

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: Cross Creek Commercial Park				2. Regulated Entity No.:			
3. Customer Name: Cross Creek Commercial Park, LLC				4. Customer No.:			
5. Project Type: (Please circle/check one)	<input checked="" type="radio"/> New	Modification		Extension		Exception	
6. Plan Type: (Please circle/check one)	<input checked="" type="radio"/> WPAP	<input type="radio"/> CZP	<input type="radio"/> SCS	<input type="radio"/> UST	<input type="radio"/> AST	<input type="radio"/> EXP	<input type="radio"/> EXT
7. Land Use: (Please circle/check one)	<input type="radio"/> Residential	<input checked="" type="radio"/> Non-residential			8. Site (acres):		12.45
9. Application Fee:		10. Permanent BMP(s):					
11. SCS (Linear Ft.):		12. AST/UST (No. Tanks):					
13. County: Williamson		14. Watershed:		San Gabriel			

Application Distribution

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

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

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

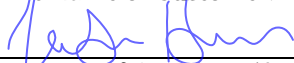
Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	—
Region (1 req.)	—	—	—
County(ies)	—	—	—
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Barton Springs/ Edwards Aquifer <input type="checkbox"/> Hays Trinity <input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

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

Jen Henderson

Print Name of Customer/Authorized Agent



5/10/2024

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.

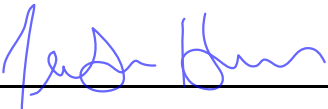
Signature

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: Jen Henderson

Date: 5/10/2024

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Cross Creek Commercial Park

2. County: Williamson

3. Stream Basin: San Gabriel

4. Groundwater Conservation District (If applicable): _____

5. Edwards Aquifer Zone:

☒ Recharge Zone

☐ Transition Zone

6. Plan Type:

☒ WPAP

☐ SCS

☐ Modification

☐ AST

☐ UST

☐ Exception Request

7. Customer (Applicant):

Contact Person: Tyler Humes
Entity: Cross Creek Commercial Park
Mailing Address: 406 N Lee St #201
City, State: Round Rock, Texas Zip: 78664
Telephone: 512.401.8882 FAX: _____
Email Address: tylerh@lottbrothers.com

8. Agent/Representative (If any):

Contact Person: Jen Henderson, P.E.
Entity: Henderson Professional Engineers
Mailing Address: 600 Round Rock West Drive, Suite 604
City, State: Round Rock, Texas Zip: 78681
Telephone: 737.203.8953 FAX: _____
Email Address: hpe@hendersonpe.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.

6540 W SH 29, Georgetown, TX 78628

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: _____

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.

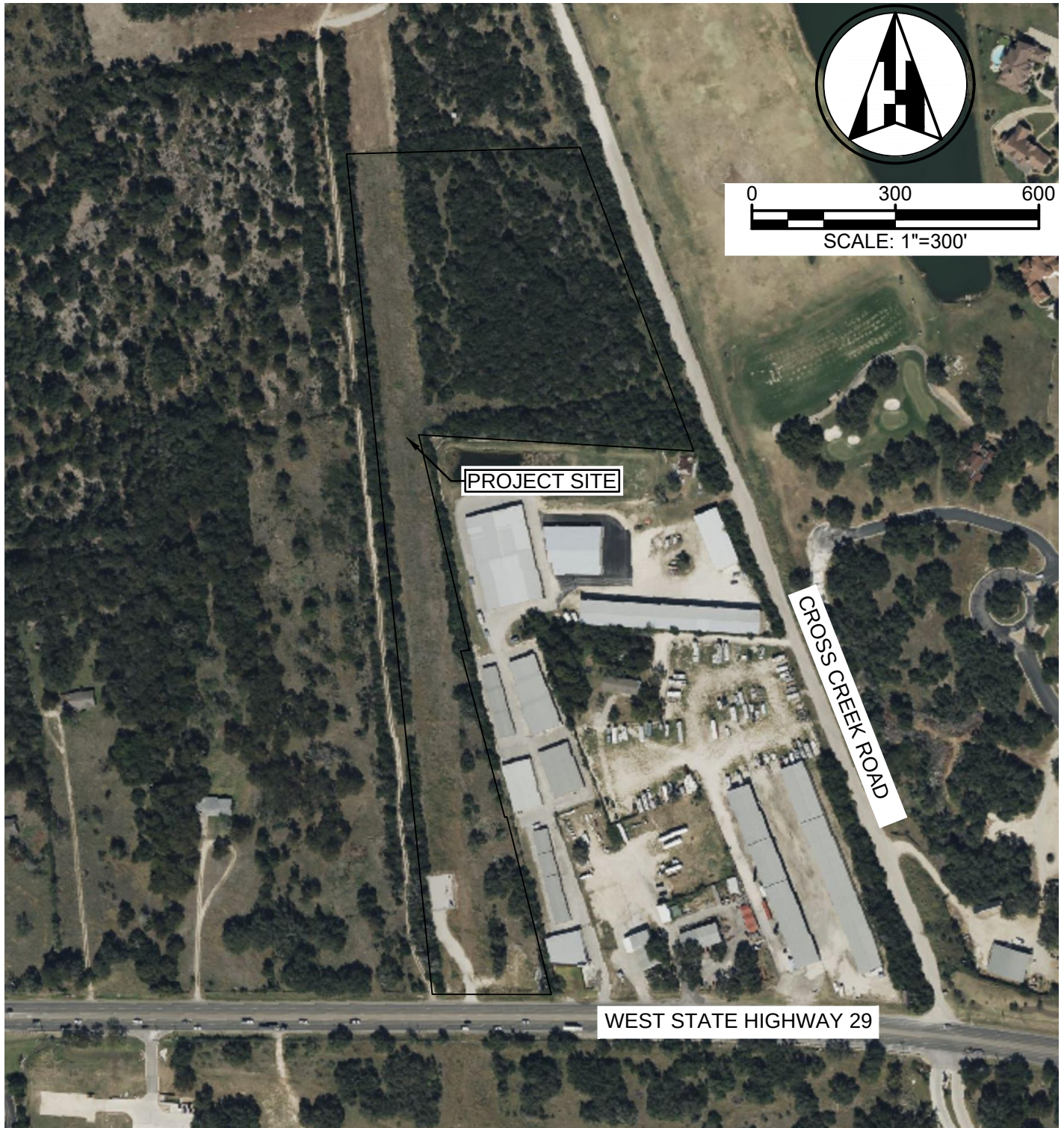


EXHIBIT
TO SERVE
**CROSS CREEK COMMERCIAL
PARK, LLC**
6540 W SH 29
GEORGETOWN, TX, 78628

ROAD MAP

Henderson Professional Engineers

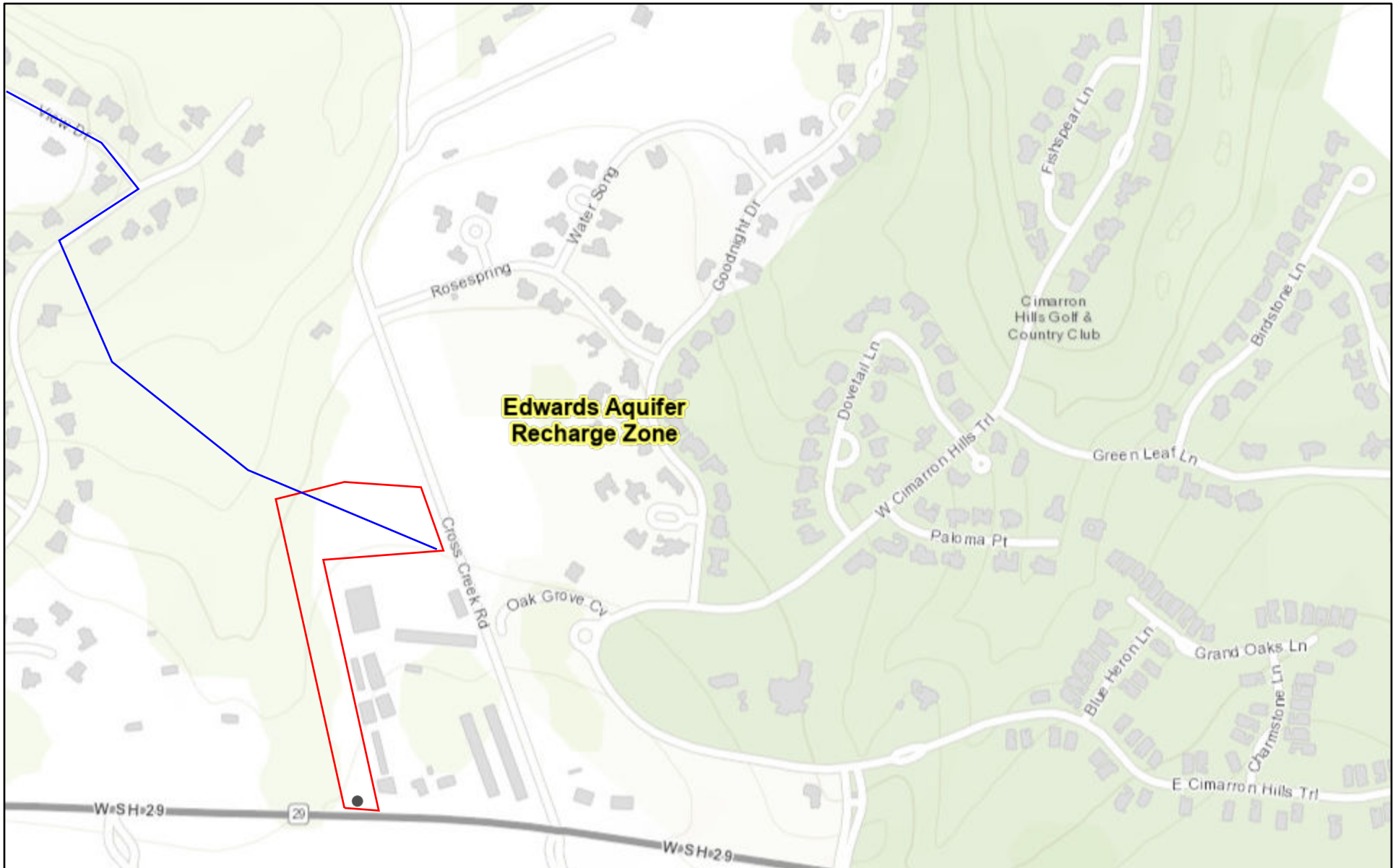
HPE

600 ROUND ROCK WEST
DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208




Civil Engineering www.hendersonpe.com

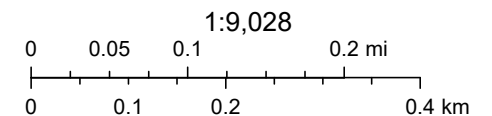
WBE210166 | HUB 1853873845300

Edwards Aquifer Viewer Custom Print



3/21/2024, 1:48:15 PM

Edwards Aquifer Label  7.5 Minute Quad Grid
 TX Counties  TCEQ_EDWARDS_OFFICIAL_MAPS



County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA, TCEQ

Web AppBuilder for ArcGIS

County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA | TCEQ |



Project Description

The project site is 12.45 acres located northwest of the Cross Creek Road and West State Highway 29 intersection. The address is 6540 W SH 29, Georgetown, TX 78628. The project site is located within the ETJ of the City of Georgetown, Williamson County, Texas. No portion of the project site is located in the 1% annual chance (100-year) floodplain per the FEMA map panel 48491C0275E effective September 26, 2008. The project site is located within the Edwards Aquifer Recharge Zone. Hydrologic soil group information came from digital information served by the United States Department of Agriculture Natural Resources Conservation Service through the Web Soil Survey 2.0 portal. The project site is entirely type 'D' soil.

The project site is currently considered to be vacant land, and most of the property is undeveloped. According to a land survey conducted by Cuplin & Associates, Inc., there is an existing crude oil pipeline underground along the length of the property. There is an existing valve site on a concrete pad on the property that is associated with said pipeline. There is also an existing firework stand. A tree survey was conducted on the site by Texas Land Surveying. Trees are present throughout the site, but they are the densest on the eastern side. The trees surveyed are composed mostly of live oak and elm, and there are some mesquites as well. A strip of land on the west side of the site, running south to north, is cleared for the crude oil pipeline. The existing impervious cover of the project site is close to 2% and the proposed is close to 45%.

The proposed development of this project includes adding 7 new buildings, a storage yard, ADA-compliant sidewalks, parking lots, loading zones and other concrete surfaces. This project is focused on the northern portion of the property, which will have two driveway accesses to Cross Creek Road.

A detention pond is planned for this project. For water quality, a sedimentation basin and a filtration basin is planned. No demolition is planned for this project.

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: Kevin Denson, P.G.


Telephone: 512 442-1122

Date: June 13, 2024

Fax: 512 442-1181

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

Signature of Geologist:



Regulated Entity Name: Cross Creek Commercial Park, 6540 W Highway 29, Georgetown, Texas

Project Information

1. Date(s) Geologic Assessment was performed: June 6, 2024

2. Type of Project:

☒ WPAP

☐ AST

☐ SCS

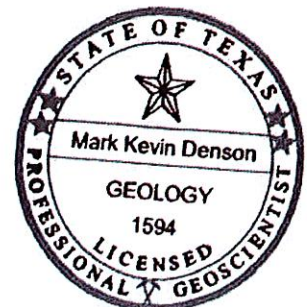
☐ UST

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)
GsB	D	2-3
EeB	D	0-1

** Soil Group Definitions (Abbreviated)*

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

6. ☒ **Attachment B – Stratigraphic Column.** A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.
7. ☒ **Attachment C – Site Geology.** A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.
8. ☒ **Attachment D – Site Geologic Map(s).** The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'
 Applicant's Site Plan Scale: 1" = _____'
 Site Geologic Map Scale: 1" = 100'
 Site Soils Map Scale (if more than 1 soil type): 1" = 250'
9. Method of collecting positional data:
 - ☒ Global Positioning System (GPS) technology.
 - ☐ Other method(s). Please describe method of data collection: _____
10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

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

Administrative Information

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

ATTACHMENT A

GEOLOGIC ASSESSMENT TABLE										PROJECT NAME: Cross Creek Commercial Park, 6540 W Highway 29, Georgetown, Texas									
LOCATION										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)	TRENCH (DEGREES)	DOM	DENSITY (NOFT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY	CATCHMENT AREA (ACRES)	TOPOGRAPHY			
						X	Y	Z											
F-1	30.64069	-97.79986	CD	5	Ked				10			5	10	X	X				
F-2	30.64097	-97.80036	CD	5	Ked							5	10	X	X				
F-3	30.64131	-97.79917	CD	5	Ked							5	10	X	X				
F-4	30.6419	-97.8003	CD	5	Ked							5	10	X	X				

* DATUM NAD27

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

8A INFILLING

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

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

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

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

Date 6/13/2024

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

Sheet 1 of 1



ATTACHMENT B

Stratigraphic Column
Cross Creek Commercial Park
6540 W Highway 29, Georgetown, Texas

HYDROGEOLOGIC SUBDIVISION	FORMATION	THICKNESS (feet)	LITHOLOGY
Edwards Aquifer	Edwards Limestone	150	Mudstone to packstone, crystalline limestone, wackestone

Source: Senger, Collins and Kreidler, 1990



ATTACHMENT C SITE-SPECIFIC GEOLOGY

The Geologic Assessment (GA) of the Cross Creek Commercial Park was performed by Kevin Denson, P.G., of Terracon on June 6, 2024. The site consists of three tracts totaling approximately 12.45 acres, and is located at 6540 West Highway 29 in Georgetown, Williamson County, Texas. The site is undeveloped and mostly heavily wooded land.

Exhibit 1 (attached) is a site location map depicting the site in relation to the surrounding area. The areas immediately surrounding the site are a mix of residential, commercial, and undeveloped properties. The site is characterized as gently sloping to the northwest, and site elevation ranges from about 972 to 944 feet above mean sea level (msl).

The surficial geologic unit present at the site has been identified as the Edwards Formation. Exhibit 3 (attached) is a geologic map of the site. The Edwards consists of massive to thin bedded limestones and dolostones. The formation is characterized by honeycomb textures, collapse breccias and cavern systems, which account for most of the significant porosity within the strata that compose most of the aquifer.

The recharge zone boundary of the Edwards Aquifer is located approximately 3,300 feet south of the site. Table 1 (attached) is a stratigraphic column prepared for the site. Exposure of the geologic unit is typically obscured by soil and vegetation, with scattered outcrops present mostly in the northern portion of the site. No faulting was observed on the site and the nearest mapped fault is located approximately 3.5 miles west-northwest of the site. The fault, which trends toward the northeast, is associated with the Balcones Fault zone which represents the dominant structural trend in the vicinity of the site. The completed Geologic Assessment form is attached.

A total of four minor geologic features were observed on the site, as described below. As seen on the attached Geologic Assessment Table, the features are not considered to be significant recharge features.

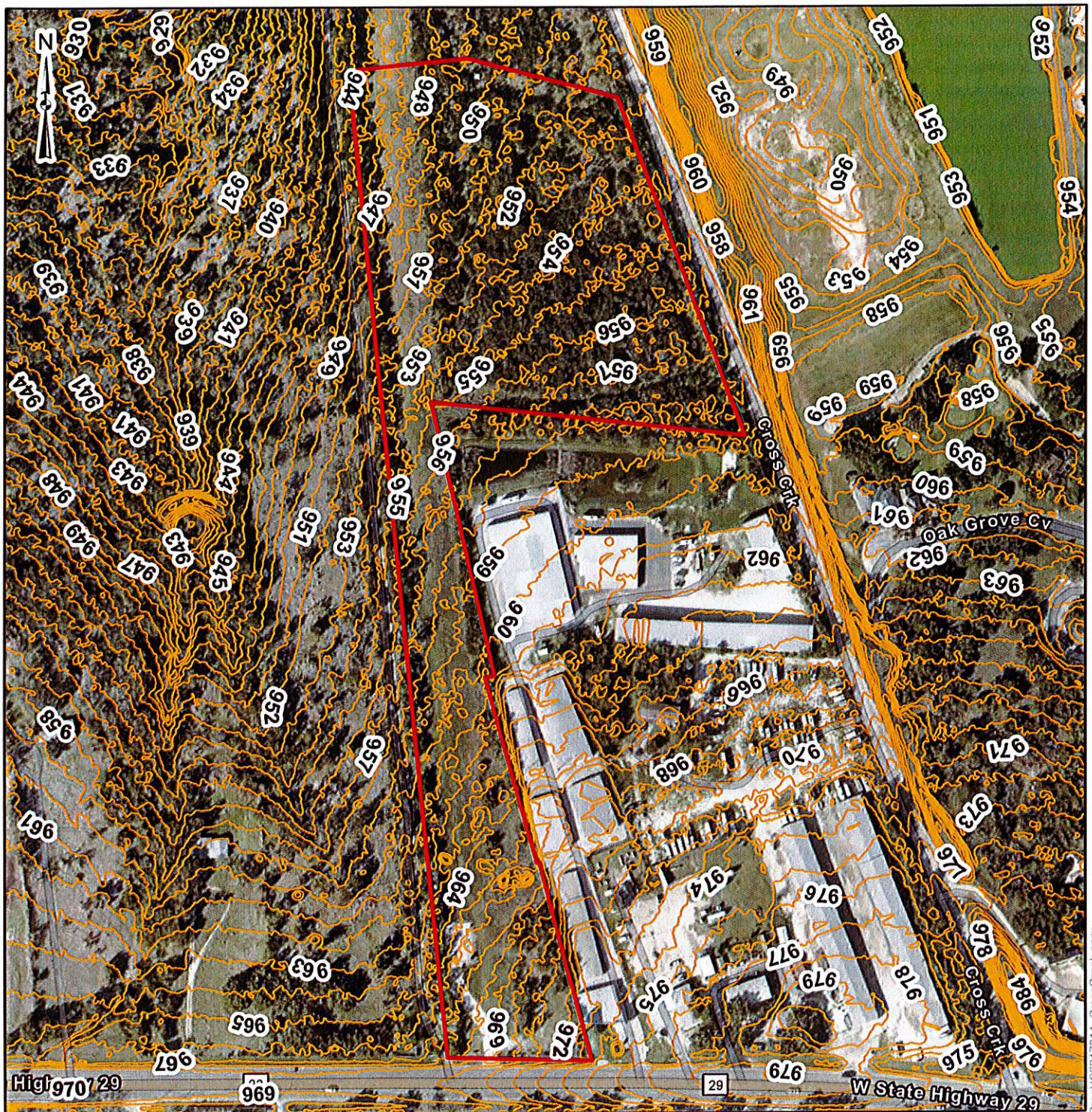
Feature F-1: Non-karst closed depression with a diameter of 5 feet and a depth of 1 foot. No rock outcrop was present.

Feature F-2: Non-karst closed depression with a diameter of 5 feet and a depth of 1.5 feet. No rock outcrop was present.

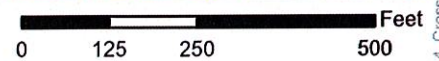
Feature F-3: Non-karst closed depression measuring approximately 4 feet by 3 feet by 1 foot deep. No rock outcrop was present.

Feature F-4: Non-karst closed depression with a diameter of 3 feet and a depth of 1.5 feet. No rock outcrop was present.

No springs or streams were observed onsite. A review of the site maps contained in Ordinance 2015-14 indicated there are no known springs occupied by the Georgetown Salamander on the site and the nearest known occupied site is located approximately 1 mile northeast of the site (Water Tank Cave). Due to the lack of significant sensitive recharge features observed on the site, the potential for fluid movement to the Edwards aquifer beneath the project is considered low.



- ▬ Approximate Project Boundary
- ▬ Williamson CAD 1-ft Topography



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

Project No.:	96247314
Date:	Jun 2024
Drawn By:	RC
Reviewed By:	KD



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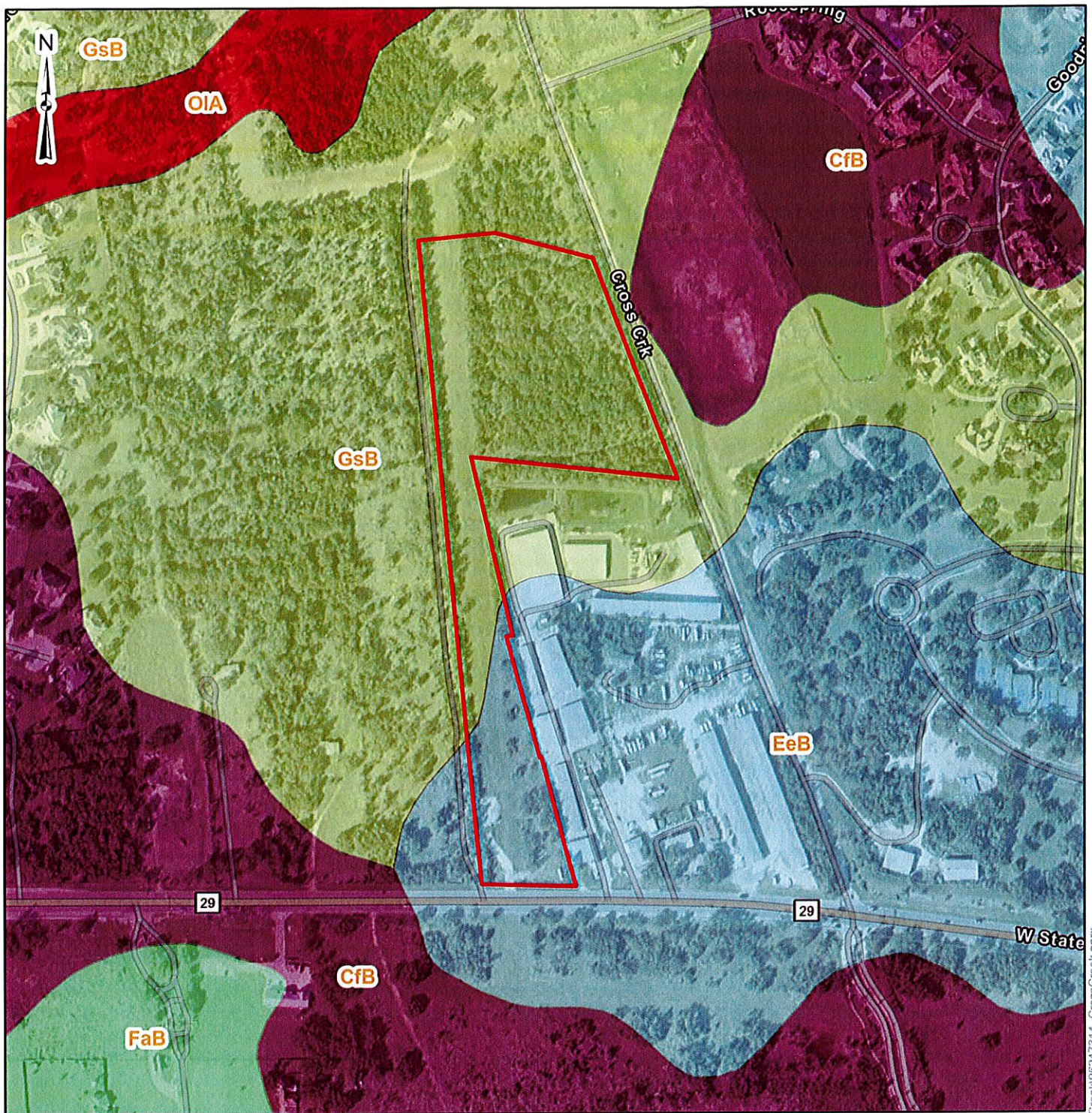
Site Specific Topography

Cross Creek Commercial Park

6540 West Highway 29
 Georgetown, Williamson County, Texas

Exhibit

1.0



- Legend:**
- Approximate Project Boundary
 - Oakalla soils, 0 to 1 percent slopes, channeled, frequently flooded (OIA)
 - Crawford clay, 1 to 3 percent slopes (CFB)
 - Eckrant stony clay, 0 to 3 percent slopes, stony (EeB)
 - Fairlie clay, 1 to 2 percent slopes (FaB)
 - Georgetown stony clay loam, 1 to 3 percent slopes (GsB)
- Scale:** 0 250 500 1,000 Feet
- DATA SOURCES:**
 Esri Community Maps Contributors, County of Williamson, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Williamson County TX, Maxar

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Site Specific Soils

Cross Creek Commercial Park

6540 West Highway 29
 Georgetown, Williamson County, Texas

Exhibit

2.0

Ked

Cross Creek Road

500'



 Approximate Project Boundary

TCEQ Edwards Aquifer Zone Data

Edwards Aquifer Contributing Zone

Edwards Aquifer Recharge Zone

0 1,250 2,500 5,000 Feet

DATA SOURCES:
County of Williamson, Texas Parks & Wildlife, CONANP,
Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc,
METI/NASA, USGS, EPA, NPS, US Census Bureau,
USDA, USFWS, Williamson County TX, Maxar, TNIRIS,
Bureau of Economic Geology

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Edwards Aquifer Zones

Cross Creek Commercial Park

6540 West Highway 29
Georgetown, Williamson County, Texas

Exhibit

4.0

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.

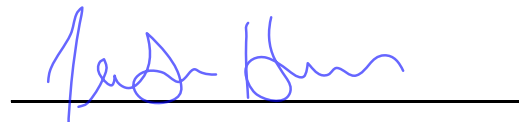
Signature

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: Jen Henderson, P.E.

Date: 5/10/2024

Signature of Customer/Agent:



Regulated Entity Name: CROSS CREEK COMMERCIAL PARK

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property): 12.45

3. Estimated projected population: _____

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	101407.7059	÷ 43,560 =	2.33
Parking	121815.7182	÷ 43,560 =	2.80
Other paved surfaces	20,712.5759	÷ 43,560 =	0.47
Total Impervious Cover	243936	÷ 43,560 =	5.60

Total Impervious Cover 5.60 ÷ **Total Acreage** 12.45 X 100 = 45 % **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 x W = _____ Ft² ÷ 43,560 Ft²/Acre = _____ acres.

10. Length of pavement area: _____ feet.

Width of pavement area: _____ feet.

L x W = _____ Ft² ÷ 43,560 Ft²/Acre = _____ acres.

Pavement area _____ acres ÷ R.O.W. area _____ acres x 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:

_____ % Domestic	_____ Gallons/day
_____ % Industrial	_____ Gallons/day
_____ % Commingled	_____ Gallons/day
TOTAL gallons/day _____	

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 _____ (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" = 20 '.

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 Flood Map 48491C0275E Dated September 26, 2008.

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.



Factors Affecting Surface Water Quality

The construction activities associated with the Cross Creek Commercial Park, LLC plan of development could result in additional Total Suspended Solids (TSS) loads during the construction of the site improvements. This potential increased loading will be mitigated with the use of silt fencing that is to be placed downgradient of the active construction areas and the placement of stabilized construction entrances at the entrance(s) of the project. Rock berms may be used in areas of concentrated flows during construction activities.

The overall impervious cover of the site will be close to 45%, 5.60-acres of the 12.45-acre site. The runoff from the site will be treated by a sedimentation basin and a filtration basin. The permanent stormwater control calculations have been provided on the plan set and demonstrate the functionality of the proposed stormwater Best Management Practices. The proposed stormwater conveyance system will protect the water quality of the San Gabriel River.



Volume and Character of Stormwater

The peak storm water before construction for Cross Creek Commercial Park, LLC improvements has been calculated to be 50.194 cfs for the 25-yr storm event and 88.630 cfs for the 100-yr storm event. This is given that the project site is currently 12.45 acres of land that is open space in fair condition over soils group D at 1 - 3 percent slopes and a percent impervious cover close to 2%. The character of existing runoff is that of undeveloped land in proximity to developed storage facilities and other commercial structures.

After construction the character of the runoff will change such that hydrocarbon residues from vehicles, buildings, and other contamination typical of a developed storage facility. may be present. The peak storm water discharges post-construction has been calculated to be 26.689 cfs for the 25-yr storm event and 35.328 cfs for the 100-yr storm event, given that the proposed impervious cover percentage is close to 45%, offsite flows that paths through the property are redirected using walls and slopes, and after detention. A proposed water quality pond with sedimentation and filtration basins on the site will capture most of the foreign elements. A proposed detention pond will detain the peak runoff for the 2-, 10-, 25-, and 100-year storms and releases are designed to be less than the existing conditions.

Detailed calculations will be shown within the construction plan set sheet set.

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.

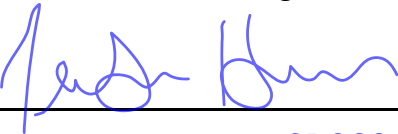
Signature

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: Jen Henderson

Date: 5/10/2024

Signature of Customer/Agent:



Regulated Entity Name: CROSS CREEK COMMERCIAL PARK

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

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 first steps that should be taken in the event of a spill are keeping people safe, identifying what has been spilled, and determining if warning signs are needed. The next step is to call the State of Texas Spill-Reporting Hotline and the SERC: 1-800-832-8224 no later than 24 hours after the discovery of the spill or discharge. The local TCEQ office shall also be contacted at 512-339-2929. All clean-up will follow the Spill Prevention and Control guidance outlined in Chapter 327 of the Texas Administrative Code.

Reasonable Response Actions:

1. Arrival of the responsible person or response personnel hired by the responsible person at the time of the discharge/spill
2. Make an effort to stop the spill or discharge
3. Minimizing the impact of the spill on public health and the environment
4. Neutralizing the effects of the incident
5. Removing the discharged or spilled substances
6. Managing the wastes



Kind of spill	Where discharged	Reportable quantity	Rule, statute, or responsible agency
Hazardous substance	onto land	"Final RQ" in Table 302.4 in 40 CFR 302.4 (PDF)	30 TAC 327
	into water	"Final RQ" or 100 lbs, whichever is less	
Any oil	coastal waters	as required by the Texas General Land Office	Texas General Land Office
Crude oil, oil that is neither a petroleum product nor used oil	onto land	210 gallons (five barrels)	30 TAC 327
	directly into water	enough to create a sheen	
Petroleum product, used oil	onto land, from an exempt PST facility	210 gallons (five barrels)	30 TAC 327
	onto land, or onto land from a non-exempt PST facility	25 gallons	
	directly into water	enough to create a sheen	
Associated with the exploration, development and production of oil, gas, or geothermal resources	under the jurisdiction of the Railroad Commission of Texas	as required by the Railroad Commission of Texas	Railroad Commission of Texas
Industrial solid waste or other substances	into water	100 lbs	30 TAC 327
From petroleum storage tanks, underground or aboveground	into water	enough to create a sheen on water	30 TAC 334 .75-81
From petroleum storage tanks, underground or aboveground	onto land	25 gallons or equal to the RQ under 40 CFR 302	30 TAC 327
Other substances that may be useful or valuable and are not ordinarily considered to be waste, but will cause pollution if discharged into water in the state	into water	100 lbs	30 TAC 327

https://www.tceq.texas.gov/response/spills/spill_rq.html

If a spill or accidental discharge is to occur it will be promptly contained by the responsible persons. Any spills will be excavated and properly disposed of.



Attachment B – Potential Sources of Contamination

There are a few potential sources of contamination with the construction of this project. A potential source of contamination is fuel for the equipment that will be utilized for excavation and other construction activities on the site. Concrete paving as well as a concrete curb and gutter will also take place on the site to construct the buildings, driveway, and parking lot. Paving can introduce a potential for surface water contamination.



Attachment C – Sequence of Major Activities

Below is a list of the major activities that will take place for the site development. The nearest receiving water ultimately discharges to San Gabriel.

1. There will be clearing and grubbing where the construction will take place. Approximately 8.19 acres of the site will be cleared of brush and trees. Silt fence will be put in place along the perimeter of the limits of construction to ensure that any soil loosened in the process will be contained on the site in the event of a storm. Tree protection will be installed before other trees are removed.
2. Excavation and utility installation will take place after the clearing and grubbing. The silt fence will still be in place from the initial installation and will be inspected to ensure it is still intact. Any damaged portions will be removed and replaced. A stabilized construction entrance will be used to prevent track out from the site.
3. After the utilities are installed the construction of the buildings, parking lots, driveways, and other developments will proceed. All previously mentioned erosion and sediment controls will be incorporated into the site development. Additional silt fencing will be put in place downstream if necessary. A concrete washout will be utilized for concrete waste.



Attachment D – Temporary Best Management Practices and Measures

Several temporary BMPs will be utilized on the project site. A silt fence will be placed along the perimeter of the site to prevent flows from picking up sediment and discharging from the site. A stabilized construction entrance will also be provided in order to prevent any vehicles entering or exiting the site from tracking out sediment into the street. Flows from the site will be contained in order to prevent them from entering surface streams, sensitive features, or the aquifer. There have not been any naturally occurring or manmade sensitive features identified on the site by the geologic survey.



Attachment F – Structural Practices

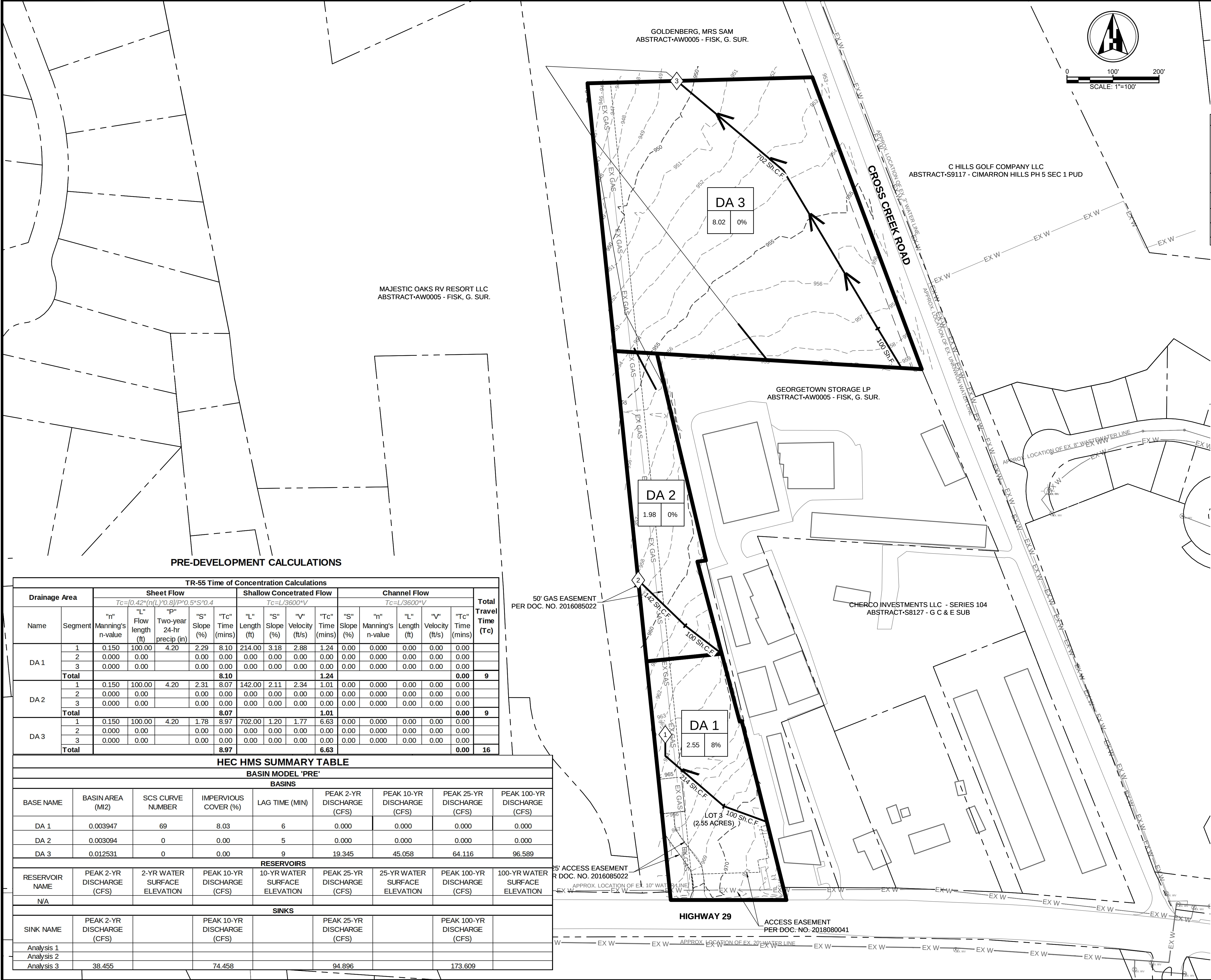
There are not any structural practices proposed on the site.



Attachment G – Drainage Area Map

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02 projects\2023\230903 lott bros\07 Sheet\SD1230903 PRE-DEVELOPMENT DRAINAGE AREA MAP.dwg

TR-55 Time of Concentration Calculations																	
Drainage Area		Sheet Flow					Shallow Concentrated Flow					Channel Flow					Total Travel Time (Tc)
		$T_c=[0.42*(n(L)^{0.8})/P^{0.5}*S^{0.4}$					$T_c=L/3600*V$					$T_c=L/3600*V$					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)		
DA 1	1	0.150	100.00	4.20	2.29	8.10	214.00	3.18	2.88	1.24	0.00	0.000	0.00	0.00	0.00		
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	Total					8.10				1.24					0.00		
DA 2	1	0.150	100.00	4.20	2.31	8.07	142.00	2.11	2.34	1.01	0.00	0.000	0.00	0.00	0.00		
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	Total					8.07				1.01					0.00		
DA 3	1	0.150	100.00	4.20	1.78	8.97	702.00	1.20	1.77	6.63	0.00	0.000	0.00	0.00	0.00		
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	Total					8.97				6.63					0.00		
HEC HMS SUMMARY TABLE																	
BASIN MODEL 'PRE'																	
BASINS																	
BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)									
DA 1	0.003947	69	8.03	6	0.000	0.000	0.000	0.000									
DA 2	0.003094	0	0.00	5	0.000	0.000	0.000	0.000									
DA 3	0.012531	0	0.00	9	19.345	45.058	64.116	96.589									
RESERVOIRS																	
RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION									
N/A																	
SINKS																	
SINK NAME	PEAK 2-YR DISCHARGE (CFS)		PEAK 10-YR DISCHARGE (CFS)		PEAK 25-YR DISCHARGE (CFS)		PEAK 100-YR DISCHARGE (CFS)										
Analysis 1																	
Analysis 2																	
Analysis 3	38.455		74.458		94.896		173.609										



LEGEND		
DRAINAGE AREA LABEL		
DA 1	0.90 Ac.	0%
ANALYSIS POINT		
100 LF Sh.F.		
500 LF Sh.C.F.		
500 LF Ch.F.		
FLOW ARROW		

WOMEN OWNED

CERTIFIED BY | WOMEN'S BUSINESS ENTERPRISE NATIONAL COUNCIL

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REVISION	No.	1	2	3	4	5

SITE DEVELOPMENT PLANS TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
GEORGETOWN, TEXAS 78628

PRE-DEVELOPMENT DRAINAGE AREA MAP

06/14/2024

PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C09.00

COUNTY PERMIT NUMBER: 2024-734-COC

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02 projects\2023\230903 lott bros\07 Sheet\SD230903 POST-DEVELOPMENT DRAINAGE AREA MAP.dwg








POST-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations															
Drainage Area		Sheet Flow					Shallow Concentrated Flow				Channel Flow				
		$T_c=[0.42*(n/L)^{0.8}/P^{0.5}*S^{0.4}$					$T_c=L/3600*V$				$T_c=L/3600*V$				
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two- year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)
DA 1	1	0.150	100.00	4.20	2.29	8.10	214.00	3.18	2.88	1.24	0.00	0.000	0.00	0.00	0.00
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	Total					8.10				1.24				0.00	9
DA 2	1	0.150	100.00	4.20	2.31	8.07	142.00	2.11	2.34	1.01	0.00	0.000	0.00	0.00	0.00
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	Total					8.07				1.01				0.00	9
DA 3	1	0.150	100.00	4.20	1.23	10.41	753.00	1.51	1.98	6.33	0.00	0.000	0.00	0.00	0.00
	2	0.000	0.00		0.00	0.00	529.00	0.92	1.54	5.71	0.00	0.000	0.00	0.00	0.00
	3	0.000	0.00		0.00	0.00	959.00	1.24	1.80	8.90	0.00	0.000	0.00	0.00	0.00
	Total					10.41				20.95				0.00	31

HEC HMS SUMMARY TABLE

BASIN MODEL 'POST'									
BASINS									
BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)	
DA 1	0.003947	69	8.03	6	0.000	0.000	0.000	0.000	
DA 2	0.003094	0	0.00	5	0.000	0.000	0.000	0.000	
DA 3	0.012531	69	45.00	19	31.926	55.826	72.879	101.223	
RESERVOIRS									
RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION	
Detention Pond	18.257	949.73	30.658	950.78	39.342	951.43	54.374	952.46	
SINKS									
SINK NAME	PEAK 2-YR DISCHARGE (CFS)	DIFFERENCE IN 2-YR PEAK (CFS)	PEAK 10-YR DISCHARGE (CFS)	DIFFERENCE IN 10-YR PEAK (CFS)	PEAK 25-YR DISCHARGE (CFS)	DIFFERENCE IN 25-YR PEAK (CFS)	PEAK 100-YR DISCHARGE (CFS)	DIFFERENCE IN 100-YR PEAK (CFS)	
Analysis 1	37.367	37.367	60.058	60.058	70.122	70.122	131.394	131.394	
Analysis 2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Analysis 3	37.367	-1.088	60.058	-14.400	70.122	-24.774	131.394	-42.215	

LEGEND					
<table border="1"><tr><td colspan="2">DA 1</td></tr><tr><td>0.90 Ac.</td><td>0%</td></tr></table>	DA 1		0.90 Ac.	0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
DA 1					
0.90 Ac.	0%				
	ANALYSIS POINT				
	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH				
	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH				
	CHANNELIZED FLOW SEGMENT OF Tc PATH				
	FLOW ARROW				

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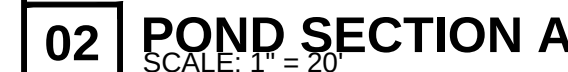
SITE DEVELOPMENT PLANS TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628

POST-DEVELOPMENT DRAINAGE AREA MAP

06/11/2024

PROJECT NO. 230903	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C10.00



Detention Pond Stage-Storage						
.50' Interval	Area		Storm	Avg. End	Accumulated	Discharge
Elevation	S.F.	AC.	Event	Method	Volume	(cfs)
947.19	0.00	0.0		0	-	0.00
947.25	132.10	0.00303		4.02905	4.02905	0.068
947.50	1728.73	0.03966		232.60375	236.6328	0.777
947.75	3603.25	0.082719		666.497	903.1303	1.897
948.00	5867.62	0.134702		1183.85875	2086.98905	3.279
948.25	8365.63	0.192048		1779.15625	3866.1453	4.925
948.50	10396.89	0.23688		2345.315	6211.4603	6.790
948.75	11475.72	0.263446		2734.07625	8945.53655	8.765
949.00	12490.82	0.28675		2995.8175	11941.35405	11.07
949.25	13592.76	0.312047		3260.4475	15201.80155	13.32
949.50	14782.92	0.339369		3546.96	18748.76155	15.82
949.73	15959.77	0.366386	2-yr	3535.4084	22284.17038	18.25
949.75	16062.10	0.368735		320.218656	22604.38905	18.55
950.00	17430.94	0.400159		4186.63	26791.01905	21.39
950.25	18888.36	0.433617		4539.9125	31330.93155	24.76
950.50	20435.00	0.469123		4915.42	36246.35155	27.83
950.75	22079.99	0.506887		5314.33775	41560.7253	29.60
950.78	22194.26	0.50951	10-yr	646.113804	42224.8391	30.65
951.00	23032.27	0.528748		4974.8187	47199.5758	33.53
951.25	23706.94	0.554426		5842.40125	53042.15905	37.77
951.43	24195.04	0.555442	25-yr	4311.17842	57533.37747	39.34
951.45	24384.86	0.559799		170.29658	59053.63405	41.97
951.50	25066.05	0.575437		6181.36375	65234.9978	45.75
951.75	25750.51	0.59115		6352.06875	71587.06655	47.47
952.00	26438.2	0.609938		6523.5875	78110.6545	51.38
952.46	27018.62	0.620262	100-yr	1062.9661	83373.62015	54.37
952.50	27129.17	0.6228		5812.9558	84806.57595	
952.75	27823.4	0.638737		6869.07125	91675.6472	
953.00	28520.88	0.654749		7043.035	98718.6822	
953.25	29221.63	0.670836		7217.81375	105936.496	
953.5	29925.64	0.686998		7393.40875	113329.9047	



Attachment I – Inspection and Maintenance for BMPs

The following inspection plan has been laid out for each BMP:

1. Silt fence
 - a. Silt fence will be inspected monthly and after large rainfall events to ensure there are not any compromised points. If it is found that the silt fence is damaged it will be removed and replaced with new fence.
2. Stabilized Construction Entrance
 - a. A stabilized construction entrance will be provided for the site. The construction entrance will be inspected on a monthly basis. If the aggregate becomes damaged or no longer prevents track out, it will be removed and replaced with new aggregate.
3. Concrete Washout
 - a. A concrete washout will be provided for any excess concrete and for truck cleaning. The washout will be inspected on a monthly basis and at the end of the day on concrete pours. Once the washout is full, it will be disposed of properly and either replaced with a new washout or emptied fully.
4. Tree Protection
 - a. Tree protection will be installed at the beginning of the project. All tree protection will be inspected on a monthly basis. If the protection is damaged at any point during the construction process it will be replaced with adequate protection.



Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

The following inspection plan has been laid out for each soil stabilization practices:

1. Tree Protection
 - a. Tree protection will be installed at the beginning of the project. All tree protection will be inspected on a monthly basis. If the protection is damaged at any point during the construction process it will be replaced with adequate protection.
2. Permanent Vegetation
 - a. At the conclusion of construction, all disturbed areas will be re-seeded with permanent grass/vegetation.
 - b. Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

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.

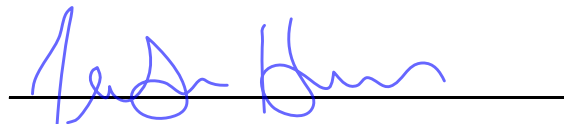
Signature

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: Jen Henderson

Date: 5/10/2024

Signature of Customer/Agent



Regulated Entity Name: CROSS CREEK COMMERCIAL PARK

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



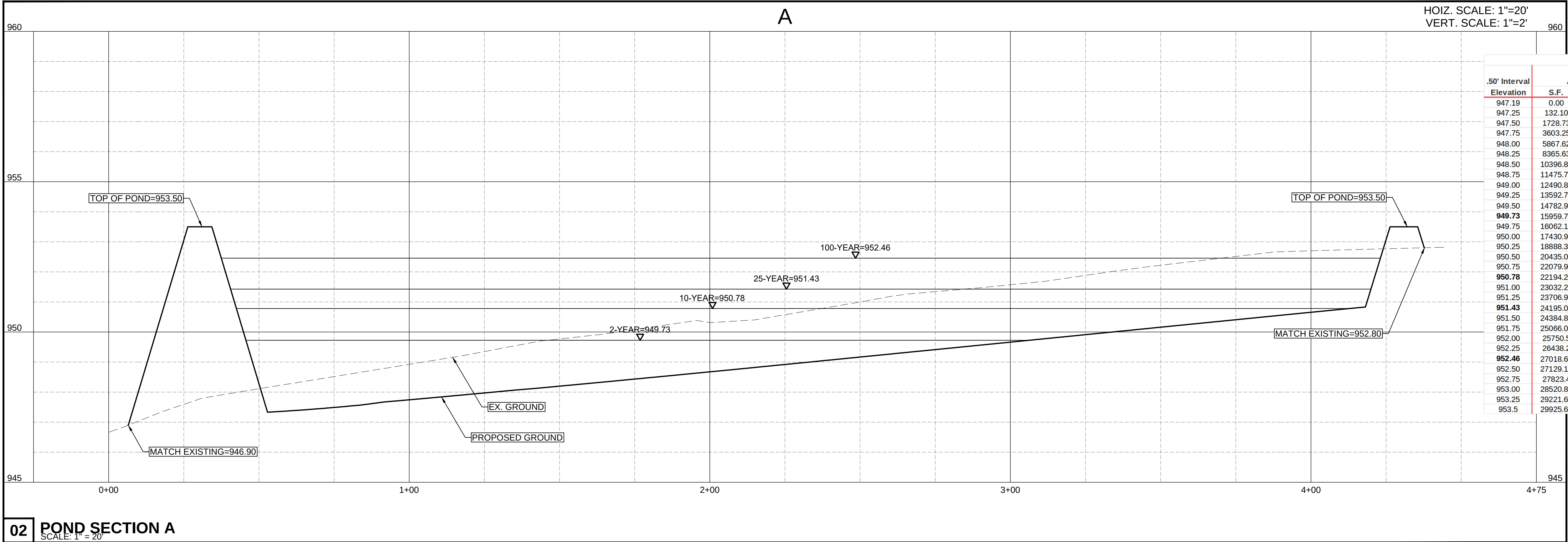
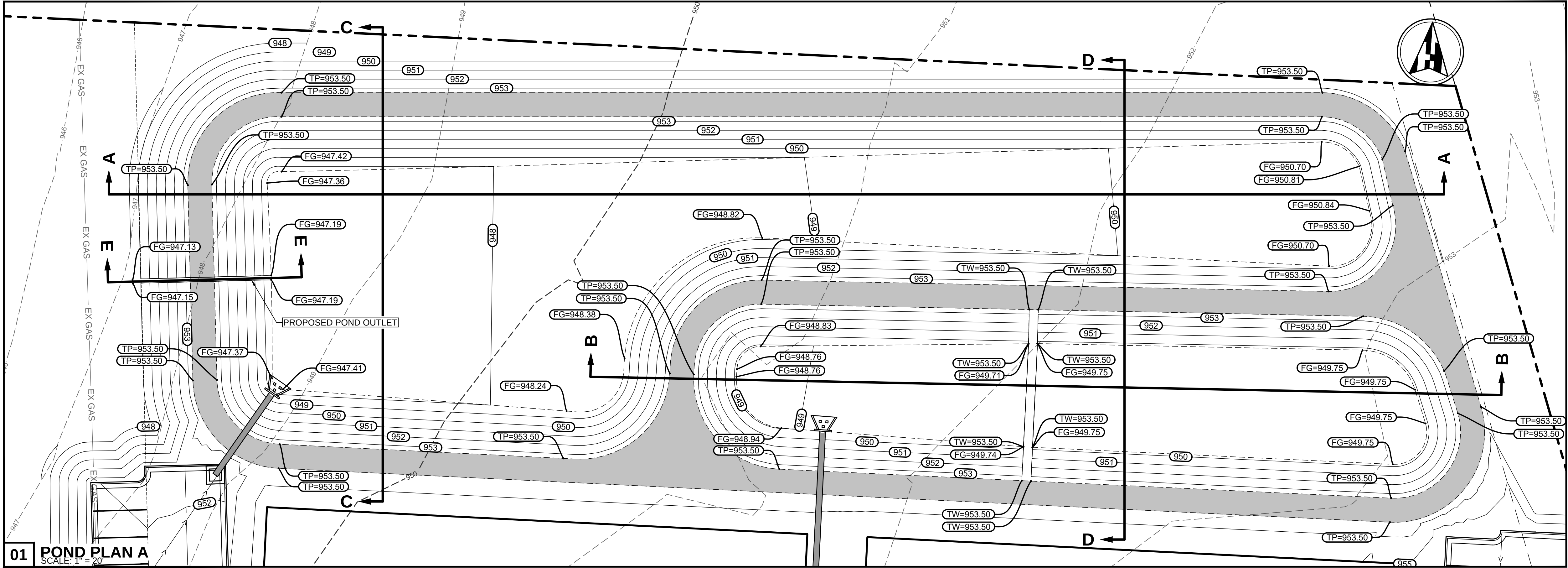
Attachment B - BMPs for Upgradient Stormwater

No BMPs for upgradient stormwater runoff will be necessary with the proposed development, for the off-site developments have their own water quality measures taken to treat water that discharges onto our project site.



