%	39,333	41,792	45,725	506,427	583,283
BDP-04 (EX)	BATCH DETENTION POND	91%	33.21	0.00	0.16	0.52	11.99	0.09	0.00	2.22	1.43	16.41	49%	14,283	15,176	15,176	87,130	95,617
TOTAL:			182.59	0.00	0.16	0.52	11.99	0.09	0.13	15.86	32.85	61.60	34%	53,617		60,901		
1 - FOR THE GEORGETOWN TSS REMOVAL REQUIREMENT, WE CONSIDER 85% OF TSS REMOVAL FOR THE DRAINAGE AREA THAT DRAINS TOWARD THE BATCH DETENTION PONDS.																		

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.

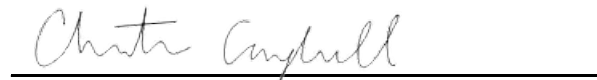
Signature

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: Christine Campbell, P.E.

Date: 10/03/2024

Signature of Customer/Agent:



Regulated Entity Name: Parkside on the River GTII - Phase 1

Project Information

Potential Sources of Contamination

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

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

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

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

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

- ☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
- ☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
- ☒ Fuels and hazardous substances will not be stored on the site.
- 2. ☒ **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
- 3. ☒ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- 4. ☒ **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

- 5. ☒ **Attachment C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
 - ☒ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.
 - ☐ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- 6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: San Gabriel River

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

The objective of this section is to describe measures to prevent or reduce the discharge of pollutants to drainage systems or watercourses. Measures include reducing the chance for spills, stopping the source of spills, containing and cleaning up spills, properly disposing of spill materials, and training employees.

The following practices will be followed for spill prevention and cleanup:

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills of toxic or hazardous material will be reported to the Owner and to the appropriate State or local government agency, regardless of the size.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.
- The site superintendent responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer onsite.
- Any reportable quantity hydrocarbon or hazardous material spill should be reported to the TCEQ at the following 24-hour toll free number 1-800-832-8224.

For a spill of Reportable Quantity:

- Initial notification. Upon the determination that a reportable discharge or spill has occurred, the responsible person shall notify the agency as soon as possible but not later than 24 hours after the discovery of the spill or discharge.
- Method of notification. The responsible person shall notify the agency in any reasonable manner including by telephone, in person, or by any other method approved by the agency. In all cases, the initial notification shall provide, to the extent known, the information listed in subsection (d) of Title 30, Part I, Chapter 327, Rule §327.3. Notice provided under this section satisfies the federal requirement to notify the State Emergency Response Commission in the State of Texas.
- Notification of local government authorities. If the discharge or spill creates an imminent health threat, the responsible person shall immediately notify and cooperate with local emergency authorities. The responsible party will cooperate with the local emergency authority in providing support to implement appropriate notification and response actions. The local emergency authority, as necessary, will implement its emergency management plan, which may include notifying and evacuating affected persons. In the absence of a local emergency authority, the responsible person shall take reasonable measures to notify potentially affected persons of the imminent health threat.
- As soon as possible, but no later than two (2) weeks after discovery of the spill or discharge, the Contractor shall reasonably attempt to notify the Owner (if identifiable) or Occupant of the property upon which the discharge or spill occurred as well as the occupants of any property that the Contractor believes is adversely affected.

More information on spill rules and appropriate responses is available on the TCEQ website at:
<http://www.tceq.texas.gov/response/>

Vehicle and Equipment Maintenance:

- If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
- Regularly inspect onsite vehicles and equipment for leaks and repair immediately.
- Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- Always use secondary containment, such as drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
 - Place drip pans or absorbent materials under paving equipment when not in use.
 - Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
 - Promptly transfer used fluids to the proper waste or recycling drums. Do not leave full drip pans or other containers lying around.
 - Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over the waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
 - Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all of the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

ATTACHMENT B – POTENTIAL SOURCES OF CONTAMINATION

Once grading activities begin, erosion of bare soil during rainfall events is the most common source of contamination. Silt fences will be installed at the beginning of the grading operation to minimize the potential for transport of the soil offsite.

Asphalt products will be used on this project. After placement of asphalt, emulsion, or coatings, the applicant will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt curing time, the applicant should maintain standby personnel and equipment to contain any asphalt wash-off should an unexpected rain occur.

During construction activities, potential sources of contamination would include petroleum products leaking from construction equipment. The contractor will be advised to keep the equipment in working order and report any spills per the spill response plan.

Other potential sources of contamination include hydraulic fluid and diesel fuel from mechanical equipment and vehicles, as well as paints and chemicals used on site. Any spills shall be handled according to the Spill Response Actions in Attachment A.

ATTACHMENT C – SEQUENCE OF MAJOR ACTIVITIES

The first activity of construction will be to install the erosion control measures, consisting of silt fences, tree protection, storm drains, inlet protection, rock berms, and stabilized construction entrances. Temporary erosion control measures will remain in place throughout the duration of construction and will be required to be maintained by the contractor to ensure proper functionality, especially after storm events. All disturbed areas to remain pervious will be vegetated using the procedures detailed in the construction plans and all temporary erosion control measures will be removed upon revegetation. Construction activities associated with this application are expected to disturb approximately 41.8 acres of the site.

Major Construction Activities and Sequencing:

The major construction activities for this project will include and be sequenced as follows:

1. Established Best Management Practices shall consist of the following: silt fencing, rock berms, temporary spoils areas, concrete truck washout pits, and temporary construction entrances (Estimated area to be disturbed = 0.63 Acres). These items are to remain and be maintained throughout all construction activities.

2. Initial site mass grading operation including right-of-way and first grading. (Estimated area to be disturbed = 13.4 Acres)
3. Installation of utilities including storm, water, and wastewater (Estimated area to be disturbed = 1.1 Acres)
4. Construction of street/driveway pavement including backfill behind curbs (estimated area to be disturbed = 4.7 Acres)
5. Total Construction (estimated area to be disturbed = 41.8 Acres)
6. Final soil stabilization for the site and removal of temporary BMPs once the soil has been stabilized.

The contractor is responsible for implementing and maintaining the storm water pollution prevention plan which includes maintaining all the necessary erosion controls throughout construction.

ATTACHMENT D – TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

As shown on the Construction Erosion Control Plans, temporary BMP practices and measures will include installing silt fences, inlet protection, rock berms, stabilized construction entrances, a concrete truck washout, and a temporary spoils area prior to beginning grading operations on the site. Temporary measures are intended to provide a method of slowing the upgradient flow, onsite flow or runoff from the construction site in order to allow sediment and suspended solids to settle out of the water. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features. As a temporary BMP, silt fences will be installed to reduce pollutants. BMP measures utilized in this plan are intended to allow storm water to continue downstream after passing through for treatment.

Site Preparation:

The methodology for pollution prevention of all on-site stormwater will include a) the erection of silt fences along the downgradient boundary of the construction activities, b) installation of inlet protection at all inlets, c) installation of stabilized construction entrances to reduce the dispersion of sediment from the site, and d) installation of a construction staging area.

Construction:

All installed erosion control measure will be inspected, and if necessary, repaired before any additional construction begins, as well as periodically throughout the construction process. The contractor will be responsible for all maintenance of erosion control measures, as well as the installation of all remaining on-site control measures, including the concrete truck washout, as necessary.

ATTACHMENT E – REQUEST TO TEMPORARILY SEAL A FEATURE

There are no sensitive features on-site within Parkside on the River GTII – Phase 1 as shown in the geologic assessment and construction plans. There will be no sealing of sensitive features on the site.

ATTACHMENT F – STRUCTURAL PRACTICES

The site flows and upgradient run off will encounter a batch detention pond.

ATTACHMENT G – DRAINAGE AREA MAPS

Refer to the construction plans attached.

ATTACHMENT H – TEMPORARY SEDIMENT POND(S) PLANS AND CALCULATIONS

The batch detention ponds will act as temporary and permanent sedimentation ponds. The proposed batch detention pond (BDP-01) provides 583,283 CF of water quality volume.

The calculated temporary sedimentation pond volume required is calculated below.

Calculation: Required Volume = (Rainfall Depth*Runoff Coefficient*Drainage Area*120%)
= 1.50 in. * 0.13 * 75.87 acres * 120%
= 64,445 CF

ATTACHMENT I – INSPECTION AND MAINTENANCE FOR BMPs

See construction plans included with this application submittal.

Temporary Best Management Practices (BMPs) and measures will be used during construction to prevent pollution of groundwater, surface water and naturally occurring environmental features. Silt fences, inlet protection, rock berms, stabilized construction entrances, tree protection, concrete washout area, and a temporary spoils area will be installed prior to beginning construction and prior to commencement of any of the activities defined in the sequence of construction as Attachment C. Inspection and maintenance of the on-site controls shall be performed during the site clearing and rough grading process. Weekly inspections will be documented in an inspection report. The inspection reports will document maintenance activities, sediment removal, and any modifications to the erosion and sedimentation controls. The perimeter fence shall be regularly monitored to ensure that the buffers remain no-construction zones until the site work has been completed and authorization has been granted by the engineer. Refer to the construction plans attached for specific controls and details.

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 run-off from the site, and through the use of silt fences placed immediately downstream of disturbed areas and inlet protection at all inlets. To minimize destruction to any portion of the Recharge Zone, on-site perimeter silt fence will also be implemented for pertinent areas throughout the entirety of construction. The Contractor is expected to inspect the controls weekly and after significant rainfalls to ensure proper function. When silt accumulates six (6) inches in depth the Contractor shall promptly remove the silt from the controls.

BMPs and measures will prevent pollutants from entering surface streams or the aquifer by intercepting stormwater potentially carrying sediment and other pollutants. BMPs and measures will implement stabilized construction entrances, a construction stockpiling/staging area, and a concrete washout area to help minimize pollutant run-off and erosion generated during construction. Paved streets and driveways adjacent to these sites will be cleaned regularly to remove excess mud, dirt or rock tracked from the site. Sedimentation will be concentrated only in these areas for efficient maintenance. Water trucks will be on-site as necessary to aid in cleaning regularly to remove excess mud, dirt or rock tracked from the site. Sedimentation will be concentrated only in these areas for efficient maintenance. Water trucks will be on-site as necessary to aid in controlling dust. BMPs will be implemented to limit/prevent contaminated inflow from entering surface streams or the aquifer. These practices are to include the following measures: the use of silt fence and inlet protection. The fabricated silt fence barricade will provide help to reduce the likelihood of contaminated runoff from entering the aquifer. If any sensitive features are identified by TCEQ inspections, or during excavation or construction, measures appropriate to the sensitivity of the discovered feature will be enacted. No blasting is proposed.

Temporary Erosion and Sedimentation Notes:

1. The Contractor shall maintain, install erosion/sedimentation controls and tree/natural protective fencing prior to any site preparation work (clearing, grubbing or excavation).
2. The placement of erosion/sedimentation controls and tree/natural area protective fencing shall be in accordance with the TCEQ Technical Guidance Manual and the approved Erosion and Sedimentation Control Plan. No erosion controls shall be placed beyond the property lines of the site unless written permission has been obtained from adjacent property owners.
3. A pre-construction conference shall be held on-site with the Contractor, design engineer/permit applicant and Environmental Inspector after installation of the erosion/sedimentation and tree/natural area protection measures and prior to beginning any site preparation work. The Contractor shall notify the Environmental Inspector at least three (3) days prior to the meeting date.
4. Any major variation in materials or locations of controls or fences from those shown on the approved plans will require a revision and must be approved by the reviewing engineer, environmental specialist or city arborist as appropriate. Minor changes to be made as field revisions to the Erosion and Sedimentation

Control Plan may be required by the Environmental Inspector during the course of construction to correct control inadequacies.

5. The Contractor is required to inspect the controls at weekly intervals and after significant rainfall events to ensure that they are functioning properly. The person(s) responsible for maintenance of controls shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches.
6. Prior to final acceptance by the City, haul roads and waterway crossing constructed for temporary Contractor access must be removed, accumulated sediment removed from the waterway and the area restored to the original grade and revegetated. All land clearing debris shall be disposed of in approved soil disposal sites.
7. All work must stop if a void in the rock substrate is discovered, which is one (1) square foot in total area, blows air from within the substrate, and/or consistently received water during any rain event. At this time it is the responsibility of the project manager to immediately contact an Environmental Inspector for further investigation.
8. All slopes shall be sodded or seeded with approved grass, grass mixtures or ground cover suitable to the area and season in which they are applied.
9. Silt fences, rock berms, sedimentation basins and similarly recognized techniques and materials shall be employed during construction to prevent point source sedimentation loading of downstream facilities. Such installation shall be regularly inspected for effectiveness. Additional measures may be required if, in the opinion of the City Engineer, they are warranted.
10. All temporary erosion control measures shall not be removed until final inspection and approval of the project by the engineer. It shall be the responsibility of the Contractor to maintain all temporary erosion control structures and to remove each structure as approved by the engineer.
11. Any dirt, mud, rocks, debris, etc., that is spilled, tracked, or otherwise deposited on any existing paved street shall be cleaned up immediately.

Dewatering Operations

1. Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMP area under way, inspect weekly to verify continued BMP implementation.
2. Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur.
3. Unit-specific maintenance requirements are included with the description of each technology.
4. Sediment removed during the maintenance of a dewatering device may be either spread onsite and stabilized, or disposed of at a disposal site.
5. Sediment that is commingled with other pollutants must be disposed of in accordance with all applicable laws and regulations.

ATTACHMENT J – SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES

Contractors will ensure that existing vegetation is preserved where attainable and that disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to temporary seeding, permanent seeding, mulching, geotextiles, sodding, tree protection, preservation of natural vegetation and other appropriate measures. All slopes shall be sodded or seeded with approved grass, grass mixtures or ground cover suitable to the area and season in which they are applied. Except as noted below, stabilization shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the activity has temporarily or permanently ceased. Refer to the construction plans attached for the TCEQ Notes, the Existing Conditions & Tree Survey, and the Erosion & Sedimentation Control Plan.

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

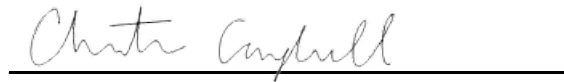
Signature

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

Print Name of Customer/Agent: Christine Campbell, P.E.

Date: 10/03/2024

Signature of Customer/Agent



Regulated Entity Name: Parkside on the River GTII - Phase 1

Permanent Best Management Practices (BMPs)

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

1. ☒ Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
☐ N/A
2. ☒ These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.
☒ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

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

☐ N/A

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

☐ N/A

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

☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.

☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.

☒ The site will not be used for low density single-family residential development.

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

☐ **Attachment A - 20% or Less Impervious Cover Waiver.** The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.

☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.

☒ The site will not be used for multi-family residential developments, schools, or small business sites.

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

- ☒ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
 - ☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
 - ☐ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.
7. ☒ **Attachment C - BMPs for On-site Stormwater.**
- ☒ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
 - ☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.
8. ☒ **Attachment D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.
- ☐ N/A
9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.
- ☒ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.
 - ☐ **Attachment E - Request to Seal Features.** A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.
10. ☒ **Attachment F - Construction Plans.** All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:
- ☒ Design calculations (TSS removal calculations)
 - ☒ TCEQ construction notes
 - ☒ All geologic features
 - ☒ All proposed structural BMP(s) plans and specifications
- ☐ N/A

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

Responsibility for Maintenance of Permanent BMP(s)

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

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

ATTACHMENT B – BMP'S FOR UPGRADIENT STORMWATER

There is no upgradient, offsite flow that will be captured in the proposed storm infrastructure and routed to the BMPs.

ATTACHMENT C – BMP'S FOR ON-SITE STORMWATER

Onsite areas considered in this description are all part of the overall Parkside on the River development Runoff flows northeast towards the creek before reaching the South Fork San Gabriel River. The proposed infrastructure is sized to treat a minimum 80% of the TSS as defined by the TCEQ and 85% of the batch detention pond TSS as defined by the City of Georgetown. In the fully-developed condition, the proposed batch detention pond (BDP-01) will treat a total of approximately 45.19 acres of impervious cover (0.13 acres from Sections 9B & 10B, 13.64 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 31.42 acres of future impervious cover from future Parkside on the River developments) and provide 45,725 lbs of TSS removal. In the fully-developed condition, the existing Parkside on the River Phase 3 Sections 6A & 6B batch detention pond (BDP-04) will treat a total of approximately 16.41 acres of impervious cover (0.16 acres from Parkside on the River Phase 3 Sections 4, 7A & 7B, 0.52 acres from Parkside on the River Phase 3 Section 5, 11.99 acres from Parkside on the River Phase 3 Sections 6A & 6B, 0.09 acres from Parkside on the River Sections 9A & 10A, 2.22 acres proposed with Parkside on the River GTII – Phase 1, and an estimated 1.43 acres of future impervious cover from future Parkside on the River developments) and provide 15,176 lbs of TSS removal.

Refer to the Construction Plans for the sediment treatment details.

ATTACHMENT D – BMP'S FOR SURFACE STREAMS

There are no surface streams on the proposed site. No portion of the project site is located within the 100-year floodplain as defined by FEMA FIRM Panel No. 48491C0460F, dated December 20, 2019.

ATTACHMENT F – CONSTRUCTION PLANS

Construction plans are attached.

ATTACHMENT I – MEASURES OF MINIMIZING SURFACE STREAM CONTAMINATION

There are no surface streams located on the proposed site.

ATTACHMENT G – INSPECTION, MAINTENANCE, REPAIR, AND RETROFIT PLAN

Batch Detention Pond

1. Inspections should take place a minimum of twice a year and be documented in inspection reports. Inspection reports should include a field logbook documenting date, location, and action items. 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.
2. 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.
3. 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.
4. 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.
5. 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.).
6. 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.
7. 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.
8. 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.



An amended copy of this document will be provided to the TCEQ within thirty days of any changes in the following information.

Responsible Party for Maintenance: HM GPII Development, Inc.
Address: 1101 North Lamar Boulevard
City, State, Zip: Austin, TX 78703
Telephone Number: (512) 481-0303

Signature of Responsible Party Blake Magee

10/03/2024



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

I Blake Magee,
Print Name
President,
Title - Owner/President/Other
of HM GPII Development, Inc.,
Corporation/Partnership/Entity Name
have authorized Christine Campbell, P.E.
Print Name of Agent/Engineer
of HR Green Development TX, 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:

Blake Magee
Applicant's Signature

10/2/24
Date

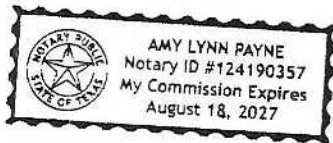
THE STATE OF Texas §
County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared Blake Magee 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 2nd day of October, 2024

Amy Lynn Payne
NOTARY PUBLIC

Amy Lynn Payne
Typed or Printed Name of Notary



MY COMMISSION EXPIRES: 8/18/27

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Parkside on the River GTII - Phase 1

Regulated Entity Location: Located west of Parkside Parkway. North of Parkside on the River Phase 3 Sections 6A & 6B.

Name of Customer: HM GPII Development, Inc.

Contact Person: Blake Magee

Phone: 512-481-0303

Customer Reference Number (if issued):CN _____

Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays

☐ Travis

☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar

☐ Medina

☐ Uvalde

☐ Comal

☐ Kinney

Application fees must be paid by check, certified check, or money order, payable to the **Texas Commission on Environmental Quality**. Your canceled check will serve as your receipt. **This form must be submitted with your fee payment.** This payment is being submitted to:

☐ Austin Regional Office

☐ San Antonio Regional Office

☒ Mailed to: TCEQ - Cashier

☐ Overnight Delivery to: TCEQ - Cashier

Revenues Section

Mail Code 214

P.O. Box 13088

Austin, TX 78711-3088

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

<i>Type of Plan</i>	<i>Size</i>	<i>Fee Due</i>
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	75.87 Acres	\$ 6,500.00
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: Chitra Campbell

Date: 10/03/2024

Application Fee Schedule

Texas Commission on Environmental Quality

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

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

Extension of Time Requests

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



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.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)		<input type="checkbox"/> Other
2. Customer Reference Number (if issued)		3. Regulated Entity Reference Number (if issued)
CN		RN

[Follow this link to search for CN or RN numbers in Central Registry**](#)

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)					
<input checked="" type="checkbox"/> New Customer		<input type="checkbox"/> Update to Customer Information					
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)		<input type="checkbox"/> Change in Regulated Entity Ownership					
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:					
HM GPII Development, Inc.							
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)				
0805619207	32095877919						
11. Type of Customer:	<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited				
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:					
12. Number of Employees		13. Independently Owned and Operated?					
<input checked="" type="checkbox"/> 0-20 <input checked="" type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following:							
<input checked="" type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Owner & Operator							
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:							
15. Mailing Address:	1011 North Lamar Boulevard						
	City	Austin	State	TX	ZIP	78703	ZIP + 4
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)			
				Blake@blakemageeco.com			
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)			
(512) 481-0303				() -			

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)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> 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.)	
Parkside on the River GTII - Phase 1	

23. Street Address of the Regulated Entity: <i>(No PO Boxes)</i>	Located west of Parkside Parkway.							
	North of Parkside on the River Phase 3 Sections 6A & 6B.							
	City	Georgetown	State	TX	ZIP	78628	ZIP + 4	
24. County	Williamson County							
Enter Physical Location Description if no street address is provided.								
25. Description to Physical Location:	Located west of Parkside Parkway. North of Parkside on the River Phase 3 Sections 6A & 6B.							
26. Nearest City					State		Nearest ZIP Code	
Georgetown					TX		78628	
27. Latitude (N) In Decimal:		30.610745			28. Longitude (W) In Decimal:		-97.769025	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
30	36	38.68N	97	46	8.49W			
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)		
1521				236115				
33. What is the Primary Business of this entity? <i>(Do not repeat the SIC or NAICS description.)</i>								
Land Development - Single Family Residential								
34. Mailing Address:	1011 North Lamar Boulevard							
	City	Austin	State	TX	ZIP	78703	ZIP + 4	
35. E-Mail Address:		blake@blakemageeco.com						
36. Telephone Number			37. Extension or Code			38. Fax Number <i>(if applicable)</i>		
(512) 481-0303						() -		

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

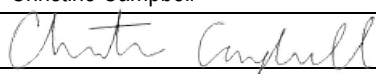
<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source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

SECTION IV: Preparer Information

40. Name:	Christine Campbell	41. Title:	Project Manager
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 872-6696		() -	christine.campbell@hrgreen.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:	HR Green Development TX, LLC	Job Title:	Project Manager
Name(In Print) :	Christine Campbell	Phone:	(512) 872-6696
Signature:		Date:	10/3/2024

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

SPECIAL WARRANTY DEED WITH VENDOR'S LIEN

THE STATE OF TEXAS §
 § KNOW ALL PERSONS BY THESE PRESENTS:
COUNTY OF WILLIAMSON §

That **GEORGETOWN PROPERTIES II, LLC**, a Texas limited liability company ("**Grantor**"), for and in consideration of the sum of \$10.00 and other valuable consideration to the undersigned paid by the Grantee herein named, the receipt and sufficiency of which are hereby acknowledged, and for the further consideration of the execution and delivery by Grantee of its promissory note of even date herewith (the "**Note**"), payable to the order of Grantor, as therein provided, bearing interest at the rate therein specified and containing provisions for acceleration of maturity and for attorney's fees, the payment of which Note is secured by a vendor's lien retained herein and additionally secured by a deed of trust of even date herewith to Stewart N. Rice, Trustee (said vendor's lien and deed of trust lien may be referred to collectively as the "**Liens**"); has GRANTED, SOLD and CONVEYED, and by these presents does GRANT, SELL and CONVEY unto **HM GPII, LP**, a Texas limited partnership ("**Grantee**"), all of the following-described real property in Williamson County, Texas and all improvements thereon (collectively, the "**Property**"), to wit:

- Tract 1: All that certain tract or parcel of land containing 314.00 acres, more or less, situated in the John Berry Survey, Abstract No. 98, the Isaac Donagan Survey, Abstract No. 178, the Robert Milby Survey, Abstract No. 459, the Daniel Medlock Survey, Abstract No. 839, the W.E. Pate Survey, Abstract No. 836, the A.H. Porter Survey, Abstract No. 490, and the Joseph Thompson Survey, Abstract No. 608, all in Williamson County, Texas, being more particularly described by metes and bounds on **Exhibit A** attached hereto; and
- Tract 2: All that certain tract or parcel of land containing 47.417 acres, more or less, situated in the I. & G.N. R.R. Survey, Abstract No. 744, the J.D. Johns Survey, Abstract No. 365, the J.T. Church Survey, Abstract No. 140 and the Key West Irrigation Survey, Abstract No. 711, all in Williamson County, Texas, being more particularly described by metes and bounds in **Exhibit B** attached hereto.

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in anywise belonging; and Grantor does hereby bind itself, its successors and assigns to WARRANT AND FOREVER DEFEND all and singular the Property unto Grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by, through and under Grantor but not otherwise.

The vendor's lien against and superior title to the Property (excluding the portion of the Property described by metes and bounds on Exhibit C, which is not encumbered by the Liens or superior title) are retained until the Note and all other sums payable thereunder, shall have been paid in full in accordance with the terms thereof, when this deed shall become absolute.

Grantor hereby EXCEPTS from this conveyance, and RESERVES to Grantor and Grantor's successors and assigns as holders of the Liens, the following described easements (collectively, the "Temporary Easements"):

1. A temporary, non-exclusive easement and right-of-way (the "**Access/Drainage Easement**") over and across the Property in the proposed locations for streets shown on the conceptual plan (the "**Plan**") attached hereto as Exhibit D and incorporated herein for all purposes. Only upon foreclosure of the Liens as to a portion of the Property, the Access/Drainage Easement will be for the use and benefit of the owners of the part of the Property subject to such foreclosure (the "**Foreclosed Land**") in order to build roads, including curbs, gutters and related storm sewer and drainage improvements, so as to provide free and uninterrupted ingress and egress for pedestrian and vehicular traffic from and to the Foreclosed Land.
2. A temporary, non-exclusive easement (the "**Public Utility Easement**") over and across the Property in the proposed locations for public rights of way and/or public utility easements shown on the Plan. Only upon foreclosure of the Liens as to a portion of the Property, the Public Utility Easement will be for the use and benefit of the owners of the Foreclosed Land in order to lay, install, maintain, replace, repair and remove utility pipes, lines and conduits (including without limitation, water, wastewater, electric, telephone, cable television, internet and gas lines and systems), and to connect to and continually use same to provide service to the Foreclosed Land.
3. Temporary easements over the Property in the areas immediately adjacent to and within 20' of the Access/Drainage Easement and the Public Utility Easement, as reasonably may be necessary to build and/or upgrade improvements within the areas covered by the Access/Drainage Easement and the Public Utility Easement in the event of foreclosure of the Liens.

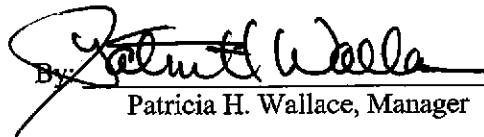
Upon recordation of a full release of the Liens, the Temporary Easements shall automatically and concurrently terminate without any additional action required by Grantor or Grantee. Further, as each final subdivision plat covering a portion of the Property is recorded, all Temporary Easements within such platted portion of the Property (and only within such platted portion of the Property) will automatically and concurrently terminate without any additional action required by Grantor or Grantee.

This conveyance is made by Grantor and accepted by Grantee subject to the matters set forth on **Exhibit E** attached hereto and incorporated herein for all purposes, to the extent, and only to the extent, that the same may still be in force and effect and applicable to the Property.

Current ad valorem taxes on the Property having been prorated, the payment thereof is assumed by Grantee.

EXECUTED to be effective February 26, 2021.

GEORGETOWN PROPERTIES II, LLC, a Texas
limited liability company

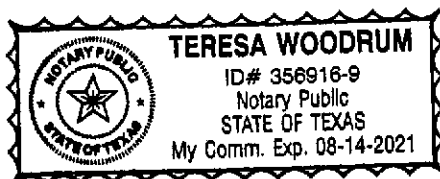
By: 
Patricia H. Wallace, Manager

Address for Grantee:

HM GPIL, LP
c/o 1011 N. Lamar Blvd
Austin, Texas 78703

THE STATE OF TEXAS §
§
COUNTY OF NUECES §

This instrument was acknowledged before me on February 24, 2021, by Patricia H. Wallace, Manager of **GEORGETOWN PROPERTIES II, LLC**, a Texas limited liability company, on behalf of said limited liability company.




NOTARY PUBLIC, State of Texas

County: Williamson
 Project: Parkside on the River
 Job No.: A201301
 MB No.: 20-011

EXHIBIT A

FIELD NOTES FOR 314.00 ACRES

Being a tract containing 314.00 acres of land located in the J.B. Berry Survey, Abstract Number 98, the R. Milby Survey, Abstract Number 459, the A.H. Porter Survey, Abstract Number 490, the D. Medlock Survey, Abstract Number 839, the J. Thompson Survey, Abstract Number 608, the W.E. Pate Survey, Abstract Number 836, and the I. Donagan Survey, Abstract Number 178 in Williamson County, Texas. Said 314.00 acre tract being all of a called 314.00 acre tract of land recorded in the name of Georgetown Properties II, LLC, in Document Number 2012043969, Official Public Records Williamson County (O.P.R.W.C.). Said 314.00 acres being more particularly described by metes and bounds as follows (*bearings are referenced to the Texas Coordinate System, NAD 1983, Central Zone*):

Beginning at a 1/2-inch iron rod found for the southwesterly corner of said 314.00 acre tract, said iron rod being a corner point on the westerly line of a called 1,143.511 acre tract of land recorded in the name of HM Parkside, LP in Document Number 2018114043, O.P.R.W.C., said iron rod also being on the easterly line of the remainder portion of a called 363.204 acre tract of land recorded in the name of SFSG Investments, LP in Document Number 2017001815, O.P.R.W.C. (Tract 1);

Thence, with the common line between said 314.00 acre tract and said 363.204 remainder tract, the following two (2) courses and distances;

1. North 14 degrees 08 minutes 44 seconds East, a distance of 718.12 feet to a capped iron rod set stamped "GBI Partners";
2. North 21 degrees 22 minutes 11 seconds West, a distance of 2,850.00 feet to a point in the center of the South San Gabriel River for the northwesterly corner of said 314.00 acre tract, said point being the most northerly corner of said 363.204 acre remainder tract, the most easterly corner of the remainder portion of a called 491.95 acre tract of land recorded in the name of Henry B. Tippe in Volume 570, Page 483, Williamson County Deed Records (W.C.D.R.), the southeasterly corner of a called 220.663 acre tract of land recorded in the name of Supak, et al in Document Number 2014081883, O.P.R.W.C.;

Thence, with the approximate centerline of said South San Gabriel River, and the southerly line of said 220.663 acre tract; the southerly line of a called 38.44 acre tract of land recorded in the name of Fitch Holdings, LLC in Document Number 202002383, O.P.R.W.C.; the southerly line of a called 68.096 acre tract of land recorded in the name of Yomac, Ltd. in Volume 2322, Page 474, W.C.D.R.; the southerly line of a called 100.390 acre tract of land recorded in the name of Overlook at Sangabriel, LLC in Document Number 2018056058, O.P.R.W.C., and the southerly line of a called 168.62 acre tract of land recorded in the name of Zamin, LP in Document Number 201403274, O.P.R.W.C. the following sixteen (16) courses and distances;

1. North 19 degrees 18 minutes 23 seconds East, a distance of 68.74 feet;
2. North 24 degrees 38 minutes 39 seconds East, a distance of 294.23 feet;
3. North 10 degrees 20 minutes 18 seconds East, a distance of 356.09 feet;
4. North 17 degrees 04 minutes 40 seconds East, a distance of 192.35 feet;
5. North 34 degrees 41 minutes 53 seconds East, a distance of 315.31 feet;
6. North 62 degrees 01 minutes 00 seconds East, a distance of 406.22 feet;
7. South 78 degrees 55 minutes 54 seconds East, a distance of 166.17 feet;
8. South 48 degrees 11 minutes 33 seconds East, a distance of 256.54 feet;
9. South 22 degrees 52 minutes 53 seconds East, a distance of 238.10 feet;
10. South 12 degrees 36 minutes 04 seconds East, a distance of 252.83 feet;
11. South 25 degrees 33 minutes 47 seconds East, a distance of 187.48 feet;
12. South 42 degrees 10 minutes 08 seconds East, a distance of 526.14 feet;
13. South 48 degrees 08 minutes 34 seconds East, a distance of 649.29 feet;
14. South 65 degrees 31 minutes 10 seconds East, a distance of 680.90 feet;
15. North 80 degrees 59 minutes 58 seconds East, a distance of 679.93 feet;
16. North 74 degrees 28 minutes 07 seconds East, a distance of 360.45 feet to a corner point on a westerly line of aforesaid 1,143.511 acre tract;

Thence, with the common line between said 314.00 acre tract and said 1,143.511 acre tract the following thirteen (13) courses and distances;

1. North 68 degrees 48 minutes 05 seconds East, a distance of 57.92 feet;
2. South 22 degrees 18 minutes 08 seconds East, a distance of 624.71 feet to a 1/2-inch iron pipe found;
3. South 22 degrees 05 minutes 52 seconds East, a distance of 1,596.68 feet to a 1/2-inch iron rod found;

4. 75.21 feet along the arc of a curve to the left, said curve having a central angle of 03 degrees 59 minutes 50 seconds, a radius of 1,078.00 feet and a chord which bears South 88 degrees 54 minutes 08 seconds West, a distance of 75.19 to a 1/2-inch iron rod found;
5. South 86 degrees 54 minutes 33 seconds West, a distance of 321.28 feet to a capped iron rod found stamped "CSA, Ltd."
6. 1,349.11 feet along the arc of a curve to the left, said curve having a central angle of 79 degrees 02 minutes 14 seconds, a radius of 978.00 feet and a chord which bears South 47 degrees 23 minutes 47 seconds West, a distance of 1,244.66 feet to a 1/2-inch iron rod found;
7. South 07 degrees 52 minutes 40 seconds West, a distance of 108.32 to a cotton spindle found;
8. 839.65 feet along the arc of a curve to the right, said curve having a central angle of 52 degrees 10 minutes 41 seconds, a radius of 922.00 feet and a chord which bears South 33 degrees 58 minutes 00 seconds West, a distance of 810.93 feet to a 1/2-inch iron rod found;
9. South 60 degrees 03 minutes 21 seconds West, a distance of 538.21 feet to a capped iron rod found stamped "CSA, Ltd."
10. 175.01 feet along the arc of a curve to the left, said curve having a central angle of 09 degrees 18 minutes 07 seconds, a radius of 1,078.00 feet and a chord which bears South 55 degrees 24 minutes 17 seconds West, a distance of 174.82 feet to a capped iron rod found stamped "CSA, Ltd."
11. North 43 degrees 23 minutes 44 seconds West, a distance of 1,170.13 feet to a 1/2-inch iron rod found;
12. 326.94 feet along the arc of a curve to the left, said curve having a central angle of 32 degrees 24 minutes 32 seconds, a radius of 578.00 feet and a chord which bears North 59 degrees 36 minutes 01 seconds West, a distance of 322.60 feet to a 1/2-inch iron rod found;
13. North 75 degrees 48 minutes 18 seconds West, a distance of 431.73 feet to the **Point of Beginning** and containing 314.00 acres of land.

GBI Partners, LP
 TBPLS Firm No. 10194150
 Ph: 512-296-2675
 June 11, 2020



EXHIBIT B

County: Williamson
 Project: Parkside on the River
 Job No.: A201301
 MB No.: 20-008

FIELD NOTES FOR 47.417 ACRES

Being a tract containing 47.417 acres of land located in the J.D. Johns Survey, Abstract Number 365, the J.T. Church Survey, Abstract Number 140, the I & G.N.R.R. Survey, Abstract Number 744 and the Key West Irrigation Survey, Abstract Number 711 in Williamson County, Texas. Said 47.417 acre tract being all of a called 47.42 acre tract of land recorded in the name of Georgetown Properties II, LLC, in Document Number 2012043969, Official Public Records Williamson County (O.P.R.W.C.). Said 47.417 acres being more particularly described by metes and bounds as follows *(bearings are referenced to the Texas Coordinate System, NAD 1983, Central Zone)*:

Beginning at a capped iron rod found stamped CS Ltd. for the southwesterly corner of said 47.20 acre tract, said iron rod being the southeasterly corner of The Preserve, Phase II, a subdivision as recorded in Cabinet GG, Slides 55-59 of the Williamson County Plat Records (W.C.P.R.), said iron rod also being on the northerly Right-of-Way (R.O.W.) line of F.M. 2243 (80' wide);

Thence, with the common line between said 47.42 acre tract and The Preserve Phase II the following three (3) courses and distances;

1. North 02 degrees 49 minutes 30 seconds West, a distance of 508.18 feet to a capped iron rod found stamped CS Ltd.;
2. North 78 degrees 45 minutes 22 seconds West, a distance of 814.82 feet to a 5/8-inch iron rod set stamped GBI Partners;
3. North 01 degrees 38 minutes 02 seconds East, a distance of 585.33 feet to a 5/8-inch iron rod set stamped GBI Partners;

Thence, continuing with the common line between said 47.42 acre tract and The Preserve Phase II, North 55 degrees 20 minutes 46 seconds East, passing at a distance of 7.04 feet a capped iron rod found stamped Bury Partners, said iron rod being the most easterly northeast corner of Lot 58 of said The Preserve, Phase II, also being the most southerly corner of Lot 59 of The Preserve Phase I, a subdivision as recorded in Cabinet EE, Slides 310-316 of the W.C.P.R., in all, a distance of 1,650.65 feet to a capped iron rod found stamped Bury Partners;

Thence, with the common line between said 47.42 acre tract and The Preserve Phase I, North 80 degrees 15 minutes 15 seconds East, a distance of 114.85 feet to the most northerly northeast corner of said 47.42 acre tract, also being an angle point on the westerly line of a called 1,143.511 acre tract of land recorded in the name of HM Parkside, LP, from which, a capped iron rod found stamped Bury Partners, bears South 67 degrees East, a distance of 0.66 feet;

Thence, with the easterly line of said 47.42 acre tract and the westerly line of said 1,143.511 acre tract the following sixteen (16) courses and distances;

1. South 34 degrees 39 minutes 43 seconds East, a distance of 126.11 feet to a capped iron rod found stamped CS Ltd.;
2. South 55 degrees 20 minutes 17 seconds West, a distance of 120.00 feet, from which a capped iron rod found stamped CS Ltd. found, bears South 68 degrees East, a distance of 0.55 feet;
3. 124.70 feet along the arc of a curve to the right, said curve having a central angle of 119 degrees 05 minutes 02 seconds, a radius of 60.00 feet and a chord which bears South 24 degrees 52 minutes 55 seconds West, a distance of 103.44 feet to a capped iron rod found stamped CS Ltd.;
4. South 34 degrees 39 minutes 43 seconds East, a distance of 97.07 feet to a capped iron rod found stamped CS Ltd.;
5. South 55 degrees 20 minutes 17 seconds West, a distance of 450.00 feet to a capped iron rod found stamped CS Ltd.;
6. South 34 degrees 39 minutes 43 seconds East, a distance of 239.78 feet to a capped iron rod found stamped CS Ltd.;
7. South 32 degrees 58 minutes 10 seconds East, a distance of 42.22 feet to a capped iron rod found stamped CS Ltd.;
8. 203.97 feet along the arc of a curve to the right, said curve having a central angle of 22 degrees 04 minutes 17 seconds, a radius of 529.50 feet and a chord which bears North 77 degrees 26 minutes 53 seconds East, a distance of 202.71 feet to a 5/8-inch iron rod found;
9. 674.39 feet along the arc of a curve to the left, said curve having a central angle of 45 degrees 58 minutes 20 seconds, a radius of 840.50 feet and a chord which bears South 03 degrees 29 minutes 00 seconds East, a distance of 656.44 feet to an 80-D nail found;
10. South 26 degrees 28 minutes 10 seconds East, a distance of 150.25 feet to an 80-D nail found;
11. 39.79 feet along the arc of a curve to the right, said curve having a central angle of 91 degrees 11 minutes 17 seconds, a radius of 25.00 feet and a chord which bears South 19 degrees 07 minutes 36 seconds West, a distance of 35.72 feet to an 80-D nail found;
12. South 27 degrees 14 minutes 19 seconds East, a distance of 65.03 feet to a 5/8-inch iron rod found;

13. 38.91 feet along the arc of a curve to the right, said curve having a central angle of 89 degrees 10 minutes 31 seconds, a radius of 25.00 feet and a chord which bears South 71 degrees 03 minutes 54 seconds East, a distance of 35.10 feet to a capped iron rod found stamped Bury Partners;
14. South 26 degrees 28 minutes 10 seconds East, a distance of 157.44 feet to a capped iron rod found stamped Bury Partners;
15. 155.33 feet along the arc of a curve to the right, said curve having a central angle of 16 degrees 06 minutes 30 seconds, a radius of 552.50 feet and a chord which bears South 18 degrees 24 minutes 54 seconds East, a distance of 154.82 feet to a capped iron rod found stamped Bury Partners;
16. South 28 degrees 25 minutes 04 seconds West, a distance of 160.70 feet to a capped iron rod found stamped Bury Partners for the southeasterly corner of said 47.42 acre tract and the southwesterly corner of said 1,143.511 acre tract, said iron rod also being on the northerly R.O.W. line of aforesaid F.M. 2243;

Thence, with the southerly line of said 47.42 acre tract and the northerly R.O.W. line of said F.M. 2243 the following three (3) courses and distances;

1. South 79 degrees 26 minutes 30 seconds West, a distance of 229.74 feet to a concrete monument found;
2. 373.03 feet along the arc of a curve to the right, said curve having a central angle of 07 degrees 27 minutes 09 seconds, a radius of 2,867.94 feet and a chord which bears South 83 degrees 33 minutes 16 seconds West, a distance of 372.77 feet to a concrete monument found;
3. South 87 degrees 09 minutes 58 seconds West, a distance of 241.10 feet to the **Point of Beginning** and containing 47.417 acres of land.

GBI Partners, LP
TBPLS Firm No. 10194150
Ph: 512-296-2675
May 20, 2020



EXHIBIT C

County: Williamson
 Project: Parkside on the River
 Job No.: A191301
 MB No.: 21-006

FIELD NOTES FOR 5.297 ACRES

Being a tract of land containing 5.297 acres of land located in the J. Thompson Survey, Abstract Number 608, the I. Donagan Survey, A-178 and the W.E. Pate Survey, A-836 in Williamson County, Texas. Said 5.297 acre tract being out of a called 314.00 acre tract of land recorded in the name of Georgetown Properties II, LLC in Document Number 2012043969, O.P.R.W.C. Said 5.297 acres being more particularly described by metes and bounds as follows (*bearings are referenced to the Texas Coordinate System, NAD 1983, Central Zone*):

Commencing at a southwesterly corner of said 314.00 acre tract, being a northwesterly corner of the remainder a called of a called 1,146.511 acre tract of land recorded in the name of HM Parkside, LP in Document Number 2018114043, O.P.R.W.C., also being on the easterly line of a called 60.5184 acre tract of land recorded in the name of AVP Ranch, Ltd. in Document Number 2011081794, O.P.R.W.C.;

Thence, with the common line between said 314.00 acre tract and said 1,143.511 acre remainder tract, the following three (3) courses and distances;

1. South 75 degrees 48 minutes 18 seconds East, a distance of 431.73 feet;
2. 326.94 feet along the arc of a curve to the right, said curve having a central angle of 32 degrees 24 minutes 32 seconds, a radius of 578.00 feet and a chord which bears South 59 degrees 36 minutes 01 seconds East, a distance of 322.60 feet;
3. South 43 degrees 23 minutes 44 seconds East, a distance of 1,170.13 feet to the **Point of Beginning** of the herein described tract;

Thence, through and across said 314.00 acre tract the following seven (7) courses and distances;

1. 190.87 feet along the arc of a curve to the right, said curve having a central angle of 9 degrees 32 minutes 48 seconds, a radius of 1,145.50 feet and a chord which bears North 55 degrees 16 minutes 56 seconds East, a distance of 190.65 feet;
2. North 60 degrees 03 minutes 21 seconds East, a distance of 538.21 feet;
3. 778.17 feet along the arc of a curve to the left, said curve having a central angle of 52 degrees 10 minutes 41 seconds, a radius of 854.50 feet and a chord which bears North 33 degrees 58 minutes 00 seconds East, a distance of 751.56 feet;
4. North 7 degrees 52 minutes 40 seconds East, a distance of 108.32 feet;

5. 1,442.23 feet along the arc of a curve to the right, said curve having a central angle of 47 degrees 23 minutes 47 seconds, a radius of 1,045.50 feet and a chord which bears North 47 degrees 23 minutes 47 seconds East, a distance of 1,330.56 feet;
6. North 86 degrees 54 minutes 53 seconds East, a distance of 321.27 feet;
7. 51.41 feet along the arc of a curve to the right, said curve having a central angle of 2 degrees 34 minutes 17 seconds, a radius of 1,145.50 feet and a chord which bears North 88 degrees 11 minutes 22 seconds East, a distance of 51.41 feet to a point on a common line between said 314.00 acre tract and said 1,146.51 acre remainder tract;

Thence, with the common line between said 314.00 acre tract and said 1,146.591 acre tract the following nine (9) courses and distances;

1. South 22 degrees 05 minutes 52 seconds East, a distance of 72.94 feet;
2. 75.21 feet along the arc of a curve to the left, said curve having a central angle of 3 degrees 59 minutes 50 seconds, a radius of 1,078.00 feet and a chord which bears South 88 degrees 54 minutes 08 seconds West, a distance of 75.19 feet;
3. South 86 degrees 54 minutes 53 seconds West, a distance of 321.28 feet;
4. 1,349.11 feet along the arc of a curve to the left, said curve having a central angle of 79 degrees 02 minutes 14 seconds, a radius of 978.00 feet and a chord which bears South 47 degrees 23 minutes 47 seconds West, a distance of 1,244.66 feet;
5. South 7 degrees 52 minutes 40 seconds West, a distance of 108.32 feet;
6. 839.65 feet along the arc of a curve to the right, said curve having a central angle of 52 degrees 10 minutes 41 seconds, a radius of 922.00 feet and a chord which bears South 33 degrees 58 minutes 00 seconds West, a distance of 810.93 feet;
7. South 60 degrees 03 minutes 21 seconds West, a distance of 538.21 feet;
8. 175.01 feet along the arc of a curve to the left, said curve having a central angle of 9 degrees 18 minutes 07 seconds, a radius of 1,078.00 feet and a chord which bears South 55 degrees 24 minutes 17 seconds West, a distance of 174.82 feet;
9. North 43 degrees 23 minutes 44 seconds West, a distance of 67.67 feet to the **Point of Beginning** containing 5.297 acres of land.

GBI Partners, LP
TBPLS Firm No. 10194150
Ph: 512-296-2675
February 12, 2021



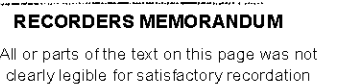
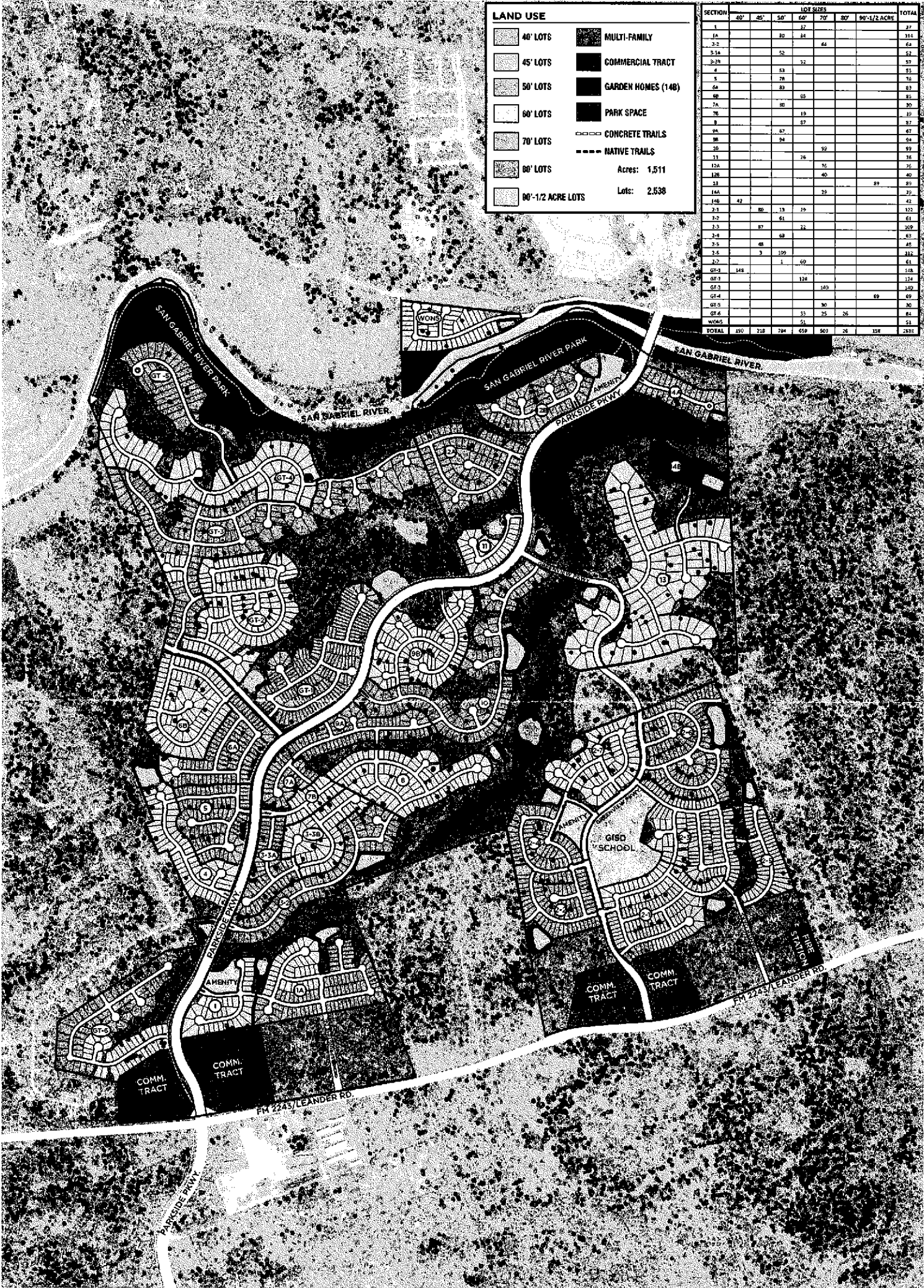


Exhibit D
Concept Plan



RECORDERS MEMORANDUM

All or parts of the text on this page was not clearly legible for satisfactory recordation

Exhibit E

Permitted Exceptions

1. Terms, conditions and stipulations of Utility Easement dated April 29, 1999, recorded under Document No. 199968547, Official Public Records of Williamson County, Texas (Tract 2).
2. Notice of Voluntary Inclusion into the Extraterritorial Jurisdiction of the City of Georgetown dated October 12, 1999, recorded under Document No. 199971384, Official Public Records of Williamson County, Texas.
3. Deed Recordation Affidavit (Edwards Aquifer Protection Plan) dated January 22, 2008, recorded under Document No. 2008006156, Official Public Records of Williamson County, Texas.
4. Terms, conditions and stipulations of Wastewater Easement dated January 11, 2017, recorded under Document No. 2017004109, Official Public Records of Williamson County, Texas.

11-GF# 202000301 JPB
RETURN TO: HERITAGE TITLE
401 CONGRESS, SUITE 1500
AUSTIN, TEXAS 78701

**ELECTRONICALLY RECORDED
OFFICIAL PUBLIC RECORDS**

2021027159

Pages: 16 Fee: \$85.00
02/26/2021 04:10 PM



Nancy E. Rister

Nancy E. Rister, County Clerk
Williamson County, Texas

PRELIMINARY PLAT
FOR
PARKSIDE ON THE RIVER
GTII PHASES 1-5
GEORGETOWN, WILLIAMSON COUNTY, TEXAS
2023-22-PP

OWNER/DEVELOPER: HM GPII, LP
1011 NORTH LAMAR BLVD.,
AUSTIN, TX 78703
(512) 481-0303
BLAKE@BLAKEMAGEECO.COM

ENGINEER/SURVEYOR: HR GREEN DEVELOPMENT TX, LLC
5508 HIGHWAY 290 WEST, SUITE 150
AUSTIN, TEXAS 78735
512.872.6696
SHERVIN.NOOSHIN@HRGREEN.COM

WATERSHED STATUS:

THIS SITE IS LOCATED IN THE SOUTH FORK OF THE SAN GABRIEL WATERSHED. THIS SITE IS LOCATED OVER THE EDWARDS AQUIFER RECHARGE ZONE AND CONTRIBUTING ZONE.

FLOODPLAIN INFORMATION:

LOTS WITHIN A SMALL PORTION OF THIS SUBDIVISION ARE ENCRoACHED BY A SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 100 YEAR FLOOD AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP NUMBER 48491C0460F, EFFECTIVE DATE DECEMBER 20, 2019, AND PER A LETTER OF MAP REVISION NUMBERED 21-06-0115P, EFFECTIVE DATE OCTOBER 14, 2021. A CONDITIONAL LETTER OF MAP REVISION (CLOMR) WOULD BE NEEDED TO RECLAIM A PORTION OF PHASE GT-5.

LEGAL DESCRIPTION:

DESCRIPTION OF 308.88 ACRES OF LAND IN THE ISAAC DONAGAN SURVEY, ABSTRACT NO. 178, THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, THE DANIEL MEDLOCK SURVEY, ABSTRACT NO. 839, THE W.E. PATE SURVEY, ABSTRACT NO. 836, THE J. B. BERRY SURVEY, ABSTRACT NO. 98, AND THE A.H. PORTER SURVEY, ABSTRACT NO. 490, WILLIAMSON COUNTY, TEXAS; BEING A PORTION OF A CERTAIN CALLED 314.00 ACRE TRACT OF LAND DESIGNATED AS TRACT 1 AND DESCRIBED IN THE SPECIAL WARRANTY DEED TO HM GPII, LP OF RECORD IN DOCUMENT NO. 2021027159, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS

BENCHMARK NOTE:

NAVD88 - GEOID12B

BM(1380)-221:
COTTON GIN SPINDLE FOUND IN THE SOUTH EDGE
OF A CONCRETE SIDEWALK
ELEVATION = 962.21 FEET.

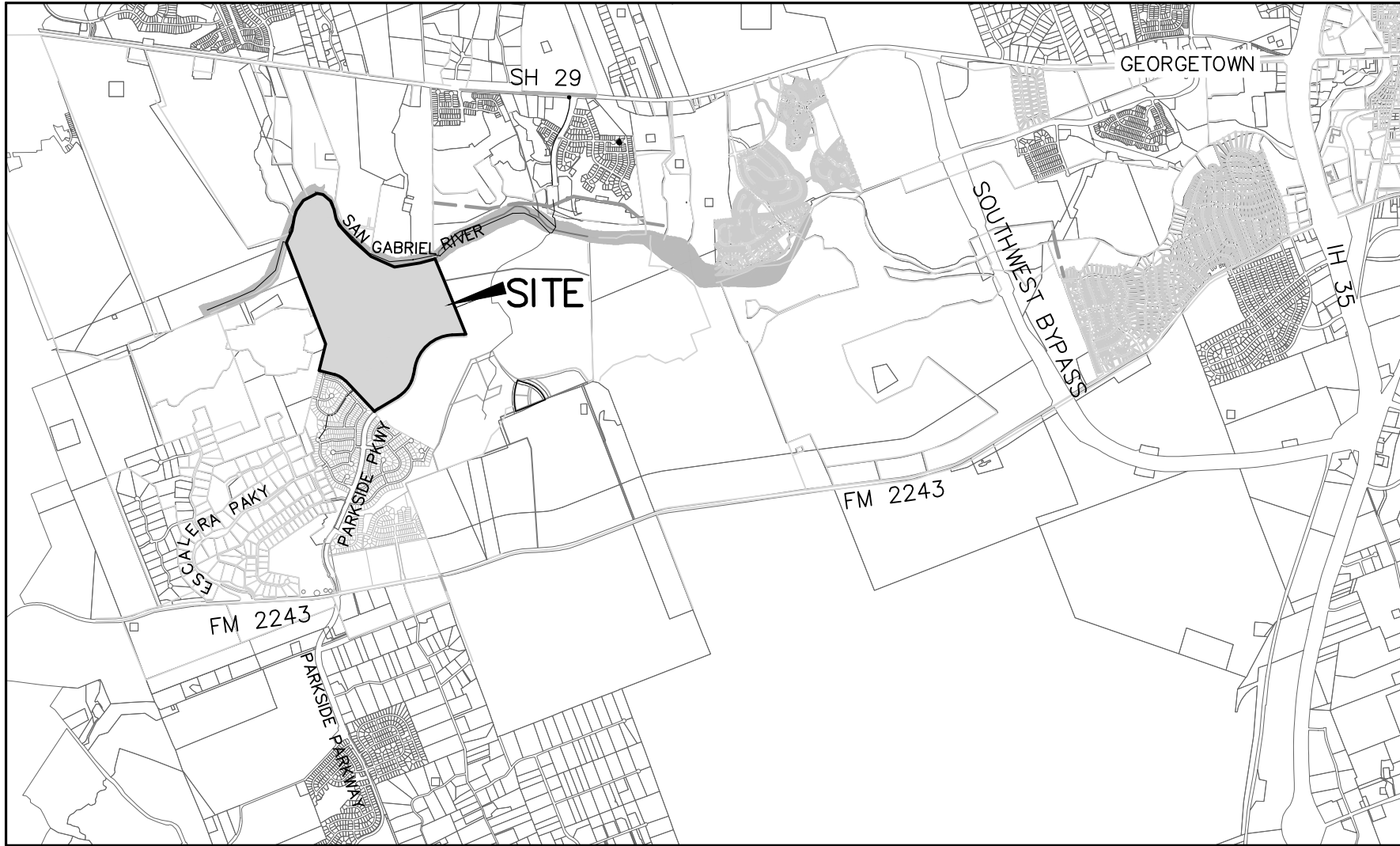
BM(1380)-700100:
MAGNAIL WITH WASHER STAMPED HR GREEN
SET IN CONCRETE RIM OF WATER MANHOLE
ELEVATION = 940.16 FEET.

BM(1380)-700200:
MAGNAIL WITH WASHER STAMPED HR GREEN
SET IN CONCRETE BASE OF BOLLARD
ELEVATION = 890.30 FEET.

STREETS

NAME	CLASSIFICATION	ROW WIDTH	MIN. PVMT WIDTH (F-F)	CURB TYPE	DESIGN SPEED	LENGTH (LF)	CUL-DE-SAC	MAINTENANCE AUTHORITY
HIGH GLORY PARKWAY	NEIGHBORHOOD COLLECTOR	70'	40'	24" CURB & GUTTER	30 MPH	1,902	NONE	PUBLIC
WALKING VALLEY LANE	LOCAL STREET	60'	35'	24" CURB & GUTTER	25 MPH	2,073	NONE	PUBLIC
TREASURE HOUSE WAY	LOCAL STREET	60'	35'	24" CURB & GUTTER	25 MPH	1,543	NONE	PUBLIC
NARROW PATH LANE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	226	NONE	PUBLIC
DOROTHY MAE CIRCLE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	2,670	NONE	PUBLIC
ANNAMAE GREEN COVE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	242	60' RADIUS	PUBLIC
FORGIVEN MAGDALENE PATH	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	406	60' RADIUS	PUBLIC
HOLY HILL	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	957	NONE	PUBLIC
TRUE KINGDOM DRIVE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	792	60' RADIUS	PUBLIC
STRONG FOUNDATION PLACE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	1,117	NONE	PUBLIC
RHEMA RIDGE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	519	NONE	PUBLIC
GRACIOUS SHEPHERD WAY	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	1,079	NONE	PUBLIC
LOVING GRACE CIRCLE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	1,757	NONE	PUBLIC
BELOVED COURT	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	213	60' RADIUS	PUBLIC
COLD SMOKE COURT	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	171	60' RADIUS	PUBLIC
SOLID CORNERSTONE CIRCLE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	2,245	NONE	PUBLIC
WATER WALKER WAY	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	1,356	NONE	PUBLIC
EMPTY SEPULCHER COVE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	382	60' RADIUS	PUBLIC
BRIGHT DOVE DRIVE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	753	60' RADIUS	PUBLIC
REVELATION WONDER RIDGE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	2,254	60' RADIUS	PUBLIC
BRAVE CEPHAS COURT	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	268	60' RADIUS	PUBLIC
LIVING WATER COURT	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	184	60' RADIUS	PUBLIC
CHOSEN CHILD COVE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	129	60' RADIUS	PUBLIC
COOL WATERS COVE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	155	60' RADIUS	PUBLIC
SHADOW MOUNTAIN DRIVE	LOCAL STREET	50'	28'	24" CURB & GUTTER	25 MPH	1,652	(2) 60' RADIUS	PUBLIC

INITIAL SUBMITTAL DATE: 07/31/2023



VICINITY MAP
SCALE: 1"=4000'

PROJECT SUMMARY

TOTAL SITE AREA: 308.88 ACRES

RESIDENTIAL LOTS..... - 473 (122.44 ACRES)

CONDOMINIUM LOTS..... - 1 (19.11 ACRES)

OPEN SPACE LOTS..... - 14 (22.64 ACRES)

OPEN SPACE /PARKLAND LOTS..... - 3 (27.12 ACRES)

OPEN SPACE /DRAINAGE LOTS..... - 3 (17.37 ACRES)

OPEN SPACE /DRAINAGE /WATER QUALITY LOTS..... - 4 (67.36 ACRES)

TOTAL LOTS..... - 498 (276.04 ACRES)

NUMBER OF BLOCKS..... - 19

STREETS (ROW AREA): 32.84 ACRES

SHEET INDEX

SHEET NUMBER SHEET TITLE

- 1 COVER SHEET
- 2 OVERALL PRELIMINARY PLAT
- 3 PHASING PLAN
- 4 PRELIMINARY PLAT (1 OF 5)
- 5 PRELIMINARY PLAT (2 OF 5)
- 6 PRELIMINARY PLAT (3 OF 5)
- 7 PRELIMINARY PLAT (4 OF 5)
- 8 PRELIMINARY PLAT (5 OF 5)
- 9 CURVE TABLES
- 10 PRELIMINARY PLAT NOTES

Approved by the City of
Georgetown on:

March 18, 2024

Per Section 3.08.070.E of the
Unified Development Code, this
Preliminary Plat will expire 24
months from date of approval if
final plat is not recorded.

*Alterations to this plan set may
require amendment, review, and
additional fee. UDC 3.09.080

SUBMITTAL DATE : JANUARY 19, 2024

SUBMITTED BY :

Sherwin Nooshin

1/19/2024

SHERVIN NOOSHIN, P.E.

DATE

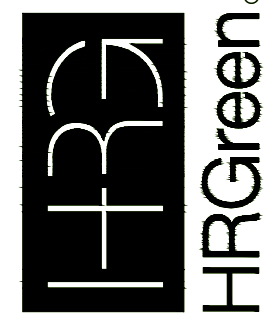
HR GREEN DEVELOPMENT TX, LLC
5508 HIGHWAY 290 WEST, SUITE 150
AUSTIN, TEXAS 78735
512.872.6696

FOR REVIEW. THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF REVIEW
UNDER THE AUTHORITY OF SHERVIN NOOSHIN, P.E. #96807 ON JANUARY 19,
2024. IT IS NOT TO BE USED FOR BIDDING, PERMIT, OR CONSTRUCTION.



Know what's below.
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SUITE 150
AUSTIN, TX 78735
512.872.6696
HRGREEN.COM
TPE NO. 10384
TPELS NO. 10194101



COVER SHEET

PARKSIDE ON THE RIVER
GTII PHASES 1-5
PRELIMINARY PLAT
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: TG/MM

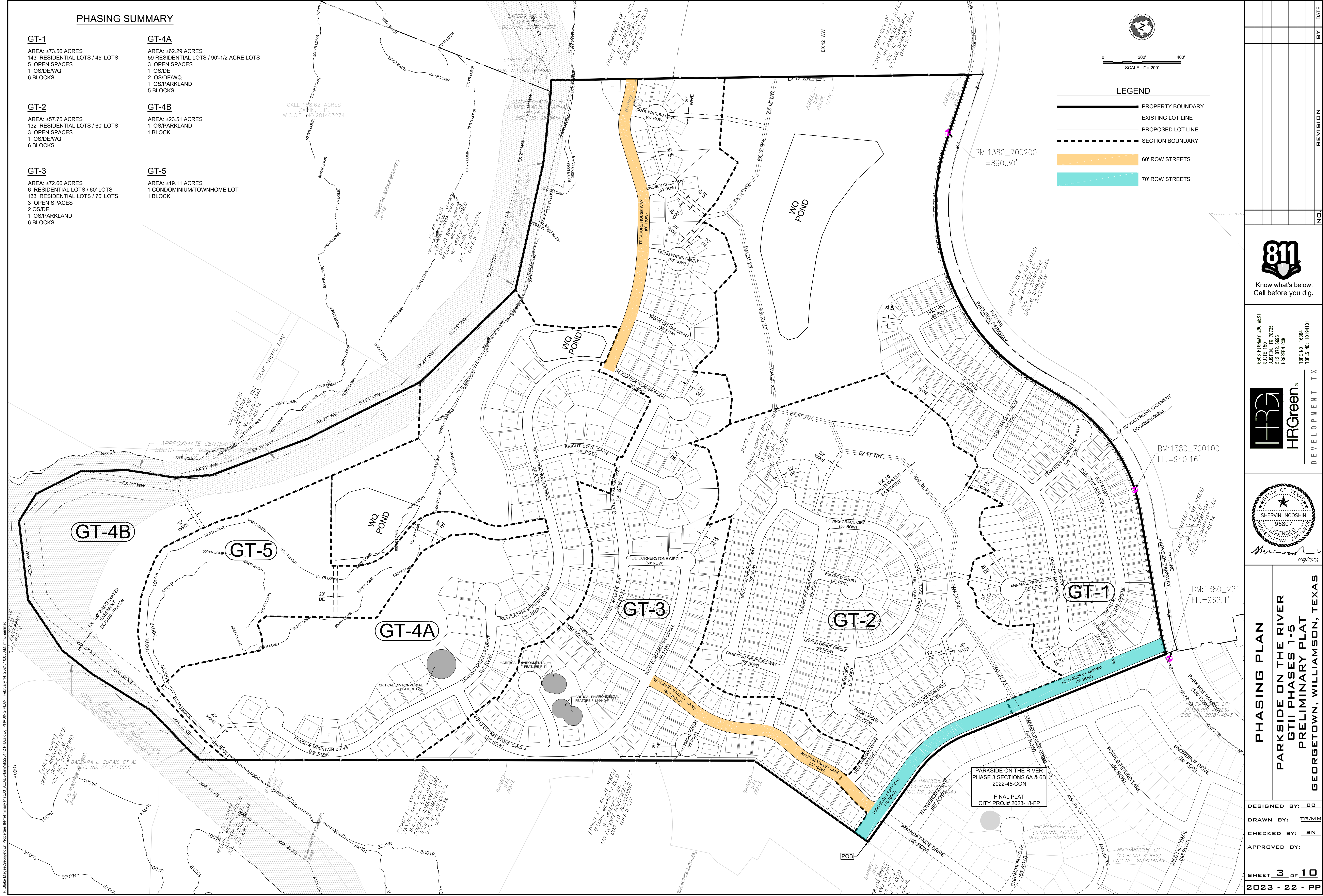
CHECKED BY: SN

APPROVED BY:

SHEET 1 OF 10

2023 - 22 - PP





PHASING SUMMARY

- GT-1**

AREA: ±73.56 ACRES
143 RESIDENTIAL LOTS / 45' LOTS
5 OPEN SPACES
1 OS/DE/WQ
6 BLOCKS
- GT-2**

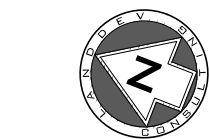
AREA: ±57.75 ACRES
132 RESIDENTIAL LOTS / 60' LOTS
3 OPEN SPACES
1 OS/DE/WQ
6 BLOCKS
- GT-3**

AREA: ±72.66 ACRES
6 RESIDENTIAL LOTS / 60' LOTS
133 RESIDENTIAL LOTS / 70' LOTS
3 OPEN SPACES
2 OS/DE
1 OS/PARKLAND
6 BLOCKS
- GT-4A**

AREA: ±62.29 ACRES
59 RESIDENTIAL LOTS / 90'-1/2 ACRE LOTS
3 OPEN SPACES
1 OS/DE
2 OS/DE/WQ
1 OS/PARKLAND
5 BLOCKS
- GT-4B**

AREA: ±23.51 ACRES
1 OS/PARKLAND
1 BLOCK
- GT-5**

AREA: ±19.11 ACRES
1 CONDOMINIUM/TOWNHOME LOT
1 BLOCK



0 200' 400'
SCALE: 1" = 200'

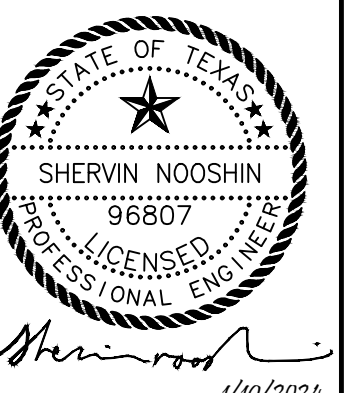
LEGEND

- PROPERTY BOUNDARY
- EXISTING LOT LINE
- PROPOSED LOT LINE
- SECTION BOUNDARY
- 60' ROW STREETS
- 70' ROW STREETS



5508 HIGHWAY 290 WEST
SUITE 150
DALLAS, TX 75235
CHRISTOPHER GREEN
HARGREEN, CON

TRF NO: 10384
TRF NO: 10194101



PHASING PLAN

PARKSIDE ON THE RIVER

GTII PHASES 1-5

PRELIMINARY PLAT

GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

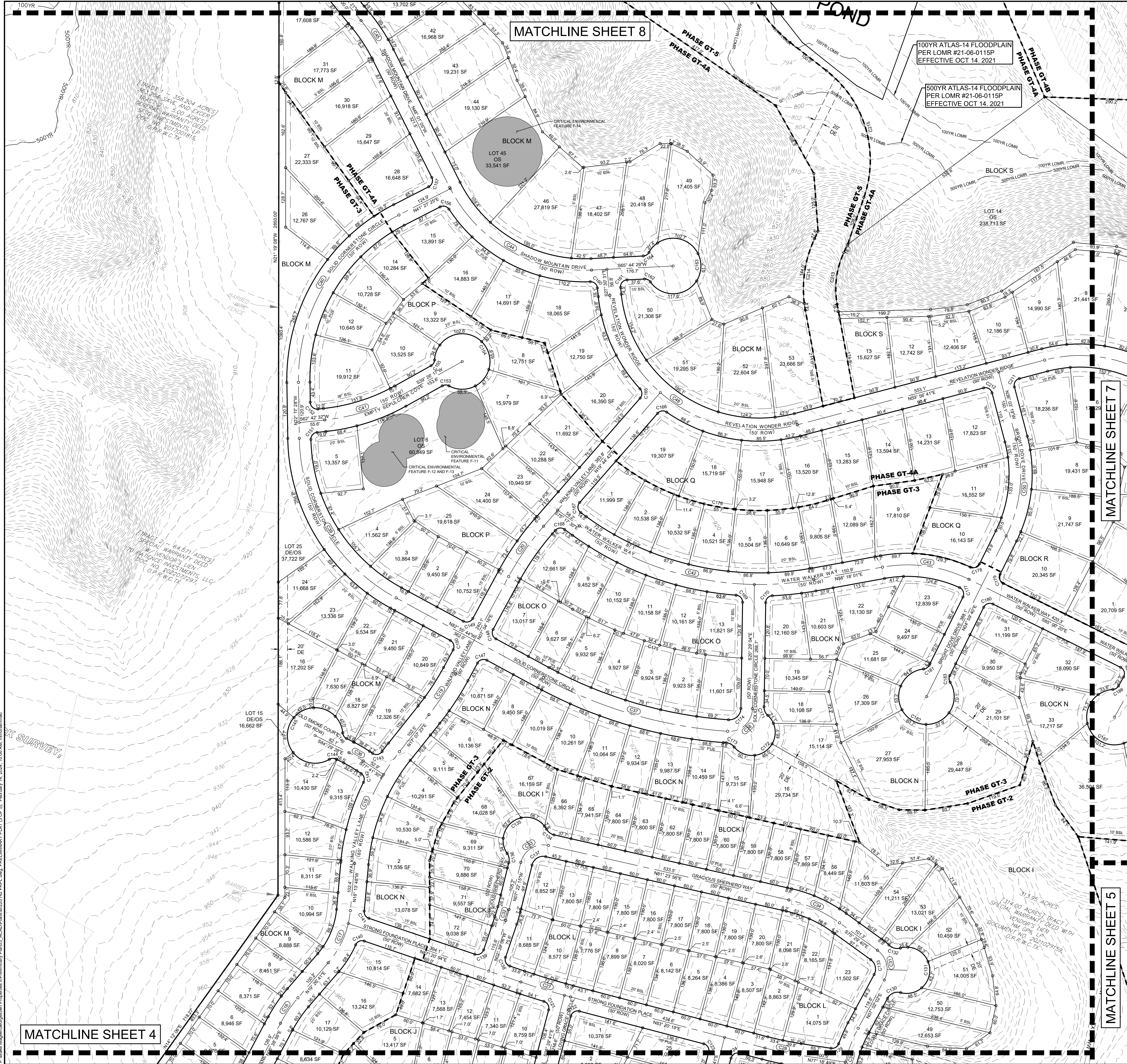
DRAWN BY: TG/MM

CHECKED BY: SN

APPROVED BY:

SHEET **3** OF **10**

2023 - 22 - PP



0 100' 200'
SCALE: 1" = 100'

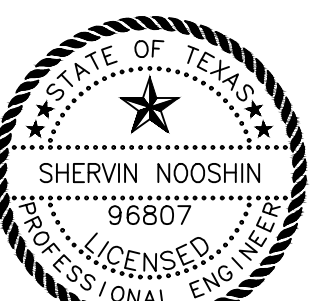
LEGEND

- PRELIMINARY PLAT BOUNDARY
- PROPOSED LOT LINE
- EXISTING MAJOR CONTOUR
- EXISTING MAJOR CONTOUR
- OS OPEN SPACE
- PUE PUBLIC UTILITY EASEMENT
- DE DRAINAGE EASEMENT
- WWE WASTEWATER EASEMENT
- STE SIGHT TRIANGLE EASEMENT
- BSL BUILDING SETBACK LINE
- 100YR LOMR 100YR FLOODPLAIN PER LOMR
- 100YR 100YR FLOODPLAIN
- 500YR LOMR 500YR FLOODPLAIN PER LOMR
- 500YR 500YR FLOODPLAIN
- REGULATORY FLOODWAY
- REGULATORY FLOODWAY PER LOMR
- PHASING BOUNDARY



Know what's below.
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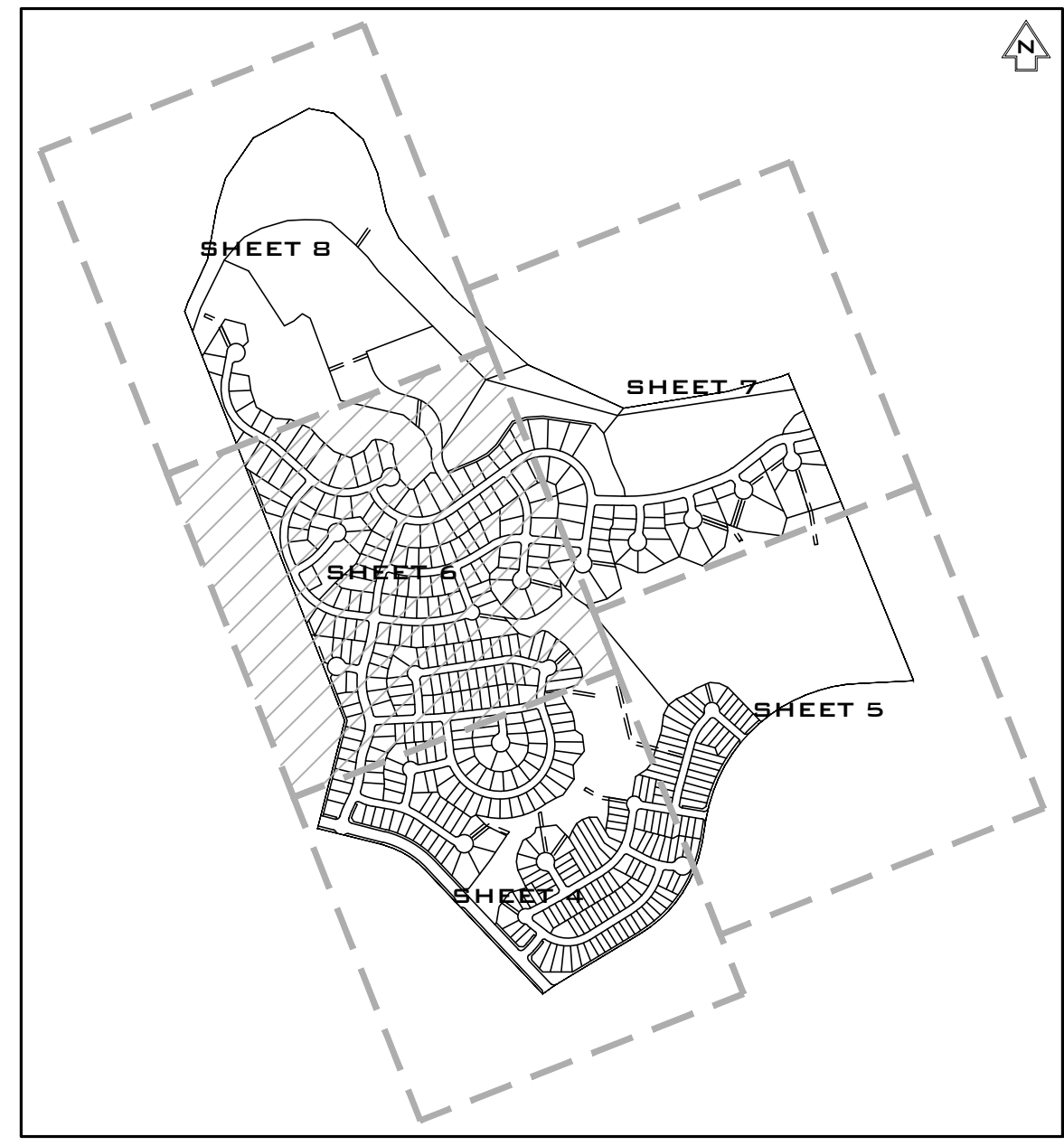
5508 HIGHWAY 290 WEST
SUITE 150
DALLAS, TX 75235
CALL 817.468.8888
HARGREEN.COM



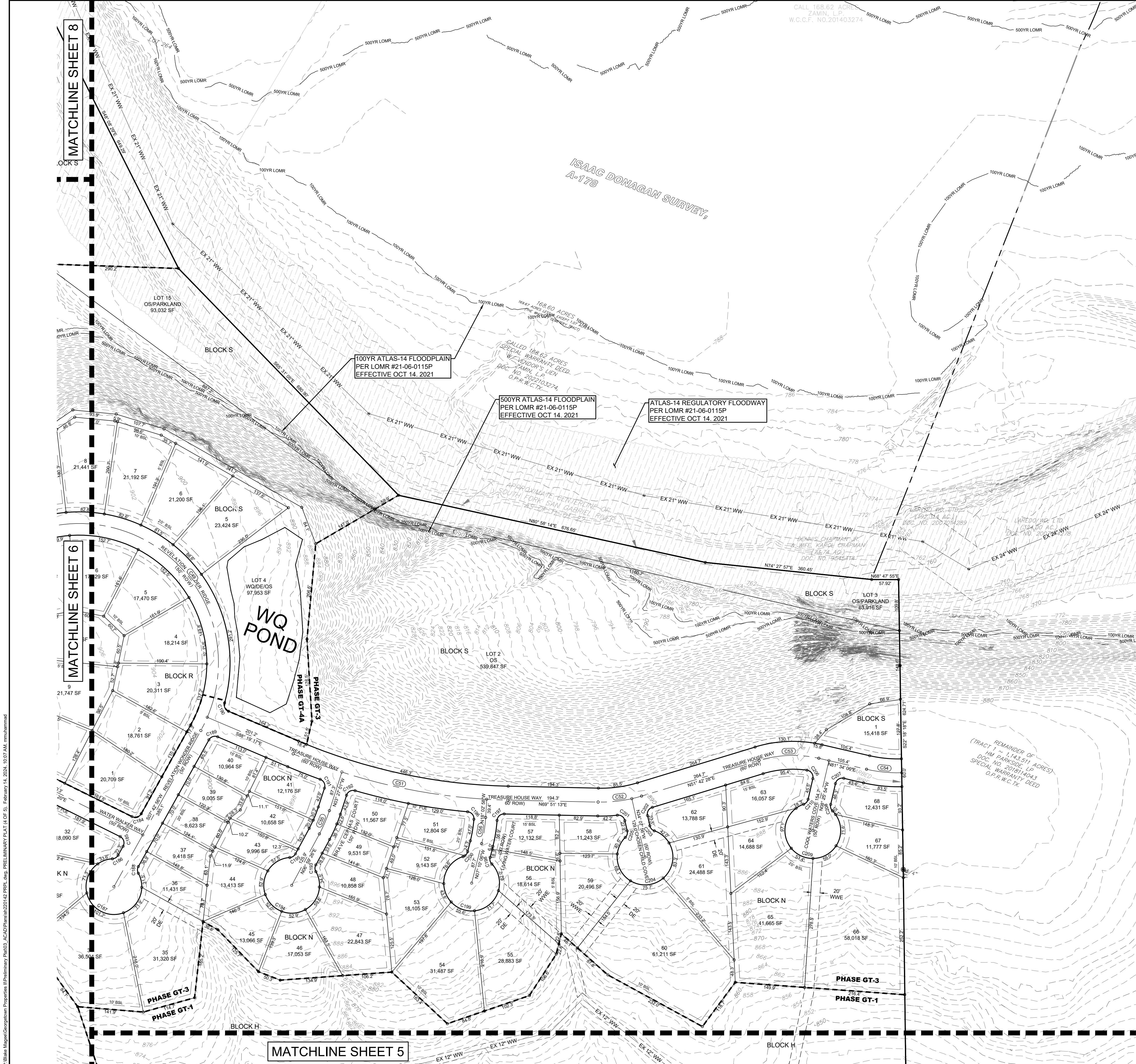
PRELIMINARY PLAT (3 OF 5)
PARKSIDE ON THE RIVER
GTII PHASES 1-5
PRELIMINARY PLAT
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: TG/MM
CHECKED BY: SN
APPROVED BY:

SHEET 6 OF 10
2023 - 22 - PP



P:\Blake_Maged\Georgetown Properties\18 Preliminary Plats\18_Preliminary Plats\18_Preliminary Plat (4 of 5). February 14, 2024, 10:07 AM, mmmmmmm



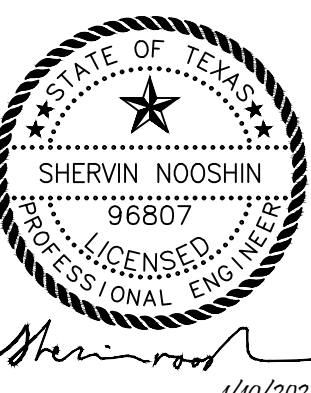
0 100' 200'
SCALE: 1" = 100'

LEGEND

- PRELIMINARY PLAT BOUNDARY
- PROPOSED LOT LINE
- EXISTING MAJOR CONTOUR
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- 500YR 500YR FLOODPLAIN
- REGULATORY FLOODWAY
- REGULATORY FLOODWAY PER LOMR
- PHASING BOUNDARY



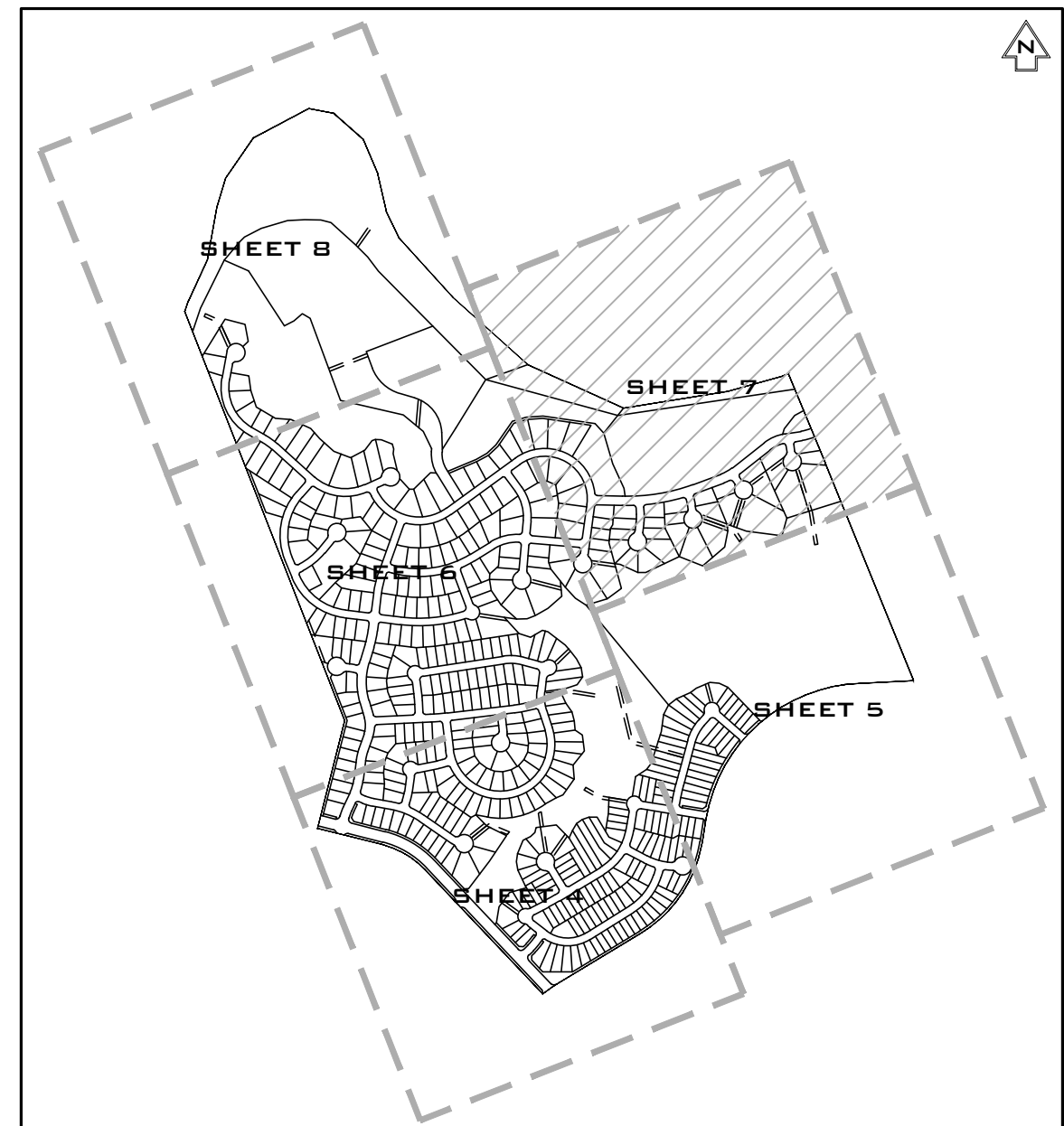
5508 HIGHWAY 290 WEST
SUITE 150
DALLAS, TX 75235
HARGREEN, CON
TPEL NO. 10194101



PRELIMINARY PLAT (4 OF 5)
PARKSIDE ON THE RIVER
GTII PHASES 1-5
PRELIMINARY PLAT
GEORGETOWN, WILLIAMSON, TEXAS

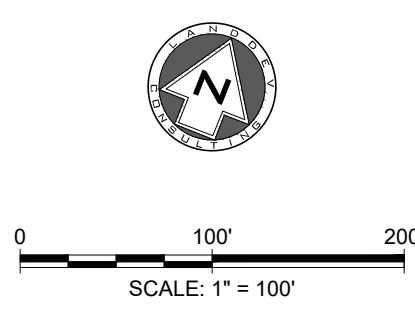
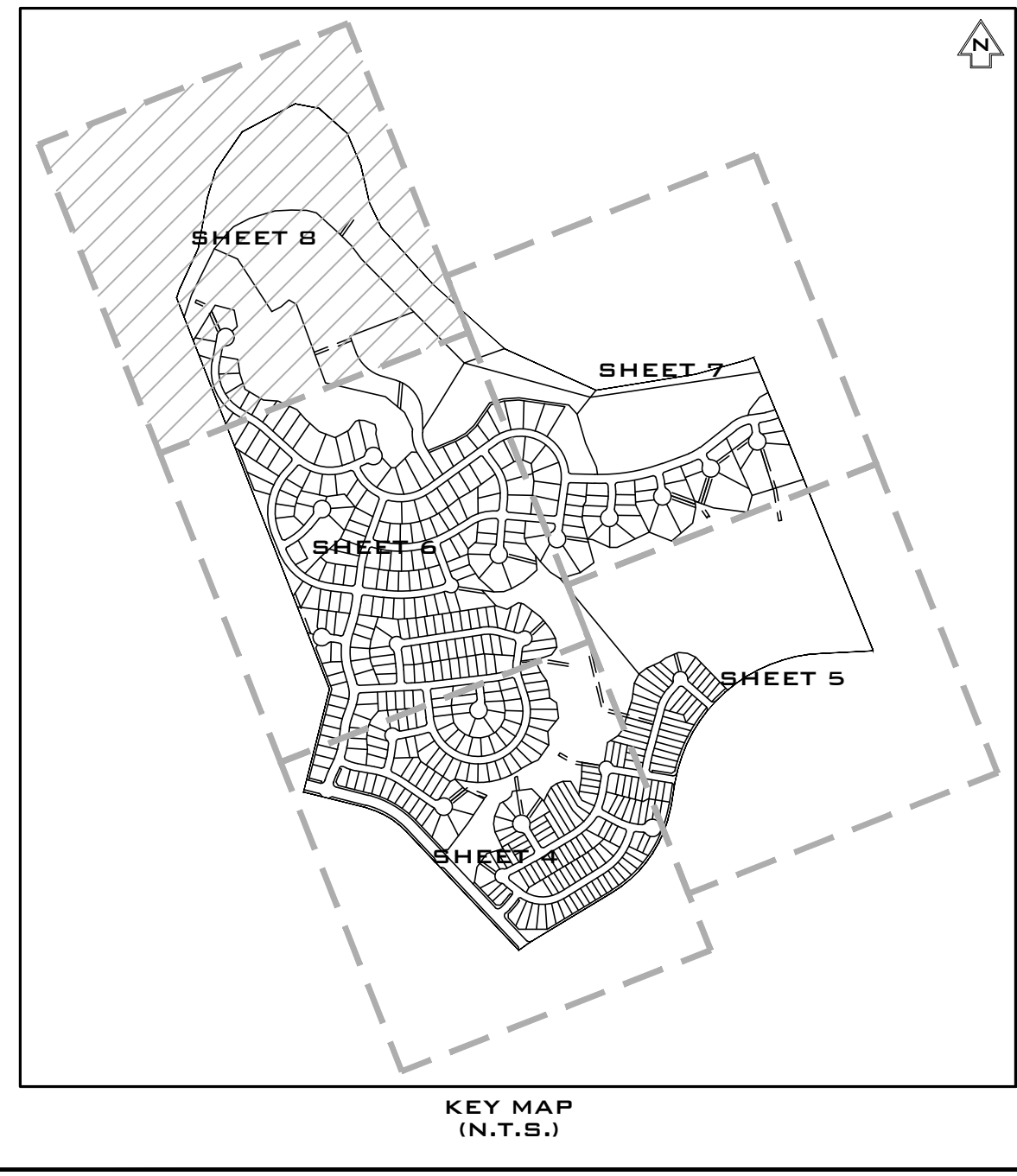
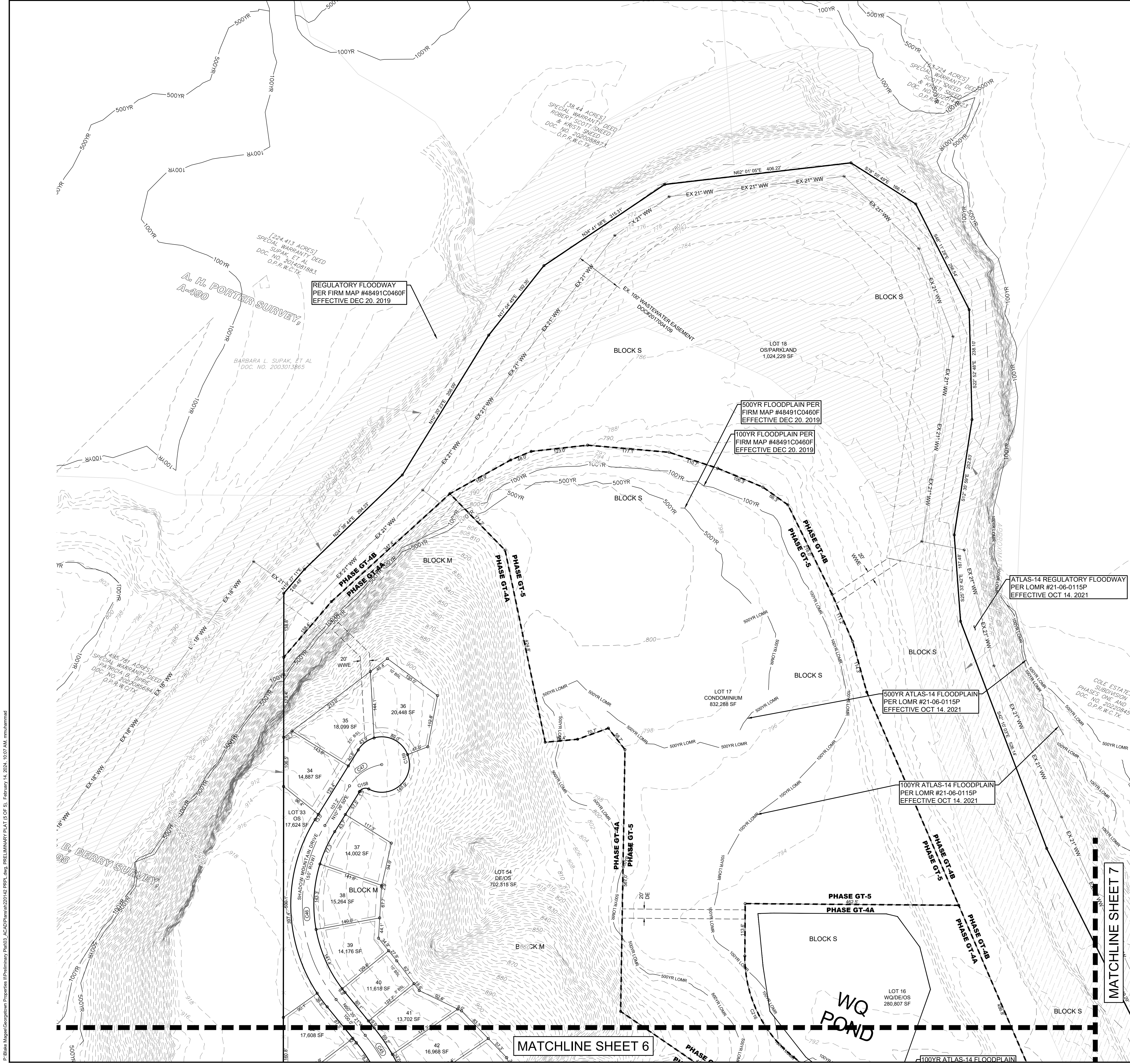
DESIGNED BY: CC
DRAWN BY: TG/MM
CHECKED BY: SN
APPROVED BY:

SHEET 7 OF 10
2023 - 22 - PP



KEY MAP
(N.T.S.)

