

SEWAGE COLLECTION SYSTEM

FOR

YMCA METRO OFFICES

1826 N. IH 35 ROUND ROCK, TX 78664

APPLICANT: YMCA OF GREATER CENTRAL TEXAS 1812 N. MAYS STREET ROUND ROCK, TX 78664

SUBMITTED TO: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY REGION 11 OFFICE 12100 PARK 35 CIRCLE, BLDG A. AUSTIN, TEXAS 78753

JUNE 2024

HEA#22-036

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 <u>30 TAC 213</u>.

Administrative Review

1. <u>Edwards Aquifer applications</u> 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: <u>http://www.tceq.texas.gov/field/eapp</u>.

- 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: YMCA METRO OFFICES				2. Regulated Entity No.: RN102840725			
3. Customer Name: YMCA OF CENTRAL TEXAS		4. Customer No.: 601387905					
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)	Residentia	Non-resident	Non-residential 8. Site		e (acres):	1.0	
9. Application Fee:	650.00	10. Permanent BMP(s):		N/A			
11. SCS (Linear Ft.):	453	12. AST/UST (No. Tanks):		N/A			
13. County:	WMSN	14. Watersh	ed:			ONION BRANCH	

Application Distribution

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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 Kegion					
County:	Hays	Travis	Williamson		
Original (1 req.)		—	_X_		
Region (1 req.)		_	_X_		
County(ies)		—			
Groundwater Conservation District(s)	Edwards Aquifer Authority Barton Springs/ Edwards Aquifer Hays Trinity Plum Creek	Barton Springs/ Edwards Aquifer	N/A		
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 Georgetown Jerrell Leander Liberty Hill Pflugerville X_Round Rock		

County:	Bexar	Comal	Kinney	Medina	Uvald
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 Uvald
City(ies) Jurisdiction	Castle Hills Fair Oaks Ranch Helotes Hill Country Village Hollywood Park San Antonio (SAWS)	Bulverde Fair Oaks Ranch Garden Ridge New Braunfels Schertz	NA	San Antonio ETJ (SAWS)	NA

Austin Region

Shavano Park

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. TERRY R. HAGOOD

Print Name of Customer/Authorized Agent

Signature of Customer/Authorized Agent

Date 6/12/24

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):		Payable to TCEQ (Y/N):			
Core Data Form Complete (Y/N):		Check: Signed (Y/N):			
Core Data Form Incomplete Nos.:		Less than 90 days old (Y/N):		J):	

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: Terry R Hagood

Date: 6/12/2024

Signature of Customer/Agent:

markityon

Project Information

- 1. Regulated Entity Name: YMCA METRO OFFICES
- 2. County: WILLIAMSON
- 3. Stream Basin: ONION BRANCH
- 4. Groundwater Conservation District (If applicable): N/A
- 5. Edwards Aquifer Zone:

\boxtimes	Recharge Zone
	Transition Zone

6. Plan Type:

WPAP	AST
\leq scs	UST
Modification	Exception Request

1 of 4

7. Customer (Applicant):

Contact Person: <u>JEFF ANDRESEN</u> Entity: <u>YMCA OF CENTRAL TEXAS</u> Mailing Address: <u>1812 N. MAYS STREET</u> City, State: <u>ROUND ROCK, TX</u> Telephone: <u>512.615.5555</u> Email Address: <u>RCARLTON@YMCACTX.ORG</u>

Zip: <u>78664</u> FAX: ____

8. Agent/Representative (If any):

Contact Person: <u>TERRY R. HAGOOD</u> Entity: <u>HAGOOD ENGINEERING ASSOCIATES, INC</u> Mailing Address: <u>900 E. MAIN STREET</u> City, State: <u>ROUND ROCK, TX</u> Telephone: <u>512.244.1546</u> Email Address: <u>TERRYH@HEAENG.COM</u>

Zip: <u>78664</u> FAX:

9. Project Location:

The project site is located inside the city limits of <u>ROUND ROCK</u>.

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

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

1826 N. MAYS STREET ROUND ROCK, TX 78664

- 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. X 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: <u>02-15-23</u>

- 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
 - \boxtimes 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.

GENERAL INFORMATION

Attachments to form TCEQ-0587

ATTACHMENT A - Road Map



ATTACHMENT B - USGS / Edwards Recharge Zone Map

See attached map

ATTACHMENT C - Project Description

Please refer to the attached plans for site improvement layout. The site is located within the City of Round Rock's (CoRR) Corporate Limits and the TCEQ Edwards Aquifer Recharge Zone.

This Sewage Collection System (SCS) Application request is for the following:

• Construction of 650 If of PVC gravity wastewater line to serve a new 7,910 sf single story building. No lift stations are a part of this SCS.

The Project is located at 1826 North Mays. The Property current legal description 1.01 acres out of the AW0130 Curry, D. Survey. During the course of permitting, the property will be platted as part of the adjacent YMCA Addition Subdivision. Once recorded the legal description will be Lot 1, Block A, Replat of Round Rock YMCA Addition. Lot 1 will be 9.730 acres; however, the Project area as defined by the limits of construction is 1.13 acres.

GENERAL INFORMATION

Attachments to form TCEQ-0587

The existing impervious cover (building and parking) was constructed prior to 1985 as a restaurant. Wastewater for the restaurant was provided by an onsite sewage facility (ossf). In 2015, the site was purchased by the YMCA and the building was repurposed for storage of YMCA goods and equipment. The ossf was decommissioned at that time.

An exception to provide a Geologic Assessment was previously made and granted per the attached email from Bo Slone dated 11-28-2023.

The site is located in a commercial urban setting. Surrounding land uses consist of commercial to the north and west, North Mays Street public row to the east, governmental/institutional to the south. The site generally slopes from east to west at approximately 0.8%. No upgradient offsite storm water flows into the site.

The site is served by CoRR Water and Wastewater Utility. Wastewater from the site will be treated at the Brushy Creek Regional Wastewater Treatment Plant.

The Project SCS begins at the connection to an existing CoRR manhole (UID 1436566). (Please refer to the following CoRR GIS System Map.) The ww line downstream of this manhole is an existing 8" line operated and maintained by the City of Round Rock. It is a line, according to City of Round Rock GIS records, that was installed in 1977; prior to the adoption of TCEQ SCS rules. The collection system, WW A, upstream of this manhole is existing and will extend approximately 354 If north across the Chasco YMCA facilities to CoRR manhole (UID 2152427). The SCS will continue 62 If through the existing 6" line with a new manhole installed to replace an existing 45-degree bend and cleanout and continue to second new manhole at the point of existing connection to the Chasco YMCA building. This manhole will be end of the Project SCS. From this new manhole, the Project will extend a 356 If, 6" PVC SDR 26 service lateral to new Metro Office building.

A second collection system line, WW A-1, extends from CoRR manhole (UID 1435587) approximately 36 If east to an existing manhole which collects service laterals from two (2) separate YMCA buildings. This line is existing.

The existing lines WW A and WW A-1 described above were constructed under two separate previously constructed projects:

2007 – Round Rock YMCA

2019 – Chasco YMCA Addition.

As-built plans are attached for both projects. Within the as-built plans, the highlighted wastewater lines were not permitted as sewage collection system lines under TCEQ rules. The Metro Office project is including the lines in this SCS application. The lines have been tested as required by TCEQ and found to be compliant. Copies of the testing report and certification by a Texas registered professional engineer are being held the YMCA of Central Texas Metro office.

Edwards Aquifer Viewer Custom Print



Edwards Aquifer Boundary

Edwards Aquifer Boundary central line

TCEQ, USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National

Web AppBuilder for ArcGIS

TCEQ | USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS

TX Counties

7.5 Minute Quad Grid



YMCA METRO OFFICE SCS GENERAL LAYOUT

SITE IMPROVEMENTS FOR: **ROUND ROCK Y.M.C.A.** Y.M.C.A. OF GREATER WILLIAMSON COUNTY **1812 NORTH MAYS STREET**

SPECIAL SITE PLAN RELEASE NOTE:

OF THE 8" WASTEWATER BSOLUTELY NO CONSTRUCTION WITHIN THIS WASTEWATER

DESIGN PROFESSIONALS

CIVIL ENGINEER

Antonio A. Prete, P.E. Baker-Aicklen and Associates, Inc. 507 West Liberty Avenue Round Rock, Texas 78664 Email: aprete@baker-aicklen.com Ph: (512) 244-9620 Fax: (512) 244-9623

ARCHITECT

Keith A. Hickman, AIA, REFP KA Hickman Architects and Interior Designers 1517 East Palm Valley Boulevard Round Rock, Texas 78664 Email: keith@kaharchitects.com Ph: (512) 255-9690 Fax: (512) 388-1843

LANDSCAPE ARCHITECT

Mark Baker SEC Planning 12357 Riata Trace Parkway Austin, Texas 78727 Email: mbaker@secplanning.com Ph: (512) 246-7003 Fax: (512) 246-7703

JOB NO.: 0129-3-010-21

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

PREPARED FOR:

Y.M.C.A. OF GREATER WILLIAMSON COUNTY 1812 NORTH MAYS STREET P.O. BOX 819

ROUND ROCK, TEXAS 78680

P.O.C.: MR. JEFF ANDRESEN EMAIL: jandresen@ymcawilliamsonco.org Ph: (512) 615-5530 Fax: (512) 244-2122

YOUNG MEN'S CHRISTIAN ASSOCIATION OF ROUND ROCK (4.097 ACRES) VOLUME 2115, PAGE 130 ORWCT CITY OF ROUND ROCK, WILLIAMSON COUNTY, TEXAS

(PHASE 2)



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purpose							
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	. *	SHEET LIST
NÔ.	SEQ.	DESCRIPTION
	1	COVER SHEET
	2	NOTES SHEET
	3	FINAL PLAT
	4	PHASING PLAN
	5	OVERALL DRAINAGE AND WATER QUALITY AREA M
	6	ORIENTATION MAP
	7	EXISTING CONDITIONS
•	. 8	DEMOLITION PLAN
	9	EROSION / SEDIMENTATION CONTROL AND TREE PROTECTION PLAN
	10	DIMENSIONAL CONTROL PLAN
8 - ² X - 66	11 · · ·	PAVING, GRADING, AND DRAINAGE PLAN
	12	STORM SEWER PLAN
	13	WATER PLAN
	14	WASTEWATER PLAN
	15	DETAILS SHEET 1 OF 6
	16	DETAILS SHEET 2 OF 6
	17	DETAILS SHEET 3 OF 6
	18	DETAILS SHEET 4 OF 6
	19 🛝	DETAILS SHEET 5 OF 6
`\	20	DETAILS SHEET 6 OF 6
	21	LANDSCAPE PLANTING PLAN
	22	LANDSCAPE PLANTING NOTES
	23	LANDSCAPE PLANTING DETAILS

C-10

C-11

C-12

C-13 C-14

C-15

C-16

C-17

C-18

C-19

C-20

1P.1 LN.1

LD.1

NOTES:

SUBMITTAL: August 13th, 2007.

SHEETS ADDED

as-builts are not for distribution to the City a as as-built closeout documentation; they

are only for the contractor's use as work

Date: 04/27/09 Comput TE

continues on Phase 2 of the project.

TEXAS ONE CALL SYSTEM -800-245-4545

UNDER PENALTY OF LAW, THE CONTRACTOR IS REQUIRED TO CONTACT THE TEXAS ONE CALL SYSTEM AT LEAST 48 HOURS BEFORE STARTING EXCAVATION. PROJECTS IN THE CITY OF AUSTIN JURISDICTION USE AUSTIN ONE CALL @ 1-800-344-8377

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AMN 03/17/20

ACC. DATE

ALL PLIANS

ACCEPTED FOR CONSTRUCTION:	
Brad Wissman AICP	11/1/07
DEVELOPMENT REVIEW COMMITTEE,	Date
alusha f. Triand PE.	310407
ENGINEERING AND DEVELOPMENT SERVICES,	Date
CITY OF ROUND ROCK.	

1. THESE PLANS ARE NOT TO BE CONSIDERED FINAL FOR CONSTRUCTION

2. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY, AND HAVE NOT BEEN INDEPENDENTLY

SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES

FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE

VERIFIED BY THE OWNER, OR ITS REPRESENTATIVE. THE CONTRACTOR

BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE

CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND

BE REQUIRED PRIOR TO APPROVAL.

ALL UNDERGROUND UTILITIES.