Attachment C - BMPs for On-site Stormwater

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02 projects\2023\230903 lot1 bro\07 Sheet\SD1230903 POND PLAN AND SECTIONS.dwg



Detention Pond Stage-Storage						
.50' Interval	Area		Storm	Avg. End	Accumulated	Discharge
Elevation	S.F.	AC.	Event	Area Method	Volume	(cfs)
947.19	0.00	0.0		0	-	0
947.25	132.10	0.003033		4.02905	4.02905	0.069
947.50	1728.73	0.039686		232.60375	236.6328	0.779
947.75	3603.25	0.082719		666.4975	903.1303	1.891
948.00	5867.62	0.134702		1183.85875	2086.98905	3.279
948.25	8365.63	0.192048		1779.15625	3866.1453	4.925
948.50	10396.89	0.23868		2345.315	6211.4603	6.790
948.75	11475.72	0.263446		2734.07625	8945.53655	8.765
949.00	12490.82	0.28675		2995.8175	11941.35405	11.079
949.25	13592.76	0.312047		3260.4475	15201.80155	13.324
949.50	14782.92	0.339369		3546.96	18748.76155	15.828
949.75	15959.77	0.366386	2-yr	3535.40884	22284.17039	18.257
949.75	16062.10	0.368735		320.218656	22604.38905	18.558
950.00	17430.94	0.400159		4186.63	26791.01905	21.398
950.25	18888.36	0.433617		4539.9125	31330.93155	24.765
950.50	20435.00	0.469123		4915.42	36246.35155	27.834
950.75	22079.99	0.506887		5314.37375	41560.7253	29.605
950.75	22194.26	0.50951	10-yr	664.113804	42224.8391	30.658
951.00	23032.27	0.528748		4974.9187	47199.7578	33.539
951.25	23706.94	0.544236		5842.40125	53042.15905	37.776
951.43	24195.04	0.555442	25-yr	4311.17842	57353.33747	39.342
951.50	24384.86	0.559799		1700.29658	59053.63405	41.978
951.75	25066.05	0.575437		6181.36375	65234.9978	45.79
952.00	25750.5	0.59115		6352.06875	71587.06655	47.478
952.25	26438.2	0.606938	100-yr	6523.5875	78110.65405	51.38
952.46	27018.62	0.620262		5612.9661	83723.62015	54.374
952.50	27129.17	0.6228		1082.9558	84806.57595	
952.75	27823.4	0.638737		8869.07125	91675.6472	
953.00	28520.88	0.654749		7043.035	98718.6822	
953.25	29221.63	0.670636		7217.81375	105936.496	
953.5	29925.64	0.686998		7393.40875	113329.9047	

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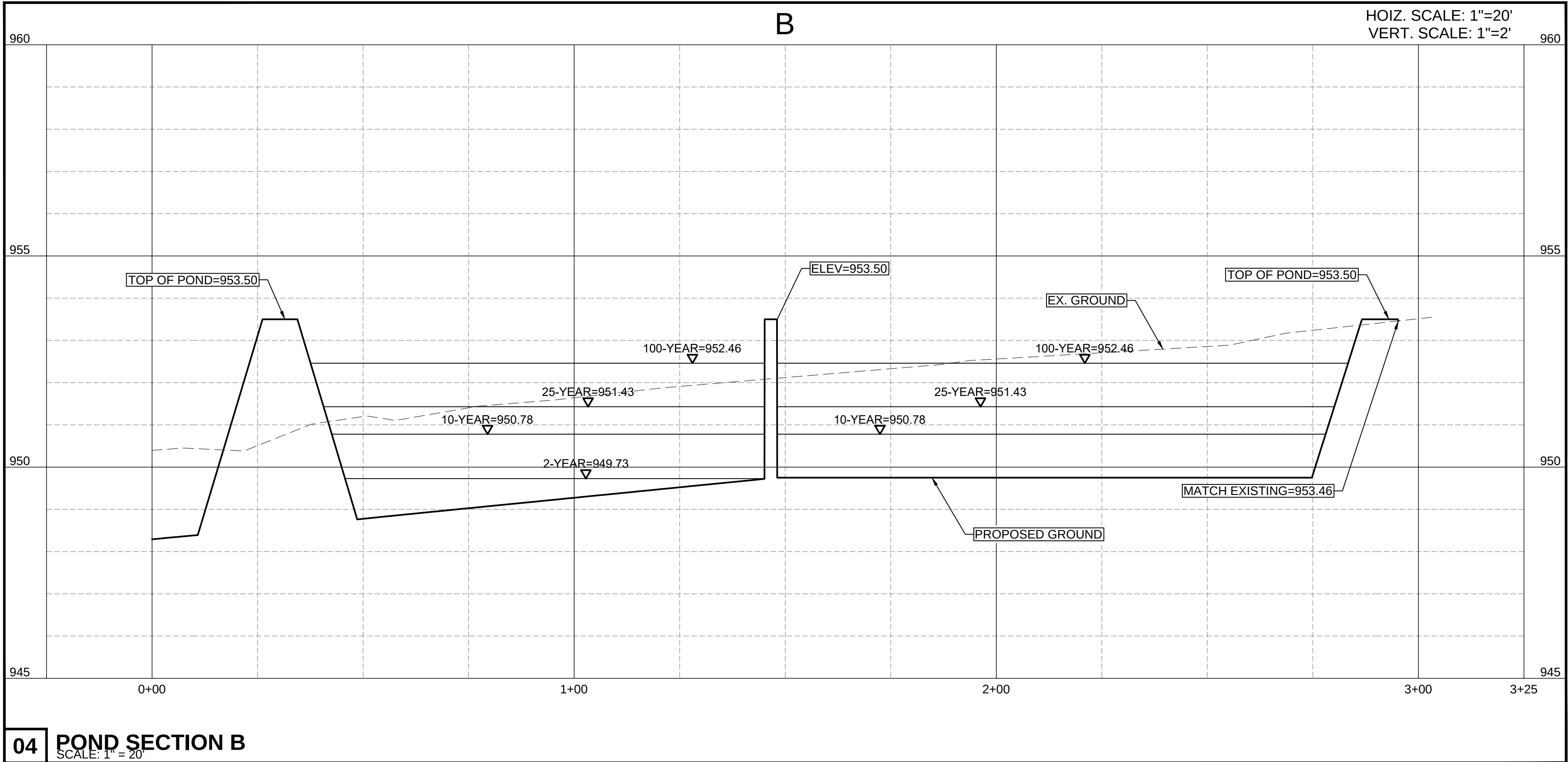
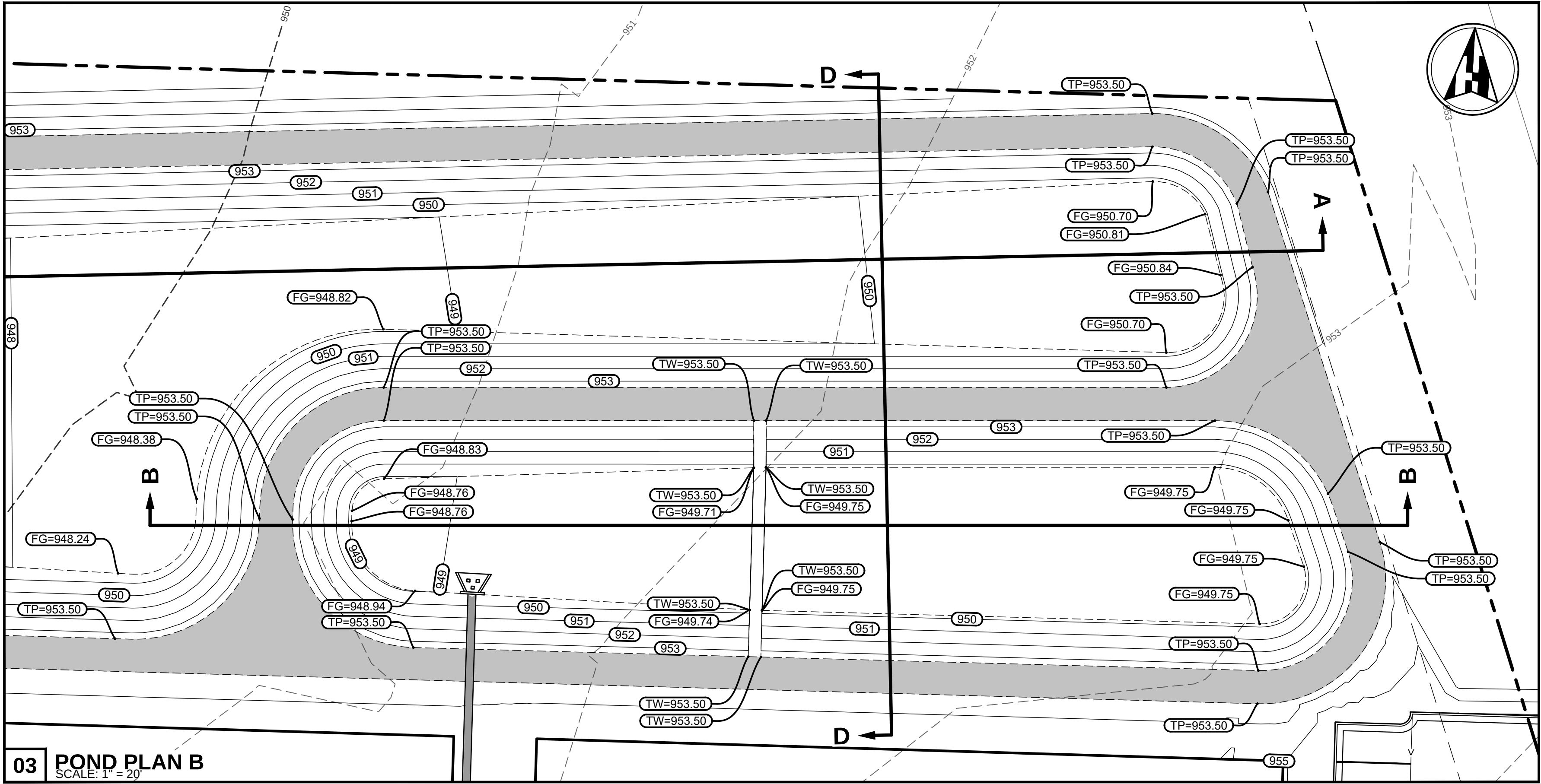
SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
POND PLAN AND SECTION 1



PROJECT NO. 230903
06/11/2024
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APPROVED BY: JH

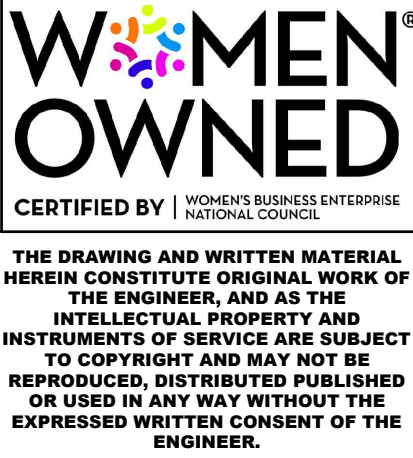
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Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lot1 bros\07 Sheet\SD1230903 POND PLAN AND SECTIONS.dwg



Sedimentation Basin Stage-Storage				
.50' Interval Elevation	Area		Avg. End Area Method	Accumulated Volume
	S.F.	AC.		
948.76	0.00	0.0	0	-
949.00	592.10	0.013593	71.052	71.052
949.25	1393.90	0.032	248.25	319.302
949.50	2288.20	0.05253	460.2625	779.5645
949.75	3190.96	0.073254	684.895	1464.4595
950.00	3355.58	0.077034	818.3175	2282.777
950.25	3521.95	0.080853	859.69125	3142.46825
950.50	3690.07	0.084712	901.5025	4043.97075
950.75	3859.95	0.088612	943.7525	4987.72325
951.00	4031.58	0.092552	986.44125	5974.1645
951.25	4204.96	0.096533	1029.5675	7003.732
951.50	4380.10	0.100553	1073.1325	8076.8645
951.75	4556.99	0.104614	1117.13625	9194.00075
952.00	4735.64	0.108715	1161.57875	10355.5795
952.25	4916.03	0.112857	1206.45875	11562.03825
952.50	5098.19	0.117038	1251.7775	12813.81575
952.75	5282.09	0.12126	1297.535	14111.35075
953.00	5467.75	0.125522	1343.73	15455.08075
953.25	5655.16	0.129825	1390.36375	16845.4445
953.50	5844.33	0.134167	1437.43625	18282.88075

Filtration Basin Stage-Storage				
.50' Interval Elevation	Area		Avg. End Area Method	Accumulated Volume
	S.F.	AC.		
949.75	4569.26	0.1	0	-
950.00	4782.53	0.109792	1168.97375	1168.97375
950.25	4997.45	0.114726	1222.4975	2391.47125
950.50	5214.04	0.119698	1276.43625	3667.9075
950.75	5432.28	0.124708	1330.79	4998.6975
951.00	5652.17	0.129756	1385.55625	6384.25375
951.25	5873.73	0.134842	1440.7375	7824.99125
951.50	6096.94	0.139966	1496.33375	9321.325
951.75	6321.80	0.145129	1552.3425	10873.6675
952.00	6548.32	0.150329	1608.765	12482.4325
952.25	6776.50	0.155567	1665.6025	14148.035
952.50	7006.33	0.160843	1722.85375	15870.88875
952.75	7237.82	0.166157	1780.51875	17651.4075
953.00	7470.97	0.17151	1838.59875	19490.00625
953.25	7705.77	0.1769	1897.0925	21387.09875
953.50	7942.23	0.182329	1956	23343.09875



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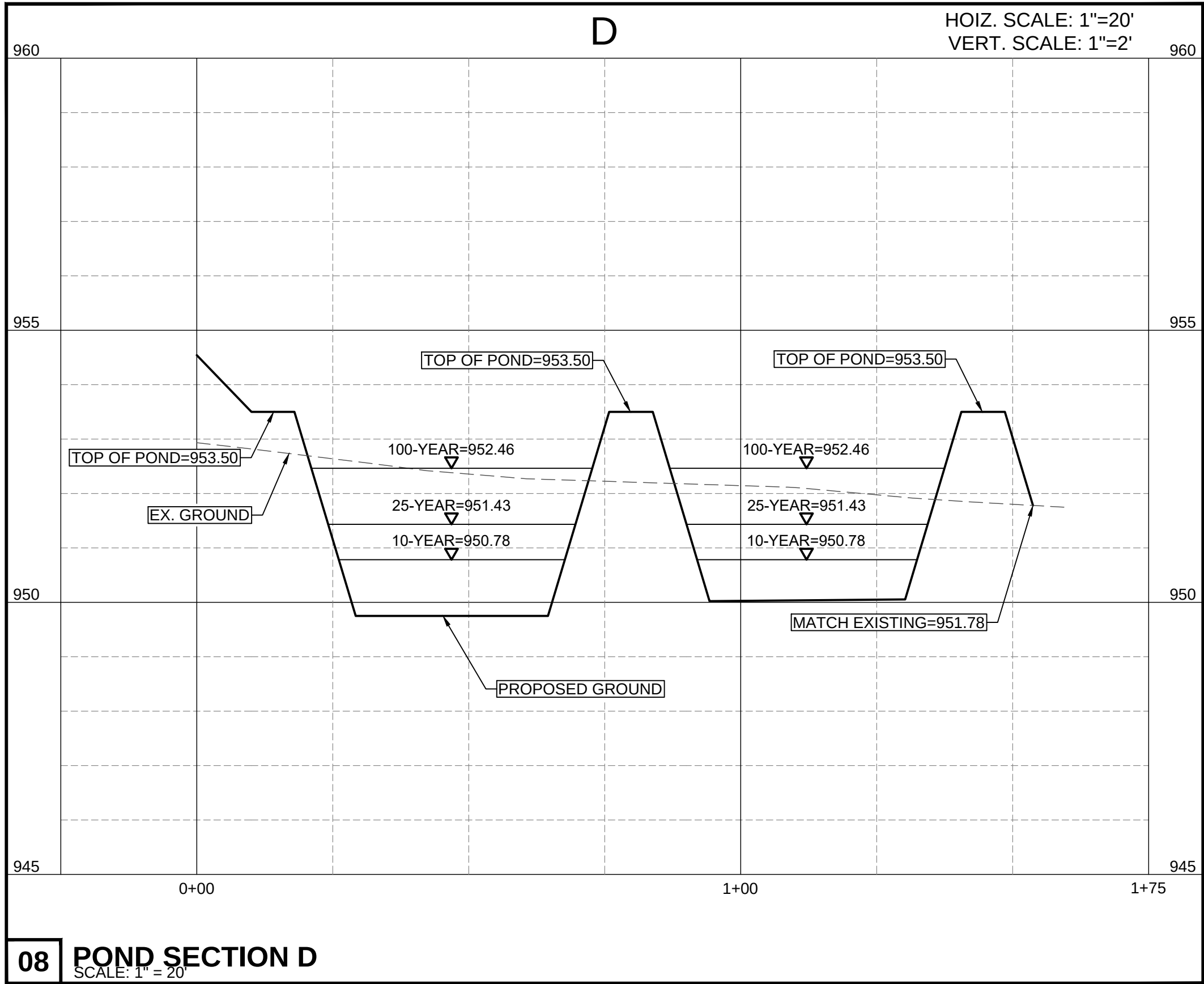
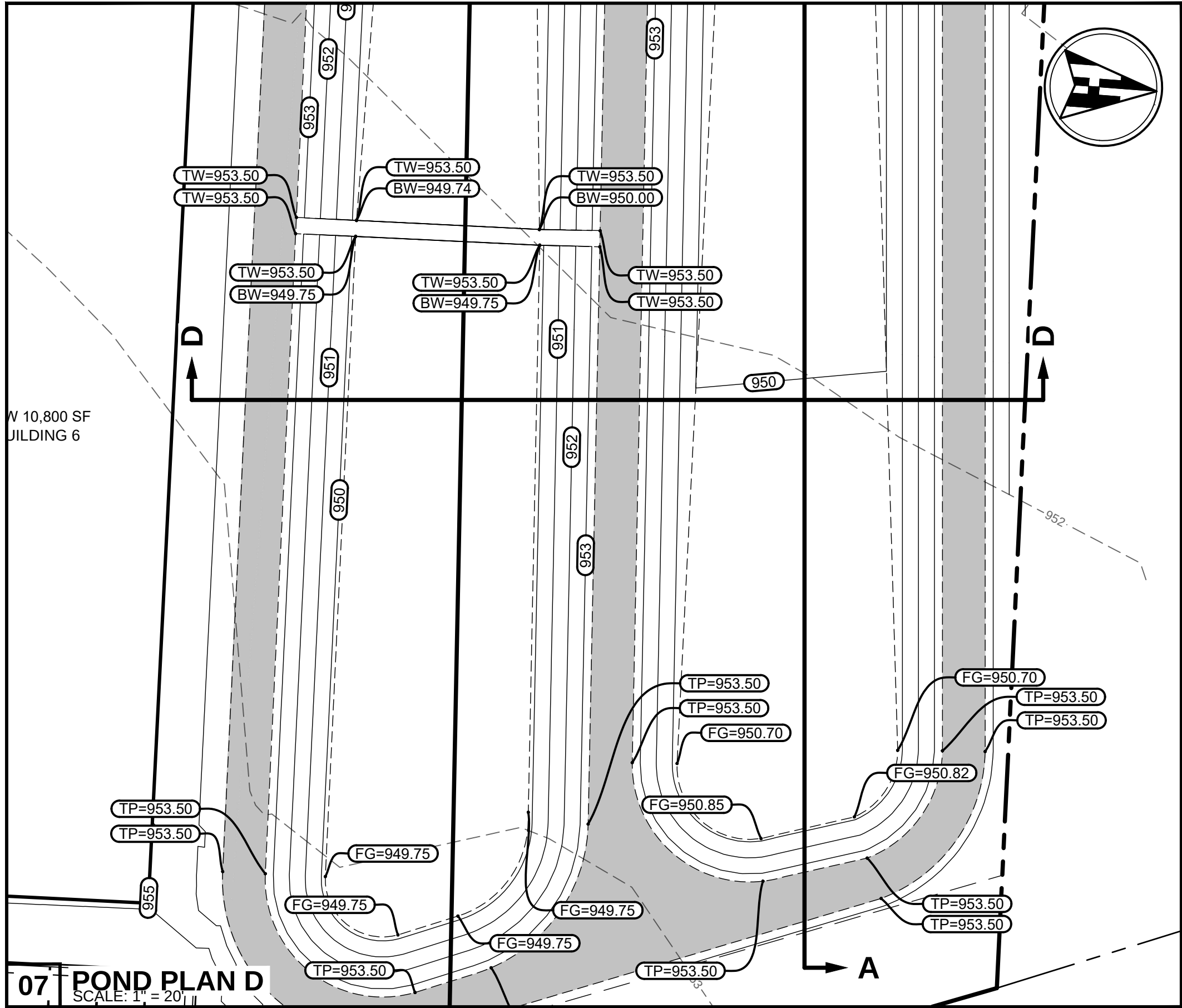
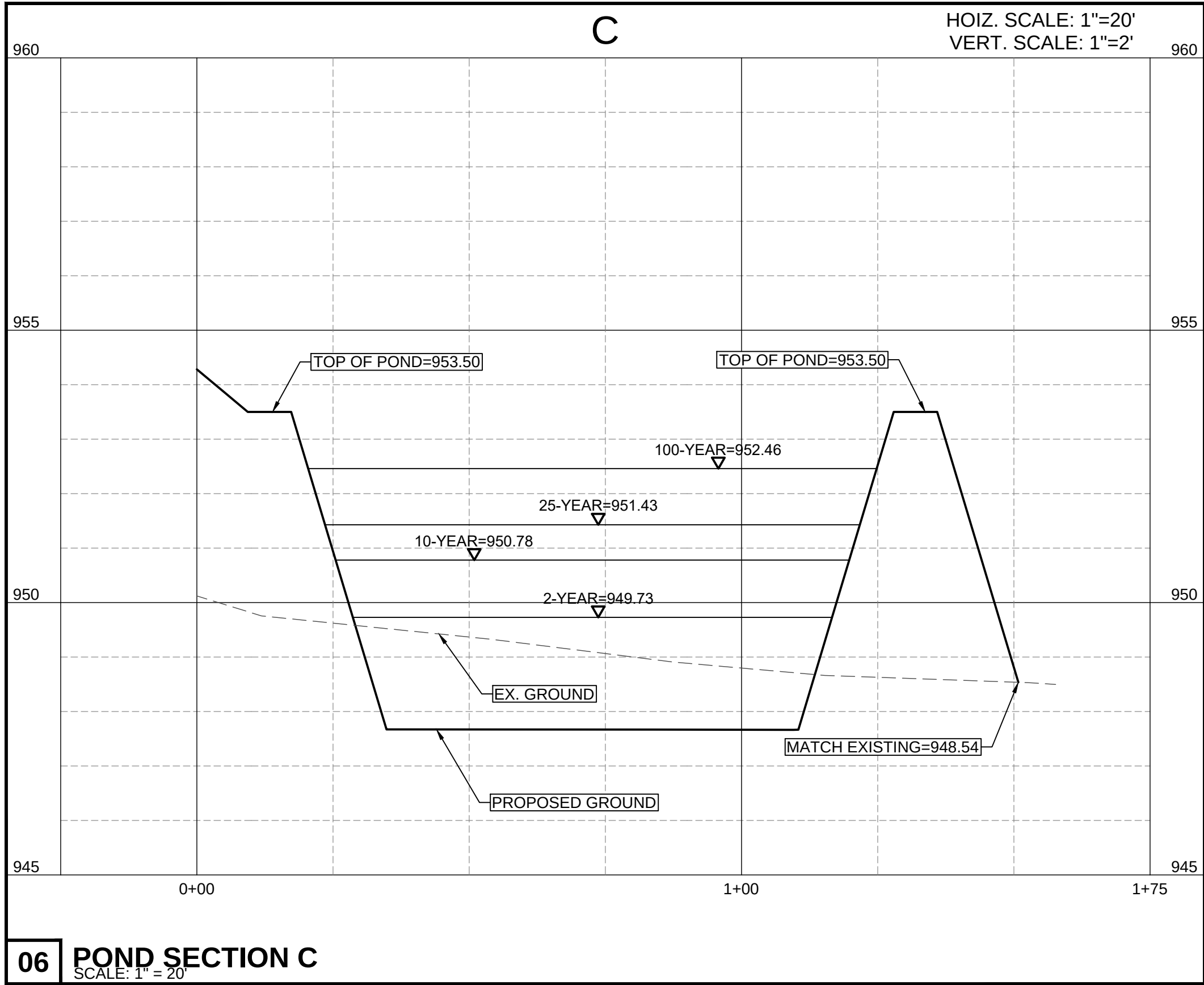
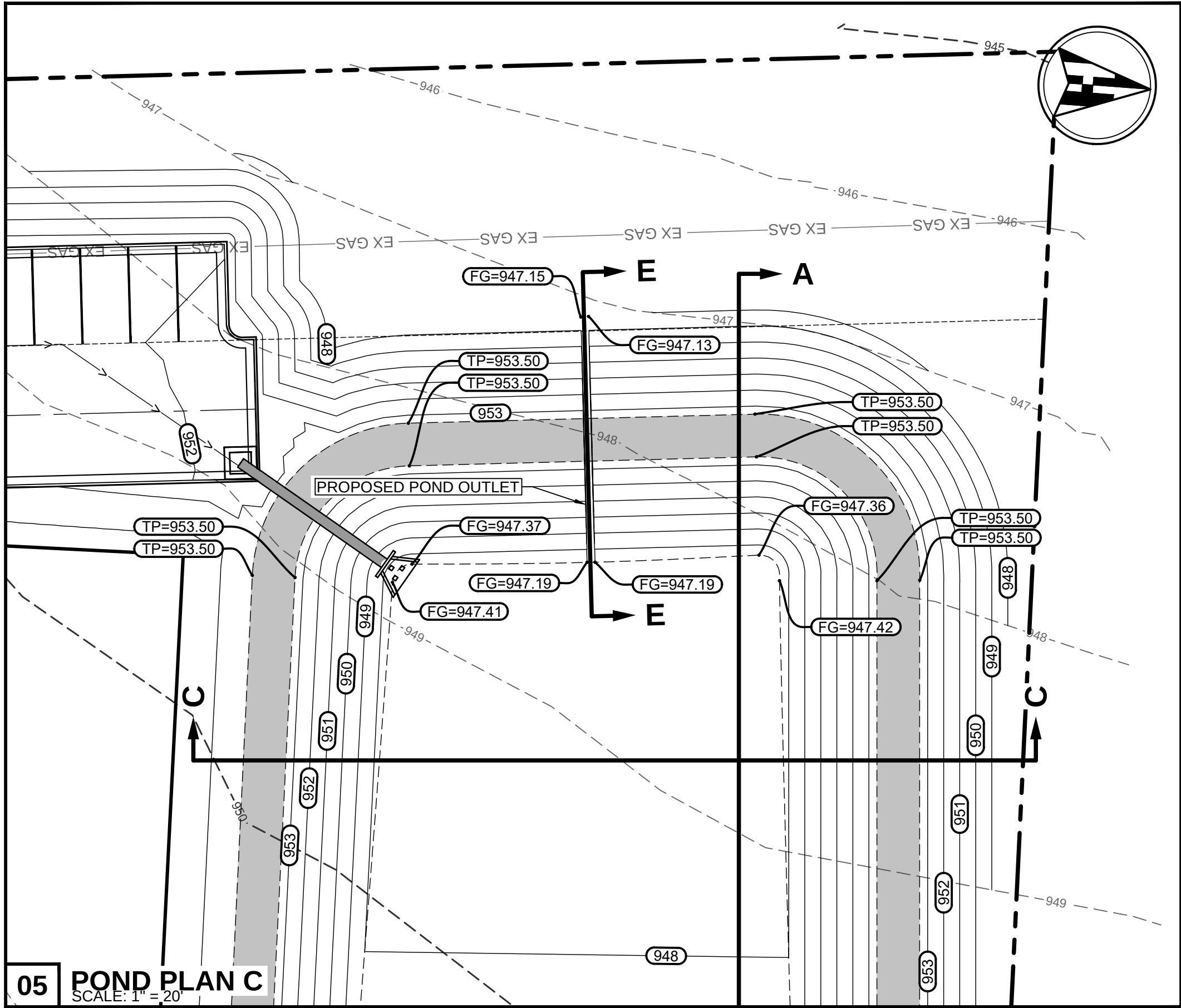
SITE DEVELOPMENT PLANS
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POND PLAN AND SECTION 2



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Detention Pond Stage-Storage					
.50' Interval	Area		Storm	Avg. End	
Elevation	S.F.	AC.	Event	Area Method	Accumulated Volume
947.19	0.00	0.0		0	-
947.25	132.10	0.003033		4.02905	4.02905
947.50	1728.73	0.039686		232.60375	236.6328
947.75	3603.25	0.082719		666.4975	903.1303
948.00	5867.62	0.134702		1183.85875	2086.98905
948.25	8365.63	0.192048		1779.15625	3866.1453
948.50	10396.89	0.23868		2345.315	6211.4603
948.75	11475.72	0.263446		2734.07625	8945.53655
949.00	12490.82	0.28675		2995.8175	11941.35405
949.25	13592.76	0.312047		3260.4475	15201.80155
949.50	14782.92	0.339369		3546.96	18748.76155
949.75	15959.77	0.366386	2-yr	3535.40884	22284.17039
949.75	16062.10	0.368735		320.218656	22604.38905
950.00	17430.94	0.400159		4186.63	26791.01905
950.25	18888.36	0.433617		4539.9125	31330.93155
950.50	20435.00	0.469123		4915.42	36246.35155
950.75	22079.99	0.506887		5314.37375	41560.7253
950.78	22194.26	0.50951	10-yr	664.113804	42224.8391
951.00	23032.27	0.528748		4974.9187	47199.7578
951.25	23706.94	0.544236		5842.40125	53042.15905
951.43	24195.04	0.555442	25-yr	4311.17842	57353.33747
951.50	24384.86	0.559799		1700.29658	59053.63405
951.75	25066.05	0.575437		6181.36375	65234.9978
952.00	25750.5	0.59115		6352.06875	71587.06655
952.25	26438.2	0.606938		6523.5875	78110.65405
952.46	27018.62	0.620262	100-yr	5612.9661	83723.62015
952.50	27129.17	0.6228		1082.9558	84806.57595
952.75	27823.4	0.638737		6869.07125	91675.6472
953.00	28520.88	0.654749		7043.035	98718.6822
953.25	29221.63	0.670836		7217.81375	105936.496
953.5	29925.64	0.686998		7393.40875	113329.9047

Filtration Basin Stage-Storage			
.50' Interval	Area	Avg. End	Accumulated
Elevation	S.F.	Area Method	Volume
949.75	4569.26	0.1	-
950.00	4782.53	0.109792	1168.97375
950.25	4997.45	0.114726	1222.4975
950.50	5214.04	0.119698	1276.43625
950.75	5432.28	0.124708	1330.79
951.00	5652.17	0.129756	1385.55625
951.25	5873.73	0.134842	1440.7375
951.50	6096.94	0.139966	1496.33375
951.75	6321.80	0.145129	1552.3425
952.00	6548.32	0.150329	1608.765
952.25	6776.50	0.155567	1665.6025
952.50	7006.33	0.160843	1722.85375
952.75	7237.82	0.166157	1780.51875
953.00	7470.97	0.17151	1838.59875
953.25	7705.77	0.1769	1897.0925
953.50	7942.23	0.182329	1956

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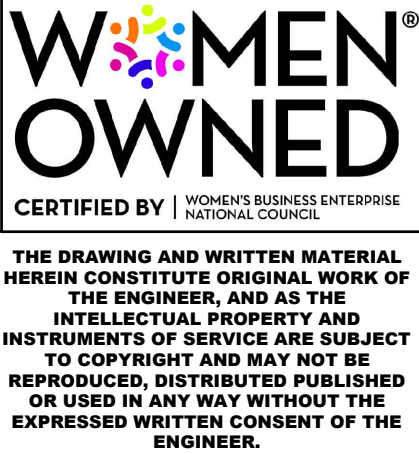
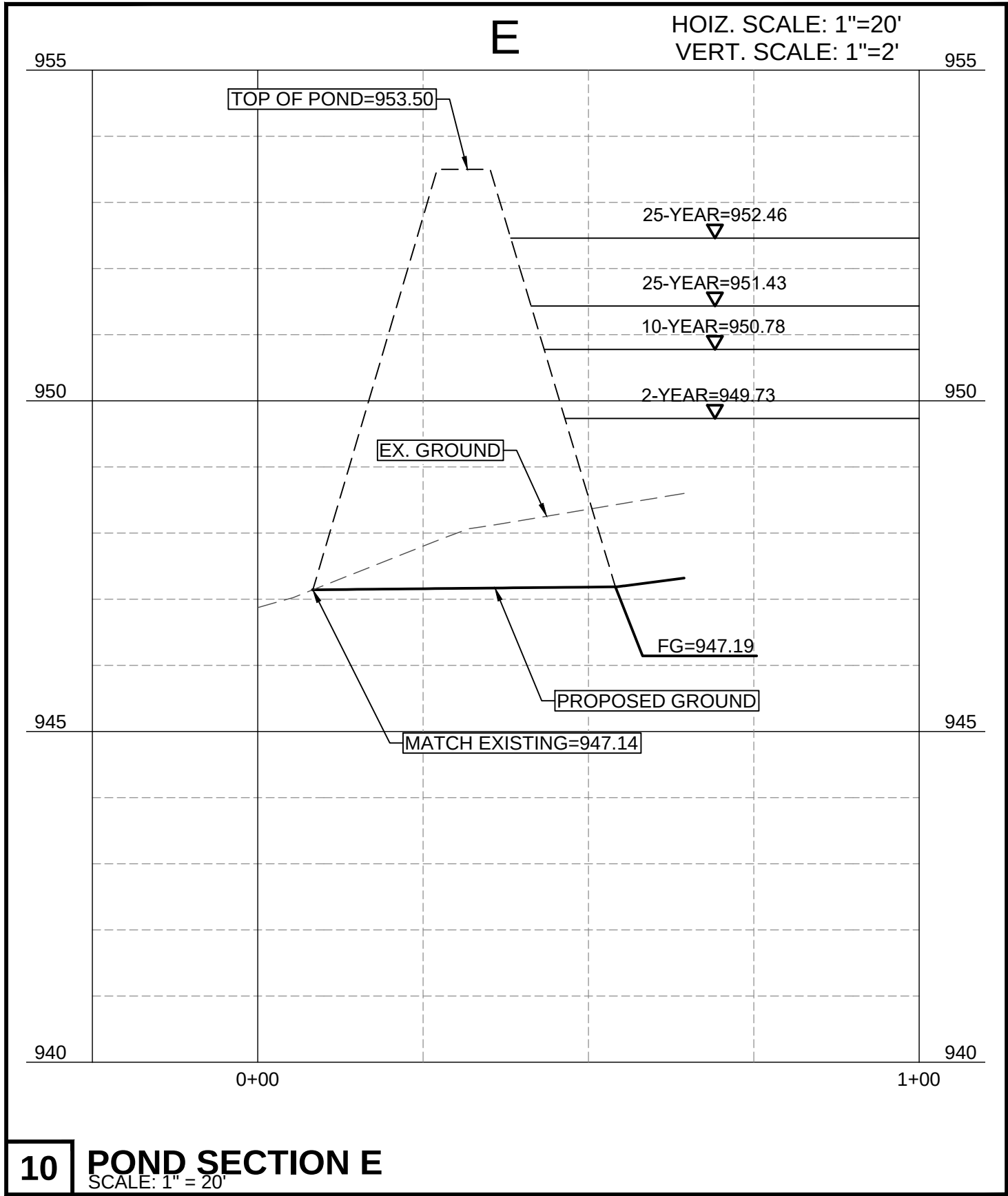
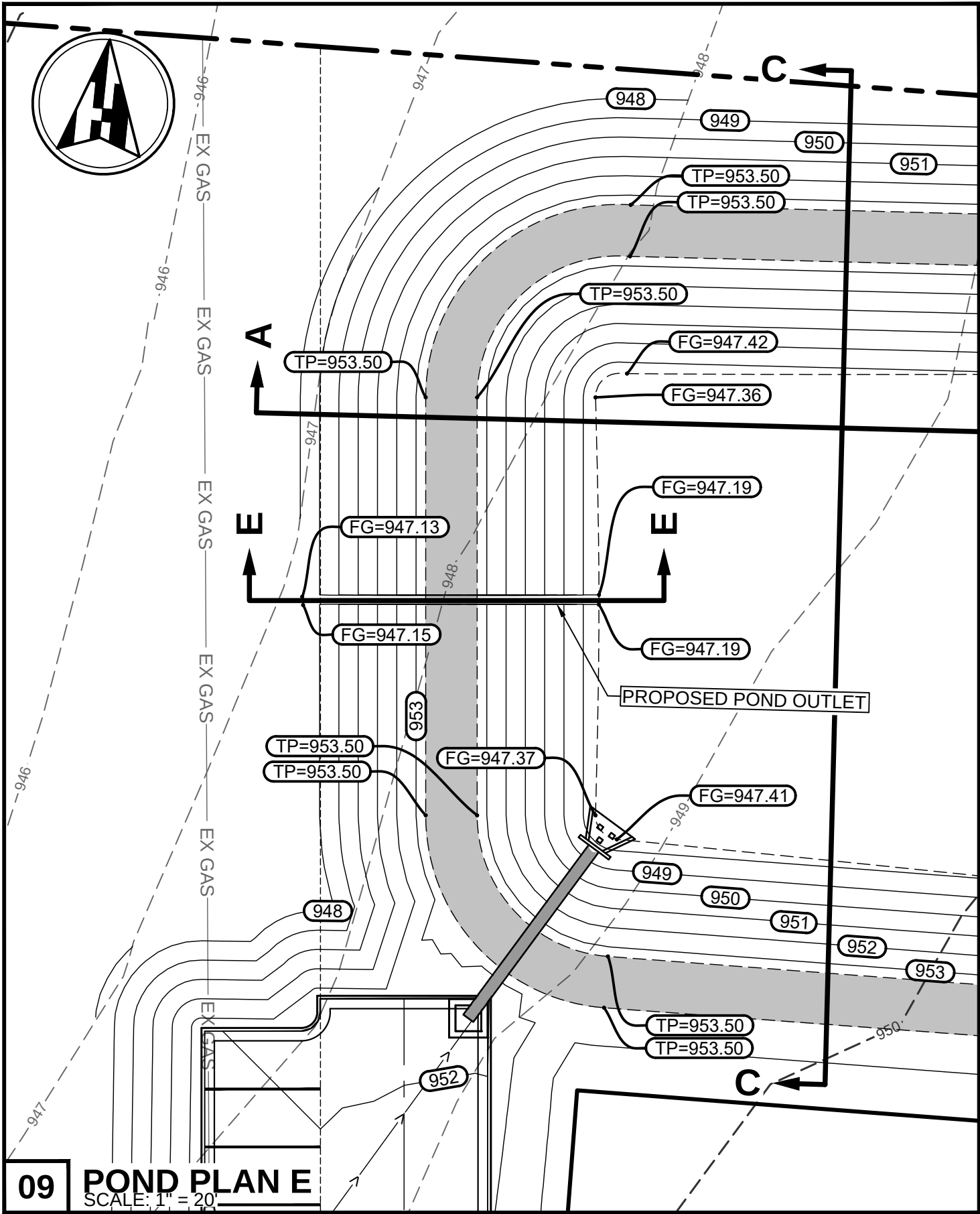
REVISION					
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SITE DEVELOPMENT PLANS
TO SERVE
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POND PLAN AND SECTION 3



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C17.03



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SITE DEVELOPMENT PLANS
TO SERVE

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6540 W. SH 29
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POND PLAN AND SECTION 4



PROJECT NO. 230903

06/11/2024

DRAWN BY: DB

CHECKED BY: AR

APPROVED BY: JH

C17.04

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lott bros\07 Sheet\SD1230903 POND PLAN AND SECTIONS.dwg

Texas Commission on Environmental Quality		
TSS Removal Calculations 04-20-2009		
		Project Name: Lott Brothers
		Date Prepared: 3/27/2024
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: $L_M = 27.2(A_N \times P)$		
where: L_M TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load		
A_N = Net increase in impervious area for the project		
P = Average annual precipitation, inches		
Site Data: Determine Required Load Removal Based on the Entire Project		
County = Williamson		
Total project area included in plan = 12.45 acres		
Predevelopment impervious area within the limits of the plan = 0.00 acres		
Total post-development impervious area within the limits of the plan = 5.60 acres		
Total post-development impervious cover fraction = 0.45		
P = 32 inches		
L_M TOTAL PROJECT = 4874 lbs.		
* The values entered in these fields should be for the total project area.		
Number of drainage basins / outfalls areas leaving the plan area = 1		

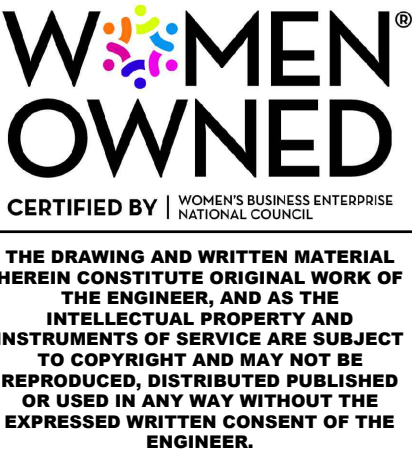
2. Drainage Basin Parameters (This information should be provided for each basin):		
Drainage Basin/Outfall Area No. = 1		
Total drainage basin/outfall area = 12.45 acres		
Predevelopment impervious area within drainage basin/outfall area = 0.00 acres		
Post-development impervious area within drainage basin/outfall area = 5.60 acres		
Post-development impervious fraction within drainage basin/outfall area = 0.45		
L_M THIS BASIN = 4874 lbs.		
3. Indicate the proposed BMP Code for this basin.		
Proposed BMP = Sand Filter		
Removal efficiency = 89 percent		
Aqualogic Cartridge Filter		
Bioretention		
Contech StormFilter		
Constructed Wetland		
Extended Detention		
Grassy Swale		
Retention / Irrigation		
Sand Filter		
Stormceptor		
Vegetated Filter Strips		
Vortechs		
Wet Basin		
Wet Vault		

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.		
RG-348 Page 3-33 Equation 3.7: $L_R = (BMP \text{ efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$		
where: A_c = Total On-Site drainage area in the BMP catchment area		
A_i = Impervious area proposed in the BMP catchment area		
A_p = Pervious area remaining in the BMP catchment area		
L_R = TSS Load removed from this catchment area by the proposed BMP		
A_c = 12.45 acres		
A_i = 5.60 acres		
A_p = 6.85 acres		
L_R = 5624 lbs		

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area.		
Desired L_M THIS BASIN = 4874 lbs.		
F = 0.87		

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.			Calculations from RG-348	Pages 3-34 to 3-36
Rainfall Depth = 1.44 inches				
Post Development Runoff Coefficient = 0.33				
On-site Water Quality Volume = 21555 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 = 4311 cubic feet				
Total Capture Volume (required water quality volume(s) x 1.20) = 25866 cubic feet				
The following sections are used to calculate the required water quality volume(s) for the selected BMP. The values for BMP Types not selected in cell C45 will show NA.				

9. Filter area for Sand Filters			Designed as Required in RG-348	Pages 3-58 to 3-63
9A. Full Sedimentation and Filtration System				
Water Quality Volume for sedimentation basin = 25866 cubic feet				
Minimum filter basin area = 1197 square feet				
Maximum sedimentation basin area = 10777 square feet			For minimum water depth of 2 feet	
Minimum sedimentation basin area = 2694 square feet			For maximum water depth of 8 feet	
9B. Partial Sedimentation and Filtration System				
Water Quality Volume for combined basins = 25866 cubic feet				
Minimum filter basin area = 2155 square feet				
Maximum sedimentation basin area = 8622 square feet			For minimum water depth of 2 feet	
Minimum sedimentation basin area = 539 square feet			For maximum water depth of 8 feet	



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SITE DEVELOPMENT PLANS
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WATER QUALITY CALCULATIONS



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C17.05



Attachment F - Construction Plan

SHEET INDEX	
NUMBER	SHEET TITLE
C00.00	COVER SHEET
C01.00	PLAT
C01.01	PLAT
C02.00	OVERALL SITE PLAN
C02.01	SITE PLAN
C02.02	SITE PLAN
C03.00	GENERAL NOTES
C03.01	CONSTRUCTION NOTES
C03.02	CONSTRUCTION NOTES
C03.03	LEGEND AND ABBREVIATIONS
C04.00	EXISTING CONDITIONS PLAN
C05.00	DEMOLITION PLAN
C06.01	CUT AND FILL EXHIBIT
C07.01	SLOPE MAP EXHIBIT
C08.01	EROSION AND SEDIMENTATION CONTROL PLAN
C09.00	PRE-DEVELOPMENT DRAINAGE AREA MAP
C10.00	POST-DEVELOPMENT DRAINAGE AREA MAP
C11.00	OVERALL UTILITY SCHEMATIC PLAN
C11.01	UTILITY SCHEMATIC PLAN
C11.02	UTILITY SCHEMATIC PLAN
C12.01	STORM SEWER PLAN
C12.02	STORM SEWER PROFILES
C13.01	FIRE PROTECTION PLAN
C14.01	DIMENSION CONTROL PLAN
C15.01	PAVING AND STRIPING PLAN
C16.01	GRADING PLAN
C17.01	POND PLAN AND SECTION 1
C17.02	POND PLAN AND SECTION 2
C17.03	POND PLAN AND SECTION 3
C17.04	POND PLAN AND SECTION 4
C17.05	WATER QUALITY CALCULATIONS
C18.01	TREE PRESERVATION PLAN
C19.00	STANDARD DETAILS - ESC
C19.01	STANDARD DETAILS - PAVING
C19.02	STANDARD DETAILS - DUMPSTER
C20.00	STANDARD DETAILS - WATER 1
C20.01	STANDARD DETAILS - WATER 2
C21.00	STANDARD DETAILS - STORM SEWER

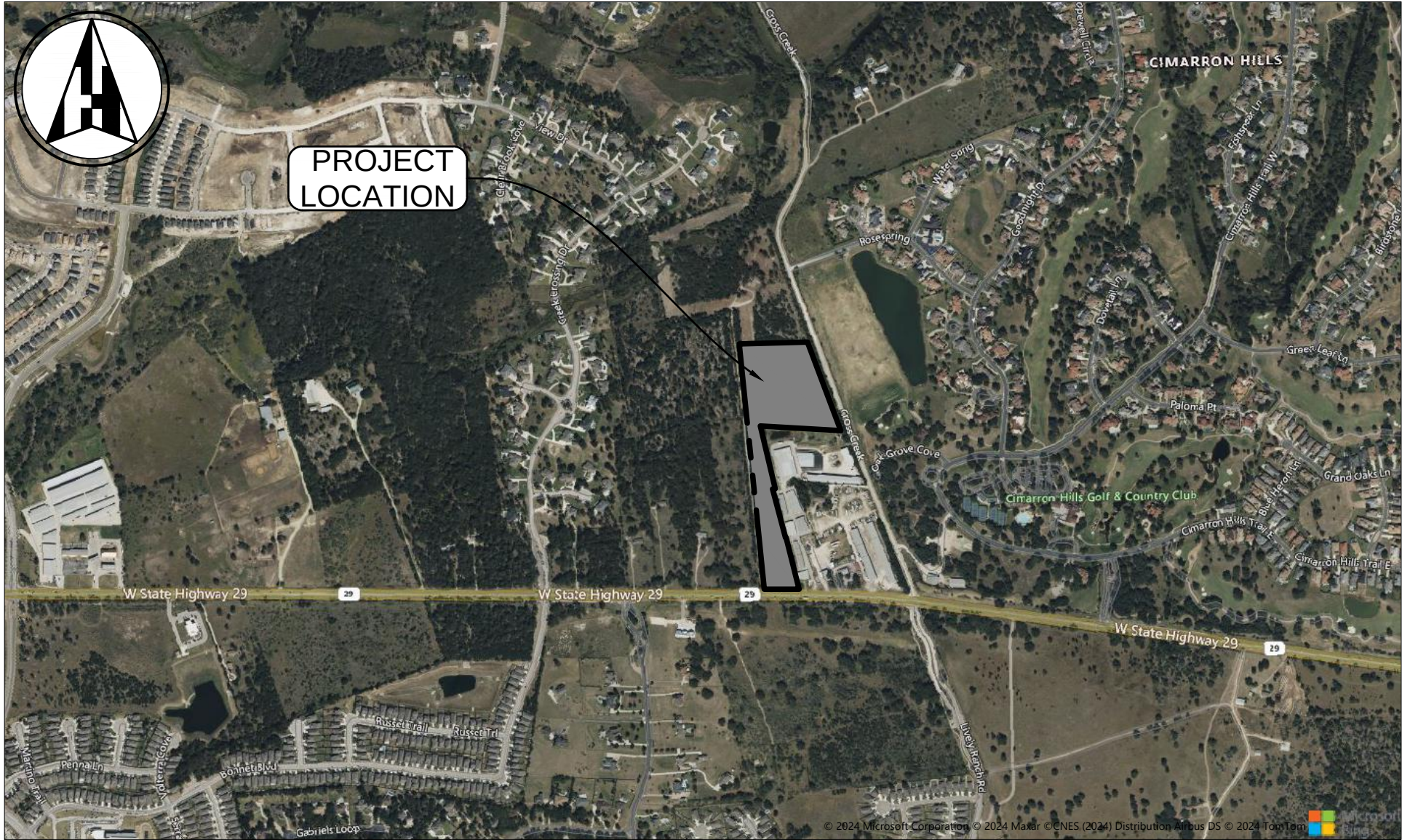
SITE DEVELOPMENT PLANS

TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29

GEORGETOWN, TEXAS 78628



VICINITY MAP

SCALE: 1"=1,000'

PROJECT DATA	
LEGAL DESCRIPTION:	FSK, G SUR., ACRES 12.45
LOT ACREAGE:	12.56 ACRES
COUNTY PROJECT NUMBER:	2024-734-COC
BENCHMARKS:	NO KNOWN BENCHMARKS
PROPOSED USE:	LIGHT INDUSTRIAL
ZONING DISTRICT:	WILLIAMSON COUNTY
IMPERVIOUS COVER TABLE	
EXISTING IMPERVIOUS COVER	8,840 S.F. 1.62%
NEW IMPERVIOUS COVER	216,904 S.F. 39.65%
TOTAL IMPERVIOUS COVER	225,744 S.F. 41.26%
UTILITY PROVIDERS	
WATER	GEORGETOWN
WASTEWATER	NONE
ELECTRIC	
GAS	
PROJECT TEAM	
OWNER/DEVELOPER:	CROSS CREEK COMMERCIAL PARK, LLC 406 LEE STREET SUITE 201 ROUND ROCK, TEXAS 78664
ARCHITECT:	MICHAEL MAULDIN M A U L D I N ARCHITECTS, PLLC 909 NE LOOP 410, SUITE 636 SAN ANTONIO, TEXAS 78209 PHONE: 210-313-3197
ENGINEER:	HENDERSON PROFESSIONAL ENGINEERS FIRM # F-22208 600 ROUND ROCK WEST DRIVE, SUITE 604 ROUND ROCK, TEXAS 78681 JENNIFER L. HENDERSON, P.E. PHONE 512.350.6228 EMAIL JEN@HENDERSONPE.COM
LANDSCAPE ARCHITECT:	N/A

- NOTES:
- PROJECT SITE IS WITHIN THE CITY OF GEORGETOWN CCN AND OUTSIDE OF ANY SANITARY CCN. ON SITE DETENTION WILL BE DONE OR REQUEST FOR PARTICIPATION IN RSMP.
 - NO PORTION OF THE PROJECT SITE IS WITHIN A FLOOD HAZARD AREA AS DELINEATED ON THE FEMA FLOOD INSURANCE RATE MAP PANEL #48491C0275E FOR WILLIAMSON COUNTY, TEXAS AND INCORPORATED AREAS, EFFECTIVE DATE 9/26/2008.
 - THIS SITE LOCATION IS UNDER EDWARDS AQUIFER RECHARGE ZONE.