P:\Blake_Mayor\Georgetown Properties\18 Preliminary Plat03_1802\Plans\2014-12 Preliminary Plat (5 of 5). February 14, 2024, 10:07 AM, mmmmmmm



- LEGEND**
- PRELIMINARY PLAT BOUNDARY
 - PROPOSED LOT LINE
 - EXISTING MAJOR CONTOUR
 - EXISTING MAJOR CONTOUR
 - OS OPEN SPACE
 - PUE PUBLIC UTILITY EASEMENT
 - DE DRAINAGE EASEMENT
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 - 100YR 100YR FLOODPLAIN
 - 500YR LOMR 500YR FLOODPLAIN PER LOMR
 - 500YR 500YR FLOODPLAIN
 - REGULATORY FLOODWAY
 - REGULATORY FLOODWAY PER LOMR
 - PHASING BOUNDARY

REVISION		DATE
BY		
NO.		
811		
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5508 HIGHWAY 290 WEST SUITE 150 DALLAS, TX 75235 CHARGES: \$100 HARGREEN, COW		TRF NO: 16384 TRF NO: 10194101
HARGREEN® DEVELOPMENT TX		
STATE OF TEXAS SHERVIN NOOSHIN 96807 LICENSED PROFESSIONAL ENGINEER 1/19/2024		
PRELIMINARY PLAT (5 OF 5)		
PARKSIDE ON THE RIVER GTII PHASES 1-5 PRELIMINARY PLAT GEORGETOWN, WILLIAMSON, TEXAS		
DESIGNED BY: CC		
DRAWN BY: TG/MM		
CHECKED BY: SN		
APPROVED BY:		
SHEET 8 OF 10		
2023 - 22 - PP		

P:\Blake_Magnet\Georgetown Properties\If Preliminary\Parcel3_CAD\Plans\220142 PREL.dwg CURVE TABLES February 14, 2024 10:09 AM m.mahmmed

HIGH GLORY PARKWAY CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C1	355.14'	628.01'	32.401°	N59° 36' 11"W	350.43

NARROW PATH LANE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C2	70.95'	300.00'	13.551°	N39° 49' 08"E	70.79

DOROTHY MAE CIRCLE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C3	78.58'	50.00'	90.049°	N54° 20' 43"E	70.74
C4	329.80'	381.00'	49.597°	N34° 06' 50"E	319.60
C5	76.29'	1100.00'	3.974°	N60° 53' 56"E	76.28
C6	100.22'	50.00'	114.842°	N5° 27' 53"E	84.27
C7	306.01'	250.00'	70.131°	N87° 01' 20"W	287.26
C8	284.45'	400.00'	40.744°	S38° 32' 24"W	278.49

ANNAMAE GREEN COVE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C9	26.18'	200.00'	7.500°	S34° 50' 17"E	26.16

FORGIVEN MAGDALENE PATH CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C10	249.18'	410.28'	34.799°	S79° 39' 55"E	245.37

HOLY HILL CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C11	121.37'	1200.00'	5.795°	S12° 16' 02"W	121.32
C12	136.14'	300.00'	26.001°	S28° 09' 55"W	134.98
C13	78.54'	50.00'	90.000°	S86° 09' 56"W	70.71

WALKING VALLEY LANE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C14	59.55'	300.00'	11.374°	N19° 52' 55"E	59.46
C15	99.07'	300.00'	18.920°	N16° 06' 32"E	98.62
C16	67.00'	300.00'	12.796°	N13° 02' 49"E	66.86
C17	124.53'	200.00'	35.675°	N1° 36' 27"E	122.53
C18	264.29'	454.01'	33.353°	N0° 26' 47"E	260.57
C19	105.26'	600.00'	10.052°	N12° 05' 49"E	105.13
C20	132.72'	600.00'	12.674°	N13° 24' 29"E	132.45

TRUE KINGDOM DRIVE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C21	66.90'	300.00'	12.777°	S73° 33' 34"E	66.76
C22	213.95'	500.00'	24.516°	S67° 41' 24"E	212.32
C23	69.29'	100.00'	39.703°	S73° 03' 49"E	67.92

RHEMA RIDGE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C24	63.39'	300.00'	12.107°	N13° 36' 31"E	63.27
C25	61.93'	50.00'	70.970°	N43° 02' 23"E	58.05
C26	36.87'	300.00'	7.041°	N75° 00' 14"E	36.84

STRONG FOUNDATION PLACE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C27	112.32'	1604.99'	4.010°	N85° 20' 36"E	112.30
C28	75.91'	721.88'	6.025°	N80° 19' 34"E	75.88

LOVING GRACE CIRCLE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C29	1103.95'	330.00'	191.672°	N77° 30' 10"E	656.58
C30	132.82'	300.00'	25.367°	N5° 38' 59"W	131.74
C31	72.02'	50.00'	82.528°	N34° 13' 49"W	65.95

GRACIOUS SHEPHERD WAY CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C32	24.71'	300.00'	4.719°	N5° 00' 41"W	24.70
C33	77.47'	50.00'	88.770°	N37° 00' 50"E	69.95
C34	120.99'	300.00'	23.107°	S87° 02' 52"E	120.17

BELOVED COURT CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C35	71.89'	100.00'	41.192°	S13° 56' 04"W	70.35

COLD SMOKE COURT CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C36	35.60'	300.00'	6.800°	S81° 05' 29"E	35.58

SOLID CORNERSTONE CIRCLE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C37	418.61'	980.00'	24.474°	S84° 50' 03"W	415.43
C38	81.23'	50.00'	93.082°	S26° 03' 23"W	72.59
C39	423.33'	400.00'	60.638°	N52° 36' 36"W	403.85
C40	445.05'	400.00'	63.748°	N9° 34' 58"E	422.44

EMPTY SEPULCHER COVE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C41	172.61'	425.00'	23.271°	S51° 04' 24"W	171.43

WATER WALKER WAY CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C42	534.58'	660.00'	46.408°	N81° 30' 15"E	520.09
C43	192.13'	300.00'	36.694°	N76° 38' 51"E	188.86

SHADOW MOUNTAIN DRIVE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C44	375.74'	325.00'	66.241°	N81° 08' 18"W	355.16
C45	87.76'	400.00'	12.571°	N54° 18' 13"W	87.59
C46	402.94'	325.00'	71.036°	N25° 04' 15"W	377.62
C47	86.32'	100.00'	49.458°	N35° 10' 35"E	83.67

REVELATION WONDER RIDGE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C48	558.99'	325.00'	98.547°	S76° 46' 55"E	492.59
C49	700.42'	300.00'	133.771°	S59° 10' 12"E	551.83

BRIGHT DOVE DRIVE CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C50	214.94'	300.00'	41.050°	N15° 31' 50"W	210.37

TREASURE HOUSE WAY CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C51	476.15'	1250.00'	21.825°	N80° 45' 58"E	473.27
C52	95.01'	300.00'	18.146°	N60° 46' 51"E	94.62
C53	130.29'	250.00'	29.861°	N66° 38' 17"E	128.82
C54	76.21'	300.00'	14.554°	N74° 17' 28"E	76.00

BRAVE CEPHAS COURT CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C55	54.67'	300.00'	10.441°	N1° 46' 13"E	54.59

LIVING WATER COURT CENTERLINE CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH
C56	56.97'	300.00'	10.881°	N12° 36' 32"W	56.89

BLOCK CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD DISTANCE
C57	43.22'	733.75'	3.375°	S85° 36' 23"W	43.22
C58	1431.43'	1052.50'	77.924°	S48° 19' 54"W	1323.64
C59	740.16'	856.00'	49.542°	S34° 08' 27"W	717.32
C60	128.09'	919.00'	7.986°	S54° 55' 09"W	127.99
C61	326.86'	578.00'	32.401°	N59° 36' 11"W	322.53
C62	727.19'	841.00'	49.542°	N34° 08' 27"E	704.75
C63	483.15'	1067.50'	25.932°	N26° 45' 51"E	479.04
C64	130.11'	1067.50'	6.984°	N46° 05' 35"E	130.03
C65	28.98'	25.00'	66.422°	N10° 11' 05"W	27.39
C66	34.49'	25.00'	79.054°	S82° 55' 21"E	31.82
C67	39.27'	25.00'	89.990°	S1° 35' 58"W	35.35
C68	39.27'	25.00'	90.010°	S88° 24' 02"E	35.36
C69	23.28'	15.00'	89.313°	N77° 41' 59"E	21.09
C70	22.25'	15.00'	85.000°	S9° 27' 24"E	20.27
C71	19.35'	25.00'	44.357°	N62° 56' 03"W	18.87
C72	162.08'	50.00'	185.732°	N7° 45' 12"E	99.87
C73	19.35'	25.00'	44.357°	N78° 26' 27"E	18.87
C74	50.11'	25.00'	114.842°	S5° 27' 53"W	42.13
C75	23.56'	15.00'	90.000°	N13° 54' 43"E	21.21
C76	23.56'	15.00'	90.000°	S76° 05' 17"E	21.21
C77	16.30'	15.00'	62.260°	N62° 13' 05"W	15.51
C78	309.24'	60.00'	295.304°	N54° 18' 13"E	64.21
C79	13.89'	15.00'	53.044°	N4° 33' 58"W	13.40
C80	22.14'	15.00'	84.573°	N75° 26' 51"E	20.19
C81	22.13'	15.00'	84.523°	N20° 00' 16"W	20.18
C82	23.54'	15.00'	89.929°	S26° 47' 47"E	21.20
C83	20.90'	15.00'	79.838°	N58° 05' 13"E	19.25
C84	14.04'	15.00'	53.635°	S61° 46' 55"E	13.53
C85	309.26'	60.00'	295.321°	N2° 37' 29"W	64.19
C86	16.38'	15.00'	62.557°	S60° 59' 37"W	15.58
C87	21.02'	25.00'	48.185°	N14° 46' 37"W	20.41
C88	162.69'	50.00'	186.429°	N54° 20' 42"E	99.84
C89	21.03'	25.00'	48.190°	S56° 32' 08"E	20.41
C90	39.29'	25.00'	90.054°	N54° 20' 33"E	35.37
C91	23.56'	15.00'	90.000°	N54° 22' 11"E	21.21
C92	23.56'	15.00'	90.000°	S35° 37' 49"E	21.21
C93	39.27'	25.00'	90.000°	N35° 37' 49"W	35.36
C94	37.61'	25.00'	86.189°	N56° 16' 31"E	34.16
C95	22.35'	25.00'	51.228°	N15° 33' 07"E	21.62
C96	167.95'	50.00'	192.455°	N86° 09' 56"E	99.41
C97	22.35'	25.00'	51.228°	S23° 13' 14"E	21.62
C98	39.27'	25.00'	90.000°	N86° 09' 56"E	35.36
C99	38.11'	25.00'	87.340°	N5° 09' 51"W	34.53
C100	38.11'	25.00'	87.340°	N87° 29' 44"E	34.53
C101	28.98'	25.00'	66.422°	S76° 36' 23"E	27.39
C102	28.95'	25.00'	66.339°	N10° 08' 35"W	27.36
C103	28.98'	25.00'	66.422°	S70° 58' 48"W	27.39
C104	28.98'	25.00'	66.422°	S42° 35' 54"E	27.39
C105	39.27'	25.00'	89.996°	N59° 31' 35"E	35.35
C106	39.27'	25.00'	90.004°	N30° 48' 25"W	35.36
C107	22.84'	15.00'	87.260°	N69° 11' 57"E	20.70
C108	22.83'	15.00'	87.186°	S23° 34' 40"E	20.69
C109	22.43'	15.00'	85.665°	N62° 29' 40"E	20.40
C110	22.47'	15.00'	85.839°	S23° 15' 27"E	20.43
C111	11.40'	15.00'	43.531°	S40° 02' 52"E	11.12
C112	305.92'	60.00'	292.137°	N15° 38' 59"E	66.98
C113	19.63'	15.00'	74.987°	N87° 04' 29"E	18.26
C114	23.74'	25.00'	54.410°	N19° 39' 00"W	22.86
C115	158.47'	50.00'	181.598°	N43° 56' 38"E	99.99
C116	24.53'	25.00'	56.218°	S73° 21' 59"E	23.56

BLOCK CURVES					
NUMBER	LENGTH	RADIUS	DELTA	CHORD BEARING	CHORD DISTANCE
C117	30.97'	25.00'	70.970°	N43° 02' 23"E	29.02
C118	21.94'	15.00'	83.794°	S66° 37' 11"E	20.03
C119	21.94'	15.00'	83.794°	S29° 35' 11"W	20.03
C120	398.93'	486.51'	46.982°	N77° 25' 47"E	387.85
C121	23.07'	15.00'	88.125°	S50° 43' 27"E	20.86
C122	23.56'	15.00'	90.000°	N38° 20' 19"E	21.21
C123	23.56'	15.00'	90.000°	S51° 39' 41"E	21.21
C124	23.56'	15.00'	90.000°	S38° 20' 19"W	21.21
C125	20.49'	15.00'	78.267°	S32° 28' 20"W	18.93
C126	305.48'	60.00'	291.709°	S74° 14' 55"E	67.36
C127	11.40'	15.00'	43.531°	N18° 20' 14"W	11.12
C128	22.88'	15.00'	87.390°	S58° 59' 30"E	20.72
C129	20.70'	15.00'	79.062°	S37° 46' 57"W	19.09
C130	33.41'	25.00'	76.566°	N45° 19' 01"E	30.98
C131	183.91'	50.00'	210.749°	N21° 46' 28"W	96.42
C132	26.98'	25.00'	61.824°	S83° 45' 46"W	25.69
C133	36.01'	25.00'	82.528°	S34° 13' 49"E	32.98
C134	21.03'	25.00'	48.190°	N74° 30' 23"W	20.41
C135	161.57'	50.00'	185.149°	S37° 00' 50"W	99.90
C136	21.03'	25.00'	48.190°	S31° 27' 57"E	20.41
C137	38.73'	25.00'	88.770°	S37° 00' 50"W	34.97
C138	23.56'	15.00'	90.000°	S47° 39' 06"E	21.21
C139	23.56'	15.00'	90.000°	S42° 20' 54"W	21.21
C140	22.28'	15.00'	85.110°	N44° 47' 36"E	20.29
C141	20.01'	15.00'	76.422°	N54° 26' 27"W	18.56
C142	21.69'	15.00'	82.848°	S36° 16' 03"E	19.85
C143	23.02'	15.00'	87.947°	N58° 20' 05"E	20.83
C144	15.12'	15.00'	57.769°	N66° 37' 27"E	14.49
C145	309.49'	60.00'	295.538°	N5° 30' 32"E	64.00
C146	15.12'	15.00'	57.769°	S55° 36' 24"E	14.49
C147	23.56'	15.00'	90.000°	N52° 04' 16"E	21.21
C148	23.56'	15.00'	90.000°	N37° 55' 44"W	21.21
C149	23.56'	15.00'	90.000°	N52° 04' 16"E	21.21
C150	23.56'	15.00'	90.000°	S37° 55' 44"E	21.21
C151	22.37'	15.00'	85.433°	N19° 59' 32"E	20.35
C152	24.87'	15.00'	95.000°	S69° 47' 28"E	22.12
C153	15.12'	15.00'	57.769°	N68° 19' 21"E	14.49
C154	309.49'	60.00'	295.538°	N50° 33' 43"W	64.00
C155	15.12'	15.00'	57.769°	S10° 33' 13"W	14.49
C156	21.91'	15.00'	83.708°	N83° 18' 40"E	20.02
C157	23.42'	15.00'	89.475°	S3° 16' 50"E	21.12
C158	22.27'	15.00'	85.060°	S54° 05' 10"W	20.28
C159	278.73'	60.00'	266.169°	N36° 28' 06"W	87.64
C160	22.53'	15.00'	86.057°	N70° 32' 13"W	20.47
C161	24.41'	15.00'	93.250°	S19° 06' 59"W	21.81
C162	15.12'	15.00'	57.769°	S85° 22' 27"E	14.49
C163	309.49'	60.00'	295.538°	N24° 15' 31"W	64.00
C164	15.12'	15.00'	57.769°	S36° 51' 24"W	14.49
C165	21.91'	15.00'	83.708°	S22° 06' 32"E	20.02
C166	21.91'	15.00'	83.708°	N61° 35' 58"E	20.02
C167	24.88'	15.00'	95.037°	S27° 46' 23"E	22.12
C168	22.24'	15.00'	84.963°	S62° 13' 37"W	20.26
C169	22.70'	15.00'	86.724°	S63° 50' 48"E	20.60
C170	22.70'	15.00'	86.724°	S22° 52' 39"W	20.60
C171	21.03'	25.00'	48.190°	S44° 34' 46"E	20.41
C172	164.06'	50.00'	187.993°	N25° 19' 21"E	99.76
C173	20.34'	25.00'	46.615°	S83° 59' 18"E	19.78
C174	40.61'	25.00'	93.082°	S26° 03' 23"W	36.29
C175	383.86'	816.47'	26.938°	N84° 42' 00"E	380.34
C176	483.52'	500.09'	55.398°	N79° 10' 41"E	464.91

P:\Blake_Magee\Georgetown Properties\1\Preliminary Plat\03_A-CAD\Prelim\202412 NOTE.dwg, February 14, 2024, 12:07 PM, mmaahmmed

ENGINEER'S CERTIFICATION

I, SHERVIN NOOSHIN, REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS SUBDIVISION IS IN THE EDWARDS AQUIFER RECHARGE ZONE AND IS ENCLOSED BY A ZONE A FLOOD AREA, AS DENOTED HEREIN, AND IS DEFINED BY FEDERAL EMERGENCY MANAGEMENT ADMINISTRATION FLOOD HAZARD BOUNDARY MAP, COMMUNITY PANEL NUMBER 48491C0480F, EFFECTIVE DATE DECEMBER 20, 2019, AND PER A LETTER OF MAP REVISION NUMBERED 21-06-0115P, EFFECTIVE DATE OCTOBER 14, 2021, AND THAT EACH LOT CONFORMS TO THE CITY OF GEORGETOWN REGULATIONS AS MODIFIED BY THE DEVELOPMENT AGREEMENT.

THE FULLY DEVELOPED, CONCENTRATED STORMWATER RUNOFF RESULTING FROM THE ONE HUNDRED (100) YEAR FREQUENCY STORM IS CONTAINED WITHIN THE DRAINAGE EASEMENTS SHOWN AND/OR PUBLIC RIGHTS-OF-WAY DEDICATED BY THIS PLAT.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT AUSTIN, TRAVIS COUNTY, TEXAS, THIS ____ DAY OF _____, 20__.

SHERVIN NOOSHIN, P.E.
REGISTERED PROFESSIONAL ENGINEER
NO. 96807 STATE OF TEXAS
HR GREEN DEVELOPMENT TX, LLC
5508 HIGHWAY 290 WEST, SUITE 150
AUSTIN, TEXAS 78735

SURVEYOR'S CERTIFICATION

I, ERNESTO NAVARRETE, REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECTLY MADE FROM AN ACTUAL SURVEY MADE ON THE GROUND OF THE PROPERTY LEGALLY DESCRIBED HEREON, AND THAT THERE ARE NO APPARENT DISCREPANCIES, CONFLICTS, OVERLAPPING OF IMPROVEMENTS, VISIBLE UTILITY LINES OR ROADS IN PLACE, EXCEPT AS SHOWN ON THE ACCOMPANYING PLAT, AND THAT THE CORNER MONUMENTS SHOWN THEREON WERE PROPERLY PLACED UNDER MY SUPERVISION IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS OF THE CITY OF GEORGETOWN, TEXAS.

TO CERTIFY WHICH, WITNESS MY HAND AND SEAL AT AUSTIN, TRAVIS COUNTY, TEXAS,

THIS ____ DAY OF _____, 20__.

ERNESTO NAVARRETE
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 6642
HR GREEN DEVELOPMENT TX, LLC
5508 HIGHWAY 290 WEST, SUITE 150
AUSTIN, TEXAS 78735

METES AND BOUNDS

DESCRIPTION OF 308.88 ACRES OF LAND IN THE ISAAC DONAGAN SURVEY, ABSTRACT NO. 178, THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, THE DANIEL MEDLOCK SURVEY, ABSTRACT NO. 839, THE W.E. PATE SURVEY, ABSTRACT NO. 836, THE J. B. BERRY SURVEY, ABSTRACT NO. 98, AND THE A.H. PORTER SURVEY, ABSTRACT NO. 490, WILLIAMSON COUNTY, TEXAS; BEING A PORTION OF A CERTAIN CALLED 314.00 ACRE TRACT OF LAND DESIGNATED AS TRACT 1 AND DESCRIBED IN THE SPECIAL WARRANTY DEED TO HM GPII, LP OF RECORD IN DOCUMENT NO. 2021027159, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS; SAID 308.88 ACRES OF LAND, AS SURVEYED BY HR GREEN DEVELOPMENT TX, LLC AND SHOWN ON THE ACCOMPANYING SKETCH, BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 5/8-INCH IRON ROD FOUND IN THE EAST LINE OF A CERTAIN CALLED 358.204 ACRE TRACT OF LAND, DESIGNATED AS TRACT 1 AND DESCRIBED IN THE GENERAL WARRANTY DEED TO SFGS INVESTMENTS, LP OF RECORD IN DOCUMENT NO. 2017001815, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, AT THE SOUTHWEST CORNER OF THE SAID 314.00 ACRE TRACT, SAME BEING THE NORTHWEST CORNER OF A CERTAIN CALLED 171.334 ACRE TRACT OF LAND DESCRIBED IN THE SPECIAL WARRANTY DEED TO HM PARKSIDE DEVELOPMENT, INC. OF RECORD IN DOCUMENT NO. 2021195608, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, FOR THE SOUTHWEST CORNER AND **POINT OF BEGINNING** OF THE TRACT DESCRIBED HEREIN;

THENCE WITH THE WEST LINE OF THE SAID 314.00 ACRE TRACT, WITH THE EAST LINE OF THE SAID 358.204 ACRE TRACT, WITH AN EAST LINE OF A CERTAIN CALLED 64.571 ACRE TRACT OF LAND DESIGNATED AS TRACT 2 AND DESCRIBED IN THE SPECIAL WARRANTY DEED WITH VENDOR'S LIEN TO 170 PATIENCE INVESTMENTS, LLC OF RECORD IN DOCUMENT NO. 2022077297, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, WITH THE WEST LINE OF THE TRACT DESCRIBED HEREIN, THE FOLLOWING TWO (2) COURSES AND DISTANCES:

1. N 14°12'06" E, A DISTANCE OF 718.27 FEET TO A MAG-NAIL WITH WASHER STAMPED "BROWN ENGINEERING" FOUND AT AN ANGLE POINT, AND
2. N 21°19'08" W, AT A DISTANCE OF 2,535.00 FEET PASS A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR A REFERENCE POINT-ON-LINE, AND CONTINUING FOR A TOTAL DISTANCE OF 2,850.00 FEET TO A CALCULATED POINT NEAR THE CENTER OF THE SOUTH SAN GABRIEL RIVER, FOR THE NORTHWEST CORNER OF THE SAID 314.00 ACRE TRACT, FOR THE NORTHWEST CORNER OF THE TRACT DESCRIBED HEREIN;

THENCE DOWNSTREAM, WITH THE APPROXIMATE CENTER OF THE SOUTH SAN GABRIEL RIVER, WITH THE NORTH LINE OF THE SAID 314.00 ACRE TRACT, WITH THE NORTH LINE OF THE TRACT DESCRIBED HEREIN, THE FOLLOWING SEVENTEEN (17) COURSES AND DISTANCES:

1. N 19°27'11" E, A DISTANCE OF 68.48 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
2. N 24°38'44" E, A DISTANCE OF 294.23 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
3. N 10°20'23" E, A DISTANCE OF 356.09 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
4. N 17°04'45" E, A DISTANCE OF 192.35 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
5. N 34°41'58" E, A DISTANCE OF 315.31 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
6. N 62°01'05" E, A DISTANCE OF 406.22 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
7. S 78°55'49" E, A DISTANCE OF 166.17 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
8. S 48°11'28" E, A DISTANCE OF 256.54 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
9. S 22°52'48" E, A DISTANCE OF 238.10 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,

10. S 12°35'59" E, A DISTANCE OF 252.83 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
11. S 25°33'42" E, A DISTANCE OF 187.48 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
12. S 42°10'03" E, A DISTANCE OF 526.14 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
13. S 48°08'29" E, A DISTANCE OF 649.29 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
14. S 65°31'05" E, A DISTANCE OF 680.90 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
15. N 80°58'14" E, A DISTANCE OF 676.65 FEET TO A CALCULATED POINT FOR AN ANGLE POINT,
16. N 74°27'57" E, A DISTANCE OF 360.45 FEET TO A CALCULATED POINT FOR AN ANGLE POINT, AND
17. N 68°47'55" E, A DISTANCE OF 57.92 FEET TO A CALCULATED POINT FOR A RE-ENTRANT CORNER IN A WEST LINE OF A CERTAIN CALLED 1,143.511 ACRE TRACT OF LAND DESIGNATED AS TRACT 1 AND DESCRIBED IN THE SPECIAL WARRANTY DEED TO HM PARKSIDE, LP OF RECORD IN DOCUMENT NO. 2018114043, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, FOR THE NORTHEAST CORNER OF THE SAID 314.00 ACRE TRACT, FOR THE NORTHEAST CORNER OF THE TRACT DESCRIBED HEREIN;

THENCE LEAVING THE APPROXIMATE CENTER OF THE SOUTH SAN GABRIEL RIVER, WITH THE EAST LINE OF THE SAID 314.00 ACRE TRACT, WITH A WEST LINE OF THE SAID 1,143.511 ACRE TRACT, WITH THE EAST LINE OF THE TRACT DESCRIBED HEREIN, THE FOLLOWING TWO (2) COURSES AND DISTANCES:

1. S 22°18'18" E, AT A DISTANCE OF 185.33 FEET PASS A ½-INCH IRON ROD FOUND FOR A REFERENCE POINT-ON-LINE, AND CONTINUING FOR A TOTAL DISTANCE OF 624.71 FEET TO A ½-INCH IRON PIPE FOUND AT AN ANGLE POINT, AND
2. S 22°06'02" E, A DISTANCE OF 1,524.24 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR THE SOUTHEAST CORNER OF THE TRACT DESCRIBED HEREIN, FROM WHICH A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "CS, LTD" FOUND AT THE SOUTHEAST CORNER OF THE SAID 314.00 ACRE TRACT, SAME BEING A RE-ENTRANT CORNER OF THE SAID 1,143.511 ACRE TRACT, BEARS S 22°06'02" E, A DISTANCE OF 72.87 FEET,

THENCE LEAVING A WEST LINE OF THE SAID 1,143.511 ACRE TRACT, CROSSING THE SAID 314.00 ACRE TRACT, WITH THE SOUTHEAST LINE OF THE TRACT DESCRIBED HEREIN, THE FOLLOWING SEVEN (7) COURSES AND DISTANCES:

1. WITH THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 733.75 FEET, AN ARC DISTANCE OF 43.22 FEET, AND A CHORD WHICH BEARS S 85°36'23" W, A DISTANCE OF 43.22 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR A POINT-OF-TANGENCY,
2. S 87°17'38" W, A DISTANCE OF 313.69 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR A POINT-OF-CURVATURE,
3. WITH THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 1,052.50 FEET, AN ARC DISTANCE OF 1,431.43 FEET, AND A CHORD WHICH BEARS S 48°19'54" W, A DISTANCE OF 1,323.64 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR A POINT-OF-TANGENCY,
4. S 09°22'11" W, A DISTANCE OF 152.08 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR A POINT-OF-CURVATURE,
5. WITH THE ARC OF A CURVE TO THE RIGHT, HAVING A RADIUS OF 856.00 FEET, AN ARC DISTANCE OF 740.16 FEET, AND A CHORD WHICH BEARS S 34°09'27" W, A DISTANCE OF 717.32 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR A POINT-OF-TANGENCY,
6. S 58°54'43" W, A DISTANCE OF 615.06 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR A POINT-OF-CURVATURE, AND

7. WITH THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 919.00 FEET, AN ARC DISTANCE OF 128.09 FEET, AND A CHORD WHICH BEARS S 54°55'09" W, A DISTANCE OF 127.99 FEET TO A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET IN THE SOUTHWEST LINE OF THE SAID 314.00 ACRE TRACT, IN THE NORTH LINE OF THE SAID 171.334 ACRE TRACT, AT THE NORTHERN TERMINUS OF THE WEST RIGHT-OF-WAY LINE OF PARKSIDE PARKWAY, A 135-FOOT WIDE PUBLIC RIGHT-OF-WAY, AS SHOWN ON PARKSIDE ON THE RIVER PHASE 3, SECTION 4 & 7A, 7B, A SUBDIVISION ACCORDING TO THE PLAT OR MAP RECORDED IN DOCUMENT NO. 2023014821, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, FOR THE SOUTH CORNER OF THE TRACT DESCRIBED HEREIN, FROM WHICH A ½-INCH IRON ROD WITH A PLASTIC CAP STAMPED "HR GREEN" SET FOR THE SOUTH CORNER OF THE SAID 314.00 ACRE TRACT, SAME BEING A RE-ENTRANT CORNER OF THE SAID 1,143.511 ACRE TRACT, BEARS S 43°23'44" E, A DISTANCE OF 59.95 FEET;

THENCE WITH THE SOUTHWEST LINE OF THE SAID 314.00 ACRE TRACT, WITH THE NORTH LINE OF THE SAID 171.334 ACRE TRACT, WITH THE SOUTHWEST LINE OF THE TRACT DESCRIBED HEREIN, THE FOLLOWING THREE (3) COURSES AND DISTANCES:

1. N 43°23'44" W, A DISTANCE OF 1,110.20 FEET TO A ½-INCH IRON ROD FOUND AT A POINT-OF-CURVATURE,
2. WITH THE ARC OF A CURVE TO THE LEFT, HAVING A RADIUS OF 578.00 FEET, AN ARC DISTANCE OF 326.86 FEET, AND A CHORD WHICH BEARS N 59°36'11" W, A DISTANCE OF 322.53 FEET TO A ½-INCH IRON ROD FOUND AT A POINT-OF-TANGENCY, AND
3. N 75°48'33" W, A DISTANCE OF 431.97 FEET TO THE **POINT OF BEGINNING** AND CONTAINING 308.88 ACRES OF LAND, MORE OR LESS.

BEARING BASIS: TEXAS COORDINATE SYSTEM, CENTRAL ZONE, NAD83, GRID.

PLAT NOTES:

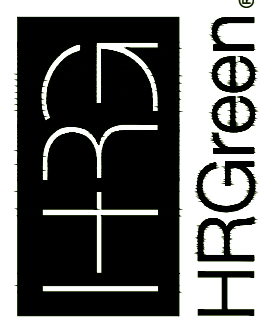
1. THIS DEVELOPMENT IS PLATTED UNDER THE REGULATIONS OF THE PARKSIDE ON THE RIVER DEVELOPMENT AGREEMENT (ORDINANCE NO. 2019-69, DOCUMENT NO. 2018117041), THE SECOND AMENDMENT TO THE DEVELOPMENT AGREEMENT (ORDINANCE NO. 2021-40, DOCUMENT NO. 2021082512), AND THE ASSOCIATED UNIFIED DEVELOPMENT CODE AND IS IN CONFORMANCE WITH THE CODES AND STANDARDS REFERENCED WITHIN.
2. CURRENT UTILITY PROVIDERS FOR THIS DEVELOPMENT ARE WATER: CITY OF GEORGETOWN, WASTEWATER: CITY OF GEORGETOWN, AND ELECTRIC: PEDERNALES ELECTRIC COOPERATIVE, INC.
3. ALL STRUCTURES/OBSTRUCTIONS ARE PROHIBITED IN DRAINAGE EASEMENTS.
4. LOTS WITHIN THIS SUBDIVISION ARE ENCLOSED BY A SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 100 YEAR FLOOD AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP NUMBER 48491C0480F, EFFECTIVE DATE DECEMBER 20, 2019, AND PER A LETTER OF MAP REVISION NUMBERED 21-06-0115P, EFFECTIVE DATE OCTOBER 14, 2021. NO DEVELOPMENT SHALL BEGIN PRIOR TO THE ISSUANCE OF A FLOODPLAIN DEVELOPMENT PERMIT FOR EACH OF THE FOLLOWING LOTS:
- BLOCK M, LOT 54
- BLOCK S, LOTS 2 - 3 AND 14 - 18
5. THE ATLAS-14 100 YEAR FLOODPLAIN IS PER LOMR #21-06-0115P, EFFECTIVE OCTOBER 14, 2021, BY LANDDEV CONSULTING, LLC.
6. FLOODPLAINS SHOWN ARE SUBJECT TO CHANGE WITH ADDITIONAL CLOMR STUDY AT THE TIME OF PLATTING, CONSTRUCTION PLAN REVIEW AND/OR LOMR AT POST CONSTRUCTION.
7. IN ORDER TO PROMOTE DRAINAGE AWAY FROM A STRUCTURE, THE SLAB ELEVATION SHOULD BE BUILT AT LEAST ONE FOOT ABOVE THE SURROUNDING GROUND, AND THE GROUND SHOULD BE GRADED AWAY FROM THE STRUCTURE AT A SLOPE OF 1/2" PER FOOT FOR A DISTANCE OF AT LEAST 10 FEET.
8. WATER QUALITY WILL BE PROVIDED PER TCEQ STANDARDS.
9. A 10-FOOT PUBLIC UTILITY EASEMENT IS RESERVED ALONG ALL LOCAL STREET FRONTAGES WITHIN THIS PLAT.
10. THE MONUMENTS OF THIS PLAT HAVE BEEN ROTATED TO THE NAD 83/93 HARN - TEXAS CENTRAL ZONE AND NAVD 88.
11. THE IMPERVIOUS COVER LIMITS SHALL BE PER EXHIBIT M-1 OF THE PARKSIDE ON THE RIVER DEVELOPMENT AGREEMENT (ORD 2019-69) BASED ON LOT SIZE AND TYPE.
12. RIGHT-OF-WAY EASEMENTS FOR WIDENING ROADWAYS OR IMPROVING DRAINAGE SHALL BE MAINTAINED BY THE LANDOWNER UNTIL ROAD OR DRAINAGE IMPROVEMENTS ARE ACTUALLY CONSTRUCTED ON THE PROPERTY. THE CITY AND/OR COUNTY HAS THE RIGHT AT ANY TIME TO TAKE POSSESSION OF ANY ROAD WIDENING EASEMENT FOR CONSTRUCTION, IMPROVEMENT, OR MAINTENANCE OF THE ADJACENT ROAD.
13. UNLESS OTHERWISE NOTED HEREIN, ALL EASEMENTS DEDICATED TO THE CITY OF GEORGETOWN BY THIS PLAT SHALL BE EXCLUSIVE TO THE CITY OF GEORGETOWN, AND GRANTOR COVENANTS THAT GRANTOR AND GRANTOR'S HEIRS, SUCCESSORS, AND ASSIGNS SHALL NOT CONVEY ANY OTHER EASEMENT, LICENSE, OR CONFLICTING RIGHT TO USE IN ANY MANNER, THE AREA (OR ANY PORTION THEREOF) COVERED BY THIS GRANT.
14. ALL EASEMENTS DEDICATED TO THE CITY OF GEORGETOWN BY THIS PLAT ADDITIONALLY INCLUDE THE FOLLOWING RIGHTS: (1) THE RIGHT OF THE CITY TO CHANGE THE SIZE OF ANY FACILITIES INSTALLED, MAINTAINED, OR OPERATED WITHIN THE EASEMENT AREA; (2) THE RIGHT OF THE CITY TO RELOCATE ANY FACILITIES WITHIN THE EASEMENT AREA; AND (3) THE RIGHT OF THE CITY TO REMOVE FROM THE EASEMENT AREA ALL TREES AND PARTS THEREOF, OR OTHER OBSTRUCTIONS, WHICH ENDANGER OR MAY INTERFERE WITH THE EFFICIENCY AND MAINTENANCE OF ANY FACILITIES WITHIN THE EASEMENT AREA.
15. THIS PLAT IS SUBJECT TO THE PROVISIONS OF THE CITY OF GEORGETOWN WATER CONSERVATION ORDINANCE.
16. THE SUBDIVISION SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
17. THE LANDOWNER ASSUMES ALL RISKS ASSOCIATED WITH IMPROVEMENTS LOCATED IN THE RIGHT-OF-WAY, OR ROAD WIDENING EASEMENTS. BY PLACING ANYTHING IN THE RIGHT-OF-WAY OR ROAD WIDENING EASEMENTS THE LANDOWNER INDEMNIFIES AND HOLDS THE CITY OF GEORGETOWN, WILLIAMSON COUNTY, THEIR OFFICERS, AGENTS AND EMPLOYEES HARMLESS FROM ANY LIABILITY OWING TO PROPERTY DEFECTS OR NEGLIGENCE NOT ATTRIBUTABLE TO THEM AND ACKNOWLEDGES THAT THE IMPROVEMENTS MAY BE REMOVED BY THE CITY AND/OR COUNTY AND THAT THE OWNER OF THE IMPROVEMENTS WILL BE RESPONSIBLE FOR THE RELOCATION AND/OR REPLACEMENT OF THE IMPROVEMENTS.
18. THE BUILDING OF ALL STREETS, ROADS AND OTHER PUBLIC THOROUGHFARES AND ANY BRIDGES OR CULVERTS NECESSARY TO BE CONSTRUCTED OR PLACED, IS THE RESPONSIBILITY OF THE OWNERS OF THIS TRACT OF LAND COVERED BY THIS PLAT IN ACCORDANCE WITH PLANS AND SPECIFICATIONS PRESCRIBED BY THE CITY OF GEORGETOWN AND/OR WILLIAMSON COUNTY, TEXAS. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUME ANY RESPONSIBILITY FOR DRAINAGE WAYS OR EASEMENTS IN THE SUBDIVISION, OTHER THAN THOSE DRAINING OR PROTECTING THE ROAD SYSTEM AND STREETS IN THEIR RESPECTIVE JURISDICTIONS.
19. NEITHER THE CITY OF GEORGETOWN NOR WILLIAMSON COUNTY ASSUMES ANY RESPONSIBILITY FOR THE ACCURACY OF REPRESENTATIONS BY OTHER PARTIES IN THIS PLAT. FLOOD PLAIN DATA IN PARTICULAR, MAY CHANGE DEPENDING ON SUBSEQUENT DEVELOPMENT. IT IS FURTHER UNDERSTOOD THAT THE OWNERS OF THE TRACT OF LAND COVERED BY THIS PLAT MUST INSTALL AT THEIR OWN EXPENSE ALL TRAFFIC CONTROL DEVICES AND SIGNAGE THAT MAY BE REQUIRED BEFORE THE STREETS IN THE SUBDIVISION HAVE FINALLY BEEN ACCEPTED FOR MAINTENANCE BY THE CITY AND/OR COUNTY.
20. PARKLAND WILL BE DEDICATED PER THE DEVELOPMENT AGREEMENT.
21. ALL LOTS WITH 5' SETBACKS SHALL REQUIRE 1,500 GPM FIRE FLOWS. REQUIRED FIRE FLOWS SHALL BE PROVIDED BY DEVELOPER THROUGH ELEVATED STORAGE, GROUND STORAGE AND PUMPS, OR OTHER APPROVED INFRASTRUCTURE.
22. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED ON JUNE 19, 2020. ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.
23. ALL WATER QUALITY, SEDIMENTATION, FILTRATION, DETENTION, AND/OR RETENTION BASINS AND RELATED APPURTENANCES SHOWN SHALL BE SITUATED WITHIN A DRAINAGE EASEMENT OR DRAINAGE LOT. THE M.U.D., HOA, OR ASSIGNEES OF THE TRACTS UPON WHICH ARE LOCATED SUCH EASEMENTS, APPURTENANCES, DETENTION, AND WATER QUALITY FACILITIES SHALL MAINTAIN SAME AND BE RESPONSIBLE FOR THEIR MAINTENANCE, ROUTINE INSPECTION, AND UPKEEP.
24. ANY HERITAGE TREE AS NOTED ON THIS PLAT IS SUBJECT, IN PERPETUITY, TO THE MAINTENANCE, CARE, PRUNING AND REMOVAL REQUIREMENTS OF THE CITY OF GEORGETOWN. APPROVED REMOVAL DOES NOT REQUIRE MODIFICATION OF THE PLAT.
25. ALL INDIVIDUAL LOTS CONTAINING HERITAGE TREES ARE CONFIGURED AND DESIGNED SO THAT THE LOT IS DEVELOPABLE FOR THE INTENDED PURPOSE WITHOUT REQUIRING REMOVAL OF THE HERITAGE TREES OR EXCEEDING THE PERCENTAGE OF ALLOWABLE DISTURBANCE WITHIN THE HERITAGE TREES CRZ.
26. IMPROVEMENTS WITHIN THE COUNTY ROAD RIGHT-OF-WAY INCLUDING, BUT NOT LIMITED TO, LANDSCAPING, IRRIGATION, LIGHTING, CUSTOM SIGNS, IS PROHIBITED WITHOUT FIRST OBTAINING AN EXECUTED LICENSE AGREEMENT WITH WILLIAMSON COUNTY.
27. ALL SIDEWALKS SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
28. THE SMALLEST RESIDENTIAL LOT, BLOCK B LOT 15, IS 5,400 SQUARE FEET.



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PRELIMINARY PLAT NOTES
PARKSIDE ON THE RIVER
GTII PHASES 1-5
PRELIMINARY PLAT
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: TG/MM

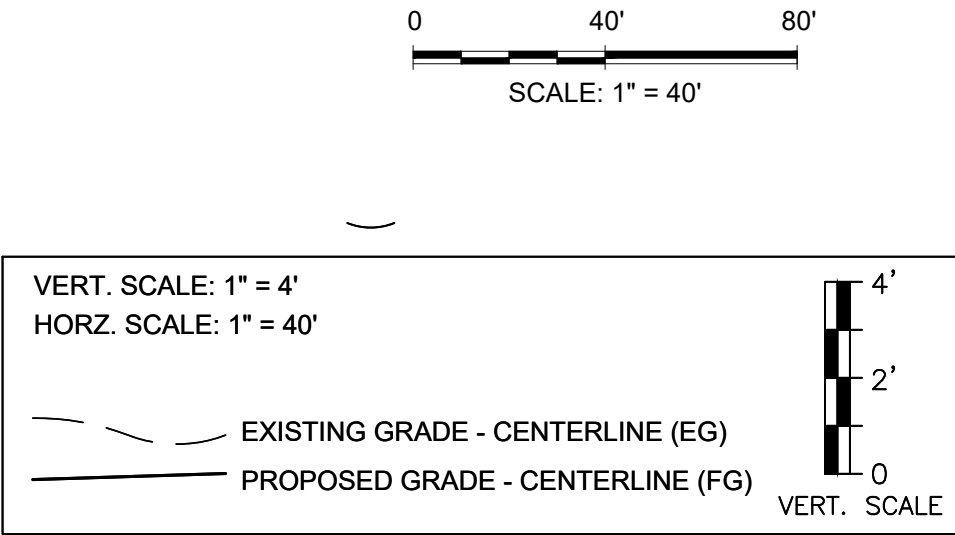
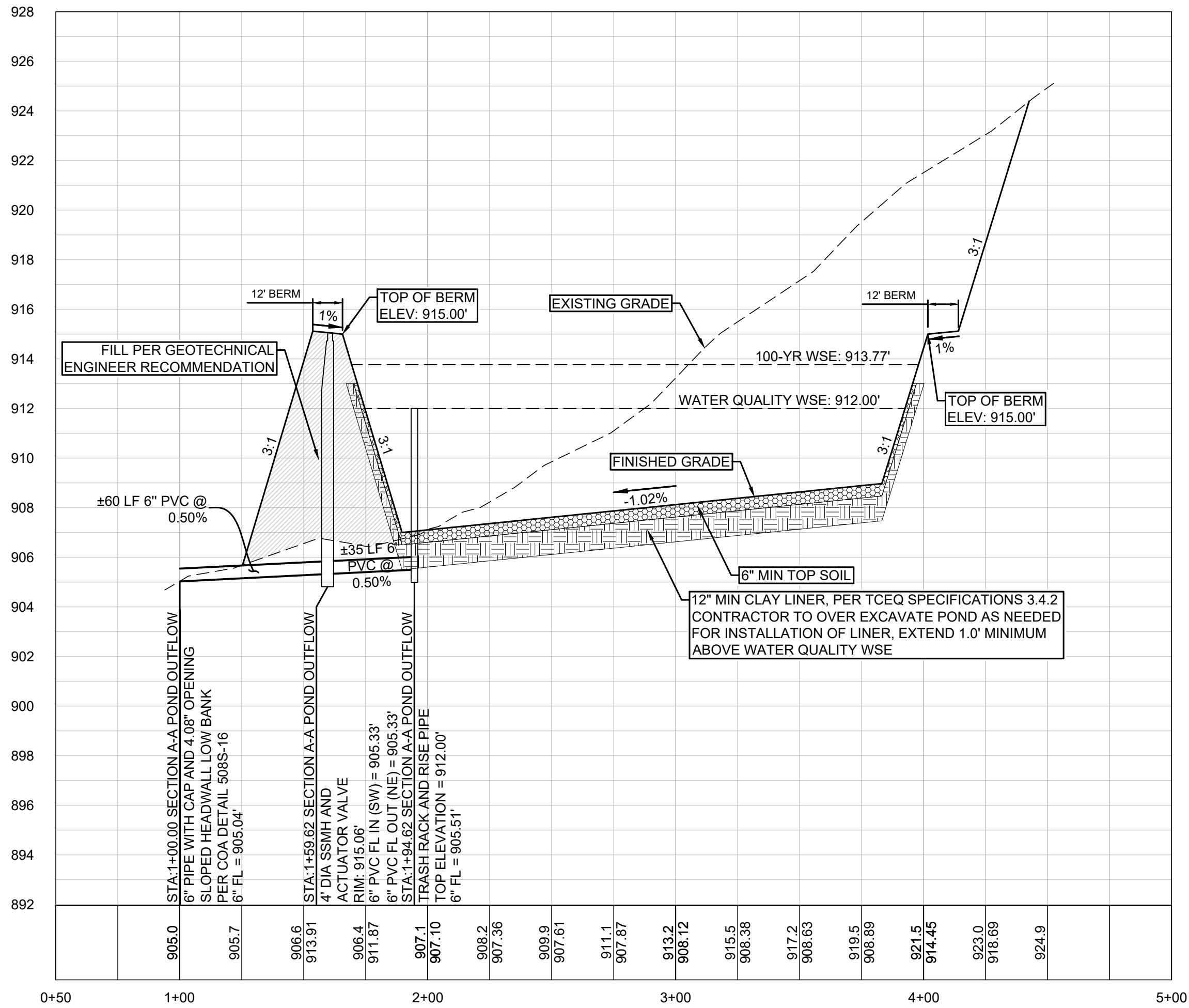
CHECKED BY: SN

APPROVED BY: _____

SHEET **10** OF **10**

2023 - 22 - PP

SECTION A-A POND OUTFLOW

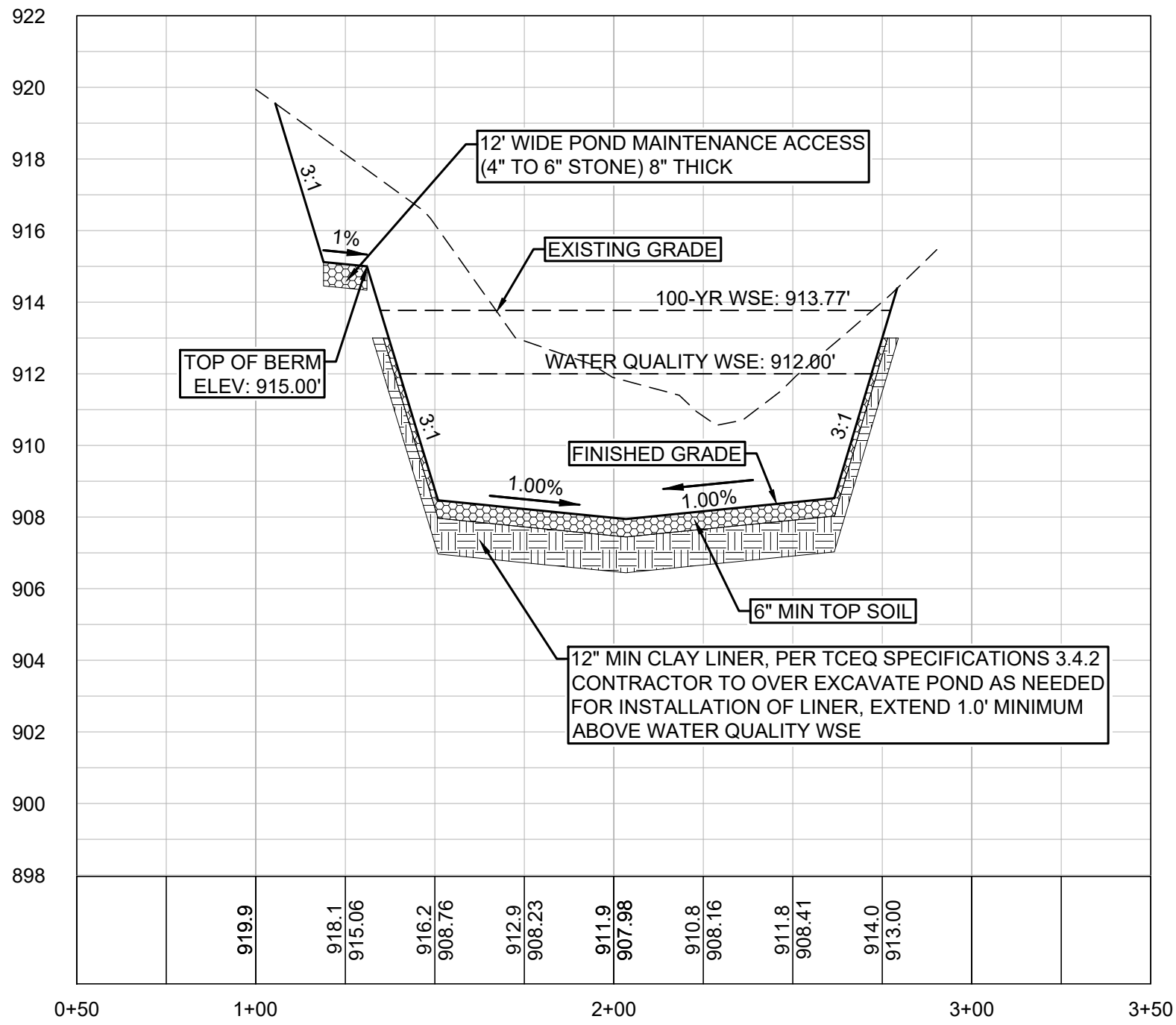


Pond Volume

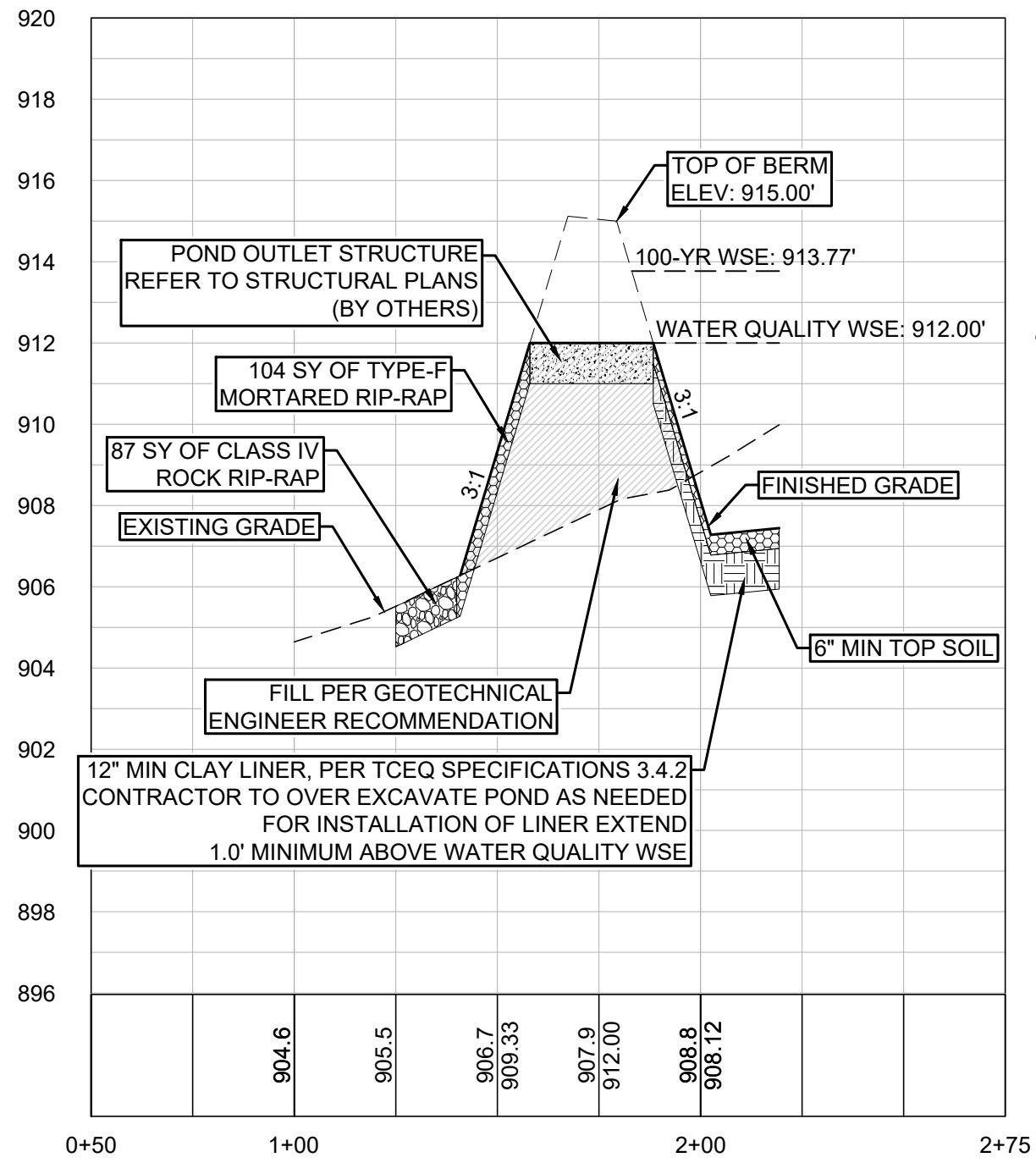
Elevation	Area		Volume		Cumulative Volume		Comments
	SF	ac	cf	ac*ft	cf	ac*ft	
907	0	0.00					Water Quality Volume
908	8614	0.20	4,307	0.10	4,307	0.10	
909	20891	0.48	14,753	0.34	19,060	0.44	
910	24849	0.57	22,870	0.53	41,930	0.96	
911	26830	0.62	25,840	0.59	67,769	1.56	
912	28865	0.66	27,848	0.64	95,617	2.20	
913	30957	0.71	29,911	0.69	125,528	2.88	Routing
914	33106	0.76	32,032	0.74	157,559	3.62	
915	35539	0.82	34,323	0.79	191,882	4.40	Freeboard

OUTFLOW STRUCTURE	
Elevation	Flow
ft	cfs
912.00	0
912.50	37
913.00	104
913.50	191
914.00	294
914.50	411
915.00	540

SECTION B-B



SECTION C-C

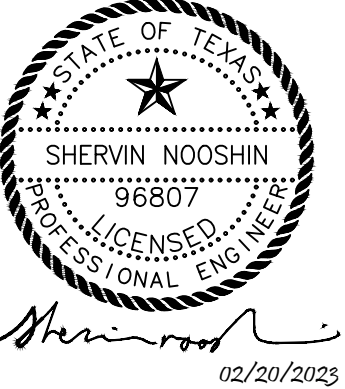


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POND SECTIONS

PARKSIDE ON THE RIVER PH 3,
SEC 6 CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: MM/CC

DRAWN BY: MM/CC

CHECKED BY: SN/DR

APPROVED BY: _____

SHEET 46 OF 97

2022-45-CON

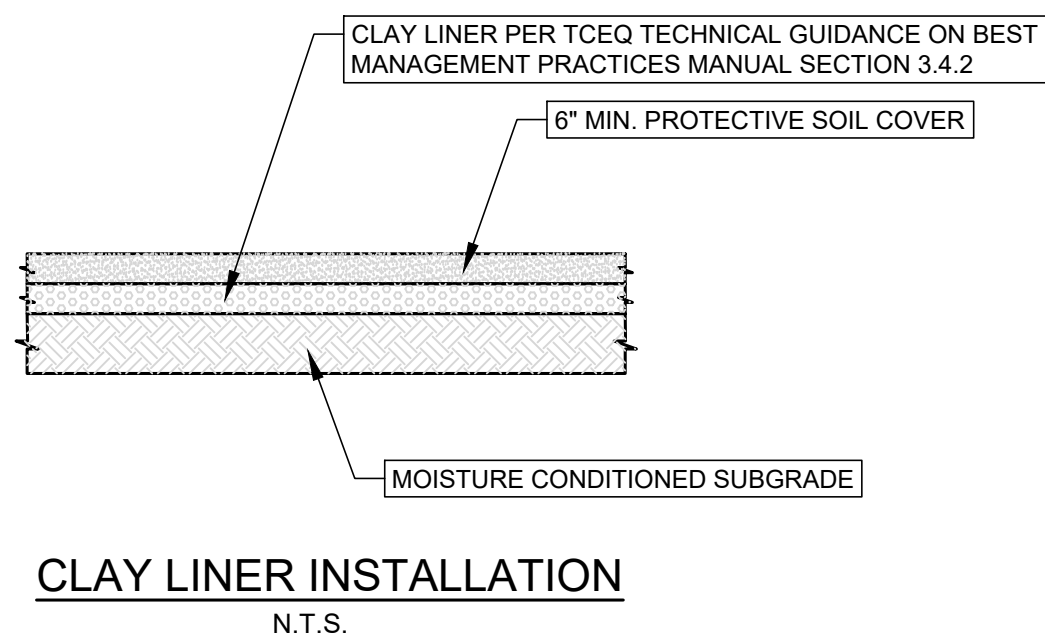
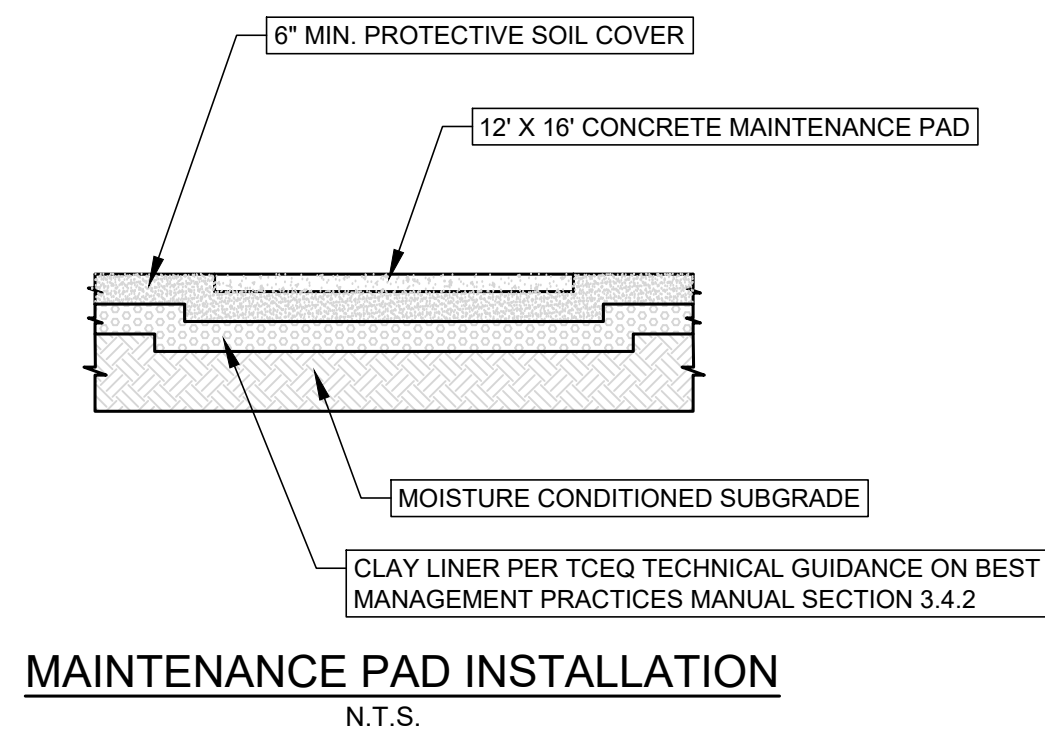
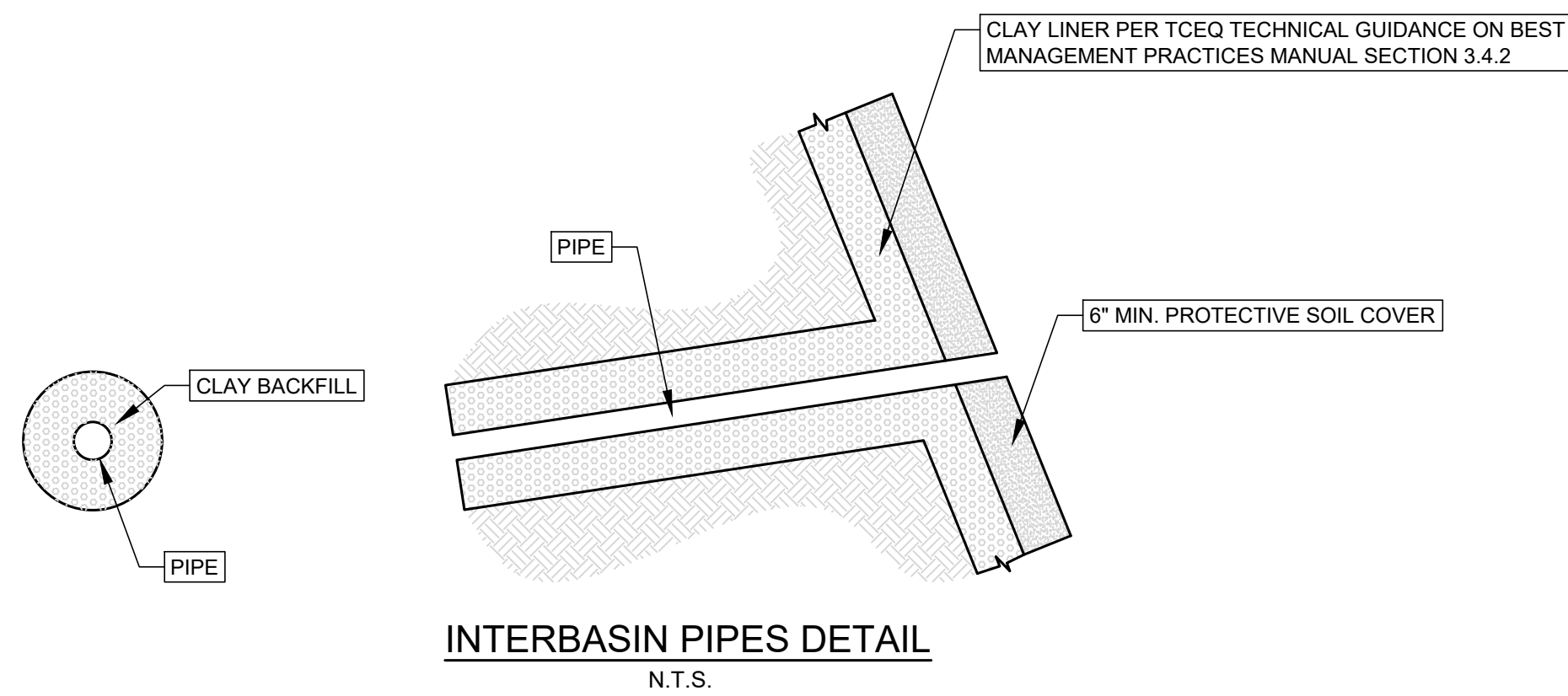
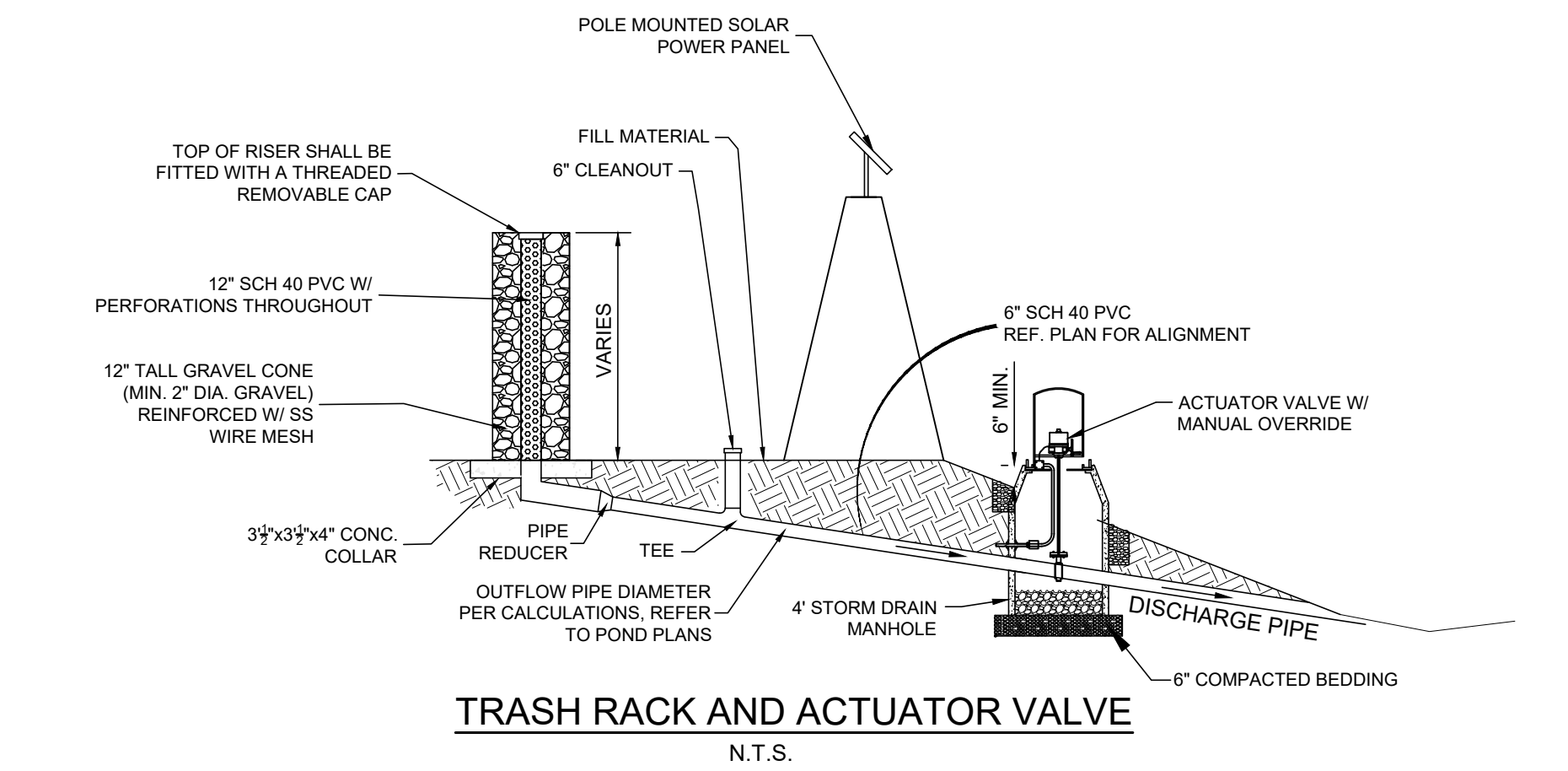
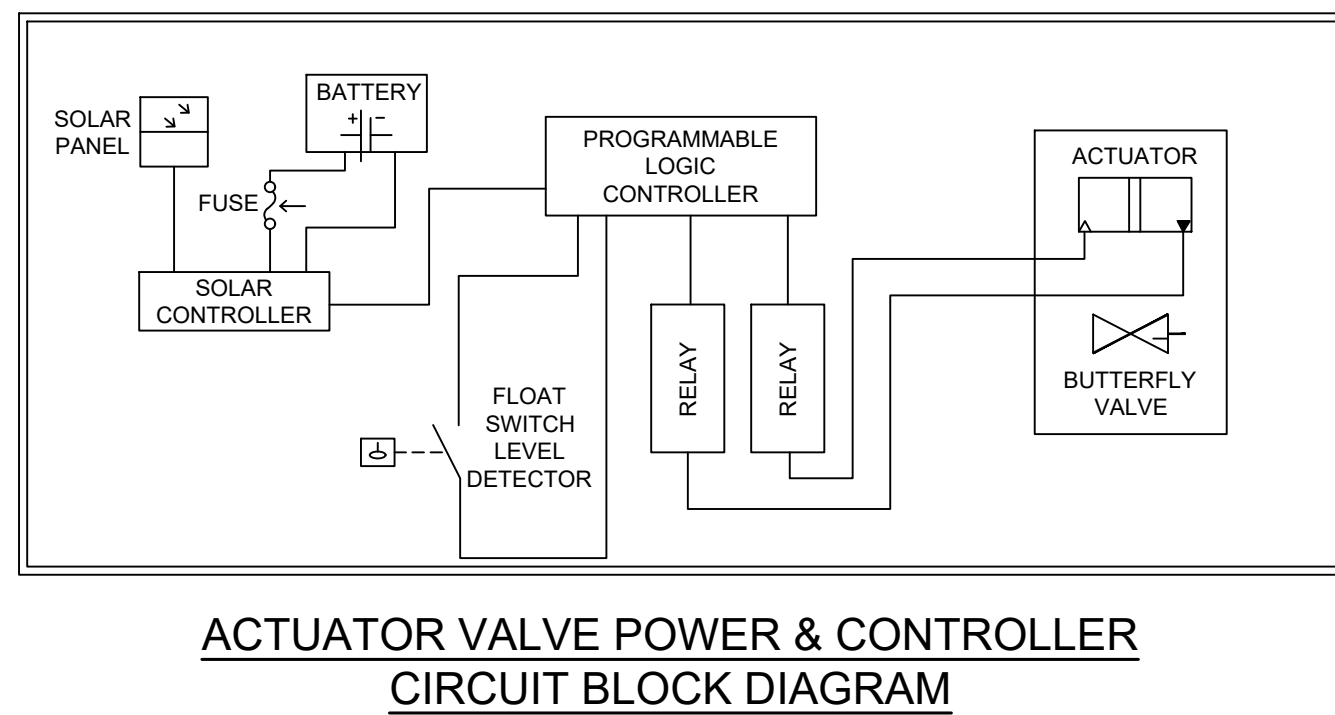
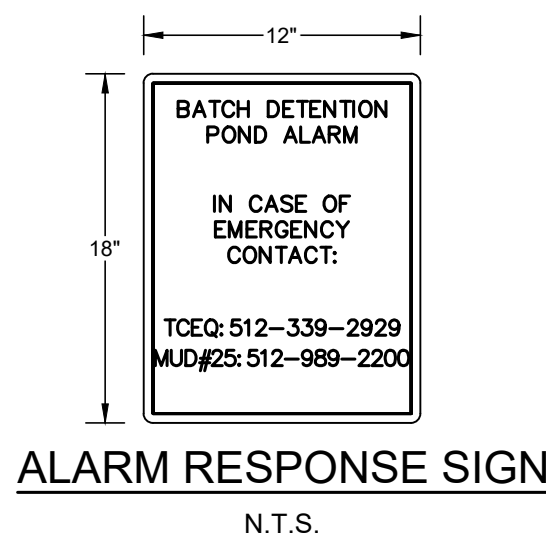
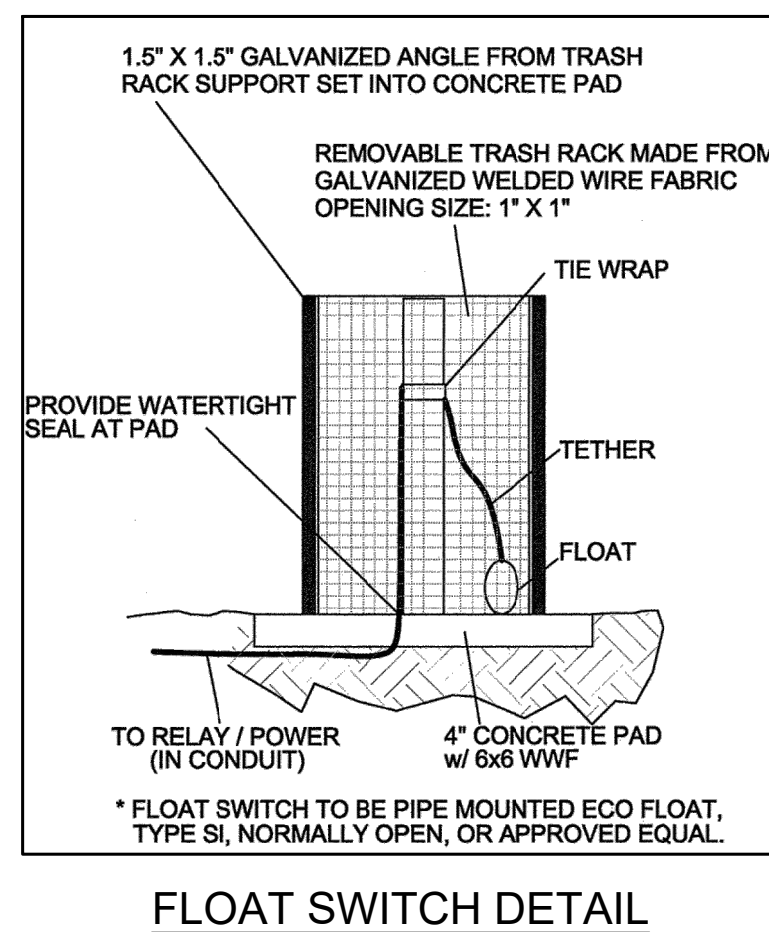
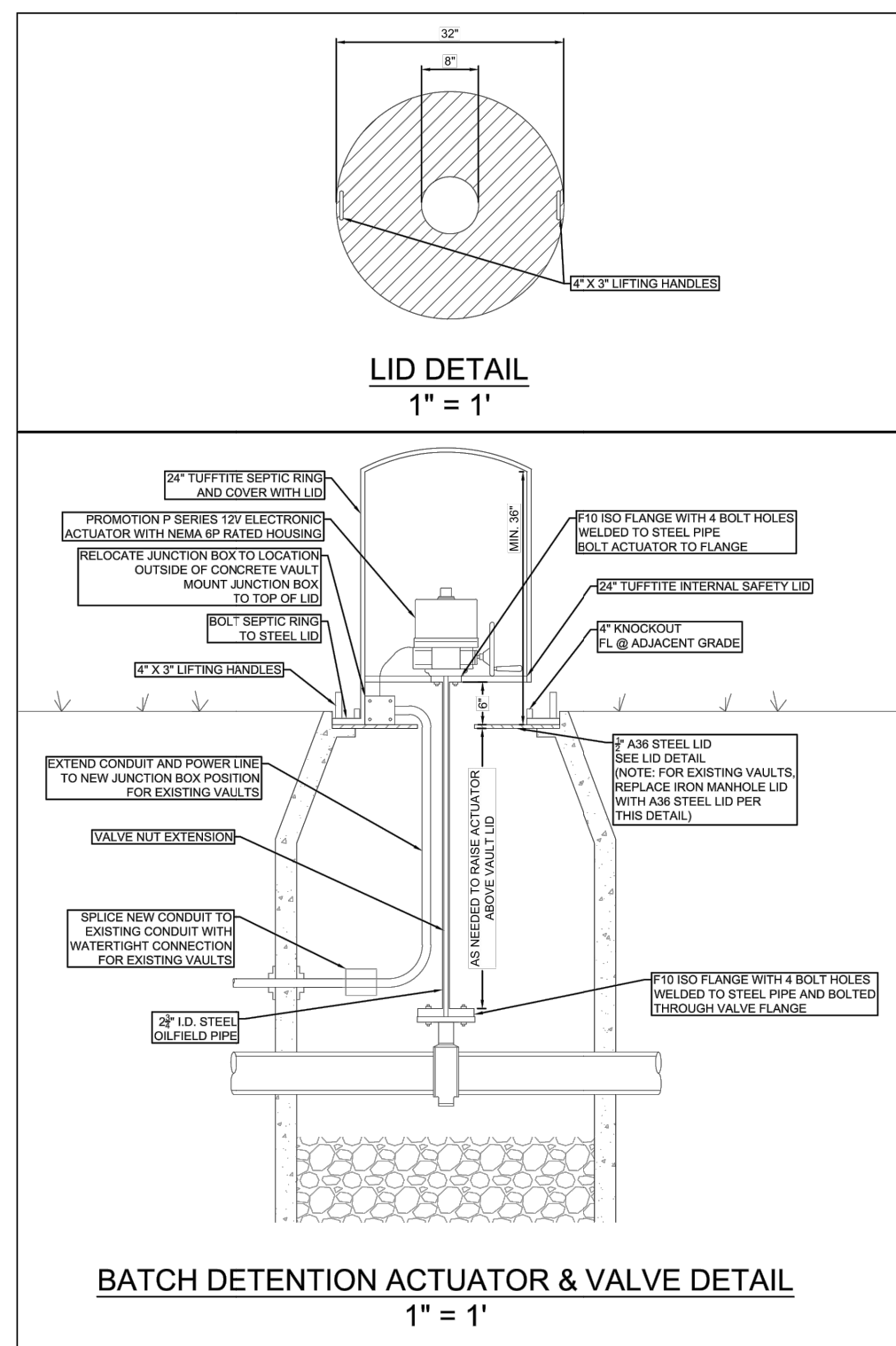


Table 3-6 Clay Liner Specifications (COA, 2004)

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

CLAY LINER SPECIFICATIONS PER TCEQ SPECIFICATIONS 3.4.2



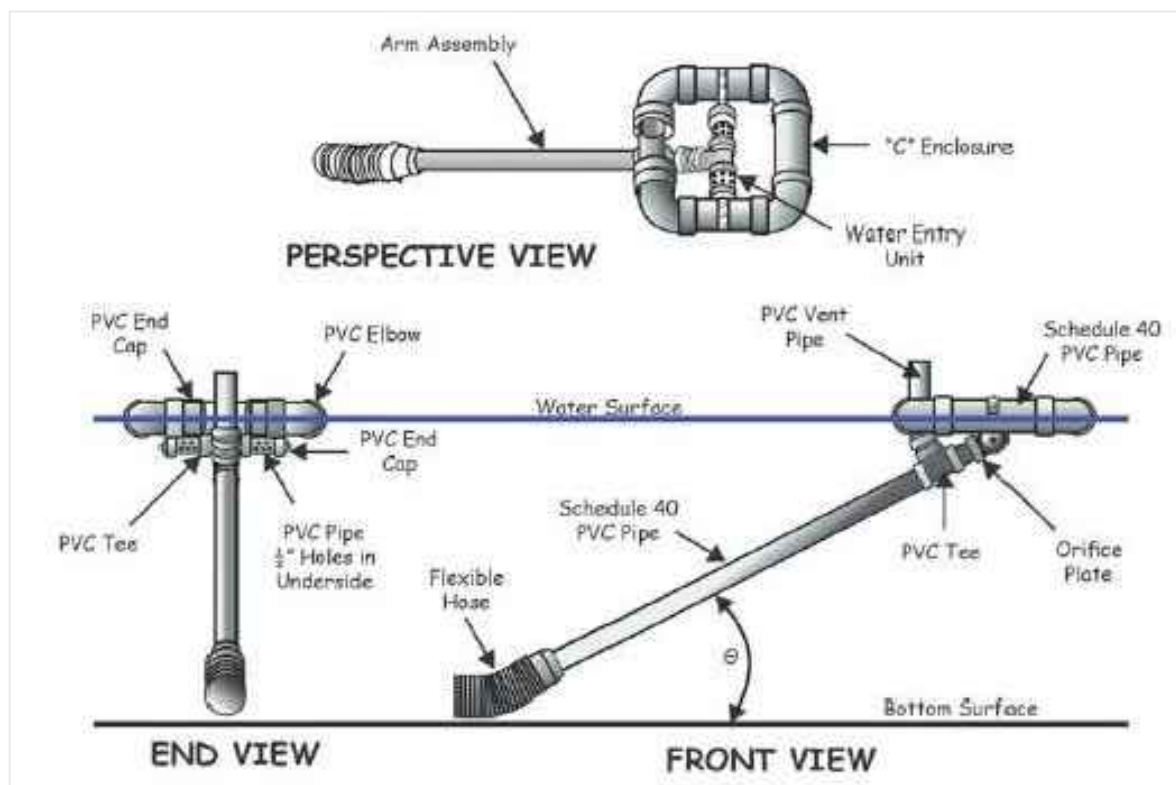
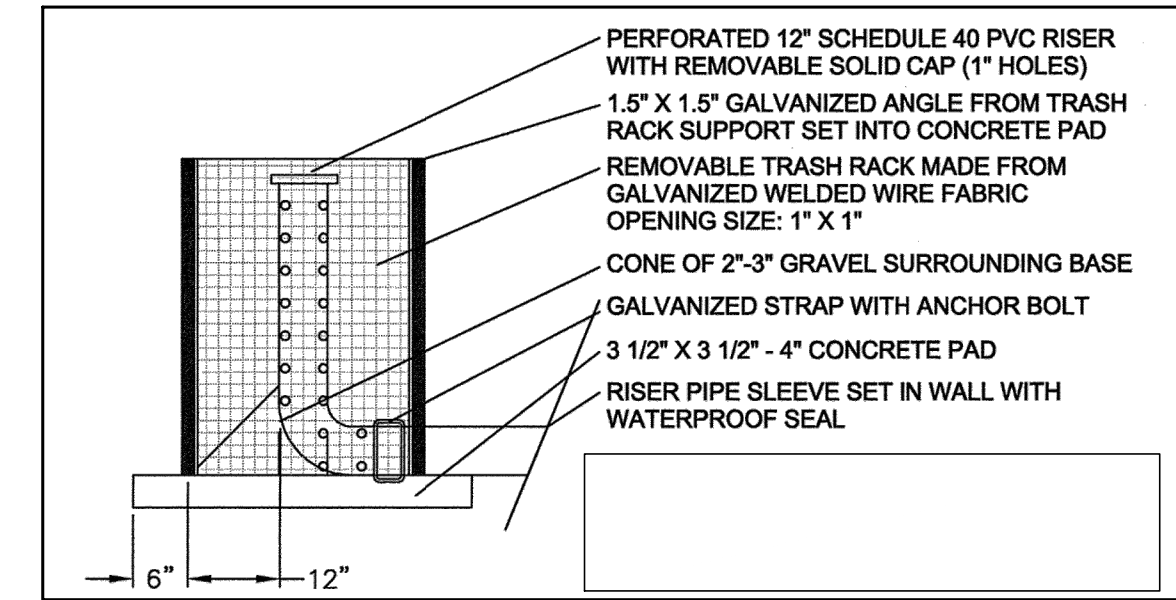
DRAWDOWN CALCULATIONS FOR A ROUND ORIFICE
PROJECT NAME: PARKSIDE ON THE RIVER PHASE 3 SECTIONS 6A & 6B

Pipe Diameter =	6.00	IN	W.Q.V. =	95.617	CF
Orifice Diameter =	4.08	IN	W.Q. Elev =	912.00	MSL
Outflow Orifice Elev =	905.04	MSL	Pond Bottom Elev =	907.00	MSL
Draining time	30.00	HR	Initial Head =	6.96	FT

TIME HRS	HEAD FT	OUTFLOW CFS	VOL CF	dV CF	Total dV CF	H FT	dH FT	W.S. MSL
0.00	6.96	1.15	95.617	4.152	0.22	6.74	912.00	
1.00	6.74	1.14	91.465	4.087	8.239	0.21	6.53	911.78
2.00	6.53	1.12	87.378	4.021	12.260	0.21	6.32	911.57
3.00	6.32	1.10	83.357	3.956	16.216	0.21	6.11	911.36
4.00	6.11	1.08	79.401	3.891	20.107	0.20	5.91	911.15
5.00	5.91	1.06	75.510	3.825	23.932	0.20	5.71	910.95
6.00	5.71	1.04	71.685	3.760	27.692	0.20	5.51	910.75
7.00	5.51	1.03	67.925	3.695	31.387	0.19	5.32	910.55
8.00	5.32	1.01	64.230	3.630	35.017	0.19	5.13	910.36
9.00	5.13	0.99	60.600	3.564	38.581	0.19	4.94	910.17
10.00	4.94	0.97	57.036	3.499	42.080	0.18	4.76	909.98
11.00	4.76	0.95	53.527	3.433	45.513	0.18	4.58	909.80
12.00	4.58	0.94	50.104	3.368	48.881	0.18	4.40	909.62
13.00	4.40	0.92	46.736	3.303	52.184	0.17	4.23	909.44
14.00	4.23	0.90	43.433	3.237	55.421	0.17	4.06	909.27
15.00	4.06	0.88	40.196	3.172	58.593	0.17	3.90	909.10
16.00	3.90	0.86	37.024	3.106	61.699	0.16	3.73	908.94
17.00	3.73	0.84	33.918	3.041	64.740	0.16	3.57	908.77
18.00	3.57	0.83	30.877	2.975	67.716	0.16	3.42	908.61
19.00	3.42	0.81	27.901	2.910	70.626	0.15	3.27	908.46
20.00	3.27	0.79	24.991	2.845	73.470	0.15	3.12	908.31
21.00	3.12	0.77	22.147	2.779	76.249	0.15	2.97	908.16
22.00	2.97	0.75	19.368	2.713	78.963	0.14	2.83	908.01
23.00	2.83	0.74	16.654	2.648	81.611	0.14	2.69	907.87
24.00	2.69	0.72	14.006	2.582	84.193	0.14	2.56	907.73
25.00	2.56	0.70	11.424	2.517	86.710	0.13	2.43	907.60
26.00	2.43	0.68	8.907	2.451	89.161	0.13	2.30	907.47
27.00	2.30	0.66	6.456	2.386	91.546	0.12	2.17	907.34
28.00	2.17	0.64	4.071	2.320	93.866	0.12	2.05	907.21
29.00	2.05	0.63	1.751	2.254	95.617	0.12	1.96	907.09
30.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
31.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
32.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
33.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
34.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
35.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
36.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
37.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
38.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
39.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
40.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
41.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
42.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
43.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
44.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
45.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
46.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
47.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00
48.00	1.96	0.00	0	0	95.617	0.00	1.96	907.00

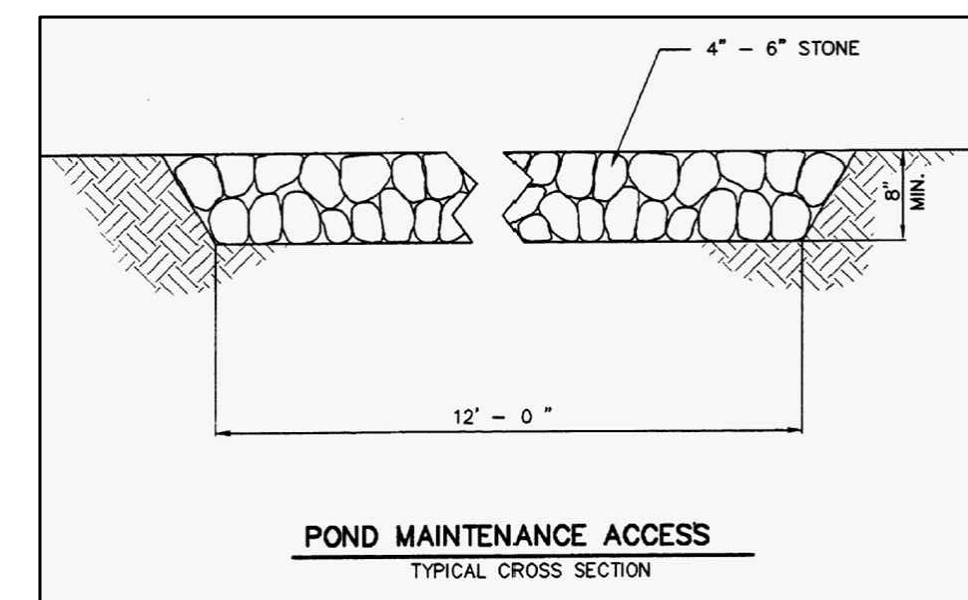
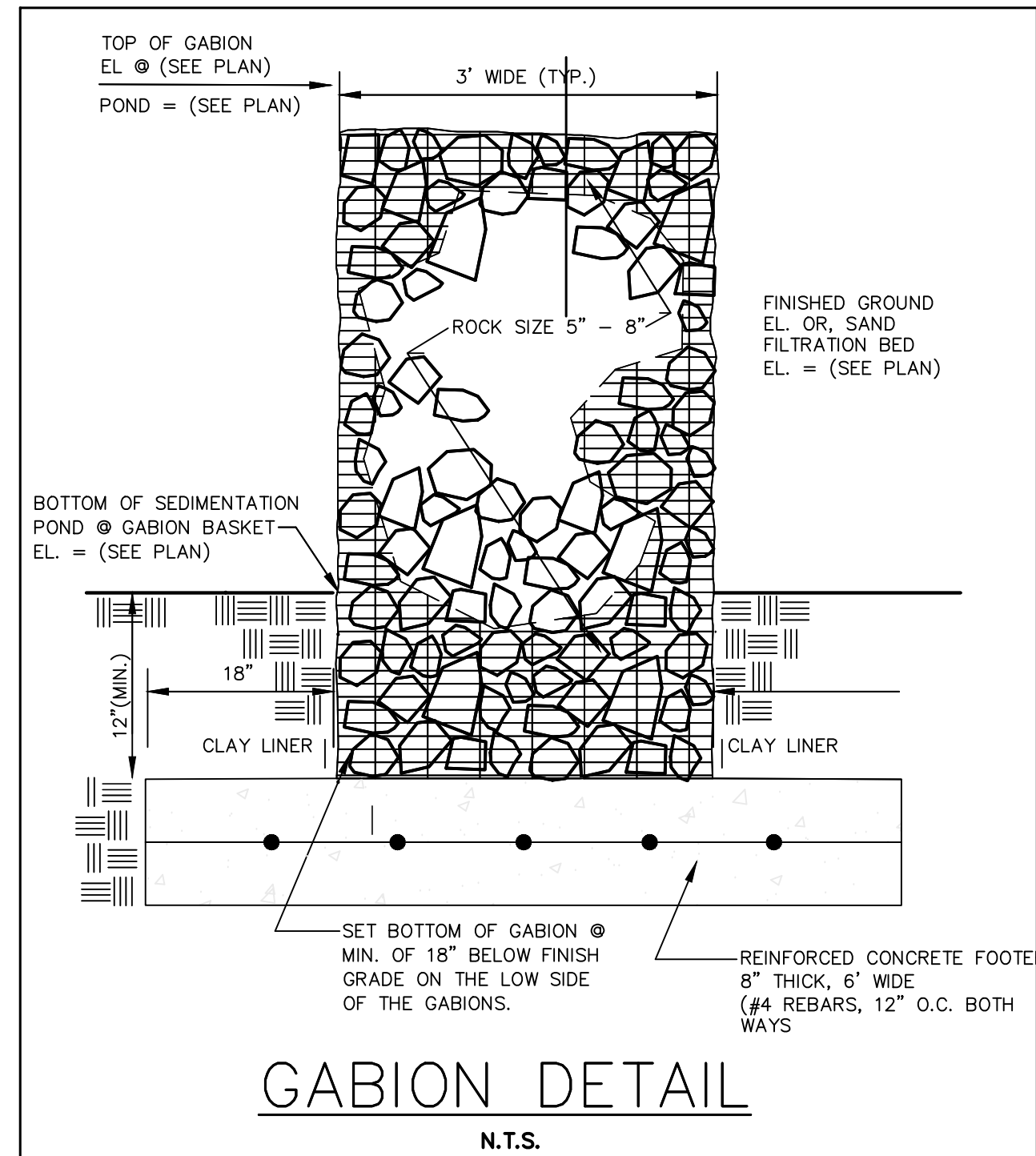
CONCRETE FILLED FIXED SEDIMENT MARKER FOR BATCH DETENTION POND

- NOTE:
- BATCH DETENTION POND SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RG-348 MANUAL (ADDENDUM).
 - THE BATCH DETENTION POND AND RISER PIPE / TRASH RACK WILL FUNCTION AS THE DEWATERING OUTLET AND SHALL BE INSTALLED AND FUNCTIONAL PRIOR TO ANY GENERAL GRADING AND UTILITY WORK.
 - SYSTEM SHALL BE 12 VDC WITH SOLAR CHARGED 12 VDC BATTERY. ALTERNATE ELECTRICAL DESIGN MAY ALSO BE UTILIZED IN LIEU OF SOLAR POWER WITH ENGINEERS APPROVAL.
 - ACTUATOR SHALL BE ELECTRONIC QUARTER-TURN WITH MANUAL OVERRIDE AND POSITION INDICATOR.
 - ACTUATOR SHALL BE "AVID 12V ACTUATOR, EPI-6" OR EQUIVALENT.
 - ACTUATOR VALVE TO BE SET AT "NORMALLY CLOSED" POSITION.
 - CONTROLLER SHALL BE SET TO OPEN VALVE 12 HOURS AFTER INITIAL RAINFALL DETECTION. VALVE TO REMAIN OPEN UNTIL 2 HRS FOLLOWING BASIN EMPTY SIGNAL.
 - LOGIC CONTROLLER SYSTEM SHALL HAVE TEST SEQUENCE TO DEAL WITH LOW BATTERY/POWER OUTAGES. ON/OFF/RESET SWITCH AND THE PROGRAMMING SHALL BE FIELD UPLOADABLE.
 - CONTROLLER SHALL BE "MORNINGSTAR SOLAR CONTROLLER, 12V, 20 AMP" OR EQUIVALENT.
 - ALL WIRING SHALL BE INSTALLED IN CONDUIT AND BURIED. CONTACT ENGINEER FOR ADDITIONAL CONTROLLER SCHEMATICS.
 - CONTRACTOR TO INSTALL LIBERTY ALARM MODEL ALM-2W OR EQUIVALENT AT A CONTROLLER PANEL.
 - ATTACH ALARM RESPONSE SIGN TO CONTROLLER POLE. REFERENCE ALARM RESPONSE SIGN TO RIGHT.
 - HAZARDOUS MATERIAL THREAT (HMT) OPERATION - THE BASIN'S OUTLET VALVE IS NORMALLY CLOSED AND WILL DETAIN A HAZARDOUS MATERIAL SPILL. HOWEVER, AFTER A SPILL OCCURS, THE MANUAL CONTROLS ON THE CONTROLLER OR THE ACTUATOR VALVE ARE USED TO PREVENT THE VALVE FROM AUTOMATICALLY OPENING PRIOR TO REMOVAL OF THE HAZARDOUS MATERIAL. ALTHOUGH NOT REQUIRED BY THE EDWARDS RULES, THE HMT OPERATION CAN BE USED TO COMPLY WITH APPENDIX A OF RG-348. IF A SPILL DOES OCCUR IN THE BASIN, ALL COMPONENTS OF THE CONTROLLER MUST BE INSPECTED AND CHECKED FOR PROPER OPERATION WITHIN 7 DAYS.
 - POWER - THE POND CONTROL SYSTEM CONTROLLER AND ACTUATOR SHALL BE 12 VOLT POWERED OR 12 VOLT SOLAR POWERED WITH BACKUP BATTERY POWER TO RESPOND TO A LOSS OF POWER IN THE MIDDLE OF A CYCLE.
 - PARTS ENCLOSURE & ALARM SYSTEM - THE PARTS ENCLOSURE SHALL BE LOCKABLE. AN ALARM SYSTEM CLEARLY VISIBLE TO INDICATE SYSTEM MALFUNCTION.
 - TEMPERATURE/WEATHER - THE SYSTEM SHALL BE CAPABLE OF OPERATION FROM 0 TO 130 DEGREES FAHRENHEIT AND FROM 10 TO 90% HUMIDITY.
 - RELIABILITY - THE SYSTEM SHALL HAVE A MINIMUM RELIABILITY OF 40,000 HOURS (4.6 YEARS).



DEWATERING SKIMMER

NOTE: DISCHARGE WATER MUST BE FILTERED USING FILTER BAG OR SOCK. DISCHARGE SHALL ALSO BE DIRECTED TOWARD SILT FENCE FOR ADDITIONAL FILTERING PRIOR TO LEAVING THE SITE.



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02/20/2023

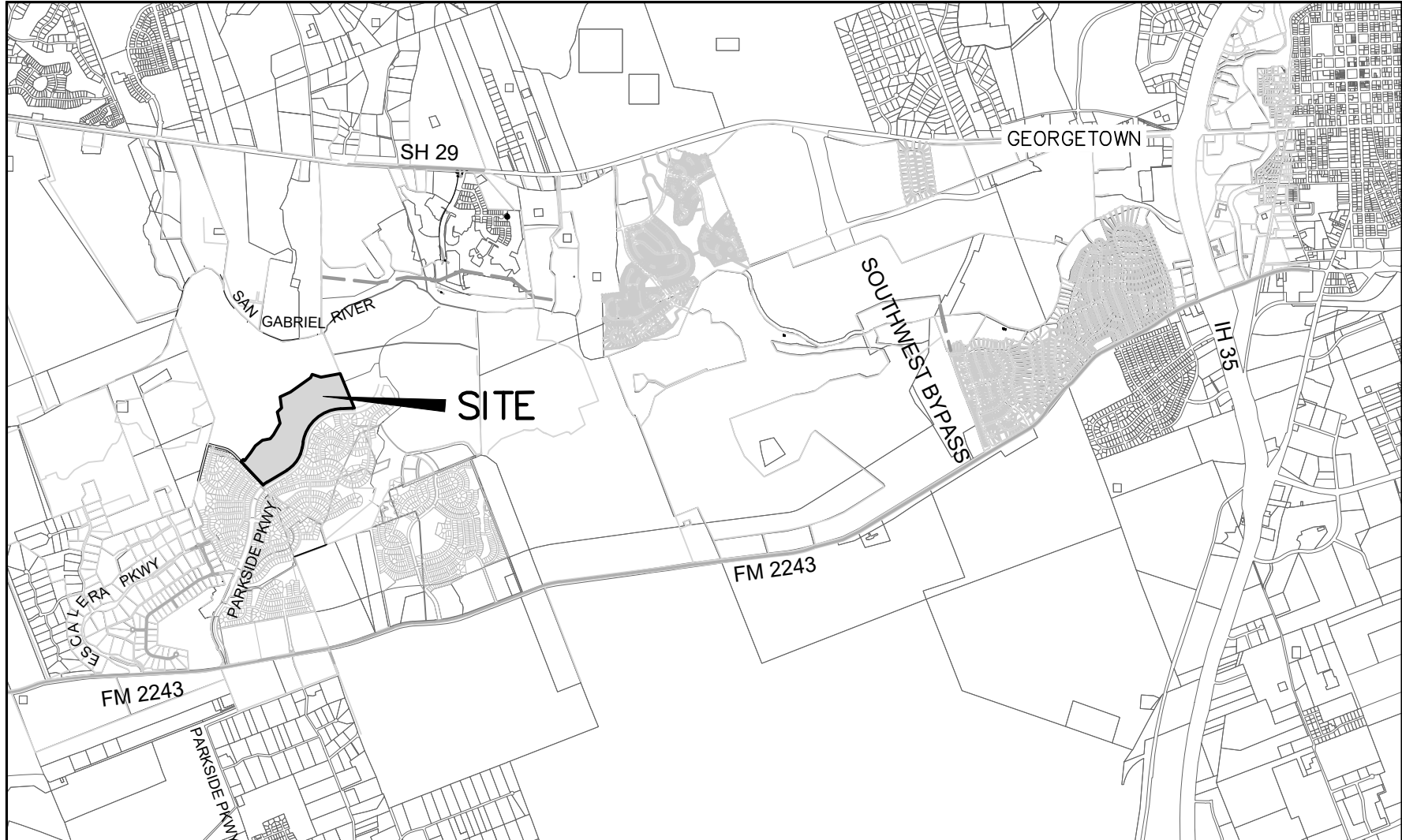
POND DETAILS
PARKSIDE ON THE RIVER PH 3,
SEC 6 CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: MM/CC
DRAWN BY: MM/CC
CHECKED BY: SN/DR
APPROVED BY: _____
SHEET **48** OF **97**
2022-45-CON

CIVIL CONSTRUCTION PLANS
PARKSIDE ON THE RIVER MUNICIPAL UTILITY DISTRICT NO. 3
PARKSIDE ON THE RIVER
GTII - PHASE 1

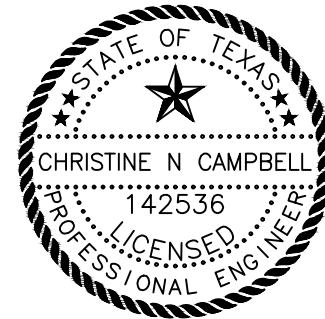
GEORGETOWN, WILLIAMSON COUNTY, TEXAS
2024-XX-CON

INITIAL SUBMITTAL DATE: 09/13/2024



VICINITY MAP
SCALE: 1"=4000'

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



SUBMITTED BY : *Christine Campbell* 09/13/2024

CHRISTINE CAMPBELL, P.E.
HR GREEN DEVELOPMENT TX, LLC
5508 HIGHWAY 290 WEST, SUITE 150
AUSTIN, TEXAS 78735
512.872.6696

DATE

REVIEWED FOR COMPLIANCE WITH

PARKSIDE ON THE RIVER M.U.D. NO. 3

DATE

OWNER/DEVELOPER: HM GPII, LP
1011 NORTH LAMAR BLVD.
AUSTIN, TX 78703
(512) 481-0303
BLAKE@BLAKEMAGEECO.COM

ENGINEER/SURVEYOR: HR GREEN DEVELOPMENT TX, LLC
5508 HIGHWAY 290 WEST, SUITE 150
AUSTIN, TEXAS 78735
512.872.6696
CHRISTINE.CAMPBELL@HRGREEN.COM

WATERSHED STATUS:

THIS SITE IS LOCATED IN THE SOUTH FORK OF THE SAN GABRIEL WATERSHED. THIS SITE IS LOCATED OVER THE EDWARDS AQUIFER RECHARGE ZONE AND CONTRIBUTING ZONE.

FLOODPLAIN INFORMATION:

NO PORTIONS OF THIS SUBDIVISION ARE WITHIN SPECIAL FLOOD HAZARD AREAS INUNDATED BY THE 100 YEAR FLOOD AS IDENTIFIED BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP NUMBER 48491C0460F, EFFECTIVE DATE DECEMBER 20, 2019.

LEGAL DESCRIPTION:

DESCRIPTION OF 75.87 ACRES OF LAND IN THE ISAAC DONAGAN SURVEY, ABSTRACT NO. 178, THE JOSEPH THOMPSON SURVEY, ABSTRACT NO. 608, AND THE W.E. PATE SURVEY, ABSTRACT NO. 836, WILLIAMSON COUNTY, TEXAS; BEING A PORTION OF A CERTAIN CALLED 314.00 ACRE TRACT OF LAND DESIGNATED AS TRACT 1 AND DESCRIBED IN THE SPECIAL WARRANTY DEED TO HM GPII, LP OF RECORD IN DOCUMENT NO. 2021027159, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS

BENCHMARK NOTE:

NAVD88 - GEOID12B

BM(1380)-221:
COTTON GIN SPINDLE FOUND IN THE SOUTH EDGE OF A CONCRETE SIDEWALK, ALONG THE WEST RIGHT-OFWAY LINE OF PARKSIDE PARKWAY, APPROXIMATELY 60 FEET WEST OF THE SOUTH CORNER OF THE SAID 314.00 ACRE TRACT.
ELEVATION = 962.21 FEET.

BM(1380)-700100:
MAG-NAIL WITH WASHER STAMPED HR GREEN SET IN CONCRETE RIM OF WATER MANHOLE, ALONG THE PROPOSED NORTHWEST RIGHT-OF-WAY LINE OF PARKSIDE PARKWAY, APPROXIMATELY 850 FEET NORTHEAST OF THE SOUTH CORNER OF A CALLED 314.00 ACRE TRACT.
ELEVATION = 940.16 FEET.

BM(1380)-700200:
MAG-NAIL WITH WASHER STAMPED HR GREEN SET IN CONCRETE BASE OF BOLLARD, ALONG THE PROPOSED NORTHWEST RIGHT-OF-WAY LINE OF PARKSIDE PARKWAY, APPROXIMATELY 350 FEET WEST OF THE EAST CORNER OF A CALLED 314.00 ACRE TRACT.
ELEVATION = 890.30 FEET.

UTILITY PROVIDERS:

WATER & WASTEWATER: GEORGETOWN UTILITY SYSTEMS
300-1 INDUSTRIAL AVENUE, GEORGETOWN TX 78626
(512) 930-3555
GUS@GEORGETOWN.ORG

ELECTRIC: PEDERNALES ELECTRIC COOPERATIVE
(877) 372-0391

NO LIABILITY NOTE:

LIMITATION OF LIABILITY - HR GREEN DEVELOPMENT TX, LLC ASSUMES NO LIABILITY FOR ANY DESIGN OR DRAWINGS IN THESE PLANS, THAT ARE NOT SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED WITH THE TEXAS BOARD OF PROFESSIONAL ENGINEERS AS A MEMBER OF THIS FIRM (#F-16384). OTHER CONSULTANTS WORK SHOWN IN THESE PLANS IS THE RESPONSIBILITY OF THE CONSULTANT WHO PREPARED SUCH WORK, AND IS INCLUDED IN THIS PLAN SET FOR REVIEW REQUIREMENTS ONLY.

SITE PLAN COMPONENTS - ALL BUILDING AND STRUCTURAL IMPROVEMENTS SHOWN HEREON ARE SHOWN FOR CONCEPTUAL PURPOSES ONLY. HR GREEN DEVELOPMENT TX, LLC IS NOT RESPONSIBLE OR LIABLE FOR THE DESIGN OF BUILDING OR STRUCTURAL IMPROVEMENTS BY OTHERS.

STRUCTURAL COMPONENTS - ALL STRUCTURAL DESIGN IS THE RESPONSIBILITY OF THE OWNER'S STRUCTURAL ENGINEER. STRUCTURAL DESIGN SHOWN HEREON IS THE DESIGN OF THE OWNER'S STRUCTURAL ENGINEER.

PAVEMENT DESIGN - PAVEMENT DESIGN SHOWN HEREON IS THE DESIGN OF THE OWNER'S GEOTECHNICAL CONSULTANT. HR GREEN DEVELOPMENT TX, LLC MAKES NO WARRANTY OR GUARANTEE AS TO ITS SUITABILITY, AND ASSUMES NO LIABILITY THEREFOR.

NOTES:

- THESE PLANS WERE PREPARED, SEALED, SIGNED AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE AND FEDERAL REQUIREMENTS AND CODES.
- THIS PROJECT IS SUBJECT TO ALL CITY STANDARD SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.
- THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
- A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED ON JUNE 19, 2020. ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GEOLOGIC ASSESSMENT ARE SHOWN HEREIN.
- THIS PROJECT IS SUBJECT TO THE 2011 UDC AND THE PARKSIDE ON THE RIVER DEVELOPMENT AGREEMENT (ORDINANCE NOS. 2019-69, 2020-84, 2021-40, 2024-18 AND RESPECTIVE DOCUMENT NOS. 2019117041, 2020162167, 2021082512, 2024031828).
- ALL ELECTRIC DISTRIBUTION LINES AND INDIVIDUAL SERVICE LINES SHALL BE INSTALLED UNDERGROUND. IF OVERHEAD LINES EXISTED PRIOR TO UNDERGROUND INSTALLATION, SUCH POLES, GUY WIRES, AND RELATED STRUCTURES SHALL BE REMOVED FOLLOWING CONSTRUCTION OF THE UNDERGROUND INFRASTRUCTURE.

REVISIONS

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CHRISTINE.CAMPBELL@HRGREEN.COM



TPE NO: 16384
TPELS NO: 10194101

DEVELOPMENT TX

COVER SHEET

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET 1 OF 91

2024-XX-CON

GENERAL CONSTRUCTION NOTES

1. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF GEORGETOWN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
2. CONTRACTOR SHALL NOTIFY GEORGETOWN UTILITIES AT 512-930-3555 AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET R.O.W. THE METHOD OF PLACEMENT AND COMPACTION OF BACKFILL IN THE CITY'S R.O.W. MUST BE APPROVED PRIOR TO THE START OF BACKFILL OPERATIONS.
3. FOR SLOPES OR TRENCHES GREATER THAN FIVE (5) FEET IN DEPTH, A NOTE MUST BE ADDED STATING THAT CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION. COPIES OF OSHA STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 E. 6TH STREET, AUSTIN, TEXAS.
4. ALL SITE WORK MUST ALSO COMPLY WITH ENVIRONMENTAL REQUIREMENTS.
5. **CONTRACTOR INFORMATION**

CONTRACTOR: UNKNOWN AT TIME OF SUBMITTAL

CONTRACTOR ADDRESS: N/A PHONE # N/A

DEVELOPER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:

HR GREEN DEVELOPMENT TX, LLC. PHONE# (512) 872-8696

PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:

HM PARKSIDE DEVELOPMENT INC. PHONE# 512-481-0303

PERSON OF FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:

HM PARKSIDE DEVELOPMENT INC. PHONE# 512-481-0303

6. TOPOGRAPHIC DATA SHOWN HEREON BASED ON GROUND TOPO SURVEY BY HR GREEN ON MAY 2024.
7. IF CONTRACTOR FINDS A DISCREPANCY WITH THE TOPOGRAPHIC INFORMATION ON THESE PLANS, HE/SHE SHOULD CONTACT THE ENGINEER/SURVEYOR IMMEDIATELY.
8. ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED AND GRADED TO DRAIN.
9. ANY TEMPORARY SPOILS STOCKPILE MUST BE LOCATED OUTSIDE OF ANY TREE DRUPLINES AND IN THE TEMPORARY SPOILS AREA DESIGNATED ON THE APPROVED PLANS. ALL SURPLUS MATERIAL WILL BE DISPOSED OF OFFSITE.
10. ALL DEBRIS AND EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE IN A MANNER NOT TO DAMAGE THE OWNER'S PROPERTY PRIOR TO ACCEPTANCE OF THE PROJECT.
11. IF CONTRACTOR ENCOUNTERS A VOID ON THE PROJECT, CONTRACTOR IS TO CONTACT ENGINEER AT (512) 872-8696 OR CRAWFORD AT CAMBRIAN ENVIRONMENTAL AT (512) 705-5541 FOR EVALUATION OF THE FEATURE. ONCE CAMBRIAN ENVIRONMENTAL HAS VERIFIED THAT THE FEATURE IS NOT AN ENDANGERED SPECIES HABITAT, CONTRACTOR MAY PROCEED AS DIRECTED BY THE DETAILS ON THESE PLANS.
12. ALL WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATION (MOST CURRENT EDITION).