UNTIL ACCEPTED BY THE CITY / AND, OR THE COUNTY. CHANGES MAY

GENERAL NOTES:	WATER AND WASTEWATER
1. All construction shall be in accordance with the City of Round Rock Standard Specifications Manual.	1. Pipe material for water mains shall be
 Any existing utilities, pavement, curbs, sidewalks, structures, trees, etc., not planned for destruction or removal that are damaged or removed shall be repaired or replaced at his expense. 	 Pipe material for pressure wastewate
3. The Contractor shall verify all depths and locations of existing utilities prior to any construction. Any discrepancies with the construction plans found in the field shall be brought immediately to the attention of the Engineer who shall be responsible for revising the plans are appropriate.	C-100, min. class 200). Pipe material D3034, max. DR-26), Ductile Iron (AV3. Unless otherwise accepted by the Cit
4. Manhole frames, covers, valves, cleanouts, etc. shall be raised to finished grade prior to final paving construction.	and depth of cover for all lines under
 The Contractor shall give the City of Round Rock 48 hours notice before beginning each phase of construction. Telephone 218-5555 (Engineering and Development Services Department). 	 All iron pipe and fittings shall be wrap All iron pipe and fittings shall be wrap
6. All areas disturbed or exposed during construction shall be revegetated in accordance with the plans and specifications. Revegetation of all disturbed or exposed areas shall consist of sodding or seeding, at the Contractor's option. However, the type of revegetation must equal or exceed the type of vegetation present before	accepted by the City Engineer.6. The Contractor shall contact the City hours prior to connecting to existing I
 Prior to any construction, the Engineer shall convene a preconstruction conference between the City of Round 	 All manholes shall be concrete with on have bolted covers. Tapping of fiberg
Rock, himself, the Contractor, other utility companies, any affected parties and any other entity the City or Engineer may require.	8. The Contractor must obtain a bulk was construction. A copy of this permit me
8. The Contractor and the Engineer shall keep accurate records of all construction that deviates from the plans. The Engineer shall furnish the City of Round Rock accurate "As-Built" drawings following completion of all construction. These "As-Built" drawings shall meet with the satisfaction of the Engineering and Development Services Department prior to final acceptance.	9. Line flushing or any activity using a la superintendent, telephone 218-5555.
9. The Round Rock City Council shall not be petitioned for acceptance until all necessary easement documents have been signed and recorded.	10. The Contractor, at his expense, shall equipment (including test gauges), so labor required for the sterilization pro personnel. Water samples will be col
10. When construction is being carried out within easements, the Contractor shall confine his work to within the permanent and any temporary easements. Prior to final acceptance, the Contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the City Engineer.	initial chlorine concentration of 50 pp shall provide flushing devices and re 11. Sampling taps shall be brought up to
11. Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.	Contractor's request, and in his prese Rock not less than 24 hours after the charged with water approved by the of Round Rock, to cover the fee char
12. Available benchmarks (City of Round Rock Datum) that may be utilized for the construction of this project are described as follows:	obtained by calling the Engineering a
BENCHMARKS: TBM 3 ELEVATION 749.60 - SQUARE CUT IN NORTHWEST CORNER OF CONCRETE CURB INLET ON WEST SIDE OF NORTH MAYS. INLET IS BETWEEN THE TWO DRIVEWAYS AT THE NORTHEAST CORNER OF	hydrostatic testing of all water lines of supplies and labor necessary to perform the tests. personnel.
THE YMCA TRACT. TBM 4 ELEVATION 747.05 - SQUARE CUT IN SOUTHWEST CORNER OF CONCRETE CURB INLET ON WEST SIDE OF NORTH MAYS. INLET IS BETWEEN THE TWO DRIVEWAYS AT THE SOUTHEAST CORNER OF THE MAGA TRACT.	13. The Contractor shall coordinate testi performing sterilization, quality testin
HORIZONTAL CONTROL POINTS	14. The Contractor shall not open or close
NUMBER NORTHING EASTING DESCRIPTION 1 10166497.6239 3129929.0109 "X" IN CONCRETE 2 10166142.6274 2120016.4159 Rod NAIL SET	 All valve boxes and covers shall be of All water service, wastewater service
2 10166142.0274 313010.4135 000 MAL SET 3 10166004.1345 3130144.0475 "MAG" NAIL SET	water service "W" on top wastewater service "S" on top valve "V" on face
1. THE DISTANCES SHOWN ON THIS DRAWING ARE IN SURFACE UNITS.	Tools for marking the curb shall be p
SCALE FACTOR OF 0.99988 DO NOT SCALE THE ELEVATIONS	Engineer and accepted by the City o
 CITY OF ROUND ROCK CONTROL POINTS WERE USED FOR HORIZONTAL AND VERTICAL CONTROL GPS #01-013, HAVING GRID VALUES OF NORTHING 10166604.5477, EASTING 3130041.3876, AND ELEV.756.01' HORIZONTAL DATUM: NAD '83 (HARN '93) VERTICAL DATUM: [NAVD '88 (GEOID99) 	17. Contact City of Round Rock Engineer obtaining existing water and wastew
4. BASIS OF BEARINGS IS GRID NORTH FOR TEXAS STATE PLANE [SOUTH] CENTRAL ZONE.	 The City of Round Rock Fire Depart order that the Fire Department may
TRENCH SAFETY NOTES:	19. Sand, as described in Specification i Acceptable bedding materials are pi
 In accordance with the Laws of the State of Texas and the U.S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected. Trench safety systems to be utilized for this project shall be the responsibility of the contractor and shall be designed by a professional engineer and 	specification: <u>Sieve Size</u> <u>Percent R</u> 1/2"
 accepted by the design engineer and the City of Round Rock. In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in 	3/8" #4 #10
 trenches 4-feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel. If trench safety system details were not provided in the plans because trenches were anticipated to be less than 5 	20. The Contractor is hereby notified that occur at off-peak hours. Such hours a.m.
feet in depth and during construction it is found that trenches are in fact 5 feet or more in depth or trenches less than 5 feet in depth are in an area where hazardous ground movement is expected, all construction shall cease, the trenched area shall be barricaded and the Engineer notified immediately. Construction shall not resume until appropriate trench safety system details, as designed by a professional engineer, are retained and copies submitted	21. All wastewater construction shall be Regulations, 30 TAC Chapter 213 a conflict, the more stringent shall app
to the City of Round Rock. STREET AND DRAINAGE NOTES:	TRAFFIC MARKING NOTES:
 All testing shall be done by an independent laboratory at the Owner's expense. Any retesting shall be paid for by the Contractor. A City inspector shall be present during all tests. Testing shall be coordinated with the City inspector and be shall be given a minimum of 24 hours notice prior to any testing. Telephone 218-5555 	 Any methods, street markings and s during construction shall conform to Highways, latest edition.
 Backfill behind the curb shall be compacted to obtain a minimum of 95% maximum density to within 3" of top of curb. Material used shall be primarily granular with no rocks larger than 6" in the greatest dimension. The 	2. All pavement markings, markers, pa with the Texas Department of Trans Bridges, and, the Texas Manual of L
remaining 3" shall be clean topsoil free from all clods and suitable for sustaining plant life.	EROSION AND SEDIMENTA
 Street rights-of-way shall be graded at a slope of 114" per foot toward the curb unless otherwise indicated. However, in policies shall the width of right-of-way at 114" per foot slope be less than 10 feet unless a specific. 	 All slopes shall be sodded or seeder season in which they are applied
request for an alternate grading scheme is made to and accepted by the City of Round Rock Engineering and Development Services Department.	 Silt fences, rock berms, sedimentati during construction to prevent point
 Barricades built to Uity or Round Rock standards shall be constructed on all dead-end streets and as necessary during construction to maintain job and public safety. 	opinion of the City Engineer, they ar
 6. All R.C.P. shall be minimum class III. 7. The subgrade material for the streets shown herein was tested by and the paving sections designed in accordance with the current City of Round Rock design criteria. The paving 	4. All temporary erosion control measu the Engineer. It shall be the response to remove each structure as approve
sections are to be constructed as follows: Flex. Base HMAC Lime Stab. Street Station Thickness Thickness Thickness	 All mud, dirt, rocks, debris, etc., spil used by the public shall be cleaned
N/AN/AN/AN/AN/AThe Geotechnical Engineer shall inspect the subgrade for compliance with the design assumptions made during preparation of the Soils Report. Any adjustments that are required shall be made through revision of the	
 construction plans. 8. Where PI's are over 20, subgrades must be stabilized utilizing a method acceptable to the City Engineer. The Geotechnical Engineer shall recommend an appropriate subgrade stabilization if sulfates are determined to be present 	

NOTES:

e PVC (AWWA C-900, min. class 200), or Ductile Iron (AWWA C-100, min. s) shall be polyethylene tubing (black, 200 psi, DR 9).

er mains shall be PVC (AWWA C-900, min. class 150), or Ductile Iron (AWWA al for gravity wastewater mains and laterals shall be PVC (ASTM D2241 or WWA C-100, min. class 200).

ity Engineer, depth of cover for all lines out of the pavement shall be 42" min., pavement shall be a min. of 30" below subgrade.

iron pipe (AWWA C-100, min. class 200).

pped with minimum 8-mil polyethylene and sealed with duct tape or equal

Inspector at 218-5555 to coordinate utility tie-ins and notify him at least 48

cast iron ring and cover. All manholes located outside of the pavement shall glass manholes shall not be allowed.

vater permit or purchase and install a water meter for all water used during nust be carried at all times by all who use water.

large quantity of water must be scheduled with the water & wastewater

I perform sterilization of all potable water lines constructed and shall provide all supplies (including concentrated chlorine disinfecting material), and necessary ocedure. The sterilization procedure shall be monitored by City of Round Rock llected by the City of Round Rock to verify each treated line has attained an pm. Where means of flushing is necessary, the Contractor, at his expense, emove said devices prior to final acceptance by the City of Round Rock.

o 3 feet above grade and shall be easily accessible for City personnel. At the sence, samples for bacteriological testing will be collected by the City of Round e treated line has been flushed of the concentrated chlorine solution and City. The Contractor shall supply a check or money order, payable to the City rged for testing each water sample. City of Round Rock fee amounts may be and Development Services Department at 218-5555.

I perform quality testing for all wastewater pipe installed and pressure pipe constructed and shall provide all equipment (including pumps and gauges),

. Quality and pressure testing shall be monitored by City of Round Rock

ting with the City of Inspector and provide no less than 24 hours notice prior to ng or pressure testing.

ose any valves unless authorized by the City of Round Rock.

cast iron.

e and valve locations shall be appropriately marked as follows:

of curb p of curb

ce of curb

provided by the Contractor. Other appropriate means of marking service and areas without curbs. Such means of marking shall be as specified by the of Round Rock.

ering and Development Services Department at 218-5555 for assistance in water locations.

ment shall be notified 48 hours prior to testing of any building sprinkler piping in monitor such testing.

item 510 pipe, shall not be used as bedding for water and wastewater lines. pipe bedding stone, pea gravel and in lieu of sand, a naturally occurring or ming to ASTM C33 for stone quality and meeting the following gradation

etained By Weight

0-2 40-85 95-100

at connecting to, shutting down, or terminating existing utility lines may have to are usually outside normal working hours and possibly between 12 a.m. and 6

e in accordance with the Texas Commission on Environmental Quality (TCEQ) and 317, as applicable. Whenever TCEQ and City of Round Rock Specifications

signage necessary for warning motorists, warning pedestrians or diverting traffic the Texas Manual of Uniform Traffic Control Devices for Streets and

aint, traffic buttons, traffic controls and signs shall be installed in accordance sportation Standard Specifications for Construction of Highways, Streets and Uniform Traffic Control Devices for Streets and Highways, latest editions.

TION CONTROL NOTES:

and restoration work shall be in accordance with the City of Round Rock

Ordinance. ed with approved grass, grass mixtures or ground cover suitable to the area and

tion basins and similarly recognized techniques and materials shall be employed source sedimentation loading of downstream facilities. Such installation shall Round Rock for effectiveness. Additional measures may be required if, in the are warranted.

ures shall not be removed until final inspection and approval of the project by sibility of the Contractor to maintain all temporary erosion control structures and ved by the Engineer.

illed, tracked or otherwise deposited on existing paved streets, drives and areas up immediately.

PUBLIC IMPROVEMENTS SUMMARY TABLE:

WATER	LINE:

Pipe Size	Material	Length
8"	C-900	122
6"	D.I.	143
2"	POLY/COPPER	24
WATER VALVES:		
Size	Qty	_

FIRE HYDRANTS:

Brand AMERICAN DARLING

WASTEWATER LINE:

Material Pipe Size SDR-26, D3034

WASTEWATER MANHOLES:

STORM SEWER LINE: Material **NO PUBLIC IMPROVEMENTS**

STORM SEWER MANHOLES:

Qty Size NO PUBLIC IMPROVIEMENTS

INLETS:

NO PUBLIC IMPROVIEMENTS

STREET PAVEMENT HMAC:

NO PUBLIC IMPROVEMENTS CURB & GUTTER:

Qty NO PUBLIC IMPROVEMENTS

SIDEWALK: NO PUBLIC IMPROVEMENT

CONCRETE VALLEY GUTTERS:

