MARKET STREET INDUSTRIAL

Water Pollution Abatement Plan

October 10, 2022

Prepared For:
Market Warehouse, LLC
Brentley Brinegar and Ben Williams
410 W. Anderson Avenue,
Round Rock, Texas 78664

Prepared By:
2P Consultants, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664

Michael Easton Mundine, P.E.
Project Manager

TBPE FIRM #F-19351

203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Water Pollution Abatement Plan – Table of Contents

Section i
TCEQ Edwards Aquifer Application Cover Page

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains “possibly sensitive” features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Market Street Industrial						**2. Regulated Entity No.:** RN111418463			
3. Customer Name: Market Warehouse, LLC						**4. Customer No.:** CN605978725			
5. Project Type: **(Please circle/check one)**	(New)		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	(WPAP)	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		(Non-residential)			**8. Site (acres):**		4.9471	
9. Application Fee:	$4,000.00		**10. Permanent BMP(s):**			Batch Detention - smartBATCH			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Williamson		**14. Watershed:**			Berry Creek			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence _X_Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	__	__	__	__	__
Region (1 req.)	__	__	__	__	__
County(ies)	__	__	__	__	__
Groundwater Conservation District(s)	__ Edwards Aquifer Authority __Trinity-Glen Rose	__Edwards Aquifer Authority	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park __San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Michael Easton Mundine, P.E.
Print Name of Customer/Authorized Agent  10/10/2022
Signature of Customer/Authorized Agent Date

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

Section I
General Information Form (TCEQ-0585)

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: Michael Easton Mundine, P.E.

Date: October 10, 2022

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Market Street Industrial
2. County: Williamson
3. Stream Basin: Brazos River
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☒ WPAP
   ☐ SCS
   ☐ Modification
   ☐ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

   Contact Person: Brentley Brinegar
   Entity: Market Warehouse, LLC
   Mailing Address: 410 W. Anderson Avenue
   City, State: Round Rock, Texas Zip: 78664
   Telephone: (512) 940-0188 FAX: _____
   Email Address: bb@512texas.com

8. Agent/Representative (If any):

   Contact Person: Michael Easton Mundine, P.E.
   Entity: 2P Consultants, LLC.
   Mailing Address: 203 E. Main St., Suite 204
   City, State: Round Rock, TX Zip: 78664
   Telephone: (512) 344-9664 FAX: _____
   Email Address: emundine@2Pconsultants.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.

    181 Market Street, Georgetown, Texas 78626

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

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

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

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

    ☒ Survey staking will be completed by this date: October 17, 2022

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:

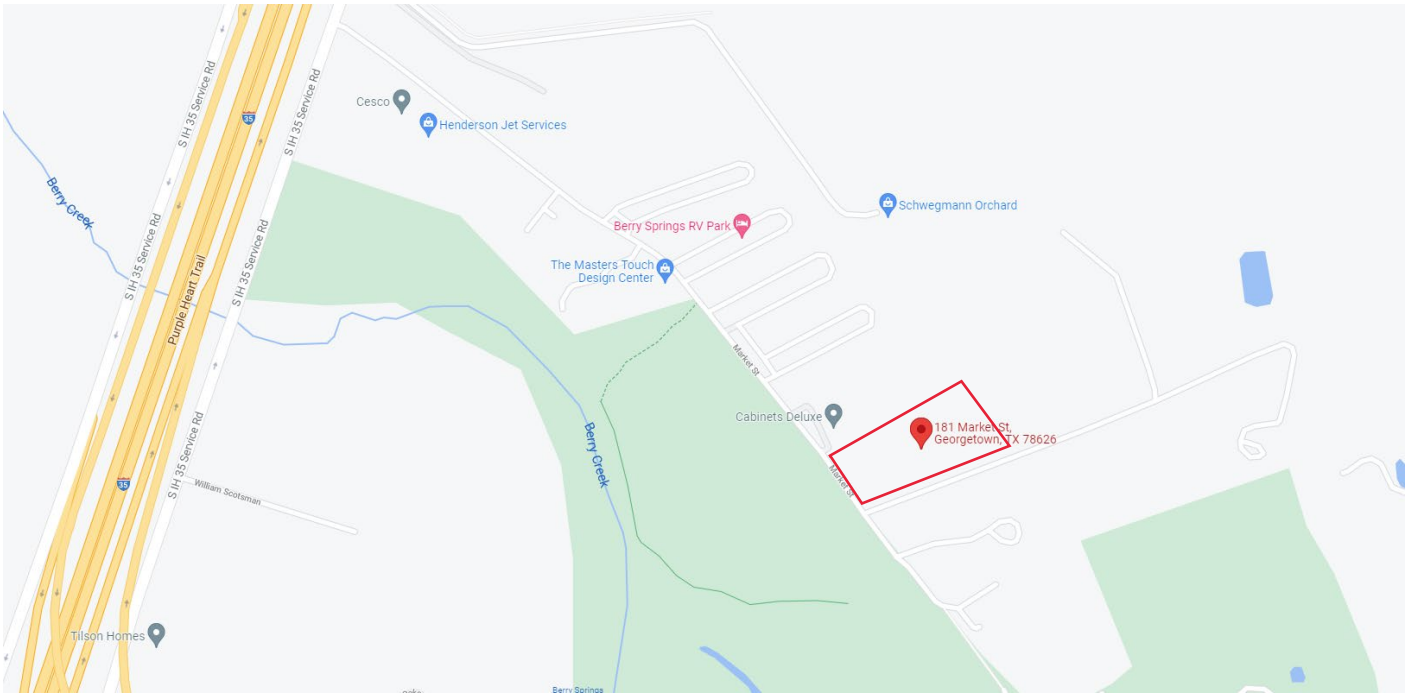
- ☐ TCEQ cashier
- ☒ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
- ☐ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 1A – Road Map

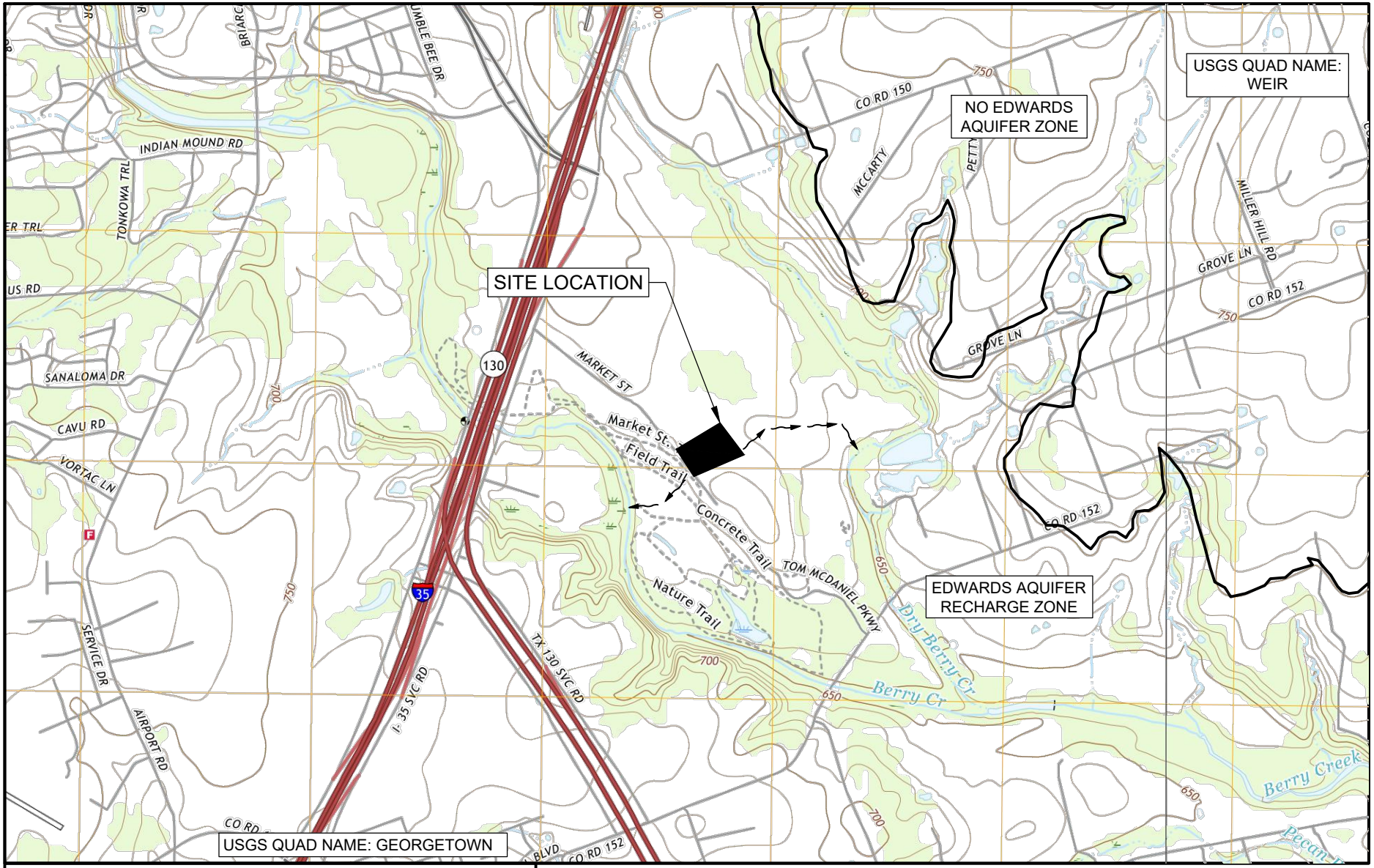


Not To Scale

Site Address: 181 Market Street, Georgetown, Texas 78626

Directions from 2P Consultants:

- Head West on E Main St toward Mays St
- Continue onto W Main St
- Turn right onto S Blair St
- At the traffic circle, take the 2nd exit onto Round Rock Ave
- Turn right onto N Interstate 35 Frontage Rd
- Slight left to merge onto I-35 N
- Merge onto I-35 N
- Take exit 265 toward TX-130/Austin
- Merge onto N Interstate 35 Frontage Rd
- Turn right onto Market St
- Site will be to your left



203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

ATTACHMENT 1B - USGS MAP

MARKET STREET INDUSTRIAL

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 1C – Project Description

The proposed Market Street Industrial is located at 181 Market St, Georgetown, Texas 78626. The development site is comprised of a single lot and is in Williamson County within the Extraterritorial Jurisdiction of the City of Georgetown, Texas. Legal description for this property is S6593 – Resource Commercial Park, Lot 12, acres 4.9471.

The existing site is vacant with no buildings and no trees greater than 8" were observed onsite. There are no existing access drives to the property. Impervious cover within the existing property is due to a turnaround easement resulting in approximately 633 sf, or 0.3% of impervious cover on the 4.9471-acre site.

The proposed site improvements include the construction of a 16,200 square foot industrial manufacturing and warehousing facility, two 15,000 square foot industrial manufacturing and warehousing facilities, and two 4,950 square foot industrial manufacturing and warehousing facilities, as well as the associated drive aisles, parking areas, stormwater facilities, and utilities. The proposed development will create approximately 120,797 sf (2.77 ac) of impervious cover to the site, or 56.02% of the total site.

The proposed increase in impervious cover will be treated by a proposed detention and water quality pond utilizing a Batch Detention System. The Batch Detention System will provide 91% Total Suspended Solids (TSS) removal efficiency. The pond has been sized to remove 80% of the TSS in accordance with the Texas Commission on Environmental Quality (TCEQ) Technical Guidance and an additional removal of 5% of the TSS as required by the City of Georgetown. The site is designed in such a way that a majority of the proposed improvements will drain across the surface toward the proposed detention and water quality pond located on the northeast corner of the property.

The proposed buildings will be served by 6" wastewater lines that feed into a 6" wastewater main that conveys the wastewater to a proposed septic field.

Section II
Geologic Assessment Form (TCEQ-0585)

Geologic Assessment of 181 Market Street, 5-Acre Tract, Georgetown, Williamson County, Texas

DECEMBER 2021

PREPARED FOR

2P Consultants, LLC

PREPARED BY

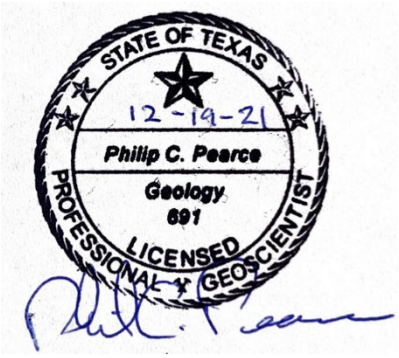
SWCA Environmental Consultants

Texas Board of Professional Geoscientists, Firm Registration No. 50159

GEOLOGIC ASSESSMENT
OF 181 MARKET STREET, 5-ACRE TRACT, GEORGETOWN, WILLIAMSON COUNTY, TEXAS

Prepared for

2P Consultants, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664



Prepared by

Philip Pearce, P.G.

SWCA Environmental Consultants
Texas Board of Professional Geoscientists, Firm Registration No. 50159
4949 N. Loop 1604 W, Suite 235
San Antonio, Texas 78249
www.swca.com

SWCA Project No. 70956

December 2021

This page intentionally left blank.

CONTENTS

Appendices

Figures

Tables

This page intentionally left blank.

1 INTRODUCTION

SWCA Environmental Consultants (SWCA) was contracted to conduct a geologic assessment of a 5-acre commercial tract of land at 181 Market Street in Georgetown, Williamson County, Texas the Project Site. The Project Area is a grassy field with a few small isolated trees located at the end of a cul-de-sac in a commercial/industrial area adjacent to the east side of Berry Springs Park and Preserve. The Project Site is wholly within the limits of the Edwards Aquifer Recharge Zone (EARZ).

This narrative geologic assessment accompanies the Texas Commission on Environmental Quality (TCEQ) geologic assessment form TCEQ-0585 completed for the Project in Round Rock, Williamson County, Texas (**Figure 1**).

2 METHODOLOGY

Prior to conducting fieldwork, SWCA Environmental Consultants (SWCA) scientists studied documents pertaining to known caves within the vicinity of the Project Site in an attempt to gather information related to documented caves (unpublished data related to SWCA et al. 2008 and other area projects). SWCA also examined aerial photography, mapped fault lines, and Project Area geology prior to fieldwork commencement.

SWCA scientists conducted a field survey on December 14, 2021. The pedestrian survey was completed by walking parallel transects spaced approximately 50 feet apart as directed by the TCEQ in the *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones* (Rev. 10-01-04). Closer spacing was used where vegetation inhibited clear observation. The SWCA scientist carefully examined all potential karst features for subsurface extent; including depressions, holes, and animal burrows. SWCA used several techniques for this effort, including probing with a digging implement to determine the thickness and consistency of fill material and feeling for air flow, which may indicate the presence of a sub-surface void space. Other techniques included recording notable feature characteristics, such as vegetation types or a semi-circular burrow mound produced by small mammal activity.

3 RESULTS

3.1 Project Overview

The Project Site lies within the Recharge Zone of the Northern Segment of the Edwards Aquifer (TCEQ 2021). The Project Site lies along a divide between Berry Creek to the south and Dry Berry Creek to the north. The Project Site elevation is approximately 690 feet above mean sea level.

3.2 Geology

The Project Site lies within an area of Quaternary-age Terrace Deposits that overlie either the Del Rio Clay or Georgetown Formation. The geology of the Project Site has been mapped most recently at a useful scale by Collins (1997) and SWCA finds this interpretation of the geology to be generally accurate. A stratigraphic column is included in **Appendix A**, **Attachment B**.

The Project Area occurs along the Balcones Fault Zone (BFZ) within the Edwards Aquifer Recharge Zone (EARZ). Structural down-warping occurred with the Gulf of Mexico's ancestral formation during the

middle Tertiary. The earth's crust was stretched in response and the BFZ formed along a zone of weakness, which currently marks the boundary between the Edwards Plateau and the Gulf Coastal Plain in central Texas. This zone is characterized by a series of northeast-trending, predominantly normal, nearly vertical, en echelon faults. No faults cross the Project Site, but a concealed fault is present to the northwest of the Project Site (Collins 1997).

Recharge into the Edwards Aquifer primarily occurs in areas where the Edwards Limestone and Georgetown Formation are exposed at the surface. Most recharge is from direct infiltration via precipitation and streamflow loss. Recharge occurs predominantly along secondary porosity features such as faults, fractures, and karst features (caves, solution cavities, sinkholes, etc.). Karst features commonly form along joints, fractures, and bedding plane surfaces in the Edwards Limestone and Georgetown Formation.

3.3 Soils

The Natural Resources Conservation Service (2021) identifies the following six soil units within the Project Site (**Table 1**):

Table 1. Project Area Soils Detail

Soil Name	Hydric	Hydrologic Soil Group*	Drainage Class	Thickness (inches)
SvB: Sunev silty clay loam, 1 to 3 percent slopes	No	B	Well drained	72

Data Source: Natural Resources Conservation Service 2021.

* Group D – Soils had very slow infiltration rates when thoroughly wetted and exhibit the highest potential for runoff.

All Project Area soil types are considered "B" hydrologic soil group classification, which have moderately low runoff potential when thoroughly wet.

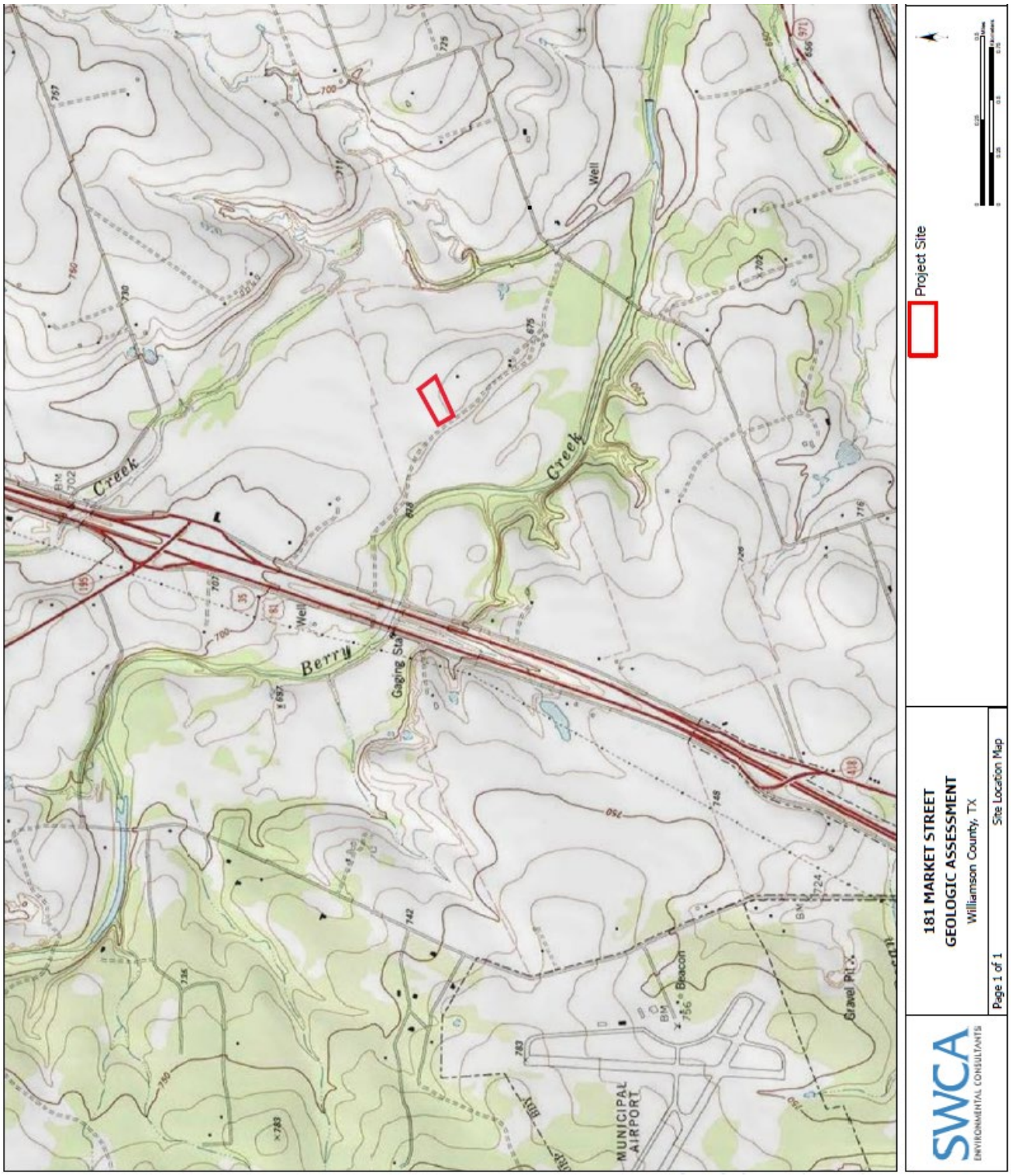


Figure 1. Project Area location map.

3.4 Site Hydrogeologic Assessment

SWCA identified one geologic feature within the Project Site, which is depicted on the geologic map (**Appendix A**, **Attachment D**). The features are described in the geologic assessment table (**Appendix A**, **Attachment A**).

Feature F-1 is a non-karst closed depression that appears to have been formed by an animal burrowing beneath roots of a small tree that has been cut down to ground level. Fine infilling is present. No bedrock is present. Due to the non-karst origin and thick soil, the probability of rapid infiltration is low.

Due to the lack of sensitive recharge features, the overall potential for fluid migration to the Edwards Aquifer within the Project Site appears relatively low compared to background infiltration rates. Based on water levels measured in a nearby water well, the potentiometric surface of the Edwards Aquifer is approximately 15-20 feet below the ground surface in the vicinity of the Project Site (**Table 2**)(Texas Water Development Board 2021).

Table 2. Potentiometric Surface Level at Nearby Water Well

Water Well	Depth to Water (feet)	Elevation	Year Measured	Distance from Project (feet)
58-19-619	16	675	1985	350
58-19-619	22	669	2005	350

Source: Texas Water Development Board 2021

Within the vicinity of the Project Site, the Georgetown Formation, which overlies the Edwards Limestone, generally acts as an upper confining unit of the Edwards Aquifer, which is under artesian pressure. Water within the Edwards Aquifer rises along faults and discharges as Berry Springs, which is a major discharge point of the Northern Segment of the Edwards Aquifer, in the adjacent Berry Springs Park and Preserve. The water level measured in nearby well 58-19-619 is likely the potentiometric surface elevation of the Edwards Aquifer that has risen from the Edwards Limestone up within the level of the overlying Georgetown Formation or Del Rio Clay, which are concealed beneath alluvial terrace deposits.

No springs or streams were identified within the limits of the Project Site.

4 REFERENCES

Collins, E.W. 1997. Geologic map of the Weir quadrangle, Texas. University of Texas at Austin, Bureau of Economic Geology Open-File Map OFM0096, scale 1:24,000.

Natural Resource Conservation Service (NRCS). 2021. Soil Survey Staff, Natural Resources Conservation Service, U.S. Department of Agriculture. Web Soil Survey. Available at: http://websoilsurvey.nrcs.usda.gov/. Accessed December 2021.

SWCA Environmental Consultants (SWCA), Smith, Robertson, Elliott, Glen, Klein, & Bell, LLP, Prime Strategies, Inc., Texas Perspectives, Inc. 2008. Williamson County Regional Habitat Conservation Plan. Prepared for Williamson County Conservation Foundation and The Honorable Lisa Birkman.

Texas Commission on Environmental Quality (TCEQ). 2021. Edwards Aquifer Viewer v3.8. Available at: http://tceq.maps.arcgis.com/apps/webappviewer/index.html?id=2e5afa3ba8144c30a49d3dc1ab49edcd. Accessed December 2021.

Texas Commission on Environmental Quality. (TCEQ). Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones. TCEQ-0585-Instructions (Rev. 10-01-04).

Texas Water Development Board (TWDB). 2021. Water Data Interactive, interactive GIS database. Available at: http://www2.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer. Accessed December 2021.

This page intentionally left blank.

APPENDIX A

Texas Commission on Environmental Quality (TCEQ) Forms

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: Philip C. Pearce, P.G.

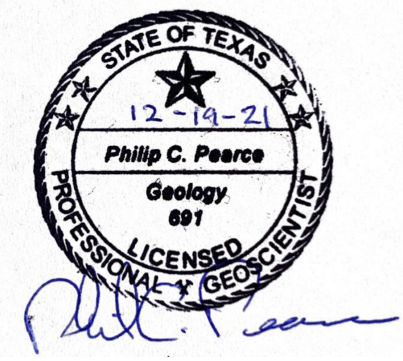
Telephone: 210.877.2847

Fax: 210.877.2848

Date: _____

Representing: SWCA Environmental Consultants (TBPG Firm Registration #50159) (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: 181 Market Street, 5-Acre Tract

Project Information

1. Date(s) Geologic Assessment was performed: December 14, 2021
2. Type of Project:
   - ☒ WPAP
   - ☒ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)

Soil Name	Group*	Thickness(feet)
SvB: Sunev silty clay loam, 1 to 3 percent slopes	B	6

** 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" = 30'
   Site Geologic Map Scale: 1" = 30'
   Site Soils Map Scale (if more than 1 soil type): 1" = NA'

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

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: 181 Market Street, 5-Acre Tract

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	30°41'22.25"	97°38'44.13"	CD	5	Ked	3	3	0.5	-	0			F	5	10	X		X		Hillside

* DATUM: NAD 83

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

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

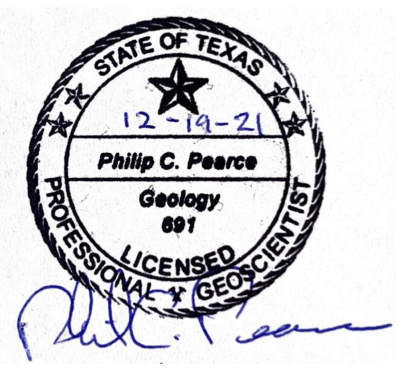
12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

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

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

Date

Sheet 1 of 1



TCEQ-0585-Table (Rev. 10-01-04)

ATTACHMENT B

Stratigraphic Column

Stratigraphic Column

Upper Cretaceous	Upper Confining Units	Navarro and Taylor Groups, undivided; 600 feet thick
		Austin Group; 325–420 feet thick
		Eagle Ford Group; 25–65 feet thick
		Buda Limestone; 40–50 feet thick
		Del Rio Clay; 40–70 feet thick
Lower Cretaceous	Edwards Aquifer	Georgetown Formation; 30–80 feet thick
		Edwards Limestone; Up to 200 feet thick
		Comanche Peak Formation; 80 feet thick
	Lower Confining Units	Walnut Formation; Up to 120 feet thick
		Upper member of Glen Rose Limestone; 500 feet thick

Note: The shaded areas represent the lithology that outcrops in the Project Area.

ATTACHMENT C

Narrative Description of Site Geology

PLEASE REFER TO SECTION 3.2 OF THIS REPORT FOR GEOLOGIC NARRATIVE DESCRIPTION

ATTACHMENT D

Site Geologic Map

LEGEND

Qt	FLUVIATILE TERRACE DEPOSITS
Kbu	BUDA LIMESTONE
Kdr	DEL RIO CLAY
Kgt	GEORGETOWN FORMATION
Kep	PERSON FORMATION
Kek	KAINER FORMATION
Kgru	GLEN ROSE FORMATION (UPPER)
Kgrl	GLEN ROSE FORMATION (LOWER)
S-1	POTENTIAL RECHARGE FEATURE
	DRAINAGE PATHWAY
	CONTACT, LOCATED APPROXIMATELY
	FAULT, LOCATED APPROXIMATELY (D, downthrown side; U, upthrown side)
	FAULT, EXISTENCE UNCERTAIN
	POSSIBLE FAULT (as located by aerial photographs)
	STRIKE AND DIP OF BEDDING
	STRIKE AND DIP OF JOINTS
	STRIKE OF VERTICAL JOINTS
C	CAVE
	NON-KARST CLOSED DEPRESSION
	SINKHOLE
	SOLUTION CAVITY
	OTHER NATURAL BEDROCK FEATURES: VUGGY ROCK, REEF DEPOSITS
	ZONE
MB	MAN-MADE FEATURE IN BEDROCK
W	WATER WELL
SS	SANITARY SEWER LINE

SCALE : 1"=30'

0' 30' 90'

60'

PROJECT LIMITS

Qt

S-1

MARKET STREET

Qt

690

STATE OF TEXAS
12-14-21
Philip C. Pearce
Geology
691
LICENSED PROFESSIONAL GEOSCIENTIST

NOTE: THE GEOSCIENTIST SEAL HAS BEEN AFFIXED TO THIS SHEET ONLY FOR PURPOSES OF GEOLOGIC INFORMATION. ALL OTHER INFORMATION SHOULD BE ACQUIRED FROM THE APPROPRIATE SIGNED AND SEALED CIVIL ENGINEERING DRAWINGS.

REVISIONS:

..\..\..\OneDrive - SWCA\Desktop\SWCA_blk_logo_centered.jpg

181 MARKET STREET
SITE GEOLOGIC MAP

JOB NO. 70956-00

DATE DEC 2021

GEOLOGIST PCP

CHECKED PCP DRAWN PCP

ATTACHMENT B

Date: Dec 19, 2021, 4:47pm User ID: PPearce
File: P:_Projects_70000\70956 181 Market Street GA\Graphics\70956 SiteGeologicMap_Draft_12182021.dwg

ATTACHMENT E

Photographic Log

Photograph 1. Photograph shows Feature F-1.

Photograph 2. Photograph of Feature F-1.

Section III
Water Pollution Abatement Plan (TCEQ-0584)

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: Michael Easton Mundine, P.E.

Date: October 10, 2022

Signature of Customer/Agent:

Regulated Entity Name: Market Street Industrial

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):4.9471

3. Estimated projected population:60

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	56100	÷ 43,560 =	1.28
Parking	22,110	÷ 43,560 =	0.51
Other paved surfaces	42587	÷ 43,560 =	0.98
Total Impervious Cover	120797	÷ 43,560 =	2.77

Total Impervious Cover 2.77 **÷ Total Acreage** 4.9471 **X 100 =** 56.06**% 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 = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.

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

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
100 % Industrial	19,447Gallons/day
_____% Commingled	_____Gallons/day

TOTAL gallons/day 19,447

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" = 30'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA Firm Map #48491C0285F dated 12/20/2019

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

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

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

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

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

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

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

☐ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☒ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ **Attachment D - Exception to the Required Geologic Assessment**. A request and justification for an exception to a portion of the Geologic Assessment is attached.

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

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

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

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

26. ☐ Surface waters (including wetlands).

    ☒ N/A

27. ☐ Locations where stormwater discharges to surface water or sensitive features are to occur.

    ☒ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 3A – Factors Affecting Surface Water Quality

The factors affecting water quality as a result of proposed site improvements are as follows:

The proposed site improvements include the construction of a 16,200 square foot industrial manufacturing and warehousing facility, two 15,000 square foot industrial manufacturing and warehousing facilities, and two 4,950 square foot industrial manufacturing and warehousing facilities, as well as the associated drive aisles, parking areas, stormwater facilities, and utilities. The proposed development will create approximately 120,797 sf (2.77 ac) of impervious cover to the site, or 56.02% of the total site. The proposed increase in impervious cover will be treated by a proposed detention and water quality pond on the northeast corner of the site utilizing a Batch Detention System. The site is designed to have the majority of the stormwater runoff flow over the surface into the pond. The stormwater will then leave the pond and be conveyed offsite through a perforated HDPE pipe that acts as a level spreader.

The proposed improvements will facilitate large, industrial vehicular traffic to the site and will cause an increase in Total Suspended Solids (TSS). The vehicular traffic which will be visiting the site will naturally cause an increase in TSS due to unforeseen leaks in vehicles which can include, but are not limited to: brake fluid, hydraulic fluid, antifreeze, oil, gasoline, and diesel fuel. The surface water quality will be affected negatively by this increase in TSS, however, this water quality will be restored to abide by TCEQ (80% TSS Removal) and City of Georgetown's (85% TSS Removal) requirements with the proposed Batch Detention Basin.

203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 3B – Volume and Character of Stormwater

The volume and character of stormwater at the project site for both existing and post-development conditions are as follows:

The existing site is undeveloped with only 632.7sf of impervious cover onsite due to a paved turnaround area in the southwest corner. Land cover consists of grassland in good condition with no trees larger than 8" observed onsite. The soil consists of Sunev and Altoga silty clay loam soils which are classified as Hydrologic Soil Group B, and, according to Table 3-6 of the City of Georgetown Drainage Criteria Manual, the surface cover of grassland in good condition with the underlying Hydrologic Soil Group of B merits a runoff curve number of 61.

Two drainage basins were defined from the existing topography onsite, namely an existing ridge running north to south near the western property boundary. The first basin is 0.904 acres and captures runoff west of the ridge including approximately 620sf of offsite area to the south and approximately 1,767sf of offsite area to the northwest and drains offsite to the west toward Market Street; 531.8sf of this offsite area is impervious. This basin contains 1,164.5sf of impervious cover or 2.96% of the drainage basin. Thus, the Composite Curve Number turns out to be 62.09 for the first drainage basin. The second basin is 4.505 acres and captures runoff east of the ridge including approximately 17,504sf of offsite area to the south and drains offsite to the northeast. This drainage area contains no impervious cover, therefore, the Composite Curve Number for this basin remains 61. Combined, the existing site drainage basins capture an offsite area of 0.453 acres. Refer to the Existing Drainage Area Map to see the existing drainage basins. See the table below for a summary of the existing basin information.

Existing Conditions Drainage Basin Information

Basin	Area (SF)	Area (AC)	Area (MI^2)	IC (SF)	IC (%)	Composite Curve Number	ToC	Lag
1	39,375.66	0.903941	0.0014124	1,164.50	2.96%	62.09	12.2	7.3
2	196,258.94	4.505485	0.0070398	0.00	0.00%	61.00	10.6	6.4

The proposed site improvements include the construction of a 16,200 square foot industrial manufacturing and warehousing facility, two 15,000 square foot industrial manufacturing and warehousing facilities, and two 4,950 square foot industrial manufacturing and warehousing facilities, as well as the associated drive aisles, parking areas, stormwater facilities, and utilities. The proposed development will create approximately 120,797 sf (2.77 ac) of impervious cover to the site, or 56.02% of the total site.

Three post-developed drainage basins were defined based on the proposed improvement grading while maintaining the existing points of offsite discharge. The first basin contains 0.702 acres of area and resembles the first existing basin capturing runoff from everything west of the proposed buildings as well as some of the main drive aisle; it also captures runoff from the same offsite area as the first existing drainage basin. The impervious cover in this basin is increased to 9,298.36sf or 30.39% of the basin giving it a Composite Curve Number of 72.25. The second basin is 4.130 acres in size and captures the runoff from the majority of the site improvements and drains northeast to the Batch Detention Basin. This central basin also captures the runoff from approximately 13,189sf of offsite area to the south. The impervious cover in the second basin is 110,674.64sf or 61.53% of the basin which gives it a Composite Curve Number of 83.76. The third basin is 0.577 acres in size and captures the runoff from the remaining area that cannot drain to the proposed detention basin in the northeast corner; it

stretches along the north and east site boundaries, captures approximately 4,380sf of offsite runoff from the south flowing onto the southeast corner of the site, and drains eastward offsite. This basin contains no impervious cover; therefore, the Composite Curve Number remains 61. Refer to the Proposed Drainage Area Map to see the proposed drainage basins and proposed drainage basin information. See the table below for a summary of the developed conditions basin information.

Developed Conditions Drainage Basin Information								
Basin	Area (SF)	Area (AC)	Area (MI^2)	IC (SF)	IC (%)	Composite Curve Number	ToC	Lag
1	30,592.05	0.702297	0.0010973	9,298.36	30.39%	72.25	12.3	7.4
2	179,882.95	4.129544	0.0064524	110,674.64	61.53%	83.76	9.8	5.9
3	25,160.56	0.577607	0.0009025	0.00	0.00%	61.00	7.4	4.4

The second post-developed basin drains north to the proposed Batch Detention Basin to be constructed in the northeast corner of the property where it will be treated through the use of a Batch Detention System that will provide 91% TSS removal efficiency, in general accordance with TCEQ Technical Guidance on Best Management Practices. The proposed Batch Detention Basin is sized for adequate stormwater treatment based on the TCEQ calculations which include the required TSS removal of 80% as well as the additional 5% TSS removal requirement of the City of Georgetown.

203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 3C – Suitability Letter from Authorized Agent

A suitability letter from the Williamson County Engineer's Office signed by Christopher Moreno can be found below.

Department of Infrastructure
County Engineer's Office
3151 SE Inner Loop, Ste B
Georgetown, TX 78626
T: 512.943.3330
F: 512.943.3335

J. Terron Evertson, PE, DR, CFM

WILLIAMSON COUNTY
1848

April 19, 2023

RE: 181 Market Street Georgetown, TX 78626
S6593 - Resource Commercial Park, Lot 12, ACRES 4.9471

The above referenced property is located within the Edwards Aquifer Recharge Zone.

Based on the surrounding subdivisions and the soil survey for Williamson County and planning material received, this office is able to determine that the soil and site conditions of this lot is suitable to allow the use of on-site sewage facilities (OSSF). It should be noted that this office has not actually studied the physical properties of this site. Site specific conditions such as OSSF setbacks, recharge features, drainage, soil conditions, etc…, will need taken into account in planning any OSSF.

These OSSF's will have to be designed by a professional engineer or a registered sanitarian. An Edwards Aquifer protection plan shall be approved by the appropriate TCEQ regional office before an authorization to construct an OSSF may be issued. The owner will be required to inform each prospective buyer, lessee or renter of the following in writing:

- That an authorization to construct shall be required before an OSSF can be constructed in the subdivision;
- That a notice of approval shall be required for the operation of an OSSF;
- Whether an application for a water pollution abatement plan as defined in Chapter 213 has been made, whether it has been approved and if any restrictions or conditions have been placed on the approval.

If this office can be of further assistance, please do not hesitate to call.

Sincerely,

Christoper Moreno, OS 35962
Williamson County - OSSF

203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 3D – Exception to the Required Geologic Assessment

An exception to the required Geologic Assessment is not being requested for this project.

This section is not applicable to this project.

Section IV
Temporary Stormwater Section (TCEQ-0602)

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: Michael Easton Mundine

Date: October 10, 2022

Signature of Customer/Agent:

Regulated Entity Name: Market Street Industrial

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: Berry Creek

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4A – Spill Response Actions

No spills of hydrocarbons or hazardous substances are expected. However, in the event such an incidence does occur, the contractor should carefully follow the following TCEQ guidelines:

Cleanup:

1. Clean up leaks and spills immediately.
2. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly.

Minor Spills:

1. Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
2. Use absorbent materials on small spills rather than hosing down or burying the spill.
3. Absorbent materials should be promptly removed and disposed of properly.
4. Follow the practice below for a minor spill:
    a. Contain the spread of the spill.
    b. Recover spilled materials.
    c. Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills:

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities. Spills should be cleaned up immediately:

1. Contain spread of the spill.
2. Notify the project foreman immediately.
3. If the spill occurs on paved or impermeable surfaces, clean up using “dry” methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
4. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
5. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills:

From any event, the Reportable Quantity (RQ) = for high toxic materials the RQ>25 gallons. For petroleum/hydrocarbon liquids, spills the RQ>250 gallons (on land) or that which creates “a sheen” on water. Only certified Hazmat teams will be responsible for handling the material at the site.

For significant or hazardous spills that are in reportable quantities:

1. Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor’s responsibility to have all emergency phone numbers at the construction site. Additionally, in the event of a hazardous material spill, local Williamson county and/or city of Georgetown police, fire and potentially EMS should be contacted in order to initiate the hazardous material response team.
2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
3. Notifications should first be made by telephone and followed up with a written report of which one copy is to be kept onsite in the report binder and one copy provided to the TCEQ.
4. The services of a spill contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
5. Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at:

http://www.tceq.state.tx.us/response/spills.html

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4B – Potential Sources of Contamination

No particular activity or process during construction is anticipated to present a significant risk of being a potential source of contamination. However, during regular construction operations, several common and minor risks of contamination are anticipated. Should the unforeseeable mishap occur during construction or regular operation of the facility, the contractor shall follow the guidelines set forth in "Attachment 4A – Spill Response Actions."

Potential sources of sediment to stormwater runoff:

- Clearing and grubbing
- Grading and excavation
- Vehicle tracking
- Topsoil stripping and stockpiling
- Landscaping

Potential pollutants and sources, other than sediment, to stormwater runoff:

- Combined Staging Area – small fueling, minor equipment maintenance, sanitary facilities.
- Materials Storage Area – solvents, adhesives, paving materials, aggregates, trash, etc.
- Construction Activities – paving, concrete pouring
- Concrete Washout Area

Potential Onsite Pollutants:

- Fertilizer
- Concrete
- Glue, adhesives
- Gasoline, diesel fuel, hydraulic fluids, antifreeze
- Sanitary toilets

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4C – Sequence of Major Activities

1. Temporary erosion and sedimentation controls are to be installed as indicated on the approved site plan and in accordance with the stormwater pollution prevention plan (SWPPP) that is required to be posted on the site. Approximately 4.95 acres will be disturbed during this activity.
2. The environmental project manager, and/or site supervisor, and/or designated responsible party, and the general contractor will follow the storm water pollution prevention plan (SWPPP) posted on the site. Temporary erosion and sedimentation controls will be revised, if needed, to comply with city inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion and sedimentation control plan.
3. Temporary erosion and sedimentation controls will be inspected and maintained in accordance with the stormwater pollution plan (SWPPP) posted on the site.
4. Begin site clearing and demolition activities. Approximately 4.95 acres will be disturbed during this activity.
5. Complete construction and begin re-vegetation of the site.
6. Upon completion of the site construction and re-vegetation of a project site, the design engineer shall submit an engineer's letter of concurrence to the City of Georgetown indicating that construction, including re-vegetation, is complete and in substantial conformity with the approved plans. After receiving this letter, a final inspection will be scheduled by the appropriate city inspector.
7. After construction is complete and all disturbed areas have been re-vegetated per plan to at least 90% established, remove the temporary erosion and sedimentation controls, and complete any necessary final re-vegetation resulting from removal of the controls. Conduct any maintenance and rehabilitation that is needed.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4D – Temporary Best Management Practices and Measures

Prior to the commencement of any construction activity whatsoever, the contractor shall install the silt fencing per the Erosion and Sedimentation Control Plan. The silt fencing shall be installed per TCEQ and local requirements. The proposed temporary BMP are intended to control increased TSS from construction activities in the following manner:

A.) The proposed development receives stormwater runoff from adjacent properties to the north and south: runoff enters the site from the north and drains to the west; stormwater flows onto the site from the south and drains west and east offsite. Stormwater runoff on the property to the east flows away from the site, and runoff from the Market Street R.O.W. flows away from the site.

B.) The temporary BMPs proposed during construction activities will prevent sediment-laden runoff from pollutant sources listed in 'Attachment 4B – Potential Sources of Contamination' from leaving the proposed site. The primary method of controlling sediment-laden stormwater runoff is through silt fencing. The silt fencing will be placed per plan along the downslope edges of the project area.

C.) With the temporary silt fences in place, no unfiltered stormwater runoff will enter any surface streams or sensitive features.

D.) The proposed project seeks to honor the natural drainage patterns that currently exist in the proposed project area. There are no known sensitive geologic features on the site. After construction is completed, the site will maintain its current drainage patterns with the stormwater runoff draining mostly to the northeast with some draining to the west.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4E – Request to Temporarily Seal a Feature

No temporary sealing of naturally occurring sensitive features on the site are proposed.

This section is not applicable to this project.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4F – Structural Practices

The following temporary BMP structural practices will be employed on the site:

1. Silt Fence – used as barrier protection around the downslope perimeter of the project. The fence retains sediment primarily by retarding flow and promoting deposition on the uphill side of the slope. Runoff is filtered as it passes through the geotextile fabric.
2. Concrete Washout Area – used to prevent or reduce the discharge of pollutants to stormwater from concrete waste. The concrete washout area is a designated area to wash out wastes into the temporary pit where the concrete can set, be broken up, and the disposed of properly.
3. Stabilized Construction Entrance – used to provide a stable entrance/exit condition from the construction site and keep mud and sediment off public roads. The stabilized construction entrance is a stabilized pad of crushed stone and should be located at any point traffic will be entering or leaving the construction site from a public right-of-way.
4. Contractor Staging Area – used as an area for the contractor to store and prepare equipment and materials before using them during the construction phase.

The placement of structural practices in the floodplain has been avoided.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4G – Drainage Area Map

See attached Construction Plans for the Existing and Proposed Drainage Area Maps.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4H – Temporary Sediment Pond(s) Plan and Calculations

There are no temporary sediment ponds or basins proposed as a temporary BMP for stormwater management on this project.

This section is not applicable to this project.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4I – Inspection and Maintenance for BMPs

The inspection and maintenance of temporary BMP's will be made according to TCEQ RG-348, Complying with the Edwards Aquifer Rules Technical Guidance on Best Management Practices.

Inspection Personnel:

Inspections shall be conducted by qualified representatives of the contractor acting on behalf of the owner or a designated party if hired separately by the owner. Each operator must delegate authority to the specifically described position or person performing inspections, as provided by 30 TAC 305.128, as an authorized person for signing reports and performing certain activities requested by the director or required by the TPDES general permit. This delegation of authority must be provided to the director of TCEQ in writing and a copy shall be kept along with the signed effective copy of the SWP3.

Inspection Schedule and Procedures - Inspections must comply with the following:

A.) An inspection shall occur weekly and after any rain event. This inspection should include an inspection of the temporary concrete washout area.

B.) The authorized party shall inspect all disturbed areas of the site, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site.