TRENCH SAFETY NOTES:

1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT WILL BE PROVIDED BY THE CONTRACTOR.
2. IN ACCORDANCE WITH THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4- FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
3. CONSTRUCTION SHALL NOT PROCEED UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE RETAINED AND COPIES SUBMITTED TO THE CITY OF GEORGETOWN.

SEQUENCE OF CONSTRUCTION

1. INSTALL TREE PROTECTION AND INITIATE TREE MITIGATION MEASURES.
2. INSTALL EROSION CONTROLS AND OFF-SITE EROSION CONTROLS AS INDICATED ON APPROVED PLANS.
3. CONTACT CITY OF GEORGETOWN AND WILLIAMSON COUNTY TO SCHEDULE PRE-CONSTRUCTION COORDINATION MEETING
4. EVALUATE TEMPORARY EROSION CONTROL INSTALLATION. REVIEW CONSTRUCTION SCHEDULE WITH THE EROSION CONTROL PLAN.
5. BEGIN SITE CLEARING AND GRADING. INSPECT AND MAINTAIN ALL CONTROLS AS PER GENERAL NOTES.
6. CONSTRUCT UTILITY LINES I.E. WATER, WASTEWATER, STORM DRAINAGE & PONDS.
7. CONSTRUCT SIDEWALK RAMPS.
8. CONSTRUCT PAVING/STREETS.
9. REVEGETATE DISTURBED AREAS OR COMPLETE A DEVELOPERS CONTRACT FOR THE REVEGETATION ALONG WITH THE ENGINEER'S CONCURRENCE LETTER.
10. PROJECT ENGINEER INSPECTS JOB AND WRITES CONCURRENCE LETTER TO THE CITY. FINAL INSPECTION IS SCHEDULED UPON RECEIPT OF LETTER.
11. REMOVE TEMPORARY EROSION/SEDIMENTATION CONTROLS AT GRASS GROWTH.

CITY OF GEORGETOWN NOTES:

1. THESE CONSTRUCTION PLANS WERE PREPARED, SEALED, SIGNED, AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE CONSTRUCTION PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE, AND FEDERAL REQUIREMENTS AND CODES.
2. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.
3. THE SITE CONSTRUCTION PLANS SHALL MEET ALL REQUIREMENTS OF THE APPROVED SITE PLAN.
4. WASTEWATER MAINS AND SERVICE LINES SHALL BE SDR 26 PVC.
5. WASTEWATER MAINS SHALL BE INSTALLED WITHOUT HORIZONTAL OR VERTICAL BENDS.
6. MAXIMUM DISTANCE BETWEEN WASTEWATER MANHOLES IS 500 FEET.
7. WASTEWATER MAINS SHALL BE LOW PRESSURE AIR TESTED AND MANDEL TESTED BY THE CONTRACTOR ACCORDING TO CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
8. WASTEWATER MANHOLES SHALL BE VACUUM TESTED AND COATED BY THE CONTRACTOR ACCORDING TO CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
9. WASTEWATER MAINS SHALL BE CAMERA TESTED BY THE CONTRACTOR AND SUBMITTED TO THE CITY ON DVD FORMAT PRIOR TO PAVING THE STREETS.
10. PRIVATE WATER SYSTEM FIRE LINES SHALL BE TESTED BY THE CONTRACTOR TO 200 PSI FOR 2 HOURS.
11. PRIVATE WATER SYSTEM FIRE LINES SHALL BE DUCTILE IRON PIPING FROM THE WATER MAIN TO THE BUILDING SPRINKLER SYSTEM, AND 200 PSI C900 FOR ALL OTHERS.
12. PUBLIC WATER SYSTEM MAINS SHALL BE 150 PSI C900 PVC AND TESTED BY THE CONTRACTOR AT 200 PSI FOR 15 MINUTES AND 150 PSI FOR 2 HOURS.
13. ALL BEND AND CHANGES IN DIRECTION ON WATER MAINS SHALL BE RESTRAINED AND THRUST BLOCKED.
14. LONG FIRE HYDRANT LEADS SHALL BE RESTRAINED.
15. ALL WATER LINES ARE TO BE BACTERIA TESTED BY THE CONTRACTOR ACCORDING TO THE CITY STANDARDS AND SPECIFICATIONS.
16. WATER AND SEWER MAIN CROSSINGS SHALL MEET ALL REQUIREMENTS OF THE TCEQ AND THE CITY.
17. FLEXIBLE BASE MATERIAL FOR PUBLIC STREETS SHALL BE TxDOT TYPE A GRADE 1.
18. HOT MIX ASPHALT CONCRETE PAVEMENT SHALL BE TYPE D UNLESS OTHERWISE SPECIFIED AND SHALL BE A MINIMUM OF 2 INCHES THICK ON PUBLIC STREETS AND ROADWAYS.
19. ALL SIDEWALK RAMPS ARE TO BE INSTALLED WITH THE PUBLIC INFRASTRUCTURE.
20. A MAINTENANCE BOND IS REQUIRED TO BE SUBMITTED TO THE CITY PRIOR TO ACCEPTANCE OF CITY PUBLIC IMPROVEMENTS. THIS BOND SHALL BE ESTABLISHED FOR 2 YEAR IN THE AMOUNT OF 10% OF THE COST OF THE PUBLIC IMPROVEMENTS AND SHALL FOLLOW THE CITY FORMAT.
21. RECORD DRAWINGS OF PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER PRIOR TO ACCEPTANCE OF THE PROJECT. THESE DRAWINGS SHALL BE A PDF EMAILED TO THE CITY DEVELOPMENT ENGINEER.

WATER AND WASTEWATER NOTES:

1. PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 200), OR DUCTILE IRON (C-115, MIN. CLASS 200) UNLESS SPECIFIED OTHERWISE.
2. PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS SHALL BE PVC (ASTM D3034, SDR-26) UNLESS SPECIFIED OTHERWISE.
3. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR TO COORDINATE UTILITY TIE-INS AND NOTIFY HIM AT LEAST 48 HOURS PRIOR TO CONNECTING TO EXISTING LINES.
4. ALL MANHOLES SHALL HAVE ECCENTRIC CONES AND SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL HAVE BOLTED COVERS. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE ALLOWED.
5. THE CONTRACTOR MUST OBTAIN A BULK WATER PERMIT OR PURCHASE AND INSTALL A WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER. CONTRACTOR TO INSTALL ABOVE GROUND WATER TANK WITH SUPPLY LINE AS INDICATO ON PLANS.
6. LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE SCHEDULED WITH THE CITY INSPECTOR.
7. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES AND LABOR NECESSARY TO PERFORM THE TESTS. QUALITY AND PRESSURE TESTING SHALL BE MONITORED BY CITY OF GEORGETOWN PERSONNEL.
8. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF INSPECTOR AND PROVIDE NO LESS THAN 24 HOURS NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING OR PRESSURE TESTING.
9. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS AUTHORIZED BY THE CITY OF GEORGETOWN.
10. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
11. TOOLS FOR MARKING THE CURB SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF MARKING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF MARKING SHALL BE AS SPECIFIED BY THE ENGINEER AND ACCEPTED BY THE CITY OF GEORGETOWN.
12. CONTACT CITY OF GEORGETOWN INSPECTION DEPARTMENT FOR ASSISTANCE IN OBTAINING EXISTING WATER AND WASTEWATER LOCATIONS.
13. SAND, AS DESCRIBED IN 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

15. 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 A.M. AND 6 A.M.
16. ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS, 30 TAC CHAPTER 31.3 AND 317, AS APPLICABLE. WHENEVER TCEQ AND CITY OF GEORGETOWN SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.
17. THE CONTRACTOR SHALL CONTACT THE "DIG TESS" SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION FOR CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. THE CITY OF GEORGETOWN WATER AND WASTEWATER MAINTENANCE RESPONSIBILITY ENDS AT R.O.W./EASEMENT LINES.
18. ALL MANHOLES IN UNPAVED AREAS PROVIDING DIRECT ACCESS TO A WASTEWATER LINE SHALL BE WATERTIGHT AND BEAR THE WORDING AND INSIGNIA FOR THE CITY OF GEORGETOWN.
19. THE OWNER IS RESPONSIBLE FOR ALL COST OF RELOCATION OR DAMAGE TO UTILITIES.
20. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH OCCUR DUE TO HIS/HER FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES.
21. THE ENGINEER, IN PREPARING THESE PLANS HAS ATTEMPTED TO LOCATE ALL EXISTING UTILITIES IN THE AREAS OF EXPANSION OR NEW CONSTRUCTION. HOWEVER, THERE MAY BE UTILITIES THAT COULD NOT BE OR WERE NOT LOCATED. UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. CONTRACTOR SHALL DETERMINE THE EXACT LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL CALL APPROPRIATE UTILITY COMPANIES FOR LOCATIONS OF THEIR UTILITIES AT LEAST 48 HOURS BEFORE EXCAVATION. IN THE EVENT THAT A UTILITY IS SITUATED SUCH THAT CONSTRUCTION CANNOT PROCEED AS SHOWN ON THE PLANS, THE CONSTRUCTION MANAGER/SUPERVISOR SHALL BE NOTIFIED IMMEDIATELY.
22. CONTRACTOR TO COORDINATE WITH APPROPRIATE UTILITY COMPANIES PRIOR TO CONSTRUCTION, ADJUSTMENT, OR RELOCATION OF EXISTING UTILITIES AS DESIGNATED ON PLANS.
23. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATER AND ASSOCIATED VALVING AND SEWER LINES AND ASSOCIATED MANHOLES, IS NINE (9) FEET OUTSIDE DIAMETER TO OUTSIDE DIAMETER. THE MINIMUM VERTICAL SEPARATION BETWEEN WATER AND SEWER LINES IS EIGHTEEN (18) INCHES.
24. THE TOP ELEVATION OF MANHOLES IN PAVED AREAS SHALL MATCH FINISH GRADE. THE TOP ELEVATION OF MANHOLES IN UNPAVED AREAS SHALL BE 3" (MIN.) ABOVE FINISH GRADE, UNLESS OTHERWISE NOTED ON PLANS.
25. CONTRACTOR SHALL COORDINATE INSPECTION OF UTILITY LINES WITH APPROPRIATE AUTHORITIES PRIOR TO BACKFILLING TRENCHES.
26. ALL WATER AND WASTEWATER LINES IN CITY R.O.W. AND EASEMENTS WILL MEET THE CITY OF GEORGETOWN WATER AND WASTEWATER DEPARTMENT DESIGN CRITERIA, AT A MINIMUM.
27. CITY MAINTENANCE OF UTILITIES ENDS AT THE PROPERTY LINE UNLESS IN AN EASEMENT.
28. EXTEND ALL EXISTING UTILITY MANHOLES, BOXES, COVERS, ETC. TO PROPOSED FINISH GRADE, UNLESS APPROVED OTHERWISE.
29. ALL UNDERGROUND UTILITY CONSTRUCTION WITHIN CITY R.O.W. OR PUBLIC EASEMENTS MUST BE ACCOMPLISHED IN ACCORDANCE WITH THE CITY OF GEORGETOWN STANDARD SPECIFICATIONS.
30. AN 80 MIL COAT OF RAVEN LINING SYSTEMS, RAVEN 405 ULTRA HIGH BUILD EPOXY COATING, OR APPROVED EQUAL, TO BE APPLIED TO ENTIRE INTERIOR OF EACH WASTEWATER MANHOLE AND UNDERSIDE OF FLAT TOPS.
31. ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED AS FOLLOWS:
- | | |
|--------------------|----------------------|
| WATER SERVICE | "W" ON TOP OF CURB |
| WASTEWATER SERVICE | "S" ON TOP OF CURB |
| VALVE | "V" ON FACE OF CURB |
| DRY UTILITIES | "DU" ON FACE OF CURB |
32. CENTER ONE 20-FOOT 150 PSI PRESSURE RATED WASTEWATER PIPE SECTION AT ALL WATERLINE CROSSINGS.
33. WHERE WATER LINES AND NEW SEWER LINE ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC CHAPTER 217 (DESIGN CRITERIA FOR DOMESTIC WASTEWATER SYSTEMS) OR 30 TAC CHAPTER 290 (PUBLIC DRINKING WATER).

EROSION AND SEDIMENTATION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN.
3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF GEORGETOWN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND CITY INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTION MEASURES AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE CONTRACTOR SHALL NOTIFY THE CITY OF GEORGETOWN, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE.
5. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
6. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED. ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF GEORGETOWN STANDARD CONSTRUCTION SPECIFICATIONS AS ADOPTED AND AMENDED UNLESS OTHERWISE SPECIFIED.
2. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
3. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER.
4. THE CONTRACTOR SHALL GIVE THE CITY OF GEORGETOWN 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION.
5. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS AND CITY OF GEORGETOWN STANDARD SPECIFICATIONS. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING, AT THE CONTRACTOR'S OPTION. HOWEVER, THE TYPE OF REVEGETATION MUST EQUAL OR EXCEED THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION UNLESS OTHERWISE REQUESTED BY THE OWNER.
6. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONVENE A PRECONSTRUCTION CONFERENCE BETWEEN THE CITY OF GEORGETOWN, HIMSELF, THE ENGINEER, THE OWNER, THE ENVIRONMENTAL ENGINEER, GEOTECHNICAL ENGINEER, UTILITY COMPANIES, ANY AFFECTED PARTIES AND ANY OTHER ENTITY THE COUNTY OR ENGINEER MAY REQUIRE.
7. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND ANY TEMPORARY EASEMENTS. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. CLEANUP SHALL BE TO THE SATISFACTION OF THE ENGINEER.
8. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
9. AVAILABLE BENCHMARK(S) THAT MAY BE UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT ARE DESCRIBED AS FOLLOWS:

- NAVD88 - (GEOID 12B)
- BM(1380)-221:
COTTON GIN SPINDLE FOUND IN THE SOUTH EDGE OF A CONCRETE SIDEWALK, ALONG THE WEST RIGHT-OF-WAY LINE OF PARKSIDE PARKWAY, APPROXIMATELY 80 FEET WEST OF THE SOUTH CORNER OF THE SAID 314.00 ACRE TRACT.
ELEVATION = 962.21 FEET.
- BM(1380)-700100:
NAG-NAL WITH WASHER STAMPED HR GREEN SET IN CONCRETE RIM OF WATER MANHOLE, ALONG THE PROPOSED NORTHWEST RIGHT-OF-WAY LINE OF PARKSIDE PARKWAY, APPROXIMATELY 850 FEET NORTHEAST OF THE SOUTH CORNER OF A CALLED 314.00 ACRE TRACT.
ELEVATION = 940.16 FEET.
- BM(1380)-700200:
NAG-NAL WITH WASHER STAMPED HR GREEN SET IN CONCRETE BASE OF BOLLARD, ALONG THE PROPOSED NORTHWEST RIGHT-OF-WAY LINE OF PARKSIDE PARKWAY, APPROXIMATELY 350 FEET WEST OF THE EAST CORNER OF A CALLED 314.00 ACRE TRACT.
ELEVATION = 890.30 FEET.
10. SIDEWALK RAMPS AND SIDEWALKS LOCATED IN FRONT OF COMMON AREAS TO BE INSTALLED WITH INFRASTRUCTURE CONSTRUCTION
11. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING UTILITY OR IMPROVEMENTS.
12. CONTRACTOR SHALL REFER TO THE GEOTECHNICAL REPORT TITLED "GEOTECHNICAL INVESTIGATION PAVEMENT THICKNESS RECOMMENDATIONS FOR PARKSIDE ON THE RIVER" DATED AUGUST 2024 BY MLA GEOTECHNICAL ENGINEER'S JOB# 2410123.002 FOR PAVEMENT DESIGN RECOMMENDATIONS. ANY CONFLICT BETWEEN THESE CONSTRUCTION PLANS AND THE GEOTECHNICAL REPORT SHALL BE RESOLVED IN FAVOR OF THE GEOTECHNICAL REPORT.
13. THE DISTRICT ENGINEER, JONES-HEROY & ASSOCIATES, INC. (KEN HEROY, PH: 512-989-2200) SHALL BE CONTACTED 48 HOURS PRIOR TO THE FOLLOWING:
- 1) PRE-CONSTRUCTION MEETINGS
2) BEGINNING EACH PHASE OF CONSTRUCTION
3) TESTING OF WATER AND/OR WASTEWATER LINES
4) FINAL WALK-THROUGH OF FACILITIES
14. WHEN REQUIRED, CONTRACTOR SHALL REMOVE PAVEMENT IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF HIGHWAY AND PUBLIC TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION.
15. ALL PAVEMENT REMOVED SHALL BE DONE SUCH THAT THE REMAINING PAVEMENT IS LEFT WITH A CLEAN STRAIGHT EDGE.
16. WHEN REQUIRED, CONTRACTOR SHALL REMOVE EXISTING PAVEMENT STRIPING BY SAND BLASTING FROM EXISTING PAVEMENT IN ACCORDANCE WITH ITEM 678 OF THE TxDOT LATEST EDITION.
17. ALL WORK IN STATE R.O.W. AND EASEMENTS SHALL BE IN ACCORDANCE WITH THE TxDOT LATEST EDITION.
18. EARTHWORK FOR ALL BUILDING FOUNDATIONS AND SLABS SHALL BE IN ACCORDANCE WITH ARCHITECTURAL BUILDING PLANS AND SPECIFICATIONS AND THE GEOTECHNICAL STUDY.
19. IF THE CONTRACTOR FINDS A DISCREPANCY WITH THE TOPOGRAPHIC INFORMATION ON THESE PLANS HE/SHE SHOULD CONTACT THE ENGINEER OR OWNER IMMEDIATELY.
20. CONTRACTOR SHALL PROTECT ALL BENCHMARKS AND PROPERTY MONUMENTATION DISTURBED DURING CONSTRUCTION.
21. DESIGN OF MAJOR DRAINAGE WAYS THROUGH A SUBDIVISION AND MAJOR STRUCTURES SUCH AS BOX CULVERTS OR BRIDGES ACROSS A MAJOR DRAINAGE CHANNEL SHALL BE COORDINATED WITH THE REQUIREMENTS OF THE WILLIAMSON COUNTY HEALTH DISTRICT WHEN ANY PORTION OF THE SUBDIVISION LIES OUTSIDE THE CITY LIMITS, AND WHEN APPLICABLE, A LETTER REQUESTING A LOCAL FLOOD PLAN MAP AMENDMENT FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) SHALL BE PROVIDED PRIOR TO FINAL CONSTRUCTION PLAN APPROVAL.

TRAFFIC MARKING NOTE

1. ANY METHODS, STREET MARKINGS AND SIGNAGE NECESSARY FOR WARNING MOTORISTS, WARNING PEDESTRIANS OR DIVERTING TRAFFIC DURING CONSTRUCTION SHALL CONFORM TO THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION.
2. ALL PAVEMENT MARKINGS, MARKERS, PAINT, TRAFFIC BUTTONS, TRAFFIC CONTROLS AND SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES AND, THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION.

ADDITIONAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MOWING AND THE REMOVAL OF ALL LITTER WITHIN THE PROJECT LIMITS SO AS TO KEEP THE SITE OF THE WORK IN A NEAT AND PRESENTABLE CONDITION AT ALL TIMES. THIS WORK WILL BE CONSIDERED SUBSIDIARY TO THE VARIOUS BID ITEMS.
2. THE CONTRACTOR SHALL PROTECT ALL AREAS WHICH ARE NOT INCLUDED IN THE ACTUAL LIMITS OF THE PROPOSED CONSTRUCTION AREAS FROM DESTRUCTION. CARE SHALL BE EXERCISED TO PREVENT DAMAGE TO TREES, VEGETATION, FENCES, POWER POLES, AND OTHER NATURAL SURROUNDINGS. THE AREAS NOT TO BE DISTURBED INCLUDE ALL GOLF COURSE AREAS, UNLESS SPECIFIED OTHERWISE. THE CONTRACTOR SHALL, AT HIS EXPENSE, RESTORE ANY AREA DISTURBED AS A RESULT OF HIS OPERATIONS TO A CONDITION AS GOOD AS, OR BETTER THAN, THAT PRESENT PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MARKING EVERY 100 FOOT ROAD STATION, AND SHALL MAINTAIN THE DURATION OF THE PROJECT. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE ITEMIZED CONSTRUCTION CONTRACT.
4. THE SUPERINTENDENT SHALL BE AVAILABLE ON THE PROJECT AT ALL TIMES WHEN WORK IS BEING PERFORMED.
5. NO BLASTING IS ALLOWED ON THIS PROJECT.
6. NO STORAGE OF HYDROCARBON OR HAZARDOUS MATERIAL IS ALLOWED ON SITE.

PARKSIDE ON THE RIVER M.U.D. NO. 3 NOTES

1. THE DISTRICT ENGINEER, JONES-HEROY & ASSOCIATES, INC. (KEN HEROY, PH: 512-989-2200) SHALL BE CONTACTED 48 HOURS PRIOR TO:
- i) PRE-CONSTRUCTION MEETINGS;
ii) BEGINNING EACH PHASE OF CONSTRUCTION
iii) TESTING OF WATER AND/OR WASTEWATER LINES; AND,
iv) FINAL WALK-THROUGH OF FACILITIES
2. REVIEW OF THE PLANS BY THE DISTRICT IS LIMITED TO WATER, WASTEWATER, AND DRAINAGE, AND DOES NOT INDICATE A REVIEW OF THE ADEQUACY OF THE DESIGN FOR THE FACILITIES. IN APPROVING THESE PLANS, THE DISTRICT MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

GEORGETOWN FIRE DEPARTMENT NOTES

1. 1,500 GPM FIRE FLOW SHALL BE PROVIDED FOR THIS PROJECT.
2. AT THE CONCLUSION OF CONSTRUCTION AND AS PART OF THE PROCESS FOR THE CITY TO ACCEPT THIS PHASE:
- THE FIRE HYDRANTS SHALL BE FLOWED AND TESTED
 - A COPY OF THE REPORT SHALL BE EMAILED INTO THE FIRE DEPARTMENT
 - THE HYDRANTS SHALL BE PAINTED AND COLOR CODED.
- *** CAUTION :IF PRESSURE REDUCING VALVES WERE INSTALLED IN THIS PHASING THEY MUST BE SET PRIOR TO FIRE HYDRANT FLOW TESTING.
3. PER CITY ORDINANCE SEC. 13.15.120, HYDRANT FLOW CODING STANDARDS. PUBLIC HYDRANTS WILL HAVE THE BARRELS PAINTED SILVER, THE HYDRANTS WILL BE FLOW TESTED, AND THE BONNET PAINTED USING THE HYDRANT FLOW STANDARD IN PARAGRAPH C.
- FLOW COLOR:
- GREATER THAN 1500 GPM BLUE
 - 1000 TO 1500 GPM GREEN
 - 500 - 999 GPM ORANGE
 - LASS THAN 500 GPM RED
 - NOT WORKING BLACK OR BAGGED

DESIGNED BY: **CG**

DRAWN BY: **MM/MKM**

CHECKED BY: **SN**

APPROVED BY: _____

SHEET **2** OF **91**

2024-XX-00N

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STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
PROFESSIONAL ENGINEER

Christine Campbell
09/25/2024

GENERAL NOTES

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
ORGANIZED SEWAGE COLLECTION SYSTEM (SCS)
GENERAL CONSTRUCTION NOTES

1. THIS ORGANIZED SEWAGE COLLECTION SYSTEM MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) EDWARDS AQUIFER RULES 30 TEXAS ADMINISTRATIVE CODE (TAC) §213.5(C) AND 217.51 – 217.70 AND 30 TAC CHAPTER 217, SUBCHAPTER D, AND THE CITY OF ROUND ROCK STANDARD SPECIFICATIONS.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROPOSED REGULATED PROJECT MUST BE PROVIDED WITH COPIES OF THE SEWAGE COLLECTION SYSTEM PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS MUST BE REQUIRED TO KEEP ON-SITE COPIES OF THE PLAN AND THE APPROVAL LETTER.
3. NO LATER THAN 48 HOURS PRIOR TO COMMENCING ANY REGULATED ACTIVITY, THE APPLICANT OR HIS AGENT MUST NOTIFY THE TCEQ AUSTIN REGIONAL OFFICE, IN WRITING, OF THE DATE ON WHICH THE REGULATED ACTIVITY WILL BEGIN.
4. ANY MODIFICATION TO THE ACTIVITIES DESCRIBED IN THE REFERENCED SCS APPLICATION FOLLOWING THE DATE OF APPROVAL MAY REQUIRE THE SUBMITAL OF AN SCS APPLICATION TO MODIFY THIS APPROVAL, INCLUDING THE PAYMENT OF APPROPRIATE FEES AND ALL INFORMATION NECESSARY FOR ITS REVIEW AND APPROVAL.
5. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO CONSTRUCTION, MUST BE MAINTAINED DURING CONSTRUCTION, AND MUST BE REMOVED WHEN SUFFICIENT VEGETATION IS ESTABLISHED TO CONTROL THE EROSION AND SEDIMENTATION AND THE CONSTRUCTION AREA IS STABILIZED.
6. THE SEWER LINE TRENCH DETAILS SHOWING THE CROSS SECTION WITH THE DIMENSIONS, PIPE PLACEMENT, AND BACKFILL INSTRUCTIONS ARE INCLUDED ON PLAN SHEET 80 OF 124 OF THESE PLANS. ALL SEWER PIPES JOINTS MUST MEET THE REQUIREMENTS IN 30 TAC §217.53(C) AN 217.65.

GRAVITY LINES MUST HAVE A SDR 35 OR LESS. PRESSURIZED SEWER SYSTEMS MUST HAVE PIPE WITH A MINIMUM WORKING PRESSURE RATING OF 150 PSI.

THE ASTM, ANSI, OR AWWA SPECIFICATION NUMBERS FOR THE PIPE(S) AND JOINTS ARE ASTM-D3034.

THE PIPE MATERIAL, THE PRESSURE CLASSES, AND THE SDR AND/OR DR DESIGNATIONS ARE SDR-26.

7. IF ANY SENSITIVE FEATURES ARE DISCOVERED DURING THE WASTEWATER LINE TRENCHING ACTIVITIES, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPLICANT MUST IMMEDIATELY NOTIFY THE APPROPRIATE REGIONAL OFFICE OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY OF THE FEATURE DISCOVERED. A GEOLOGIST'S ASSESSMENT OF THE LOCATION AND EXTENT OF THE FEATURE DISCOVERED MUST BE REPORTED TO THAT REGIONAL OFFICE IN WRITING WITHIN TWO WORKING DAYS. THE APPLICANT MUST SUBMIT A PLAN FOR ENSURING THE STRUCTURAL INTEGRITY OF THE SEWER LINE OR FOR MODIFYING THE PROPOSED COLLECTION SYSTEM ALIGNMENT AROUND THE FEATURE. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE EXECUTIVE DIRECTOR HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY WHILE MAINTAINING THE STRUCTURAL INTEGRITY OF THE LINE.

8. SEWER LINES LOCATED WITHIN OR CROSSING THE 5-YEAR FLOODPLAIN OF A DRAINAGE WAY WILL BE PROTECTED FROM INUNDATION AND STREAM WENTIGS WHICH COULD CAUSE EROSION AND SCOURING OF BACKFILL. THE TRENCH MUST BE CAPPED WITH CONCRETE TO PREVENT SCOURING OF BACKFILL, OR THE SEWER LINES MUST BE ENCASED IN CONCRETE. ALL CONCRETE SHALL HAVE A MINIMUM THICKNESS OF SIX (6) INCHES.

9. BLASTING PROCEDURES FOR PROTECTION OF EXISTING SEWER LINES AND OTHER UTILITIES WILL BE IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION CRITERIA. SAND IS NOT ALLOWED AS BEDDING OR BACKFILL IN TRENCHES THAT HAVE BEEN BLASTED. IF ANY EXISTING SEWER LINES ARE DAMAGED, THE LINES MUST BE REPAIRED AND RETESTED.

10. ALL MANHOLES CONSTRUCTED OR REHABILITATED ON THIS PROJECT MUST HAVE WATER TIGHT SIZE ON SIZE RESILIENT CONNECTORS ALLOWING FOR DIFFERENTIAL SETTLEMENT. IF MANHOLES ARE CONSTRUCTED WITHIN THE 100-YEAR FLOODPLAIN, THE COVER MUST HAVE A GASKET AND BE BOLTED TO THE RING. WHERE GASKETED MANHOLE COVERS ARE REQUIRED FOR MORE THAN THREE MANHOLES IN SEQUENCE OR FOR MORE THAN 1500 FEET, ALTERNATE MEANS OF VENTING WILL BE PROVIDED. BRICKS ARE NOT AN ACCEPTABLE CONSTRUCTION MATERIAL FOR ANY PORTION OF THE MANHOLE.

THE DIAMETER OF THE MANHOLES MUST BE A MINIMUM OF FOUR FEET AND THE MANHOLE FOR ENTRY MUST HAVE A MINIMUM CLEAR OPENING DIAMETER OF 30 INCHES. THESE DIMENSIONS AND OTHER DETAILS SHOWING COMPLIANCE WITH THE COMMISSION'S RULES CONCERNING MANHOLES AND SEWER LINE/MANHOLE INVERTS DESCRIBED IN 30 TAC §217.55 ARE INCLUDED ON PLAN SHEET 75 & 77 OF 124.

IT IS SUGGESTED THAT ENTRANCE INTO MANHOLES IN EXCESS OF FOUR FEET DEEP BE ACCOMPLISHED BY MEANS OF A PORTABLE LADDER. THE INCLUSION OF STEPS IN A MANHOLE IS PROHIBITED.

11. WHERE WATER LINES AND NEW SEWER LINE ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC §217.53(D) (PIPE DESIGN) AND 30 TAC §290.44(E) (WATER DISTRIBUTION).

12. WHERE SEWERS LINES DEViate FROM STRAIGHT ALIGNMENT AND UNIFORM GRADE ALL CURVATURE OF SEWER PIPE MUST BE ACHIEVED BY THE FOLLOWING PROCEDURE WHICH IS RECOMMENDED BY THE PIPE MANUFACTURER: N/A.

IF PIPE FLEXURE IS PROPOSED, THE FOLLOWING METHOD OF PREVENTING DEFLECTION OF THE JOINT MUST BE USED: N/A.

SPECIFIC CARE MUST BE TAKEN TO ENSURE THAT THE JOINT IS PLACED IN THE CENTER OF THE TRENCH AND PROPERLY BEDDED IN ACCORDANCE WITH 30 TAC §217.54.

13. NEW SEWAGE COLLECTION SYSTEM LINES MUST BE CONSTRUCTED WITH STUB OUTS FOR THE CONNECTION OF ANTICIPATED EXTENSIONS. THE LOCATION OF SUCH STUB OUTS MUST BE MARKED ON THE GROUND SUCH THAT THEIR LOCATION CAN BE EASILY DETERMINED AT THE TIME OF CONNECTION OF THE EXTENSIONS. SUCH STUB OUTS MUST BE MANUFACTURED WYES OR TEES THAT ARE COMPATIBLE IN SIZE AND MATERIAL WITH BOTH THE SEWER LINE AND THE EXTENSION. AT THE TIME OF ORIGINAL CONSTRUCTION, NEW STUB-OUTS MUST BE CONSTRUCTED SUFFICIENTLY TO EXTEND BEYOND THE END OF THE STREET PAVEMENT. ALL STUB-OUTS MUST BE SEALED WITH A MANUFACTURED CAP TO PREVENT LEAKAGE. EXTENSIONS THAT WERE NOT ANTICIPATED AT THE TIME OF ORIGINAL CONSTRUCTION OR THAT ARE TO BE CONNECTED TO AN EXISTING SEWER LINE NOT FURNISHED WITH STUB OUTS MUST BE CONNECTED USING A MANUFACTURED SADDLE AND IN ACCORDANCE WITH ACCEPTED PLUMBING TECHNIQUES.

14. TRENCHING, BEDDING AND BACKFILL MUST CONFORM WITH 30 TAC §217.54. THE BEDDING AND BACKFILL FOR FLEXIBLE PIPE MUST COMPLY WITH THE STANDARDS OF ASTM D-2321, CLASSES IA, IB, II OR III. RIGID PIPE BEDDING MUST COMPLY WITH THE REQUIREMENTS OF ASTM C 12 (ANSI A 106.2) CLASSES A, B OR C.

15. SEWER LINES MUST BE TESTED FROM MANHOLE TO MANHOLE. WHEN A NEW SEWER LINE IS CONNECTED TO AN EXISTING STUB OR CLEAN-OUT, IT MUST BE TESTED FROM EXISTING MANHOLE TO NEW MANHOLE. IF A STUB OR CLEAN-OUT IS USED AT THE END OF THE PROPOSED SEWER LINE, NO PRIVATE SERVICE ATTACHMENTS MAY BE CONNECTED BETWEEN THE LAST MANHOLE AND THE CLEANOUT UNLESS IT CAN BE CERTIFIED AS CONFORMING WITH THE PROVISIONS OF 30 TAC §213.5(C)(3)(E).

16. ALL SEWER LINES MUST BE TESTED IN ACCORDANCE WITH 30 TAC §217.57. THE ENGINEER MUST RETAIN COPIES OF ALL TEST RESULTS WHICH MUST BE MADE AVAILABLE TO THE EXECUTIVE DIRECTOR UPON REQUEST. THE ENGINEER MUST CERTIFY IN WRITING THAT ALL WASTEWATER LINES HAVE PASSED ALL REQUIRED TESTING TO THE APPROPRIATE REGIONAL OFFICE WITHIN 30 DAYS OF TEST COMPLETION AND PRIOR TO USE OF THE NEW COLLECTION SYSTEM. THE TESTING METHOD WILL BE
- (A) OR A COLLECTION SYSTEM PIPE THAT WILL TRANSPORT WASTEWATER BY GRAVITY FLOW, THE DESIGN MUST SPECIFY AN INFILTRATION AND EXFILTRATION TEST OR A LOW-PRESSURE AIR TEST. A TEST MUST CONFORM TO THE FOLLOWING REQUIREMENTS:

- (1) LOW PRESSURE AIR TEST
- (A) A LOW PRESSURE AIR TEST MUST FOLLOW THE PROCEDURES DESCRIBED IN AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) C-828, ASTM C-924, OR ASTM F-1417 OR OTHER PROCEDURE APPROVED BY THE EXECUTIVE DIRECTOR.
- EXCEPT AS TO TESTING TIMES AS REQUIRED IN TABLE C.3 IN SUBPARAGRAPH (C) OF THIS PARAGRAPH OR EQUATION C.3 IN SUBPARAGRAPH (B)(II) OF THIS PARAGRAPH,
- (B) FOR SECTIONS OF COLLECTION SYSTEM PIPE LESS THAN 36 INCH AVERAGE INSIDE DIAMETER, THE FOLLOWING PROCEDURE MUST APPLY, UNLESS A PIPE IS TO BE TESTED AS REQUIRED BY PARAGRAPH (2) OF THIS SUBSECTION.
- (I) A PIPE MUST BE PRESSURIZED TO 3.5 POUNDS PER SQUARE INCH (PSI) GREATER THAN THE PRESSURE EXERTED BY GROUNDWATER ABOVE THE PIPE.
- (II) ONCE THE PRESSURE IS STABILIZED, THE MINIMUM TIME ALLOWABLE FOR THE PRESSURE TO DROP FROM 3.5 PSI GAUGE TO 2.5 PSI GAUGE IS COMPUTED FROM THE FOLLOWING EQUATION:

$$\text{EQUATION C.3 } T = \frac{0.085 \times D \times K}{Q}$$

WHERE:

- T = TIME FOR PRESSURE TO DROP 1.0 POUND PER SQUARE INCH GAUGE IN SECONDS
- K = 0.000419 X D X L, BUT NOT LESS THAN 1.0
- D = AVERAGE INSIDE PIPE DIAMETER IN INCHES
- L = LENGTH OF LINE OF SAME SIZE BEING TESTED, IN FEET
- Q = RATE OF LOSS, 0.0015 CUBIC FEET PER MINUTE PER SQUARE FOOT INTERNAL SURFACE
- (C) SINCE A K VALUE OF LESS THAN 1.0 MAY NOT BE USED, THE MINIMUM TESTING TIME FOR EACH PIPE DIAMETER IS SHOWN IN THE FOLLOWING

TABLE C.3:

PIPE DIAMETER (INCHES)	MINIMUM TIME (SECONDS)	MAXIMUM LENGTH FOR MINIMUM TIME (FEET)	TIME FOR LONGER LENGTH (SECONDS/FOOT)
6	340	398	0.855
8	454	288	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

- (D) AN OWNER MAY STOP A TEST IF NO PRESSURE LOSS HAS OCCURRED DURING THE FIRST 25% OF THE CALCULATED TESTING TIME.
- (E) IF ANY PRESSURE LOSS OR LEAKAGE HAS OCCURRED DURING THE FIRST 25% OF A TESTING PERIOD, THEN THE TEST MUST CONTINUE FOR THE ENTIRE TEST DURATION AS OUTLINED ABOVE OR UNTIL FAILURE.
- (F) WASTEWATER COLLECTION SYSTEM PIPES WITH A 27 INCH OR LARGER AVERAGE INSIDE DIAMETER MAY BE AIR TESTED AT EACH JOINT INSTEAD OF FOLLOWING THE PROCEDURE OUTLINED IN THIS SECTION.
- (G) A TESTING PROCEDURE FOR PIPE WITH AN INSIDE DIAMETER GREATER THAN 33 INCHES MUST BE APPROVED BY THE EXECUTIVE DIRECTOR.
- (2) INFILTRATION/EXFILTRATION TEST.

- (A) THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH OF DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF 2.0 FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE.
- (B) AN OWNER SHALL USE AN INFILTRATION TEST IN LIEU OF AN EXFILTRATION TEST WHEN PIPES ARE INSTALLED BELOW THE GROUNDWATER LEVEL.
- (C) THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE, OR AT LEAST TWO FEET ABOVE EXISTING GROUNDWATER LEVEL, WHICHEVER IS GREATER.
- (D) FOR CONSTRUCTION WITHIN A 25-YEAR FLOOD PLAIN, THE INFILTRATION OR EXFILTRATION MUST NOT EXCEED 10 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT THE SAME MINIMUM TEST HEAD AS IN SUBPARAGRAPH (C) OF THIS PARAGRAPH.
- (E) IF THE QUANTITY OF INFILTRATION OR EXFILTRATION EXCEEDS THE MAXIMUM QUANTITY SPECIFIED, AN OWNER SHALL UNDERTAKE REMEDIAL ACTION IN ORDER TO REDUCE THE INFILTRATION OR EXFILTRATION TO AN AMOUNT WITHIN THE LIMITS SPECIFIED. AN OWNER SHALL RETEST A PIPE FOLLOWING A REMEDIATION ACTION.
- (F) IF A GRAVITY COLLECTION PIPE IS COMPOSED OF FLEXIBLE PIPE, DEFLECTION TESTING IS ALSO REQUIRED. THE FOLLOWING PROCEDURES MUST BE FOLLOWED:
- (1) FOR A COLLECTION PIPE WITH INSIDE DIAMETER LESS THAN 27 INCHES, DEFLECTION MEASUREMENT REQUIRES A RIGID MANDREL.
- (A) MANDREL SIZING
- (I) A RIGID MANDREL MUST HAVE AN OUTSIDE DIAMETER (OD) NOT LESS THAN 98% OF THE BASE INSIDE DIAMETER (ID) OR AVERAGE ID OF A PIPE, AS SPECIFIED IN THE APPROPRIATE STANDARD BY THE ASTM'S, AMERICAN WATER WORKS ASSOCIATION, UN-BELL, OR AMERICAN NATIONAL STANDARDS INSTITUTE, OR ANY RELATED APPENDIX.
- (II) IF A MANDREL SIZING DIAMETER IS NOT SPECIFIED IN THE APPROPRIATE STANDARD, THE MANDREL MUST HAVE AN OD EQUAL TO 95% OF THE ID OF A PIPE. IN THIS CASE, THE ID OF THE PIPE, FOR THE PURPOSE OF DETERMINING THE OD OF THE MANDREL, MUST EQUAL BE THE AVERAGE OUTSIDE DIAMETER MINUS TWO MINIMUM WALL THICKNESSES FOR OD CONTROLLED PIPE AND THE AVERAGE INSIDE DIAMETER FOR ID CONTROLLED PIPE.
- (III) ALL DIMENSIONS MUST MEET THE APPROPRIATE STANDARD.
- (B) MANDREL DESIGN
- (I) A RIGID MANDREL MUST BE CONSTRUCTED OF A METAL OR A RIGID PLASTIC MATERIAL THAT CAN WITHSTAND 200 PSI WITHOUT BEING DEFORMED.
- (II) A MANDREL MUST HAVE NINE OR MORE ODD NUMBER OF RUNNERS OR LEGS.
- (III) A BARREL SECTION LENGTH MUST EQUAL AT LEAST 75% OF THE INSIDE DIAMETER OF A PIPE.
- (IV) EACH SIZE MANDREL MUST USE A SEPARATE PROVING RING.
- (C) METHOD OPTIONS
- (I) AN ADJUSTABLE OR FLEXIBLE MANDREL IS PROHIBITED.
- (II) A TEST MAY NOT USE TELEVISION INSPECTION AS A SUBSTITUTE FOR A DEFLECTION TEST
- (III) IF REQUESTED, THE EXECUTIVE DIRECTOR MAY APPROVE THE USE OF A DEFLECTOMETER OR A MANDREL WITH REMOVABLE LEGS OR RUNNERS ON A CASE-BY-CASE BASIS.
- (2) FOR A GRAVITY COLLECTION SYSTEM PIPE WITH AN INSIDE DIAMETER 27 INCHES AND GREATER, OTHER TEST METHODS MAY BE USED TO DETERMINE VERTICAL DEFLECTION.
- (3) A DEFLECTION TEST METHOD MUST BE ACCURATE TO WITHIN PLUS OR MINUS 0.2% DEFLECTION.
- (4) AN OWNER SHALL NOT CONDUCT A DEFLECTION TEST UNTIL AT LEAST 30 DAYS AFTER THE FINAL BACKFILL.
- (5) GRAVITY COLLECTION SYSTEM PIPE DEFLECTION MUST NOT EXCEED FIVE PERCENT (5%).
- (6) IF A PIPE SECTION FAILS A DEFLECTION TEST, AN OWNER SHALL CORRECT THE PROBLEM AND CONDUCT A SECOND TEST AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
17. ALL MANHOLES MUST BE TESTED TO MEET OR EXCEED THE REQUIREMENTS OF 30 TAC §217.58.

18. ALL PRIVATE SERVICE LATERALS MUST BE INSPECTED AND CERTIFIED IN ACCORDANCE WITH 30 TAC §213.5(C)(3)(I). AFTER INSTALLATION OF AND, PRIOR TO COVERING AND CONNECTING A PRIVATE SERVICE LATERAL TO AN EXISTING ORGANIZED SEWAGE COLLECTION SYSTEM, A TEXAS LICENSED PROFESSIONAL ENGINEER, TEXAS REGISTERED SANITARIAN, OR APPROPRIATE CITY INSPECTOR MUST VISUALLY INSPECT THE PRIVATE SERVICE LATERAL AND THE CONNECTION TO THE SEWAGE COLLECTION SYSTEM, AND CERTIFY THAT IT IS CONSTRUCTED IN CONFORMITY WITH THE APPLICABLE PROVISIONS OF THIS SECTION. THE OWNER OF THE COLLECTION SYSTEM MUST MAINTAIN SUCH CERTIFICATIONS FOR FIVE YEARS AND FORWARD COPIES TO THE APPROPRIATE REGIONAL OFFICE UPON REQUEST. CONNECTIONS MAY ONLY BE MADE TO AN APPROVED SEWAGE COLLECTION SYSTEM.

SUPPLEMENTAL TCEQ NOTES:

1. WATERTIGHT, SIZE ON SIZE RESILIENT CONNECTORS CONFORMING TO ASTM C-923 ARE REQUIRED FOR CONNECTING PIPE TO MANHOLES.
2. IF FAULTS, CAVERNS, OR SUBSIDENCE ARE DISCOVERED DURING CONSTRUCTION, CONSTRUCTION SHOULD BE HALTED TO ALLOW THE FEATURES TO BE INSPECTED BY THE DESIGN ENGINEER OR GEOLOGICAL OR GEOTECHNICAL PROFESSIONAL.
3. TRENCH WALLS MUST BE VERTICAL TO AT LEAST ONE FOOT ABOVE THE PIPE. TRENCH BACKFILL MUST BE FREE OF STONES GREATER THAN 6-INCHES AND FREE OF ORGANIC OR ANY OTHER UNSTABLE MATERIAL.
4. ALL WASTEWATER PIPE MATERIAL PVC SDR26-ASTM-3034 USED MUST HAVE A MINIMUM ALLOWABLE TENSILE.

TCEQ WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES

1. This water distribution system must be constructed in accordance with the current Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D. When conflicts are noted with local standards, the more stringent requirement shall be applied. At a minimum, construction for public water systems must always meet TCEQ's "Rules and Regulations for Public Water Systems."
2. All newly installed pipes and related products must conform to American National Standards Institute (ANSI)/NSF International Standard 61 and must be certified by an organization accredited by ANSI [§290.44(a)(1)].
3. Plastic pipe for use in public water systems must bear the NSF International Seal of Approval (NSI-pw) and have an ASTM design pressure rating of at least 150 psi or a standard dimension ratio of 26 or less [§290.44(a)(2)].
4. No pipe which has been used for any purpose other than the conveyance of drinking water shall be accepted or relocated for use in any public drinking water supply [§290.44(a)(3)].
5. All water line crossings of wastewater mains shall be perpendicular [§290.44(e)(4)(B)].
6. Water transmission and distribution lines shall be installed in accordance with the manufacturer's instructions. However, the top of the water line must be located below the frost line and in no case shall the top of the water line be less than 24 inches below ground surface [§290.44(a)(4)].
7. The maximum allowable lead content of pipes, pipe fittings, plumbing fittings, and fixtures is 0.25 percent [§290.44(b)].
8. The contractor shall install appropriate air release devices with vent openings to the atmosphere covered with 1/6-mesh or finer, corrosion resistant screening material or an acceptable equivalent [§290.44(d)(1)].
9. The contractor shall not place the pipe in water or where it can be flooded with water or sewage during its storage or installation [§290.44(f)(1)].
10. When waterlines are laid under any flowing or intermittent stream or semi-permanent body of water the waterline shall be installed in a separate watertight pipe encasement. Valves must be provided on each side of the crossing with facilities to allow the underwater portion of the system to be isolated and tested [§290.44(d)(2)].
11. Pursuant to 30 TAC §290.44(a)(5), the hydrostatic leakage rate shall not exceed the amount allowed or recommended by the most current AWWA formulas for PVC pipe, cast iron and ductile iron pipe. Include the formulas in the notes on the plans.

Where:

- Q = the quantity of makeup water in gallons per hour,
 - L = the length of the pipe section being tested, in feet,
 - D = the nominal diameter of the pipe in inches, and
 - P = the average test pressure during the hydrostatic test in pounds per square inch (psi).
- o The hydrostatic leakage rate for ductile iron (DI) pipe and appurtenances shall not exceed the amount allowed or recommended by formulas in America Water Works Association (AWWA) C-600 as required in 30 TAC §290.44(a)(5). Please ensure that the formula for this calculation is correct and most current formula is in use;

$$L = \frac{SD\sqrt{P}}{148,000}$$

Where:

- L = the quantity of makeup water in gallons per hour,
- S = the length of the pipe section being tested, in feet,
- D = the nominal diameter of the pipe in inches, and
- P = the average test pressure during the hydrostatic test in pounds per square inch (psi).

12. The contractor shall maintain a minimum separation distance in all directions of nine feet between the proposed waterline and wastewater collection facilities including manholes. If this distance cannot be maintained, the contractor must immediately notify the project engineer for further direction. Separation distances, installation methods, and materials utilized must meet §290.44(e)(1)-(4).
13. The separation distance from a potable waterline to a wastewater main or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant [§290.44(e)(5)].
14. Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater line, wastewater lateral, or wastewater service line regardless of construction [§290.44(e)(6)].
15. Suction mains to pumping equipment shall not cross wastewater mains, wastewater laterals, or wastewater service lines. Raw water supply lines shall not be installed within five feet of any tile or concrete wastewater main, wastewater lateral, or wastewater service line [§290.44(e)(7)].
16. Waterlines shall not be installed closer than ten feet to septic tank drainfields [§290.44(e)(8)].
17. The contractor shall disinfect the new waterlines in accordance with AWWA Standard C-651-14 or most recent, then flush and sample the lines before being placed into service. Samples shall be collected for microbiological analysis to check the effectiveness of the disinfection procedure which shall be repeated if contamination persists. A minimum of one sample for each 1,000 feet of completed waterline will be required or at the next available sampling point beyond 1,000 feet as designated by the design engineer [§290.44(f)(3)].
18. Dechlorination of disinfecting water shall be in strict accordance with current AWWA Standard C655-09 or most recent.

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

Edwards Aquifer Protection Program Construction Notes – Legal Disclaimer

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

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any regulated activities. This notice must include:
- the name of the approved project;
 - the activity start date; and
 - the contact information of the prime contractor.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan (WPAP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature(s) (caves, solution cavity, sink hole, etc.) is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. Construction activities may not be resumed until the TCEQ has reviewed and approved the appropriate protective measures in order to protect any sensitive feature and the Edwards Aquifer from potentially adverse impacts to water quality.
4. No temporary or permanent hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.
5. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the approved plans and manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.
6. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.
7. Sediment must be removed from the sediment traps or sedimentation basins not later than when it occupies 50% of the basin's design capacity.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. If portions of the site will have a temporary or permanent cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.
11. The following records shall be maintained and made available to the TCEQ upon request:
- the dates when major grading activities occur;
 - the dates when construction activities temporarily or permanently cease on a portion of the site; and
 - the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

- A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
- B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
- C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office 12100 Park 35 Circle, Building A Austin, Texas 78753-1808 Phone (512) 339-2929 Fax (512) 339-3795	San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329
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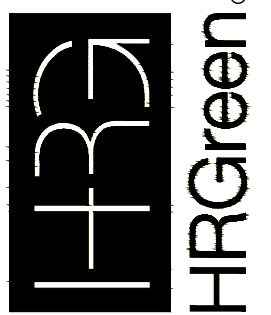
THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.



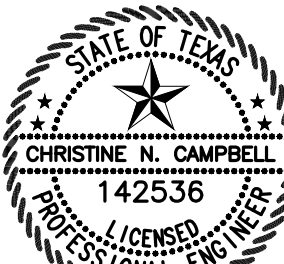
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DEP. NO.: 10384
DPLS NO.: 10194101



DEVELOPMENT TX



Christine Campbell
09/19/2024

TCEQ NOTES
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

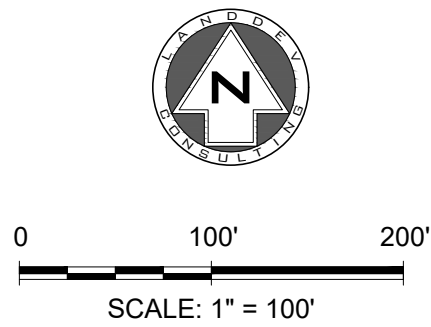
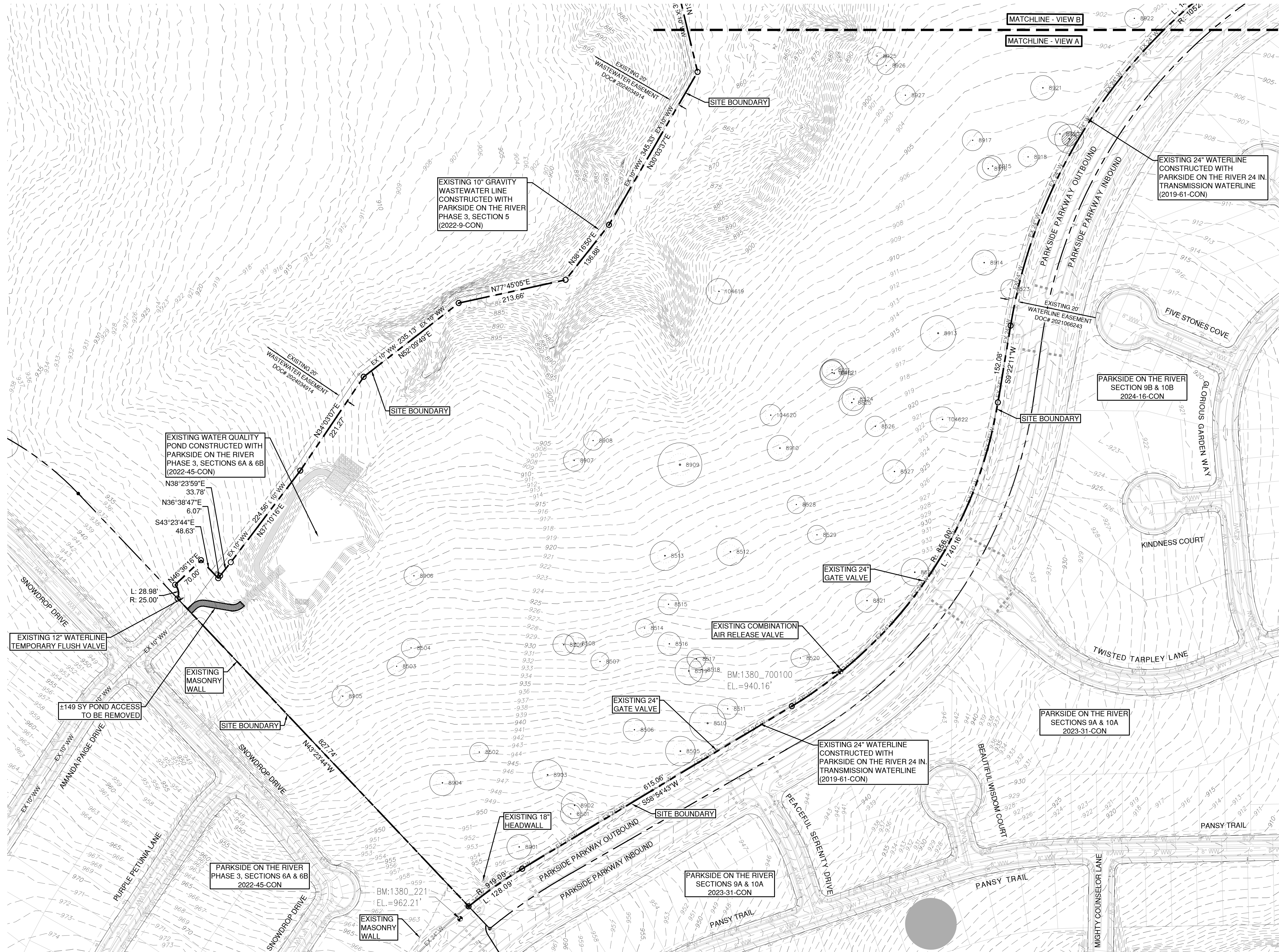
CHECKED BY: SN

APPROVED BY: _____

SHEET 3 OF 91

2024-XX-CON

P:\Blake_Magnus\Georgetown Properties\1031_1032_ACAD\Parade\2024\1031_XCOND.dwg, EXISTING CONDITIONS & DEMOLITION PLAN VIEW A, September 24, 2024, 2:21 PM, mkm, mkm



- LEGEND**
- SITE BOUNDARY
 - PROPOSED LOT LINE
 - EASEMENT
 - - - 8.40' EXISTING MAJOR CONTOUR
 - - - 8.34' EXISTING MINOR CONTOUR
 - 100YR FEMA ZONE A FLOODPLAIN
 - 100YR FULLY DEVELOPED FLOODPLAIN
 - OHE OVERHEAD ELECTRIC LINE
 - OLD PARCEL LINE
 - EXISTING TREES
 - EXISTING HERITAGE TREES



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SUITE 150
MCKINNEY, TX 75069
817.442.1111
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RPLS. NO.: 10194101

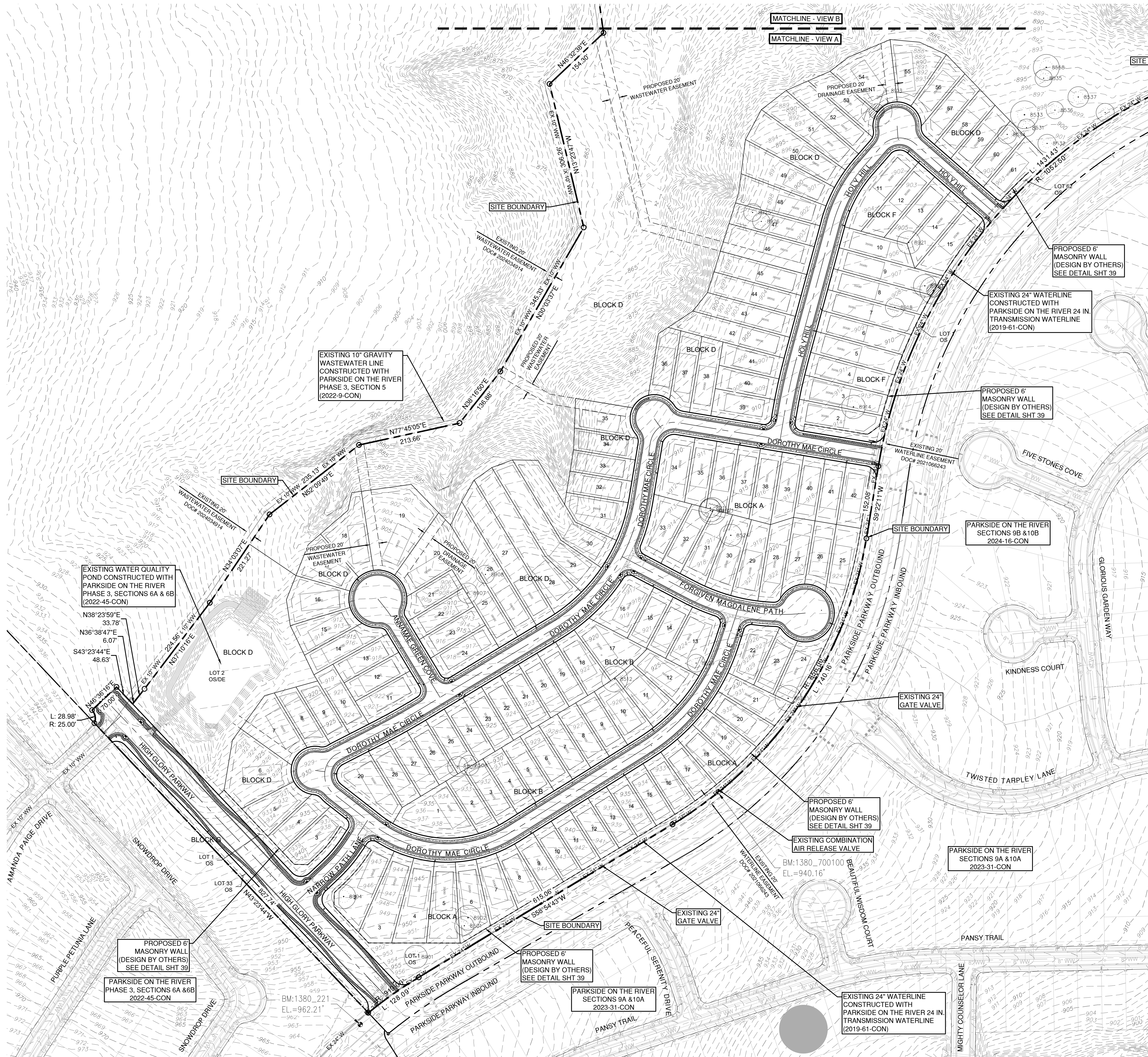


**EXISTING CONDITIONS &
DEMOLITION PLAN VIEW A**
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MKM
CHECKED BY: SN
APPROVED BY: _____

SHEET 9 OF 91
2024-XX-CON

P:\Blake_Magnat\Georgetown Properties\103_103_A020\ParasidR2182 Pond.dwg, PROPOSED CONDITIONS PLAN VIEW A, September 24, 2024, 2:24 PM, mallas.muhamed



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SCALE: 1" = 100'

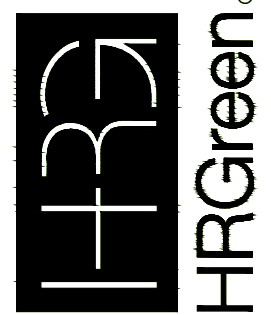
LEGEND

- SITE BOUNDARY
- - - PROPOSED LOT LINE
- - - EASEMENT
- - - 8.40' EXISTING MAJOR CONTOUR
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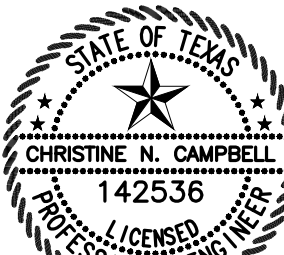


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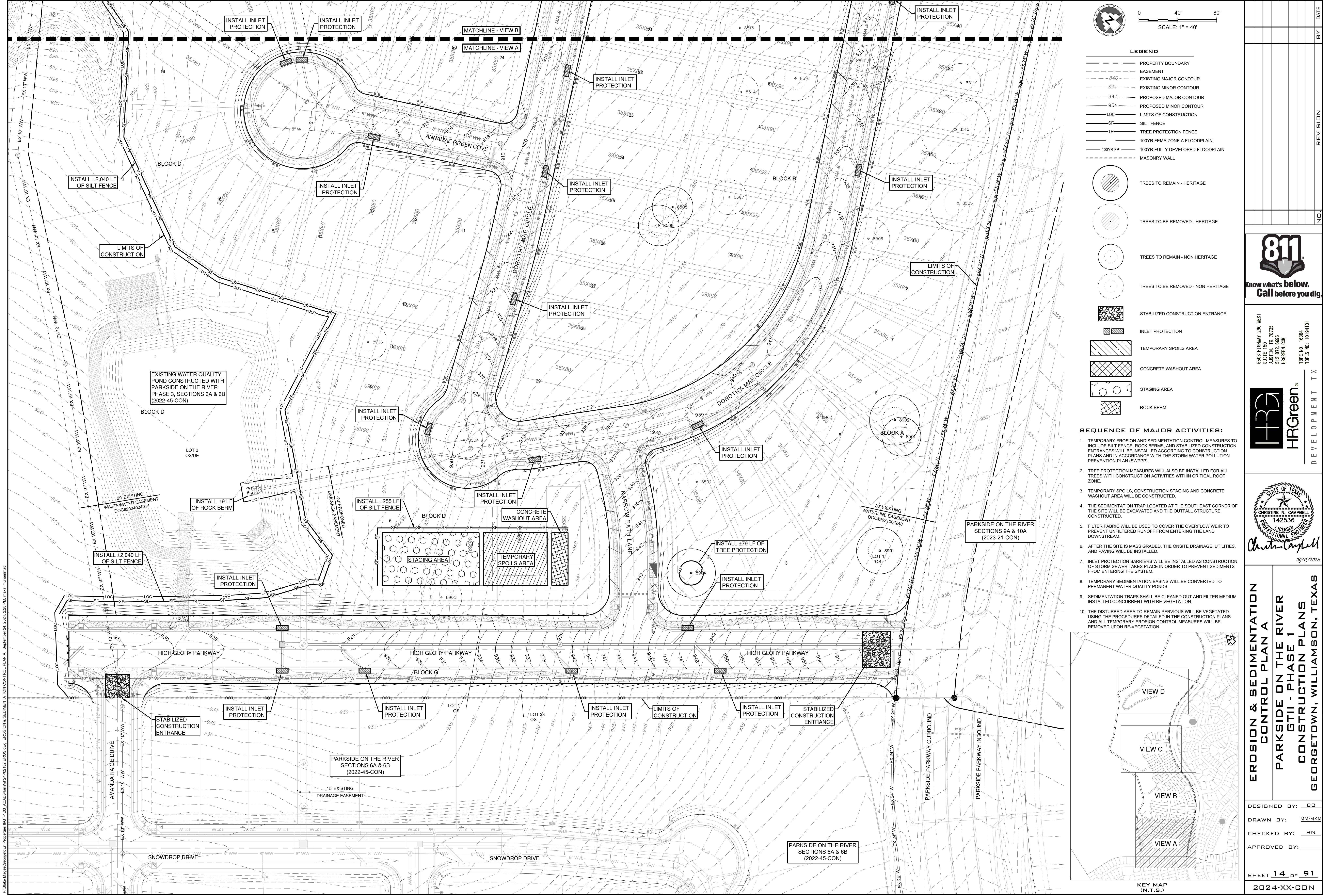


Christine Campbell
09/03/2024

PROPOSED CONDITIONS PLAN
VIEW A
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MKM
CHECKED BY: SN
APPROVED BY:

SHEET 11 OF 91
2024-XX-CON



040'80'
SCALE: 1" = 40'

LEGEND

PROPERTY BOUNDARY

EASEMENT

EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

LIMITS OF CONSTRUCTION

SILT FENCE

TP

TREE PROTECTION FENCE

100YR FEMA ZONE A FLOODPLAIN

100YR FULLY DEVELOPED FLOODPLAIN

MASONRY WALL

TREES TO REMAIN - HERITAGE

TREES TO BE REMOVED - HERITAGE

TREES TO REMAIN - NON HERITAGE

TREES TO BE REMOVED - NON HERITAGE

STABILIZED CONSTRUCTION ENTRANCE

INLET PROTECTION

TEMPORARY SPOILS AREA

CONCRETE WASHOUT AREA

STAGING AREA

ROCK BERM

SEQUENCE OF MAJOR ACTIVITIES:

1. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES TO INCLUDE SILT FENCE, ROCK BERMS, AND STABILIZED CONSTRUCTION ENTRANCES WILL BE INSTALLED ACCORDING TO CONSTRUCTION PLANS AND IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

2. TREE PROTECTION MEASURES WILL ALSO BE INSTALLED FOR ALL TREES WITH CONSTRUCTION ACTIVITIES WITHIN CRITICAL ROOT ZONE.

3. TEMPORARY SPOILS, CONSTRUCTION STAGING AND CONCRETE WASHOUT AREA WILL BE CONSTRUCTED.

4. THE SEDIMENTATION TRAP LOCATED AT THE SOUTHEAST CORNER OF THE SITE WILL BE EXCAVATED AND THE OUTFALL STRUCTURE CONSTRUCTED.

5. FILTER FABRIC WILL BE USED TO COVER THE OVERFLOW WEIR TO PREVENT UNFILTERED RUNOFF FROM ENTERING THE LAND DOWNSLOPE.

6. AFTER THE SITE IS MASS GRADED, THE ONSITE DRAINAGE, UTILITIES, AND PAVING WILL BE INSTALLED.

7. INLET PROTECTION BARRIERS WILL BE INSTALLED AS CONSTRUCTION OF STORM SEWER TAKES PLACE IN ORDER TO PREVENT SEDIMENTS FROM ENTERING THE SYSTEM.

8. TEMPORARY SEDIMENTATION BASINS WILL BE CONVERTED TO PERMANENT WATER QUALITY PONDS.

9. SEDIMENTATION TRAPS SHALL BE CLEANED OUT AND FILTER MEDIUM INSTALLED CONCURRENT WITH RE-VEGETATION.

10. THE DISTURBED AREA TO REMAIN PERVIOUS WILL BE VEGETATED USING THE PROCEDURES DETAILED IN THE CONSTRUCTION PLANS AND ALL TEMPORARY EROSION CONTROL MEASURES WILL BE REMOVED UPON RE-VEGETATION.

KEY MAP
(N.T.S.)

VIEW D

VIEW C

VIEW B

VIEW A

DATE

BY

REVISION

NO.

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STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER

09/15/2024

EROSION & SEDIMENTATION
CONTROL PLAN A

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

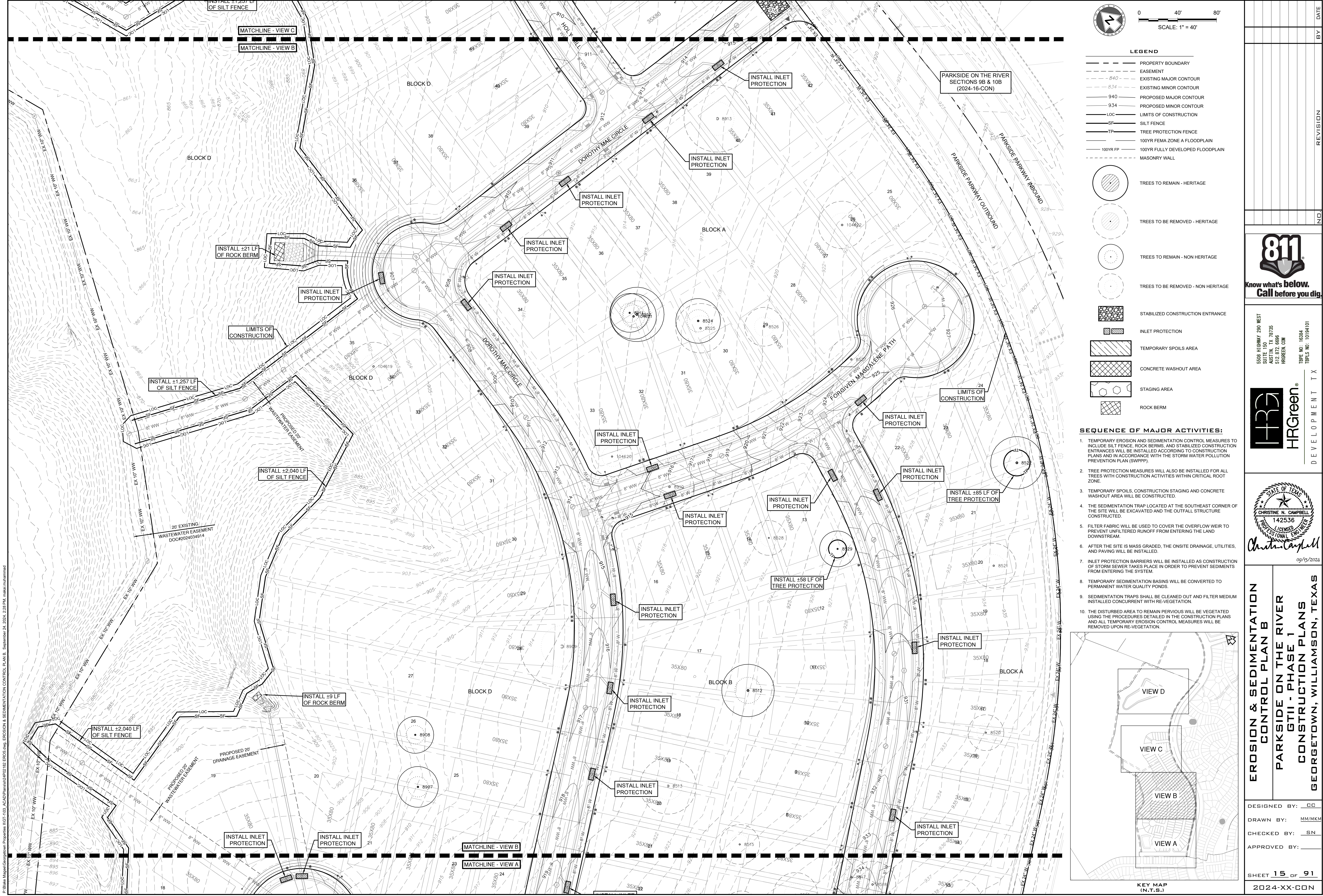
DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET 14 OF 91

2024-XX-CON



040'80'
SCALE: 1" = 40'

LEGEND

PROPERTY BOUNDARY

EASEMENT

EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

LIMITS OF CONSTRUCTION

SILT FENCE

TREE PROTECTION FENCE

100YR FEMA ZONE A FLOODPLAIN

100YR FULLY DEVELOPED FLOODPLAIN

MASONRY WALL

TREES TO REMAIN - HERITAGE

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TREES TO REMAIN - NON HERITAGE

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1. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES TO INCLUDE SILT FENCE, ROCK BERMS, AND STABILIZED CONSTRUCTION ENTRANCES WILL BE INSTALLED ACCORDING TO CONSTRUCTION PLANS AND IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

2. TREE PROTECTION MEASURES WILL ALSO BE INSTALLED FOR ALL TREES WITH CONSTRUCTION ACTIVITIES WITHIN CRITICAL ROOT ZONE.

3. TEMPORARY SPOILS, CONSTRUCTION STAGING AND CONCRETE WASHOUT AREA WILL BE CONSTRUCTED.

4. THE SEDIMENTATION TRAP LOCATED AT THE SOUTHEAST CORNER OF THE SITE WILL BE EXCAVATED AND THE OUTFALL STRUCTURE CONSTRUCTED.

5. FILTER FABRIC WILL BE USED TO COVER THE OVERFLOW WEIR TO PREVENT UNFILTERED RUNOFF FROM ENTERING THE LAND DOWNSLOPE.

6. AFTER THE SITE IS MASS GRADED, THE ONSITE DRAINAGE, UTILITIES, AND PAVING WILL BE INSTALLED.

7. INLET PROTECTION BARRIERS WILL BE INSTALLED AS CONSTRUCTION OF STORM SEWER TAKES PLACE IN ORDER TO PREVENT SEDIMENTS FROM ENTERING THE SYSTEM.

8. TEMPORARY SEDIMENTATION BASINS WILL BE CONVERTED TO PERMANENT WATER QUALITY PONDS.

9. SEDIMENTATION TRAPS SHALL BE CLEANED OUT AND FILTER MEDIUM INSTALLED CONCURRENT WITH RE-VEGETATION.

10. THE DISTURBED AREA TO REMAIN PERVIOUS WILL BE VEGETATED USING THE PROCEDURES DETAILED IN THE CONSTRUCTION PLANS AND ALL TEMPORARY EROSION CONTROL MEASURES WILL BE REMOVED UPON RE-VEGETATION.

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DATE

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STATE OF TEXAS

CHRISTINE N. CAMPBELL

142536

PROFESSIONAL ENGINEER

09/15/2024

EROSION & SEDIMENTATION
CONTROL PLAN B
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

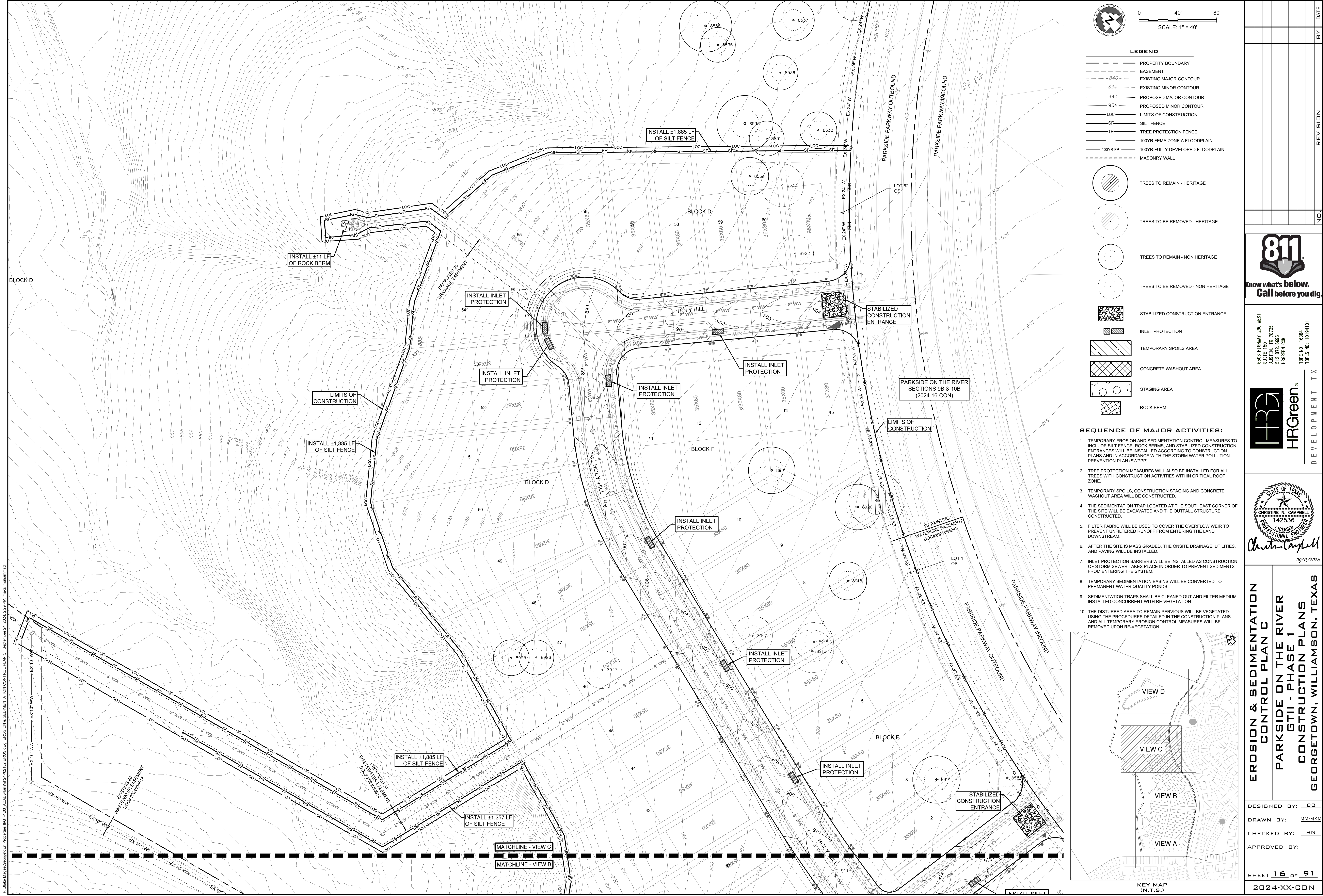
DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET 15 OF 91

2024-XX-CON



040'80'
SCALE: 1" = 40'

LEGEND

PROPERTY BOUNDARY

EASEMENT

EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

LIMITS OF CONSTRUCTION

SILT FENCE

TREE PROTECTION FENCE

100YR FEMA ZONE A FLOODPLAIN

100YR FULLY DEVELOPED FLOODPLAIN

MASONRY WALL

TREES TO REMAIN - HERITAGE

TREES TO BE REMOVED - HERITAGE

TREES TO REMAIN - NON HERITAGE

TREES TO BE REMOVED - NON HERITAGE

STABILIZED CONSTRUCTION ENTRANCE

INLET PROTECTION

TEMPORARY SPOILS AREA

CONCRETE WASHOUT AREA

STAGING AREA

ROCK BERM

SEQUENCE OF MAJOR ACTIVITIES:

1. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES TO INCLUDE SILT FENCE, ROCK BERM, AND STABILIZED CONSTRUCTION ENTRANCES WILL BE INSTALLED ACCORDING TO CONSTRUCTION PLANS AND IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).

2. TREE PROTECTION MEASURES WILL ALSO BE INSTALLED FOR ALL TREES WITH CONSTRUCTION ACTIVITIES WITHIN CRITICAL ROOT ZONE.

3. TEMPORARY SPOILS, CONSTRUCTION STAGING AND CONCRETE WASHOUT AREA WILL BE CONSTRUCTED.

4. THE SEDIMENTATION TRAP LOCATED AT THE SOUTHEAST CORNER OF THE SITE WILL BE EXCAVATED AND THE OUTFALL STRUCTURE CONSTRUCTED.

5. FILTER FABRIC WILL BE USED TO COVER THE OVERFLOW WEIR TO PREVENT UNFILTERED RUNOFF FROM ENTERING THE LAND DOWNSREAM.

6. AFTER THE SITE IS MASS GRADED, THE ONSITE DRAINAGE, UTILITIES, AND PAVING WILL BE INSTALLED.

7. INLET PROTECTION BARRIERS WILL BE INSTALLED AS CONSTRUCTION OF STORM SEWER TAKES PLACE IN ORDER TO PREVENT SEDIMENTS FROM ENTERING THE SYSTEM.

8. TEMPORARY SEDIMENTATION BASINS WILL BE CONVERTED TO PERMANENT WATER QUALITY PONDS.

9. SEDIMENTATION TRAPS SHALL BE CLEANED OUT AND FILTER MEDIUM INSTALLED CONCURRENT WITH RE-VEGETATION.

10. THE DISTURBED AREA TO REMAIN PERVIOUS WILL BE VEGETATED USING THE PROCEDURES DETAILED IN THE CONSTRUCTION PLANS AND ALL TEMPORARY EROSION CONTROL MEASURES WILL BE REMOVED UPON RE-VEGETATION.

VIEW D

VIEW C

VIEW B

VIEW A

KEY MAP
(N.T.S.)

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

5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75069
HARGREEN, CON
TBBE NO: 16384
TBBE NO: 10194101

HRGreen

DEVELOPMENT TX

STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER

09/15/2024
Christine Campbell

EROSION & SEDIMENTATION
CONTROL PLAN C

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET 16 OF 91

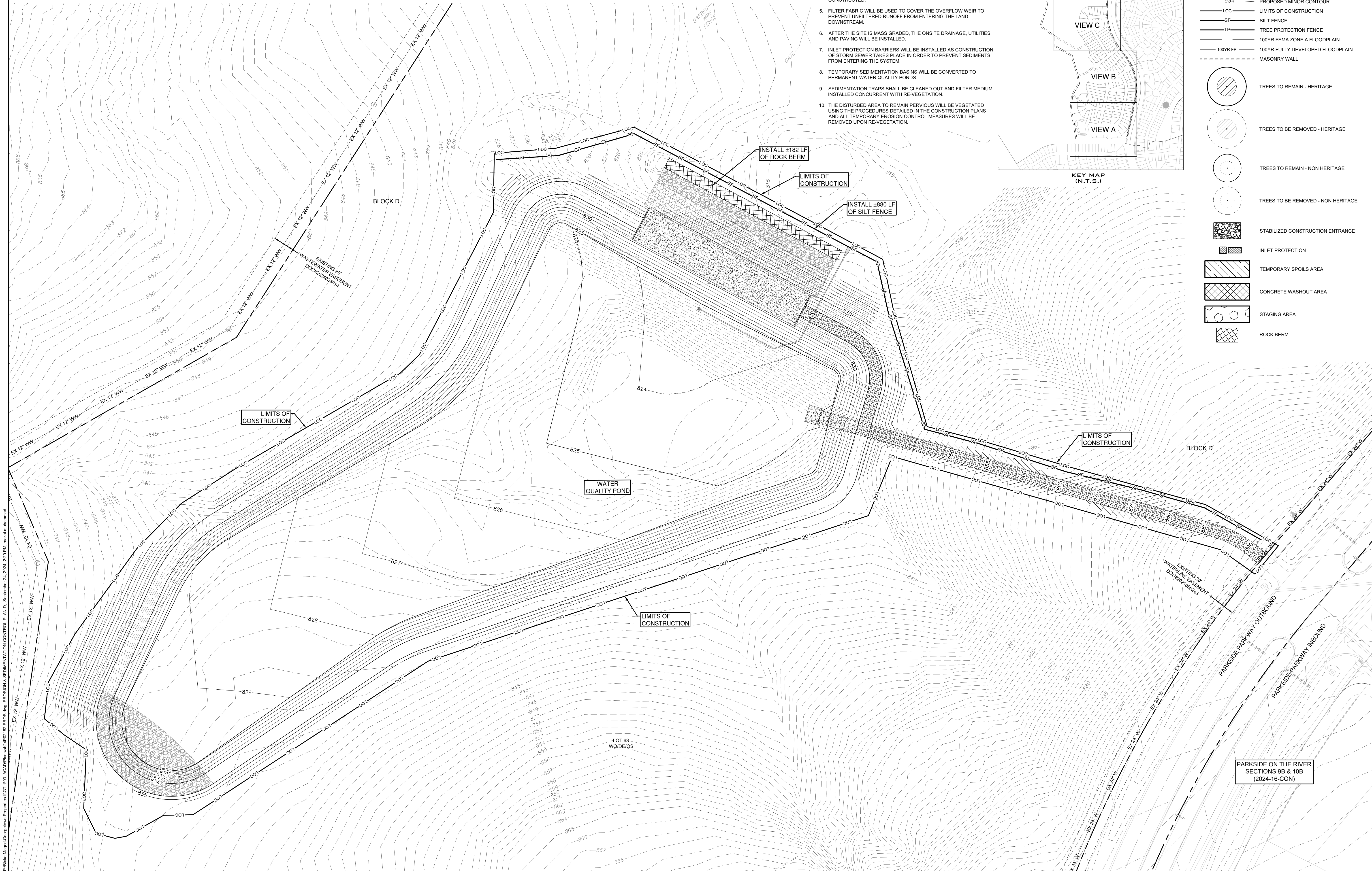
2024-XX-CON

REVISION

BY

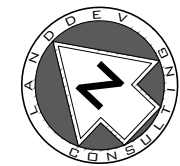
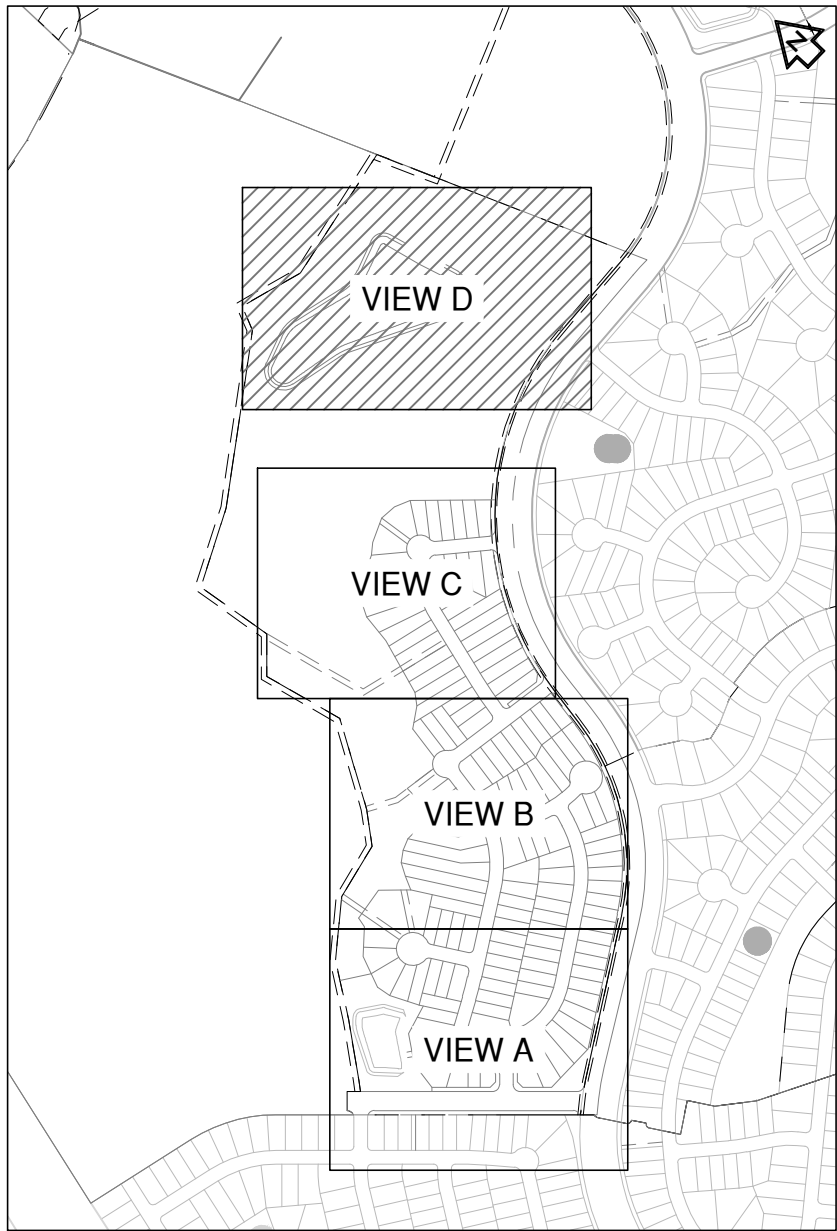
DATE

P:\Blake_Maps\Georgetown Properties\11GT-103_ACAD\Mapas\11GT-103_EROSION & SEDIMENTATION CONTROL PLAN.D September 24, 2024, 2:29 PM, maha.muhammad



SEQUENCE OF MAJOR ACTIVITIES:

1. TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES TO INCLUDE SILT FENCE, ROCK BERMS, AND STABILIZED CONSTRUCTION ENTRANCES WILL BE INSTALLED ACCORDING TO CONSTRUCTION PLANS AND IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
2. TREE PROTECTION MEASURES WILL ALSO BE INSTALLED FOR ALL TREES WITH CONSTRUCTION ACTIVITIES WITHIN CRITICAL ROOT ZONE.
3. TEMPORARY SPOILS, CONSTRUCTION STAGING AND CONCRETE WASHOUT AREA WILL BE CONSTRUCTED.
4. THE SEDIMENTATION TRAP LOCATED AT THE SOUTHEAST CORNER OF THE SITE WILL BE EXCAVATED AND THE OUTFALL STRUCTURE CONSTRUCTED.
5. FILTER FABRIC WILL BE USED TO COVER THE OVERFLOW WEIR TO PREVENT UNFILTERED RUNOFF FROM ENTERING THE LAND DOWNSTREAM.
6. AFTER THE SITE IS MASS GRADED, THE ONSITE DRAINAGE, UTILITIES, AND PAVING WILL BE INSTALLED.
7. INLET PROTECTION BARRIERS WILL BE INSTALLED AS CONSTRUCTION OF STORM SEWER TAKES PLACE IN ORDER TO PREVENT SEDIMENTS FROM ENTERING THE SYSTEM.
8. TEMPORARY SEDIMENTATION BASINS WILL BE CONVERTED TO PERMANENT WATER QUALITY PONDS.
9. SEDIMENTATION TRAPS SHALL BE CLEANED OUT AND FILTER MEDIUM INSTALLED CONCURRENT WITH RE-VEGETATION.
10. THE DISTURBED AREA TO REMAIN PERVIOUS WILL BE VEGETATED USING THE PROCEDURES DETAILED IN THE CONSTRUCTION PLANS AND ALL TEMPORARY EROSION CONTROL MEASURES WILL BE REMOVED UPON RE-VEGETATION.



0 40' 80'
SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EASEMENT
- 840 - - - - - EXISTING MAJOR CONTOUR
- 834 - - - - - EXISTING MINOR CONTOUR
- 940 - - - - - PROPOSED MAJOR CONTOUR
- 934 - - - - - PROPOSED MINOR CONTOUR
- LOC - - - - - LIMITS OF CONSTRUCTION
- SF - - - - - SILT FENCE
- TP - - - - - TREE PROTECTION FENCE
- 100YR FEMA ZONE A FLOODPLAIN
- 100YR FULLY DEVELOPED FLOODPLAIN
- MASONRY WALL
- TREES TO REMAIN - HERITAGE
- TREES TO BE REMOVED - HERITAGE
- TREES TO REMAIN - NON HERITAGE
- TREES TO BE REMOVED - NON HERITAGE
- STABILIZED CONSTRUCTION ENTRANCE
- INLET PROTECTION
- TEMPORARY SPOILS AREA
- CONCRETE WASHOUT AREA
- STAGING AREA
- ROCK BERM

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TBE NO: 16384 TPLS NO: 10194101	
HARGREEN® DEVELOPMENT TX	
STATE OF TEXAS CHRISTINE N. CAMPBELL 142536 LICENSED PROFESSIONAL ENGINEER Christine Campbell 09/19/2024	
EROSION & SEDIMENTATION CONTROL PLAN D PARKSIDE ON THE RIVER GTII - PHASE 1 CONSTRUCTION PLANS GEORGETOWN, WILLIAMSON, TEXAS	
DESIGNED BY: CC	
DRAWN BY: MM/MKM	
CHECKED BY: SN	
APPROVED BY:	
SHEET 17 OF 91	
2024-XX-CON	



0 40' 80'

SCALE: 1" = 40'

LEGEND

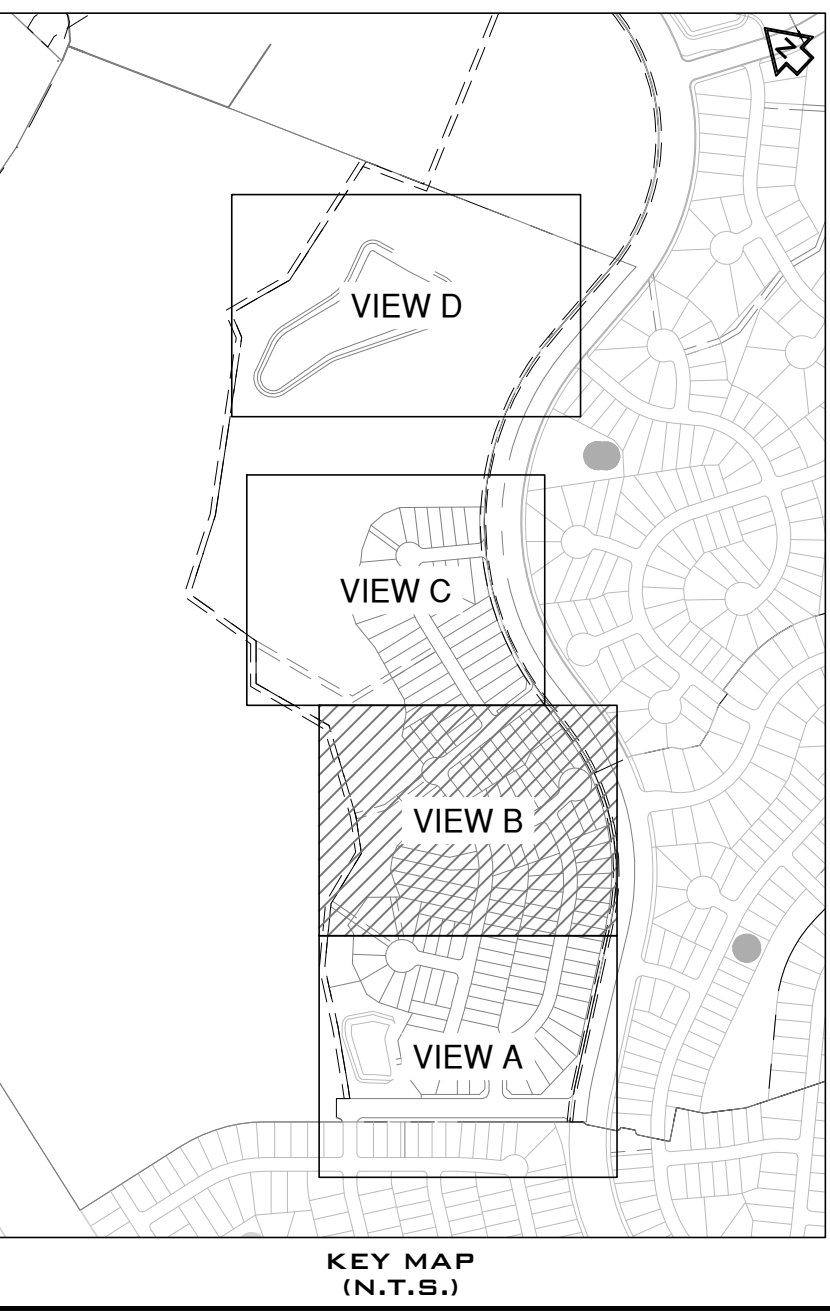
- PROPERTY BOUNDARY
- EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 940 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100YR FEMA ZONE A FLOODPLAIN
- 100YR FULLY DEVELOPED FLOODPLAIN
- MASONRY WALL (BY OTHERS)

TREES TO REMAIN - HERITAGE

TREES TO REMAIN - NON-HERITAGE

ASPHALT PAVING
(REFER TO SHEET 39 FOR
PAVEMENT DESIGN SECTIONS)

- NOTES:**
- FILL SHOULD BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY TxDOT - 114 - E, AND PER GEOTECHNICAL ENGINEERS RECOMMENDATION.
 - FILL WITHIN THE RESIDENTIAL LOT AREAS SHALL BE PLACED ACCORDING TO THE HUD 79G REQUIREMENTS SPECIFICATIONS
 - VEGETATE ALL DISTURBED AREAS WITHIN THE ROW AND OPEN SPACE AREAS PER CITY OF GEORGETOWN SPECIFICATIONS.



DATE

BY

REVISION

NO.

5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75069
HARGREEN, CON

TYPE NO: 10384
TPLS NO: 10194101

DEVELOPMENT TX

Christine Campbell
09/03/2024

**PAVING & GRADING
PLAN B**

**PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS**

GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET **33** OF **91**

2024-XX-CON



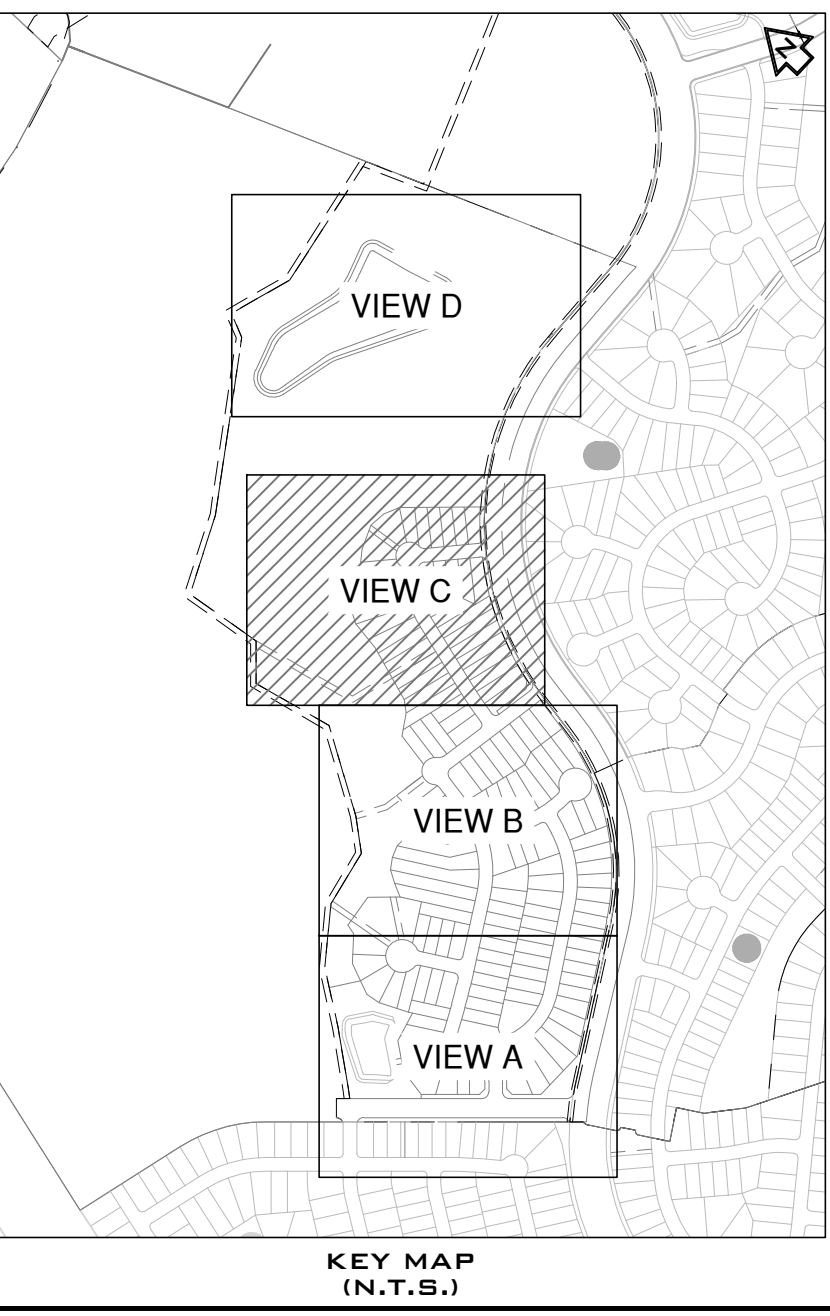
0 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- EASEMENT
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- 940 PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- 100YR FEMA ZONE A FLOODPLAIN
- 100YR FP 100YR FULLY DEVELOPED FLOODPLAIN
- MASONRY WALL (BY OTHERS)
- TREES TO REMAIN - HERITAGE
- TREES TO REMAIN - NON-HERITAGE
- ASPHALT PAVING (REFER TO SHEET 39 FOR PAVEMENT DESIGN SECTIONS)

- NOTES:**
- FILL SHOULD BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY TxDOT - 114 - E, AND PER GEOTECHNICAL ENGINEERS RECOMMENDATION.
 - FILL WITHIN THE RESIDENTIAL LOT AREAS SHALL BE PLACED ACCORDING TO THE HUD 79G REQUIREMENTS SPECIFICATIONS
 - VEGETATE ALL DISTURBED AREAS WITHIN THE ROW AND OPEN SPACE AREAS PER CITY OF GEORGETOWN SPECIFICATIONS.



BY

DATE

REVISION

NO.