GENERAL INFORMATION					
BUILDING SUMMARY (# OF BLDGS)	FLOOR AREA (BLDG S.F.)	# OF STORES/ BUILDING HEIGHT	USE & OCCUPANCY CLASSICIATION (PER IBC)	TYPE OF CONSTRUCTION (PER IBC)	IF APPLICABLE TYPE OF AUTOMATIC FIRE SPRINKLER SYSTEM (NFPA 13R OR NFPA 13)
BUILDING #1	7,200	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #2	7,200	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #3	7,200	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #4	14,400	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #5	21,600	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #6	10,800	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #7	10,800	1 STORY - 20'	S-1	II-B	NFPA 13



PLAN SUBMITTALS		
NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

REVISIONS							
NO.	DESCRIPTION	REVISE (R) CORRECT (C) ADD (A) VOID (V) SHEET NO'S	NET CHANGE IMPERVIOUS COVER (SQ.FT.)/%	TOTAL IMPERVIOUS COVER (SQ.FT.)/%	DESIGN ENGINEER SIGNATURE	WILLIAMSON COUNTY APPROVAL	APPROVAL DATE

REVIEWED FOR COMPLIANCE WITH COUNTY REQUIREMENTS (WCSR 2021B)

WILLIAMSON COUNTY ENGINEER DATE

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



06/14/2024

SHEET C00.00

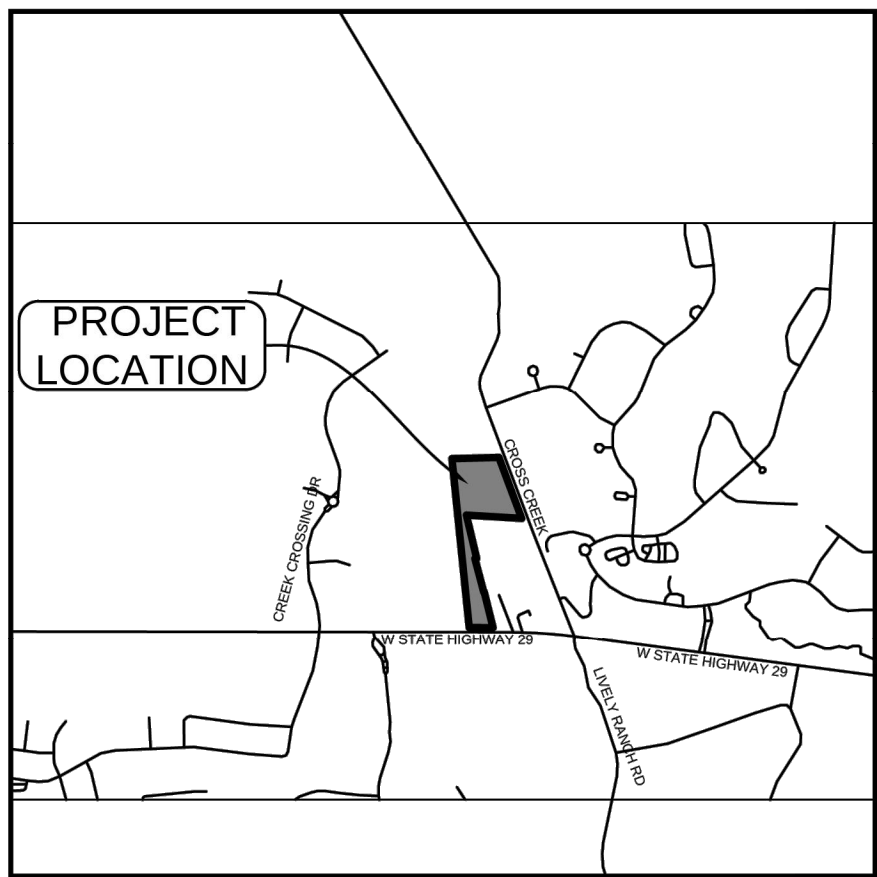
Henderson Professional Engineers

HPE 600 ROUND ROCK WEST
DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
Civil Engineering www.hendersonpe.com

WBE210166 | HUB 1853873845300

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lot1.bros\07 Sheet\SD1230903 PLAT.dwg

Plotted by: Harry, Plot date: 29/05/2024, File name: h:\02_projects\2023\230903 Lot1.bros\07 Sheet\FP\230903 FINAL PLAT.dwg



VICINITY MAP
SCALE: 1"=2,000'

LEGEND

- IRON ROD SET
● IRON ROD FOUND
■ BENCHMARK
— PROPERTY LINE
— ADJOINING PROPERTY LINE
- - - DRAINAGE EASEMENT
- - - - - WATER EASEMENT
- - - - - BUILDING SETBACK LINE (BSL)
- - - - - 25' OSSF SETBACK
- - - - - EXISTING ROAD CENTERLINE
ROW RIGHT-OF-WAY
VOL./PG. VOLUME/PAGE
DRWC DEED RECORDS WILLIAMSON COUNTY
OPRWCT OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY
DOC DOCUMENT

OWNER 1: CROSS CREEK COMMERCIAL PARK, LLC
406 LEE STREET SUITE 201
ROUND ROCK, TEXAS 78664
OWNER 2: TBN DEVELOPMENT, LLC
406 LEE STREET SUITE 201
ROUND ROCK, TEXAS 78664
SURVEYOR: WILLIAM C. STEWART, RPLS No. 5785
TEXAS LAND SURVEYING, INC
3613 WILLIAMS DRIVE, SUITE 903
GEORGETOWN, TEXAS 78628
PHONE (512) 930-1600
E-MAIL NICOLE@TEXAS-LS.COM
ENGINEER: JENNIFER HENDERSON, PE
HENDERSON PROFESSIONAL ENGINEERS
PELS FIRM #F-22208
600 ROUND ROCK WEST DRIVE, SUITE 604
ROUND ROCK, TEXAS 78681
PHONE 512.350.6228
E-MAIL JEN@HENDERSONPE.COM
SUBMITTAL DATE: 5/20/2024
ORIGINAL GREENLIEF FISK SURVEY
SURVEY: ABSTRACT NO. 5
FEMA 48491C0275E
FLOODPLAIN:
WATER: CITY OF GEORGETOWN, TEXAS
WASTEWATER: OSSF
BENCHMARK: ELEV. = 528.41' (NAVD88)
TEMPORARY BENCHMARK BOX CUT ON DRAIN

PRELIMINARY PLAT
OF
CROSS CREEK COMMERCIAL PARK

PROPERTY DESCRIPTION:

BEING A 12.45 ACRE TRACT, MORE OR LESS, OUT OF THE GREENLIEF FISK SURVEY, ABSTRACT NO. 5, WILLIAMSON COUNTY, TEXAS, FUTHER BEING A PORTION OF A CALLED 12.673 ACRE TRACT OF LAND AS DESCRIBED IN DEED TO LIBERTY HEIGHTS INVESTMENTS LLC, RECORDED IN DOCUMENT NO. 2021072045 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS (OPRWCT), AS MODIFIED BY BOUNDARY LINE AGREEMENT IN VOL. 1395, PG 826, OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, SAID 12.45 ACRE TRACT BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS:

BEGINNING AT A 1/2" IRON PIN FOUND, ALONG THE NORTH RIGHT-OF-WAY LINE OF STATE HIGHWAY NO. 29, AT THE SOUTHEAST CORNER OF A CALLED 22.66 ACRE TRACT DESCRIBED IN DOCUMENT TO MRS. SAM GOLDENBERG, RECORDED IN VOLUME 1705, PAGE 793 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, AT THE SOUTHWEST CORNER OF SAID 12.673 ACRE TRACT, AND HEREOF;

THENCE ALONG THE EAST AND SOUTH LINES OF SAID 22.66 ACRE TRACT, THE FOLLOWING COURSES AND DISTANCES:

- 1) NORTH 05°49'52" WEST, A DISTANCE OF 1765.46' TO A 1/2" IRON PIN FOUND AT THE NORTHWEST CORNER HEREOF;
- 2) NORTH 88°25'06" EAST, PER SAID BOUNDARY LINE AGREEMENT, A DISTANCE OF 490.19' TO 1/2" IRON ROD SET WITH PLASTIC CAP STAMPED "CUPLIN", AT THE NORTHEAST CORNER OF SAID BLANN TRACT, AND HEREOF;

THENCE SOUTH 20°26'53" EAST, ALONG THE WEST RIGHT-OF-WAY LINE OF SAID CROSS CREEK ROAD, THE EAST LINE OF SAID BLANN TRACT, AND HEREOF, AT 30.89' PASSING A 60D NAIL FOUND IN A FENCE POST, IN ALL A DISTANCE OF 677.31', TO A 1/2" IRON PIN FOUND AT THE NORTHEAST CORNER OF LOT 2, THE RICHARDS SUBDIVISION, A SUBDIVISION LOCATED IN WILLIAMSON COUNTY, TEXAS, RECORDED IN CABINET X, SLIDE 187 OF THE PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS, WHENCE A 1/2" IRON ROD FOUND FOR REFERENCE BEARS N24°22'15"E, A DISTANCE OF 5.38';

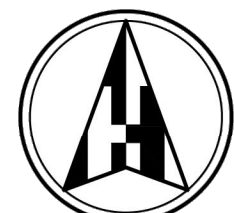
THENCE ALONG THE NORTH AND WEST LINES OF SAID LOT 2, THE EAST LINE OF SAID BLANN TRACT, AND HEREOF, THE FOLLOWING COURSES AND DISTANCES:

- 1) NORTH 86°37'24" WEST, A DISTANCE OF 576.64' TO A 1/2" IRON PIN FOUND FOR A REENTRANT CORNER HEREOF AND THE NORTHWEST CORNER OF SAID LOT 2.
- 2) SOUTH 13°19'40" EAST, A DISTANCE OF 461.96' TO A 1/2" IRON PIN WITH CAP "CUPLIN" FOUND AT THE NORTHEAST CORNER OF A CALLED 0.135 ACRE TRACT DESCRIBED IN DOCUMENT TO GEORGETOWN STORAGE, LP, RECORDED IN DOCUMENT NO. 2016061045 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS;

THENCE ALONG THE NORTH AND WEST LINES OF SAID 0.135 ACRE TRACT, AND THE EAST LINE HEREOF, THE FOLLOWING COURSES AND DISTANCES:

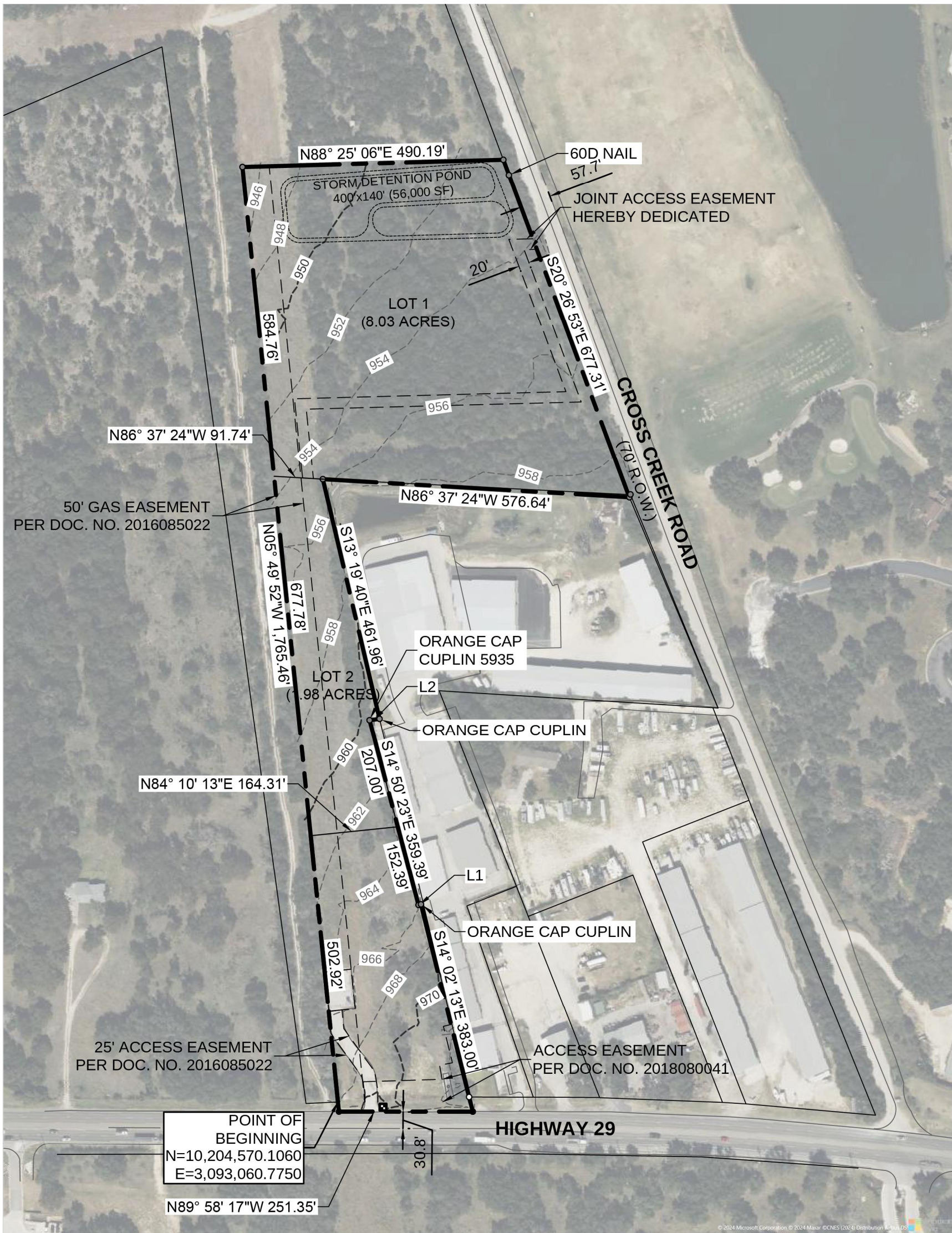
- 1) SOUTH 82°13'02" WEST, A DISTANCE OF 18.94' TO A 1/2" IRON PIN FOUND;
- 2) SOUTH 14°50'23" EAST, A DISTANCE OF 359.39' TO A 1/2" IRON PIN FOUND;
- 3) NORTH 74°58'59" EAST, A DISTANCE OF 4.70' TO A 1/2" IRON PIN WITH CAP "CUPLIN" FOUND;
- 4) SOUTH 14°02'13" EAST, A DISTANCE OF 383.09' TO A 1/2" IRON PIN FOUND ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID HIGHWAY 29, FOR THE SOUTHEAST CORNER OF SAID BLANN TRACT, AND HEREOF;

THENCE NORTH 89°51'05" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID HIGHWAY NO. 29, THE SOUTH LINE OF SAID BLANN TRACT, AND HEREOF, A DISTANCE OF 248.84' TO THE POINT OF BEGINNING, CONTAINING 12.45 ACRES, MORE OR LESS.



0 200 400
SCALE: 1"=200'

BEARINGS CITED HEREON BASED ON STATE
PLANE COORDINATES, GRID NORTH, CENTRAL
ZONE, TEXAS NAD 83 (93).



LINE TABLE		
LINE #	LENGTH	DIRECTION
L1	4.70	N74° 58' 59"E
L2	18.94	S82° 13' 02"W

LOT TABLE	
PARCEL #	AREA (AC.)
1	8.03
2	1.98

SHEET 01 OF 02

Henderson Professional Engineers
HPE 600 ROUND ROCK WEST
DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PELS FIRM #F-22208
Civil Engineering www.hendersonpe.com
WBE210166 | HUB 1853873845300

COUNTY PERMIT NUMBER 2024-734-COC

WOMEN OWNED
CERTIFIED BY | WOMEN'S BUSINESS ENTERPRISE
NATIONAL COUNCIL
THE DRAWING AND WRITTEN MATERIAL
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THE ENGINEER, AND AS THE
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REVISION	No.	1	2	3	4	5

SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
PLAT



PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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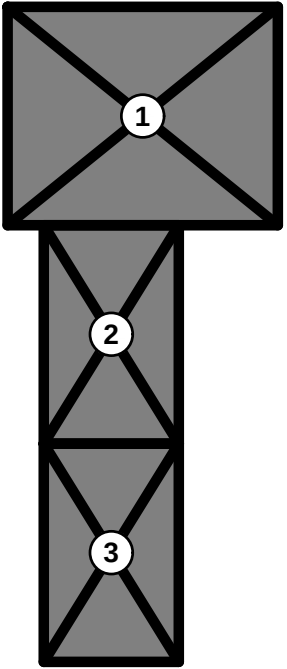
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COUNTY PERMIT NUMBER: 2024-734-COC

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\20903 lot1.bros\07_Sheet\SD1230903 SITE PLAN.dwg



LEGEND	
---	LIMITS OF CONSTRUCTION
---	ACCESSIBLE ROUTE OF TRAVEL
(3)	PARKING COUNT
---	FIRE LANE
---	EXISTING CONTOUR
(529)	CONTOUR
---	PROPERTY LINE
---	EXISTING PROPERTY LINES
---	BUILDING SETBACK LINE
---	SANITARY SEWER MANHOLE
---	NATURAL GAS LINE
---	EXISTING OVERHEAD ELECTRIC
---	EXISTING FENCE



- NOTES:
- ALL DIMENSIONS ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED.
 - ALL CURB RETURN RADII ARE 2'-6" (AT BACK OF CURB), UNLESS OTHERWISE NOTED.
 - REFER TO SHEET C15.01 FOR PAVING AND STRIPING DIMENSIONS.

SITE DATA TABLE			
LAND USE AND ZONING		VACANT	
EXISTING USE	PROPOSED USE	LIGHT INDUSTRIAL	
ZONING DISTRICT		WILLIAMSON COUNTY	
IMPERVIOUS COVER		ACRES	S.F.
SITE AREA		12.56 Ac.	547,114 S.F.
EXISTING IMPERVIOUS COVER		0.203 Ac.	8,840 S.F.
LOT 1 (10.02 ACRES)		0.000 Ac.	0 S.F.
LOT 2 (2.55 ACRES)		0.203 Ac.	8,840 S.F.
NEW IMPERVIOUS COVER		4.979 Ac.	216,904 S.F.
TOTAL IMPERVIOUS COVER		225,744 S.F.	41.26%
BUILDING AREA		ACRES	S.F.
EXISTING BUILDINGS		0.000 Ac.	0 S.F.
PROPOSED BUILDINGS			
BUILDING #1		0.165 Ac.	7,200 S.F.
BUILDING #2		0.165 Ac.	7,200 S.F.
BUILDING #3		0.165 Ac.	7,200 S.F.
BUILDING #4		0.331 Ac.	14,400 S.F.
BUILDING #5		0.496 Ac.	21,600 S.F.
BUILDING #6		0.248 Ac.	10,800 S.F.
BUILDING #7		0.248 Ac.	10,800 S.F.
GROSS FLOOR AREA		1.818 Ac.	79,200 S.F.
PARKING		1.023 Ac.	44,550 S.F.
DRIVELANE		1.027 Ac.	44,719 S.F.

PARKING TABLE			
BLDG #	BUILDING (OR AREA) USE	PARKING RATIO	PARKING #/S
BUILDING #1	7,200	400	18
BUILDING #2	7,200	400	18
BUILDING #3	7,200	400	18
BUILDING #4	14,400	400	36
BUILDING #5	21,600	400	54
BUILDING #6	10,800	400	27
BUILDING #7	10,800	400	27
TOTAL PARKING REQUIRED			198
STANDARD PARKING PROVIDED			268
ADA SPACES REQUIRED			7
ADA SPACED PROVIDED			0
TOTAL PARKING PROVIDED			275



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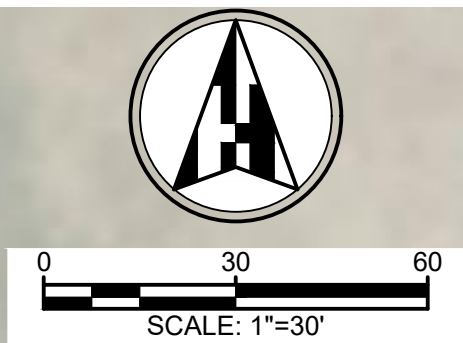
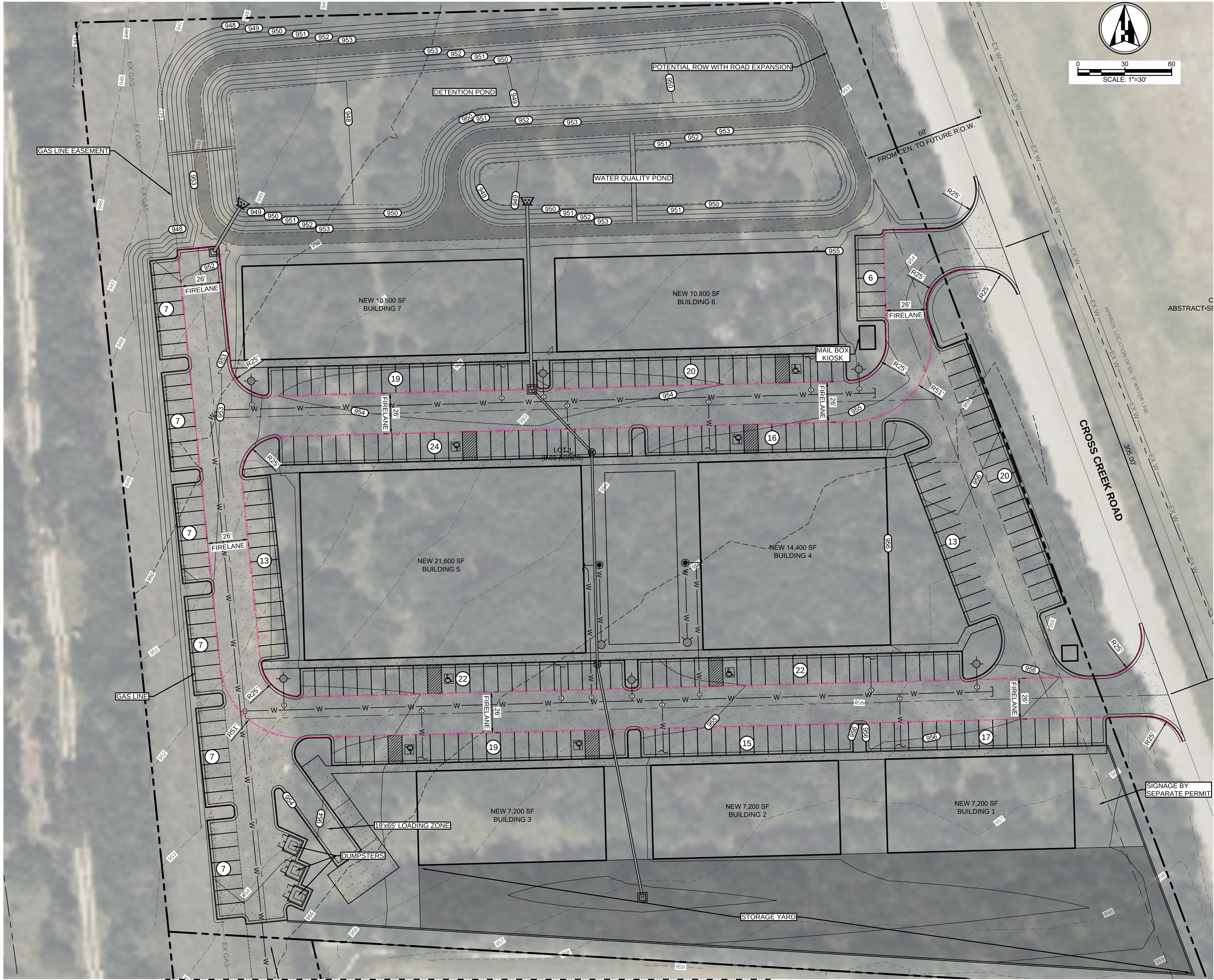
SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
OVERALL SITE PLAN



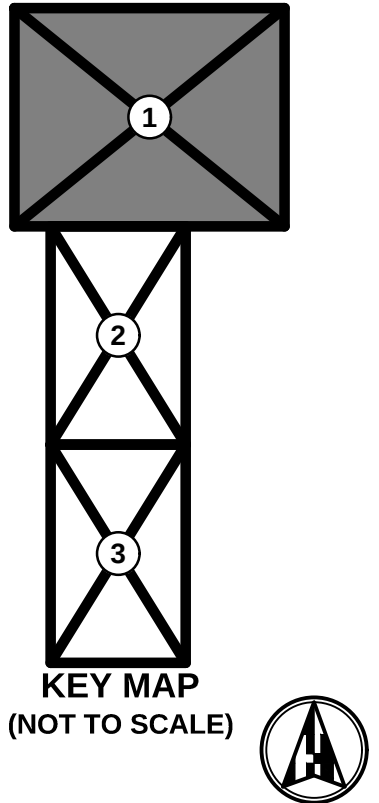
PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
CHECKED BY: AR
APPROVED BY: JH

C02.00

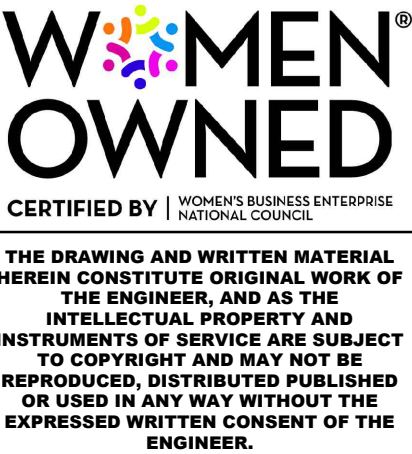
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LEGEND	
	LIMITS OF CONSTRUCTION
	ACCESSIBLE ROUTE OF TRAVEL
	PARKING COUNT
	FIRE LANE
	EXISTING CONTOUR
	CONTOUR
	PROPERTY LINE
	EXISTING PROPERTY LINES
	BUILDING SETBACK LINE
	SANITARY SEWER MANHOLE
	NATURAL GAS LINE
	EXISTING OVERHEAD ELECTRIC
	EXISTING FENCE



- NOTES:
- ALL DIMENSIONS ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED.
 - ALL CURB RETURN RADII ARE 2'-6" (AT BACK OF CURB), UNLESS OTHERWISE NOTED.
 - REFER TO SHEET C15.01 FOR PAVING AND STRIPING DIMENSIONS.



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SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628



PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
CHECKED BY: AR
APPROVED BY: JH

C02.01

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02 projects\2023\230903 lot1 bro\07 Sheet\SD1230903 SITE PLAN.dwg

02 SITE PLAN

SCALE: 1" = 30'



Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lot1 broa\07 Sheet\SD1230903 GENERAL NOTES.dwg

COUNTY ROADWAY NOTES:
B4 - CONSTRUCTION – GENERAL

B4.1 A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED PRIOR TO THE START OF CONSTRUCTION. THE DESIGN ENGINEER, OWNER, CONTRACTOR, SUBCONTRACTORS, AND COUNTY ENGINEER SHALL ATTEND THIS MEETING. ALL ROADS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS AS APPROVED BY THE COUNTY ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS FOUND IN THE CURRENT VERSION OF THE "TEXAS DEPARTMENT OF TRANSPORTATION MANUAL STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS, AND BRIDGES" UNLESS OTHERWISE STATED ON THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER.

B4.2 ALL MATERIALS SHALL BE SAMPLED AND TESTED BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE COUNTY ENGINEER. THE OWNER SHALL PAY FOR ALL TESTING SERVICES AND SHALL FURNISH THE COUNTY ENGINEER WITH CERTIFIED COPIES OF THESE TEST RESULTS. THE COUNTY ENGINEER MUST APPROVE THE TEST RESULTS PRIOR TO CONSTRUCTING THE NEXT COURSE OF THE ROADWAY STRUCTURE. ANY MATERIAL WHICH DOES NOT MEET THE MINIMUM REQUIRED TEST SPECIFICATIONS SHALL BE REMOVED AND RE-COMPACTED OR REPLACED UNLESS ALTERNATIVE REMEDIAL ACTION IS APPROVED IN WRITING FROM THE COUNTY ENGINEER.

B4.3 EXCEPT FOR ELECTRICAL LINES, ALL UNDERGROUND NONFERROUS UTILITIES WITHIN A RIGHT-OF-WAY OR EASEMENT MUST BE ACCOMPANIED BY FERROUS METAL LINES TO AID IN TRACING THE LOCATION OF SAID UTILITIES THROUGH THE USE OF A METAL DETECTOR.

B4.4 ALL PROPOSED PAVEMENTS (FLEXIBLE AND RIGID) ARE TO BE SPECIFIED IN THE GEOTECH REPORT. THE GEOTECH REPORT IS TO BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER. PAVEMENT DESIGNS SHALL FOLLOW THE BELOW COUNTY REQUIREMENTS BASED UPON SOIL CONDITIONS FROM SAMPLES TAKEN ALONG THE PROPOSED ROADWAYS. TEST BORINGS SHALL BE PLACED AT A MAXIMUM SPACING OF 500 FEET OR OTHER SAMPLING FREQUENCY APPROVED BY THE COUNTY ENGINEER BASED ON RECOMMENDATIONS PROVIDED BY THE GEOTECHNICAL ENGINEER. BORINGS SHALL BE TO A DEPTH OF TEN FT OR, IF SOLID ROCK IS ENCOUNTERED, ONE FT WILLIAMSON COUNTY, TEXAS - SUBDIVISION REGULATIONS PAGE 38
BELOW NON-FRACTURED ROCK OR 3 FT BELOW FRACTURED ROCK. THE PAVEMENT DESIGN MUST MEET AT LEAST THE MINIMUM OF ONE OF THE APPROVED COUNTY DESIGNS AND PROVIDED IN THE GEOTECHNICAL REPORT FOR REVIEW AND APPROVAL PRIOR TO THE REVIEW AND APPROVAL OF THE CONSTRUCTION PLANS. IN ADDITION TO THE BASIS OF THE PAVEMENT DESIGN, THE SOILS REPORT SHALL CONTAIN THE RESULTS OF SAMPLED AND TESTED SUBGRADE FOR PLASTICITY INDEX.

B4.5 FLEXIBLE PAVEMENT DESIGNS BASED ON ROADWAY CLASSIFICATION

MINIMUM LOCAL ROADWAY (URBAN) FLEXIBLE PAVEMENT DESIGN				
PLASTICITY INDEX	PI <20	PI 20-35	PI 35-55	MATERIAL REQUIREMENTS
SOIL CLASSIFICATION	CLAYEY SAND	LEAN CLAY	FAT CLAY	MATERIAL REQUIREMENTS
HMA SURFACE	2"	2"	2"	TXDOT ITEM 340 D- GR HMA PG 70-22 SAC B (1)
PRIME COAT OR ONE COURSE UNDERSEAL				AEP OR TXDOT ITEM 316 (4)
FLEXIBLE BASE	12"	12"	14"	TXDOT ITEM 247 FLBS TY A GR 5(2)
LIME TREATED SUBGRADE		8"	8"	TXDOT ITEM 260 (3)
NOTES:	1) SEE APPENDIX B7 FOR MATERIAL REQUIREMENTS FOR HMA. 2) SEE APPENDIX B6 FOR ADDITIONAL FLEXIBLE BASE SPECIFICATIONS. 3) PELLITIZED LIME IS NOT ALLOWED. USE HYDRATED LIME OR LIME SLURRY. CONFIRM SULFATES ARE NOT PRESENT IN SOIL. 4) FOR PI >55 ADDITIONAL PAVEMENT STRUCTURE IS NECESSARY AND SHALL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER.			

MINIMUM COLLECTOR ROADWAY (URBAN) FLEXIBLE PAVEMENT DESIGN				
PLASTICITY INDEX	PI <20	PI 20-35	PI 35-55	MATERIAL REQUIREMENTS
SOIL CLASSIFICATION	CLAYEY SAND	LEAN CLAY	FAT CLAY	MATERIAL REQUIREMENTS
HMA SURFACE	2"	2"	2"	TXDOT ITEM 340 D- GR HMA PG 70-22 SAC B (1)
PRIME COAT OR ONE COURSE UNDERSEAL				AEP OR TXDOT ITEM 316 (4)
FLEXIBLE BASE	14"	14"	16"	TXDOT ITEM 247 FLBS TY A GR 5(2)
LIME TREATED SUBGRADE		8"	8"	TXDOT ITEM 260 (3)
NOTES:	1) SEE APPENDIX B7 FOR MATERIAL REQUIREMENTS FOR HMA. 2) SEE APPENDIX B6 FOR ADDITIONAL FLEXIBLE BASE SPECIFICATIONS. 3) PELLITIZED LIME IS NOT ALLOWED. USE HYDRATED LIME OR LIME SLURRY. CONFIRM SULFATES ARE NOT PRESENT IN SOIL. 4) FOR PI >55 ADDITIONAL PAVEMENT STRUCTURE IS NECESSARY AND SHALL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER.			

MINIMUM ARTERIAL ROADWAY (URBAN) FLEXIBLE PAVEMENT DESIGN				
PLASTICITY INDEX	PI <20	PI 20-35	PI 35-55	MATERIAL REQUIREMENTS
SOIL CLASSIFICATION	CLAYEY SAND	LEAN CLAY	FAT CLAY	MATERIAL REQUIREMENTS
HMA SURFACE	2"	2"	2"	TXDOT ITEM 340 D- GR HMA PG 70-22 SAC B (1)
PRIME COAT OR ONE COURSE UNDERSEAL				AEP OR TXDOT ITEM 316 (4)
FLEXIBLE BASE	20"	20"	22"	TXDOT ITEM 247 FLBS TY A GR 5(2)
LIME TREATED SUBGRADE		8"	10"	TXDOT ITEM 260 (3)
NOTES:	1) SEE APPENDIX B7 FOR MATERIAL REQUIREMENTS FOR HMA. 2) SEE APPENDIX B6 FOR ADDITIONAL FLEXIBLE BASE SPECIFICATIONS. 3) PELLITIZED LIME IS NOT ALLOWED. USE HYDRATED LIME OR LIME SLURRY. CONFIRM SULFATES ARE NOT PRESENT IN SOIL. 4) FOR PI >55 ADDITIONAL PAVEMENT STRUCTURE IS NECESSARY AND SHALL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER. 5) SEE APPENDIX B7 FOR REQUIREMENTS ON ASPHALT AND AGGREGATE.			

B4.6 RIGID PAVEMENT DESIGNS BASED ON ROADWAY CLASSIFICATION

LOCAL ROADWAY (URBAN/ RURAL) RIGID PAVEMENT DESIGN				
PLASTICITY INDEX	PI <20	PI 20-35	PI 35-55	MATERIAL REQUIREMENTS
SOIL CLASSIFICATION	CLAYEY SAND	LEAN CLAY	FAT CLAY	MATERIAL REQUIREMENTS
CRCP	6"	6"	8"	TXDOT ITEM 421 – CLASS P CONCRETE CRCP (1)- 13, CONTINUOUSLY REINFORCED CONCRETE PAVEMENT, ONELAYER STEEL BAR PLACEMENT
HMA BOND BREAKER	1"	1"	1"	TXDOT ITEM D- GR HMA TY D OR TY F PG 64-22
FLEXIBLE BASE	6"	8"	8"	TXDOT ITEM 247 FLBS TY A GR 4(2)
LIME TREATED SUBGRADE			8"	TXDOT ITEM 260 (3)
NOTES:	1) SEE APPENDIX B7 FOR MATERIAL REQUIREMENTS FOR HMA. 2) SEE APPENDIX B6 FOR ADDITIONAL FLEXIBLE BASE SPECIFICATIONS. 3) PELLITIZED LIME IS NOT ALLOWED. USE HYDRATED LIME OR LIME SLURRY. CONFIRM SULFATES ARE NOT PRESENT IN SOIL. 4) FOR PI >55 ADDITIONAL PAVEMENT STRUCTURE IS NECESSARY AND SHALL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER.			

COLLECTOR ROADWAY (URBAN/ RURAL) RIGID PAVEMENT DESIGN				
PLASTICITY INDEX	PI <20	PI 20-35	PI 35-55	MATERIAL REQUIREMENTS
SOIL CLASSIFICATION	CLAYEY SAND	LEAN CLAY	FAT CLAY	MATERIAL REQUIREMENTS
CRCP	6"	6"	8"	TXDOT ITEM 421 – CLASS P CONCRETE CRCP (1)- 13, CONTINUOUSLY REINFORCED CONCRETE PAVEMENT, ONELAYER STEEL BAR PLACEMENT
HMA BOND BREAKER	1"	1"	1"	TXDOT ITEM D- GR HMA TY D OR TY F PG 64-22
FLEXIBLE BASE	8"	10"	10"	TXDOT ITEM 247 FLBS TY A GR 4(2)
LIME TREATED SUBGRADE			8"	TXDOT ITEM 260 (3)
NOTES:	1) SEE APPENDIX B7 FOR MATERIAL REQUIREMENTS FOR HMA. 2) SEE APPENDIX B6 FOR ADDITIONAL FLEXIBLE BASE SPECIFICATIONS. 3) PELLITIZED LIME IS NOT ALLOWED. USE HYDRATED LIME OR LIME SLURRY. CONFIRM SULFATES ARE NOT PRESENT IN SOIL. 4) FOR PI >55 ADDITIONAL PAVEMENT STRUCTURE IS NECESSARY AND SHALL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER.			

ARTERIAL ROADWAY (URBAN/ RURAL) RIGID PAVEMENT DESIGN				
PLASTICITY INDEX	PI <20	PI 20-35	PI 35-55	MATERIAL REQUIREMENTS
SOIL CLASSIFICATION	CLAYEY SAND	LEAN CLAY	FAT CLAY	MATERIAL REQUIREMENTS
CRCP	11"	11"	11"	TXDOT ITEM 421 – CLASS P CONCRETE CRCP (1)- 13, CONTINUOUSLY REINFORCED CONCRETE PAVEMENT, ONELAYER STEEL BAR PLACEMENT
HMA BOND BREAKER	1"	1"	1"	TXDOT ITEM D- GR HMA TY D OR TY F PG 64-22
FLEXIBLE BASE	12"	12"	12"	TXDOT ITEM 247 FLBS TY A GR 4(2)
LIME TREATED SUBGRADE		6"	10"	TXDOT ITEM 260 (3)
NOTES:	1) SEE APPENDIX B7 FOR MATERIAL REQUIREMENTS FOR HMA. 2) SEE APPENDIX B6 FOR ADDITIONAL FLEXIBLE BASE SPECIFICATIONS. 3) PELLITIZED LIME IS NOT ALLOWED. USE HYDRATED LIME OR LIME SLURRY. CONFIRM SULFATES ARE NOT PRESENT IN SOIL. 4) FOR PI >55 ADDITIONAL PAVEMENT STRUCTURE IS NECESSARY AND SHALL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER.			

B5 - SUBGRADE

B5.1 THE PREPARATION OF THE SUBGRADE SHALL FOLLOW GOOD ENGINEERING PRACTICES AS DIRECTED BY THE COUNTY ENGINEER IN CONJUNCTION WITH RECOMMENDATIONS OUTLINED IN THE GEOTECHNICAL REPORT. WHEN THE PLASTICITY INDEX (PI) IS GREATER THAN 20, A SUFFICIENT AMOUNT OF LIME SHALL BE ADDED AS DESCRIBED IN ITEM 260 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION UNTIL THE PI IS LESS THAN 20. IF THE ADDITION OF LIME AS DESCRIBED IN ITEM 260 IS NOT FEASIBLE, AN ALTERNATE STABILIZING DESIGN SHALL BE PROPOSED AND SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL. THE SUBGRADE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A DRY DENSITY PER TXDOT ITEM 132. IN ADDITION, PROOF ROLLING MAY BE REQUIRED BY THE COUNTY ENGINEER.

B5.2 IF LIME IS NECESSARY, THEN A SUFFICIENT AMOUNT OF LIME SHALL BE ADDED, AS DESCRIBED IN ITEM 260 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION TO PROPERLY STABILIZE SUBGRADE. THE USE OF HYDRATED LIME OR LIME SLURRY IS APPROVED; HOWEVER, THE USE OF PELLITIZED LIME IS NOT APPROVED.

B5.3 PRIOR TO LIME STABILIZATION, A SULFATE TEST OF IN SITU SOILS SHALL BE PERFORMED BY DEVELOPER TO CONFIRM THE APPROPRIATE MEANS AND METHODS OF STABILIZATION. PROVIDE SULFATE TEST TO COUNTY ENGINEER PRIOR TO STABILIZATION.

B5.4 ANY VARIATION TO THE COUNTY'S STABILIZATION REQUIREMENTS MUST BE APPROVED BY THE COUNTY ENGINEER.

B5.5 THE SUBGRADE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A DRY DENSITY PER TXDOT ITEM 132. IN ADDITION, PROOF ROLLING MAY BE REQUIRED BY THE COUNTY ENGINEER.

B5.6 THE SUBGRADE SHALL BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF ALL INSPECTION REPORTS FURNISHED TO THE COUNTY ENGINEER. THE COUNTY ENGINEER MUST APPROVE THE REPORT PRIOR TO APPLICATION OF THE BASE MATERIAL. ALL DENSITY TEST REPORTS SHALL INCLUDE A COPY OF THE WORK SHEET SHOWING THE PERCENTAGE OF THE MAXIMUM DRY (PROCTOR) DENSITY. THE NUMBER AND LOCATION OF ALL SUBGRADE TESTS SHALL BE DETERMINED BY THE COUNTY ENGINEER.

B6 - BASE MATERIAL

B6.1 BASE MATERIAL SHALL CONFORM TO ITEM 247 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION, "FLEXIBLE BASE". THE BASE MATERIAL SHALL BE TYPE A GRADE 4, OR AS APPROVED BY THE COUNTY ENGINEER. GRADE 4 MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TABLE B6.1 BELOW:

TABLE B6.1: GRADATION SPECIFICATION FOR TY A, GRADE 4

MASTER GRADATION SIEVE SIZE	CUMULATIVE % RETAINED
2 ½"	-
1 ¾"	0
7/8"	10% - 35%
3/8"	30% - 65%
#4	45% - 75%
#40	70% - 90%
#200	87% - 95%

B6.2 EACH LAYER OF BASE COURSE SHALL BE TESTED FOR IN-PLACE DRY DENSITY AND MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF ALL BASE TEST SAMPLES SHALL BE DETERMINED BY THE COUNTY ENGINEER.

B6.3 THE BASE SHALL BE PREPARED AND COMPACTED TO ACHIEVE A MINIMUM OF 100% OF THE MAXIMUM (PROCTOR) DRY DENSITY OR AS APPROVED BY THE COUNTY ENGINEER UPON RECOMMENDATION BY THE TESTING LABORATORY. THE MAXIMUM LIFT SHALL NOT EXCEED SIX INCHES. THE BASE MUST BE INSPECTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY AND A CERTIFIED COPY OF THE TEST RESULTS FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL. PRIOR TO THE PLACEMENT OF THE FIRST LIFT OF BASE, THE STOCKPILE SHALL BE TESTED FOR THE SPECIFICATIONS FOUND IN ITEM 247 TABLE 1 AND THE RESULT FURNISHED TO THE COUNTY ENGINEER FOR APPROVAL.

B7 - BITUMINOUS PAVEMENT

B7.1 URBAN ROADS REQUIRE A MINIMUM 2 INCH WEARING SURFACE OF HMAC TYPE D. THE MIX SHALL BE FROM A TXDOT CERTIFIED PLANT AND THE MIX DESIGN SHALL BE SUBMITTED TO THE COUNTY ENGINEER FOR APPROVAL PRIOR TO PLACEMENT OF THE MATERIAL.

B7.2 IF PROVIDING MIXTURE TYPE C OR D, USE PERFORMANCE GRADE (PG) BINDER 70-22. PROVIDE PG BINDER THAT DOES NOT CONTAIN RECYCLED ENGINE OIL BOTTOMS (REOBS) OR POLY PHOSPHORIC ACID (PPA). RECYCLED ASPHALT PAVEMENT (RAP) IS NOT PERMITTED FOR USE AS A COMPONENT OF THE HMACP. THE CONTRACTOR IS ALSO NOT PERMITTED THE USE RECYCLED ASPHALT SHINGLES (RAS) AS A COMPONENT OF THE HMACP.

B7.3 IF PROVIDING MIXTURE TYPE B, USE PG BINDER 64-22. PROVIDE PG BINDERS THAT DO NOT CONTAIN REOBS OR PPA. FOR SUBSURFACE COURSE TYPE B, THE USE OF TWENTY PERCENT (20%) RAP IS PERMITTED IN THE MIX DESIGN. THE CONTRACTOR IS NOT PERMITTED TO USE RAS AS A COMPONENT OF THE HMACP.

B7.4 TARGET LABORATORY MOLDED DENSITY IS 96.5% FOR ALL MIXTURES WITHOUT RAP AND WHEN USING A TEXAS GYRATORY COMPACTOR (TGC) FOR DESIGNING THE MIXTURE. WHEN USING SUPERPAVE GYRATORY COMPACTOR (SGC) TO DESIGN MIXTURES, SUBMIT THE SGC MIX DESIGN TO THE ENGINEER FOR APPROVAL.

B7.5 ALL MIXTURES MUST MEET THE HAMBURG REQUIREMENT AS STATED IN THE TABLE BELOW.

HIGH-TEMPERATURE BINDER GRADE	TEST METHOD	HAMBURG WHEEL TEST REQUIREMENTS*
		MINIMUM # OF PASSES @ 0.5" RUT DEPTH, TESTED @122°F
PG 64 OR LOWER	TEX-242-F	7,000
PG 70	TEX-242-F	15,000
PG 76 OR HIGHER	TEX-242-F	20,000

* THE COUNTY ENGINEER MAY ACCEPT HAMBURG WHEEL TEST RESULTS FOR PRODUCTION AND PLACEMENT IF NO MORE THAN 10% OF THE 5 MOST RECENT TESTS IS BELOW THE SPECIFIED NUMBER OF PASSES AND THE FAILING TEST IS NO MORE THAN 2,000 PASSES BELOW THE SPECIFIED NUMBER OF PASSES.

B7.6 SUBMIT ANY PROPOSED ADJUSTMENTS OR CHANGES TO A JOB MIX FORMULA TO THE COUNTY ENGINEER BEFORE PRODUCTION OF THE NEW JOB MIX FORMULA.

B7.7 UNLESS OTHERWISE APPROVED, PROVIDE TYPE B MIXTURES THAT HAVE NO LESS THAN 4.5% ASPHALT BINDER, AND TY C AND D MIXTURES WITH NO LESS THAN 4.7% BINDER.

B7.8 FOR MIXTURE DESIGN VERIFICATION, PROVIDE THE ENGINEER WITH TWO 5-GALLON BUCKETS OF EACH AGGREGATE STOCKPILE TO BE USED ON THE PROJECT AND THREE GALLONS OF EACH PG BINDER TO BE USED ON THE PROJECT. ALSO PROVIDE SUFFICIENT QUANTITIES OF ANY OTHER ADDITIVES THAT WILL BE USED IN THE HMA MIXTURE. THIS MUST BE DONE PRIOR TO APPROVAL OF THE MIX DESIGN, UNLESS ALREADY PERFORMED WITHIN A ONE-YEAR TIME PERIOD.

B7.9 PRIOR TO ALLOWING PRODUCTION OF THE TRIAL BATCH, THE ENGINEER WILL USE THE MATERIALS PROVIDED BY THE CONTRACTOR TO PERFORM THE FOLLOWING TESTS TO VERIFY THE HMA MIXTURE DESIGN.

- INDIRECT TENSILE TEST IN ACCORDANCE WITH TEX-226-F
 - HAMBURG WHEEL TEST IN ACCORDANCE WITH TEX-242-F
 - OVERLAY TEST IN ACCORDANCE WITH TEX-248-F
 - CANTABRO TEST IN ACCORDANCE WITH TEX-245-F
- FOR MIXTURES DESIGNED WITH A TEXAS GYRATORY COMPACTOR (TGC), THE ENGINEER MAY REQUIRE THAT THE TARGET LABORATORY MOLDED DENSITY BE RAISED TO NO MORE THAN 97.5% OR MAY LOWER THE DESIGN NUMBER OF GYRATIONS TO NO LESS THAN 35 FOR MIXTURES DESIGNED WITH AN SGC IF ANY OF THE FOLLOWING CONDITIONS EXIST.
- THE INDIRECT TENSILE TEST RESULTS IN A VALUE GREATER THAN 200 PSI
 - THE HAMBURG WHEEL TEST RESULTS IN A VALUE LESS THAN 3.0 MM
 - THE OVERLAY TEST RESULTS IN A VALUE LESS THAN 100 CYCLES
 - THE CANTABRO TEST RESULTS IN A VALUE OF MORE THAN 20% LOSS
- IN LIEU OF, OR IN ADDITION TO EVALUATING THE MIXTURE DESIGN PRIOR TO ALLOWING A TRIAL BATCH TO BE PRODUCED, THE ENGINEER MAY ALSO EVALUATE THE MIXTURE PRODUCED DURING THE TRIAL BATCH FOR COMPLIANCE WITH THE 4 TESTS LISTED ABOVE.

B7.10 CONTRACTOR'S QUALITY CONTROL (CQC) TEST REPORTS SHALL BE SUBMITTED TO THE COUNTY ENGINEER ON A DAILY BASIS. AS A MINIMUM, DAILY CQC TESTING ON THE PRODUCED MIX SHALL INCLUDE: SIEVE ANALYSIS TEX-200-F, ASPHALT CONTENT TEX-236-F, HVEEM STABILITY TEX-208-F, LABORATORY COMPACTED DENSITY TEX-207-F, AND MAXIMUM SPECIFIC GRAVITY TEX-227-F. THE NUMBER AND LOCATION OF ALL HMAC TESTS SHALL BE DETERMINED BY THE COUNTY ENGINEER WITH A MINIMUM OF THREE, 6-INCH DIAMETER FIELD CORES SECURED AND TESTED BY THE CONTRACTOR FROM EACH DAY'S PAVING. EACH HMAC COURSE SHALL BE TESTED FOR IN-PLACE DENSITY, BITUMINOUS CONTENT AND AGGREGATE GRADATION, AND SHALL BE MEASURED FOR COMPACTED THICKNESS. THE NUMBER AND LOCATION OF ALL HMAC TEST SAMPLES SHALL BE DETERMINED BY THE COUNTY ENGINEER.

B7.11 RURAL ROADS MAY USE EITHER THE SPECIFICATIONS FOUND IN SECTION B7.1 OR A TWO-COURSE SURFACE IN ACCORDANCE WITH ITEM 316, TREATMENT WEARING SURFACE, OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. THE TYPE AND RATE OF ASPHALT AND AGGREGATE SHALL BE INDICATED ON THE PLANS AS A BASIS OF ESTIMATE AND SHALL BE DETERMINED AT THE PRECONSTRUCTION CONFERENCE. AGGREGATE USED IN THE MIX SHALL BE ON THE TXDOT QUALITY MONITORING SCHEDULE. AGGREGATE SHALL BE TYPE B GRADE 4. GRADATION TESTS SHALL BE REQUIRED FOR EACH 300 CUBIC YARDS OF MATERIAL PLACED WITH A MINIMUM OF TWO TESTS PER EACH GRADE PER EACH PROJECT. TEST RESULTS SHALL BE REVIEWED BY THE COUNTY ENGINEER PRIOR TO APPLICATION OF THE MATERIAL.

B9 - CONCRETE - GENERAL

B9.1 UNLESS OTHERWISE SPECIFIED, CONCRETE SHALL BE IN ACCORDANCE WITH ITEM 421 OF THE CURRENT EDITION OF THE TXDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND BE PLACED IN ACCORDANCE WITH THE APPLICABLE ITEM.

B9.2 ALL CONCRETE SHALL BE TESTED FOR COMPRESSIVE STRENGTH. ONE SET OF THREE CONCRETE TEST CYLINDERS SHALL BE MOLDED FOR EVERY 50 CUBIC YARDS OF CONCRETE PLACED FOR EACH CLASS OF CONCRETE PER DAY, OR AT ANY OTHER INTERVAL AS DETERMINED BY THE COUNTY ENGINEER. A SLUMP TEST SHALL BE REQUIRED WITH EACH SET OF TEST CYLINDERS. ONE CYLINDER SHALL BE TESTED FOR COMPRESSIVE STRENGTH AT AN AGE OF SEVEN DAYS AND THE REMAINING TWO CYLINDERS SHALL BE TESTED AT 28 DAYS OF AGE.