C.) Disturbed areas and areas used for storage of materials that are exposed to precipitation or within limits of the 1% annual chance (100 year) floodplain must be inspected for evidence of, or the potential for, pollutants entering the runoff from the site. Erosion and sediment control measures identified in the plan must be observed to ensure that they are operating correctly. Observations can be made during wet or dry weather conditions. Where discharge locations or points are accessible, they must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. This can be done by inspecting receiving waters to see whether any signs or erosion or sediment are associated with the discharge location. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

D.) Based on the results of the inspection, the site description and the pollution prevention measures identified in the plan must be revised as soon as possible after an inspection that reveals inadequacies. The inspection and plan review process must provide for timely implementation of any changes to the plan with 7 calendar days following the inspection.

E.) An inspection report that summarizes the scope of the inspection, name(s) and qualifications of personnel conducting the inspection, the dates of the inspection, major observations relating to the implementation of the SWP3. Major observations shall include as a minimum location of discharges of sediment or other pollutants from the site, location of BMPs that need to be maintained, location of BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where BMPs are needed. Actions taken as a result of the inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and the TPDES general permit. The report must be signed by the authorized representative delegated by the operators in accordance with TAC 305.128.

Maintenance and Corrective Actions - Maintenance of erosion control facilities shall consist of the minimum requirements as follows:

A.) In ongoing construction areas inspect erosion control improvements to confirm facilities are in place and operable. Where facilities have been temporarily set aside or damaged due to construction activity, place facilities in service before leaving job site.
B.) If weather forecast predicts possibility of rain, check entire facilities throughout site to assure facilities are in place and operable. If job site weather conditions indicate high probability of rain, make special inspection of erosion control facilities.
C.) After rainfall events review erosion control facilities as soon as site is accessible. Clean berm/swales and other structural facilities. Determine where additional facilities or alternative techniques are needed to control sediment leaving site.
D.) After portions of site have been seeded, review these areas on regular basis in accordance with project specifications to assure proper watering until grass is established. Reseed areas where grass is not well established.
E.) Spills are to be handled as specified by the manufacturer of the product in a timely safe manner by personnel. The site superintendent will be responsible for coordinating spill prevention and cleanup operations.
F.) Concrete trucks will discharge extra concrete or wash out drum only at an approved location on site. Residual product shall be properly disposed of.
G.) Inspect vehicle entrance and exits for evidence of off-site tracking and correct as needed.
H.) If sediment escapes the site, the contractor where feasible and where access is available shall collect and remove sedimentation material by appropriate non-damaging methods. Additionally, the contractor shall correct the condition causing discharges.
I.) If inspections or other information sources reveal a control has been used incorrectly, or that a control is performing inadequately, the contractor must replace, correct or modify the control as soon as practical after discovery of the deficiency.

Silt Fence – Inspection and maintenance guidelines for silt fences are as follows:

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

Stabilized Construction Entrance – Inspection and maintenance guidelines for the stabilized construction entrance are as follows:

A.) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment.
B.) All sediments spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
C.) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public rights-of-way.
D.) 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.
E.) All sediment should be prevented from entering any storm drain, ditch, or water course by using approved methods.

Concrete Washout Area – Inspection and maintenance guidelines for the concrete washout area are as follows:

A.) Concrete washout areas should be located at least 50 feet from sensitive features, storm drains, open ditches, or water bodies.
B.) Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
C.) Plastic lining material should be a minimum of 10 mil in polyethylene sheeting and should be free of holes, tears, or other defects that compromise the impermeability of the material.
D.) When temporary concrete washout facilities are no longer required for the work, the hardened concrete should be removed and disposed of. Materials sued to construct temporary concrete washout facilities should be removed from the site of the work and disposed of. Holes, depressions, or other ground disturbance caused by the removal of the temporary concrete washout facilities should be backfilled and repaired.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 4J – Schedule of Interim and Permanent Soil Stabilization Practices

Prior to Disturbance – Install all temporary erosion and sedimentation control features.

During Construction – Inspect and maintain all temporary erosion and sedimentation control structures per TCEQ regulations.

After Completion of Permanent Erosion and Sediment Controls – Stabilize and restore all areas disturbed during construction. Permanent seeding will be applied immediately after the final design grades are achieved on portions of the site but no later than 14 days after construction activities have permanently ceased. After the entire site is stabilized, any sediment that has accumulated will be removed and hauled off-site for disposal. Construction debris, trash and temporary BMPs including silt fences, material storage areas, sanitary toilets, etc.) will also be removed and any areas disturbed during removal will be seeded immediately.

Section V
Permanent Stormwater Section (TCEQ-0600)

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)(Ii), (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: Michael Easton Mundine, P.E.

Date: October 10, 2022

Signature of Customer/Agent

Regulated Entity Name: Market Street Industrial

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

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5A – 20% or Less Impervious Cover Waiver

The site will not be used for multi-family residential developments, schools, or small business sites. This project will also have more than 20% impervious cover.

This section is not applicable to this project.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5B – BMPs for Upgradient Stormwater

The proposed development receives upgradient stormwater from neighboring properties to the south and north. The total off-site area which drains onto the proposed development totals 0.456 acres, of which only 0.01 acres is impervious cover.

The portions of southern properties that stormwater flows over are the narrow access portions of flag lots which are grass-covered areas with no existing impervious cover. Thus, the runoff from these properties does not flow over any impervious cover before entering the site. The existing ridge splits this southern drainage into the two existing drainage basins such that the majority flows northeast into the second basin. The proposed basins maintain this drainage pattern so that 620sf of offsite area drains into Drainage Basin #1 and discharges west offsite; 13,189sf of offsite area drains into Drainage Basin #2, flowing across the site improvements into the Batch Detention Basin; and 4,380sf of offsite area drains into Drainage Basin #3 and flows offsite to the east.

About 1,767sf of the neighboring property to the north drains onto the site. This upgradient stormwater sheet flows over about 531.8sf of impervious cover and then sheet flows over grass-covered ground before entering the northwest corner of the site. This runoff that enters the site does not drain across any proposed impervious cover before discharging offsite to the west.

The proposed Batch Detention Basin is used to treat the offsite stormwater that flows over proposed improvements for the development and has been sized accordingly. Refer to “Attachment 5C – BMPs for Onsite Stormwater” for more information on surface drainage features.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5C – BMPs for On-Site Stormwater

In general accordance with the TCEQ Technical Guidance Manual, onsite stormwater BMP's must be designed to remove at least 80% of the increased total suspended solids (TSS) from the proposed project. The City of Georgetown requires an additional 5%, for a minimum requirement of 85% TSS removal. A Batch Detention Basin is proposed for this WPAP. The proposed site drains to the Batch Detention Basin located on the northeast corner of the site.

As described in the Addendum Sheet of "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices" (TCEQ Approval of Innovative Technology, Section 3.2.17),

> "Batch Detention Basins capture and temporarily detain the water quality volume from a storm event using an automated controller and valve. They are intended to serve primarily as settling basins for the solids fraction, and as a means of limiting downstream erosion by controlling peak flow rates during erosive events… Batch detention basins are designed to prevent clogging of the outflow structure and resuspension of captured sediment during a discharge. They also provide enhanced dissolved pollutant removal performance. The batch detention design typically incorporates a non-clogging outflow structure, such as an orifice protected by a trash rack, or a perforated riser pipe protected by riprap."

The three post-developed drainage basins were defined based on the proposed site and pond grading, while relatively maintaining the existing points of offsite discharge. The first proposed drainage basin captures an area of 0.702 acres and drains west to Market Street. The second post-developed basin drains north and is the only basin that drains to the proposed Batch Detention Basin. Capturing an area of 4.130 acres, this second basin has 61.53% impervious cover due to the110,674.64sf of impervious cover from the proposed improvements which makes up 91.62% of the total site impervious cover of 120,796.57sf. The Batch Detention Basin has been sized accordingly to treat the amount of runoff that will flow over the proposed impervious surfaces. The third proposed drainage basin captures an area of 0.578 acres and drains offsite to the east.

The Batch Detention Basin was sized to provide TSS storage for the entire proposed developments. Using the TCEQ Calculation Spreadsheet, the required water volume for this Batch Detention Basin is 20,126 cubic feet. An additional 4,025 cubic feet is required for sediment storage for a total capture volume of 24,151 cubic feet. As designed, the proposed water quality pond provides 24,151 cubic feet of volume at an elevation of 686.15', which will be the rim elevation for the rotating bucket of the SmartBatch System. This capture volume exceeds the volume necessary for the minimum 80% TSS required by TCEQ and the 85% required by the City of Georgetown. The calculations performed using TCEQ's spreadsheet can be found in the following pages.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Additional information is provided for cells with a red triangle in the upper right corn
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will r

1. The Required Load Reduction for the total project: Calculations from RG-348

Page 3-29 Equation 3.3: $L_M = 28.93(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resul
A_N = Net increase in impervious a
P = Average annual precipitation

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

County =	Williamson	
Total project area included in plan * =	4.95	acres
Predevelopment impervious area within the limits of the plan * =	0.02	acres
Total post-development impervious area within the limits of the plan* =	2.77	acres
Total post-development impervious cover fraction * =	0.56	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	2550	lbs.

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

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

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

Drainage Basin/Outfall Area No. = 2

Total drainage basin/outfall area =	4.13	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	2.54	acres
Post-development impervious fraction within drainage basin/outfall area =	0.62	
$L_{M\ THIS\ BASIN}$ =	2351	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Batch Detention System
Removal efficiency = 91 percent

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

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

where:

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

A_C =	**4.13**	acres
A_I =	**2.54**	acres
A_P =	**1.59**	acres
L_R =	**2584**	lbs

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

Desired $L_{M\ THIS\ BASIN}$ =	**2550**	lbs.
F =	**0.99**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Rainfall Depth =	**3.66**	inches
Post Development Runoff Coefficient =	**0.43**	
On-site Water Quality Volume =	**23673**	cubic feet

Calculations from RG-348

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet

Storage for Sediment =	**4735**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**28408**	cubic feet

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

7. Retention/Irrigation System Designed as Required in RG

Required Water Quality Volume for retention basin =	**NA**	cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	**0.1**	in/hr
Irrigation area =	**NA**	square feet
	NA	acres

8. Extended Detention Basin System Designed as Required in RG

Required Water Quality Volume for extended detention basin =	**NA**	cubic feet

9. Filter area for Sand Filters Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	**NA**	cubic feet
Minimum filter basin area =	**NA**	square feet
Maximum sedimentation basin area =	**NA**	square feet
Minimum sedimentation basin area =	**NA**	square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	**NA**	cubic feet
Minimum filter basin area =	**NA**	square feet
Maximum sedimentation basin area =	**NA**	square feet
Minimum sedimentation basin area =	**NA**	square feet

10. Bioretention System Designed as Required in RG

Required Water Quality Volume for Bioretention Basin =	**NA**	cubic feet

11. Wet Basins Designed as Required in RG

Required capacity of Permanent Pool =	**NA**	cubic feet
Required capacity at WQV Elevation =	**NA**	cubic feet

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5D – BMPs for Surface Streams

No BMPs are proposed to specifically affect surface streams.

The function of the proposed onsite BMPs is to remove TSS from stormwater runoff while retaining natural flow patterns downstream of the site. Therefore, the BMPs proposed for reducing pollutant loads in surface stream are the onsite BMPs and are described in the previous section: “Attachment 5C – BMPs for On-site Stormwater”.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5E – Request to Seal Features

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 for any features on this site.

This section is not applicable to this project.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5F – Construction Plans

An electronic copy of the design plans is included with this submittal. Full-sized copies of the construction plans are submitted separately.

203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5G – Inspection, Maintenance, Repair, and Retrofit Plan

The following are recommended maintenance procedures as outlined in TCEQ's Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices.

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

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

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

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

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

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

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

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

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

Record Keeping: Records of all inspections and maintenance for the facility shall be recorded and maintained for the water quality facility beginning at startup of the facility. Record keeping shall be detailed to provide type of maintenance or repair made, date of the service, and detail of the extent of the maintenance or repair. The owner or responsible party of the facility is responsible for maintaining the facility as outlined in this plan until such time as another
entity assumes responsibility in writing or ownership of the property is transferred. A copy of the transfer of ownership or responsibility must be filed with the Executive Director of TCEQ within 30-days of the transfer.

Owner's Signature — Date: 12-17-2024

Engineer's Signature — Date: 10/10/2022

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5H – Pilot-Scale Field Testing Plan

TCEQ's Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices was used to design permanent BMPs and measures for this site.

This section is not applicable to this project.

2P CONSULTANTS, LLC
203 E. Main Street, Suite 204
Round Rock, Texas 78664
512-344-9664
TBPE FIRM #F-19351

Attachment 5I – Measures for Minimizing Surface Stream Contamination

BMPs proposed to reduce pollutants in surface streams are discussed in Attachment 5C: "BMPs for Onsite Stormwater."

Peak runoff rates for the existing and proposed drainage areas were determined using HEC-HMS 4.9. Atlas 14 rainfall precipitation data was taken from the Williamson County Subdivision Regulations for a site located over the San Gabriel River Zone. This rainfall data was plugged into HEC-HMS as a 24-hour frequency storm for the 2, 10, 25, 50, and 100-year storm events. The Atlas 14 rainfall precipitation data can be found in the table below.

Atlas 14 Rainfall Precipitation Data					
Duration	2-YR (in)	10-YR (in)	25-YR (in)	50-YR (in)	100-YR (in)
5 MIN	0.51	0.757	0.921	1.05	1.19
15 MIN	1.02	1.51	1.84	2.10	2.37
1 HOUR	1.88	2.79	3.40	3.88	4.39
2 HOURS	2.30	3.55	4.43	5.16	5.98
3 HOURS	2.55	4.02	5.09	6.01	7.06
6 HOURS	2.98	4.81	6.18	7.38	8.75
12 HOURS	3.44	5.54	7.12	8.48	10.1
24 HOURS	3.94	6.30	8.04	9.53	11.2

Two drainage basins were defined from the existing topography onsite which shows an existing ridge running north to south near the western property boundary. The first basin is 0.904 acres and captures runoff west of the ridge including approximately 620sf of offsite area to the south and approximately 1,767sf of offsite area to the northwest, of which about 531.8sf is impervious, and drains offsite to the west toward Market Street. This basin contains 1,164.50sf of impervious cover or 2.96% of the drainage basin. Thus, the Composite Curve Number turns out to be 62.09. The second basin is 4.505 acres and captures runoff east of the ridge including approximately 17,504sf of offsite area to the south and drains offsite to the northeast. This drainage area contains no impervious cover, therefore, the Composite Curve Number for this basin remains 61. A summary of the existing conditions drainage basin information and the drainage calculations from the HEC-HMS model for the existing conditions are as follows:

Existing Conditions Drainage Basin Information								
Basin	Area (SF)	Area (AC)	Area (MI^2)	IC (SF)	IC (%)	Composite Curve Number	ToC	Lag
1	39,375.66	0.903941	0.0014124	1,164.50	2.96%	62.09	12.2	7.3
2	196,258.94	4.505485	0.0070398	0.00	0.00%	61.00	10.6	6.4

Existing Conditions Drainage Calculations					
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
1	0.58	1.70	2.60	3.37	4.21
2	2.73	8.56	13.36	17.46	21.95

Three post-developed drainage basins were defined based on the proposed improvement grading while maintaining the existing points of offsite discharge. The first basin contains 0.702 acres of area and resembles the first existing basin capturing runoff from everything west of the proposed buildings and some of the main drive aisle; it also captures runoff from the same offsite areas as the first existing drainage basin. The impervious cover in this basin is increased to 9,298.36sf or 30.39% of the basin giving it a Composite Curve Number of 72.25. The second basin is 4.130 acres in size and captures the runoff from the majority of the site improvements and drains northeast to the Batch Detention Basin. This central basin also captures the runoff from approximately 13,189sf of offsite area to the south. The impervious cover in the second basin is 110,674.64sf or 61.53% of the basin which gives it a Composite Curve Number of 83.76. The third basin is 0.578 acres in size and captures the runoff from the remaining area that cannot drain to the proposed detention basin in the northeast corner; it stretches along the north and east site boundaries, captures approximately 4,380sf of offsite runoff from the south flowing onto the southeast corner of the site, and drains eastward offsite. This basin contains no impervious cover; therefore, the Composite Curve Number remains 61. A summary of the developed conditions drainage basin information and drainage calculations from the HEC-HMS model for the proposed conditions are as follows:

Developed Conditions Drainage Basin Information								
Basin	Area (SF)	Area (AC)	Area (MI^2)	IC (SF)	IC (%)	Composite Curve Number	ToC	Lag
1	30,592.05	0.702297	0.0010973	9,298.36	30.39%	72.25	12.3	7.4
2	179,882.95	4.129544	0.0064524	110,674.64	61.53%	83.76	9.8	5.9
3	25,160.56	0.577607	0.0009025	0.00	0.00%	61.00	7.4	4.4

Developed Conditions Drainage Calculations					
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
1	0.92	1.85	2.55	3.13	3.77
2	9.64	16.03	20.63	24.37	28.36
3	0.41	1.29	2.01	2.61	3.28
POI-1	0.92	1.85	2.55	3.13	3.77
POI-2	1.86	6.14	9.81	12.92	16.24

A summary of comparison between the existing and proposed drainage calculations is as follows:

Existing vs. Developed Conditions Drainage Calculations					
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
POI-1	0.34	0.15	-0.05	-0.24	-0.44
POI-2	-0.87	-2.42	-3.55	-4.54	-5.71

The proposed Batch Detention Basin will provide the necessary detention needed to lower the stormwater runoff flow rate at Point of Interest #2 below existing conditions while also providing the water quality treatment required for the development. Stormwater will fill the pond until it reaches the rim of the rotating bucket at 686.31'. The bucket is 30" tall and the base is at 684.20', but it begins in an angled position such that the rim starts at 686.31', which is the water quality surface elevation. As the stormwater runoff in the pond rises above an elevation of 686.31', the stormwater will enter the outfall bucket and be conveyed to an 18" level spreader that releases the water to the northeast. Twelve hours after the rainfall event begins, the outfall bucket will slowly rotate to an elevation of 684.20' over the span of 46 hours to completely empty the pond after all the suspended solids have settled.

A table showing the storage capacity of the Batch Detention Basin can be seen below:

Detention and Water Quality Pond Stage Storage			
Elevation	Area (SF)	Area (AC)	Cumulative Volume (cu. ft.)
684.20	12.25	0.00	0.00
684.25	118.48	0.00	3.27
684.50	1995.38	0.05	267.50
684.75	6394.40	0.15	1,316.22
685.00	12412.11	0.28	3,667.04
685.25	16838.62	0.39	7,323.38
685.50	19190.34	0.44	11,827.00
685.75	20347.13	0.47	16,769.18
686.00	20848.51	0.48	21,918.64
686.25	21318.11	0.49	27,189.46
686.31	21431.58	0.49	28,471.96
686.50	21791.48	0.50	32,578.15
686.75	22268.62	0.51	38,085.66
687.00	22749.53	0.52	43,712.93
687.25	23240.06	0.53	49,461.63
687.50	23862.4	0.55	55,349.43
687.75	25320.46	0.58	61,497.29
688.00	28105.36	0.65	68,175.52

Stormwater runoff leaving the Batch Detention Basin is reduced from the existing conditions for the 2-YR, 10-YR, 25-YR, 50-YR, and 100-YR storm events. Stormwater runoff from the Batch Detention Basin will enter an 18" HDPE level spreader to eliminate any adverse impacts to neighboring or downstream properties as the stormwater flow will be spread out into a sheet flow condition instead of a concentrated discharge.

Section VI
Agent Authorization Form (TCEQ-0599)

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

I Brentley Brinegar,
Print Name

~~Owner~~ MANAGER,
Title - Owner/President/Other

of Market Warehouse, LLC,
Corporation/Partnership/Entity Name

have authorized Michael Easton Mundine
Print Name of Agent/Engineer

of 2P Consultants, LLC
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

12-17-2021
Date

THE STATE OF Texas §

County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared [illegible] 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 17 day of December, 2021.

Tana Johnson
NOTARY PUBLIC

Tana Johnson
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 1-11-2022

TANA JOHNSON
Notary Public, State of Texas
Comm. Expires 01-11-2022
Notary ID 131405870

Section VII
Application Fee Form (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Market Street Industrial
Regulated Entity Location: 181 Market Street, Georgetown, TX 78626
Name of Customer: Market Warehouse, LLC
Contact Person: Michael Easton Mundine Phone: (512) 344-9664
Customer Reference Number (if issued):CN 605978725
Regulated Entity Reference Number (if issued):RN 111418463

Austin Regional Office (3373)

☐ Hays ☐ Travis ☒ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☐ Comal ☐ Kinney

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

☒ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	4.9471 Acres	$ 4,000.00
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: October 10, 2022

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

Section VIII
Core Data Form (TCEQ-10400)

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☒ New Permit, Registration or Authorization (*Core Data Form should be submitted with the program application.)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 605978725		RN 111418463

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	00/10/2022

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

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

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
Market Warehouse, 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)*
0804276847	32081522479	87-3193322	

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees	13. Independently Owned and Operated?
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☒ Yes ☐ No

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

☒ Owner ☐ Operator ☐ Owner & Operator

☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:							
	410 W. Anderson Avenue						
	City	Round Rock	State	TX	ZIP	78664	ZIP + 4

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	bb@512texas.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(512) 940-0188		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected below this form should be accompanied by a permit application)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC.)

22. Regulated Entity Name *(Enter name of the site where the regulated action is taking place.)*

Market Street Industrial

23. Street Address of the Regulated Entity: *(No PO Boxes)*	181 Market Street							
	City	Georgetown	**State**	TX	**ZIP**	78626	**ZIP + 4**	
24. County	Williamson							

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	

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

27. Latitude (N) In Decimal:	30.689392	**28. Longitude (W) In Decimal:**	97.646156

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30°	41'	21.81"	97°	38'	46.16"

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)
5999	5999	45399	453998

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

Industrial Office and Warehouse Space

34. Mailing Address:	**410 West Anderson Avenue**							
	City	**Round Rock**	**State**	**TX**	**ZIP**	**78664**	**ZIP + 4**	

35. E-Mail Address:	**bb@512texas.com**

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 940-188		**( ) -**

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

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Emissions Inventory Air	☐ Industrial Hazardous Waste
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	Michael Easton Mundine, P.E.	**41. Title:**	Project Manager

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512) 344-9664		( ) -	emundine@2pconsultants.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:	2P Consultants, LLC.	**Job Title:**	Project Manager
Name*(In Print)* **:**	Michael Easton Mundine, P.E.	**Phone:**	(512) 344-9664
Signature:		**Date:**	10/18/2022

PROJECT TITLE : MARKET STREET INDUSTRIAL - STORMWATER PERMIT

PROJECT LEGAL DESCRIPTION: 56593 - RESOURCE COMMERCIAL PARK
LOT 12, 4.9471 ACRES

PROJECT STREET ADDRESS: 181 MARKET STREET
GEORGETOWN, TEXAS 78626

PROPERTY OWNER: MARKET WAREHOUSE, LLC
ADDRESS: BRENTLEY BRINEGAR AND BEN WILLIAMS
410 W. ANDERSON AVENUE
ROUND ROCK, TEXAS 78664
PHONE: 512-940-0188

ENGINEER: MICHAEL EASTON MUNDINE,P.E.
2P CONSULTANTS, LLC
ADDRESS: 203 E. MAIN STREET, SUITE 203
ROUND ROCK, TX 78664
NELSON W. OGREN , P.E
PHONE: 512-344-9664

SITE CALCULATIONS:

EXISTING SITE IMPERVIOUS COVER

BOUNDARY	215,499.25 SQ FT	= 4.947 AC
BUILDINGS, SW, PAVEMENT	632.70 SQ FT	= 0.015 AC
EXISTING IMPERVIOUS COVER		0.29%

PROPOSED SITE IMPERVIOUS COVER

PROPOSED BUILDINGS,	56100.00 SQ FT	= 1.29 AC
PROPOSED TOTAL SITE IC	120,796.57 SQ FT	= 2.77 AC
PROPOSED IMPERVIOUS COVER		56.02%

CITY LIMITS NOTE: THE PROJECT IS LOCATED IN THE EXTRATERRITORIAL JURISDICTION OF THE CITY OF GEORGETOWN.

FLOODPLAIN NOTE: NO PORTION OF THIS PROJECT IS LOCATED WITHIN THE 100-YEAR FLOODPLAIN AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FIRM MAPS: #48491C0285F EFFECTIVE DECEMBER 20, 2019.

AQUIFER NOTE: THIS PROJECT IS LOCATED IN THE EDWARDS AQUIFER RECHARGE ZONE.

WATERSHED NOTE: THIS SITE IS LOCATED IN THE BERRY CREEK WATERSHED, THERE ARE NO KNOWN CRITICAL ENVIRONMENTAL FEATURES EVIDENT ON THIS SITE.

WATER QUALITY: THIS PROJECT IS LOCATED WITHIN THE EDWARD'S AQUIFER RECHARGE ZONE AND HAS AN APPROVED WPAP UNDER EDWARD'S AQUIFER PROTECTION PROGRAM. WPAP#________________________

DETENTION NOTE: THIS SITE PROVIDES FOR ONSITE DETENTION.

BENCHMARKS:
BM "A": A MAG NAIL WITH A METAL WASHER STAMPED "JPH BENCHMARL" SET IN CONCRETE FOR A WATER VALVE LOCATED IN THE RIGHT-OF-WAY OF MARKET STREET, APPROXIMATELY 27 FEET SOUTHWESTERLY FROM THE WAST CORNER OF THE SUBJECT PROPERTY. BENCHMARK ELEVATION = 687.25' (NAVD'88)

UTILITY CONTACTS:

WATER:	CITY OF GEORGETOWN	512-930-3640
WASTEWATER:	PRIVATE SEPTIC SYSTEM	
ELECTRIC:	PEDERNALES ELECTRIC COOPERATIVE	512-355-2131
CABLE/TELEPHONE:	TBD	TBD
NATURAL GAS:	TBD	TBD

STORMWATER PERMIT NOTES:

1. THESE PLANS WERE PREPARED, SEALED, SIGNED, AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON THE ENGINEER'S CONCURRENCE OF COMPLAINCE, THE PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE, AND FEDERAL REQUIREMENTS AND CODES.
2. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD SPECIFICATIONS AND DETAILS IN EFFECT AT THE TIME OF THE SUBMITTAL OF THE PROJECT TO THE CITY.
3. THIS PROJECT IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
4. WHERE NO EXISTING OVERHEAD INFRASTRUCTURE EXISTS, UNDERGROUND ELECTRIC UTILITY LINES SHALL BE LOCATED ALONG THE STREET AND WITHIN THE SITE. WHERE EXISTING OVERHEAD INFRASTRUCTURE IS TO BE RELOCATED, IT SHALL BE RE-INSTALLED UNDERGROUND AND THE EXISTING FACILITIES SHALL BE REMOVED AT THE DISCRETION OF THE DEVELOPMENT ENGINEER.
5. ALL ELECTRIC AND COMMUNICATION INFRASTRUCTURE SHALL COMPLY WITH UDC SECTION 13.06.

ADDITIONAL NOTES FOR PROPERTIES LOCATED OVER THE EDWARDS AQUIFER RECHARGE ZONE:

1. THE PROPERTY SUBJECT TO THIS APPLICATION IS SUBJECT TO THE WATER QUALITY REGULATIONS OF THE CITY OF GEORGETOWN.
2. A GEOLOGIC ASSESSMENT, IN ACCORDANCE WITH THE CITY OF GEORGETOWN WATER QUALITY REGULATIONS, WAS COMPLETED ON DECEMBER 15, 2020. ANY SPRINGS AND STREAMS AS IDENTIFIED IN THE GELOGIC ASSESSMENT ARE SHOWN HEREIN.

IMPORTANT NOTES TO CONTRACTOR

1. THE LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER, DESIGN ENGINEER OR THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES, AND SHALL REPAIR OR REPLACE TO NEW QUALITY.
2. CAUTION: DO NOT USE THESE DRAWINGS FOR STAKING BUILDINGS ON THIS PROJECT. THE SIZE AND CONFIGURATION OF THESE BUILDINGS SHOWN HEREON ARE BASED ON THE LATEST ARCHITECTURAL INFORMATION AVAILABLE TO 2P CONSULTANTS, LLC. AT THE TIME OF COMPLETION OF THESE PLANS. THE FUTURE SIZE AND CONFIGURATION OF EACH BUILDING IS SUBJECT TO CHANGE. THE LATEST APPROVED, SIGNED AND SEALED ARCHITECTURAL PLANS SHOULD BE CONSULTED FOR THE ACTUAL SIZE, CONFIGURATION AND LOCATION OF EACH BUILDING.
3. CONTRACTOR SHALL REFER TO CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS, OR ANY REQUIRED LOCAL CODE WHICHEVER IS MOST STRINGENT.
4. THIS SITE IS SUBJECT TO TPDES REGULATIONS. TXR15000. TDLR NO.:TABS2021007840
5. THE CONTRACTOR SHALL OBTAIN A "NOTICE OF PROPOSED INSTALLATION OF UTILITY LINE PERMIT FROM WILLIAMSON COUNTY FOR ANY WORK PERFORMED IN THE EXISTING COUNTY RIGHT-OF-WAY (DRIVEWAY APRON, WATER MAIN TIE-IN, ETC.) THIS PERMIT APPLICATION WILL REQUIRE A LIABILITY AGREEMENT, A CONSTRUCTION COST ESTIMATE FOR WORK WITHIN THE RIGHT-OF-WAY INCLUDING PAVEMENT REPAIR (IF NEEDED), A PERFORMANCE BOND, CONSTRUCTION PLANS AND, IF NECESSARY, A TRAFFIC CONTROL PLAN. AN INSPECTION FEE, AND A PRE-CONSTRUCTION MEETING MAY ALSO BE REQUIRED, DEPENDING ON THE SCOPE OF WORK. THE PERMIT WILL BE REVIEWED AND APPROVED BY THE COUNTY ENGINEER, AND MUST ALSO BE APPROVED BY THE WILLIAMSON COUNTY COMMISSIONERS COURT IF ANY ROAD CLOSURE IS INVOLVED.

GENERAL NOTES:

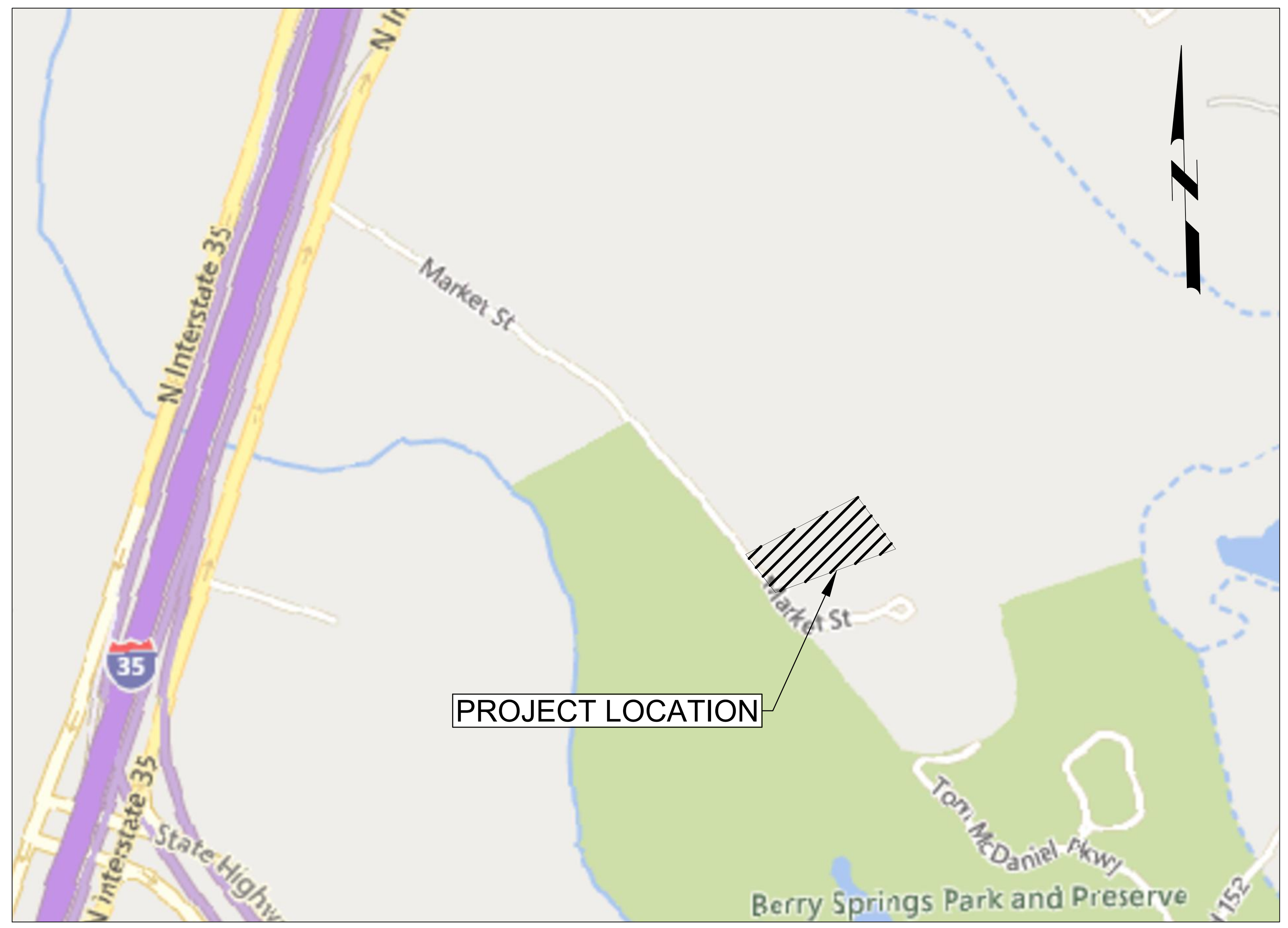
1. IT IS THE RESPONSIBILITY OF THE PROPERTY OWNER, AND SUCCESSORS TO THE CURRENT PROPERTY OWNER, TO ENSURE THE SUBJECT PROPERTY AND ANY IMPROVEMENTS ARE MAINTAINED IN CONFORMANCE WITH THIS SITE DEVELOPMENT PLAN.
2. THIS DEVELOPMENT SHALL COMPLY WITH ALL STANDARDS OF THE UNIFIED DEVELOPMENT CODE (UDC), THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS, THE DEVELOPMENT MANUAL AND ALL OTHER APPLICABLE CITY STANDARDS.
3. THIS SITE DEVELOPMENT PLAN SHALL MEET THE UDC STORMWATER REQUIREMENTS.
4. ALL SIGNAGE REQUIRES A SEPARATE APPLICATION AND APPROVAL FROM THE INSPECTION SERVICES DEPARTMENT. NO SIGNAGE IS APPROVED WITH THE SITE DEVELOPMENT PLAN.
5. SIDEWALKS SHALL BE PROVIDED IN ACCORDANCE WITH THE UDC.
6. DRIVEWAYS WILL REQUIRE APPROVAL BY THE DEVELOPMENT ENGINEER OF THE CITY OF GEORGETOWN.
7. OUTDOOR LIGHTING SHALL COMPLY WITH SECTION 7.04 OF THE UDC.
8. SCREENING OF MECHANICAL EQUIPMENT, DUMPSTERS AND PARKING SHALL COMPLY WITH CHAPTER 8 OF THE UDC. THE SCREENING IS SHOWN ON THE LANDSCAPE AND ARCHITECTURAL PLANS, AS APPLICABLE.
9. THE COMPANION LANDSCAPE PLAN HAS BEEN DESIGNED AND PLANT MATERIALS SHALL BE INSTALLED TO MEET ALL REQUIREMENTS OF THE UDC.
10. ALL MAINTENANCE OF REQUIRED LANDSCAPE SHALL COMPLY WITH THE MAINTENANCE STANDARDS OF CHAPTER 8 OF THE UDC.
11. A SEPARATE IRRIGATION PLAN SHALL BE REQUIRED AT THE TIME OF BUILDING PERMIT APPLICATION.
12. FIRE FLOW REQUIREMENTS OF 1,500 GALLONS PER MINUTE ARE BEING PERMITTED IN THIS APPLICATION.
13. ANY HERITAGE TREE NOTED ON THIS SITE DEVELOPMENT PLAN IS SUBJECT, IN PERPETUITY, TO THE MAINTENANCE, CARE, PRUNING AND REMOVAL REQUIREMENTS OF THE UNIFIED DEVELOPMENT CODE.

IMAGES: * signature TP.png * NWO_Sign TP.png
XREFS: * MEM SEAL.dwg

STORMWATER PERMIT

MARKET STREET INDUSTRIAL STORMWATER PERMIT

181 MARKET STREET
GEORGETOWN, TEXAS 78626
DECEMBER 20TH, 2021
2021-32-SWP



VICINITY MAP - 1" = 600'

RECORDED FINAL PLAT DOC.NO 1997016292

WPAP CASE #______________________________

SWPPP______________________________

REVISIONS / CORRECTIONS

No.	Description	Revise (R) Add (A) Void (V) Sheet No.'s	TOTAL # SHEETS IN PLAN SET	NET CHANGE IMP. COVER (SQ FT)	TOTAL SITE IMP. COVER (SF. FT)/%	CITY APPROVAL DATE	DATE IMAGED

NOTES:

1. THESE PLANS ARE NOT TO BE CONSIDERED FINAL FOR CONSTRUCTION UNTIL ACCEPTED BY THE CITY / AND, OR THE COUNTY. CHANGES MAY BE REQUIRED PRIOR TO APPROVAL.
2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY, AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER, OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

Sheet List Table

WILLIAMSON COUNTY CERTIFICATE OF COMPLIANCE NUMBER

WILLIAMSON COUNTY DRIVEWAY PERMIT NUMBER

JURISDICTIONAL REVIEW

AS APPROVED BY THE PLANNING AND ZONING COMMISSION ON: (DATE)

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

I, MICHAEL EASTON MUNDINE P.E., do hereby confirm that any new Public Works and Drainage Improvements described herein, have been designed in compliance with the stormwater drainage policy adopted by the City of Georgetown, Texas.

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER

5/4/2023 5/4/23

MICHAEL EASTON MUNDINE, P.E. DATE

ENGINEERING 2P CONSULTING

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

GENERAL NOTES: (CITY)

1. THESE CONSTRUCTION PLANS WERE PREPARED, SEALED, SIGNED AND DATED BY A TEXAS LICENSED PROFESSIONAL ENGINEER. THEREFORE, BASED ON THE ENGINEER'S CONCURRENCE OF COMPLIANCE, THE CONSTRUCTION PLANS FOR CONSTRUCTION OF THE PROPOSED PROJECT ARE HEREBY APPROVED SUBJECT TO THE STANDARD CONSTRUCTION SPECIFICATIONS AND DETAILS MANUAL AND ALL OTHER APPLICABLE CITY, STATE AND FEDERAL REQUIREMENTS AND CODES.
2. THIS PROJECT IS SUBJECT TO ALL CITY STANDARD SPECIFICATIONS AND DETAILS IN AFFECT AT THE TIME OF SUBMITTAL OF THE PROJECT TO THE CITY.
3. THIS SITE CONSTRUCTION PLANS SHALL MEET ALL REQUIREMENTS OF THE APPROVED SITE PLAN.
4. WASTEWATER MAINS AND SERVICE LINES SHALL BE SDR 26 PVC.
5. WASTEWATER MAINS SHALL BE INSTALLED WITHOUT HORIZONTAL OR VERTICAL BENDS.
6. MAXIMUM DISTANCE BETWEEN MANHOLES IS 500 FEET.
7. WASTEWATER MAINS SHALL BE LOW PRESSURE AIR TEST AND MANDREL TESTED BY THE CONTRACTOR ACCORDING TO CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
8. WASTEWATER MANHOLES SHALL BE VACUUM TESTED AND COATED BY CONTRACTOR ACCORDING TO THE CITY OF GEORGETOWN AND TCEQ REQUIREMENTS.
9. WASTEWATER MAINS SHALL BE CAMERA TESTED BY THE CONTRACTOR AND SUBMITTED TO THE CITY OF GEORGETOWN DVD FORMAT PRIOR TO PAVING THE STREETS.
10. PRIVATE WATER SYSTEM FIRE LINES SHALL BE TESTED BY CONTRACTOR TO 200 PSI FOR 4 HOURS.
11. PRIVATE WATER SYSTEM FIRE LINES SHALL BE DUCTILE IRON PIPING FROM THE WATER MAIN TO THE BUILDING SPRINKLER SYSTEM, AND 200 PSI C900 PVC FOR ALL OTHERS.
12. PUBLIC WATER SYSTEM MAINS SHALL BE 150 PSI C900 PVC AND TESTED BY THE CONTRACTOR AT 150 PSI FOR 2 HOURS.
13. ALL BENDS AND CHANGES IN DIRECTION ON WATER MAINS SHALL BE RESTRAINED AND THRUST BLOCKED.
14. LONG FIRE HYDRANT LEAD SHALL BE RESTRAINED.
15. ALL WATER LINES ARE TO BE BACTERIA TESTED BY THE CONTRACTOR ACCORDING TO THE CITY STANDARDS AND SPECIFICATIONS.
16. WATER AND SEWER MAIN CROSSINGS SHALL MEET ALL REQUIREMENTS OF TCEQ AND THE CITY,
17. FLEXIBLE BASE MATERIAL FOR PUBLIC STREETS SHALL BE TXDOT TYPE A GRADE 1.
18. HOT MIX ASPHALT CONCRETE PAVEMENT SHALL BE TYPE D UNLESS OTHERWISE SPECIFIED AND SHALL BE A MINIMUM OF 2 INCHES THICK ON PUBLIC STREETS AND ROADS.
19. ALL SIDEWALK RAMPS ARE TO BE INSTALLED WITH THE PUBLIC INFRASTRUCTURE.
20. A MAINTENANCE BOND IS REQUIRED TO BE SUBMITTED TO THE CITY PRIOR TO ACCEPTANCE OF THE PUBLIC IMPROVEMENT. THIS BOND SHALL BE ESTABLISHED FOR 2YEARS IN THE AMOUNT OF 10% OF THE COST OF THE PUBLIC IMPROVEMENTS AND SHALL FOLLOW THE CITY FORMAT.
21. RECORD DRAWINGS OF THE PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER PRIOR TO ACCEPTANCE OF THE PROJECT. THESE DRAWINGS SHALL BE ON TIFF OR PDF (300dpi).

GENERAL NOTES: (CITY)

PRIOR TO CONSTRUCTION ABOVE THE SLAB, PROVIDE AN ALL-WEATHER DRIVE SURFACE OF ASPHALT OR CONCRETE OR CHIP SEAL PLACED ONTO BASE MATERIAL ENGINEERED TO WITHSTAND 75,000 LBS. AN ACCEPTANCE INSPECTION BY FIRE INSPECTIONS IS REQUIRED.

2012 IFC 503 AND D102.1

FIRE PROTECTION NOTES

1. APPROVAL OF THIS SITE PLAN DOES NOT IMPLY APPROVAL TO INSTALL UNDERGROUND FIRE LINES. PRIOR TO INSTALLATION OF UNDERGROUND FIRE LINES, A SEPARATE PERMIT SHALL BE SUBMITTED, UNDER GROUND FIRE LINE SUPPLY.
2. BACKFLOW PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH THE CITY OF GEORGETOWN REQUIREMENTS WHEN REQUIRED. BACKFLOW PROTECTION WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE UTILITY DRAWINGS.
3. ALL PRIVATE FIRE LINES AND WHAT THEY PROVIDE SERVICE TO WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24 INSTILLATION OF PRIVATE SERVICE MAINS AND THEIR APPURTENANCES.
4. ALL TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES SHALL BE RESTRAINED AGAINST MOVEMENT. THRUST BLOCKING AND JOINT RESTRAINED WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24.
5. ALL UNDERGROUND SHALL REMAIN UNCOVERED UNTIL A VISUAL INSPECTION IS CONDUCTED BY THE GEORGETOWN FIRE MARSHAL'S OFFICE (FMO). ALL JOINT RESTRAINTS AND THRUST BLOCKING SHALL BE UNCOVERED FOR VISUAL INSPECTION.
6. ALL UNDERGROUND SHALL BE FLUSHED PER THE REQUIREMENTS OF NFPA STANDARD 24 AND WITNESSED BY GEORGETOWN FMO.
7. ALL UNDERGROUND SHALL PASS A HYDROSTATIC TEST WITNESSED BY GEORGETOWN FMO. ALL JOINTS SHALL BE UNCOVERED FOR HYDROSTATIC TESTING. ALL PIPING AND ATTACHMENTS SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE TESTED AT 200 PSI, OR 50 PSI MORE THAN THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE + OR - 5 PSI FOR 2 HOURS.
8. FENCES, LANDSCAPING, AND OTHER ITEMS WILL NOT BE INSTALLED WITHIN 3 FT, AND WHERE THEY WILL OBSTRUCT THE VISIBILITY OR ACCESS TO HYDRANTS, OR REMOTE FDCs.
9. LICENSE REQUIREMENTS OF EITHER RME-U OR G. WHEN CONNECTING BY UNDERGROUND TO THE WATER PURVEYOR'S MAIN FROM THE POINT OF CONNECTION OR VALVE WHERE THE PRIMARY PURPOSE OF WATER IS FOR FIRE PROTECTION SPRINKLER SYSTEM.