5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75735
CITY OF GEORGETOWN
HRGREEN.COM

TBPE NO: 10384
TBPLS NO: 10194101

HRGreen®
DEVELOPMENT TX

Christine Campbell
09/13/2024

**PAVING & GRADING
PLAN C**

**PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS**

GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

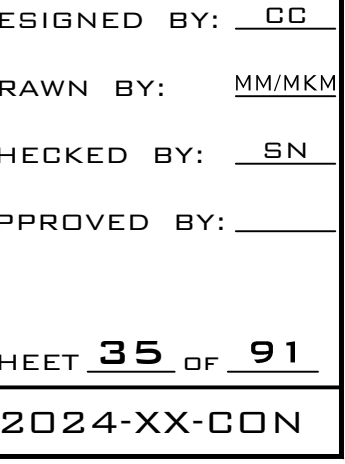
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SHEET **34** OF **91**

2024-XX-CON



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NOTES:

1. COMMERCIAL SIDEWALKS WIDTHS - 6'
2. RESIDENTIAL SIDEWALKS WIDTHS - 5'
3. ALL SLOPES ARE MAXIMUM ALLOWABLE. FLATTER SLOPES THAT WILL STILL DRAIN PROPERLY ARE ENCOURAGED.
4. ALL CONCRETE SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.
5. FOR PURPOSES OF WARNING, THE CURB RAMPS SHALL HAVE A LIGHT REFLECTIVE VALUE AND TEXTURE THAT SIGNIFICANTLY CONTRASTS WITH THAT OF ADJOINING PEDESTRIAN ROUTES.
6. TEXTURES MAY CONSIST OF PAVERS WITH TRUNCATED DOMED SURFACES. TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT. SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED.
7. COLOR CONTRAST, FOR EXAMPLE, MAY BE ACCOMPLISHED WITH COLORED CONCRETE PAVERS THAT HAVE TRUNCATED DOMES WHICH WOULD PROVIDE A CONTRAST WITH TYPICALLY LIGHT COLORED CONCRETE.
8. ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, VISIBILITY AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY THE TEXAS DEPARTMENT OF TRANSPORTATION (TxDOT).
9. RAISED MEDIAN SEPARATE OPPOSING DIRECTIONS OF TRAFFIC AND PROVIDE A REFUGE AREA FOR PEDESTRIANS IF THEY ARE UNABLE TO CROSS THE ENTIRE ROADWAY IN THE ALLOTTED SIGNAL PHASE. MEDIAN CROSSING SHALL BE A MINIMUM OF 5' WIDE. MEDIAN SHOULD BE DESIGNED TO PROVIDE ACCESSIBLE PASSAGE OVER OR THROUGH THEM.
10. ALL SIDEWALK PLANS AND DETAILS SHALL BE SUBMITTED AND APPROVED BY "REGISTERED ACCESSIBILITY SPECIALIST" (RAS).
11. ANY PART OF THE ACCESSIBLE ROUTE WITH A SLOPE GREATER THAN 1:20 (5%) SHALL BE CONSIDERED A RAMP. IF A RAMP HAS A RISE GREATER THAN 6 INCHES OR A HORIZONTAL PROJECTION GREATER THAN 12 INCHES, THEN IT SHALL MEET THE REQUIREMENTS OF A RAMP PER TAS AND THE ONLY EXCEPTION IS AT CURB RAMPS. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS. CURB RAMPS SHALL BE PROVIDED WHERE EVER AN ACCESSIBLE ROUTE CROSSES (PENETRATES) A CURB.
12. TRAFFIC SIGNAL OR LUMINATION POLES, GROUND BONES, CONTROLLER BOXES, SIGNS, DRAINAGE FACILITIES AND OTHER ITEMS SHALL BE PLACED SO NOT TO OBSTRUCT THE ACCESSIBLE ROUTE OR ACT PROTRUDING OBJECTS.
13. ALL SIDEWALKS SHALL BE DOWNE INTO EXISTING SIDEWALKS, DRIVEWAYS, DRIVEWAYS, INLET BONES, RETAINING WALLS, ETC.
14. ALL SIDEWALK CROSS-SLOPES SHALL NOT EXCEED 1:50, UNLESS A VARIANCE IS PROVIDED BY TDR.

(PENETRATES) A CURB.

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
SIDEWALKS GENERAL NOTES
SD28

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

The Architect/Engineer assumes responsibility for appropriate use of this standard.

NOTE: ALL RAMPS SHALL BE CONTAINED WITHIN THE RESPECTIVE CURB RETURN RADII.

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
TYPICAL INTERSECTION LAYOUT
SD29

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

The Architect/Engineer assumes responsibility for appropriate use of this standard.

NOTE: CURB RAMP FOR ON-STREET PROJECTS SUCH AS RESTORATION, SEAL COAT AND OVERLAY PROJECTS, PLACEMENT OF CURB RAMPS SHALL BE DETERMINED IN THE FOLLOWING ORDER OF PREFERENCE: PERPENDICULAR, PARALLEL OR COMBINATION. THE MOST PREFERABLE OPTION THAT IS FEASIBLE AT EACH CORNER SHALL BE PROVIDED. ALL RAMPS SHALL BE CONFINED WITHIN THE RESPECTIVE CURB RETURN RADII.

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
CURB RAMP PLACEMENTS AT INTERSECTIONS
SD30

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

NOTE - GUARDRAIL SHALL BE PRIMED AND PAINTED BLACK

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
FALL PROTECTION FENCE
SD31

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

The Architect/Engineer assumes responsibility for appropriate use of this standard.

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
DRIVEWAY APRON TYPE 10
SD34

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

The Architect/Engineer assumes responsibility for appropriate use of this standard.

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
DRIVEWAY APRONS TYPES 12 & 13
SD35

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

The Architect/Engineer assumes responsibility for appropriate use of this standard.

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
CURB RAMP TEXTURES TYPE A
SD37

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

NOTE: LANDING LENGTH VARIED PER CURB RAMP. CITY'S DISCRETION TO MAKE ALL CONSISTENT OR VARY PER TYPE.

ADOPTED 6/21/2006 TRB

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
SIDEWALK RAMP DETAILS TYPE 1-3
SD31

DATE: 11/20/2023
BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

Parkside on the River Phase 1 - REVISED
Engineer's Job No. 24101123.002

RECOMMENDATIONS - PAVEMENT THICKNESS SECTIONS

Street Classification	Subgrade Material	Hot Mix Asphaltic Concrete, in	Crushed Limestone Base, in	Low Plasticity Sub-Base, in	Lime Stabilized Subgrade, in
Local Streets	Subgrade PI greater than 20 - Option 1	2.0	14	-	-
	Subgrade PI greater than 20 - Option 2	2.0	8	18**	-
	Subgrade PI greater than 20 - Option 3	2.0	8	-	8
Residential Collector	Subgrade PI less than 20	2.0	8	-	-
	Subgrade PI greater than 20 - Option 1	2.0	15	-	-
	Subgrade PI greater than 20 - Option 2	2.0	10	18**	-
Neighborhood Collector	Subgrade PI greater than 20 - Option 3	2.0	10	-	8
	Subgrade PI less than 20	2.0	10	-	-
	Subgrade PI greater than 20 - Option 1	2.0	20	-	-
	Subgrade PI greater than 20 - Option 2	2.0	13	18**	-
	Subgrade PI greater than 20 - Option 3	2.0	13	-	8
	Subgrade PI less than 20	2.0	13	-	-

- NOTE:
1. ** - Or the remaining thickness of surface clay. Natural weathered or intact limestone should not be removed to place a low plasticity subbase.
 2. Any expansive fill (PI > 20) placed in the subgrade after test pit completion shall be considered an expansive subgrade.
 3. If lime is used, the surface clay must first be tested for sulfate reaction and a mix design should be completed to determine the proper lime content, lime type, mixing procedure, and curing conditions required.
 4. Delineation between these different pavement thickness sections should be completed in the field by observation of open utility trenches and the pavement subgrade by the Geotechnical Engineer or his designee. Given the known variability of surface soils at this site, the Geotechnical Engineer must verify the subgrade before installation of the pavement system can proceed. Multiple site visits may be required depending on the construction schedule. Finalized distinction between pavement thickness section options can be provided as addendum to this report as these observations are completed. Please contact the Geotechnical Engineer when the utility trenches are open.
 5. The subgrade improvement should be extended 1.5 feet beyond the back of the curb line for PI less than 20 and 3 feet beyond the back of the curb line for PI greater than 20 options.
 6. These pavement thickness designs are intended to transfer the load from the anticipated traffic conditions.
 7. The responsibility of assigning street classification to the streets in this project is left to the civil engineer.
 8. If pavement designs other than those listed above are desired, please contact MLA Geotechnical.

-6-

MLA Geotechnical Dallas/Fort Worth Austin San Antonio Houston Bryan/College Station Killen "put us to the test"

- NOTE:
1. CONTRACTOR SHALL REFERENCE "GEOTECHNICAL INVESTIGATION PAVEMENT THICKNESS RECOMMENDATIONS FOR PARKSIDE ON THE RIVER PHASE 1 - REVISED" CREATED AUGUST 2024 BY MLA GEOTECHNICAL, ENGINEER'S JOB # 24101123.002. CONTRACTOR IS RESPONSIBLE FOR VERIFYING WITH MLA GEOTECHNICAL.
 2. CONTRACTOR TO USE "VIRGIN MIX" TxDOT HMAR WEARING SURFACE 340 TYPE D, WITHOUT RAP OR RAZ. IN THE EVENT THAT THE CITY SPECIFICATIONS OR GEOTECH REPORT CONFLICT WITH THIS THEN THIS NOTE SHALL CONTROL.
 3. THE BASE OVERBUILD SHOULD BE EXTENDED A MINIMUM OF 18" BEYOND THE BACK OF CURB. IF LIME TREATMENT IS BEING USED, THE BASE OVERBUILD SHOULD BE EXTENDED 3 FEET BEYOND THE BACK OF THE CURB.
 4. AVOID INSTALLATION OF IRRIGATION, PLANTINGS, SILT FENCE, ETC. IN THE BASE OVERBUILD.
 5. ALL MATERIAL IMPORTED AND USED FOR ROADWAY FILL AND SUBGRADE SHALL BE LOW P.I. MATERIAL UNLESS CONTRACTOR OBTAINS APPROVAL FROM DEVELOPER. IF CONTRACTOR CHOOSES TO BRING IN HIGH P.I. MATERIAL FOR SUBGRADE, CONTRACTOR IS RESPONSIBLE FOR ALTERNATE PAVEMENT DESIGN PER THE GEOTECH REPORT AND ASSOCIATED COSTS.
 6. CONTRACTOR TO ENSURE THAT ALL ONSITE MATERIAL USED FOR ROADWAY FILL AND SUBGRADE SHALL BE LOW P.I. MATERIAL UNLESS LOW P.I. MATERIAL DOES NOT EXIST FROM ONSITE MATERIAL. CONTRACTOR TO COORDINATE FINDINGS WITH THE DEVELOPER AND OBTAIN APPROVAL FOR NEEDING TO USE ALTERNATE PAVEMENT DESIGN PER THE GEOTECH REPORT.

SINGLE WYTHE SCREEN WALL SECTION

SINGLE WYTHE WALL ELEVATION

MASONRY WALL DETAIL

TYPICAL RESIDENTIAL LOCAL STREET CROSS SECTION AND UTILITIES LAYOUT

TYPICAL NEIGHBORHOOD COLLECTOR CROSS SECTION AND UTILITIES LAYOUT

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

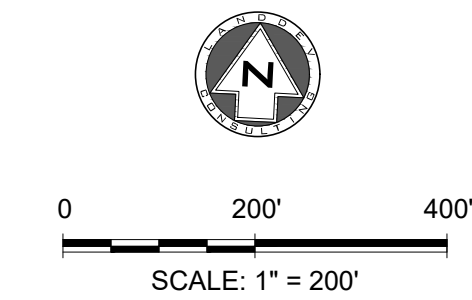
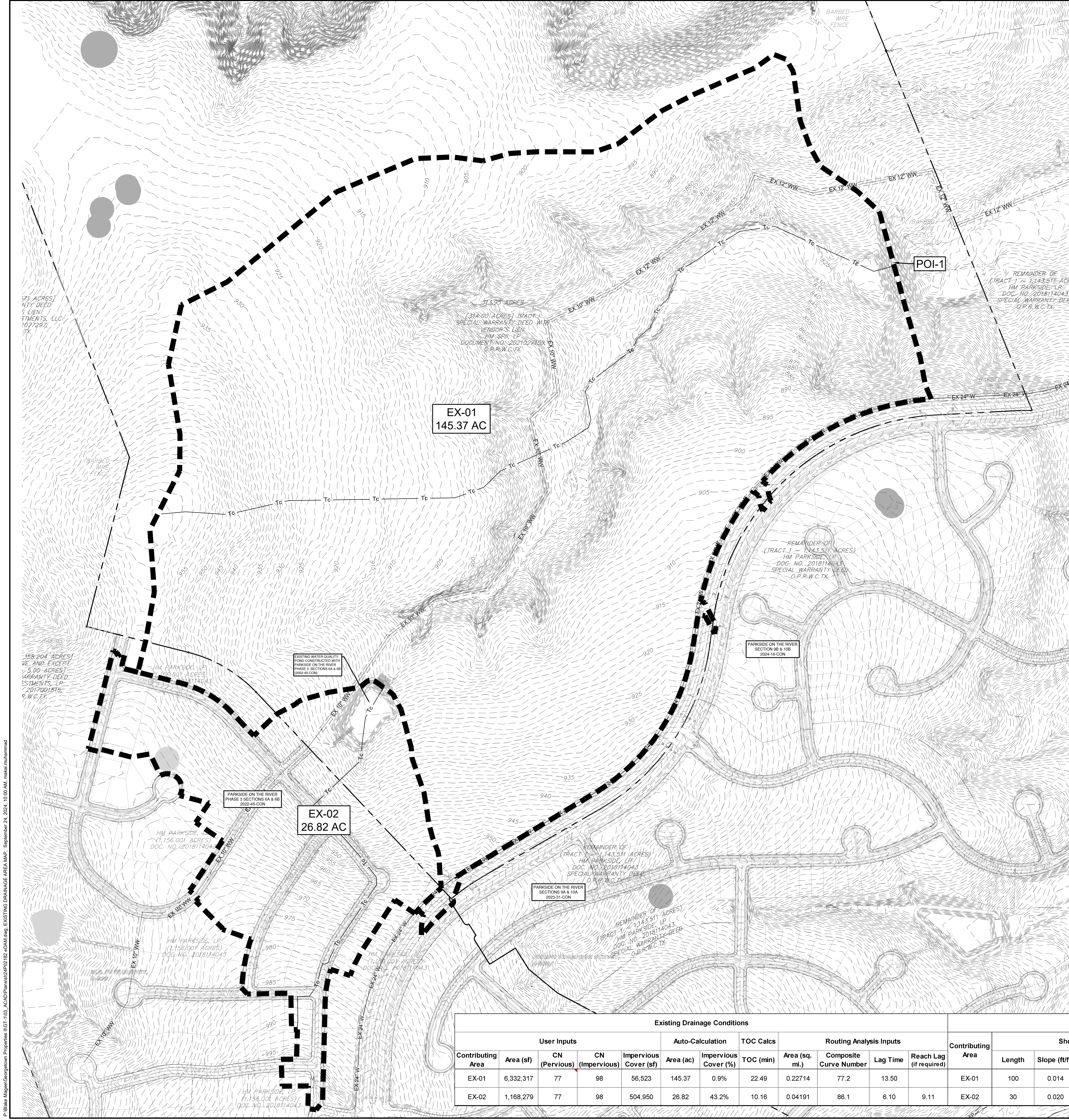
5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75069
817.483.8888
HARGREEN.COM

HRGreen®
DEVELOPMENT TX

STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER
09/03/2024

PAVING DETAILS
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MKM
CHECKED BY: SN
APPROVED BY: [Signature]
SHEET 39 OF 91
2024-XX-CON



- LEGEND**
- 834 - EXISTING MINOR CONTOUR
 - 835 - EXISTING MAJOR CONTOUR
 - 834 - PROPOSED MINOR CONTOUR
 - 835 - PROPOSED MAJOR CONTOUR
 - BOUNDARY
 - EASEMENT
 - 100YR - 100 YR PROPOSED CONDITION FLOODPLAIN
 - 100YR - 100 YR FEMA ZONE A FLOODPLAIN
 - CREEK CENTERLINE
 - PROPOSED STORM LINE
 - FIRE HYDRANT
 - WATER VALVE
 - STORM SEWER MANHOLE
 - WASTEWATER MANHOLE
 - CURB INLET
 - TREES TO REMAIN HERITAGE
 - TREES TO REMAIN NON-HERITAGE
 - DRAINAGE AREA
 - Tc - TIME OF CONCENTRATION

NOTES:

1. PLEASE REFER TO THE DETENTION WAIVER ANALYSIS, SEALED MARCH 25, 2019, SUBMITTED AND APPROVED WITH THE 2019-5-PP AND THE DETENTION WAIVER ANALYSIS ADDENDUM 1, SEALED JULY 28, 2023, SUBMITTED AND APPROVED WITH THE 2023-22-PP. NO DETENTION IS REQUIRED FOR THIS PROJECT.

Existing Conditions - Flows & Volumes - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
EX-01	198.98	424.82	599.30	919.16	21.56	45.58	64.62	100.54
EX-02	66.00	121.16	161.81	234.98	5.59	10.52	14.27	21.17
POI-1	254.19	529.63	739.13	1,125.49	27.15	56.10	78.89	121.71

Proposed (Interim) Conditions - Flows & Volumes - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
PR-01	214.19	441.54	614.68	930.10	23.02	47.34	66.40	102.16
PR-02	73.89	133.72	177.74	256.83	6.28	11.67	15.76	23.27
POI-1	258.14	533.61	743.09	1,125.08	29.30	59.01	82.16	125.43

Fully-Developed Conditions - Flows & Volumes - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
FD-01	295.78	568.49	771.16	1,136.79	28.23	54.94	75.47	113.55
FD-02	85.14	153.47	203.68	293.88	7.25	13.42	18.09	26.67
POI-1	328.13	643.09	877.10	1,303.89	35.47	68.36	93.56	140.22

Flow & Volume Comparison (Interim - Existing) - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
POI-1	3.95	3.98	3.96	-0.41	2.15	2.91	3.27	3.72

Flow & Volume Comparison (Fully-Developed - Existing) - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
POI-1	73.94	113.46	137.97	178.40	8.32	12.26	14.67	18.51

Existing Drainage Conditions												Time of Concentration Calculations													
User Inputs					Auto-Calculation		TOC Calcs	Routing Analysis Inputs				Contributing	Sheet Flow				Shallow Concentrated Flow (Unpaved)			Shallow Concentrated Flow (Paved)			Pipe/Channel Flow 1		
Contributing Area	Area (sf)	CN (Pervious)	CN (Impervious)	Impervious Cover (sf)	Area (ac)	Impervious Cover (%)	TOC (min)	Area (sq. mi.)	Composite Curve Number	Lag Time	Reach Lag (if required)	Area	Length	Slope (ft/ft)	Roughness Coefficient	T _{sheet}	Length (ft)	Slope (ft/ft)	T _{unpaved}	Length (ft)	Slope (ft/ft)	T _{paved}	Length (ft)	Velocity (ft)	T _{channel} (min)
EX-01	6,332,317	77	98	56,523	145.37	0.9%	22.49	0.22714	77.2	13.50		EX-01	100	0.014	0.150	10.18	1776	0.060	7.47			0.00	1743	6	4.84
EX-02	1,168,279	77	98	504,950	26.82	43.2%	10.16	0.04191	86.1	6.10	9.11	EX-02	30	0.020	0.240	4.91	104	0.020	0.76			0.00	1617	6	4.49

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STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER

09/23/2024

EXISTING DRAINAGE
AREA MAP
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

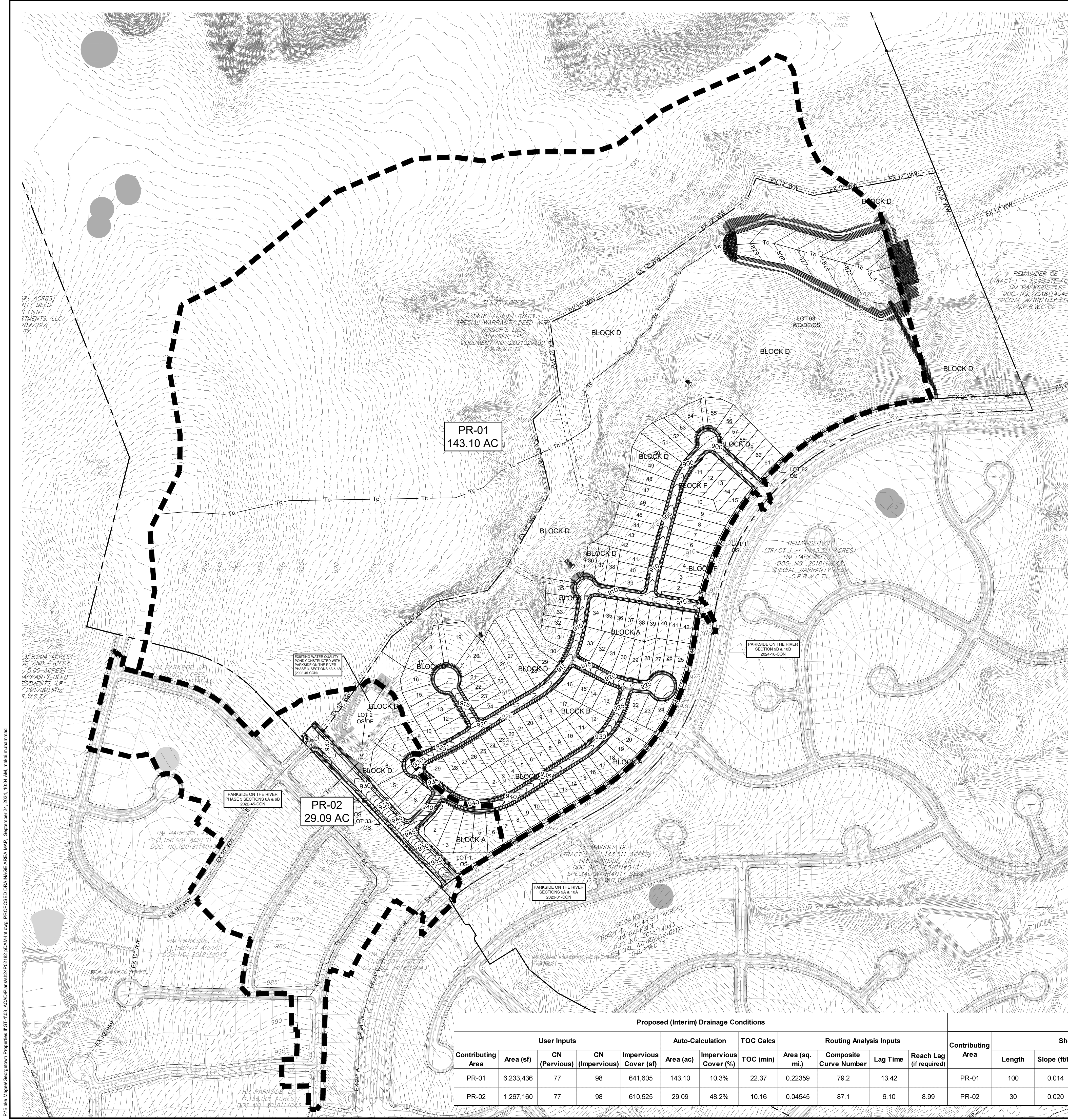
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APPROVED BY:

SHEET 40 OF 91

2024-XX-CON



0200'400'

SCALE: 1" = 200'

LEGEND

834

EXISTING MINOR CONTOUR

835

EXISTING MAJOR CONTOUR

834

PROPOSED MINOR CONTOUR

835

PROPOSED MAJOR CONTOUR

EASEMENT

100YR

100 YR PROPOSED CONDITION FLOODPLAIN

100YR

100 YR FEMA ZONE A FLOODPLAIN

CREEK CENTERLINE

SD

PROPOSED STORM LINE

FIRE HYDRANT

WATER VALVE

SD

STORM SEWER MANHOLE

WW

WASTEWATER MANHOLE

CURB INLET

TREES TO REMAIN HERITAGE

TREES TO REMAIN NON-HERITAGE

DRAINAGE AREA

Tc

TIME OF CONCENTRATION

NOTES:

1. PLEASE REFER TO THE DETENTION WAIVER ANALYSIS, SEALED MARCH 25, 2019, SUBMITTED AND APPROVED WITH THE 2019-5-PP AND THE DETENTION WAIVER ANALYSIS ADDENDUM 1, SEALED JULY 28, 2023, SUBMITTED AND APPROVED WITH THE 2023-22-PP. NO DETENTION IS REQUIRED FOR THIS PROJECT.

Existing Conditions - Flows & Volumes - Atlas 14							
ID	Peak Flows (cfs)				Volumes (ac-ft)		
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	100-yr
EX-01	198.98	424.82	599.30	919.16	21.56	45.58	64.62
EX-02	66.00	121.16	161.81	234.98	5.59	10.52	14.27
POI-1	254.19	529.63	739.13	1,125.49	27.15	56.10	78.89

Proposed (Interim) Conditions - Flows & Volumes - Atlas 14							
ID	Peak Flows (cfs)				Volumes (ac-ft)		
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	100-yr
PR-01	214.19	441.54	614.68	930.10	23.02	47.34	66.40
PR-02	73.89	133.72	177.74	256.83	6.28	11.67	15.76
POI-1	258.14	533.61	743.09	1,125.08	29.30	59.01	82.16

Fully-Developed Conditions - Flows & Volumes - Atlas 14							
ID	Peak Flows (cfs)				Volumes (ac-ft)		
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	100-yr
FD-01	295.78	568.49	771.16	1,136.79	28.23	54.94	75.47
FD-02	85.14	153.47	203.68	293.88	7.25	13.42	18.09
POI-1	328.13	643.09	877.10	1,303.89	35.47	68.36	93.56

Flow & Volume Comparison (Interim - Existing) - Atlas 14							
ID	Peak Flows (cfs)				Volumes (ac-ft)		
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	100-yr
POI-1	3.95	3.98	3.96	-0.41	2.15	2.91	3.27

Flow & Volume Comparison (Fully-Developed - Existing) - Atlas 14							
ID	Peak Flows (cfs)				Volumes (ac-ft)		
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	100-yr
POI-1	73.94	113.46	137.97	178.40	8.32	12.26	14.67

Proposed (Interim) Drainage Conditions										Time of Concentration Calculations															
User Inputs					Auto-Calculation		TOC Calcs		Routing Analysis Inputs			Contributing Area	Sheet Flow				Shallow Concentrated Flow (Unpaved)			Shallow Concentrated Flow (Paved)			Pipe/Channel Flow 1		
Contributing Area	Area (sf)	CN (Pervious)	CN (Impervious)	Impervious Cover (sf)	Area (ac)	Impervious Cover (%)	TOC (min)	Area (sq. mi.)	Composite Curve Number	Lag Time	Reach Lag (if required)		Length	Slope (ft/ft)	Roughness Coefficient	T _{sheet}	Length (ft)	Slope (ft/ft)	T _{unpaved}	Length (ft)	Slope (ft/ft)	T _{paved}	Length (ft)	Velocity (ft)	T _{channel} (min)
PR-01	6,233,436	77	98	641,605	143.10	10.3%	22.37	0.22359	79.2	13.42		PR-01	100	0.014	0.150	10.18	1776	0.060	7.47			0.00	1699	6	4.72
PR-02	1,267,160	77	98	610,525	29.09	48.2%	10.16	0.04545	87.1	6.10	8.99	PR-02	30	0.020	0.240	4.91	104	0.020	0.76			0.00	1617	6	4.49

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REGISTERED PROFESSIONAL ENGINEER
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T&E NO. 1019401

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142536
REGISTERED PROFESSIONAL ENGINEER
09/03/2024

PROPOSED DRAINAGE
AREA MAP
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

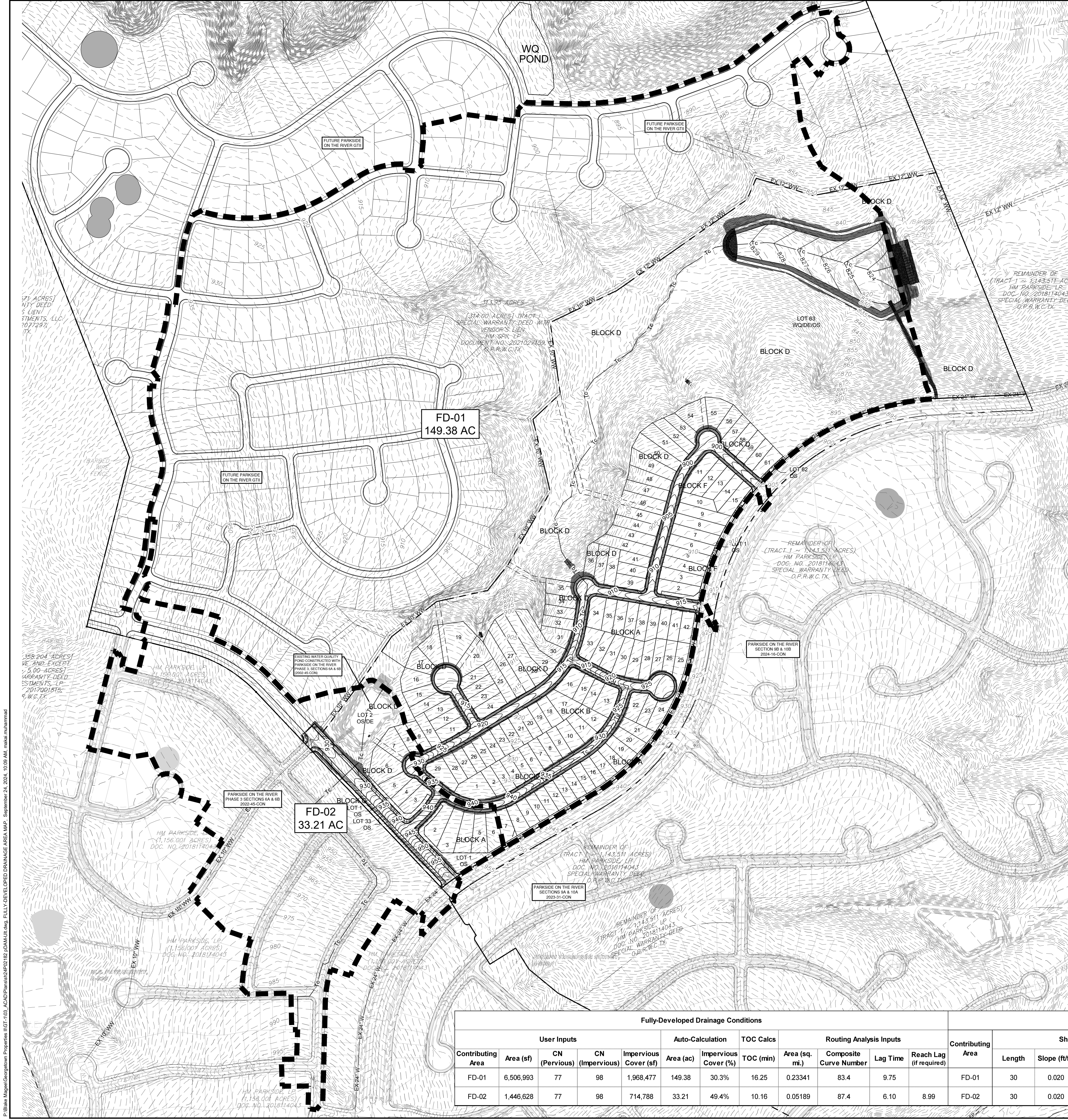
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CHECKED BY: SN

APPROVED BY:

SHEET 41 OF 91

2024-XX-CON



NOTES:

1. PLEASE REFER TO THE DETENTION WAIVER ANALYSIS, SEALED MARCH 25, 2019, SUBMITTED AND APPROVED WITH THE 2019-5-PP AND THE DETENTION WAIVER ANALYSIS ADDENDUM 1, SEALED JULY 28, 2023, SUBMITTED AND APPROVED WITH THE 2023-22-PP. NO DETENTION IS REQUIRED FOR THIS PROJECT.

Existing Conditions - Flows & Volumes - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
EX-01	198.98	424.82	599.30	919.16	21.56	45.58	64.62	100.54
EX-02	66.00	121.16	161.81	234.98	5.59	10.52	14.27	21.17
POI-1	254.19	529.63	739.13	1,125.49	27.15	56.10	78.89	121.71

Proposed (Interim) Conditions - Flows & Volumes - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
PR-01	214.19	441.54	614.68	930.10	23.02	47.34	66.40	102.16
PR-02	73.89	133.72	177.74	256.83	6.28	11.67	15.76	23.27
POI-1	258.14	533.61	743.09	1,125.08	29.30	59.01	82.16	125.43

Fully-Developed Conditions - Flows & Volumes - Atlas 14								
ID	Peak Flows (cfs)				Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	25-yr	100-yr
FD-01	295.78	568.49	771.16	1,136.79	28.23	54.94	75.47	113.55
FD-02	85.14	153.47	203.68	293.88	7.25	13.42	18.09	26.67
POI-1	328.13	643.09	877.10	1,303.89	35.47	68.36	93.56	140.22

Flow & Volume Comparison (Interim - Existing) - Atlas 14							
ID	Peak Flows (cfs)			Volumes (ac-ft)			
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	100-yr
POI-1	3.95	3.98	3.96	-0.41	2.15	2.91	3.72

Flow & Volume Comparison (Fully-Developed - Existing) - Atlas 14							
ID	Peak Flows (cfs)				Volumes (ac-ft)		
	2-yr	10-yr	25-yr	100-yr	2-yr	10-yr	100-yr
POI-1	73.94	113.46	137.97	178.40	8.32	12.26	18.51

Fully-Developed Drainage Conditions												Time of Concentration Calculations													
User Inputs					Auto-Calculation		TOC Calcs	Routing Analysis Inputs				Contributing	Sheet Flow				Shallow Concentrated Flow (Unpaved)			Shallow Concentrated Flow (Paved)			Pipe/Channel Flow 1		
Contributing Area	Area (sf)	CN (Pervious)	CN (Impervious)	Impervious Cover (sf)	Area (ac)	Impervious Cover (%)	TOC (min)	Area (sq. mi.)	Composite Curve Number	Lag Time	Reach Lag (if required)	Area	Length	Slope (ft/ft)	Roughness Coefficient	T _{sheet}	Length (ft)	Slope (ft/ft)	T _{unpaved}	Length (ft)	Slope (ft/ft)	T _{paved}	Length (ft)	Velocity (ft)	T _{channel} (min)
FD-01	6,506,993	77	98	1,968,477	149.38	30.3%	16.25	0.23341	83.4	9.75		FD-01	30	0.020	0.240	4.91	110	0.020	0.80			0.00	3794	6	10.54
FD-02	1,446,628	77	98	714,788	33.21	49.4%	10.16	0.05189	87.4	6.10	8.99	FD-02	30	0.020	0.240	4.91	104	0.020	0.76			0.00	1617	6	4.49

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09/23/2024

FULLY-DEVELOPED
DRAINAGE AREA MAP

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS

GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

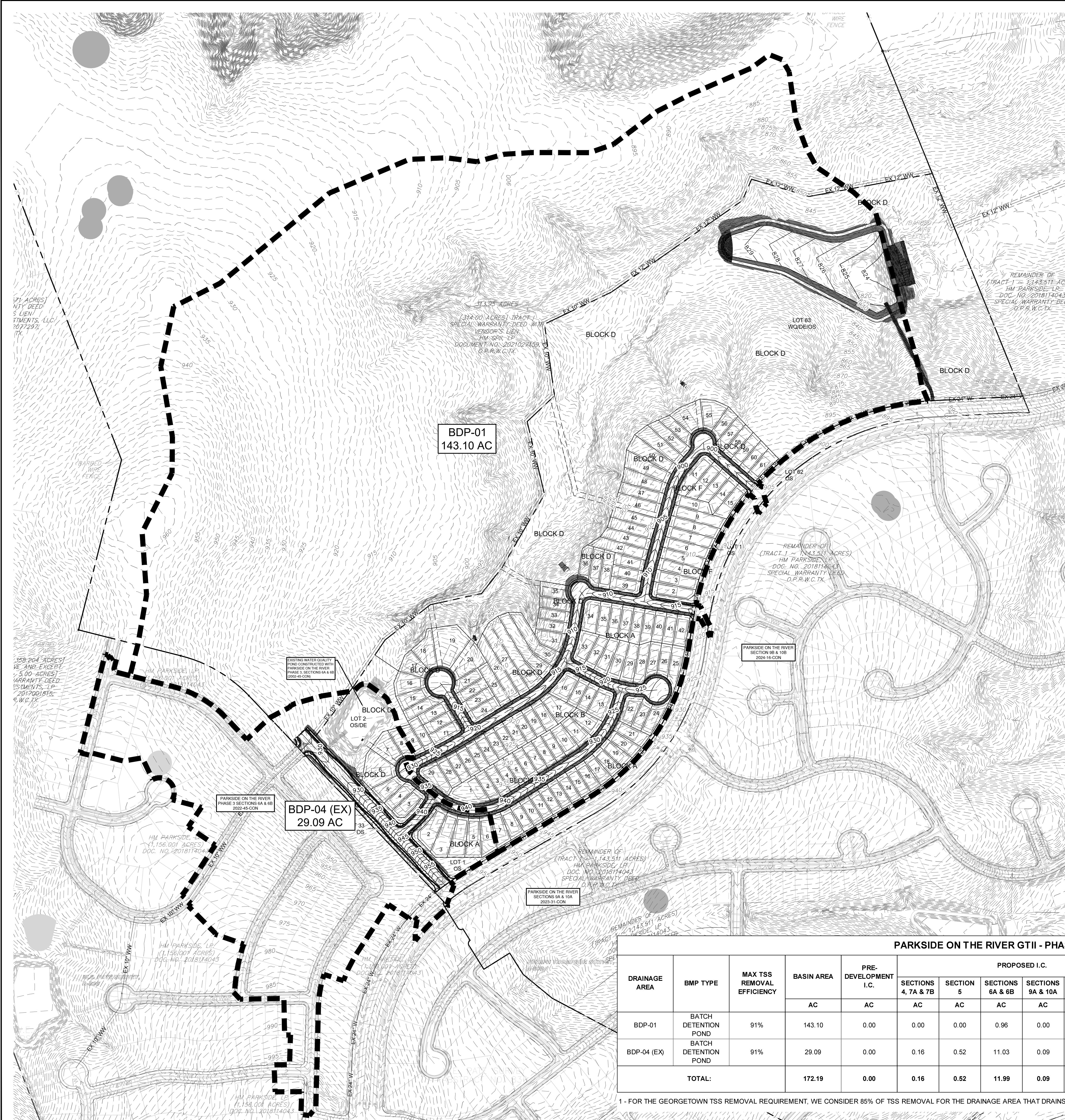
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SHEET 42 OF 91

2024-XX-CON

P:\Blake_Maps\Georgetown Properties\TGT-103_ACO\TSSRemoval\DWG\WATER QUALITY DRAINAGE AREA MAP (INTERIM). September 24, 2024, 10:17 AM, mkm, mmmmm



0200'400'

SCALE: 1" = 200'

LEGEND

834

EXISTING MINOR CONTOUR

835

EXISTING MAJOR CONTOUR

834

PROPOSED MINOR CONTOUR

835

PROPOSED MAJOR CONTOUR

BOUNDARY

EASEMENT

100YR

100 YR PROPOSED CONDITION FLOODPLAIN

100YR

100 YR FEMA ZONE A FLOODPLAIN

CREEK CENTERLINE

SD

PROPOSED STORM LINE

FIRE HYDRANT

WATER VALVE

SD

STORM SEWER MANHOLE

WW

WASTEWATER MANHOLE

CURB INLET

TREES TO REMAIN HERITAGE

TREES TO REMAIN NON-HERITAGE

DRAINAGE AREA

PARKSIDE ON THE RIVER GTII - PHASE 1 - TSS REMOVAL SUMMARY - INTERIM																	
DRAINAGE AREA	BMP TYPE	MAX TSS REMOVAL EFFICIENCY	BASIN AREA	PRE-DEVELOPMENT I.C.	PROPOSED I.C.						POST-DEVELOPMENT I.C.		TCEQ REQUIRED 80% TSS LOAD REMOVAL	CITY OF GEORGETOWN REQUIRED 85% POND TSS LOAD REMOVAL	PROVIDED TSS LOAD REMOVAL	VOLUME REQUIRED	VOLUME PROVIDED
					SECTIONS 4, 7A & 7B	SECTION 5	SECTIONS 6A & 6B	SECTIONS 9A & 10A	SECTIONS 9B & 10B	GTII PH 1	AC	%					
BDP-01	BATCH DETENTION POND	91%	143.10	0.00	0.00	0.00	0.96	0.00	0.13	13.64	14.73	10%	12,821	13,622	14,904	119,320	583,283
BDP-04 (EX)	BATCH DETENTION POND	91%	29.09	0.00	0.16	0.52	11.03	0.09	0.00	2.22	14.02	48%	12,203	12,966	12,966	74,914	95,617
TOTAL:			172.19	0.00	0.16	0.52	11.99	0.09	0.13	15.86	28.75	17%	25,024		27,870		

1 - FOR THE GEORGETOWN TSS REMOVAL REQUIREMENT, WE CONSIDER 85% OF TSS REMOVAL FOR THE DRAINAGE AREA THAT DRAINS TOWARD THE BATCH DETENTION PONDS.

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STATE OF TEXAS
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142536
LICENSED PROFESSIONAL ENGINEER

Christine Campbell
09/23/2024

WATER QUALITY DRAINAGE
AREA MAP (INTERIM)

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS

GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET 45 OF 91

2024-XX-CON

BATCH DETENTION POND - BDP-01 (FULLY-DEVELOPED)

BATCH DETENTION POND - BDP-04 (EX) (FULLY-DEVELOPED)

Texas Commission on Environmental Quality		Project Name: Parkside on the River GTII - Phase 1 Date Prepared: 9/19/2024	
TSS Removal Calculations 04-20-2009			
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: $L_{wT} = 27.2(A_{ti} \times P)$			
where:	L_{wT} TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load A_{ti} = 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 = 75.97 acres Preddevelopment impervious area within the limits of the plan = 0.00 acres Total post-development impervious area within the limits of the plan = 15.66 acres Total post-development impervious cover fraction = 0.21 P = 32 inches		
	L_{wT} TOTAL PROJECT = 13806 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. = BDP-01			
	Total drainage basin/outfall area = 149.38 acres Preddevelopment impervious area within drainage basin/outfall area = 0.00 acres Post-development impervious area within drainage basin/outfall area = 45.19 acres Post-development impervious fraction within drainage basin/outfall area = 0.30 L_{wT} THIS BASIN = 39333 lbs.		
3. Indicate the proposed BMP Code for this basin.			
	Proposed BMP = Batch Detention Removal efficiency = 91 percent		
4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.			
RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$			
where:	A_C = Total On-Site drainage area in the BMP catchment area A_i = Impervious area proposed in the BMP catchment area A_p = Previous area remaining in the BMP catchment area L_R = TSS Load removed from this catchment area by the proposed BMP		
	A_C = 149.38 acres A_i = 45.19 acres A_p = 104.19 acres L_R = 47170 lbs.		
5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area			
	Desired L_{wT} THIS BASIN = 45725 lbs. F = 0.97		
6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.			
	Rainfall Depth = 3.00 inches Post Development Runoff Coefficient = 0.26 On-site Water Quality Volume = 422023 cubic feet	Calculations from RG-348	Pages 3-34 to 3-36
	Calculations from RG-348 Off-site area draining to BMP = 0.00 acres Off-site Impervious cover draining to BMP = 0.00 acres Impervious fraction of off-site area = 0 Off-site Runoff Coefficient = 0.00 Off-site Water Quality Volume = 0 cubic feet Storage for Sediment = 84406 Total Capture Volume (required water quality volume(s) x 1.20) = 506427 cubic feet 1/2 WQV = 253214	Pages 3-36 to 3-37	

Texas Commission on Environmental Quality					
TSS Removal Calculations 04-20-2009			Project Name: Parkside on the River GTII - Phase 1 Date Prepared: 9/20/2024		
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: $L_{\text{TOTAL PROJECT}} = 27.2(A_N \times P)$					
where: $L_{\text{TOTAL PROJECT}}$ = 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 Based on the Entire Project					
County = Williamson					
Total project area included in plan = 75.97 acres					
Predevelopment impervious area within the limits of the plan = 0.00 acres					
Total post-development impervious area within the limits of the plan = 16.88 acres					
Total post-development impervious cover fraction = 0.21					
P = 32 inches					
$L_{\text{TOTAL PROJECT}}$ = 13805 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. = BDP-04 (EX)*					
Total drainage basin/outfall area = 33.21 acres					
Predevelopment impervious area within drainage basin/outfall area = 0.00 acres					
Post-development impervious area within drainage basin/outfall area = 16.41 acres					
Post-development impervious fraction within drainage basin/outfall area = 0.49					
$L_{\text{B THIS BASIN}}$ = 14283 lbs.					
3. Indicate the proposed BMP Code for this basin.					
Proposed BMP = Batch Detention					
Removal efficiency = 91 percent					
4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.					
RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_i + A_p + A_o \times 0.54)$					
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 = Previous area remaining in the BMP catchment area L_R = TSS Load removed from this catchment area by the proposed BMP					
A_C = 33.21 acres					
A_i = 16.41 acres					
A_p = 16.80 acres					
L_R = 16796 lbs.					
5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area					
Desired $L_{\text{B THIS BASIN}}$ = 16176 lbs.					
F = 0.90					
6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.					
Rainfall Depth = 1.70 inches					
Post Development Runoff Coefficient = 0.36					
On-site Water Quality Volume = 72608 cubic feet					
Calculations from RG-348					
Pages 3-36 to 3-37					
Off-site area draining to BMP = 0.00 acres					
Off-site impervious cover draining to BMP = 0.00 acres					
Impervious fraction of off-site area = 0					
Off-site Runoff Coefficient = 0.00					
Off-site Water Quality Volume = 0 cubic feet					
Storage for Sediment = 14522					
Total Capture Volume (required water quality volume(s) x 1.20) = 87130 cubic feet					
1/2 WQV = 43565					

SHEET 47 OF 91
2024-XX-CON

1. CONTRACTOR TO UTILIZE A TEMPORARY CONSTRUCTION PUMP TO DISCHARGE WATER FROM THE POND AFTER A RAINFALL EVENT, DURING CONSTRUCTION. PUMP IS TO DISCHARGE UPSTREAM OF PROPOSED ROCK BERM LOCATED BETWEEN THE CREEK BED. AT NO TIME SHALL THE PUMP BE DISCHARGED DIRECTLY INTO STORMSEWER SYSTEM BEFORE CROSSING A ROCK BERM.
2. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES, AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY. CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO ROADS A MINIMUM OF ONCE DAILY.
3. ALL DISTURBED AREAS TO BE REVEGETATED PRIOR TO ACCEPTANCE.
4. 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.
5. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC ROADWAY.

10. GRADING WORK WITHIN THE 1/2 CRITICAL ROOT ZONE OF ALL PROTECTED TREES SHALL BE DONE BY HAND OR WITH RUBBER TIRED EQUIPMENT.

1. CONTRACTOR SHALL MAINTAIN THE DEWATERING SYSTEM TO ENSURE PERFORMANCE. IF THE DEWATERING SYSTEM IS NOT PERFORMING, THE CONTRACTOR MUST IMMEDIATELY MAKE THE NECESSARY MODIFICATIONS FOLLOWING THE ENVIRONMENTAL INSPECTOR'S DIRECTION TO ENSURE ADEQUATE SYSTEM PERFORMANCE. CONTRACTOR SHALL PROVIDE THE DEWATERING PLAN AT THE PRECONSTRUCTION MEETING.
2. THE SKIMMER IS TO BE USED DURING CONSTRUCTION AND SHALL BE REMOVED AFTER COMPLETING CONSTRUCTION OF THE BATCH DETENTION POND.

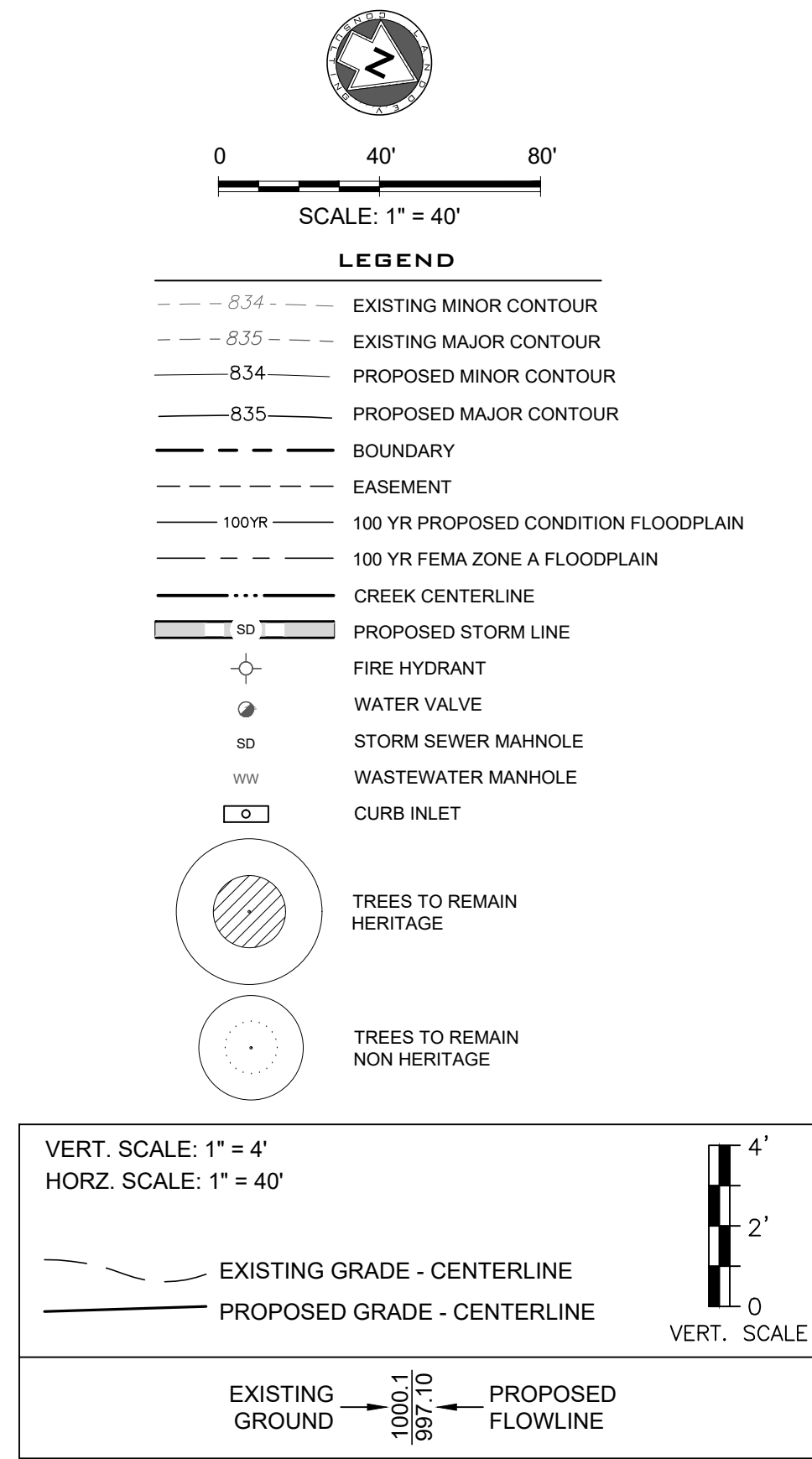
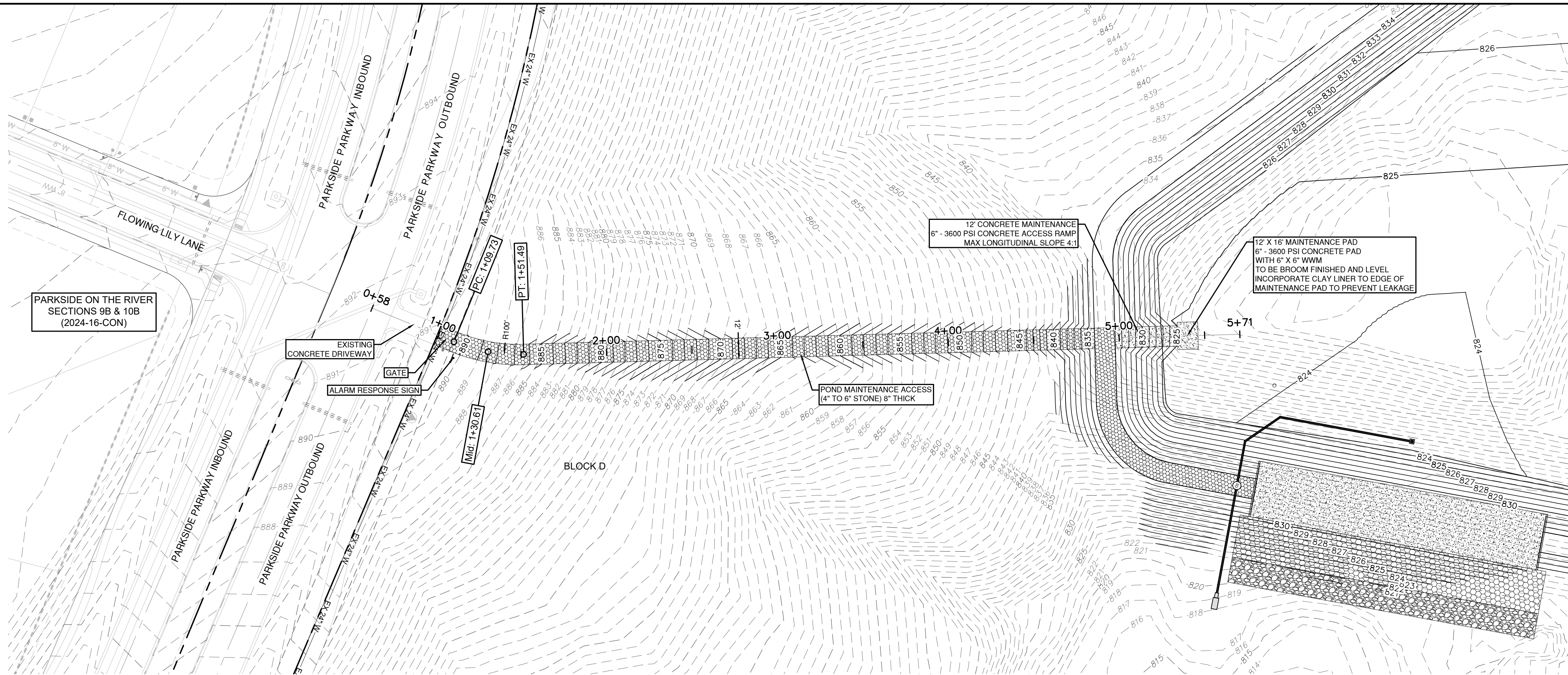
DESIGNED BY: CC
DRAWN BY: MM/MK
CHECKED BY: SN
APPROVED BY: _____

SHEET 48 OF 91

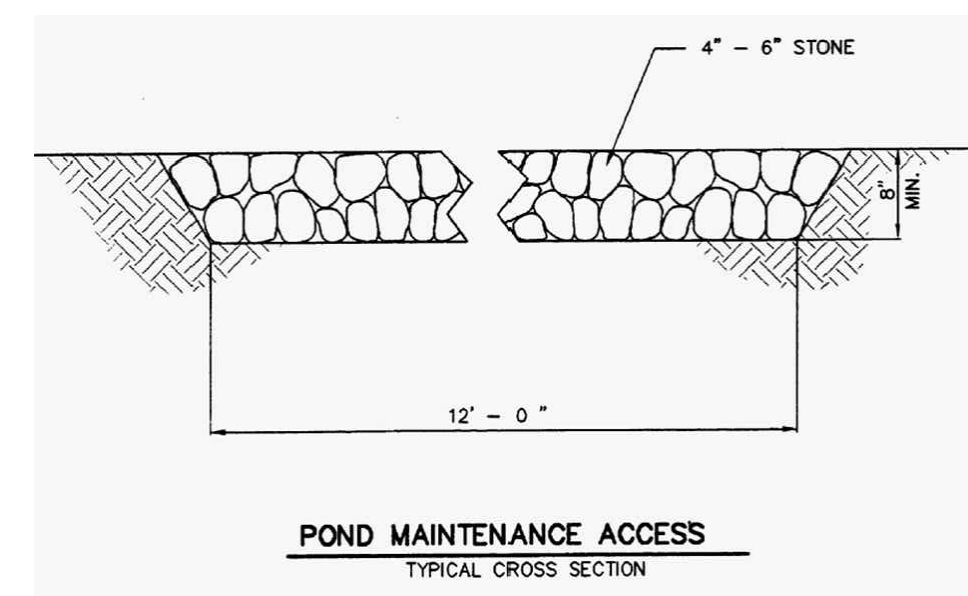
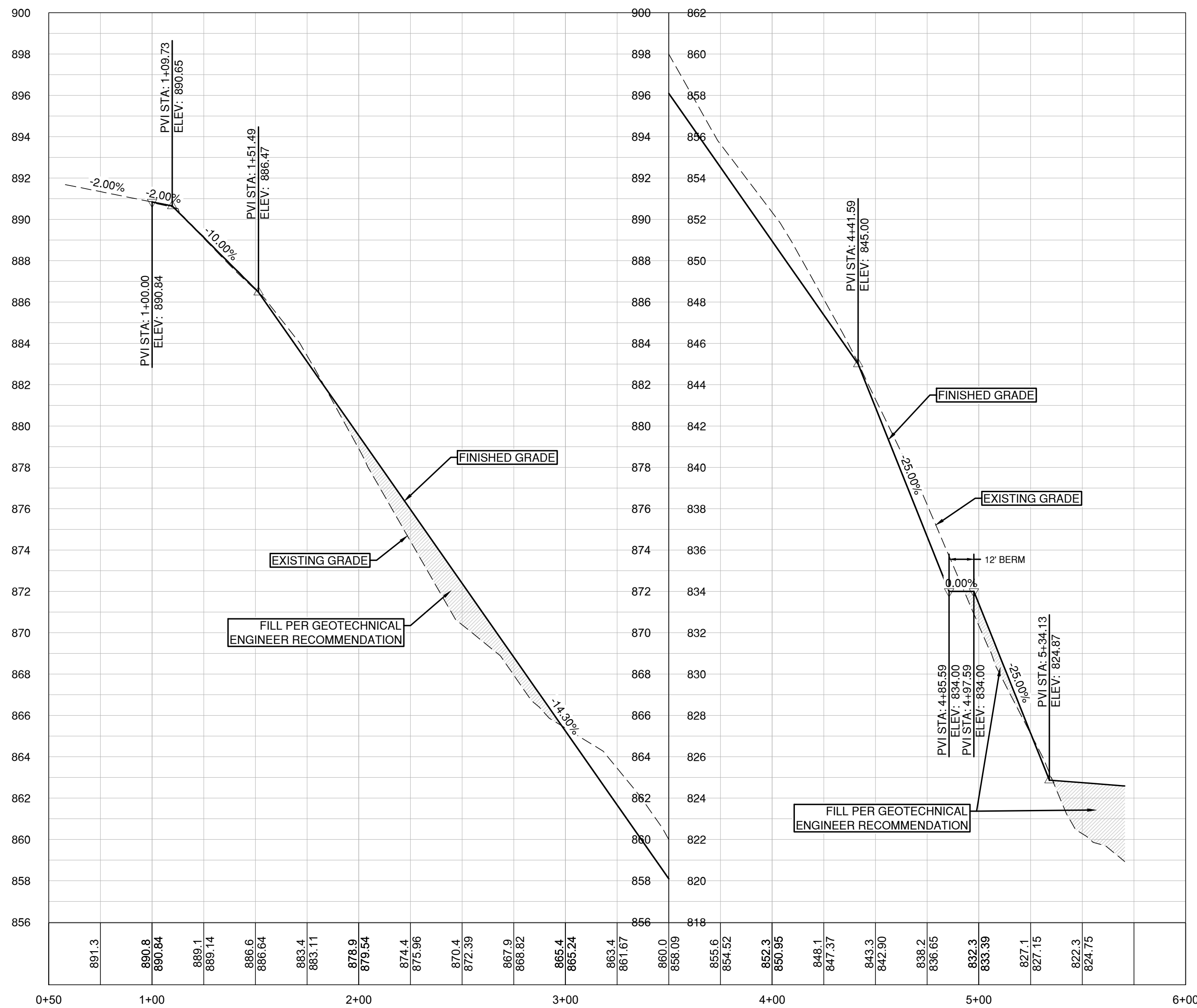
2024-XX-CON

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P:\Blake_Magnus\Georgetown Properties\181GT-103_ACAD\Drawings\181GT-103_POND.dwg POND ACCESS ROAD, September 24, 2024, 10:25 AM, mada muhammad



POND ACCESS ROAD



NO.	REVISION	BY	DATE



Know what's below.
Call before you dig.



5508 HIGHWAY 290 WEST
SUITE 150
DALLAS, TX 75235
714.460.8888
HARGREEN.COM

TYPE NO: 10384
TIFLS NO: 10194101

DEVELOPMENT TX



Christine Campbell
09/03/2024

POND ACCESS ROAD

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MM

CHECKED BY: SN

APPROVED BY: _____

SHEET 49 OF 91

2024-XX-CON

SECTION A-A

VERT. SCALE: 1" = 4'
HORZ. SCALE: 1" = 40'

EXISTING GRADE - CENTERLINE
 PROPOSED GRADE - CENTERLINE

EXISTING GROUND → 1000.1
 PROPOSED FLOWLINE ← 997.10

Pond Volume

Elevation	Area		Volume		Cumulative Volume		Comments
	SF	ac	cf	ac*ft	cf	ac*ft	
823	0	0.00					Water Quality Volume
824	9,161	0.21	4,581	0.11	4,581	0.11	
825	37,904	0.87	23,533	0.54	28,113	0.65	
826	68,635	1.58	53,270	1.22	81,383	1.87	
827	89,355	2.05	78,995	1.81	160,378	3.68	
828	108,133	2.48	98,744	2.27	259,122	5.95	
829	128,070	2.94	118,102	2.71	377,223	8.66	
830	143,868	3.30	135,969	3.12	513,192	11.78	Routing
830.5	146,676	3.37	206,060	4.73	583,283	13.39	
831	149,440	3.43	73,327	1.68	586,519	13.46	
832	155,008	3.56	152,224	3.49	738,743	16.96	
833	160,631	3.69	157,820	3.62	896,563	20.58	Freeboard
834	166,309	3.82	163,470	3.75	1,060,033	24.33	

OUTFLOW STRUCTURE

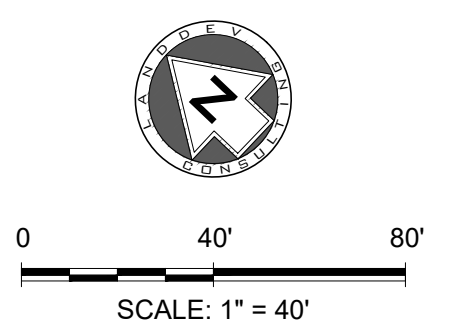
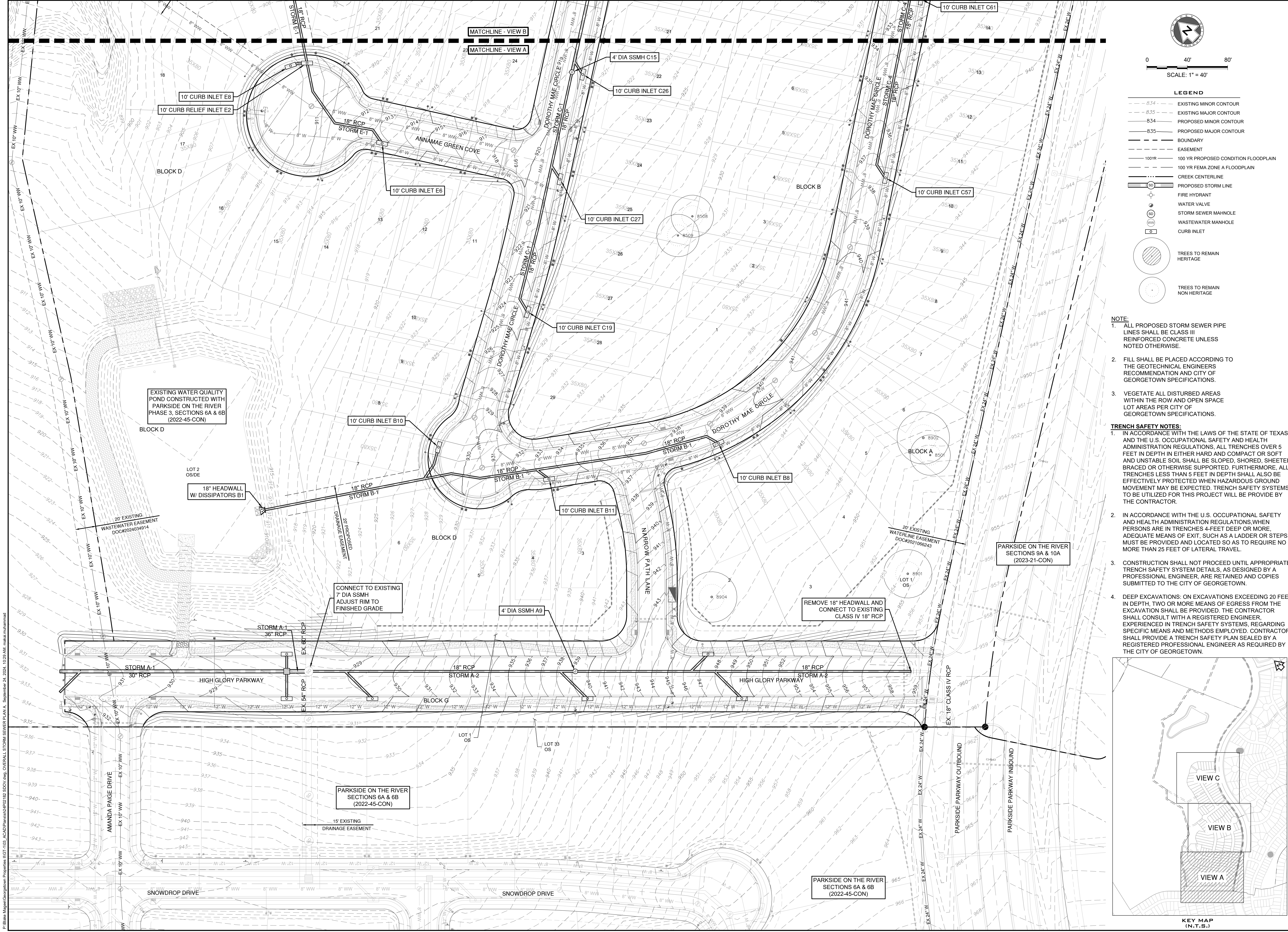
Elevation	Flow
ft	cfs
830.50	0
831.00	156
831.50	442
832.00	812
832.50	1,250
833.00	1,747
833.50	2,297
834.00	2,894

Q = C_w L H^{1.5}

Q - weir flow rate (cfs)
C_w - Weir Coefficient BROAD: 2.60
L - horizontal length of weir crest (ft) BROAD: 170 FT
H - head above weir crest elevation (ft)

[illegible]

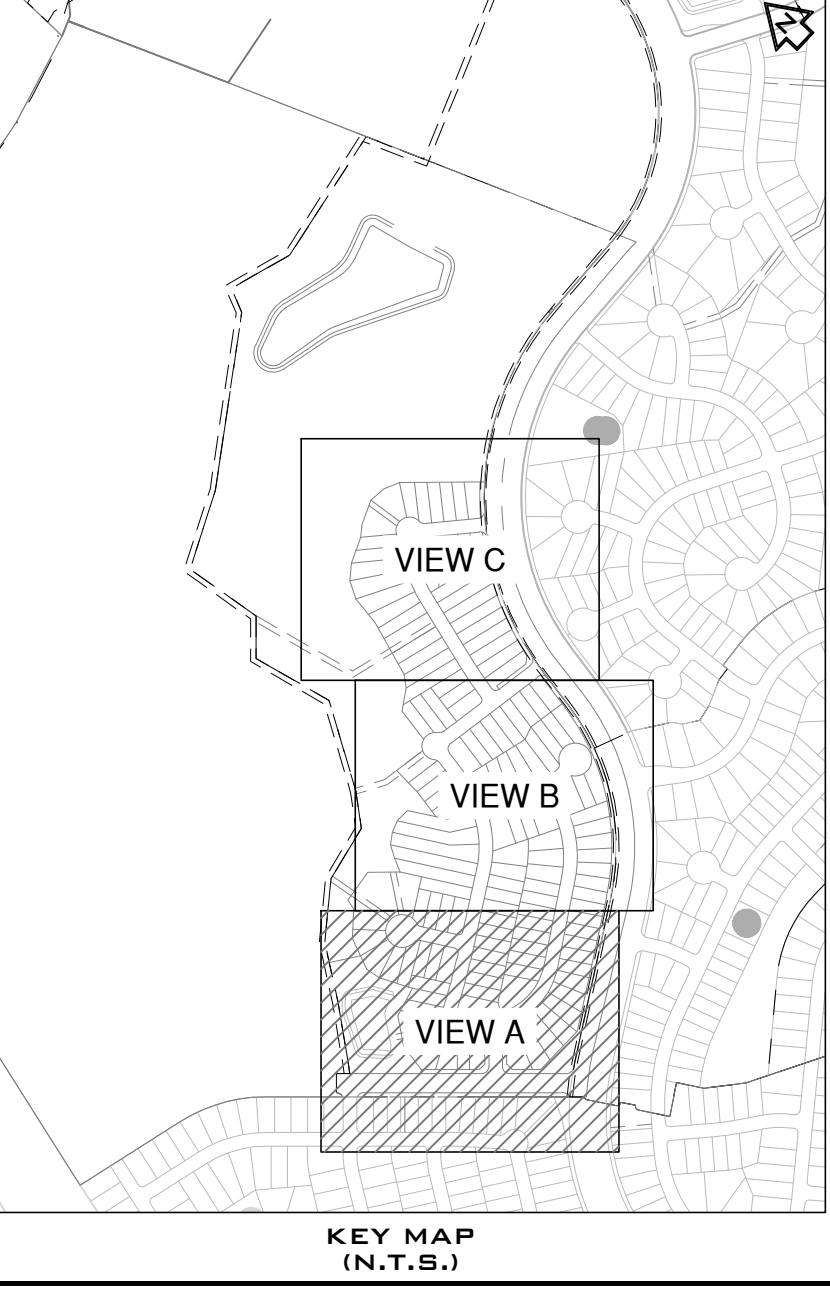
P:\Blake Magee\Georgetown Properties II\GT-1103_ACAD\Plan\sh24P02182 POND.dwg, September 24, 2024, 10:26 AM, makai.muhammad



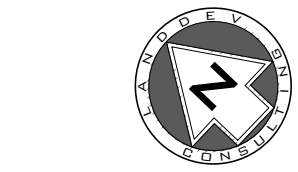
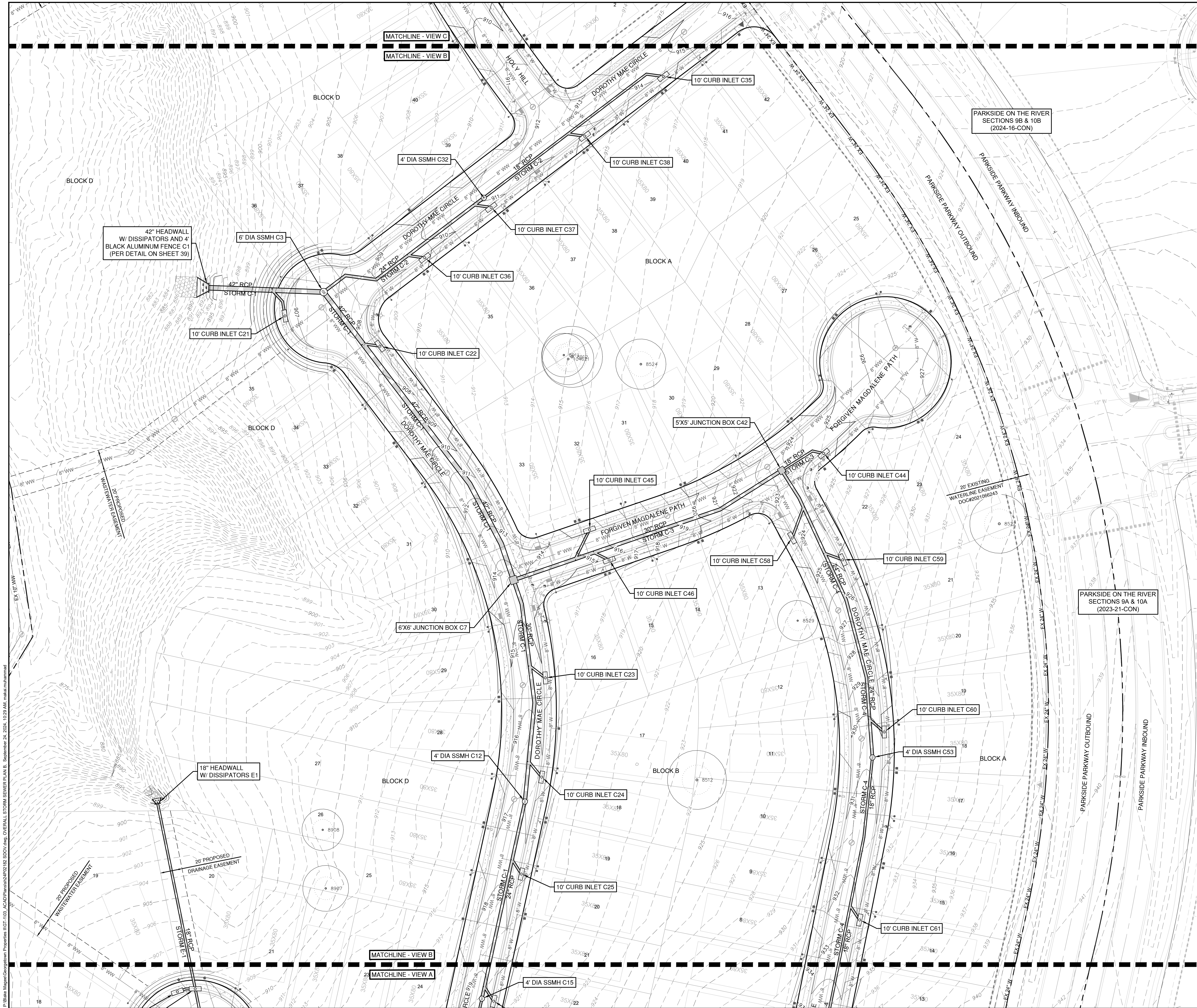
- LEGEND**
- 8.34 - - - - - EXISTING MINOR CONTOUR
 - 8.35 - - - - - EXISTING MAJOR CONTOUR
 - 8.34 - - - - - PROPOSED MINOR CONTOUR
 - 8.35 - - - - - PROPOSED MAJOR CONTOUR
 - BOUNDARY
 - EASEMENT
 - 100 YR 100 YR PROPOSED CONDITION FLOODPLAIN
 - 100 YR FEMA ZONE A FLOODPLAIN
 - CREEK CENTERLINE
 - SD PROPOSED STORM LINE
 - FW FIRE HYDRANT
 - SV WATER VALVE
 - SM STORM SEWER MAHOLE
 - WW WASTEWATER MAHOLE
 - CI CURB INLET
 - Trees to remain HERITAGE
 - Trees to remain NON HERITAGE

- NOTE:**
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 - FILL SHALL BE PLACED ACCORDING TO THE GEOTECHNICAL ENGINEERS RECOMMENDATION AND CITY OF GEORGETOWN SPECIFICATIONS.
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811 Know what's below. Call before you dig.	
5508 HIGHWAY 290 WEST SUITE 150 MCKINNEY, TX 75065 WWW.811TX.COM	TYPE NO: 10384 RPLS NO: 10194101
HRGreen DEVELOPMENT TX	
OVERALL STORM SEWER PLAN A PARKSIDE ON THE RIVER GTII - PHASE 1 CONSTRUCTION PLANS GEORGETOWN, WILLIAMSON, TEXAS	
DESIGNED BY: CC	
DRAWN BY: MM/MKM	
CHECKED BY: SN	
APPROVED BY:	
SHEET 53 OF 91	
2024-XX-CON	

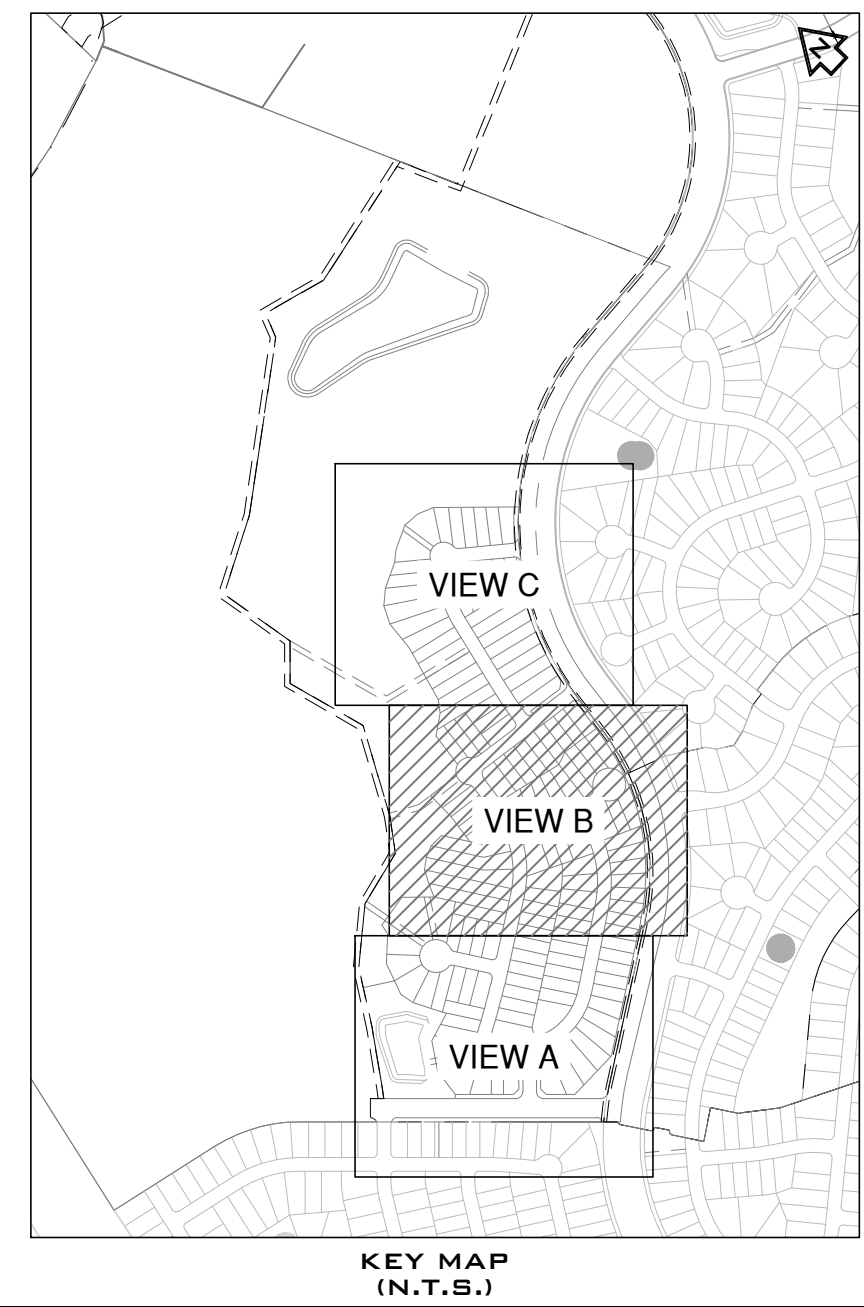


0 40' 80'
SCALE: 1" = 40'

- LEGEND**
- 8.34 - - - - - EXISTING MINOR CONTOUR
 - 8.35 - - - - - EXISTING MAJOR CONTOUR
 - 8.34 - - - - - PROPOSED MINOR CONTOUR
 - 8.35 - - - - - PROPOSED MAJOR CONTOUR
 - BOUNDARY
 - EASEMENT
 - 100YR 100 YR PROPOSED CONDITION FLOODPLAIN
 - 100 YR FEMA ZONE A FLOODPLAIN
 - ... CREEK CENTERLINE
 - SD PROPOSED STORM LINE
 - Fire Hydrant
 - Water Valve
 - SD Storm Sewer Manhole
 - WW Wastewater Manhole
 - C- Curb Inlet
 - Trees to Remain Heritage
 - Trees to Remain Non Heritage

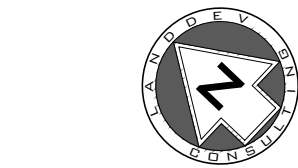
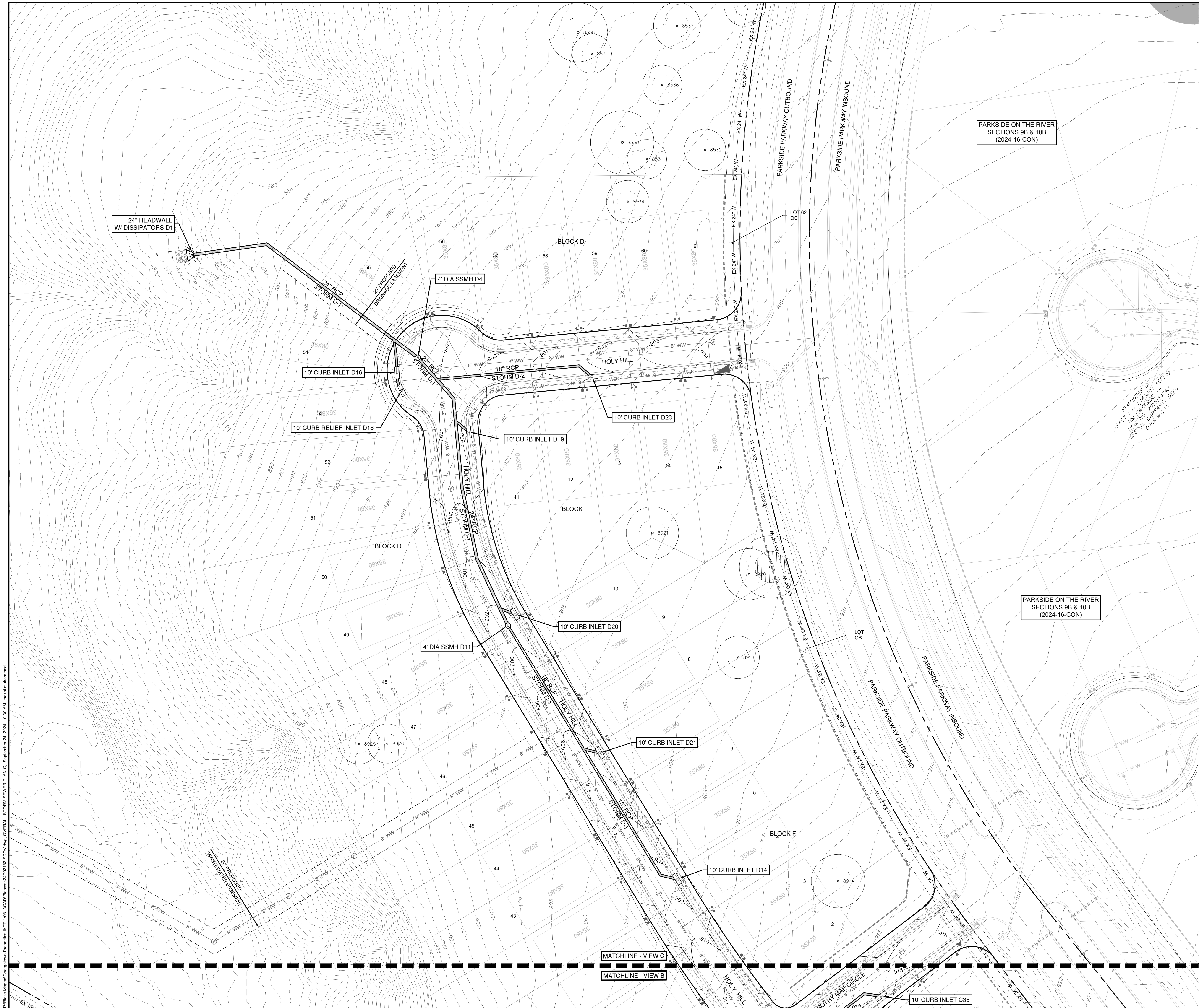
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811 Know what's below. Call before you dig.	
5508 HIGHWAY 290 WEST SUITE 150 MCKINNEY, TX 75065 CHRISTINE N. CAMPBELL HRGREEN, CON	TYPE NO: 10384 TPLS NO: 10194101
HRGreen DEVELOPMENT TX	
OVERALL STORM SEWER PLAN B PARKSIDE ON THE RIVER GTII - PHASE 1 CONSTRUCTION PLANS GEORGETOWN, WILLIAMSON, TEXAS	
DESIGNED BY: CC	
DRAWN BY: MM/MKM	
CHECKED BY: SN	
APPROVED BY:	
SHEET 54 OF 91	
2024-XX-CON	

P:\Blake_Mayor\Georgetown Properties\1001-103_A007ParksOnTheRiverPlan C_S001.dwg OVERALL STORM SEWER PLAN C September 24, 2024 10:30 AM maha.muhammad



0 40' 80'
SCALE: 1" = 40'

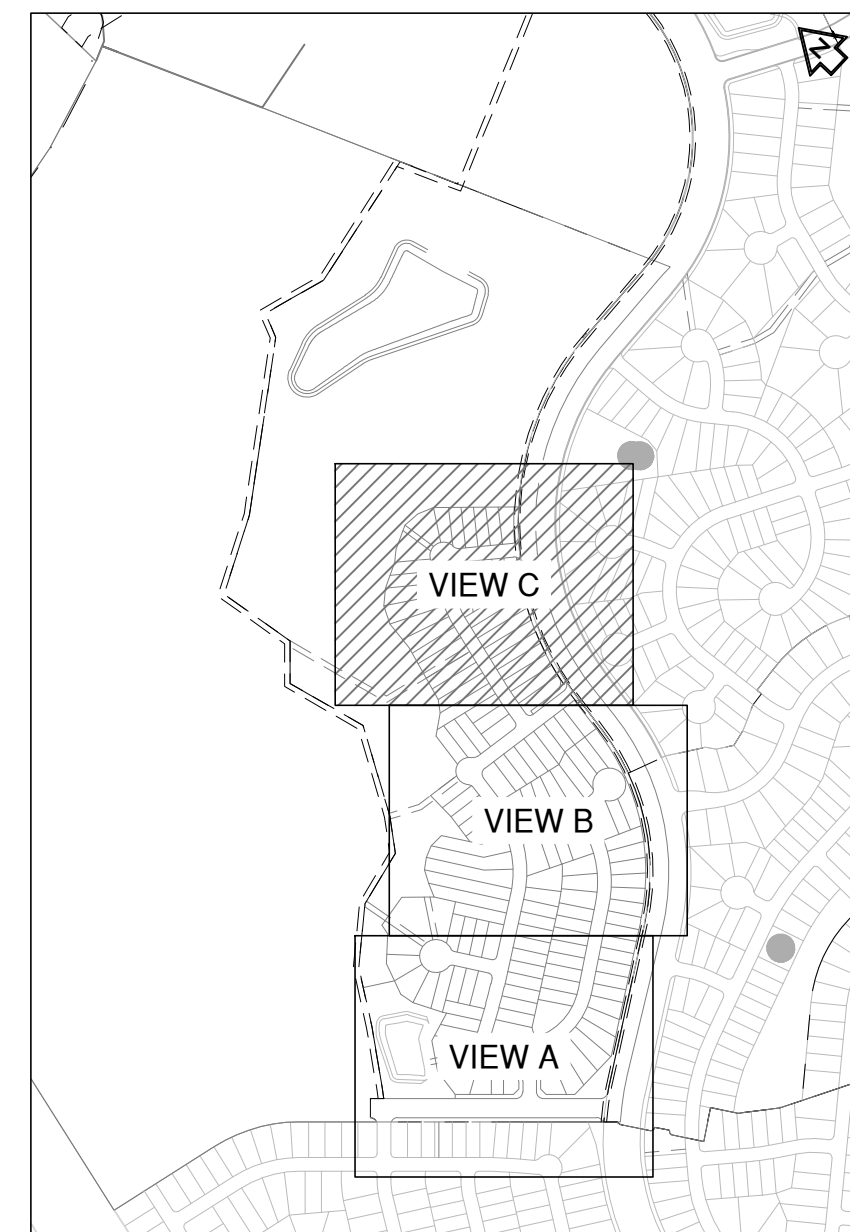
LEGEND	
	EXISTING MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	PROPOSED MAJOR CONTOUR
	BOUNDARY
	EASEMENT
	100 YR PROPOSED CONDITION FLOODPLAIN
	100 YR FEMA ZONE A FLOODPLAIN
	CREEK CENTERLINE
	PROPOSED STORM LINE
	FIRE HYDRANT
	WATER VALVE
	STORM SEWER MANHOLE
	WASTEWATER MANHOLE
	CURB INLET
	TREES TO REMAIN HERITAGE
	TREES TO REMAIN NON HERITAGE

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TRENCH SAFETY NOTES:

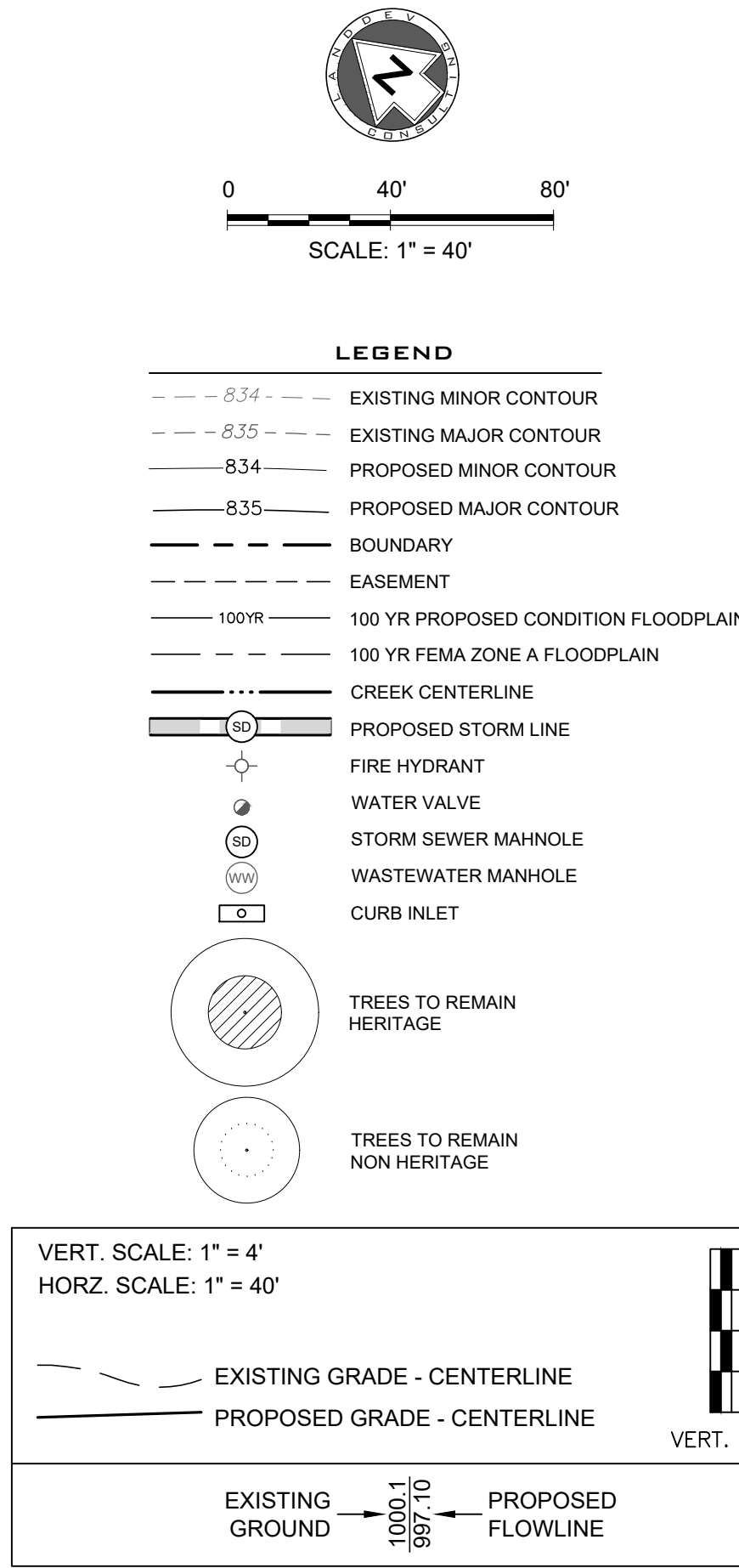
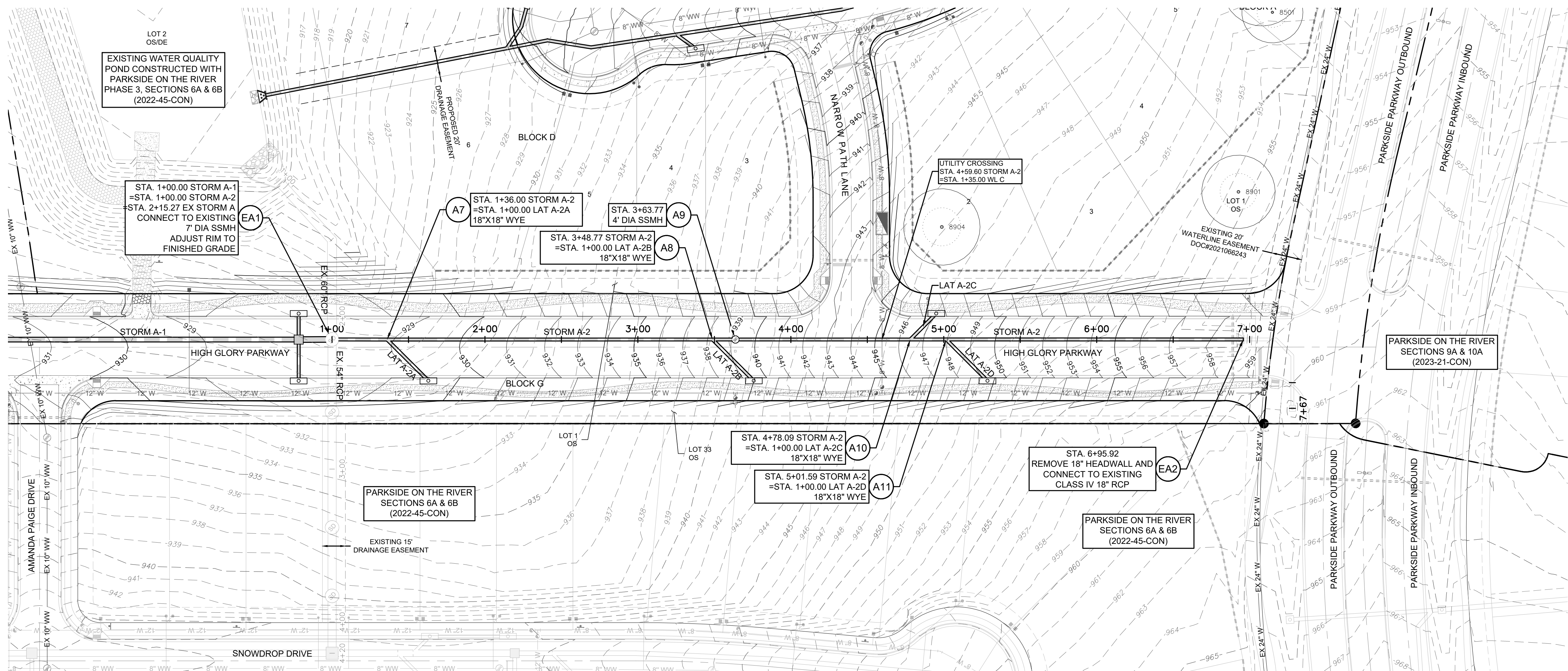
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KEY MAP (N.T.S.)

BY		DATE
REVISION		
NO.		
 Know what's below. Call before you dig.		
5508 HIGHWAY 290 WEST SUITE 150 DALLAS, TX 75235 CHRISTINE CAMPBELL HRGREEN.COM		
TPE NO: 16384 TPELS NO: 10194101		
 DEVELOPMENT TX		
 Christine Campbell 09/13/2024		
OVERALL STORM SEWER PLAN C PARKSIDE ON THE RIVER GTII - PHASE 1 CONSTRUCTION PLANS GEORGETOWN, WILLIAMSON, TEXAS		
DESIGNED BY: CC		
DRAWN BY: MM/MKM		
CHECKED BY: SN		
APPROVED BY:		
SHEET 55 OF 91		
2024-XX-CON		

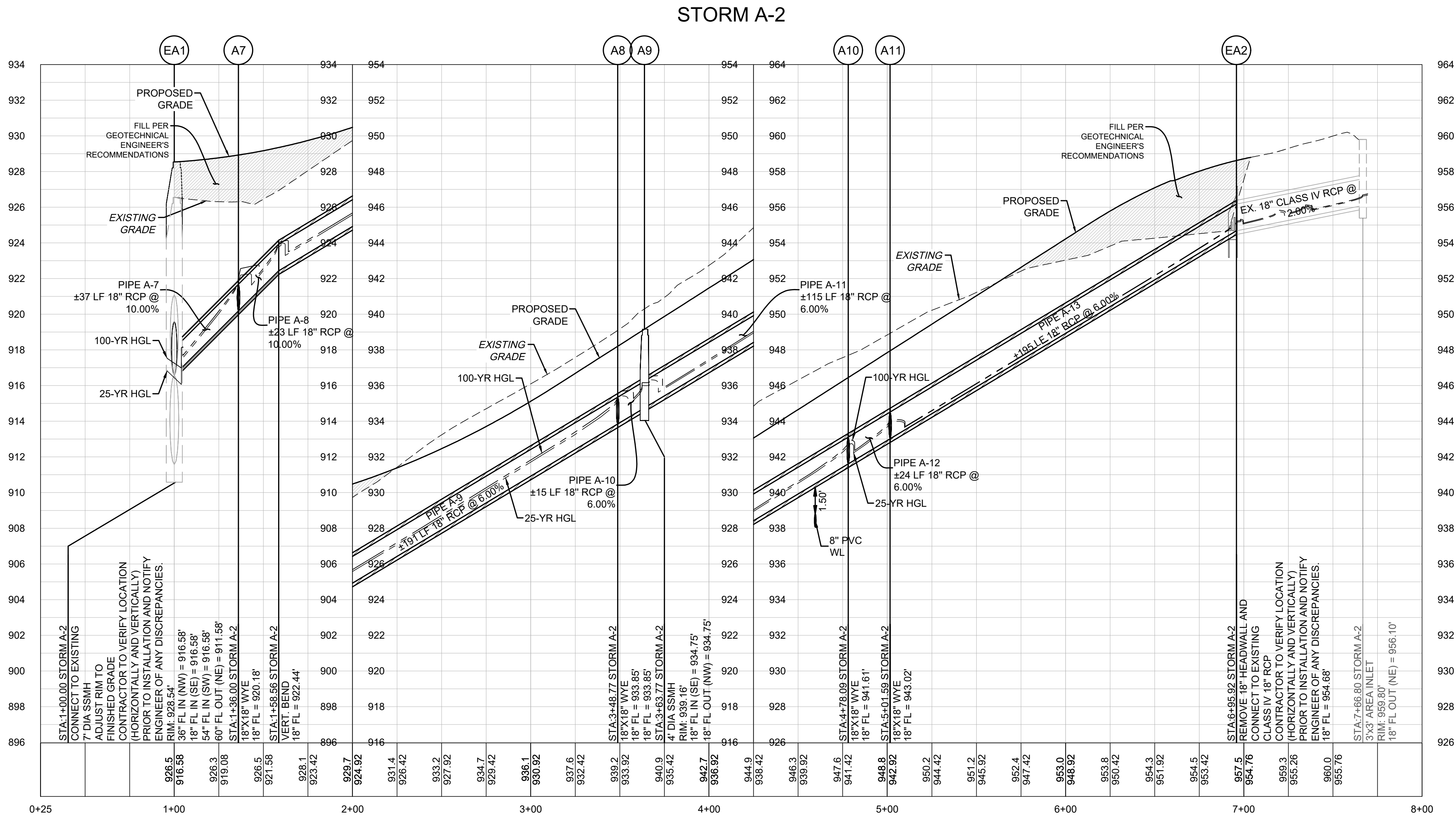
P:\Blake_Magnet\Georgetown Properties\1031-1032_ACO\Drawings\2024\1031-1032 STORM A-2 PLAN & PROFILE - September 24, 2024, 2:43 PM, maha.muhammad



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Pipe Label	Slope (%)	Q25 (cfs)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE A-7	10.00%	17.09	12.93	1.44	21.51	12.19	1.55
PIPE A-8	10.00%	11.64	6.88	2.01	14.69	8.44	2.38
PIPE A-9	6.00%	11.64	6.88	1.54	14.69	8.44	1.63
PIPE A-10	6.00%	7.58	4.97	1.57	9.61	5.90	1.83
PIPE A-11	6.00%	7.58	4.97	1.57	9.61	5.90	1.76
PIPE A-12	6.00%	5.78	4.53	1.14	7.41	5.02	1.34
PIPE A-13	6.00%	1.64	2.34	0.99	2.06	2.54	1.09



STORM A-2 PLAN & PROFILE

PARKSIDE ON THE RIVER

GTII - PHASE 1

CONSTRUCTION PLANS

GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET 57 OF 91

2024-XX-CON

811

Know what's below.
Call before you dig.