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SITE DEVELOPMENT PLANS TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
GENERAL NOTES



PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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Plotted by: Harry, Plot date: 11/06/2024
File name: h:02_projects\2023\230903 lott bros\07 Sheet\SD1230903 GENERAL NOTES.dwg

GENERAL NOTES:

- ENGINEER OF RECORD SHALL BE NOTIFIED IN WRITING 48-HOURS PRIOR TO THE START OF CONSTRUCTION
- BLASTING IS NOT PERMITTED ON THIS PROJECT UNDER ANY CIRCUMSTANCE. SHOULD BLASTING BE NECESSARY PLEASE NOTIFY THE ENGINEER OF RECORD
- ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).
- THESE PLANS DO NOT EXTEND TO OR INCLUDE DESIGNS OR SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE REGISTERED PROFESSIONAL ENGINEER(S) HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED IN THE WORK.
- THE TRENCH EXCAVATION AND SHORING SAFETY SYSTEM, AS OUTLINED IN THE TECHNICAL SPECIFICATIONS, WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE.
- CONTRACTOR SHALL ASSURE HIMSELF THAT ALL CONSTRUCTION PERMITS HAVE BEEN OBTAINED PRIOR TO COMMENCEMENT OF WORK. REQUIRED PERMITS THAT CAN ONLY BE ISSUED TO CONTRACTOR ARE TO BE OBTAINED AT THE CONTRACTORS EXPENSE.
- CONTRACTOR SHALL GIVE A MINIMUM OF 48 HOURS NOTICE TO ALL AUTHORIZED INSPECTORS, SUPERINTENDENTS, OR PERSONS IN CHARGE OF PRIVATE AND PUBLIC UTILITIES AFFECTED BY HIS OPERATIONS PRIOR TO COMMENCEMENT OF WORK.
- CONTRACTOR SHALL TAKE ALL DUE PRECAUTIONS TO PROTECT EXISTING FACILITIES FROM DAMAGE. ANY DAMAGE TO EXISTING FACILITIES INCURRED AS A RESULT OF THESE CONSTRUCTION OPERATIONS ARE TO BE REPAIRED IMMEDIATELY BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION AT NO ADDITIONAL COST TO OWNER.
- LOCATION OF EXISTING UTILITIES SHOWN ON PLANS ARE APPROXIMATE. NO WARRANTY IS IMPLIED AS TO THE ACTUAL LOCATION OF EXISTING UTILITIES. CONTRACTOR MUST FIELD VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- WHEN UNLOCATED OR INCORRECTLY LOCATED UNDERGROUND PIPING OR A BREAK IN A LINE OR OTHER UTILITIES AND SERVICES ARE ENCOUNTERED DURING SITE WORK OPERATIONS, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE UTILITY COMPANY IMMEDIATELY TO OBTAIN PROCEDURE DIRECTIONS. THE CONTRACTOR SHALL COOPERATE WITH THE APPLICABLE UTILITY COMPANY IN MAINTAINING ACTIVE SERVICES IN OPERATION.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO PUBLIC AND PRIVATE FACILITIES DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES TO BE COORDINATED WITH THE OWNER.
- THE CONTRACTOR SHALL COORDINATE INTERRUPTIONS OF ALL UTILITIES AND SERVICES WITH APPLICABLE UTILITY COMPANY OR COMPANIES. ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY COMPANY OR AGENCY INVOLVED.
- 1THE CONTRACTOR SHALL LOCATE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, AND CONTROL POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PUBLIC SURVEYOR IN THE STATE OF TEXAS AT NO ADDITIONAL COST TO OWNER.
- EXISTING PAVING, BUILDING, AND OTHER ITEMS SHOWN ON THESE PLANS NOT SPECIFICALLY RELATED TO THE WORK OF THE CONTRACTOR IS FOR INFORMATION ONLY.
- DEMOLITION PERMITS (IF NEEDED) ARE TO BE OBTAINED BY THE CONTRACTOR.
- EXISTING SURFACE AND SUBSURFACE STRUCTURES (GAS MAINS, WATER MAINS, STORM SEWER, TELEPHONE CABLES, ETC.) ARE SHOWN ON THE PLANS IF THEIR LOCATION HAS BEEN DETERMINED, BUT IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO AVOID DAMAGING THESE EXISTING STRUCTURES WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR FAILURE TO SHOW ANY OR ALL OF THESE STRUCTURES ON THE PLANS OR TO SHOW THEM IN THEIR EXACT LOCATION. IF ANY STRUCTURE IS DAMAGED BY THE CONTRACTOR, IT SHALL BE HIS RESPONSIBILITY TO REPAIR THE DAMAGE AT HIS EXPENSE AND RESTORE THE STRUCTURE TO IT'S ORIGINAL CONDITION.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY LOCATIONS, ELEVATIONS AND DIMENSIONS OF ADJACENT AND/OR CONFLICTING UTILITIES IN ADVANCE OF CONSTRUCTION IN ORDER THAT ADJUSTMENTS CAN BE MADE TO PROVIDE ADEQUATE CLEARANCE, IF REQUIRED. THE CONTRACTOR SHALL PRESERVE AND PROTECT PUBLIC UTILITIES AT ALL TIMES DURING CONSTRUCTION. ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTORS OPERATIONS SHALL BE RESTORED AT HIS EXPENSE. THE ENGINEER SHALL BE NOTIFIED WHEN PROPOSED FACILITY GRADES CONFLICT WITH EXISTING UTILITY GRADES.
- ALL CONCEPTS, IDEAS, DESIGNS, ARRANGEMENTS, AND PLANS INDICATED OR REPRESENTED BY THESE INSTRUMENTS, AS OUTLINED ON THE TITLE SHEET INDEX, AND BY ANY ADDENDUM ARE OWNED BY AND ARE THE PROPERTY OF HENDERSON PROFESSIONAL ENGINEERS, L.L.C. AND WERE CREATED AND DEVELOPED FOR THE USE ON AND IN CONNECTION WITH THE SPECIFIED PROJECT. THESE CONCEPTS, IDEAS, DESIGN, ARRANGEMENTS, OR PLANS SHALL NOT BE USED BY ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION AND CONSENT OF HENDERSON PROFESSIONAL ENGINEERS WHOSE CONTACT INFO IS FOUND IN THE TITLE BLOCK OF EVERY PLAN SHEET.
- A PRE-CONSTRUCTION CONFERENCE IS TO BE HELD PRIOR TO BEGINNING CONSTRUCTION. THE CONFERENCE SHALL TAKE PLACE EITHER VIRTUALLY OR AT A LOCATION AND TIME SELECTED BY OWNER AND ENGINEER. CONTRACTOR TO ARRANGE ENGINEER, OWNER AND PERTINENT SUB CONTRACTOR ATTENDANCE AT THIS MEETING.
- CONTRACTOR SHALL NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO ANY CONSTRUCTION.
- IN THE EVENT OF A DISCREPANCY WITHIN THE PLANS OR BETWEEN THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL BE REQUIRED TO PERFORM THE MOST INVOLVED WORK TO SATISFY THE INTENT OF THE PROJECT.
- TOPSOIL REPLACEMENT IS REQUIRED IN ALL AREAS. AREAS OF BACKFILL, EXCAVATION, OR GRADING SHALL BE BROUGHT TO WITHIN SIX INCHES OF FINAL GRADE AND BROUGHT TO GRADE WITH COMPACTED TOP SOIL. DISTURBED AREA BETWEEN ROW AND EDGE OF PAVEMENT TO BE VEGETATED ACCORDING TO COSA ITEM 516 "HYDROMULCH."
- MAIL SERVICE SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. PAYMENT FOR REMOVAL, TEMPORARY RELOCATION AND PERMANENT LOCATION OF ALL MAILBOXES SHALL CONSIDERED SUBSIDIARY TO OTHER ITEMS OF WORK.
- EXISTING SIGNS TO BE RELOCATED TO WITHIN A MINIMUM OF SEVEN FEET FROM THE PROPOSED EDGE OF PAVEMENT.
- SHOULD HENDERSON PROFESSIONAL ENGINEERS INSTALL SIGNAGE AT THE CONSTRUCTION SITE THEN ANY DAMAGES OR ISSUES SHOULD BE IMMEDIATELY CONVEYED TO THE ENGINEER OF RECORD FOR REMEDIATION.

GENERAL ENVIRONMENTAL NOTES:

- CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS REGARDING EXCESS AND WASTE MATERIALS, INCLUDING METHODS OF HANDLING AND DISPOSAL.
- CONTRACTOR SHALL LOCATE MATERIAL STORAGE AREAS AWAY FROM STORM WATER CONVEYANCE SYSTEMS. PROVIDE PROTECTED STORAGE AREAS FOR CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER POTENTIALLY TOXIC MATERIALS.
- FUEL STORAGE IS ALLOWED ON THIS PROJECT AND SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATORY REQUIREMENTS.
- THE CONTRACTOR SHALL ADVISE OWNER IMMEDIATELY, VERBALLY AND IN WRITING, OF ANY FUEL OR TOXIC MATERIALS SPILLS WITHIN THE PROJECT/CONSTRUCTION AREA AND THE ACTIONS TO BE TAKEN TO REMEDY THE PROBLEM.
- THE CONTRACTOR SHALL DISPOSE OF FUELS, HAZARDOUS MATERIALS, AND CONTAMINATED EXCAVATIONS IN A LEGALLY APPROVED MANNER.
- NO OPEN BURNING IS ALLOWED ON THIS PROJECT.

PAVING NOTES / TRAFFIC CONTROL NOTES:

- ANY EXISTING PAVEMENT, CURBS, AND/OR SIDEWALK DAMAGED OR REMOVED BY THE CONTRACTOR ARE TO BE REPAIRED BY THE CONTRACTOR TO AT LEAST THE PRE-EXISTING CONDITION AT HIS EXPENSE BEFORE ACCEPTANCE OF THE WORK.
- TRAFFIC CONTROLS DURING CONSTRUCTION TO BE CONTRACTORS RESPONSIBILITY AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL MAINTAIN AT LEAST ONE TRAFFIC LANE OPEN AT ALL TIMES DURING CONSTRUCTION (ALL AFFECTED STREETS).

SITE GRADING NOTES:

- THE CONTRACTOR SHALL CONTROL DUST CAUSED BY THE WORK AND COMPLY WITH POLLUTION CONTROL REGULATIONS OF GOVERNING AUTHORITIES.
- ALL EXCESS EXCAVATED MATERIAL IS TO BE REMOVED FROM THE SITE. THE EXCESS EXCAVATION MATERIAL SHALL NOT BE STOCKPILED.
- ADJUST MANHOLES COVERS, VALVE BOXES, ELECTRICAL MANHOLES, ETC. TO MATCH PROPOSED FINISHED GRADE (NO SEPARATE PAY).

STORM WATER NOTES:

- THROUGHOUT THE CONSTRUCTION, AND AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL ASSURE THAT DRAINAGE OF STORM WATER RUNOFF IS NOT BLOCKED.
- MODIFICATIONS TO ANY STORM CONVEYANCE SYSTEM MUST BE IMMEDIATELY REPORTED TO THE ENGINEER OF RECORD TO ENSURE GENERAL CONFORMANCE WITH APPLICABLE PERMITS.
- CONSTRUCTION MEANS AND METHODS SHALL BE USED TO ENSURE RUNOFF FROM THE SITE IS CONTROLLED THROUGH THE DURATION OF THE PROJECT. PONDS MAY BE ROUGH CUT WHEN NECESSARY.

CONCRETE CONSTRUCTION NOTES:

- ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS NOTED IN THE PLANS.
- ALL REINFORCING BARS SHALL CONFORM TO ASTM A-305 AND ASTM A-316, GRADE 60.
- ALL CONCRETE AND REINFORCING STEEL SHALL CONFORM TO CURRENT A.C.I. CODE.
- ALL BAR SPLICES, CORNER DOWELS, AND JOINT DOWELS SHALL HAVE A MINIMUM LAP LENGTH OF 40 BAR DIAMETERS OR 30", WHICHEVER IS GREATER.
- NO FLY ASH ADDITIVES WILL BE PERMITTED IN STRUCTURAL CONCRETE.

UTILITY NOTES:

- THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE LOCATION OF THE UNDERGROUND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND AVOIDING ALL EXISTING UTILITIES.
- ALL UTILITY TRENCH COMPACTION TESTS WITHIN THE STREET PAVEMENT SECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND VERIFIED BY THE OWNER'S TESTING PROVIDER. FILL MATERIAL SHALL BE PLACED IN UNIFORM LAYERS NOT TO EXCEED TWELVE INCHES (12") LOOSE. EACH MATERIAL SHALL BE COMPACTED AS SPECIFIED AND TESTED FOR DENSITY AND MOISTURE IN ACCORDANCE WITH TEST METHODS TEX-113-E, TEX-114-E, TEX-115-E. THE NUMBER OF LOCATIONS OF REQUIRED TESTS SHALL BE DETERMINED BY THE ENGINEER, APPROVED BY THE STREET INSPECTOR AND AGREED TO AT THE PRE-CONSTRUCTION MEETING. UPON COMPLETION OF TESTING THE OWNER'S TESTING PROVIDER SHALL PROVIDE THE STREET INSPECTOR WITH ALL TESTING DOCUMENTATION AND A CERTIFICATION STATING THAT THE PLACEMENT OF FILL MATERIAL HAS BEEN COMPLETED IN ACCORDANCE WITH THE PLANS.

SAFETY FENCE NOTES:

- SAFETY FENCE, WHEN NECESSARY, SHALL BE USED TO PROTECT ALL EXCAVATIONS AND TO SEPARATE CONSTRUCTION ACTIVITIES FROM PEDESTRIAN, DURING THE ENTIRE CONSTRUCTION PERIOD.
- ALL SAFETY FENCING SHALL BE PLASTIC, 4' MINIMUM HEIGHT AND ORANGE IN COLOR.
- SAFETY FENCE USED WITHIN THE ROADWAY SHALL BE REFLECTORIZED WITH A MINIMUM OF TWO (2) STRIPS OF RETROREFLECTIVE MATERIAL. A MINIMUM OF 1' WIDE THE LENGTH OF THE FENCE OR DELINEATED BY CHANNELIZING DEVICES.
- SAFETY FENCE USED TO SEPARATE SIDEWALKS FROM CONSTRUCTION ACTIVITIES SHALL HAVE MINIMUM ENCROACHMENT TO THE SIDEWALK.
- FENCE MATERIAL SHALL BE SUPPORTED FROM 1/4" DIA. NYLON ROPE FROM POSTS SPACED ON A MAXIMUM 8 FT. CENTERS. POSTS SHALL EXTEND 4' ABOVE NATURAL GROUND. FENCE MATERIAL SHALL BE SECURED TO POSTS W/ PLASTIC WIRE TIES, MINIMUM 3 PER POST.
- POST SHALL INCLUDE SUPPORT BRACES SUFFICIENT TO HANDLE ALL LOADS.
- PAYMENT FOR SECURITY FENCE SHALL BE BASED ON A LUMP SUM FOR EACH EXTENSION INCLUDING ALL INCIDENTAL WORK (LABOR, MATERIALS, EQUIPMENT, ETC.)

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE, OR STRUCTURAL DESIGN/GEOTECHNICAL SAFETY/EQUIPMENT CONSULTANT, IF ANY SHALL REVIEW THESE PLANS AND ANY GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

SPECIAL CONDITIONS AND NOTES:

- EXISTING UTILITIES IN THE AREA ARE SHOWN IN ACCORDANCE WITH ASCE 38-02 "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" AS SPECIFIED IN THE SIGNED CONTRACT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO THE START OF ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
- ALL UTILITY SYMBOLS SHOWN REPRESENT APPROXIMATE LOCATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO THE APPROPRIATE AGENCY'S STANDARD SPECIFICATIONS AND INSTALLATION DETAILS FOR ACTUAL LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- IN THE EVENT THESE NOTES CONTRADICT OR ARE IN CONFLICT WITH THE MUNICIPALITY NOTES, THE MORE STRINGENT REQUIREMENT SHALL BE FOLLOWED.
- THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE PRE-CONSTRUCTION MEETING AND A COPY SHALL BE AVAILABLE ON-SITE AT ALL TIMES.

SPECIAL CONDITIONS AND NOTES:

- EXISTING UTILITIES IN THE AREA ARE SHOWN IN ACCORDANCE WITH ASCE 38-02 "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA" AS SPECIFIED IN THE SIGNED CONTRACT SCOPE OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE TEXAS ONE CALL CENTER PRIOR TO THE START OF ANY CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK.
- ALL UTILITY SYMBOLS SHOWN REPRESENT APPROXIMATE LOCATIONS UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO THE APPROPRIATE AGENCY'S STANDARD SPECIFICATIONS AND INSTALLATION DETAILS FOR ACTUAL LOCATIONS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- IN THE EVENT THESE NOTES CONTRADICT OR ARE IN CONFLICT WITH THE MUNICIPALITY NOTES, THE MORE STRINGENT REQUIREMENT SHALL BE FOLLOWED.
- THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE PRE-CONSTRUCTION MEETING AND A COPY SHALL BE AVAILABLE ON-SITE AT ALL TIMES.

TCEQ WATER POLLUTION ABATEMENT PLAN:

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.
- LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
- 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.
- 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.
- 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.
- 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.THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

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No.	1	2	3	4	5

SITE DEVELOPMENT PLANS TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
GEORGETOWN, TEXAS 78628

CONSTRUCTION NOTES

STATE OF TEXAS

JENNIFER L. HENDERSON

116883

LICENSED PROFESSIONAL ENGINEER

06/14/2024

PROJECT NO. 230903

06/11/2024

DRAWN BY: DB

CHECKED BY: AR

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COUNTY PERMIT NUMBER: 2024-734-COC

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TCEQ ORGANIZED SEWAGE COLLECTION SYSTEM GENERAL CONSTRUCTION NOTES:

1. THIS ORGANIZED SEWAGE COLLECTION SYSTEM (SCS) MUST BE CONSTRUCTED IN ACCORDANCE WITH 30 TEXAS ADMINISTRATIVE CODE (TAC) §213.5(C), THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) EDWARDS AQUIFER RULES AND ANY LOCAL GOVERNMENT STANDARD SPECIFICATIONS.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROPOSED REGULATED PROJECT MUST BE PROVIDED WITH COPIES OF THE SCS PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS MUST BE REQUIRED TO KEEP ON-SITE COPIES OF THE PLAN AND THE APPROVAL LETTER.
3. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE PRESIDING TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
- THE NAME OF THE APPROVED PROJECT;
 - THE ACTIVITY START DATE; AND
 - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
4. ANY MODIFICATION TO THE ACTIVITIES DESCRIBED IN THE REFERENCED SCS APPLICATION FOLLOWING THE DATE OF APPROVAL MAY REQUIRE THE SUBMITTAL OF AN SCS APPLICATION TO MODIFY THIS APPROVAL, INCLUDING THE PAYMENT OF APPROPRIATE FEES AND ALL INFORMATION NECESSARY FOR ITS REVIEW AND APPROVAL.
5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
6. IF ANY SENSITIVE FEATURES ARE DISCOVERED DURING THE WASTEWATER LINE TRENCHING ACTIVITIES, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPLICANT MUST IMMEDIATELY NOTIFY THE APPROPRIATE REGIONAL OFFICE OF THE TCEQ OF THE FEATURE DISCOVERED. A GEOLOGIST'S ASSESSMENT OF THE LOCATION AND EXTENT OF THE FEATURE DISCOVERED MUST BE REPORTED TO THAT REGIONAL OFFICE IN WRITING AND THE APPLICANT MUST SUBMIT A PLAN FOR ENSURING THE STRUCTURAL INTEGRITY OF THE SEWER LINE OR FOR MODIFYING THE PROPOSED COLLECTION SYSTEM ALIGNMENT AROUND THE FEATURE. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE EXECUTIVE DIRECTOR HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY WHILE MAINTAINING THE STRUCTURAL INTEGRITY OF THE LINE.
7. SEWER LINES LOCATED WITHIN OR CROSSING THE 5-YEAR FLOODPLAIN OF A DRAINAGE WAY WILL BE PROTECTED FROM INUNDATION AND STREAM VELOCITIES WHICH COULD CAUSE EROSION AND SCOURING OF BACKFILL. THE TRENCH MUST BE CAPPED WITH CONCRETE TO PREVENT SCOURING OF BACKFILL, OR THE SEWER LINES MUST BE ENCASED IN CONCRETE. ALL CONCRETE SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES.
8. BLASTING PROCEDURES FOR PROTECTION OF EXISTING SEWER LINES AND OTHER UTILITIES WILL BE IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION CRITERIA. SAND IS NOT ALLOWED AS BEDDING OR BACKFILL IN TRENCHES THAT HAVE BEEN BLASTED. IF ANY EXISTING SEWER LINES ARE DAMAGED, THE LINES MUST BE REPAIRED AND RETESTED. E SHALL HAVE A MINIMUM THICKNESS OF 6 INCHES.
9. ALL MANHOLES CONSTRUCTED OR REHABILITATED ON THIS PROJECT MUST HAVE WATERTIGHT SIZE ON SIZE RESILIENT CONNECTORS ALLOWING FOR DIFFERENTIAL SETTLEMENT. IF MANHOLES ARE CONSTRUCTED WITHIN THE 100-YEAR FLOODPLAIN, THE COVER MUST HAVE A GASKET AND BE BOLTED TO THE RING. WHERE GASKETED MANHOLE COVERS ARE REQUIRED FOR MORE THAN THREE MANHOLES IN SEQUENCE OR FOR MORE THAN 1500 FEET, ALTERNATE MEANS OF VENTING WILL BE PROVIDED. BRICKS ARE NOT AN ACCEPTABLE CONSTRUCTION MATERIAL FOR ANY PORTION OF THE MANHOLE. THE DIAMETER OF THE MANHOLES MUST BE A MINIMUM OF FOUR FEET AND THE MANHOLE FOR ENTRY MUST HAVE A MINIMUM CLEAR OPENING DIAMETER OF 30 INCHES. THESE DIMENSIONS AND OTHER DETAILS SHOWING COMPLIANCE WITH THE COMMISSION'S RULES CONCERNING MANHOLES AND SEWER LINE/MANHOLE INVERTS DESCRIBED IN 30 TAC §217.55 ARE INCLUDED ON PLAN SHEET ___ OF ___. IT IS SUGGESTED THAT ENTRANCE INTO MANHOLES IN EXCESS OF FOUR FEET DEEP BE ACCOMPLISHED BY MEANS OF A PORTABLE LADDER. THE INCLUSION OF STEPS IN A MANHOLE IS PROHIBITED.
10. WHERE WATER LINES AND NEW SEWER LINES ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC §217.53(D) (PIPE DESIGN) AND 30 TAC §290.44(E) (WATER DISTRIBUTION).
11. WHERE SEWERS LINES DEVIATE FROM STRAIGHT ALIGNMENT AND UNIFORM GRADE ALL CURVATURE OF SEWER PIPE MUST BE ACHIEVED BY THE FOLLOWING PROCEDURE WHICH IS RECOMMENDED BY THE PIPE MANUFACTURER:
IF PIPE FLEXURE IS PROPOSED, THE FOLLOWING METHOD OF PREVENTING DEFLECTION OF THE JOINT MUST BE USED: _____.

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

12. NEW SEWAGE COLLECTION SYSTEM LINES MUST BE CONSTRUCTED WITH STUB OUTS FOR THE CONNECTION OF ANTICIPATED EXTENSIONS. THE LOCATION OF SUCH STUB OUTS MUST BE MARKED ON THE GROUND SUCH THAT THEIR LOCATION CAN BE EASILY DETERMINED AT THE TIME OF CONNECTION OF THE EXTENSIONS. SUCH STUB OUTS MUST BE MANUFACTURED WYES OR TEES THAT ARE COMPATIBLE IN SIZE AND MATERIAL WITH BOTH THE SEWER LINE AND THE EXTENSION. AT THE TIME OF ORIGINAL CONSTRUCTION, NEW STUB-OUTS MUST BE CONSTRUCTED SUFFICIENTLY TO EXTEND BEYOND THE END OF THE STREET PAVEMENT. ALL STUB-OUTS MUST BE SEALED WITH A MANUFACTURED CAP TO PREVENT LEAKAGE. EXTENSIONS THAT WERE NOT ANTICIPATED AT THE TIME OF ORIGINAL CONSTRUCTION OR THAT ARE TO BE CONNECTED TO AN EXISTING SEWER LINE NOT FURNISHED WITH STUB OUTS MUST BE CONNECTED USING A MANUFACTURED SADDLE AND IN ACCORDANCE WITH ACCEPTED PLUMBING TECHNIQUES.
- IF NO STUB-OUT IS PRESENT AN ALTERNATE METHOD OF JOINING LATERALS IS SHOWN IN THE DETAIL ON PLAN SHEET ___ OF ___ (FOR POTENTIAL FUTURE LATERALS).
- THE PRIVATE SERVICE LATERAL STUB-OUTS MUST BE INSTALLED AS SHOWN ON THE PLAN AND PROFILE SHEETS ON PLAN SHEET ___ OF ___ AND MARKED AFTER BACKFILLING AS SHOWN IN THE DETAIL ON PLAN SHEET ___ OF ___.
13. TRENCHING, BEDDING AND BACKFILL MUST CONFORM WITH 30 TAC §217.54. THE BEDDING AND BACKFILL FOR FLEXIBLE PIPE MUST COMPLY WITH THE STANDARDS OF ASTM D-2321, CLASSES IA, IB, II OR III. RIGID PIPE BEDDING MUST COMPLY WITH THE REQUIREMENTS OF ASTM C 12 (ANSI A 106.2) CLASSES A, B OR C.
14. SEWER LINES MUST BE TESTED FROM MANHOLE TO MANHOLE. WHEN A NEW SEWER LINE IS CONNECTED TO AN EXISTING STUB OR CLEAN-OUT, IT MUST BE TESTED FROM EXISTING MANHOLE TO NEW MANHOLE. IF A STUB OR CLEAN-OUT IS USED AT THE END OF THE PROPOSED SEWER LINE, NO PRIVATE SERVICE ATTACHMENTS MAY BE CONNECTED BETWEEN THE LAST MANHOLE AND THE CLEANOUT UNLESS IT CAN BE CERTIFIED AS CONFORMING WITH THE PROVISIONS OF 30 TAC §213.5(C)(3)(E).
15. ALL SEWER LINES MUST BE TESTED IN ACCORDANCE WITH 30 TAC §217.57. THE ENGINEER MUST RETAIN COPIES OF ALL TEST RESULTS WHICH MUST BE MADE AVAILABLE TO THE EXECUTIVE DIRECTOR UPON REQUEST. THE ENGINEER MUST CERTIFY IN WRITING THAT ALL WASTEWATER LINES HAVE PASSED ALL REQUIRED TESTING TO THE APPROPRIATE REGIONAL OFFICE WITHIN 30 DAYS OF TEST COMPLETION AND PRIOR TO USE OF THE NEW COLLECTION SYSTEM. TESTING METHOD WILL BE:
- (a) FOR A COLLECTION SYSTEM PIPE THAT WILL TRANSPORT WASTEWATER BY GRAVITY FLOW, THE DESIGN MUST SPECIFY AN INFILTRATION AND EXFILTRATION TEST OR A LOW-PRESSURE AIR TEST. A TEST MUST CONFORM TO THE FOLLOWING REQUIREMENTS:
- (1) LOW PRESSURE AIR TEST:
- (A) A LOW PRESSURE AIR TEST MUST FOLLOW THE PROCEDURES DESCRIBED IN AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) C-828, ASTM C-924, OR ASTM F-1417 OR OTHER PROCEDURE APPROVED BY THE EXECUTIVE DIRECTOR, EXCEPT AS TO TESTING TIMES AS REQUIRED IN TABLE C.3 IN SUBPARAGRAPH (C) OF THIS PARAGRAPH OR EQUATION C.3 IN SUBPARAGRAPH (B)(II) OF THIS PARAGRAPH.
- (B) FOR SECTIONS OF COLLECTION SYSTEM PIPE LESS THAN 36 INCH AVERAGE INSIDE DIAMETER, THE FOLLOWING PROCEDURE MUST APPLY, UNLESS A PIPE IS TO BE TESTED AS REQUIRED BY PARAGRAPH (2) OF THIS SUBSECTION.
- (i) A PIPE MUST BE PRESSURIZED TO 3.5 POUNDS PER SQUARE INCH (PSI) GREATER THAN THE PRESSURE EXERTED BY GROUNDWATER ABOVE THE PIPE.
- (ii) ONCE THE PRESSURE IS STABILIZED, THE MINIMUM TIME ALLOWABLE FOR THE PRESSURE TO DROP FROM 3.5 PSI GAUGE TO PSI GAUGE IS COMPUTED FROM THE FOLLOWING EQUATION:
- EQUATION C.3
$$T = \frac{0.085 \times D \times K}{Q}$$
- WHERE:
- T = TIME FOR PRESSURE TO DROP 1.0 POUND PER SQUARE INCH GAUGE IN SECONDS
- K = $0.000419 \times D \times L$ 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 INTERNA SURFACE
- (C) SINCE A K VALUE OF LESS THAN 1.0 MAY NOT BE USED, THE MINIMUM TESTING TIME FOR EACH PIPE DIAMETER IS SHOWN IN THE FOLLOWING TABLE C.3:

PIPE DIAMETER (INCHES)	MINIMUM TIME (SECONDS)	MAXIMUM LENGTH FOR MINIMUM TIME (FEET)	TIME FOR LONGER LENGTH (SECONDS/FOOT)
6	340	398	0.855
8	454	298	1.520
10	567	239	2.374
12	680	199	3.419
15	850	159	5.342
18	1020	133	7.693
21	1190	114	10.471
24	1360	100	13.676
27	1530	88	17.309
30	1700	80	21.369
33	1870	72	25.856

- (D) AN OWNER MAY STOP A TEST IF NO PRESSURE LOSS HAS OCCURRED DURING THE FIRST 25% OF THE CALCULATED TESTING TIME.
- (E) IF ANY PRESSURE LOSS OR LEAKAGE HAS OCCURRED DURING THE FIRST 25% OF A TESTING PERIOD, THEN THE TEST MUST CONTINUE FOR THE ENTIRE TEST DURATION AS OUTLINED ABOVE OR UNTIL FAILURE.
- (F) WASTEWATER COLLECTION SYSTEM PIPES WITH A 27 INCH OR LARGER AVERAGE INSIDE DIAMETER MAY BE AIR TESTED AT EACH JOINT INSTEAD OF FOLLOWING THE PROCEDURE OUTLINED IN THIS SECTION.
- (G) A TESTING PROCEDURE FOR PIPE WITH AN INSIDE DIAMETER GREATER THAN 33 INCHES MUST BE APPROVED BY THE EXECUTIVE DIRECTOR.
- (2) INFILTRATION/EXFILTRATION TEST:
- (A) THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH OF DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF 2.0 FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE.
- (B) AN OWNER SHALL USE AN INFILTRATION TEST IN LIEU OF AN EXFILTRATION TEST WHEN PIPES ARE INSTALLED BELOW THE GROUNDWATER LEVEL.
- (C) THE TOTAL EXFILTRATION, AS DETERMINED BY A HYDROSTATIC HEAD TEST, MUST NOT EXCEED 50 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT A MINIMUM TEST HEAD OF TWO FEET ABOVE THE CROWN OF A PIPE AT AN UPSTREAM MANHOLE, OR AT LEAST TWO FEET ABOVE EXISTING GROUNDWATER LEVEL, WHICHEVER IS GREATER.
- (D) FOR CONSTRUCTION WITHIN A 25-YEAR FLOOD PLAIN, THE INFILTRATION OR EXFILTRATION MUST NOT EXCEED 10 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOURS AT THE SAME MINIMUM TEST HEAD AS IN SUBPARAGRAPH (C) OF THIS PARAGRAPH.
- (E) IF THE QUANTITY OF INFILTRATION OR EXFILTRATION EXCEEDS THE MAXIMUM QUANTITY SPECIFIED, AN OWNER SHALL UNDERTAKE REMEDIAL ACTION IN ORDER TO REDUCE THE INFILTRATION OR EXFILTRATION TO AN AMOUNT WITHIN THE LIMITS SPECIFIED. AN OWNER SHALL RETEST A PIPE FOLLOWING A REMEDIATION ACTION.
- (b) IF A GRAVITY COLLECTION PIPE IS COMPOSED OF FLEXIBLE PIPE, DEFLECTION TESTING IS ALSO REQUIRED. THE FOLLOWING PROCEDURES MUST BE FOLLOWED:
- (1) FOR A COLLECTION PIPE WITH INSIDE DIAMETER LESS THAN 27 INCHES, DEFLECTION MEASUREMENT REQUIRES A RIGID MANDREL.
- (A) MANDREL SIZING.
- (i) A RIGID MANDREL MUST HAVE AN OUTSIDE DIAMETER (OD) NOT LESS THAN 95% OF THE BASE INSIDE DIAMETER (ID) OR AVERAGE ID OF A PIPE, AS SPECIFIED IN THE APPROPRIATE STANDARD BY THE ASTM, AMERICAN WATER WORKS ASSOCIATION, UNI-BELL, OR AMERICAN NATIONAL STANDARDS INSTITUTE, OR ANY RELATED APPENDIX.
- (ii) IF A MANDREL SIZING DIAMETER IS NOT SPECIFIED IN THE APPROPRIATE STANDARD, THE MANDREL MUST HAVE AN OD EQUAL TO 95% OF THE ID OF A PIPE. IN THIS CASE, THE ID OF THE PIPE, FOR THE PURPOSE OF DETERMINING THE OD OF THE MANDREL, MUST EQUAL BE THE AVERAGE OUTSIDE DIAMETER MINUS TWO MINIMUM WALL THICKNESSES FOR OD CONTROLLED PIPE AND THE AVERAGE INSIDE DIAMETER FOR ID CONTROLLED PIPE.
- (iii) ALL DIMENSIONS MUST MEET THE APPROPRIATE STANDARD.
- (B) MANDREL DESIGN.
- (i) A RIGID MANDREL MUST BE CONSTRUCTED OF A METAL OR A RIGID PLASTIC MATERIAL THAT CAN WITHSTAND 200 PSI WITHOUT BEING DEFORMED.
- (ii) A MANDREL MUST HAVE NINE OR MORE ODD NUMBER OF RUNNERS OR LEGS.
- (iii) A BARREL SECTION LENGTH MUST EQUAL AT LEAST 75% OF THE INSIDE DIAMETER OF A PIPE.
- (iv) EACH SIZE MANDREL MUST USE A SEPARATE PROVING RING.
- (C) METHOD OPTIONS.
- (i) AN ADJUSTABLE OR FLEXIBLE MANDREL IS PROHIBITED.
- (ii) A TEST MAY NOT USE TELEVISION INSPECTION AS A SUBSTITUTE FOR A DEFLECTION TEST.
- (iii) IF REQUESTED, THE EXECUTIVE DIRECTOR MAY APPROVE THE USE OF A DEFLECTOMETER OR A MANDREL WITH REMOVABLE LEGS OR RUNNERS ON A CASE-BY-CASE BASIS.
- (2) FOR A GRAVITY COLLECTION SYSTEM PIPE WITH AN INSIDE DIAMETER 27 INCHES AND GREATER, OTHER TEST METHODS MAY BE USED TO DETERMINE VERTICAL DEFLECTION.
- (3) A DEFLECTION TEST METHOD MUST BE ACCURATE TO WITHIN PLUS OR MINUS 0.2% DEFLECTION.
- (4) AN OWNER SHALL NOT CONDUCT A DEFLECTION TEST UNTIL AT LEAST 30 DAYS AFTER THE FINAL BACKFILL.
- (5) GRAVITY COLLECTION SYSTEM PIPE DEFLECTION MUST NOT EXCEED FIVE PERCENT (5%).
- (6) IF A PIPE SECTION FAILS A DEFLECTION TEST, AN OWNER SHALL CORRECT THE PROBLEM AND CONDUCT A SECOND TEST AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
16. ALL MANHOLES MUST BE TESTED TO MEET OR EXCEED THE REQUIREMENTS OF 30 TAC §217.58.
- (a) ALL MANHOLES MUST PASS A LEAKAGE TEST.
- (b) AN OWNER SHALL TEST EACH MANHOLE (AFTER ASSEMBLY AND BACKFILLING) FOR LEAKAGE, SEPARATE AND (B) INDEPENDENT OF THE COLLECTION SYSTEM PIPES, BY HYDROSTATIC EXFILTRATION TESTING, VACUUM TESTING, OR OTHER METHOD APPROVED BY THE EXECUTIVE DIRECTOR.
- (1) HYDROSTATIC TESTING.
- (A) THE MAXIMUM LEAKAGE FOR HYDROSTATIC TESTING OR ANY ALTERNATIVE TEST METHODS IS 0.025 GALLONS PER FOOT DIAMETER PER FOOT OF MANHOLE DEPTH PER HOUR.
- (B) TO PERFORM A HYDROSTATIC EXFILTRATION TEST, AN OWNER SHALL SEAL ALL WASTEWATER PIPES COMING INTO A MANHOLE WITH AN INTERNAL PIPE PLUG, FILL THE MANHOLE WITH WATER, AND MAINTAIN THE TEST FOR AT LEAST ONE HOUR.
- (C) A TEST FOR CONCRETE MANHOLES MAY USE A 24-HOUR WETTING PERIOD BEFORE TESTING TO ALLOW SATURATION OF THE CONCRETE.
- (2) VACUUM TESTING.
- (A) TO PERFORM A VACUUM TEST, AN OWNER SHALL PLUG ALL LIFT HOLES AND EXTERIOR JOINTS WITH A NON-SHRINK GROUT AND PLUS ALL PIPES ENTERING A MANHOLE.
- (B) NO GROUT MUST BE PLACED IN HORIZONTAL JOINTS BEFORE TESTING.
- (C) STUB-OUTS, MANHOLE BOOTS, AND PIPE PLUGS MUST BE SECURED TO PREVENT MOVEMENT WHILE A VACUUM IS DRAWN.
- (D) AN OWNER SHALL USE A MINIMUM 60 INCH/LB TORQUE WRENCH TO TIGHTEN THE EXTERNAL CLAMPS THAT SECURE A TEST COVER TO THE TOP OF A MANHOLE.
- (E) A TEST HEAD MUST BE PLACED AT THE INSIDE OF THE TOP OF A CONE SECTION, AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- (F) THERE MUST BE A VACUUM OF 10 INCHES OF MERCURY INSIDE A MANHOLE TO PERFORM A VALID TEST.
- (G) A TEST DOES NOT BEGIN UNTIL AFTER THE VACUUM PUMP IS OFF.
- (H) A MANHOLE PASSES THE TEST IF AFTER 2.0 MINUTES AND WITH ALL VALVES CLOSED, THE VACUUM IS AT LEAST 9.0 INCHES OF MERCURY.
17. ALL PRIVATE SERVICE LATERALS MUST BE INSPECTED AND CERTIFIED IN ACCORDANCE WITH 30 TAC §213.5(C)(3)(i). AFTER INSTALLATION OF AND, PRIOR TO COVERING AND CONNECTING A PRIVATE SERVICE LATERAL TO AN EXISTING ORGANIZED SEWAGE COLLECTION SYSTEM, A TEXAS LICENSED PROFESSIONAL ENGINEER, TEXAS REGISTERED SANITARIAN, OR APPROPRIATE CITY INSPECTOR MUST VISUALLY INSPECT THE PRIVATE SERVICE LATERAL AND THE CONNECTION TO THE SEWAGE COLLECTION SYSTEM, AND CERTIFY THAT IT IS CONSTRUCTED IN CONFORMITY WITH THE APPLICABLE PROVISIONS OF THIS SECTION. THE OWNER OF THE COLLECTION SYSTEM MUST MAINTAIN SUCH CERTIFICATIONS FOR FIVE YEARS AND FORWARD COPIES TO THE APPROPRIATE REGIONAL OFFICE UPON REQUEST. CONNECTIONS MAY ONLY BE MADE TO AN APPROVED SEWAGE COLLECTION SYSTEM.



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	5

SITE DEVELOPMENT PLANS
TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
GEORGETOWN, TEXAS 78628

CONSTRUCTION NOTES



PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C03.02

	EXISTING WROUGHT IRON FENCE
	EXISTING CHAIN LINK FENCE
	EXISTING WIRE FENCE
	EXISTING WOOD FENCE
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING FIBER OPTIC LINE
	EXISTING GAS LINE
	EXISTING WASTEWATER LINE (THICKNESS INDICATES INNER PIPE DIAMETER)
	EXISTING STORM SEWER LINE (THICKNESS INDICATES INNER PIPE DIAMETER)
	EXISTING OVERHEAD TELEPHONE LINE
	EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING WATER LINE (THICKNESS INDICATES INNER PIPE DIAMETER)
	EXISTING CONTOURS, WITH ELEVATION LABELED
	EXISTING CURB AND GUTTER
	EXISTING WASTEWATER MANHOLE (DRAWN TO SCALE)
	EXISTING WASTEWATER CLEANOUT
	EXISTING STORM SEWER MANHOLE
	EXISTING CURB INLET
	EXISTING FDC
	EXISTING FIRE HYDRANT
	EXISTING GATE VALVE
	EXISTING LIGHT POLE
	EXISTING TREES / HERITAGE TREES (SIZE ADJUSTED PER TREE) TAG REFERS TO TREE SURVEY DATA TABLE
	EXISTING WATER METER
	EXISTING WATER WELL
	EXISTING HOSE BIB/FAUCET
	EXISTING UTILITY POLE
	EXISTING SIGN (TEXT VARIES)
	EXISTING TELEPHONE RISER
	EXISTING CABLE/TV BOX
	EXISTING GAS METER
	EXISTING PULL BOX
	EXISTING ELECTRIC METER
	EXISTING GUY WIRE
	EXISTING MAILBOX
	FOUND PIN
	SET PIN

LEGEND

	NEW WATER LINE
	NEW WASTEWATER LINE (WIDTH REPRESENTS PIPE O.D.)
	NEW STORM SEWER LINE (WIDTH REPRESENTS PIPE O.D.)
	NEW WROUGHT IRON FENCE
	NEW CHAIN LINK FENCE
	NEW WIRE FENCE
	NEW WOOD FENCE
	NEW CURB AND GUTTER
	LIMITS OF CONSTRUCTION
	ACCESSIBLE ROUTE
	NEW WASTEWATER MANHOLE (DRAWN TO SCALE)
	NEW WASTEWATER CLEANOUT
	NEW WATER METER WITH VAULT
	NEW BACKFLOW PREVENTER
	BICYCLE PARKING
	NEW GATE VALVE
	NEW LIGHT POLE
	NEW FIRE DEPARTMENT CONNECTION
	NEW FIRE HYDRANT
	NEW GRATE INLET
	PARKING LABEL
	PROPOSED CONTOUR
	DIRECTION OF SURFACE WATER RUNOFF



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ABBREVIATIONS LEGEND

EX.	EXISTING
O.C.E.W.	ON CENTER, EACH WAY
TYP.	TYPICAL
APPROX.	APPROXIMATE
O.P.R.W.C.	OFFICIAL PUBLIC RECORDS WILLIAMSON COUNTY
O.P.R.T.C.	OFFICIAL PUBLIC RECORDS TRAVIS COUNTY
D.R.W.C.T.	DEED RECORDS WILLIAMSON COUNTY TEXAS
A.D.A.	AMERICANS WITH DISABILITIES ACT
O.D.	OUTSIDE DIAMETER (PIPE)
R.O.W.	RIGHT-OF-WAY
DOC. NO.	DOCUMENT NUMBER
VOL/PG.	VOLUME/PAGE
A.D.T.	AVERAGE DAILY TRAFFIC
M.P.H.	MILES PER HOUR
AC.	ACRE
SQ. FT.	SQUARE FEET
L.F.	LINEAR FEET
STA.	STATION
FL	FLOWLINE
F.F.E.	FINISHED FLOOR ELEVATION
D.I.	DUCTILE IRON
CFS	CUBIC FEET PER SECOND
CMP	CORRUGATED METAL PIPE
HDPE	HIGH-DENSITY POLYETHYLENE
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE
SCH	SCHEDULE
P.O.B.	POINT OF BEGINNING
N.T.S.	NOT TO SCALE
HMAC	HOT-MIX ASPHALT CONCRETE
CONC.	CONCRETE

SITE DEVELOPMENT PLANS
TO SERVE

CROSS CREEK COMMERCIAL PARK

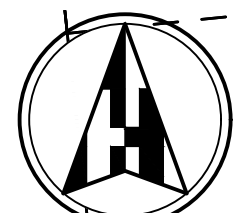
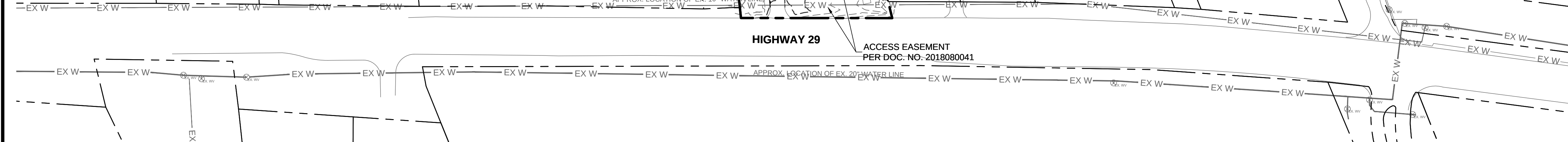
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LEGEND AND ABBREVIATIONS









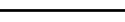




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C03.03



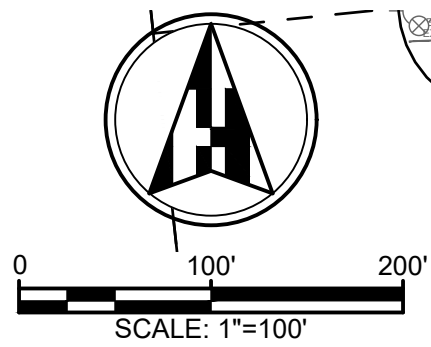
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LEGEND	
	LIMITS OF CONSTRUCTION
	ACCESSIBLE ROUTE OF TRAVEL
	PARKING COUNT
	EXISTING WATER LINE
	PROPOSED WATER LINE
	EXISTING WASTEWATER LINE
	PROPOSED WASTEWATER LINE
	EXISTING STORMWATER LINE
	PROPOSED STORMWATER LINE
	EXISTING CONTOUR
	PROPOSED CONTOUR

PROJECT NO. 230903		 06/14/2024	SITE DEVELOPMENT PLANS TO SERVE		CROSS CREEK COMMERCIAL PARK		<div><div>Henderson Professional Engineers</div><div>HPE</div><div>Civil Engineering</div><div>www.hendersonpe.com</div><div>WBE210166 HUB 185373845300</div></div>	
	06/11/2024		DRAWN BY: DB	6540 W. SH 29 GEORGETOWN, TEXAS 78628				
			CHECKED BY: AR	EXISTING CONDITIONS PLAN				
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C04.00								

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STATE OF TEXAS

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SITE DEVELOPMENT PLANS TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
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DEMOLITION PLAN

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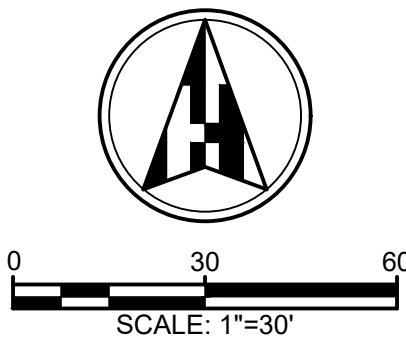
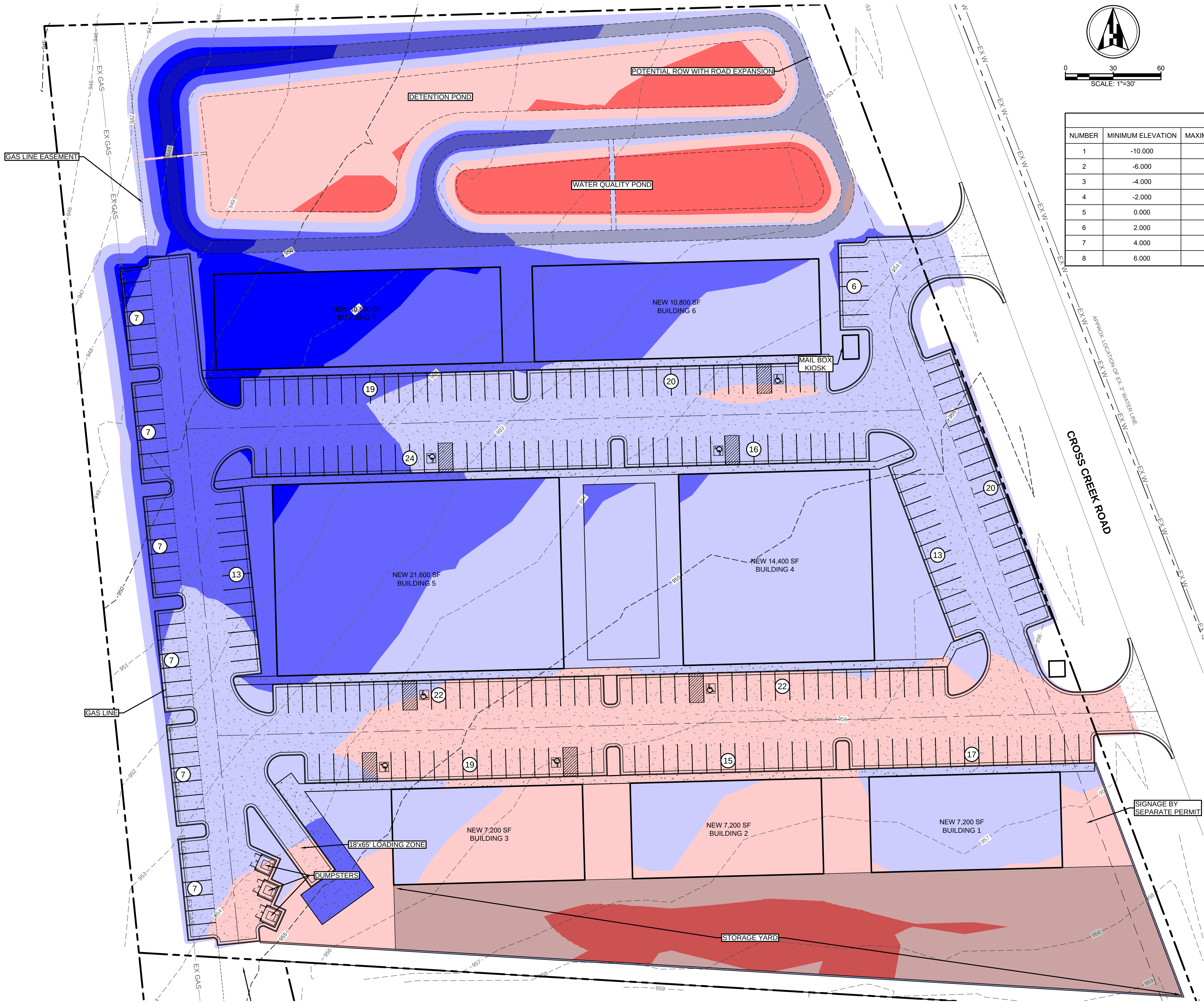
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C05.00

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lot1_bros\07_Sheet\SD1230903 CUT AND FILL EXHIBIT.dwg



ELEVATION TABLE					
NUMBER	MINIMUM ELEVATION	MAXIMUM ELEVATION	COLOR	AREA (SF)	VOLUME (CY)
1	-10.000	-6.000	Red	0.00	0.00
2	-6.000	-4.000	Red	0.00	0.00
3	-4.000	-2.000	Red	8411.56	152.57
4	-2.000	0.000	Red	96511.10	3776.29
5	0.000	2.000	Blue	133184.61	11047.34
6	2.000	4.000	Blue	68975.15	3716.47
7	4.000	6.000	Blue	16716.02	496.08
8	6.000	10.000	Blue	1046.93	10.45

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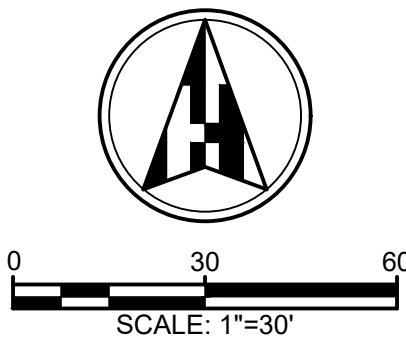
SITE DEVELOPMENT PLANS
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CUT AND FILL EXHIBIT



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C06.01

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lot1 bro\07 Sheet\SD\230903 SLOPE MAP EXHIBIT.dwg



Slopes Table			
Number	Minimum Slope	Maximum Slope	Color
1	0.00%	2.00%	Blue
2	2.00%	5.00%	Green
3	5.00%	10.00%	Yellow
4	10.00%	99999900.00%	Red

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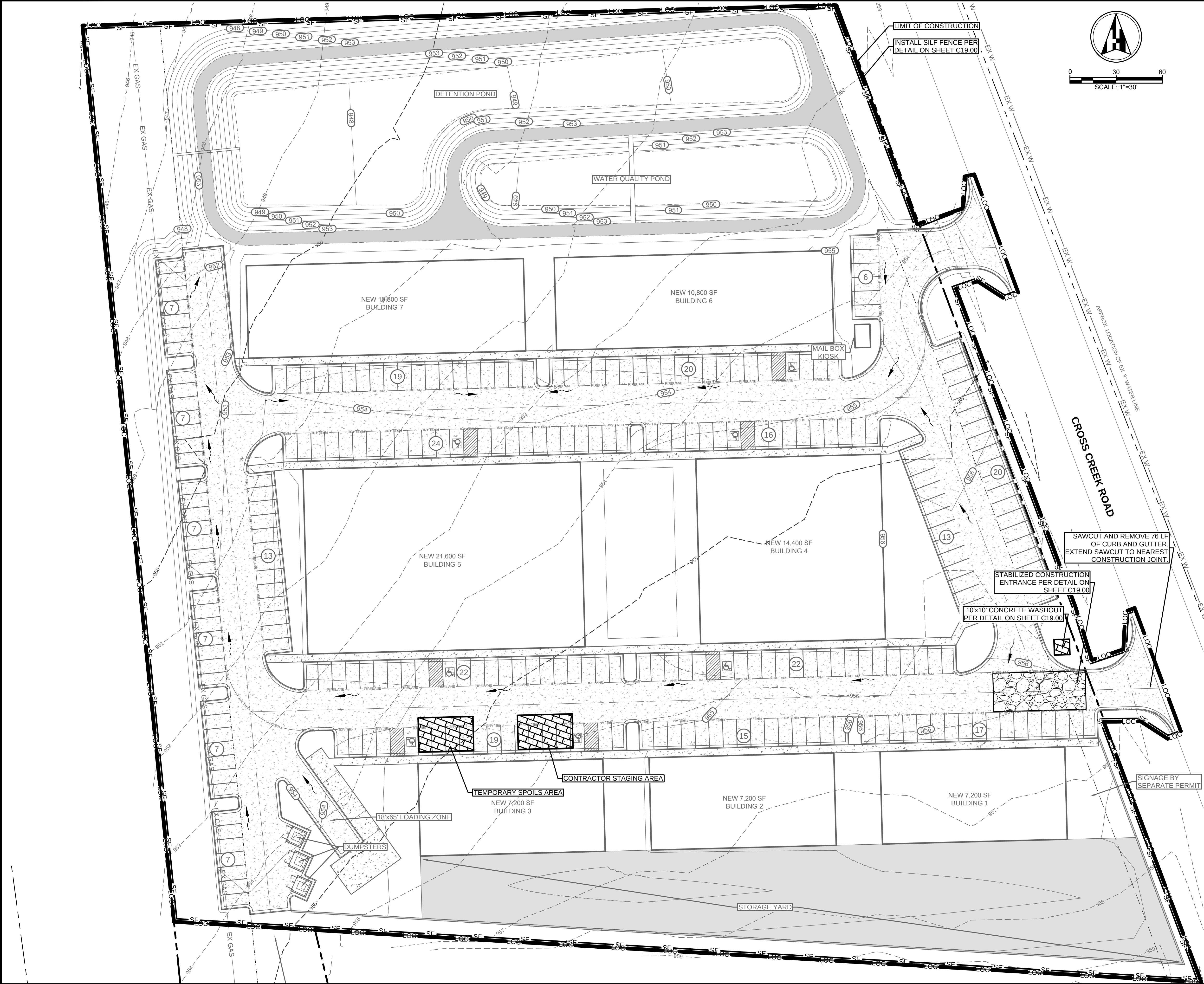
SITE DEVELOPMENT PLANS
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SLOPE MAP EXHIBIT



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C07.01

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903_01.txd
Sheet: SD1230903 EROSION AND SEDIMENTATION CONTROL PLAN.dwg



LEGEND	
	LIMITS OF CONSTRUCTION (8.19 Ac.)
	ROCK CHECK DAM
	INLET PROTECTION
	SILT FENCE
	CONSTRUCTION FENCE
	FILTER DIKE
	TREE PROTECTION FENCE
	FLOW ARROW

- NOTES:
- NO ENVIRONMENTALLY SENSITIVE AREAS ARE LOCATED ON OR DOWNSTREAM OF THIS PROJECT SITE.
 - THIS PROJECT WILL NOT REQUIRE ANY FORM OF PHASING OR SLOPE STABILIZATION.
 - REFER TO LANDSCAPE PLANS FOR RESEEDING AND REVEGETATION REQUIREMENTS.
 - NO PERMANENT EROSION CONTROL MEASURES WILL BE INSTALLED WITH THIS PROJECT.
 - REFER TO SHEET C19.00 FOR STANDARD DETAILS - ESC.
 - 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.
 - 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.
 - ALL SLOPES SHALL BE SODDED OR SEEDDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.