NO PUBLIC IMPROVEMENTS











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		AS COMMISSION ON ENVIRONMENTAL QUALITY GANIZED SEWAGE COLLECTION SYSTEM GENERAL CONSTRUCTION NOTES	16.	All sewer lines must be results which must be n that all wastewater lines
	1.	This Organized Sewage Collection System must be designed and constructed in accordance with the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules 30 Texas Administrative Code (TAC) §213.5(c), the Design Criteria for Sewerage Systems 30 TAC §317.1, 30 TAC §317.2, 30 TAC §317.3, and 30 TAC §317.13, and the City of Standard Specifications.		A. Infiltration or Exfiltr 50 gallons per inch
	2.	All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the Sewage Collection System plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors must be required to keep on-site copies of the plan and the approval letter.		of the pipe at the u must be used in lie not exceed 50 gall the crown of the pi is greater. For cor
	3.	Prior to commencing any regulated activity, the applicant or his agent must notify the Austin Regional Office, in writing, of the date on which the regulated activity will begin.		gailons per inch di infiltration or exfiltr to reduce the infiltr
	4.	Any modification to the activities described in the referenced SCS application following the date of approval may require the submittal of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.		 B. Low Pressure Air 1 in ASTM C-828, A test times must be
	5.	The temporary erosion and sedimentation controls must be installed prior to initiating any other construction activity and maintained in accordance with the requirements of the construction plans. All temporary erosion and sedimentation controls must be removed when the construction area is stabilized.		the following proce greater than the pr minimum time allo square inch gauge
	6.	The sewer line trench details showing the cross section with the dimensions, pipe placement, and backfill instructions are included on Plan Sheet of of these plans. All sewer pipes joints must meet the requirements in 30 TAC §317.2(a)(3).		where:
	÷.,	Gravity lines must be SDR 35 or less. Pressurized sewer systems must have pipe with a minimum working pressure rating of 150 psi.		T = time
		The ASTM, ANSI, or AWWA specification numbers for the pipe(s) and joints are		K = 0.00 D = ave L = lend
		The pipe material, the pressure classes, and the SDR and/or DR designations are		Q = rate
	7.	If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately. The owner must notify the appropriate regional office of the Texas Commission on Environmental Quality in writing within two working days of the feature discovered. The applicant must submit a plan for ensuring the structural integrity of the sewer line or for modifying the proposed collection system alignment around the feature. The regulated activities near the sensitive feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality while maintaining the structural integrity of the line.		Pipe Diamet (inches) 6 10
	8.	Sewer lines located within or crossing the 5-year floodplain of a drainageway will be protected from inundation and stream velocities which could cause erosion and scouring of backfill. The trench must be capped with concrete to prevent scouring of backfill, or the sewer lines must be encased in concrete. All concrete shall have a minimum thickness of six (6) inches.		<u>12</u> 15 18
	9. *	Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria. Sand is not allowed as bedding or backfill in trenches that have been blasted. If any existing sewer lines are damaged, the lines must be repaired and retested.		21 24 27
	10.	All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement. If manholes are constructed within the 100-year floodplain, the cover must have a gasket and be bolted to the ring. Where gasketed manhole covers are required for more than three manholes in sequence or for more than 1500 feet, alternate means of venting will be provided. Bricks are not an acceptable construction material for any portion of the manhole.		<u>30</u> 33
		The diameter of the manholes must be a minimum of four feet and the manhole covers must have a minimum nominal diameter of two feet. These dimensions and other details showing compliance with the commission's rules concerning manholes and sewer line/manhole inverts described in 30 TAC 317.2(c)(5)(E) are included on Plan Sheet of It is suggested that entrance into manholes in excess of four feet deep be accomplished by means of a portable ladder. Where steps are used, they shall be made of a non-corrosive material and be in accordance with applicable		The test may be s any pressure loss for the entire test larger may be air joint. If the joint to pipe is to be press
	11.	OSHA specifications. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation		pressure has stab gauge to 2.5 pour C. Deflection Testing
	12.	must meet the requirements of 30 TAC §317.13 (Design of Sewerage Systems) or 30 TAC §290.44(e) (Water Hygiene). Hygiene). Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved		of 27 inches and g deflections. Othe must be conducte
		by the following procedure which is recommended by the pipe manufacturer:		must be conducte without mechanic
		If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: 		sizes of pipe. Up Engineer appointed the deflection test
		accordance with 30 TAC §317.2(a)(5).	ч	§317.1(e)(1) of th to consider the re
	13.	extensions. The location of such "stub outs" must be constructed with "stub outs" for the connection of antioparded outs" can be easily determined at the time of connection of the extensions. Such "stub outs" must be manufactured wyes or tees that are compatible in size and material with both the sewer line and the extension. At the time of original construction, new "stub-outs" must be constructed sufficiently to extend beyond the edge(s) of any street pavement under which they will pass to the property line. All "stub-outs" must be sealed with a manufactured cap to prevent leakage. Extensions that were not anticipated at the time of original construction or that are to be connected to an existing sewer line not furnished with "stub outs" must be connected using a manufactured saddle and in		 (i) The rigid many pipe. The inside shall be the average inside or other "tolera" (ii) The rigid many pipe.
		accordance with accepted plumbing techniques. If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet of (For	•	number of legate the inside diar
		potential tuture laterals). The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet of		(iii) Adjustable or test. A deflect runners may b
	14.	and marked after backfilling as shown in the detail on Plan Sheet of Trenching, bedding and backfill must conform with 30 TAC §317.2(a)(5). The bedding and backfill for flexible pipe	17	. All manholes must be
	15	 must comply with the standards of ASTM D-2321, Classes IA, IB, II or III. Rigid pipe bedding must comply with the requirements of ASTM C 12 (ANSI A 106.2) classes A, B or C. Sewer lines must be tested from manhole to manhole. When a new sewer line is connected to an existing stub or clean-out, it must be tested from existing manhole to new manhole. If a stub or clean-out is used at the end of the proposed sewer line, no private service attachments may be connected between the last manhole and the cleanout 	18	 All private service late installation of and, prio collection system, a Te inspector must visually certify that it is constru- cutom must mointain
		unless it can be certified as conforming with the provisions of 30 TAC §213.5(c)(3)(E).	Tł	request. Connections
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tested in accordance with 30 TAC §317.2(a)(4). The engineer must retain copies of all test nade available to the executive director upon request. The engineer must certify in writing s have passed all required testing to the appropriate regional office within 30 days of test use of the new collection system. Testing method will be:

- must be computed from the following equation:

000419 X D X L, but not less than 1.0 rage inside pipe diameter in inches gth of line of same size being tested, in feet

 $\boldsymbol{\varrho}$

Pipe Diameter (inches)	Minimum Time (seconds)	Length for Minimum (feet)	Time for Longer Length (seconds)
6	340	398	0.855(L)
8	454	298	1.520(L)
10	567	239	2.374(L)
12	680	199	3.419(L)
15	850	159	5.342(L)
18	1020	133	7.693(L)
21	1190	114	10.471(L)
24	1360	100	13.676(L)
27	1530	88	17.309(L)
30	1700	80	21.369(L)
33	1870	72	25.856(L)

- quirements of the approval to have been met.

- be accepted on a case by case basis.

TRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO ALL SUBCONTRACTORS.

ation Tests. The total exfiltration as determined by a hydrostatic head test, must not exceed diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown upstream manhole. When pipes are installed below the groundwater level an infiltration test eu of the exfiltration test. The total infiltration, as determined by a hydrostatic head test, must lons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above ipe at the upstream manhole, or at least two feet above existing groundwater level, whichever struction within the 25 year flood plain, the infiltration or exfiltration must not exceed 10 ameter per mile of pipe per 24 hours at the same minimum test head. If the quantity of ation exceeds the maximum quantity specified, remedial action must be undertaken in order ation or exfiltration to an amount within the limits specified.

Fest. The procedure for the low pressure air test must conform to the procedures described ASTM C-924, ASTM F-1417 or other appropriate procedures, except for testing times. The as outlined in this section. For sections of pipe less than 36-inch average inside diameter, edure must apply unless the pipe is to be joint tested. The pipe must be pressurized to 3.5 psi ressure exerted by groundwater above the pipe. Once the pressure is stabilized, the wable for the pressure to drop from 3.5 pounds per square inch gauge to 2.5 pounds per

T = 0.085 x D x K

e for pressure to drop 1.0 pound per square inch gauge in seconds

of loss, 0.0015 cubic feet per minute per square foot internal surface will be used.

than 1.0 will not be used, there are minimum times for each pipe diameter as outlined below:

topped if no pressure loss has occurred during the first 25% of the calculated testing time. If s or leakage has occurred during the first 25% of the testing period, then the test must continue duration as outlined above or until failure. Lines with a 27-inch average inside diameter and tested at each joint. Pipe greater than 36 inch diameter must be tested for leakage at each est is used, a visual inspection of the joint must be performed immediately after testing. The surized to 3.5 psi greater than the pressure exerted by groundwater above the pipe. Once the ilized, the minimum time allowable for the pressure to drop from 3.5 pounds per square inch nds per square inch gauge must be 10 seconds.

. Deflection tests must be performed on all flexible pipes. For pipelines with inside diameters es, a rigid mandrel must be used to measure deflection. For pipelines with an inside diameter greater, a method approved by the executive director must be used to test for vertical r methods must provide a precision of ± two tenths of one percent (0.2 %) deflection. The test ted after the final backfill has been in place at least 30 days. No pipe will exceed a deflection of pipe should fail to pass the deflection test, the problem must be corrected and a second test ed after the final backfill has been in place an additional 30 days. The tests must be performed ical pulling devices. The design engineer should recognize that this is a maximum deflection pes and a deflection test less than five percent may be more appropriate for specific types and oon completion of construction, the design engineer or other Texas Licensed Professional ted by the owner must certify, to the Executive Director, that the entire installation has passed . This certification may be made in conjunction with the notice of completion required in his title (relating to General Provisions). This certification must be provided for the Commission

drel shall have an outside diameter (O.D.) equal to 95% of the inside diameter (I.D.) of the ide diameter of the pipe, for the purpose of determining the outside diameter of the mandrel, verage outside diameter minus two minimum wall thicknesses for O.D. controlled pipe and the e diameter for I.D. controlled pipe, all dimensions shall be per appropriate standard. Statistical ance packages" shall not be considered in mandrel sizing.

drel shall be constructed of a metal or a rigid plastic material that can withstand 200 psi deformed. The mandrel shall have nine or more "runners" or "legs" as long as the total gs is an odd number. The barrel section of the mandrel shall have a length of at least 75% of neter of the pipe. A proving ring shall be provided and used for each size mandrel in use.

flexible mandrels are prohibited. A television inspection is not a substitute for the deflection tometer may be approved for use on a case by case basis. Mandrels with removable legs or

tested to meet or exceed the requirements of 30 TAC §317.2(c)(5)(H).

rals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After ior to covering and connecting a private service lateral to an existing organized sewage exas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city inspect the private service lateral and the connection to the sewage collection system, and icted in conformity with the applicable provisions of this section. The owner of the collection such certifications for five years and forward copies to the appropriate regional office upon may only be made to an approved sewage collection system.







TYPICAL MANDREL DETAILS

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		ER LINE *A* AENTS EWATER ING 6"	ROPOSED) KISTING) (PROPOSED)	ATER LINE "A" EWATER IN PLACE BASE R LINE R CPOSED) XISTING) (PROPOSED) (PROPOSED)	739
		ATER LINE "A" VEMENTS ISTING 6" ISTING 6"	(PROPOSED) (EXISTING) 29 (PROPOSED)	EWATER LINE "A" (STEWATER ST IN PLACE BASE (PROPOSED) (EXISTING) .57 (PROPOSED)	
		EWATER LINE "A" SOVEMENTS WASTEWATER EXISTING 6" NE	39 (PROPOSED) 46 (EXISTING) 41.29 (PROPOSED)	STEWATER LINE "A" WASTEWATER CAST IN PLACE BASE MATER LINE 67 (PROPOSED) 41.57 (PROPOSED)	
······································		STEWATER LINE "A" IPROVEMENTS 'Ø WASTEWATER ER EXISTING 6" LINE	41.39 (PROPOSED) 41.46 (EXISTING) = 741.29 (PROPOSED)	VASTEWATER LINE "A" 10 WASTEWATER H CAST IN PLADE BASE TEWATER LINE 41.67 (PROPOSED) 142.49 (EXISTING) = 741.57 (PROPOSED)	739 738 738 737 737
		VASTEWATER LINE "A" C IMPROVEMENTS T 4'Ø WASTEWATER OVER EXISTING 6" FER LINE	= 741.39 (PROPOSED) = 741.46 (EXISTING) (S)= 741.29 (PROPOSED)	0 V/ASTEWATER LINE "A" 7.1 4'Ø WASTEWATER MITH CAST IN PLACE BASE ASTEWATER LINE 741.67 (PROPOSED) 742.49 (EXISTING) (W)= 741.57 (PROPOSED)	
		08 WASTEWATER LINE "A" 3LIC IMPROVEMENTS RUCT 4'Ø WASTEWATER E OVER EXISTING 6" VATER LINE)(E)= 741.39 (PROPOSED))(N)= 741.46 (EXISTING) UT)(S)= 741.29 (PROPOSED)	14.50 WASTEWATER LINE "A" RUCT 4'Ø WASTEWATER LE WITH CAST IN PLACE BASE WASTEWATER LINE (WASTEWATER LINE (N)(E)= 741.67 (PROPOSED) (N)= 742.49 (EXISTING) UT)(W)= 741.57 (PROPOSED)	739 738 738 737 737 736
		2-08 WASTEWATER LINE "A" PUBLIC IMPROVEMENTS STRUCT 4'% WASTEWATER HOLE OVER EXISTING 6" TEWATER LINE	(IN)(E)= 741.39 (PROPOSED) (IN)(N)= 741.46 (EXISTING) (@UT)(S)= 741.29 (PROPOSED)	2+44.50 WASTEWATER LINE "A" STRUCT 4'@ WASTEWATER HOLE WITH CAST IN PLACE BASE 4. WASTEWATER LINE (IN)(E)= 741.67 (PROPOSED) (IN)(N)= 742.49 (EXISTING) (0UT)(W)= 741.57 (PROPOSED)	
· · · · · · · · · · · · · · · · · · ·		A. 2+08 WASTEWATER LINE "A" ID PUBLIC IMPROVEMENTS NNSTRUCT 4'Ø WASTEWATER NNHØLE OVER EXISTING 6" ASTEWATER LINE	FL (IN)(E)= 741.39 (PROPOSED) FL (IN)(N)= 741.46 (EXISTING) FL (OUT)(S)= 741.29 (PROPOSED)	 A. 2444.50 WASTEWATER LINE "A" DNSTRUCT 4'Ø WASTEWATER ANHOLE WITH CAST IN PLACE BASE ANHOLE WITH CAST IN PLACE BASE E-IN 4" WASTEWATER LINE FL (IN)(E)= 741.67 (PROPOSED) FL (IN)(N)= 742.49 (EXISTING) FL (OUT)(W)= 741.57 (PROPOSED) 	
		STA. 2+08 WASTEWATER LINE "A" END PUBLIC IMPROVEMENTS CONSTRUCT 4'Ø WASTEWATER MANHØLE OVER EXISTING 6" WASTEWATER LINE	8" FL (IN)(E)= 741.39 (PROPOSED) 6" FL (IN)(N)= 741.46 (EXISTING) 8" FL (QUT)(S)= 741.29 (PROPOSED)	STA. 2+44.50 WASTEWATER LINE "A" CONSTRUCT 4/Ø WASTEWATER MANHOLE WITH CAST IN PLACE BASE TIE-IN 4" WASTEWATER LINE 8" FL (IN)(E)= 741.67 (PROPOSED) 4" FL (IN)(N)= 742.49 (EXISTING) 8" FL (QUT)(W)= 741.57 (PROPOSED)	739 738 737 737 736 736 735 734
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WASTEWATER LINE "A" 1" - 20' H 1" - 2' V

> MANDREL SHALL BE CONSTRUCTED OF METAL OR A RIGID PLASTIC MATERIAL THAT CAN WITHSTAND 200PSI WITHOUT BEING DEFORMED. AFTER WELDING IS COMPLETED,

TRUE THE OUTSIDE DIAMETER DIMENSION. FOR THE FULL LENGTH OF "B" TO 0.010 A PROVING RING SHALL BE PROVIDED AND USED FOR EACH SIZE MANDREL IN USE.