5508 HIGHWAY 290 WEST
SUITE 150
DALLAS, TX 75235
CITY OF GEORGETOWN
HARGREEN, CON

TPE NO: 16384
TPELS NO: 10194101

H3

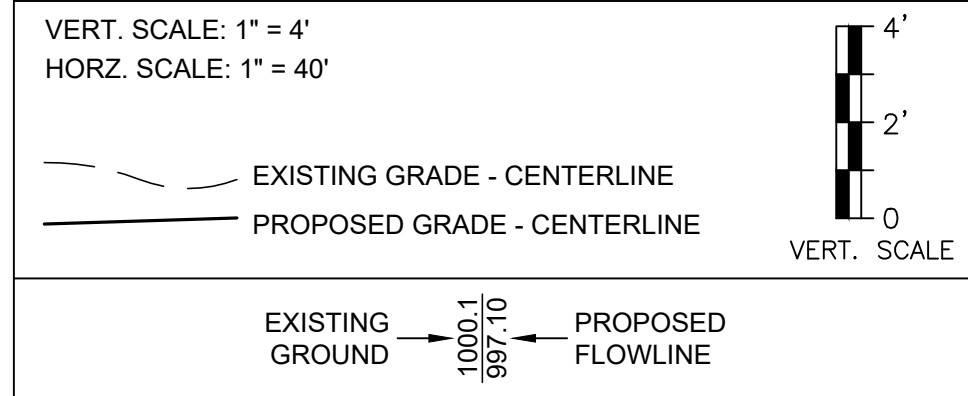
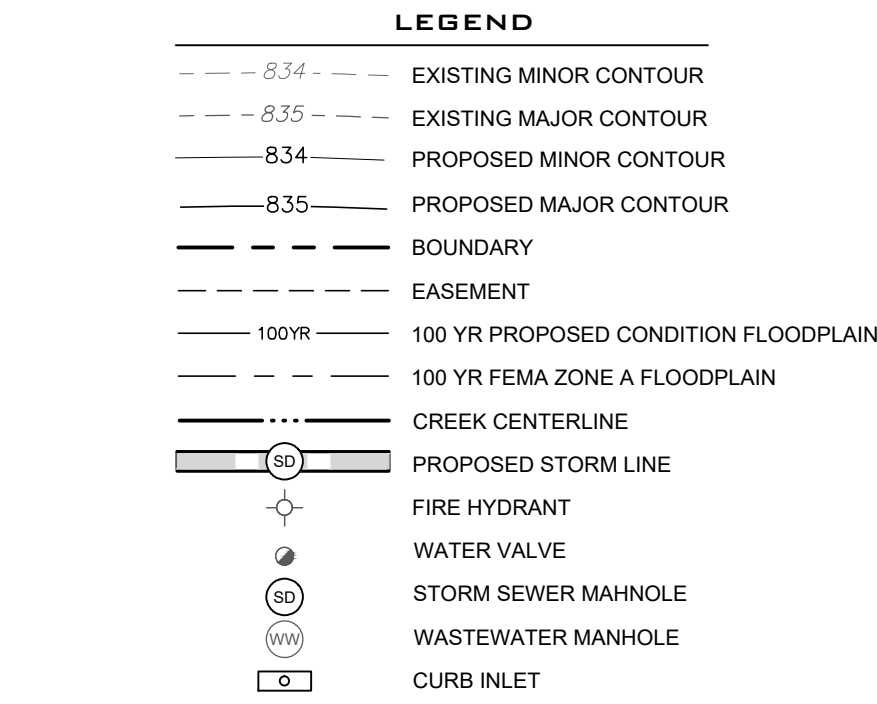
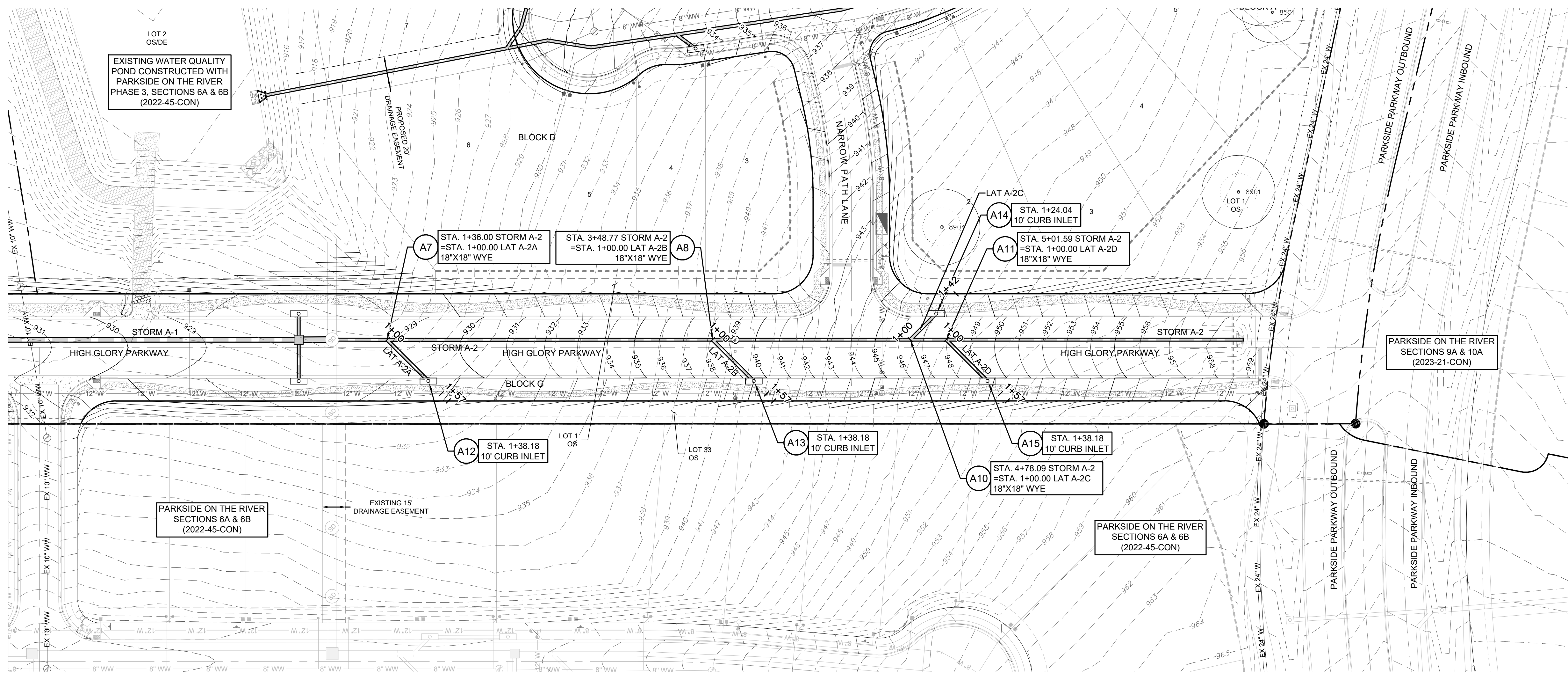
HARGREEN

DEVELOPMENT TX

STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
PROFESSIONAL ENGINEER

09/03/2024

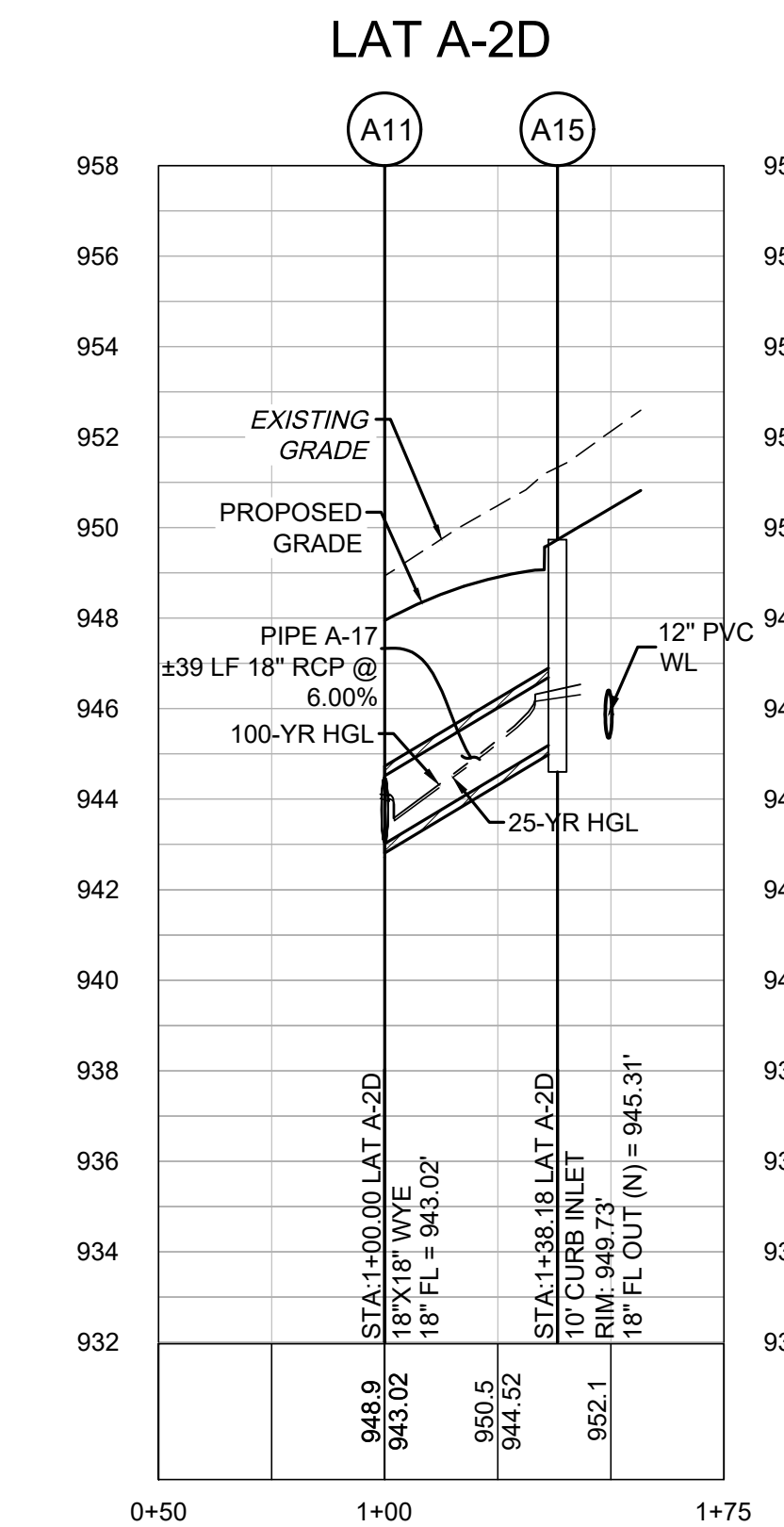
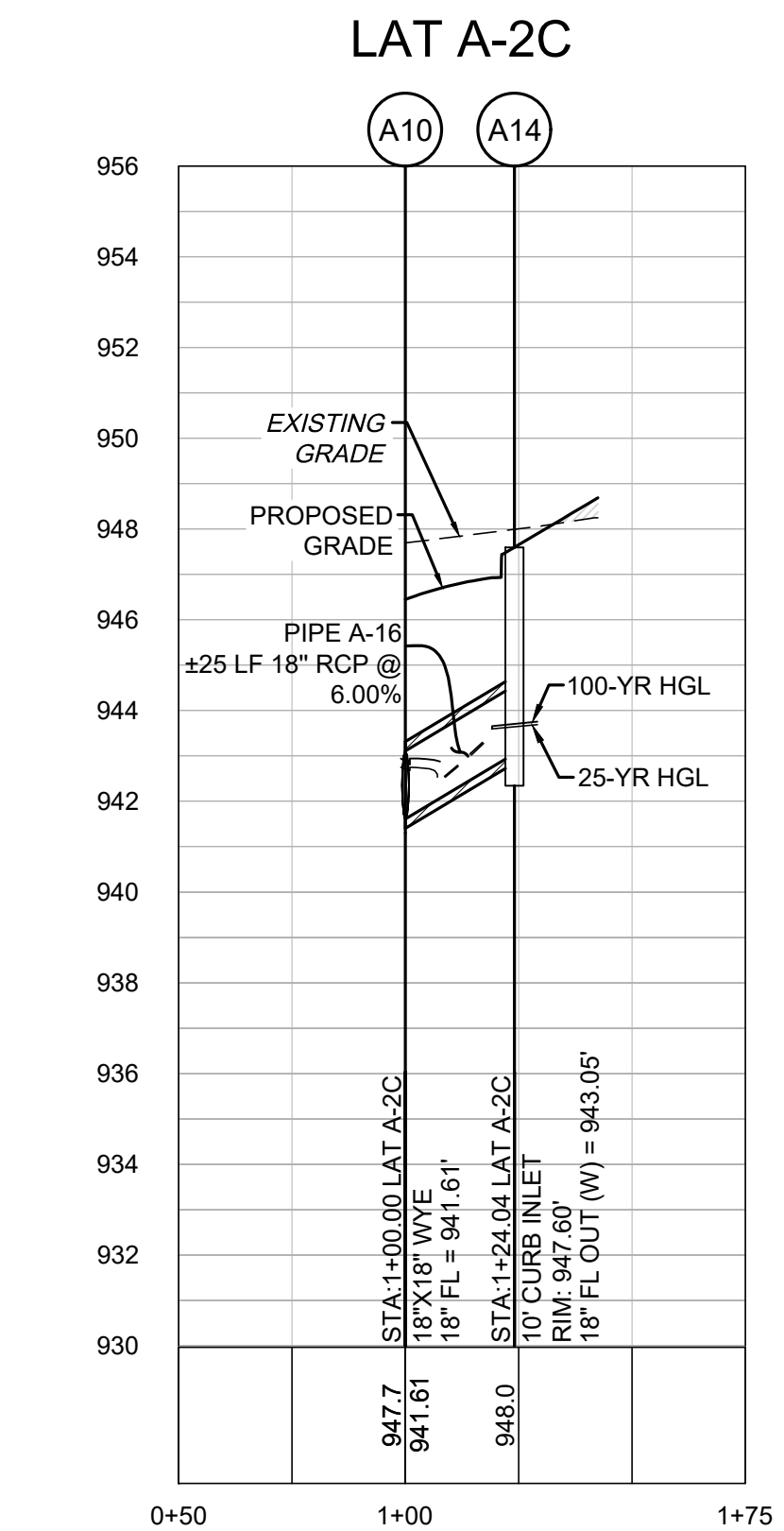
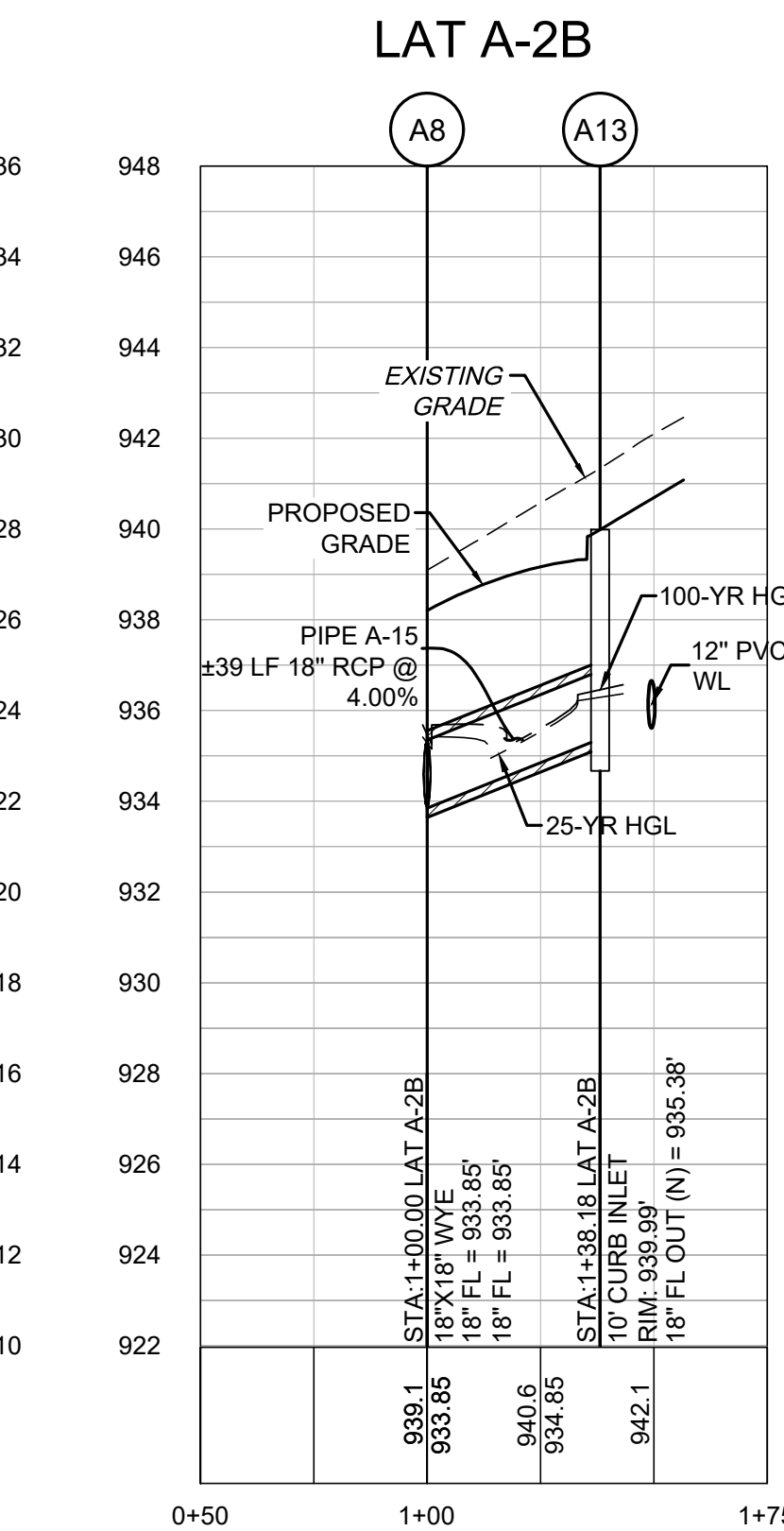
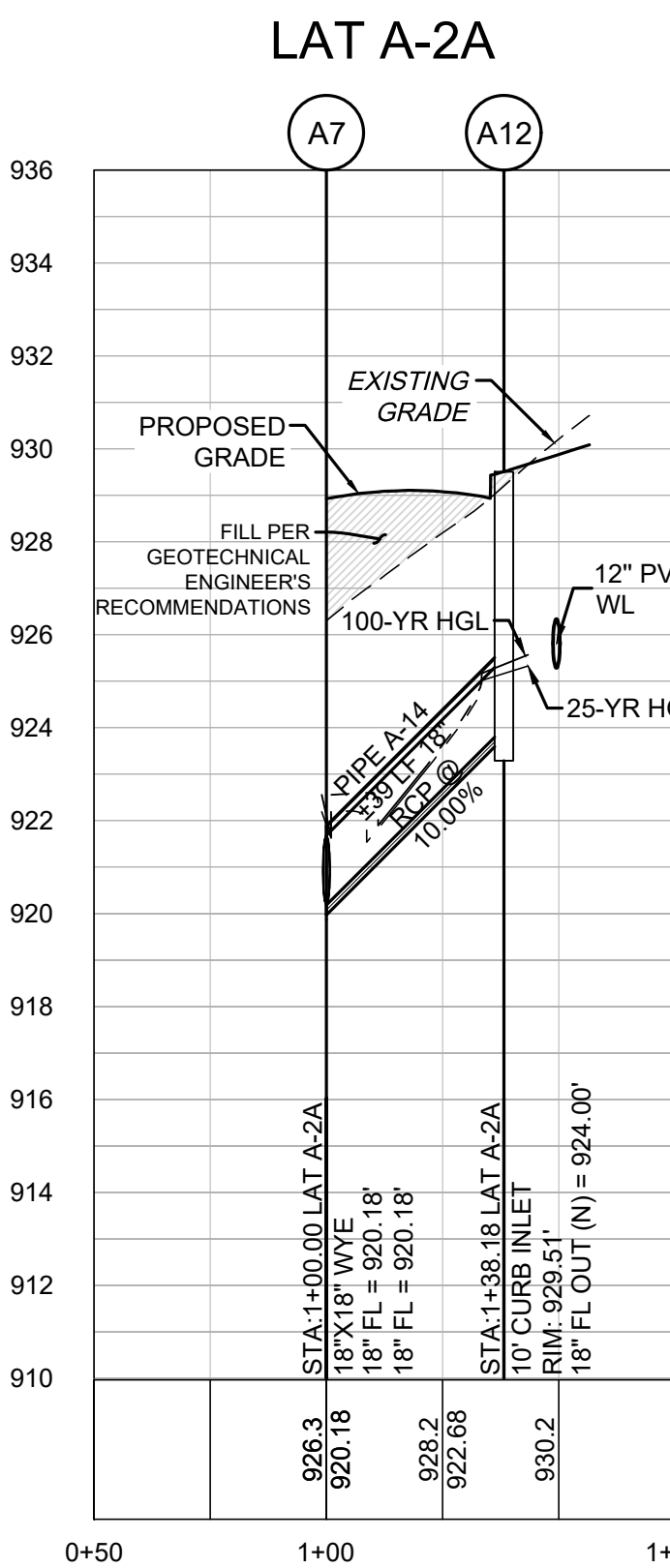
P:\Blake_Magnel\Georgetown Properties\181GT-103_ACO2\Parasol\402182_SDP\STORM A LATS.dwg STORM A LATS (mg) September 24, 2024 10:36 AM mada.mohammed



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Pipe Label	Slope (%)	Q25 (cfs)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE A-14	10.00%	5.45	4.00	2.01	6.82	4.62	2.38
PIPE A-15	4.00%	4.06	3.37	1.57	5.08	3.84	1.83
PIPE A-16	6.00%	1.80	2.35	1.14	2.20	2.49	1.34
PIPE A-17	6.00%	4.14	3.90	0.99	5.35	4.39	1.09



STORM A-2 LATERALS

PARKSIDE ON THE RIVER

GTII - PHASE 1

CONSTRUCTION PLANS

GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

811

Know what's below.
Call before you dig.

5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75735
CALL 817-445-8888
HARGREEN.COM

TPE NO: 16384
TPELS NO: 10194101

H3

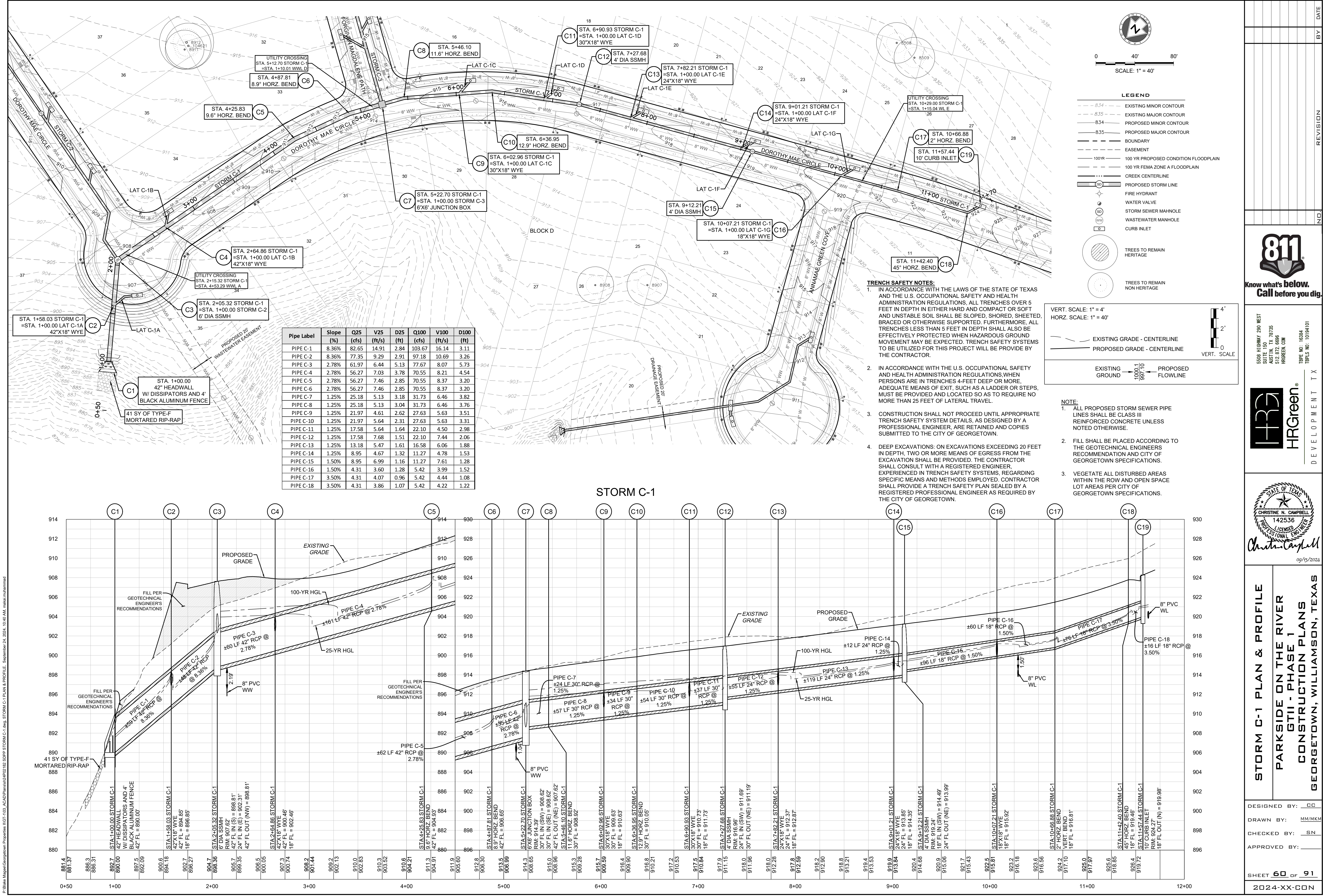
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STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
REGISTERED PROFESSIONAL ENGINEER

Christine Campbell

09/13/2024



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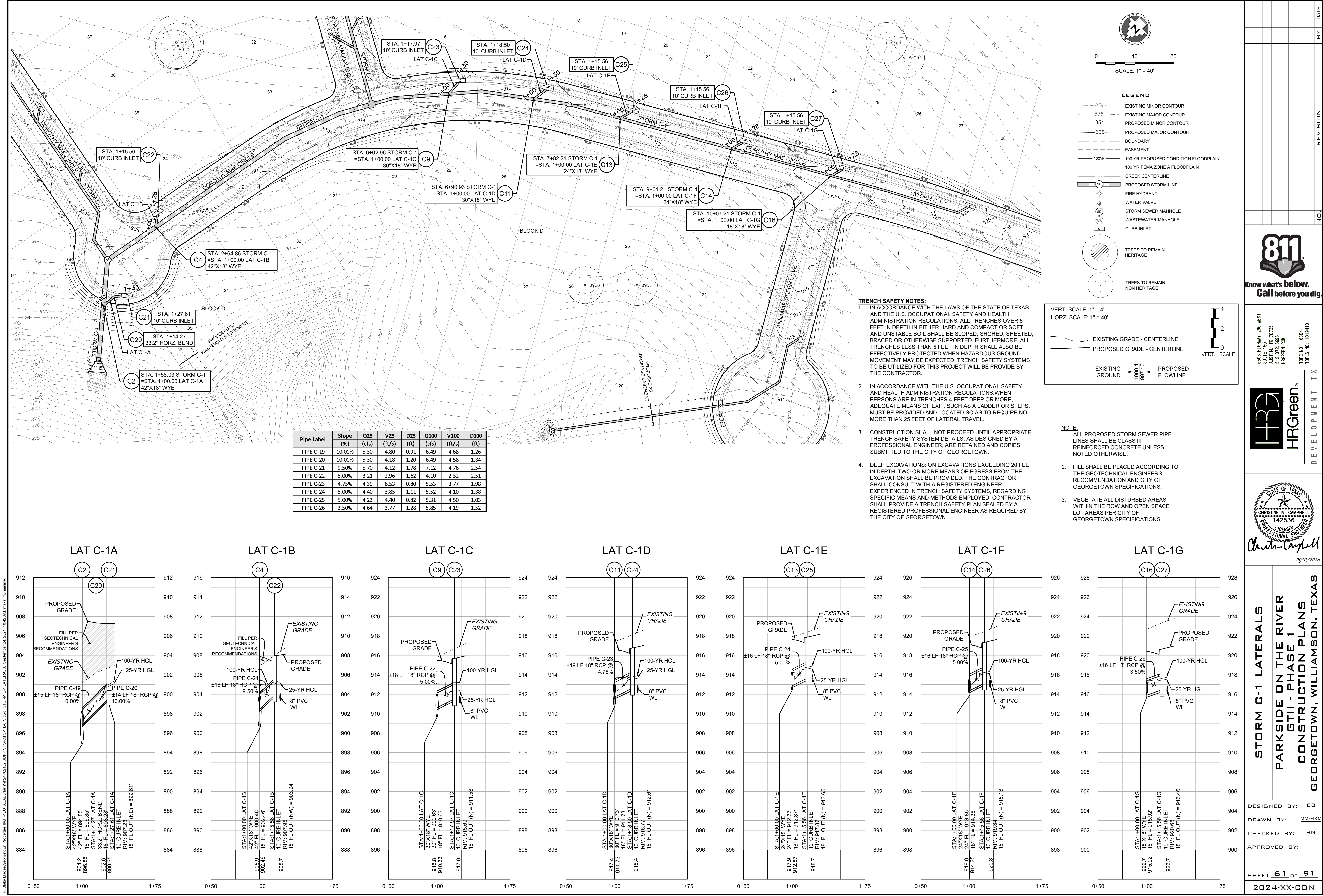
STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
REGISTERED PROFESSIONAL ENGINEER
09/03/2024

STORM C-1 PLAN & PROFILE
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

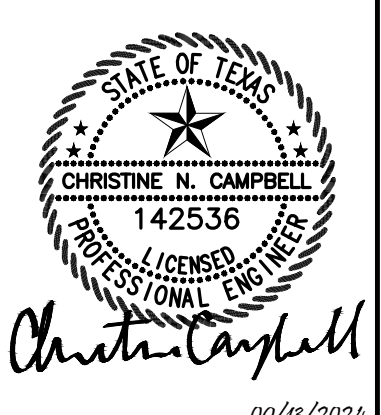
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APPROVED BY:

SHEET 60 OF 91
2024-XX-CON

DATE
BY
REVISION
NO.



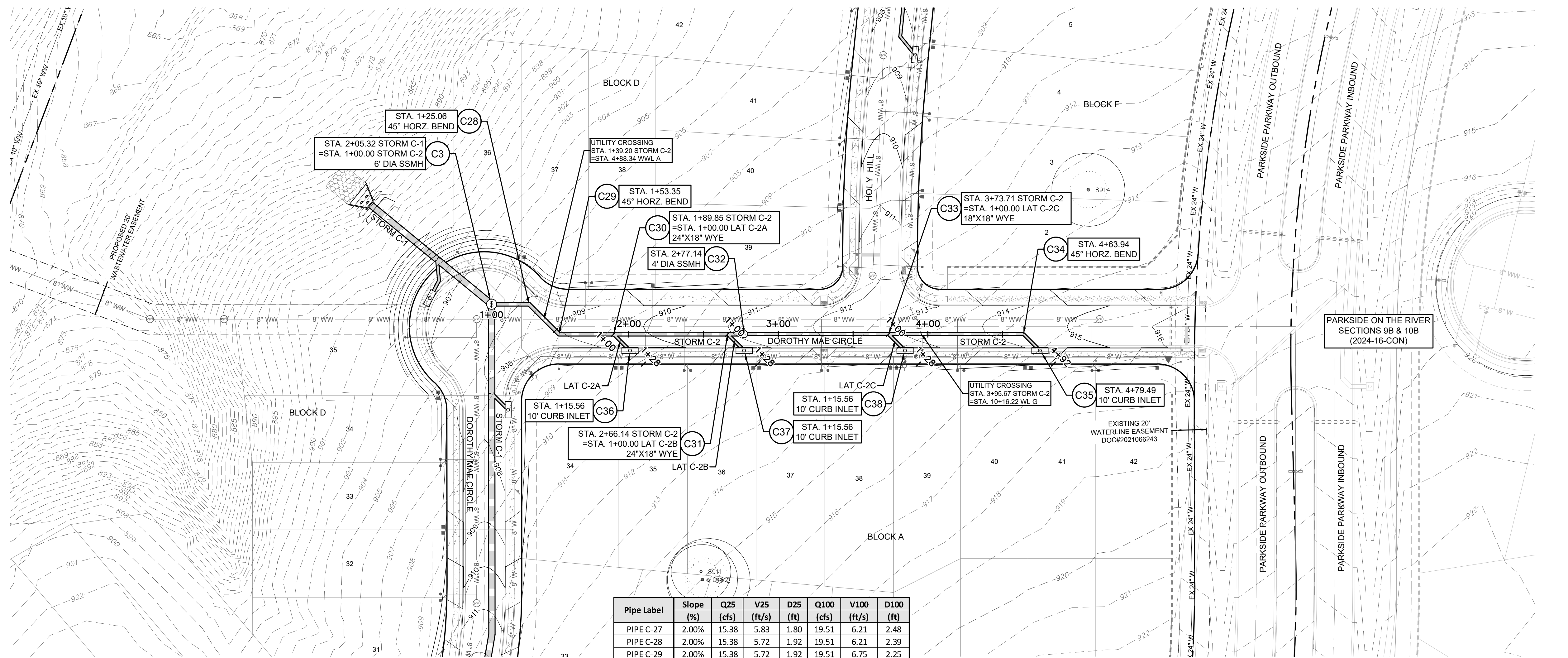
5508 HIGHWAY 290 WEST
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DALLAS, TX 75235
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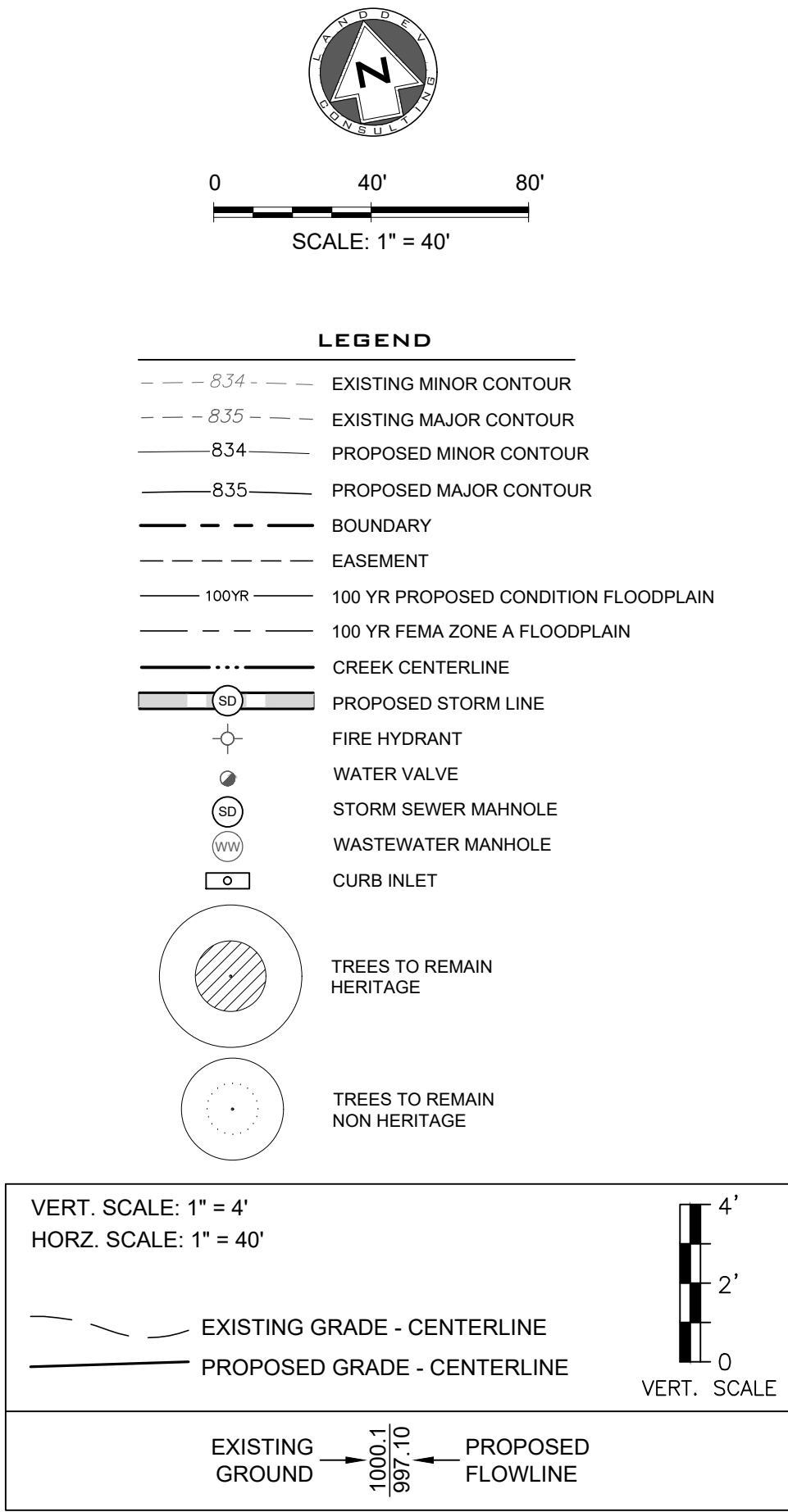
STORM C-1 LATERALS
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MKM
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APPROVED BY: _____
SHEET 61 OF 91
2024-XX-CON

P:\Blake_Maged\Georgetown Properties\TGT-103_ACAD\Drawings\DWG\182_SDP\STORM C-2.dwg STORM C-2 & LATERALS PLAN & PROFILE September 24, 2024 2:45 PM m.maged



Pipe Label	Slope (%)	Q25 (cfs)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE C-27	2.00%	15.38	5.83	1.80	19.51	6.21	2.48
PIPE C-28	2.00%	15.38	5.72	1.92	19.51	6.21	2.39
PIPE C-29	2.00%	15.38	5.72	1.92	19.51	6.75	2.25
PIPE C-30	2.00%	11.78	5.28	1.47	14.95	5.80	1.73
PIPE C-31	2.00%	8.05	4.46	1.26	10.20	4.89	1.42
PIPE C-32	2.00%	8.05	7.19	1.10	10.20	7.82	1.23
PIPE C-33	2.00%	4.38	3.73	1.19	5.57	4.09	1.43
PIPE C-34	2.00%	4.38	3.88	1.08	5.57	4.27	1.23
PIPE C-35	7.00%	3.60	3.62	0.97	4.56	3.78	1.23
PIPE C-36	6.00%	3.73	4.22	0.76	4.75	4.44	0.92
PIPE C-37	4.00%	3.67	3.36	1.19	4.63	3.66	1.43

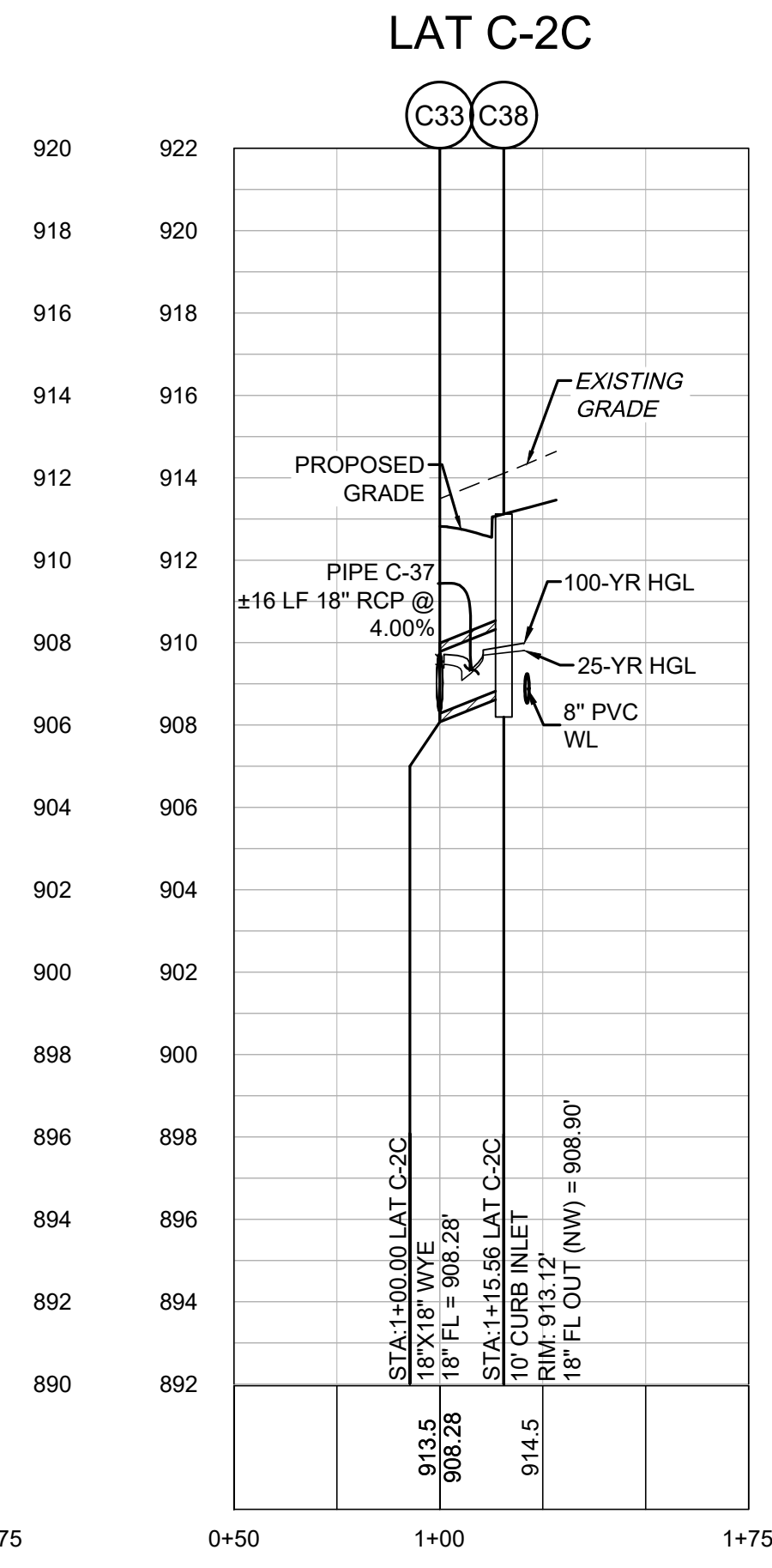
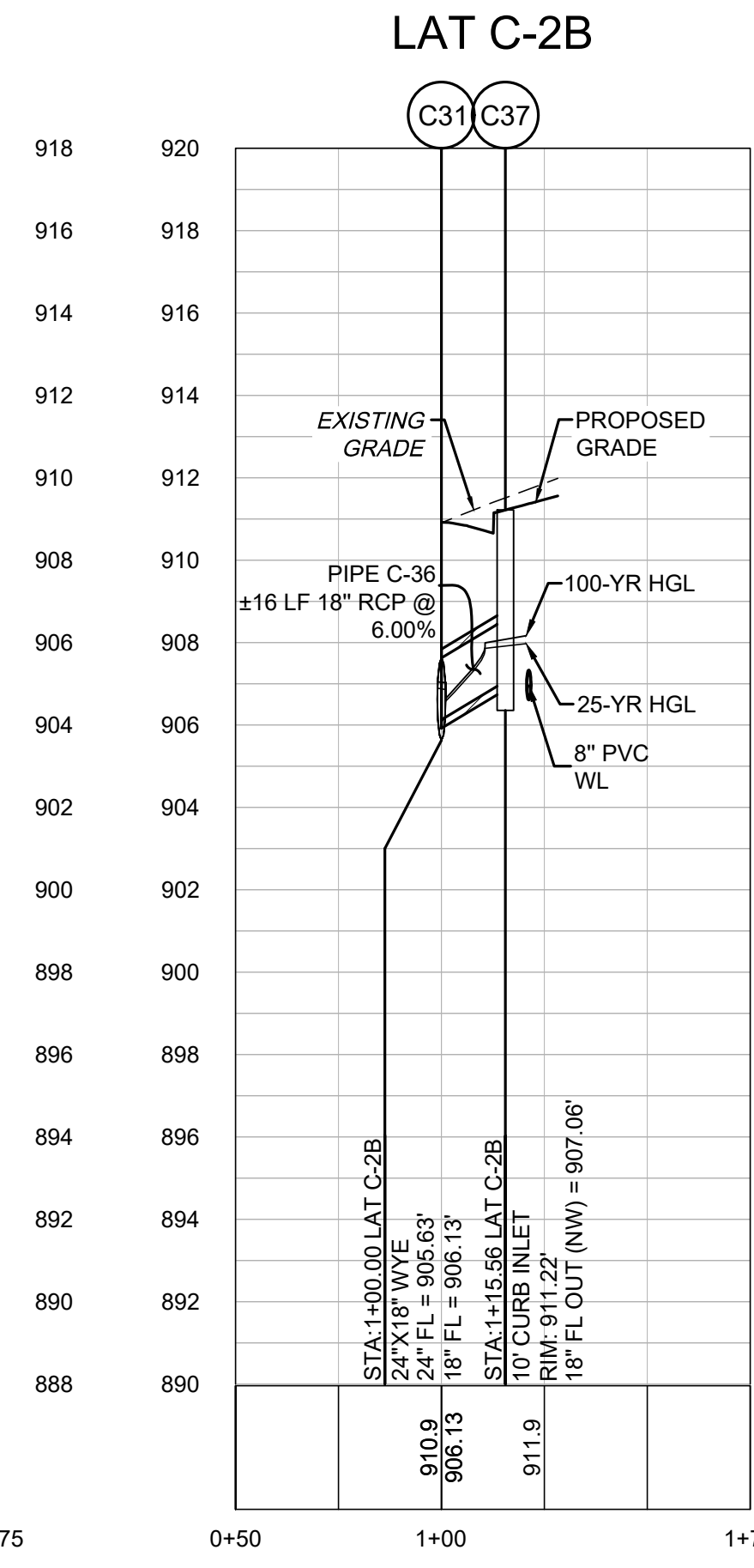
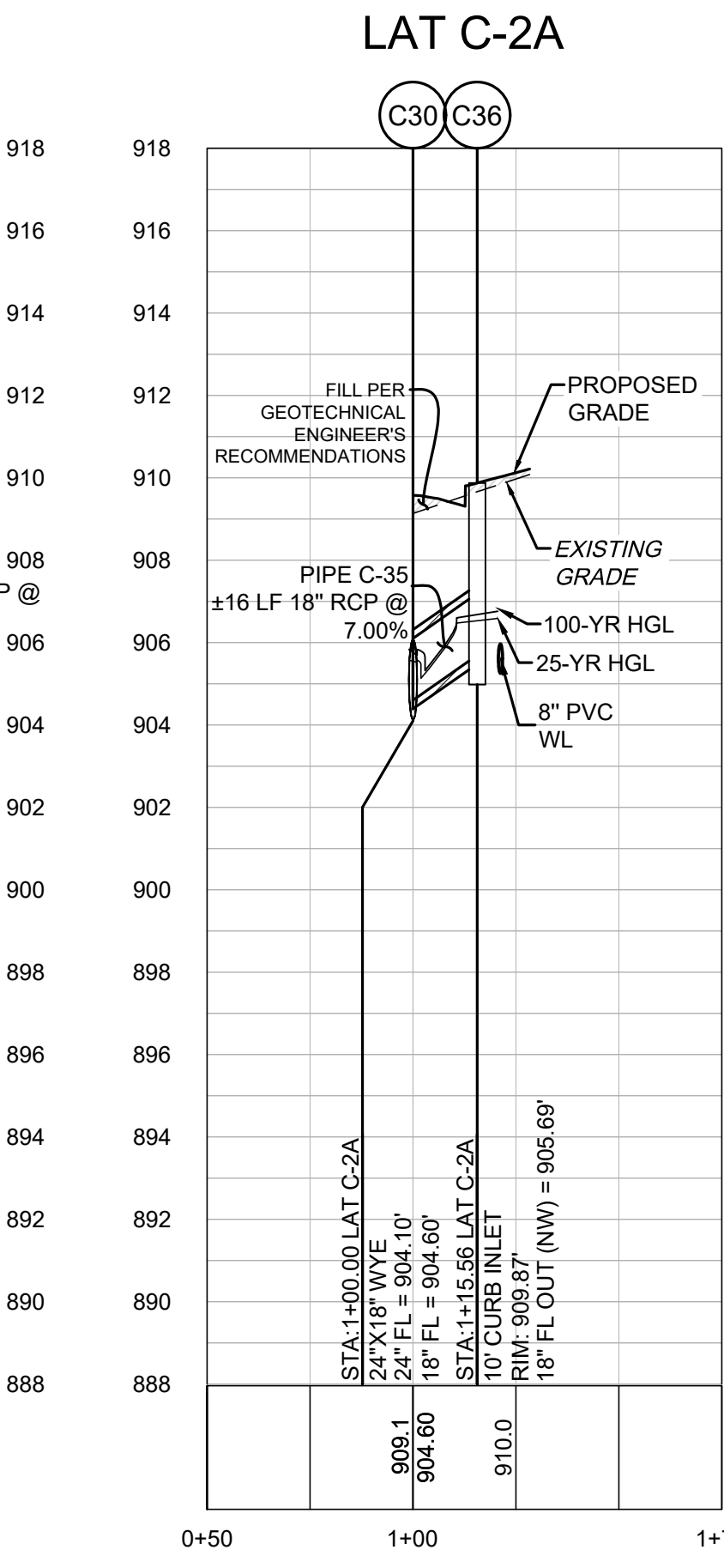
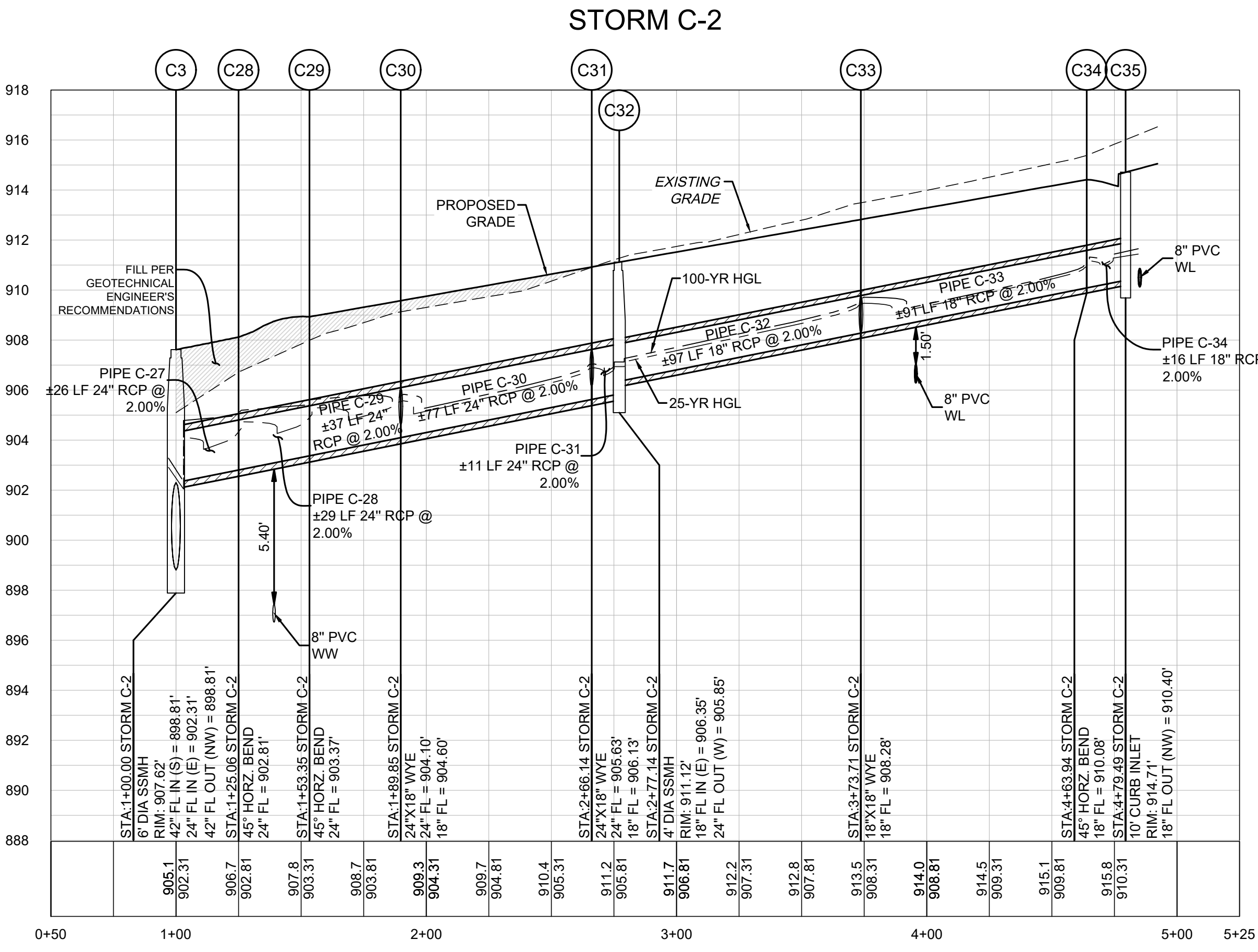


NOTE:

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- FILL SHALL BE PLACED ACCORDING TO THE GEOTECHNICAL ENGINEERS RECOMMENDATION AND CITY OF GEORGETOWN SPECIFICATIONS.
- VEGETATE ALL DISTURBED AREAS WITHIN THE ROW AND OPEN SPACE LOT AREAS PER CITY OF GEORGETOWN SPECIFICATIONS.

TRENCH SAFETY NOTES:

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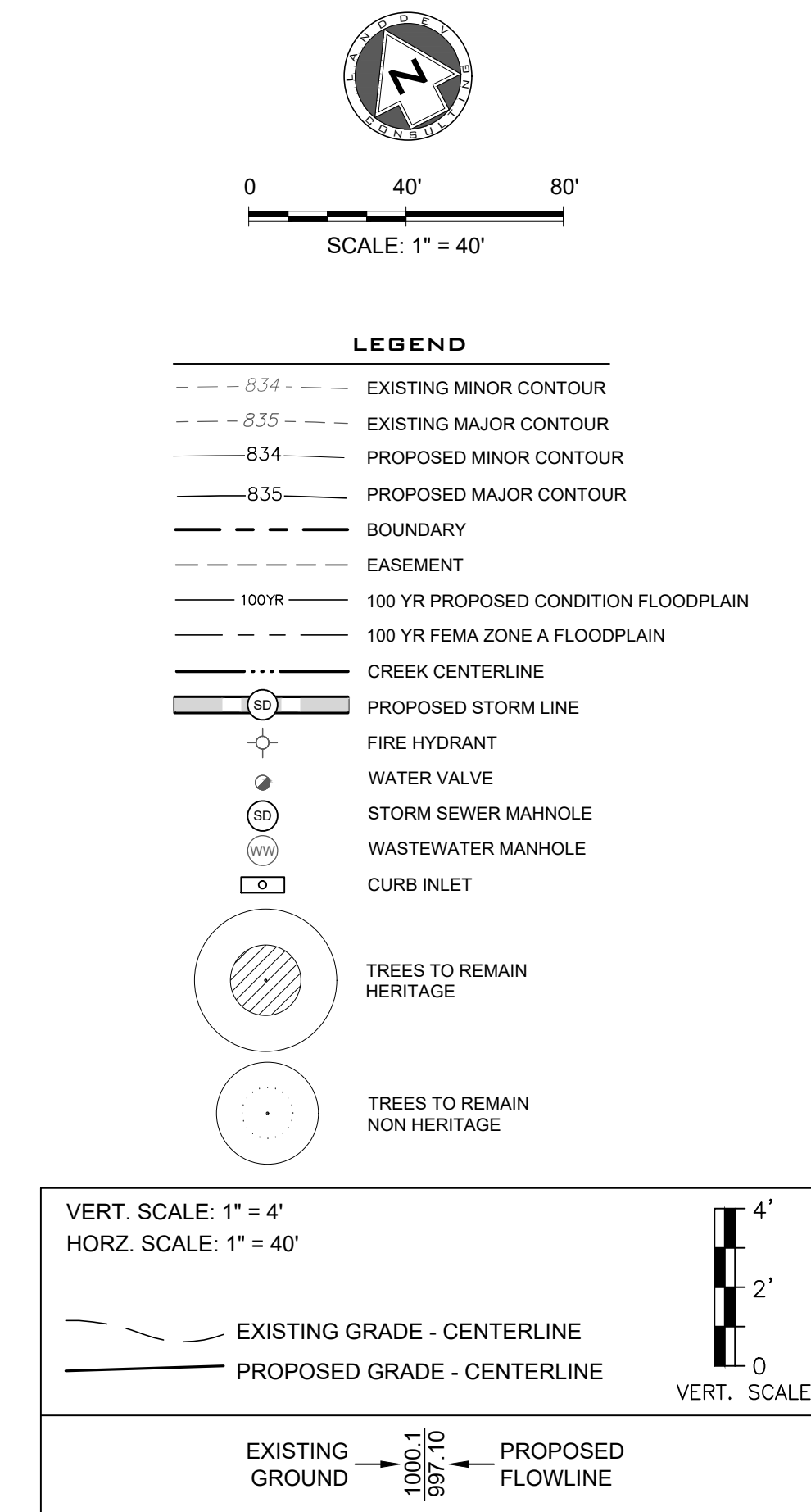
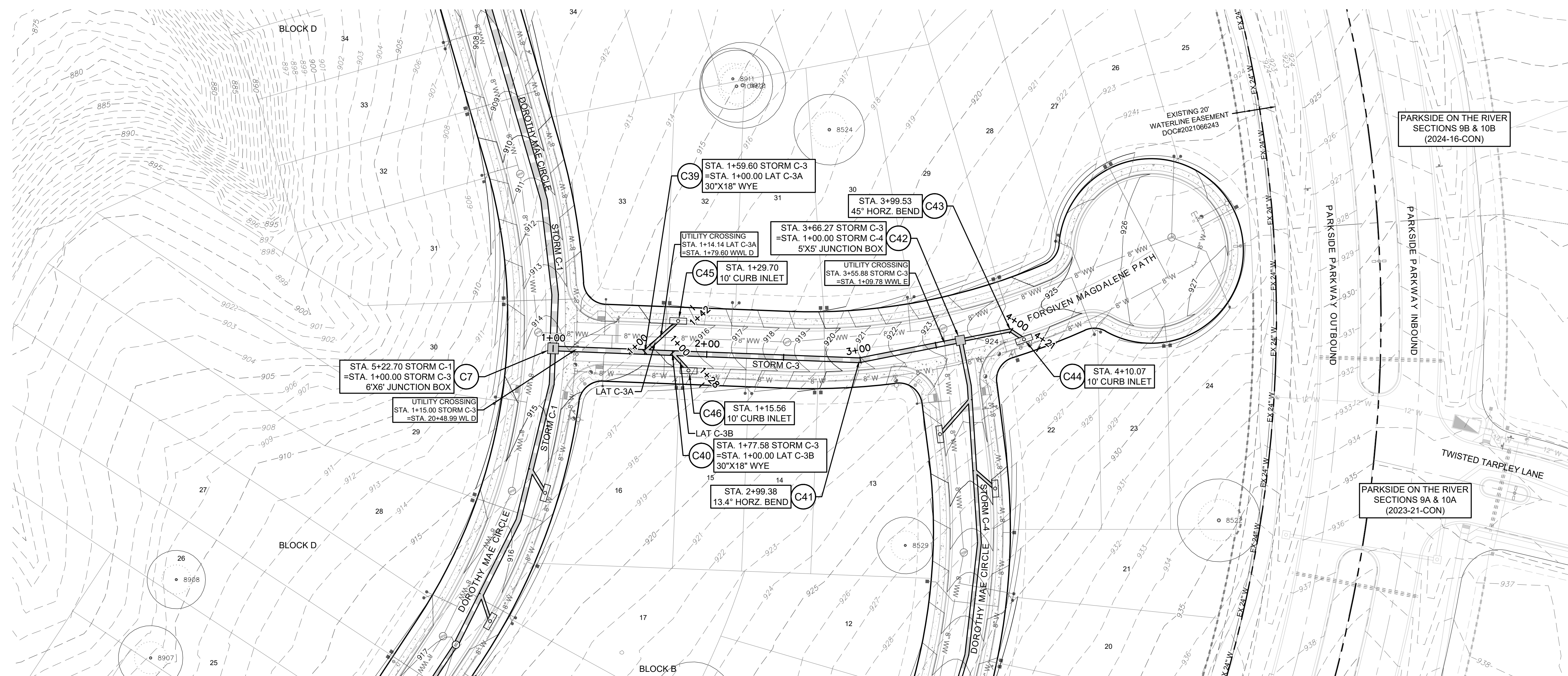
5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75065
HARGREEN, COW
TYPE NO: 16384
RPLS NO: 10194101

HARGREEN
DEVELOPMENT TX

Christine Campbell
09/19/2024

STORM C-2 & LATERALS PLAN & PROFILE
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

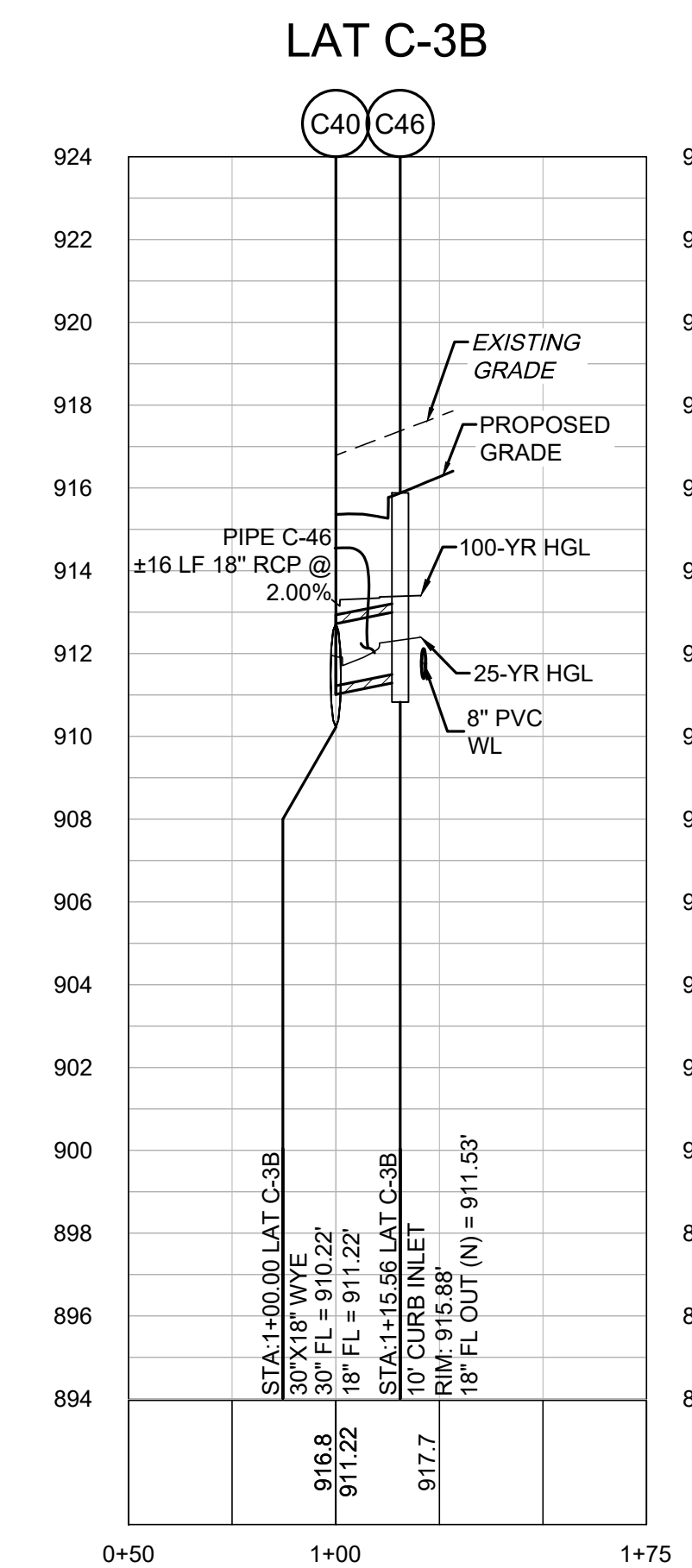
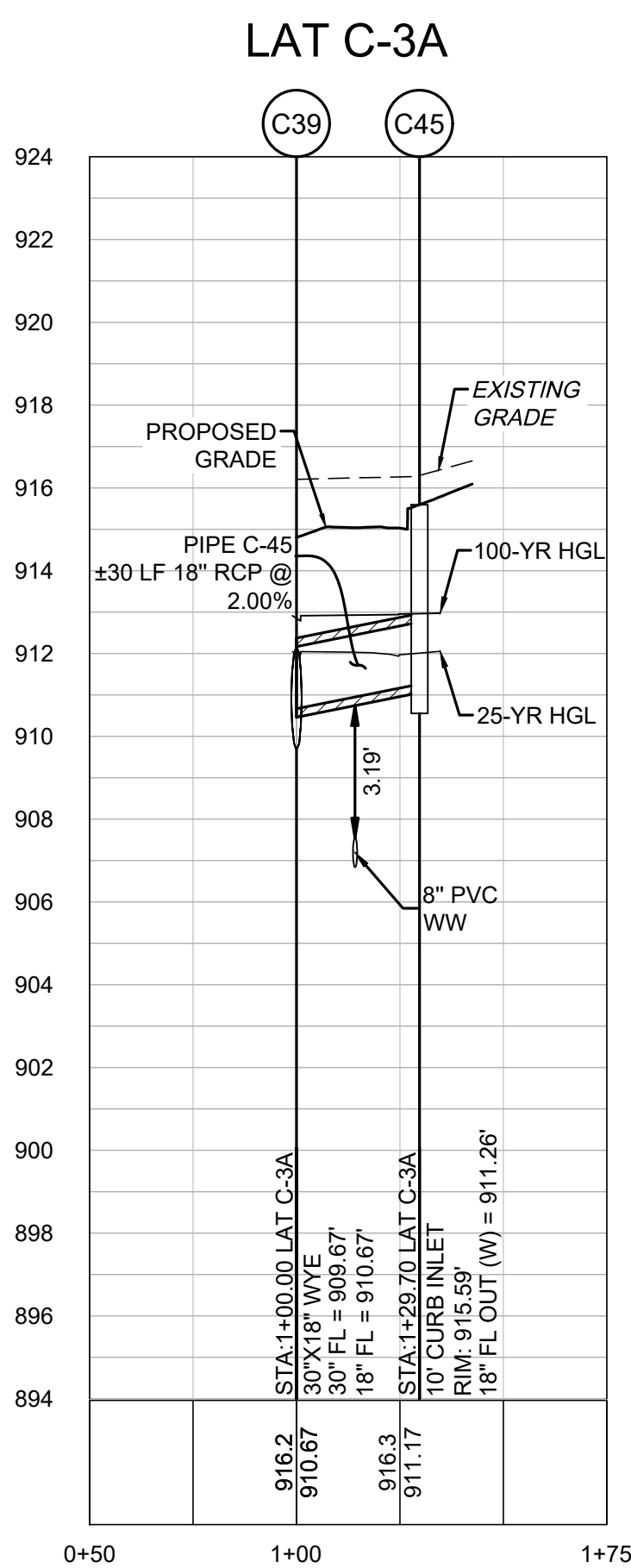
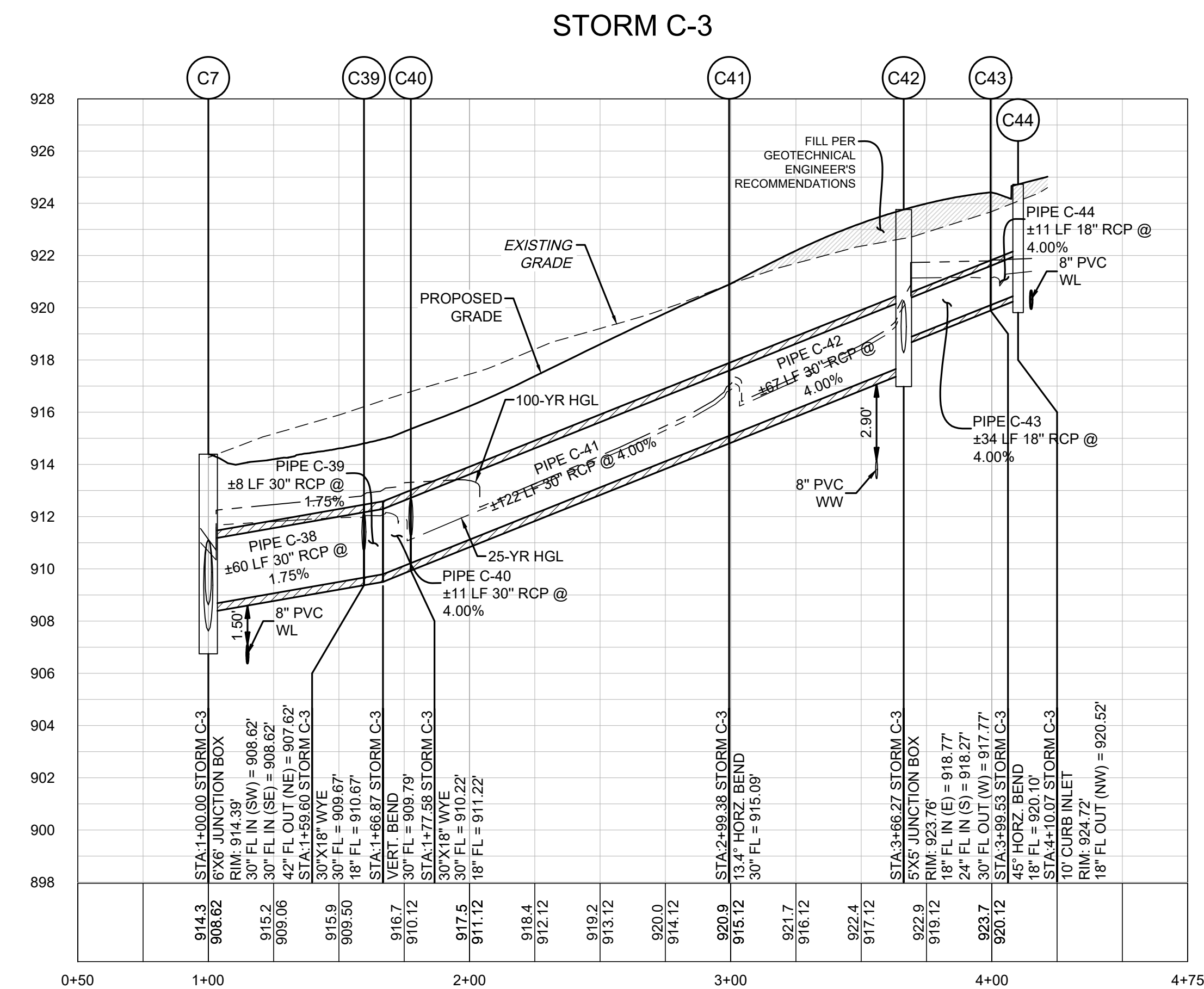
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APPROVED BY: _____
SHEET **62** OF **91**
2024-XX-CON



- NOTE:**
1. ALL PROPOSED STORM SEWER PIPE LINES SHALL BE CLASS III REINFORCED CONCRETE UNLESS NOTED OTHERWISE.
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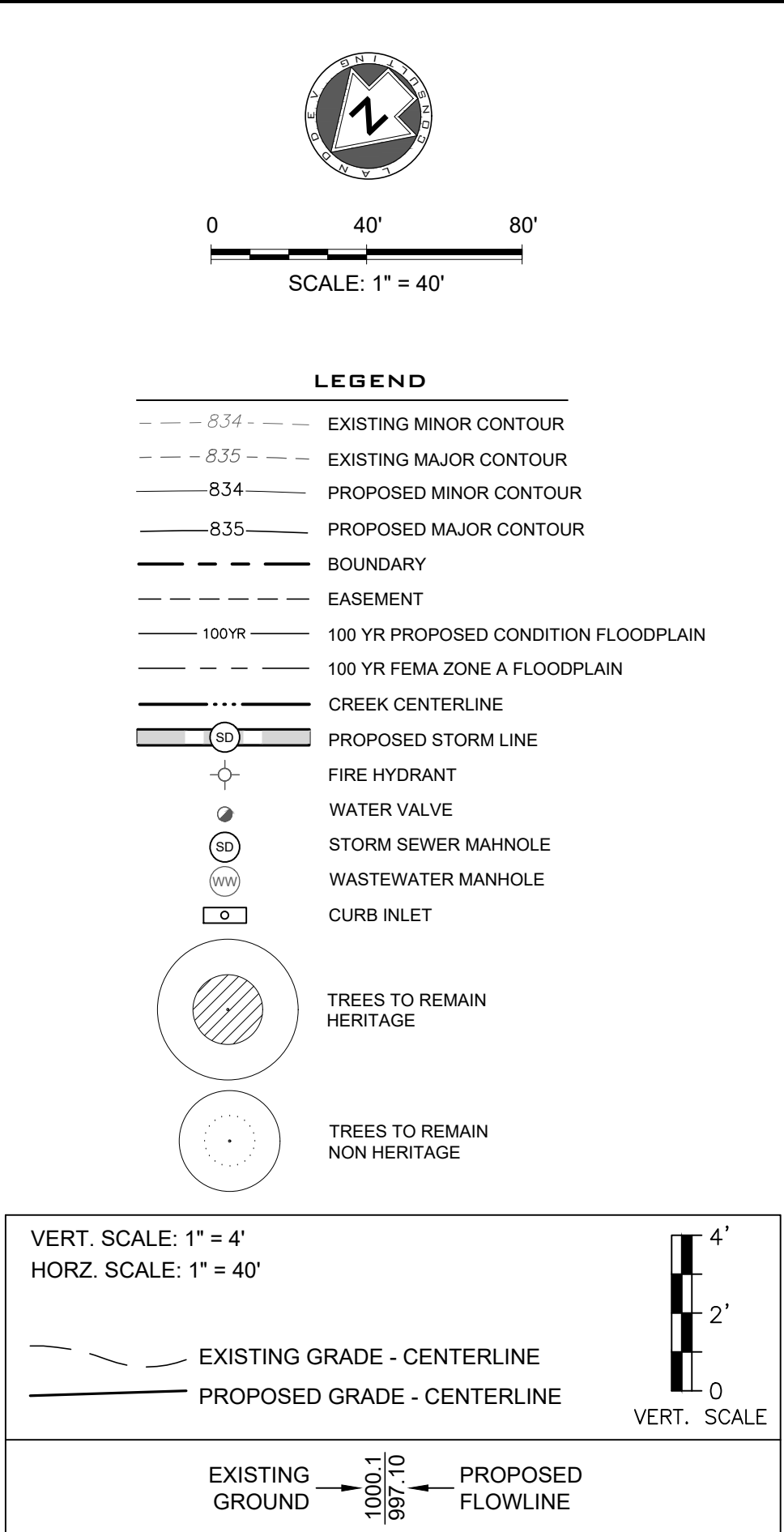
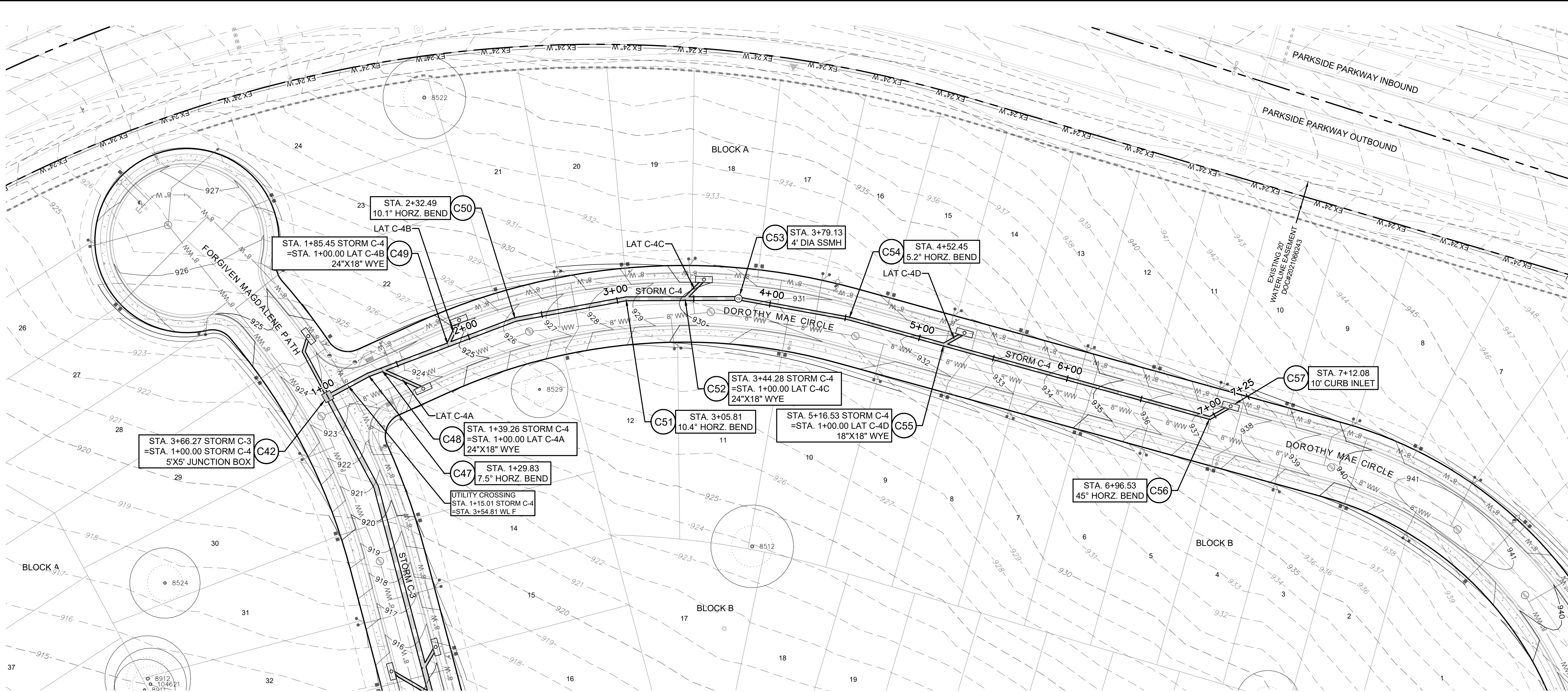
Pipe Label	Slope (%)	Q25 (ft/s)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE C-38	1.75%	31.09	6.46	3.05	38.82	7.91	3.62
PIPE C-39	1.75%	28.44	6.02	2.38	35.57	7.25	3.24
PIPE C-40	4.00%	28.44	6.68	2.37	35.77	7.25	3.30
PIPE C-41	4.00%	24.28	6.55	1.87	30.37	6.94	3.21
PIPE C-42	4.00%	24.28	6.30	2.04	30.37	7.07	2.28
PIPE C-43	4.00%	3.41	2.30	2.37	4.26	2.41	1.96
PIPE C-44	4.00%	3.41	3.35	1.08	4.26	2.52	1.72
PIPE C-45	2.00%	2.65	2.52	1.38	3.25	1.84	2.24
PIPE C-46	2.00%	4.16	4.20	0.87	5.20	2.94	2.21

**STORM C-3 & LATERALS
PLAN & PROFILE**

DESIGNED BY: CC
DRAWN BY: MM/MK
CHECKED BY: SN
APPROVED BY: _____

SHEET 63 OF 91
2024-XX-CON

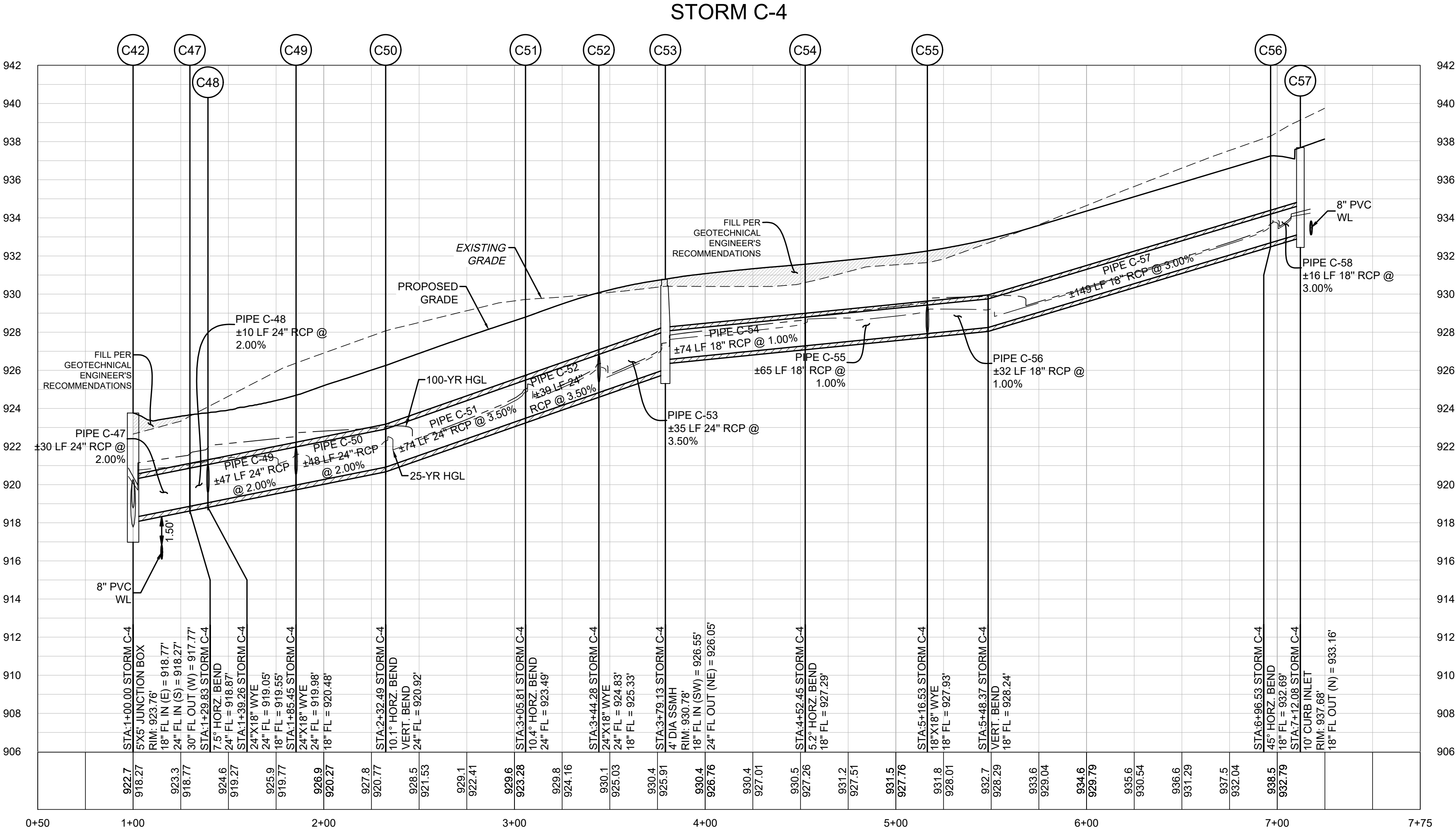
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- NOTE:**
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Pipe Label	Slope (%)	Q25 (cfs)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE C-47	2.00%	20.87	6.64	2.49	26.11	8.31	2.87
PIPE C-48	2.00%	20.87	6.64	2.25	26.11	8.31	2.84
PIPE C-49	2.00%	17.79	6.30	2.29	22.33	7.11	3.00
PIPE C-50	2.00%	13.44	5.52	1.62	16.84	5.36	2.75
PIPE C-51	3.50%	13.44	5.55	1.60	16.84	6.06	2.14
PIPE C-52	3.50%	13.44	5.55	1.60	16.84	6.21	1.80
PIPE C-53	3.50%	8.93	4.63	1.33	11.19	5.00	1.54
PIPE C-54	1.00%	8.93	6.39	1.16	11.19	6.83	1.35
PIPE C-55	1.00%	8.93	5.66	1.40	11.19	6.33	1.61
PIPE C-56	1.00%	4.55	3.41	1.29	5.72	3.24	1.86
PIPE C-57	3.00%	4.55	4.12	1.00	5.72	4.13	1.66
PIPE C-58	3.00%	4.55	3.94	1.11	5.72	4.32	1.25



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TYPE NO: 10384
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STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER

09/19/2024

STORM C-4 PLAN & PROFILE

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

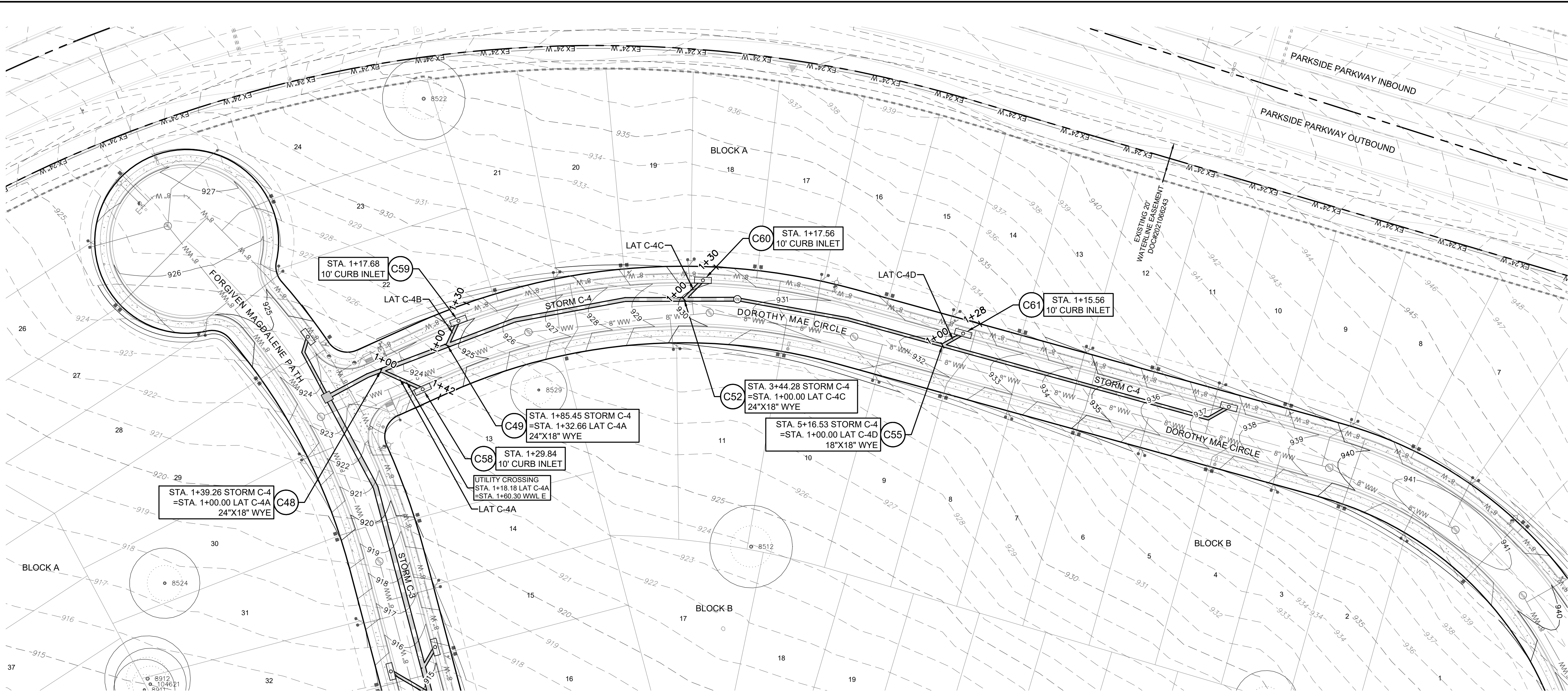
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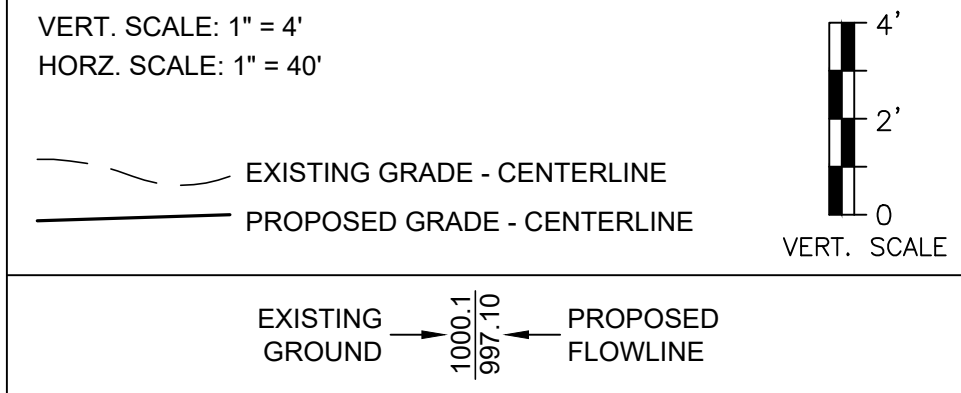
2024-XX-CON

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SCALE: 1" = 40'

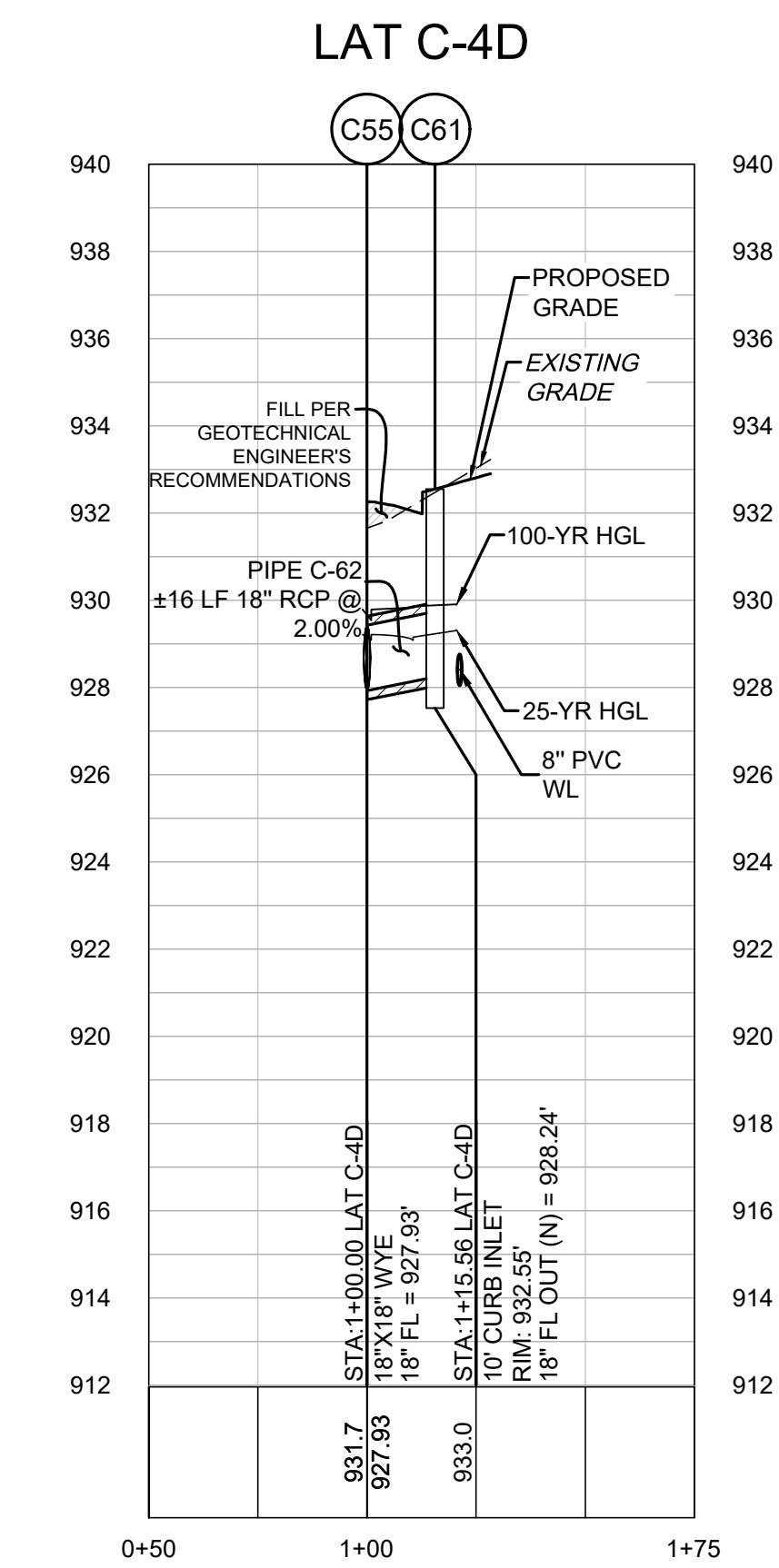
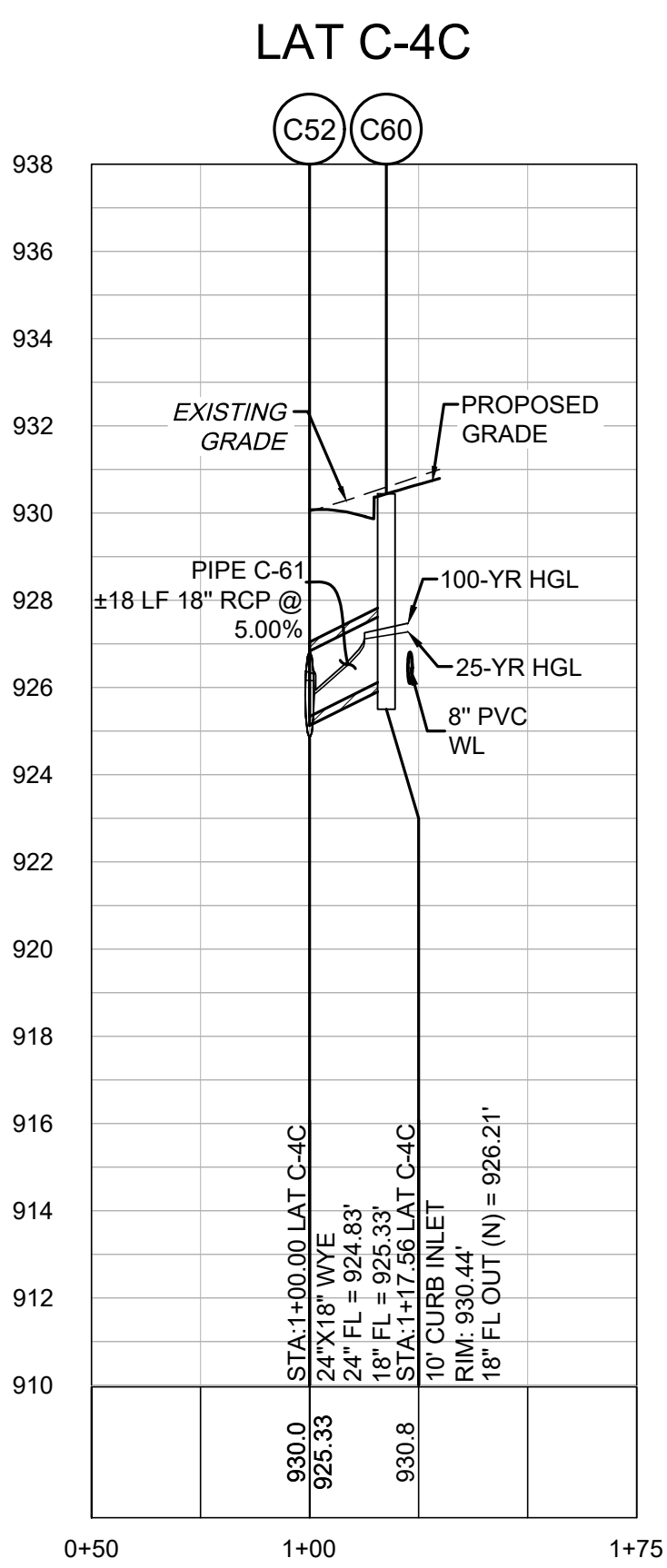
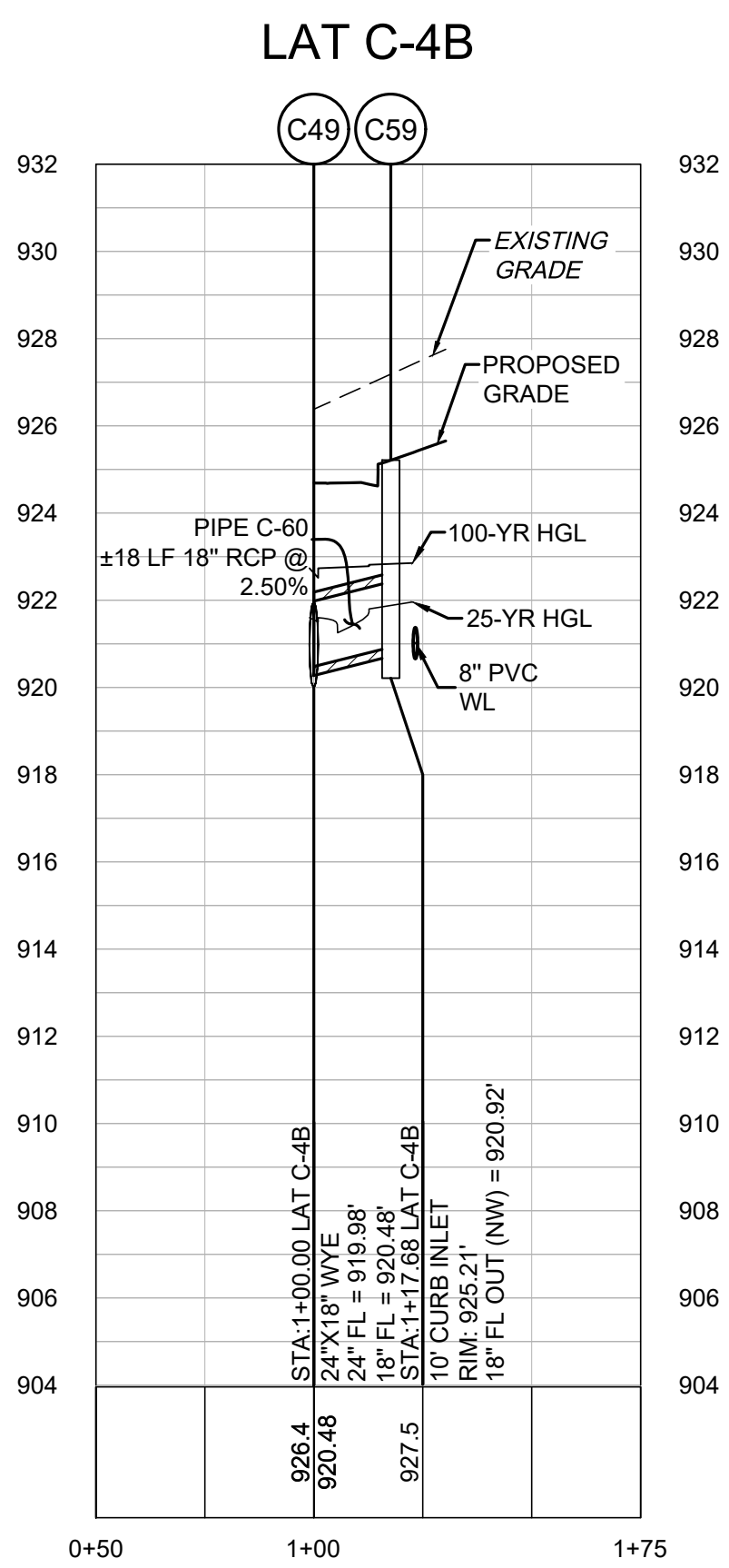
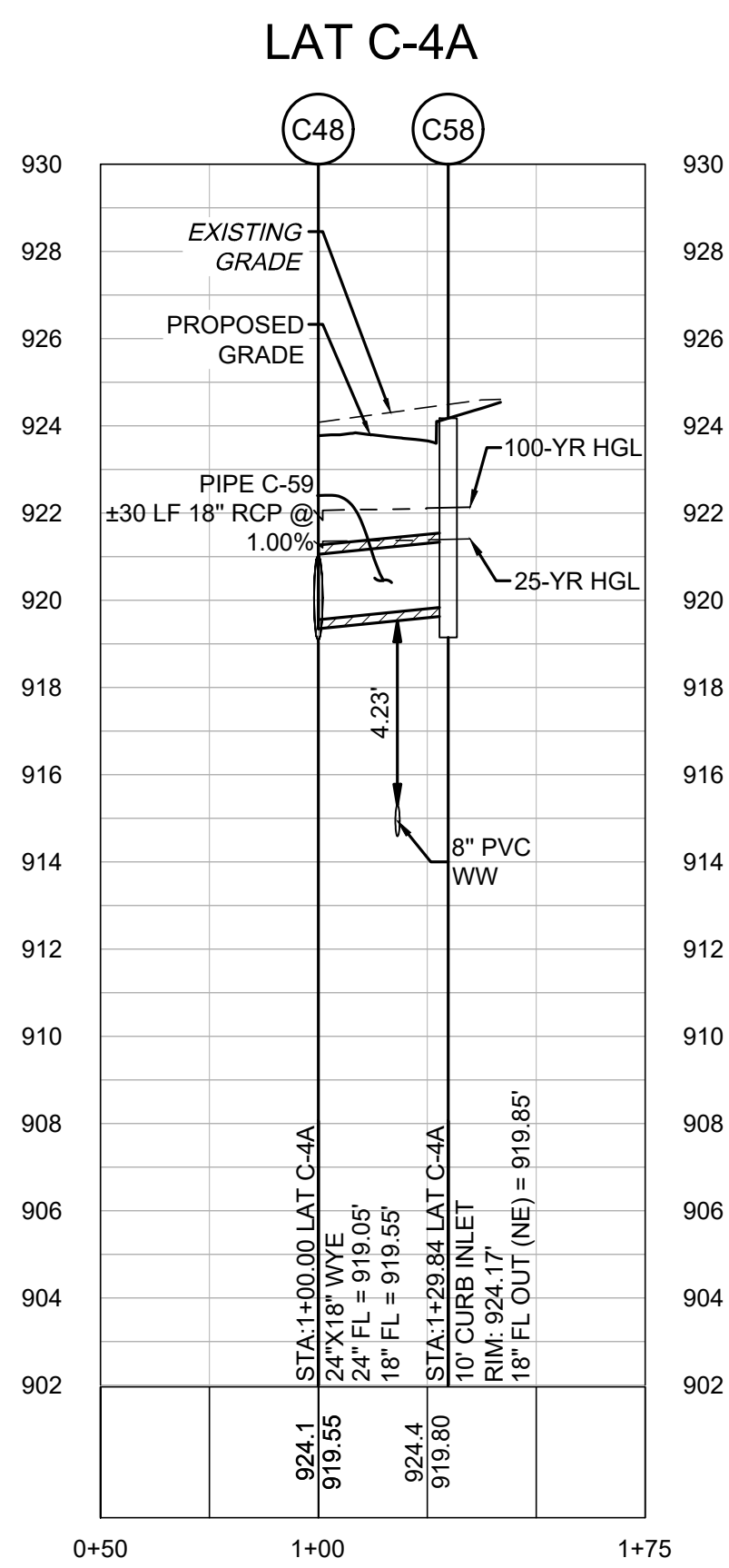
- LEGEND**
- 834 - EXISTING MINOR CONTOUR
 - 835 - EXISTING MAJOR CONTOUR
 - 834 - PROPOSED MINOR CONTOUR
 - 835 - PROPOSED MAJOR CONTOUR
 - BOUNDARY
 - EASEMENT
 - 100YR - 100 YR PROPOSED CONDITION FLOODPLAIN
 - 100YR - 100 YR FEMA ZONE A FLOODPLAIN
 - CREEK CENTERLINE
 - PROPOSED STORM LINE
 - ⊕ FIRE HYDRANT
 - ⊕ WATER VALVE
 - ⊕ STORM SEWER MAHNOLE
 - ⊕ WASTEWATER MAHNOLE
 - ⊕ CURB INLET
 - ⊙ TREES TO REMAIN HERITAGE
 - ⊙ TREES TO REMAIN NON-HERITAGE



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Pipe Label	Slope (%)	Q25 (cfs)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE C-59	1.00%	3.08	1.74	1.79	3.78	2.14	2.50
PIPE C-60	2.50%	4.35	3.81	1.12	5.49	3.11	2.25
PIPE C-61	5.00%	4.51	4.54	0.83	5.65	4.67	1.04
PIPE C-62	2.00%	4.38	3.51	1.29	5.47	3.10	1.86



STORM C-4 LATERALS

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MKM
CHECKED BY: SN
APPROVED BY:

SHEET 65 OF 91
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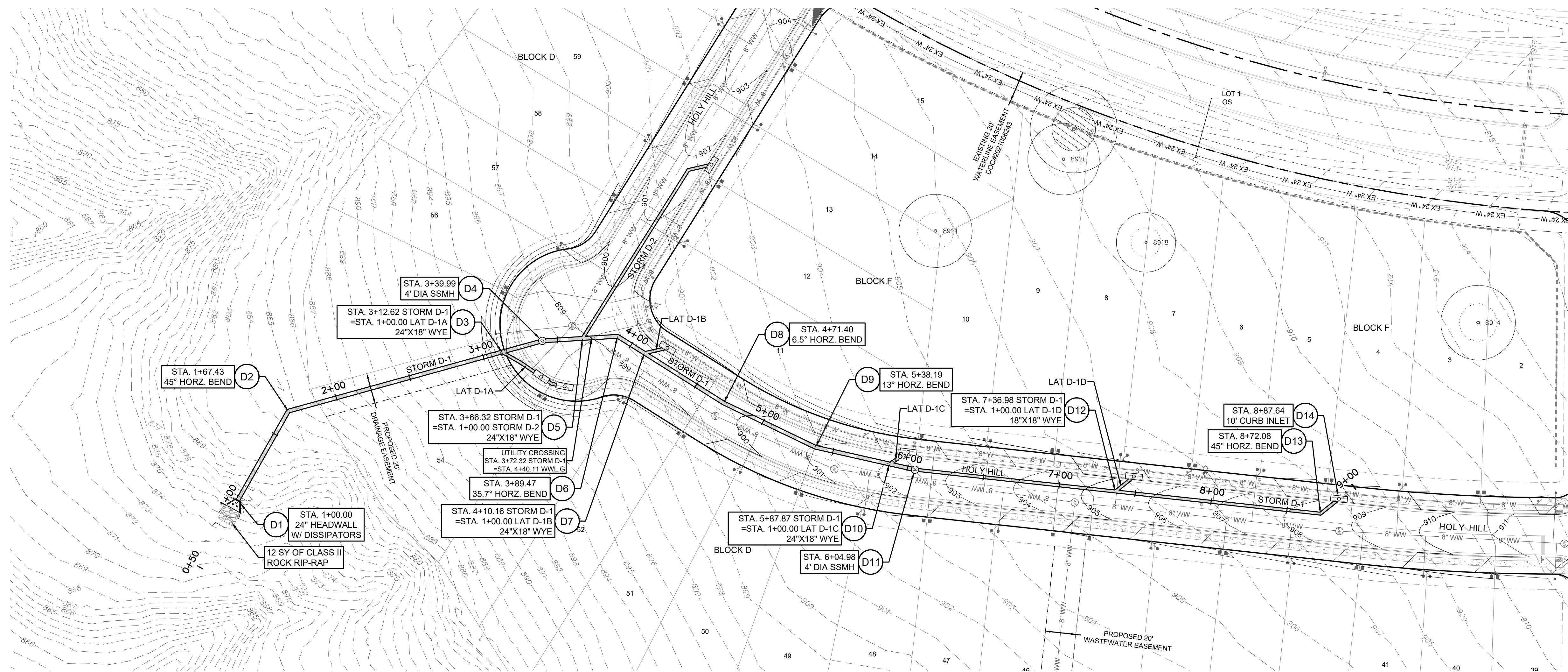
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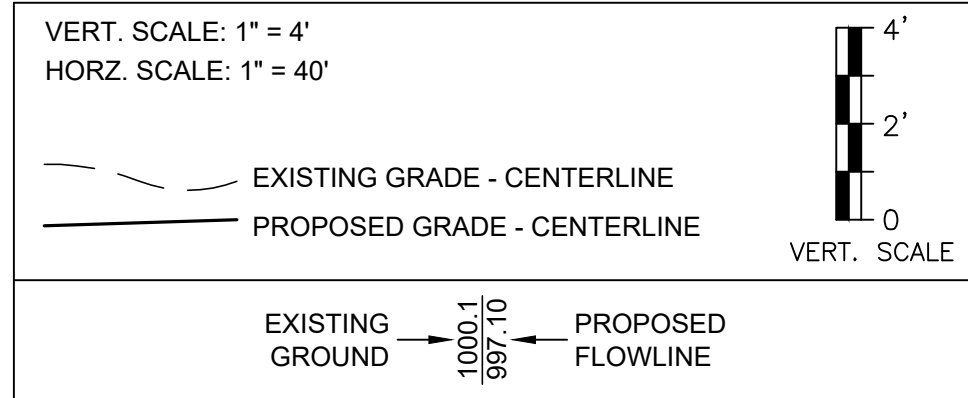
STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER
09/03/2024

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0 40' 80'
SCALE: 1" = 40'

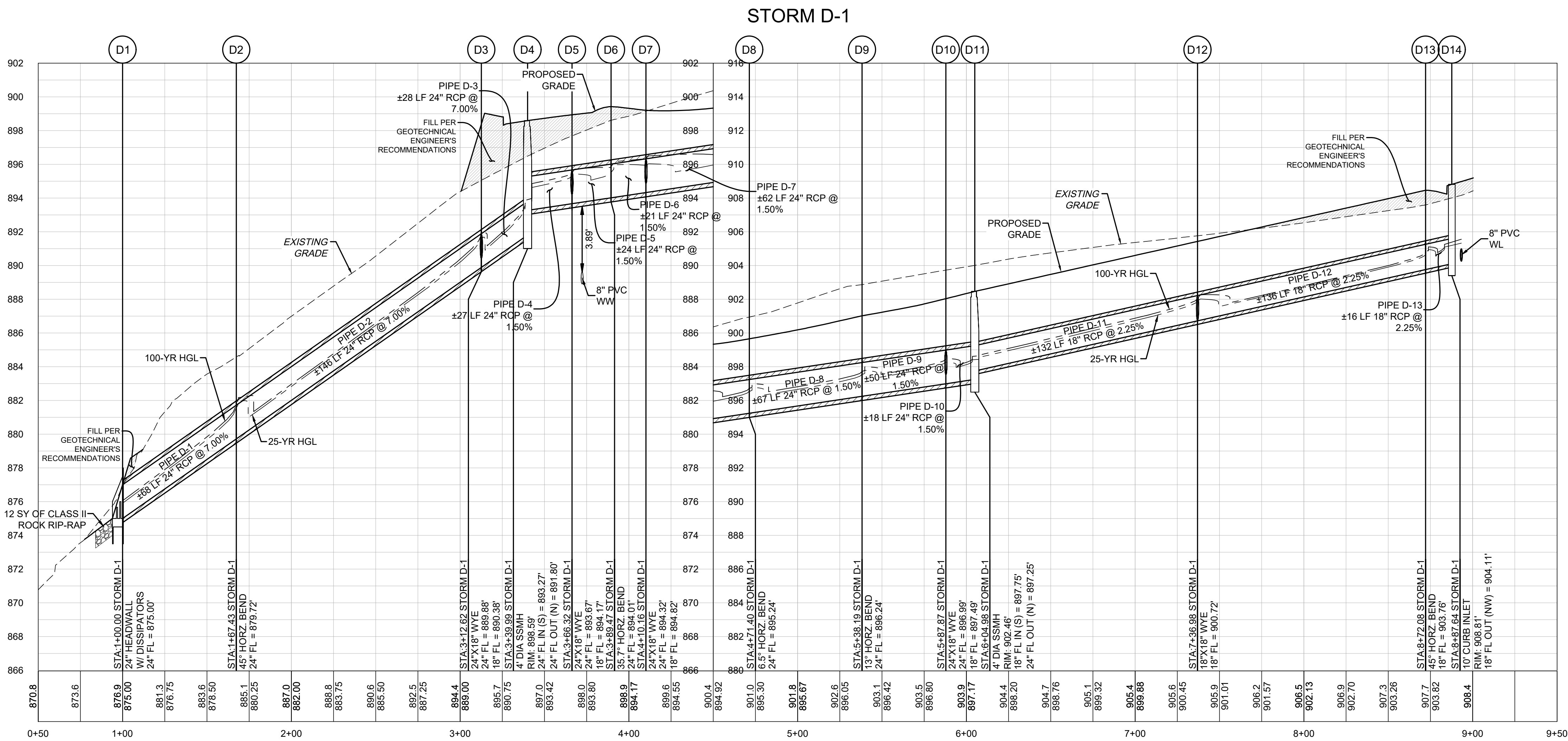
- LEGEND**
- 834 - EXISTING MINOR CONTOUR
 - 835 - EXISTING MAJOR CONTOUR
 - 834 - PROPOSED MINOR CONTOUR
 - 835 - PROPOSED MAJOR CONTOUR
 - BOUNDARY
 - EASEMENT
 - 100YR - 100 YR PROPOSED CONDITION FLOODPLAIN
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 - FIRE HYDRANT
 - WATER VALVE
 - STORM SEWER MANHOLE
 - WASTEWATER MANHOLE
 - CURB INLET



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Pipe Label	Slope (%)	Q25 (cfs)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE D-1	7.00%	22.31	11.99	1.69	28.22	13.10	1.83
PIPE D-2	7.00%	22.31	7.50	2.23	28.22	9.17	2.44
PIPE D-3	7.00%	19.98	7.04	1.81	25.36	8.35	2.04
PIPE D-4	1.50%	19.98	8.11	1.61	25.36	9.06	1.77
PIPE D-5	1.50%	16.03	6.04	1.76	20.37	6.67	2.04
PIPE D-6	1.50%	16.03	5.52	1.96	20.37	6.48	2.14
PIPE D-7	1.50%	12.51	5.16	1.71	15.93	5.83	2.17
PIPE D-8	1.50%	12.51	5.38	1.54	15.93	6.03	1.75
PIPE D-9	1.50%	12.51	5.38	1.54	15.93	6.03	1.75
PIPE D-10	1.50%	8.90	4.72	1.28	11.32	5.11	1.49
PIPE D-11	2.25%	8.90	7.65	1.15	11.32	8.36	1.29
PIPE D-12	2.25%	5.18	4.02	1.29	6.57	4.51	1.54
PIPE D-13	2.25%	5.18	4.14	1.19	6.57	4.61	1.35

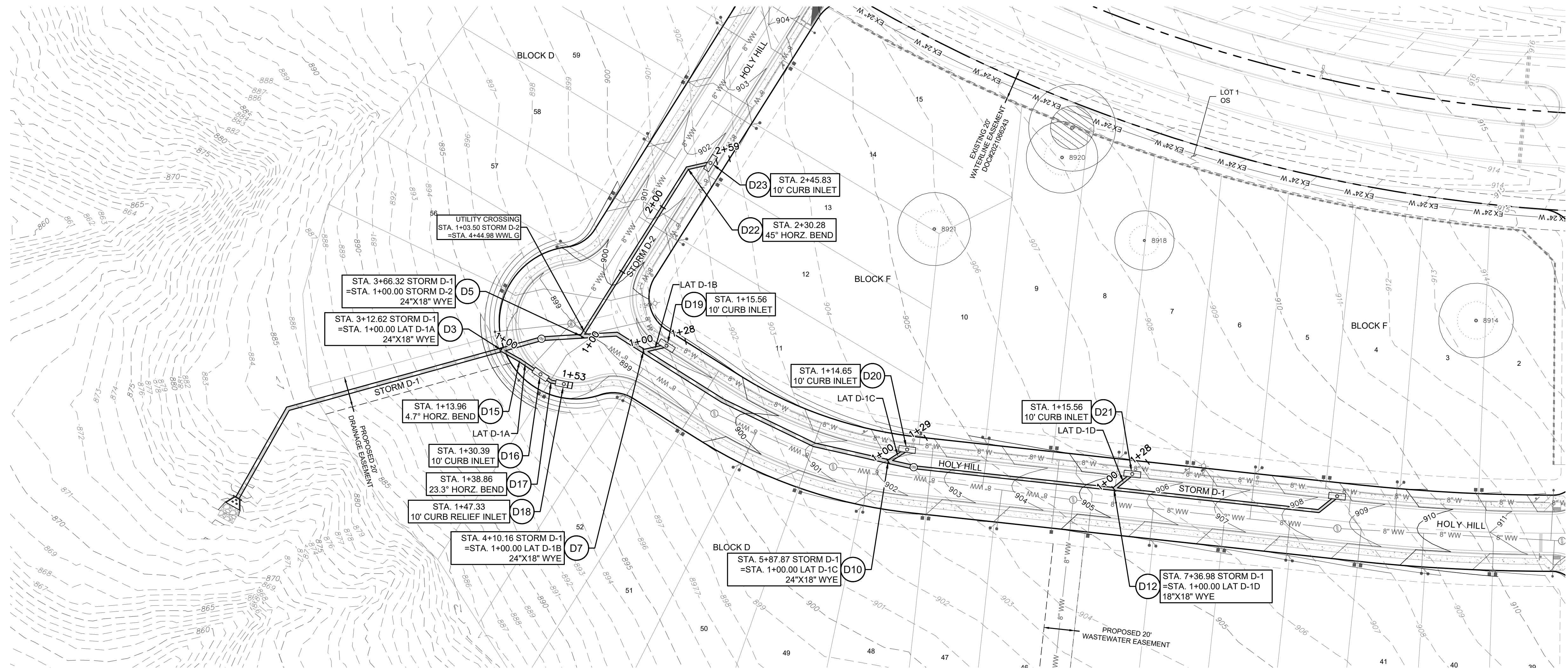


STORM D-1 PLAN & PROFILE
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MKM
CHECKED BY: SN
APPROVED BY:

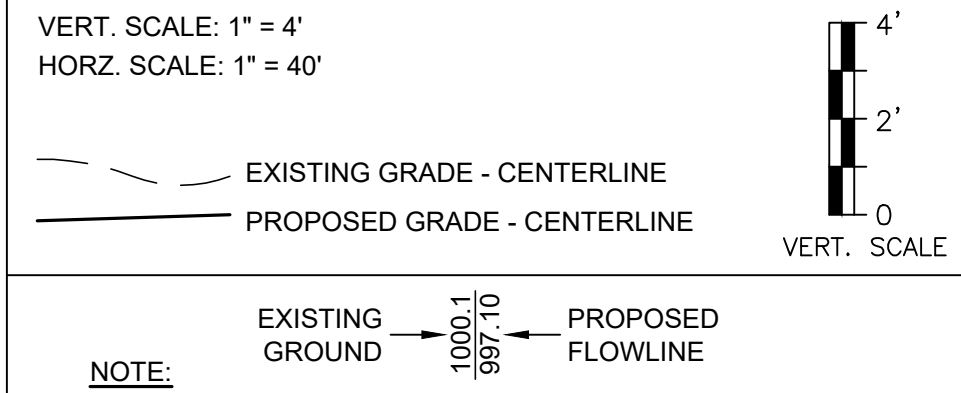
SHEET 66 OF 91
2024-XX-CON

P:\Blake_Magnet\Georgetown Properties\1037-103 ACAD\Drawings\DWG\1037-103 STORM D-1 LATERALS & STORM D-2 PLAN & PROFILE September 24, 2024 10:57 AM mla.mahmoud



0 40' 80'
SCALE: 1" = 40'

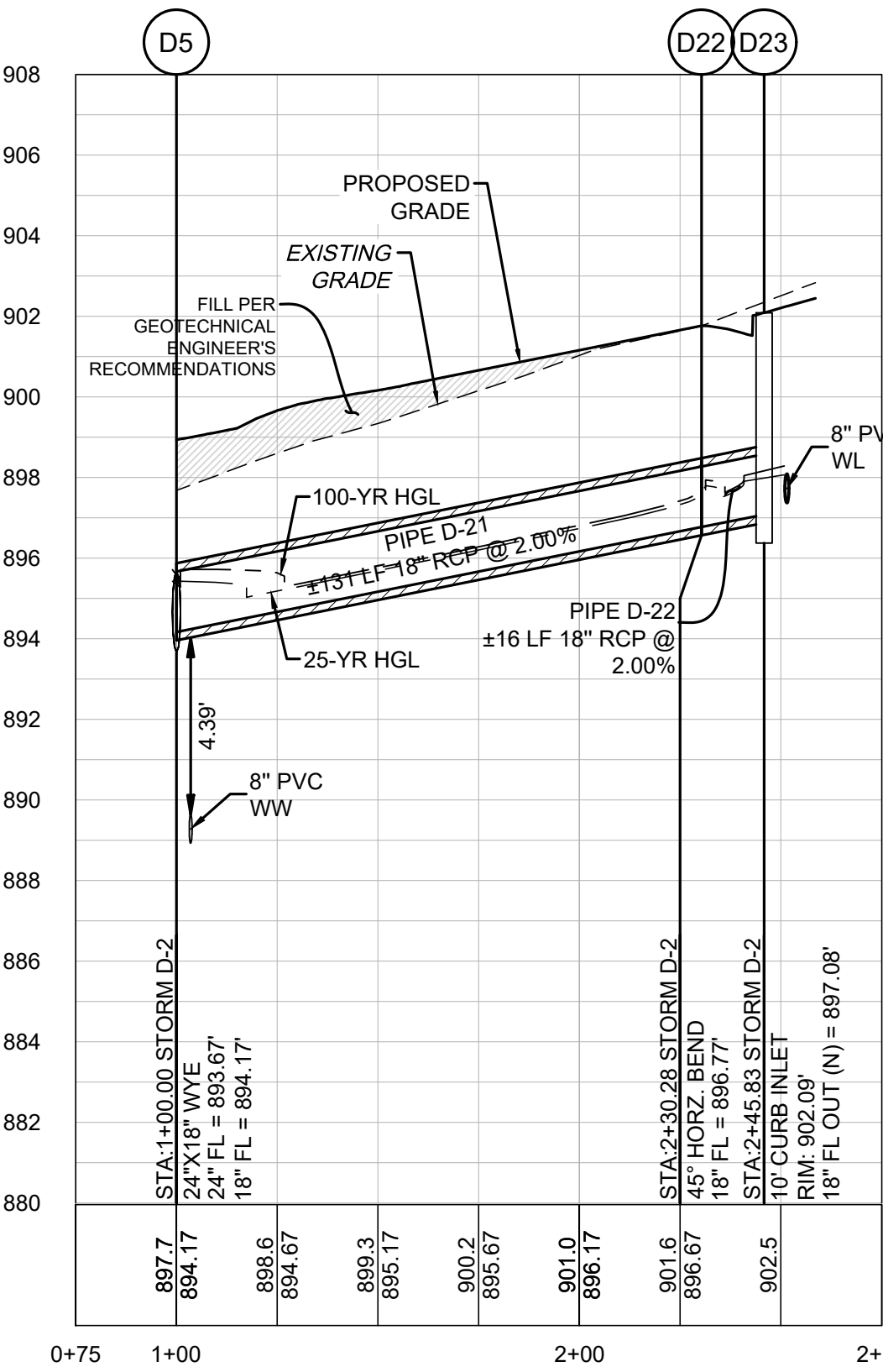
- LEGEND**
- 834 - - - EXISTING MINOR CONTOUR
 - 835 - - - EXISTING MAJOR CONTOUR
 - 834 - - - PROPOSED MINOR CONTOUR
 - 835 - - - PROPOSED MAJOR CONTOUR
 - - - BOUNDARY
 - - - EASEMENT
 - 100YR - - - 100 YR PROPOSED CONDITION FLOODPLAIN
 - 100YR - - - 100 YR FEMA ZONE A FLOODPLAIN
 - - - CREEK CENTERLINE
 - - - PROPOSED STORM LINE
 - ⊕ - FIRE HYDRANT
 - ⊕ - WATER VALVE
 - ⊕ - STORM SEWER MANHOLE
 - ⊕ - WASTEWATER MANHOLE
 - ⊕ - CURB INLET
 - ⊕ - TREES TO REMAIN HERITAGE
 - ⊕ - TREES TO REMAIN NON-HERITAGE



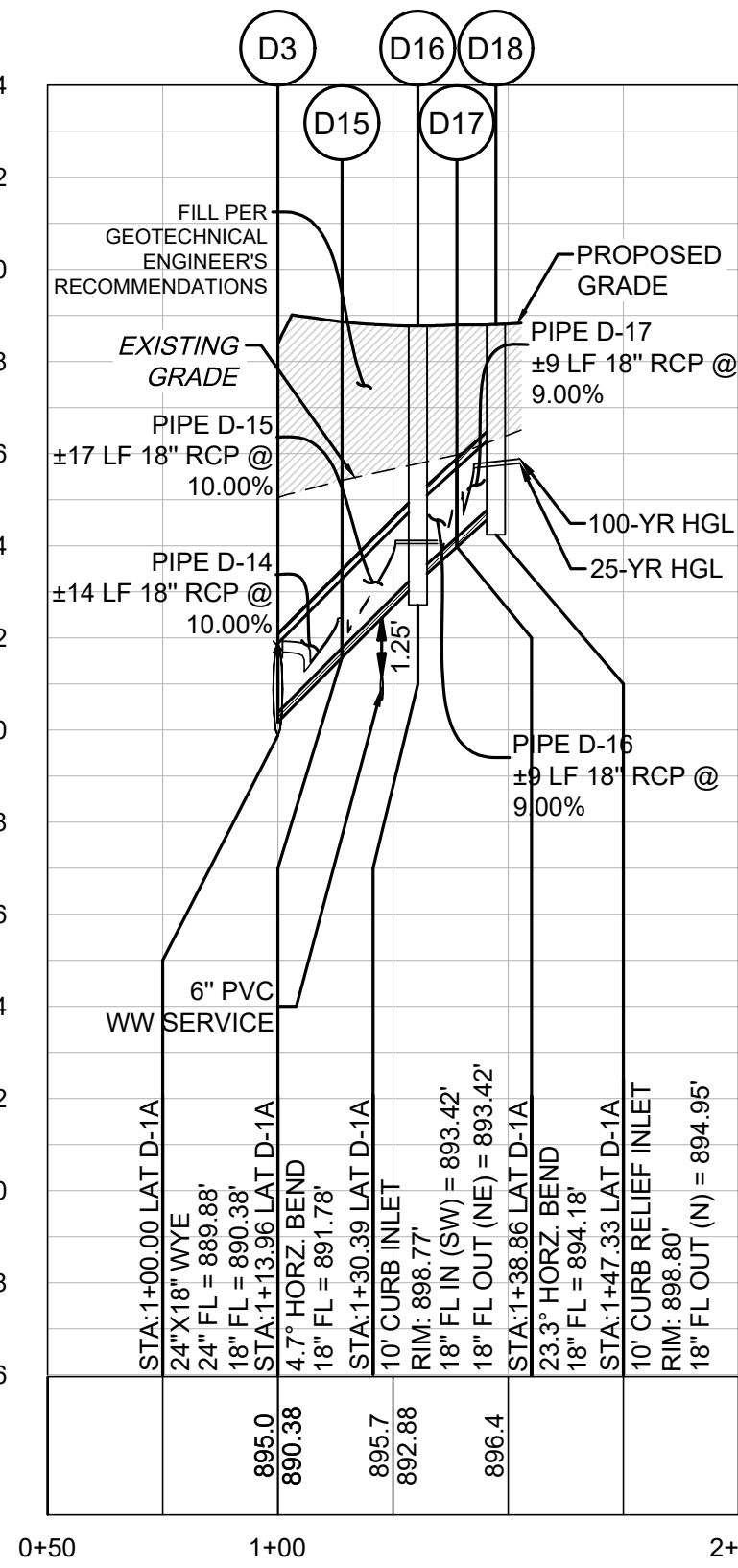
- TRENCH SAFETY NOTES:**
- IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT WILL BE PROVIDED BY THE CONTRACTOR.
 - IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4 FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
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Pipe Label	Slope (%)	Q25 (cfs)	V25 (ft/s)	D25 (ft)	Q100 (cfs)	V100 (ft/s)	D100 (ft)
PIPE D-14	10.00%	2.33	2.57	1.31	2.86	2.79	1.54
PIPE D-15	10.00%	2.33	3.33	0.69	2.86	3.55	0.77
PIPE D-16	9.00%	3.24	3.93	0.74	3.98	4.20	0.82
PIPE D-17	9.00%	3.24	3.59	0.87	3.98	3.85	0.97
PIPE D-18	1.00%	3.52	2.50	1.21	4.44	2.51	1.67
PIPE D-19	5.00%	3.61	4.08	0.78	4.61	4.17	0.99
PIPE D-20	5.00%	3.72	3.31	1.29	4.75	3.69	1.54
PIPE D-21	2.00%	3.95	3.45	1.26	4.99	3.79	1.54
PIPE D-22	2.00%	3.95	3.74	1.02	4.99	4.08	1.16

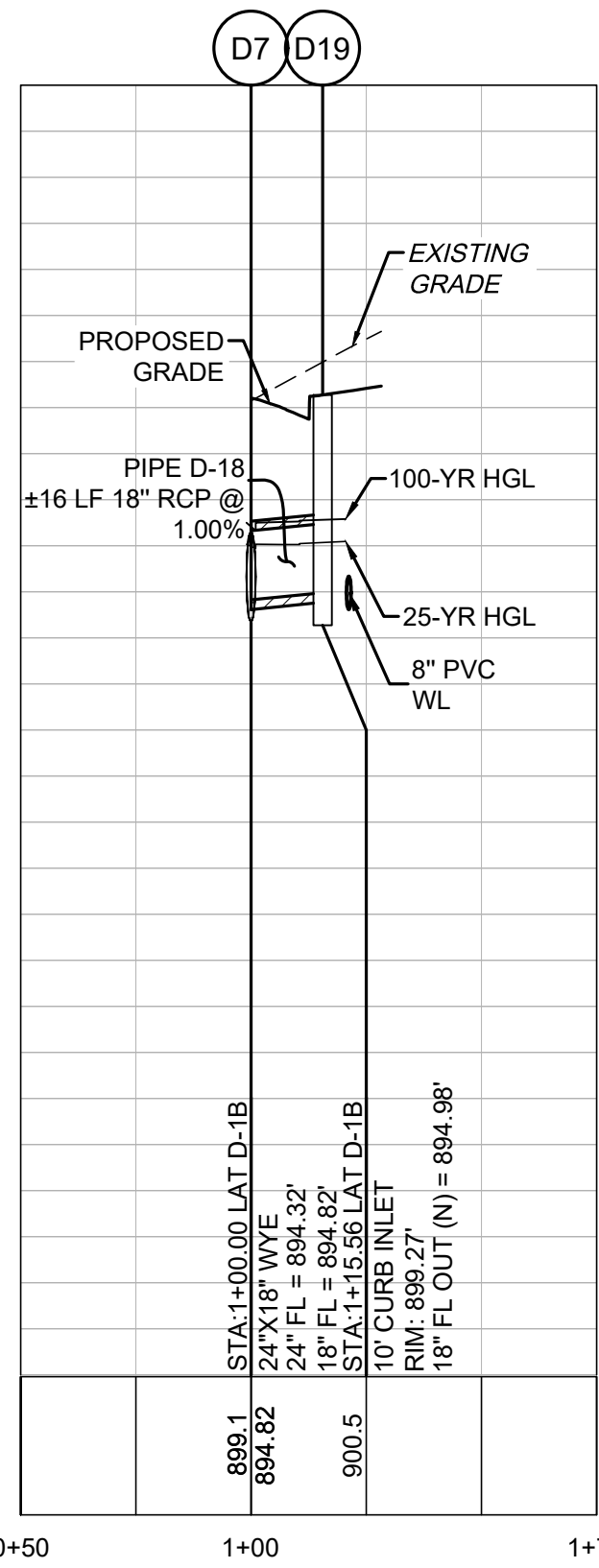
STORM D-2



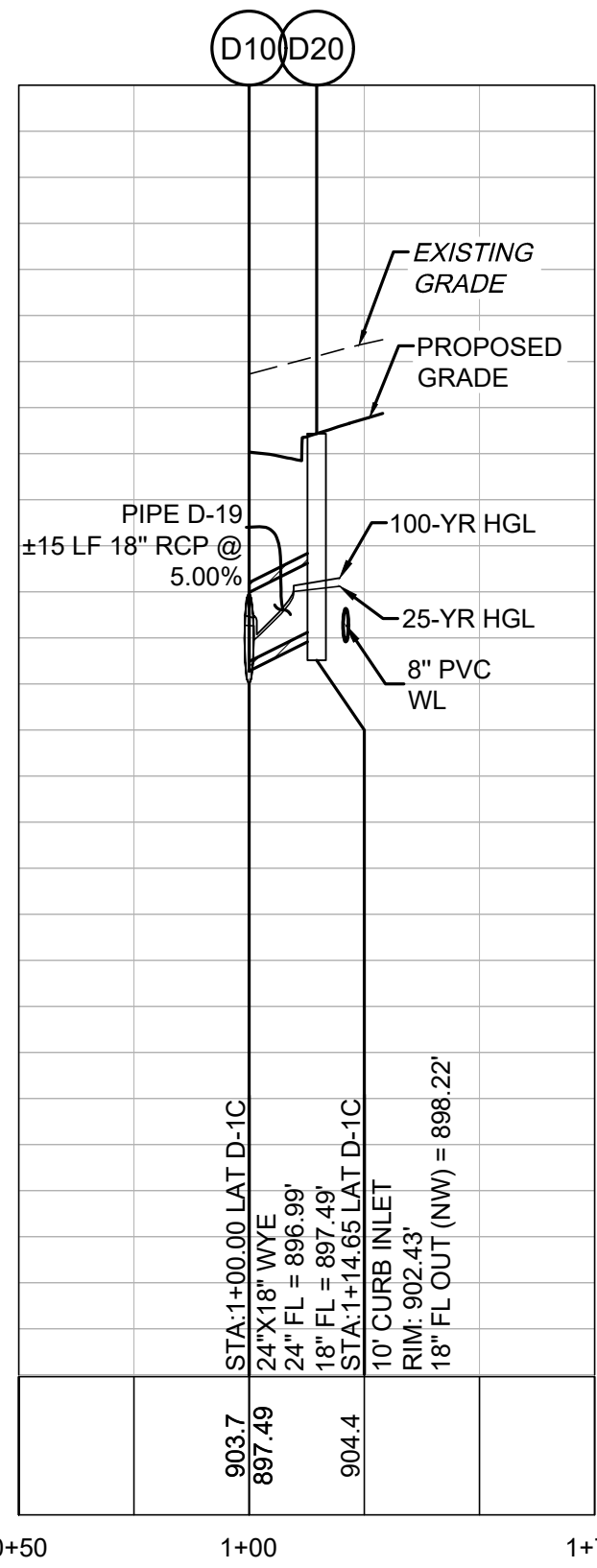
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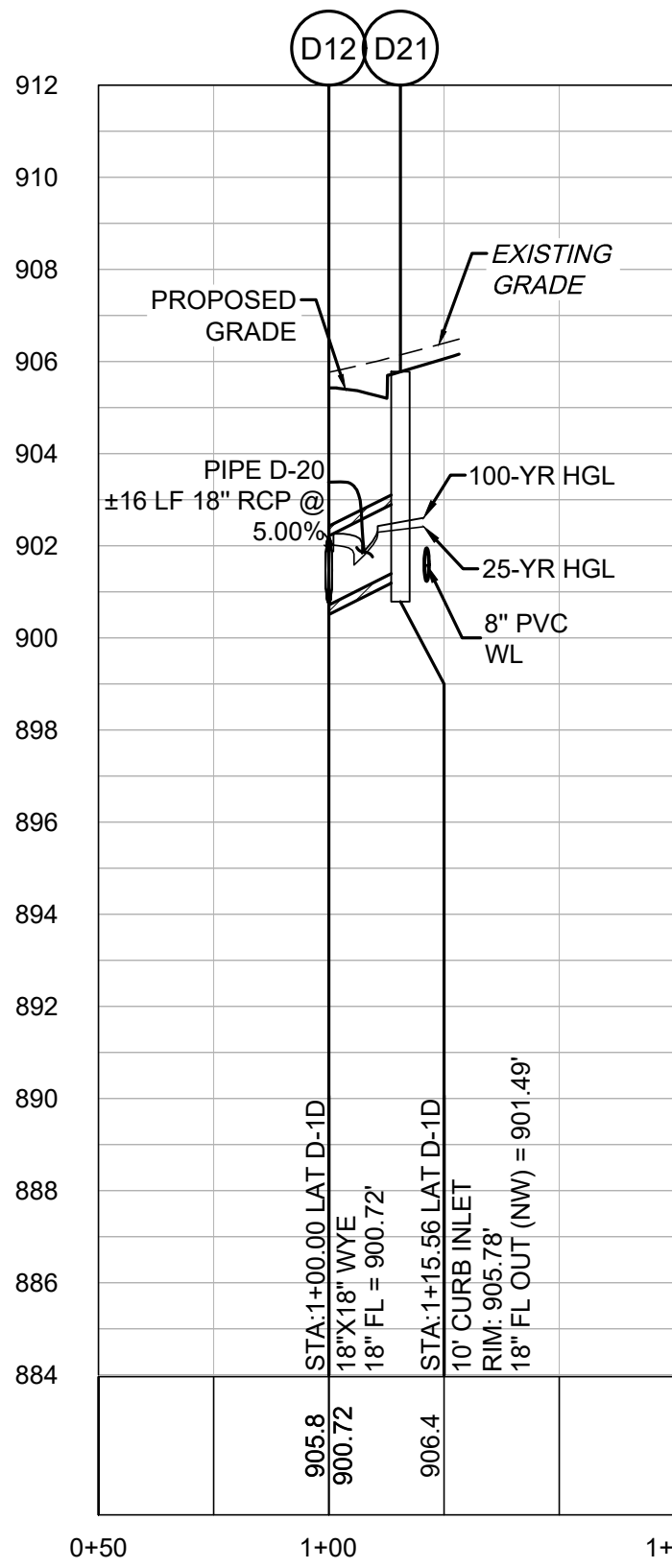
LAT D-1B



LAT D-1C



LAT D-1D



STORM D-1 LATERALS &
STORM D-2 PLAN & PROFILE
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MKM
CHECKED BY: SN
APPROVED BY:

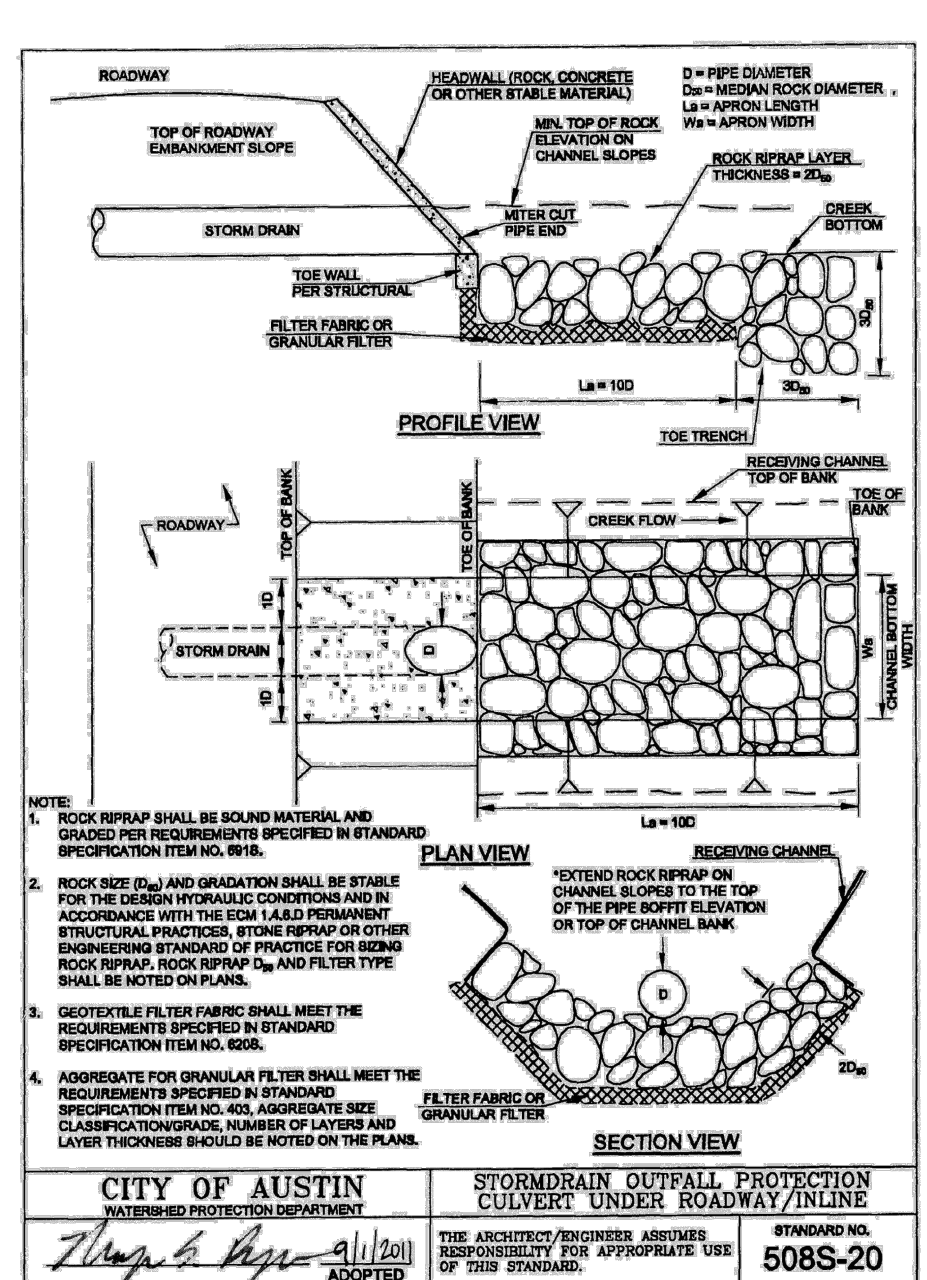
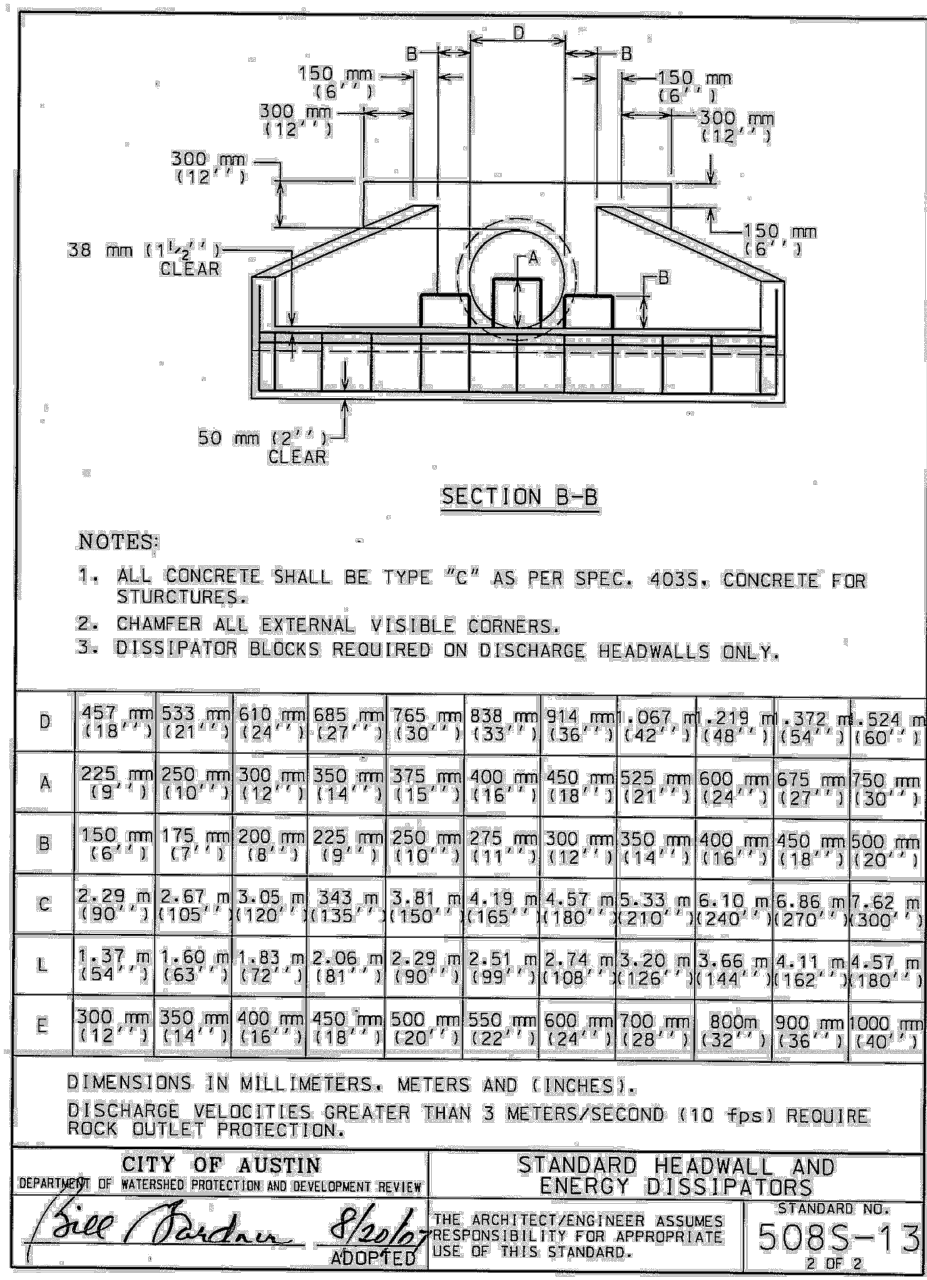
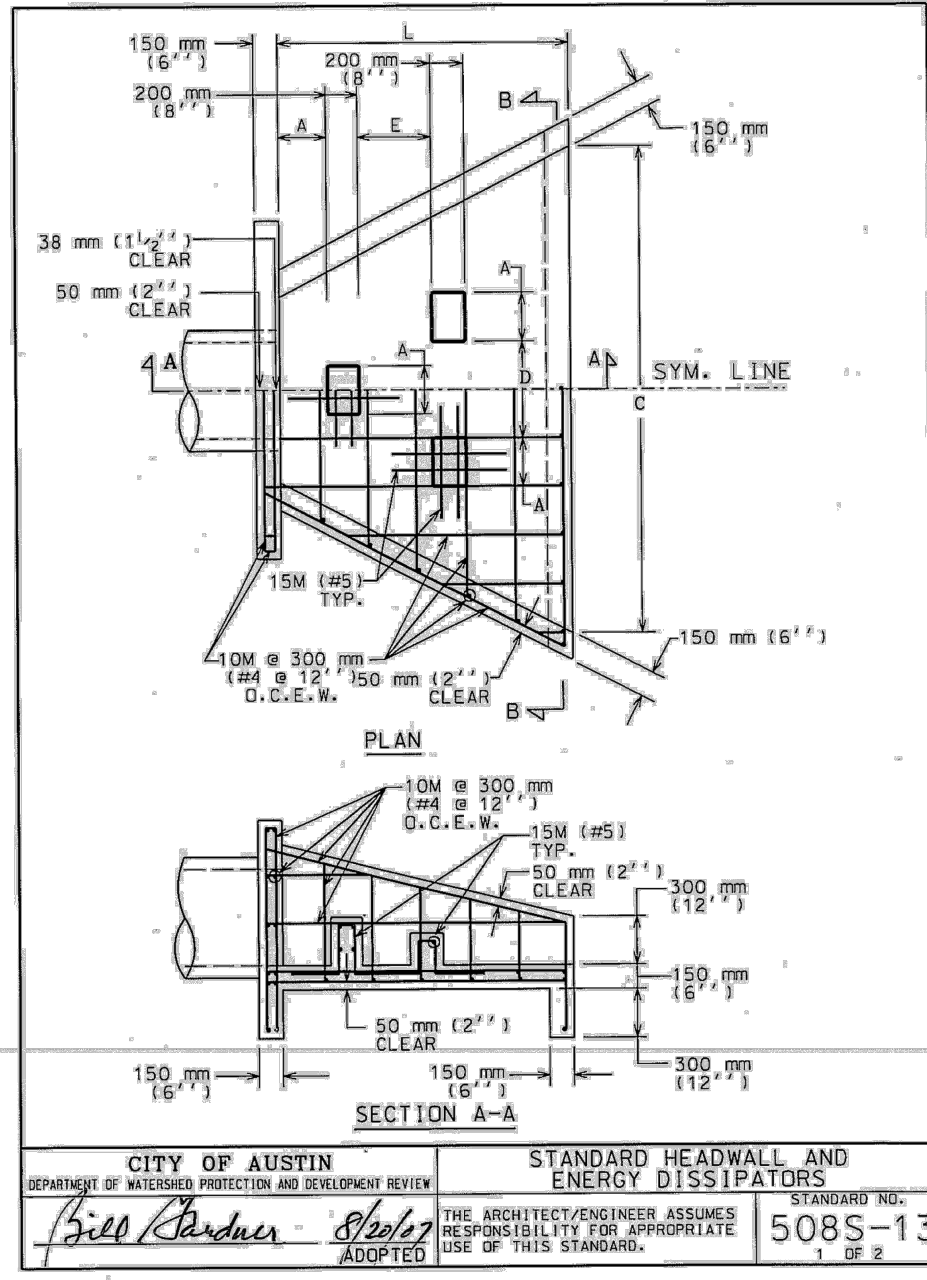
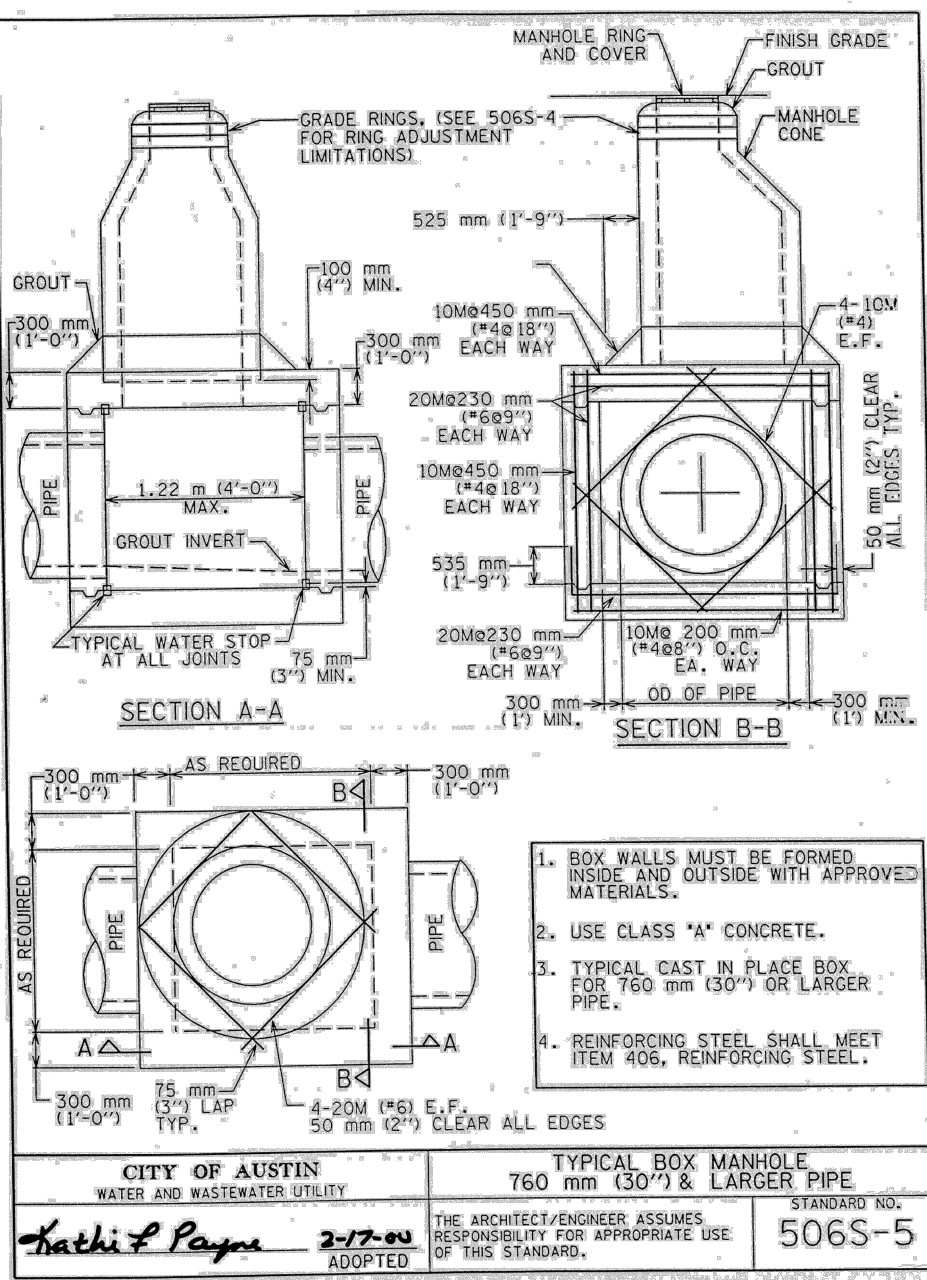
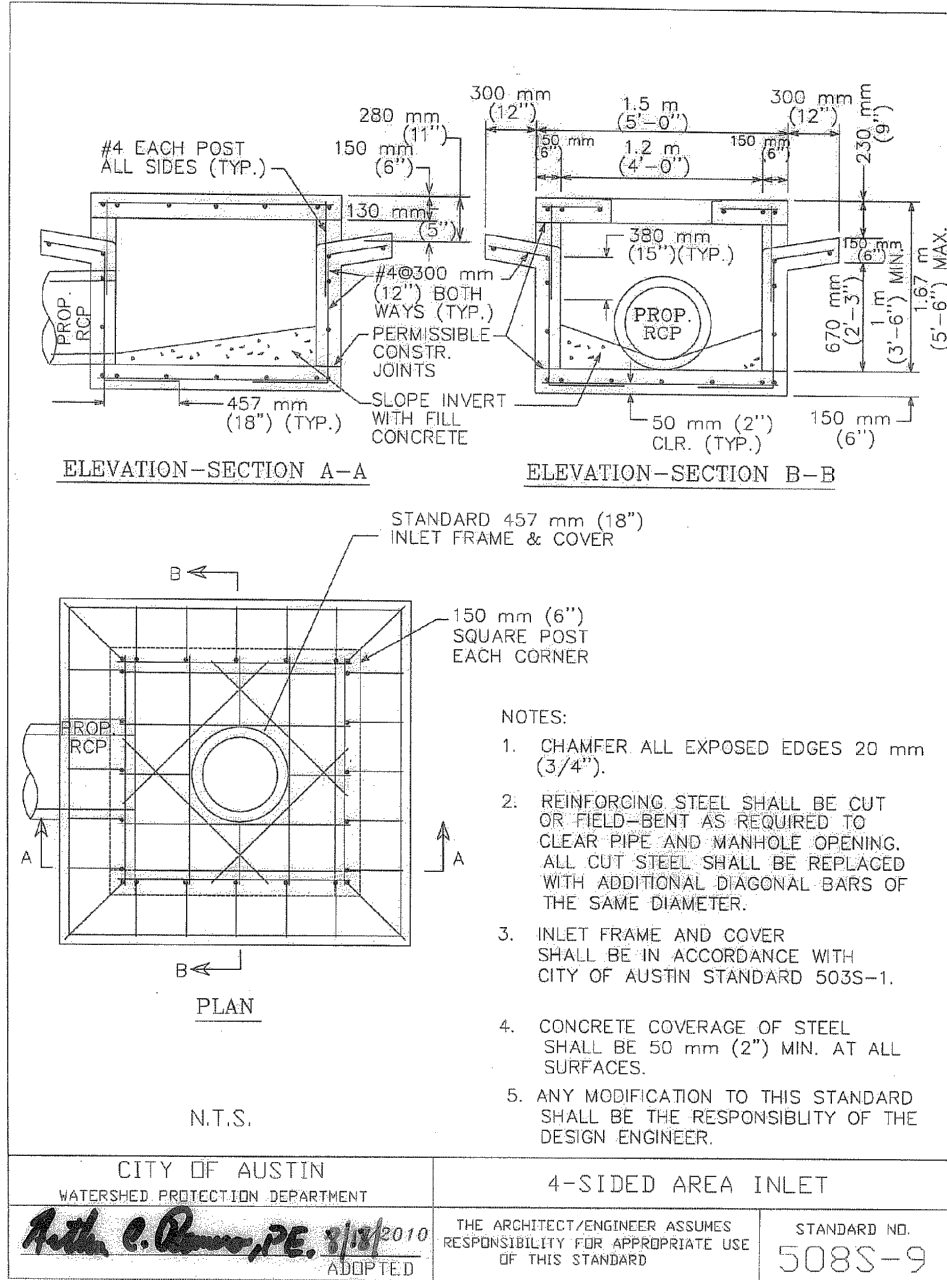
SHEET 67 OF 91
2024-XX-CON

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

5508 HIGHWAY 290 WEST
SUITE 150
DALLAS, TX 75235
CITY OF GEORGETOWN
HRGreen
DEVELOPMENT TX

STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER
09/23/2024

Plot Style: LandDev_Geotown.ctb
Template: LDC_C102022.DWT
P:\Blaize_Magnet\Geotown\Projects\RG1-103_A02022\DWG\DRG\DTLS.dwg, September 24, 2024, 11:50 AM, malik muhammad



RIP-RAP CLASSIFICATION SPECIFICATIONS	
CLASS 1 RIP-RAP	No more than 10% of the stone will have a diameter greater than twelve (12) inches; no more than 50% of the stone will have a diameter less than ten (10) inches; and no more than 10% of the stone will have a diameter of less than six (6) inches. The thickness of the rip-rap liner will be no less than twelve (12) inches.
CLASS 2 RIP-RAP	No more than 10% of the stone will have a diameter greater than sixteen (16) inches; no more than 50% of the stone will have a diameter less than twelve (12) inches; and no more than 10% of the stone will have a diameter of less than six (6) inches. The thickness of the rip-rap liner will be no less than sixteen (16) inches.
CLASS 3 RIP-RAP	No more than 10% of the stone will have a diameter greater than twenty two (22) inches; no more than 50% of the stone will have a diameter less than sixteen (16) inches; and no more than 10% of the stone will have a diameter of less than eight (8) inches. The thickness of the rip-rap liner will be no less than twenty two (22) inches.
CLASS 4 RIP-RAP	No more than 10% of the stone will have a diameter greater than twenty seven (27) inches; no more than 50% of the stone will have a diameter less than twenty two (22) inches; and no more than 10% of the stone will have a diameter of less than ten (10) inches. The thickness of the rip-rap liner will be no less than twenty seven (27) inches.
CLASS 5 RIP-RAP	No more than 10% of the stone will have a diameter greater than thirty four (34) inches; no more than 50% of the stone will have a diameter less than twenty seven (27) inches; and no more than 10% of the stone will have a diameter of less than sixteen (16) inches. The thickness of the rip-rap liner will be no less than thirty four (34) inches.

DESIGNED BY: *CC*

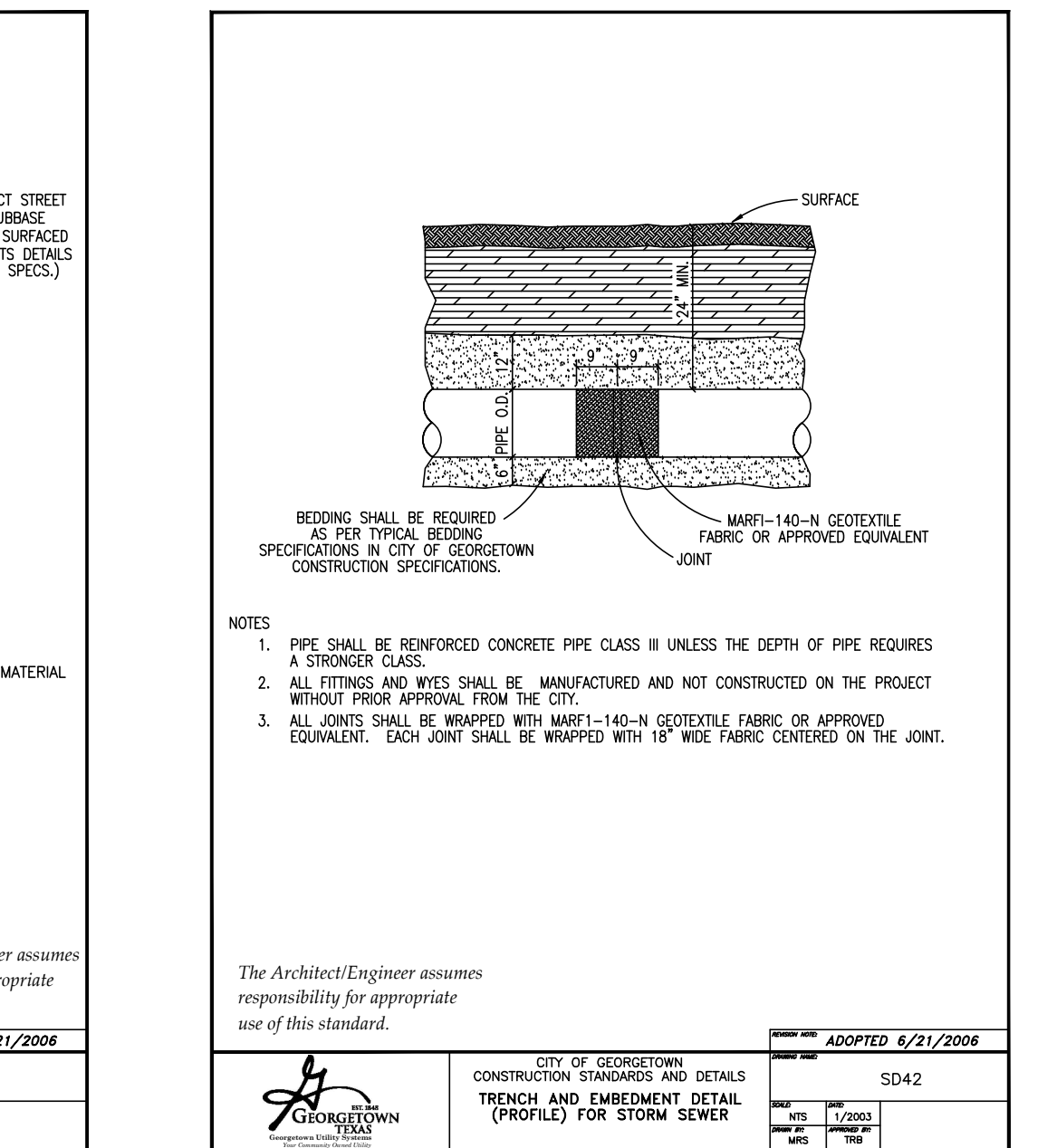
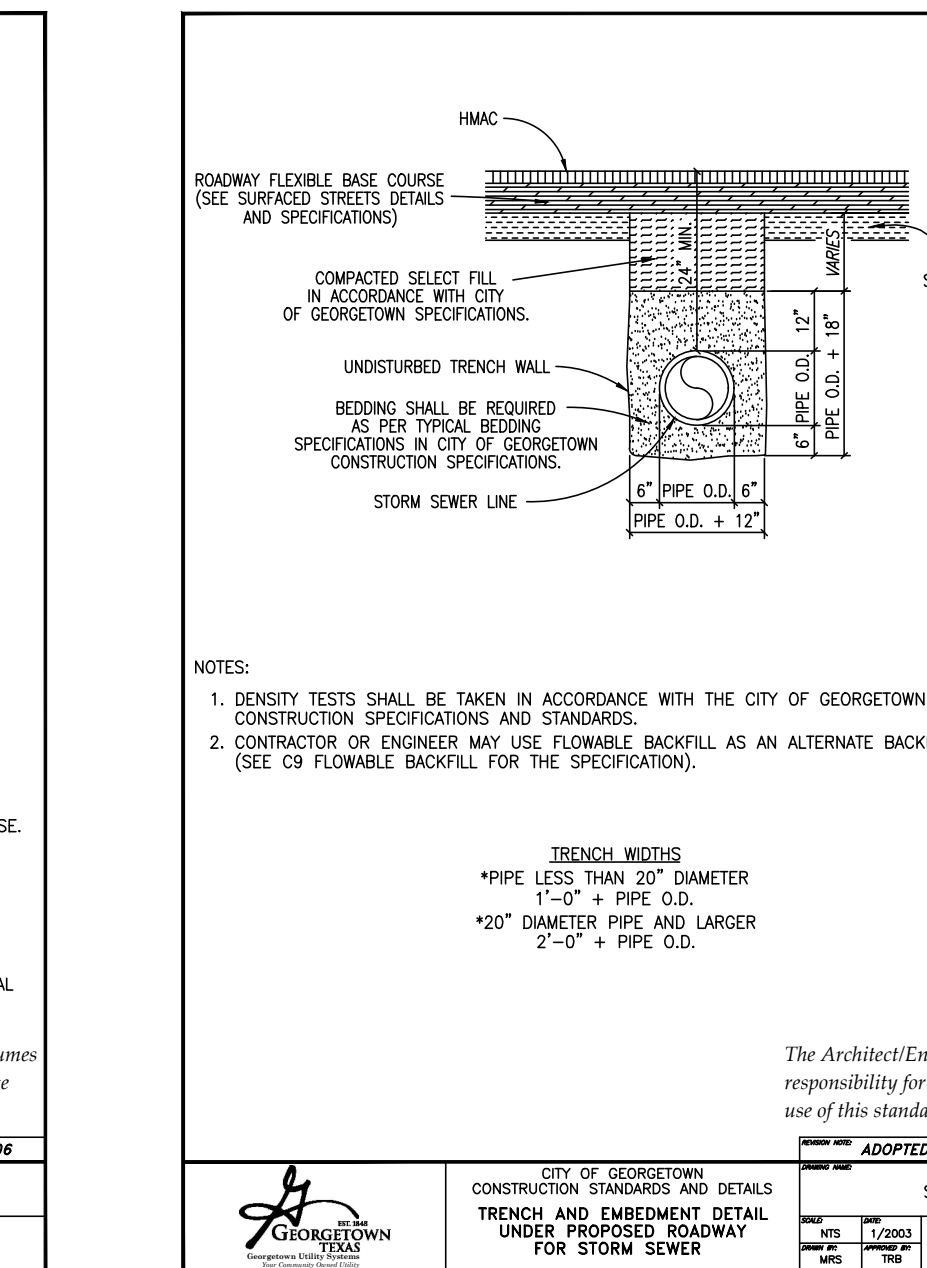
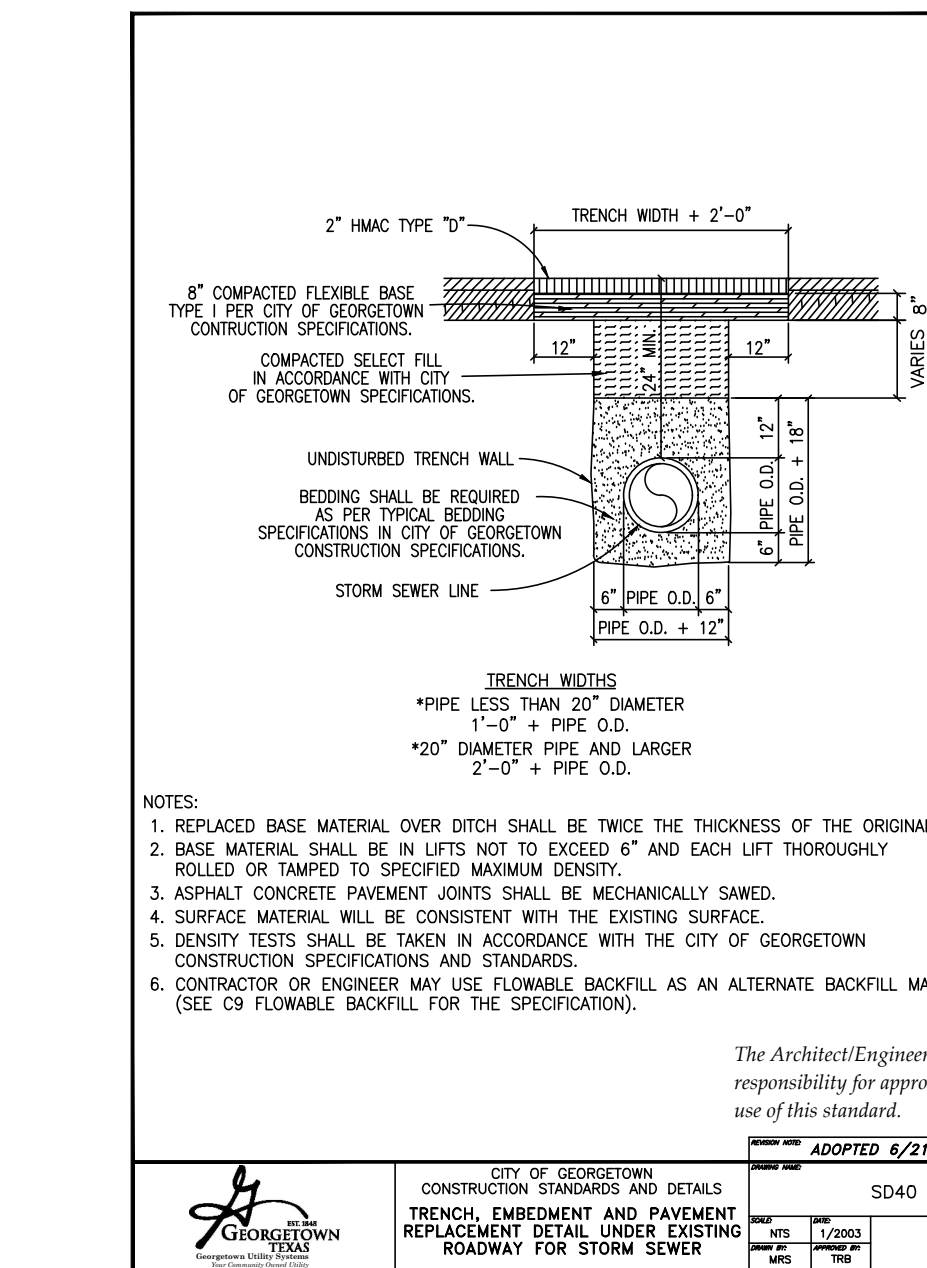
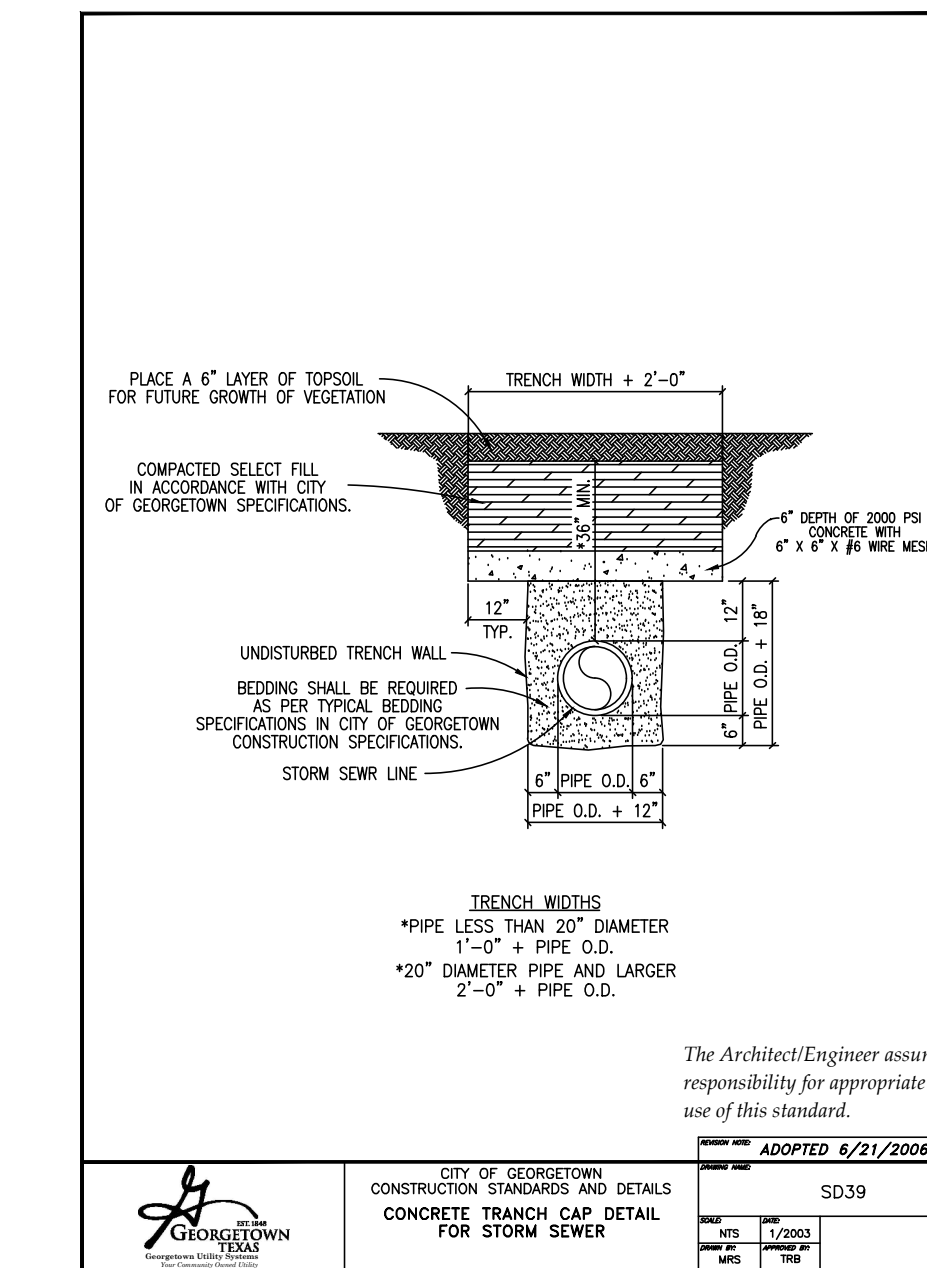
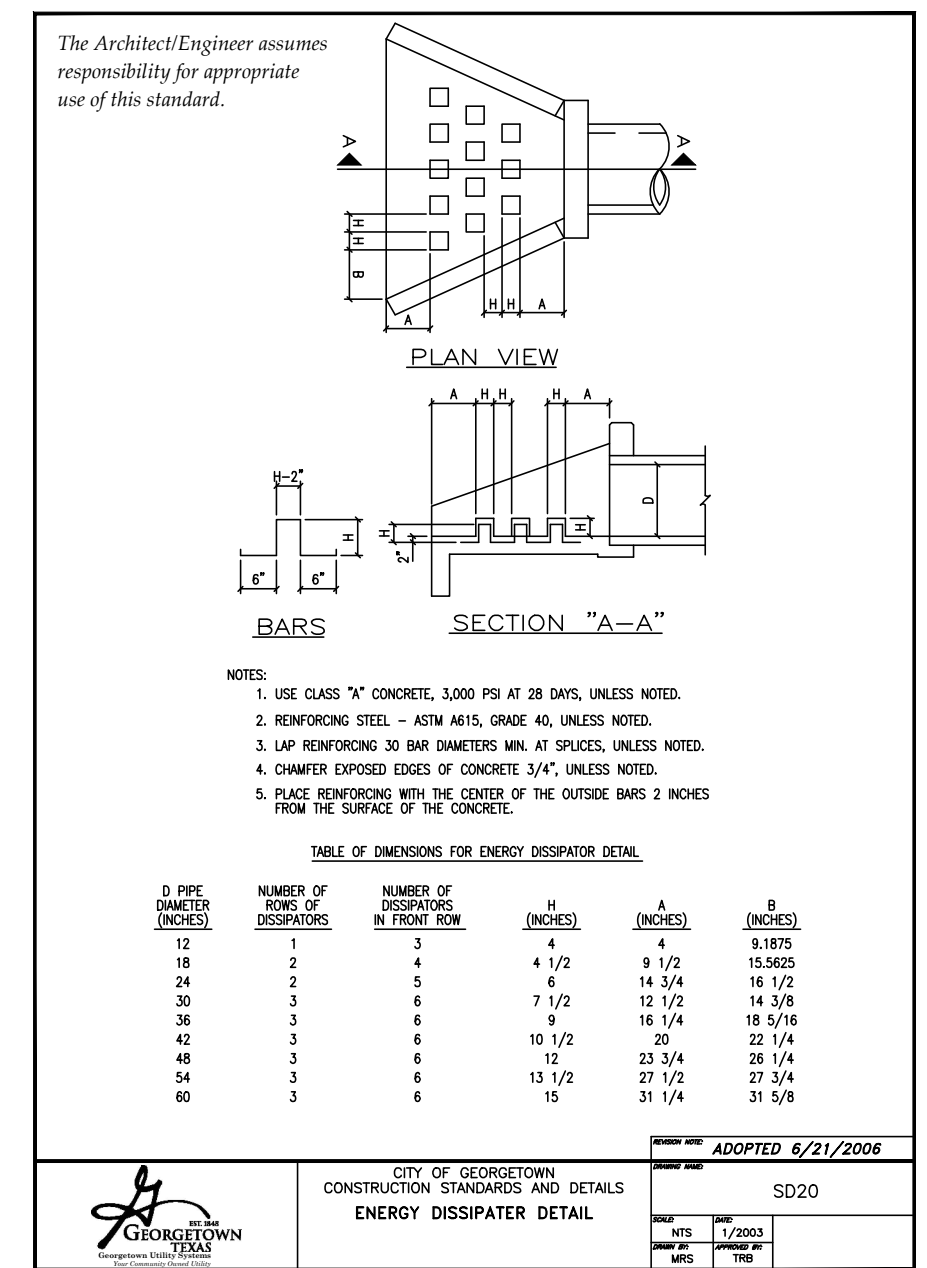
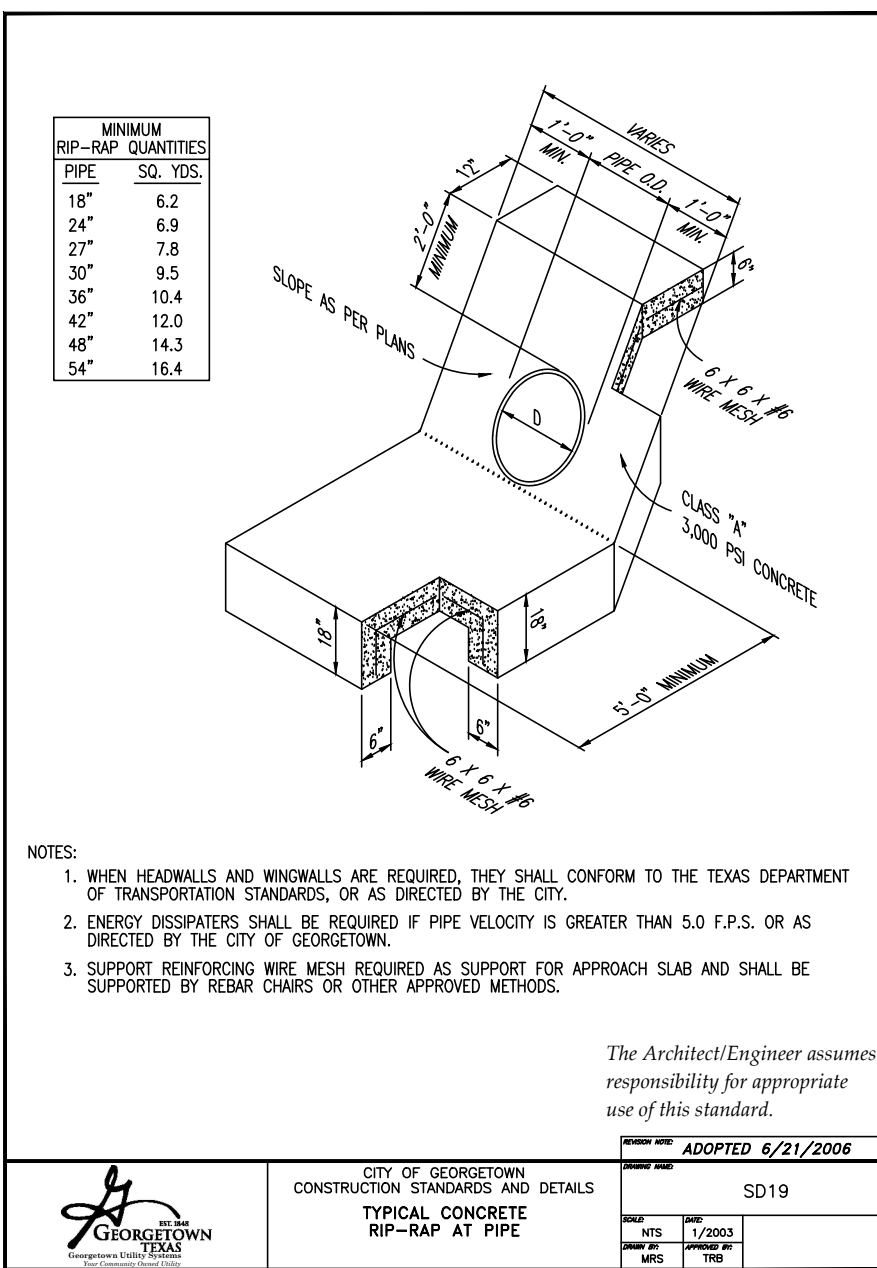
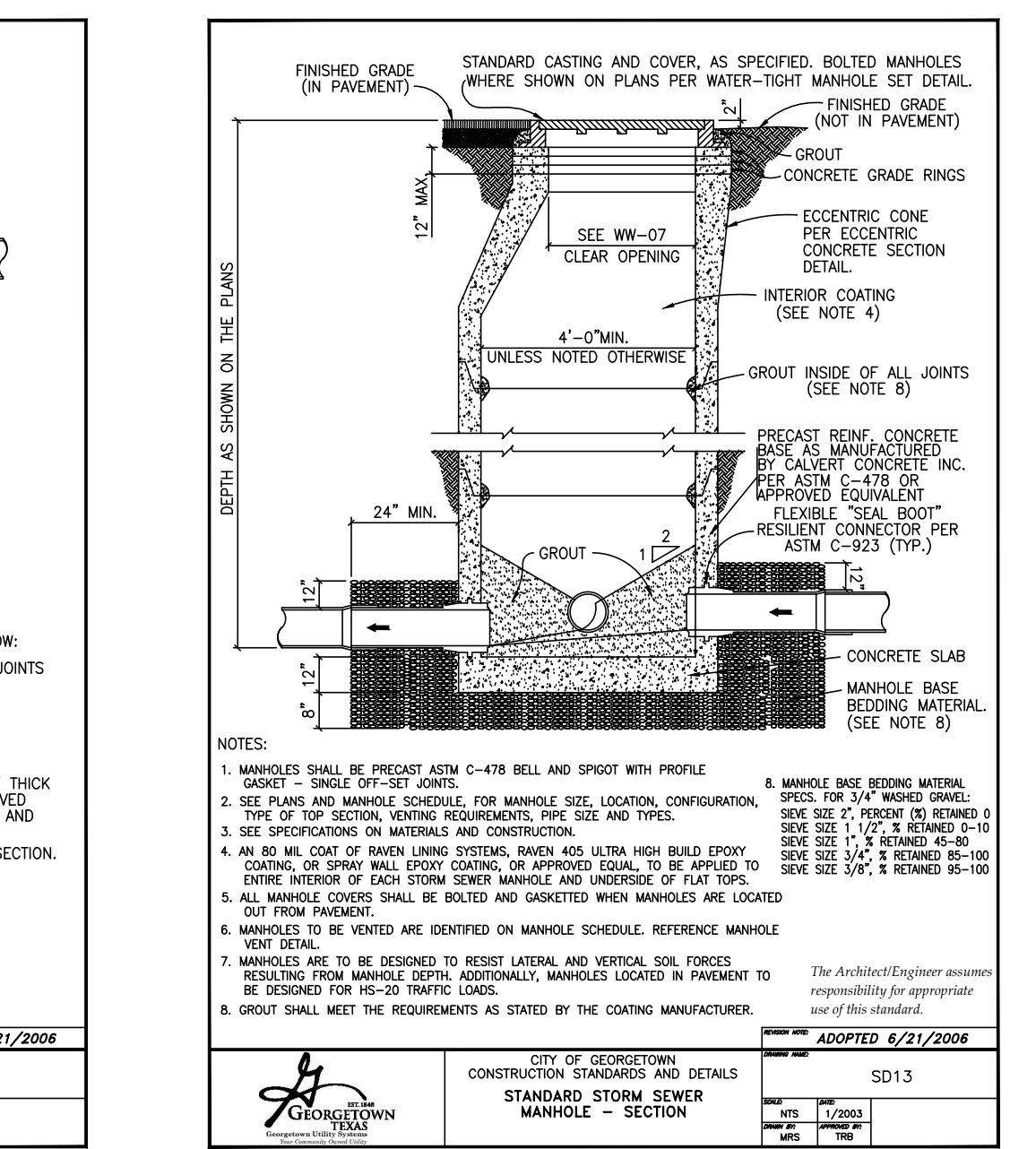
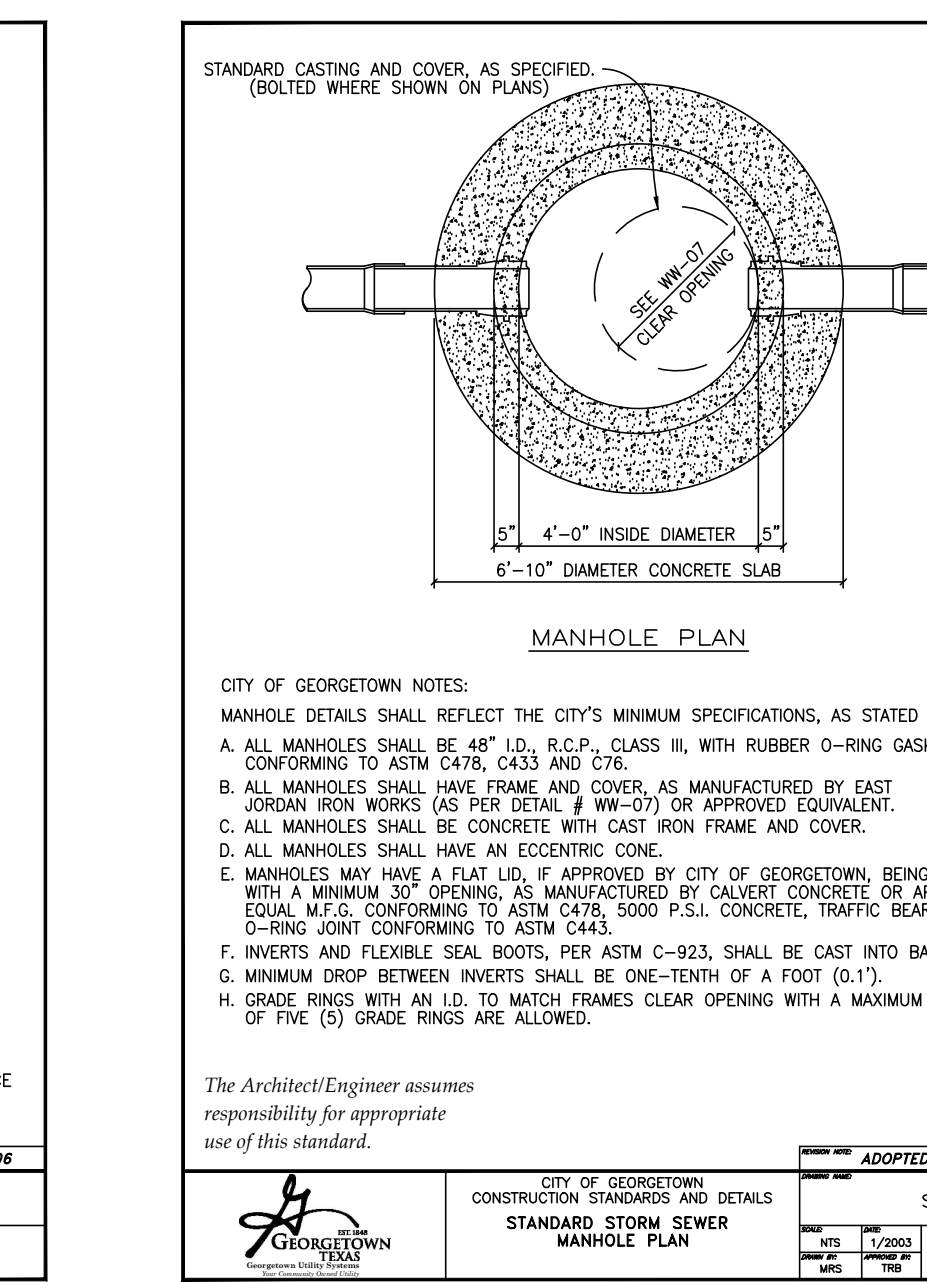
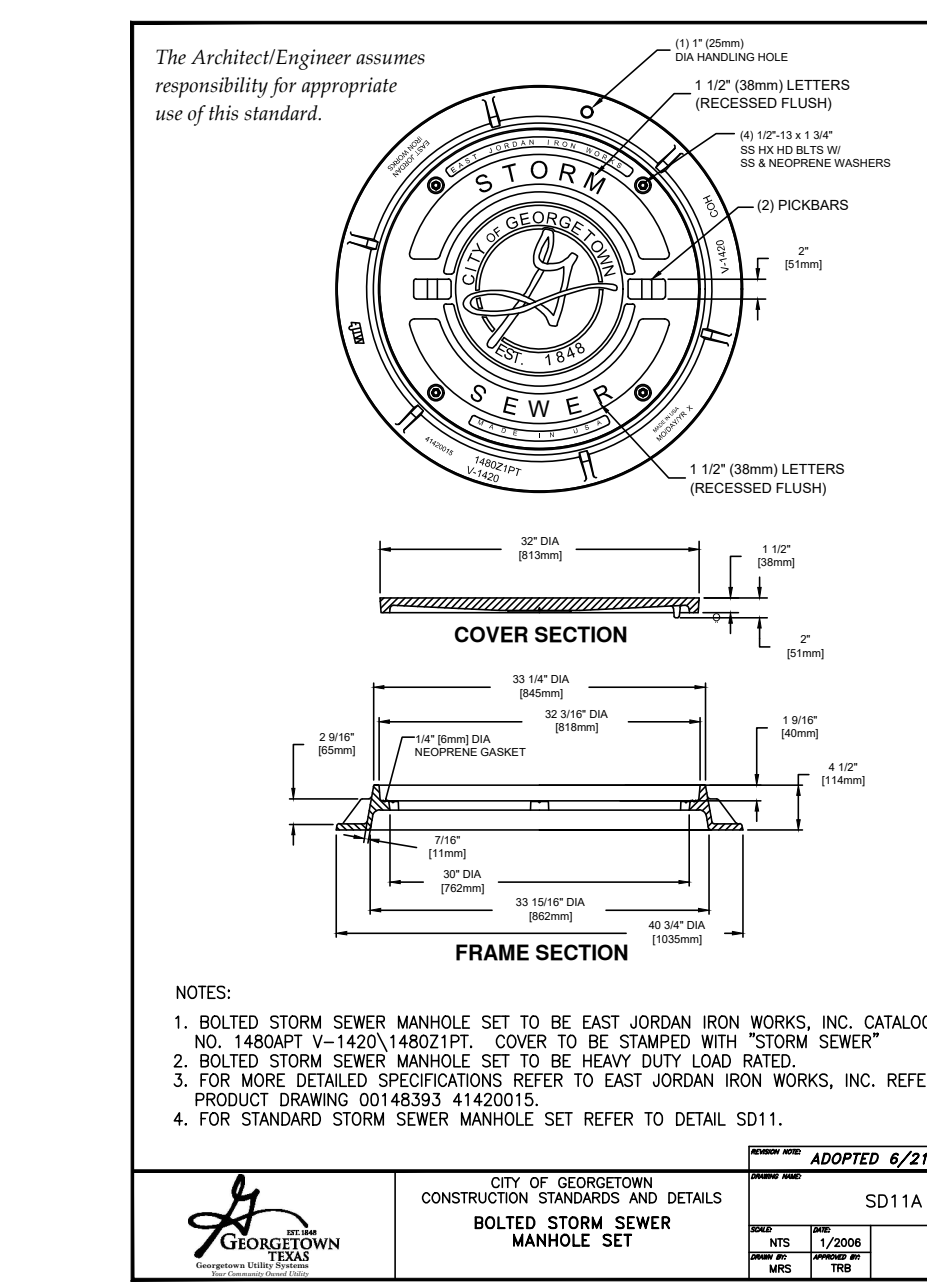
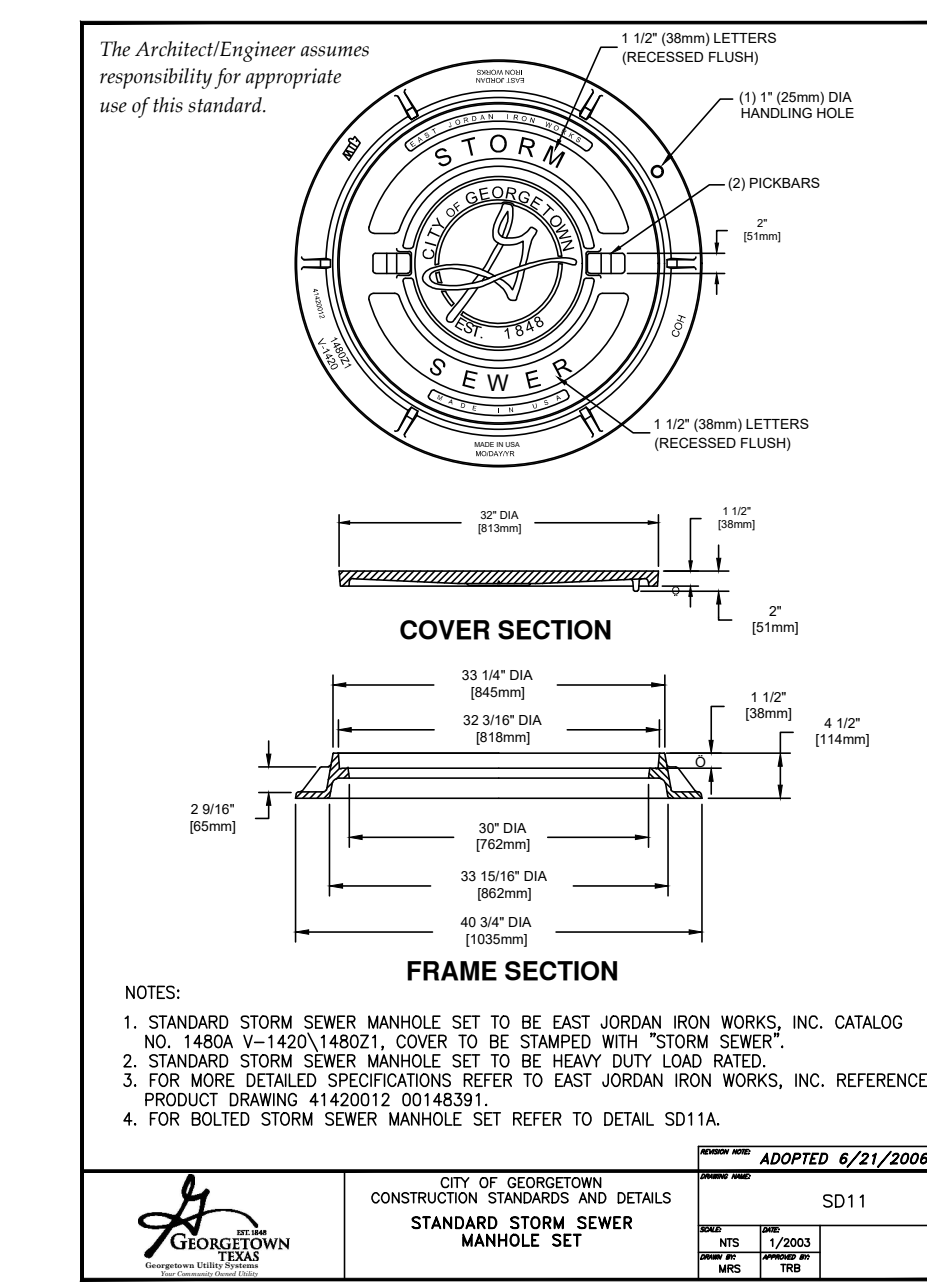
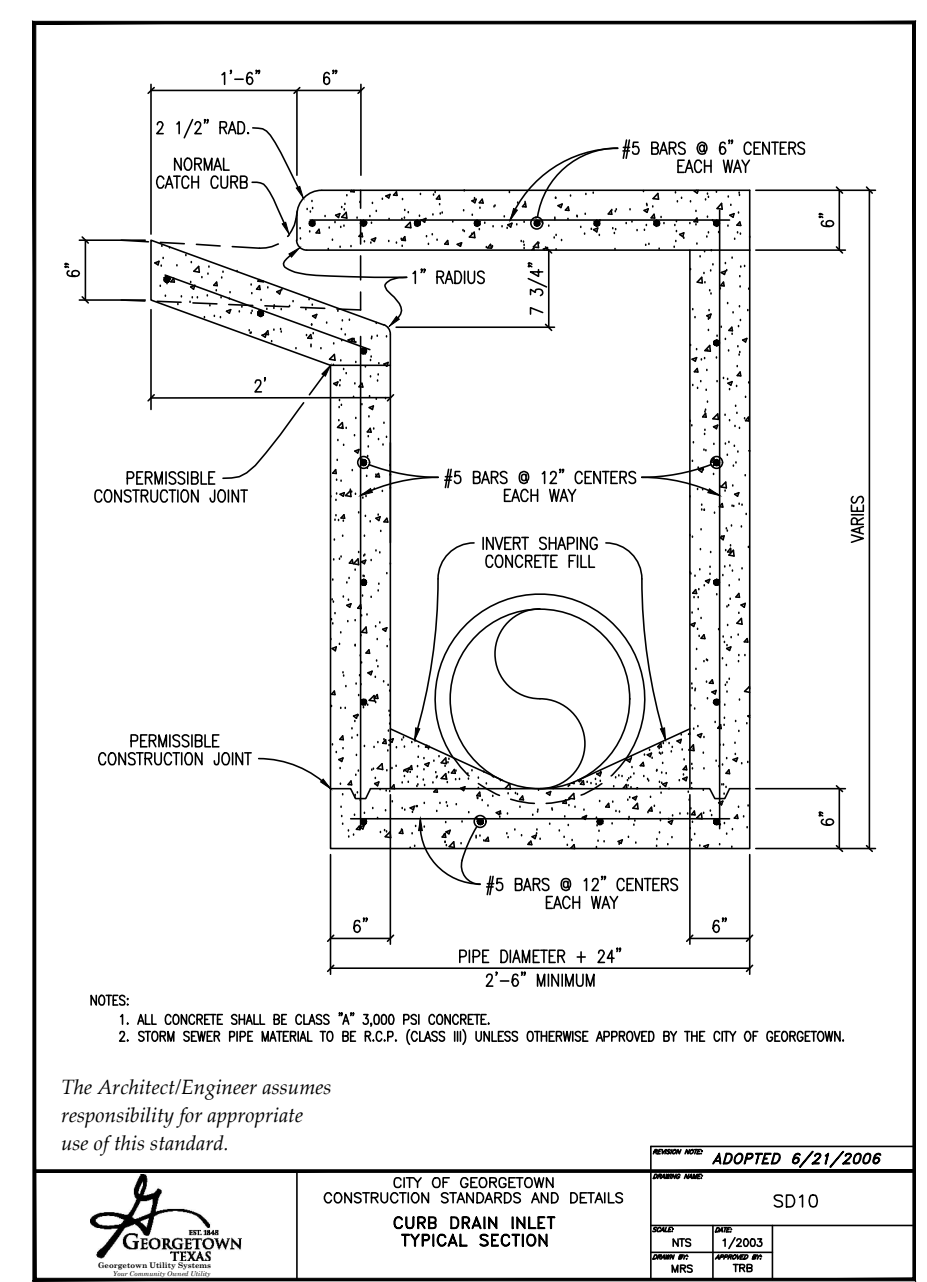
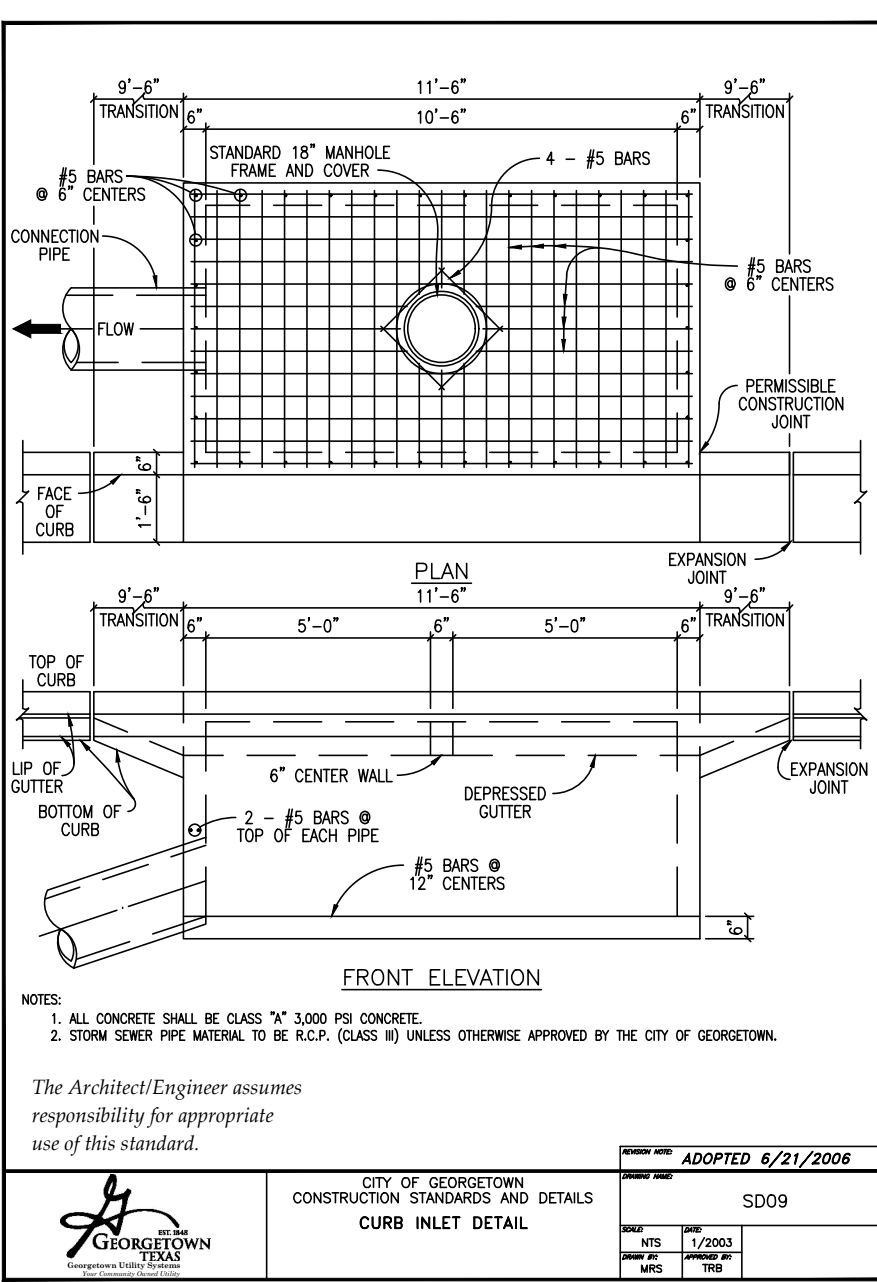
DRAWN BY: *MM/MKM*

CHECKED BY: *SN*

APPROVED BY: _____

69 of 91

2024-XX-CON



811

Know what's below.
Call before you dig.