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SITE DEVELOPMENT PLANS TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
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EROSION AND SEDIMENTATION CONTROL PLAN

STATE OF TEXAS
JENNIFER L. HENDERSON
116883
LICENSED PROFESSIONAL ENGINEER

06/14/2024

PROJECT NO. 230903

06/11/2024

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C08.01

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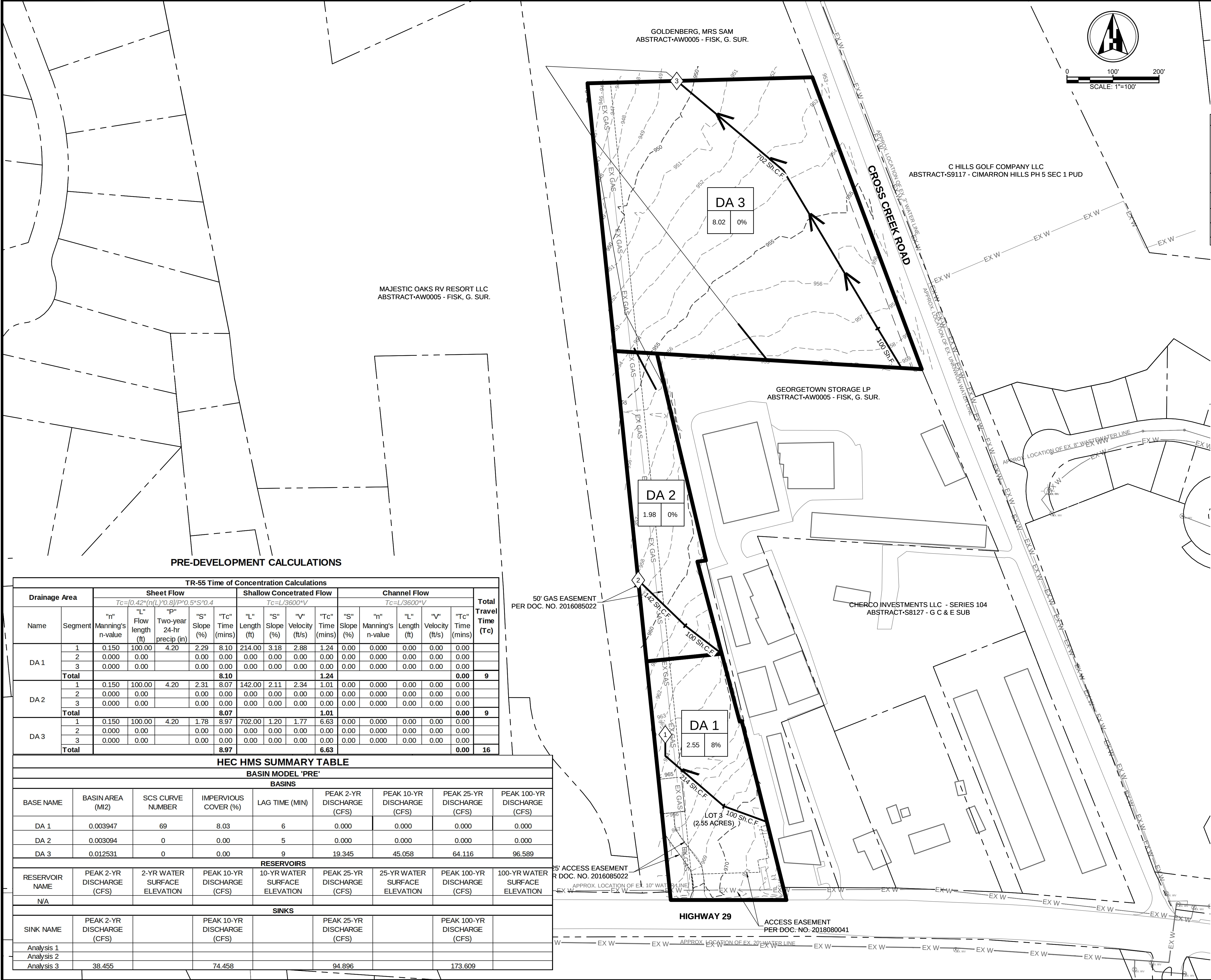
COUNTY PERMIT NUMBER: 2024-734-COC






Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02 projects\2023\230903 lott bros\07 Sheet\SD1230903 PRE-DEVELOPMENT DRAINAGE AREA MAP.dwg

TR-55 Time of Concentration Calculations																	
Drainage Area		Sheet Flow					Shallow Concentrated Flow					Channel Flow					Total Travel Time (Tc)
		Tc=[0.42*(n(L)^0.8)/P^0.5*S^0.4					Tc=L/3600*V					Tc=L/3600*V					
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two-year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)		
DA 1	1	0.150	100.00	4.20	2.29	8.10	214.00	3.18	2.88	1.24	0.00	0.000	0.00	0.00	0.00		
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	Total					8.10				1.24					0.00		
DA 2	1	0.150	100.00	4.20	2.31	8.07	142.00	2.11	2.34	1.01	0.00	0.000	0.00	0.00	0.00		
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	Total					8.07				1.01					0.00		
DA 3	1	0.150	100.00	4.20	1.78	8.97	702.00	1.20	1.77	6.63	0.00	0.000	0.00	0.00	0.00		
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00		
	Total					8.97				6.63					0.00		

50' GA
PER DOC. NO.

HEC HMS SUMMARY TABLE								
BASIN MODEL 'PRE'								
BASINS								
BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)
DA 1	0.003947	69	8.03	6	0.000	0.000	0.000	0.000
DA 2	0.003094	0	0.00	5	0.000	0.000	0.000	0.000
DA 3	0.012531	0	0.00	9	19.345	45.058	64.116	96.589
RESERVOIRS								
RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION
N/A								
SINKS								
SINK NAME	PEAK 2-YR DISCHARGE (CFS)		PEAK 10-YR DISCHARGE (CFS)		PEAK 25-YR DISCHARGE (CFS)		PEAK 100-YR DISCHARGE (CFS)	
Analysis 1								
Analysis 2								
Analysis 3	38.455		74.458		94.896		173.609	



LEGEND					
<table border="1"><tr><td colspan="2">DA 1</td></tr><tr><td>0.90 Ac.</td><td>0%</td></tr></table>	DA 1		0.90 Ac.	0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
DA 1					
0.90 Ac.	0%				
	ANALYSIS POINT				
	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH				
	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH				
	CHANNELIZED FLOW SEGMENT OF Tc PATH				
	FLOW ARROW				

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SITE DEVELOPMENT PLANS TO SERVE

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PRE-DEVELOPMENT DRAINAGE AREA MAP

STATE OF TEXAS

JENNIFER L. HENDERSON

116883

PROFESSIONAL ENGINEER

06/14/2024

PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C09.00

COUNTY PERMIT NUMBER: 2024-734-COC

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File name: h:\02 projects\2023\230903 lott bros\07 Sheet\SD230903 POST-DEVELOPMENT DRAINAGE AREA MAP.dwg








POST-DEVELOPMENT CALCULATIONS

TR-55 Time of Concentration Calculations															
Drainage Area		Sheet Flow					Shallow Concentrated Flow				Channel Flow				
		$T_c=[0.42*(n/L)^{0.8}/P^{0.5}*S^{0.4}$					$T_c=L/3600*V$				$T_c=L/3600*V$				
Name	Segment	"n" Manning's n-value	"L" Flow length (ft)	"P" Two- year 24-hr precip (in)	"S" Slope (%)	"Tc" Time (mins)	"L" Length (ft)	"S" Slope (%)	"V" Velocity (ft/s)	"Tc" Time (mins)	"S" Slope (%)	"n" Manning's n-value	"L" Length (ft)	"V" Velocity (ft/s)	"Tc" Time (mins)
DA 1	1	0.150	100.00	4.20	2.29	8.10	214.00	3.18	2.88	1.24	0.00	0.000	0.00	0.00	0.00
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	Total					8.10				1.24				0.00	9
DA 2	1	0.150	100.00	4.20	2.31	8.07	142.00	2.11	2.34	1.01	0.00	0.000	0.00	0.00	0.00
	2	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	3	0.000	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00
	Total					8.07				1.01				0.00	9
DA 3	1	0.150	100.00	4.20	1.23	10.41	753.00	1.51	1.98	6.33	0.00	0.000	0.00	0.00	0.00
	2	0.000	0.00		0.00	0.00	529.00	0.92	1.54	5.71	0.00	0.000	0.00	0.00	0.00
	3	0.000	0.00		0.00	0.00	959.00	1.24	1.80	8.90	0.00	0.000	0.00	0.00	0.00
	Total					10.41				20.95				0.00	31

HEC HMS SUMMARY TABLE

BASIN MODEL 'POST'									
BASINS									
BASE NAME	BASIN AREA (MI2)	SCS CURVE NUMBER	IMPERVIOUS COVER (%)	LAG TIME (MIN)	PEAK 2-YR DISCHARGE (CFS)	PEAK 10-YR DISCHARGE (CFS)	PEAK 25-YR DISCHARGE (CFS)	PEAK 100-YR DISCHARGE (CFS)	
DA 1	0.003947	69	8.03	6	0.000	0.000	0.000	0.000	
DA 2	0.003094	0	0.00	5	0.000	0.000	0.000	0.000	
DA 3	0.012531	69	45.00	19	31.926	55.826	72.879	101.223	
RESERVOIRS									
RESERVOIR NAME	PEAK 2-YR DISCHARGE (CFS)	2-YR WATER SURFACE ELEVATION	PEAK 10-YR DISCHARGE (CFS)	10-YR WATER SURFACE ELEVATION	PEAK 25-YR DISCHARGE (CFS)	25-YR WATER SURFACE ELEVATION	PEAK 100-YR DISCHARGE (CFS)	100-YR WATER SURFACE ELEVATION	
Detention Pond	18.257	949.73	30.658	950.78	39.342	951.43	54.374	952.46	
SINKS									
SINK NAME	PEAK 2-YR DISCHARGE (CFS)	DIFFERENCE IN 2-YR PEAK (CFS)	PEAK 10-YR DISCHARGE (CFS)	DIFFERENCE IN 10-YR PEAK (CFS)	PEAK 25-YR DISCHARGE (CFS)	DIFFERENCE IN 25-YR PEAK (CFS)	PEAK 100-YR DISCHARGE (CFS)	DIFFERENCE IN 100-YR PEAK (CFS)	
Analysis 1	37.367	37.367	60.058	60.058	70.122	70.122	131.394	131.394	
Analysis 2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Analysis 3	37.367	-1.088	60.058	-14.400	70.122	-24.774	131.394	-42.215	

LEGEND					
<table border="1"><tr><td colspan="2">DA 1</td></tr><tr><td>0.90 Ac.</td><td>0%</td></tr></table>	DA 1		0.90 Ac.	0%	DRAINAGE AREA LABEL AREA NAME, AREA (ACRES), IMPERVIOUS COVER PERCENTAGE
DA 1					
0.90 Ac.	0%				
	ANALYSIS POINT				
	SHEET FLOW SEGMENT OF TIME OF CONCENTRATION (Tc) PATH				
	SHALLOW CONCENTRATED FLOW SEGMENT OF Tc PATH				
	CHANNELIZED FLOW SEGMENT OF Tc PATH				
	FLOW ARROW				

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SITE DEVELOPMENT PLANS TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
GEORGETOWN, TEXAS 78628

POST-DEVELOPMENT DRAINAGE AREA MAP

STATE OF TEXAS

JENNIFER L. HENDERSON

116883

PROFESSIONAL ENGINEER

06/14/2024

PROJECT NO. 230903

06/11/2024

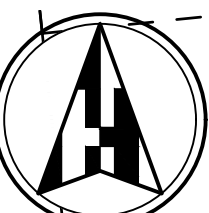
DRAWN BY: DB

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APPROVED BY: JH

C10.00

COUNTY PERMIT NUMBER: 2024-734-COC



SCALE: 1"=100'



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LEGEND	
— EX W —	EXISTING WATER LINE
— W —	WATER LINE
— EX WW —	EXISTING WASTEWATER LINE
===	WASTEWATER LINE
— EX SD —	EXISTING STORMWATER LINE
===	STORMWATER LINE



KEY MAP
(NOT TO SCALE)



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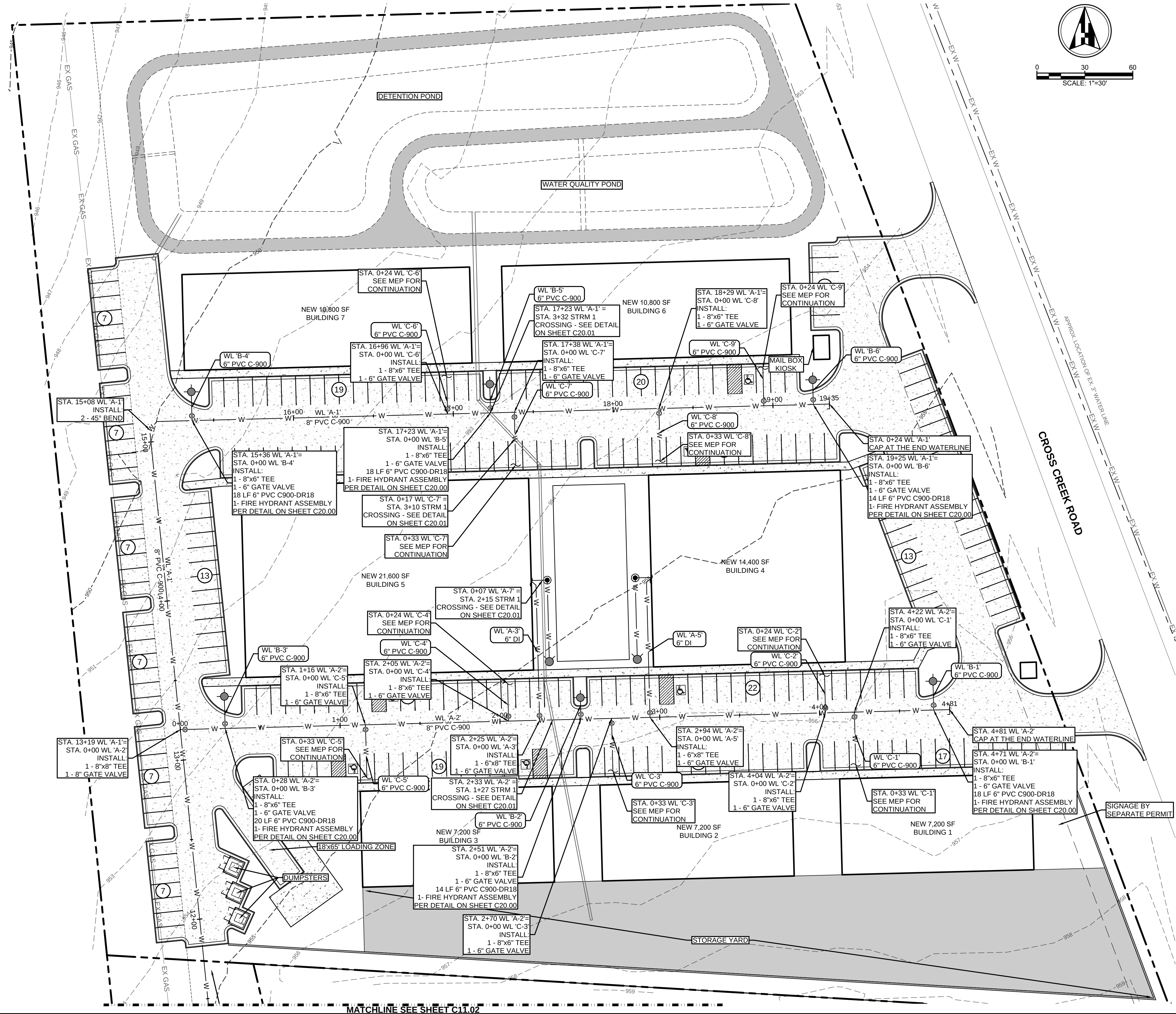
OVERALL UTILITY SCHEMATIC PLAN



PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
CHECKED BY: AR
APPROVED BY: JH

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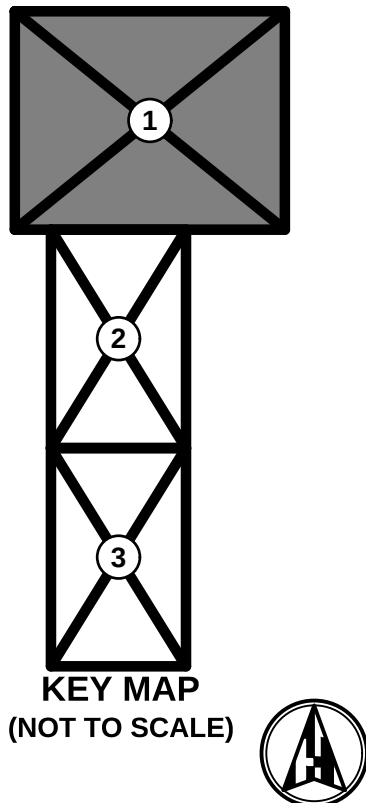
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LEGEND	
— EX W —	EXISTING WATER LINE
— W —	WATER LINE
— EX WW —	EXISTING WASTEWATER LINE
====	WASTEWATER LINE
— EX SD —	EXISTING STORMWATER LINE
====	STORMWATER LINE
- - - -	BUILDING SETBACK
— — — —	SUBJECT PROPERTY
— EX W —	EXISTING WATER LINE
— EX WW —	EXISTING WASTEWATER LINE
○	EXISTING WASTEWATER MANHOLE
●	WASTEWATER MANHOLE
---	529
■	EXISTING CONTOUR
⊗	BENCHMARK
⊗	WATER VALVE
●	IRON ROD FOUND (IRF)
⊕	FIRE HYDRANT
⊕	ELECTRIC POWER POLE
⌈	UTILITY PIPE CAP
~	UTILITY PIPE CONTINUATION
⌈	BACKFLOW PREVENTER




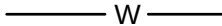

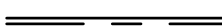


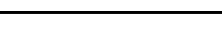














SITE DEVELOPMENT PLANS
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UTILITY SCHEMATIC PLAN

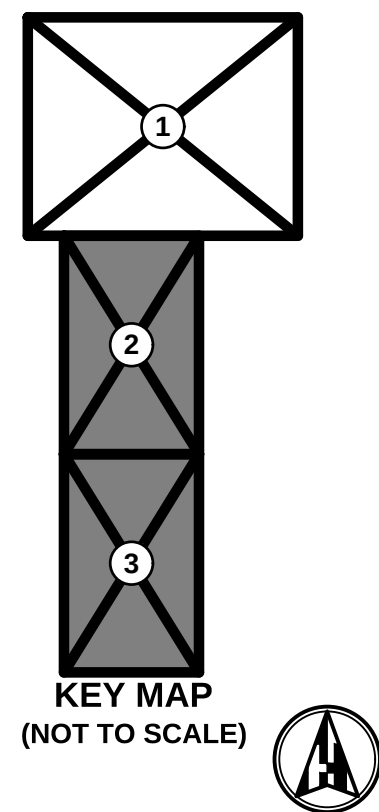


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APPROVED BY: JH

C11.01



LEGEND	
	EXISTING WATER LINE
	WATER LINE
	EXISTING WASTEWATER LINE
	WASTEWATER LINE
	EXISTING STORMWATER LINE
	STORMWATER LINE
	BUILDING SETBACK
	SUBJECT PROPERTY
	EXISTING WATER LINE
	EXISTING WASTEWATER LINE
	EXISTING WASTEWATER MANHOLE
	WASTEWATER MANHOLE
	EXISTING CONTOUR
	BENCHMARK
	WATER VALVE
	IRON ROD FOUND (IRF)
	FIRE HYDRANT
	ELECTRIC POWER POLE
	UTILITY PIPE CAP
	UTILITY PIPE CONTINUATION
	BACKFLOW PREVENTER



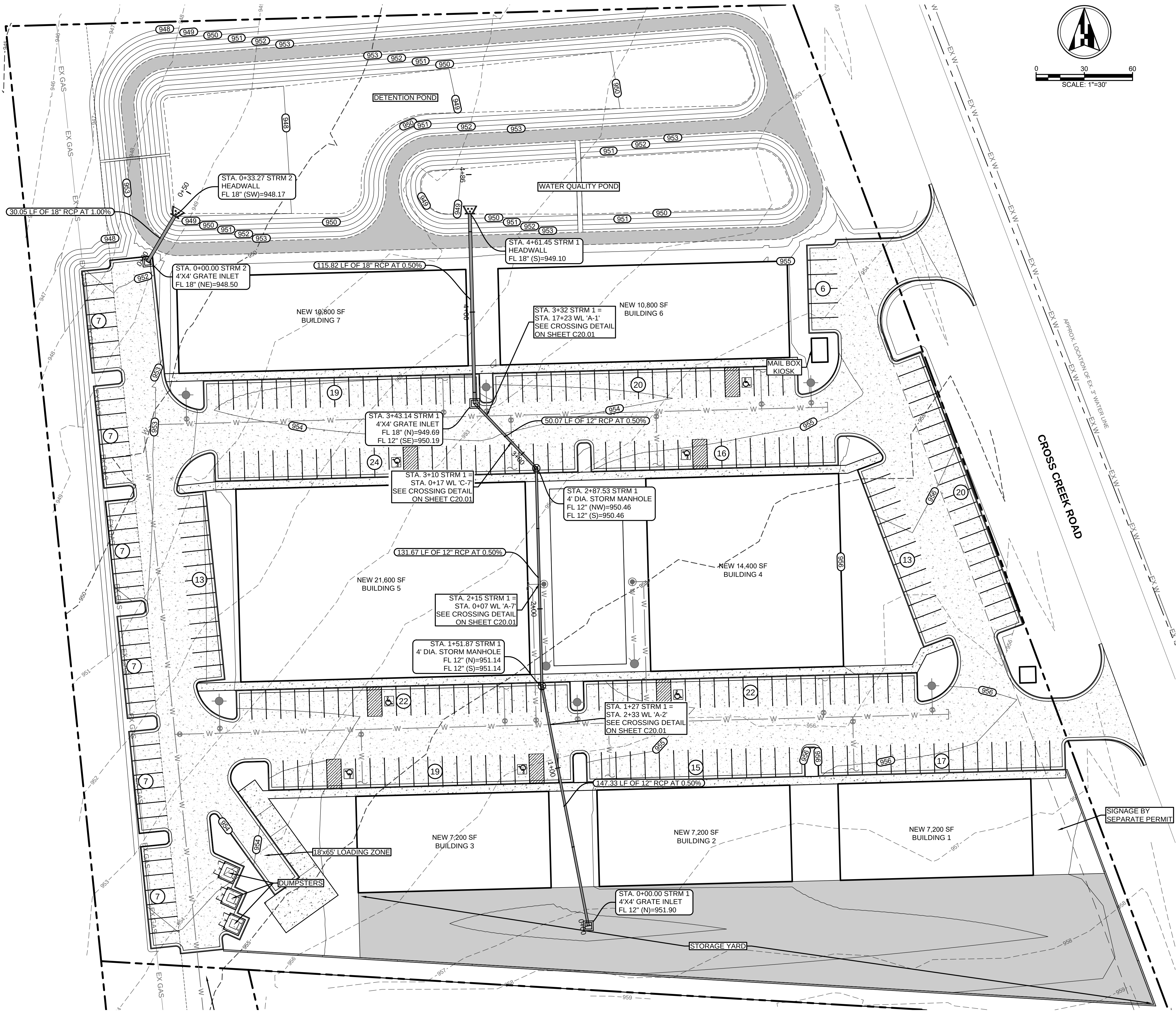
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UTILITY SCHEMATIC PLAN



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Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903_t01_bros\07_Sheet\SD\230309 STORM PLAN.dwg



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LEGEND	
	EXISTING WATER LINE
	WATER LINE
	EXISTING WASTEWATER LINE
	WASTEWATER LINE
	EXISTING STORMWATER LINE
	STORMWATER LINE
	BUILDING SETBACK
	SUBJECT PROPERTY
	EXISTING WATER LINE
	EXISTING WASTEWATER LINE
	EXISTING WASTEWATER MANHOLE
	WASTEWATER MANHOLE
	EXISTING CONTOUR
	BENCHMARK
	WATER VALVE
	IRON ROD FOUND (IRF)
	FIRE HYDRANT
	ELECTRIC POWER POLE
	UTILITY PIPE CAP
	UTILITY PIPE CONTINUATION
	BACKFLOW PREVENTER

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SITE DEVELOPMENT PLANS
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STORM SEWER PLAN

STATE OF TEXAS
JENNIFER L. HENDERSON
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06/14/2024

PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C12.01

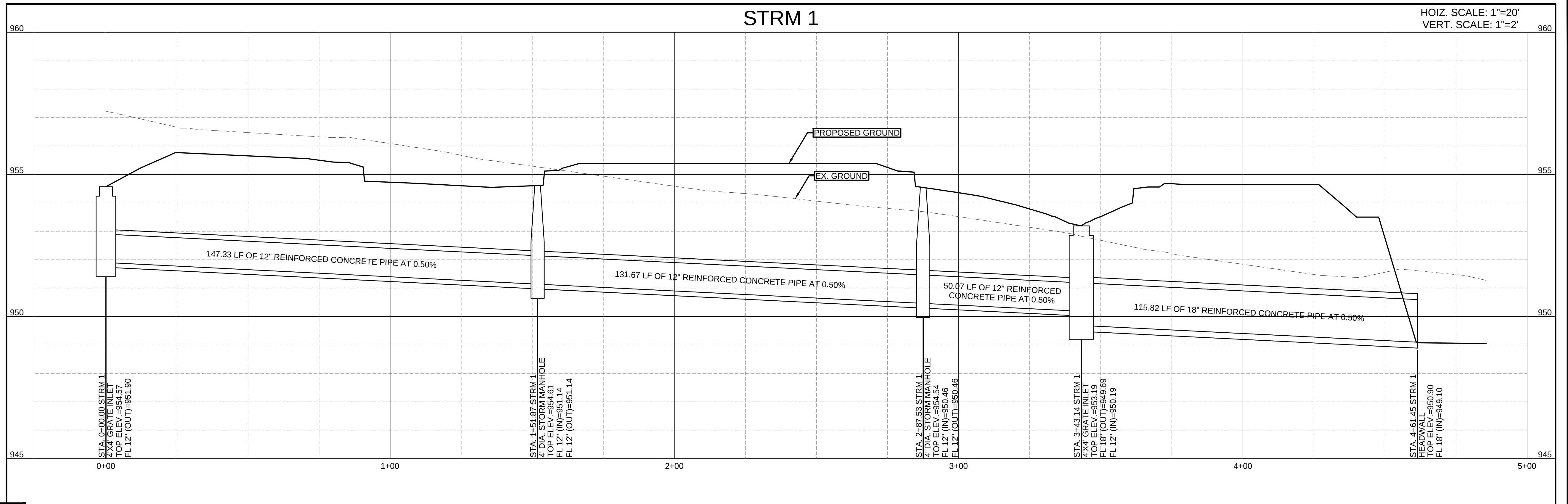
COUNTY PERMIT NUMBER: 2024-734-COC

Plotted by: Harry, Plot date: 11/06/2024
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01

STORM PROFILE A

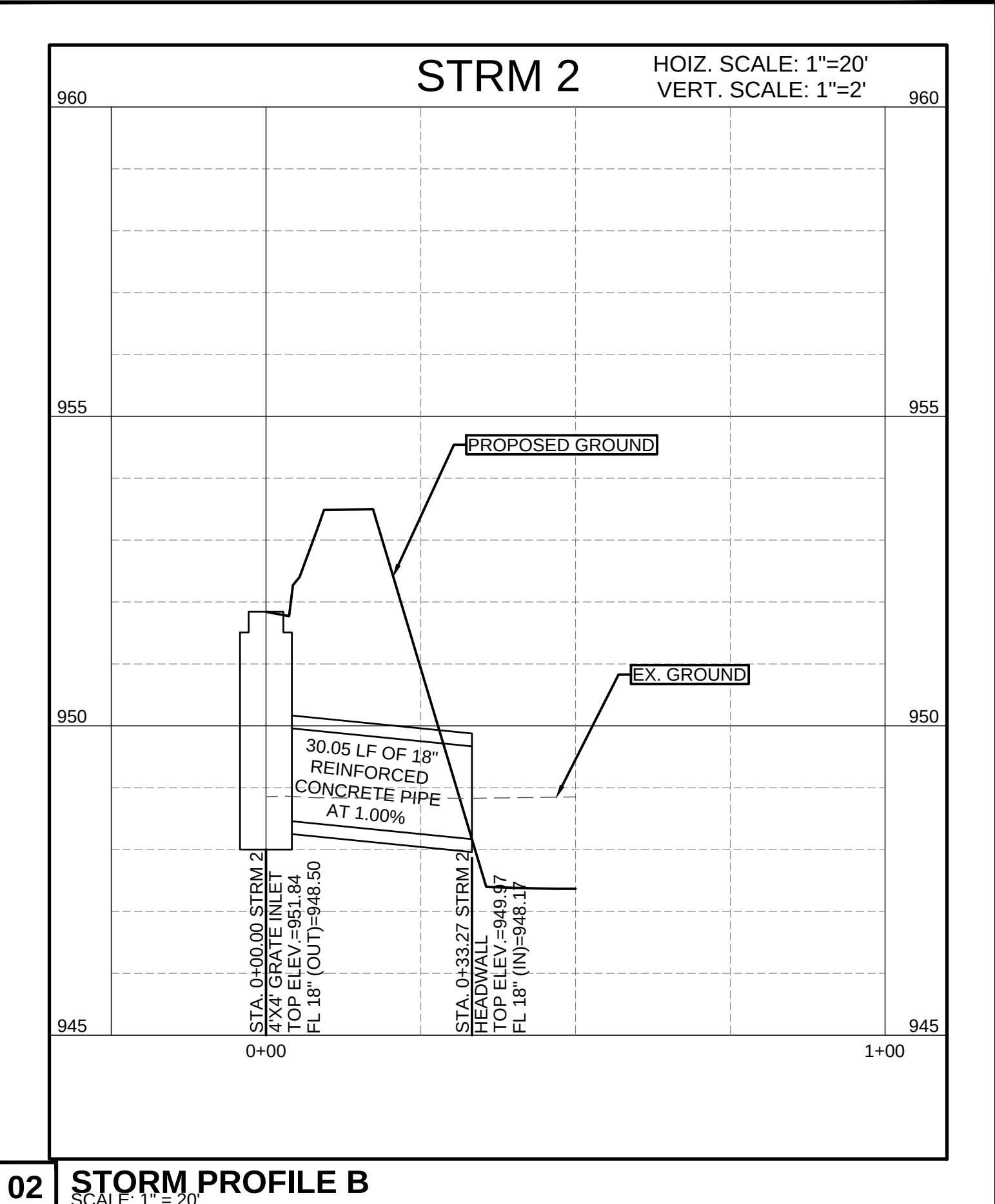
SCALE: 1" = 20'



02

STORM PROFILE B

SCALE: 1" = 20'



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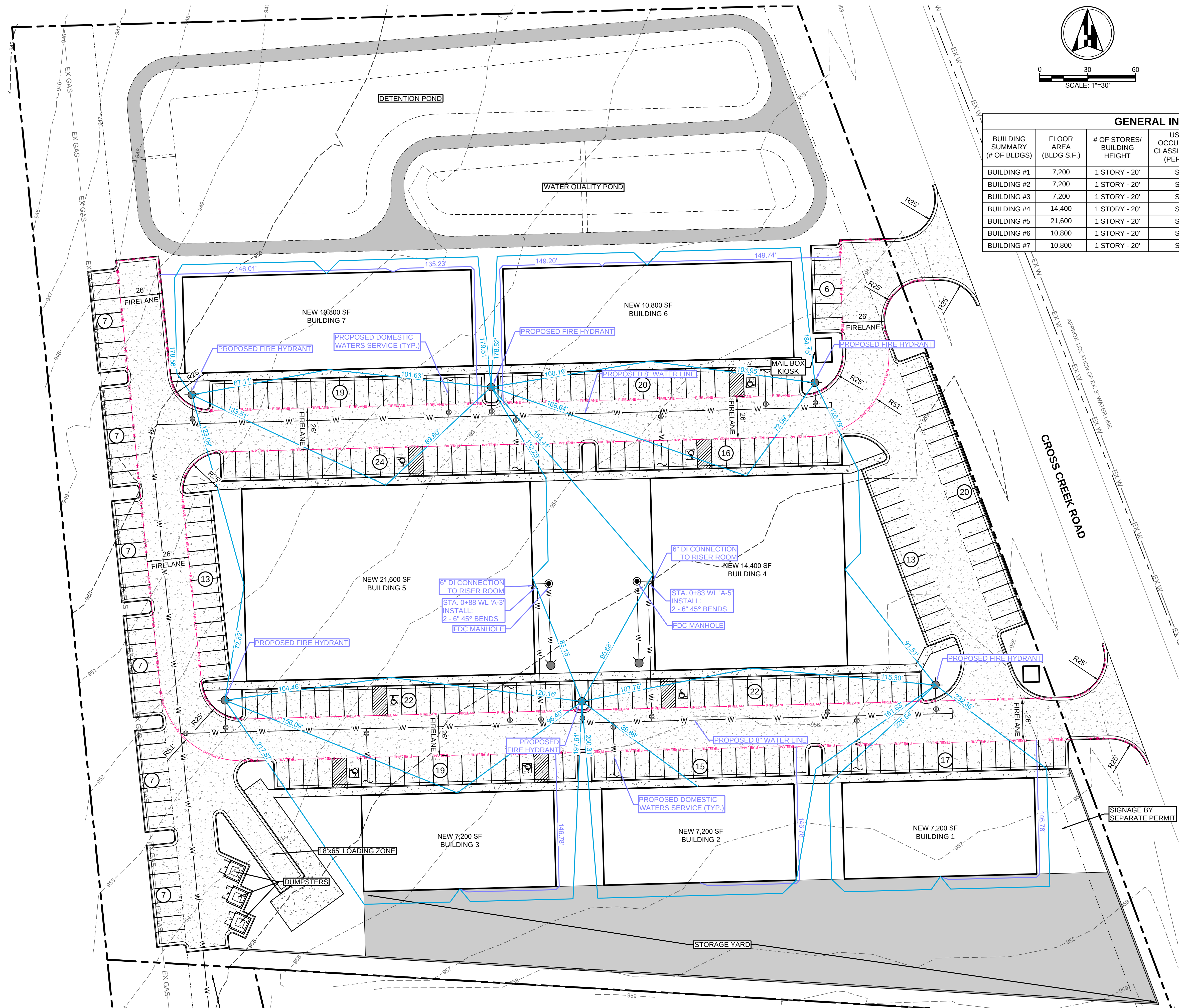
STORM SEWER PROFILES



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C12.02

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lot1 bro\07 Sheet\SD1230309 FIRE PROTECTION PLAN.dwg



GENERAL INFORMATION

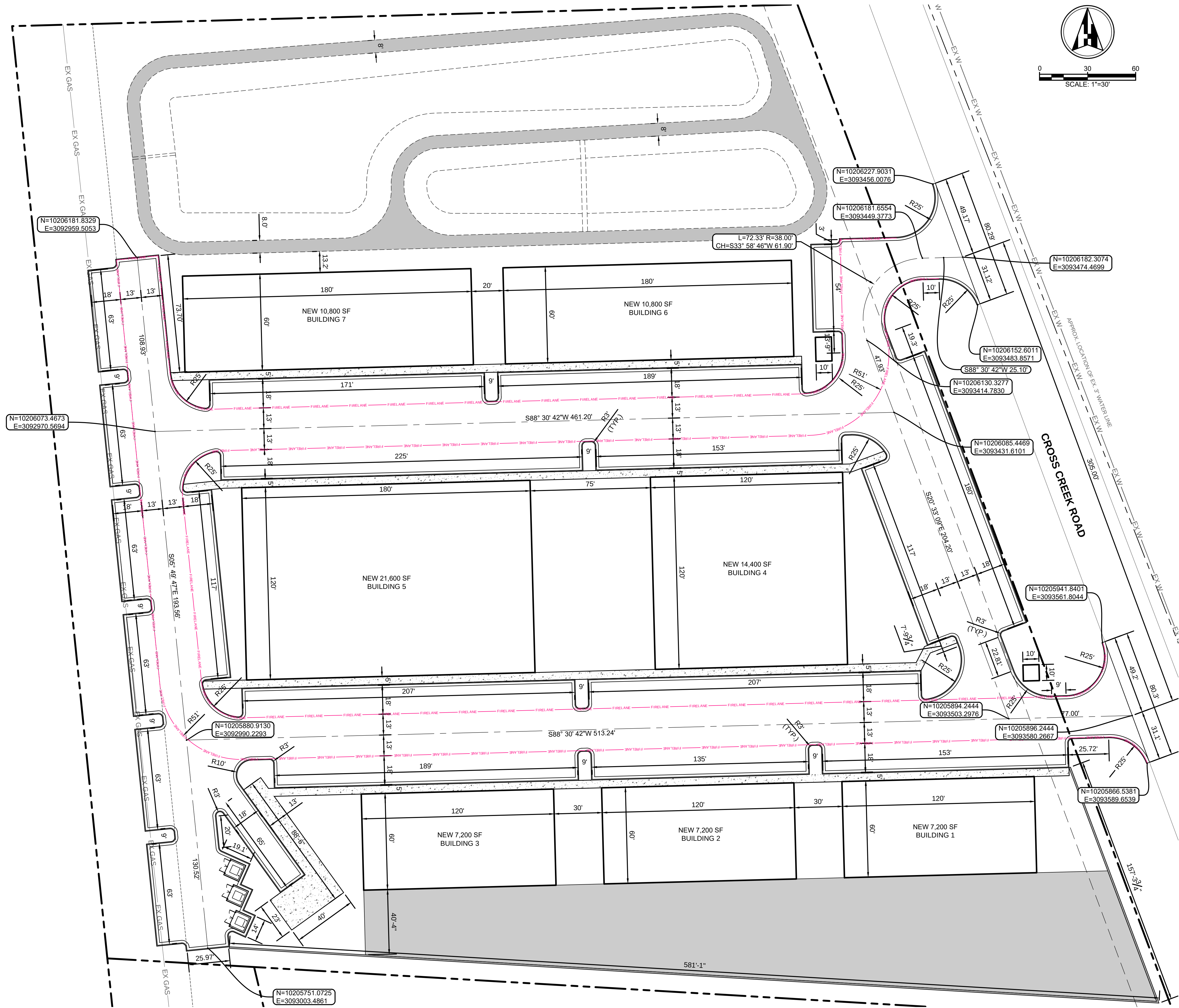
BUILDING SUMMARY (# OF BLDGS)	FLOOR AREA (BLDG S.F.)	# OF STORES/ BUILDING HEIGHT	USE & OCCUPANCY CLASSIFICATION (PER IBC)	TYPE OF CONSTRUCTION (PER IBC)	IF APPLICABLE TYPE OF AUTOMATIC FIRE SPRINKLER SYSTEM (NFPA 13R OR NFPA 13)
BUILDING #1	7,200	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #2	7,200	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #3	7,200	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #4	14,400	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #5	21,600	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #6	10,800	1 STORY - 20'	S-1	II-B	NFPA 13
BUILDING #7	10,800	1 STORY - 20'	S-1	II-B	NFPA 13

SITE DEVELOPMENT PLANS
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FIRE PROTECTION PLAN



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06/11/2024
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C13.01



LEGEND	
---	SUBJECT PROPERTY
---	ADJOINING PROPERTY
---	PROPOSED WASTEWATER EASEMENT
⊗	EXISTING WATER VALVE
⊙	EXISTING WASTEWATER MANHOLE
●	PROPOSED WASTEWATER MANHOLE
---	PROPOSED WASTEWATER LINE
EX SD	EXISTING STORM SEWER
EX OE	EXISTING OVERHEAD ELECTRIC
⊘	EXISTING POWER POLE
X	EXISTING WIRE FENCE
○	EXISTING CHAIN LINK FENCE
□	EXISTING METAL BEAM GUARD RAIL
//	PROPOSED WOOD FENCE
529	EXISTING CONTOUR
●	IRON ROD FOUND
■	BENCHMARK
▨	"PARCEL 5 ROW"
▩	"PARCEL 6 ROW"
---	FIRELANE
---	5' FRONT SETBACK
---	PEDESTRIAN ACCESS ROUTE

- NOTES:
- ALL DIMENSIONS ARE TO THE BACK OF CURB, UNLESS OTHERWISE NOTED.
 - ALL CURB RETURN RADII ARE 2'-6" (AT BACK OF CURB), UNLESS OTHERWISE NOTED.
 - REFER TO SHEET C15.01 FOR PAVING AND STRIPING DIMENSIONS.



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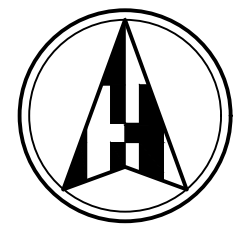
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SITE DEVELOPMENT PLANS
TO SERVE
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DIMENSION CONTROL PLAN



PROJECT NO. 230903	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C14.01








0 30 60
SCALE: 1"=30'



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LEGEND	
	ASPHALT PAVEMENT
	CONCRETE PAVEMENT
	CONCRETE SIDEWALK
	FIRE LANE STRIPE
	SUBJECT PROPERTY

NOTES:

1. REFER TO SHEETS C19.01 FOR DETAILS.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB, OR CENTER OF STRIPING (WHERE APPLICABLE), UNLESS OTHERWISE NOTED.
3. FIRE APPARATUS ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE SURFACED SO AS TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES.
4. REFER TO SHEET C14.01 FOR DIMENSION CONTROL PLAN.

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**SITE DEVELOPMENT PLANS
TO SERVE**

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
GEORGETOWN, TEXAS 78628

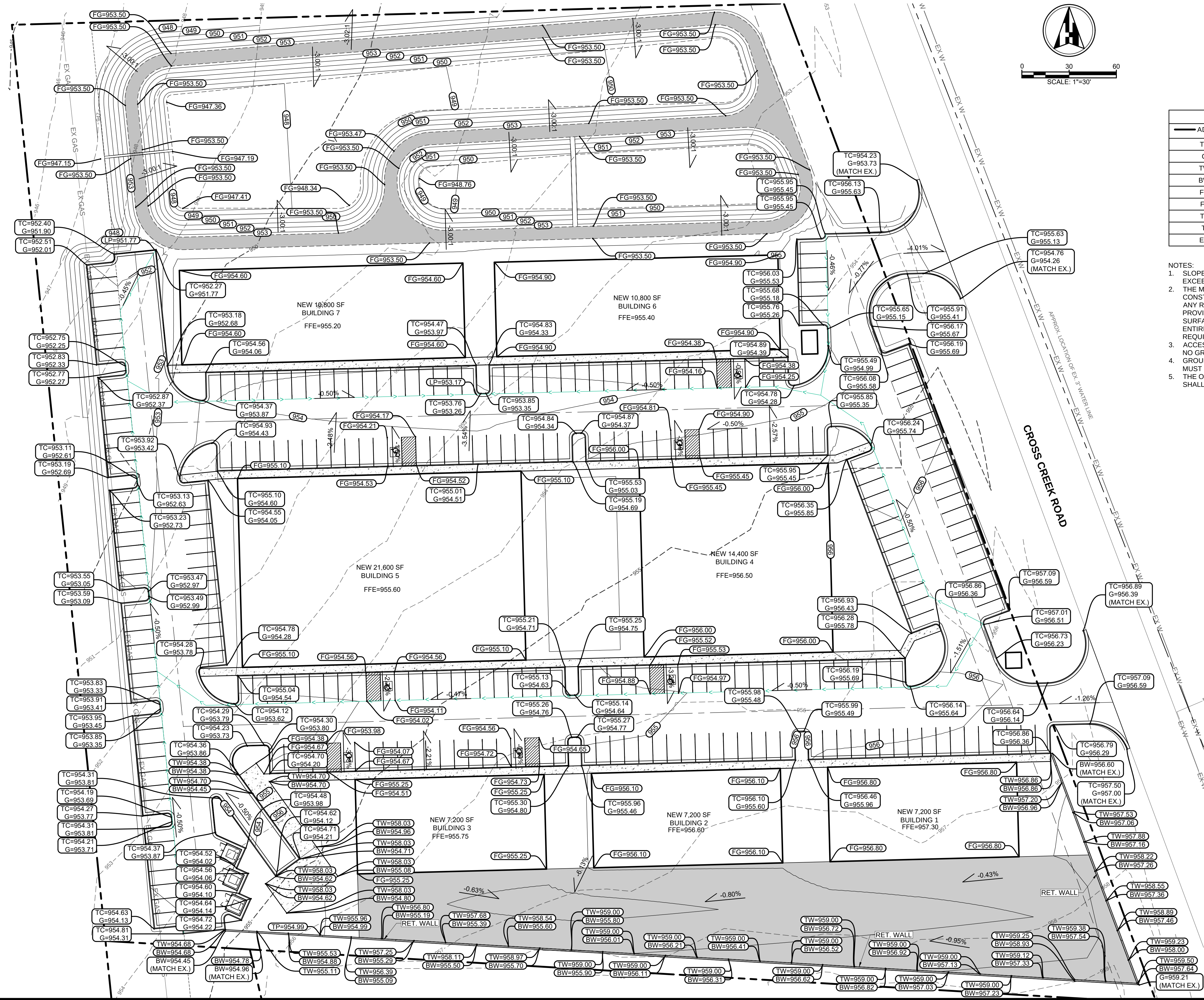
PAVING AND STRIPING PLAN



PROJECT NO. 230903
06/11/2024
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CHECKED BY: AR
APPROVED BY: JH

C15.01

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903_tbt_bros\07_Sheet\SD1230903 GRADING.dwg



LEGEND	
— ADA —	ACCESSIBLE ROUTE OF TRAVEL
TC	TOP OF CURB
G	GUTTER
TW	TOP OF WALL
BW	BOTTOM OF WALL
FG	FINISHED GRADE
FL	FLOWLINE
TP	TOP OF PAVEMENT
TI	TOP OF INLET
EG	EXISTING GRADE

- NOTES:
- SLOPES OF ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP.
 - THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30". RAMP SHALL BE PROVIDED WITH HANDRAILS AND GROUND SURFACE EDGE PROTECTION EACH SIDE AND ENTIRE LENGTH OF RAMP PER TDLR ADA REQUIREMENTS.
 - ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50.
 - GROUND SURFACE ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM AND SLIP RESISTANT.
 - THE OVERALL MAXIMUM GRADE OF THE FIRE LANE SHALL NOT EXCEED 10%.