CONSTRUCTION SEQUENCING

1. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION AND INITIATE TREE MITIGATION MEASURES.
2. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REVISED, IF NEEDED, TO COMPLY WITH CITY INSPECTORS' DIRECTIVES, AND REVISED CONSTRUCTION SCHEDULE RELATIVE TO THE WATER QUALITY PLAN REQUIREMENTS AND THE EROSION PLAN.
3. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.
4. BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
5. COMPLETE CONSTRUCTION AND START RE-VEGETATION OF THE SITE.
6. UPON COMPLETION OF THE SITE CONSTRUCTION AND RE-VEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE TO THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT INDICATING THAT CONSTRUCTION, INCLUDING RE-VEGETATION, IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
7. AFTER CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN RE-VEGETATED PER PLAN TO AT LEAST 90 PERCENT ESTABLISHED, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL RE-VEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WATER QUALITY PONDS OR CONTROLS.

TPDES / SWPPP

A STORMWATER POLLUTION PREVENTION PLAN, AS REQUIRED BY THE STATE OF TEXAS UNDER THE TPDES STATUTES, IS REQUIRED FOR THIS PROJECT. THE SWPPP MUST BE FILED AND AVAILABLE FOR INSPECTION ON-SITE. PROJECT INFO & CONTACT NAME SHALL BE POSTED IN A PUBLIC PLACE AT THE MAIN GATE / CONSTRUCTION ENTRANCE. THE NOTICE OF INTENT (NOI) SHALL BE FILED WITH T.C.E.Q. AND A COPY GIVEN TO THE CITY OF GEORGETOWN. NO WORK SHALL BE STARTED BEFORE ALL ASPECTS OF THE SWPPP ARE IN PLACE. ALL REGULATIONS ON THE SWPPP SHALL BE STRICTLY FOLLOWED OR THE CONTRACTOR WILL BE SUBJECT TO SERIOUS FINES. CONTRACTOR INFORMATION:

CONTRACTOR:

CONTRACTOR PHONE NUMBER:

FIRE DEPARTMENT NOTES

ON PAVEMENT FIRE LINE STRIPES SHALL BE A CONTINUOUS 8" RED COLOR STRIPE WITH: "NO PARKING - FIRE LANE - TOW AWAY ZONE" IN 4" WHITE COLOR LETTERS.

ALONG CURBS, PAINT FACE WITH RED COLOR AND WRITE WITH 4" WHITE COLOR LETTERS: "NO PARKING - FIRE LANE - TOW AWAY ZONE".

TECQ-0592 (Rev. 3/15/07)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE 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. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.
5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.
6. 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).
7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.
8. 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).
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.
11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;

B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;

C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

AUSTIN REGIONAL OFFICE	SAN ANTONIO REGIONAL OFFICE
2800 S. IH 35, SUITE 100	14250 JUDSON ROAD
AUSTIN, TEXAS 78704-5712	SAN ANTONIO, TEXAS 78233-4480
PHONE (512) 339-2929	PHONE (210) 490-3096
FAX (512) 339-3795	FAX (210) 545-4329

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS

PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER DISTRIBUTION SYSTEM
GENERAL CONSTRUCTION NOTES

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS, AT A MINIMUM, MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS.
2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61-G AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI, AS REQUIRED BY 30 TAC §290.44(A)(1).
3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF PW-G) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS, AS REQUIRED BY 30 TAC §290.44(A)(2).
4. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY, AS REQUIRED BY 30 TAC §290.44(A)(3).
5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR, AS REQUIRED BY 30 TAC §290.44(E)(4)(B).
6. WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE, AS REQUIRED BY 30 TAC §290.44(A)(4).
7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT, AS REQUIRED BY 30 TAC §290.44(B)
8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT, AS REQUIRED BY 30 TAC §290.44(D)(1).
9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION, AS REQUIRED BY 30 TAC §290.44(F)(1).
10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED, AS REQUIRED BY 30 TAC §290.44(F)(1).
11. PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS.
   - THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC §290.44(A)(5), PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

$$Q = \frac{LPD\sqrt{P}}{148{,}000}$$

WHERE:

Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,

L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,

D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND

P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

   - THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-600 AS REQUIRED IN 30 TAC §290.44(A)(5), PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

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

WHERE:

L = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,

S = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,

D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND

P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIAL UTILIZED MUST MEET 30 TAC §290.44(E)(1)-(4).
13. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEAN-OUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT, AS REQUIRED BY 30 TAC §290.44(E)(5).
14. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION, AS REQUIRED BY 30 TAC §290.44(E)(6).
15. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE, AS REQUIRED BY 30 TAC §290.44(E)(7).
16. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAINFIELDS, AS REQUIRED BY 30 TAC §290.44(E)(8).
17. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14 OR MOST RECENT, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK FOR EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER, AS REQUIRED BY 30 TAC §290.44(F)(3).
18. DECHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER

5/4/2023

NO.	DATE	REVISIONS	RECOMM'D

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

GENERAL NOTES

PERMIT No.
2021-32-SWP

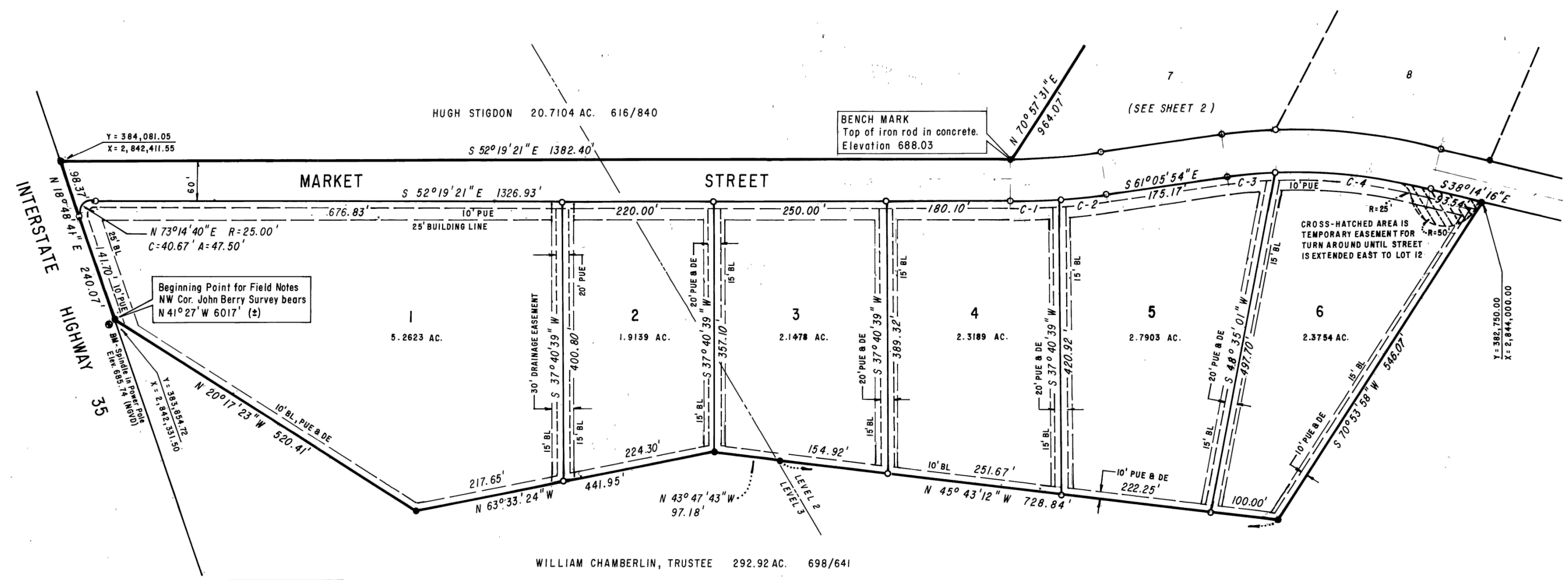
SHEET No.
2
OF 28

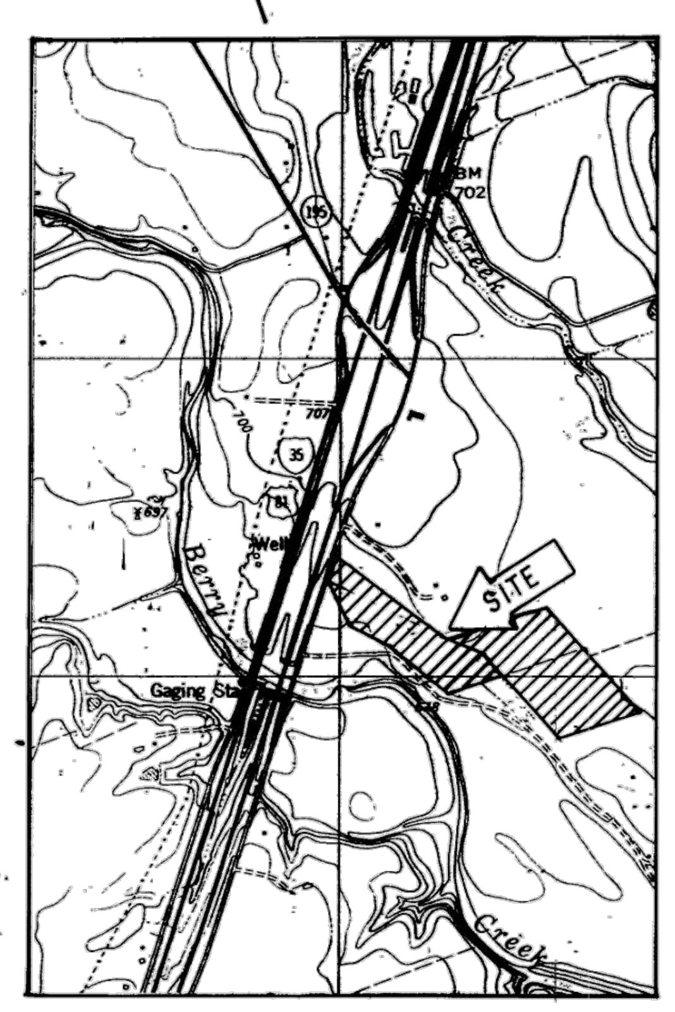
Cabinet O Slide 174 Doc#9716292

DOC# 9716292

RESOURCE COMMERCIAL PARK

52.14 ACRES OUT OF THE JOHN BERRY SURVEY, ABSTRACT 51 — WILLIAMSON COUNTY TEXAS





LOCATION DIAGRAM 1"=2000'

FIELD NOTES

BEING 52.1441 ACRES OF LAND OUT OF THE JOHN BERRY SURVEY, ABSTRACT NO. 51, WILLIAMSON COUNTY, TEXAS, AND BEING ALL OF THOSE CERTAIN TRACTS OF LAND DESCRIBED IN DEEDS TO DORSEYS LIVING TRUST OF 1993 PART A, J. D. DORSEY, TRUSTEE, RECORDED IN VOLUME 9630, PAGE 935, AND OFFICIAL RECORDS OF WILLIAMSON COUNTY, AND BEING MORE PARTICULARLY DESCRIBED BY METES AND BOUNDS AS FOLLOWS, TO WIT:

BEGINNING at an iron rod found at the most westerly corner hereof in the southeast right-of-way of Interstate Highway 35, from which the northwest corner of the John Berry Survey, Abstract No. 51, bears N 41° 27' W a distance of 6017 feet;

THENCE N 18°48' 41" E a distance of 240.07 feet with the southeast line of IH-35 to an iron rod found at the most northerly corner hereof;

THENCE with the northeast line hereof, the following described four (4) courses and distances:

1) S 52° 19' 21" E a distance of 1382.40 feet to an iron rod found;
2) N 70° 57' 31" E a distance of 964.07 feet to an iron rod found;
3) S 36° 07' 12" E a distance of 805.69 feet to an iron rod found, and;
4) S 36° 00' 17" E a distance of 1015.20 feet to an iron rod found at the most easterly corner hereof;

THENCE S 70° 03' 55" W a distance of 773.09 feet to an iron rod found at the most southerly corner hereof;

THENCE with the southwesterly line hereof, the following described seven (7) courses and distances:

1) N 37° 56' 41" W a distance of 723.57 feet to an iron rod found;
2) N 38° 14' 16" W a distance of 487.56 feet to an iron rod found;
3) S 70° 53' 58" W a distance of 545.93 feet to an iron rod found;
4) N 45° 43' 12" W a distance of 728.84 feet to a nail found in a 66" dia. live oak;
5) N 43° 47' 43" W a distance of 97.18 feet to a nail found in top of a post;
6) N 63° 33' 24" W a distance of 441.95 feet to an iron rod found, and;
7) N 20° 17' 23" W a distance of 520.41 feet to the Place of Beginning, containing 52.1441 acres of land.

DRIVEWAY CULVERT SCHEDULE

Lot Number	Culvert Size (Min.)	Culvert Slope	Q_{25} (cfs)	Headwater (ft.)	Q_{100} (cfs)	Headwater (ft.)
Lot 1	Culvert Not Required		Not Applicable		Not Applicable	
Lot 2	Culvert Not Required		Not Applicable		Not Applicable	
Lot 3	Culvert Not Required		Not Applicable		Not Applicable	
Lot 4	Culvert Not Required		Not Applicable		Not Applicable	
Lot 5	Culvert Not Required		Not Applicable		Not Applicable	
Lot 6	Culvert Not Required		Not Applicable		Not Applicable	
Lot 7	24" CMP	0.80%	8.9	1.63	12.5	2.06
Lot 8	2 @ 18" CMP	0.80%	14.2	1.87	20.2	2.90
Lot 9	24" CMP	0.80%	6.7	1.41	9.3	1.68
Lot 10	18" CMP	0.80%	2.0	0.85	2.8	0.96
Lot 11	18" CMP	0.80%	4.4	1.23	6.0	1.59
Lot 12	18" CMP	0.80%	5.0	1.35	6.9	1.80

NOTE: Changes to above culvert sizing may only be made by a Texas Registered Professional Engineer. Culvert cost and installation is the responsibility of the individual lot Owner.

All culvert calculations based on following assumptions:

1. Corrugated Metal Pipe culverts used (FHWA Chart No. 2)
2. Beveled pipe ends (scale no. 2 on chart)
3. Mannings 'n' value of 0.024
4. Entrance Loss coefficient of 0.50
5. Culvert length = 30 ft. per drive
6. Culvert slope = ditch line slope (0.80% min.)

● DENOTES IRON ROD FD.
○ DENOTES IRON ROD SET
BL BUILDING LINE
PUE PUBLIC UTILITY EASEMENT
DE DRAINAGE ESMT.

Doc# 9716292
Pages: 3
Date : 04-16-1997
Time : 08:35:30 A.M.
Filed & Recorded in Official Records of WILLIAMSON County, TX.
ELAINE BIZZELL
COUNTY CLERK
Rec. $ 106.00

SHEET 1 of 3

96072

PHOTOGRAPHIC MYLAR

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX DRAWN: VALUE REVIEWED: VALUE

FOR INFORMATIONAL PURPOSES ONLY

NO. DATE REVISIONS RECORD

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

FINAL PLAT (1 OF 3)

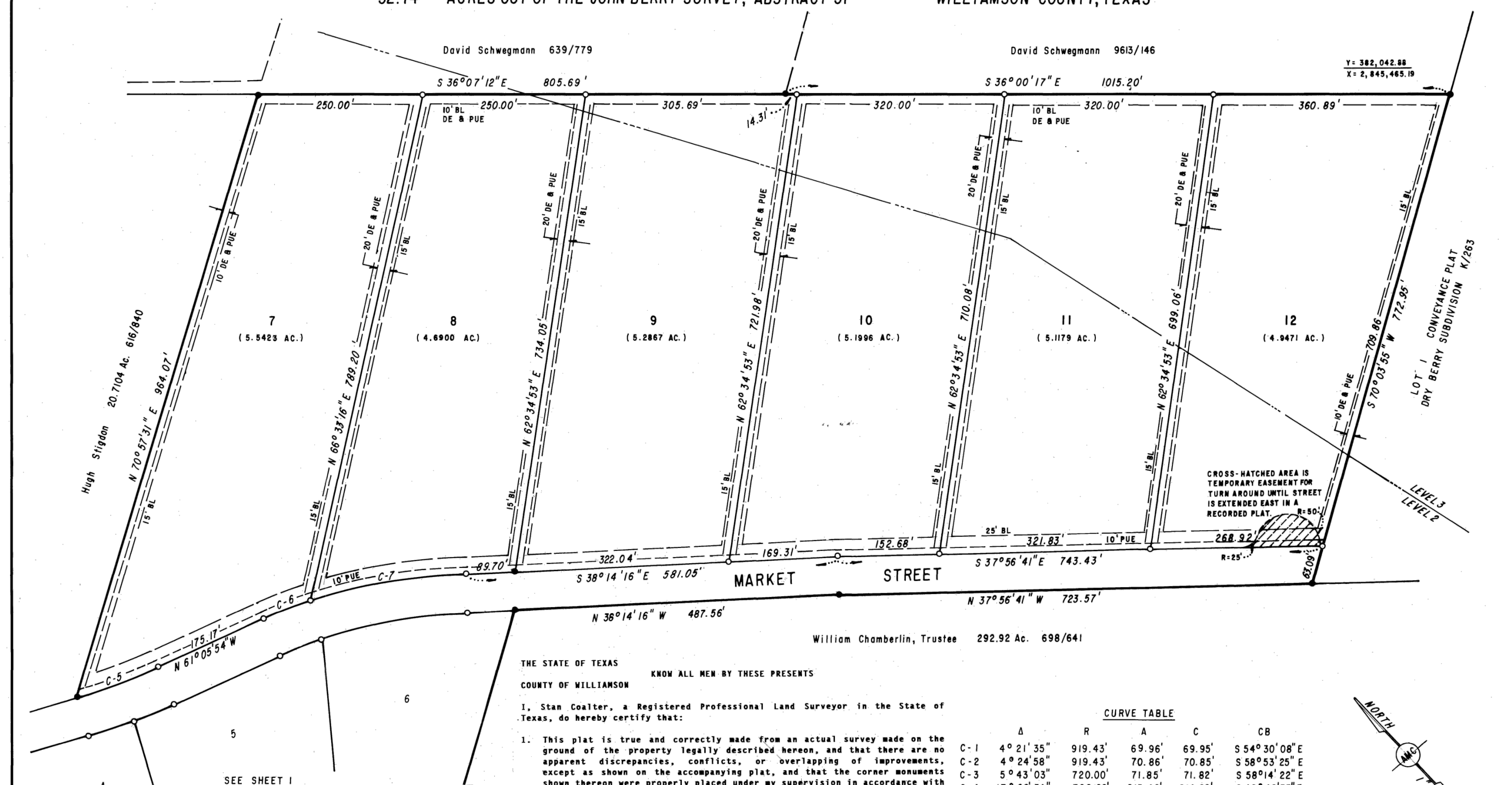
PERMIT No. 2021-32-SWP

SHEET No. 3 OF 28

Cabinet O Slide 175

RESOURCE COMMERCIAL PARK

52.14 ACRES OUT OF THE JOHN BERRY SURVEY, ABSTRACT 51 — WILLIAMSON COUNTY, TEXAS



THE STATE OF TEXAS
COUNTY OF WILLIAMSON

That I, Elaine Bizzell, Clerk of the County Court of said County, do hereby certify that the foregoing instrument in writing, with its certification of authentication, was filed for record in my office on the 10 day of April A.D., 1997, at 12:45 o'clock P. M. and duly recorded on the 16 day of April A.D., 1997, at 8:35 o'clock A. M. in the Plat Records of said County, in Cabinet O, Slide(s) 174, 175 + 176.

WITNESS MY HAND AND SEAL of the County Court of said County, at office in Georgetown, Texas, the date last above written.

ELAINE BIZZELL, Clerk, County Court
Williamson County, Texas

By: Leslie Hargett
Deputy

THE STATE OF TEXAS
KNOW ALL MEN BY THESE PRESENTS
COUNTY OF WILLIAMSON

I, Stan Coalter, a Registered Professional Land Surveyor in the State of Texas, do hereby certify that:

1. This plat is true and correctly made from an actual survey made on the ground of the property legally described hereon, and that there are no apparent discrepancies, conflicts, or overlapping of improvements, except as shown on the accompanying plat, and that the corner monuments shown thereon were properly placed under my supervision in accordance with the Subdivision Regulations of the City of Georgetown, Texas.

2. This tract is located within the Edwards Aquifer Recharge Zone.

3. This tract is not within a Special Flood Hazard Area as identified by the U.S. Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel No. 481079 0115C, effective 11-8-96.

4. The plat and field notes shown hereon form mathematically closed figures.

TO CERTIFY WHICH, WITNESS my hand and seal at Round Rock, Texas, this 27th day of November, 1996.

Stan Coalter, RPLS, LSLS

COALTER & ASSOCIATES
905 N. IH-35, Suite 108
Round Rock, Texas 78664
512-255-8211

STATE OF TEXAS REGISTERED STAN COALTER 1481 PROFESSIONAL LAND SURVEYOR

CURVE TABLE

	Δ	R	A	C	CB
C-1	4°21'35"	919.43'	69.96'	69.95'	S 54°30'08" E
C-2	4°24'58"	919.43'	70.86'	70.85'	S 58°53'25" E
C-3	5°43'03"	720.00'	71.85'	71.82'	S 58°14'22" E
C-4	17°08'34"	720.00'	215.42'	214.62'	S 46°48'33" E
C-5	8°46'33"	859.43'	131.64'	131.51'	N 56°42'37" W
C-6	6°11'02"	780.00'	84.18'	84.14'	N 58°00'22" W
C-7	16°40'35"	780.00'	227.02'	226.22'	N 46°34'34" W

96072

SHEET 2 OF 3

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX DRAWN: VALUE REVIEWED: VALUE

FOR INFORMATIONAL PURPOSES ONLY

NO. DATE REVISIONS RECOM'D

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

FINAL PLAT (2 OF 3)

PERMIT No. 2021-32-SWP

SHEET No. 4 OF 28

cabinet O Slide 176

RESOURCE COMMERCIAL PARK

NOTES

1. Electrical service for this subdivision will be provided by Pedernales Electric Cooperative, Inc. Water service will be provided by the Chisholm Trail S.U.D. Sewer service will be by on-site sewage facilities.
2. This tract is located within the Edwards Aquifer Recharge Zone. No construction in the subdivision may begin until the Texas Natural Resources Conservation Commission has approved in writing the water pollution abatement plan.
3. This subdivision is not within a Special Flood Hazard Area inundated by the 100 year flood plain as identified by the U. S. Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel 481079 0115C effective 11-8-96.
4. The provisions of the Century-Plan Development Plan shall govern this project. This tract is designated Intensity Level 2 & 3.
5. There shall be an avigation easement over this subdivision which:
   a. Grants for the use and benefit of the public a continuing easement and right of flight for the passage of aircraft in the space above the surface of the land over which this easement is obtained, together with the right to cause in said air space such noise as may be inherent in the operation of aircraft, now known or hereafter used for navigation of or flight in the air space, using said air space for landing at, taking off from or operating on the Georgetown Municipal Airport, and;
   b. Will limit the height of any structure to no more than the approach slope of the transition slope elevation of the Georgetown Airport as indicated on the plat. maximum height of any structure shall be the difference between the ground elevation and the avigation elevation for any particular location.
   c. This subdivision is located beneath the horizontal control elevation of 939 feet.
   d. The maximum height of any structure located in the easement is 254 feet.
6. Maximum impervious cover shall not exceed 70 percent.
7. All lots in this subdivision are for commercial land use.
8. A Public Utility Easement 10' in width is hereby dedicated adjacent to all right-of-ways, and a Drainage and Public Utility Easement 10' in width is hereby dedicated along the sides and rear of all lots.
9. No structure or land on this plat shall hereafter be located or altered without first submitting a CERTIFICATE OF COMPLIANCE Application Form to the Williamson County Flood Plain Administrator.
10. All public roadways and easements are dedicated free of liens.
11. Linear feet of new street dedicated hereon is 3325.
12. All building slab elevations shall be 1' above any point on the lot within 5' of the perimeter of the building.
13. Pursuant to the Development Agreement concerning Resource Commercial Park, no septic permits shall be issued to Lots 9-12 until Market Street is extended to the end of each lot.
14. As lots in the subdivision are developed, water quality controls shall be provided in accordance with the current TNRCC Edwards Aquifer Recharge Zone regulations. Water quality controls shall be designed to treat on-site development as well as roadway development from the roadway centerline to the adjacent right-of-way line. For Lots 1, 2, 3, and 4, these controls shall be designed to treat on-site development as well as roadway development within the entire right-of-way adjcent to each lot.
15. On-site stormwater detention for each lot will be sized to accommodate the concentrated run-off from the adjacent Market Street right-of-way.

ENGINEER'S CERTIFICATION

THE STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF TRAVIS

I, James M. Cook, a Registered Professional Engineer in the state of Texas, do hereby certify that the fully developed, concentrated stormwater runoff resulting from the one hundred (100) year frequency storm is contained within the drainage easements shown and/or public rights-of-way dedicated by this plat.

TO CERTIFY WHICH, WITNESS, my hand and seal at Austin, Texas, this 2nd day of FEBRUARY, 1997.

James M. Cook, P.E. #58640

Cook-Steinman & Associates
3101 Bee Cave Road, Suite 314
Austin, Texas 78746
Tel. 306-0011
Fax 306-0033

STATE OF TEXAS
JAMES M. COOK
REGISTERED PROFESSIONAL ENGINEER

The subdivision known as RESOURCE COMMERCIAL PARK has been approved for filing for record according to the minutes of the meeting of the Georgetown City Council on the 25TH day of FEBRUARY, 1997 A.D.

Leo Wood, Mayor
City of Georgetown, Texas

Cari Sandra Lee Deputy City Secretary
City of Georgetown, Texas

I, ______________, City Manager of the City of Georgetown, Texas, hereby certify that this subdivision plat conforms to all requirements of the Subdivision Regulations as to which approval is required.

Date: 4/7/97

Bob Hart, City Manager
City of Georgetown, Texas

Accepted and authorized for record by the City Planning and Zoning Commission of the City of Georgetown, Texas.

Date: 4/7/97

Leon Douglas, Chairman

Date: 4-9-97

Hiedy L. Kuigma for Edward J. Barry, Secretary
Edward J. Barry

Approved for the U.S. Postal Service this 31 day of MARCH, 1997.

POSTMASTER

GENERAL NOTE

Based upon the above representations of the engineer or surveyor whose seal is affixed hereto, and after a review of the plat as represented by the said engineer or surveyor, I find that this plat complies with the requirements of Edwards Aquifer Regulations for Williamson County, the Williamson County Flood Plain Regulations, and Williamson County On-Site Sewerage Facility Regulations. This certification is made solely upon such representations and should not be relied upon for verification of the facts alleged. The Williamson County Health District and Williamson County disclaims any responsibility to any member of the public for independent verification of the representations, factual or otherwise, contained in this plat and the documents associated with it.

Paulo Pinto RS
Paulo Pinto
Director of Environmental Services

DATE: 2/6/97

THE STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF WILLIAMSON

That I, J. D. Dorsey, Trustee, Dorseys Living Trust of 1993 Part A, sole owner of the certain tract of land recorded in Volume 9630, Page 935, and VOL. 9662, PG. 951, Official Records of Williamson County, do hereby state that there are no lien holders of the certain tract of land and do hereby subdivide said parcel as shown hereon, and do hereby consent to all plat note requirements shown hereon, and do hereby dedicate to the County of Williamson the streets, alleys, rights-of-way, easements, and public places shown hereon for such public purposes as the City of Georgetown may deem appropriate. This subdivision is to be known as RESOURCE COMMERCIAL PARK.

TO CERTIFY WHICH, WITNESS by my hand this 15th day of February, 1997.

J. D. Dorsey, Trustee

J. D. DORSEY
P.O. BOX 314
GEORGETOWN, TEXAS 78627
Tel. 512-869-7302
Fax 512-869-5866

THE STATE OF TEXAS

KNOW ALL MEN BY THESE PRESENTS

COUNTY OF WILLIAMSON

Before me, the undersigned authority, on this day personally appeared J. D. Dorsey, Trustee, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL of office this the 15th day of February, 1997.

Melba Stevison

Notary Public in and for the State of ~~Texas~~ Louisiana
My Commission is for life

COMMISSIONERS' COURT APPROVAL

In approving this plat by the Commissioners' Court of Williamson County, Texas, it is understood that the building of all streets, roads and other public thoroughfares and any bridges or culverts necessary to be constructed or placed is the responsibility of the owners of the tract of land covered by this plat in accordance with the plans and specifications prescribed by the Commissioners' Court of Williamson County, Texas. Said Commissioners' Court assumes no obligation to build or maintain any of the streets, roads, or other public thoroughfares shown on this plat or of constructing any of the bridges or culverts in connection therewith. It is further understood that upon completion of the aforesaid obligations of the Developer and either 60 per cent occupancy of the lots along the roadways and streets in the subdivision has been achieved or the expiration of 2 years from the date of completion, and all driveway drainpipes have been installed, on written permission from the County Commissioners' Court, the County will assume full responsibility for maintenance of said streets and roads. The County will assume no responsibility for drainage ways or easements in the subdivision, other than those draining or protecting the road system and streets.

The County assumes no responsibility for the accuracy of representations by other parties in this plat. Flood plain data, in particular, may change depending on subsequent development.

It is further understood that the owners of the tract of land covered by this plat must install at their own expense all traffic control devices and signage that may be required before the streets in the subdivision have finally been accepted for maintenance by the County.

I, John Doerfler, County Judge of Williamson County, Texas, do hereby certify tha this plat, with field notes and surveyors certificate appearing hereon, of RESOURCE COMMERCIAL PARK, a subdivision having been fully presented to the Commissioner's Court of Williamson County, Texas, and by the said Court duly considered, was this day approved, and said Plat is authorized to be recorded and registered in the proper records of the County Clerk of Williamson County, Texas.

John Doerfler, County Judge — signed 4-15-97

Date: approved 3-18-97

SHEET 3 OF 3

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX DRAWN: VALUE REVIEWED: VALUE

FOR INFORMATIONAL PURPOSES ONLY

NO.	DATE	REVISIONS	RECOM'D

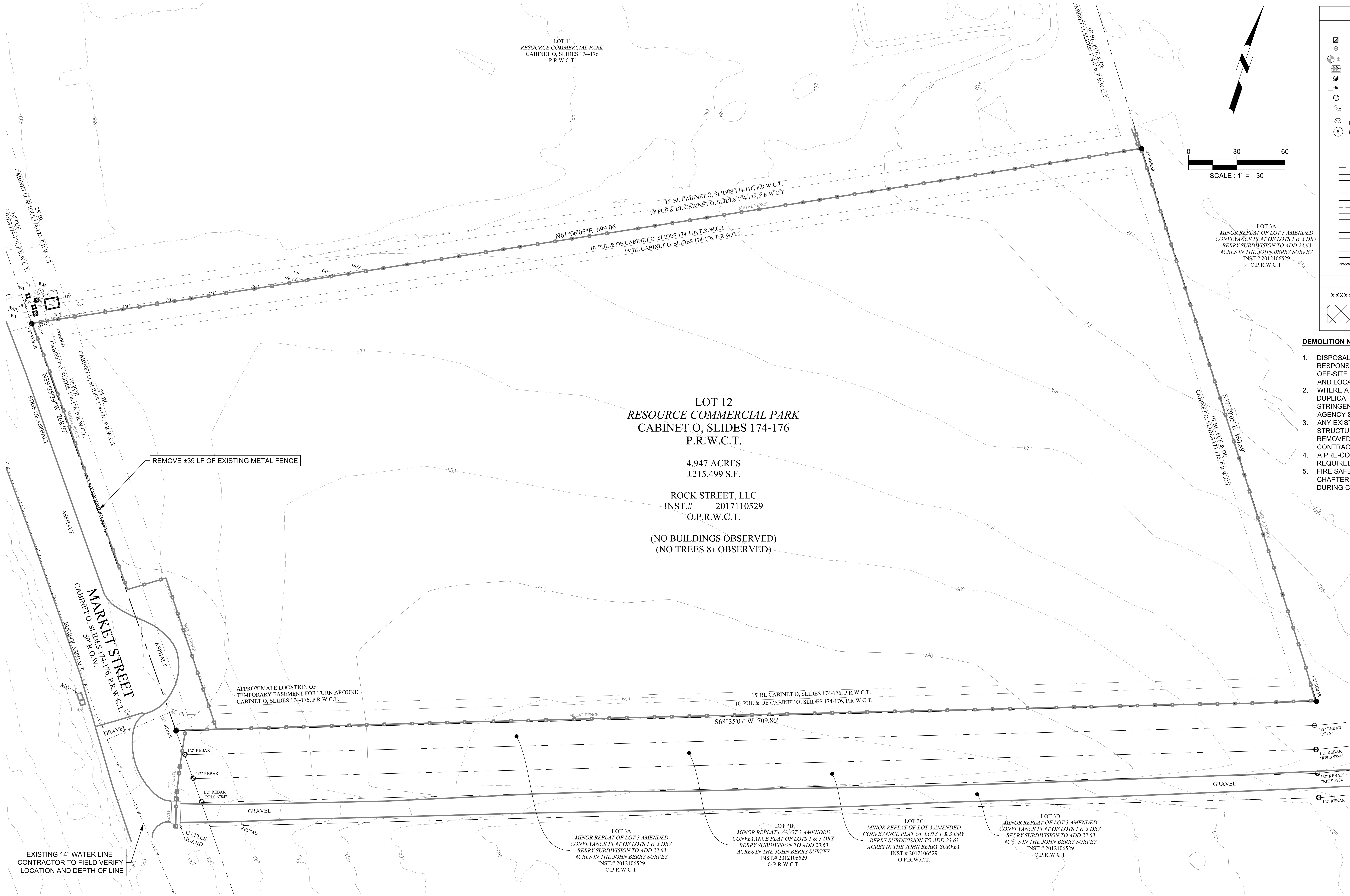
MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

FINAL PLAT (3 OF 3)

PERMIT No. 2021-32-SWP

SHEET No. 5 OF 28



GENERAL LEGEND

SYMBOLS

WATER METER, WATER VALVE, FIRE HYDRANT, BACKFLOW PREVENTER, UTILITY POLE, LIGHT POLE, WASTEWATER MANHOLE, CLEAN OUT, KEYNOTES, PARKING COUNT, WW SERVICE, WATER SERVICE, STORMSEWER MANHOLE, SIGN, CURB INLET, GRATE INLET, TABLE TOP AREA INLET, TREE TO BE SAVED, TREE TO BE REMOVED

LINETYPES

PROPERTY BOUNDARY, LIMITS OF CONSTRUCTION, FENCES (CHAINLINK), (IRON), (WOOD), (BARB WIRE), DITCH (CREEK) LINE, EXISTING CONTOURS, PROPOSED CONTOURS, CURB & GUTTER, UNDERGROUND ELEC., OVERHEAD UTILITY, UNDERGROUND TELE., UNDERGROUND GAS LINE, WATER LINE, WASTEWATER LINE, ACCESSIBLE ROUTE

DEMOLITION LEGEND

xxxxxxxxx LINE DEMO (UTILITIES, CURBS)

AREA OF DEMO (VEGETATION, PAVEMENT, UTILITIES)

DEMOLITION NOTES:

1. DISPOSAL OF ALL DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS.
2. WHERE A STATE OR LOCAL MUNICIPAL STANDARD DETAIL DUPLICATES A DETAIL SHOWN ON THE PLANS, THE MORE STRINGENT DETAIL AS DETERMINED BY THE REVIEWING AGENCY SHALL APPLY.
3. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREE, ETC. THAT IS DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.
4. A PRE-CONSTRUCTION MEETING WITH THE CITY, IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
5. FIRE SAFETY: THIS SITE SHALL BE COMPLIANT WITH CHAPTER 33 OF THE INTERNATIONAL FIRE CODE 2015, DURING CONSTRUCTION AND DEMOLITION.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO. | DATE | REVISIONS | RECORD

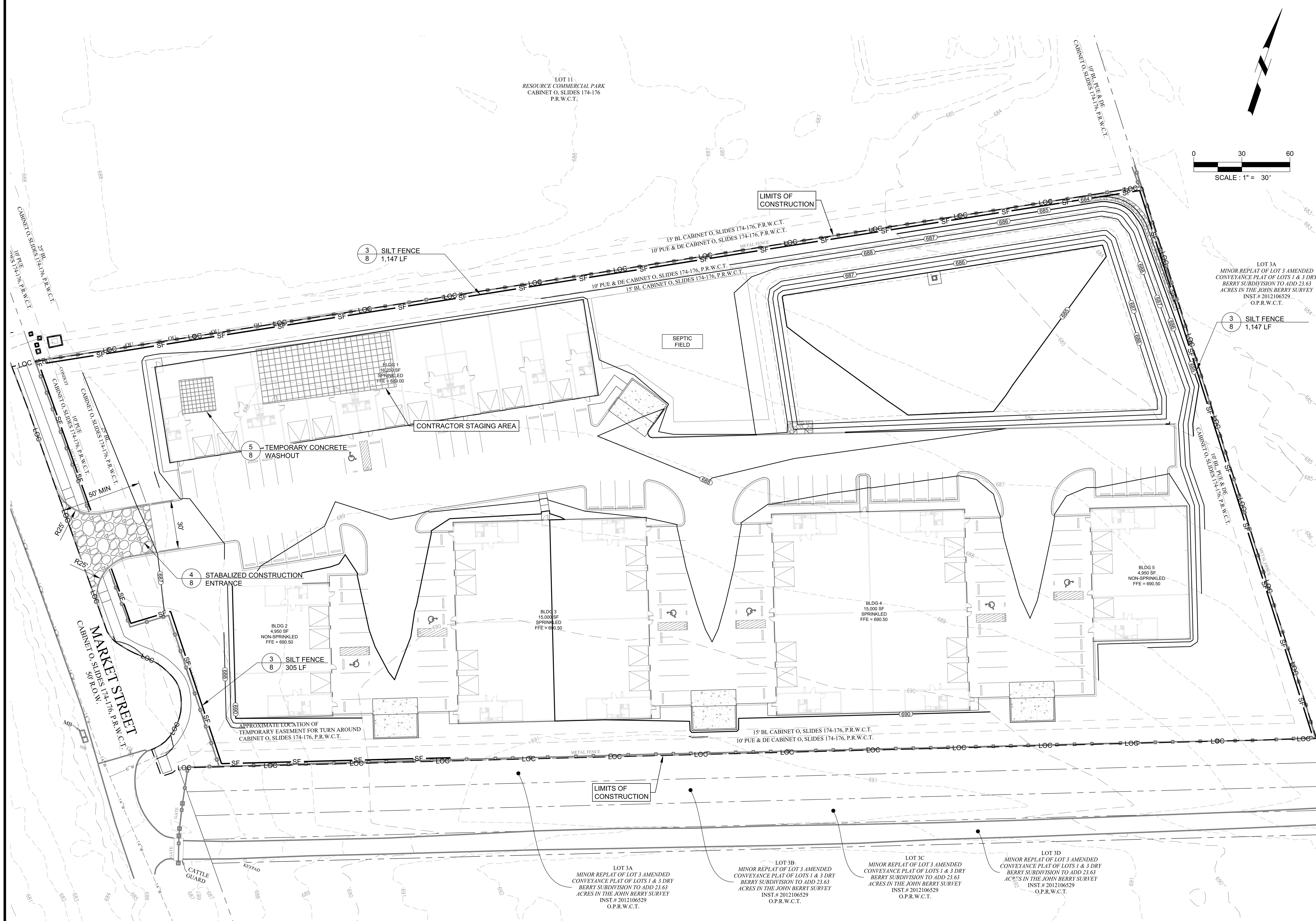
MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

EXISTING CONDITIONS & DEMO PLAN

PERMIT No. 2021-32-SWP

SHEET No. 6 OF 28



GENERAL LEGEND

SYMBOLS

WATER METER
WATER VALVE
FIRE HYDRANT
BACKFLOW PREVENTER
UTILITY POLE
LIGHT POLE
WASTEWATER MANHOLE
CLEAN OUT
KEYNOTES
PARKING COUNT
WW SERVICE
WATER SERVICE
STORMSEWER MANHOLE
SIGN
CURB INLET
GRATE INLET
TABLE TOP AREA INLET
TREE TO BE SAVED
TREE TO BE REMOVED

LINETYPES

PROPERTY BOUNDARY
LIMITS OF CONSTRUCTION
FENCES (CHAINLINK)
(IRON)
(WOOD)
(BARB WIRE)
DITCH (CREEK) LINE
EXISTING CONTOURS
PROPOSED CONTOURS
CURB & GUTTER
UNDERGROUND ELEC.
OVERHEAD UTILITY
UNDERGROUND TELE.
UNDERGROUND GAS LINE
WATER LINE
WASTEWATER LINE
ACCESSIBLE ROUTE

EROSION & SEDIMENT CONTROL, TREE PROTECTION LEGEND

LIMITS OF CONSTRUCTION
TREE PROTECTION FENCING
ROCK BERM
SILT FENCE
ORANGE MESH SAFETY FENCE
INLET PROTECTION
LP LOW POINT
HP HIGH POINT
STABILIZED CONSTRUCTION ENTRANCE
TEMPORARY SPOILS SITE
CONSTRUCTION STAGING AREA
EROSION CONTROL BLANKET
REVEGETATION AREA

NOTES:

1. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER CITY CODE, OR AS DIRECTED BY THE OWNERS REPRESENTATIVE.
2. SILT FENCE TYPE AND INSTALLATION SHALL COMPLY WITH DETAIL.
3. ALL DISTURBED AREAS SHALL BE REVEGETATED WITH NATIVE GRASSES (REFER TO NOTE SHEET FOR SPECS). ALL DISTURBED AREAS WITH SLOPES 5:1 OR STEEPER, WHICH ARE NOT ARMORED OTHERWISE, SHALL HAVE A SOIL RETENTION BLANKET (EXCELSIOR II OR APPROVED EQUAL) INSTALLED TO ASSIST WITH REVEGETATION.

DETAIL NUMBER
SHEET NUMBER WHERE DETAIL IS LOCATED
/ # DETAIL NAME
DETAIL REFERENCE CALLOUT

ESTIMATED ESC QUANTITIES:

LIMITS OF CONSTRUCTION	= 5.00 AC.
SILT FENCE	= ±1,452 LF
TREE PROTECTION FENCE	= ±0 LF
ROCK BERM	= ±0 LF

NOTE:
THESE VALUES ARE APPROXIMATE AND SHOULD NOT BE USED FOR BIDDING AND/OR CONSTRUCTION PURPOSES. CONTRACTOR TO VERIFY EROSION AND SEDIMENTATION CONTROL QUANTITIES.

ESC NOTES:

1. NO TREES 8" OR BIGGER ARE OBSERVED ON SITE.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX DRAWN: VALUE REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

EROSION AND SEDIMENTATION CONTROL PLAN

PERMIT No.
2021-32-SWP

SHEET No.
7
OF 28

GUIDELINES FOR DESIGN AND INSTALLATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROLS

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%

* FOR ROCK BERM DESIGN WHERE PARAMETERS ARE OTHER THAN STATED, DRAINAGE AREA CALCULATIONS AND ROCK BERM DESIGN MUST BE SUBMITTED FOR REVIEW.

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

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

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

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
TEMPORARY EROSION AND SEDIMENTATION CONTROL GUIDELINES
1

NOTE: THIS SECTION IS INTENDED TO ASSIST THOSE PERSONS PREPARING WATER POLLUTION ABATEMENT PLANS (WPAP) OR STORM WATER POLLUTION PREVENTION PLANS (SW3P) THAT COMPLY WITH FEDERAL, STATE AND/OR LOCAL STORM WATER REGULATIONS.

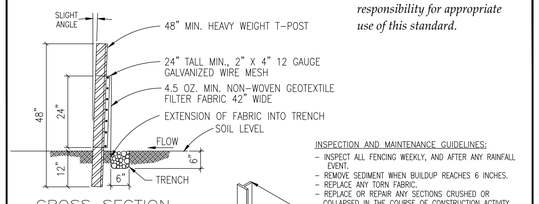
1. THE CONTRACTOR TO INSTALL AND MAINTAIN EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING, GRADING, OR EXCAVATION). CONTRACTOR TO REMOVE EROSION/SEDIMENTATION CONTROLS AT THE COMPLETION OF PROJECT AND GRASS RESTORATION.
2. 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 PLACEMENT OF EROSION/SEDIMENTATION CONTROLS TO BE IN ACCORDANCE WITH THE APPROVED 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 BE DONE BETWEEN MAY 1 AND SEPTEMBER 15 EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING. IF PLANTING IS AUTHORIZED TO BE DONE OUTSIDE THE DATES SPECIFIED, THE SEED SHALL BE PLANTED WITH THE ADDITION OF WINTER FESCUE (KENTUCKY 31) AT A RATE OF 100lb/ACRE. GRASS SHALL BE COMMON BERMUDA GRASS, HULLED, MINIMUM 82% PURE LIVE SEED. ALL GRASS SEED SHALL BE FREE FROM NOXIOUS WEED, GRADE "A" RECENT CROP, RECLEANED AND TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. SEED SHALL BE FURNISHED IN SEALED, STANDARD CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS.
5. ALL DISTURBED AREAS TO BE RESTORED AS NOTED IN THE WATER POLLUTION 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 OCCURRENCES OF 1/2 INCH OR GREATER TO POSTPONE THE WATERING SCHEDULE ONE WEEK.
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 FOUR (4) INCHES OF TOPSOIL TO BE PLACED IN ALL AREAS DISTURBED BY 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 BUILDUP WITHIN TREE DRIPLINE.
11. TO AVOID SOIL COMPACTION, CONTRACTOR SHALL NOT ALLOW VEHICULAR TRAFFIC, PARKING, OR STORAGE OF EQUIPMENT OR MATERIALS IN THE TREE DRIPLINE AREAS.
12. WHERE A FENCE IS CLOSER THAN FOUR (4) FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF EIGHT (8) FEET (OR TO THE LIMITS 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. ANY ROOT EXPOSED BY CONSTRUCTION ACTIVITY TO BE PRUNED 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 THEM 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 BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.). ALL FINISHED PRUNING TO BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE "NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES").
16. THE CONTRACTOR IS TO INSPECT THE 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 SPOIL DISPOSAL SITE. THE CONTRACTOR TO CONDUCT PERIODIC INSPECTIONS OF ALL EROSION/SEDIMENTATION CONTROLS AND TO MAKE ANY REPAIRS OR MODIFICATIONS NECESSARY TO ASSURE CONTINUED EFFECTIVE OPERATION OF EACH DEVICE.
17. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT IMMEDIATELY ADJACENT TO A PROTECTED TREE, ERECT THE FENCE APPROXIMATELY TWO TO FOUR FEET (2'-4') BEHIND THE AREA IN QUESTION.
18. NO ABOVE AND/OR BELOW GROUND TEMPORARY FUEL STORAGE FACILITIES TO BE STORED ON THE PROJECT SITE.
19. IF EROSION AND SEDIMENTATION CONTROL SYSTEMS ARE EXISTING FROM PRIOR CONTRACTS, OWNER'S REPRESENTATIVE AND THE CONTRACTOR TO EXAMINE THE EXISTING EROSION AND SEDIMENTATION CONTROL SYSTEMS FOR DAMAGE PRIOR TO CONSTRUCTION. ANY DAMAGE TO PREEXISTING EROSION AND SEDIMENTATION CONTROLS NOTED TO BE REPAIRED AT OWNERS EXPENSE.
20. INTENTIONAL RELEASE OF VEHICLE OR EQUIPMENT FLUIDS ONTO THE GROUND IS NOT ALLOWED. CONTAMINATED SOIL RESULTING FROM ACCIDENTAL SPILL TO BE REMOVED AND DISPOSED OF PROPERLY.