5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75069
HIREN, TEXAS

PHONE NO: 10384
FAX NO: 10194101

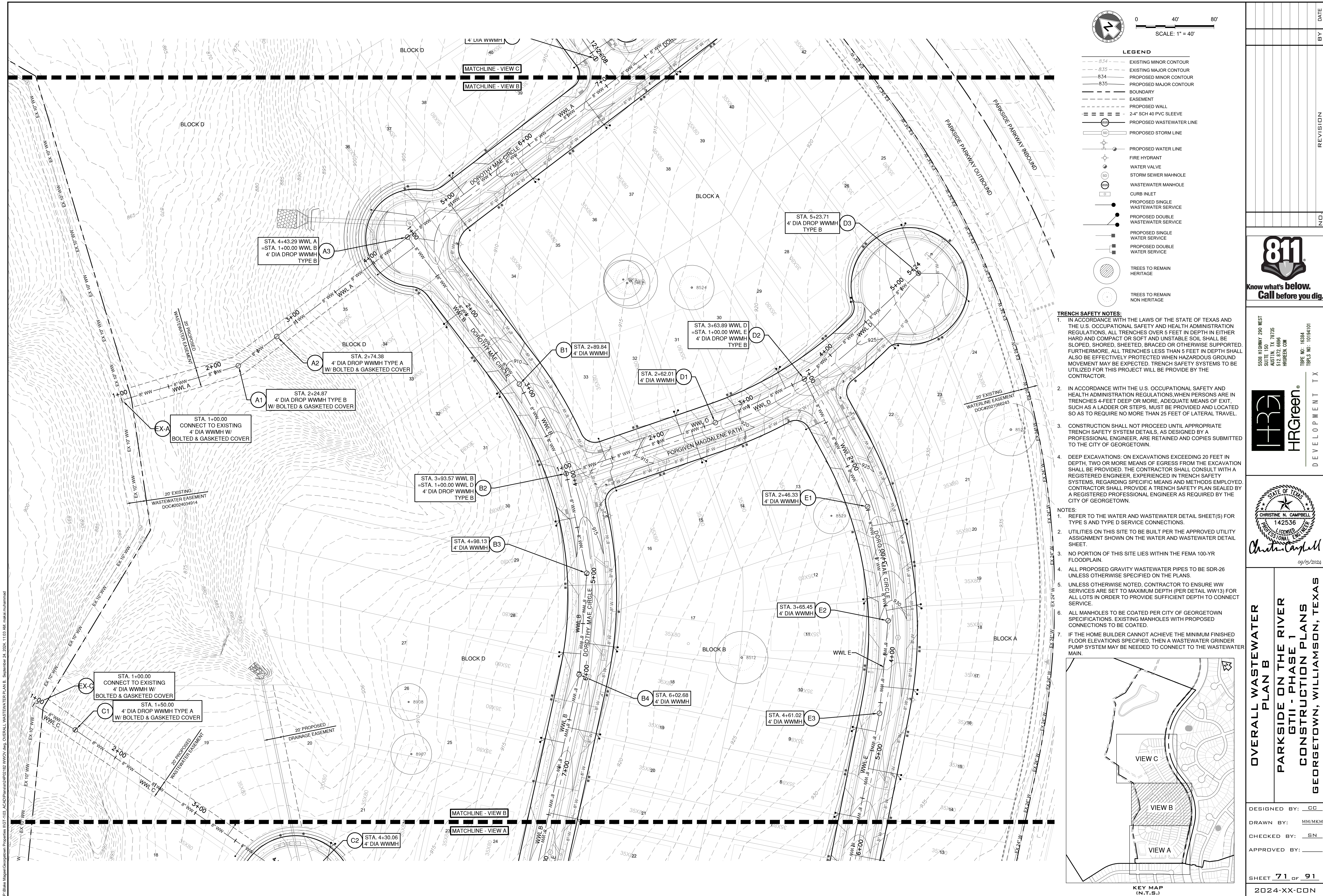
HRGreen

DEVELOPMENT TX

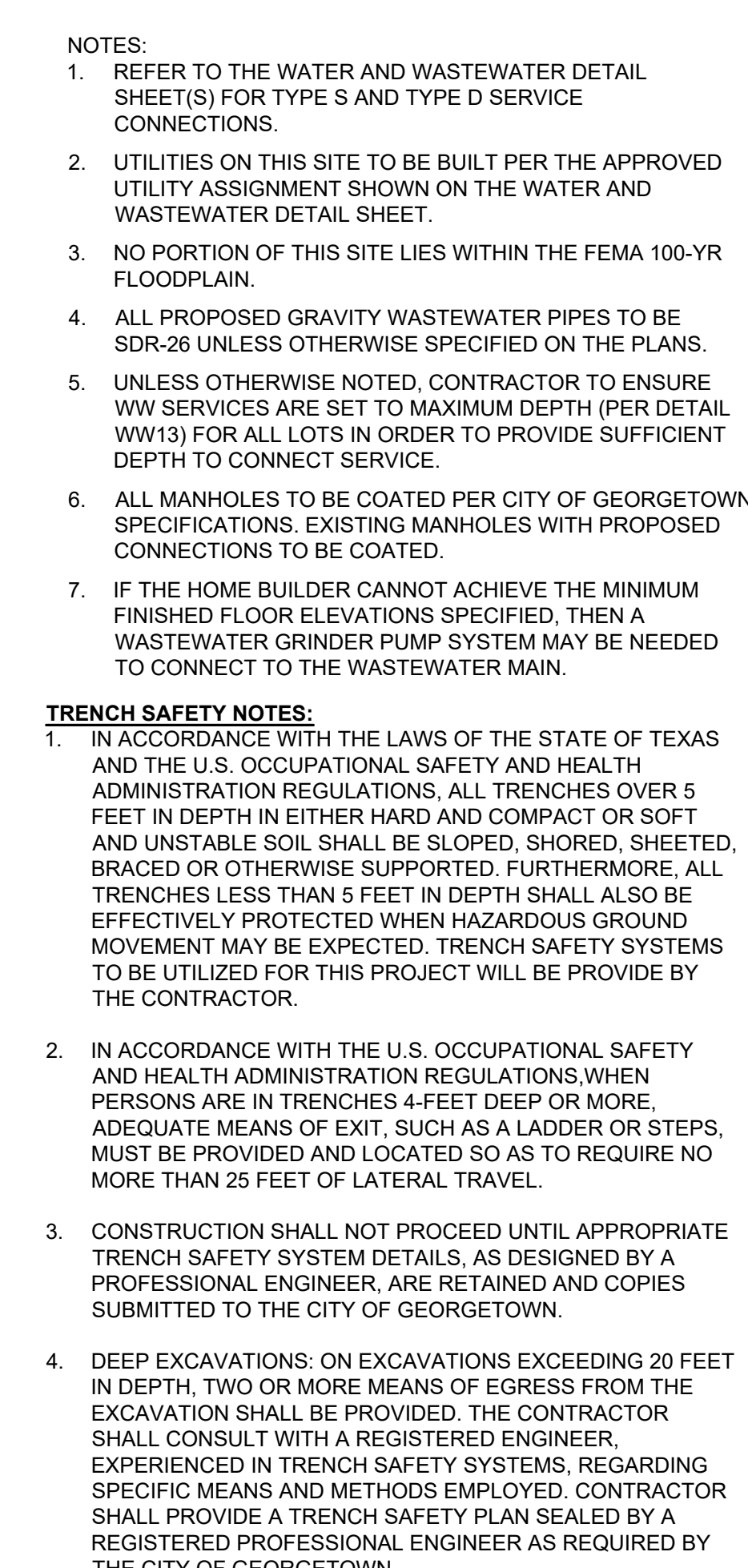
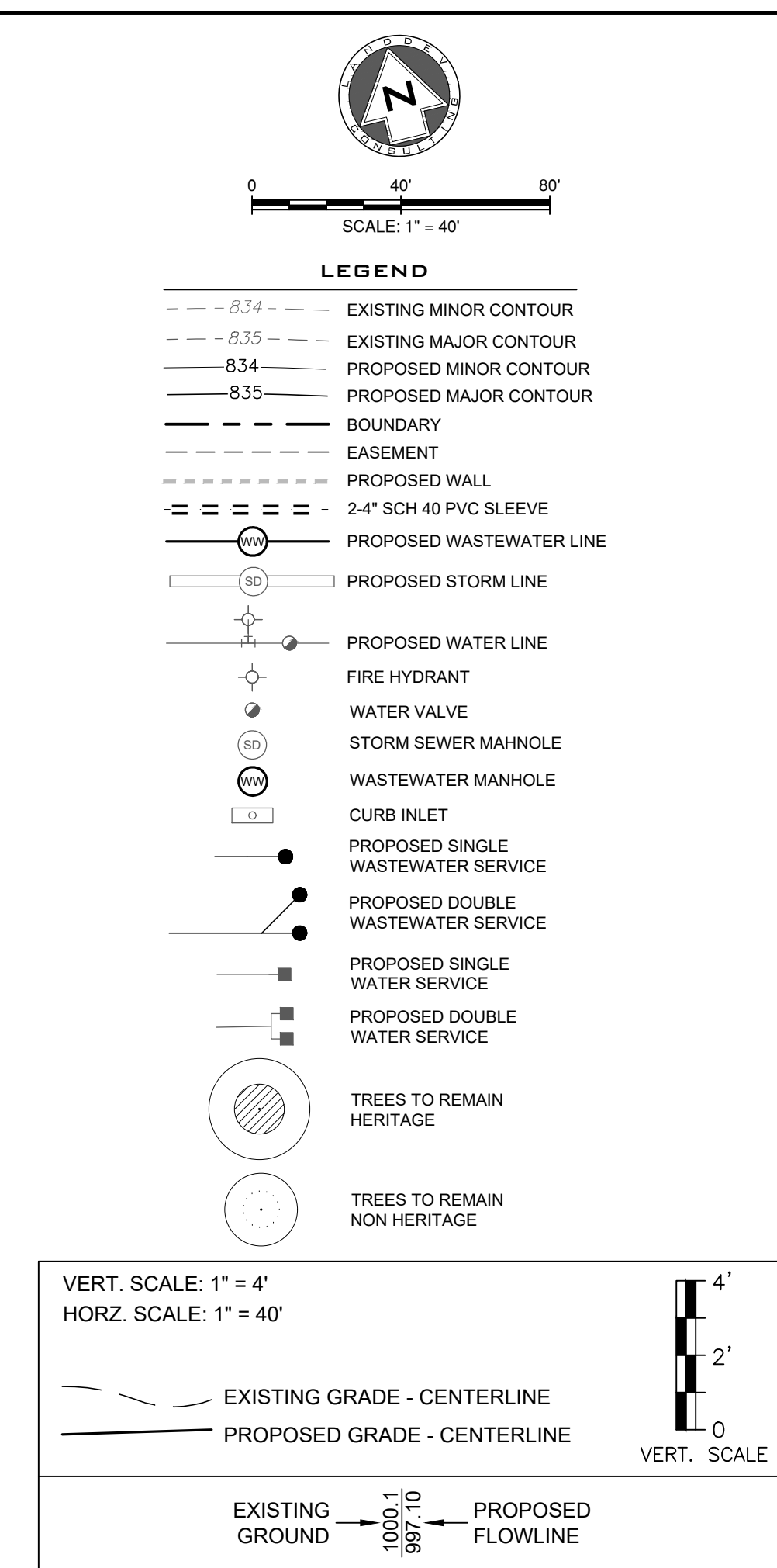
STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
PROFESSIONAL ENGINEER

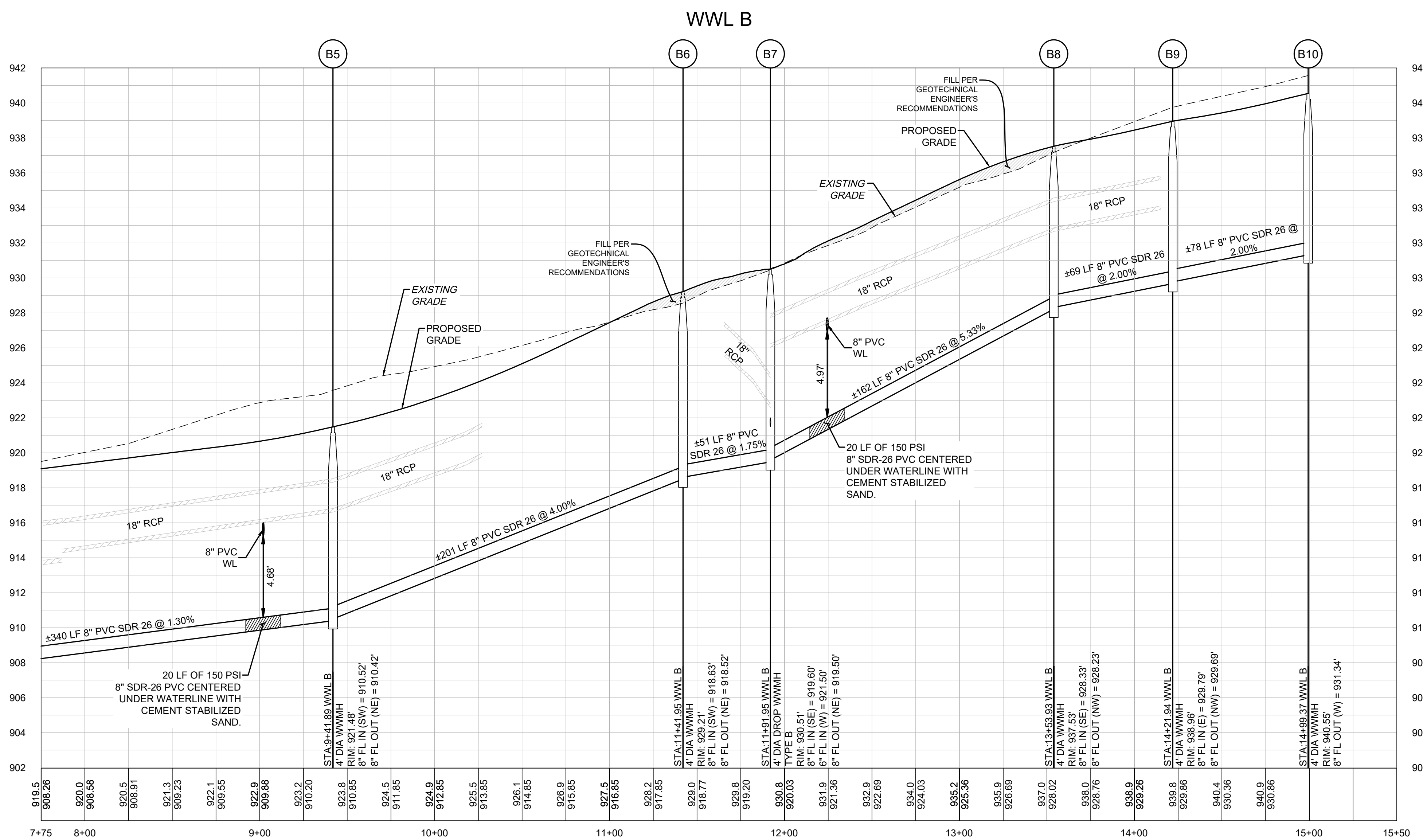
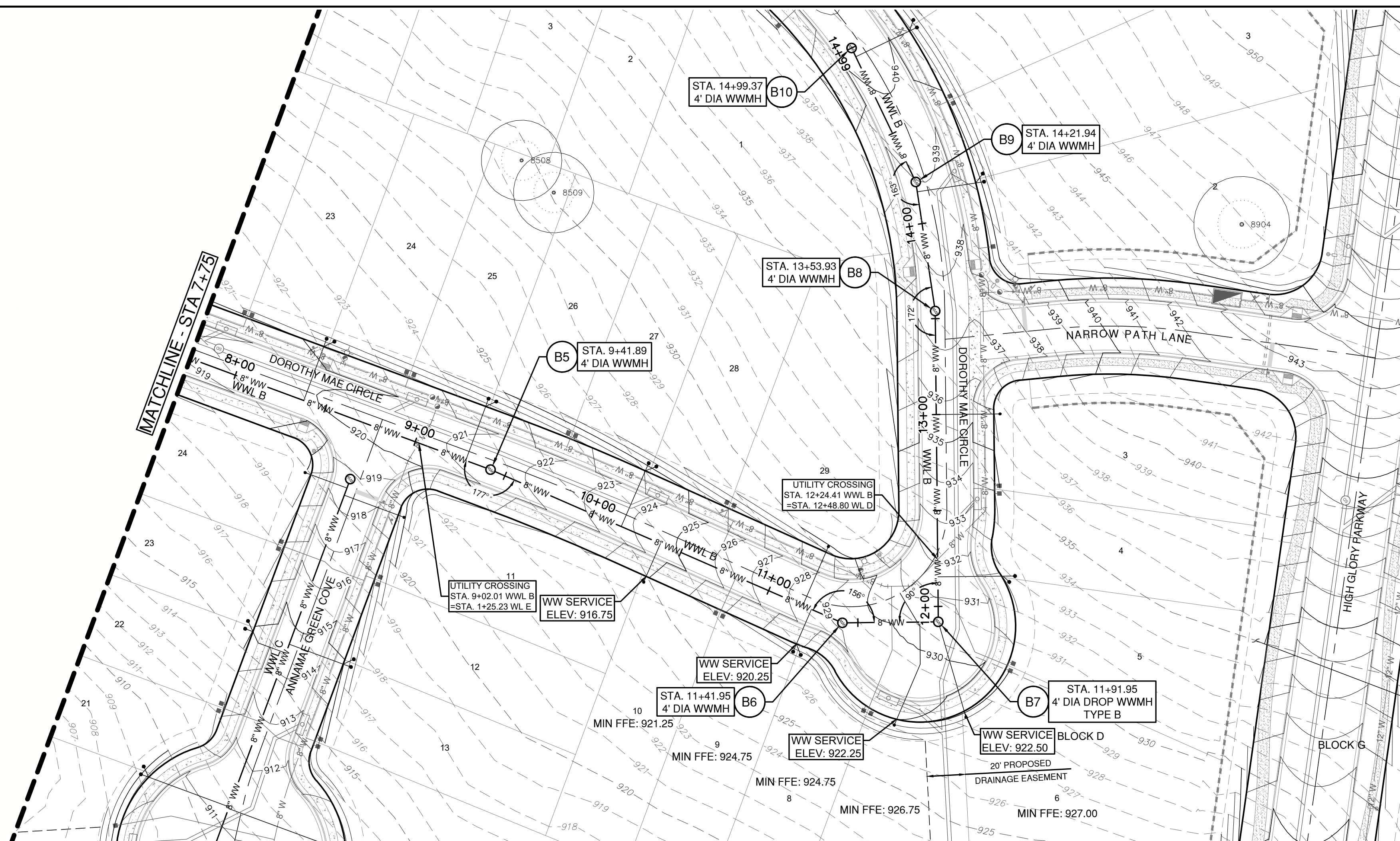
09/13/2024

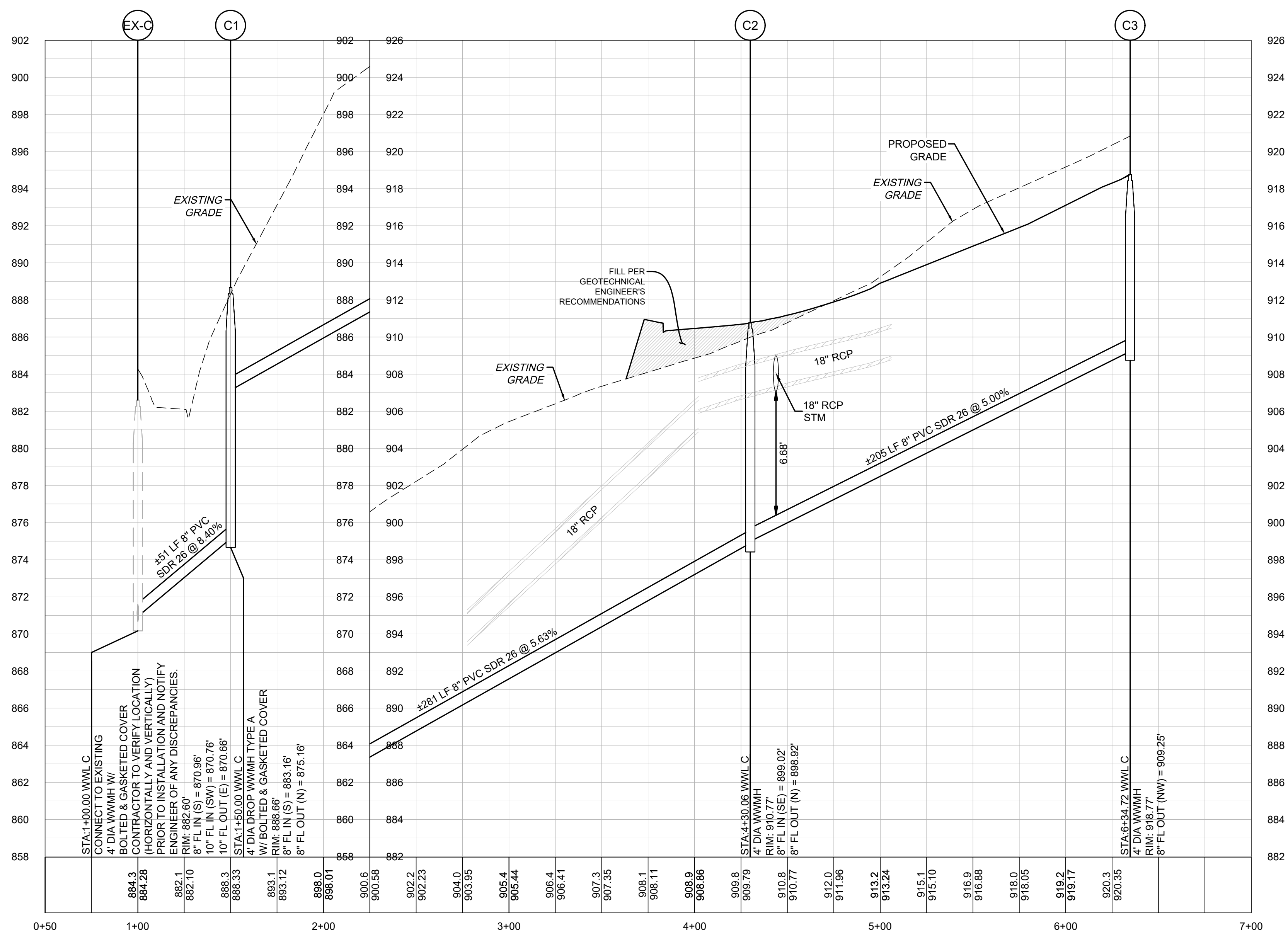
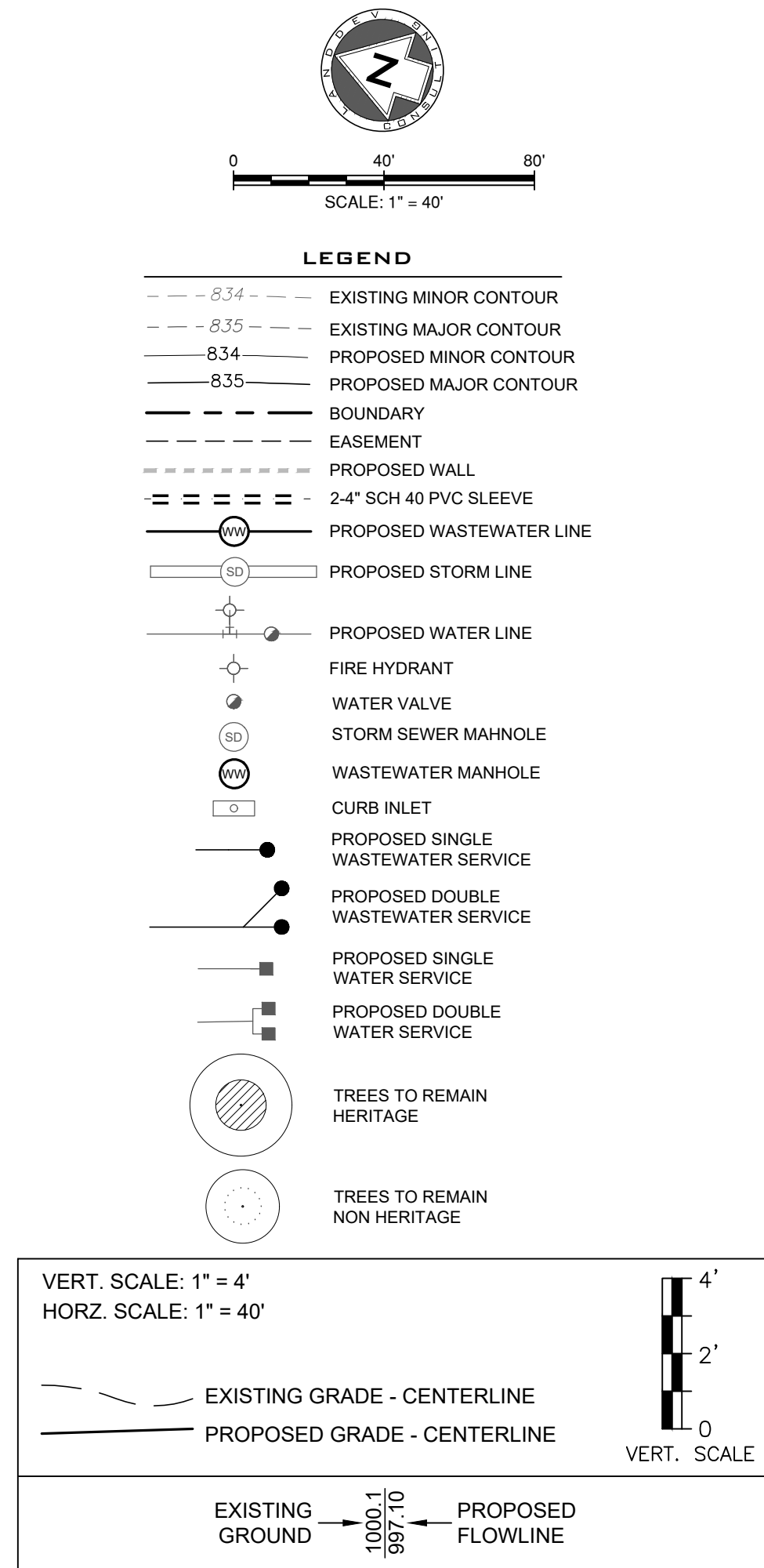
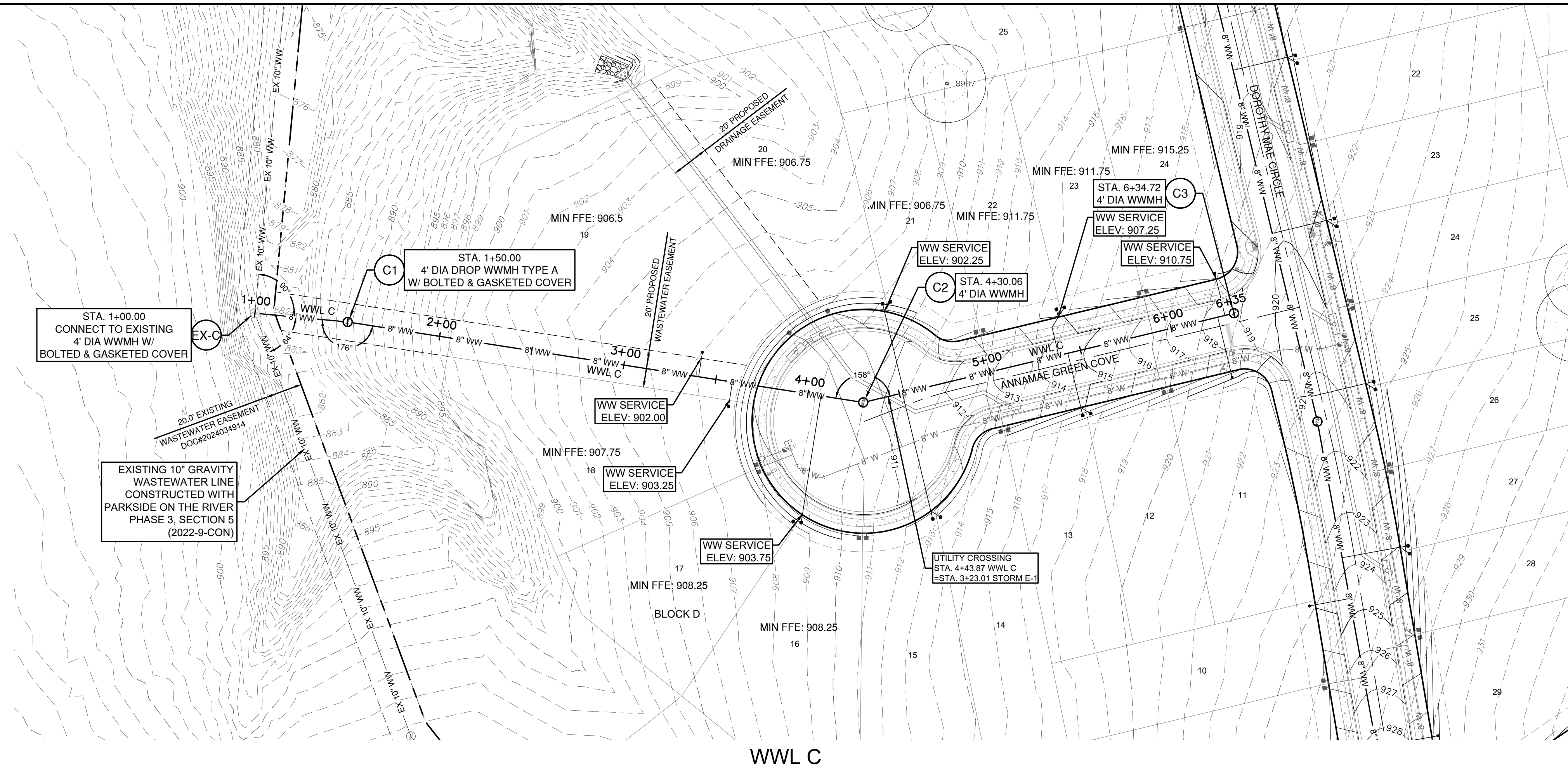
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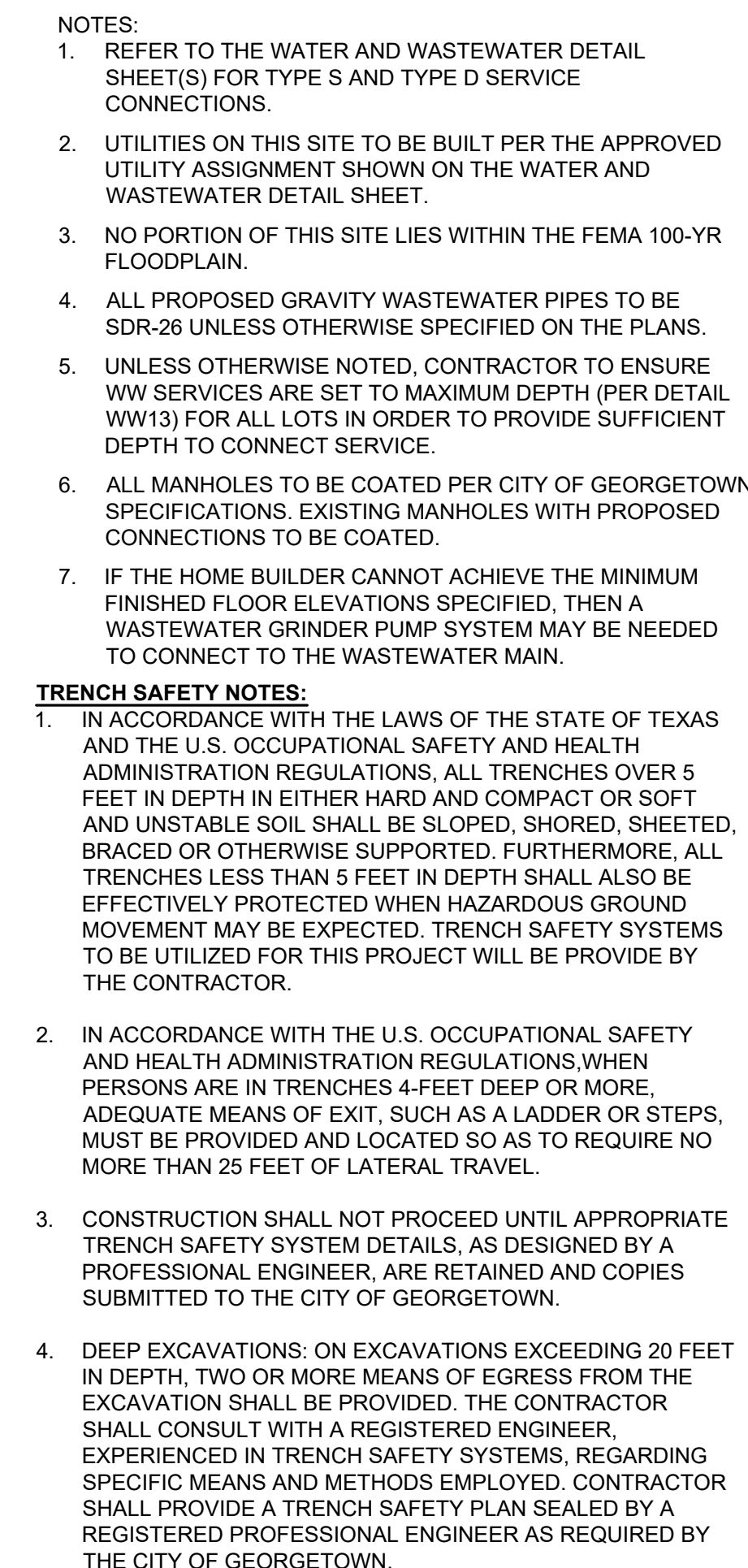
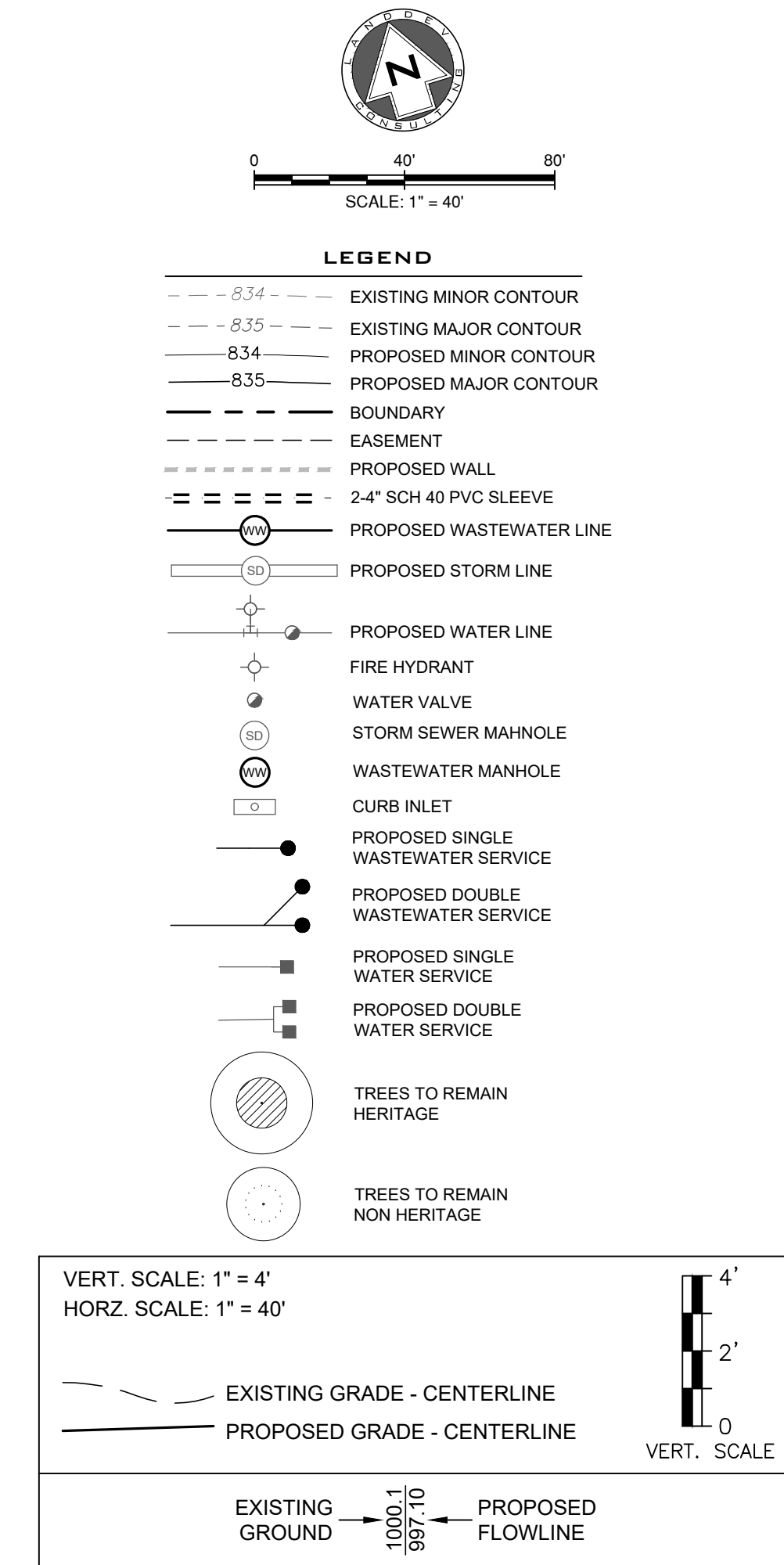


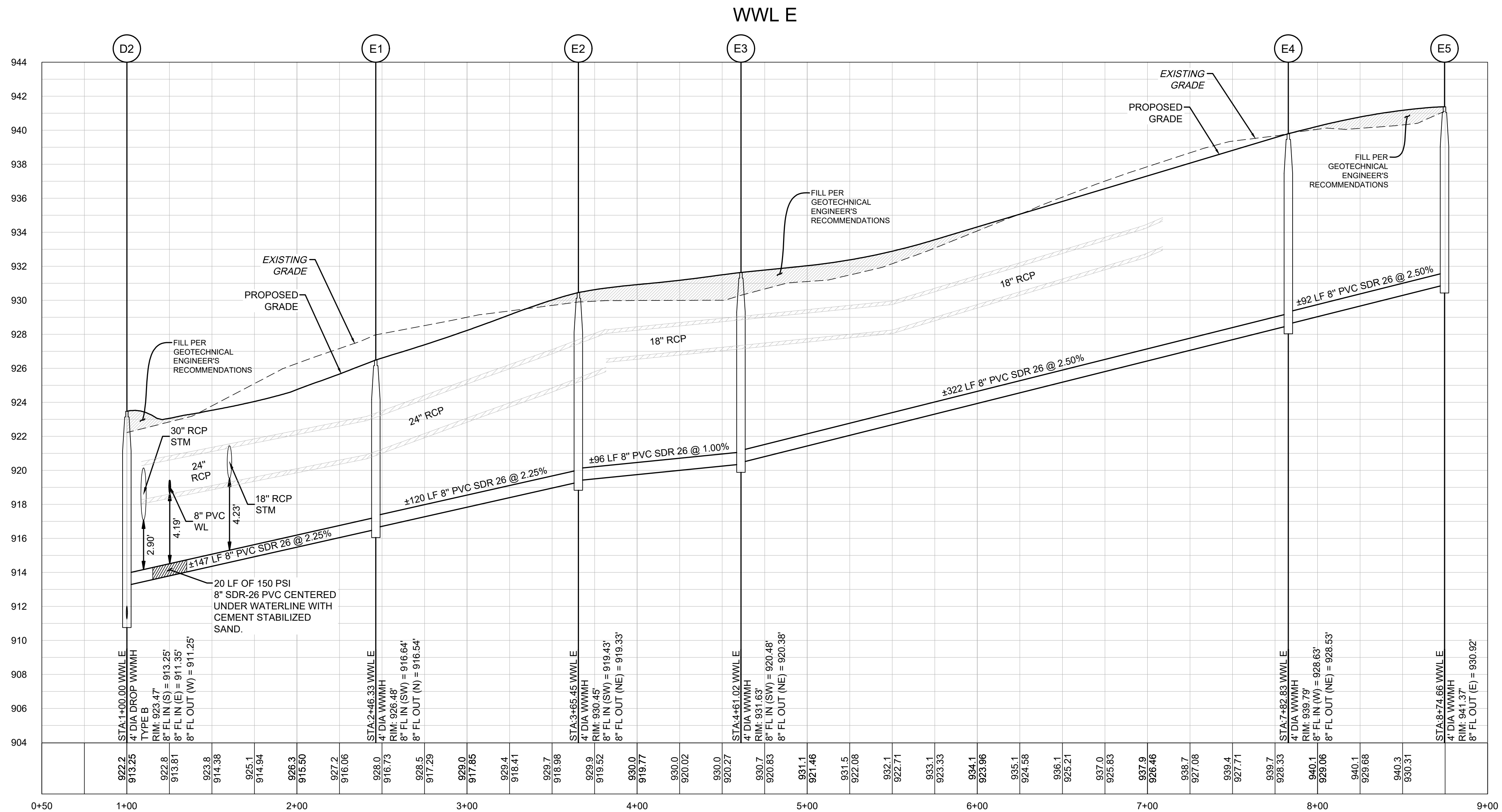
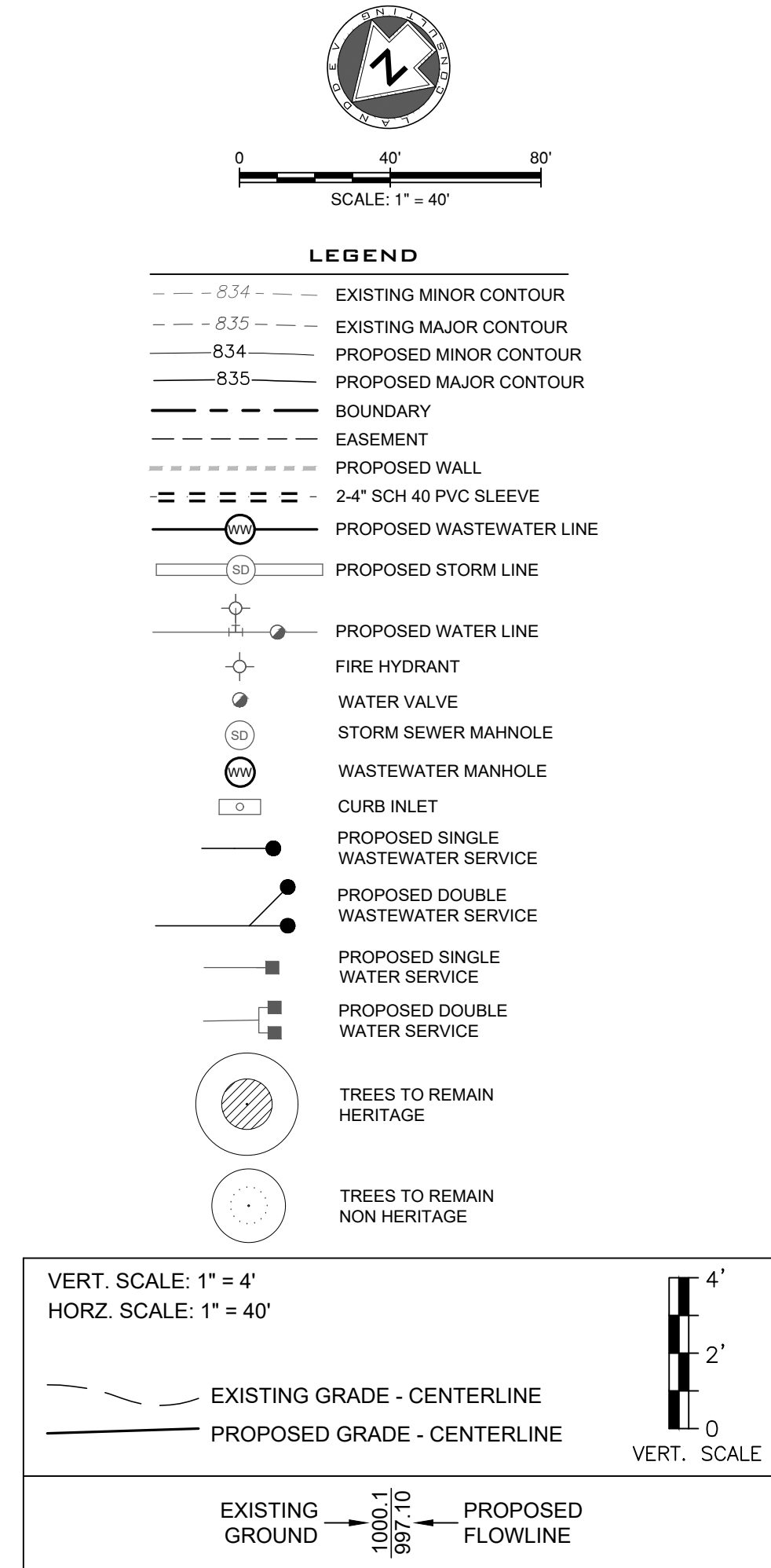
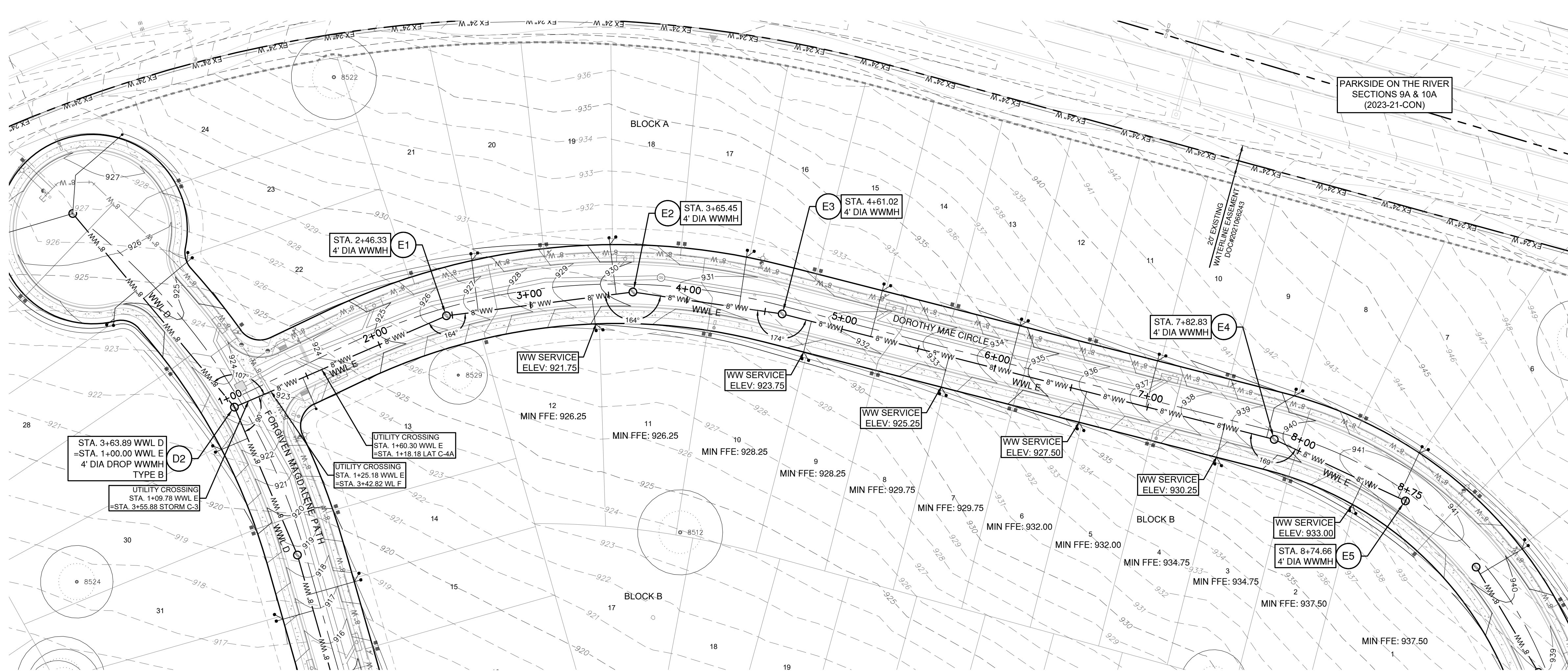




- NOTES:**
- REFER TO THE WATER AND WASTEWATER DETAIL SHEET(S) FOR TYPE S AND TYPE D SERVICE CONNECTIONS.
 - UTILITIES ON THIS SITE TO BE BUILT PER THE APPROVED UTILITY ASSIGNMENT SHOWN ON THE WATER AND WASTEWATER DETAIL SHEET.
 - NO PORTION OF THIS SITE LIES WITHIN THE FEMA 100-YR FLOODPLAIN.
 - ALL PROPOSED GRAVITY WASTEWATER PIPES TO BE SDR-26 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 - UNLESS OTHERWISE NOTED, CONTRACTOR TO ENSURE WW SERVICES ARE SET TO MAXIMUM DEPTH (PER DETAIL WW13) FOR ALL LOTS IN ORDER TO PROVIDE SUFFICIENT DEPTH TO CONNECT SERVICE.
 - ALL MANHOLES TO BE COATED PER CITY OF GEORGETOWN SPECIFICATIONS. EXISTING MANHOLES WITH PROPOSED CONNECTIONS TO BE COATED.
 - IF THE HOME BUILDER CANNOT ACHIEVE THE MINIMUM FINISHED FLOOR ELEVATIONS SPECIFIED, THEN A WASTEWATER GRINDER PUMP SYSTEM MAY BE NEEDED TO CONNECT TO THE WASTEWATER MAIN.
- TRENCH SAFETY NOTES:**
- IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT WILL BE PROVIDED BY THE CONTRACTOR.
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BY		DATE
REVISION		
NO.		
 Know what's below. Call before you dig.		
5508 HIGHWAY 290 WEST SUITE 150 WILSON, TX 75735 CHRISTINE N. CAMPBELL HRRGREEN, CON		
TYPE NO: 10384 TPLS NO: 10194101		
TX		
 HRRGREEN DEVELOPMENT		
 Christine Campbell 09/23/2024		
WWL C PLAN & PROFILE PARKSIDE ON THE RIVER GTII - PHASE 1 CONSTRUCTION PLANS GEORGETOWN, WILLIAMSON, TEXAS		
DESIGNED BY: CC		
DRAWN BY: MM/MKM		
CHECKED BY: SN		
APPROVED BY:		
SHEET 76 OF 91		
2024-XX-CON		





- NOTES:**
- REFER TO THE WATER AND WASTEWATER DETAIL SHEET(S) FOR TYPE S AND TYPE D SERVICE CONNECTIONS.
 - UTILITIES ON THIS SITE TO BE BUILT PER THE APPROVED UTILITY ASSIGNMENT SHOWN ON THE WATER AND WASTEWATER DETAIL SHEET.
 - NO PORTION OF THIS SITE LIES WITHIN THE FEMA 100-YR FLOODPLAIN.
 - ALL PROPOSED GRAVITY WASTEWATER PIPES TO BE SDR-26 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 - UNLESS OTHERWISE NOTED, CONTRACTOR TO ENSURE WW SERVICES ARE SET TO MAXIMUM DEPTH (PER DETAIL WW13) FOR ALL LOTS IN ORDER TO PROVIDE SUFFICIENT DEPTH TO CONNECT SERVICE.
 - ALL MANHOLES TO BE COATED PER CITY OF GEORGETOWN SPECIFICATIONS. EXISTING MANHOLES WITH PROPOSED CONNECTIONS TO BE COATED.
 - IF THE HOME BUILDER CANNOT ACHIEVE THE MINIMUM FINISHED FLOOR ELEVATIONS SPECIFIED, THEN A WASTEWATER GRINDER PUMP SYSTEM MAY BE NEEDED TO CONNECT TO THE WASTEWATER MAIN.
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WWL E PLAN & PROFILE
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC
DRAWN BY: MM/MCM
CHECKED BY: SN
APPROVED BY: _____

SHEET **78** OF **91**
2024-XX-CON

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

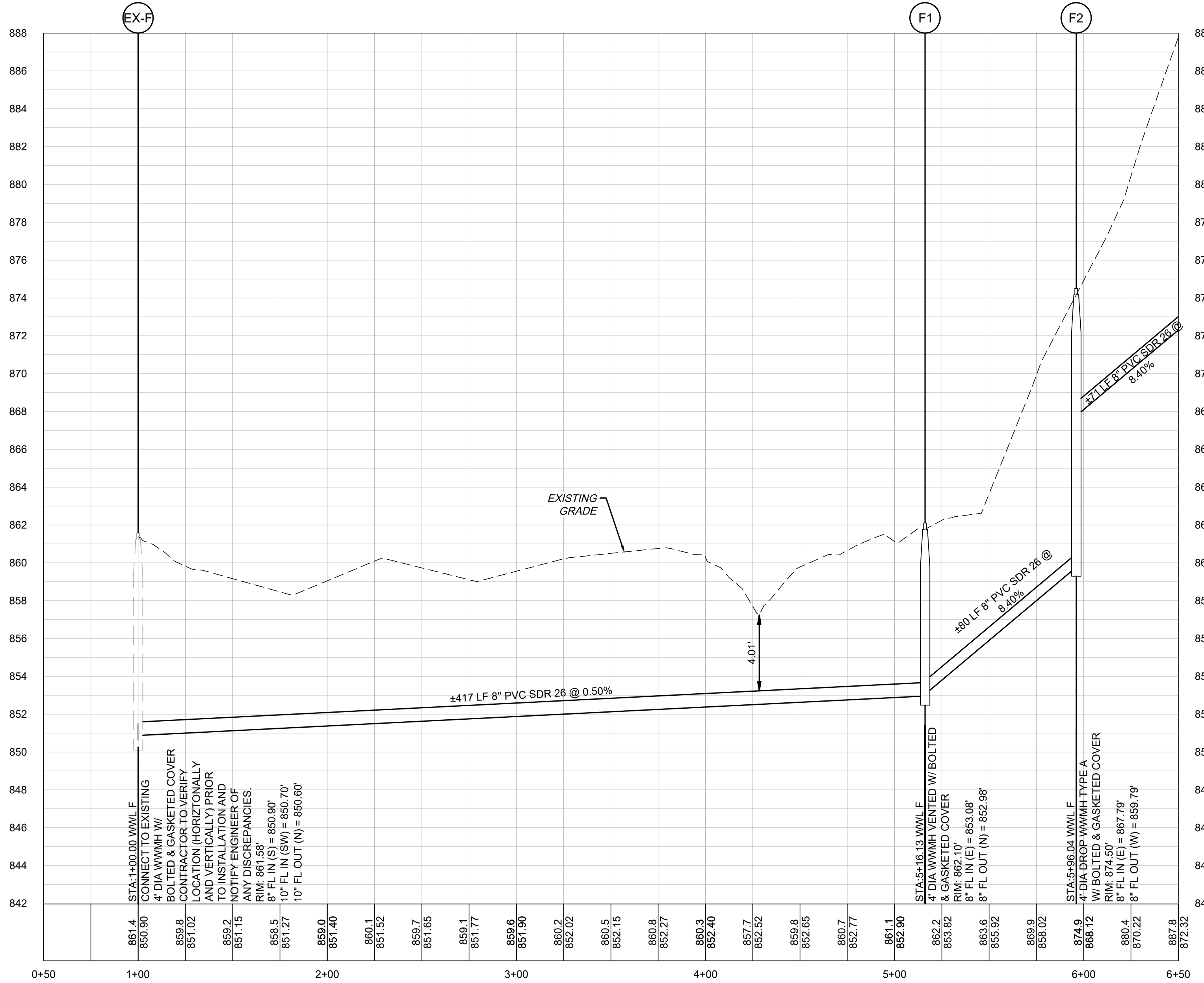
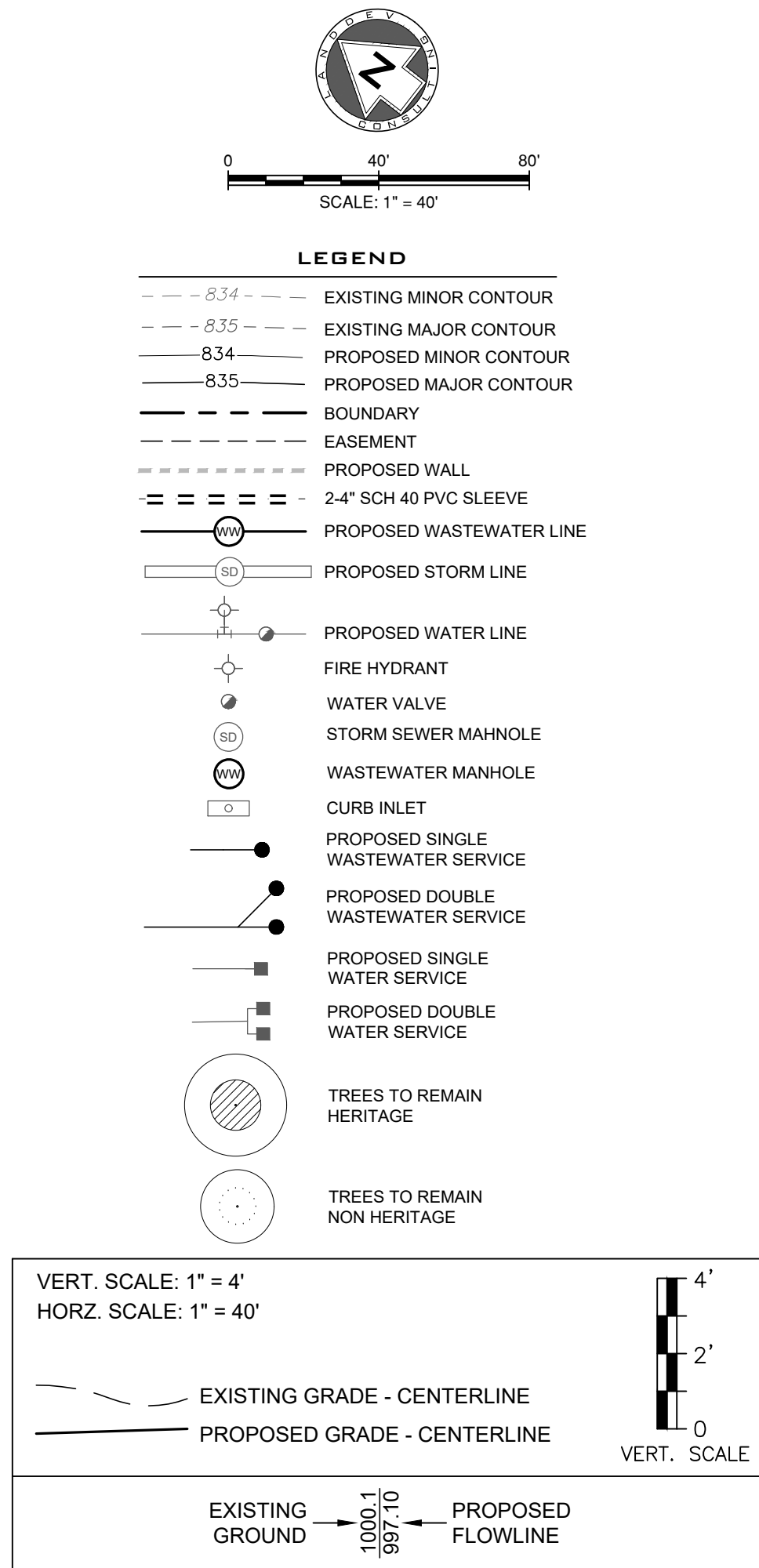
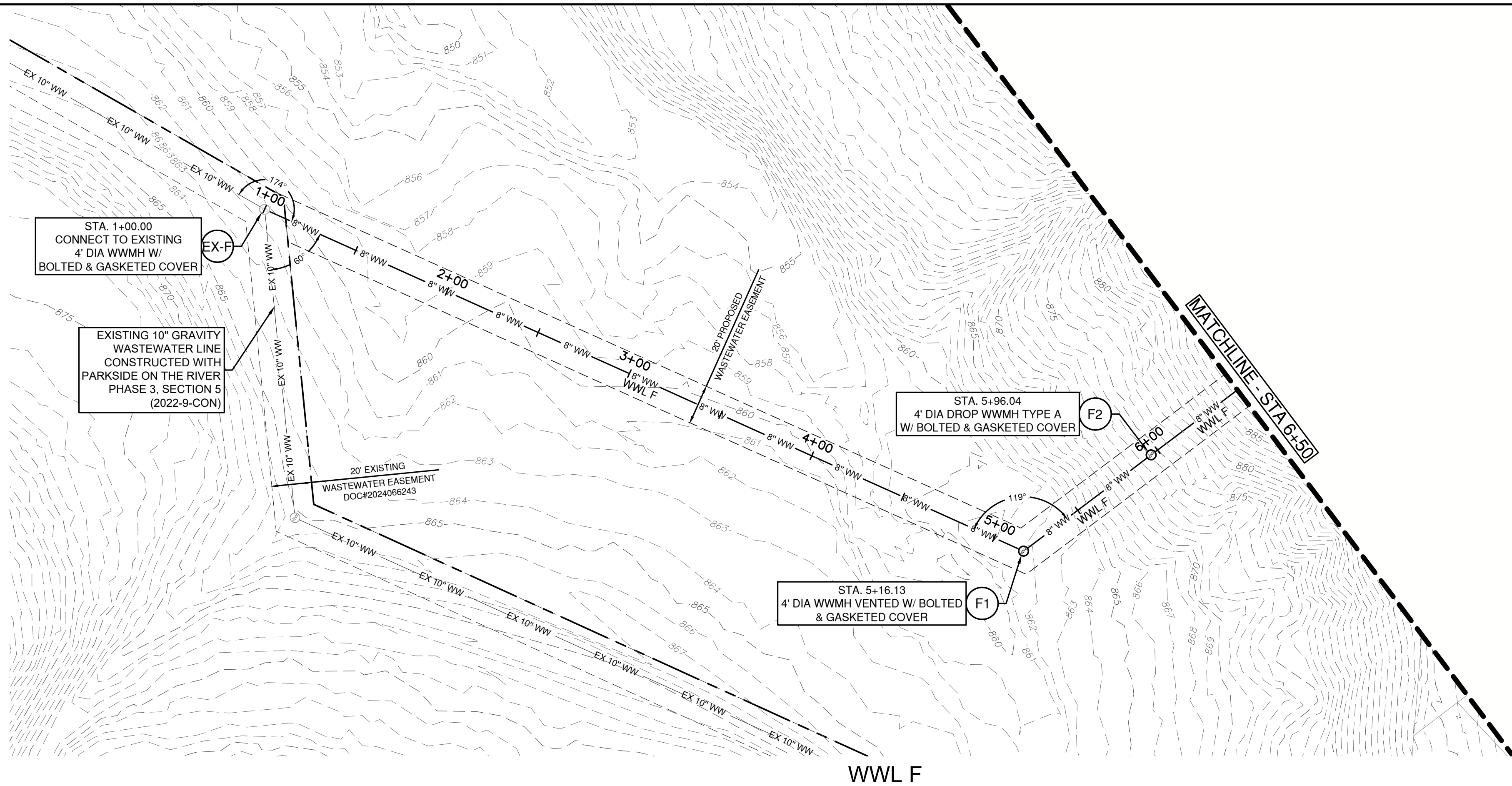
5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75065
817.281.1111
HRGREEN.COM

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DEVELOPMENT TX

STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
PROFESSIONAL ENGINEER
09/19/2024

TPE NO: 16384
TPELS NO: 10194101

Plot Style: LandDev_Geotab.ctb
Template: LDC_C102022.DWT
P:\Blake_Maged\Georgetown Properties\1021103_ACO2\Parsons\0402182_WWPP_WWL_F.dwg WWL F PLAN & PROFILE 1+00 - 6+50 September 24, 2024 11:19 AM mkaal.muhammad



- NOTES:
- REFER TO THE WATER AND WASTEWATER DETAIL SHEET(S) FOR TYPE S AND TYPE D SERVICE CONNECTIONS.
 - UTILITIES ON THIS SITE TO BE BUILT PER THE APPROVED UTILITY ASSIGNMENT SHOWN ON THE WATER AND WASTEWATER DETAIL SHEET.
 - NO PORTION OF THIS SITE LIES WITHIN THE FEMA 100-YR FLOODPLAIN.
 - ALL PROPOSED GRAVITY WASTEWATER PIPES TO BE SDR-26 UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 - UNLESS OTHERWISE NOTED, CONTRACTOR TO ENSURE WW SERVICES ARE SET TO MAXIMUM DEPTH (PER DETAIL WW13) FOR ALL LOTS IN ORDER TO PROVIDE SUFFICIENT DEPTH TO CONNECT SERVICE.
 - ALL MANHOLES TO BE COATED PER CITY OF GEORGETOWN SPECIFICATIONS. EXISTING MANHOLES WITH PROPOSED CONNECTIONS TO BE COATED.
 - IF THE HOME BUILDER CANNOT ACHIEVE THE MINIMUM FINISHED FLOOR ELEVATIONS SPECIFIED, THEN A WASTEWATER GRINDER PUMP SYSTEM MAY BE NEEDED TO CONNECT TO THE WASTEWATER MAIN.
- TRENCH SAFETY NOTES:
- IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT WILL BE PROVIDED BY THE CONTRACTOR.
 - IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4-FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
 - CONSTRUCTION SHALL NOT PROCEED UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE RETAINED AND COPIES SUBMITTED TO THE CITY OF GEORGETOWN.
 - DEEP EXCAVATIONS: ON EXCAVATIONS EXCEEDING 20 FEET IN DEPTH, TWO OR MORE MEANS OF EGRESS FROM THE EXCAVATION SHALL BE PROVIDED. THE CONTRACTOR SHALL CONSULT WITH A REGISTERED ENGINEER, EXPERIENCED IN TRENCH SAFETY SYSTEMS, REGARDING SPECIFIC MEANS AND METHODS EMPLOYED. CONTRACTOR SHALL PROVIDE A TRENCH SAFETY PLAN SEALED BY A REGISTERED PROFESSIONAL ENGINEER AS REQUIRED BY THE CITY OF GEORGETOWN.

NO.	REVISION	BY	DATE

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5508 HIGHWAY 290 WEST
SUITE 150
WILSON, TX 76795
CHRISTINE N. CAMPBELL
HRGREEN, INC.

TYPE NO: 10384
TPLS NO: 10194101

HRGreen
DEVELOPMENT TX

Christine Campbell
09/03/2024

WWL F PLAN & PROFILE
1+00 - 6+50
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

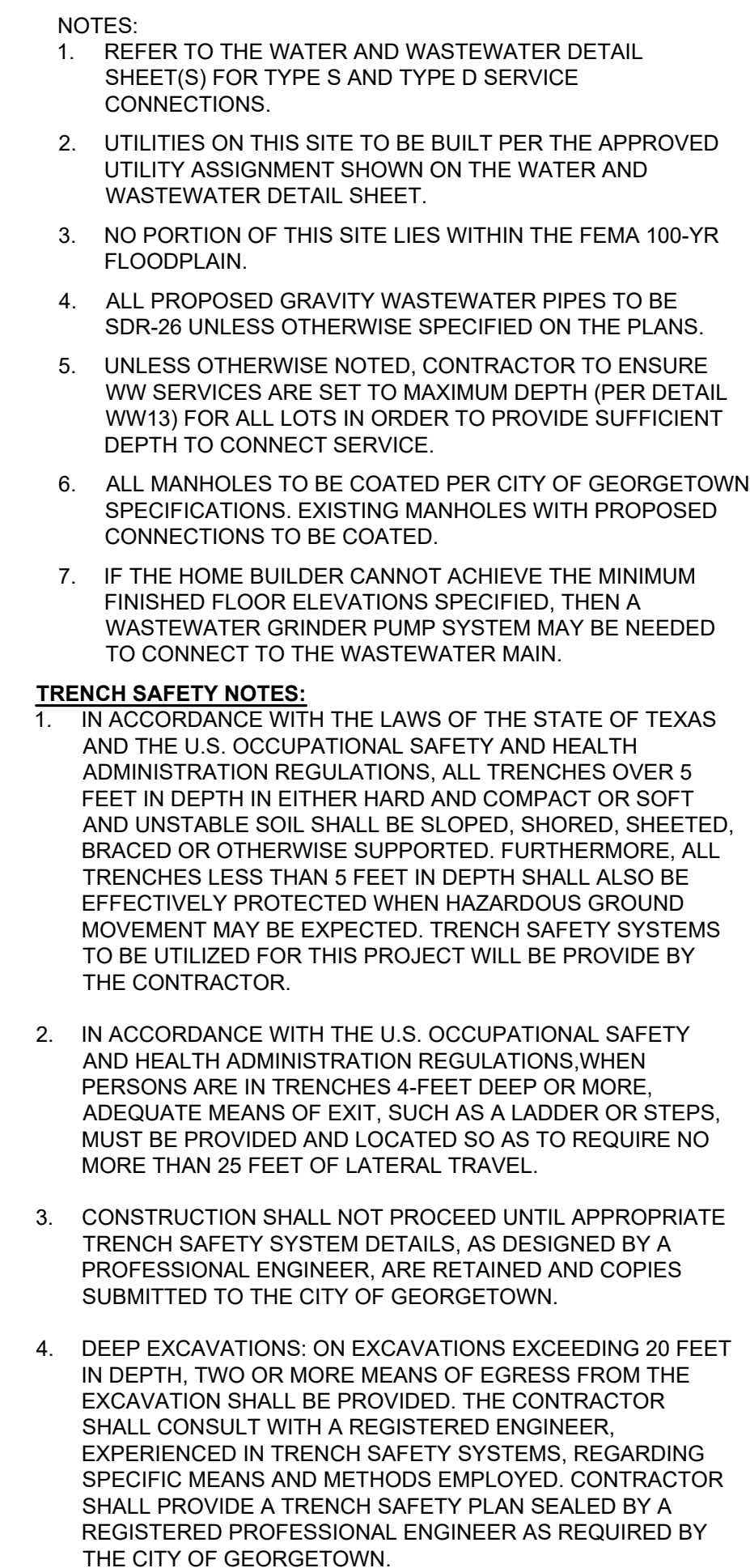
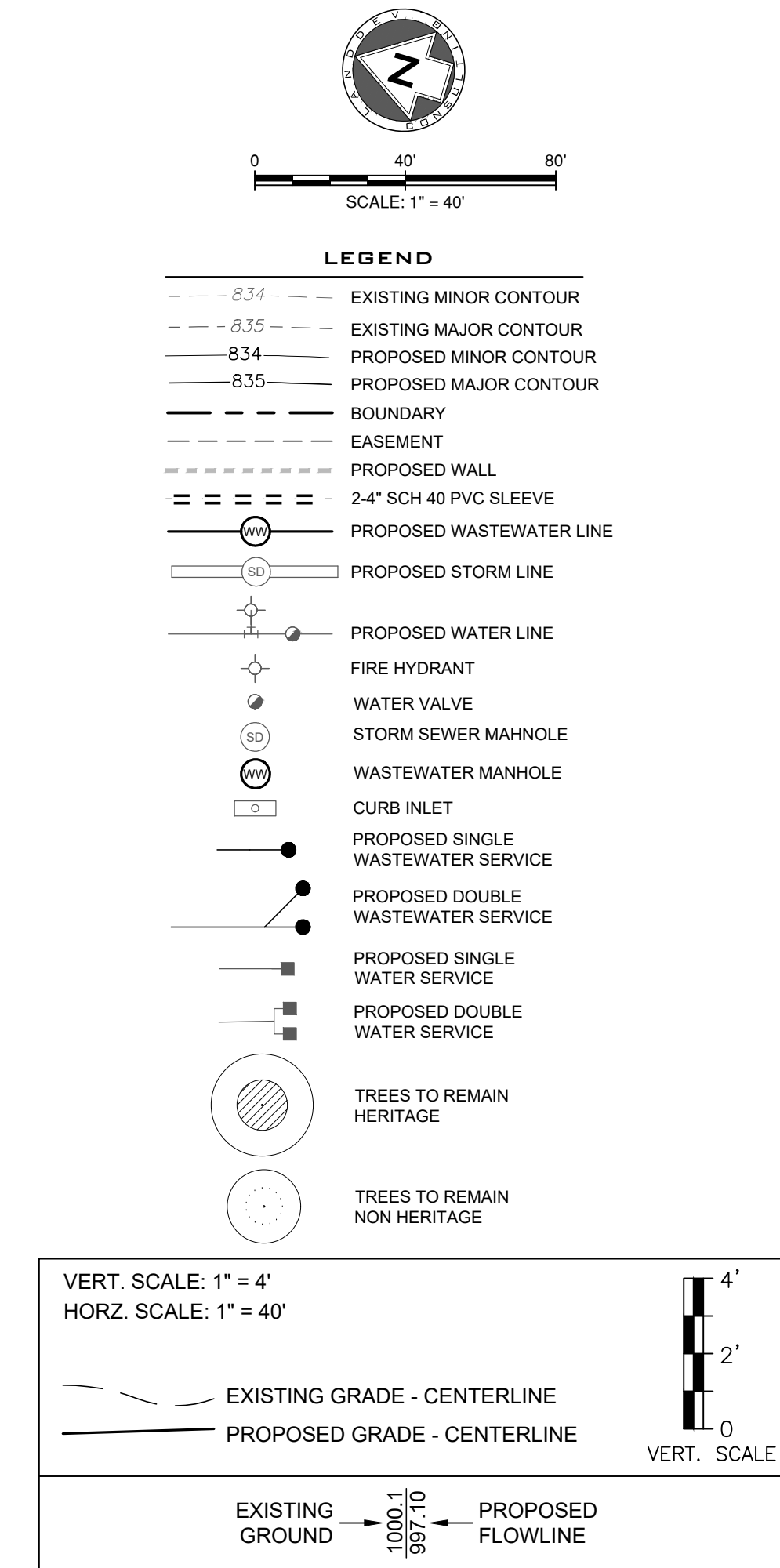
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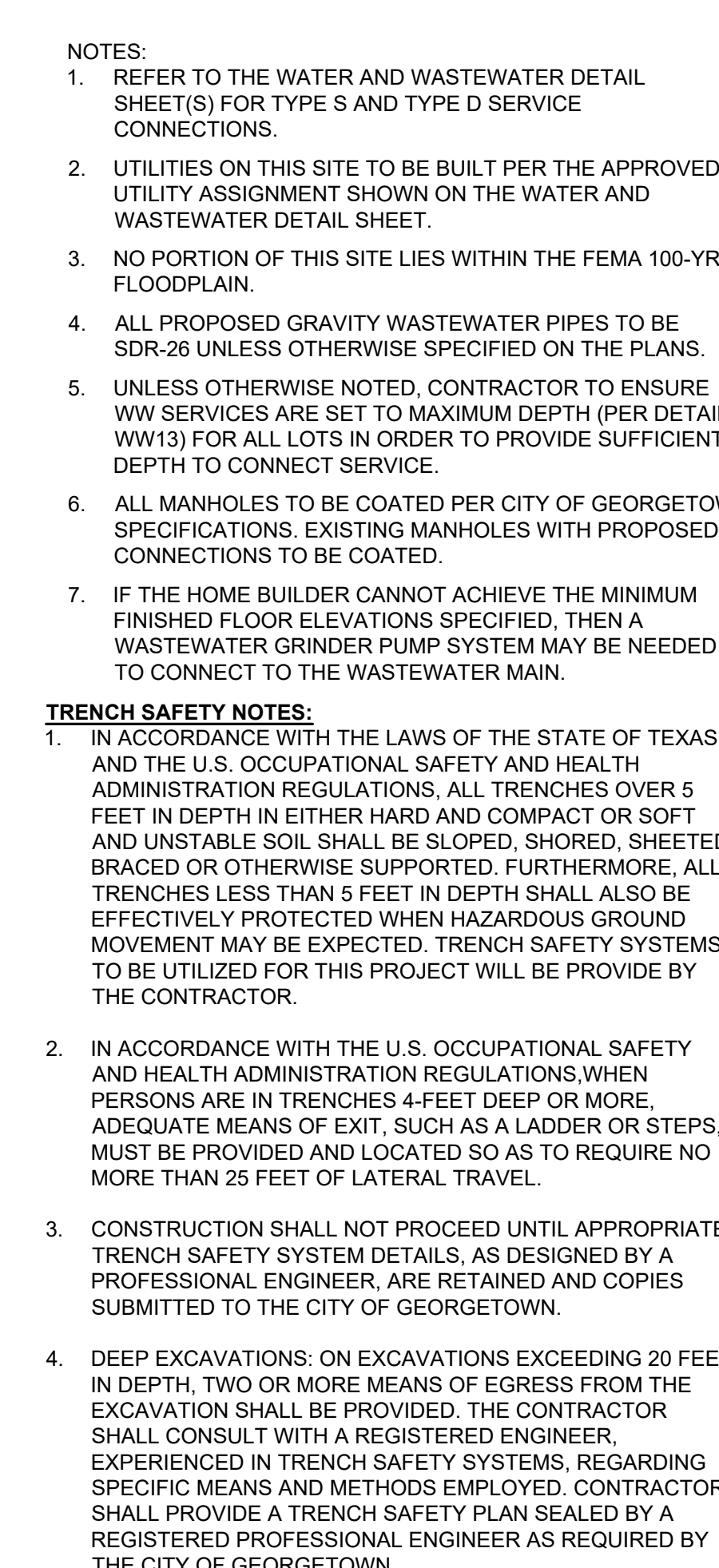
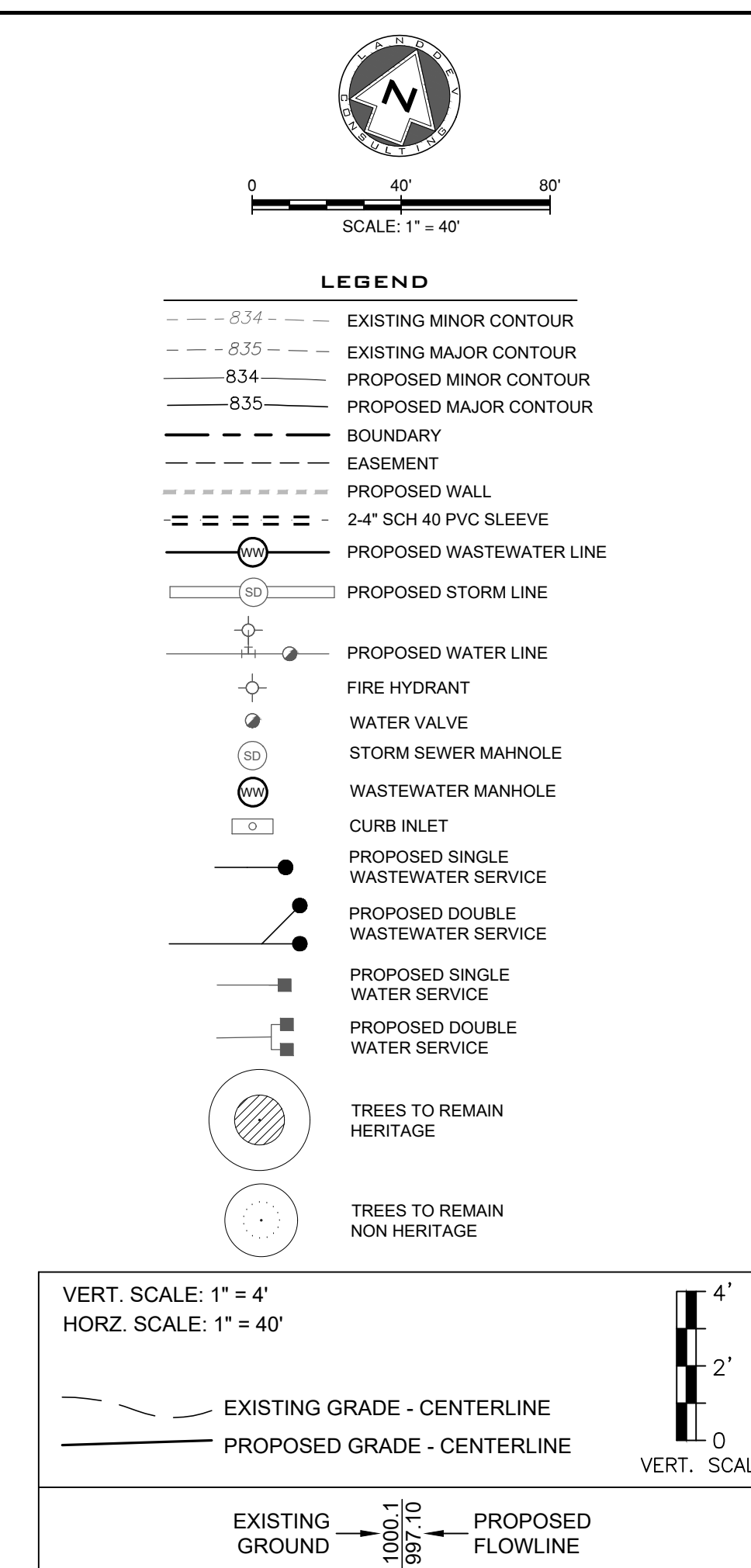
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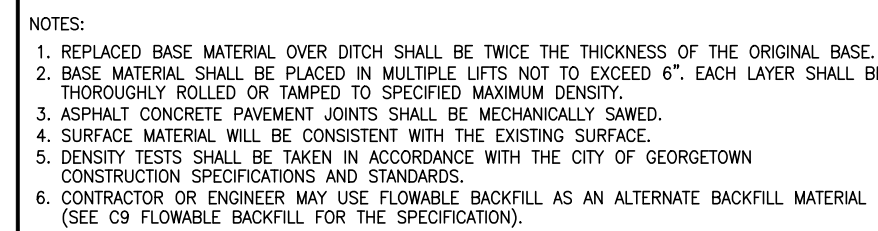
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APPROVED BY: _____

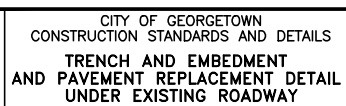
SHEET **79** OF **91**
2024-XX-CON

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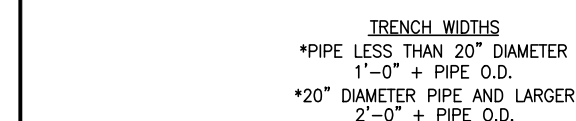




The Architect/Engineer assumes responsibility for appropriate use of this standard.



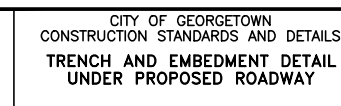
ADOPTED 6/21/200



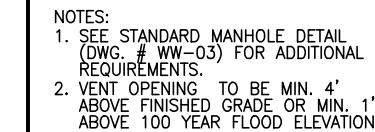
NOTES:

1. DENSITY TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS.
2. CONTRACTOR OR ENGINEER MAY USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL (SEE C9 FLOWABLE BACKFILL FOR THE SPECIFICATION).

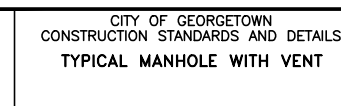
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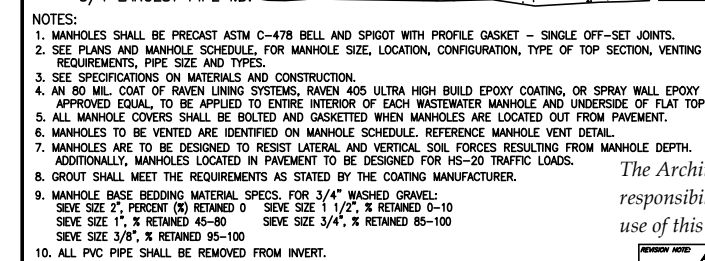
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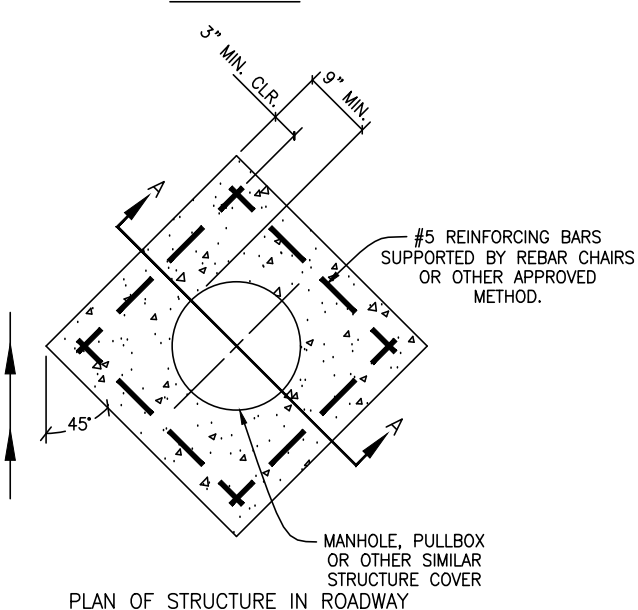
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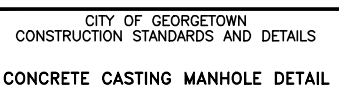
The Architect/Engineer assumes responsibility for appropriate use of this standard.



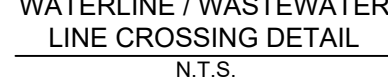
ADOPTED 6/21/2004



NOTE:
INSTALLATION OF THE CONCRETE CASTING IS REQUIRED
FOR AND APPLIES TO ALL TYPES OF
MANHOLES TO BE LOCATED IN THE ROADWAY



APPROVED 6/21/2005



SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.	STANDARD 520-AW-3 OF 4



: 16384
D: 10194101



DEVELOPMENT



09/13/2024

WASTEWATER DETAILS

DESIGNED BY: CC

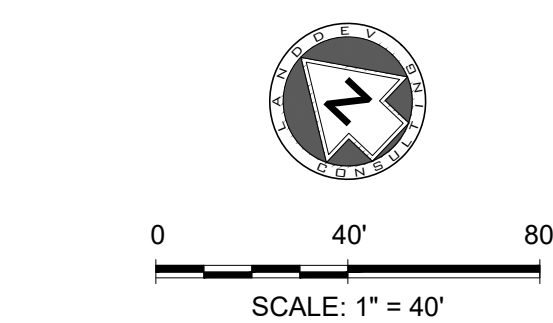
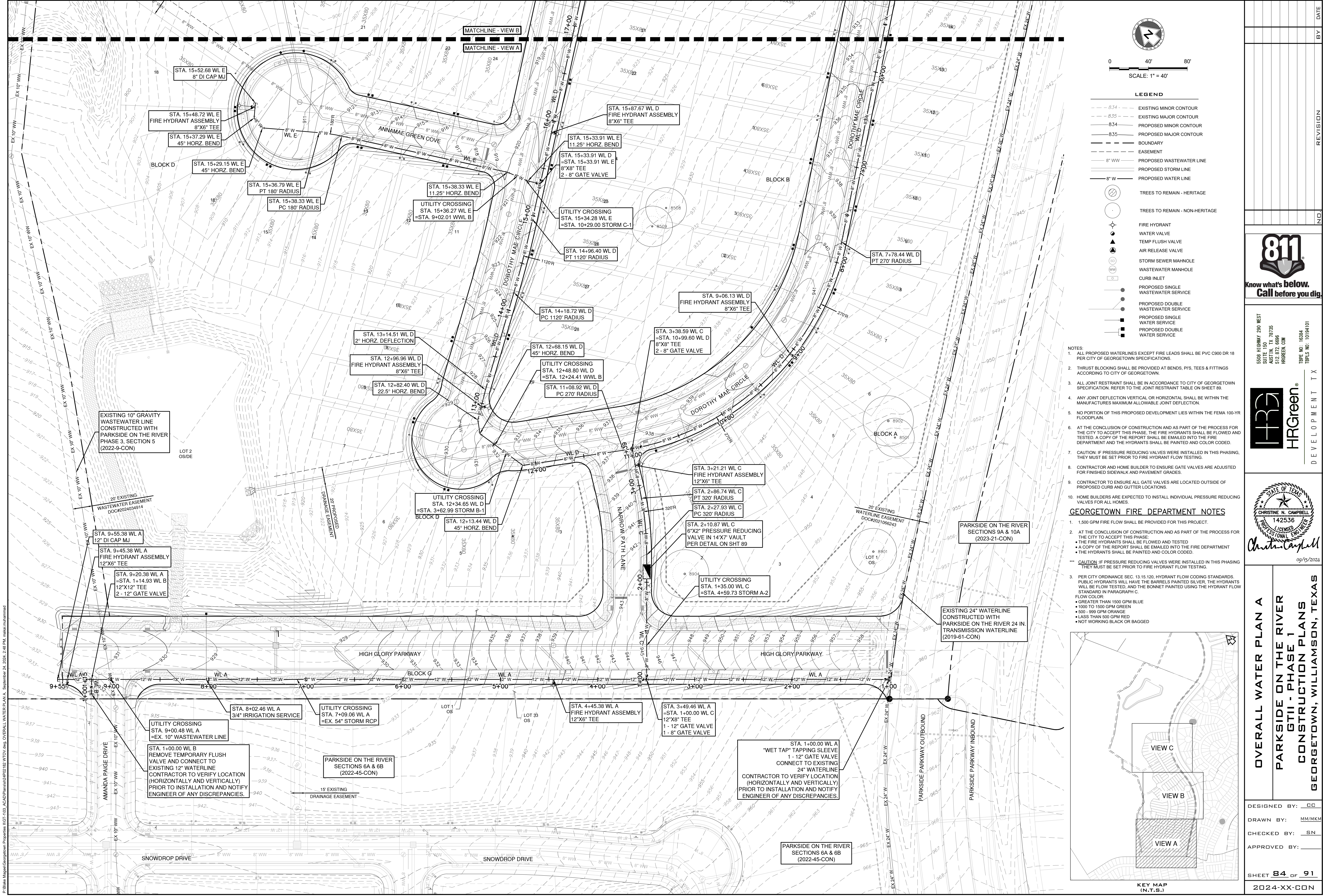
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APPROVED BY: _____

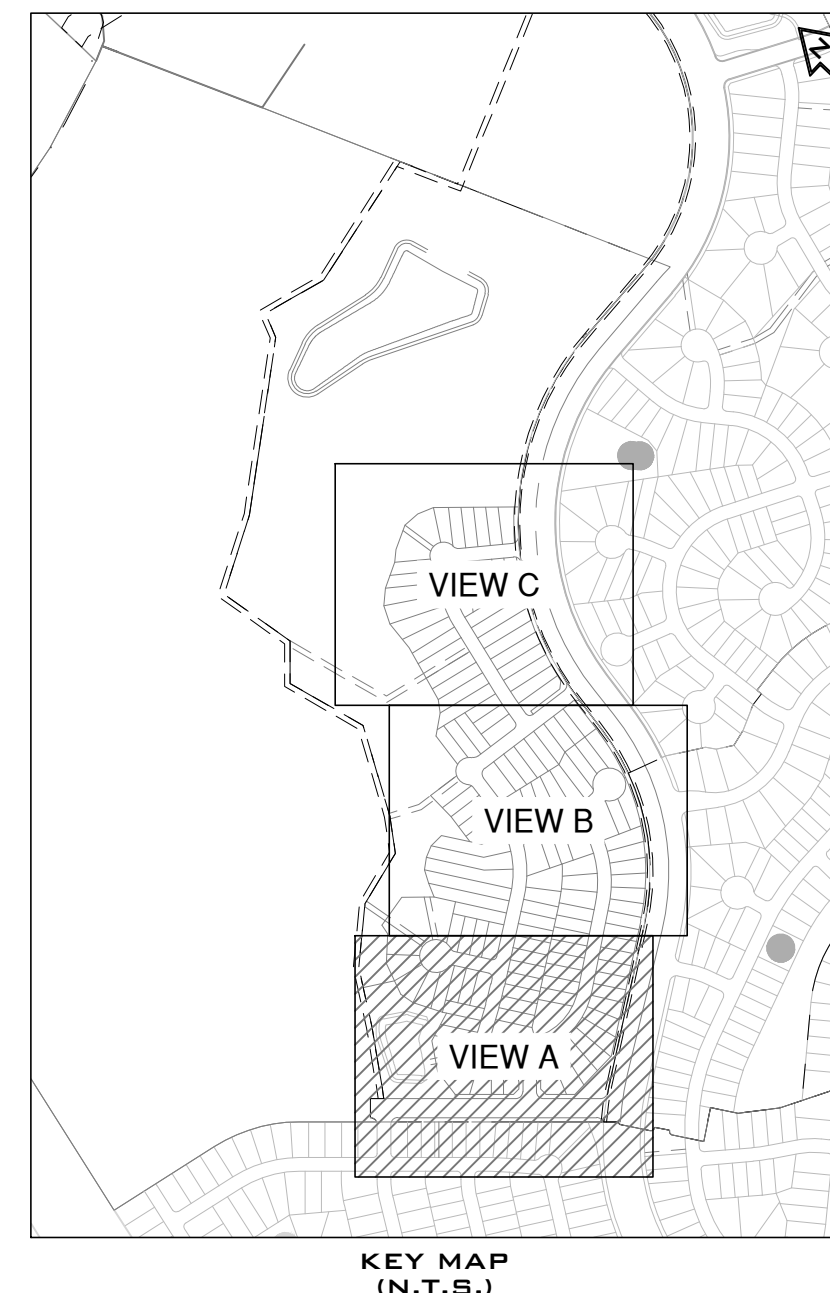
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2024-XX-CON

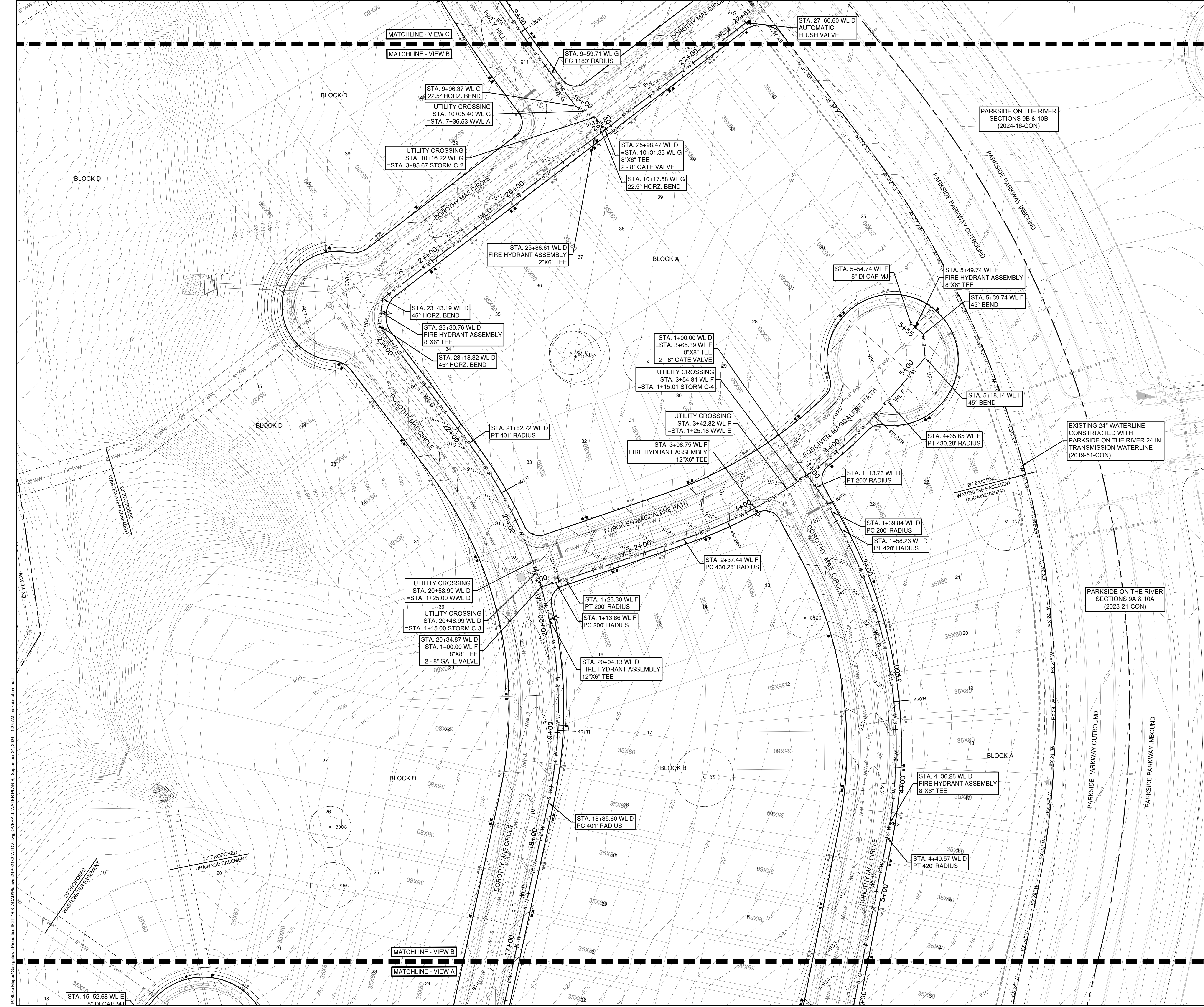


- LEGEND**
- 8.34 --- EXISTING MINOR CONTOUR
 - 8.35 --- EXISTING MAJOR CONTOUR
 - 8.34 --- PROPOSED MINOR CONTOUR
 - 8.35 --- PROPOSED MAJOR CONTOUR
 - --- BOUNDARY
 - --- EASEMENT
 - 8" WW --- PROPOSED WASTEWATER LINE
 - --- PROPOSED STORM LINE
 - 8" W --- PROPOSED WATER LINE
 - TREES TO REMAIN - HERITAGE
 - TREES TO REMAIN - NON-HERITAGE
 - FIRE HYDRANT
 - WATER VALVE
 - TEMP FLUSH VALVE
 - AIR RELEASE VALVE
 - STORM SEWER MANHOLE
 - WASTEWATER MANHOLE
 - CURB INLET
 - PROPOSED SINGLE WASTEWATER SERVICE
 - PROPOSED DOUBLE WASTEWATER SERVICE
 - PROPOSED SINGLE WATER SERVICE
 - PROPOSED DOUBLE WATER SERVICE

- NOTES:**
1. ALL PROPOSED WATERLINES EXCEPT FIRE LEADS SHALL BE PVC C900 DR 18 PER CITY OF GEORGETOWN SPECIFICATIONS.
 2. THRUST BLOCKING SHALL BE PROVIDED AT BENDS, PIS, TEES & FITTINGS ACCORDING TO CITY OF GEORGETOWN.
 3. ALL JOINT RESTRAINT SHALL BE IN ACCORDANCE TO CITY OF GEORGETOWN SPECIFICATION. REFER TO THE JOINT RESTRAINT TABLE ON SHEET 89.
 4. ANY JOINT DEFLECTION VERTICAL OR HORIZONTAL SHALL BE WITHIN THE MANUFACTURES MAXIMUM ALLOWABLE JOINT DEFLECTION.
 5. NO PORTION OF THIS PROPOSED DEVELOPMENT LIES WITHIN THE FEMA 100-YR FLOODPLAIN.
 6. AT THE CONCLUSION OF CONSTRUCTION AND AS PART OF THE PROCESS FOR THE CITY TO ACCEPT THIS PHASE, THE FIRE HYDRANTS SHALL BE FLOWED AND TESTED. A COPY OF THE REPORT SHALL BE EMAILED INTO THE FIRE DEPARTMENT AND THE HYDRANTS SHALL BE PAINTED AND COLOR CODED.
 7. CAUTION: IF PRESSURE REDUCING VALVES WERE INSTALLED IN THIS PHASING, THEY MUST BE SET PRIOR TO FIRE HYDRANT FLOW TESTING.
 8. CONTRACTOR AND HOME BUILDER TO ENSURE GATE VALVES ARE ADJUSTED FOR FINISHED SIDEWALK AND PAVEMENT GRADES.
 9. CONTRACTOR TO ENSURE ALL GATE VALVES ARE LOCATED OUTSIDE OF PROPOSED CURB AND GUTTER LOCATIONS.
 10. HOME BUILDERS ARE EXPECTED TO INSTALL INDIVIDUAL PRESSURE REDUCING VALVES FOR ALL HOMES.
- GEORGETOWN FIRE DEPARTMENT NOTES**
1. 1,500 GPM FIRE FLOW SHALL BE PROVIDED FOR THIS PROJECT.
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 - A COPY OF THE REPORT SHALL BE EMAILED INTO THE FIRE DEPARTMENT
 - THE HYDRANTS SHALL BE PAINTED AND COLOR CODED.
 3. PER CITY ORDINANCE SEC. 13.15.120, HYDRANT FLOW CODING STANDARDS. PUBLIC HYDRANTS WILL HAVE THE BARRELS PAINTED SILVER, THE HYDRANTS WILL BE FLOW TESTED, AND THE BONNET PAINTED USING THE HYDRANT FLOW STANDARD IN PARAGRAPH C.
 - FLOW COLOR:
 - GREATER THAN 1500 GPM BLUE
 - 1000 TO 1500 GPM GREEN
 - 500 - 999 GPM ORANGE
 - LESS THAN 500 GPM RED
 - NOT WORKING BLACK OR BAGGED



811	
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HARGREEN® DEVELOPMENT TX	
STATE OF TEXAS CHRISTINE N. CAMPBELL 142536 PROFESSIONAL ENGINEER 09/15/2024	
OVERALL WATER PLAN A PARKSIDE ON THE RIVER GTII - PHASE 1 CONSTRUCTION PLANS GEORGETOWN, WILLIAMSON, TEXAS	
DESIGNED BY: CC	DRAWN BY: MM/MKM
CHECKED BY: SN	APPROVED BY:
SHEET 84 OF 91	
2024-XX-CON	



0 40' 80'

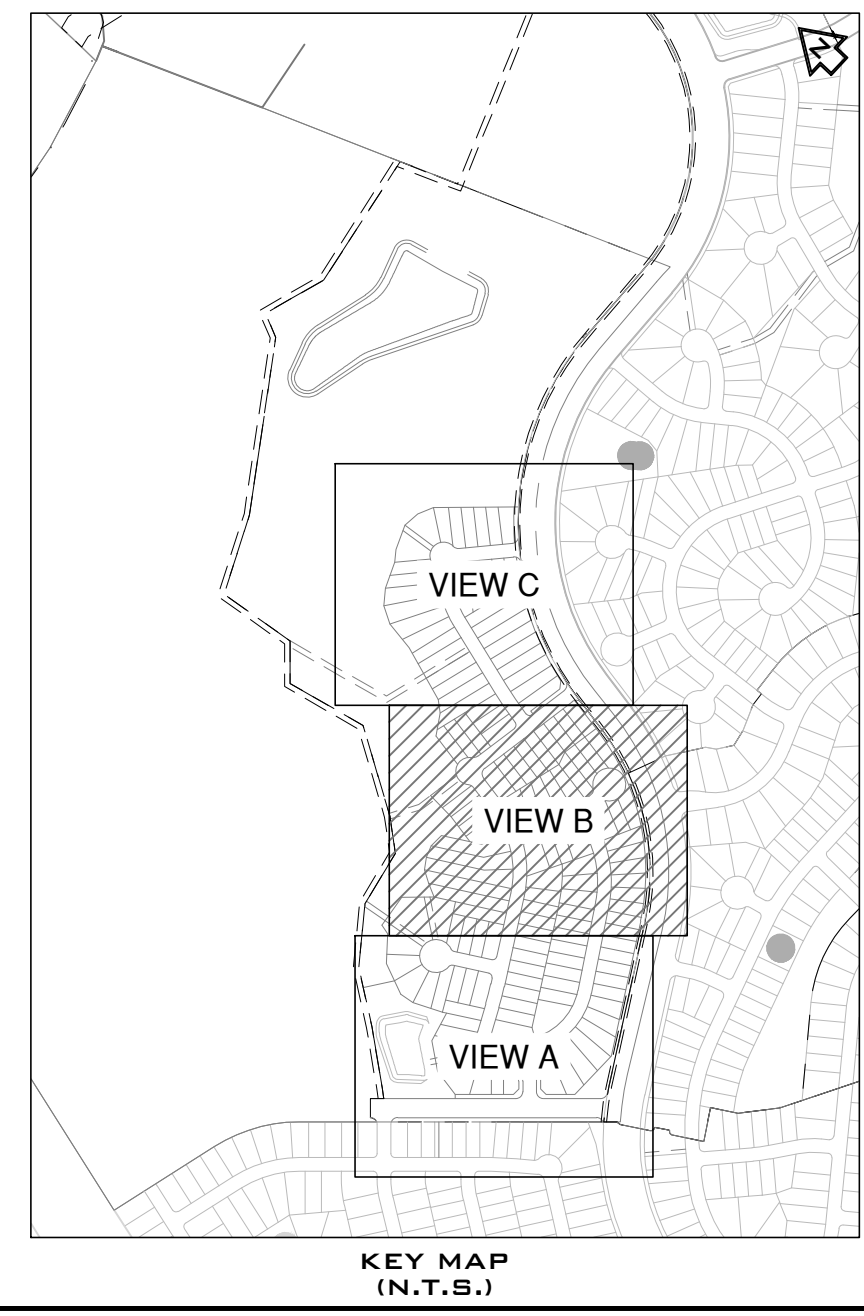
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LEGEND