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SITE DEVELOPMENT PLANS
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GEORGETOWN, TEXAS 78628

GRADING PLAN

STATE OF TEXAS
JENNIFER L. HENDERSON
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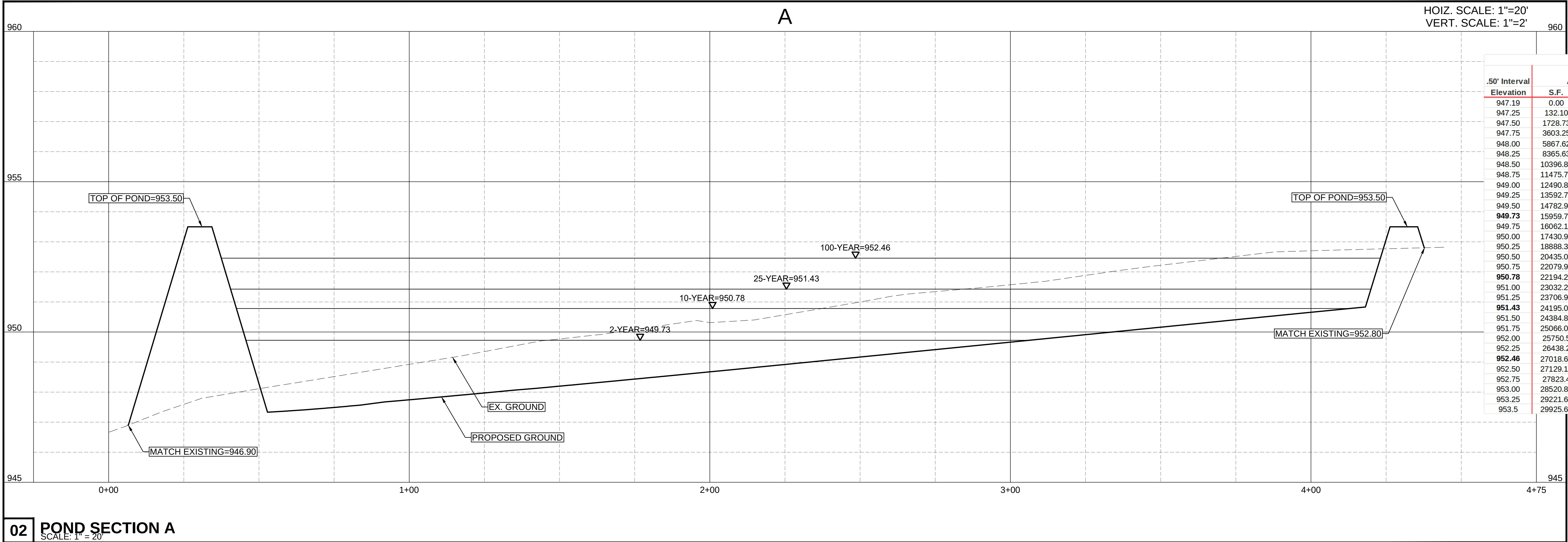
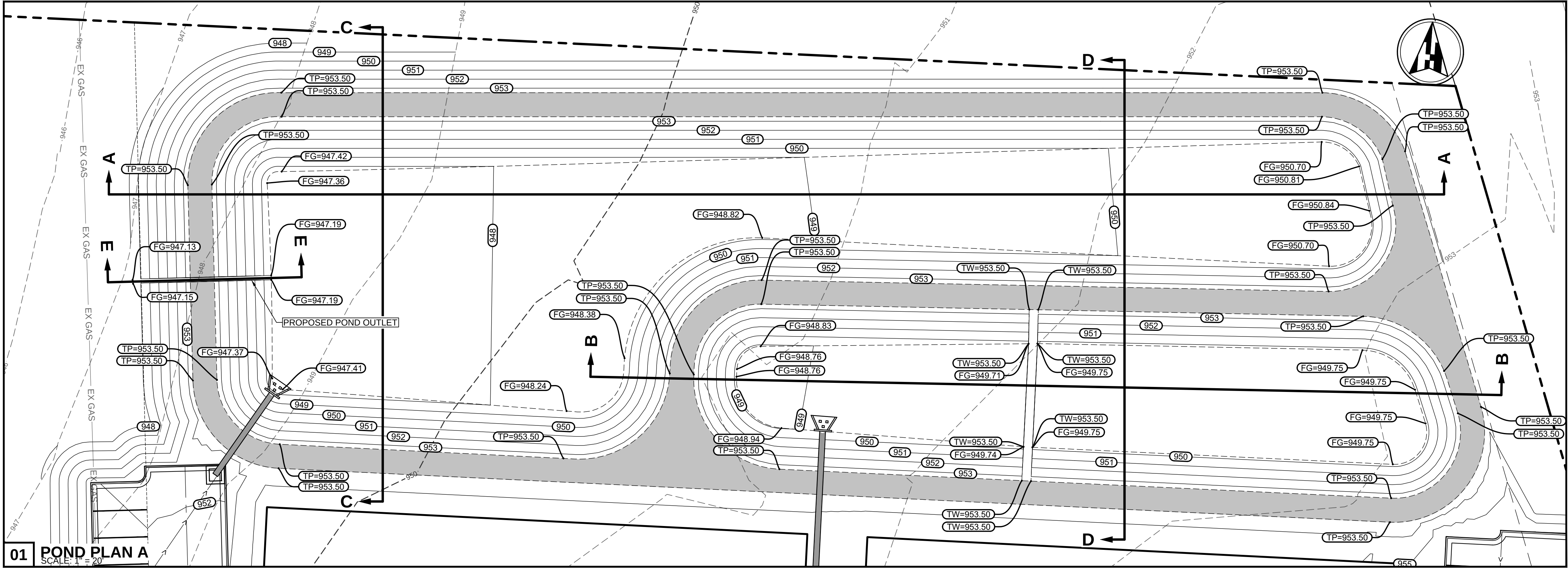
06/14/2024

PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C16.01

COUNTY PERMIT NUMBER: 2024-734-COC

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02 projects\2023\230903 lot1 bro\07 Sheet\SD1230903 POND PLAN AND SECTIONS.dwg



Detention Pond Stage-Storage						
.50' Interval	Area		Storm	Avg. End	Accumulated	Discharge
Elevation	S.F.	AC.	Event	Area Method	Volume	(cfs)
947.19	0.00	0.0		0	-	0
947.25	132.10	0.003033		4.02905	4.02905	0.069
947.50	1728.73	0.039686		232.60375	236.6328	0.779
947.75	3603.25	0.082719		666.4975	903.1303	1.891
948.00	5867.62	0.134702		1183.85875	2086.98905	3.279
948.25	8365.63	0.192048		1779.15625	3866.1453	4.925
948.50	10396.89	0.23868		2345.315	6211.4603	6.790
948.75	11475.72	0.263446		2734.07625	8945.53655	8.765
949.00	12490.82	0.28675		2995.8175	11941.35405	11.079
949.25	13592.76	0.312047		3260.4475	15201.80155	13.324
949.50	14782.92	0.339369		3546.96	18748.76155	15.828
949.75	15959.77	0.366386	2-yr	3535.40884	22284.17039	18.257
949.75	16062.10	0.368735		320.218656	22604.38905	18.558
950.00	17430.94	0.400159		4186.63	26791.01905	21.398
950.25	18888.36	0.433617		4539.9125	31330.93155	24.765
950.50	20435.00	0.469123		4915.42	36246.35155	27.834
950.75	22079.99	0.506887		5314.37375	41560.7253	29.605
950.75	22194.26	0.50951	10-yr	664.113804	42224.8391	30.658
951.00	23032.27	0.528748		4974.9187	47199.7578	33.539
951.25	23706.94	0.544236		5842.40125	53042.15905	37.776
951.43	24195.04	0.555442	25-yr	4311.17842	57353.33747	39.342
951.50	24384.86	0.559799		1700.29658	59053.63405	41.978
951.75	25066.05	0.575437		6181.36375	65234.9978	45.79
952.00	25750.5	0.59115		6352.06875	71587.06655	47.478
952.25	26438.2	0.606938	100-yr	6523.5875	78110.65405	51.38
952.46	27018.62	0.620262		5612.9661	83723.62015	54.374
952.50	27129.17	0.6228		1082.9558	84806.57595	
952.75	27823.4	0.638737		8869.07125	91675.6472	
953.00	28520.88	0.654749		7043.035	98718.6822	
953.25	29221.63	0.670636		7217.81375	105936.496	
953.5	29925.64	0.686998		7393.40875	113329.9047	

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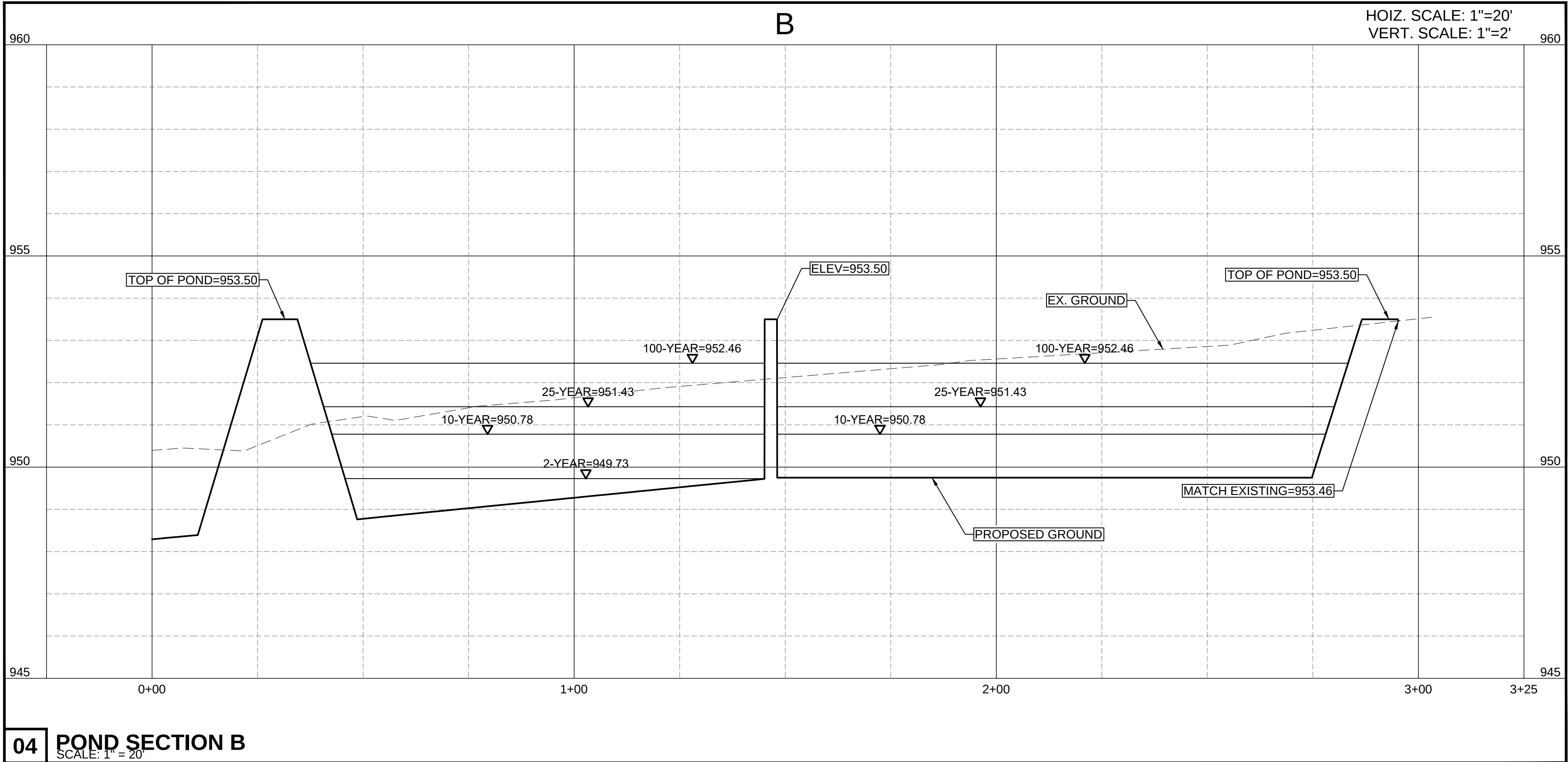
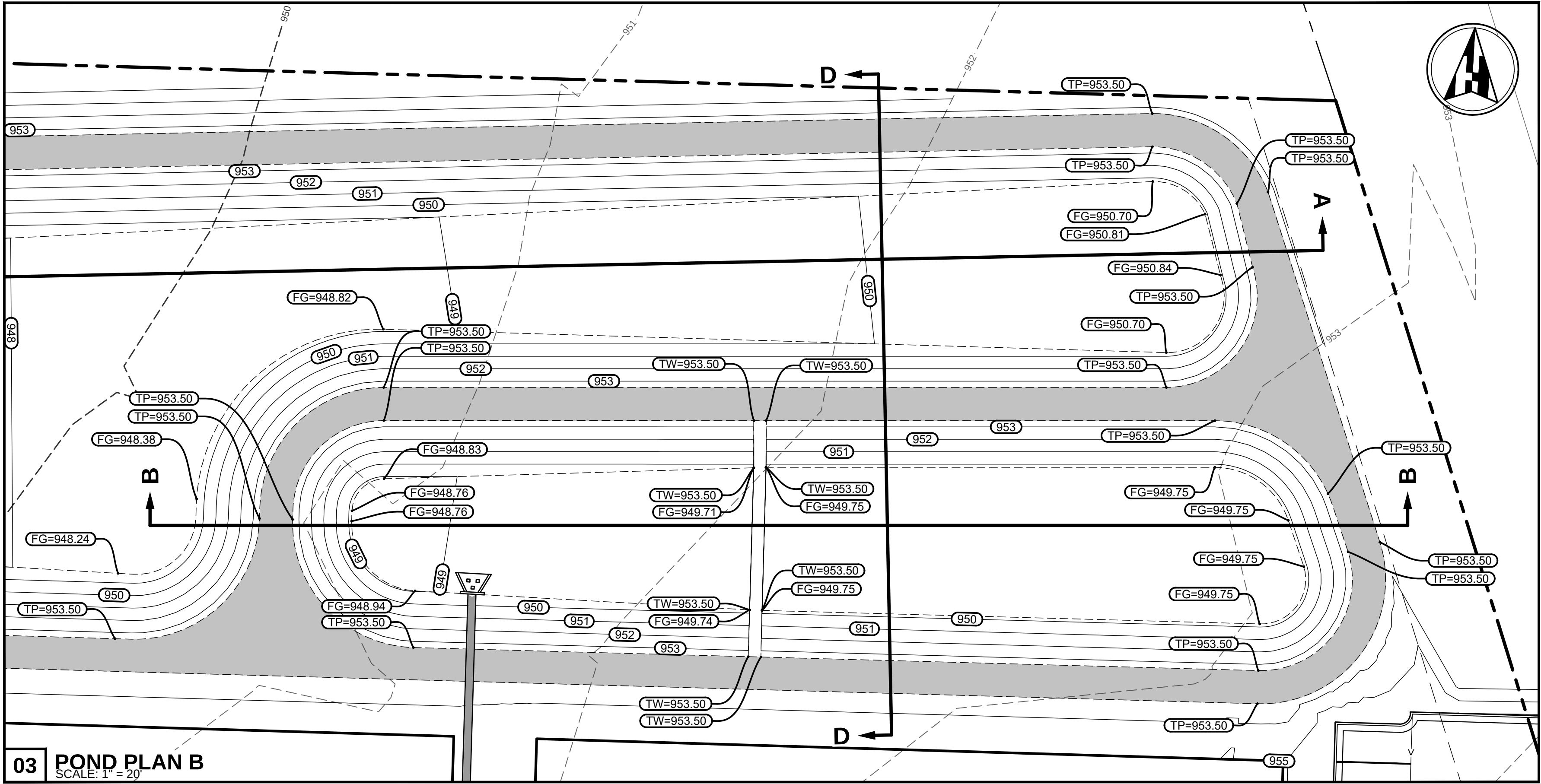
SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
POND PLAN AND SECTION 1



PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
CHECKED BY: AR
APPROVED BY: JH

C17.01

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lot1 bros\07 Sheet\SD1230903 POND PLAN AND SECTIONS.dwg



Sedimentation Basin Stage-Storage				
.50' Interval Elevation	Area		Avg. End Area Method	Accumulated Volume
	S.F.	AC.		
948.76	0.00	0.0	0	-
949.00	592.10	0.013593	71.052	71.052
949.25	1393.90	0.032	248.25	319.302
949.50	2288.20	0.05253	460.2625	779.5645
949.75	3190.96	0.073254	684.895	1464.4595
950.00	3355.58	0.077034	818.3175	2282.777
950.25	3521.95	0.080853	859.69125	3142.46825
950.50	3690.07	0.084712	901.5025	4043.97075
950.75	3859.95	0.088612	943.7525	4987.72325
951.00	4031.58	0.092552	986.44125	5974.1645
951.25	4204.96	0.096533	1029.5675	7003.732
951.50	4380.10	0.100553	1073.1325	8076.8645
951.75	4556.99	0.104614	1117.13625	9194.00075
952.00	4735.64	0.108715	1161.57875	10355.5795
952.25	4916.03	0.112857	1206.45875	11562.03825
952.50	5098.19	0.117038	1251.7775	12813.81575
952.75	5282.09	0.12126	1297.535	14111.35075
953.00	5467.75	0.125522	1343.73	15455.08075
953.25	5655.16	0.129825	1390.36375	16845.4445
953.50	5844.33	0.134167	1437.43625	18282.88075

Filtration Basin Stage-Storage				
.50' Interval Elevation	Area		Avg. End Area Method	Accumulated Volume
	S.F.	AC.		
949.75	4569.26	0.1	0	-
950.00	4782.53	0.109792	1168.97375	1168.97375
950.25	4997.45	0.114726	1222.4975	2391.47125
950.50	5214.04	0.119698	1276.43625	3667.9075
950.75	5432.28	0.124708	1330.79	4998.6975
951.00	5652.17	0.129756	1385.55625	6384.25375
951.25	5873.73	0.134842	1440.7375	7824.99125
951.50	6096.94	0.139966	1496.33375	9321.325
951.75	6321.80	0.145129	1552.3425	10873.6675
952.00	6548.32	0.150329	1608.765	12482.4325
952.25	6776.50	0.155567	1665.6025	14148.035
952.50	7006.33	0.160843	1722.85375	15870.88875
952.75	7237.82	0.166157	1780.51875	17651.4075
953.00	7470.97	0.17151	1838.59875	19490.00625
953.25	7705.77	0.1769	1897.0925	21387.09875
953.50	7942.23	0.182329	1956	23343.09875



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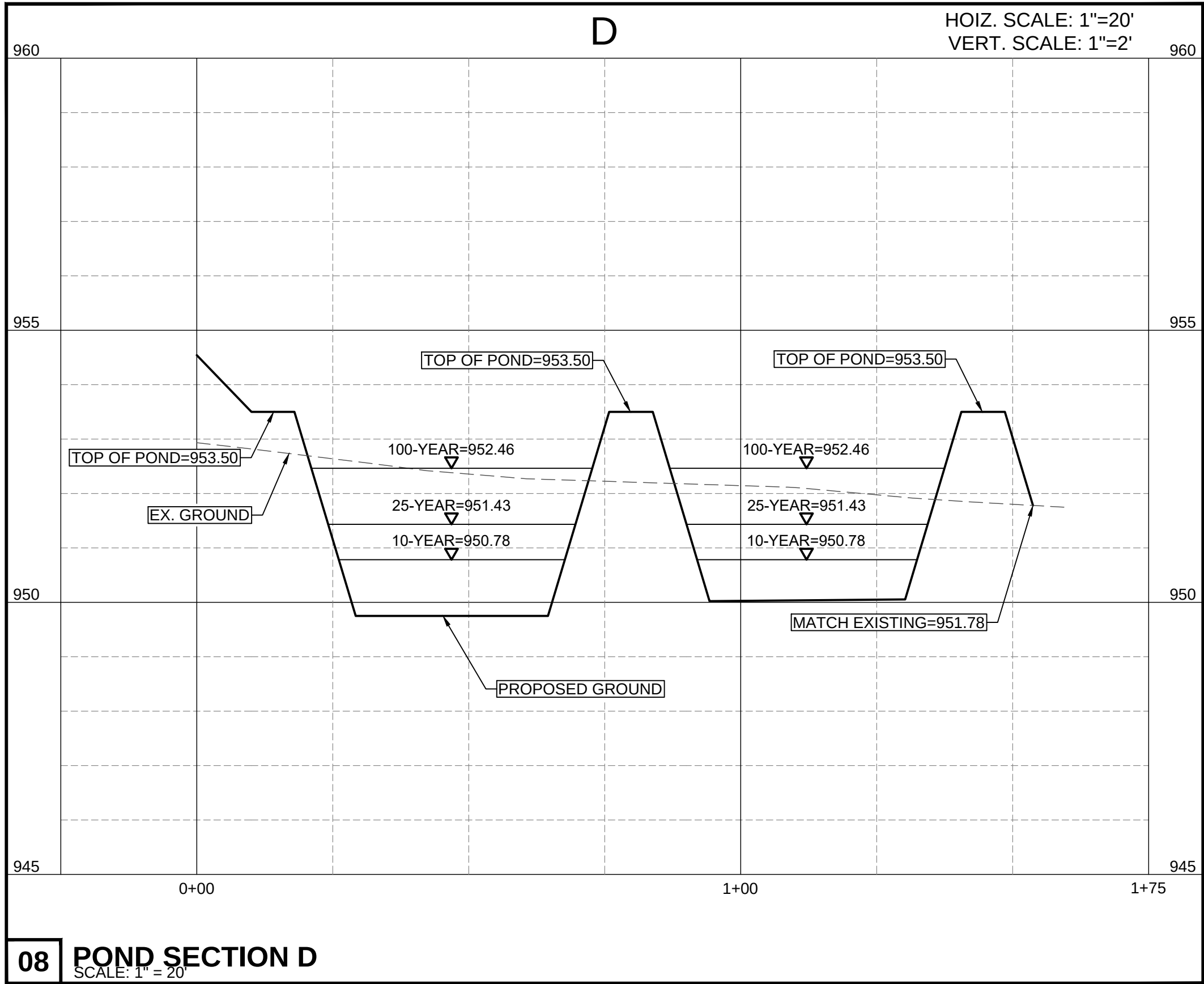
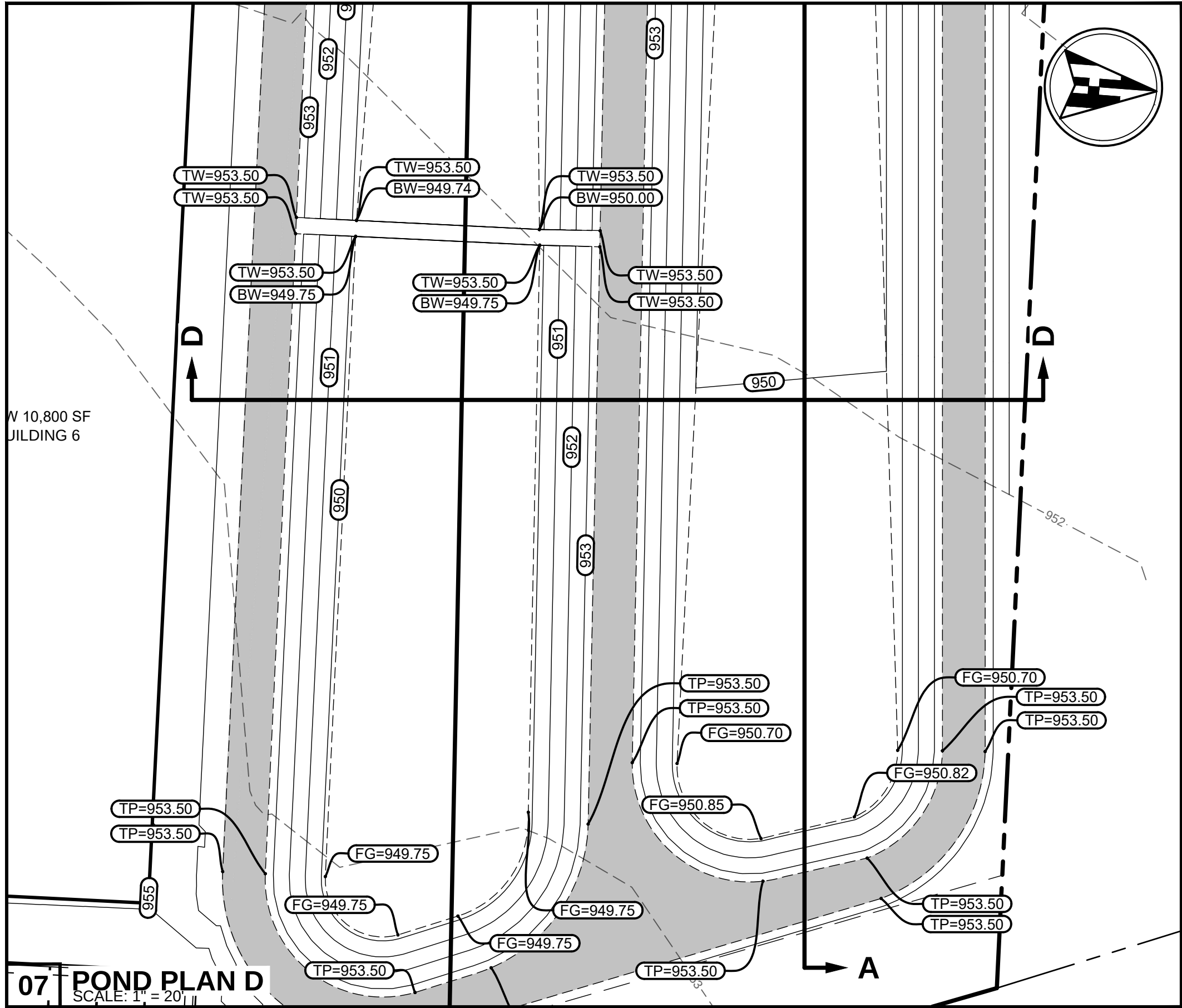
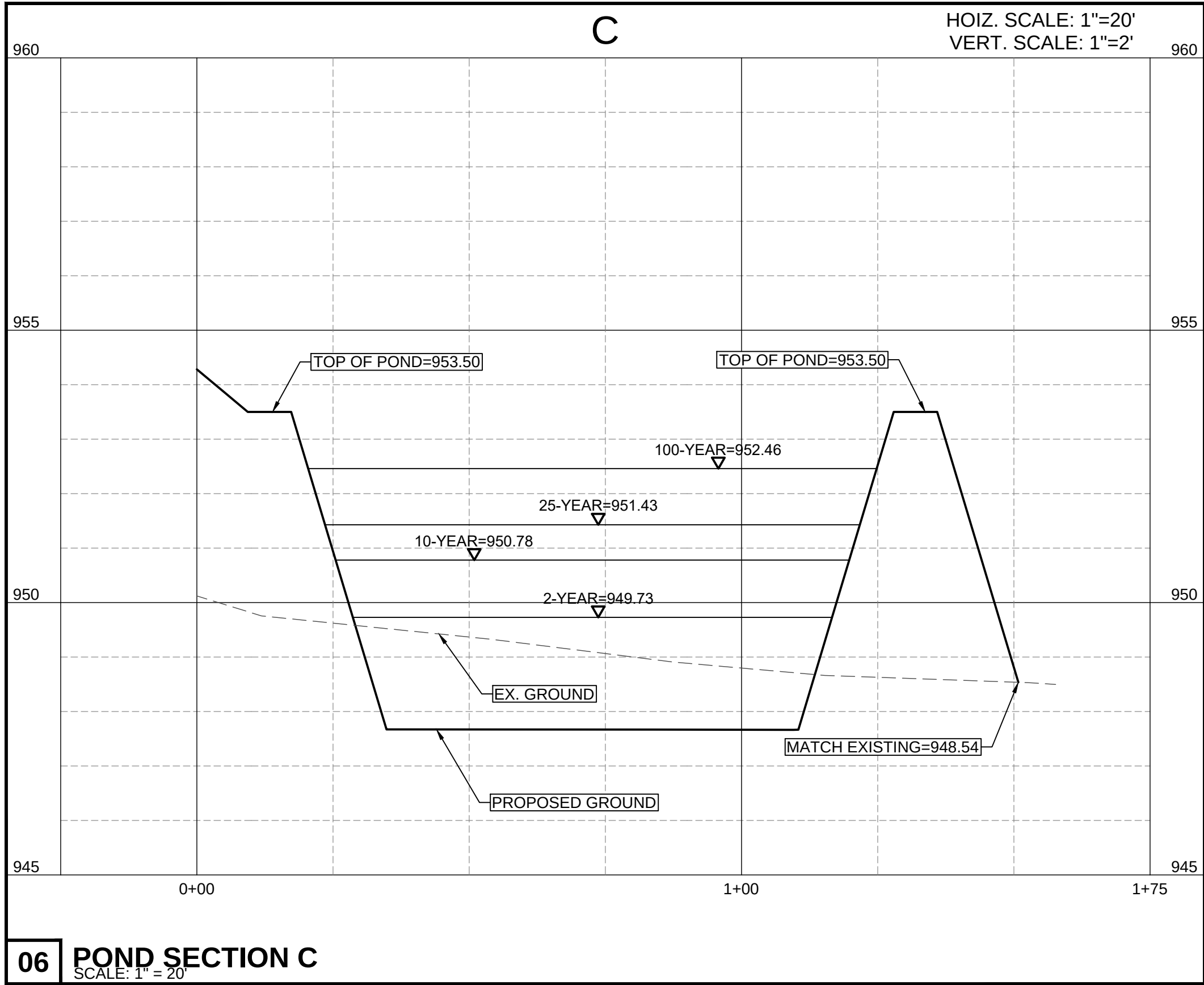
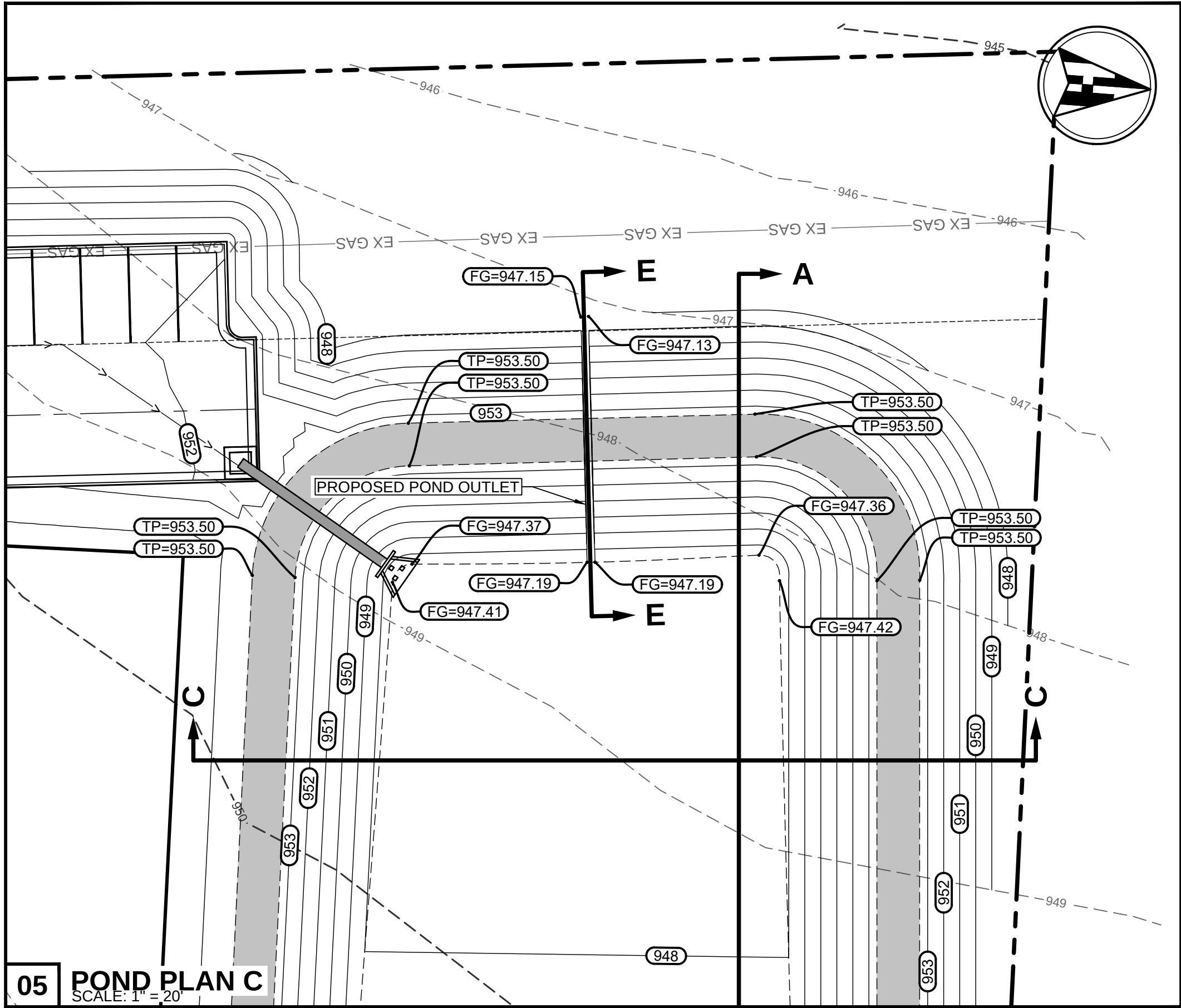
SITE DEVELOPMENT PLANS
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POND PLAN AND SECTION 2



PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C17.02

Plotted by: Harry, Plot date: 11/06/2024
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Detention Pond Stage-Storage					
.50' Interval	Area		Storm	Avg. End	
Elevation	S.F.	AC.	Event	Area Method	Accumulated Volume
947.19	0.00	0.0		0	0
947.25	132.10	0.003033		4.02905	4.02905
947.50	1728.73	0.039686		232.60375	236.6328
947.75	3603.25	0.082719		666.4975	903.1303
948.00	5867.62	0.134702		1183.85875	2086.98905
948.25	8365.63	0.192048		1779.15625	3866.1453
948.50	10396.89	0.23868		2345.315	6211.4603
948.75	11475.72	0.263446		2734.07625	8945.53655
949.00	12490.82	0.28675		2995.8175	11941.35405
949.25	13592.76	0.312047		3260.4475	15201.80155
949.50	14782.92	0.339369		3546.96	18748.76155
949.75	15959.77	0.366386	2-yr	3535.40884	22284.17039
949.75	16062.10	0.368735		320.218656	22604.38905
950.00	17430.94	0.400159		4186.63	26791.01905
950.25	18888.36	0.433617		4539.9125	31330.93155
950.50	20435.00	0.469123		4915.42	36246.35155
950.75	22079.99	0.506887		5314.37375	41560.7253
950.78	22194.26	0.50951	10-yr	664.113804	42224.8391
951.00	23032.27	0.528748		4974.9187	47199.7578
951.25	23706.94	0.544236		5842.40125	53042.15905
951.43	24195.04	0.555442	25-yr	4311.17842	57353.33747
951.50	24384.86	0.559799		1700.29658	59053.63405
951.75	25066.05	0.575437		6181.36375	65234.9978
952.00	25750.5	0.59115		6352.06875	71587.06655
952.25	26438.2	0.606938		6523.5875	78110.65405
952.46	27018.62	0.620262	100-yr	5612.9661	83723.62015
952.50	27129.17	0.6228		1082.9558	84806.57595
952.75	27823.4	0.638737		6869.07125	91675.6472
953.00	28520.88	0.654749		7043.035	98718.6822
953.25	29221.63	0.670836		7217.81375	105936.496
953.5	29925.64	0.686998		7393.40875	113329.9047

Filtration Basin Stage-Storage			
.50' Interval	Area	Avg. End	
Elevation	S.F.	Area Method	Accumulated Volume
949.75	4569.26	0.1	0
950.00	4782.53	0.109792	1168.97375
950.25	4997.45	0.114726	1222.4975
950.50	5214.04	0.119698	1276.43625
950.75	5432.28	0.124708	1330.79
951.00	5652.17	0.129756	1385.55625
951.25	5873.73	0.134842	1440.7375
951.50	6096.94	0.139966	1496.33375
951.75	6321.80	0.145129	1552.3425
952.00	6548.32	0.150329	1608.765
952.25	6776.50	0.155567	1665.6025
952.50	7006.33	0.160843	1722.85375
952.75	7237.82	0.166157	1780.51875
953.00	7470.97	0.17151	1838.59875
953.25	7705.77	0.1769	1897.0925
953.50	7942.23	0.182329	1956

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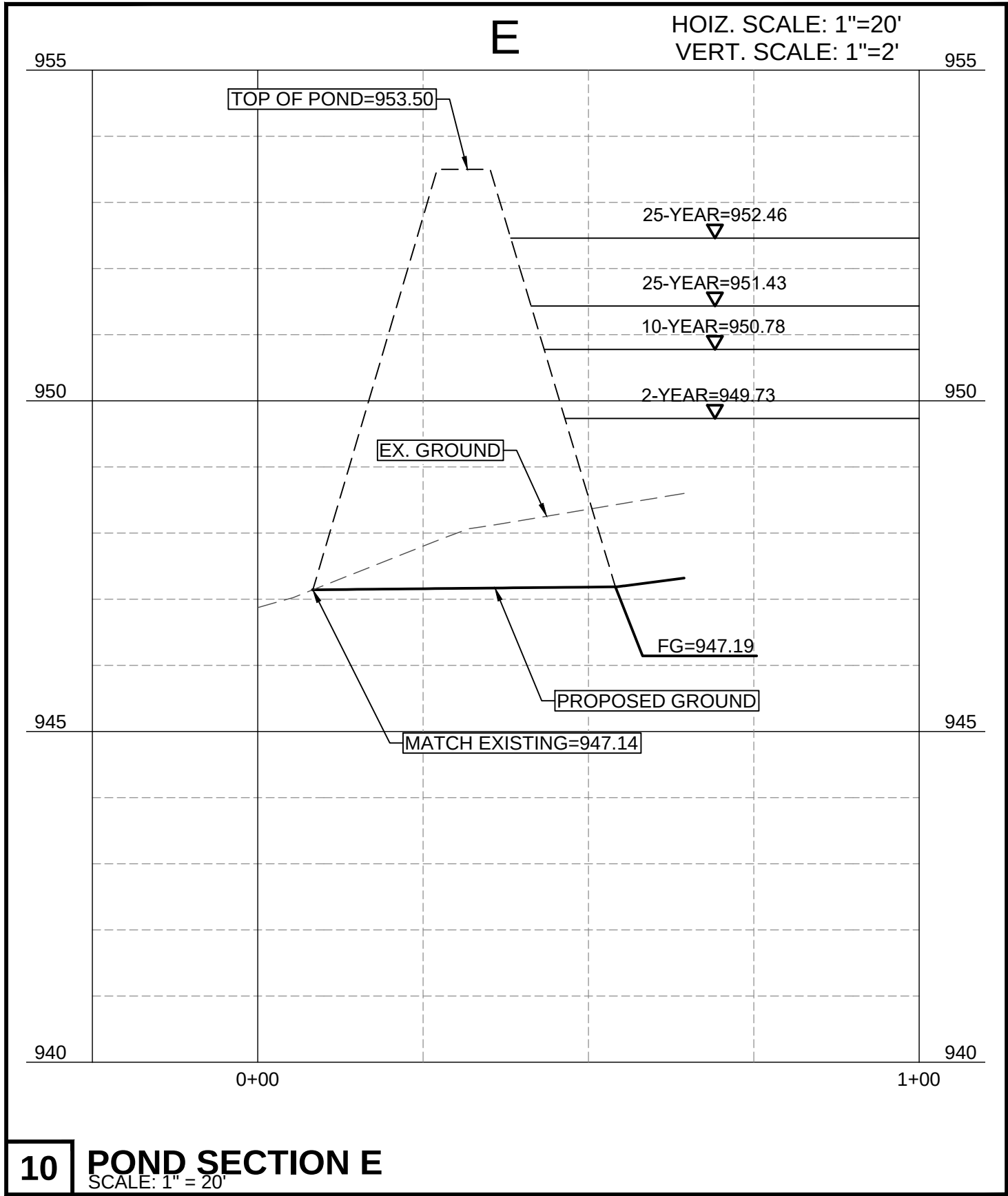
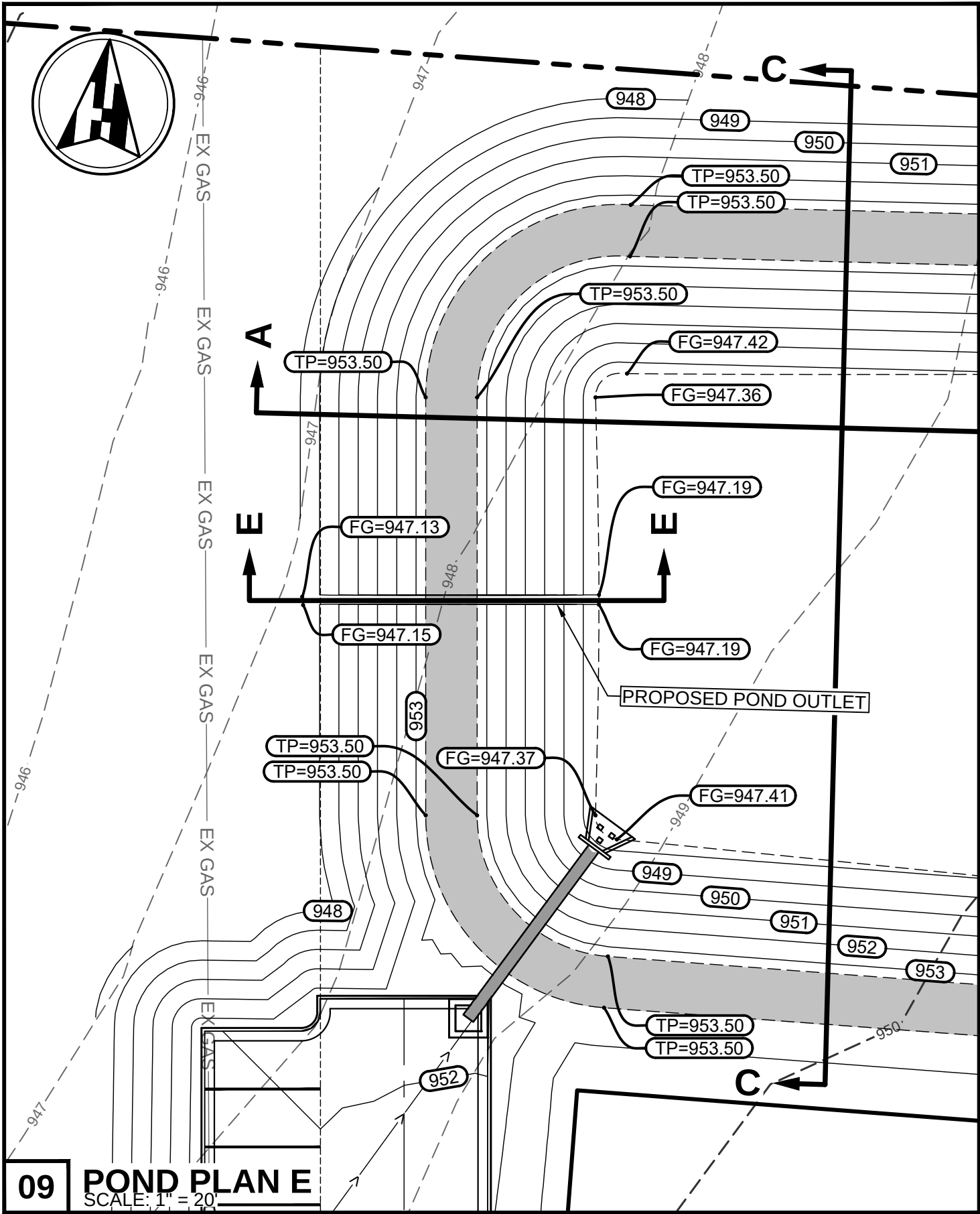
REVISION					
No.	1	2	3	4	5

SITE DEVELOPMENT PLANS
TO SERVE
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6540 W. SH 29
GEORGETOWN, TEXAS 78628
POND PLAN AND SECTION 3



PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C17.03



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SITE DEVELOPMENT PLANS
TO SERVE
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6540 W. SH 29
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POND PLAN AND SECTION 4

STATE OF TEXAS
JENNIFER L. HENDERSON
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06/14/2024

PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
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C17.04

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lott bros\07 Sheet\SD1230903 POND PLAN AND SECTIONS.dwg

Texas Commission on Environmental Quality		
TSS Removal Calculations 04-20-2009		
		Project Name: Lott Brothers
		Date Prepared: 3/27/2024
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: $L_M = 27.2(A_N \times P)$		
where: L_M TOTAL PROJECT = Required TSS removal resulting from the proposed development = 80% of increased load A_N = Net increase in impervious area for the project P = Average annual precipitation, inches		
Site Data: Determine Required Load Removal Based on the Entire Project County = Williamson Total project area included in plan = 12.45 acres Predevelopment impervious area within the limits of the plan = 0.00 acres Total post-development impervious area within the limits of the plan = 5.60 acres Total post-development impervious cover fraction = 0.45 P = 32 inches		
L_M TOTAL PROJECT = 4874 lbs.		
* The values entered in these fields should be for the total project area.		
Number of drainage basins / outfalls areas leaving the plan area = 1		

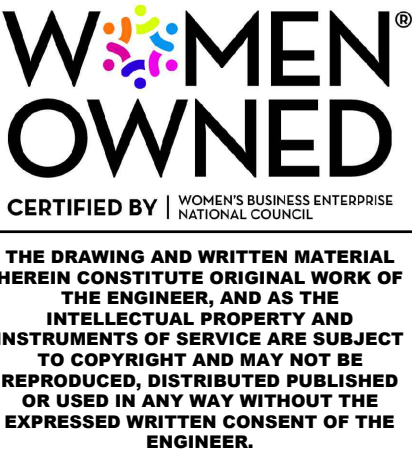
2. Drainage Basin Parameters (This information should be provided for each basin):		
Drainage Basin/Outfall Area No. = 1		
Total drainage basin/outfall area = 12.45 acres		
Predevelopment impervious area within drainage basin/outfall area = 0.00 acres		
Post-development impervious area within drainage basin/outfall area = 5.60 acres		
Post-development impervious fraction within drainage basin/outfall area = 0.45		
L_M THIS BASIN = 4874 lbs.		
3. Indicate the proposed BMP Code for this basin.		
Proposed BMP = Sand Filter		
Removal efficiency = 89 percent		
Aqualogic Cartridge Filter Bioretention Contech StormFilter Constructed Wetland Extended Detention Grassy Swale Retention / Irrigation Sand Filter Stormceptor Vegetated Filter Strips Vortechs Wet Basin Wet Vault		

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.		
RG-348 Page 3-33 Equation 3.7: $L_R = (BMP \text{ efficiency}) \times P \times (A_i \times 34.6 + A_p \times 0.54)$		
where: A_c = Total On-Site drainage area in the BMP catchment area A_i = Impervious area proposed in the BMP catchment area A_p = Pervious area remaining in the BMP catchment area L_R = TSS Load removed from this catchment area by the proposed BMP		
A_c = 12.45 acres		
A_i = 5.60 acres		
A_p = 6.85 acres		
L_R = 5624 lbs		

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area.		
Desired L_M THIS BASIN = 4874 lbs.		
F = 0.87		

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36		
Rainfall Depth = 1.44 inches		
Post Development Runoff Coefficient = 0.33		
On-site Water Quality Volume = 21555 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 = 4311 cubic feet		
Total Capture Volume (required water quality volume(s) x 1.20) = 25866 cubic feet		
The following sections are used to calculate the required water quality volume(s) for the selected BMP. The values for BMP Types not selected in cell C45 will show NA.		

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63		
9A. Full Sedimentation and Filtration System		
Water Quality Volume for sedimentation basin = 25866 cubic feet		
Minimum filter basin area = 1197 square feet		
Maximum sedimentation basin area = 10777 square feet		
Minimum sedimentation basin area = 2694 square feet		
For minimum water depth of 2 feet For maximum water depth of 8 feet		
9B. Partial Sedimentation and Filtration System		
Water Quality Volume for combined basins = 25866 cubic feet		
Minimum filter basin area = 2155 square feet		
Maximum sedimentation basin area = 8622 square feet		
Minimum sedimentation basin area = 539 square feet		
For minimum water depth of 2 feet For maximum water depth of 8 feet		



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SITE DEVELOPMENT PLANS
TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
GEORGETOWN, TEXAS 78628

WATER QUALITY CALCULATIONS



PROJECT NO. 230903

06/11/2024

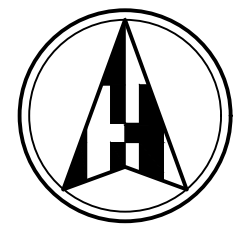
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C17.05

Plotted by: Harry, Plot date: 11/06/2024
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0 30 60
SCALE: 1"=30'

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SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
TREE PRESERVATION PLAN



PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
CHECKED BY: AR
APPROVED BY: JH

C18.01

TYPE OF STRUCTURE	REACH LENGTH	MAXIMUM DRAINAGE AREA	SLOPE
SILT FENCE	N/A	2 ACRES	0 – 10%
	200 FEET	2 ACRES	10 – 20%
	100 FEET	1 ACRE	20 – 30%
	50 FEET	1/2 ACRE	> 30%
TRIANGLE FILTER DIKE	100 FEET	1/2 ACRE	< 30% SLOPE
	50 FEET	1/4 ACRE	> 30% SLOPE
ROCK BERM *, **	500 FEET	< 5 ACRES	0 – 10%

** HIGH SERVICE ROCK BERMS MAY BE REQUIRED IN AREAS OF ENVIRONMENTAL SIGNIFICANCE AS DETERMINED BY THE CITY OF GEORGETOWN.

REVISION: ADOPTED 6/21/2006	
DRAWING NAME: EC01	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	APPROVED BY: TRB

1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING THROUGHOUT THE PROJECT.
2. ALL PROJECTS WITHIN THE RECHARGE ZONE OF THE EDWARD'S AQUIFER SHALL SUBMIT A BEST MANAGEMENT PRACTICES AND WATER POLLUTION AND ABATEMENT PLAN TO THE TNRCC FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
3. THE CONTRACTOR SHALL DEVELOP AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING. EROSION AND SEDIMENTATION CONTROL PLAN AND WATER POLLUTION ABATEMENT PLAN. DEVIATIONS FROM THE APPROVED PLAN MUST BE SUBMITTED TO AND APPROVED BY THE OWNER'S REPRESENTATIVE.
4. ALL PLANTING SHALL DONE BETWEEN 15 OCTOBER AND 15 DECEMBER. SEED SHALL BE SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO TAKE PLACE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITIONAL REQUIREMENT OF A 10% BUFFER ZONE OUTSIDE THE DATES SPECIFIED. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, AND SEED SHALL BE STORED IN A SEaled CONTAINER WITH AN INERT GAS FILLING. SEED SHALL BE STORED IN A SEaled CONTAINER (RECELANED) AND TREATED WITH APPROPRIATE FLUORIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEaled, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. SOIL MUST BE RESTORED AS NOTED IN THE EROSION/SEDIMENTATION ABATEMENT PLAN.
6. THE PLANTED AREA TO BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF FOUR (4) INCHES. THE IRRIGATION TO OCCUR AT 10-DAY INTERVALS DURING THE FIRST TWO MONTHS TO INSURE GERMINATION AND ESTABLISHMENT OF THE GRASS. RAINFALL EXCEEDING 1/2" PER HOUR OR 1/4" PER HOUR IS REQUIRED TO POSTPONE IRRIGATION UNTIL AFTER THE NEXT RAINFALL.
7. RESTORATION TO BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2" INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 25 SQUARE FEET EXIST.
8. A MINIMUM OF 10% OF THE TOTAL AREA OF THE PROJECT SHALL BE LEFT IN ALL AREAS DISPOSED WITH CONSTRUCTION.
9. THE CONTRACTOR TO HYDROMULCH OR SOD (AS SHOWN ON PLANS) ALL EXPOSED CUTS AND FILLS UPON COMPLETION OF CONSTRUCTION.
10. EROSION AND SEDIMENTATION CONTROLS TO BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL EROSION OR SEDIMENTATION OF THE ADJACENT PROPERTY.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIFLINE AREAS.
12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON BRACKETS (MINIMUM 8" FEET) OR TO 10 FEET OF LOWER BRANCHING IN ADDITION TO THE FENCING.
13. TREES TO BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
14. ALL ROOT EXPOSURE BY CONSTRUCTION ACTIVITY TO BE PROBED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOPSOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN TWO DAYS, COVER WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
15. CONTRACTOR TO PRUNE VEGETATION TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND EQUIPMENT SUPPORT. CONTRACTOR TO MAINTAIN BRANCHES OF TREES TO BE PRESERVED TO A MINIMUM OF 10 FEET. IF NOT RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PUBLISHING HANDBOOK FOR SHAPE TREES").
16. IF THE CONTRACTOR'S CONTROLS AT WEEKLY INTERVALS AND AFTER EVERY RAINFALL EXCEEDING 1/4" INCH TO VERIFY THAT THEY HAVE NOT BEEN SIGNIFICANTLY DISTURBED, ANY ACCUMULATED SEDIMENT AFTER A SIGNIFICANT RAINFALL TO BE REMOVED AND PLACED IN THE OWNER DESIGNATED SPILL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT VISUAL INSPECTIONS OF THE EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAWING SURFACE, TREE WELL, OR OTHER SUCH STRUCTURE TO BE CONSTRUCTED OR TO A PROTECTED TREE, ERCT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'-4") BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FLUID STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE SHALL BE REQUIRED TO EXAMINE AND VERIFY THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED PRIOR TO CONSTRUCTION.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS INTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.



EST. 1860
GEORGETOWN
TEXAS
Georgetown Utility Systems
Your Community Owned Utility

REVISION: ADOPTED 6/21/2006	
DRAWING NAME: EC01A	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	APPROVED BY: TRB

CROSS SECTION

Diagram illustrating the cross-section of a trench installation, showing the following components and dimensions:

- 48" MIN. HEAVY WEIGHT T-POST**: Vertical post supporting the structure.
- 48" MIN. TALL MIN., 2" X 4" 12 GA. GALVANIZED WIRE MESH**: Mesh structure above the trench.
- 4.5 OZ. MIN. NON-WOVEN GEOTEXTILE FABRIC 42" WIDE**: Fabric layer below the mesh.
- EXTENSION OF FABRIC INTO TRENCH**: Fabric layer extending into the trench.
- FLOW**: Direction of water flow indicated by an arrow.
- SOIL LEVEL**: Ground surface level.
- TRENCH**: The excavation area.
- Dimensions**:
 - Overall height: 48"
 - Height of mesh: 24"
 - Height of fabric extension: 12"
 - Trench width: 6"
 - Flow path width: 6"

INSPECTION AND MAINTENANCE GUIDELINES:

- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

- LAY THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
 - CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A FLAT APPROACH SURFACE. EXCAVATE A DEPOSIT OF 6" WIDE TRENCH AT UPSTREAM SIDE OF FACE PER PLAN.
 - DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW. STAKE THE TOP OF THE WIRE TO THE T-POST WITH A 12 GAUGE GALVANIZED 7" LONG CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED TO THE T-POST WITH 12 GAUGE GALVANIZED WIRE.
 - THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE ANCHOR EXCAVATED TRENCH. THE FABRIC TO OVERLAP THE TOP OF THE WIRE BY 1".
 - ANCHOR THE SILT FENCE BY BACKFILLING WITH EXCAVATED DIRT AND ROCKS (NOT LARGER THAN 2").
 - GROUPEL PIECES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 SPACES. SPACES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
 - FLOW SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW DRAINAGE.



EST. 1948
GEORGETOWN
 TEXAS
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REVISION: ADOPTED 6/21/2006	
DRAWING NAME: EC02	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	APPROVED BY: TRB

A cross-sectional diagram of a rock pile covered with woven wire sheathing. The diagram shows a cylindrical structure with a woven wire mesh (labeled 'WOVEN WIRE SHEATHING') covering the exterior. The interior is filled with rounded stones (labeled 'ROCK'). A vertical section is cut away to reveal the internal structure. The top of the structure is labeled '0.5\"/>

- LAYOUT THE ROCK BERM FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
CLEAR THE GROUND OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- PLACE WIRE IN PLACE ALONG THE GROUND ALONG THE PROPOSED INSTALLATION WITH ENOUGH OVERLAP TO COMPLETELY ENCLOSE THE FINISHED SIZE OF THE BERM.
- PLACE THE ROCK ALONG THE CENTER OF THE WIRE TO THE DESIGNATED HEIGHT.
- WIRE INTERLACE WITH THE PREVIOUSLY PLACED WIRE MESH SECURE ENOUGH SO THAT WHEN WALKED ACROSS THE STRUCTURE RETAINS ITS SHAPE.
- SECURE WITH THE WIRE.
- THE CHAIN OR BERM SHOULD BE TIED TO EXISTING UPGRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROX 12 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.
- THE BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPLIEAST ARE STABILIZED AND ACCUMULATED SILT REMOVED.

- INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REMOVE ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.




EST. 1946
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REVISION: <i>ADOPTED 6/21/2008</i>	
DRAWING NAME: EC03	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	APPROVED BY: TRB

The diagram illustrates a cross-section of a rock pile structure. The structure consists of a core of "3\" TO 5\" OPEN GRADED ROCK" surrounded by a "WOVEN WIRE SHEATHING". A "SILT FENCE" is shown at the downstream end of the rock pile. A "FLOW" arrow indicates the direction of water movement from right to left. A vertical dimension line indicates a "2'-0\" MINIMUM" height for the rock pile above the ground level.

INSPECTION AND MAINTENANCE GUIDELINES:

- INSPECTIONS SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL EVENT BY THE CONTRACTOR. FOR THE INSTALLATIONS IN STREAMBEDS, ADDITIONAL ONLY INSPECTIONS SHOULD BE MADE ON ROCK BERM.
- REMOVE SEDIMENT AND OTHER DEBRIS WHEN BULBUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER.
- REPAIR ANY LOOSE WIRE SHEATHING.
- THE BERM SHOULD BE RESHAPE AS NEEDED DURING INSPECTION.
- THE BERM SHOULD BE REPLACES WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

 <p> <small>EST. 1984</small> GEORGETOWN TEXAS Georgetown Utility Systems <small>Your Community Needs Utility</small> </p>	<p> CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS HIGH SERVICE ROCK BERM DETAIL </p>	<small>REVISION DATE:</small> ADOPTED 6/21/2006		
		<small>DESIGNER NAME:</small> EC04		
		<small>SCALE:</small> NTS	<small>DRAWN BY:</small> MRS	<small>DATE:</small> 1/2003
		<small>APPROVED BY:</small> TRB		

- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC RIGHTS-OF-WAY. THE MAY RIGORS PERIOD TOP DRESSING WITH ADDITIONAL SOLE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ON TO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
- WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
- WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
- ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.



EST. 1848
GEORGETOWN
TEXAS
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 Your Community Owned Utility

REVISION NOTE: ADOPTED 6/21/2006	
DRAWING NAME: EC06	
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	APPROVED BY: TRB

SECTION A-A

Diagram illustrating a rectangular structure, likely a trench or foundation, with dimensions and components labeled:

- 10 MIL. PLASTIC LINING**: Indicated by an arrow pointing to the top edge of the structure.
- SANDBAGS**: Indicated by an arrow pointing to a row of sandbags along the top edge.
- 10'**: Dimension indicating the width of the structure.
- 10'**: Dimension indicating the height of the structure.
- A**: A point or location marked on the right side of the structure.
- BERM**: Indicated by an arrow pointing to a sloped area at the bottom of the structure.