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

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

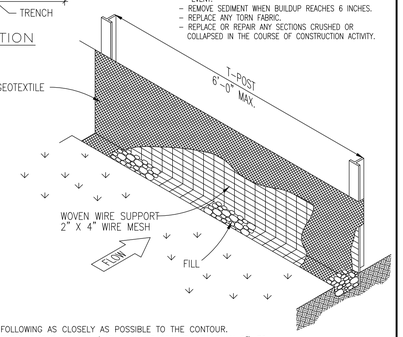
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
EROSION AND SEDIMENTATION AND TREE PROTECTION NOTES
2

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



CROSS SECTION

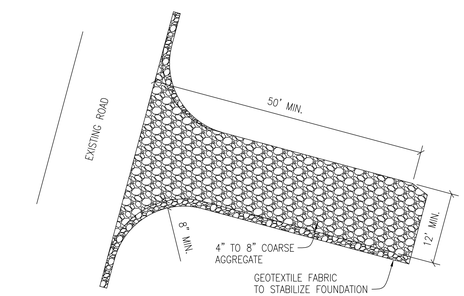
INSPECTION AND MAINTENANCE GUIDELINES:
- INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL EVENT.
- REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
- REPLACE ANY TORN FABRIC.
- REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY.

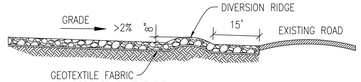


INSTALLATION:
- LAYOUT THE SILT FENCE FOLLOWING AS CLOSELY AS POSSIBLE TO THE CONTOUR.
- CLEAR THE GROUND OF DEBRIS, ROCKS, PLANTS (INCLUDING GRASSES TALLER THAN 2") TO PROVIDE A SMOOTH FLOW APPROACH SURFACE. EXCAVATE 6" DEEP X 6" WIDE TRENCH ON UPSTREAM SIDE OF FACE PER PLANS.
- DRIVE THE HEAVY DUTY T-POST AT LEAST 12 INCHES INTO THE GROUND AND AT A SLIGHT ANGLE TOWARDS THE FLOW.
- ATTACH THE 2" X 4" 12 GAUGE WELDED WIRE MESH TO THE T-POST WITH 11 1/2 GAUGE GALVANIZED T-POST CLIPS. THE TOP OF THE WIRE TO BE 24" ABOVE GROUND LEVEL. THE WELDED WIRE MESH TO BE OVERLAPPED 6" AND TIED AT LEAST 6 TIMES WITH HOG RINGS.
- THE SILT FENCE TO BE INSTALLED WITH A SKIRT A MINIMUM OF 6" WIDE PLACED ON THE UPHILL SIDE OF THE FENCE INSIDE 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").
- GEOTEXTILE SPLICES SHOULD BE A MINIMUM OF 18" WIDE ATTACHED IN AT LEAST 6 PLACES. SPLICES IN CONCENTRATED FLOW AREAS WILL NOT BE ACCEPTED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

REVISION NOTE:	ADOPTED 6/21/2006
DRAWING NAME:	EC02
SCALE: NTS	DATE: 1/2003
DRAWN BY: MRS	APPROVED BY: TRB

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
SILT FENCE DETAIL
3





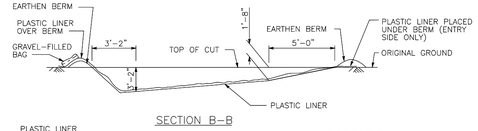
INSTALLATION:
- CLEAR THE AREA OF DEBRIS, ROCKS OR PLANTS THAT WILL INTERFERE WITH INSTALLATION.
- GRADE THE AREA FOR THE ENTRANCE TO FLOW BACK ON TO THE CONSTRUCTION SITE. RUNOFF FROM THE STABILIZED CONSTRUCTION
- PLACE GEOTEXTILE FABRIC AS APPROVED BY THE CITY.
- PLACE ROCK AS APPROVED BY THE CITY.

INSPECTIONS AND MAINTENANCE GUIDELINES:
- THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
- ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED 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.

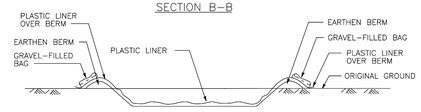
The Architect/Engineer assumes responsibility for appropriate use of this standard.

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

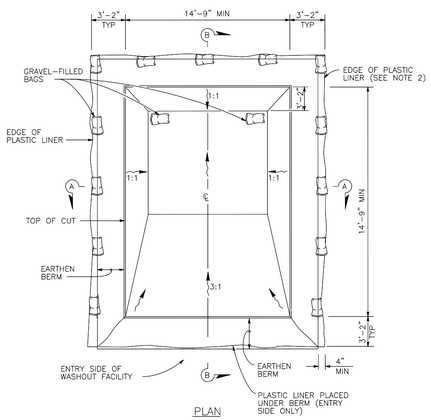
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
STABILIZED CONSTRUCTION ENTRANCE
4



SECTION B-B

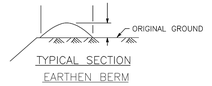


SECTION A-A

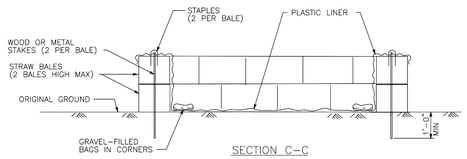


PLAN

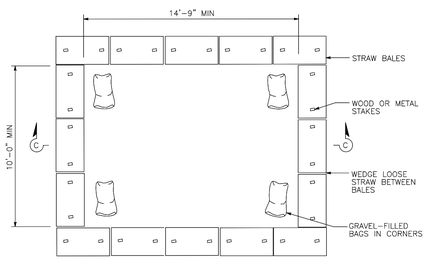
5 TEMPORARY CONCRETE WASHOUT FACILITY (BELOW GRADE) NTS



TYPICAL SECTION EARTHEN BERM



SECTION C-C



PLAN

5 TEMPORARY CONCRETE WASHOUT FACILITY (ON GRADE) NTS

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

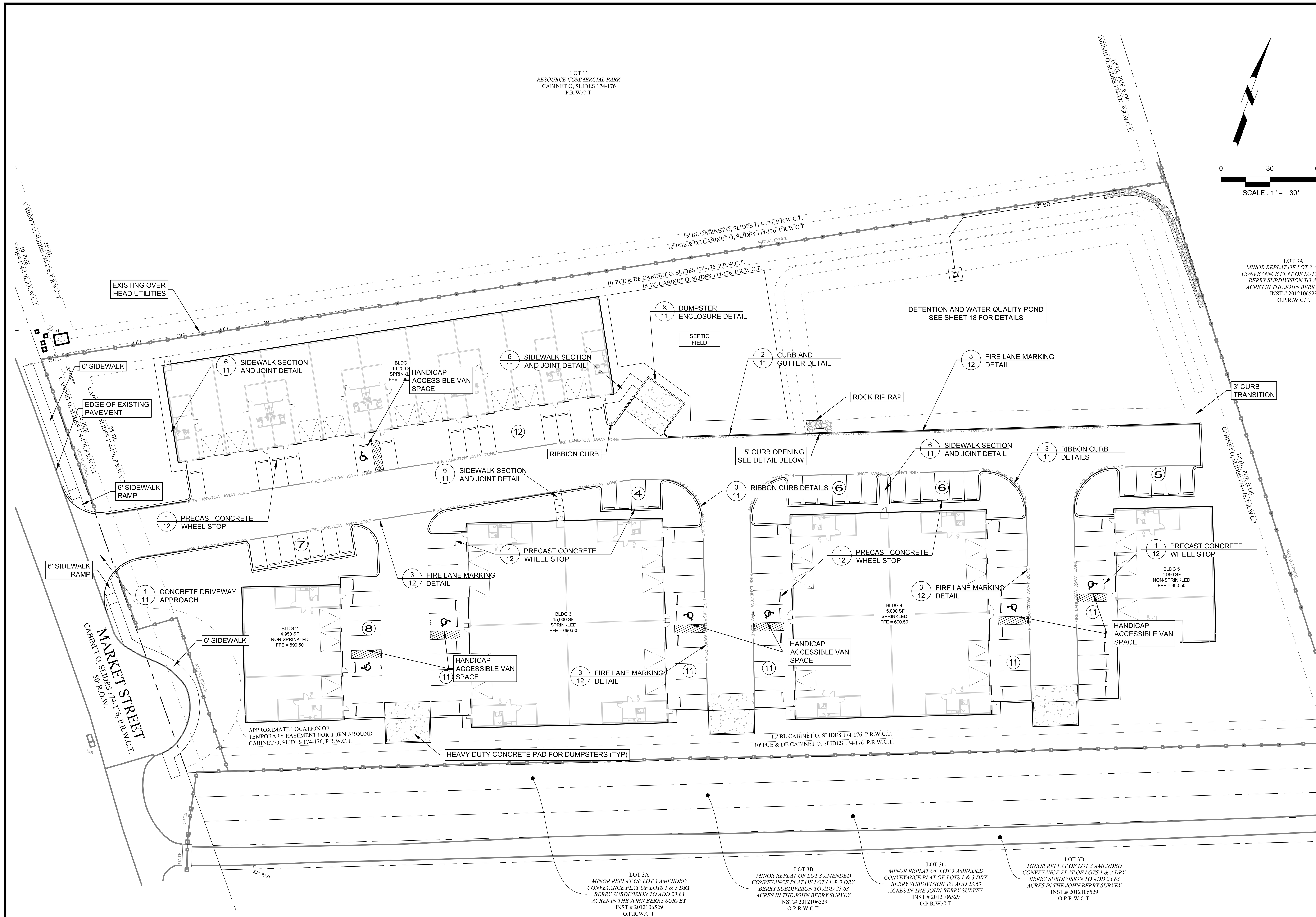
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

EROSION & SEDIMENTATION DETAILS

PERMIT No.
2021-32-SWP

SHEET No.
8
OF 28

IMAGES: * C:\2021\Projects\Market Street Industrial\181 Market Street - Georgetown\CAD\Sheets\DETAILS.dwg
XREFS: * 24x36 2PC Titleblock.dwg * EC01.dwg * EC01A.dwg * EC02.dwg * EC06.dwg * 2345-REVISED.dwg * WD1.dwg * WD1A.dwg * WD2.dwg * WD3.dwg * WD4.dwg * WD5.dwg * WD6.dwg * WD7.dwg * WD8.dwg * WD9.dwg * WD10.dwg * WD11.dwg * WD12.dwg * WD13.dwg * WD14.dwg * WD15.dwg * WD16.dwg * WD17.dwg * WD18.dwg * WD19.dwg * WD20.dwg * WD21.dwg *



GENERAL LEGEND

SYMBOLS

WATER METER; WATER VALVE; FIRE HYDRANT; BACKFLOW PREVENTER; UTILITY POLE; LIGHT POLE; WASTEWATER MANHOLE; CLEAN OUT; KEYNOTES; PARKING COUNT; WW SERVICE; WATER SERVICE; STORMSEWER MANHOLE; SIGN; CURB INLET; GRATE INLET; TABLE TOP AREA INLET; TREE TO BE SAVED; TREE TO BE REMOVED

LINETYPES

PROPERTY BOUNDARY; LIMITS OF CONSTRUCTION; FENCES (CHAINLINK) (IRON) (WOOD) (BARB WIRE); DITCH (CREEK) LINE; EXISTING CONTOURS; PROPOSED CONTOURS; CURB & GUTTER; UNDERGROUND ELEC.; OVERHEAD UTILITY; UNDERGROUND TELE.; UNDERGROUND GAS LINE; WATER LINE; WASTEWATER LINE; ACCESSIBLE ROUTE

DETAIL NUMBER
SHEET NUMBER WHERE DETAIL IS LOCATED
DETAIL NAME
DETAIL REFERENCE CALLOUT

SITE PLAN NOTES:

1. DIMENSIONS ARE SHOWN ON THE DIMENSIONAL CONTROL PLAN. FOR PRECISE DIMENSIONS AND LOCATION OF SITE IMPROVEMENTS, ELECTRONIC FILES OF THE SITE LAYOUT WILL BE MADE AVAILABLE TO THE CONTRACTOR AND HIS SURVEYOR UPON REQUEST. FOR BUILDING DIMENSIONS, CONTRACTOR SHALL USE ARCHITECTURAL AND STRUCTURAL PLANS.
2. EXISTING UTILITIES ARE SHOWN PER RECORD DRAWINGS.
3. SLOPES ON 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 INCHES. REFER TO GRADING SHEET(S).
4. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH PROPANE SUPPLIER FOR FUEL TANK UNDERGROUND TIE DOWNS.
5. FIRE LANE STRIPING TO BE 6" WIDE RED PAINT WITH "FIRE LANE -- TOW AWAY ZONE" IN 4" TALL WHITE LETTERS. "FIRE LANE" BY ITSELF IS NOT ACCEPTABLE. WORDING MAY NOT BE SPACED GREATER THAN 30' APART. STRIPING TO BE PAINTED ON THE FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON THE PARKING SURFACE WHEN IT IS NOT.

Trip Generation Table

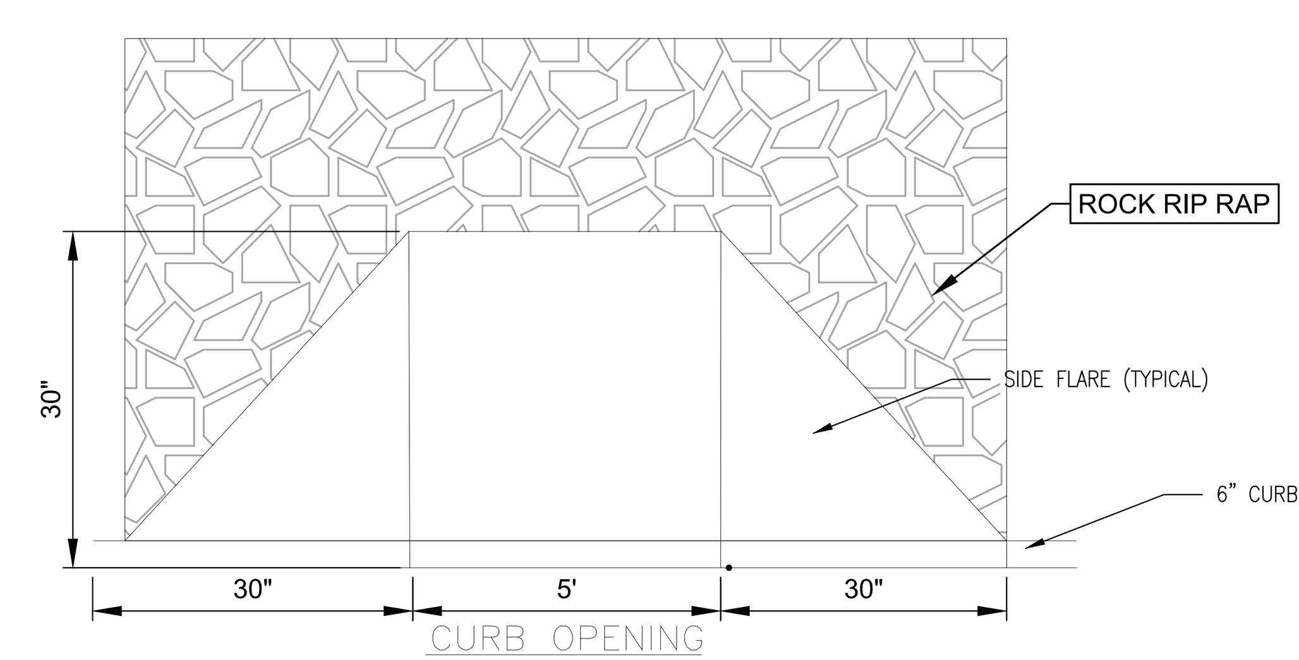
Building Use/ITE Code	Area (SF)	Total Generated Trips		
		Daily	Peak AM Hour	Peak PM Hour
General Office	10,500	116	16	16
Warehouse	45,600	162	14	15
Total		278	30	31

SITE AREA CALCULATIONS

	AREA (SF)	AREA (AC)	AREA (%)
SITE AREA	215,499.25	4.95	100%
EXISTING IMPERVIOUS COVER	632.70	0.015	0.29%
PROPOSED IMPERVIOUS COVER	120,796.57	2.77	56.02%

PARKING ANALYSIS

USE	(SF)	RATIO	REQUIRED
INDUSTRIAL MANUFACTURING AND WAREHOUSING - INDOOR FACILITY	10,500	1:500	21
INDUSTRIAL MANUFACTURING AND WAREHOUSING - INDOOR STORAGE	45,600	1:2500	19
TOTAL PARKING SPACES REQUIRED			40
HANDICAP PARKING SPACES REQUIRED			2
TOTAL PARKING SPACES PROVIDED			91
HANDICAP PARKING SPOTS PROVIDED			7



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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

NO.	DATE	REVISIONS	RECOMD

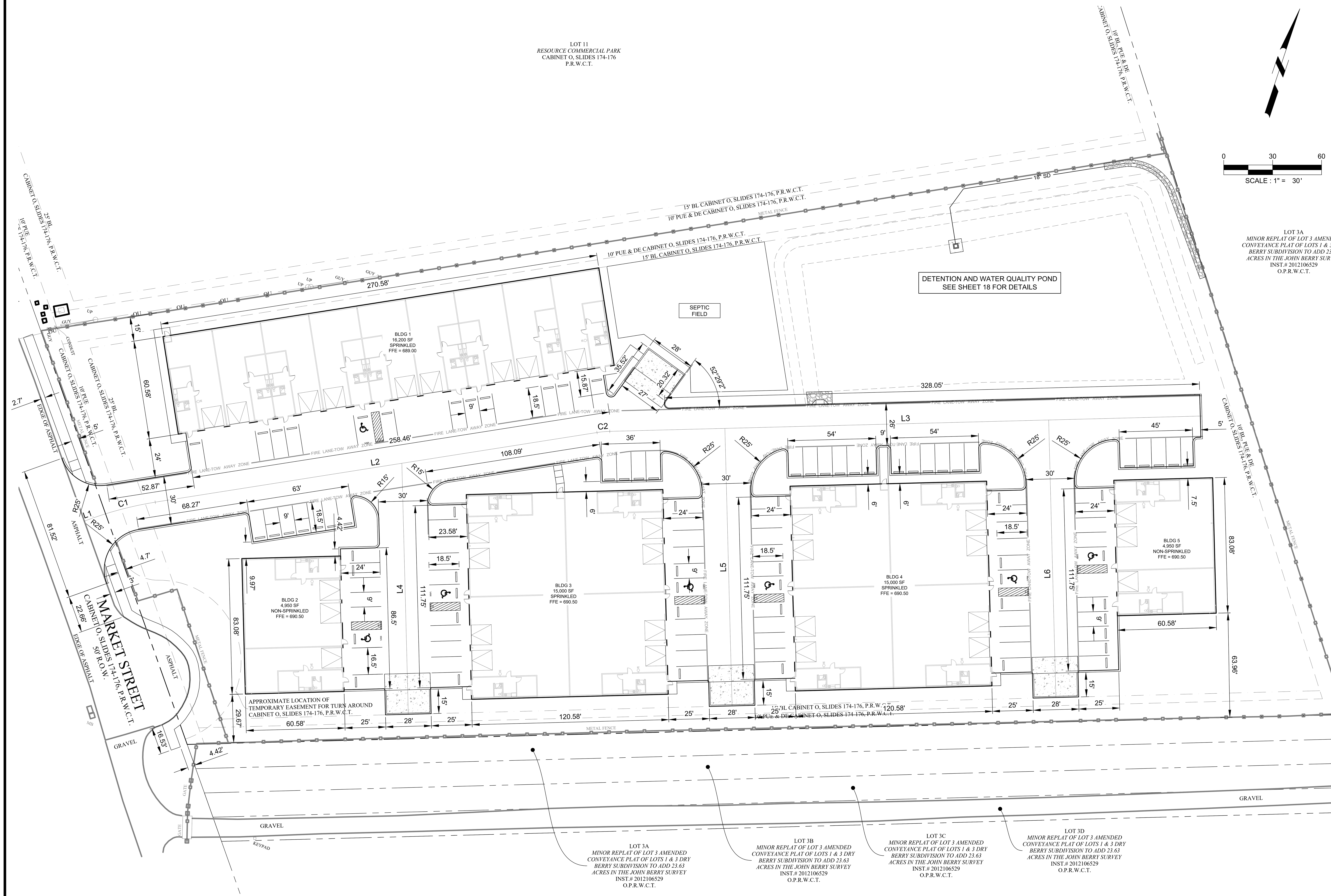
MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

SITE PLAN

PERMIT No.
2021-32-SWP

SHEET No.



GENERAL LEGEND

SYMBOLS

- WATER METER
- WATER VALVE
- FIRE HYDRANT
- BACKFLOW PREVENTER
- UTILITY POLE
- LIGHT POLE
- WASTEWATER MANHOLE
- CLEAN OUT
- KEYNOTES
- PARKING COUNT
- WW SERVICE
- WATER SERVICE
- STORMSEWER MANHOLE
- SIGN
- CURB INLET
- GRATE INLET
- TABLE TOP AREA INLET
- TREE TO BE SAVED
- TREE TO BE REMOVED

LINETYPES

- PROPERTY BOUNDARY
- LIMITS OF CONSTRUCTION
- FENCES (CHAINLINK)
- (IRON)
- (WOOD)
- (BARB WIRE)
- DITCH (CREEK) LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- CURB & GUTTER
- UNDERGROUND ELEC.
- OVERHEAD UTILITY
- UNDERGROUND TELE.
- UNDERGROUND GAS LINE
- WATER LINE
- WASTEWATER LINE
- ACCESSIBLE ROUTE

DIMENSIONAL CONTROL PLAN NOTES:

1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES INCLUDING EXISTING IRRIGATION ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE ASSOCIATED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
2. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
3. CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL PROPERTY CORNERS.
4. CONTRACTOR SHALL MATCH EXISTING CURB AND GUTTER IN SIZE, GRADE, TYPE, AND ALIGNMENT AT ADJACENT ROADWAYS.
5. ALL WORK ON THIS PLAN SHOULD BE DONE IN STRICT COMPLIANCE WITH CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS.
6. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRY LOCATIONS, DOWNSPOUT LOCATIONS AND TOTAL NUMBER OF DOWNSPOUTS REQUIRED.
7. ALL CURB RADII ARE 3' UNLESS OTHERWISE NOTED.
8. CONTRACTOR SHALL COORDINATE WITH APPROPRIATE UTILITY COMPANIES PRIOR TO CONSTRUCTION, ADJUSTMENT, OR RELOCATION OF EXISTING UTILITIES.

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

LINE TABLE

LINE #	LENGTH	BEARING
L1	5.97	N50° 34' 30.99"E
L2	274.24	N61° 06' 04.99"E
L3	363.24	N68° 35' 06.99"E
L4	153.96	N21° 24' 53.01"W
L5	170.25	N21° 24' 53.01"W
L6	170.25	N21° 24' 53.01"W

CURVE TABLE

CURVE #	LENGTH	RADIUS	DELTA
C1	39.131	213.00	010.5261
C2	7.837	60.00	007.4839

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOMD

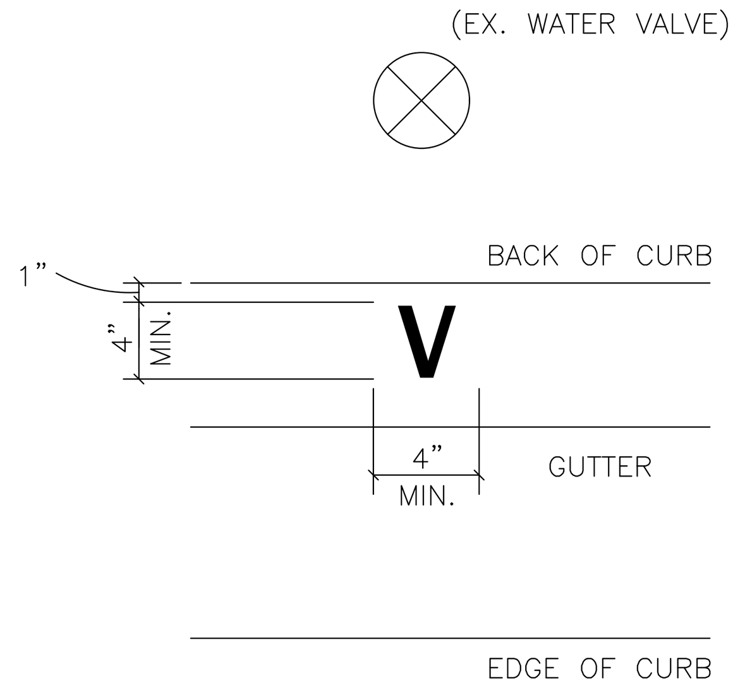
MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

DIMENSIONAL CONTROL PLAN

PERMIT No.
2021-32-SWP

SHEET No.
10
OF 28



PLAN VIEW
(TYPICAL)

NOTES:

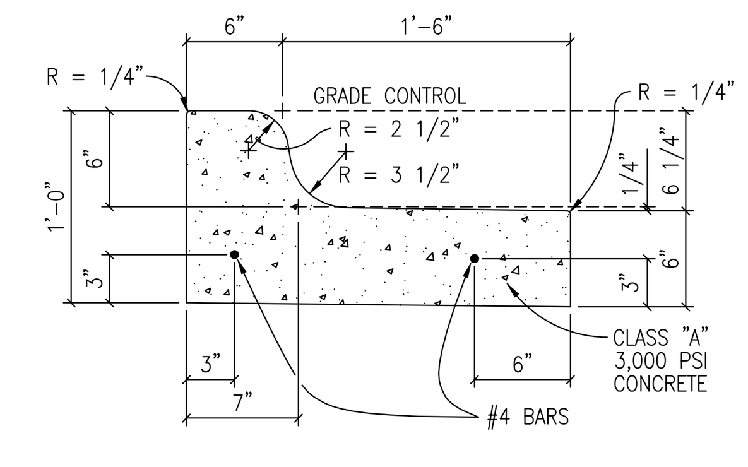
1. ALL WATER SERVICE, WASTE WATER SERVICE AND VALVE LOCATIONS SHALL BE APPROXIMATLEY MARKED AS FOLLOWS:

WATER SERVICE	"W"	TOP OF CURB
WASTE WATER SERVICE	"S"	TOP OF CURB
VALVE	"V"	TOP OF CURB

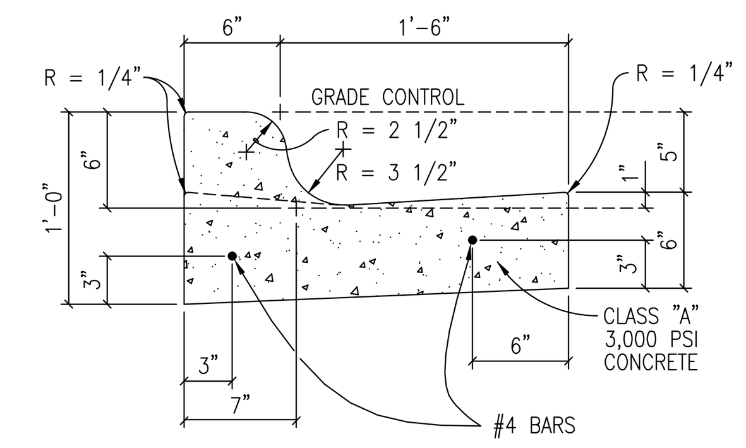
2. LETTERS SHALL HAVE A 1/2" MAX. WIDTH.

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

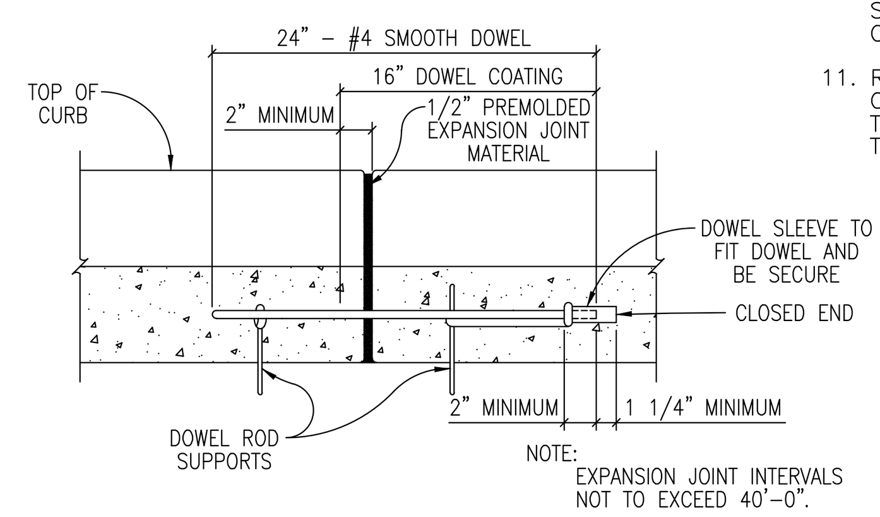
REVISION NOTE: ADOPTED 6/21/2006
GEORGETOWN TEXAS — Georgetown Utility Systems
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
CURB STAMP DETAIL — SD05 — (1)
SCALE: NTS — DATE: 1/2003 — DRAWN BY: MRS — APPROVED BY: TRB



SPILL CURB



CATCH AND LAYDOWN CURB



CURB DOWEL DETAIL

NOTES:

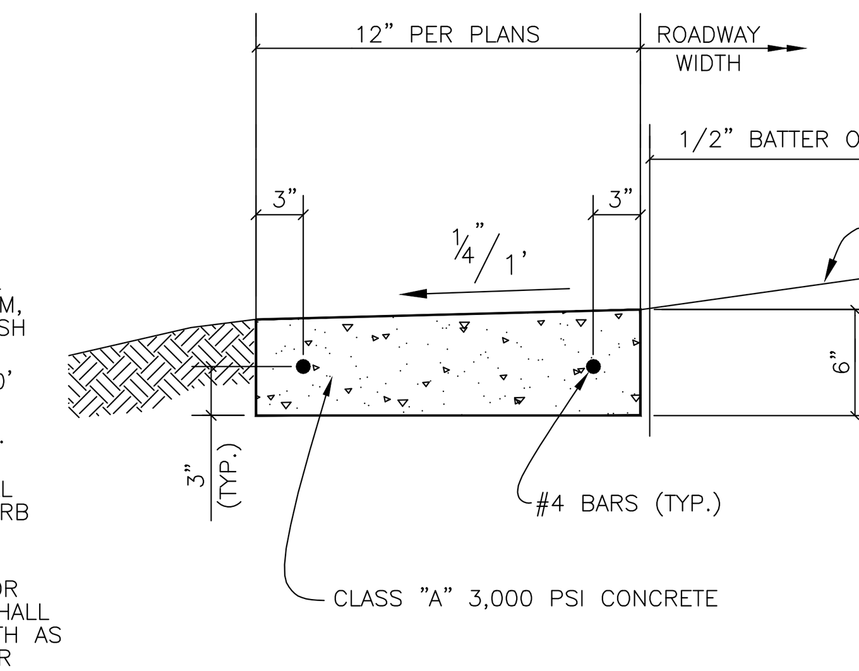
1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR THE CITY OF GEORGETOWN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. 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.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. REINFORCING BARS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
11. 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.

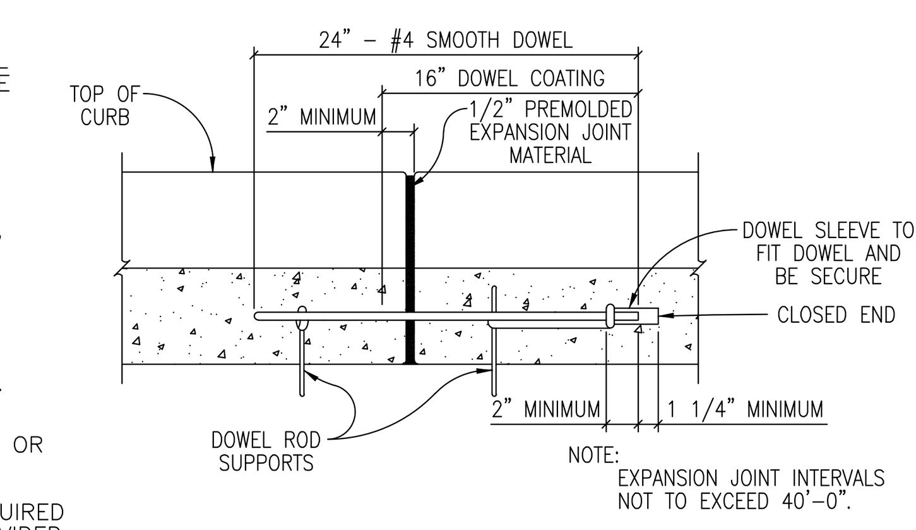
REVISION NOTE: ADOPTED 6/21/2006
GEORGETOWN TEXAS — Georgetown Utility Systems
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
CURB AND GUTTER DETAILS — SD06 — (2)
SCALE: NTS — DATE: 1/2003 — DRAWN BY: MRS — APPROVED BY: TRB

NOTES:

1. ALL WORK AND MATERIAL SHALL CONFORM TO ASTM A615, A615M, C309, AND D1752. BROOM FINISH EXPOSED SURFACE.
2. CONTRACTION JOINT SPACING 10' MAX.
3. EXPANSION JOINTS AS PER STD. ASTM D-1752.
4. 1/2" EXPANSION JOINT MATERIAL SHALL BE PROVIDED WHERE CURB IS ADJACENT TO SIDEWALK OR RIP-RAP.
5. TRANSITIONS BETWEEN CURBS OR DIFFERING CROSS SECTIONS SHALL OCCUR OVER A 20 FOOT LENGTH AS APPROVED BY THE ENGINEER OR TH CITY OF GEORGETOWN.
6. ALL CONCRETE SHALL BE CLASS A, 3000 PSI.
7. ALL SURFACES THAT ARE CHIPPED OR OTHERWISE DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED.
8. ONE OF THE FOLLOWING SCHEMES 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. CURB AND GUTTER (REINFORCED) SHALL HAVE LONGITUDINAL REINFORCING BARS AS FOLLOWS: THREE #4.
   B. ALL TYPES OF CURB (REINFORCED) SHALL HAVE #4 BAR FOR LONGITUDINAL REINFORCEMENT.
9. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 15 INCH.
10. REBAR SUPPORTS SHALL BE SUPPORTED WITH REBAR CHAIRS OR OTHER APPROVED METHODS.
11. REBAR SUPPORTS ARE NOT REQUIRED ON MACHINE PLACED CURB PROVIDED THAT REBAR IS PROPERLY GUIDED INTO THE CURB SECTION.



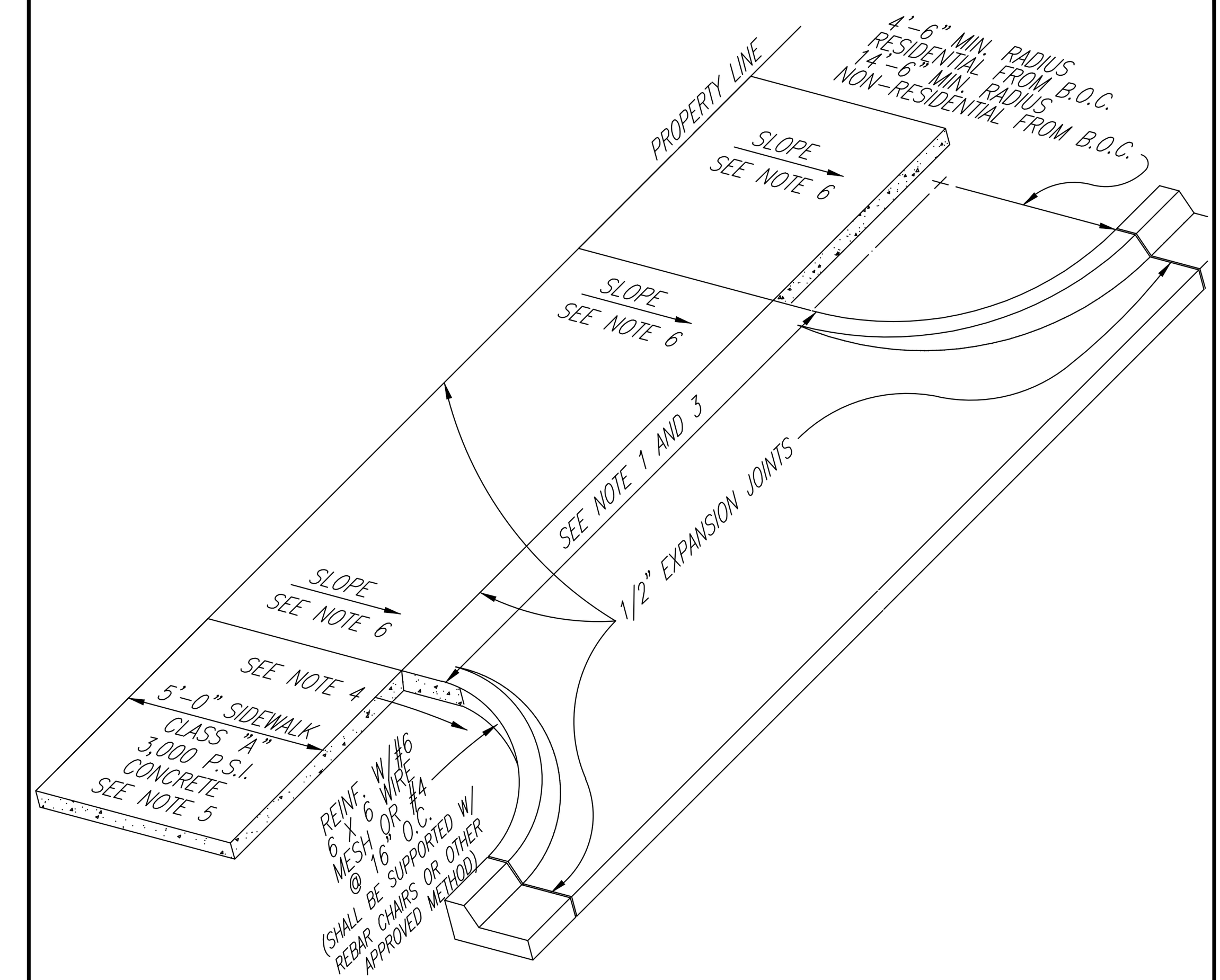
RIBBON CURB



CURB DOWEL DETAIL

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

REVISION NOTE: ADOPTED 6/21/2006
GEORGETOWN TEXAS — Georgetown Utility Systems
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
RIBBON CURB DETAILS — SD08 — (3)
SCALE: NTS — DATE: 1/2003 — DRAWN BY: MRS — APPROVED BY: TRB

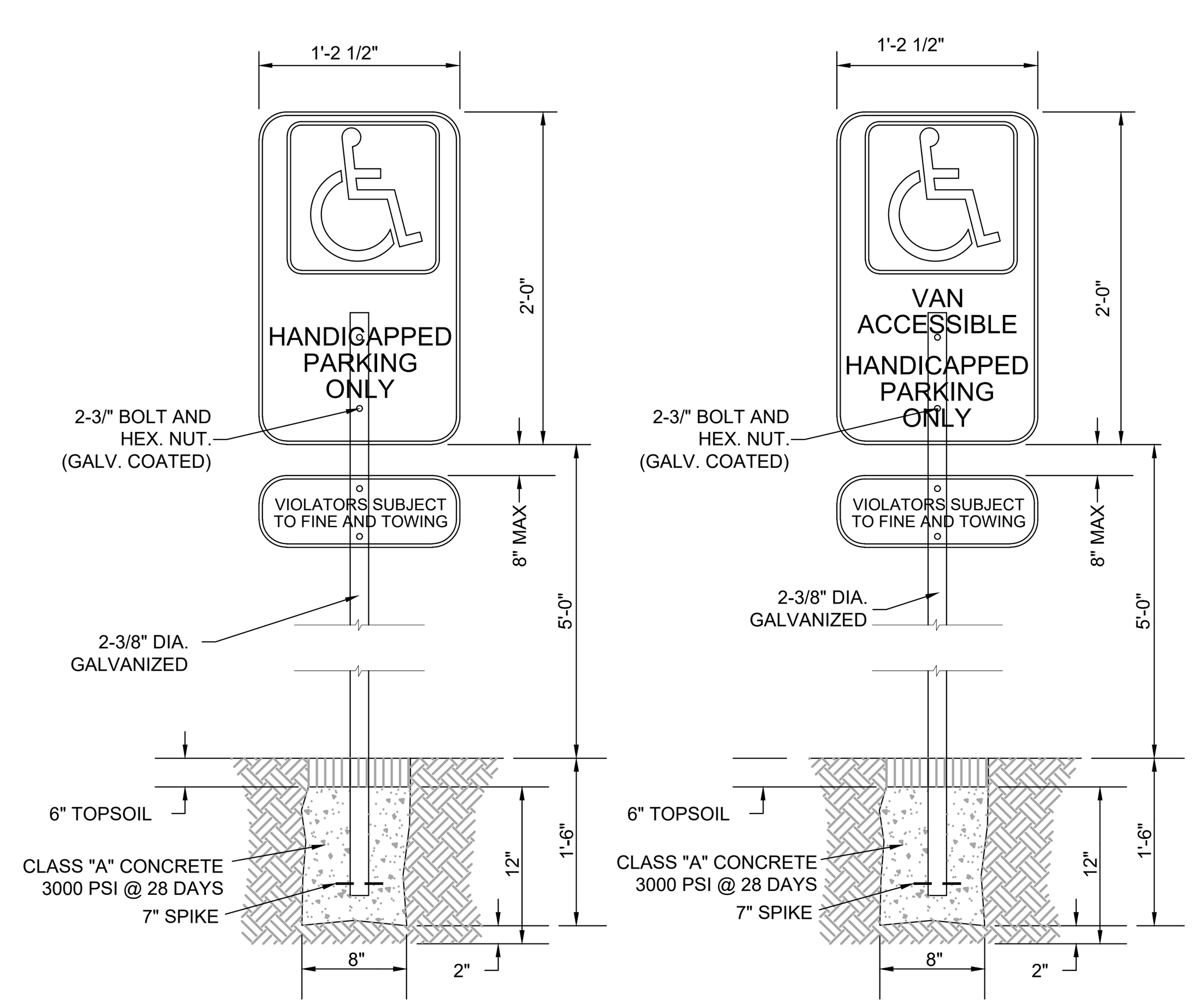


NOTES:

1. MAXIMUM WIDTH OF APPROACH SHALL BE 24'-0" FOR RESIDENTIAL, 30'-0" FOR NON-RESIDENTIAL UNDIVIDED AND 45'-0" FOR NON-RESIDENTIAL DIVIDED.
2. DRIVEWAY PERMITS SHALL BE ACQUIRED FROM CITY INSPECTION OFFICE.
3. MINIMUM WIDTH OF APPROACH SHALL BE 10'-0" FOR RESIDENTIAL AND 15'-0" FOR NON-RESIDENTIAL.
4. LINEAR "RADIUS" AT CORNERS, PERMITTED FOR "SINGLE FAMILY" OR "TWO FAMILY" RESIDENTIAL DRIVEWAY APPROACH.
5. SIDEWALK LOCATION SHALL BE APPROVED BY CITY ENGINEER PRIOR TO FINAL DESIGN.
6. SLOPE 1/8" PER FOOT USUAL, SHALL NOT EXCEED 2.0%.
7. DRIVEWAY APPROACH THICKNESS SHALL BE A MIN. OF 6".