MANDREL OD MUST BE EQUAL TO 95% OF THE ID OF THE PIPE 5. MANDREL BARREL LENGTH 'B' MUST BE

EQUAL TO 75% OF THE ID OF THE PIPE ADJUSTABLE MANDREL IS NOT ACCEPTABLE.



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Landscape Notes Reference: City of Round RockTree Techinical Manual: Standards and Specifications; January 13, 2005; Section 3; Tree Removal, Replacement Planting & Maintenance Standards

3.1. INTRODUCTION

A protected tree may not be removed without City review and approval, except in certain emergencies. The purpose of City review is to verify that the removal is allowed under the Ordinance, and to prevent unnecessary tree removal. This section discusses conditions for tree removal, replacement of protected trees, planting and pruning of replacement trees, and maintenance.

3.2. TREE REMOVAL

3.2.1. Allowable removal-Tree removal is approved as part of the subdivision and site plan process, or in the case of individual trees, through the tree removal permit process. These three processes are defined in the Ordinance. A tree removal permit must be granted, or a site or subdivision plan with a tree survey and replacement plan approved, before removing a protected tree regardless of the condition of the tree.

3.2.2. Protected Tree Removal Permit Application-Tree removal applications are available at the City of Round Rock Forestry Division. The form is required ONLY when a request for tree removal originates with an owner of fully developed land, including a single family house under construction. All other requests for removal of protected trees take place during the subdivision and site development processes as defined in the Ordinance. The form can be found in the Appendix. Additional information may be required by the

Forestry Manager. An application for a Protected Tree Removal Permit shall be processed within fifteen (15) working days from the date the application is received.

3.3. TREE REPLACEMENT PLAN

Replacement requirements are defined in the Ordinance, and are limited to protected trees, excluding monarch trees. It is important to note that tree replacements during the site plan process will be addressed in both the Tree Protection and Preservation Ordinance and the Landscape Ordinance. Whichever ordinance requires the greatest number of tree replacement inches, that is the ordinance which will be followed in terms of the number of inches to be replaced. The tree requirements of both ordinances will not be added up. See Section 3.1108 of the Ordinance for the types of replacements that are required dependent on lot size and development status.

In selecting trees to be replaced, the types of trees removed will be replaced with the same or similar species. Each replacement tree shall be a minimum of three inches (3") caliper, a minimum of ten feet (10') in height, and a minimum of five (5) feet in spread when planted. flustration 3-1 shows the type of information required on a tree replacement plan.

The Tree Replacement Plan will include four elements: 1) a table including the common or Latin name; tree size in caliper inches, height, and spread; tree symbols; quantity; and for the purposes of the Chapter 11, Zoning section 11.501, Landscape Development Standards, if the tree is considered large, medium, or small; 2) a tree planting plan (may be combined with the Landscape Plan); 3) proper tree planting details including planting hole, tree planting, staking, and mulching: and, 4) notes on proper tree planting as described in section 3.7 of this Manual

3.4. TREE PLANTING REOUREMENTS

3.4.1. Species-The replacement trees shall be the same or similar species unless the Forestry Manager determines that another species would be more suitable for the location or if there is a need to promote diversity of species. Factors to be considered include the long term health of the tree in the location and its compatibility with adjacent uses as well as design considerations.

If the Forestry Manager deems it necessary to plant species other than those that were removed, the following issues will be considered. Street trees: On any four hundred foot (400') length of street, a single species of tree

may be planted. On a length of street greater than four hundred feet (400'), no more than twenty percent (20%) of the total number of trees shall be of one species.

Non-street areas: For plantings in non-street areas (parking lots for example), no more than 20 percent (20%) of the total number of trees planted may be of one species. Exceptions must be approved by the Forestry Manager.

The above restrictions are designed to avoid creating monocultures, or areas of plantings made up of only one species of trees. Monocultures are undesirable because if a certain species is prone to a particular disease or is more susceptible to storm damage or temperature extremes, then it is likely the entire stand could die or be destroyed by a single disease or weather event. Creating planting areas of several species creates a more diverse, and therefore more resistant, urban forest.

Hackberry, Chinese Tallow, Chinaberry, Mulberry, Arizona Ash, Cottonwood, Poplar, Silver Maple, Mimosa, and Willow. shall not be planted along city streets due to damaging surface roots and the possibility of causing damage to sidewalks, utilities and curbs. These trees also have short lifespans, weak wood, and susceptibility to disease and insects.

With the exceptions noted above, other species shall be chosen from the City of Round Rock approved tree list provided in Appendix B of this Manual.

3.4.2. Planting distances/spacing requirements:

a. Minimum distance between newly planted trees Large sized trees: 40 ft.:

Medium sized trees: 30 ft: and

Small sized trees: 20 feet

b. Minimum distance from any underground utility, water meter boxes, and fire hydrant: 5 feet

c. Distance from trees to curb, sidewalk, or driveway: Minimum 4 feet. d. Planting strips should be a minimum of 8 ft wide.

e. Minimum distance from buildings and similar structures:

Large size tree: 30 ft; Medium size tree: 20 ft: and

Small size tree: 10 ft.

f. Minimum distance from overhead utility lines. Trees cannot be planted under utility lines. In order to avoid future interference of limbs, planting may take place as

3-3

Large trees: 30 feet from line: Medium trees: 20 feet from line: and

Small trees: 10 feet from line.

g. From curb line of an intersection: 25 feet, which is subject to visibility triangles. h. Minimum distance from stop or yield signs: 20 feet. i. Distance from directional traffic sign: 10 feet.

j. Distance from street lights: 25 feet, or 15 feet if narrow growing species is planted. Tree selection shall take into consideration ordinance requirements for height clearances as defined in Chapter 9 of the Code. As they grow, trees will need to be pruned to provide pedestrian clearance of at least 8 feet over sidewalks, and vehicular clearance of 14 feet over

Variations from the requirements listed above must be approved by the Forestry Manager.

3.5. TREE STOCK AND MATERIALS

3.5.1. Quality-it is the contractor's responsibility to supply tree stock that meets ANSI 760.1-1996 and any other standards addressed in this Manual. All trees installed within the City of Round Rock shall conform with the American Standard for Nursery Stock.

Trees shall be sound, healthy, vigorous, and free of plant disease and insect pests or their damage.

Container grown trees shall be grown for at least 8-months in containers in which delivered and shall not be root bound or have girdling roots. The root ball will be moist and the roots will be contained within the container. Trees shall not have been topped or headed.

The tree will have healthy leaves if it is the time of year for trees to have leaves. There will be no weeds growing out of the container.

if the tree is multi-stemmed, the stems will not be squeezing against each other or the trunk of the tree.

Trees with broken tops, branches, injured trunks, poor structure, low branching, poor vigor, and apparent poor quality shall be rejected and the Forestry Manager has the right to reject them if they do not meet the quality standards.

3.5.2 Container grown/ball and burlapped trees- From April 1-September 30, only container grown trees will be planted. From October 1-March 31, either container grown or ball and burlapped (B&B) trees may be planted. Recommendation: Regardless, due to the poor soil and high temperatures in our area, it is recommended that container grown trees be used during all times of the

3.5.3 Miscellaneous materials-The following materials shall be used unless otherwise specified:

Tree stakes. Metal T-posts shall be used. Tree Ties. Tree ties may include one of two types. The first is a 10 gauge wire, cushioned with a rubber hose around the trunk. The wire should not touch the trunk. The second is a plastic chain lock, also called twist brace.

Mulch. All newly planted trees should be mulched with 2-4 inches of organic mulch. Mulch should never be placed against the trunk of a tree. There should be a space of 1-2 inches between the trunk and mulch. Mulch should cover the entire tree planting hole. No volcano mulching is allowed. Root Control Barriers. Use along all public sidewalks, and indicate on approved plans and drawings.

3.6. PLANTING SITE PREPARATION

3.6.1. Soil preparation and conditioning-All debris, wood chips, pavement, concrete and rocks over 2-inches in diameter shall be removed from the planting pit to a minimum of 24-inch depth, unless specified otherwise.

3.6.2. Planter pit preparation Trees in a confined planter pit or sidewalk area: The planting hole shall be excavated to a minimum of 30-inches deep x the width of the exposed area. Scarify the sides of the pit. Soil beneath the rootball shall be compacted to prevent settling. Trees in all other areas:

a. Mark out a planting area 2 to 3 times wider than the rootball diameter (the wider the better). Loosen this area to about an 8" depth. This will enable your tree to extend a dense mat of tiny roots well out into the soil in the first one to ten weeks in the ground. b. Excavate the hole's width a minimum of two times the diameter of the container, and deep enough to allow the root ball of the container to rest on firm soil with the top of the root ball even with the grade. Scarify the sides

and the bottom of the pit. 3.6.3 Drainage

Adequate drainage must be provided to the surrounding soil for the planting of new trees. If the trees are to be planted in impermeable or infertile soil and water infiltration rates are less than two (2) inches an hour, then one of the following drainage systems or other approved measures must be implemented:

French drain, a minimum of three feet in depth Drain tiles or lines beneath the trees Auger six drain holes at the bottom perimeter of the planting pit, at a minimum of four (4) inches in diameter, twenty-four (24) inches deep and filled with medium sand or fine gravel 3.6.4. Aeration tubes for trees Trees planted in sidewalk planter pits, planting strip, parking islands, or medians shall use 4-inch diameter perforated aeration piping (rigid or flexible), circling the bottom of the planter connected to a 'T' fitting to two riser tubes with grated caps and wrapped with filter fabric. This detail she approved landscape plans,

3.7. PLANTING THE TREE

3.7.1. Container grown tree Pull the container away from the root ball. Don't pull the tree out by its trunk. Container grown trees often have circling or girdling roots running along the edge of the rootball. If they exist in this area, cut them and spread them apart. Place the root ball in the center of the hole and adjust the tree so it is straight and at the proper level. Make any adjustments prior to filling the hole with dirt.

3.7.2. Ball and burlapped tree Rest the root ball in the center of the hole, and reshape the hole so the tree will be straight and at the proper level. After adjusting the tree, pull the burlap and any other material away from the sides and top of the root ball. Do not remove the burlap from the bottom. If you adjust or lift the tree after the burlap has been removed you run the risk of damaging the root system.

3.7.3. Backfill soil, amended soil Backfill with the original soil unless the original soil has been removed or the soil is poor. If soil must be amended, consult with a landscape architect or certified arborist in identifying the most appropriate soil mix.

3.7.4. Filling the hole Fill until the hole is half full. Flood the hole with a slow hose or tamp gently with your foot to firm the soil. Repeat until the hole is full. Do not press too firmly-only firm enough to hold the tree upright. Backfilling with soil and water or gently tamping will remove large air pockets.

3.7.5. Constructing a berm or dam Construct a small dam or berm three (3) feet in diameter around the tree. The berm should be approximately three (3) inches high.

3.7.6. Mulching Cover the entire loosened area of soil with 2 to 4 inches of mulch composed of shredded wood or bark in the entire planting area. Mulch will be placed one to two inches away from the trunk of the tree.

3.7.7. Staking or guying Bamboo stakes, if any, will be removed. Staking or guying is to prevent movement of the lower trunk and root system. Movement of the top is desirable and will strengthen the tree. The stakes will be installed 12-18 inches in undisturbed soil outside of the planting hole. Depending on height and size of the tree, stakes shall be six, eight, or ten feet tall. Trees shall be staked with 3 metal T-posts. Metal stakes will not rub against tree trunks. Tree ties will be located near the lowest main branch on the tree. Check a staked or guyed tree monthly during the growing season and after storms or strong wind. The system will be snug, but not to the point of making an impression on the stem or trunk. If that happens, loosen the tie or wire around the trunk. Do not stake a tree any longer than necessary. One or two growing seasons is all that is needed.

Branches should not rub against the stakes. For trees over four (4) inches, guy wires should be used, with a minimum of three guys. Cable or wire is attached to the tree by running wires through a piece of hose or by using lag hooks on large trees. The guys should be secured to arrowhead-shaped land anchors (C), wooden stakes (D), or deadmen buried in the soil

Tree guards. For trees in turf areas requiring regular mowing and/or weed eating, the tree trunk shall be protected with TreeGuard or equivalent. Tree grates. Where sidewalk width is less than 8-feet and new trees will be

installed in a tree well, metal tree grates may be used and approved by the DRC. Minimum size grates shall be 4' x 4' unless specified otherwise. All tree grates shall be mounted in frames, frames inset into a concrete foundation within the sidewalk or surface material, and shall be flush with the surrounding surface.

After the hole has been prepared as described in Section 3.6 above, the tree is ready to be

3.8. PRUNING NEWLY PLANTED TREES

Young trees are pruned to allow for proper growth through the years. If the tree is of high quality, it should need little pruning. It is no longer common practice to automatically trim a certain percentage of limbs from a newly planted tree. The tree needs as much follage as can be available to assure rapid growth and solid leaf structure. This includes refraining from "limbing up" and topping.

3.8.1. Prohibition

Topping trees-tree replacement may be required if this is done Limbing up trees (the practice of cutting the lowest branches to a desired height)

3.8.2. Pruning guidelines (Recommended)

Scaffolding/ permanent branches. Identify the scaffolding/permanent branches. The lowest permanent branch should have a diameter of one-half or less of the trunk diameter where the branch attaches to the trunk. The vertical spacing of permanent scaffold branches should equal a distance equal to 3% of the tree's eventual height. Thus, a tree that will be 50 feet tall should have permanent scaffold branches spaced about 18 inches apart along the trunk. Avoid allowing two scaffold branches to arise one above the other on the same side of the tree. Maintain radial balance with branches growing outward in each direction.