01 CONCRETE WASHOUT

1	
2	
3	
4	
5	

SITE DEVELOPMENT PLANS TO SERVE

CROSS CREEK COMMERCIAL PARK

0340 W. 35TH ST
GEORGETOWN, TEXAS 78628

STANDARD DETAILS - ESC



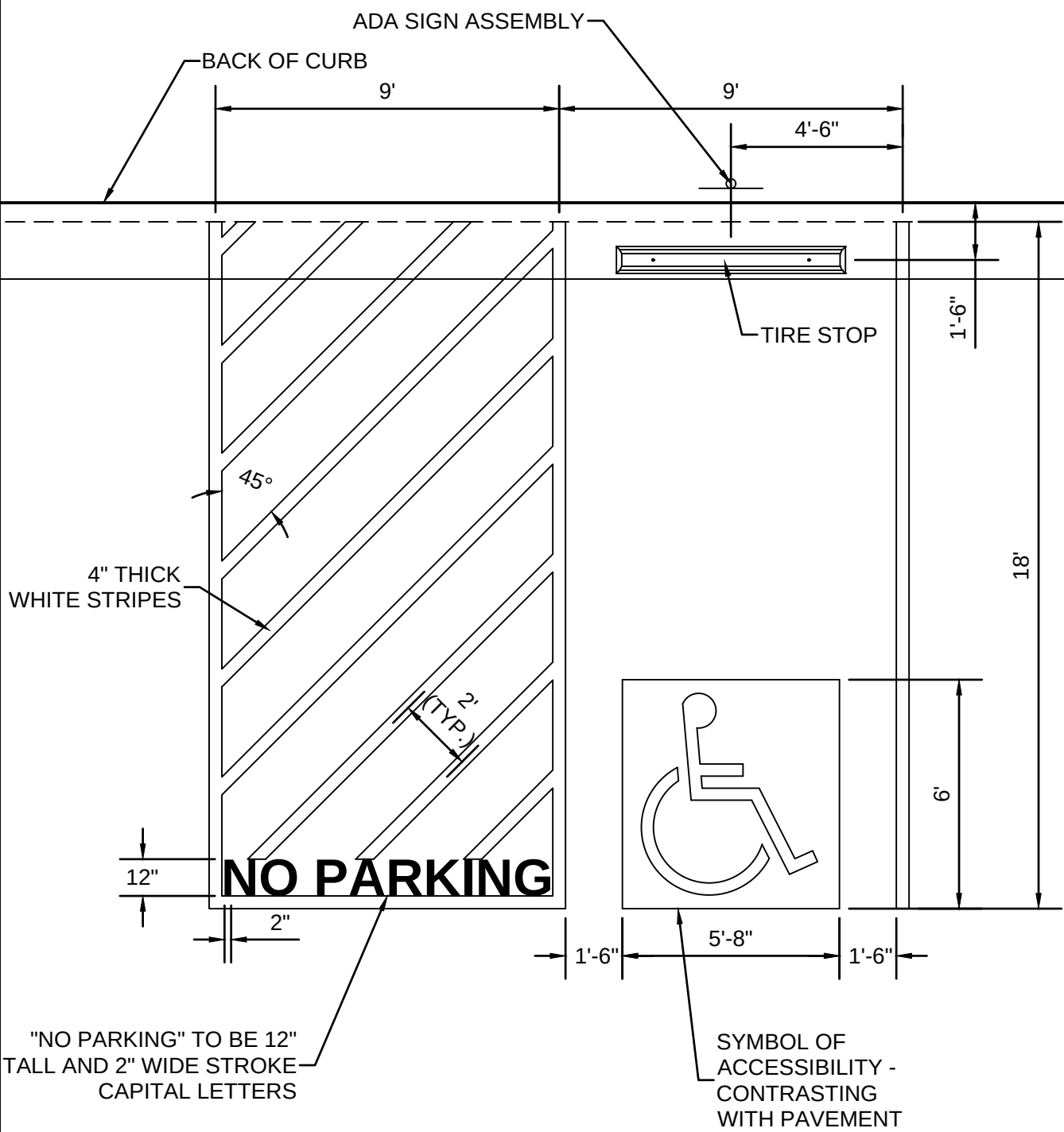
PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
CHECKED BY: AR
APPROVED BY: JH

C19.00

Plotted by: Harry, Plot date: 11/06/2024
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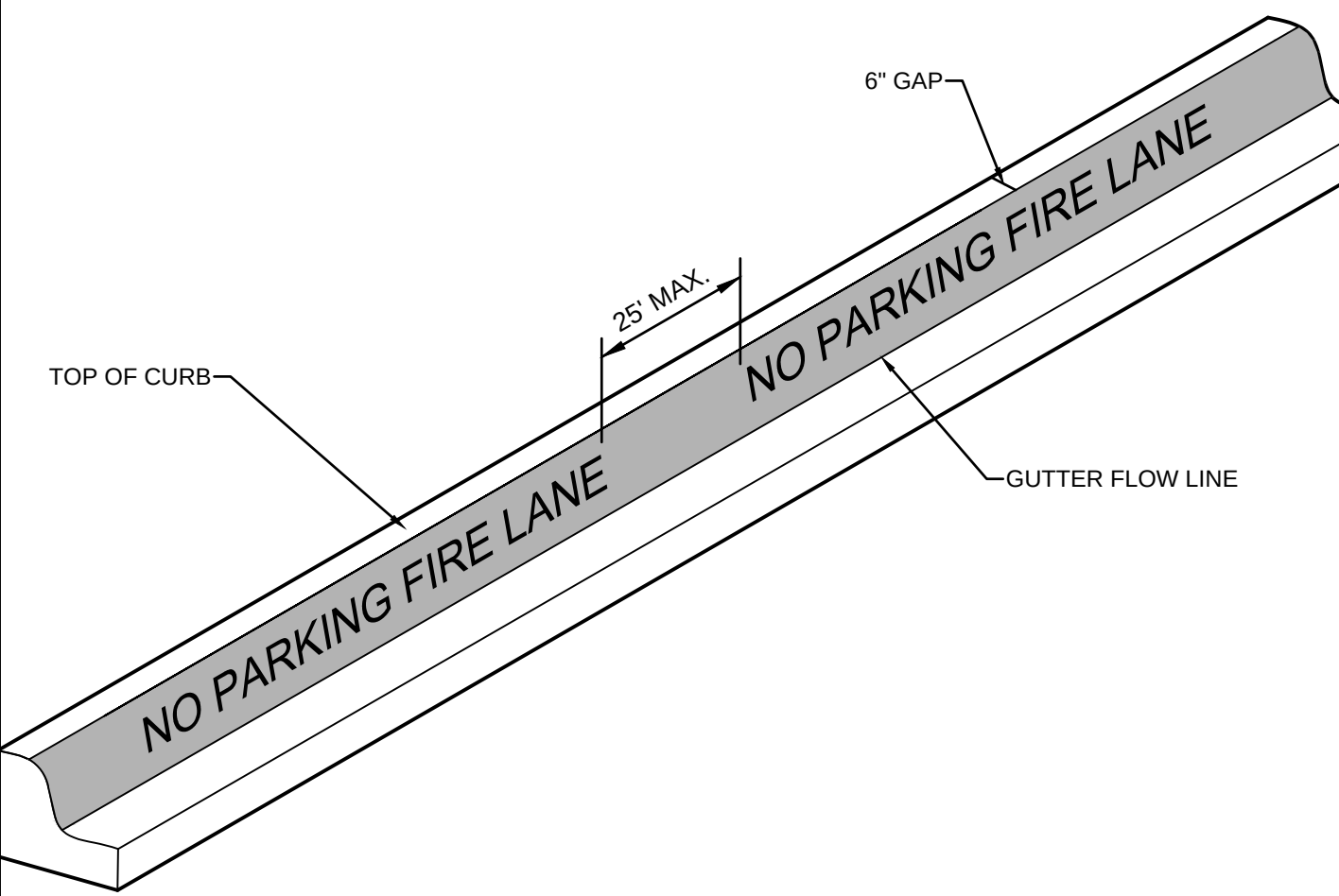
01 ADA PARKING

SCALE: 1/4" = 1'-0"



02 FIRE LANE STRIPING

SCALE: 1" = 1'-0"



NOTES:
STRIPING, FIRE APPARATUS ACCESS ROADS SHALL BE CONTINUOUSLY MARKED BY PAINTED LINES OF RED TRAFFIC OR STRIPING PAINT SIX INCHES (6") IN WIDTH TO SHOW THE BOUNDARIES OF THE LANE. THE WORDS "NO PARKING FIRE LANE" OR "FIRE LANE NO PARKING" SHALL APPEAR IN FOUR INCH (4") WHITE LETTERS AT 25 FOOT INTERVALS ON THE RED BORDER MARKINGS ALONG BOTH SIDES OF THE FIRE LANES. WHERE A CURB IS AVAILABLE, THE STRIPING SHALL BE ON THE VERTICAL FACE OF THE CURB.

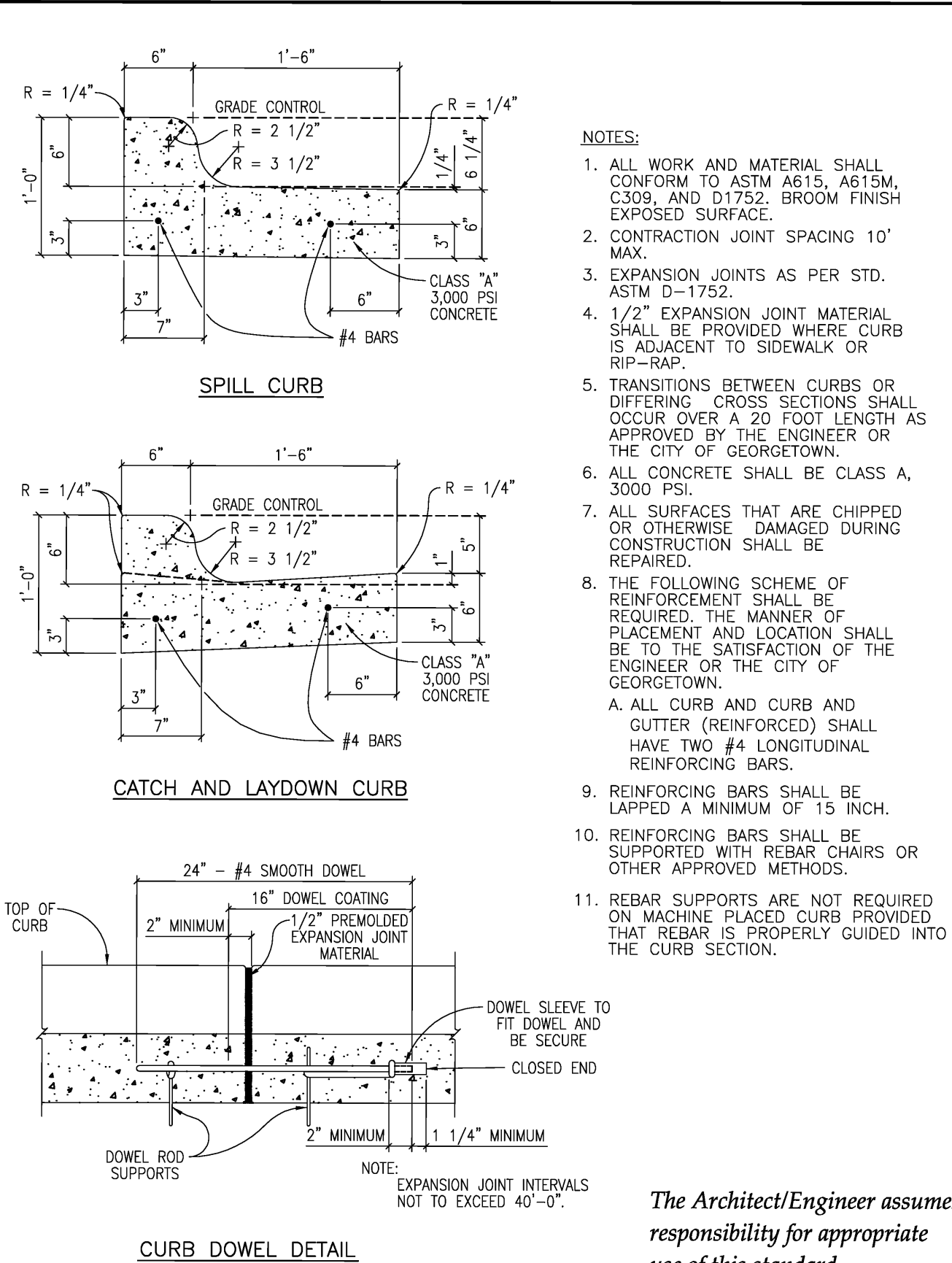
02 FLUME SECTION

SCALE: 3/4" = 1'-0"



03 ADA SIGN AND SYMBOL

SCALE: 3" = 1'-0"



NOTES:

- ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C308, AND D1752. BROOM FINISH EXPOSED SURFACE.
- CONTRACTION JOINT SPACING 10' MAX.
- EXPANSION JOINTS AS PER STD. ASTM D-1752.
- 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
- TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR THE CITY OF GEORGETOWN.
- ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
- ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
- THE FOLLOWING SCHEME OF REINFORCEMENT SHALL BE REQUIRED. THE MANNER OF PLACEMENT AND LOCATION SHALL BE TO THE SATISFACTION OF THE ENGINEER OR THE CITY OF GEORGETOWN.
A. ALL CURB AND CURB AND GUTTER (REINFORCED) SHALL HAVE TWO #4 LONGITUDINAL REINFORCING BARS.
- REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
- REINFORCING BARS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
- REBAR SUPPORTS ARE NOT REQUIRED ON MACHINE PLACED CURB PROVIDED THAT REBAR IS PROPERLY GUIDED INTO THE CURB SECTION.

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

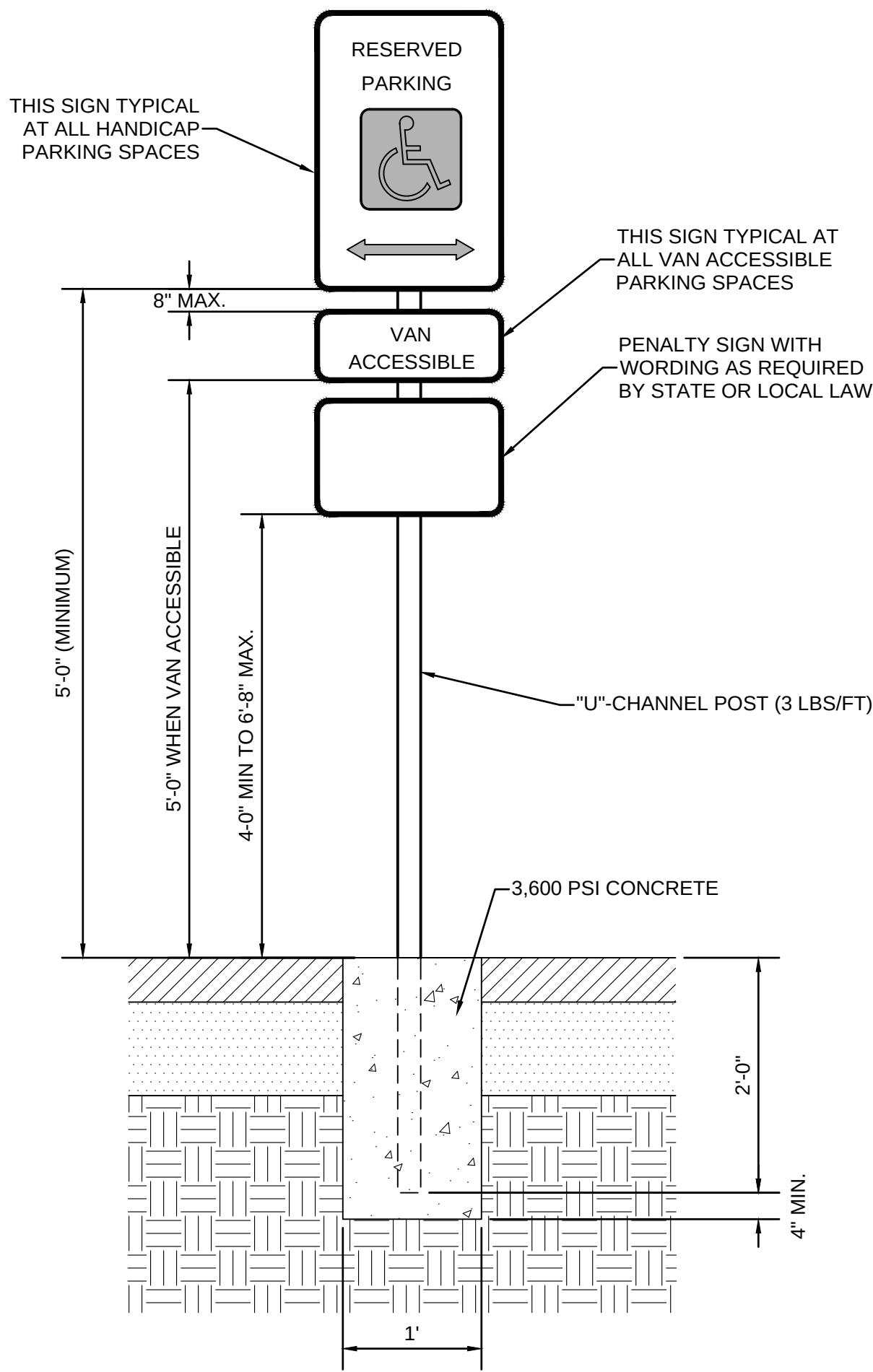
REVISION NOTE: ADOPTED 6/21/2006

DESIGN NAME: SD06

SCALE: NTS
DATE: MRS. TIRB

04 ADA SIGN ASSEMBLY

SCALE: 1" = 1'-0"



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REVISION

No.

1

2

3

4

5

SITE DEVELOPMENT PLANS TO SERVE

CROSS CREEK COMMERCIAL PARK

6540 W. SH 29
GEORGETOWN, TEXAS 78628

STANDARD DETAILS - PAVING



PROJECT NO. 230903

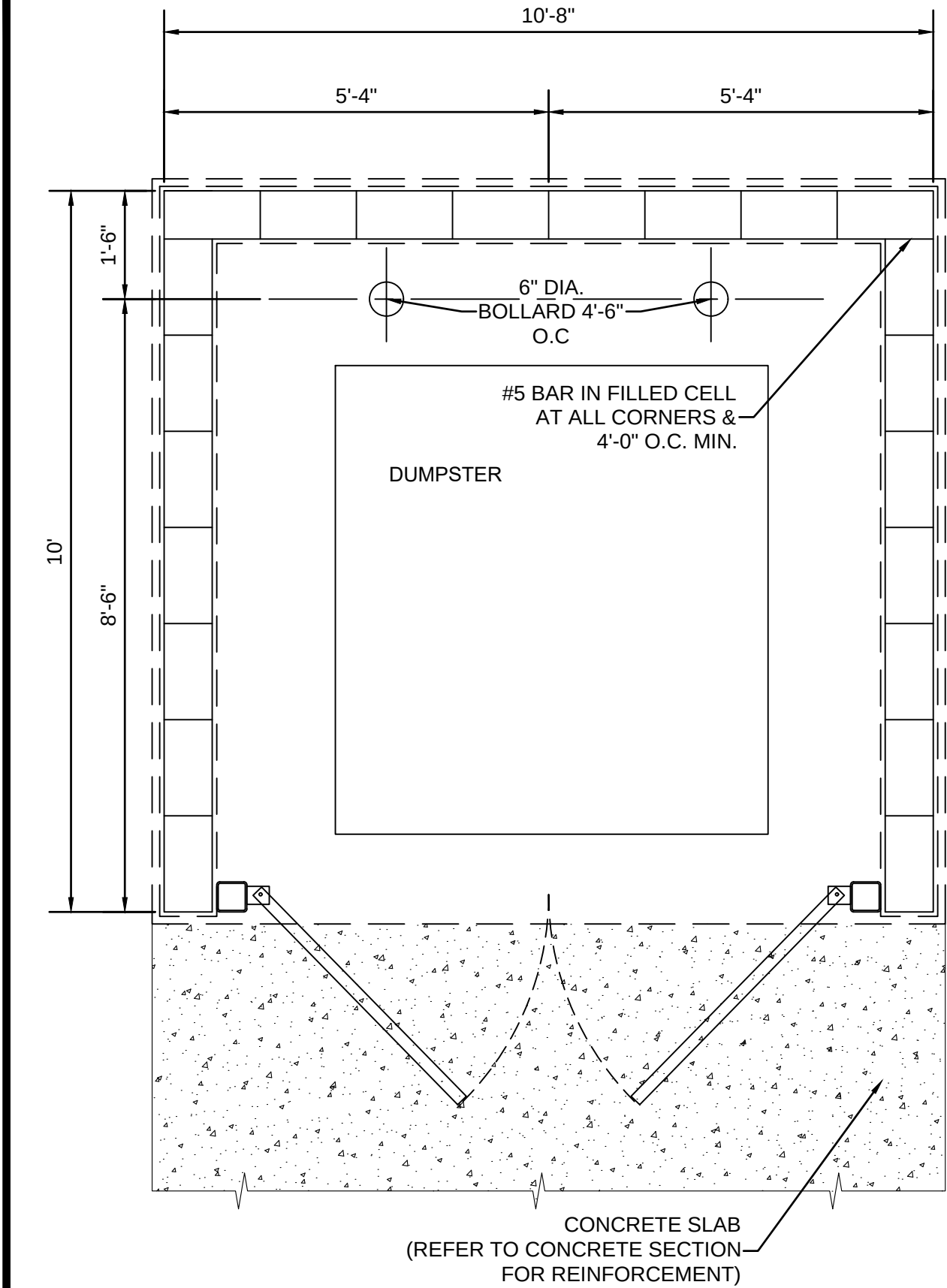
06/11/2024

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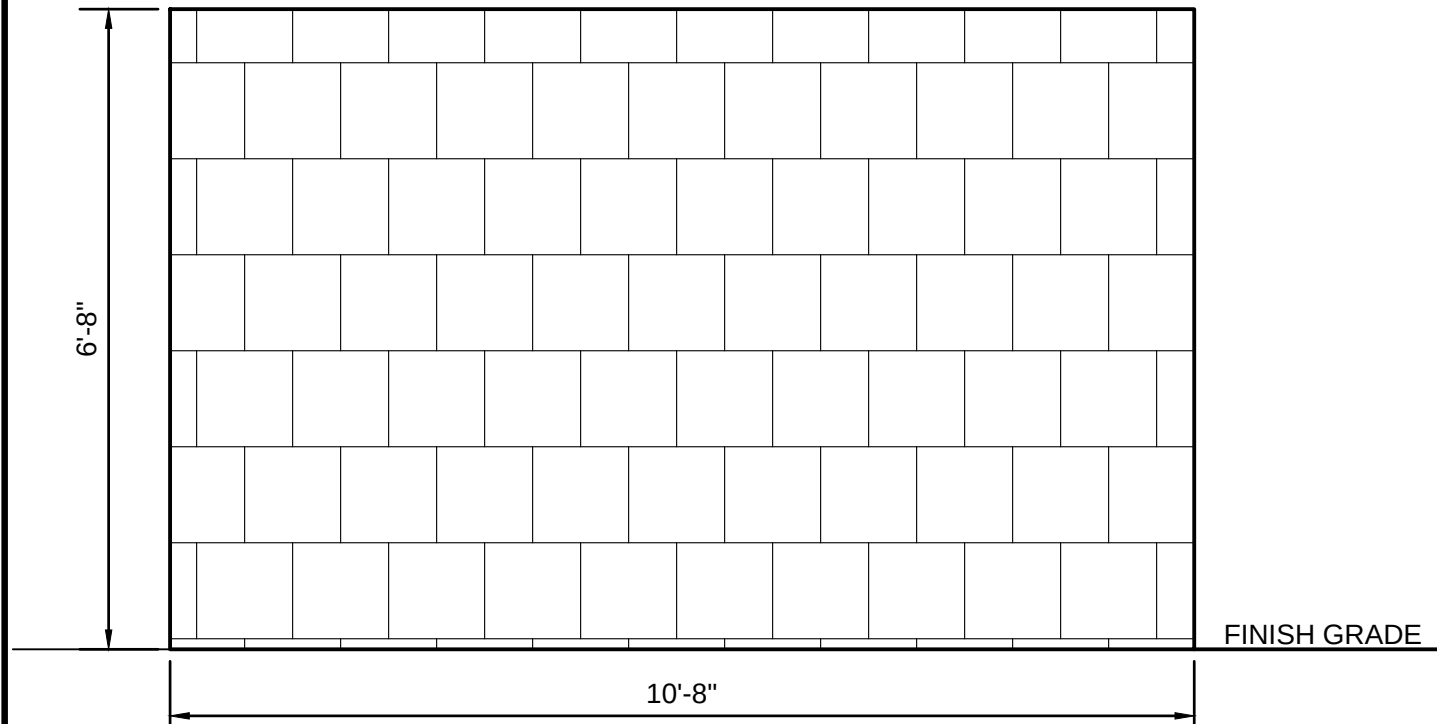
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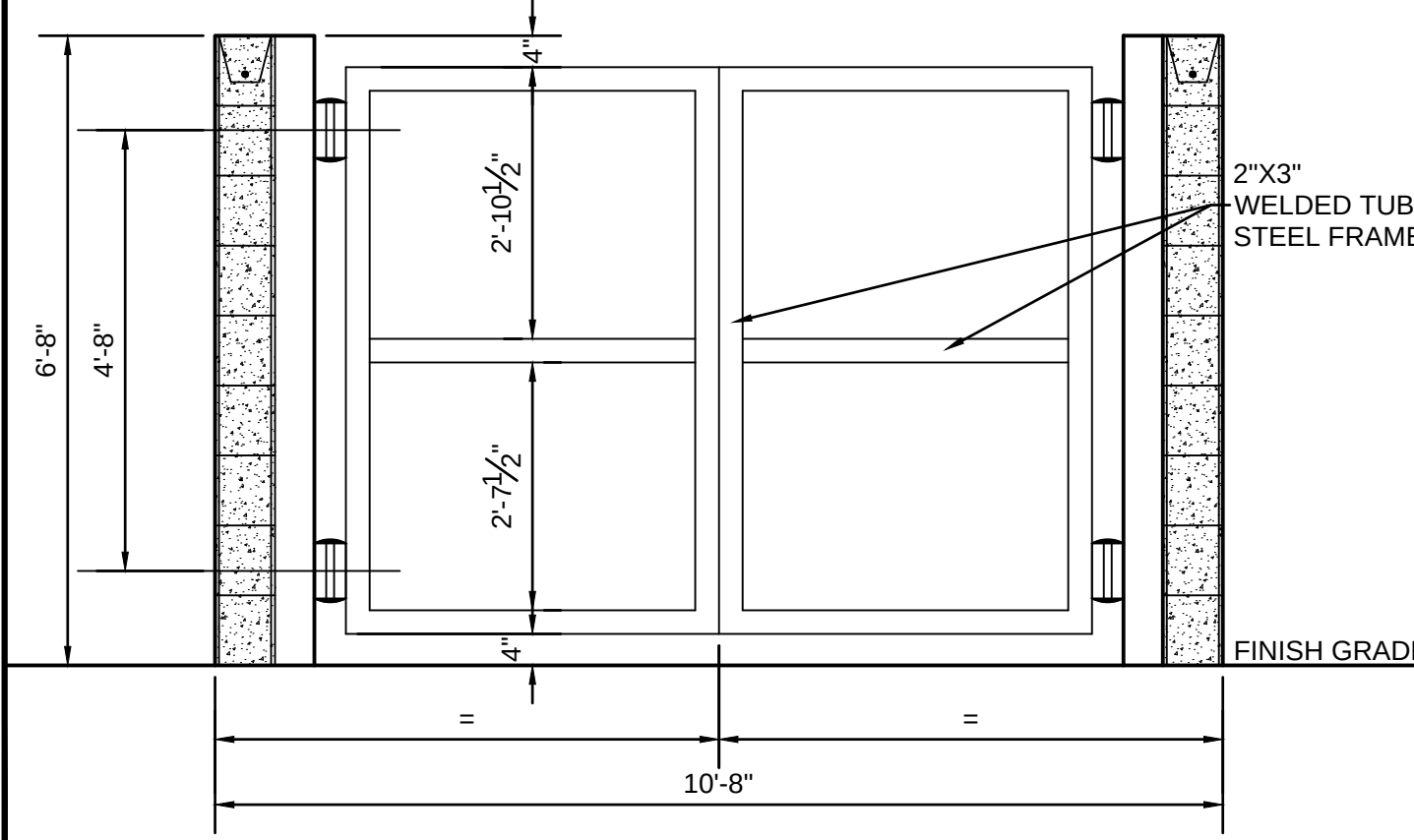
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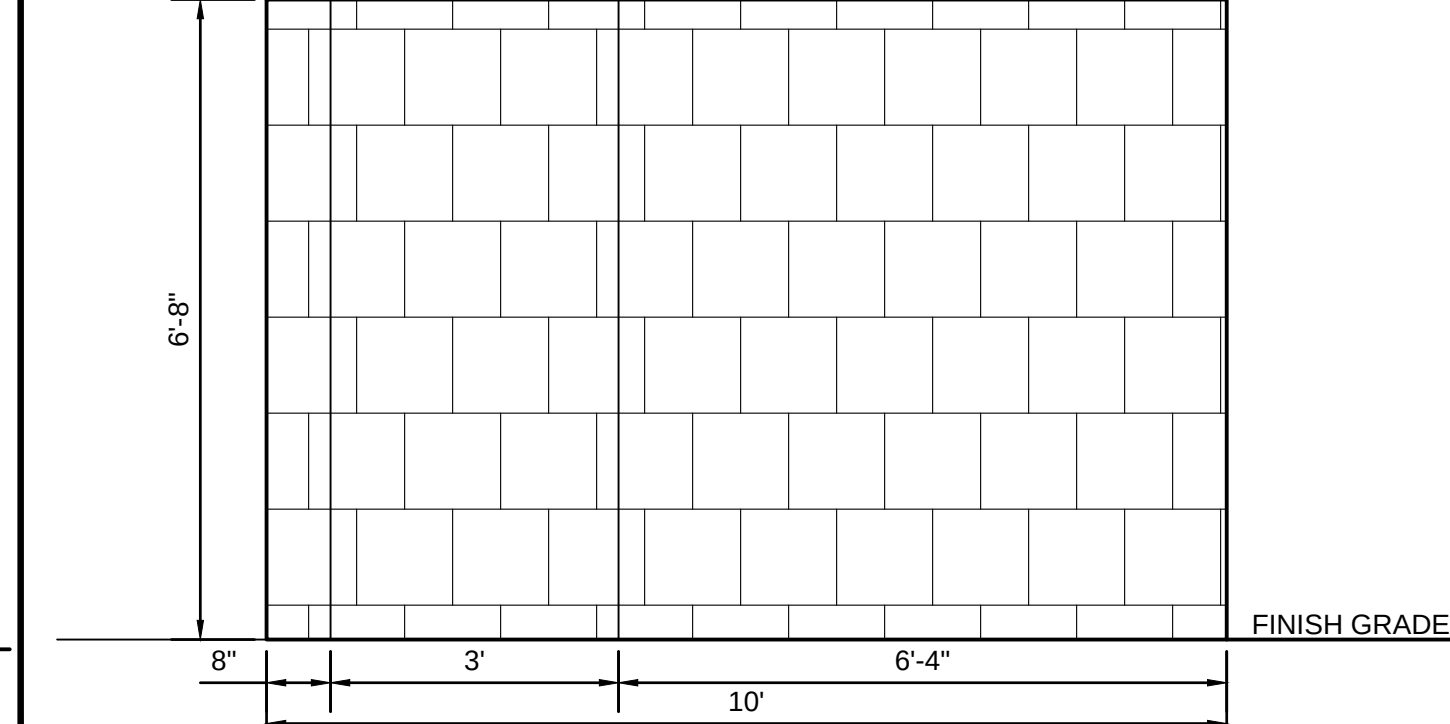
01 DUMPSTER ENCLOSURE PLAN
SCALE: 1/2" = 1'-0"



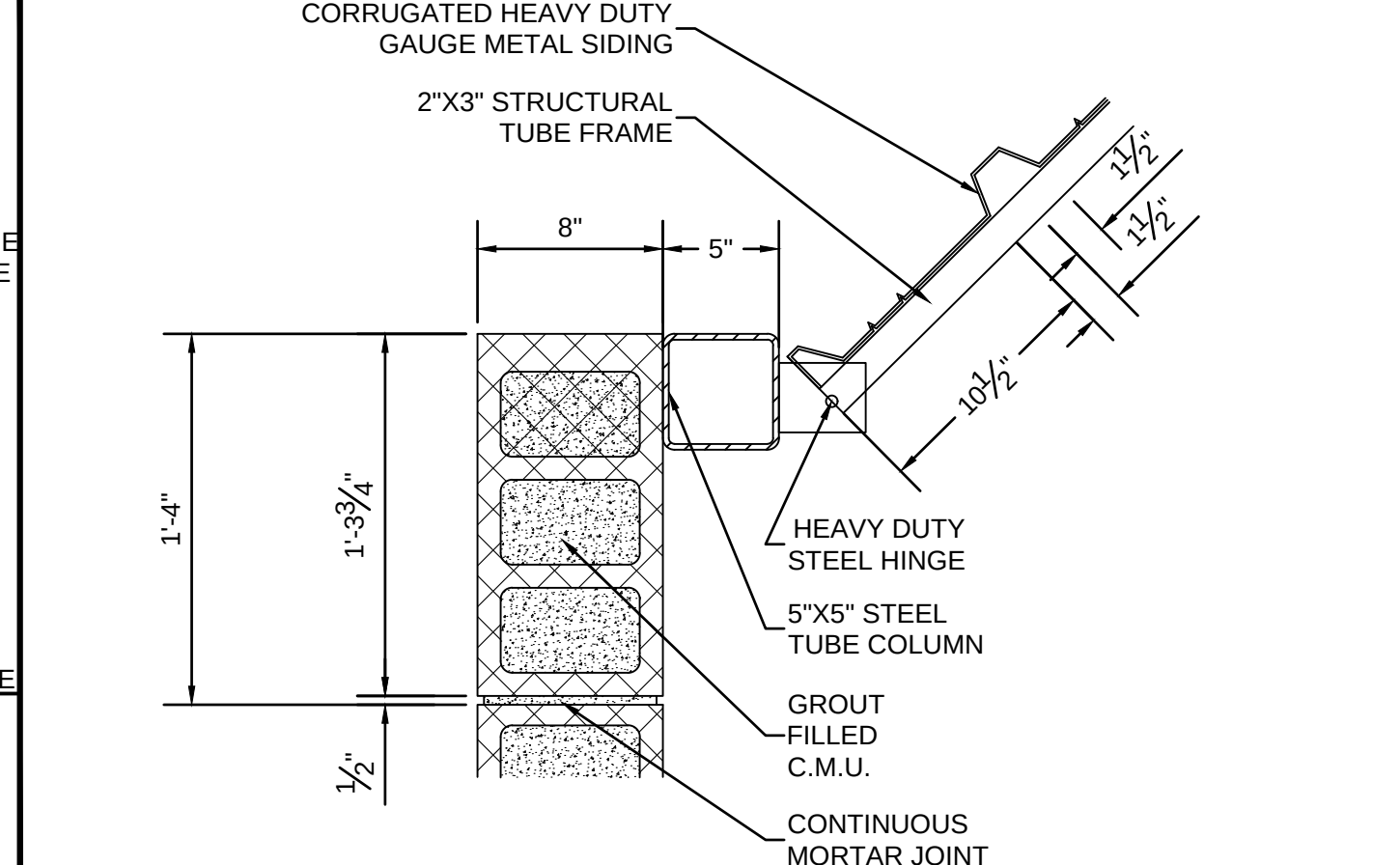
02 DUMPSTER ENCLOSURE REAR ELEVATION
SCALE: 1/2" = 1'-0"



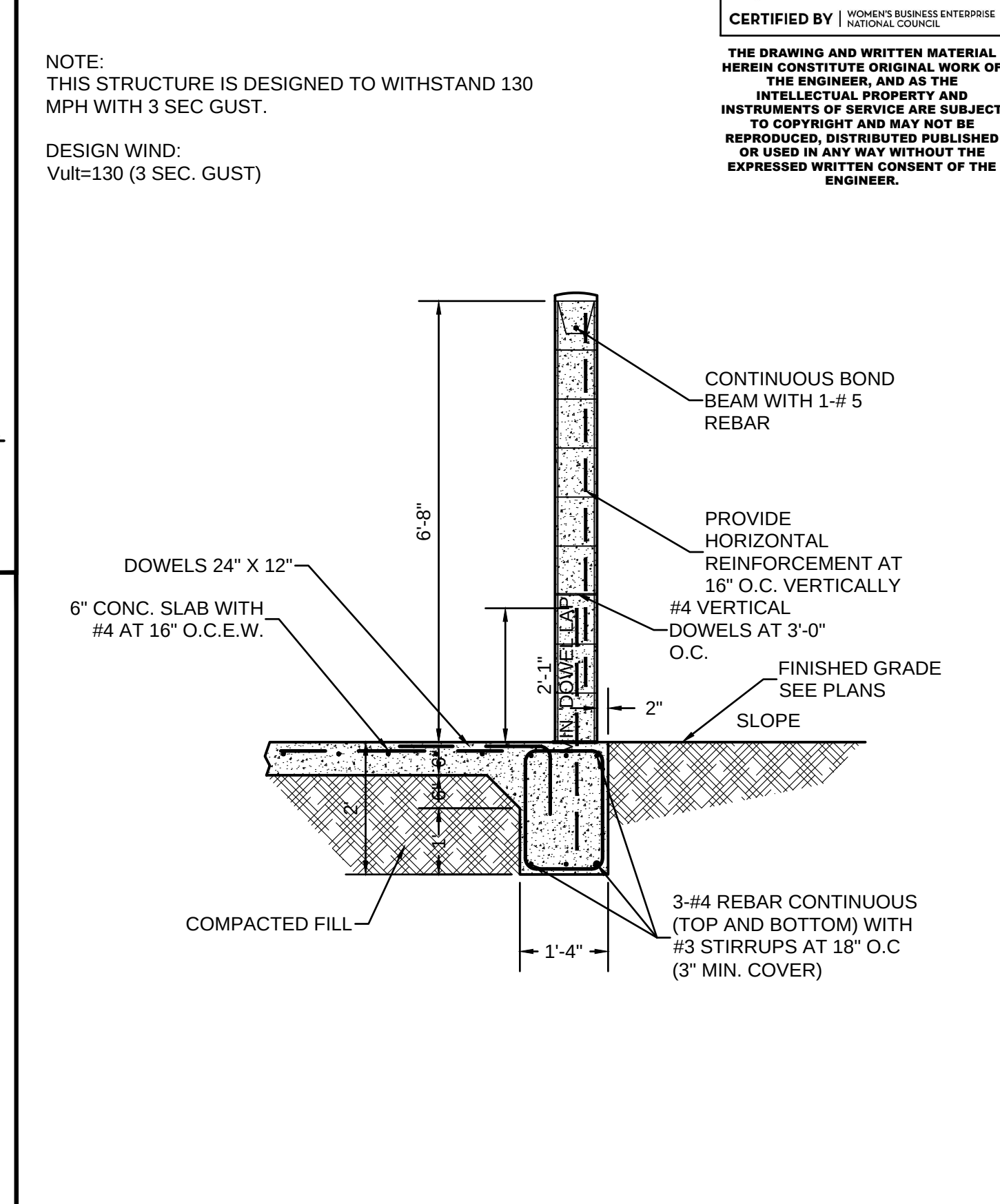
03 DUMPSTER ENCLOSURE SECTION
SCALE: 1/2" = 1'-0"



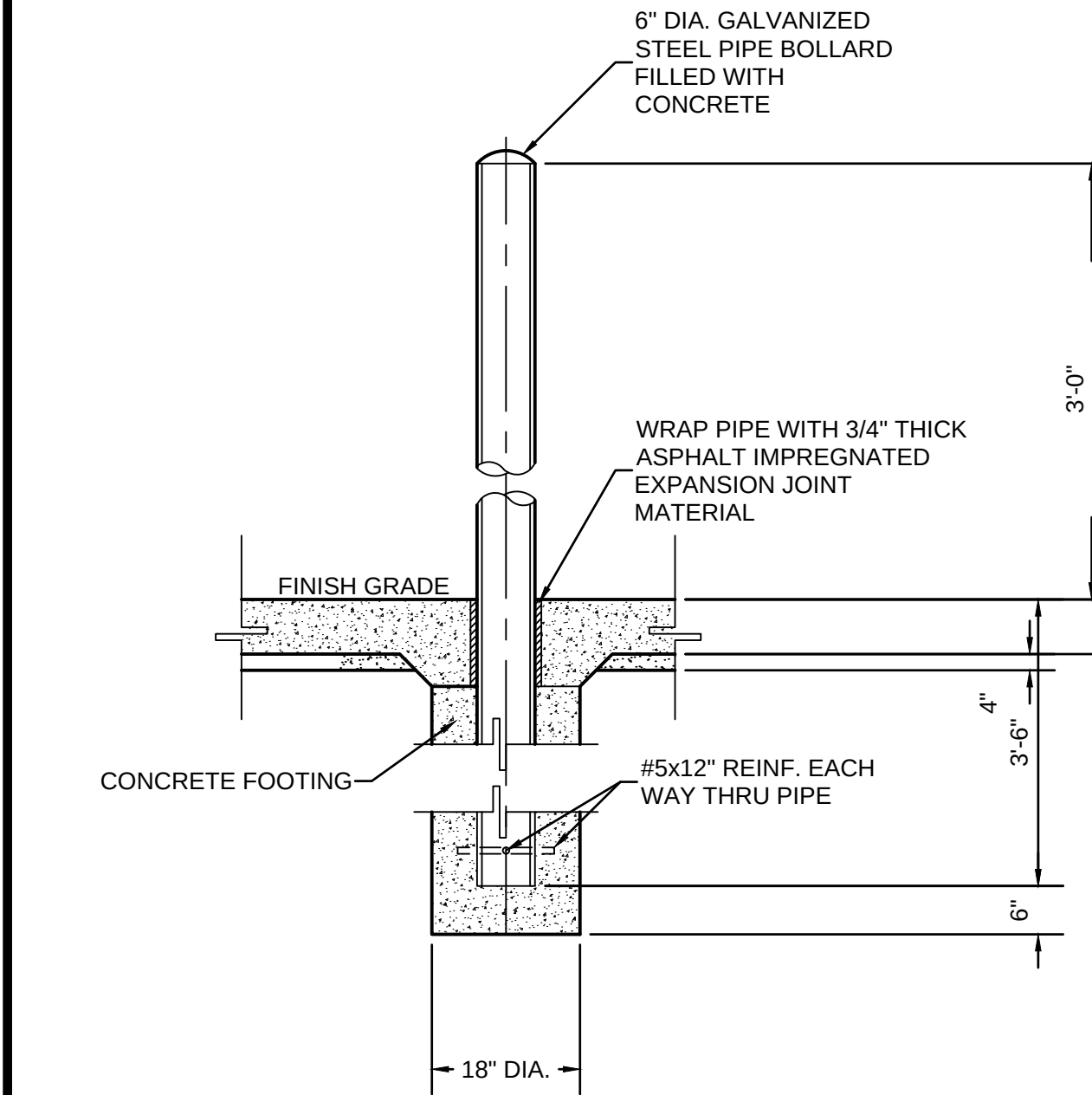
04 DUMPSTER ENCLOSURE SIDE ELEVATION
SCALE: 1/2" = 1'-0"



05 HINGE DETAIL
SCALE: 1 1/2" = 1'-0"



06 DUMPSTER ENCLOSURE WALL SECTION
SCALE: 1/2" = 1'-0"



07 PIPE BOLLARD
SCALE: 1/2" = 1'-0"

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NOTE:
THIS STRUCTURE IS DESIGNED TO WITHSTAND 130 MPH WITH 3 SEC GUST.

DESIGN WIND:
Vult=130 (3 SEC. GUST)