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

REVISION NOTE: REVISED 6/25/2015 WBD
REVISION NOTE: ADOPTED 6/21/2006 TRB
GEORGETOWN TEXAS — Georgetown Utility Systems
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
CONCRETE DRIVEWAY APPROACH TYPICAL — SD15 — (4)
SCALE: NTS — DATE: 1/2003 — DRAWN BY: MRS — APPROVED BY: TRB

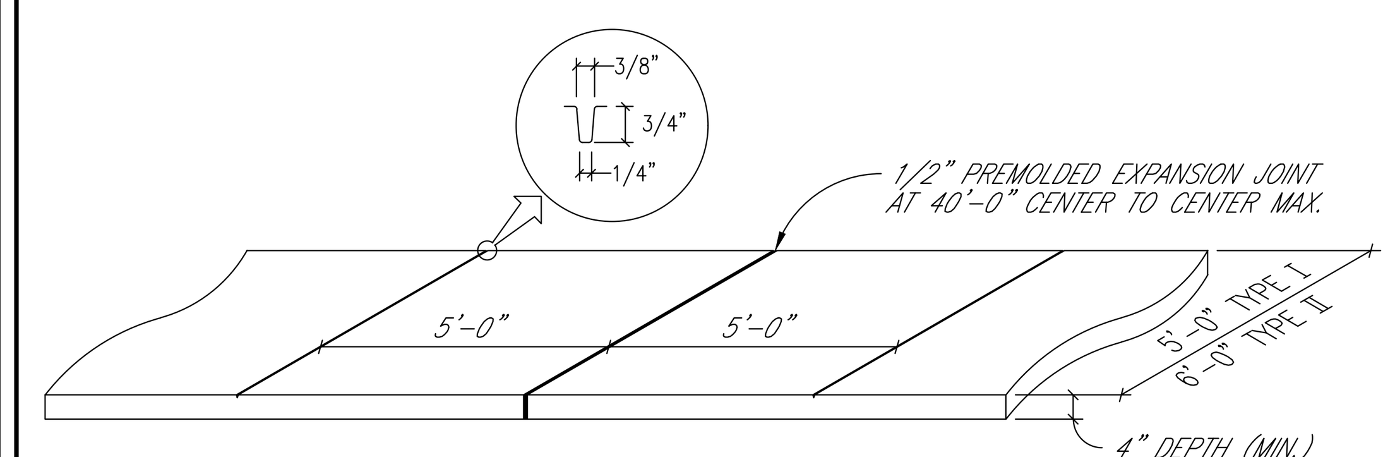


(5)

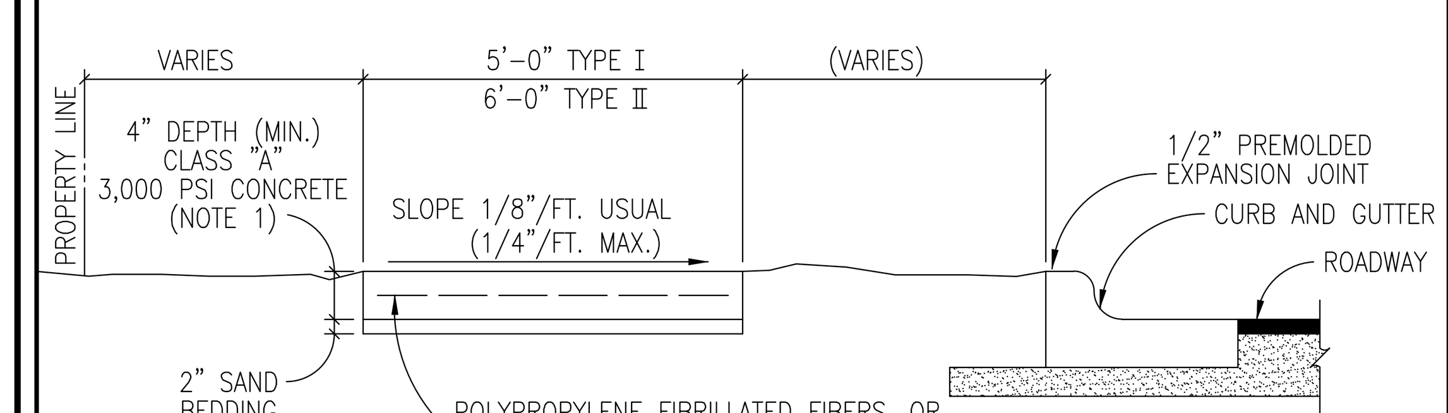
HANDICAPPED PARKING SIGNS

NOT TO SCALE

DETAILS.dwg



TYPE I – AS REQUIRED FOR SINGLE FAMILY, DUPLEXES AND TOWNHOUSES, TRIPLEXES AND QUADRAPLEXES.
TYPE II – AS REQUIRED FOR MULTI-FAMILY, OTHER NON-RESIDENTIAL USES AND PARKING LOTS/STRUCTURES.
ALL THOROUGHFARES (COLLECTOR AND ABOVE) REQUIRE TYPE II.

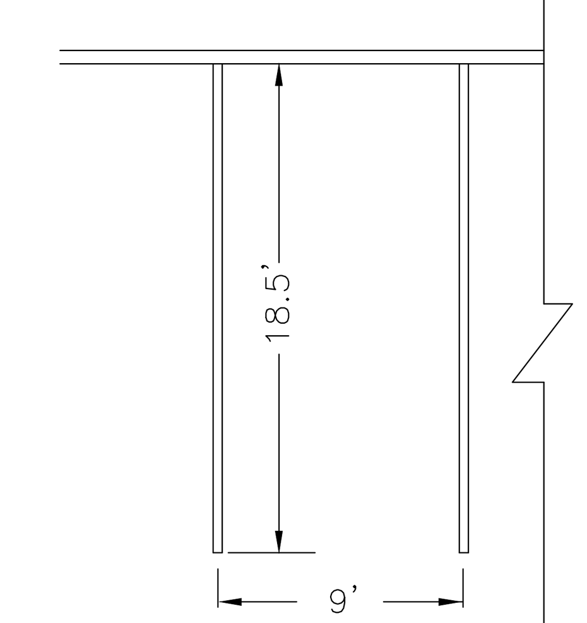


NOTES:

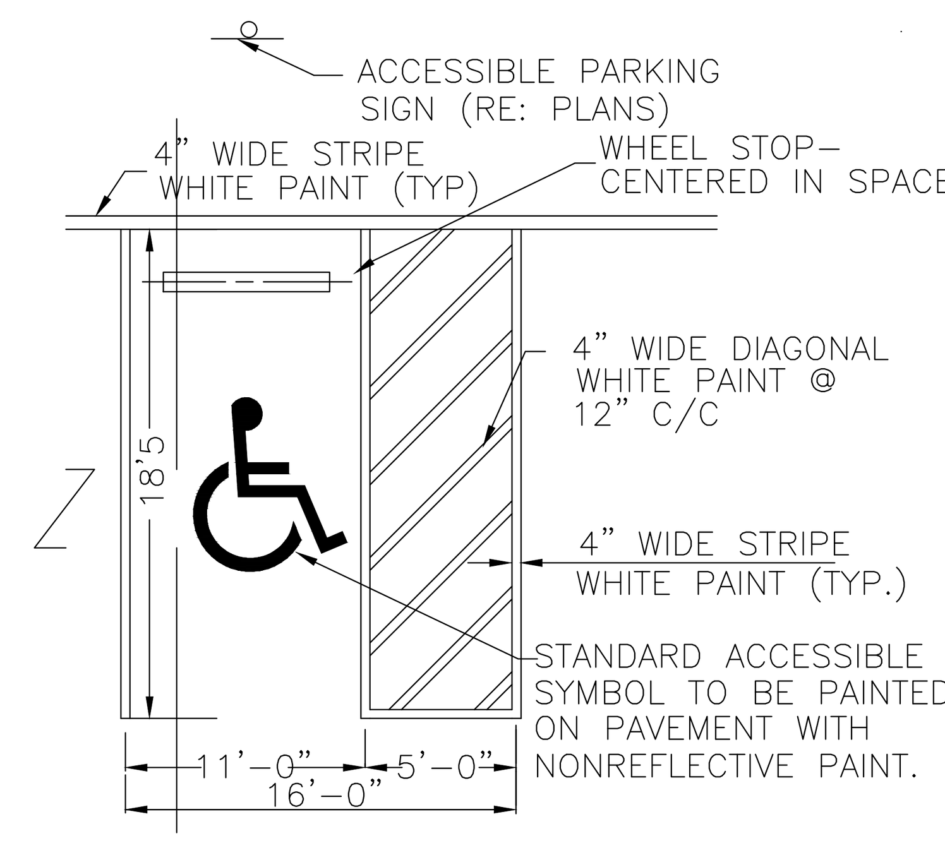
1. STANDARD LOCATION OF SIDEWALK SHALL BE IN CONFORMANCE WITH THE UDC.
2. SIDEWALK SHALL CONFORM TO CURRENT TDLR/TAS STANDARDS.
3. ALL SIDEWALKS SHALL BE SUBMITTED AND APPROVED BY THE REGISTERED ACCESSIBILITY SPECIALIST (RAS) AND ENGINEER OF RECORD.
4. ANY VARIANCE IN TEXTURE, GRADE OR ALIGNMENT SHALL BE APPROVED BY THE REGISTERED ACCESSIBILITY SPECIALIST (RAS) AND BY THE CITY ENGINEER.
5. SLIP DOWEL SHALL BE INSTALLED AT EVERY LONGITUDINAL EXPANSION JOINT (UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER DURING ENGINEERING PLAN REVIEW PRIOR TO FINAL DESIGN).

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

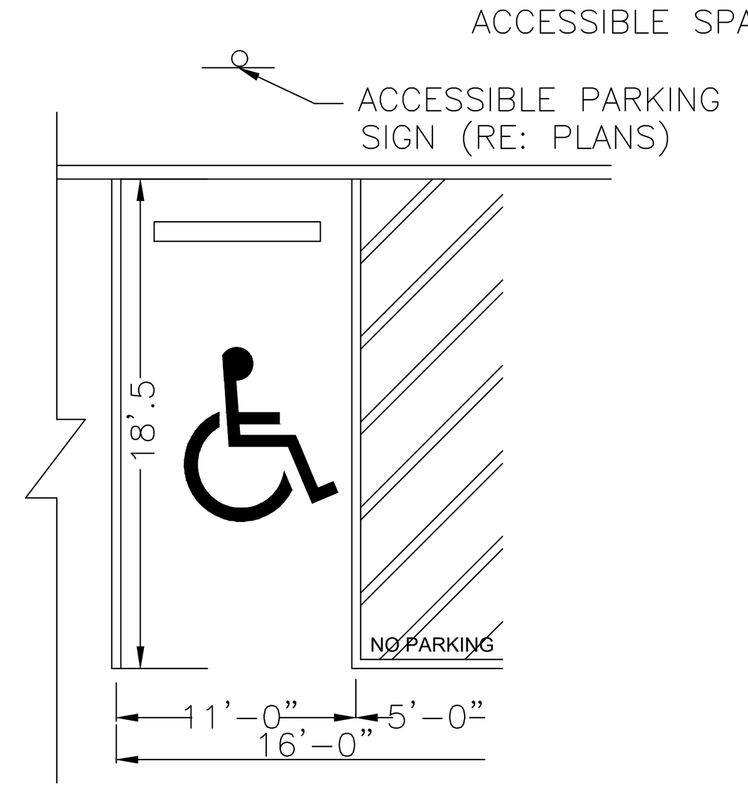
REVISION NOTE: REVISED 6/25/2015 WBD
REVISION NOTE: ADOPTED 6/21/2006 TRB
GEORGETOWN TEXAS — Georgetown Utility Systems
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS
SIDEWALK SECTION AND JOINT DETAIL — SD14 — (6)
SCALE: NTS — DATE: 1/2003 — DRAWN BY: MRS — APPROVED BY: TRB



STANDARD SPACE



ACCESSIBLE SPACE



ACCESSIBLE VAN SPACE

NOTES:

1. RAMP ACCESS AND SURFACE SLOPES SHALL COMPLY WITH ADA REQUIREMENTS.
2. EACH ACCESSIBLE PARKING SPACE SHALL BE SIGNED IN ACCORDANCE WITH ADA REQUIREMENTS.

TYPICAL PARKING SPACE LAYOUT (7)
N.T.S.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX — DRAWN: VALUE — REVIEWED: VALUE

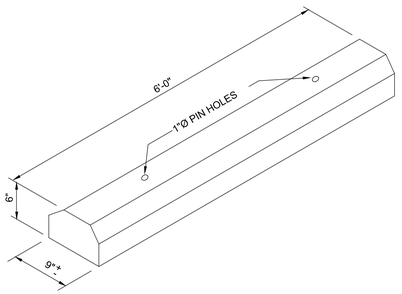
STATE OF TEXAS — MICHAEL EASTON MUNDINE — 143266 — LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECORD

MARKET STREET INDUSTRIAL
MARKET STREET INDUSTRIAL STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

SITE PLAN DETAILS (1 OF 2)

PERMIT No. 2021-32-SWP
SHEET No. 11 OF 28



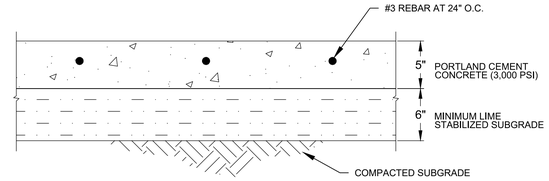
ISOMETRIC

NOTES:
1. FURNISH TWO (2) 3/4" Ø IRON PINS PER WHEEL STOP, 3'-0" LONG
2. MINIMUM REINFORCEMENT TO BE 2 EA. LONGITUDINAL #3 BARS.

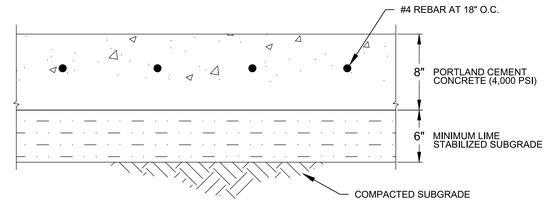
1 PRECAST CONCRETE WHEEL STOP

NOT TO SCALE

DET 312



SEPARATE PARKING STALLS

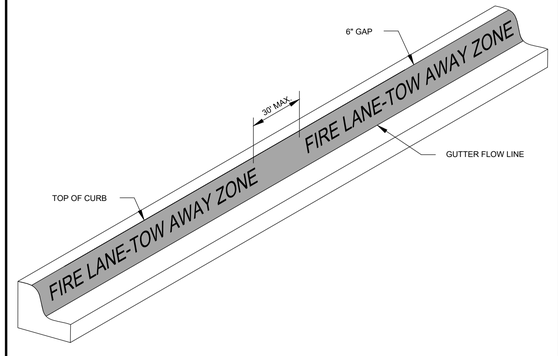


DRIVE AISLE & BUILDING ACCESS

NOTE:
PAVEMENT SECTIONS SHALL BE PREPARED AND INSTALLED IN GENERAL ACCORDANCE WITH GEOTECHNICAL INVESTION, PREPARED BY SWCA ENVIRONMENTAL CONSULTANTS. ON DECEMBER 12, 2021.

2 SITE PAVEMENT SECTIONS

N.T.S.



NOTES:
FIRE LANE STRIPING TO BE 6" WIDE RED PAINT WITH "FIRE LANE TOW AWAY ZONE" IN 4" TALL WHITE LETTERS. WORDING MAY NOT BE SPACED GREATER THAN 30' APART. STRIPING TO BE PAINTED ON THE FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON THE PARKING SURFACE WHEN IT IS NOT.

3 FIRE LANE MARKING DETAIL

NOT TO SCALE

DETAILS.dwg

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: EM | DRAWN: DO | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER

5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

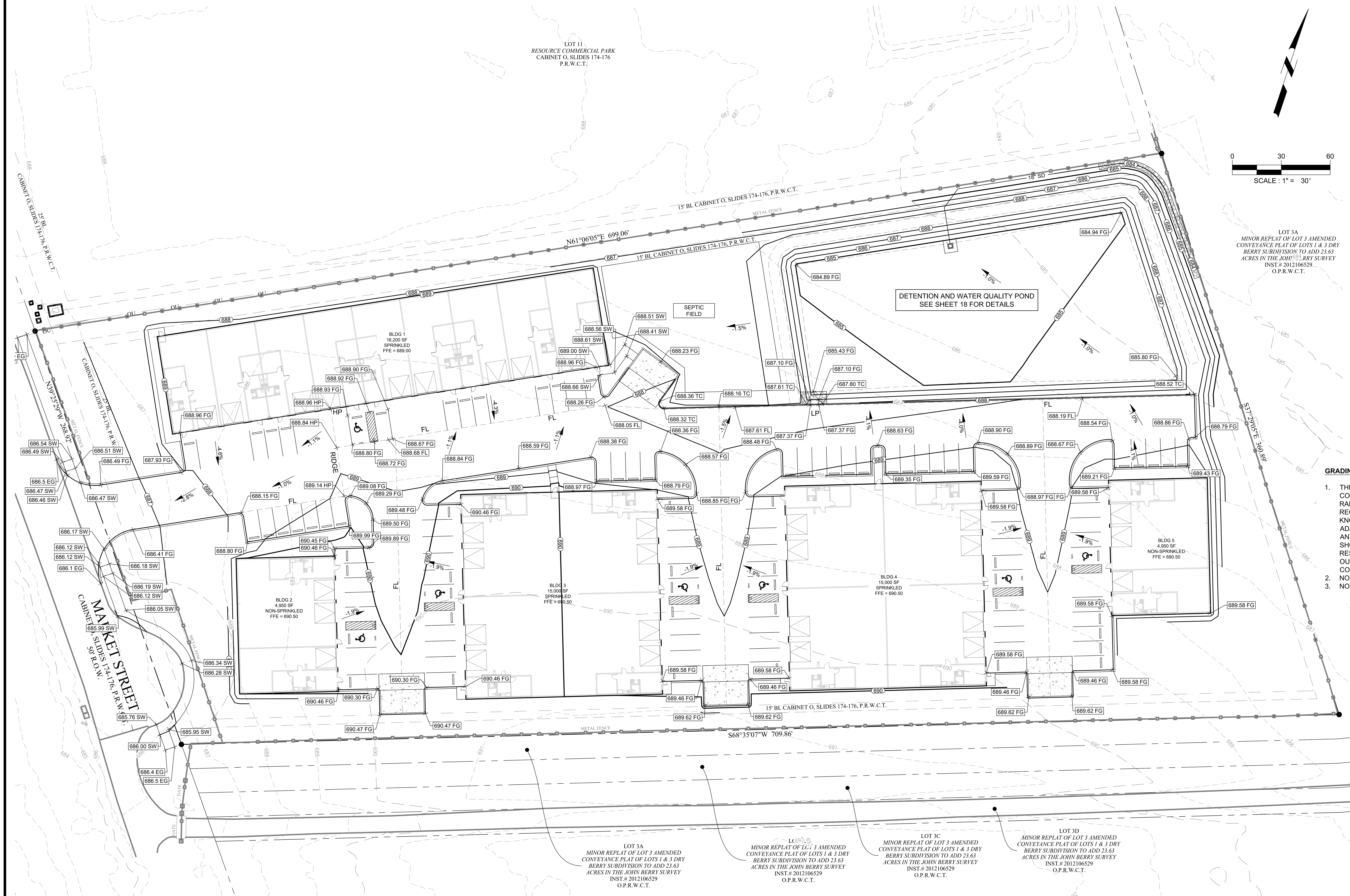
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

SITE PLAN DETAILS (2 OF 2)

PERMIT No.
2021-32-SWP

SHEET No.
12
OF 28

IMAGES: I:\GIS\pdf\Files.gif I:\GIS\pdf\Files.gif I:\GIS\pdf\Files.gif



GENERAL LEGEND

SYMBOLS

- WATER METER
- WATER VALVE
- FIRE HYDRANT
- BACKFLOW PREVENTER
- UTILITY POLE
- LIGHT POLE
- WASTEWATER MANHOLE
- CLEAN OUT
- KEYNOTES
- PARKING COUNT
- WW SERVICE
- WATER SERVICE
- STORMSEWER MANHOLE
- SIGN
- CURB INLET
- GRATE INLET
- TABLE TOP AREA INLET
- TREE TO BE SAVED
- TREE TO BE REMOVED

LINETYPES

- PROPERTY BOUNDARY
- LOC — LIMITS OF CONSTRUCTION
- FENCES (CHAINLINK) (IRON) (WOOD) (BARB WIRE)
- DITCH (CREEK) LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- CURB & GUTTER
- UGE — UNDERGROUND ELEC.
- OHE — OVERHEAD UTILITY
- TEL — UNDERGROUND TELE.
- GAS — UNDERGROUND GAS LINE
- W — WATER LINE
- WW — WASTEWATER LINE
- ACCESSIBLE ROUTE

GRADING LEGEND

EXISTING

- (493.00 NG) NATURAL GROUND
- (493.00 EX GUT) GUTTER
- (493.00 EX PAV) PVMT
- (493.00 EX SW) SIDEWALK

PROPOSED

- 493.00 PAV — PAVEMENT
- 493.00 TOW — TOP OF WALL
- 493.00 TC — TOP OF CURB
- 493.00 TOE — TOE OF SLOPE
- 493.00 SW — SIDEWALK
- 493.00 TOP — TOP OF SLOPE
- 493.00 TG — TOP OF GRATE INLET
- 493.00 CONC — CONCRETE
- 493.00 FL — FLOWLINE
- 493.00 FF — FINISHED FLOOR
- 493.00 FG — FINISHED GROUND
- 493.00 IE — INLET ELEVATION
- PROPOSED GRADE BREAK ON SURFACE (CONC, PVMT, GRASS, ETC.)
- LP — LOW POINT
- HP — HIGH POINT

GRADING NOTES:

1. THE CONTRACTOR IS FULLY RESPONSIBLE FOR CONSTRUCTION OF SIDEWALKS, LANDINGS, PORCHES, RAMPS & PARKING SPACES THAT MEET ADA/TAS REQUIREMENTS. THE CONTRACTOR SHALL HAVE FULL KNOWLEDGE OF THE DETAILS ON THESE PLANS AND OF ADA/TAS REGULATIONS. SHOULD THE CONTRACTOR FIND AN ELEVATION OR CONDITION THAT IS DIFFERENT THAN SHOWN ON THE PLANS, IT IS THE CONTRACTORS FINAL RESPONSIBILITY TO CONTACT THE ENGINEER TO WORK OUT A DESIGN THAT MEETS ADA & TAS, PRIOR TO CONSTRUCTION, NOT AFTER THE WORK IS COMPLETED.
2. NO CROSS SLOPE SHALL EXCEED 2%.
3. NO RUNNING SLOPE SHALL EXCEED 5%.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECORD

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

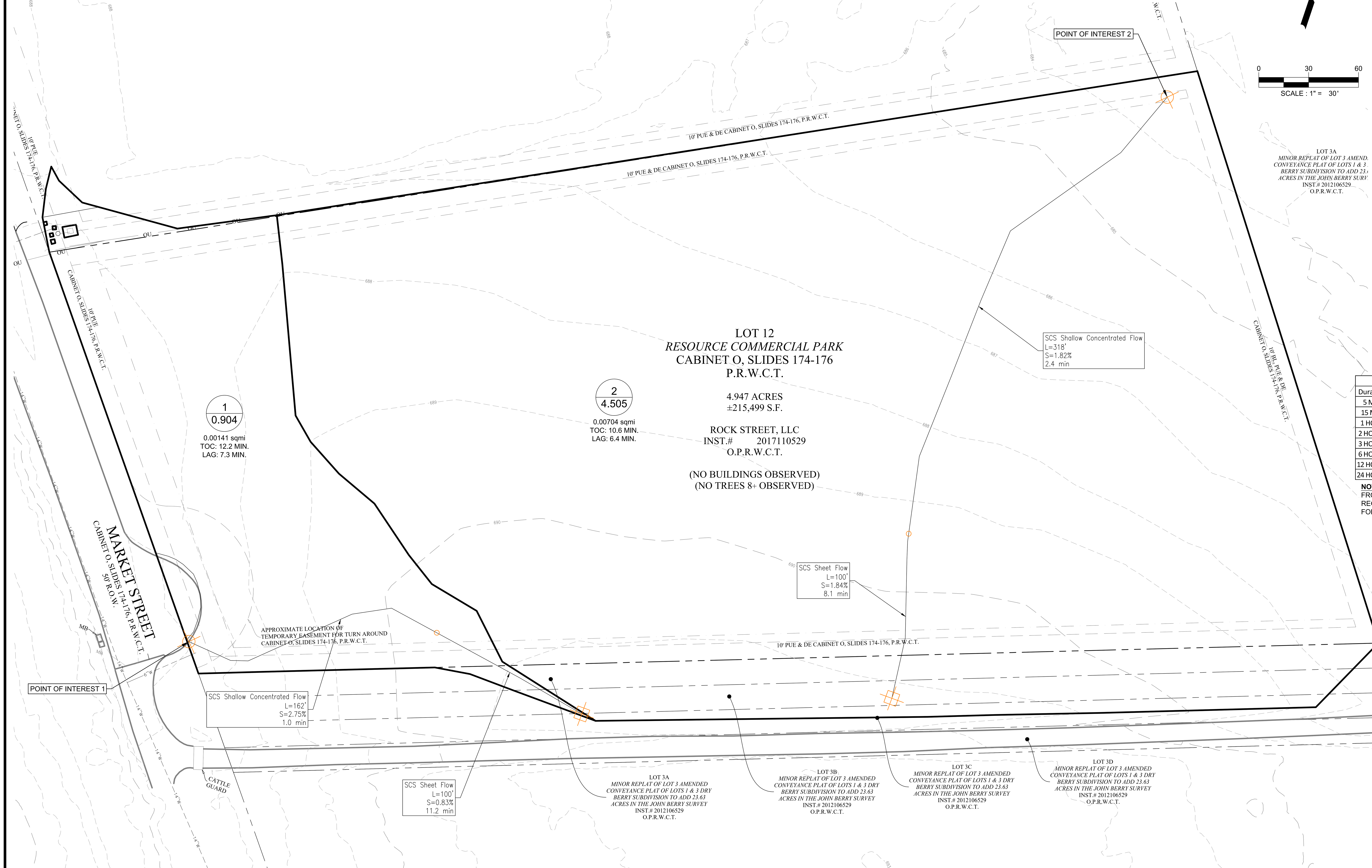
GRADING PLAN

PERMIT No.
2021-32-SWP

SHEET No.
13
OF 28

Existing Conditions Drainage Basin Information									
Basin	Area (SF)	Area (AC)	Area (MI²)	IC (SF)	IC (%)	Base Curve Number	Composite Curve Number	ToC	Lag
1	36,990.49	0.849185	0.0013269	632.70	1.71%	61.00	61.63	9.1	5.5
2	178,508.76	4.097997	0.0064031	0.00	0.00%	61.00	61.00	10.4	6.2

Existing Conditions Drainage Calculations					
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
1	0.58	1.70	2.60	3.37	4.21
2	2.73	8.56	13.36	17.46	21.95



GENERAL LEGEND

SYMBOLS

- WATER METER
- WATER VALVE
- FIRE HYDRANT
- BACKFLOW PREVENTER
- UTILITY POLE
- LIGHT POLE
- WASTEWATER MANHOLE
- CLEAN OUT
- KEYNOTES
- PARKING COUNT
- WW SERVICE
- WATER SERVICE
- STORMSEWER MANHOLE
- SIGN
- CURB INLET
- GRATE INLET
- TABLE TOP AREA INLET
- TREE TO BE SAVED
- TREE TO BE REMOVED

LINETYPES

- PROPERTY BOUNDARY
- LIMITS OF CONSTRUCTION
- FENCES (CHAINLINK) (IRON) (WOOD) (BARB WIRE)
- DITCH (CREEK) LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- CURB & GUTTER
- UNDERGROUND ELEC.
- OVERHEAD UTILITY
- UNDERGROUND TELE.
- UNDERGROUND GAS LINE
- WATER LINE
- WASTEWATER LINE
- ACCESSIBLE ROUTE

DRAINAGE STUDY LEGEND

- DRAINAGE BOUNDARY LINE
- DA / ACRE — DRAINAGE BOUNDARY LABEL DRAINAGE AREA (ACRES)
- NO — INLET NUMBER
- FLOW ARROW
- TIME OF CONCENTRATION LINE
- 100-YR — EXISTING 100-YR FLOOD PLAIN LINE
- PR 100-YR — PROPOSED 100-YR FLOOD PLAIN LINE
- LP LOW POINT — HP HIGH POINT

Atlas 14 Rainfall Precipitation Data					
Duration	2-YR (in)	10-YR (in)	25-YR (in)	50-YR (in)	100-YR (in)
5 MIN	0.51	0.757	0.921	1.05	1.19
15 MIN	1.02	1.51	1.84	2.10	2.37
1 HOUR	1.88	2.79	3.40	3.88	4.39
2 HOURS	2.30	3.55	4.43	5.16	5.98
3 HOURS	2.55	4.02	5.09	6.01	7.06
6 HOURS	2.98	4.81	6.18	7.38	8.75
12 HOURS	3.44	5.54	7.12	8.48	10.1
24 HOURS	3.94	6.30	8.04	9.53	11.2

NOTE: ATLAS 14 RAINFALL PRECIPITATION DATA TAKEN FROM THE WILLIAMSON COUNTY SUBDIVISION REGULATIONS, EFFECTIVE AS OF DECEMBER 7TH, 2021, FOR A SITE LOCATED IN THE SAN GABRIEL RIVER ZONE.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

EXISTING CONDITIONS DRAINAGE AREA MAP

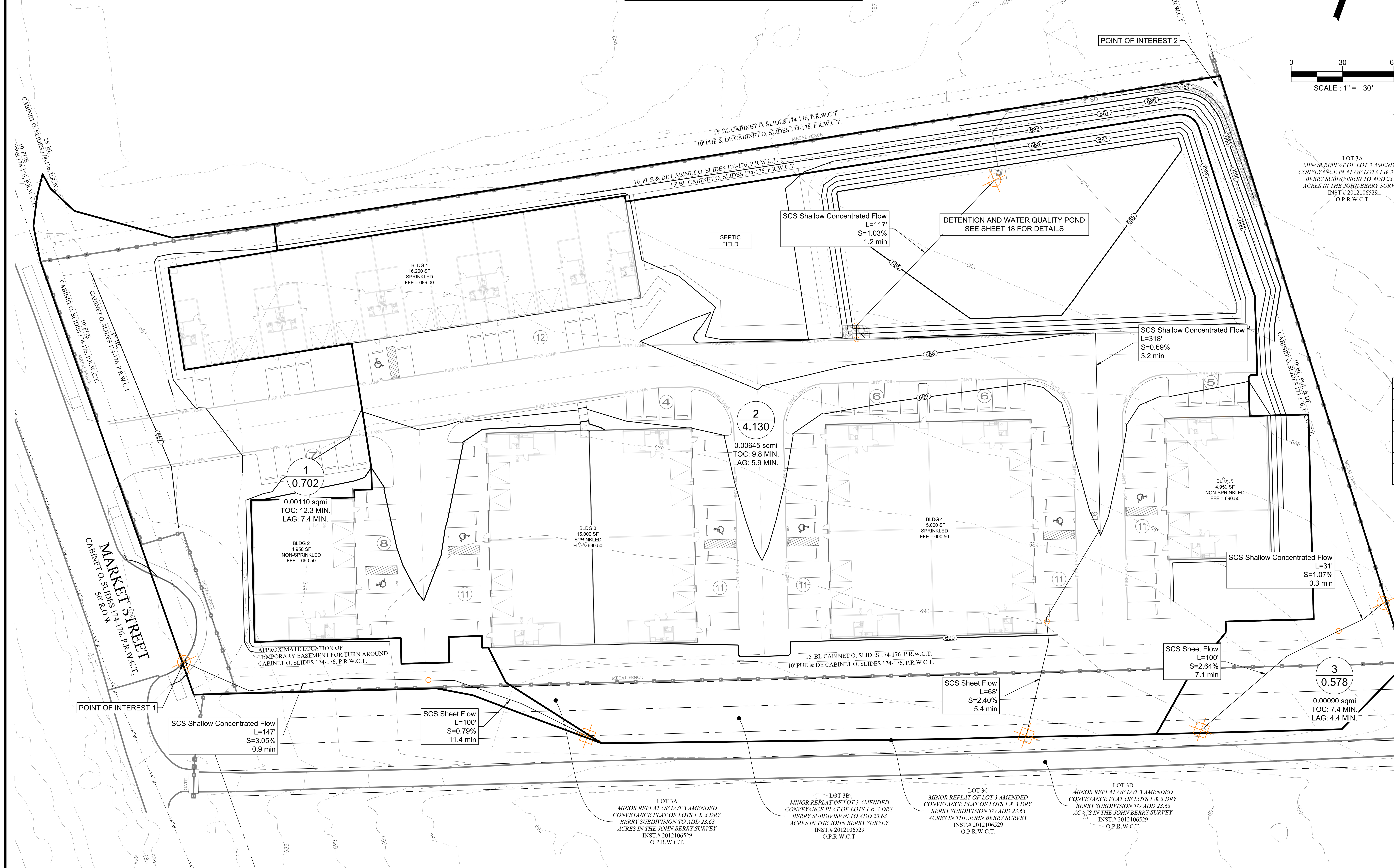
PERMIT No.
2021-32-SWP

SHEET No.
14
OF 28

Developed Conditions Drainage Calculations					
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
1	0.95	1.88	2.58	3.17	3.80
2	9.64	16.03	20.63	24.37	28.36
3	0.41	1.29	2.01	2.61	3.28
POI-1	0.95	1.88	2.58	3.17	3.80
POI-2	3.20	6.57	8.70	9.85	16.24

Existing vs. Developed Conditions Drainage Calculations					
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
POI-1	0.37	0.18	-0.02	-0.20	-0.41
POI-2	0.47	-1.99	-4.66	-7.61	-5.71

Developed Conditions Drainage Basin Information									
Basin	Area (SF)	Area (AC)	Area (MI²)	IC (SF)	IC (%)	Base Curve Number	Composite Curve Number	ToC	Lag
1	28,200.65	0.647398	0.0010116	9,761.80	34.62%	61.00	73.81	7.8	4.7
2	166,693.60	3.826758	0.0059793	110,674.64	66.39%	61.00	85.57	6.6	4
3	20,599.73	0.472905	0.0007389	0.00	0.00%	61.00	61.00	6.0	3.6



GENERAL LEGEND

SYMBOLS

- WATER METER
- WATER VALVE
- FIRE HYDRANT
- BACKFLOW PREVENTER
- UTILITY POLE
- LIGHT POLE
- WASTEWATER MANHOLE
- CLEAN OUT
- KEYNOTES
- PARKING COUNT
- WW SERVICE
- WATER SERVICE
- STORMSEWER MANHOLE
- SIGN
- CURB INLET
- GRATE INLET
- TABLE TOP AREA INLET
- TREE TO BE SAVED
- TREE TO BE REMOVED

LINETYPES

- PROPERTY BOUNDARY
- LOC — LIMITS OF CONSTRUCTION
- FENCES (CHAINLINK) (IRON) (WOOD) (BARB WIRE)
- DITCH (CREEK) LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- CURB & GUTTER
- UGE — UNDERGROUND ELEC.
- OHE — OVERHEAD UTILITY
- TEL — UNDERGROUND TELE.
- GAS — UNDERGROUND GAS LINE
- W — WATER LINE
- WW — WASTEWATER LINE
- ACCESSIBLE ROUTE

DRAINAGE STUDY LEGEND

- DRAINAGE BOUNDARY LINE
- DA / ACRE — DRAINAGE BOUNDARY LABEL DRAINAGE AREA (ACRES)
- NO — INLET NUMBER
- FLOW ARROW
- TIME OF CONCENTRATION LINE
- 100-YR — EXISTING 100-YR FLOOD PLAIN LINE
- PR 100-YR — PROPOSED 100-YR FLOOD PLAIN LINE
- LP — LOW POINT
- HP — HIGH POINT

Atlas 14 Rainfall Precipitation Data					
Duration	2-YR (in)	10-YR (in)	25-YR (in)	50-YR (in)	100-YR (in)
5 MIN	0.51	0.757	0.921	1.05	1.19
15 MIN	1.02	1.51	1.84	2.10	2.37
1 HOUR	1.88	2.79	3.40	3.88	4.39
2 HOURS	2.30	3.55	4.43	5.16	5.98
3 HOURS	2.55	4.02	5.09	6.01	7.06
6 HOURS	2.98	4.81	6.18	7.38	8.75
12 HOURS	3.44	5.54	7.12	8.48	10.1
24 HOURS	3.94	6.30	8.04	9.53	11.2

NOTE: ATLAS 14 RAINFALL PRECIPITATION DATA TAKEN FROM THE WILLIAMSON COUNTY SUBDIVISION REGULATIONS, EFFECTIVE AS OF DECEMBER 7TH, 2021, FOR A SITE LOCATED IN THE SAN GABRIEL RIVER ZONE.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

NO. | DATE | REVISIONS | RECOMD

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

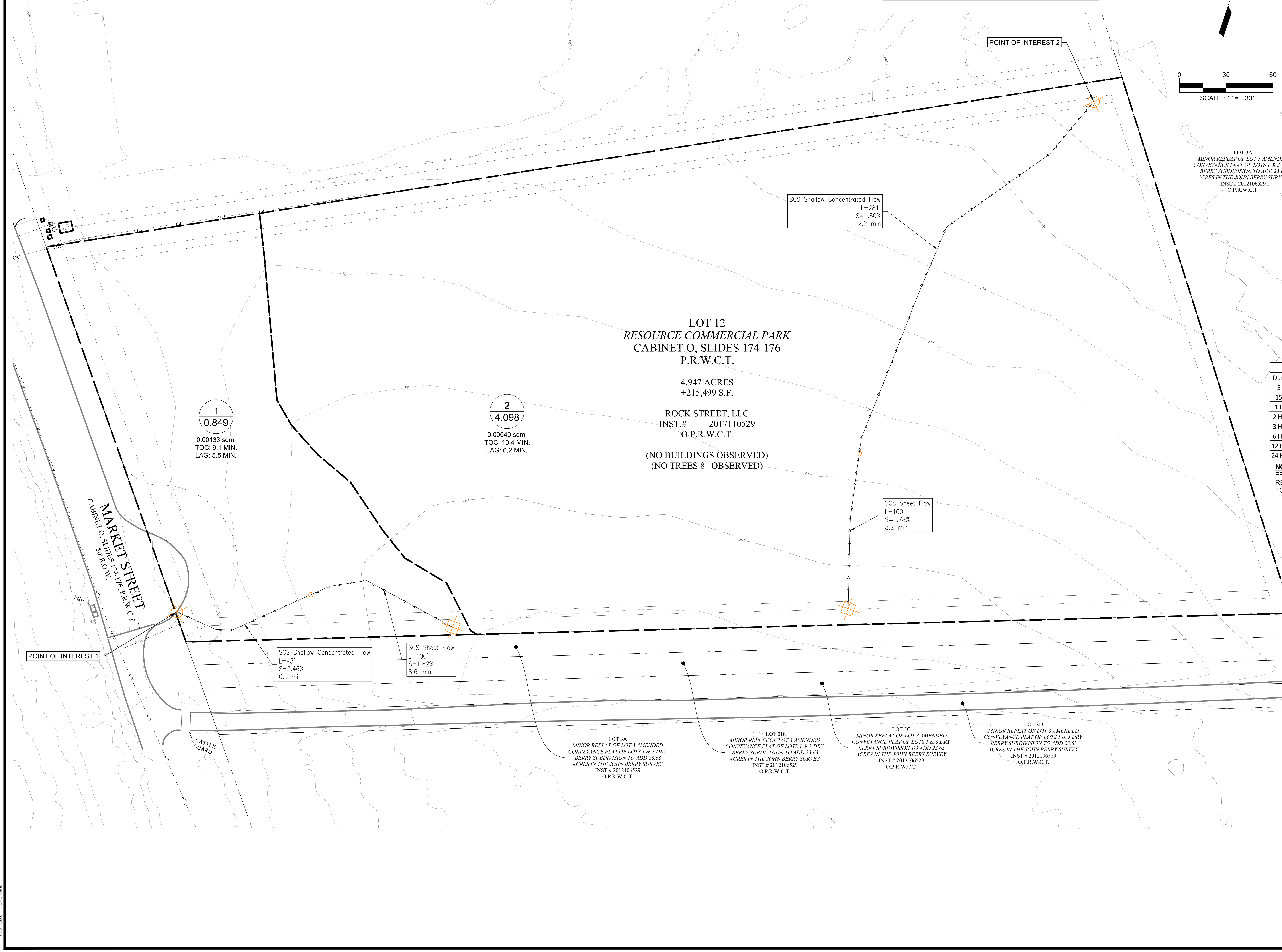
DEVELOPED CONDITIONS DRAINAGE AREA MAP

PERMIT No. 2021-32-SWP

SHEET No. 15 OF 28

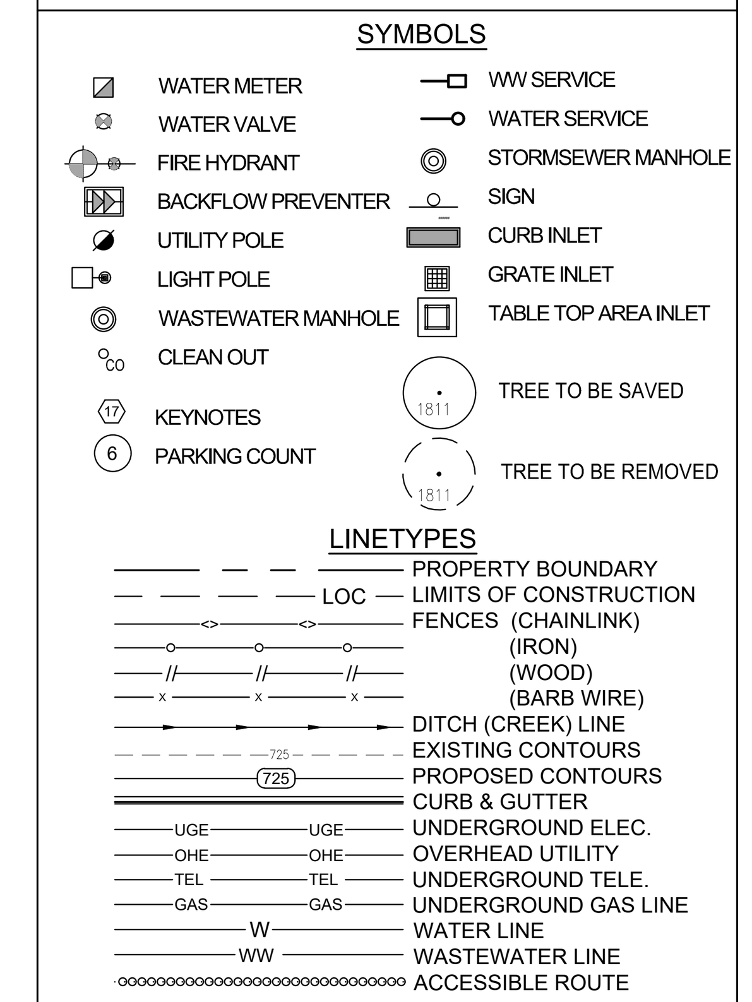
Existing Conditions Drainage Basin Information									
Basin	Area (SF)	Area (AC)	Area (MI^2)	IC (SF)	IC (%)	Base Curve Number	Composite Curve Number	ToC	Lag
1	36,990.49	0.849185	0.0013269	632.70	1.71%	61.00	61.63	9.1	5.5
2	178,508.76	4.097997	0.0064031	0.00	0.00%	61.00	61.00	10.4	6.2

Existing Conditions Drainage Calculations					
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
1	0.59	1.77	2.73	3.55	4.45
2	2.52	7.90	12.33	16.11	20.24



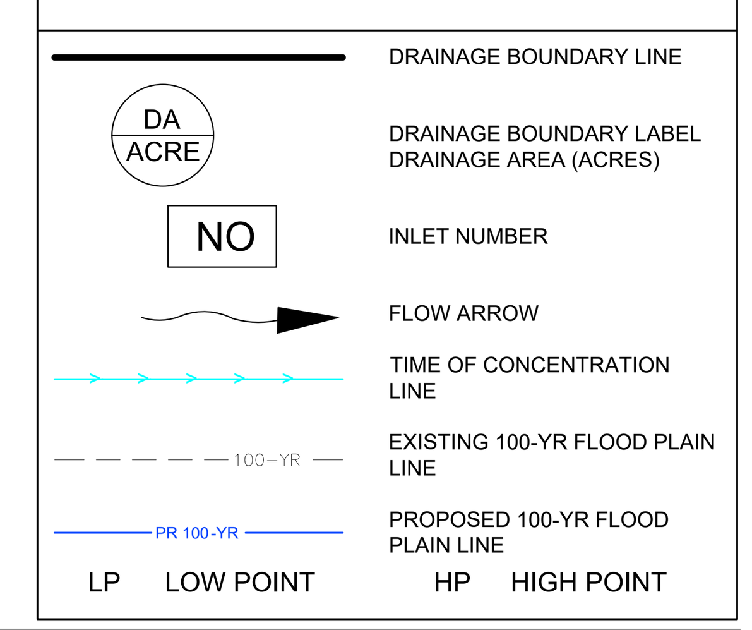
LOT 11
RESOURCE COMMERCIAL PARK
CABINET O, SLIDES 174-176
P.R.W.C.T.
POINT OF INTEREST 2
SCALE : 1" = 30'
LOT 3A
MINOR REPLAT OF LOT 3 AMEND.
CONVEYANCE PLAT OF LOTS 1 & 3
BERRY SUBDIVISION TO ADD 23.63
ACRES IN THE JOHN BERRY SURV
INST.# 2012106529
O.P.R.W.C.T.
SCS Shallow Concentrated Flow
L=281'
S=1.80%
2.2 min
LOT 12
RESOURCE COMMERCIAL PARK
CABINET O, SLIDES 174-176
P.R.W.C.T.
4.947 ACRES
±215,499 S.F.
ROCK STREET, LLC
INST.# 2017110529
O.P.R.W.C.T.
(NO BUILDINGS OBSERVED)
(NO TREES 8+ OBSERVED)
1
0.849
0.00133 sqmi
TOC: 9.1 MIN.
LAG: 5.5 MIN.
2
4.098
0.00640 sqmi
TOC: 10.4 MIN.
LAG: 6.2 MIN.
MARKET STREET
CABINET O, SLIDES 174-176, P.R.W.C.T.
50' R.O.W.
SCS Sheet Flow
L=100'
S=1.78%
8.2 min
POINT OF INTEREST 1
SCS Shallow Concentrated Flow
L=93'
S=3.46%
0.5 min
SCS Sheet Flow
L=100'
S=1.62%
8.6 min
CATTLE GUARD
LOT 3A
MINOR REPLAT OF LOT 3 AMENDED
CONVEYANCE PLAT OF LOTS 1 & 3 DRY
BERRY SUBDIVISION TO ADD 23.63
ACRES IN THE JOHN BERRY SURVEY
INST.# 2012106529
O.P.R.W.C.T.
LOT 3B
MINOR REPLAT OF LOT 3 AMENDED
CONVEYANCE PLAT OF LOTS 1 & 3 DRY
BERRY SUBDIVISION TO ADD 23.63
ACRES IN THE JOHN BERRY SURVEY
INST.# 2012106529
O.P.R.W.C.T.
LOT 3C
MINOR REPLAT OF LOT 3 AMENDED
CONVEYANCE PLAT OF LOTS 1 & 3 DRY
BERRY SUBDIVISION TO ADD 23.63
ACRES IN THE JOHN BERRY SURVEY
INST.# 2012106529
O.P.R.W.C.T.
LOT 3D
MINOR REPLAT OF LOT 3 AMENDED
CONVEYANCE PLAT OF LOTS 1 & 3 DRY
BERRY SUBDIVISION TO ADD 23.63
ACRES IN THE JOHN BERRY SURVEY
INST.# 2012106529
O.P.R.W.C.T.