3.8.3. Limb removal (Recommended) The following may be removed.

a. Torn, damaged, dead branches. Remove the branch just outside of the branch collar. See Mustration 2-9.

b. Double Leaders: Maintain a dominant trunk for at least six-eight feet without a major fork. If the trunk divides into two or more relatively equal stems, favor one strong stem and remove the others. Cut one stem back to a lateral branch. c. Rubbing branches: Eliminate branches that are rubbing or will soon rub agains another branch.

d. Crowding: Give each branch room to grow with minimal competition for sunlight. When possible, have major lateral branches evenly spaced eight to ten inches apart along the trunk. If the tree by its nature would

loose too much foliage in the process of eliminating crowding, maintain at least half the follage on

branches in the lower 2/3 of the tree.

e. Narrow Branch Angles/Included Bark: Remove one

branch if the angle is 40% or narrower or if it appears that the bark from the branch is becoming pinched

between the branch and the trunk.

f. Sprouts and Suckers: Remove sprouts and suckers.

g. Temporary branches: Leave temporary branches that are not competing with permanent, scaffolding

branches.

3.9. IRRIGATION

All required landscape areas shall be irrigated by an underground automatic system that may include a drip irrigation system. This system shall adhere to manufacturer specifications and the rules and regulations establishe by Texas Natural Resource Conservation Commission or successor agency. In addition, an irrigation system must be designed by a landscape architect or irrigator licensed by the State of Texas. An irrigation system shall comply with the following guidelines: 3.9.1 sprinkler head spacing shall be designed for head to head coverage

and adjusted for prevailing winds. The system shall promote minimum run-off and minimum over spray onto non-irrigated areas. 3.9.2 Sprinkler heads shall have matched precipitation rates within

each control valve circuit.

3.9.3 Adjustable flow controls shall be required on circuit remote control valves. Pressure regulation component (s) shall be required where static pressure exceeds manufacturer's recommended operating

3.10. IRRIGATION

range.

An automatic irrigation system will be installed. Tree irrigation shall not share the same irrigation zone, including valves and circuits, as shrubs and plants due to different watering requirements. A minimum of one (1) bubbler each shall be provided for all newly planted trees. Trees larger than 4 inches in caliper shall have 2 bubblers. Bubblers shall be located between 1-2 feet from the trunk.




NOTE: STAKE TREES 2 1/2" CALIPER AND OVER.

TREE BRACING STRAP 1 1/2" WIDE HEAVY NYLON STRAP MATERIAL WITH EYELETS - (3) 2"x2" OAK WOOD STAKES, 6' LENGTH, MIN. INSERTED 18" BELOW GRADE

- 3" LAYER OF MULCH

- 3" SAUCER BERM

FINISH GRADE

- REMOVE TOP 1/3 OF BURLAP FROM B&B TREES. SEE NOTE BELOW. AMENDED PLANTING MIX

UNDISTURBED SOIL LINE TO PROVIDE - POSITIVE DRAINAGE AWAY FROM PLANT. (IF SOIL HAS BEEN PREVIOUSLY DISTURBED, TAMP SOIL UNDER ROOT BALL TO MINIMIZE SETTLEMENT)

SAUCER BERM

LIMIT OF MULCH. MULCH SHALL NOT CONTACT BARK

(3)-2"x2"x6' STAKES

NOTE: NOTE: REMOVE ALL TREATED OR PLASTIC COATED BURLAP, STRAPPING, WIRE OR NYLON TWINE FROM ROOT BALL. AFTER SETTING IN HOLE, CUT AWAY TOP AND SIDES OF WIRE BASKET, IF ANY.







- REMOVE TOP 1/3 OF BURLAP FROM B&B TREES - 3" LAYER OF MULCH

- 3' SAUCER BERM - FINISHED GRADE

PLANTING SOIL MIXTURE

- UNDISTURBED SOIL LINE TO PROVIDE POSITIVE DRAINAGE AWAY FROM PLANT. (IF SOIL HAS BEEN PREVIOUSLY DISTURBED, TAMP SOIL UNDER ROOT BALL TO MINIMIZE SETTLEMENT.)

(3)

SAUCER BERM

LIMIT OF MULCH, MULCH SHALL NOT CONTACT BARK

NOTE: REMOVE ALL TREATED OR PLASTIC COATED BURLAP, STRAPPING, WIRE OR NYLON TWINE FROM ROOT BALL. AFTER SETTING IN HOLE, CUT AWAY TOP AND SIDES OF WIRE BASKET, IF ANY.



SHRUB BED PLANTING

SCALE: N.T.S.

-MIN. 3" DEPTH OF SHREDDED MULCH SET SHRUB ROOTBALL I' ABOVE EXISTING GRADE, COMPACT SOIL MIX DIRECTLY BELOW SHRUB ROOTBALL

FINISHED GRADE BACKFILL PER SPECIFICATIONS SCARIFY SIDES OF PLANTING PIT

TREE PLANTING - MULTISTEM

3X DIA. ROOT BALL Min





BENCHMARKS

TBM #1 - SANITARY SEWER MANHOLE

ELEV = 744.47 TBM #2 - SANITARY SEWER MANHOLE LID

ELEV = 747.95

PLANE COORDINATE SYSTEM = CENT AL ZONE, NAD 83, 93 ADJUSTMENT (ERTICAL DATUM - NAVD88 (GEOID MODEL 2012-A) BASED ON COOPERATIVE GPS RTK NETWORK.

LEGAL DESCRIPTION

LOT 2 SWEETBRIAR II ADDITION CABINET L., SLIDES 281-282 P.R.W.C.T

		PLAN SUBMITTALS
NO.	DATE	COMMENTS
1	6/7/2019	SUBMITTAL TO CITY OF ROUND ROCK DSO.
2	6/13/2019	SUBMITTAL TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ)
3	7/8/2019	ISSUED FOR BID.
4	7/24/2019	UPDATE SUBMITTAL TO CORR DSO
5	7/29/2019	ISSUED FOR BID
6	9/16/2019	UPDATE SUBMITTAL TO CoRR DSO
7	10/04/2019	ASAP SUBMITTAL TO CORR DSO
8		
9		
10		

YMCA OF GREATER WILLIAMSON COUNTY **KAH ARCHITECTURE**

- NO PORTION OF THE ABOVE LEGALLY DESCRIBED PROPERTY IS WITHIN THE DESIGNATED 19 ANNUAL CHANCE FLOODPLAIN AREA AS DESIGNATED BY F.E.M.A. FLOOD INSURANCE RATE MAP (FIRM) ON COMMUNITY PANEL NO. 48491C0515E; DATED SEPTEMBER 26, 2008 FOR THE CITY OF ROUND ROCK, WILLIAMSON COUNTY, TEXAS.
- 2. THIS PROPERTY IS WITHIN THE EDWARDS AQUIFER RECHARGE ZONE.
- 3. SEE SHEET COO FOR GENERAL NOTES.
- 4. THIS SITE WILL HAVE ON-SITE DETENTION.

911 N. MAIN TAYLOR, TEXAS 76574 **BRUCE L. BRYAN** (512) 352 9090 BRUCE@BRYANTECHNICALSERVICES.COM

SITE DEVELOPMENT PLANS **SUBMITTED FOR CHASCO YMCA ADDITION 1801 NORTH INTERSTATE 35 ROUND ROCK, TEXAS 78664** SDP1904-0001

		Sheet List Table	
#	SHEET	DESCRIPTION	
01	CVR	COVER SHEET	
02	SRV1	SURVEY 1	
03	SRV2	SURVEY 2	
04	PLAT 1	PLAT 1	
05	PLAT2	PLAT 2	
06	SP1	OVERALL SITE PLAN	
07	C00	GENERAL NOTES	
08	C10	EROSION AND SEDIMENTATION CONTROL PLAN	
09	CII	DEMOLITION PLAN	
10	C20	DIMENSION CONTROL PLAN	
11	C30	PAVING AND STRIPING PLAN	
12	C40	GRADING PLAN	
13	C50A	EXISTING DRAINAGE AREA MAP	
14	C50B	DEVELOPED DRAINAGE AREA MAP	
15	C51	DRAINAGE PLAN	
16	C52	STORM SEWER PROFILES	
. 17	C60	UTILITY PLAN	
18	C61	UTILITY PROFILES	
19	C70	CONSTRUCTION DETAILS	<u>,</u>
20	C71	UTILITY DETAILS	
21	C72	ESC DETAILS	
22	LA I	LANDSCAPE PLAN	
23	LA 2	LANDSCAPE DETAILS	
24	PH	PHOTOMETRIC PLAN	

THE STATE OF TEXAS COUNTY OF WILLIAMSON

ARCHITECT

2299 WALSH DRIVE.

ROUND ROCK, TEXAS 78681

KEITH A. HICKMAN, AIA, REFP, RID, LEED AP

(512) 255 9690

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OWNER

1012 NORTH MAYS STREET **ROUND ROCK, TEXAS 78664 RICH CARLTON** (512) 615 5555 RCARLTON@YMCAGWC.ORG

SURVEYOR **BRYAN TECHNICAL** SERVICES, INC.

ENGINEER HAGOOD ENGINEERING **ASSOCIATES, INC.** 900 E. MAIN STREET

ROUND ROCK, TEXAS 78664 TERRY R. HAGOOD, P.E. (512) 244-1546 TERRYH@HEAENG.COM

LANDSCAPE ARCHITECT STUDIO 16:19, LLC. 1717 N. IH 35, SUITE 308

ROUND ROCK, TEXAS 78664 BRAD SIMS, ASLA. (512) 534 8680 BSIMS@STUDIO1619.COM

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF ROUND ROCK MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIG ENGINEER. STATE OF TEXAS COUNTY OF WILLIAMSON I, TERRY R. HAGOOD, DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAGE IMPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH THE SUBDIVISION AND BUILDING REGULATION ORDINANCES AND STORM WATER DRAINAGE POLICY ADOPTED BY THE CITY OF ROUND ROCK, TEXAS. 10/04/2019 Terry R. Hanood Date TERRY R. HAGOOD Registered Professional Engineer ACCEPTED FOR CONSTRUCTION BY: 10-4-2019 ment Services SDP1904-0001 SITE PLAN PERMIT NO. RECORDED FINAL PLAT DOC. NO. 2007079067 11001608 08/07/19 WPAP APPROVAL CASE # **IMPERVIOUS COVER** PUBLIC SIDEWALK, STREET, CURB AND GUTTER 35,022 SF BUILDING FOOTPRINT 2,717 SF PARKING, PRIVATE SIDEWALK 861 SF 38,600 SF OTAL OTAL AREA OF DISTURBANCE (LOC) 77,117 SF

013120-2 CONTRACTOR FIELD SET This plan set shall remain on the site or subdivision premises for the life of the project and shall be utilized for any and all improvements contained herein



Call before you dig

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		900 E. Main Street Round Rock. TX 784	564	JOB NO:	18-021
		Phone (512) 244-11 Fax (512) 244-1010	546 D	DRAWN BY:	TA
s V		www.hea.eng.pro TBPE Registration N	ww.hea.eng.pro BPE Registration No. F-12709		TRH
		JOB NO. 18-017	© 2019 HEA, Inc.	P.I.C.:	TRH
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		С. Г.	Point	Table	5			
	Point # 2748	Elevation 745.18	Northing 10164772.62	Easting 3129162.34	Description TRE 9 OAK TT1851	Poir 27	it # 68	Elevatio 744.69
	2749	745.08	10164769.71	3129164.55	TRE 13 OAK TT1850	27	69	744.80
	2750	745.14	10164763.62	3129162.15	TRE 23 OAK TWIN		70	744.78
	2752	745.24	10164764.65	3129171.97	TRE 19 OAK TT1845	27	72	744.72
	2753	745.70	10164764.62	3129176.08	TRE 24 OAK TT 741	27	73	746.65
	2754	745.37	10164766.76	3129177.30	TRE 13 OAK TT 739	27	74	747.35
	2756	744.86	10164877.11	3129141.31	TRE 15.5 OAK	27	76	744.61
	2757	745.94	10164872.99	3129139.68	TRE 18.5 OAK TWIN	27	77	748.67
	2758	744.33	10164873.08	3129135.90	TRE 13.5 OAK	27	78	743.05
	2759	744.26	10164871.28	3129137.79	TRE 17.7 OAK TWIN	27	79	742.16
	2760	/44.54 744 31	10164875.68	3129138.67	TRE 13 OAK		81	742.97
	2762	744.14	10164878.83	3129131.42	TRE 7 OAK	27	82	741.56
	2763	744.23	10164877.43	3129129.02	TRE 10.5 OAK	27	83	745.32
	2764	744.62	10164875.61	3129126.51	TRE 16.2 OAK TWIN	27	84	745.32
	2765	746.13	10164870.73	3129126.33	TRE 25.2 OAK TWIN	27	85	747.56
	2766	/44.32	10164870.64	3129130.36	I IKE 22.2 OAK TWIN	1. 27	86 I	747.36

2767 744.85 10164898.22 3129132.19 TRE 24 OAK TRIPLE

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SCALE: 1" = 30'

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		Poin	t Table
Point #	Elevation	Northing	Easting
2768	744.69	10164897.76	3129134.70
2769	744.80	10164899.63	3129135.15
2770	744.78	10164901.91	3129134.06
2771	744.85	10164903.50	3129132.28
2772	744.72	10164901.46	3129130.88
2773	746.65	10164925.38	3128917.41
2774	747.35	10164882.07	3128999.08
2775	746.93	10164732.60	3129019.08
2776	744.61	10164726.53	3128993.14
2777	748.67	10164722.02	3128965.42
2778	743.05	10164735.92	3129119.14
2779	742.16	10164720.31	3129076.09
2780	742.97	10164704.64	3129049.34
2781	743.77	10164687.31	3129110.53
2782	741.56	10164673.55	3129008.13
2783	745.32	10164694.63	3129152,43
2784	745.32	10164692.56	3129159.01
2785	747.56	10164714.91	3129249.06
2786	747.36	10164712.95	3129249.31
2787	747.21	10164712.41	3129235.04
	2. X		