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REVISION	No.	1	2	3	4	5

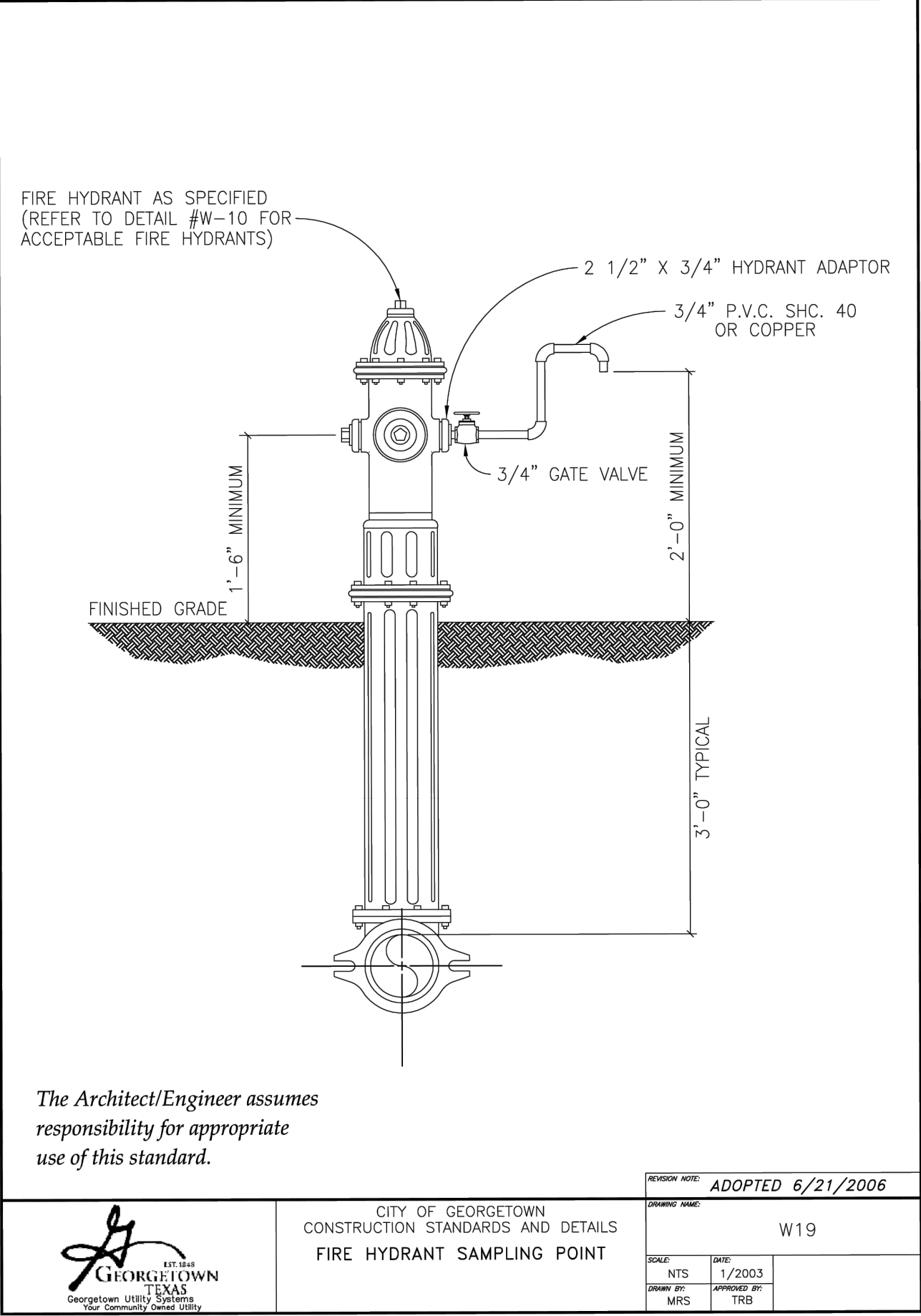
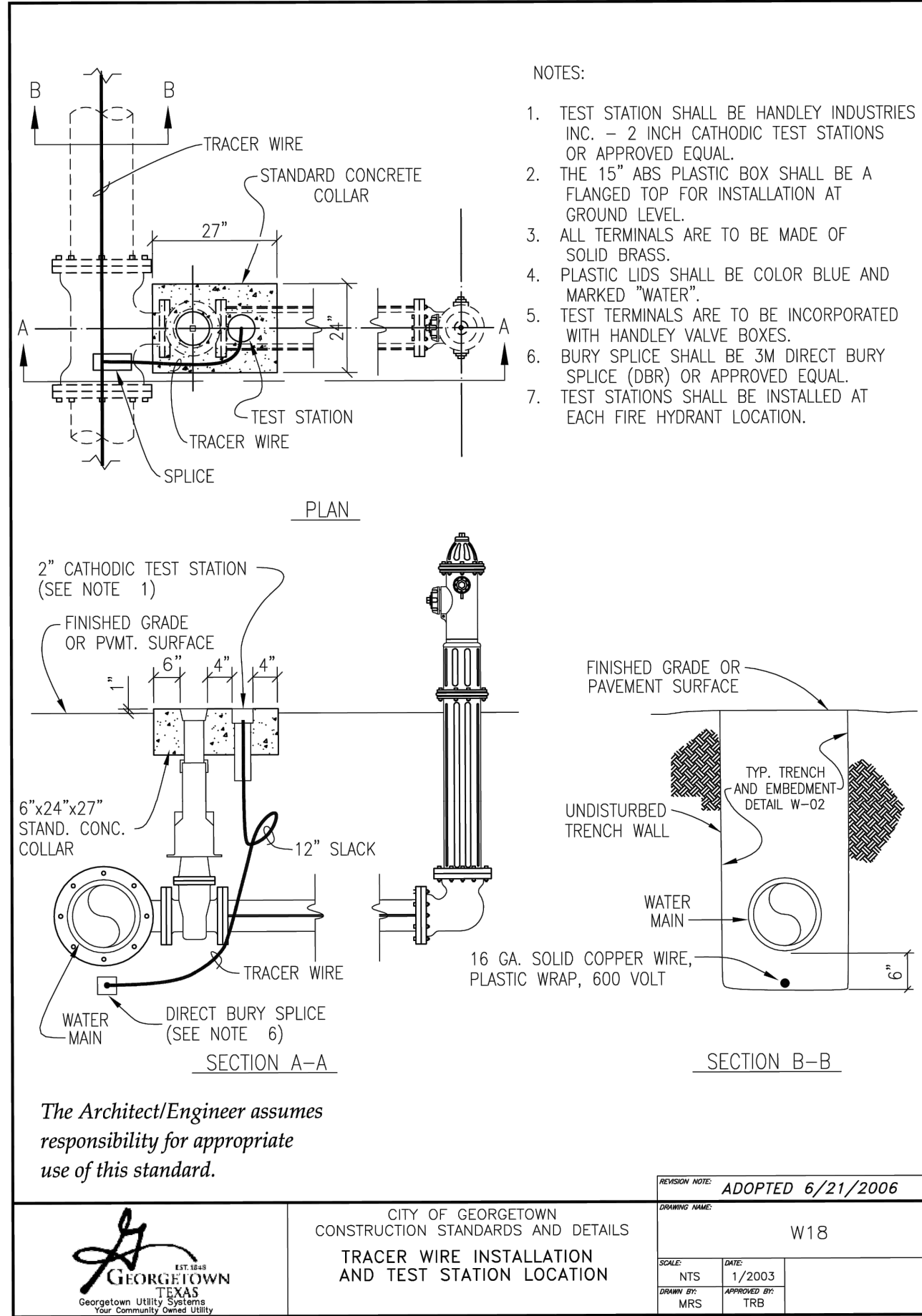
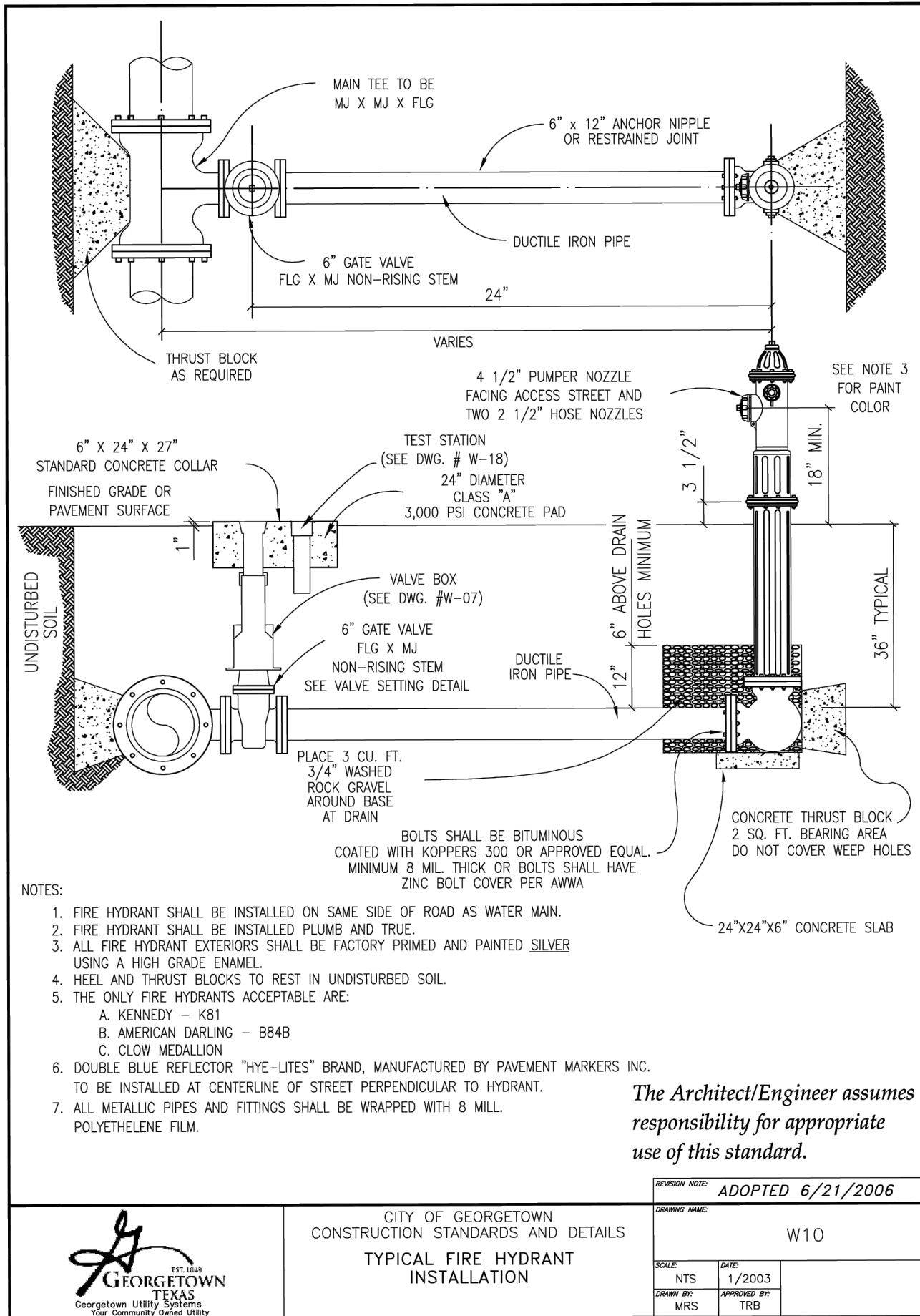
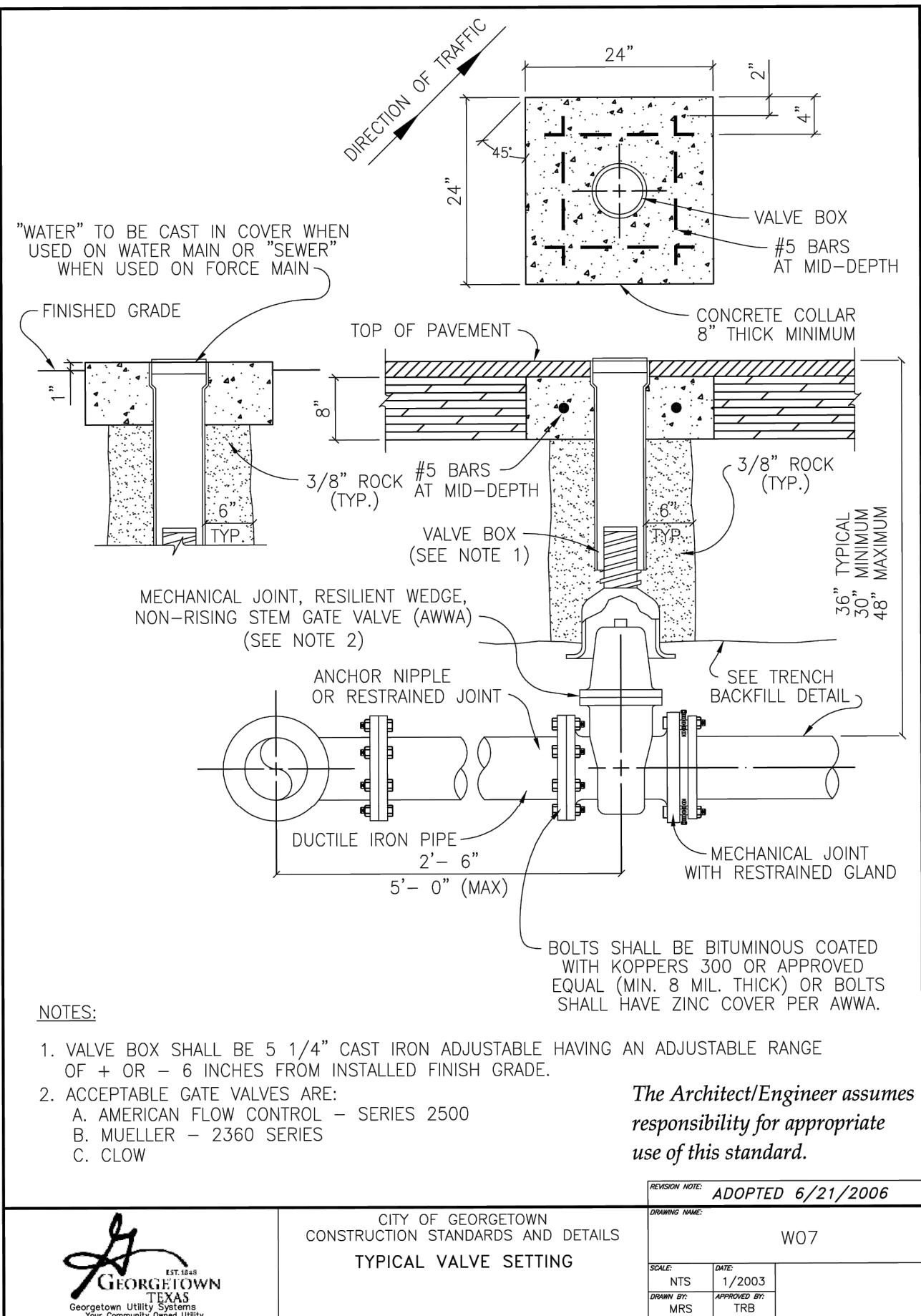
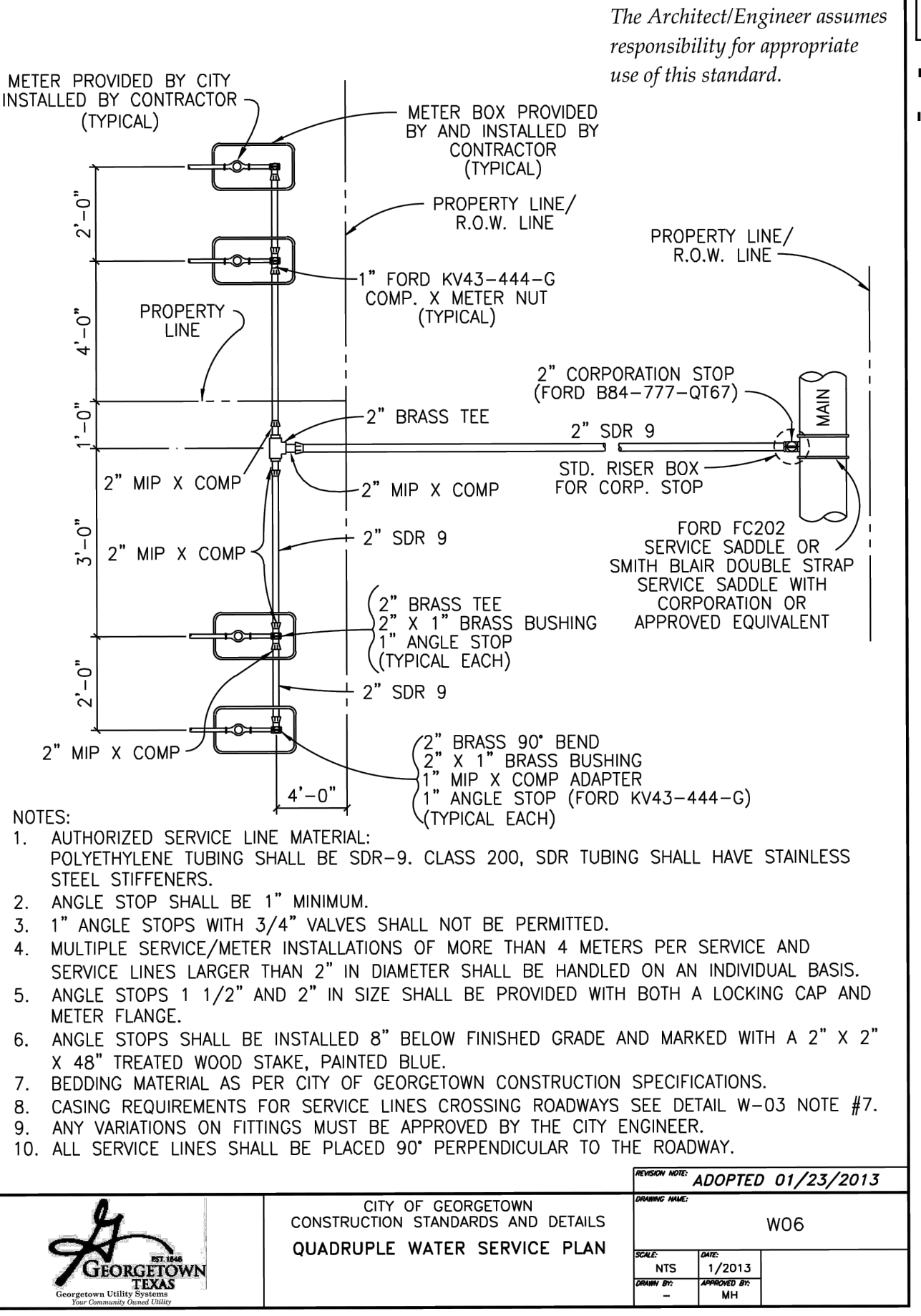
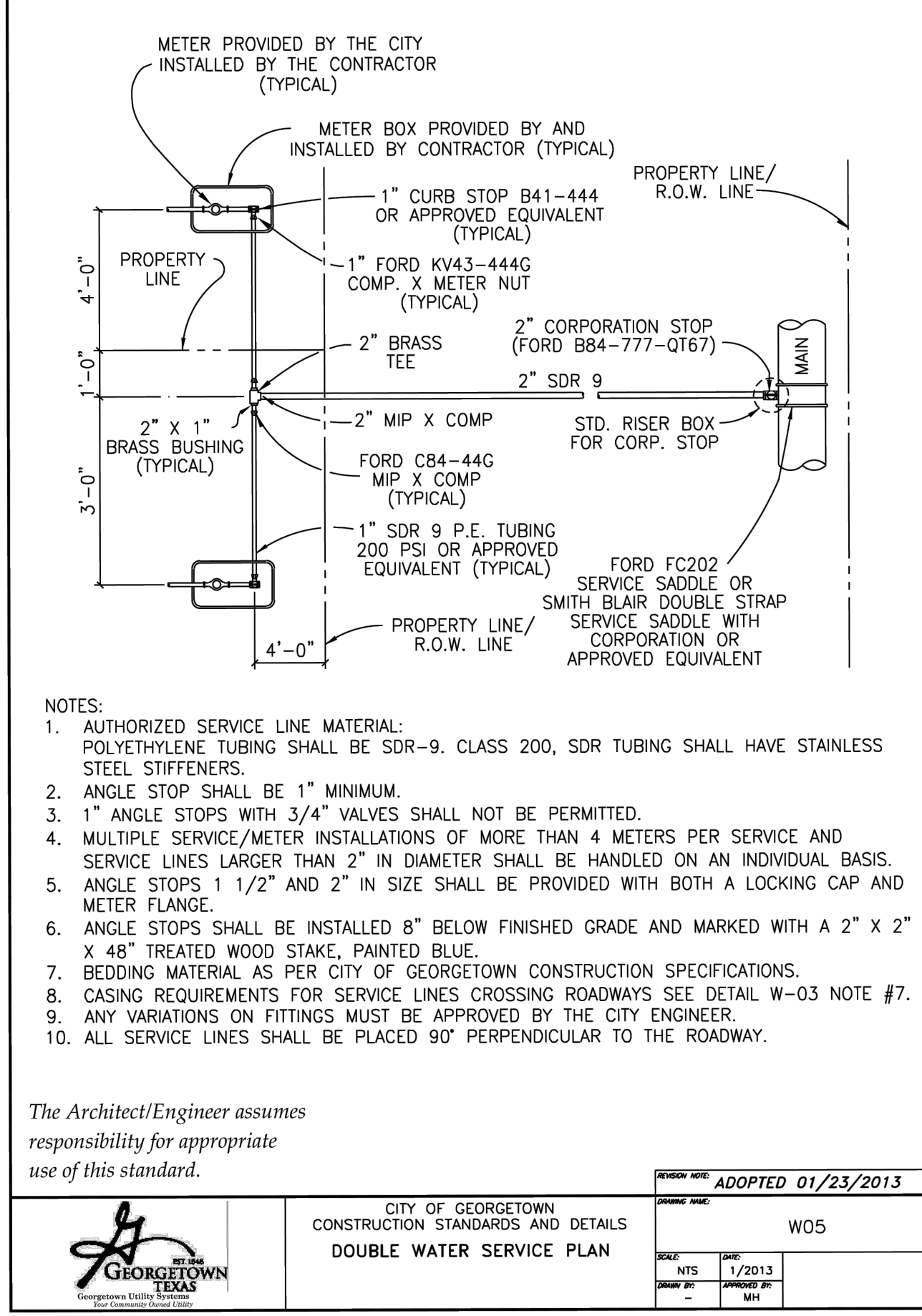
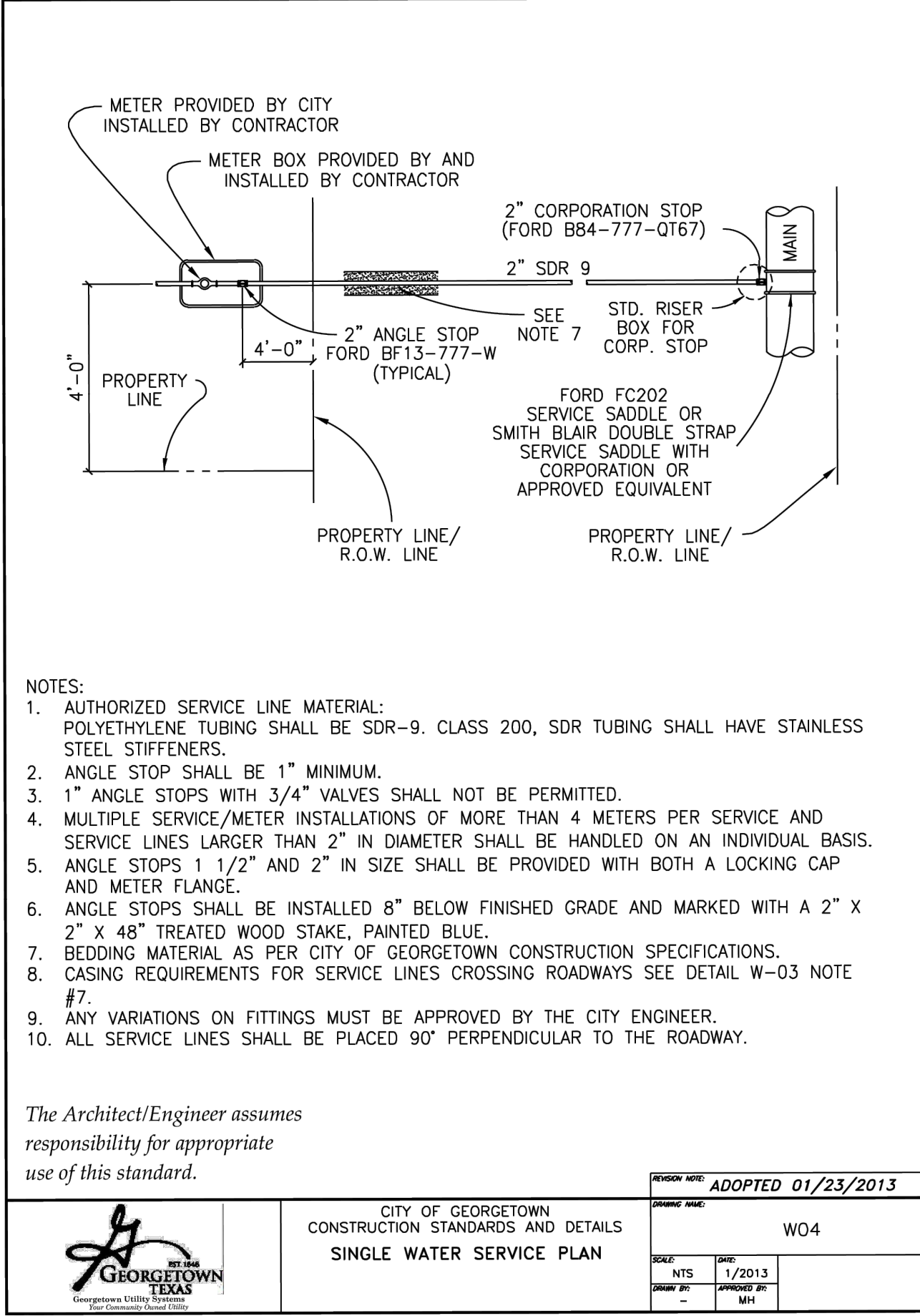
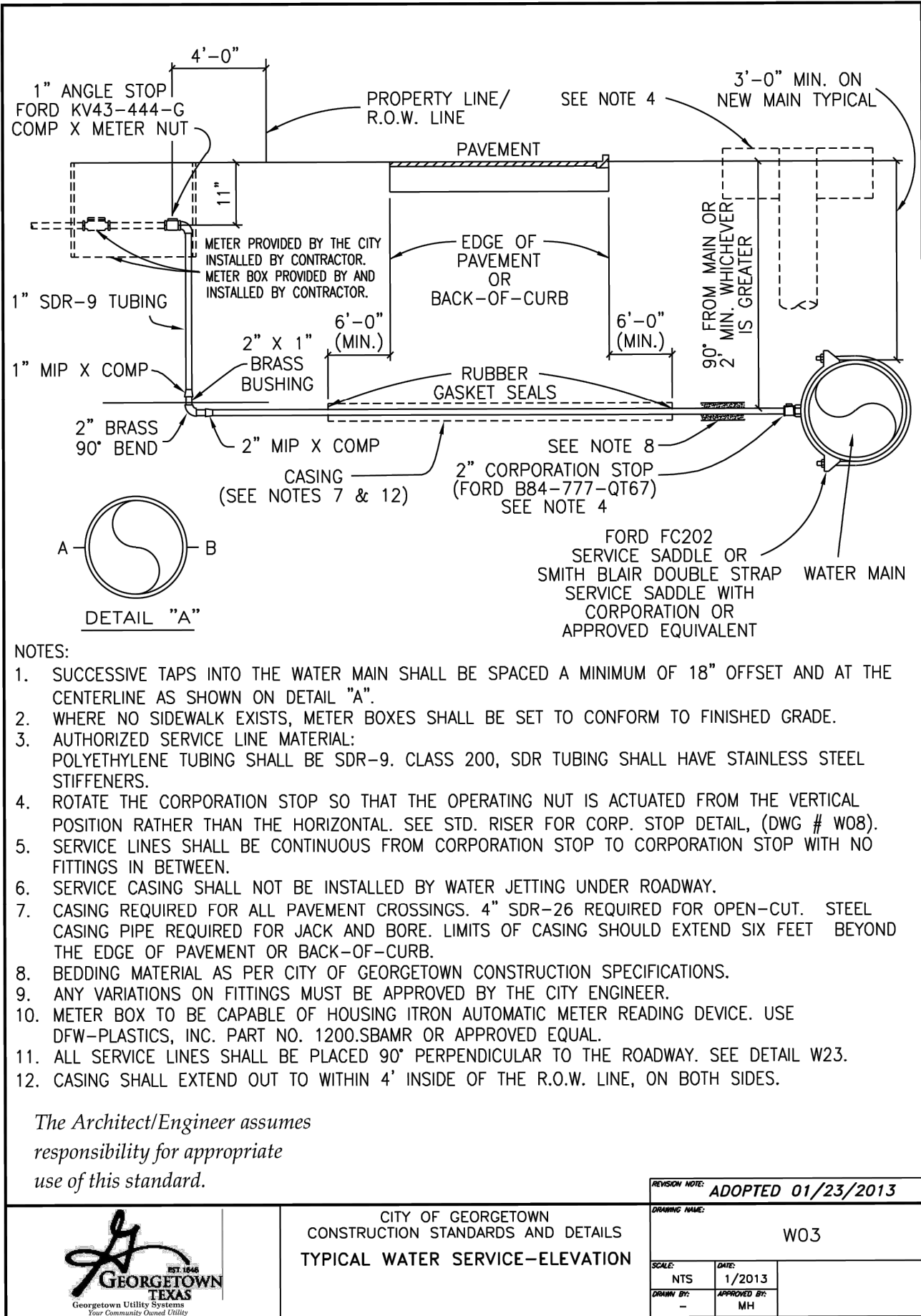
SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
STANDARD DETAILS - DUMPSTER



PROJECT NO. 230903	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
06/11/2024			

C19.02

Plotted by: Harry, Plot date: 11/06/2024
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SITE DEVELOPMENT PLANS
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6540 W. SH 29
GEORGETOWN, TEXAS 78628

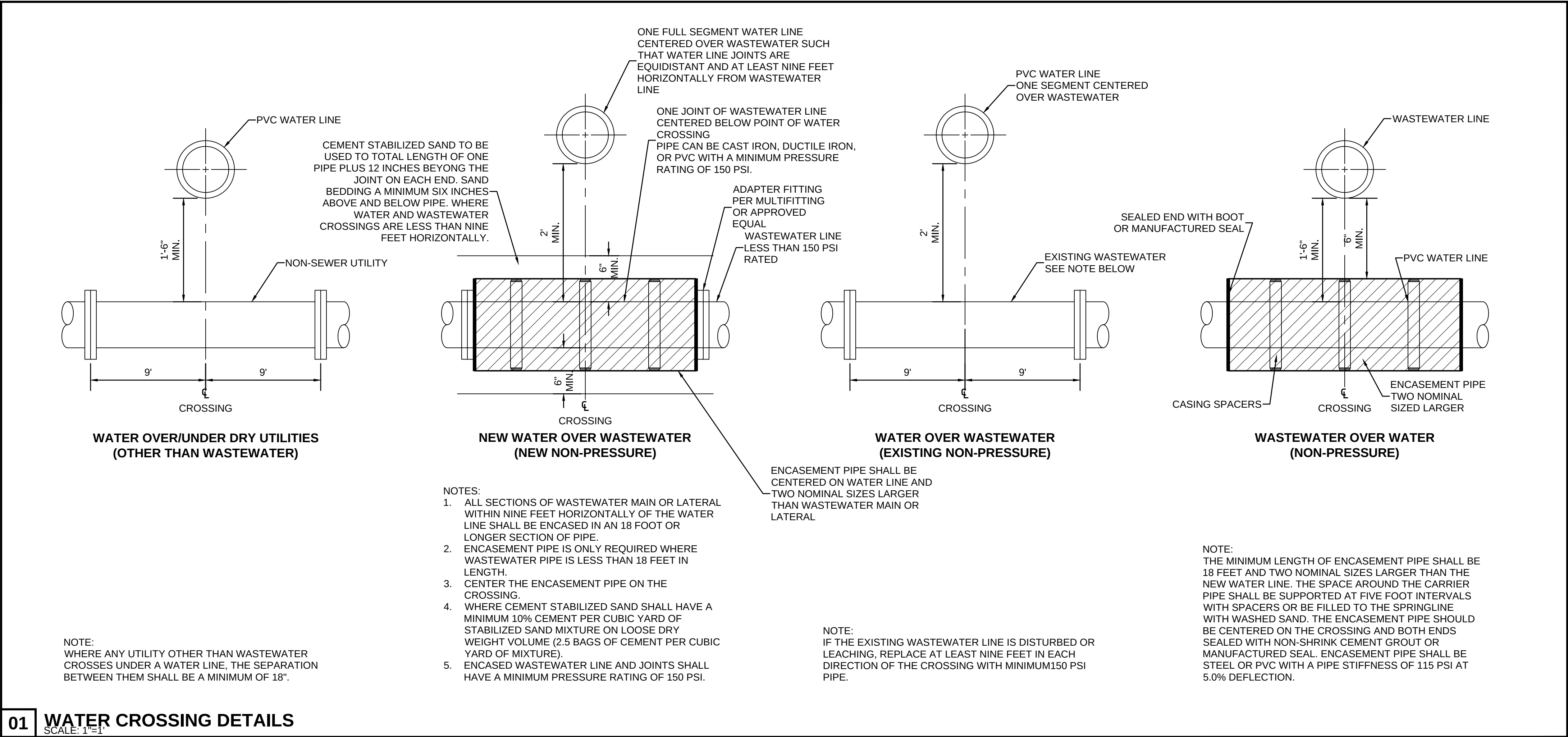
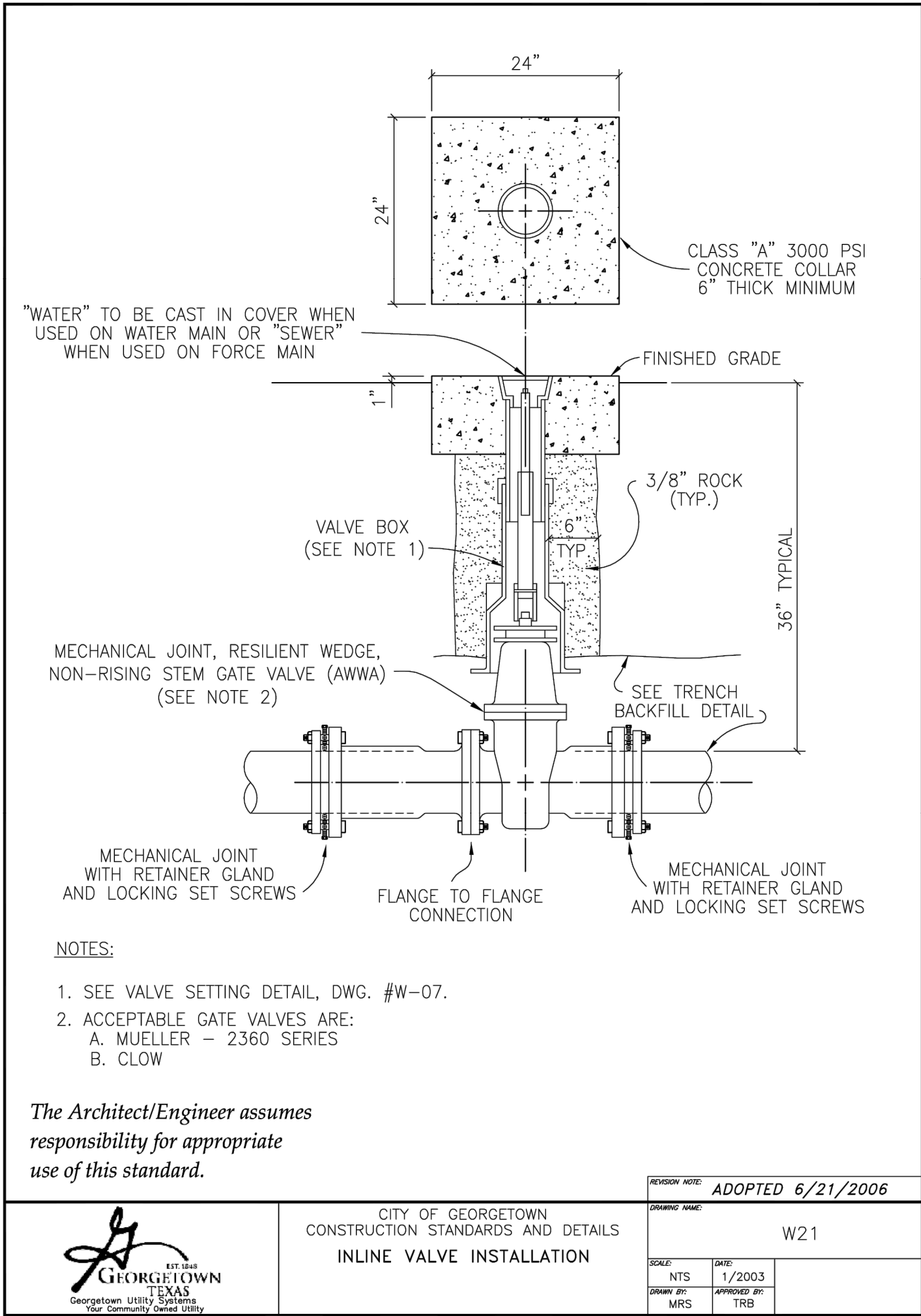
STANDARD DETAILS - WATER 1



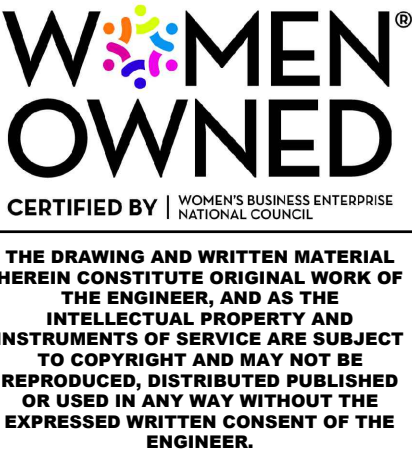
PROJECT NO. 230903
06/11/2024
DRAWN BY: DB
CHECKED BY: AR
APPROVED BY: JH

C20.00

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02_projects\2023\230903 lott bros\07 Sheet\SD\230903 DETAILS.dwg



01 WATER CROSSING DETAILS
SCALE: 1"=1'



Henderson Professional Engineers
600 ROUND ROCK WEST
DRIVE, SUITE 604
ROUND ROCK, TX 78681
512.350.6228
PLLS FRM #F-22208
www.hendersonpe.com
WB210166 | HUB 18337845300

REVISION	No.
	1
	2
	3
	4
	5

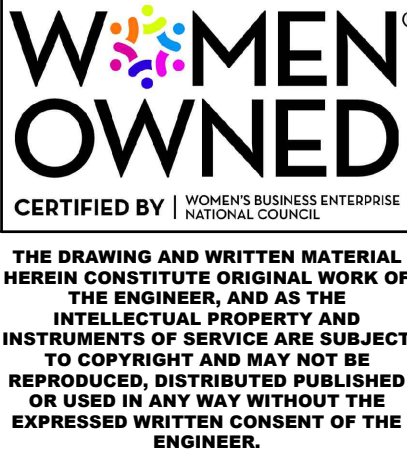
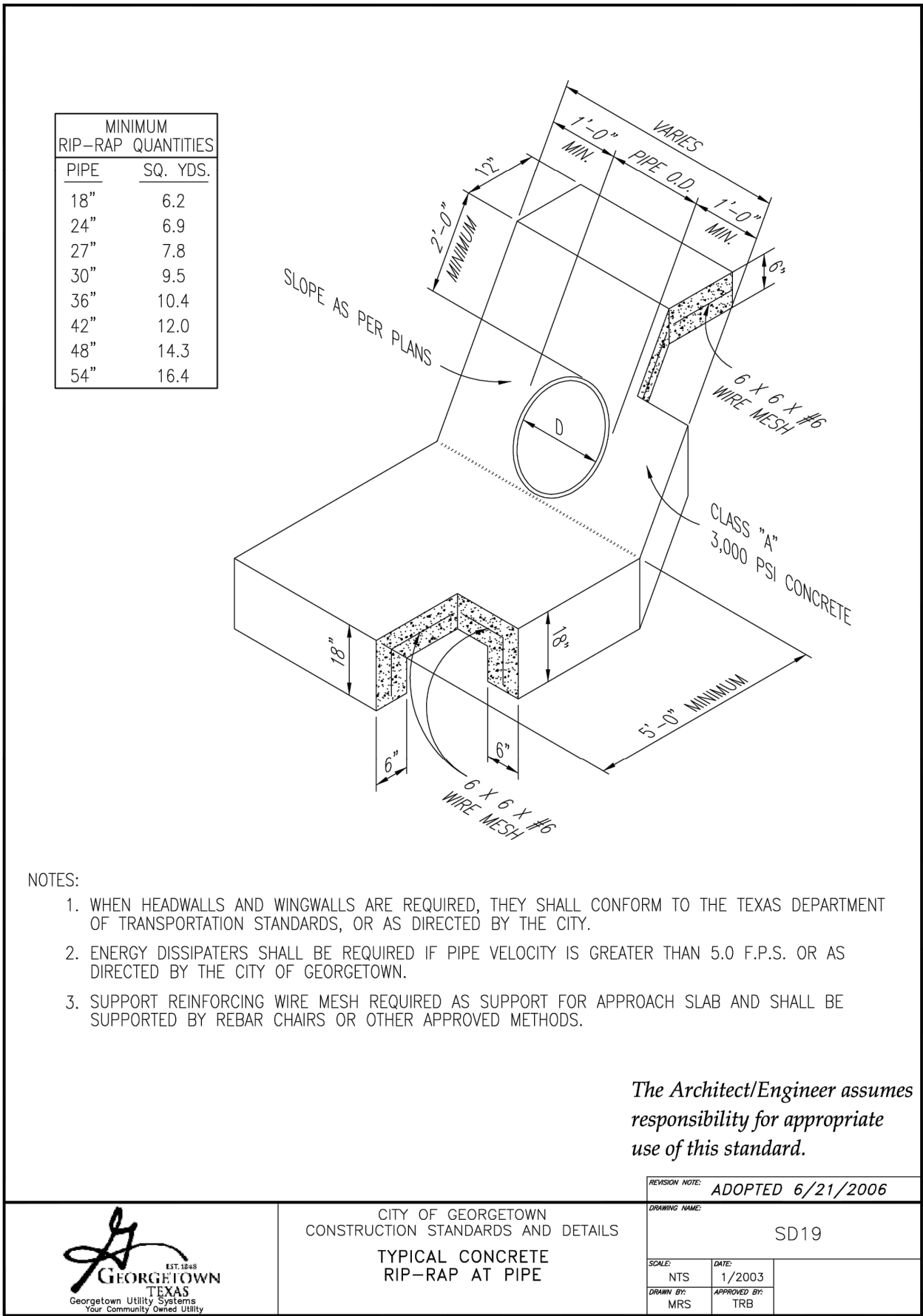
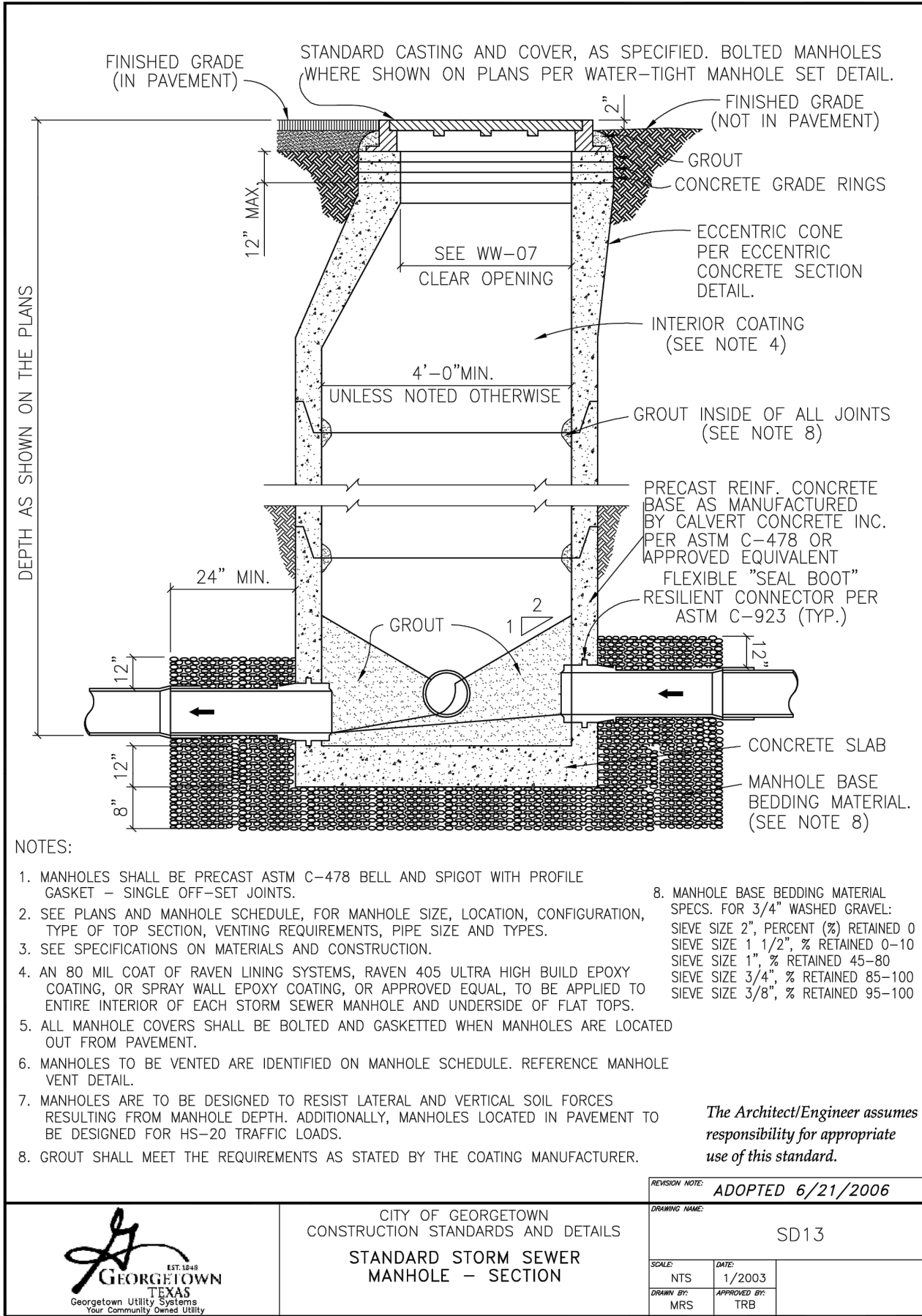
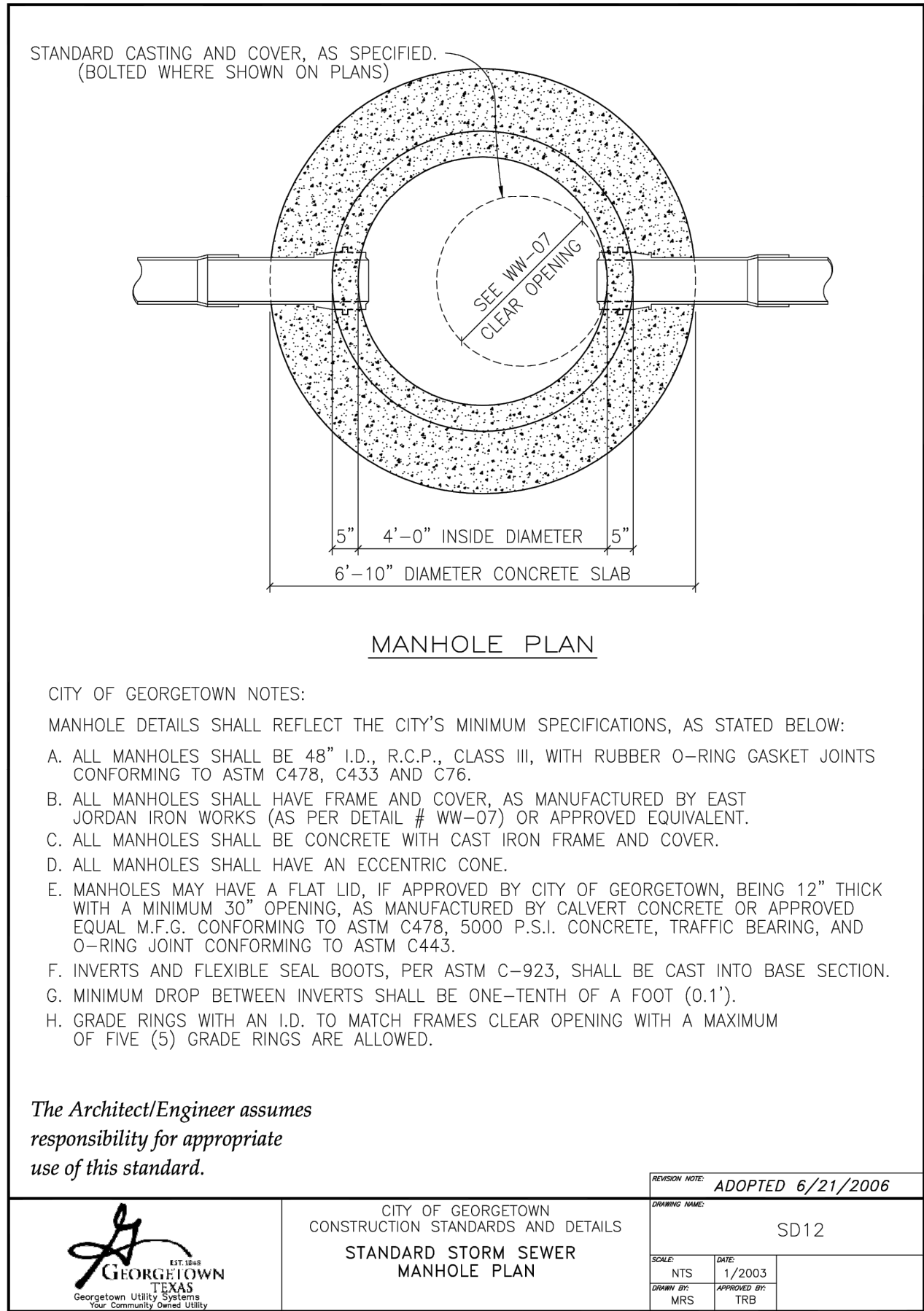
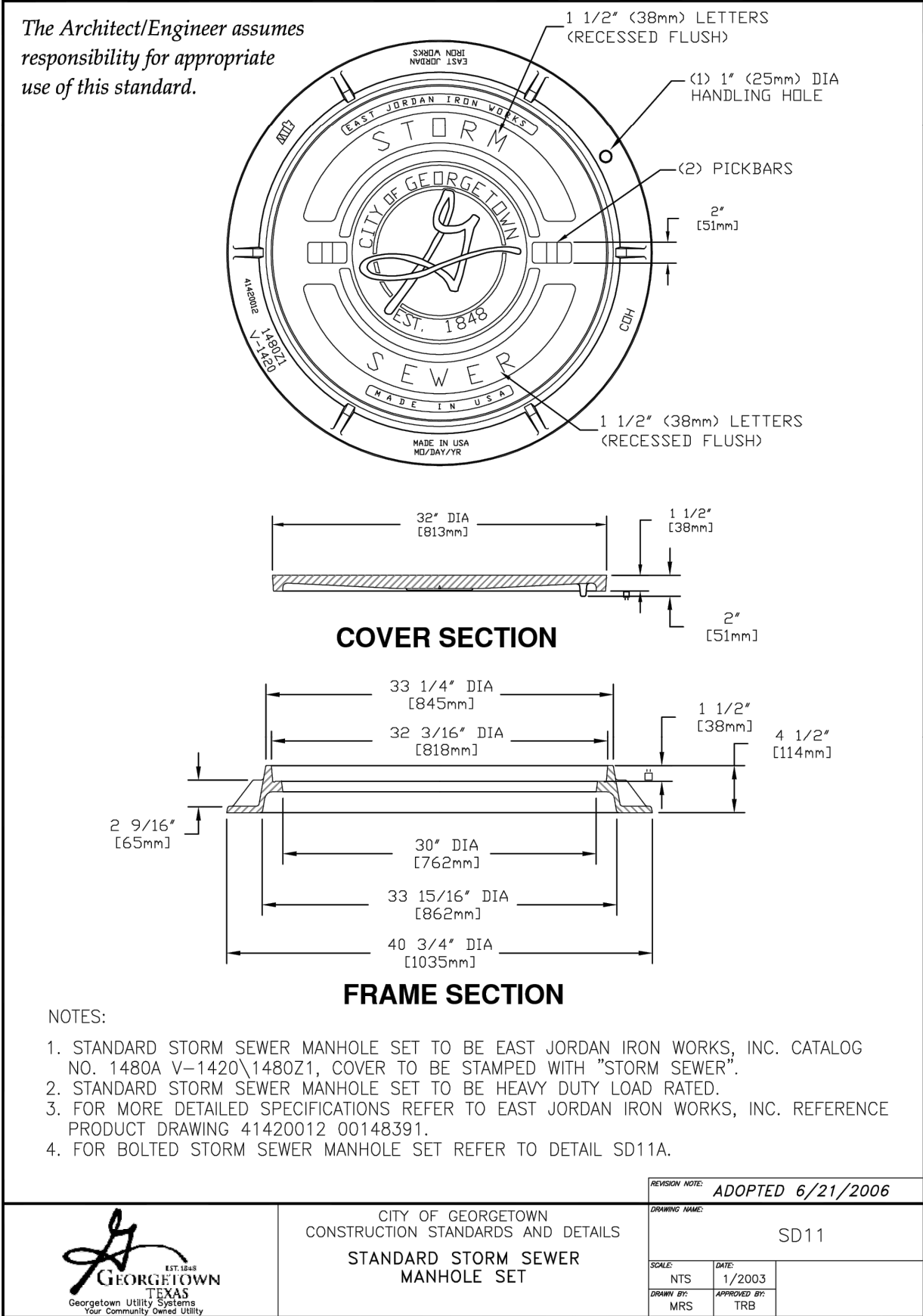
SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
STANDARD DETAILS - WATER 2



PROJECT NO. 230903	DATE 06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C20.01

Plotted by: Harry, Plot date: 11/06/2024
File name: h:\02 projects\2023\230903 lbt.bros\07 Sheet\SD12\30903 DETAILS.dwg



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REVISION	No.	1	2	3	4	5

SITE DEVELOPMENT PLANS
TO SERVE
CROSS CREEK COMMERCIAL PARK
6540 W. SH 29
GEORGETOWN, TEXAS 78628
STANDARD DETAILS - STORM SEWER



PROJECT NO. 230903	06/11/2024	DRAWN BY: DB	CHECKED BY: AR	APPROVED BY: JH
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C21.00



Attachment G - Inspection, Maintenance, Repair and Retrofit Plan.



STORMWATER MAINTENANCE PLAN

It is the responsibility of the property owner's association to maintain detention ponds on nonresidential property, unless otherwise approved by the City. If regular maintenance and inspections are not undertaken, the detention pond will not achieve its intended purposes and can create nuisance conditions for nearby residents. This page provides guidance on maintenance and inspection activities that are typically required for detention ponds, along with a suggested frequency for each activity.

Inspection Activities	Suggested Schedule
After several storm events or an extreme storm event, inspect for: bank stability; signs of erosion; and damage to, or clogging of, the outlet structures and pilot channels.	As Needed
Note excessive erosion of pond banks or bottom; trash and debris; clogging of the outlet structures and any pilot channels; sediment accumulation in the pond and inlet/outlet structures; tree growth on pond walls; the presence of burrowing animals; standing water where there should be none; vigor and density of the grass turf on the pond side slopes and floor; differential settlement; cracking; leakage; and slope stability.	Semi-annually
Inspect that the outlet structures, pipes, level spreaders, and downstream and pilot channels are free of debris and are operational.	Annually
Note signs of pollution, such as oil sheens, discolored water, or unpleasant odors.	Annually
Check for sediment accumulation in the facility.	Annually

Maintenance Activities	Suggested Schedule
Mowing the facility. Mulch the grass or catch and remove the grass clippings.	Monthly or As Needed
Debris and litter removal.	Monthly or As Needed
Seed or sod to restore dead or damaged ground cover.	Annual or As Needed
Repair and revegetate eroded or undercut areas. Repair any damage to the structural elements of the pond.	As Needed
Remove vegetation that may hinder the operation of the pond.	As Needed
Monitor sediment accumulations and remove sediment when the pond volume has been reduced by 20%.	10-years or As Needed



Additional Maintenance Notes:

Besides the detention pond, outlet structures, pipes, level spreader, and channels that are mentioned in the suggested maintenance plan, any other components of stormwater management should also be checked periodically and kept in full working order. Furthermore, ensure that any potential sources of debris on the property does not contribute to the deterioration of the stormwater management structures. Failure to do so could not only cause maintenance issues to the aforementioned stormwater management structures, but negatively impact the ability of the property as a whole to handle storm events.

Recommended Frequency of Service:

Potential sources of debris on the property include, but are not limited to, the townhome building, garage, and workshop. Other components of stormwater management include, but are not limited to, roof gutters and roof leaders. Ultimately, the frequency of inspection and service cleaning of these sources and components depends on the amount of runoff, pollutant loading, and interference from debris (leaves, vegetation, trash, etc.). It is recommended that they are to be inspected and cleaned at least four times a year (especially during the fall, when leaves have fallen from the trees), both to maintain the function of those components and appearances of the property.

Suggested Service Procedures:

Roof gutters: The roof gutters of the house shall be inspected and cleared of any leaves, twigs, debris, etc. This shall be done at in the early spring, and late fall after all of the leaves have fallen from trees.

Roof Leaders: The maintenance of the roof leaders shall be in accordance with the aforementioned suggested schedule and shall include the inspection of the leaders via the cleanouts and removal of any debris, obstruction and sediment.

Reporting:

A maintenance log shall be kept of each inspection outlining the items inspected and the maintenance performed. These logs should be kept on file by the Owner and must be shared with the City upon request.



DRY POND INSPECTION AND MAINTENANCE CHECKLIST

Facility:			
Location/Address:			
Date:	Time:	Weather Conditions:	Date of Last Inspection:
Inspector:		Title:	
Rain in Last 48 Hours: <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes, list amount and timing:	
Pretreatment: <input type="checkbox"/> vegetated filter strip <input type="checkbox"/> swale <input type="checkbox"/> forebay <input type="checkbox"/> other, specify:			
Site Plan or As-Built Plan Available: <input type="checkbox"/> Yes <input type="checkbox"/> No			

Inspection Item		Comment	Action Needed
1. PRETREATMENT			
Sediment has accumulated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Trash and debris have accumulated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
2. DEWATERING			
The water quality orifice is visible.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
3. INLETS			
Inlets are in poor structural condition.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Sediment has accumulated and/or is blocking the inlets.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Erosion is occurring around the inlets.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
4. EMBANKMENT			
Sinkholes or cracks are visible in the embankment.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Trees or woody vegetation present on the dam or embankment.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
5. POND AREA			
Trash and debris have accumulated.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Invasive plants are present.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Erosion is evident on the pond floor or low flow channel.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
The micro-pool has sediment accumulation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Sinkholes or animal borrows are present.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
6. SIDE WALLS AND EMBANKMENT			
Erosion is evident.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Sinkholes, animal borrows, or instability are present.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
7. OUTLETS AND OVERFLOW STRUCTURE			
Outlets or overflow structures in poor structural condition.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Sediment, trash or debris is blocking the outlets or overflow structure.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Erosion is occurring around the outlets or overflow structure.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No
Joints are not watertight and/or leaks are visible.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		<input type="checkbox"/> Yes <input type="checkbox"/> No

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

Tyler Humes

Print Name

Managing Partner

Title - Owner/President/Other

Cross Creek Commercial Park, LLC

of Corporation/Partnership/Entity Name

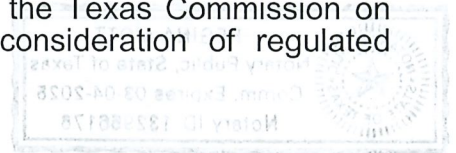
have authorized Jen Henderson, P.E.

Print Name of Agent/Engineer

Henderson Professional Engineers

of Print Name of Firm

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



I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:


Applicant's Signature

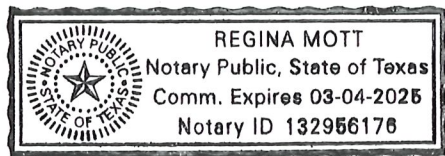
5/10/24
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared Tyler Humes 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 10 day of May.



Regina Mott
NOTARY PUBLIC

Regina Mott
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 03-04-2025

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Cross Creek Commercial Park

Regulated Entity Location: 6540 W SH 29, Georgetown, TX 78628

Name of Customer: Tyler Humes, Cross Creek Commercial Park, LLC

Contact Person: Jen Henderson, P.E.

Phone: 737-203-8953

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

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	12.45 Acres	\$ 6,500
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature: 

Date: 5/10/2024

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 Core Data Form

For detailed instructions on completing this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)		
<input 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)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if issued)
CN		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		05/10/2024	
<input checked="" type="checkbox"/> New Customer <input type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership					
<input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)					
<i>The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).</i>					
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)				<i>If new Customer, enter previous Customer below:</i>	
CROSS CREEK COMMERCIAL PARK, LLC					
7. TX SOS/CPA Filing Number		8. TX State Tax ID (11 digits)		9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0805307414		32092510395		99-1113356	
11. Type of Customer:		<input type="checkbox"/> Corporation		<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input checked="" type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship		<input type="checkbox"/> Other:	
12. Number of Employees				13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input 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 type="checkbox"/> Owner <input checked="" type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other:					
<input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant					
15. Mailing Address:	406 N LEE ST.				
	SUITE 201				
	City	ROUND ROCK	State	TX	ZIP 78664 ZIP + 4 4313
16. Country Mailing Information (if outside USA)				17. E-Mail Address (if applicable)	
18. Telephone Number		19. Extension or Code		20. Fax Number (if applicable)	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information								
<i>The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)								
CROSS CREEK COMMERCIAL PARK								
23. Street Address of the Regulated Entity: (No PO Boxes)	1000 CROSS CREEK RD							
	City	GEORGETOWN	State	TX	ZIP	78628	ZIP + 4	
24. County	WILLIAMSON							

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

25. Description to Physical Location:	1/3 MI NORTH OF SH 29, 1.8 MI EAST OF RONALD REAGAN BLVD							
26. Nearest City					State	Nearest ZIP Code		
GEORGETOWN					TX		78628	
<i>Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).</i>								
27. Latitude (N) In Decimal:		30.642247928038994,			28. Longitude (W) In Decimal:		-97.79878199737475	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds			
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)		
6531-04				236200				
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)								
PROPERTY MANAGEMENT								
34. Mailing Address:	406 N LEE ST.							
	SUITE 201							
	City	ROUND ROCK	State	TX	ZIP	78664	ZIP + 4	4313
35. E-Mail Address:		tylerh@lottbrothers.com						
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)		
(512) 401-8882						() -		

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

SECTION IV: Preparer Information

40. Name:	JEN HENDERSON			41. Title:	PROFESSIONAL ENGINEER
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(737) 203-8953		() -	HPE@HENDERSONPE.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:	CROSS CREEK COMMERCIAL PARK, LLC	Job Title:	OWNER	
Name (In Print):	TYLER HUMES	Phone:	(512) 401- 8882	
Signature:			Date:	5/10/2024