GENERAL LEGEND



SYMBOLS
WATER METER
WATER VALVE
FIRE HYDRANT
BACKFLOW PREVENTER
UTILITY POLE
LIGHT POLE
WASTEWATER MANHOLE
CLEAN OUT
KEYNOTES
PARKING COUNT
WW SERVICE
WATER SERVICE
STORMSEWER MANHOLE
SIGN
CURB INLET
GRATE INLET
TABLE TOP AREA INLET
TREE TO BE SAVED
TREE TO BE REMOVED
LINETYPES
PROPERTY BOUNDARY
LIMITS OF CONSTRUCTION
FENCES (CHAINLINK)
(IRON)
(WOOD)
(BARB WIRE)
DITCH (CREEK) LINE
EXISTING CONTOURS
PROPOSED CONTOURS
CURB & GUTTER
UNDERGROUND ELEC.
OVERHEAD UTILITY
UNDERGROUND TELE.
UNDERGROUND GAS LINE
WATER LINE
WASTEWATER LINE
ACCESSIBLE ROUTE

DRAINAGE STUDY LEGEND



Atlas 14 Rainfall Precipitation Data					
Duration	2-YR (in)	10-YR (in)	25-YR (in)	50-YR (in)	100-YR (in)
5 MIN	0.51	0.757	0.921	1.05	1.19
15 MIN	1.02	1.51	1.84	2.10	2.37
1 HOUR	1.88	2.79	3.40	3.88	4.39
2 HOURS	2.30	3.55	4.43	5.16	5.98
3 HOURS	2.55	4.02	5.09	6.01	7.06
6 HOURS	2.98	4.81	6.18	7.38	8.75
12 HOURS	3.44	5.54	7.12	8.48	10.1
24 HOURS	3.94	6.30	8.04	9.53	11.2

NOTE: ATLAS 14 RAINFALL PRECIPITATION DATA TAKEN FROM THE WILLIAMSON COUNTY SUBDIVISION REGULATIONS, EFFECTIVE AS OF DECEMBER 7TH, 2021, FOR A SITE LOCATED IN THE SAN GABRIEL RIVER ZONE.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

REVIEWED VALUE | DRAWN DO | DESIGNED EM

STATE OF TEXAS — MICHAEL EASTON MUNDINE — 143266 — LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO. | DATE | REVISIONS | RECOM'D

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

ON-SITE EXISTING CONDITIONS DRAINAGE AREA MAP

PERMIT No.
2021-32-SWP

Developed Conditions Drainage Calculations

Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
1	1.12	2.16	2.95	3.60	4.30
2	11.02	17.97	22.91	26.91	31.18
3	0.36	1.13	1.76	2.30	2.89
POI-1	1.12	2.16	2.95	3.60	4.30
POI-2	3.15	7.13	8.61	9.67	10.75

Existing vs. Developed Conditions Drainage Calculations

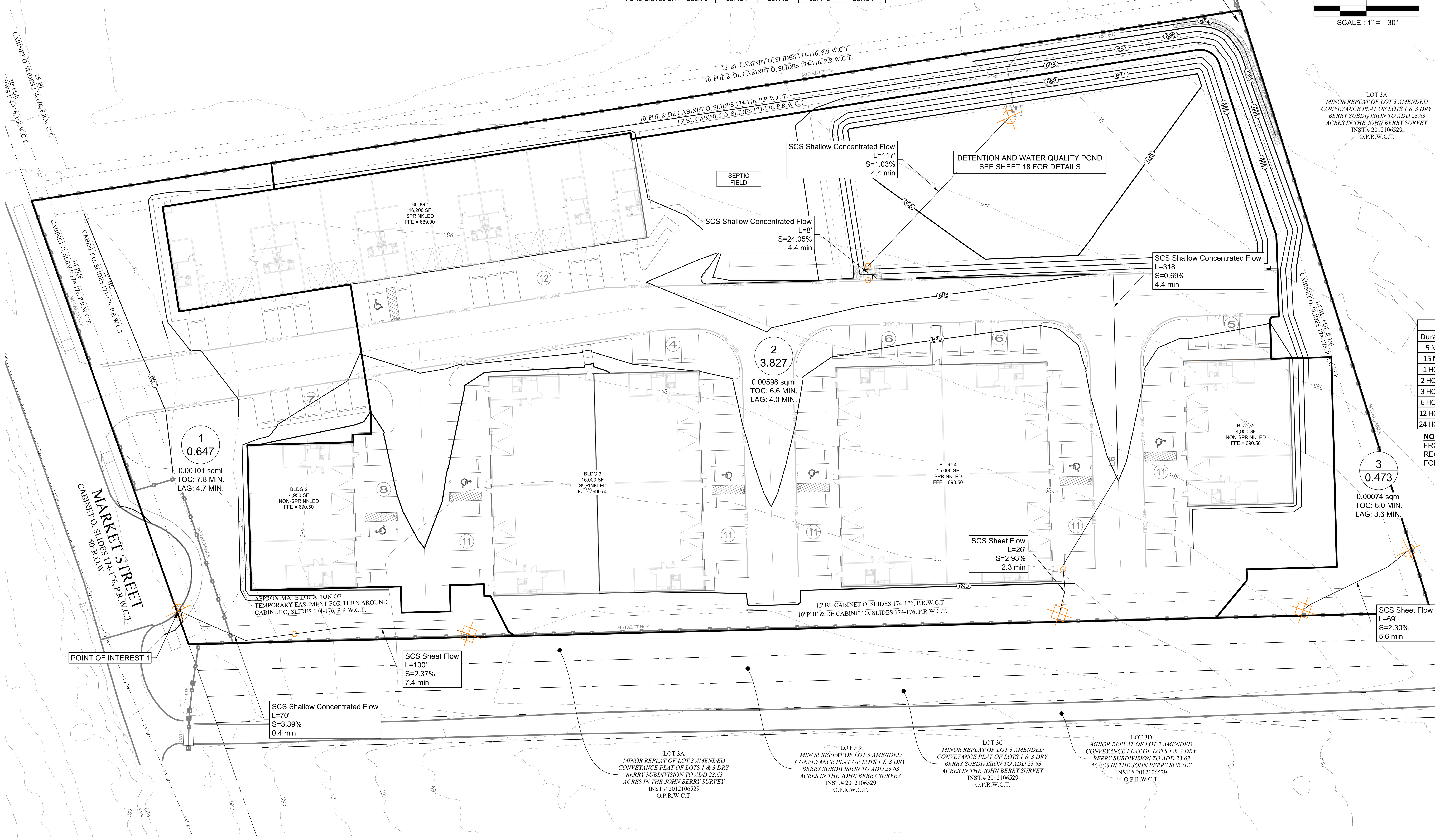
Basin	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
POI-1	0.53	0.39	0.22	0.05	-0.15
POI-2	0.63	-0.77	-3.72	-6.44	-9.49

Detention and Water Quality Pond Drainage Calculations

Event	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
Pond Inflow	11.02	17.97	22.91	26.91	31.18
Pond Outflow	3.00	6.56	7.72	8.50	9.22
Pond Elevation	686.70	687.14	687.45	687.70	687.94

Developed Conditions Drainage Basin Information

Basin	Area (SF)	Area (AC)	Area (MI²)	IC (SF)	IC (%)	Base Curve Number	Composite Curve Number	ToC	Lag
1	28,200.65	0.647398	0.0010116	9,761.80	34.62%	61.00	73.81	7.8	4.7
2	166,693.60	3.826758	0.0059793	110,674.64	66.39%	61.00	85.57	6.6	4
3	20,599.73	0.472905	0.0007389	0.00	0.00%	61.00	61.00	6.0	3.6



GENERAL LEGEND

SYMBOLS

WATER METER; WATER VALVE; FIRE HYDRANT; BACKFLOW PREVENTER; UTILITY POLE; LIGHT POLE; WASTEWATER MANHOLE; CLEAN OUT; KEYNOTES; PARKING COUNT; WW SERVICE; WATER SERVICE; STORMSEWER MANHOLE; SIGN; CURB INLET; GRATE INLET; TABLE TOP AREA INLET; TREE TO BE SAVED; TREE TO BE REMOVED

LINETYPES

PROPERTY BOUNDARY; LIMITS OF CONSTRUCTION; FENCES (CHAINLINK) (IRON) (WOOD) (BARB WIRE); DITCH (CREEK) LINE; EXISTING CONTOURS; PROPOSED CONTOURS; CURB & GUTTER; UNDERGROUND ELEC.; OVERHEAD UTILITY; UNDERGROUND TELE.; UNDERGROUND GAS LINE; WATER LINE; WASTEWATER LINE; ACCESSIBLE ROUTE

DRAINAGE STUDY LEGEND

DRAINAGE BOUNDARY LINE

DRAINAGE BOUNDARY LABEL DRAINAGE AREA (ACRES)

INLET NUMBER

FLOW ARROW

TIME OF CONCENTRATION LINE

EXISTING 100-YR FLOOD PLAIN LINE

PROPOSED 100-YR FLOOD PLAIN LINE

LP LOW POINT HP HIGH POINT

Atlas 14 Rainfall Precipitation Data

Duration	2-YR (in)	10-YR (in)	25-YR (in)	50-YR (in)	100-YR (in)
5 MIN	0.51	0.757	0.921	1.05	1.19
15 MIN	1.02	1.51	1.84	2.10	2.37
1 HOUR	1.88	2.79	3.40	3.88	4.39
2 HOURS	2.30	3.55	4.43	5.16	5.98
3 HOURS	2.55	4.02	5.09	6.01	7.06
6 HOURS	2.98	4.81	6.18	7.38	8.75
12 HOURS	3.44	5.54	7.12	8.48	10.1
24 HOURS	3.94	6.30	8.04	9.53	11.2

NOTE: ATLAS 14 RAINFALL PRECIPITATION DATA TAKEN FROM THE WILLIAMSON COUNTY SUBDIVISION REGULATIONS, EFFECTIVE AS OF DECEMBER 7TH, 2021, FOR A SITE LOCATED IN THE SAN GABRIEL RIVER ZONE.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

STATE OF TEXAS — MICHAEL EASTON MUNDING — 143266 — LICENSED PROFESSIONAL ENGINEER

5/4/2023

DESIGNED: EM | DRAWN: DO | REVIEWED: VALUE

NO. | DATE | REVISIONS | RECORD

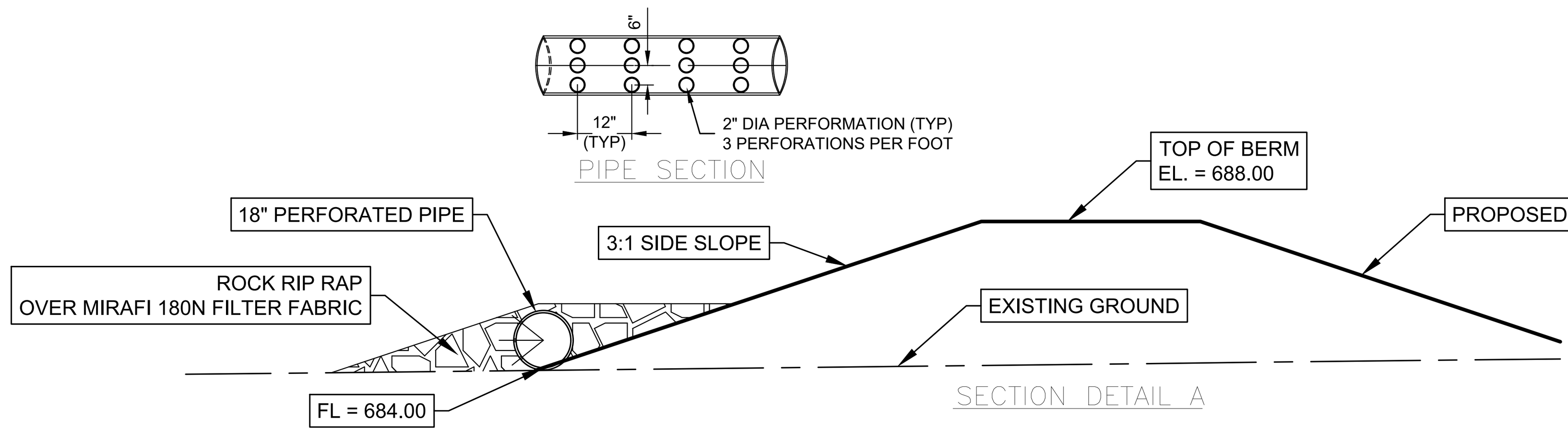
MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

ON-SITE DEVELOPED CONDITIONS DRAINAGE AREA MAP

PERMIT No. 2021-32-SWP

SHEET No. 17 OF 28



Detention and Water Quality Pond Stage Storage				
Elevation	Area (SF)	Area (AC)	Cumulative Volume (cu. ft.)	Perforated Pipe Discharge ($Q=L*B*C_d*A*sqrt(2gH)$)
684.20	12.25	0.00	0.00	7.14
684.25	118.48	0.00	3.27	7.98
684.50	1995.38	0.05	267.50	11.29
684.75	6394.40	0.15	1,316.22	13.83
685.00	12412.11	0.28	3,667.04	15.97
685.25	16838.62	0.39	7,323.38	17.85
685.50	19190.34	0.44	11,827.00	19.56
685.75	20347.13	0.47	16,769.18	21.12
686.00	20848.51	0.48	21,918.64	22.58
686.25	21318.11	0.49	27,189.46	23.95
686.31	21431.58	0.49	28,471.96	24.27
686.50	21791.48	0.50	32,578.15	25.25
686.75	22268.62	0.51	38,085.66	26.48
687.00	22749.53	0.52	43,712.93	27.66
687.25	23240.06	0.53	49,461.63	28.79
687.50	23862.4	0.55	55,349.43	29.87
687.75	25320.46	0.58	61,497.29	30.92
688.00	28105.36	0.65	68,175.52	31.94

Detention and Water Quality Pond Drainage Calculations					
Event	2-YR (CFS)	10-YR (CFS)	25-YR (CFS)	50-YR (CFS)	100-YR (CFS)
Pond Inflow	9.64	16.03	20.63	24.37	28.36
Pond Outflow	3.03	6.57	7.80	8.62	9.39
Pond Elevation	686.70	687.14	687.47	687.73	688.00

NOTES:

1) WATER QUALITY SURFACE ELEVATION = 686.31'
2) L = PERFORATED PIPE LENGTH OF 99.68'
3) B = CLOGGING FACTOR OF 0.5
4) C_d = COEFFICIENT OF DISCHARGE OF 0.61
5) A = AREA OF PERFORATIONS PER LINEAR FOOT OF PIPE. FOR THREE 2" HOLES EVERY 1 FOOT, A = 0.06545 SF.
6) g = ACCELERATION DUE TO GRAVITY - 32.2 FT/S^2
7) H = HEAD OF WATER AT A GIVEN WATER SURFACE ELEVATION.

0 20 40
SCALE : 1" = 20'

GENERAL LEGEND

SYMBOLS

WATER METER; WATER VALVE; FIRE HYDRANT; BACKFLOW PREVENTER; UTILITY POLE; LIGHT POLE; WASTEWATER MANHOLE; CLEAN OUT; KEYNOTES; PARKING COUNT; WW SERVICE; WATER SERVICE; STORMSEWER MANHOLE; SIGN; CURB INLET; GRATE INLET; TABLE TOP AREA INLET; TREE TO BE SAVED; TREE TO BE REMOVED

LINETYPES

PROPERTY BOUNDARY; LIMITS OF CONSTRUCTION; FENCES (CHAINLINK) (IRON) (WOOD) (BARB WIRE); DITCH (CREEK) LINE; EXISTING CONTOURS; PROPOSED CONTOURS; CURB & GUTTER; UNDERGROUND ELEC.; OVERHEAD UTILITY; UNDERGROUND TELE.; UNDERGROUND GAS LINE; WATER LINE; WASTEWATER LINE; ACCESSIBLE ROUTE

GRADING LEGEND

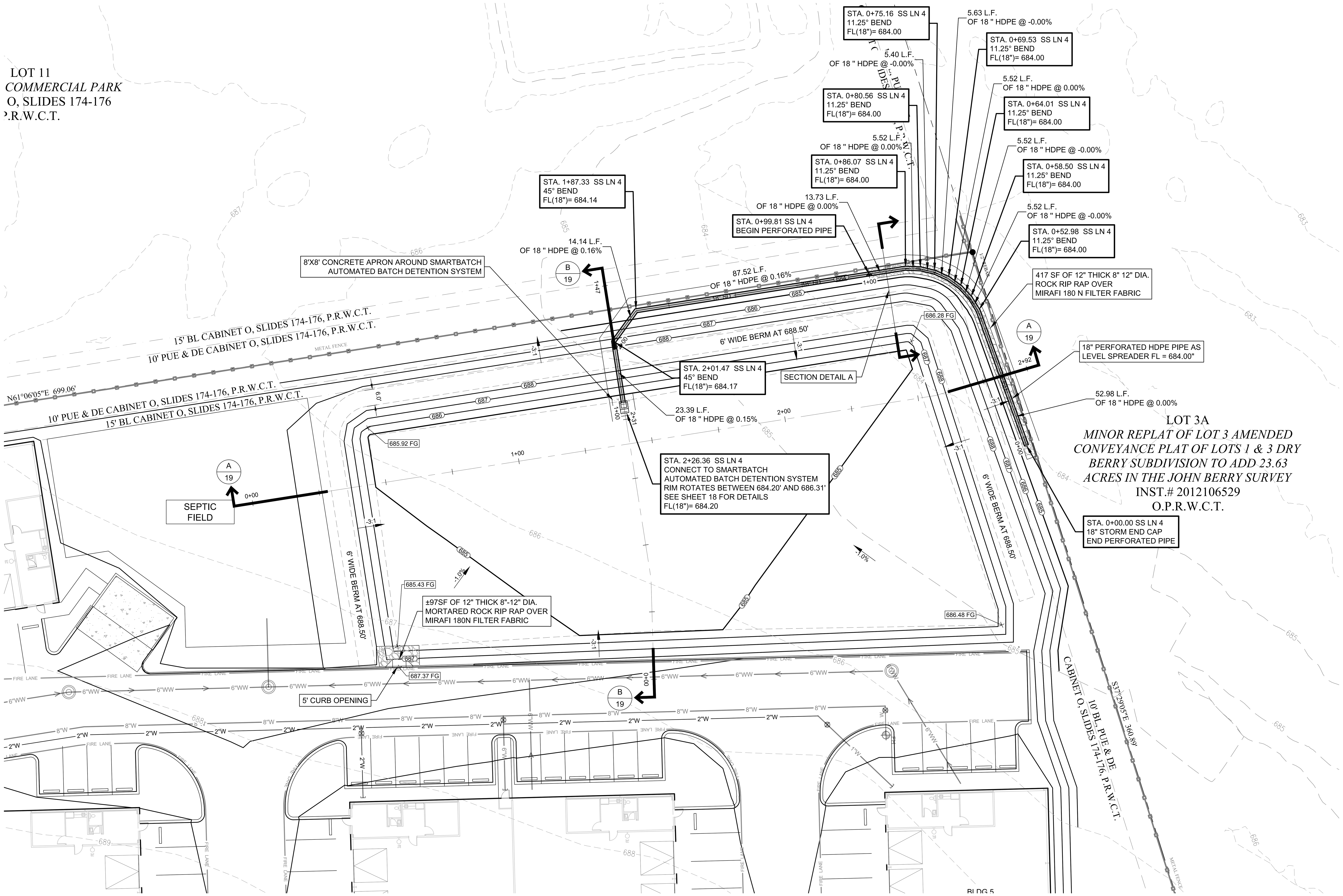
EXISTING

(493.00 NG) NATURAL GROUND; (493.00 EX GUT) GUTTER; (493.00 EX PAV) PVMT; (493.00 EX SW) SIDEWALK

PROPOSED

493.00 PAV PAVEMENT; 493.00 TOW TOP OF WALL; 493.00 TC TOP OF CURB; 493.00 TOE TOE OF SLOPE; 493.00 SW SIDEWALK; 493.00 TOP TOP OF SLOPE; 493.00 TG TOP OF GRATE INLET; 493.00 CONC CONCRETE; 493.00 FL FLOWLINE; 493.00 FF FINISHED FLOOR; 493.00 IE INLET ELEVATION; 493.00 FG FINISHED GROUND; PROPOSED GRADE BREAK ON SURFACE (CONC, PVMT, GRASS, ETC.)

LP LOW POINT HP HIGH POINT



CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

REVIEWED VALUE / DRAWN VALUE / DESIGNED XXXXX

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

RECORD / REVISIONS / DATE / NO.

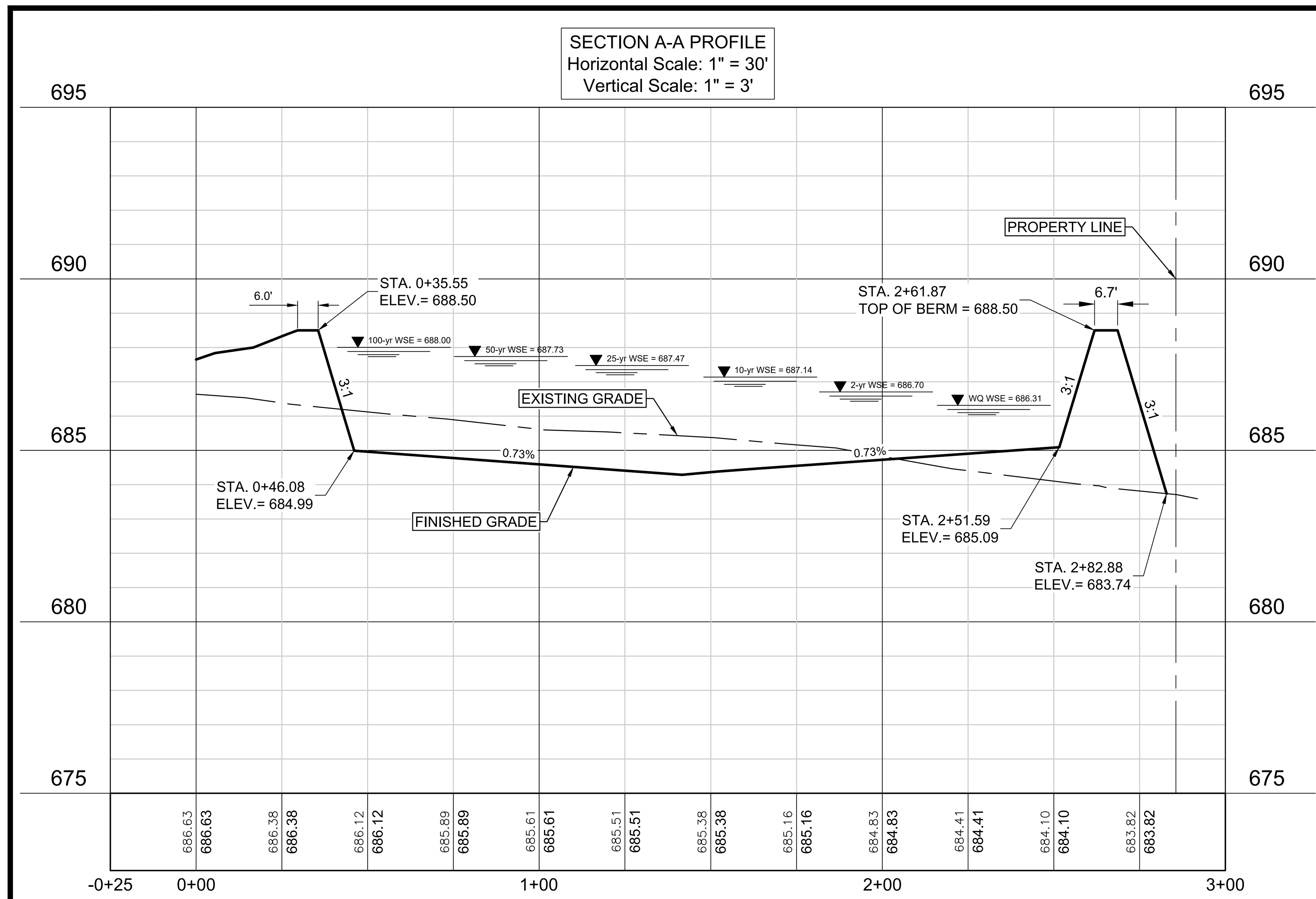
MARKET STREET INDUSTRIAL

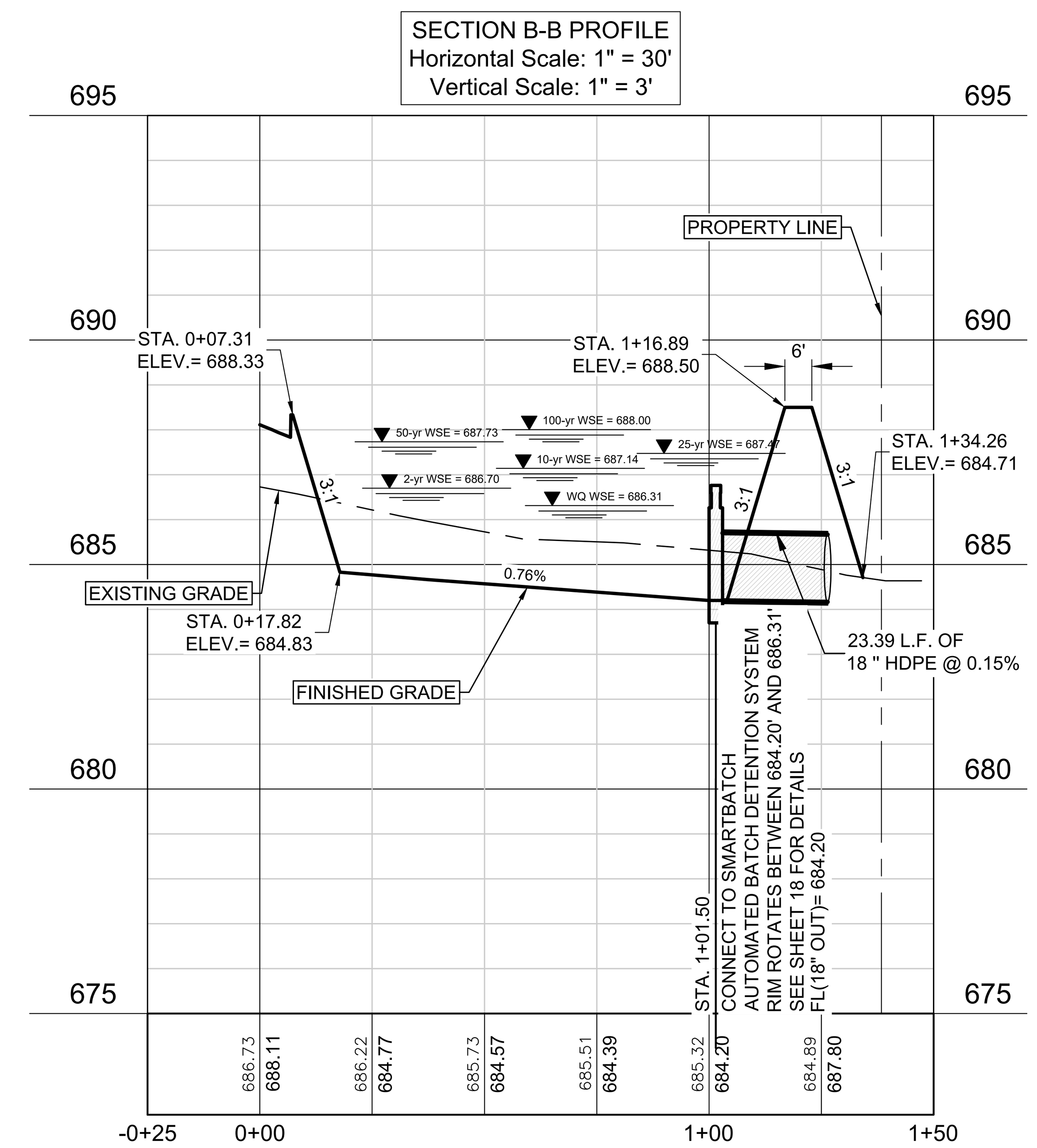
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

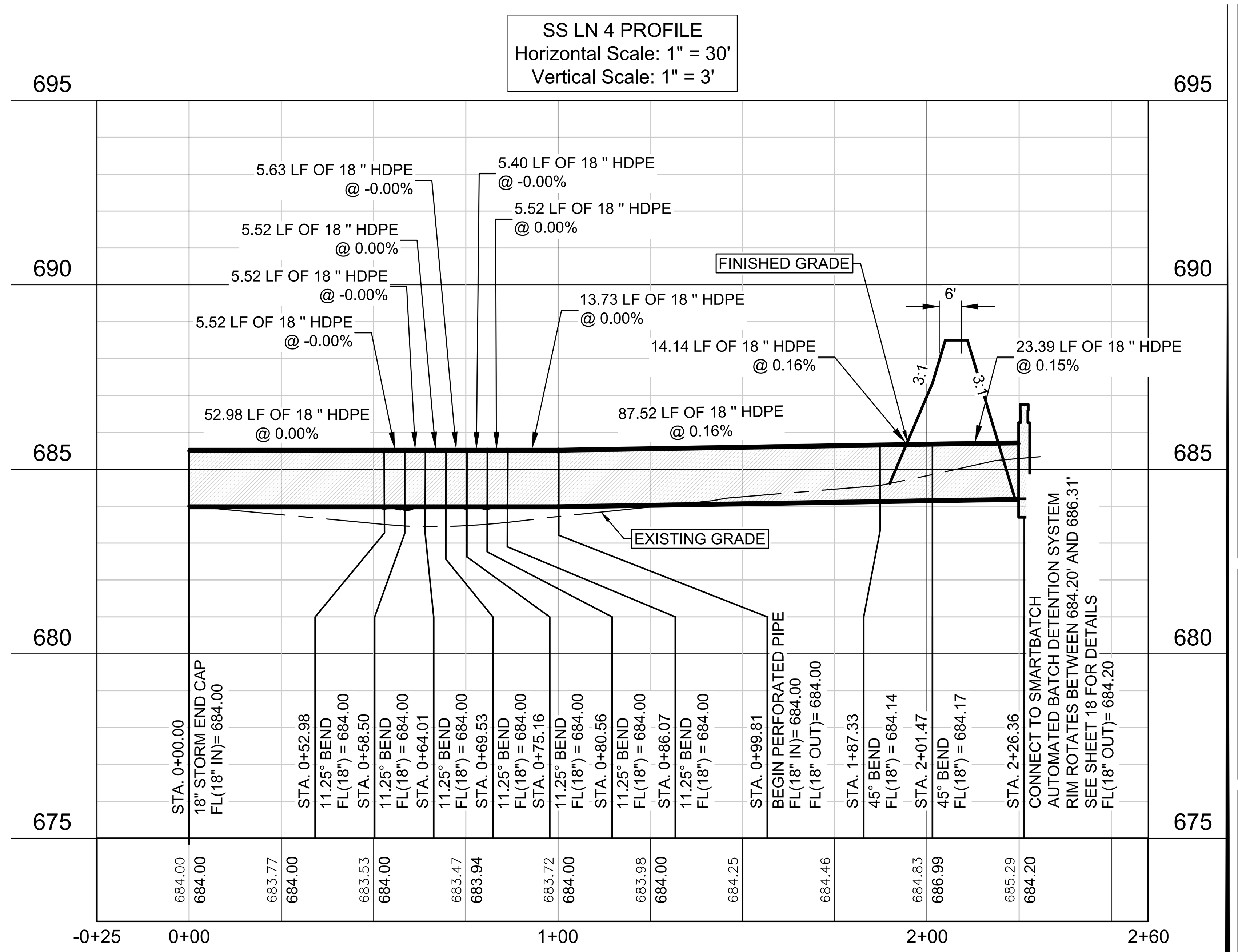
WATER QUALITY POND PLAN

PERMIT No.
2021-32-SWP

SHEET No.
18
OF 28







Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Additional information is provided for cells with a red triangle in the upper right corn
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will r

1. The Required Load Reduction for the total project: Calculations from RG-348

Page 3-29 Equation 3.3: $L_M = 28.93(A_N \times P)$

where:
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resul
A_N = Net increase in impervious a
P = Average annual precipitation

Site Data: Determine Required Load Removal Based on the Entire Project
County = **Williamson**
Total project area included in plan * = **4.95** acres
Predevelopment impervious area within the limits of the plan * = **0.02** acres
Total post-development impervious area within the limits of the plan* = **2.77** acres
Total post-development impervious cover fraction * = **0.56**
P = **32** inches

$L_{M\ TOTAL\ PROJECT}$ = **2550** lbs.

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

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

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

Drainage Basin/Outfall Area No. = 2

Total drainage basin/outfall area = **4.13** acres
Predevelopment impervious area within drainage basin/outfall area = **0.00** acres
Post-development impervious area within drainage basin/outfall area = **2.54** acres
Post-development impervious fraction within drainage basin/outfall area = **0.62**
$L_{M\ THIS\ BASIN}$ = **2351** lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Batch Detention System**
Removal efficiency = **91** percent

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

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

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

A_C = **4.13** acres
A_I = **2.54** acres
A_P = **1.59** acres
L_R = **2584** lbs

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

Desired $L_{M\ THIS\ BASIN}$ = **2550** lbs.

F = **0.99**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Rainfall Depth = **3.66** inches
Post Development Runoff Coefficient = **0.43**
On-site Water Quality Volume = **23673** cubic feet

Calculations from RG-348

Off-site area draining to BMP = **0.00** acres
Off-site Impervious cover draining to BMP = **0.00** acres
Impervious fraction of off-site area = **0**
Off-site Runoff Coefficient = **0.00**
Off-site Water Quality Volume = **0** cubic feet

Storage for Sediment = **4735**
Total Capture Volume (required water quality volume(s) x 1.20) = 28408 cubic feet
The following sections are used to calculate the required water quality volume(s) for the selected BMP
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = 0.1 in/hr
Irrigation area = NA square feet
NA acres

8. Extended Detention Basin System Designed as Required in RG

Required Water Quality Volume for extended detention basin = **NA** cubic feet

9. Filter area for Sand Filters Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet
Minimum sedimentation basin area = **NA** square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **NA** cubic feet

Minimum filter basin area = **NA** square feet

Maximum sedimentation basin area = **NA** square feet
Minimum sedimentation basin area = **NA** square feet

10. Bioretention System Designed as Required in RG

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins Designed as Required in RG

Required capacity of Permanent Pool = **NA** cubic feet
Required capacity at WQV Elevation = **NA** cubic feet

NOTES:

1) WATER QUALITY VOLUME REQUIRED: 28,408.00 CUBIC FEET
2) WATER QUALITY VOLUME PROVIDED: 28,471.96 CUBIC FEET
3) AUTOMATED BATCH DETENTION SYSTEM ROTATES BETWEEN BOTTOM OF POND ELEVATION AT 684.20' AND WATER QUALITY ELEVATION AT 686.31'

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

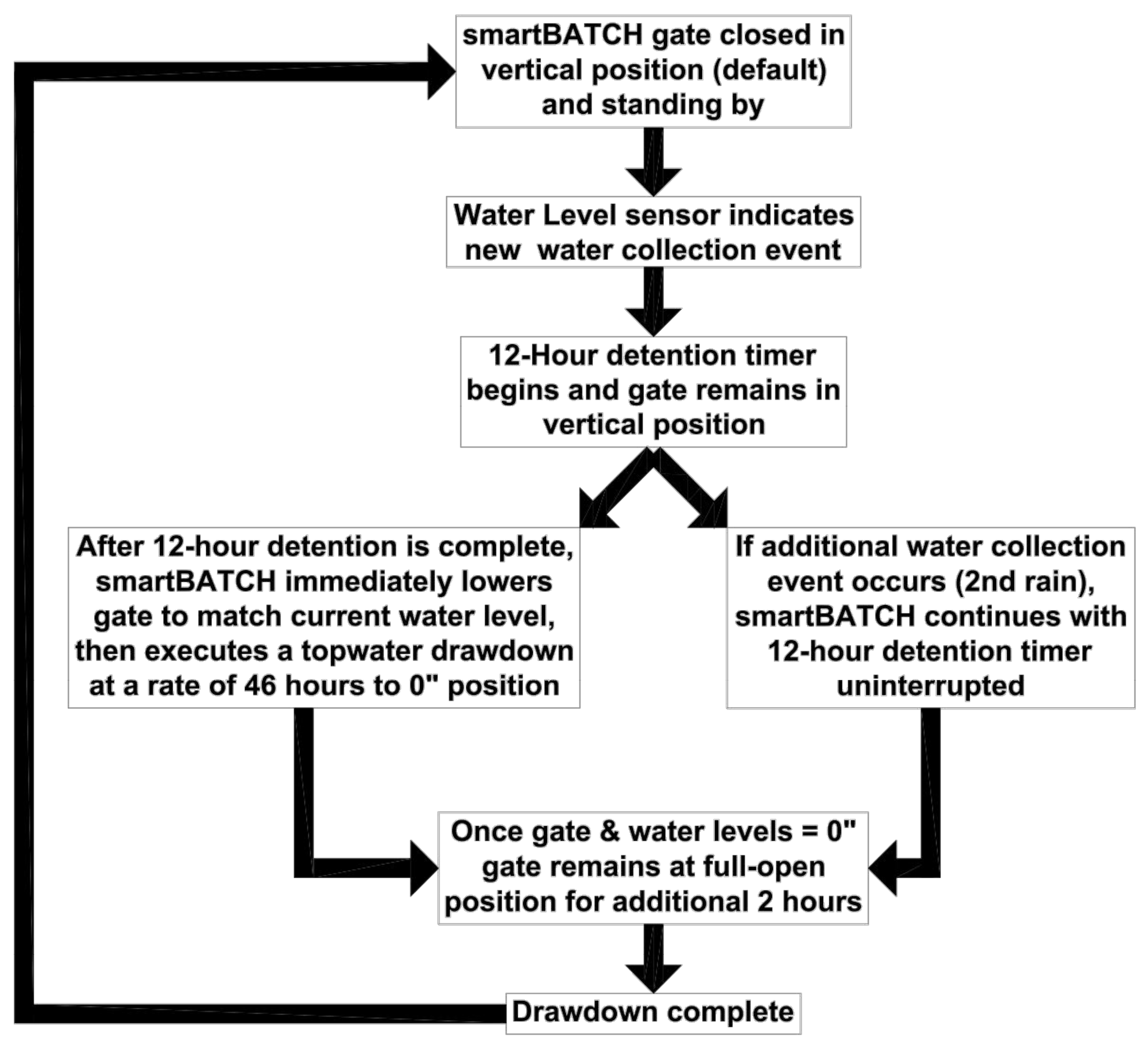
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WATER QUALITY POND
PROFILES & CALCULATIONS