Description
TRE 6 OAK
TRE 11 OAK
TRE 10 OAK
TRE 16.5 OAK
TRE 13.5 OAK
TRE 19.2 OAK TWIN
TRE 26.1 OAK 5PRONG
TRE 17,5 OAK
TRE 13 OAK
TRE 18 OAK
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NG TRE 27.7 OAK TWIN
TRE 27.7 OAK TWIN TRE 22.5 OAK TWIN
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Point #	Elevation	Northing	Easting	Description
2788	746.52	10164707.75	3129227.63	TRE 7 HACK
2789	746.52	10164705.39	3129225.69	TRE 7 HACK
2790	746.47	10164701.53	3129226.64	TRE 18.7 OAK TWN
2791	746.87	10164702.66	3129233.86	TRE 28 OAK
2792	748.52	10164705.40	3129239.13	TRE 15 OAK
2793	746.79	10164707.84	3129239.53	TRE 12 OAK
2794	746.89	10164701.91	3129277.71	TRE 6 HACK
2795	747.54	10164708.30	3129273.54	TRE 22.45 OAK CLUSTER
2796	748.66	10164790.05	3129317.60	TRE 8 OAK
2797	747.76	10164797.13	3129272.75	TRE 7 OAK
2798	747.44	10164726.04	3129391.10	TRE 12 HACK
2799	749.43	10164728.26	3129378.38	TRE 18 OAK
2800	748.15	10164721.00	3129310.70	TRE 6 ELM
2801	746.80	10164713.24	3129311.84	TRE 6.5 HACK
2802	747.90	10164714.18	3129305.35	TRE 7.5 HACK
2803	747.44	10164714.43	3129284.51	TRE 9 CHINA



	CABINET DD
	OWNER: YMCA OF GREATER WILLIAMSON COUNTY P.O. BOX 819 ROUND ROCK, TEXAS 78680
	ACREAGE: 7.409 ACRES
	SURVEY: DAVID CURRY SURVEY, ABSTRACT NO. 130
	NUMBER OF LOTS: 2
	ZONING: ALL LOTS - C-1 (GENERAL COMMERCIAL)
	DATE: PLANNING & ZONING, AUGUST 15, 2007
	DATE: SUBMITTAL, JULY 18, 2007
	405 BRUSHY CREEK ROAD CEDAR PARK, TEXAS 78613 (512) 260-3700
	ENGINEER: BAKER - AICKLEN & ASSOC., INC. 507 W. LIBERTY AVENUE ROUND ROCK, TEXAS 78664 (512) 244-9620
	BENCHMARK: TBM 1 ELEVATION 742.77 - SQUARE CUT IN TOP OF THE RETAINING WALL WEST SIDE OF WATER QUALITY POND APPROXIMATELY 2.5' SOUTH OF THE NORTHWEST CORNER.
	TBM 2 ELEVATION 745.21 - SQUARE CUT IN THE TOP OF CURB AT THE CENTER OF THE WEST BULLNOSE OF THE NORTHWEST PARKING ISLAND APPROXIMATELY 133' FROM THE NORTHEAST CORNER OF PARKING LOT.
	VERTICAL DATUM: NAVD 88(GEOID99) BASED CITY OF ROUND ROCK CONTROL POINT 01-013
	NOTES:
	1) BUILDING SETBACKS SHALL BE IN ACCORDANCE WITH CHAPTER 11, ZONING, CITY OF ROUND ROCK CODE OF ORDINANCES (1995 EDITIO
	2) BASIS OF BEARINGS IS GRID NORTH FOR THE TEXAS STATE PLANE COORDINATE SYSTEM (4203) NAD '83 (HARN '93)
	3) NO PORTION OF THIS TRACT IS ENCROACHED BY ANY SPECIAL FLO HAZARD AREAS INUNDATED BY THE 100 YEAR FLOOD AS IDENTIFIEL BY THE U.S. FEDERAL EMERGENCY MANAGEMENT AGENCY BOUNDARY MAP (FLOOD INSURANCE RATE MAP) COMMUNITY PANE NUMBER 48491C 0330 D, EFFECTIVE DATE JANUARY 3, 1997, FOR WILLIAMSON COUNTY, TEXAS. NO PORTION OF THIS TRACT IS ENCROACHED BY THE ULTIMATE 100 YR FLOODPLAIN.
	4) NO OBSTRUCTIONS, INCLUDING BUT NOT LIMITED TO FENCES, STRUCTURES, STORAGE, OR FILL, SHALL BE PLACED WITHIN THE LIMITS OF ANY DRAINAGE EASEMENT SHOWN HEREON.
	5) LOT 2A WILL TAKE ACCESS THROUGH THE INGRESS/EGRESS EASEMENT DEDICATED HEREIN. NO DIRECT DRIVEWAY ACCESS TO 35 FROM LOT 2A IS ALLOWED.
	6) A 5' P.U.E. ALONG NORTH MAYS STREET IS HEREBY DEDICATED.
	P-1 (NO LOT NUMBER GIVEN)
	CLEARWATER SUBDIVISION CABINET G, SLIDE 37313 P.R.W.C., TX
	P-2 TRACT III YOUNG MEN'S CHRISTIAN ASSOCIATION
MYLAR	OF ROUND ROCK (0,121 ACRES) VOLUME 2115, PAGE 130 O.R.W.C., TX (2,783 ACRES) VOLUME 2115, PAGE 130
APHIC	P-3 TRACT IN YOUNG MEN'S CHRISTIAN ASSOCIATION OF ROUND ROCK
HOTOGR	(0.31 ACRES) VOLUME 2115, PAGE 130 O.R.W.C., TX SWEETBRIAR II ADDITION CABINET L, SLIDES 281-282 PRWCT
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CONTRACTOR FIELD SET This plan set shall remain on the site or subdivision premises for the life of the project and shall be utilized for any and all improvements contained herein.



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CABINET DD THE STATE OF TEXAS) COUNTY OF WILLIAMSON THAT THE YMCA OF GREATER WILLIAMSON COUNTY, ACTING BY AND THROUGH JEFF ANDRESEN, ITS PRESIDENT AND CHIEF EXECUTIVE OFFICER, AS OWNER OF THE CERTAIN 7.409-ACRE TRACT OF LAND SITUATED IN THE DAVID CURRY SURVEY, ABSTRACT NO. 130, IN WILLIAMSON COUNTY, TEXAS, BEING ALL OF THAT CALLED 4.097-ACRE TRACT OF LAND IN DEED TO YOUNG MEN'S CHRISTIAN ASSOCIATION OF ROUND ROCK OF RECORD IN VOLUME 2115, PAGE 130 OF THE OFFICIAL RECORDS OF WILLIAMSON COUNTY, TEXAS, SAID 4.097-ACRE TRACT BEING COMPRISED OF FOUR (4) TRACTS: TRACT I, A CALLED 0.883-ACRE TRACT, BEING ALL OF THAT CERTAIN CLEARWATER, A SUBDIVISION ACCORDING TO THE PLAT OF RECORD IN CABINET C, SLIDE 373 OF THE PLAT RECORDS OF SAID COUNTY, TRACT II, A CALLED 2.783-ACRE TRACT, TRACT III, A CALLED 0.121-ACRE TRACT AND TRACT IV, A CALLED 0.31-ACRE TRACT, AND ALSO BEING ALL OF LOT 2 (3.317 ACRES), SWEETBRIAR II ADDITION, A SUBDIVISION ACCORDING TO THE PLAT OF RECORD IN CABINET L, SLIDES 281-282 OF SAID PLAT RECORDS DO HEREBY DEDICATE TO THE PUBLIC FOREVER USE OF THE STREETS, ALLEYS, EASEMENTS AND ALL OTHER LANDS INTENDED FOR PUBLIC DEDICATION AS SHOWN HEREON TO BE KNOWN AS: AND CONVEYED BY DEED UNDER DOCOMENT No. 2003071604 YMCA OF GREATER WILLIAMSON COUNTY ROUND ROCK BRANCH: A FINAL PLAT OF 3.209 ACRES AND A REPLAT OF LOT 2 SWEETBRIAR II ADDITION AND CLEARWATER SUBDIVISION JEFF ANDRESEN, WISA OF GREATER WILLIAMSON COUNTY, PRESIDENT / CEO 1812 MAYS ST. ROUND ROCK, TEXAS 78664 THE STATE OF TEXAS COUNTY OFWILLIAMSON THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THE _OL____ DAY OF _____ AUGUST_____ BY JEFF ANDRESEN, PRESIDENT / CEO YMCA OF GREATER WILLIAMSON COUNTY. NOTARY PUBLIC, STATE OF TEXAS Notary Public, State of Tanta PRINTED NAME Sherry Johnson MY COMMISSION EXPIRES: 03-20-11 THE STATE OF TEXAS) COUNTY OF WILLIAMSON) THAT JP MORGAN CHASE, THE LIEN HOLDER OF THE CERTAIN 3.317-ACRE TRACT OF LAND SITUATED IN THE DAVID CURRY SURVEY, ABSTRACT NO. 130, IN WILLIAMSON COUNTY, TEXAS, BEING ALL OF LOT 2, SWEETBRIAR II ADDITION, A SUBDIVISION ACCORDING TO THE PLAT OF RECORD IN CABINET L, SLIDES 281-282 OF SAID PLAT RECORDS AND DO FURTHER HEREBY JOIN, APPROVE, AND CONSENT TO THE DEDICATION TO THE PUBLIC FOREVER USE OF THE STREETS, ALLEYS, EASEMENTS AND ALL OTHER LANDS INTENDED FOR PUBLIC DEDICATION AS SHOWN HEREON. BY: KI ALLEN, VICE PRESIDENT-AUSTIN REGIO JP MORGAN CHASE 221 W. SIXTH STREET - FLOOR 2 AUSTIN, TEXAS 78701-3400 THE STATE OF TEXAS) COUNTY OF WILLIAMSON) THIS INSTRUMENT WAS ACKNOWLEDGED BEFORE ME ON THE 2 DAY OF August BY KI ALLEN, VICE PRESIDENT-AUSTIN REGION, JP MORGAN CHASE NOTARY PUBLIC, STATE OF TEXAS CYNTHIA C. ALMRADO PRINTED NAME CYAHILA CAlvarado STATE OF TEXAS 4-21-2009 MY COMMISSION EXPIRES: My Comm. Exp. 04-21-1





PLAT2 05 SITE PLAN NO. SDP1904-0001



									HAGOOD ENGINEERING ASSOCIATES
					1 F F F	<u>Type of Cons</u> Huilding OCC Type of Cons Height: Rame:	TRUCTION UPANCY TYP TRUCTION:	SCALE: 1" = 40 ASSEMBLY GROUP A-3 TYPE V-B 25'-0" STEEL	900 E. Main Street Round Rock, TX 78664 Phone (512) 244-1546 Fax (512) 244-1010 www.heaeng.com TBPE Registration No. F-12709
					P Z	ROPOSED USA CONING	GE	GYMNASIUM & PARKING (COMMERCIAL) C-1 (GENERAL COMMERCIAL)	TE OF TETTS
					<u>р</u> 1	ARKING COUN OTAL # OF PA	NT TABLE RKING SPAC	EXISTING REMOVED PROPOSED TOTAL REQUIRED S: 334 21 57 370 303	TERRY R. HAGOOD
						¥ of standar ¥ of ada park	d parking s (Ing spaces)	ACES: 324 20 57 361 295 10 1 0 9 8	NO SISTERE
					<u>د</u> ۲	Calculations Xisting Build New Building Ot Acreage	3 ING AREA FOOTPRINT	73,071 SF REA 2,717 SF 322,388 SF 7.401 Ac.	THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960
								LEGEND	THIS DRAWING MAY NOT BE MODIFIED WITHOUT THE EXPRESS WHITEN CONSENT OF THE ENGINEER, AND THEN ONLY IN ACCORDANCE WITH THE RULES OF THE TEXAS ENGINEERING PRACTICE ACT.
								O IRON ROD FOUND/SET CONCRETE MONUMENT FOUND/SET ▲	JOB NO.18-021 © 2019 HEA, Inc. DATE SIGNED: 10/04/2019 ISSUED FOR: <u>AGENCY REVIEW</u>
	[PIPE FOUND S STORMWATER MANHOLE (DRAWN TO SCALE)	
1								JUNCTION BOX (DRAWN TO SCALE) GRATE INLET (DRAWN TO SCALE)	
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	<i> </i> - FC	DUND 1/2" IRON	ROD					EXISTING UNDERGROUND TELEPHONE LINE W - EXISTING WATER LINE (SIZE VARIES)	
	-•								
								EXISTING TREE TO REMAIN (SIZE VARIES)	
N S	EY SPECIES	STATUS	TREE NUMBER	CALIPERS	TREE SURV	EY SPECIES	STATUS	EXISTING TREE TO BE REMOVED (SIZE VARIES)	
	OAK OAK	TO REMAIN TO REMAIN	2,776 2,777	13 18"	13.00" 0.00"	OAK LIVE OAK	TO REMAIN TO REMAIN		
	OAK TWIN OAK	TO REMAIN	2,779 2,780	27.7 22.5	27.70" 22.50"	OAK TWIN	TO REMAIN TO REMAIN		
	OAK OAK	TO REMAIN	2,781 2,782	31	31.00 ⁴ 15.00 ⁹	OAK HACKBERRY	TO REMAIN TO REMAIN	<u>NOTE</u>	
	OAK OAK	TO REMAIN	2,783 2.784	13	13.00"	HACKBERRY	TO REMAIN	1. EXISTING DOUBLE DUMPSTER LOCATED AT THE NORTH EAST CORNER OF THE YMCA OF GREATER WILLIAMSON COUNTY ROUND ROCK TRACT WILL BE UTILIZED AT THE DUMPSTER ENCLOSURE FOR THIS PROJECT.	2
	OAK	TO REMAIN	2,785	9.5 0.5	9.50" 9.50"	HACKBERRY	TO REMAIN		REVISIO
	OAK	TO REMAIN	2,787	7.3	7.00"	HACKBERRY	TO REMAIN	CONTRACTOR FIFT D SET	HION I
	OAK TWIN	TO REMAIN	2,789	1	7.00"	HACKBERRY	TO REMAIN	This plan set shall remain on the site or subdivision	DESCR
	OAK OAK	TO REMAIN	2,790 2,791	18.7 28	18.70" 28.00"	OAK TWIN OAK	IO REMAIN TO REMAIN	premises for the life of the project and shall be utilized for any and all improvements	
	OAK OAK TWIN	TO REMAIN TO REMAIN	2,792 2,793	15 12	15.00" 12.00"	OAK OAK	TO REMAIN TO REMAIN	contained herein.	00
	OAK TWIN OAK TWIN	TO REMAIN	2,794 2,795	6 22.45	6.00" 22.45"	HACKBERRY OAK CLUSTER	TO REMAIN TO REMAIN		HEA PROJECT NO.18-021
	ОАК ОАК	TO REMAIN	2,796 2,797	8	8.00" 7.00"	OAK OAK	TO REMAIN TO REMAIN		- 1990ED DAIE: 10/04/2019
	OAK OAK	TO REMAIN TO REMAIN	2,798 2,799	12 18	12.00" 18.00"	HACKBERRY OAK	TO REMAIN TO REMAIN		OVERALL SITE PLAN
	OAK OAK	TO REMAIN	2,800 2,801	6.5	6.00" 6.50"	ELM HACKBERRY	TO REMAIN		SHEET NO.
	OAK TWIN	TO REMAIN	2,802 2.803	7.5	7.50" 9 กก"	HACKBERRY	TO REMAIN		SP1
	~71/	DE ALIVIQUEU	2,000		7.00	CI III V WLNAT	I TO ALIVUIY		06