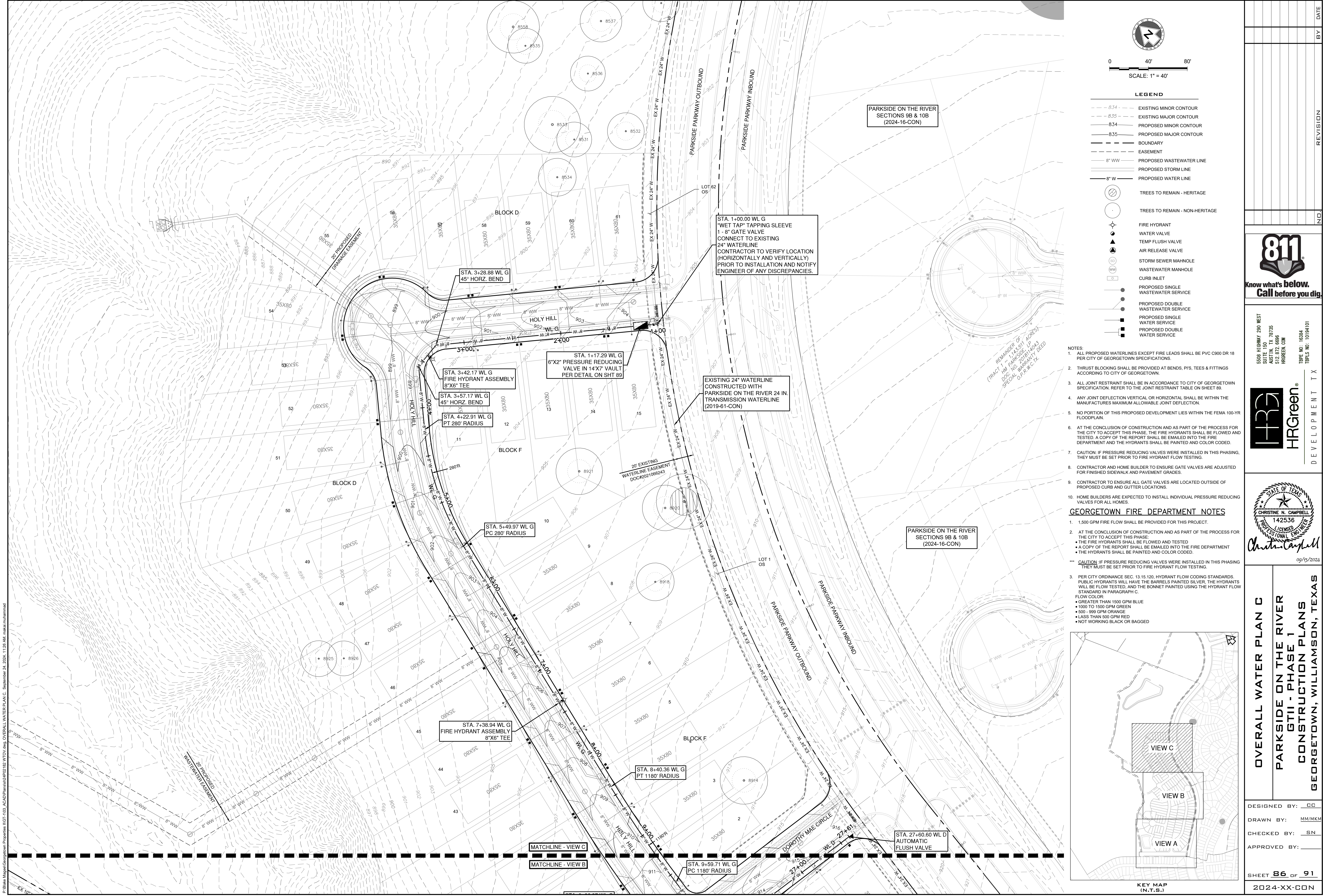
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 - LESS THAN 500 GPM RED
 - NOT WORKING BLACK OR BAGGED



		BY	DATE
		REVISION	
		NO.	
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TYPE NO: 10384 RPLS NO: 10194101			
		DEVELOPMENT TX	
09/13/2024			
OVERALL WATER PLAN B			
PARKSIDE ON THE RIVER			
GTII - PHASE 1			
CONSTRUCTION PLANS			
GEORGETOWN, WILLIAMSON, TEXAS			
DESIGNED BY: CC			
DRAWN BY: MM/MMK			
CHECKED BY: SN			
APPROVED BY:			
SHEET 85 OF 91			
2024-XX-CON			



P:\Blake_Mayor\Georgetown Properties\1003_ACAD\Drawings\DWG\2024\103_OVERALL WATER PLAN C.dwg, September 24, 2024, 11:28 AM, mada.mohamed

811

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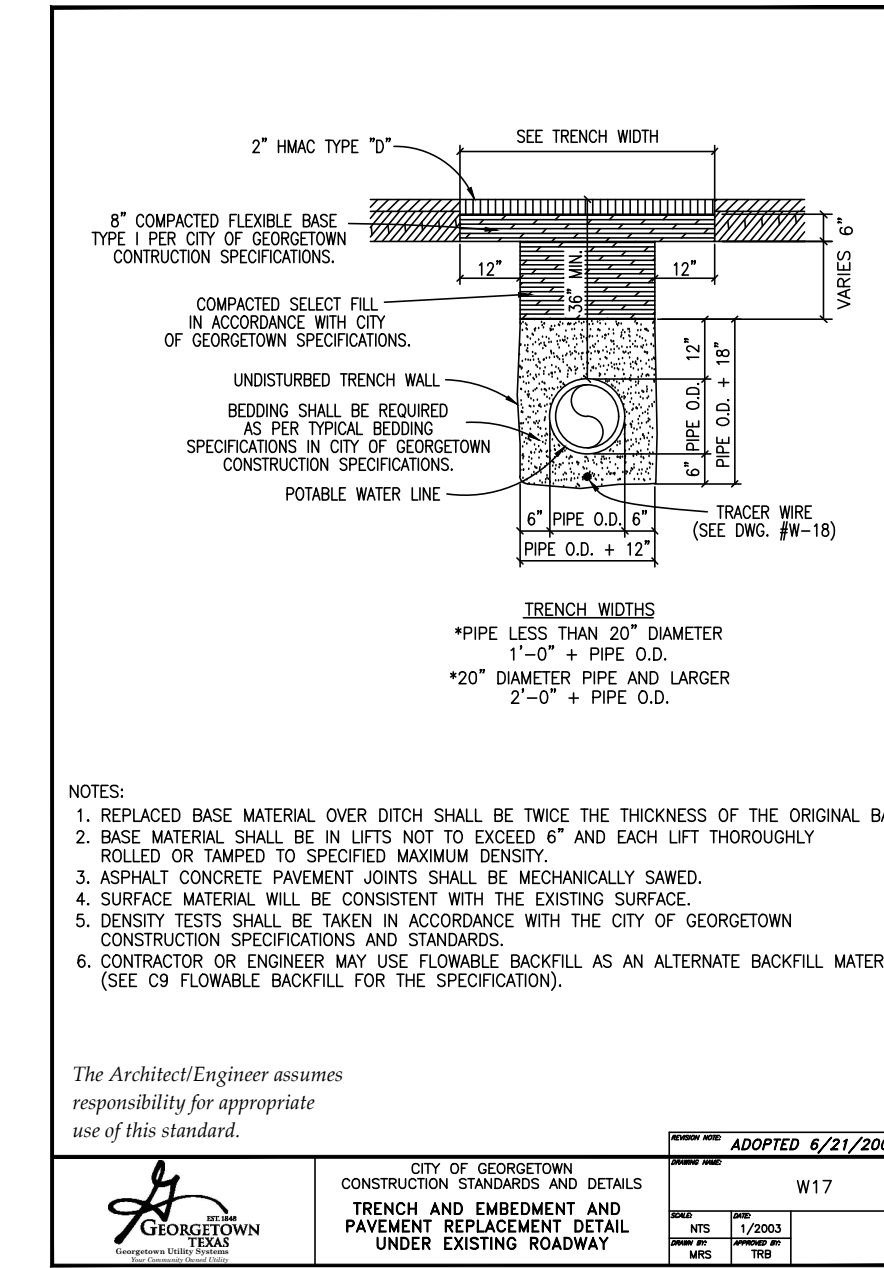
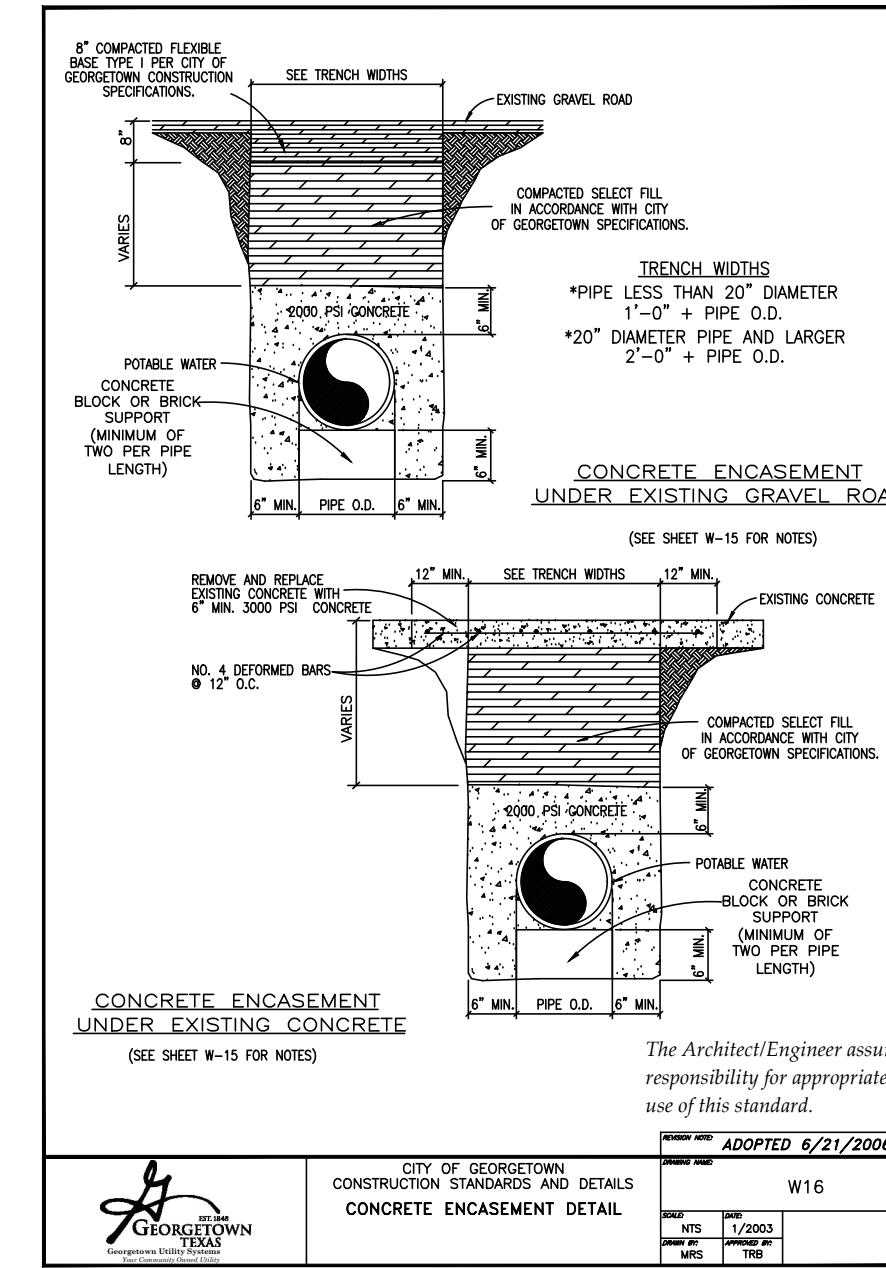
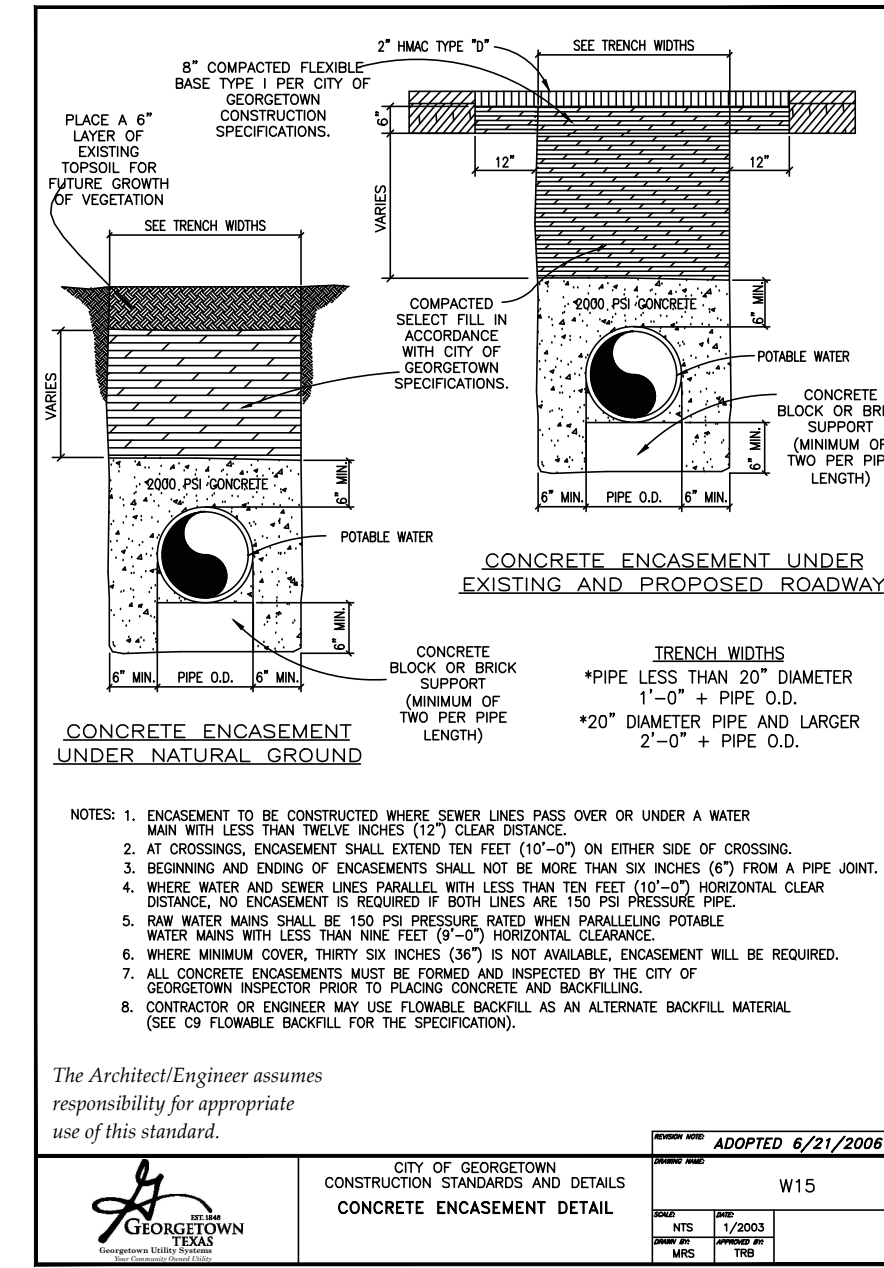
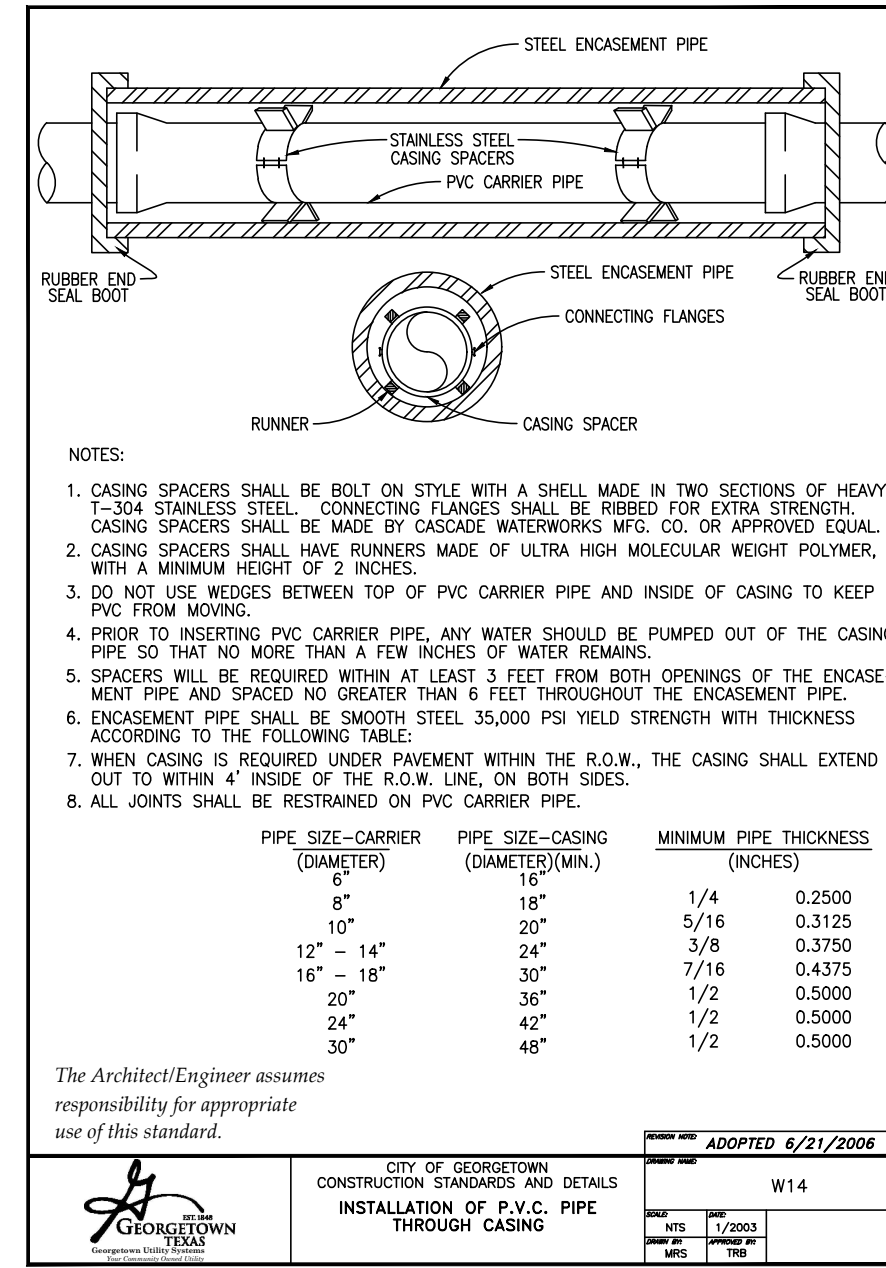
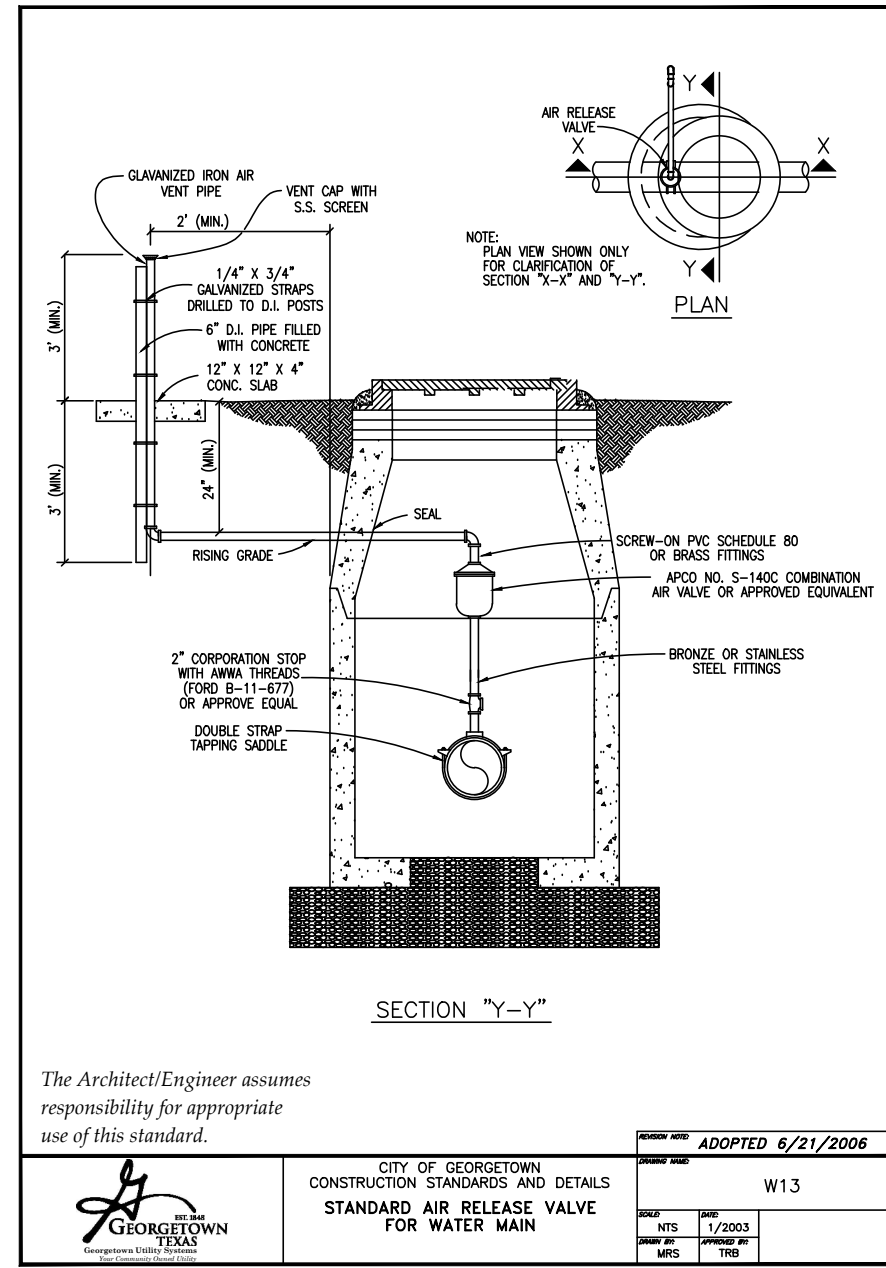
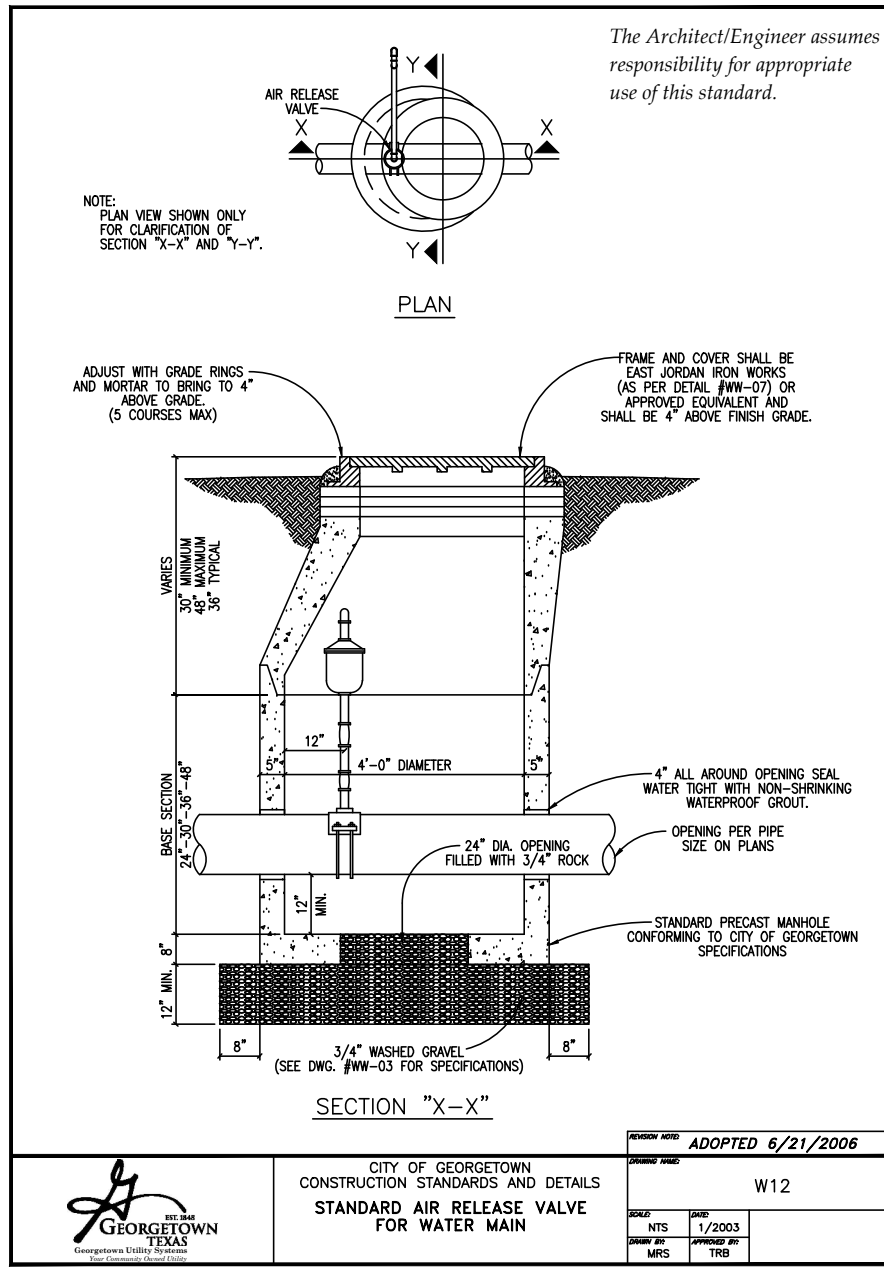
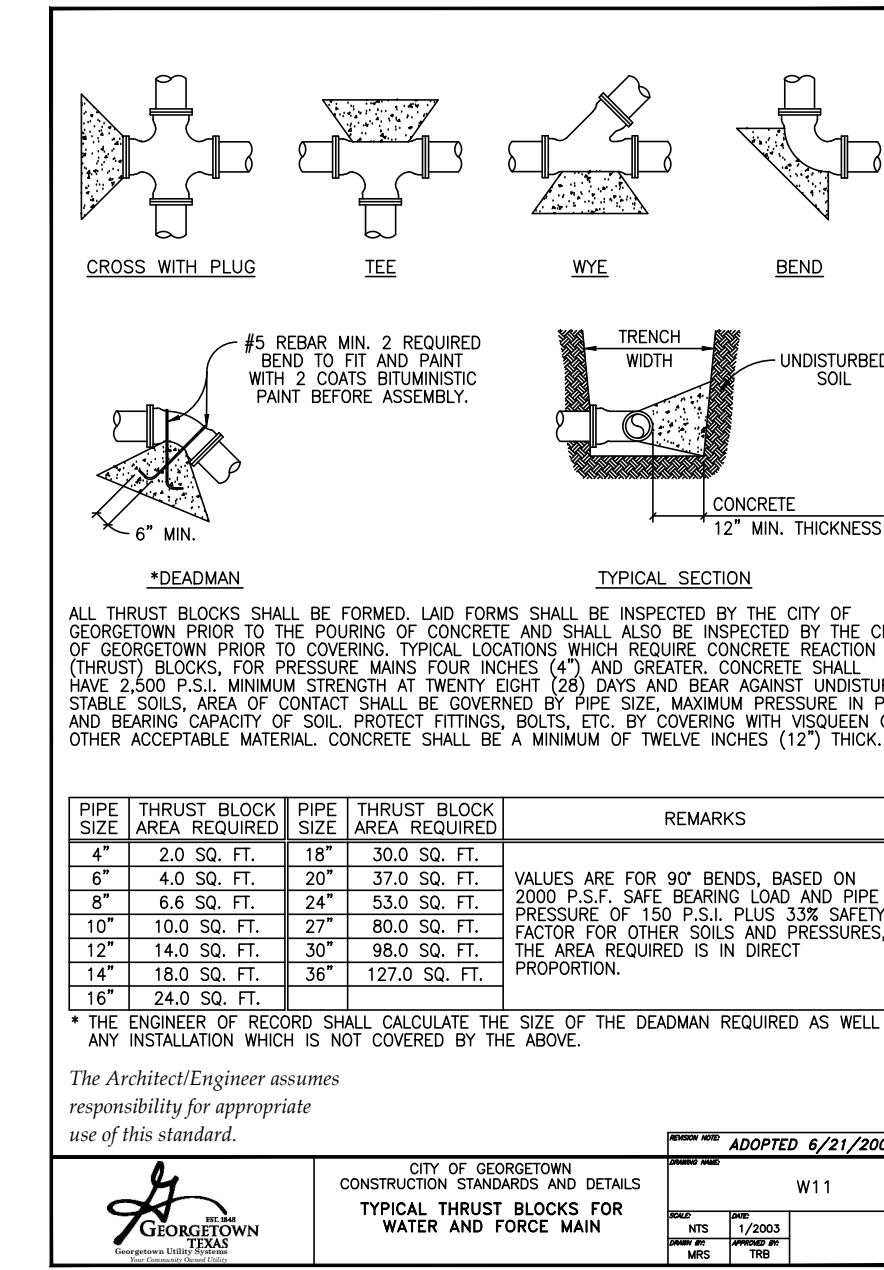
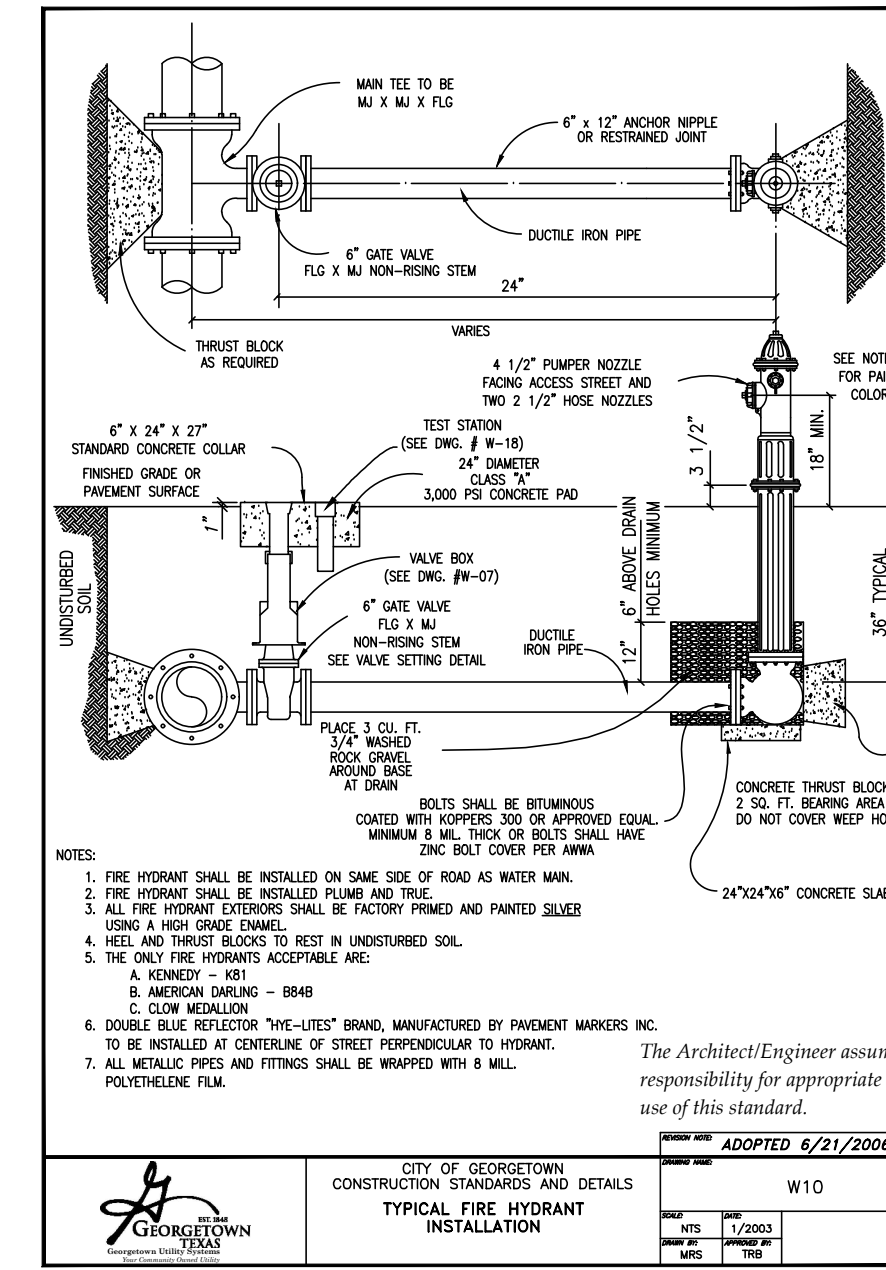
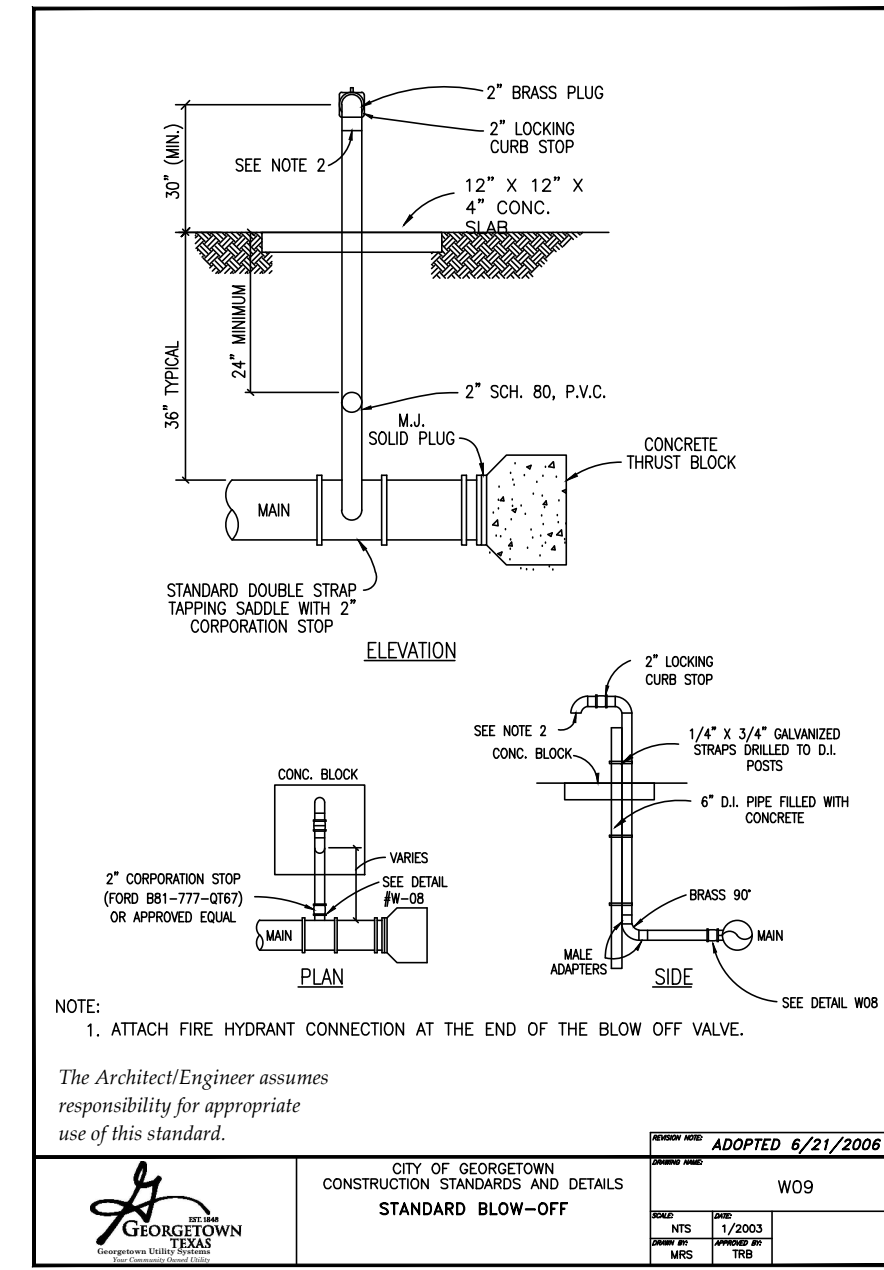
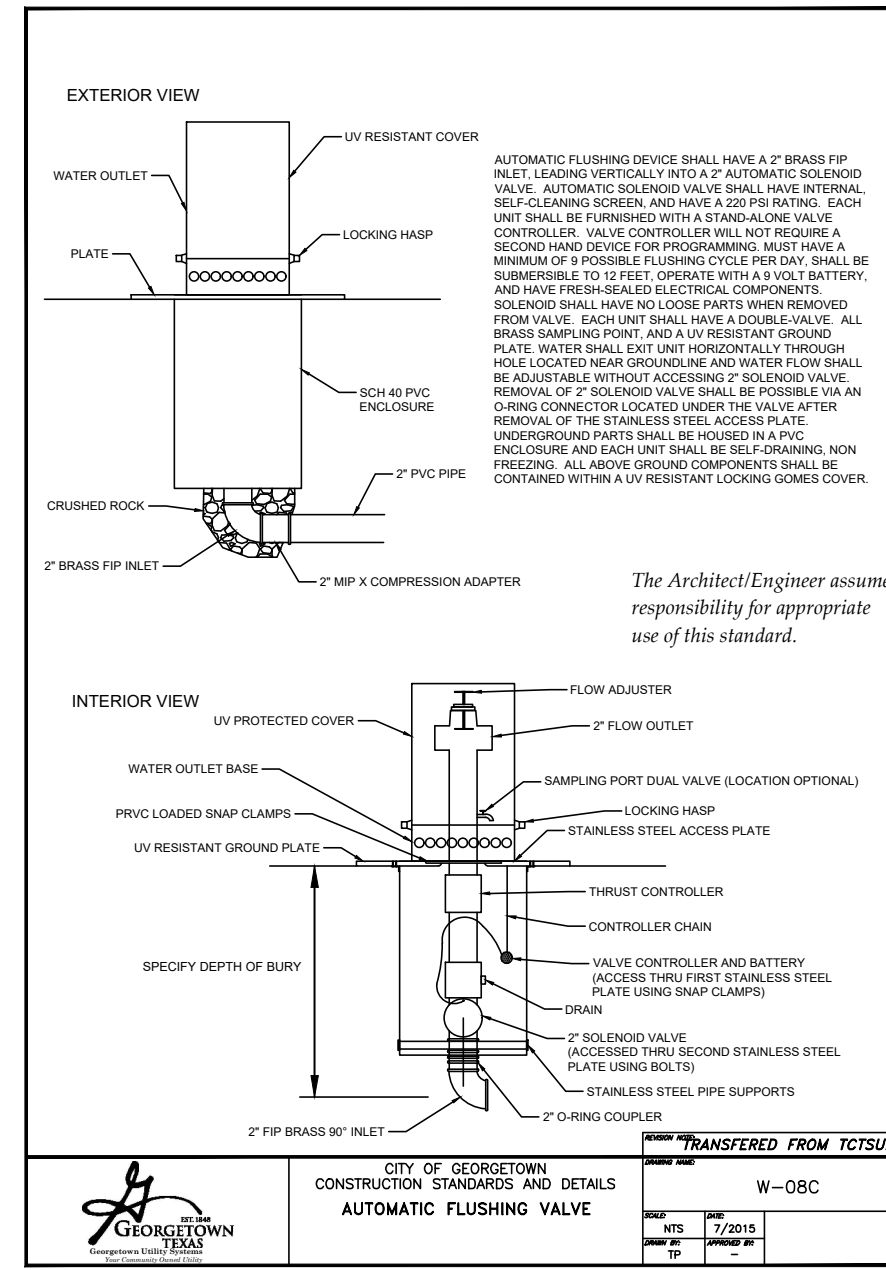
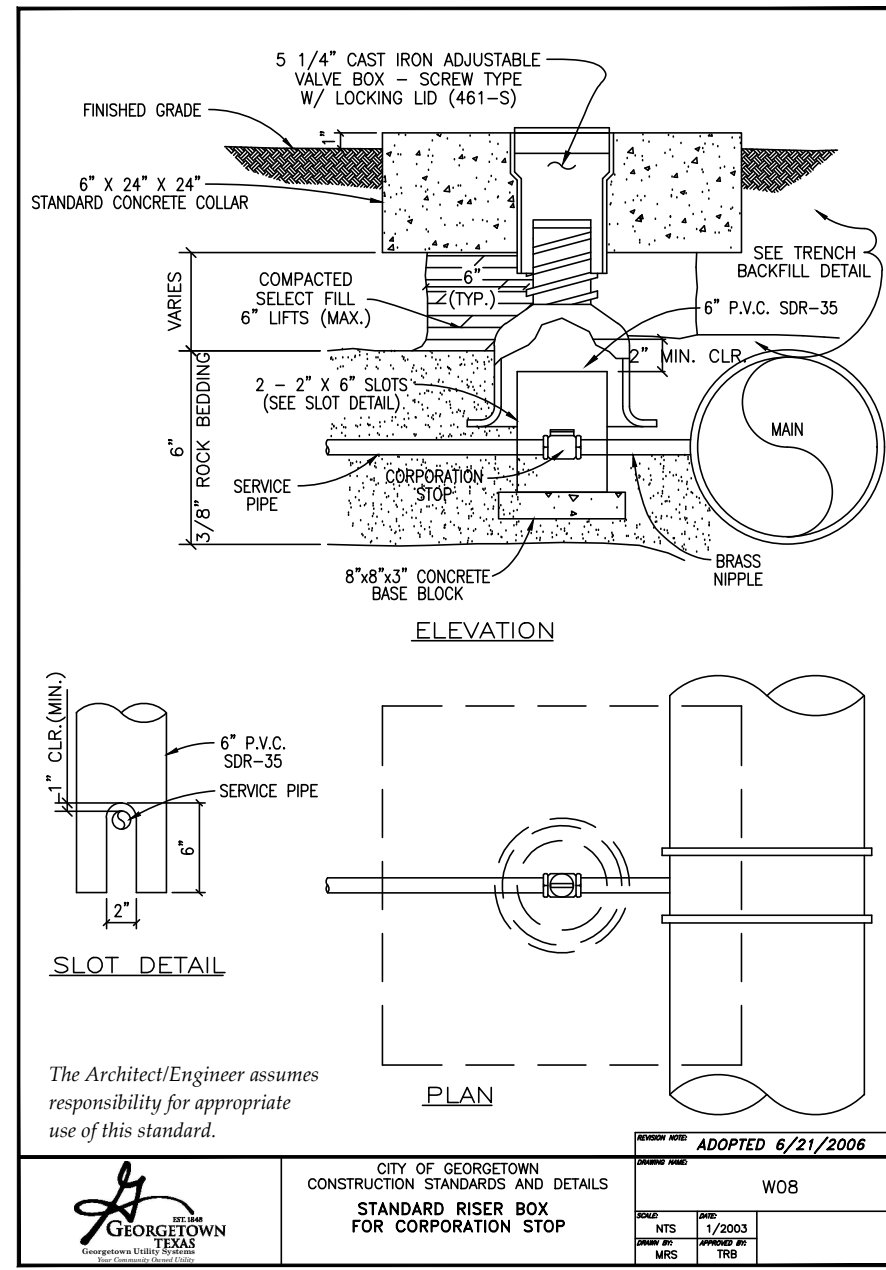
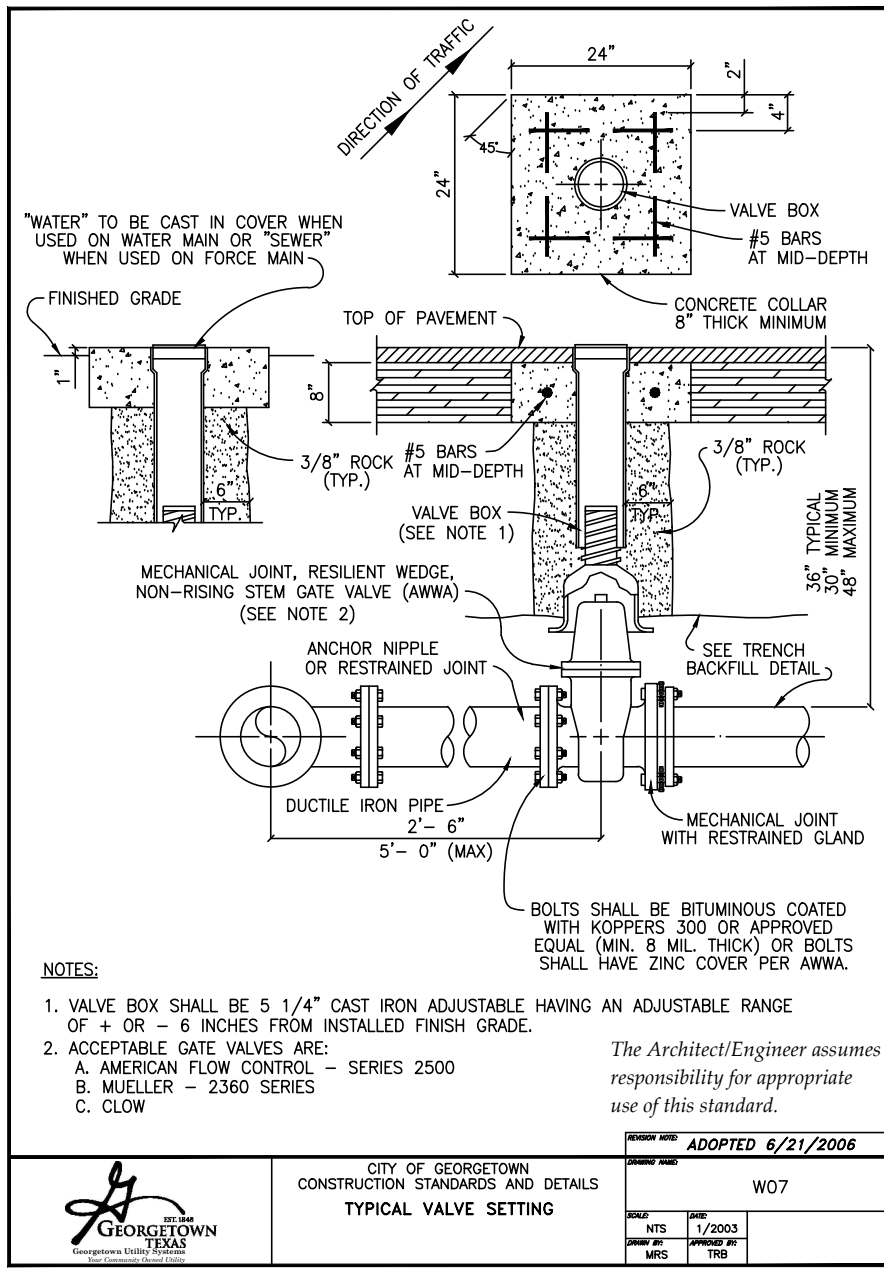
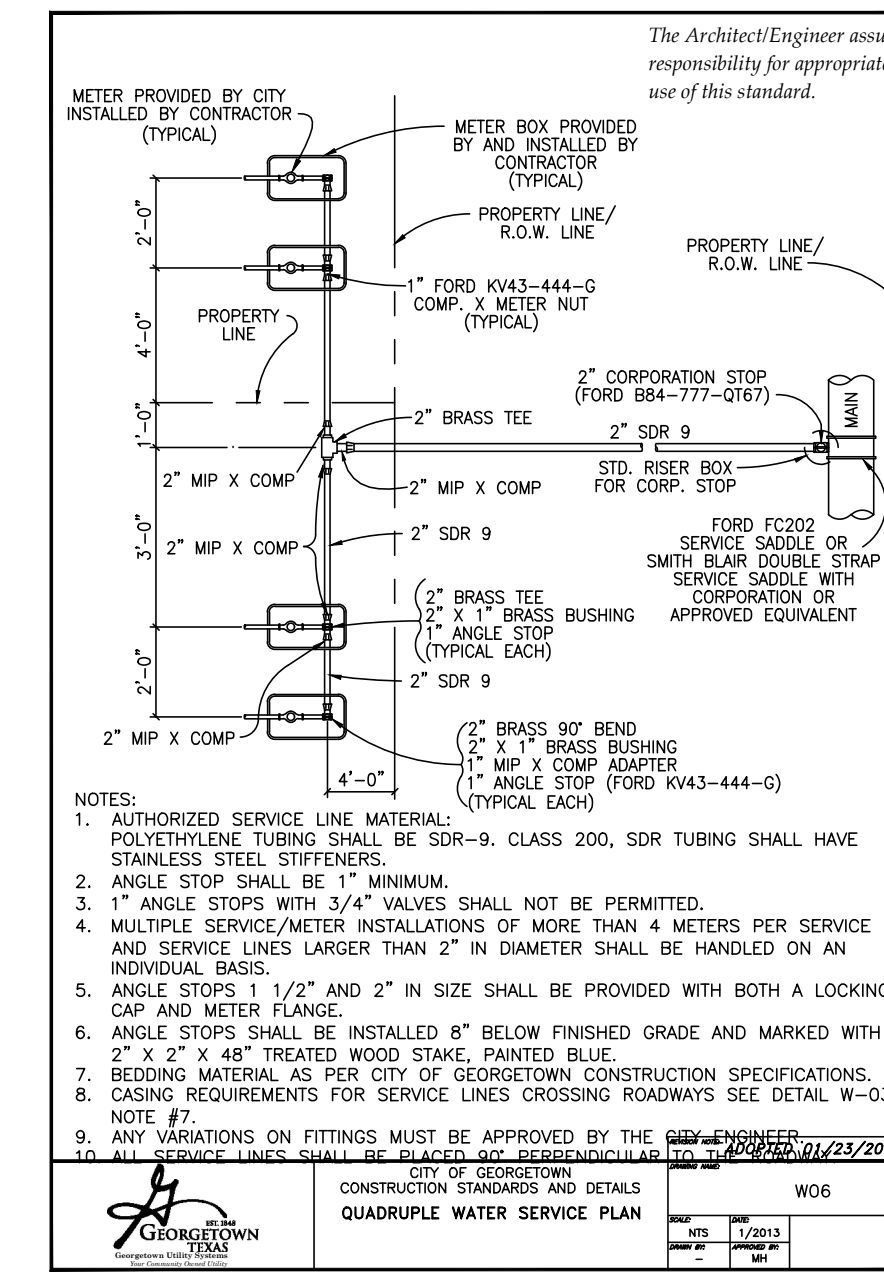
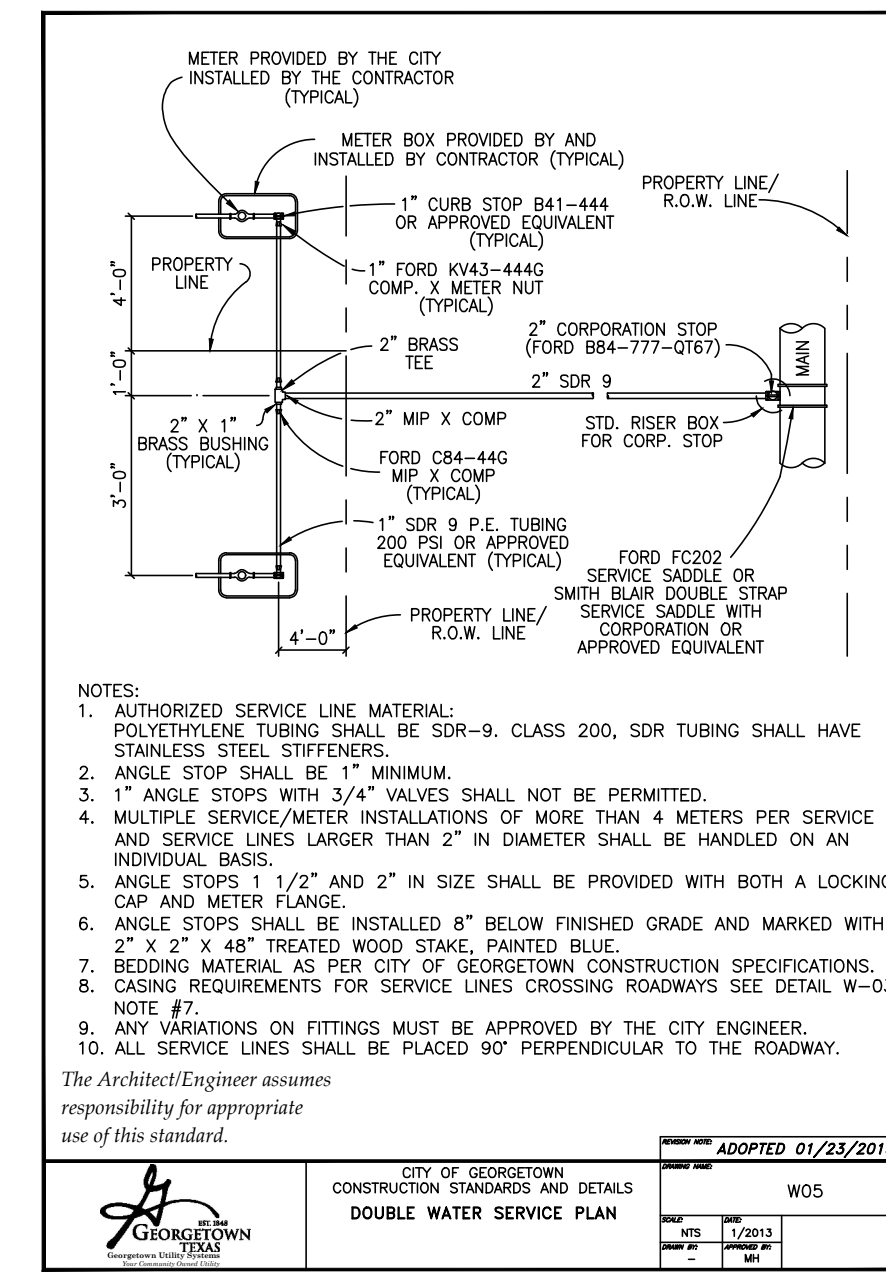
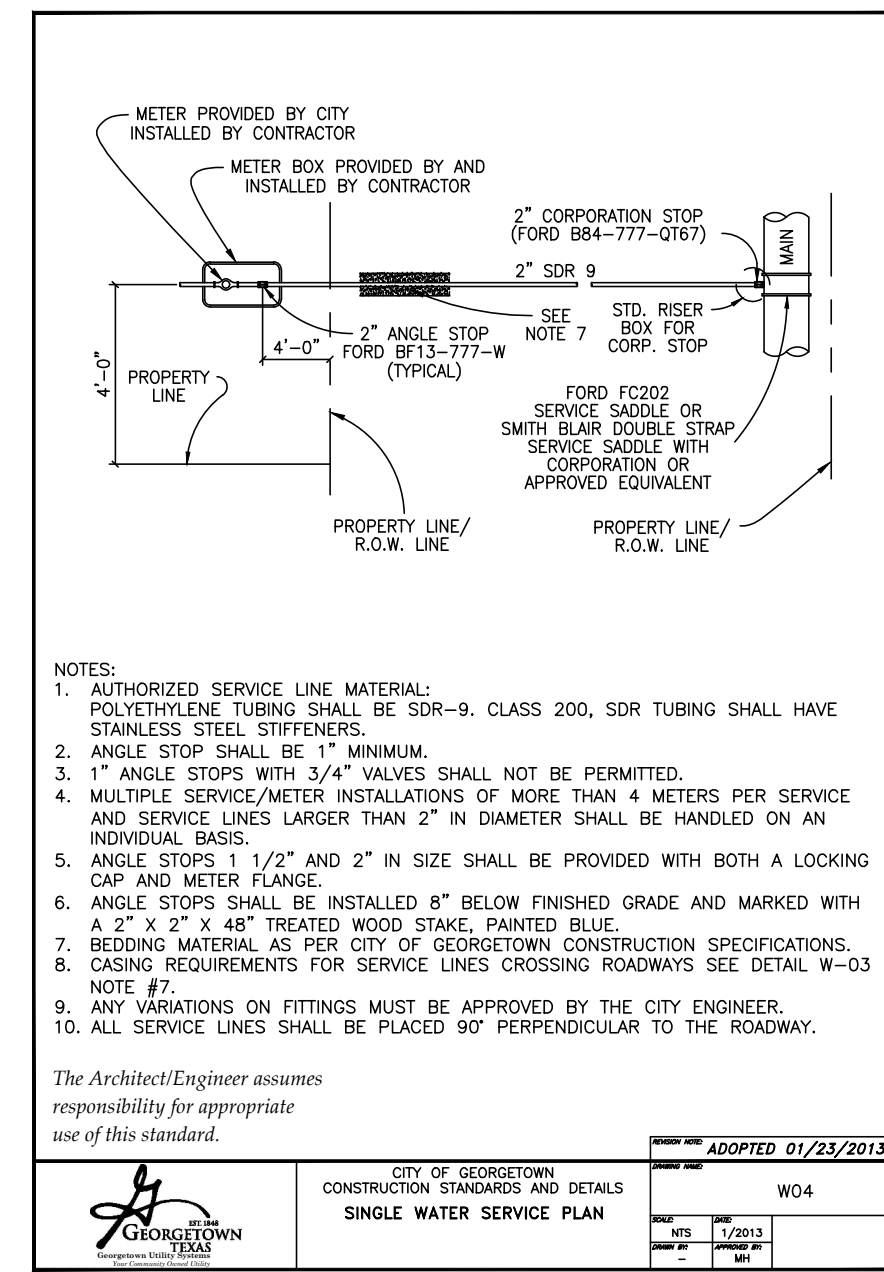
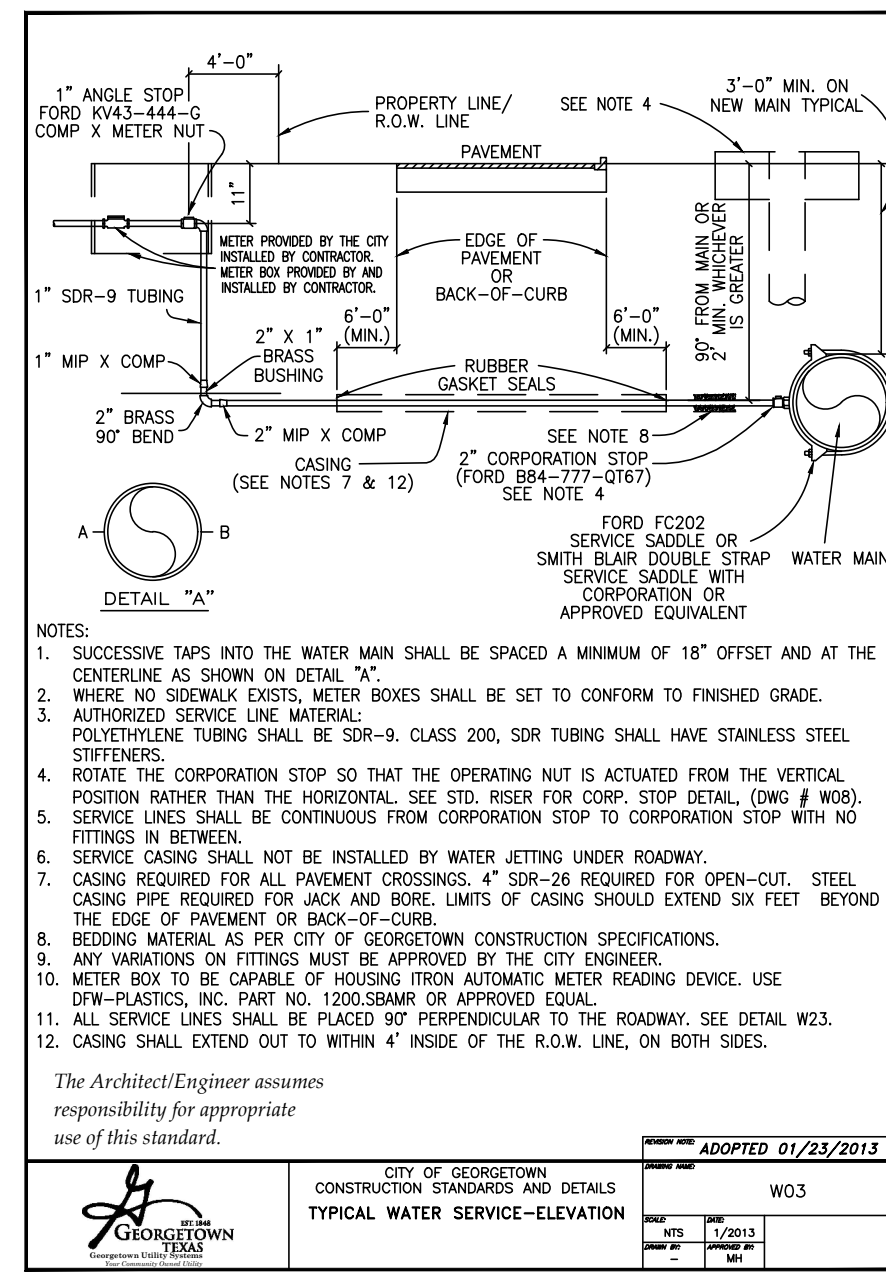
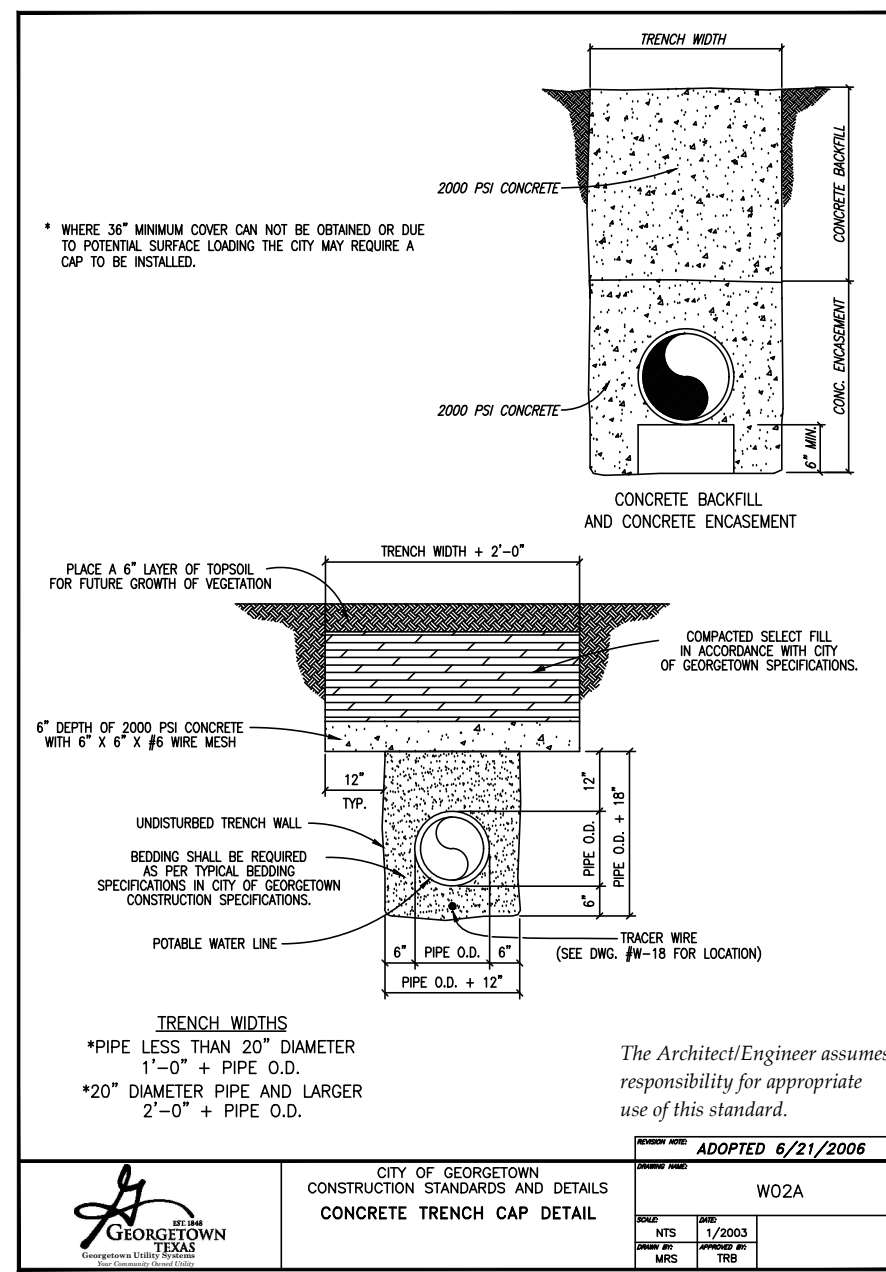
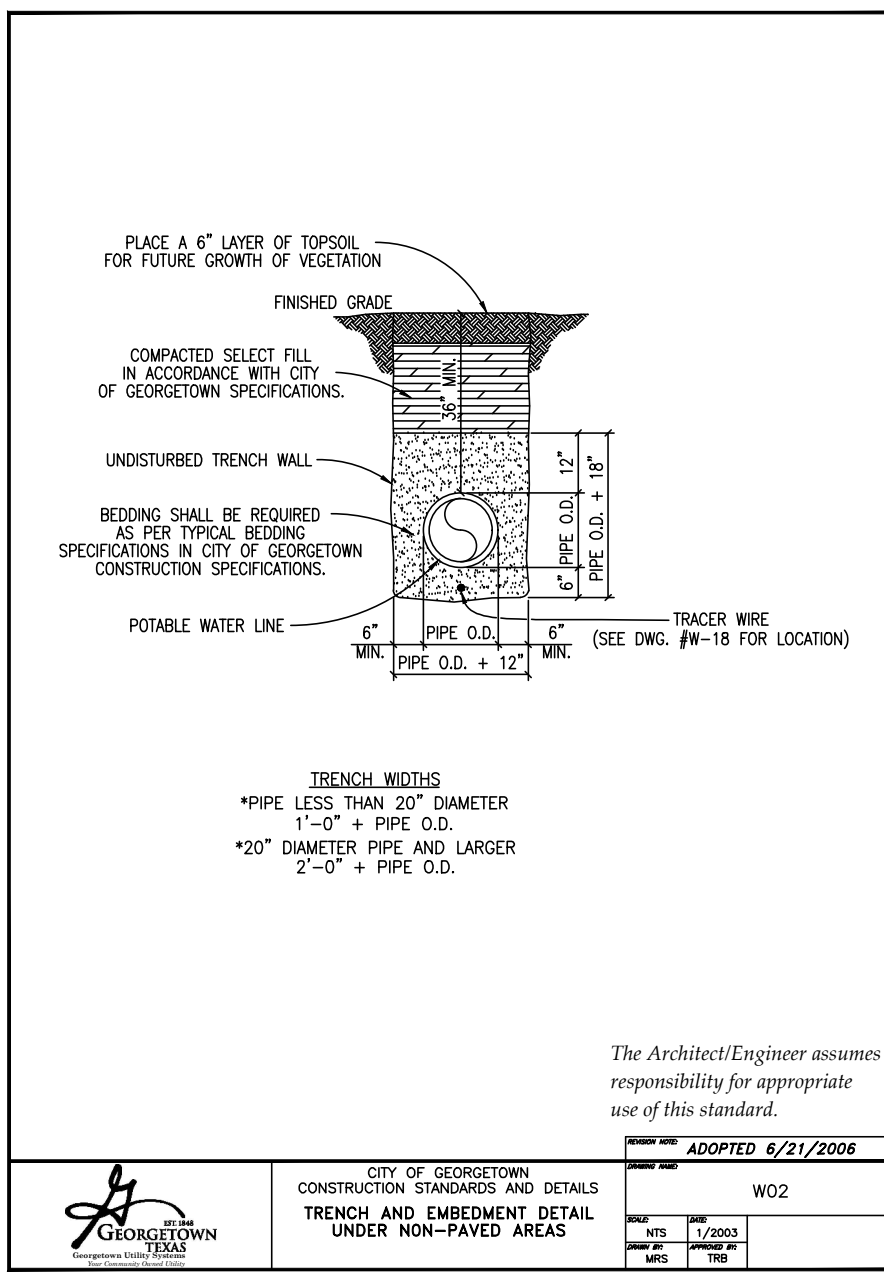
STATE OF TEXAS
CHRISTINE N. CAMPBELL
142536
LICENSED PROFESSIONAL ENGINEER

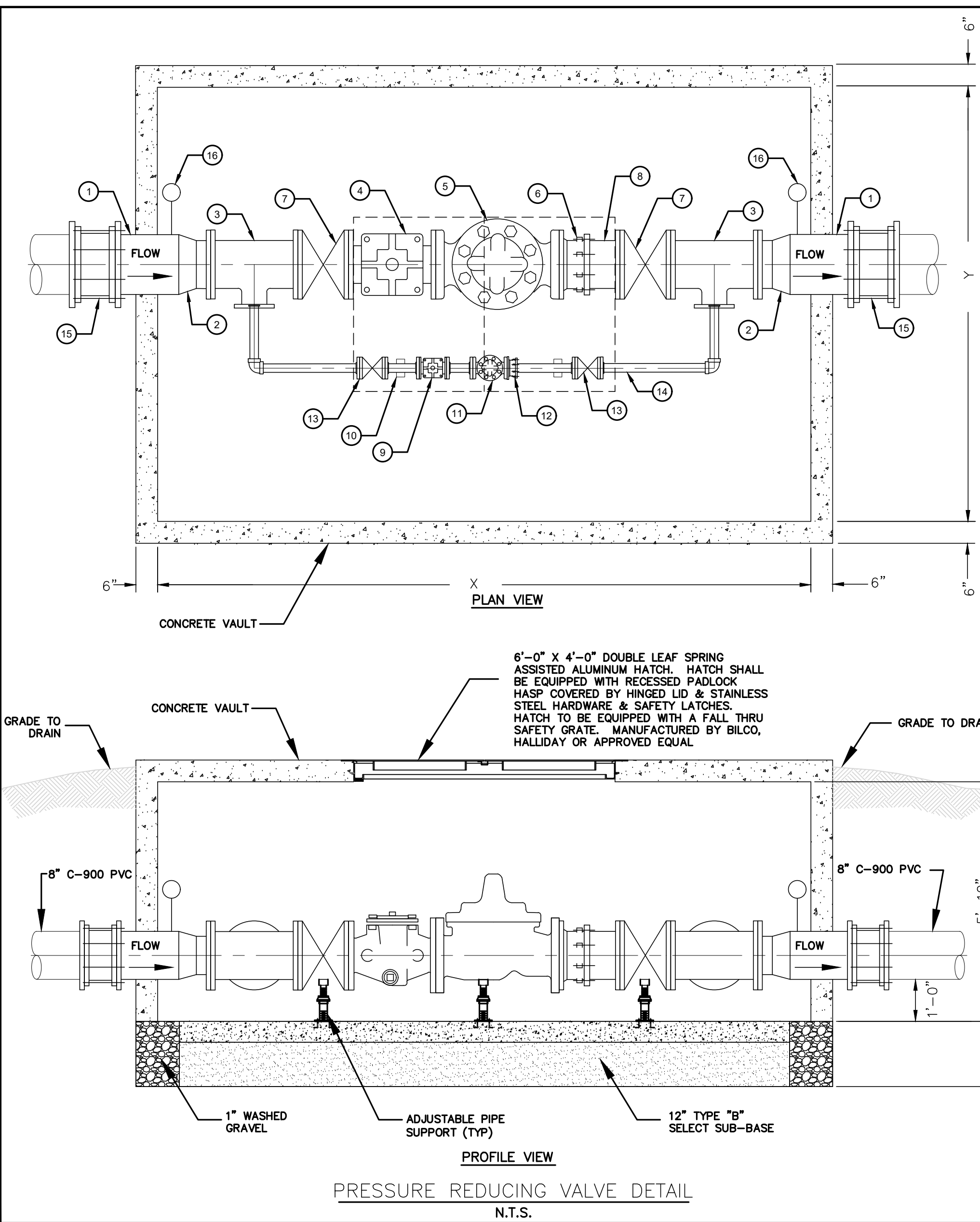
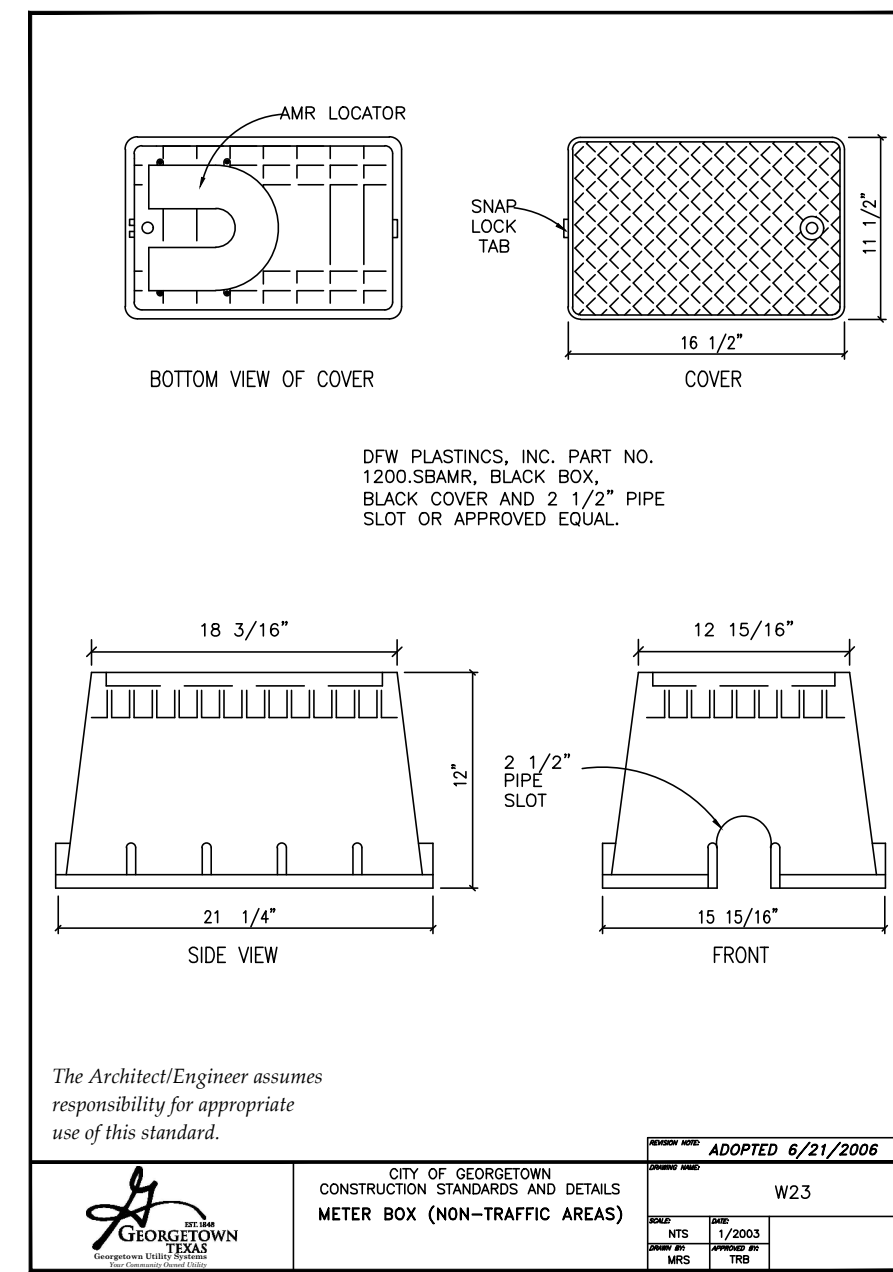
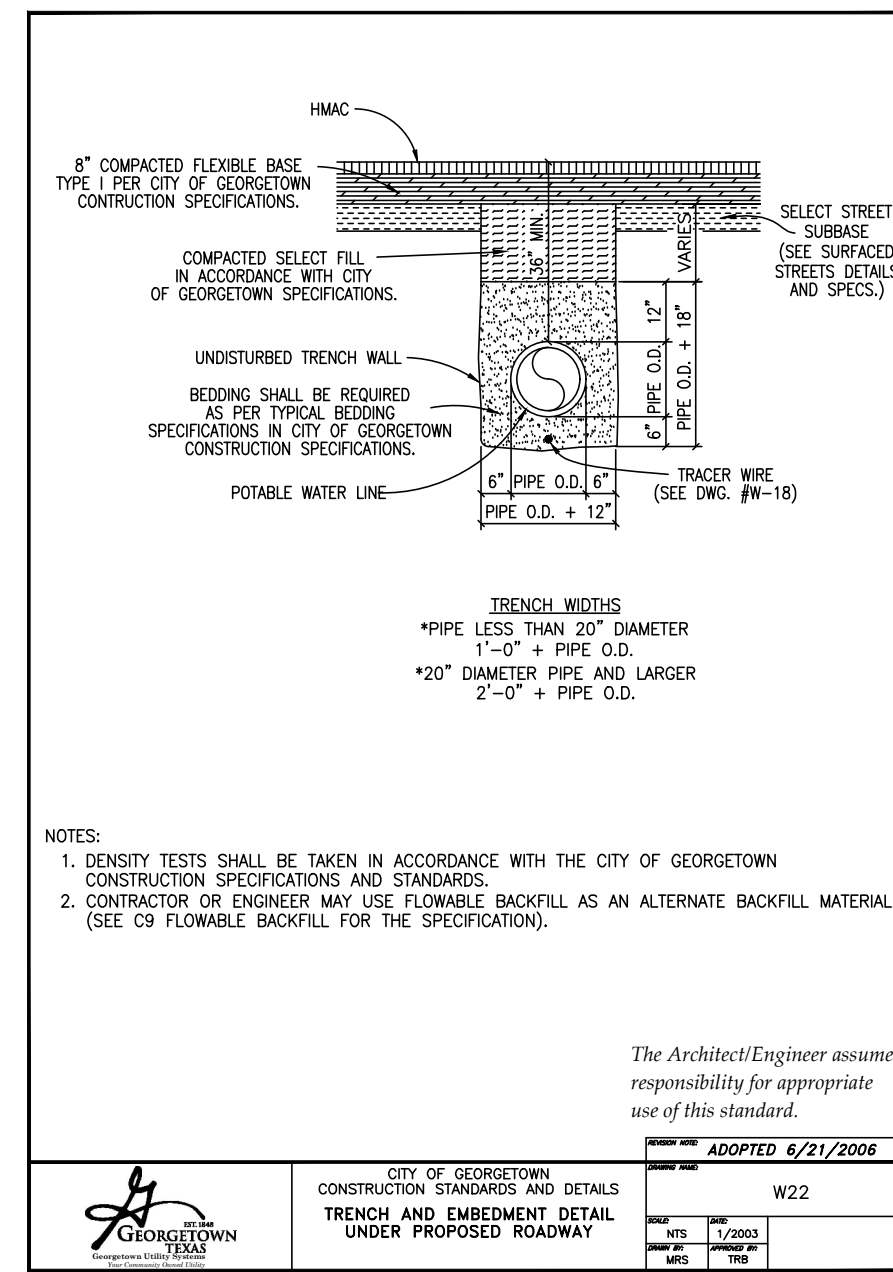
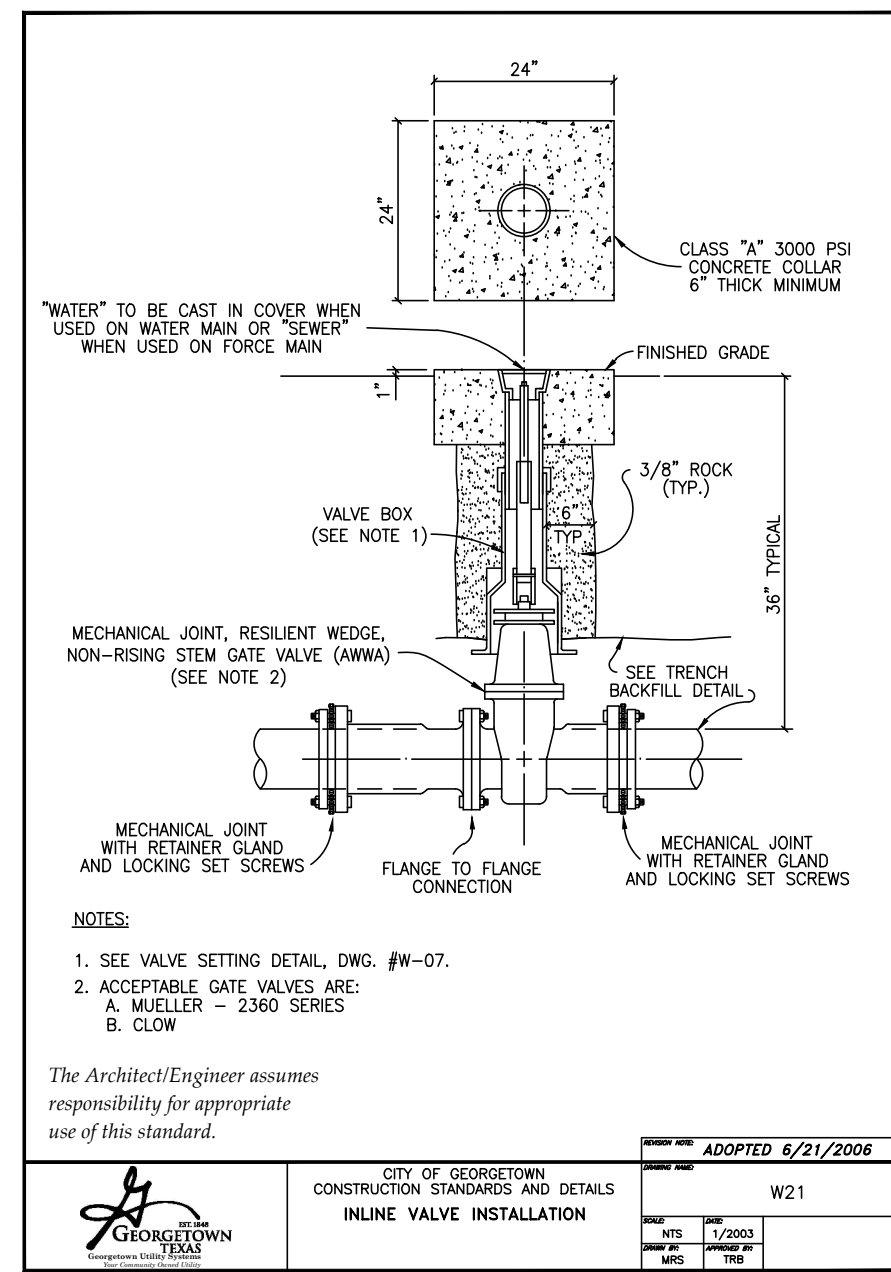
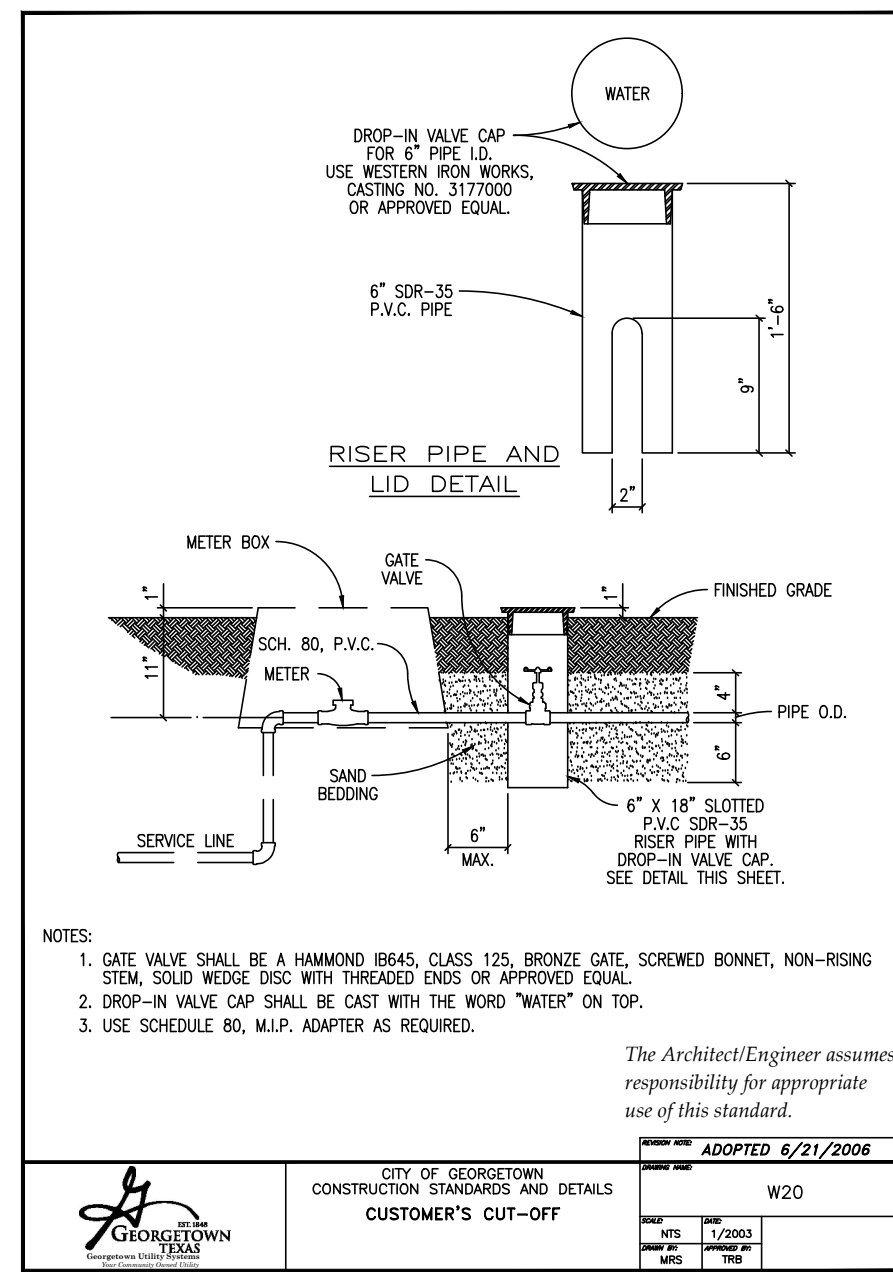
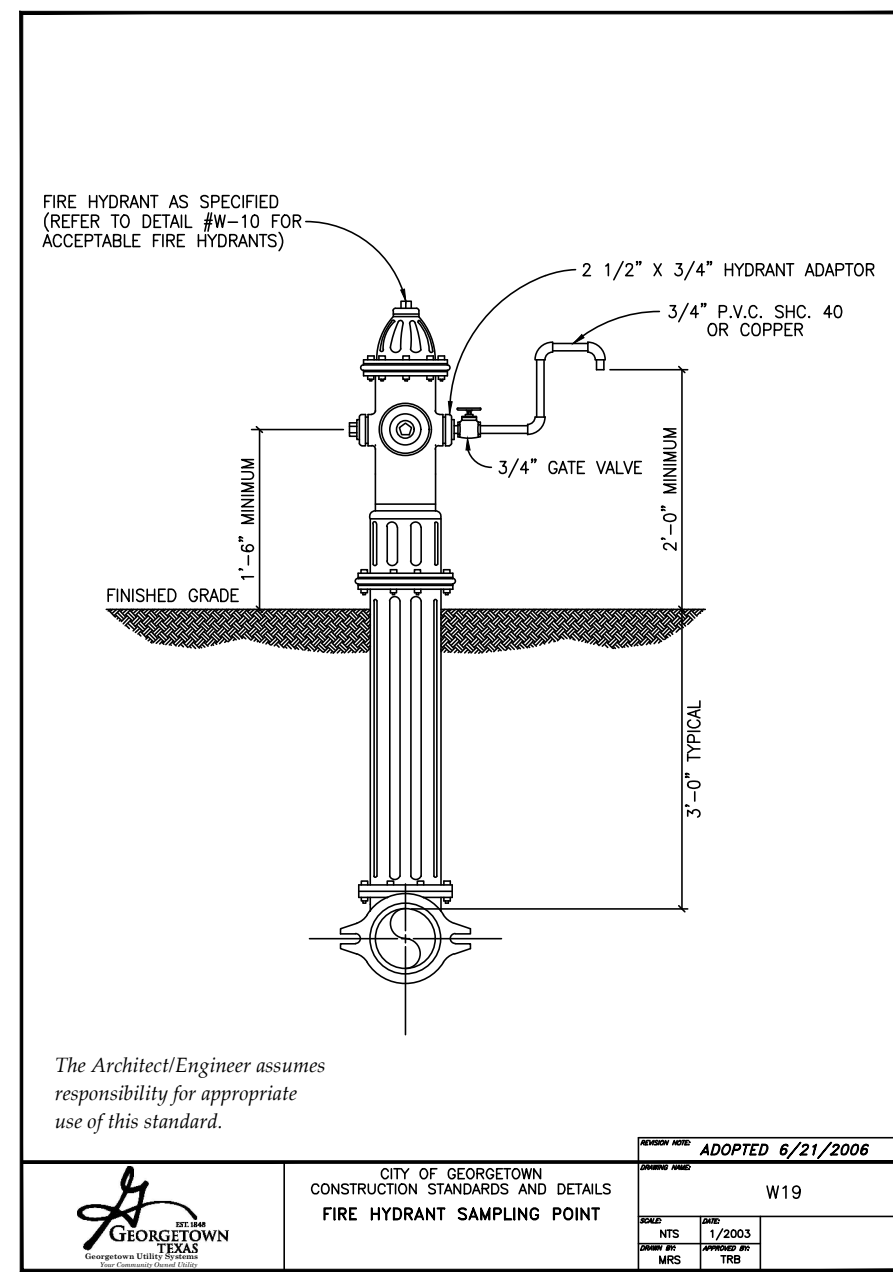
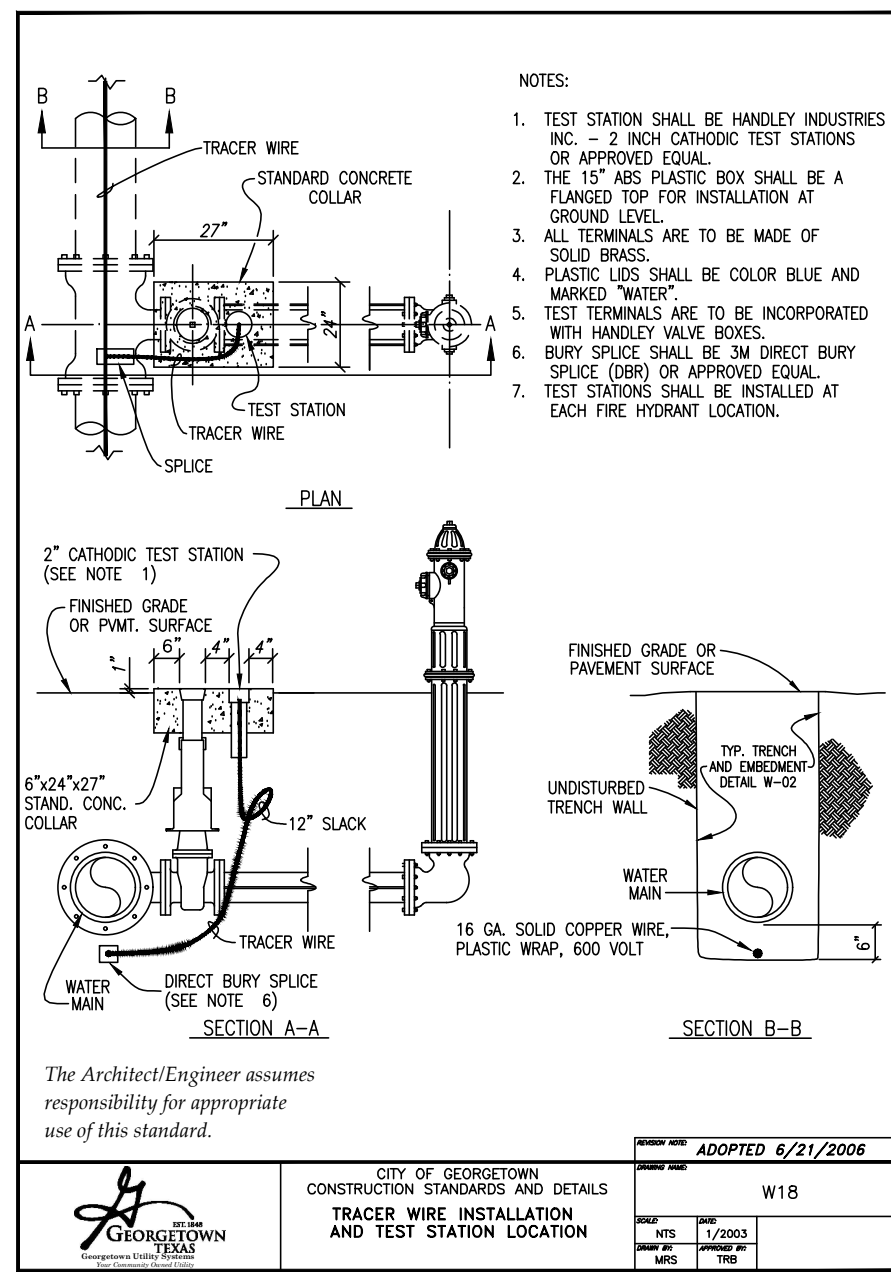
Christine Campbell
09/15/2024

OVERALL WATER PLAN C
PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

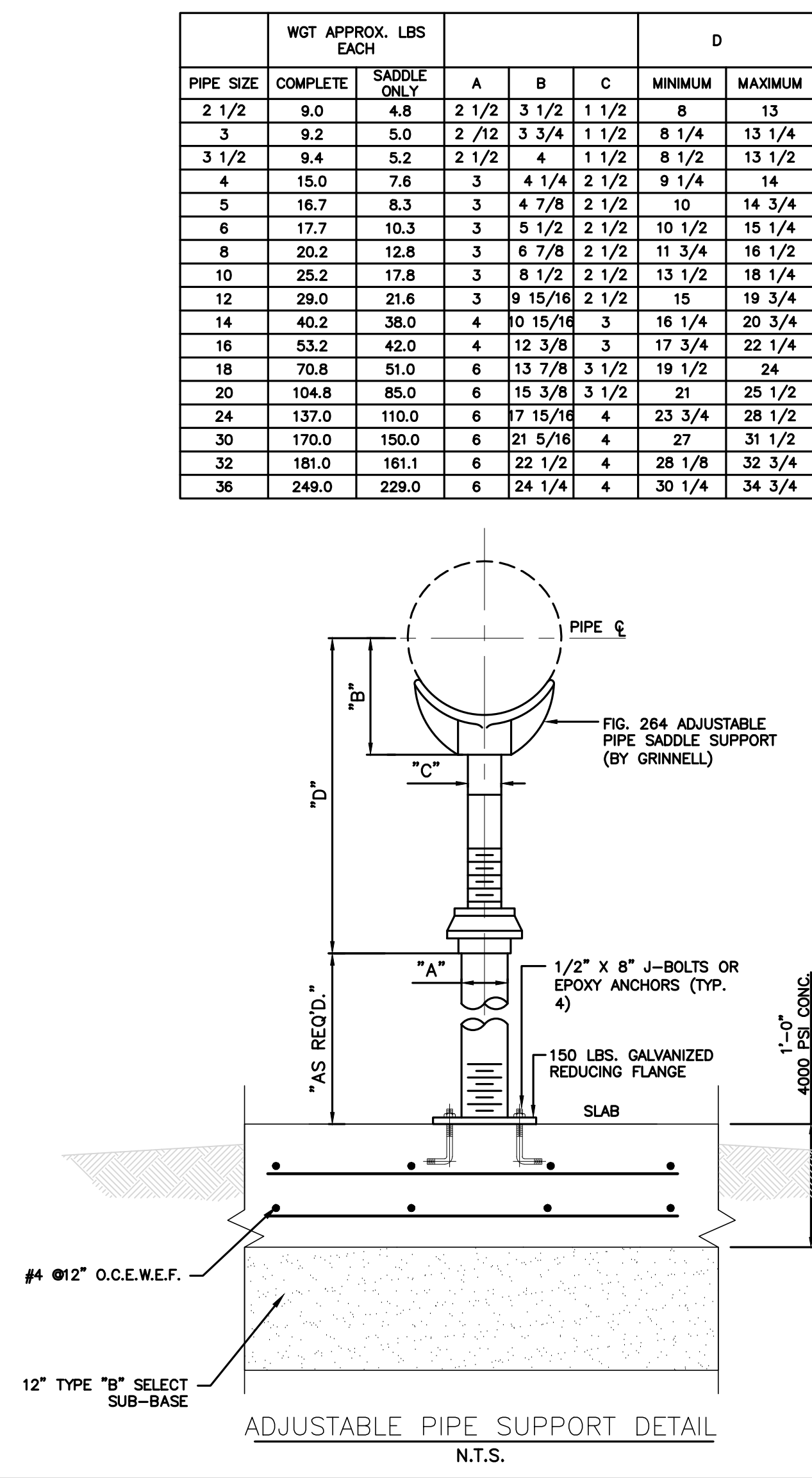
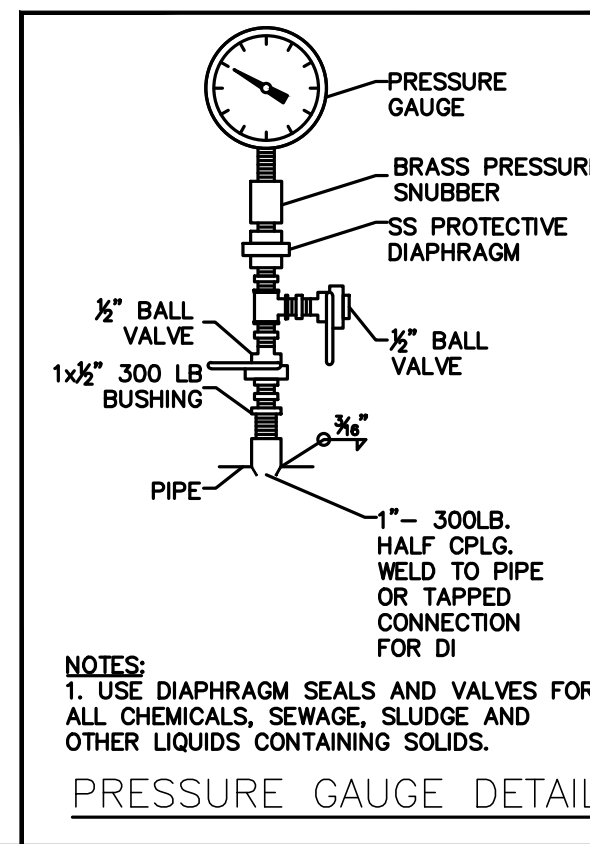
DESIGNED BY: CC
DRAWN BY: MM/MKM
CHECKED BY: SN
APPROVED BY:

SHEET 86 OF 91
2024-XX-CON

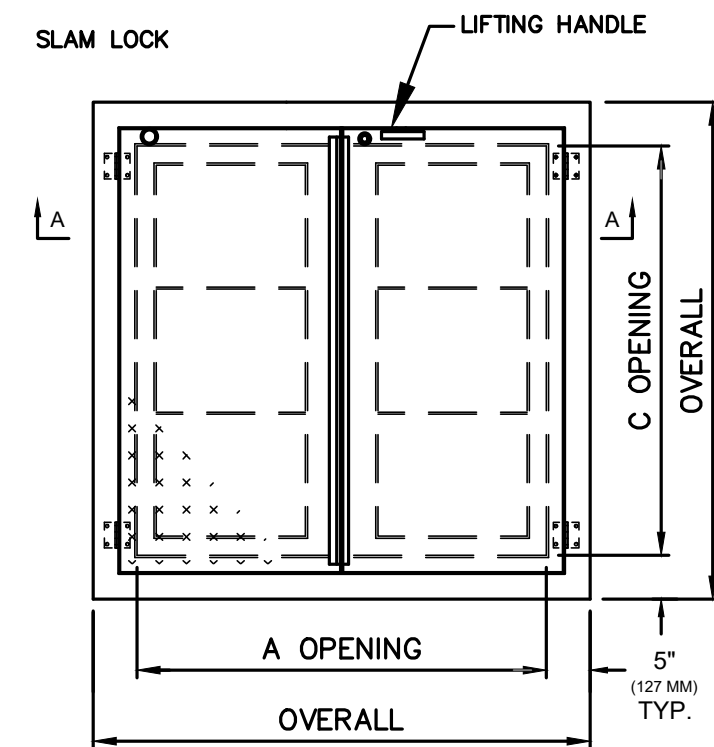




PIPE SIZE	COMPLETE	SADDLE ONLY	A	B	C	MINIMUM	MAXIMUM
2 1/2	9.0	4.8	2 1/2	3 1/2	1 1/2	8	13
3	9.2	5.0	2 1/2	3 3/4	1 1/2	8 1/4	13 1/4
3 1/2	9.4	5.2	2 1/2	4	1 1/2	8 1/2	13 1/2
4	15.0	7.6	3	4 1/4	2 1/2	9 1/4	14
5	16.7	8.3	3	4 7/8	2 1/2	10	14 3/4
6	17.7	10.3	3	5 1/2	2 1/2	10 1/2	15 1/4
8	20.2	12.8	3	6 7/8	2 1/2	11 3/4	16 1/2
10	25.2	17.8	3	8 1/2	2 1/2	13 1/2	18 1/4
12	29.0	21.6	3	9 15/16	2 1/2	15	19 3/4
14	40.2	38.0	4	10 15/16	3	16 1/4	20 3/4
16	53.2	42.0	4	12 3/8	3	17 3/4	22 1/4
18	70.8	51.0	6	13 7/8	3 1/2	19 1/2	24
20	104.8	85.0	6	15 3/8	3 1/2	21	25 1/2
24	137.0	110.0	6	17 15/16	4	23 3/4	28 1/2
30	170.0	150.0	6	21 5/16	4	27	31 1/2
32	181.0	161.1	6	22 1/2	4	28 1/8	32 3/4
36	249.0	229.0	6	24 1/4	4	30 1/4	34 3/4



- HATCH TO INCLUDE:**
- AUTO-LOCK T-316 STAINLESS STEEL HOLD OPEN ARM WITH RELEASE HANDLE
 - T-316 STAINLESS STEEL HINGES AND ATTACHING HARDWARE
 - T-316 STAINLESS STEEL SLAM LOCK WITH REMOVABLE KEY
 - STAINLESS STEEL COMPRESSION SPRING ASSIST
 - BUILT-IN NEOPRENE CUSHION/GASKET
 - NON-OZONE DEPLETING BITUMINOUS COATING
 - DOUBLE LEAF CONSTRUCTION
 - 300 LBS. PER SQ. FT. LOAD RATING (1464 KG. PER SQ. METER LOAD RATING)
 - EXTRUDED ALUMINUM CHANNEL FRAME
 - RECESSED LIFTING HANDLE
 - LIFETIME GUARANTEE
 - RETRO GATE FALL PROTECTION



ALUMINUM HATCH DETAIL
N.T.S.

PVC C900 Joint Restraints			
Pipe Size	Fitting	Bend Angle	Restraint Length
8"	Horizontal Bend	11.25	4'
8"	Horizontal Bend	22.5	8'
8"	Horizontal Bend	45	16'
8"	Horizontal Bend	90	38'
8"	Vertical Bend	11.25	11'
8"	Vertical Bend	22.5	21'
8"	Vertical Bend	45	43'
8"	Gate Valve	-	103'
12"	Horizontal Bend	11.25	6'
12"	Horizontal Bend	22.5	11'
12"	Horizontal Bend	45	22'
12"	Horizontal Bend	90	53'
12"	Vertical Bend	11.25	15'
12"	Vertical Bend	22.5	30'
12"	Vertical Bend	45	61'
12"	Reducer (12" to 8")	-	78'
12"	Gate Valve	-	146'

* Assumes 4' bury depth, 200 psi test pressure, trench type of 5, safety factor of 2.0, and CH granular soil

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Know what's below. Call before you dig.

5508 HIGHWAY 290 WEST
SUITE 150
MCKINNEY, TX 75065
817.271.7355
HRR@HRRGREEN.COM

HRGreen

DEVELOPMENT TX

STATE OF TEXAS

CHRISTINE N. CAMPBELL

142536

PROFESSIONAL ENGINEER

09/15/2024

WATER DETAILS

PARKSIDE ON THE RIVER
GTII - PHASE 1
CONSTRUCTION PLANS
GEORGETOWN, WILLIAMSON, TEXAS

DESIGNED BY: CC

DRAWN BY: MM/MKM

CHECKED BY: SN

APPROVED BY:

SHEET 88 OF 91

2024-XX-CON