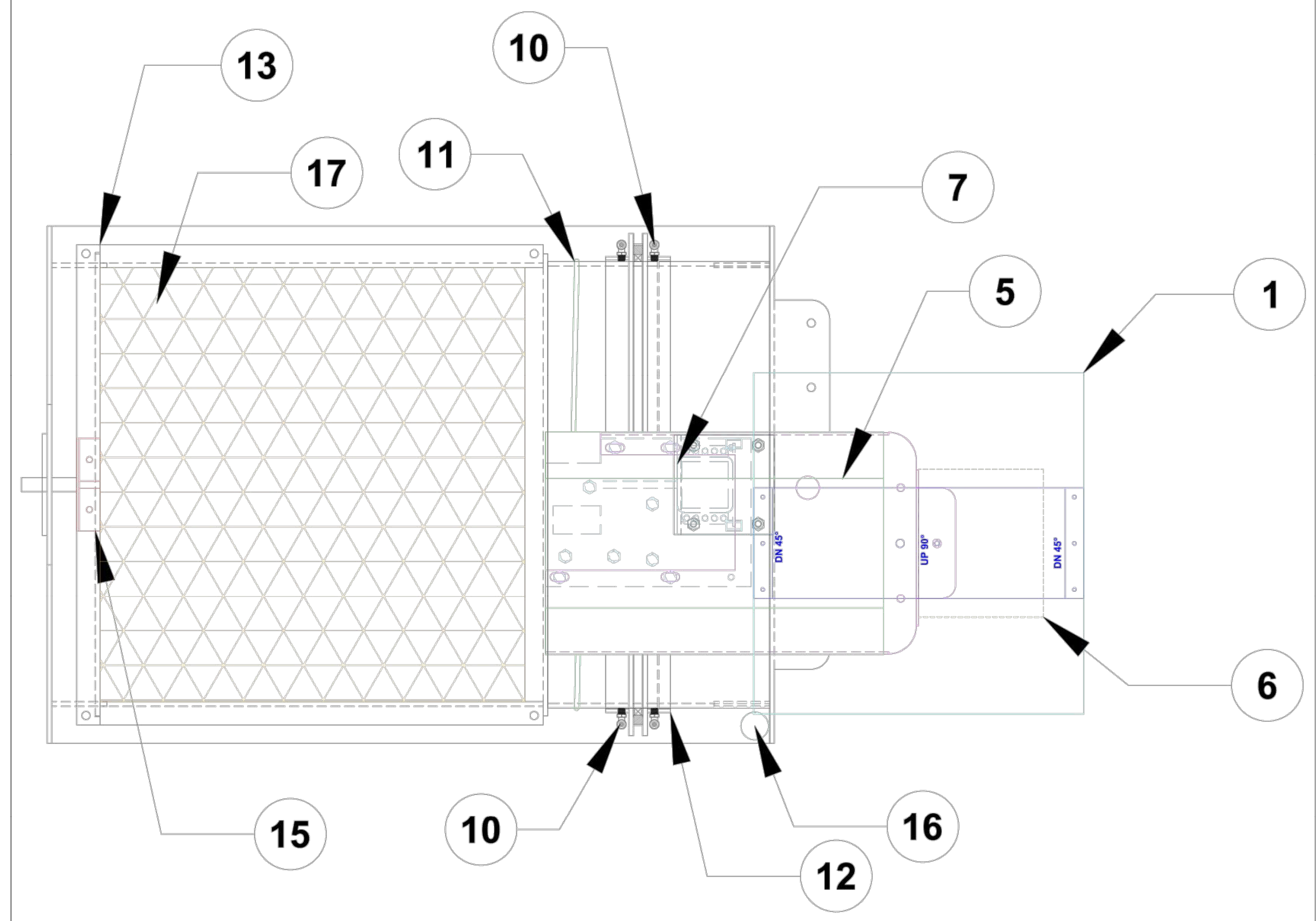
PERMIT No.
2021-32-SWP

SHEET No.
19
OF 28

PROGRAMMABLE LOGIC FLOW CHART

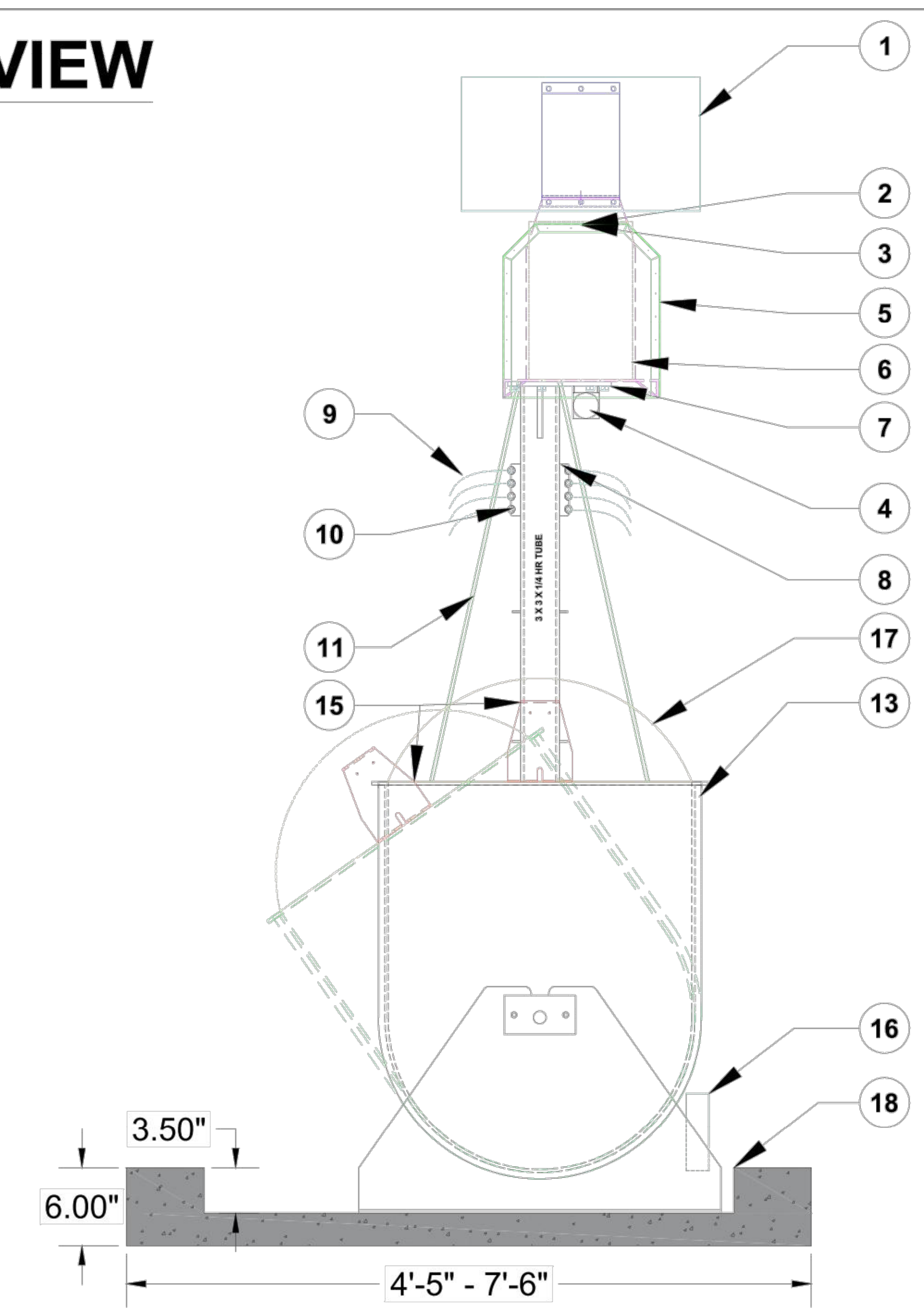


TOP VIEW

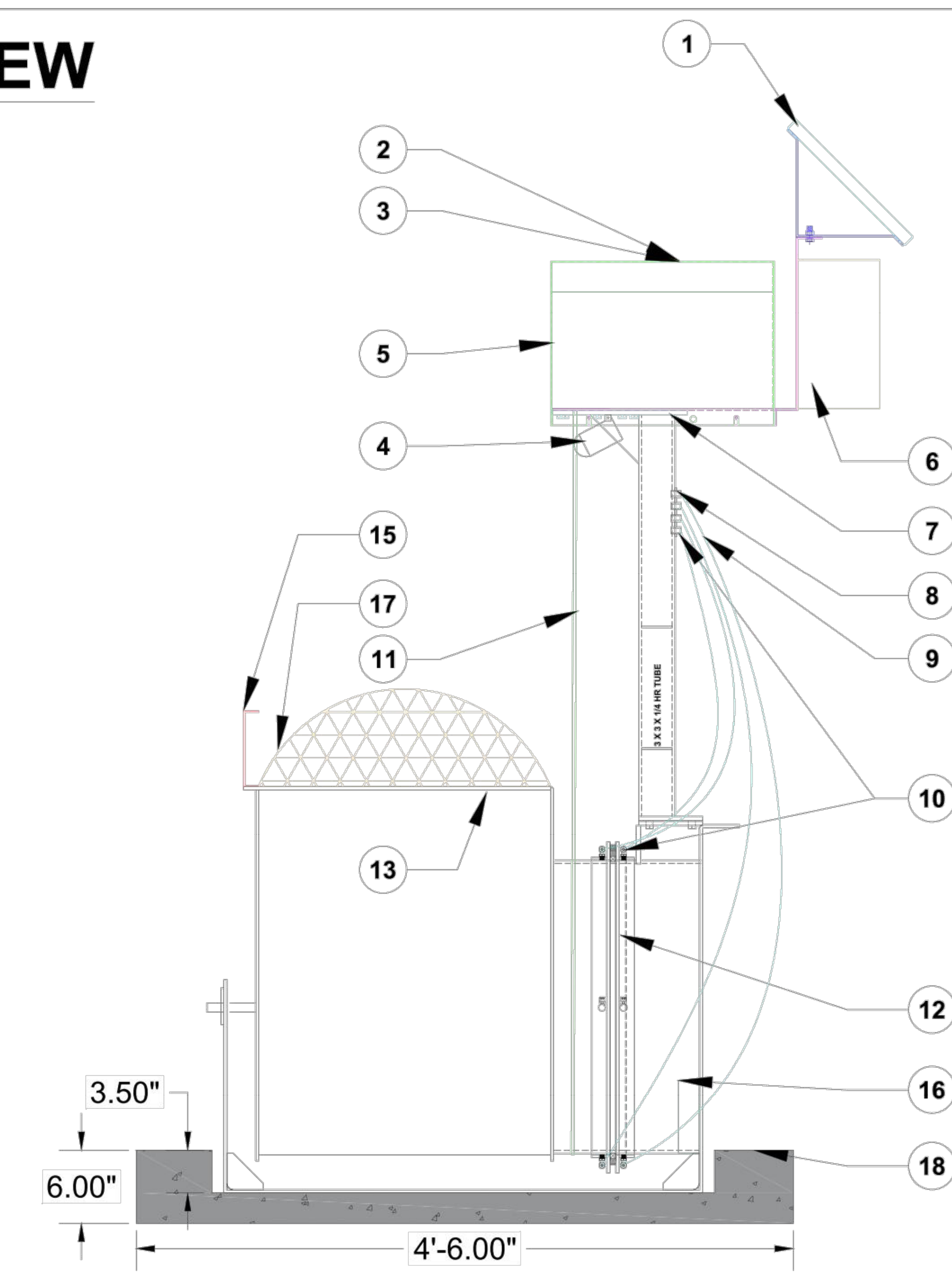


Item	Parts List smartBATCH Components
1	12 V SOLAR PANEL WITH 30 WATT CHARGING CAPACITY
2	ANTENNA (NOT DISPLAYED)
3	CELL DATA MODEM (NOT DISPLAYED)
4	CAMERA
5	WEATHERPROOF ELECTRONIC BOX
6	CONTROL BOX
7	PEDESTAL
8	REMOTE GREASE MANIFOLD
9	GREASE TUBES
10	GREASE FITTINGS
11	$\frac{3}{16}$" Galvanized Cables
12	24" Rotary Valve
13	24" Drum
14	Outlet Pipe (Size TBD By Engineer, Max 24")
15	Inclinometer
16	Level Transducer
17	Beehive Grate
18	6" Concrete Pad (By Others, Size Varies)

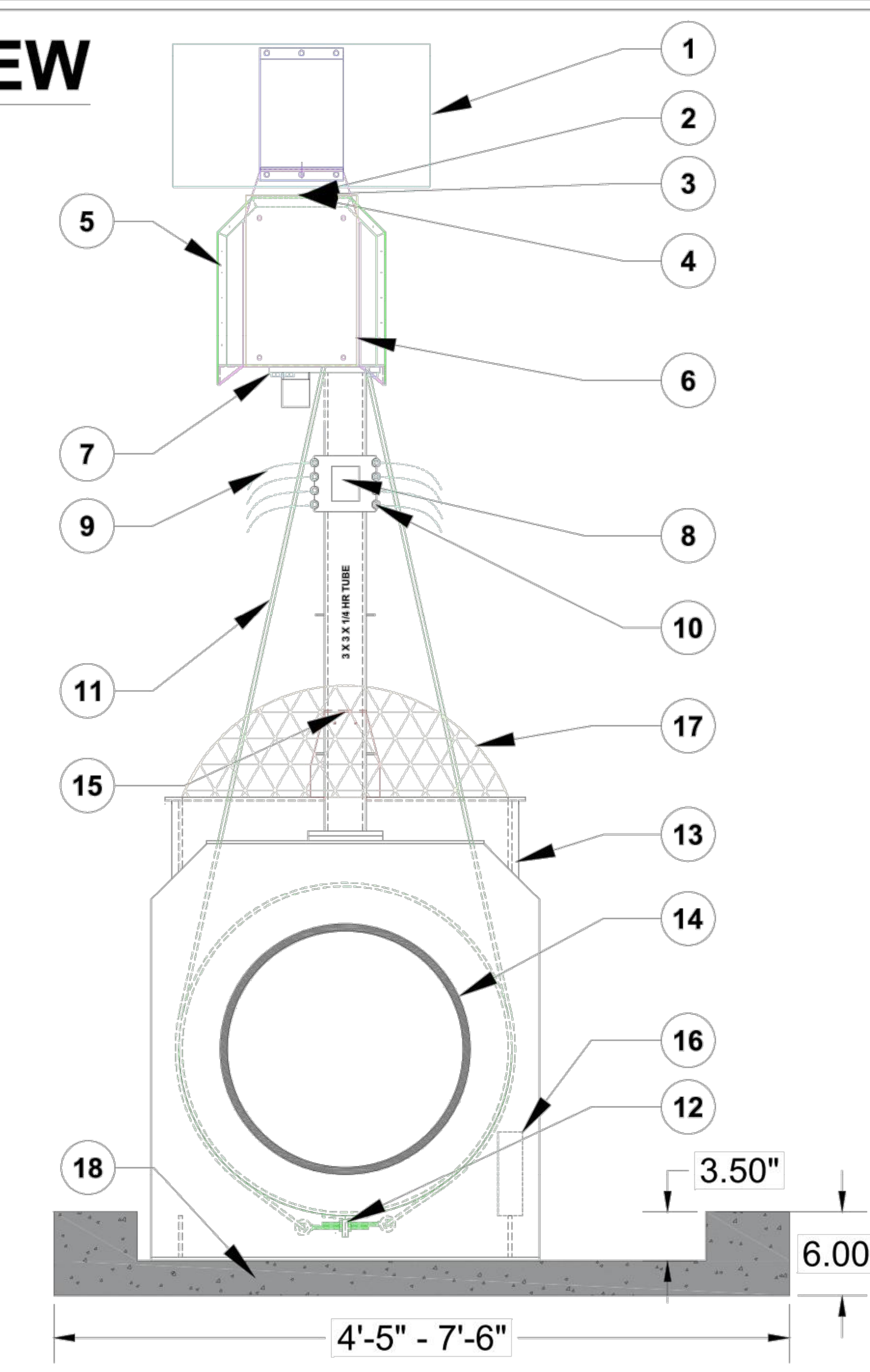
FRONT VIEW



SIDE VIEW



BACK VIEW



CONSTRUCTION ECO SERVICES

smartBATCH Automated Batch Detention Systems

FOR ADDITIONAL INFORMATION PLEASE CONTACT: CONSTRUCTION ECO SERVICES, 832-456-1000, www.ecosvs.com

CONVERGENT WATER TECHNOLOGIES

NOTES:

1. DRUM TO ROTATE FROM 684.2 TO 686.15
2. 0.75' PLATE TO BE ADDED VERTICALLY TO ROTATION DRUM

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX DRAWN: VALUE REVIEWED: VALUE

STATE OF TEXAS MICHAEL EASTON MUNDINE 143266 LICENSED PROFESSIONAL ENGINEER 5/4/2023

NO. DATE REVISIONS RECORD

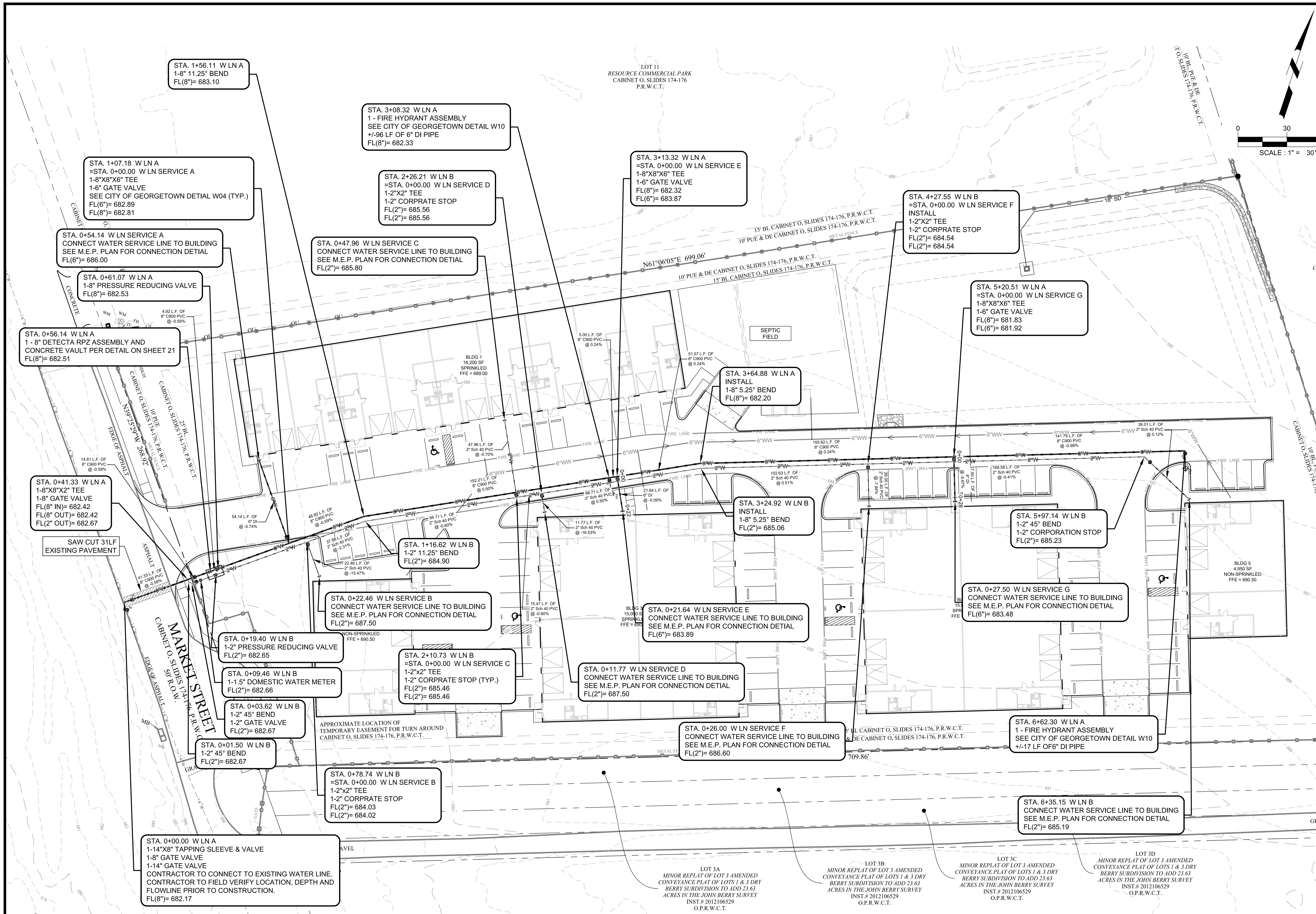
MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WATER QUALITY POND DETAILS

PERMIT No. 2021-32-SWP

SHEET No. 20 OF 28



GENERAL LEGEND

SYMBOLS

WATER METER	WW SERVICE
WATER VALVE	WATER SERVICE
FIRE HYDRANT	STORMSEWER MANHOLE
BACKFLOW PREVENTER	SIGN
UTILITY POLE	CURB INLET
LIGHT POLE	GRATE INLET
WASTEWATER MANHOLE	TABLE TOP AREA INLET
CLEAN OUT	TREE TO BE SAVED
KEYNOTES	TREE TO BE REMOVED
PARKING COUNT	

LINETYPES

- PROPERTY BOUNDARY
- LIMITS OF CONSTRUCTION (LOC)
- FENCES (CHAINLINK)
- (IRON)
- (WOOD)
- (BARB WIRE)
- DITCH (CREEK) LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- CURB & GUTTER
- UNDERGROUND ELEC. (UGE)
- OVERHEAD UTILITY (OHE)
- UNDERGROUND TELE. (TEL)
- UNDERGROUND GAS LINE (GAS)
- WATER LINE (W)
- WASTEWATER LINE (WW)
- ACCESSIBLE ROUTE

NOTES:

1. WATER SERVICE TO BE PROVIDED BY THE CITY OF GEORGETOWN.
2. CONTRACTOR TO COORDINATE WITH M.E.P. PLANS FOR ALL UTILITY STUB OUTS.
3. CONTRACTOR TO ENSURE FIRE HYDRANTS, METERS OR VALVES ARE NOT PLACES WITHIN SIDEWALKS.
4. UNLESS OTHERWISE NOTED, ALL WATER LINES 4"-12" IN DIAMETER SHALL BE C900 PVC PIPE, WATER LINES LESS THAN 4" IN DIAMETER SHALL BE SCH 40 PVC PIPE.
5. ALL WASTEWATER LINES ARE TO BE CONSTRUCTED OF SDR 26 (160 PSI PRESSURE RATING).
6. CONTRACTOR TO COORDINATE AND INSTALL NECESSARY IRRIGATION, ELECTRICAL AND TELECOMMUNICATION SLEEVES PRIOR TO PLACEMENT OF PAVEMENT.
7. ALL BENDS, TEES, REDUCERS AND GATE VALVES SHALL BE RESTRAINED PER CITY OF GEORGETOWN STANDARDS.
8. MINIMUM CLEARANCE BETWEEN WATER AND SANITARY SEWER LINES SHALL COMPLY WITH TCEQ REQUIREMENTS.
9. REFER TO SITE PLAN FOR UTILITY EASEMENT(S) LOCATION(S).
10. CONTRACTOR SHALL COORDINATE LIGHT POLE LOCATIONS AND SLEEVING FOR ELECTRICAL SERVICE WITH M.E.P.
11. CONTRACTOR SHALL COORDINATE LOCATIONS, SIZE AND TYPE OF LIGHTING WITH M.E.P. AND BUILDING PLANS.
12. CONTRACTOR SHALL ADJUST ALL VISIBLE UTILITY FEATURES TO FINISHED GRADE AS NEEDED AT NO ADDITIONAL COST TO OWNER.

FIRE HYDRANT COLOR CODE SYSTEM:

LA-507.5.7 CITY OF GEORGETOWN FIRE HYDRANT COLOR CODE SYSTEM. PRIVATE FIRE HYDRANT MAINTENANCE SHALL BE IN ACCORDANCE WITH NFPA 291.

a. ALL PRIVATE HYDRANT BARRELS WILL BE PAINTED RED WITH THE BONNET PAINTED USING THE HYDRANT FLOW STANDARD IN PARAGRAPH C OF THIS SECTION TO INDICATE FLOW. IT WILL BE THE CUSTOMER'S RESPONSIBILITY TO TEST AND MAINTAIN THEIR PRIVATE FIRE HYDRANT(S).
b. ALL PRIVATE FIRE HYDRANTS SHOULD BE INSPECTED, MAINTAINED, AND FLOW TESTED ANNUALLY AND COLOR CODED TO INDICATE THE EXPECTED FIRE FLOW FROM THE HYDRANT DURING NORMAL OPERATION. SUCH COLOR APPLIED TO THE FIRE HYDRANT BY PAINTING THE BONNET THE APPROPRIATE COLOR FOR THE EXPECTED FLOW CONDITION.
c. **HYDRANT FLOW CODING STANDARDS.** PUBLIC HYDRANTS BARRELS WILL BE PAINTED SILVER, THE HYDRANTS WILL BE FLOW TESTED, AND THE BONNET PAINTED USING THE HYDRANT FLOW STANDARD IN AS FOLLOWS:

FLOW	COLOR
GREATER THAN 1500 GPM	BLUE
1000-1500 GPM	GREEN
500-999 GPM	ORANGE
LESS THAN 500 GPM	RED
NOT WORKING	BLACK OR BAGGED

FIRE PROTECTION NOTES

1. APPROVAL OF THIS SITE PLAN DOES NOT IMPLY APPROVAL TO INSTALL UNDERGROUND FIRE LINES. PRIOR TO INSTALLATION OF UNDERGROUND FIRE LINES, A SEPARATE PERMIT SHALL BE SUBMITTED, UNDER GROUND FIRE LINE SUPPLY.
2. BACKFLOW PROTECTION WILL BE PROVIDED IN ACCORDANCE WITH THE CITY OF GEORGETOWN REQUIREMENTS WHEN REQUIRED. BACKFLOW PROTECTION WILL BE INSTALLED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE UTILITY DRAWINGS.
3. ALL PRIVATE FIRE LINES AND WHAT THEY PROVIDE SERVICE TO WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24 INSTILLATION OF PRIVATE SERVICE MAINS AND THEIR APPURTENANCES.
4. ALL TEES, PLUGS, CAPS, BENDS, REDUCERS, VALVES SHALL BE RESTRAINED AGAINST MOVEMENT. THRUST BLOCKING AND JOINT RESTRAINED WILL BE INSTALLED IN ACCORDANCE WITH NFPA 24.
5. ALL UNDERGROUND SHALL REMAIN UNCOVERED UNTIL A VISUAL INSPECTION IS CONDUCTED BY THE GEORGETOWN FIRE MARSHAL'S OFFICE (FMO). ALL JOINT RESTRAINTS AND THRUST BLOCKING SHALL BE UNCOVERED FOR VISUAL INSPECTION.
6. ALL UNDERGROUND SHALL BE FLUSHED PER THE REQUIREMENTS OF NFPA STANDARD 24 AND WITNESSED BY GEORGETOWN FMO.
7. ALL UNDERGROUND SHALL PASS A HYDROSTATIC TEST WITNESSED BY GEORGETOWN FMO. ALL JOINTS SHALL BE UNCOVERED FOR HYDROSTATIC TESTING. ALL PIPING AND ATTACHMENTS SUBJECTED TO SYSTEM WORKING PRESSURE SHALL BE TESTED AT 200 PSI, OR 50 PSI MORE THAN THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, AND SHALL MAINTAIN THAT PRESSURE + OR - 5 PSI FOR 2 HOURS.
8. FENCES, LANDSCAPING, AND OTHER ITEMS WILL NOT BE INSTALLED WITHIN 3 FT, AND WHERE THEY WILL OBSTRUCT THE VISIBILITY OR ACCESS TO HYDRANTS, OR REMOTE FDCs.
9. LICENSE REQUIREMENTS OF EITHER RME-U OR G. WHEN CONNECTING BY UNDERGROUND TO THE WATER PURVEYOR'S MAIN FROM THE POINT OF CONNECTION OR VALVE WHERE THE PRIMARY PURPOSE OF WATER IS FOR FIRE PROTECTION SPRINKLER SYSTEM.

GEORGETOWN UTILITY SYSTEMS CONSTRUCTION STANDARDS
W3.18 - INSTALLATION OF TAPPING SLEEVE AND VALVE

A. THE CITY OF GEORGETOWN SHALL BE CONTACTED AND THEIR PERMISSION GRANTED PRIOR TO TAPPING A LINE. THE REQUIRED PROCEDURES AND TIMETABLE SHALL BE FOLLOWED EXACTLY.
B. INSTALLATION SHALL BE MADE UNDER PRESSURE AND FLOW SHALL BE MAINTAINED. THE DIAMETERS OF THE TAP SHALL BE A MINIMUM OF 1/4-INCH LESS THAN THE INSIDE DIAMETER OF THE BRANCH LINE.
C. THE ENTIRE OPERATION SHALL BE CONDUCTED BY WORKERS EXPERIENCED IN THE INSTALLATION OF TAPPING SLEEVES AND VALVES. THE TAPPING MACHINE SHALL BE FURNISHED BY THE CONTRACTOR.
D. DETERMINE THE LOCATION OF THE LINE TO BE TAPPED TO CONFIRM THAT THE PROPOSED LOCATION WILL BE SATISFACTORY AND THAT NO INTERFERENCE WILL BE ENCOUNTERED SUCH AS JOINTS OR FITTINGS. NO TAP OR SLEEVE WILL BE MADE CLOSER THAN THREE (3) FEET FROM A PIPE JOINT.
E. A TAPPING SLEEVE AND VALVE WITH BOXES SHALL BE SET SQUARELY CENTERED ON THE LINE TO BE TAPPED. ADEQUATE SUPPORT SHALL BE PROVIDED UNDER THE SLEEVE AND VALVE DURING THE TAPPING OPERATION. THRUST BLOCKS OR OTHER PERMANENT RESTRAINT ACCEPTABLE TO THE ENGINEER AND THE CITY SHALL BE PROVIDED BEHIND ALL TAPPING SLEEVES. PROPER TAMPING OF SUPPORTING PIPE BEDDING MATERIAL AROUND AND UNDER THE VALVE AND SLEEVE IS MANDATORY FOR BURIED INSTALLATIONS.
F. AFTER COMPLETING THE TAP, THE VALVE SHALL BE FLUSHED TO ENSURE THAT THE VALVE SEAT IS CLEAN. ALL PROPER REGULATORY PROCEDURES (INCLUDING DISINFECTION) SHALL BE FOLLOWED EXACTLY.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX DRAWN: VALUE REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

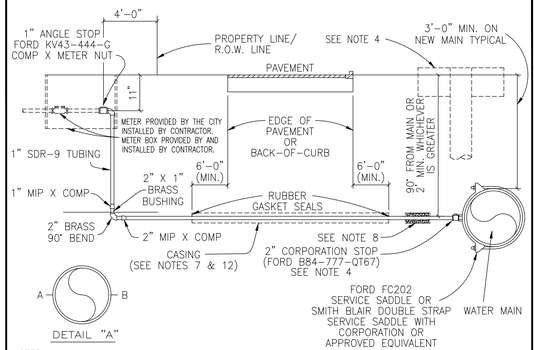
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WATER PLAN

PERMIT No.
2021-32-SWP

SHEET No.
21
OF 28

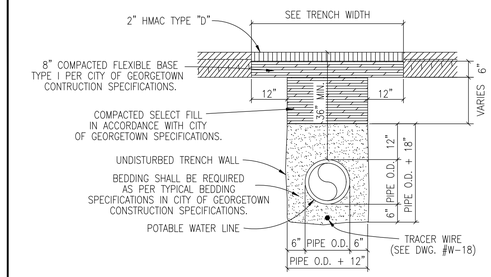
IMAGES: * signature TP.png * NWO_Sign TP.png
XREFS: * E-BASE.dwg * 24x36 2PC TitleBlock.dwg * P-BASE.dwg * MEM SEAL.dwg
DWG: N:\Projects\Brinegar Properties\181 Market Street - Georgetown\CAD\Sheets\WATER PLAN.dwg
PLOT DATE: Thursday, May 04, 2023
PLOTTED BY: EMUNDINE



NOTES:
1. SUCCESSIVE TAPS INTO THE WATER MAIN SHALL BE SPACED A MINIMUM OF 18" OFFSET AND AT THE CENTERLINE AS SHOWN ON DETAIL "A".
2. WHERE NO SIDEWALK EXISTS, METER BOXES SHALL BE SET TO CONFORM TO FINISHED GRADE.
3. AUTHORIZED SERVICE LINE MATERIAL: POLYETHYLENE TUBING SHALL BE SDR-9. CLASS 200, SDR TUBING SHALL HAVE STAINLESS STEEL STIFFENERS.
4. ROTATE THE CORPORATION STOP SO THAT THE OPERATING NUT IS ACTUATED FROM THE VERTICAL POSITION RATHER THAN THE HORIZONTAL. SEE STD. RISER FOR CORP. STOP DETAIL, (DWG # W08).
5. SERVICE LINES SHALL BE CONTINUOUS FROM CORPORATION STOP TO CORPORATION STOP WITH NO FITTINGS IN BETWEEN.
6. SERVICE CASING SHALL NOT BE INSTALLED BY WATER JETTING UNDER ROADWAY.
7. CASING REQUIRED FOR ALL PAVEMENT CROSSINGS. 4" SDR-26 REQUIRED FOR OPEN-CUT. STEEL CASING PIPE REQUIRED FOR JACK AND BORE. LIMITS OF CASING SHOULD EXTEND SIX FEET BEYOND THE EDGE OF PAVEMENT OR BACK-OF-CURB.
8. BEDDING MATERIAL AS PER CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS.
9. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY ENGINEER.
10. METER BOX TO BE CAPABLE OF HOUSING ITRON AUTOMATIC METER READING DEVICE. USE DFW-PLASTICS, INC. PART NO. 1200SBAMR OR APPROVED EQUAL.
11. ALL SERVICE LINES SHALL BE PLACED 90° PERPENDICULAR TO THE ROADWAY. SEE DETAIL W23.
12. CASING SHALL EXTEND OUT TO WITHIN 4' INSIDE OF THE R.O.W. LINE, ON BOTH SIDES.

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

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TYPICAL WATER SERVICE-ELEVATION	REVISION NOTE: ADOPTED 01/23/2013 DRAWING NAME: W03 SCALE: NTS; DATE: 1/2013 DRAWN BY: --; APPROVED BY: MH	

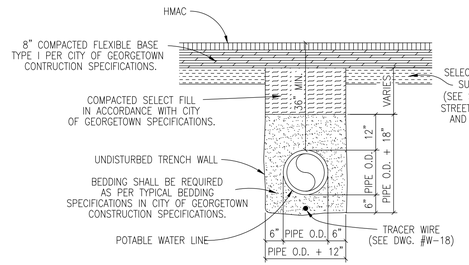


TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

NOTES:
1. REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE.
2. BASE MATERIAL SHALL BE IN LIFTS NOT TO EXCEED 6" AND EACH LIFT THOROUGHLY ROLLED OR TAMPED TO SPECIFIED MAXIMUM DENSITY.
3. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
4. SURFACE MATERIAL WILL BE CONSISTENT WITH THE EXISTING SURFACE.
5. DENSITY TESTS SHALL BE TAKEN IN ACCORDANCE WITH THE CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS AND STANDARDS.
6. CONTRACTOR OR ENGINEER MAY USE FLOWABLE BACKFILL AS AN ALTERNATE BACKFILL MATERIAL (SEE C9 FLOWABLE BACKFILL FOR THE SPECIFICATION).

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

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TRENCH AND EMBEDMENT AND PAVEMENT REPLACEMENT DETAIL UNDER EXISTING ROADWAY	REVISION NOTE: ADOPTED 6/21/2006 DRAWING NAME: W17 SCALE: NTS; DATE: 1/2003 DRAWN BY: MRS; APPROVED BY: TRB	

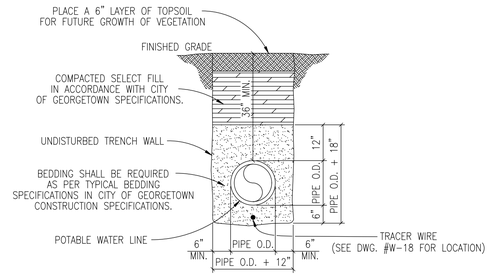


TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

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

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

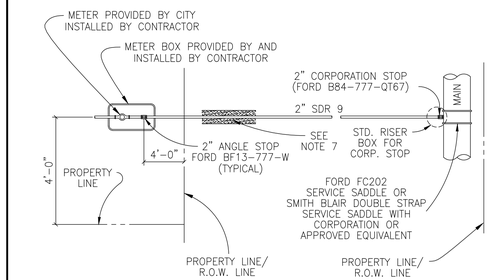
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TRENCH AND EMBEDMENT DETAIL UNDER PROPOSED ROADWAY	REVISION NOTE: ADOPTED 6/21/2006 DRAWING NAME: W22 SCALE: NTS; DATE: 1/2003 DRAWN BY: MRS; APPROVED BY: TRB	



TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

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

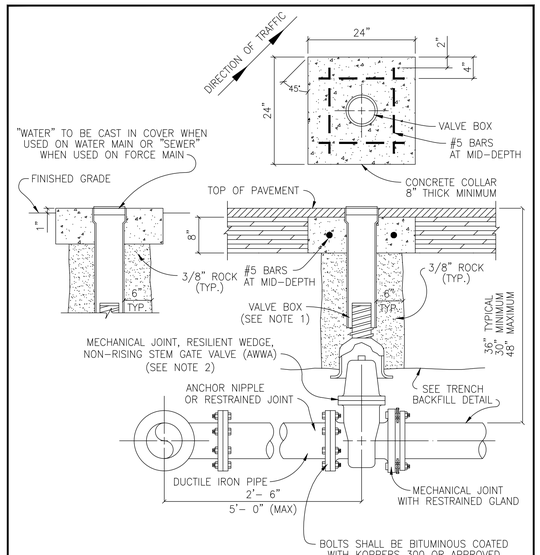
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TRENCH AND EMBEDMENT DETAIL UNDER NON-PAVED AREAS	REVISION NOTE: ADOPTED 6/21/2006 DRAWING NAME: W02 SCALE: NTS; DATE: 1/2003 DRAWN BY: MRS; APPROVED BY: TRB	



NOTES:
1. AUTHORIZED SERVICE LINE MATERIAL: POLYETHYLENE TUBING SHALL BE SDR-9. CLASS 200, SDR TUBING SHALL HAVE STAINLESS STEEL STIFFENERS.
2. ANGLE STOP SHALL BE 1" MINIMUM.
3. 1" ANGLE STOPS WITH 3/4" VALVES SHALL NOT BE PERMITTED.
4. MULTIPLE SERVICE/METER INSTALLATIONS OF MORE THAN 4 METERS PER SERVICE AND SERVICE LINES LARGER THAN 2" IN DIAMETER SHALL BE HANDLED ON AN INDIVIDUAL BASIS.
5. ANGLE STOPS 1 1/2" AND 2" IN SIZE SHALL BE PROVIDED WITH BOTH A LOCKING CAP AND METER FLANGE.
6. ANGLE STOPS SHALL BE INSTALLED 8" BELOW FINISHED GRADE AND MARKED WITH A 2" X 2" X 48" TREATED WOOD STAKE, PAINTED BLUE.
7. BEDDING MATERIAL AS PER CITY OF GEORGETOWN CONSTRUCTION SPECIFICATIONS.
8. CASING REQUIREMENTS FOR SERVICE LINES CROSSING ROADWAYS SEE DETAIL W-03 NOTE #7.
9. ANY VARIATIONS ON FITTINGS MUST BE APPROVED BY THE CITY ENGINEER.
10. ALL SERVICE LINES SHALL BE PLACED 90° PERPENDICULAR TO THE ROADWAY.

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

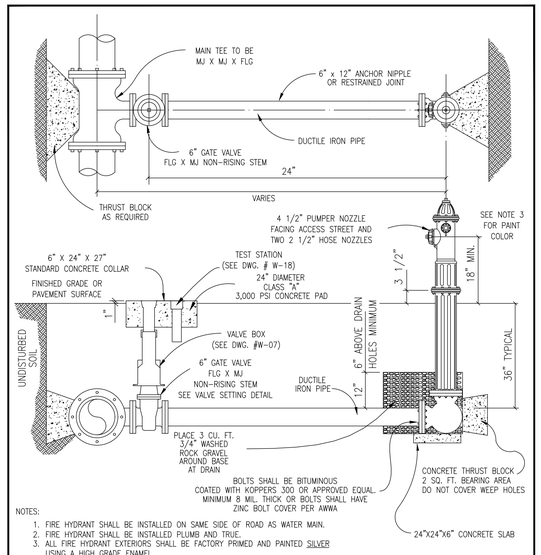
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS SINGLE WATER SERVICE PLAN	REVISION NOTE: ADOPTED 01/23/2013 DRAWING NAME: W04 SCALE: NTS; DATE: 1/2013 DRAWN BY: --; APPROVED BY: MH	



NOTES:
1. VALVE BOX SHALL BE 5 1/4" CAST IRON ADJUSTABLE HAVING AN ADJUSTABLE RANGE OF + OR - 6 INCHES FROM INSTALLED FINISH GRADE.
2. ACCEPTABLE GATE VALVES ARE:
   A. AMERICAN FLOW CONTROL - SERIES 2500
   B. MUELLER - 2360 SERIES
   C. CLOW

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

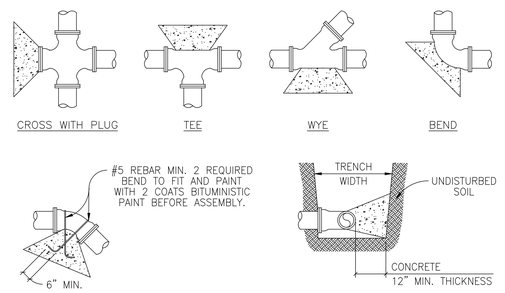
CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TYPICAL VALVE SETTING	REVISION NOTE: ADOPTED 6/21/2006 DRAWING NAME: W07 SCALE: NTS; DATE: 1/2003 DRAWN BY: MRS; APPROVED BY: TRB	



NOTES:
1. FIRE HYDRANT SHALL BE INSTALLED ON SAME SIDE OF ROAD AS WATER MAIN.
2. FIRE HYDRANT SHALL BE INSTALLED PLUMB AND TRUE.
3. ALL FIRE HYDRANT EXTERIORS SHALL BE FACTORY PRIMED AND PAINTED SILVER USING A HIGH GRADE ENAMEL.
4. HEEL AND THRUST BLOCKS TO REST IN UNDISTURBED SOIL.
5. THE ONLY FIRE HYDRANTS ACCEPTABLE ARE:
   A. KENNEDY - K81
   B. AMERICAN DARLING - B84B
   C. CLOW MEDALLION
6. DOUBLE BLUE REFLECTOR "HYE-LITES" BRAND, MANUFACTURED BY PAVEMENT MARKERS INC. TO BE INSTALLED AT CENTERLINE OF STREET PERPENDICULAR TO HYDRANT.
7. ALL METALLIC PIPES AND FITTINGS SHALL BE WRAPPED WITH 8 MILL. POLYETHELENE FILM.

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

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TYPICAL FIRE HYDRANT INSTALLATION	REVISION NOTE: ADOPTED 6/21/2006 DRAWING NAME: W10 SCALE: NTS; DATE: 1/2003 DRAWN BY: MRS; APPROVED BY: TRB	



*DEADMAN

TYPICAL SECTION

ALL THRUST BLOCKS SHALL BE FORMED. LAID FORMS SHALL BE INSPECTED BY THE CITY OF GEORGETOWN PRIOR TO THE POURING OF CONCRETE AND SHALL ALSO BE INSPECTED BY THE CITY OF GEORGETOWN PRIOR TO COVERING. TYPICAL LOCATIONS WHICH REQUIRE CONCRETE REACTION (THRUST) BLOCKS, FOR PRESSURE MAINS FOUR INCHES (4") AND GREATER. CONCRETE SHALL HAVE 2,500 P.S.I. MINIMUM STRENGTH AT TWENTY EIGHT (28) DAYS AND BEAR AGAINST UNDISTURBED STABLE SOILS, AREA OF CONTACT SHALL BE GOVERNED BY PIPE SIZE, MAXIMUM PRESSURE IN PIPE, AND BEARING CAPACITY OF SOIL. PROTECT FITTINGS, BOLTS, ETC. BY COVERING WITH VISQUEEN OR OTHER ACCEPTABLE MATERIAL. CONCRETE SHALL BE A MINIMUM OF TWELVE INCHES (12") THICK.

PIPE SIZE	THRUST BLOCK AREA REQUIRED	PIPE SIZE	THRUST BLOCK AREA REQUIRED	REMARKS
4"	2.0 SQ. FT.	18"	30.0 SQ. FT.	
6"	4.0 SQ. FT.	20"	37.0 SQ. FT.	VALUES ARE FOR 90° BENDS, BASED ON 2000 P.S.F. SAFE BEARING LOAD AND PIPE PRESSURE OF 150 P.S.I. PLUS 33% SAFETY FACTOR FOR OTHER SOILS AND PRESSURES, THE AREA REQUIRED IS IN DIRECT PROPORTION.
8"	6.6 SQ. FT.	24"	53.0 SQ. FT.	
10"	10.0 SQ. FT.	27"	80.0 SQ. FT.	
12"	14.0 SQ. FT.	30"	98.0 SQ. FT.	
14"	18.0 SQ. FT.	36"	127.0 SQ. FT.	
16"	24.0 SQ. FT.			

* THE ENGINEER OF RECORD SHALL CALCULATE THE SIZE OF THE DEADMAN REQUIRED AS WELL AS ANY INSTALLATION WHICH IS NOT COVERED BY THE ABOVE.

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

CITY OF GEORGETOWN CONSTRUCTION STANDARDS AND DETAILS TYPICAL THRUST BLOCKS FOR WATER AND FORCE MAIN	REVISION NOTE: ADOPTED 6/21/2006 DRAWING NAME: W11 SCALE: NTS; DATE: 1/2003 DRAWN BY: MRS; APPROVED BY: TRB	

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

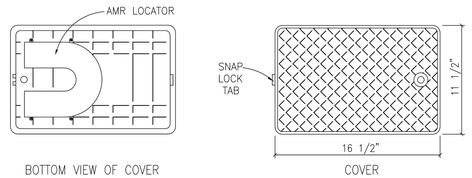
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WATER DETAILS (1 OF 2)

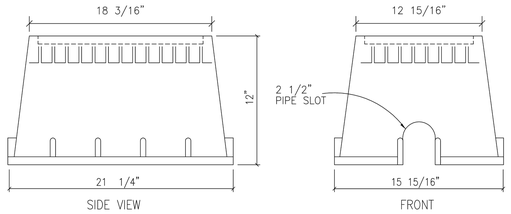
PERMIT No.
2021-32-SWP

SHEET No.
22
OF 28

XREFS: * 24x36 2PC Tembo.dwg * Edit.dwg * Edit.dwg * 24x36 2PC Tembo.dwg * 24x36 2PC Tembo.dwg * 24x36 2PC Tembo



DFW PLASTINCS, INC. PART NO. 1200.SBAMR, BLACK BOX, BLACK COVER AND 2 1/2" PIPE SLOT OR APPROVED EQUAL.



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

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
METER BOX (NON-TRAFFIC AREAS)

REVISION NOTE:	ADOPTED 6/21/2006
DRAWING NAME:	W23
SCALE: NTS	DATE: 1/2003
DESIGNED BY: MRS	APPROVED BY: TRB

ES-A-4000SS-12

Job Name _____ Contractor _____

Job Location _____ Approval _____

Engineer _____ Contractor's P.O. No. _____

Approval _____ Representative _____

LEAD FREE*

Series 4000SS

Reduced Pressure Zone Assemblies

Sizes: 12"

Series 4000SS Reduced Pressure Zone Assemblies are designed to provide protection of the potable water supply in accordance with national codes. This series can be used where approved by the local authority having jurisdiction on health-hazard cross-connections. Series 4000SS features short lay length, lightweight stainless steel body, corrosive resistant stainless steel relief valve, and patented cam-check assembly.

Features

- Stainless steel construction provides long term corrosion resistance and maximum strength
- Stainless steel body is half the weight of competitive designs reducing installation & shipping costs
- Short end-to-end dimensions makes retrofit easy
- Cam-check assembly provides maximum flow at low pressure drop
- No special tools required for servicing
- Compact construction allows for smaller enclosures
- Stainless steel relief valve features a balanced rolling diaphragm to eliminate sliding seals and lower maintenance costs

Specifications

A Reduced Pressure Zone Assembly shall be installed at each cross-connection to prevent backsiphonage and backpressure of hazardous materials into the potable water supply. The series 4000SS features Lead Free* construction to comply with Lead Free* installation requirements. The assembly shall consist of a pressure differential relief valve located in a zone between two positive seating cam-check assemblies. The main valve body shall be manufactured from 300 Series stainless steel for corrosion resistance. The cam-check assembly shall be of thermoplastic construction with stainless steel hinge pins, cam arm, and cam bearing. The cam-check assembly shall utilize a single torsion spring design to minimize pressure drop through the assembly. The cam-check assembly shall be modular and shall seal to the main valve body by the use of an O-ring. There shall be no brass or bronze parts used within the check assembly or relief valve. The use of seat screws to retain the check valve seat is prohibited. All internal parts shall be accessible through a single cover on the valve assembly securely held in place by a two-bolt grooved coupling. The differential relief valve shall be of stainless steel construction and shall utilize a rolling diaphragm and no sliding seals. The relief valve shall be bottom mounted and supplied with a steel reinforced sensing hose. The assembly shall include two resilient seated shutoff valves & four ball type test cocks. The assembly shall be an Ames Fire & Waterworks Series 4000SS.

NOTICE

When installing a drain line on Series 4000SS backflow preventer, use air gap.
See Literature ES-A-AG/EL/TC for additional information.

Standards

AWWA C511-92

Available Models

Suffix:
NRS – non-rising stem resilient seated gate valves
OSY – UL/FM outside stem and yoke resilient seated gate valves
LG – less gates

NOTICE

The installation of a drain line is recommended. When installing a drain line, an air gap is necessary. The 4000SS should be installed with a minimum clearance of 12" between lowest point of the assembly and the floor drain or grade.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

NOTICE

Inquire with governing authorities for local installation requirements

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

AMES FIRE & WATERWORKS
A WATTS Brand

Materials

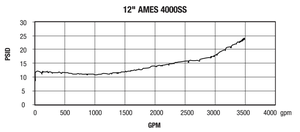
All internal metal parts: 300 Series stainless steel
Main valve body: 300 Series stainless steel
Check assembly: Noryl®
Flange dimension in accordance with AWWA Class D

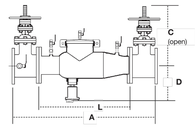
Capacity

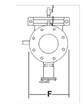
Documented flow characteristics (including shutoff valves).

Pressure – Temperature

Temperature Range: 33°F – 110°F (0.5°C – 43°C)
Maximum Working Pressure: 175 psi (12.1 bar)







Dimensions – Weights

Note: Strainer sold separately

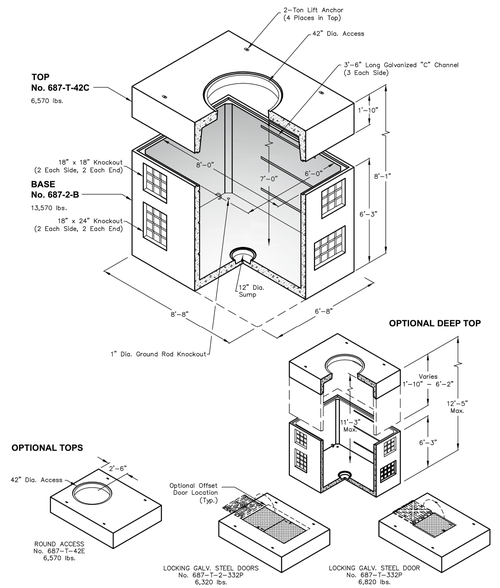
SIZE	DIMENSIONS												NET WEIGHT			
	A		C (OSY)		(NRS)		D		F		L		w/Gates		w/o Gates	
in.	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lb	kg	lb	kg
12	57½	1461	53⅛	1349	26¾	679	12½	318	19	483	29½	749	1043	474	219	100

Noryl® is a registered trademark of General Electric Company

AMES FIRE & WATERWORKS
A WATTS Brand

USA: Backflow Tel: (978) 689-6066 • Fax: (978) 975-8350 • AmesFireWater.com
USA: Control Valves Tel: (713) 943-0688 • Fax: (713) 944-9445 • AmesFireWater.com
Canada: Tel: (905) 332-4090 • Fax: (905) 332-7068 • AmesFireWater.ca
Latin America: Tel: (52) 81-1001-8600 • AmesFireWater.com

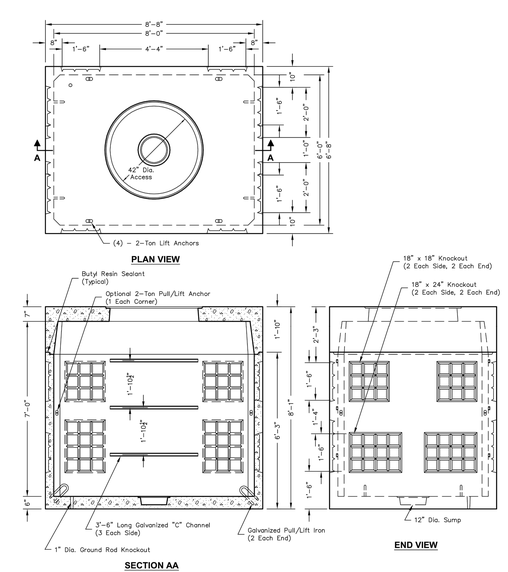
687-2-LA



Note: Designed for 0 to 5'-0" of Cover

Oldcastle Precast®	687-2-LA	687-2-LA 6 x 8 - 2 PC. POWER / WATER / GAS
PO Box 323, Wilsonville, Oregon 97070-0323	File Name: 020-687LA	
Tel: (503) 682-2844 Fax: (503) 682-2657	Issue Date: 2016	
	oldcastleprecast.com/wilsonville	

687-2-LA



Oldcastle Precast®	687-2-LA	687-2-LA 6 x 8 - 2 PC. POWER / WATER / GAS
PO Box 323, Wilsonville, Oregon 97070-0323	File Name: 020-687LA	
Tel: (503) 682-2844 Fax: (503) 682-2657	Issue Date: 2016	
	oldcastleprecast.com/wilsonville	

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: EM DRAWN: DO REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

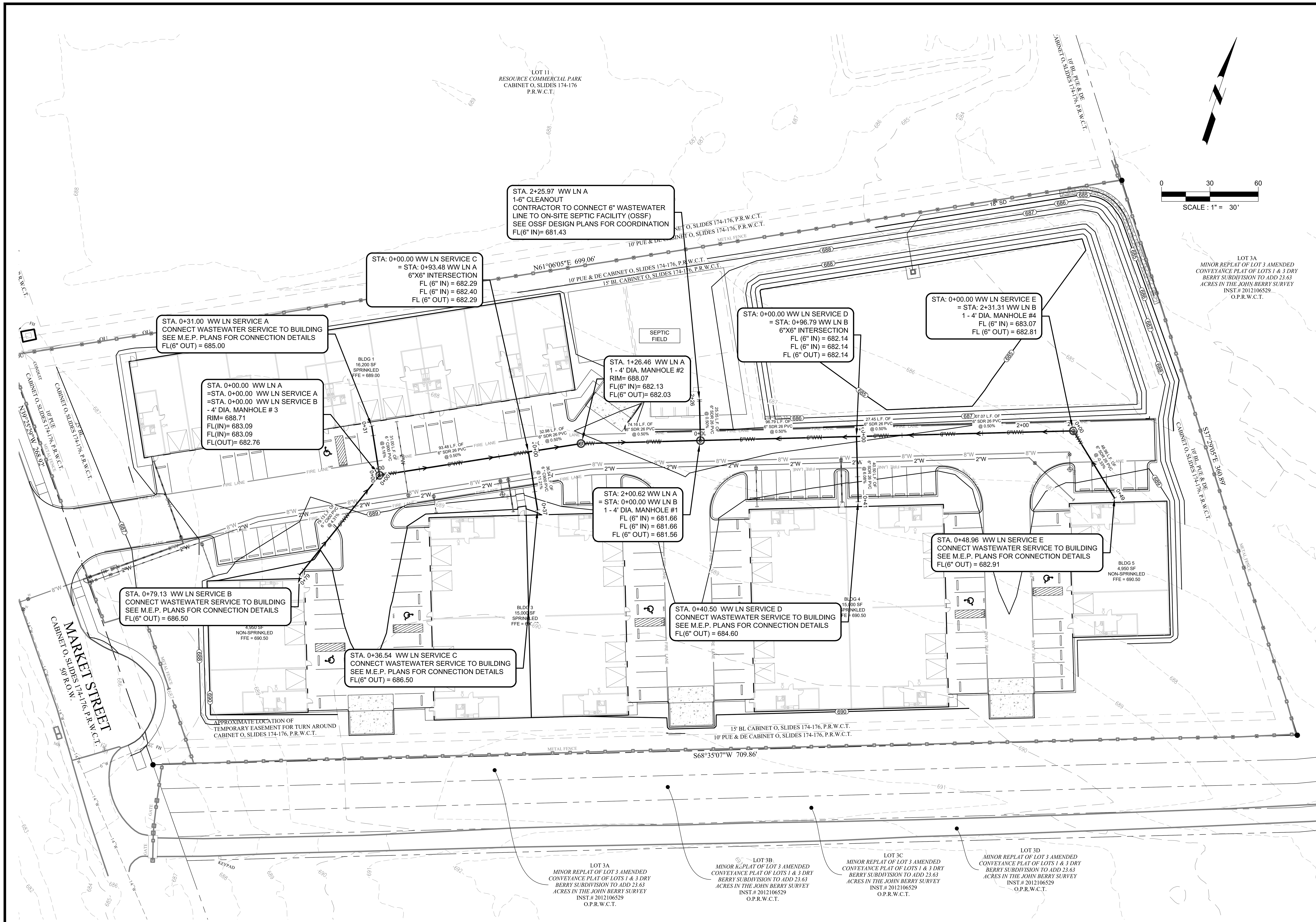
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WATER DETAILS (2 OF 2)

PERMIT No.
2021-32-SWP

SHEET No.
23
OF 28

IMAGES: *.DGN;pwMTFlow.sif *.DGN;pwMTFlow.sif *.DGN;pwMTFlow.sif



GENERAL LEGEND

SYMBOLS

- WATER METER
- WATER VALVE
- FIRE HYDRANT
- BACKFLOW PREVENTER
- UTILITY POLE
- LIGHT POLE
- WASTEWATER MANHOLE
- CLEAN OUT
- KEYNOTES
- PARKING COUNT
- WW SERVICE
- WATER SERVICE
- STORMSEWER MANHOLE
- SIGN
- CURB INLET
- GRATE INLET
- TABLE TOP AREA INLET
- TREE TO BE SAVED
- TREE TO BE REMOVED

LINETYPES

- PROPERTY BOUNDARY
- LIMITS OF CONSTRUCTION
- FENCES (CHAINLINK) (IRON) (WOOD) (BARB WIRE)
- DITCH (CREEK) LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- CURB & GUTTER
- UNDERGROUND ELEC.
- OVERHEAD UTILITY
- UNDERGROUND TELE.
- UNDERGROUND GAS LINE
- WATER LINE
- WASTEWATER LINE
- ACCESSIBLE ROUTE

NOTES:

1. WATER SERVICE TO BE PROVIDED BY THE CITY OF GEORGETOWN.
2. CONTRACTOR TO COORDINATE WITH M.E.P. PLANS FOR ALL UTILITY STUB OUTS.
3. CONTRACTOR TO ENSURE FIRE HYDRANTS, METERS OR VALVES ARE NOT PLACES WITHIN SIDEWALKS.
4. UNLESS OTHERWISE NOTED, ALL WATER LINES 4"-12" IN DIAMETER SHALL BE C900 PVC PIPE, WATER LINES LESS THAN 4" IN DIAMETER SHALL BE SCH 40 PVC PIPE.
5. ALL WASTEWATER LINES ARE TO BE CONSTRUCTED OF SDR 26 (160 PSI PRESSURE RATING).
6. CONTRACTOR TO COORDINATE AND INSTALL NECESSARY IRRIGATION, ELECTRICAL AND TELECOMMUNICATION SLEEVES PRIOR TO PLACEMENT OF PAVEMENT.
7. ALL BENDS, TEES, REDUCERS AND GATE VALVES SHALL BE RESTRAINED PER CITY OF GEORGETOWN STANDARDS.
8. MINIMUM CLEARANCE BETWEEN WATER AND SANITARY SEWER LINES SHALL COMPLY WITH TCEQ REQUIREMENTS.
9. REFER TO SITE PLAN FOR UTILITY EASEMENT(S) LOCATION(S).
10. CONTRACTOR SHALL COORDINATE LIGHT POLE LOCATIONS AND SLEEVING FOR ELECTRICAL SERVICE WITH M.E.P.
11. CONTRACTOR SHALL COORDINATE LOCATIONS, SIZE AND TYPE OF LIGHTING WITH M.E.P. AND BUILDING PLANS.
12. CONTRACTOR SHALL ADJUST ALL VISIBLE UTILITY FEATURES TO FINISHED GRADE AS NEEDED AT NO ADDITIONAL COST TO OWNER.

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOMD

MARKET STREET INDUSTRIAL

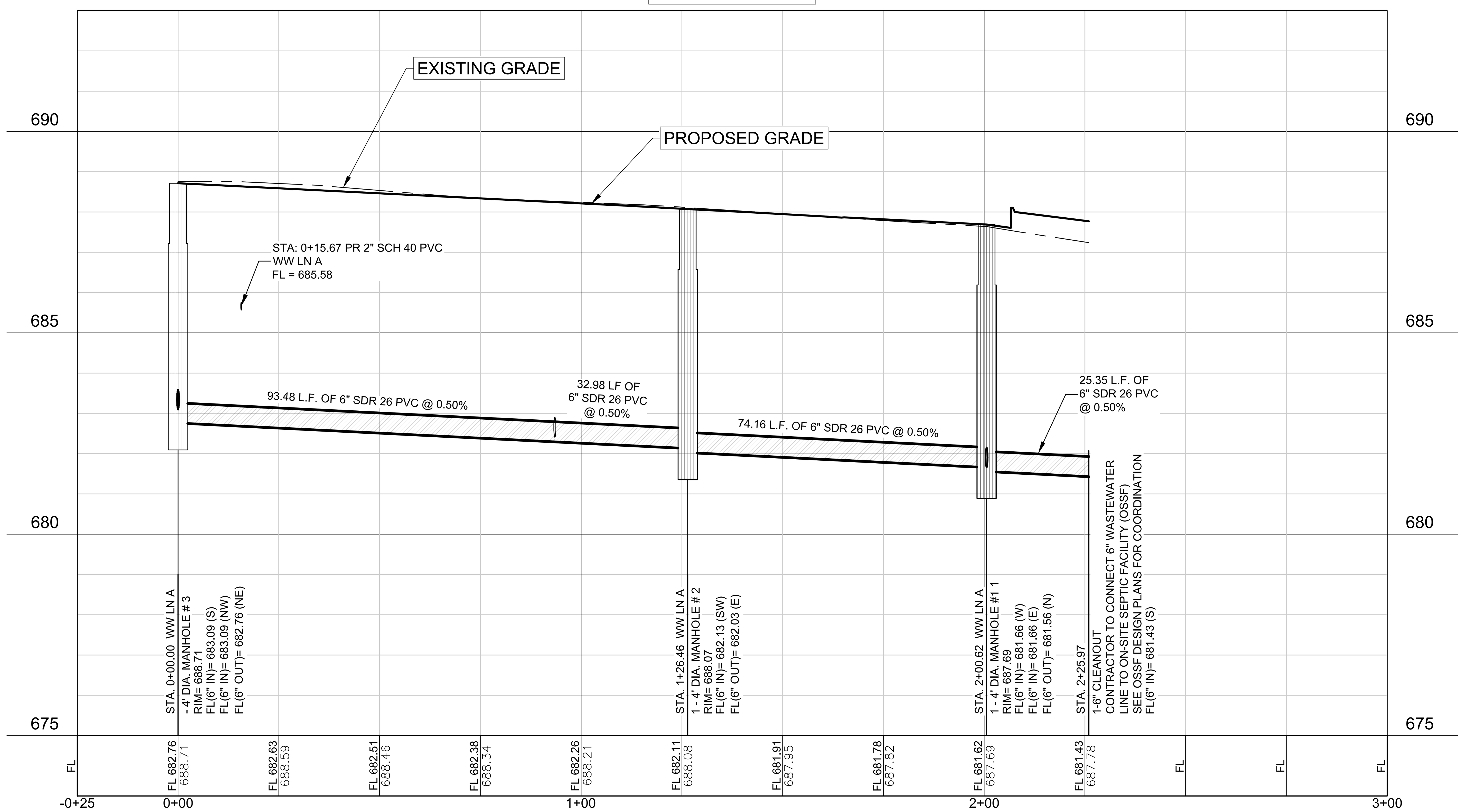
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WASTEWATER PLAN

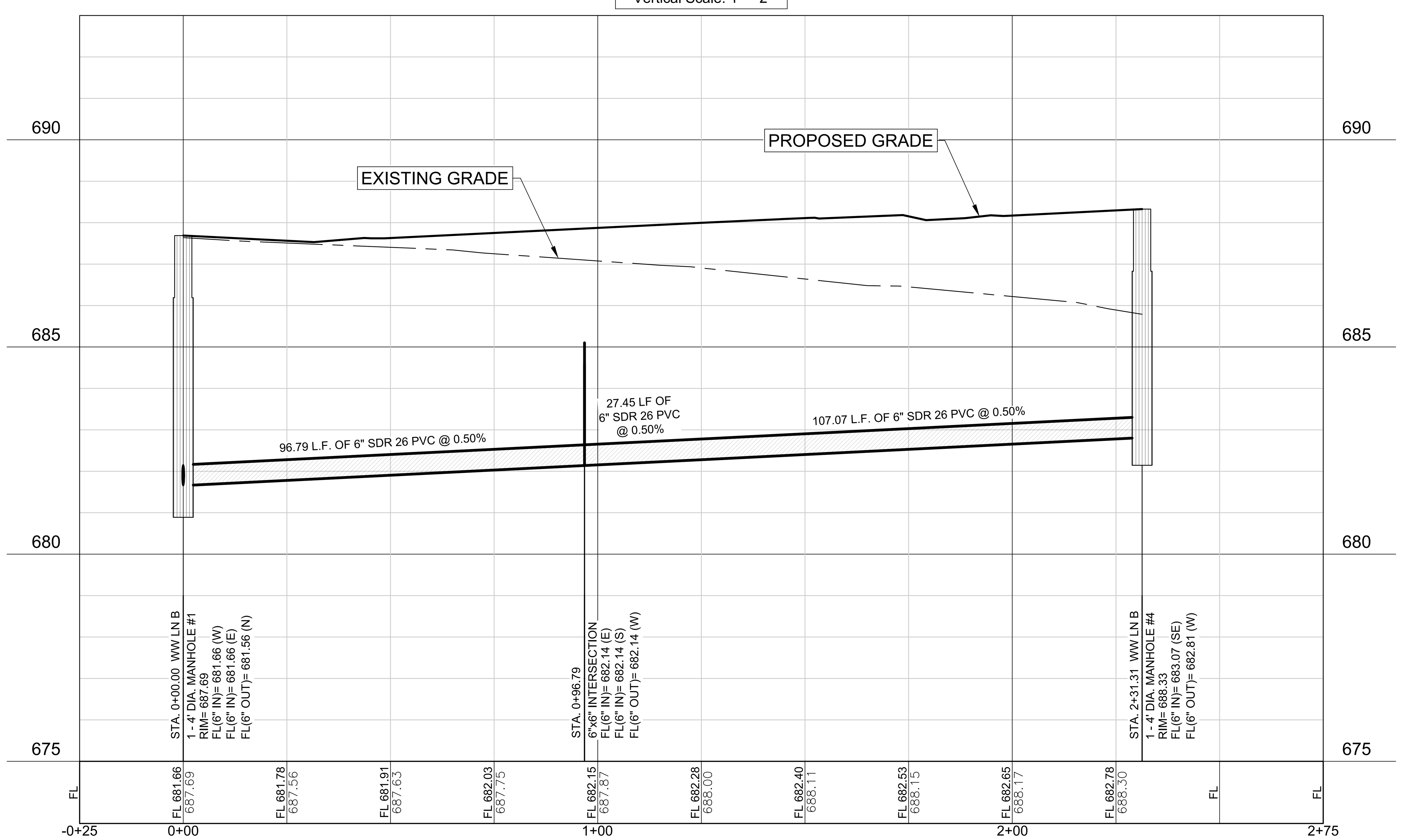
PERMIT No.
2021-32-SWP

SHEET No.
24
OF 28

WW LN A PROFILE
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 2'



WW LN B PROFILE
Horizontal Scale: 1" = 20'
Vertical Scale: 1" = 2'



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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

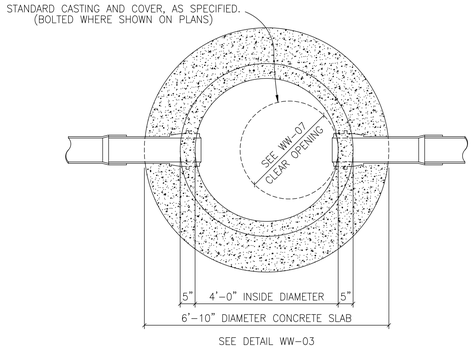
MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WASTEWATER PROFILES

PERMIT No.
2021-32-SWP

SHEET No.
25
OF 28



SEE DETAIL WW-03

MANHOLE PLAN

CITY OF GEORGETOWN NOTES:

MANHOLE DETAILS SHALL REFLECT THE CITY'S MINIMUM SPECIFICATIONS, AS STATED BELOW:

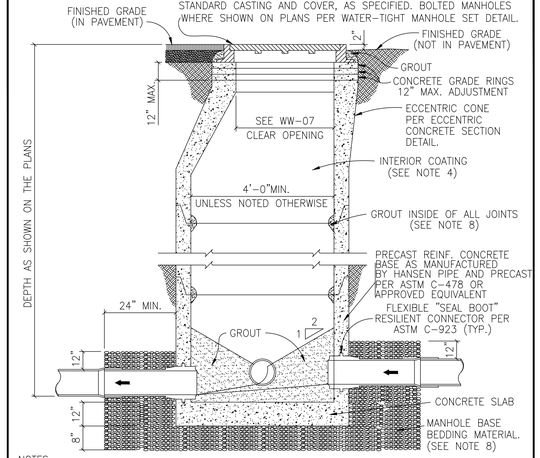
A. ALL MANHOLES SHALL BE 48" I.D., R.C.P., CLASS III, WITH RUBBER PROFILE GASKET – SINGLE OFF-SET JOINT CONFORMING TO ASTM C478, C433 AND C76.
B. ALL MANHOLES SHALL HAVE FRAME AND COVER, AS MANUFACTURED BY EAST JORDAN IRON WORKS (AS PER DETAIL # WW-07) OR APPROVED EQUIVALENT.
C. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON FRAME AND COVER.
D. ALL MANHOLES SHALL HAVE AN ECCENTRIC CONE.
E. MANHOLES MAY HAVE A FLAT LID, IF APPROVED BY CITY OF GEORGETOWN, BEING 12" THICK WITH A MINIMUM 30" OPENING, AS MANUFACTURED BY HANSEN PIPE AND PRECAST OR APPROVED EQUAL M.F.G. CONFORMING TO ASTM C478, 5000 P.S.I. CONCRETE, TRAFFIC BEARING AND WITH PROFILE GASKET – SINGLE OFF-SET JOINT CONFORMING TO ASTM C443.
F. INVERTS AND FLEXIBLE SEAL BOOTS, PER ASTM C-923, SHALL BE CAST INTO BASE SECTION.
G. MINIMUM DROP BETWEEN INVERTS SHALL BE ONE-TENTH OF A FOOT (0.1').
H. GRADE RINGS WITH AN I.D. TO MATCH FRAMES CLEAR OPENING WITH A MAXIMUM ADJUSTMENT OF 12" ARE ALLOWED.

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

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
1 STANDARD MANHOLE – PLAN

DRAWING NAME: WW02
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



NOTES:

1. MANHOLES SHALL BE PRECAST ASTM C-478 BELL AND SPIGOT WITH PROFILE GASKET – SINGLE OFF-SET JOINTS.
2. SEE PLANS AND MANHOLE SCHEDULE, FOR MANHOLE SIZE, LOCATION, CONFIGURATION, TYPE OF TOP SECTION, VENTING REQUIREMENTS, PIPE SIZE AND TYPES.
3. SEE SPECIFICATIONS ON MATERIALS AND CONSTRUCTION.
4. AN 80 MIL. COAT OF RAVEN LINING SYSTEMS, RAVEN 405 ULTRA HIGH BUILD EPOXY COATING, OR SPRAY WALL EPOXY COATING, OR APPROVED EQUAL, TO BE APPLIED TO ENTIRE INTERIOR OF EACH WASTEWATER MANHOLE AND UNDERSIDE OF FLAT TOPS.
5. ALL MANHOLE COVERS SHALL BE BOLTED AND GASKETTED WHEN MANHOLES ARE LOCATED OUT FROM PAVEMENT.
6. MANHOLES TO BE VENTED ARE IDENTIFIED ON MANHOLE SCHEDULE. REFERENCE MANHOLE VENT DETAIL.
7. MANHOLES ARE TO BE DESIGNED TO RESIST LATERAL AND VERTICAL SOIL FORCES RESULTING FROM MANHOLE DEPTH. ADDITIONALLY, MANHOLES LOCATED IN PAVEMENT TO BE DESIGNED FOR HS-20 TRAFFIC LOADS.
8. GROUT SHALL MEET THE REQUIREMENTS AS STATED BY THE COATING MANUFACTURER.
9. MANHOLE BASE BEDDING MATERIAL SPECS. FOR 3/4" WASHED GRAVEL:
   SIEVE SIZE 2", PERCENT (%) RETAINED 0
   SIEVE SIZE 1 1/2", % RETAINED 0-10
   SIEVE SIZE 1", % RETAINED 45-80
   SIEVE SIZE 3/4", % RETAINED 85-100
   SIEVE SIZE 3/8", % RETAINED 95-100

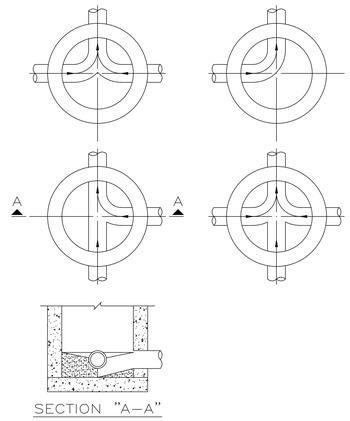
The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
2 STANDARD MANHOLE – SECTION

DRAWING NAME: WW03
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB

FLOW PATTERNS FOR INVERT CHANNELS



SECTION "A-A"

NOTES:

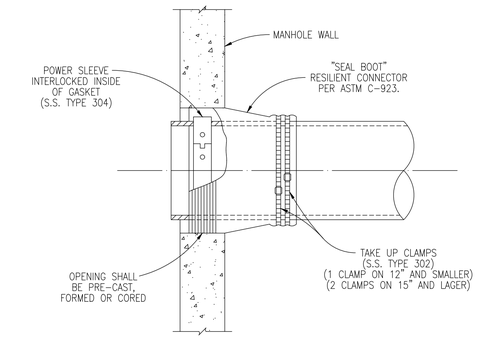
1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.
2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOW.
3. CHANNELS FOR FUTURE CONSTRUCTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND, AND COVERED WITH 1" OF MORTAR.
4. SLOPE MANHOLE ITSELF WITH A 1:2 SLOPE FROM MANHOLE WALL TO CHANNEL.
5. INVERT SHALL BE A MINIMUM OF 1/2 THE DIAMETER OF THE LARGEST PIPE OR 4" DEEP.

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

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
3 FLOW PATTERNS FOR INVERT CHANNELS

DRAWING NAME: WW06
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB

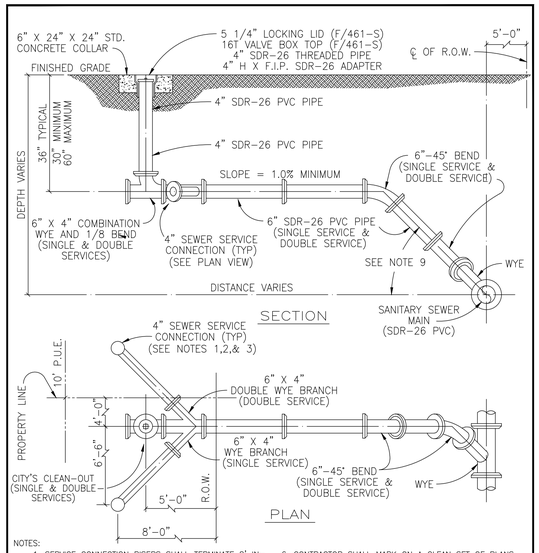


The Architect/Engineer assumes responsibility for appropriate use of this standard.

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
4 FLEXIBLE "SEAL BOOT" CONNECTOR

DRAWING NAME: WW10
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



NOTES:

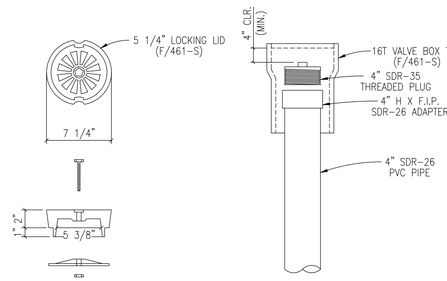
1. SERVICE CONNECTION RISERS SHALL TERMINATE 8' IN-SIDE THE PROPETY LINE.
2. THE END OF EACH SERVICE CONNECTION RISER SHALL BE EXTENDED 12" ABOVE FINISH GRADE.
3. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED CAP OR PLUG.
4. FOR P.V.C. INSTALLATIONS, CONNECT TO EXISTING "BELL END" AND CONNECT OPPSITE END WITH P.V.C. TO P.V.C. KNOCK ON SLEEVE.
5. SOLIDLY TAMP BACKFILL AT LEAST ONE FOOT (1'-0") ABOVE TOP OF PIPE. SERVICES UNDER PAVED AREAS SHALL BE BACKFILLED TO THE SAME SPECIFICATIONS AS SHOWN ON PAVEMENT REPLACEMENT DETAIL.
6. CONTRACTOR SHALL MARK ON A CLEAN SET OF PLANS THE FINAL STATIONING OR DISTANCE AND DIRECTION FROM MANHOLE TO EACH SERVICE LATERAL AND GIVE TO ENGINEER FOR RECORD DRAWING PURPOSES.
7. ANY DEVIATION FROM THESE METHODS MUST BE APPROVED BY THE CITY OF GEORGETOWN ENGINEERING DEPARTMENT.
8. SERVICE LINE MATERIAL SHALL BE P.V.C., SDR-26.
9. SEWER SERVICE SLOPE TO BE 45° OFF CENTERLINE OF MAIN.

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

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
5 SEWER SERVICE CONNECTIONS

DRAWING NAME: WW13
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



5 1/4" LOCKING LID
(F/461-S)

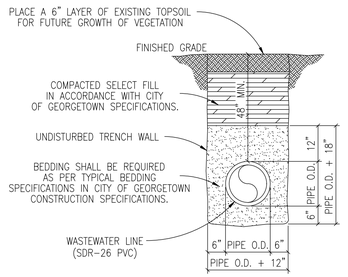
SEWER CLEAN-OUT
CITY OF GEORGETOWN
(RESIDENTIAL SERVICE)

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

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
6 SEWER CLEAN-OUT DETAIL

DRAWING NAME: WW12
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



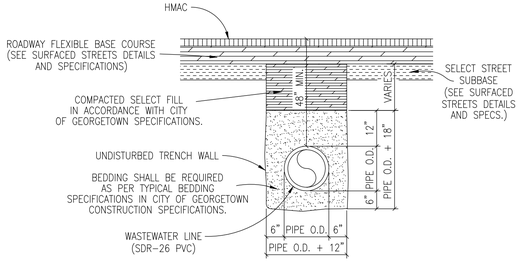
TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

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

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
7 TRENCH AND EMBEDMENT DETAIL UNDER NON-PAVED AREAS

DRAWING NAME: WW16
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB



TRENCH WIDTHS
*PIPE LESS THAN 20" DIAMETER
1'-0" + PIPE O.D.
*20" DIAMETER PIPE AND LARGER
2'-0" + PIPE O.D.

NOTES:

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

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

REVISION NOTE: ADOPTED 6/21/2006

CITY OF GEORGETOWN
CONSTRUCTION STANDARDS AND DETAILS
8 TRENCH AND EMBEDMENT DETAIL UNDER PROPOSED ROADWAY

DRAWING NAME: WW18
SCALE: NTS | DATE: 1/2003
DRAWN BY: MRS | APPROVED BY: TRB

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512.344.9664
TBPE FIRM #F-19351

DESIGNED: XXXXX | DRAWN: VALUE | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

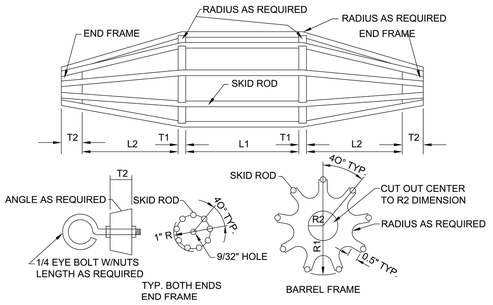
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WASTEWATER DETAILS (1 OF 2)

PERMIT No.
2021-32-SWP

SHEET No.
26
OF 28

XREFS: "24x36 2PC Trellis.dwg" "Exh1.dwg" "Exh2.dwg" "Exh3.dwg" "SEC.dwg" "Exh1-HS10SD.dwg" "WW2.dwg" "WW3.dwg" "WW6.dwg" "WW10.dwg" "WW13.dwg" "WW12.dwg" "WW16.dwg" "WW18.dwg" "WW-RESVRSW.dwg" "WW7.dwg" "WW10.dwg" "WW22.dwg" "WW1.dwg" "WS01-RESSDN.dwg" "WW05.dwg" "WW08.dwg" "WW09.dwg" "WW03.dwg" "WW04.dwg" "WW11.dwg" "WW14.dwg" "WW15.dwg" "WW17.dwg" "WW19.dwg" "WW20.dwg" "WW21.dwg" "WW23.dwg" "WW24.dwg" "WW25.dwg" "WW26.dwg" "WW27.dwg" "WW28.dwg" "WW29.dwg" "WW30.dwg" "WW31.dwg" "WW32.dwg" "WW33.dwg" "WW34.dwg" "WW35.dwg" "WW36.dwg" "WW37.dwg" "WW38.dwg" "WW39.dwg" "WW40.dwg" "WW41.dwg" "WW42.dwg" "WW43.dwg" "WW44.dwg" "WW45.dwg" "WW46.dwg" "WW47.dwg" "WW48.dwg" "WW49.dwg" "WW50.dwg" "WW51.dwg" "WW52.dwg" "WW53.dwg" "WW54.dwg" "WW55.dwg" "WW56.dwg" "WW57.dwg" "WW58.dwg" "WW59.dwg" "WW60.dwg" "WW61.dwg" "WW62.dwg"



MANDREL SHALL BE CONSTRUCTED FROM METAL OR RIGID PLASTIC
MATERERIAL THAT CAN WITHSTAND 200 PSI WITHOUT BEING DEFORMED.
NOTE: WELD ALL RODS TO FRAME

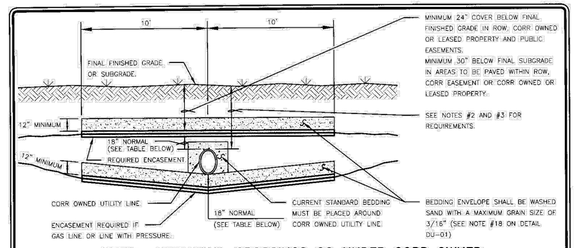
MANDREL DIMENSIONS
5% DEFLECTION
FOR O.D. CONTROLLED PVC PIPE
(ALL DIMENSIONS IN INCHES)

SIZE	TYPE	O.D. AVERAGE	MIN. WALL THICKNESS	L1	L2	R1	R2	T1	T1	ROD DIA.
6"	D3034 SDR35	6.275	0.180	4.50	6	2.81	0.75	0.375	1.0	0.375
8"	D3034 SDR35	8.400	0.240	6.00	6	3.76	1.25	0.375	1.0	0.375
10"	D3034 SDR35	10.500	0.300	7.50	6	4.70	1.50	0.375	1.0	0.375
12"	D3034 SDR26	12.500	0.481	9.00	6	5.50	1.75	0.375	1.0	0.375
15"	D3034 SDR35	15.300	0.437	11.25	6	6.85	2.00	0.375	1.0	0.375
18"	F679 T-1	18.701	0.536	13.50	9	8.37	2.50	0.500	1.5	0.500
21"	F679 T-1	22.047	0.632	15.75	9	9.87	3.00	0.500	1.5	0.500
24"	F679 T-1	24.803	0.711	18.00	9	11.11	3.50	0.500	1.5	0.500
27"	F679 T-1	27.953	0.801	20.25	9	12.52	4.00	0.500	1.5	0.500

MANDREL DETAIL

NOT TO SCALE

DET 130



NOTE: **NORMALLY, CROSSINGS GO UNDER CORR OWNED LINES WITH LESS THAN 60" OF COVER.**

UTILITY MINIMUM CLEARANCE TABLE

	CORR OWNED LINE SIZE	CROSSING (AS NEAR 90° AS POSSIBLE)	PARALLEL ROUTES
POTABLE WATERLINES	LESS THAN ~ 6"	12"	36"
	6" ~ 36"	18"	48"
	LARGER	24"	72"
RECYCLE AND WASTEWATER LINES	LESS THAN ~ 6"	12"	36"
	6" ~ 36"	18"	48"
	LARGER	24"	60"
STORMWATER LINES	LESS THAN ~ 18"	12"	24"
	18" ~ 60"	18"	36"
	LARGER	24"	60"

FOR ADDITIONAL GENERAL NOTES, SEE DETAIL DU-01

NOTES:

1. ALL TRENCH SAFETY SHALL COMPLY WITH APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.
2. AN ENCASED (SEE NOTE #7) UTILITY LINE/CLUSTER WITH SAND BEDDING, WILL BE ALLOWED TO CROSS OVER A CORR OWNED UTILITY LINE THAT HAS 60" OF COVER OR MORE, PROVIDED THERE IS COMPLIANCE WITH THE CLEARANCE, INSTALLATION AND COVER FROM FINAL SURFACE GRADE SHOWN ON THIS DETAIL. CLEARANCE STANDARDS CAN BE FOUND IN THE **UTILITY MINIMUM CLEARANCE TABLE** SHOWN ON THIS SHEET AND MINIMUM COVER IS SHOWN ON THE DETAIL SKETCH FOR EACH TYPE OF TRENCH (IN UNPAVED AREAS, IN EXISTING PAVEMENT AND IN AREAS WHERE PAVEMENT IS PROPOSED).
3. IF THE CORR LINE IS LARGE (36"+ POTABLE WATERLINE, RECYCLE LINE OR WASTEWATER LINE, 60"+ STORMWATER LINE) AND/OR HAS LESS THAN 60" OF COVER WITH SPECIAL SITE CONDITIONS, DETAILED PLANS WITH WRITTEN JUSTIFICATION FOR CROSSING OVER A PROPOSED OR EXISTING CORR OWNED LINE, MUST BE SUBMITTED FOR APPROVAL A MINIMUM OF 10 DAYS BEFORE PROPOSED INSTALLATION.
4. NO ENCASEMENT (SAND BEDDING ONLY) IS REQUIRED WHERE THE UTILITY CROSSES UNDER THE CORR OWNED UTILITY LINE, EXCEPT FOR A GAS LINE, OR LINE WITH PRESSURE, WHICH MUST BE ENCASED. CLEARANCE STANDARDS COMPLIANCE REQUIRED.
5. WHERE THERE IS KNOWN GROUND WATER, PLANS MUST BE SUBMITTED, THAT SHOW AN ACCEPTABLE CONTROL OF THE WET CONDITION.
6. ENCASEMENT IN THESE CROSSINGS, MUST BE SCH. 40 STEEL OR SCH. 80 PVC OR GREATER IN ADDITION TO THE CONDUIT ON ELECTRICAL LINES WITH MORE THAN 120V TO GROUND, ALL GAS LINES, ALL FIBER OPTIC CABLES AND ALL TELEPHONE CABLES WITH MORE THAN 100 PRS.

RECORD SIGNED COPY ON FILE AT PUBLIC WORKS	CITY OF ROUND ROCK	DRAWING NO: DU-05
APPROVED 07-11-06 DATE	UTILITY CROSSING INSTALLATION (UC) DETAIL	ROUND ROCK, TEXAS PLANNING FOR TOMORROW
THIS ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL.		

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: EM | DRAWN: DO | REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED
PROFESSIONAL ENGINEER

5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

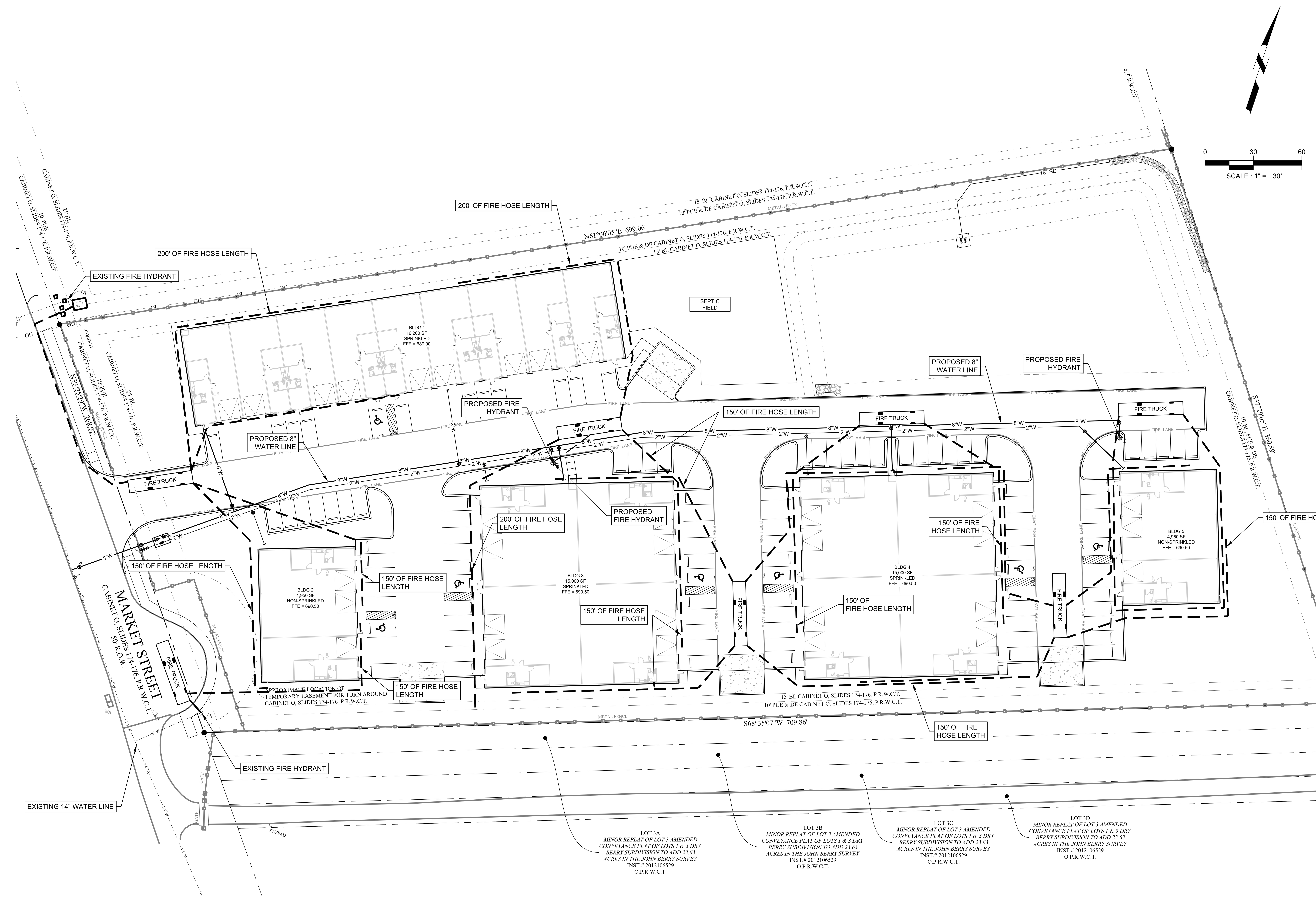
MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

WASTEWATER DETAILS (2 OF 2)

PERMIT No.
2021-32-SWP

SHEET No.
27
OF 28

IMAGES: *.DGN;pp0Thumb.gif *.DGN;pp0Thumb.gif *.DGN;pp0Thumb.gif



GENERAL LEGEND

SYMBOLS

WATER METER
WATER VALVE
FIRE HYDRANT
BACKFLOW PREVENTER
UTILITY POLE
LIGHT POLE
WASTEWATER MANHOLE
CLEAN OUT
KEYNOTES
PARKING COUNT
WW SERVICE
WATER SERVICE
STORMSEWER MANHOLE
SIGN
CURB INLET
GRATE INLET
TABLE TOP AREA INLET
TREE TO BE SAVED
TREE TO BE REMOVED

LINETYPES

PROPERTY BOUNDARY
LIMITS OF CONSTRUCTION
FENCES (CHAINLINK)
(IRON)
(WOOD)
(BARB WIRE)
DITCH (CREEK) LINE
EXISTING CONTOURS
PROPOSED CONTOURS
CURB & GUTTER
UNDERGROUND ELEC.
OVERHEAD UTILITY
UNDERGROUND TELE.
UNDERGROUND GAS LINE
WATER LINE
WASTEWATER LINE
ACCESSIBLE ROUTE

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

CONTRACTOR NOTES:

EXISTING UNDERGROUND AND OVERHEAD UTILITIES IN VICINITY. CONTRACTOR TO CONTACT UTILITY COMPANIES PRIOR TO CONSTRUCTION. CONTRACTOR TO FIELD VERIFY EXISTING UTILITY LOCATIONS & DEPTHS PRIOR TO BEGINNING CONSTRUCTION.

CONTRACTOR SHALL CONSIDER PROPOSED UTILITY IMPROVEMENTS AND PROVIDE ADEQUATE HORIZONTAL AND VERTICAL CLEARANCE DURING INSTALLATION OF ALL UTILITY INFRASTRUCTURE.

2P CONSULTANTS, LLC
203 E. MAIN STREET, SUITE 204
ROUND ROCK, TEXAS 78664
512-344-9664
TBPE FIRM #F-19351

DESIGNED: XXXXX DRAWN: VALUE REVIEWED: VALUE

STATE OF TEXAS
MICHAEL EASTON MUNDINE
143266
LICENSED PROFESSIONAL ENGINEER
5/4/2023

NO.	DATE	REVISIONS	RECOM'D

MARKET STREET INDUSTRIAL

MARKET STREET INDUSTRIAL
STORMWATER PERMIT
181 MARKET STREET GEORGETOWN, TEXAS 78626

FIRE PROTECTION PLAN

PERMIT No.
2021-32-SWP