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AVHEA Projects/Projects 18-000/18-021 Chasco YMCA/CAL

SITE PLAN NO. SDP1904-0001

As-Built ENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK STANDARD CONSTRUCTION SPECIFICATIONS.
- ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., NOT PLANNED FOR DESTRUCTION OR REMOVAL THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE
- THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER WHO SHALL BE RESPONSIBLE FOR REVISING THE PLANS AS APPROPRIATE.
- MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL PAVING CONSTRUCTION.
- THE CONTRACTOR SHALL GIVE THE CITY OF ROUND ROCK 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. TELEPHONE (512) 218-7043 (DEVELOPMENT SERVICES DEPARTMENT).
- ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE RENEGOTIATED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. RENEGOTIATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING. AT THE CONTRACTOR'S OPTION. HOWEVER, THE TYPE OF RENEGOTIATION MUST EQUAL OR EXCEED THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION UNLESS NOTED OTHERWISE.
- PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL CONVENE A RECONSTRUCTION CONFERENCE BETWEEN THE CITY OF ROUND ROCK, HIMSELF, THE CONTRACTOR, OTHER UTILITY COMPANIES, ANY AFFECTED PARTIES AND ANY OTHER ENTITY THE CITY OR ENGINEER MAY REQUIRE.
- THE CONTRACTOR AND THE ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. THE ENGINEER SHALL FURNISH THE CITY OF ROUND ROCK ACCURATE "AS-BUILT" DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS-BUILT" DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE PUBLIC WORKS DEPARTMENT PRIOR TO FINAL ACCEPTANCE.
- THE ROUND ROCK CITY COUNCIL SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.
- WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND ANY TEMPORARY EASEMENTS. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. CLEAN-UP SHALL BE TO THE SATISFACTION OF THE ENGINEER.
- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
- AVAILABLE BENCHMARKS THAT MAY BE UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT ARE DESCRIBED AS FOLLOWS
- TBM #1 SANITARY SEWER MANHOLE $ELEV = 744.66^{\circ}$
- TBM #2 SANITARY SEWER MANHOLE LID
- ELEV = 748.01'
- PLANE COORDINATE SYSTEM = CENTRAL ZONE, NAD 83, 93 ADJUSTMENT VERTICAL DATUM - NAVD88 (GEOID MODEL 2012-A) BASED ON COOPERATIVE GPS RTK NETWORK.

TRENCH SAFETY NOTES:

- IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT ARE DESCRIBED IN SECTION 312333 OF THE SPECIFICATIONS. AN ENGINEERED TRENCH SAFETY PLAN SHALL BE SUBMITTED PRIOR TO ANY EXCAVATION.
- IN ACCORDANCE WITH THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4 FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
- IF TRENCH SAFETY SYSTEM DETAILS WERE NOT PROVIDED IN THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS. THAN 5 FEET IN DEPTH AND DURING CONSTRUCTION IT IS FOUND THAT TRENCHES ARE IN FACT 5 FEET OR MORE IN DEPTH OR OR TRENCHES LESS THAN 5 FEET IN DEPTH ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE ENGINEER NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE RETAINED AND COPIES SUBMITTED TO THE CITY OF ROUND ROCK.

STREET AND DRAINAGE NOTES:

- ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE CITY INSPECTOR AND HE SHALL BE GIVEN A MINIMUM OF 24 HOURS NOTICE PRIOR TO ANY TESTING. TELEPHONE (512) 218-5555 (INSPECTIONS).
- BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 3" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE.
- DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE TY, WATER SERVICES, ETC., SHALL BE A MINIMUM OF 30" BELOW UPGRADE.
- STREET RIGHTS-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OF-WAY AT 1/4" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY OF ROUND ROCK DEVELOPMENT SERVICES DEPARTMENT
- BARRICADES BUILT TO CITY OF ROUND ROCK STANDARDS SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY
- ALL R.C.P. SHALL BE MINIMUM CLASS III.
- THE UPGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BY: ALLIANCE ENGINEERING GROUP, INC. IN A REPORT DATED FEBRUARY 2017, AND THE PAVING SECTIONS DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF ROUND ROCK DESIGN CRITERIA. THE PAVING SECTIONS ARE TO BE CONSTRUCTED AS FOLLOWS: SEE DETAIL SHEET 17/C70
- MAC THICKNESS FLEXIBLE BASE THICKNESS STATION STREET LIME STABILIZATION THICKNESS
- THE GEOGRAPHICAL ENGINEER SHALL INSPECT THE UPGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT, ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISION OF THE CONSTRUCTION PLANS.
- WHERE PI'S ARE OVER 20, UPGRADES MUST BE STABILIZED UTILIZING A METHOD ACCEPTABLE TO THE CITY ENGINEER. THE GEOGRAPHICAL ENGINEER SHALL RECOMMEND AN APPROPRIATE UPGRADE STABILIZATION IF SULFATES ARE DETERMINED TO BE PRESENT

CITY OF ROUND ROC

WATER AND WASTEWATER NOTES:

- 1. PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AIWA C-900, MIN. C 200). WATER SERVICES (2" OR LESS) SHALL BE POLYETHYLENE TUBING
- 2 PIPE MATERIAL FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AIW RATED OR DUCTILE IRON (AIWA C-100, MIN, CLASS 200). PIPE MATERI (ATM D2241 OR D3034, MAX. DR-26), DUCTILE IRON (AIWA C-100, MI
- UNLESS OTHERWISE DIRECTED BY THE CITY ENGINEER, DEPTH OF CO 42" MINIMUM AND DEPTH OF COVER FOR ALL LINES UNDER PAVEMEN
- 4. ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON PIPE (AIWA C-100,
- 5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-M EQUAL ACCEPTED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR AT (512) 2 HIM AT LEAST 48 HOURS PRIOR TO CONNECTING TO EXISTING LINES.
- ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND CO PAVEMENT SHALL HAVE BOLTED COVERS. TAPPING OF FIBERGLASS M
- THE CONTRACTOR MUST OBTAIN A BULK WATER PERMIT OR PURCHA 8 DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED
- LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WAT ROCK INSPECTOR, TELEPHONE (512) 218-3241.
- THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES DISINFECTING MATERIAL), AND NECESSARY LABOR REQUIRED FOR TH PROCEDURE SHALL BE MONITORED BY CITY OF ROUND ROCK PERSO CITY OF ROUND ROCK TO VERIFY EACH TREATED LINE HAS ATTAINED WHERE MEANS OF FLUSHING IS NECESSARY, THE CONTRACTOR, AT H REMOVE SAID DEVICES PRIOR TO FINAL ACCEPTANCE BY THE CITY OF
- SAMPLING TAPS SHALL BE BROUGHT UP TO 3 FEET ABOVE GRADE AN AT THE CONTRACTOR'S REQUEST, AND IN HIS PRESENCE, SAMPLES FO THE CITY OF ROUND ROCK NOT LESS THAN 24 HOURS AFTER THE TR CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER SUPPLY A CHECK OR MONEY ORDER, PAYABLE TO THE CITY OF ROUN EACH WATER SAMPLE. CITY OF ROUND ROCK FEE AMOUNTS MAY BE DEPARTMENT AT (512) 218-7043.
- 12. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM QUALITY TESTIN PIPE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED ANI AND GAUGES), SUPPLIES AND LABOR NECESSARY TO PERFORM THE TE MONITORED BY CITY OF ROUND ROCK PERSONNEL.
- 13. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF THAN 24 HOURS NOTICE PRIOR TO PERFORMING STERILIZATION, QU
- 14. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS
- ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.

CURB VALVE

16. ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS S

WATER SERVICE "W" ON TOP OF CURB WASTEWATER SERVICE "S" ON TOP OF CURB VI ON FACE OF CURB

TOOLS FOR MARKING THE CURB SHALL BE PROVIDED BY THE CONTRA SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHO SPECIFIED BY THE ENGINEER AND ACCEPTED BY THE CITY OF ROUND

- CONTACT THE CITY OF ROUND ROCK DEVELOPMENT SERVICES DEPAR OBTAINING EXISTING WATER AND WASTEWATER LOCATIONS.
- 18. THE CITY OF ROUND ROCK FIRE DEPARTMENT SHALL BE NOTIFIED 48 SPRINKLER PIPING IN ORDER THAT THE FIRE DEPARTMENT MAY MONITOR
- 19. SAND, AS DESCRIBED IN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE LINES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, P OCCURRING OR MANUFACTURED STONE MATERIAL CONFORMING TO FOLLOWING GRADATION SPECIFICATION.

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#1	0		9	5-100	

- 20. THE CONTRACTOR IS HEREBY NOTIFIED THAT CONNECTING TO, SHU LINES, MAY HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE POSSIBLY BETWEEN 12 A.M. AND 6 A.M.
- 21. ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH QUALITY (ATC) REGULATIONS, 30 ATC CHAPTER 213 AND 317 OR 217 ROUND ROCK SPECIFICATIONS CONFLICT, THE MORE STRINGENT SH

TRAFFIC MARKING NOTES:

- 1. ANY METHODS, STREET MARKINGS AND SIGNAGE NECESSARY FOR WA DIVERTING TRAFFIC DURING CONSTRUCTION SHALL CONFORM TO TH DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITION.
- 2. ALL PAVEMENT MARKINGS, MARKERS, PAINT, TRAFFIC BUTTONS, TRAFF ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION ST HIGHWAYS, STREETS AND BRIDGES AND, THE TEXAS MANUAL OF UNIFO HIGHWAYS, LATEST EDITIONS.

EROSION AND SEDIMENTATION CONTROL NOTES: 1. EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK

- ROUND ROCK EROSION AND SEDIMENTATION CONTROL ORDINANCE ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GR AREA AND SEASON IN WHICH THEY ARE APPLIED.
- 3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS AND SIMILARLY RE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SED SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY THE CITY OF ROUND ROCK FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY ENGINEER, THEY ARE WARRANTED.
- 4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE PROJECT BY THE ENGINEER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.
- 5. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.

OTES

CK GENERAL CONSTRUCTION	<u>N N</u>	10
CLASS 200), OR DUCTILE IRON (AIWA C-100, MIN. CLASS (BLACK, 200 PSI, DR 9),	TR 1.	EE A C
VA C-900, MIN. CLASS 150), SDR-26 HIGH PRESSURE IAL FOR GRAVITY WASTEWATER MAINS SHALL BE PVC VIN. CLASS 200).	2.	A C Pl
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OF ALL POTABLE WATER LINES CONSTRUCTED AND	7. 7.	E) F(1.
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D SHALL BE EASILY ACCESSIBLE FOR CITY PERSONNEL. DR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY		PF Re
REATED LINE HAS BEEN FLUSHED OF THE APPROVED BY THE CITY. THE CONTRACTOR SHALL ND ROCK, TO COVER THE FEE CHARGED FOR TESTING OBTAINED BY CALLING THE DEVELOPMENT SERVICES	9. 10.	W W Al G
NG FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE D SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS ESTS. QUALITY AND PRESSURE TESTING SHALL BE	11,	Al T(Re B/
ROUND ROCK INSPECTOR AND PROVIDE NO LESS IALITY TESTING OR PRESSURE TESTING.	12.	PR EC
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ACTOR, OTHER APPROPRIATE MEANS OF MARKING OUT CURBS, SUCH MEANS OF MARKING SHALL BE AS	16.	N(W
RTMENT AT (512) 218-7043 FOR ASSISTANCE IN	17.	PR Be Pr
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ECOGNIZED TECHNIQUES AND MATERIALS SHALL BE DIMENTATION LOADING OF DOWNSTREAM FACILITIES.	U.	- I K

- PROTECTION NOTES
 - ALL TREES NOT LOCATED WITHIN THE LIMITS OF CONSTRUCTION AND OUTSIDE OF DISTURBED AREAS SHALL BE PRESERVED. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL TREES TO BE PRESERVED FROM HIS ACTIVITIES.
 - ALL TREES SHOWN TO BE RETAINED WITHIN THE LIMITS OF CONSTRUCTION ON THE PLANS, SHALL BE PROTECTED DURING CONSTRUCTION WITH FENCING. SEE: TREE PROTECTION TREE WELLS (EC-06), TREE PROTECTION TREE LOCATION (EC-07) AND TREE ROTECTION FENCE-CHAIN LINK (EC-08).
 - TREE PROTECTION FENCES SHALL BE ERECTED ACCORDING TO CITY STANDARDS FOR TREE PROTECTION, INCLUDING TYPES OF FENCING AND SIGNAGE.
- TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING, OR GRADING) AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT
- ROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DILLIES.
- ENCES SHALL COMPLETELY SURROUND THE TREE OR CLUSTERS OF TREES, LOCATED AT THE OUTERMOST LIMITS OF THE TREE BRANCHES (PIPELINE) OR CRITICAL ROOT ZONE (CRUZ), WHICHEVER IS GREATER; AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
- SOIL COMPACTION IN CRUZ AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIAL. CRUZ DISTURBANCES DUE TO GRADE CHANGES OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE FORESTRY MANAGER.
- WOUNDS TO EXPOSED ROOTS, TRUNK, OR LIMBS BY MECHANICAL EQUIPMENT OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING, AND FIRES.
- XCEPTIONS TO INSTALLING TREE FENCES AT THE TREE DILLIES OR CRUZ, WHICHEVER IS GREATER, MAY BE PERMITTED IN THE
- OLLOWING CASES: WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, OR TREE WELL;
- HERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA. HERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN 6 FEET TO THE BUILDING. HERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE FORESTRY MANAGER TO DISCUSS ALTERNATIVES.

IERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE THAT IS CLOSER THAN 5 FEET TO A TREE TRUNK, THE TRUNK SHALL BE ROTECTED BY STRAPPED-ON PLANKING TO A HEIGHT OF 8 FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE EDUCED FENCING PROVIDED.

- WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN AREAS OF UNPROTECTED ROOT ZONES UNDER THE PIPELINE OR CRUZ. WHICHEVER IS GREATER, THOSE AREAS SHOULD BE COVERED WITH 4 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION.
- ALL GRADING WITHIN CRUZ AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE. PRIOR TO RADING, RELOCATE PROTECTIVE FENCING TO 2 FEET BEHIND THE GRADE CHANGE AREA.
- NY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL AND BACKFILLED WITH GOOD QUALITY OP SOIL WITHIN TWO DAYS. IF EXPOSED ROOT AREAS CANNOT BE BACKFILLED WITHIN 2 DAYS, AN ORGANIC MATERIAL WHICH EDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION SHALL BE PLACED TO COVER THE ROOTS UNTIL ACKFILL CAN OCCUR.
- RIOR TO EXCAVATION OR GRADE CUTTING WITHIN TREE DILLIES, A CLEAN CUT SHALL BE MADE WITH A ROCK SAW OR SIMILAR QUIPMENT, IN A LOCATION AND TO A DEPTH APPROVED BY THE FORESTRY MANAGER, TO MINIMIZE DAMAGE TO REMAINING OOTS.
- REES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES WILL BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT. DRY WEATHER. TREE CROWNS ARE TO BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON LEAVES.
- WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, A PLASTIC VAPOR BARRIER SHALL BE PLACED BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE CRUZ.
- NY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE RUNKS AS POSSIBLE.
- O LANDSCAPE TOPSOIL DRESSING GREATER THAN FOUR (4) INCHES SHALL BE PERMITTED WITHIN THE PIPELINE OR CRUZ OF TREES. HICHEVER IS GREATER. NO TOPSOIL IS PERMITTED ON ROOT FLARES OF ANY TREE.
- RUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND CONSTRUCTION EQUIPMENT SHALL TAKE PLACE EFORE CONSTRUCTION BEGINS. ALL PRUNING MUST BE DONE ACCORDING TO CITY STANDARDS AND AS OUTLINED IN LITERATURE ROVIDED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA PRUNING TECHNIQUES).
- ALL OAK TREE CUTS, INTENTIONAL OR UNINTENTIONAL, SHALL BE SEALED WITH AN APPROVED PRUNING SEALER IMMEDIATELY (WITHIN O MINUTES). TREE PAINT MUST BE KEPT ON SITE AT ALL TIMES.
- HE FORESTRY MANAGER HAS THE AUTHORITY TO REQUIRE ADDITIONAL TREE PROTECTION BEFORE OR DURING CONSTRUCTION.
- REES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED. REFER TO THE TTY OF ROUND ROUND ROCK TREE TECHNICAL MANUAL FOR APPROPRIATE REMOVAL METHODS.
- RIOR TO CONSTRUCTION, ALL LOWER TREE LIMBS OVER ROADWAYS MUST BE PRUNED TO A HEIGHT OF 14 FEET USING THE ECHNIQUES DESCRIBED IN THE CITY OF ROUND ROCK TREE TECHNICAL MANUAL
- EVIATIONS FROM THE ABOVE REQUIREMENTS AND NEGLIGENT DAMAGE TO TREES MAY BE CONSIDERED AS ORDINANCE IOLATIONS.

JENCE OF CONSTRUCTION:

- **VSTALL TREE PROTECTION AS NOTED ON APPROVED SITE PLAN.**
- ISTALL EROSION CONTROLS AS INDICATED ON APPROVED SITE PLAN.
- CHEDULE PRE CONSTRUCTION MEETING WITH THE CITY OF ROUND ROCK INSPECTION DEPT., CONTRACTOR, UTILITY ONTRACTOR, AND ENGINEER. (512) 218-6607.
- VALUATION OF TEMPORARY EROSION CONTROL INSTALLATION. REVIEW CONSTRUCTION SCHEDULE AND THE EROSION ONTROL PLAN
- DBTAIN APPROVAL OF TREE PROTECTION BY PS STAFF. OBTAIN APPROVAL OF EROSION CONTROL MEASURES. BTAIN APPROVAL FROM CITY OF ROUND ROCK FIRE MARSHAL REGARDING CONSTRUCTION SEQUENCING AND PHASING. EGIN SITE CLEARING.
- ISTALL TEMPORARY SEDIMENTATION PONDS AND ROUGH GRADE SITE. INSPECT AND MAINTAIN ALL CONTROLS AS PER ENERAL NOTES.
- **ONSTRUCT SITE UTILITIES.**
- ID-CONSTRUCTION ON-SITE MEETING TO COORDINATE CHANGES IN CONSTRUCTION SCHEDULE AND EVALUATE FECTIVENESS OF EROSION CONTROL PLAN (CITY INSPECTOR, PROJECT ENGINEER, GENERAL CONTRACTOR).
- ONSTRUCT PAVING, PARKING AND BUILDINGS.
- CHEDULE AND ATTEND PROJECT CLOSEOUT MEETING WITH CORER PS.
- OMPLETE CONSTRUCTION AND INSTALL LANDSCAPING.
- EVELOP AND SUBMIT FOR CORER PS REVIEW DETENTION / W.Q. POND BMP REPORT AND FILE WITH WILLIAMSON COUNTY **ROVIDE AS-BUILTS TO ENGINEER.**
- RENEGOTIATE DISTURBED AREAS OR COMPLETE A DEVELOPERS CONTRACT FOR THE RE-VEGETATION ALONG WITH THE ENGINEERS CONCURRENCE LETTER.
- Q. PROJECT ENGINEER INSPECTS JOB AND WRITES CONCURRENCE LETTER TO THE CITY. FINAL INSPECTION IS SCHEDULED UPON RECEIPT OF THE LETTER
- R. RECEIVE CITY CLEARANCE FOR OCCUPANCY.

S. REMOVE TEMPORARY EROSION/SEDIMENTATION CONTROLS.

 THE NAME OF THE APPROVED PROJECT; THE ACTIVITY START DATE; AND

- APPROVAL LETTER.
- STABILIZED.
- ETC.
- PREVENTED FROM BEING DISCHARGED OFFSITE.
- SITE
- 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.
- ANY OF THE FOLLOWING:
- STRUCTURES:
- PREVENT POLLUTION OF THE EDWARDS AQUIFER:

POLLUTION ABATEMENT PLAN.

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ATC WPAP NOTES

(REV. 7/15/15) TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL CONSTRUCTION NOTES

A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE ATC REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE

THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE ATC 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

IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION. ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE ATC REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE ATC HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY

ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS. SENSITIVE FEATURES.

SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN TCEQ-0592 WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.

LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE

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

IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE ATC UPON REQUEST

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

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

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

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-------------------------------EXISTING FIBER OPTIC LINE



CONTRACTOR FIELD SET This plan set shall remain on the site or subdivision premises for the life of the project and shall be utilized for any and all improvements contained herein.

CITY OF ROUND ROCK PUBLIC IMPROVEMENT SUMMARY TABLES

0175	WASTEWATER						
SIZE	TYPE	LENGTH (LF)	VOL (GAL)				
PR 26	SDR-26 PVC	290.5000	758.5000				

CITE	WATER						
ЭIZE	ТҮРЕ	LENGTH (LF)	VOL (GAL)				
5ª	D.I	20	29.3749				
3"	BLACK POLY.	28	10.2812				
8	PVC	180.5	471.3039				
3"	DI	21.5	56.1387				

VAT	ER METER	
	QTY	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1

WASTEWATER MANHOLES QTY SIZE 2 4 5' 6'

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	G	ATE VAI	VES
	SIZE TO	таі	BRAND

GATE VALVES							
SIZE	TOTAL	BRAND					
2 "	1	CLOW					
6"	2	CLOW					
8"	2	CLOW					

LEGEND IRON ROD FOUND/SET CONCRETE MONUMENT FOUND/SET NAIL FOUND/SET PIPE FOUND STORMWATER MANHOLE (DRAWN TO SCALE) JUNCTION BOX (DRAWN TO SCALE) GRATE INLET (DRAWN TO SCALE) WASTEWATER MANHOLE (DRAWN TO SCALE) WASTEWATER CLEANOUT GAS TEST STATION GAS METER ELECTRIC METER LIGHT POLE SIGNAL LIGHT POLE UTILITY POLE **TELEPHONE MANHOLE** FIRE HYDRANT GATE VALVE IRRIGATION CONTROL VALVE WATER METER **EXISTING CONTOURS** - PROPOSED CONTOUR PROPOSED CURB AND GUTTER — PROPOSED ASPHALT - PROPOSED X" DIA. GAS LINE

PROPOSED X" DIA. STORM SEWER LINE PROPOSED X" DIA. WASTEWATER LINE - PROPOSED X" DIA. WATER LINE - EXISTING CHAIN LINK FENCE - EXISTING WIRE FENCE - EXISTING WOOD FENCE - SETBACK LINE EASEMENT LINE - EXISTING ASPHALT - EXISTING OVERHEAD ELECTRIC LINE EXISTING UNDERGROUND ELECTRIC LINE EXISTING OVERHEAD TELEPHONE LINE - EXISTING UNDERGROUND TELEPHONE LINE EXISTING WATER LINE (SIZE VARIES)

BENCHMARK LOCATION

EXISTING TREE TO REMAIN (SIZE VARIES)

EXISTING TREE TO BE REMOVED (SIZE VARIES)

X Ĩ. Ċ. 0 0 -SITI 80

HAGOOD

900 E. Main Street

Round Rock, TX 78664

Phone (512) 244-1546

TBPE Registration No. F-12709

*

TERRY R. HAGOOD

: 52960

THE SEAL APPEARING ON THIS DOCUMENT WA

EXPRESS WRITTEN CONSENT OF THE ENGINEER, AND THEN ONLY IN ACCORDANCE WITH THE RULES OF THE TEXAS ENGINEERING PRACTICE ACT.

52960 IS DRAWING MAY NOT BE MODIFIED WIT

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DATE SIGNED: 10/04/2019 ISSUED FOR: AGENCY REVIEW

DRIZED BY TERRY R. HAGOOD, P.I

Fax (512) 244-1010

www.heaeng.com



SDP1904-000





100 _____ 100 X" GAS LINE X" STORM SEWER LIN X" WASTEWATER LIN X" WATER LINE _____ — — X— — _____ سمي مسيد سي _____ _ _ _ W _ _ _ — — — FM — — (10) (... \sim

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itan Silis	EXISTING FIBER OPTIC LINE
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BENCHMARK LOCATION EXISTING TREE TO REMAIN (SIZE VARIES)

> EXISTING TREE TO BE REMOVED (SIZE VARIES)

CONTRACTOR FIELD SET This plan set shall remain . on the site or subdivision premises for the life of the project and shall be utilized for any and all improvements contained herein.

NOTE 1. ALL DIMENSIONS ARE TO THE BACK OF CURB UNLESS OTHERWISE NOTED.

EXISTING ADA RAMP . Luna _ _ - - - -WATER LINE EASEMENT-VACATED DOC. # 2009033955 OPRWC P.U.E. DOC. # 2009015825 OPRWC PUE VACATED # 2020159136 ----in a second seco EXW TBM #1 SANITARY SEWER MANHOLE ELEV. 748.01 EX SSMH TG=776.55 24/ FL (OUT)(SE)=74 18 HE (IN) INWI=742 8

WOOD FENC

g 14,2020-11:26am Z:\HEA\HEA Projects\Projects 18-000\18-021 Chasco YMCA\CAD Files\Civi\SD\18-021

Te 75	exas Commission on Environmental Quality S Removal Calculations 04-20-2009	
80	<u>The Required Load Reduction for the total project:</u> Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$	POD E. Main Street Round Rock, TX 78444
	where: L _{M TOTAL PROJECT} = Required TSS removal resulting from the proposed development = 80% of increased loc A _N = Net increase in impervious area for the project P = Average annual precipitation, inches Site Data: Determine Required Load Removal Based on the Entire Project County = Williamson	ad Phone (512) 244-1546 Fax (512) 244-1010 www.heaeng.com TBPE Registration No. F-12709
	Total project area included in plan * = 4.88 acres Predevelopment impervious area within the limits of the plan * = 0.00 acres Total post-development impervious area within the limits of the plan * = 3.45 acres Total post-development impervious cover fraction * = 0.71 acres P = 32 inches	TERRY R. HAGOOD
	L _{M TOTAL PROJECT} = 3003 [°] lbs. he values entered in these fields should be for the total project area. Number of drainage basins / outfalls areas leaving the plan area ≓ ↑	52960 52960 52960 50 50 50 50 50 50 50 50 50 5
	vrainage Basin Parameters (This information should be provided for each basin): Drainage Basin/Outfall Area No. = 1 Total drainage basin/outfall area = 4.88 acres	THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGGOD, P.E. 52960
	Predevelopment impervous area within drainage basin/outfail area = 0.00 acres Post-development impervous area within drainage basin/outfail area = 3.45 acres Post-development impervous fraction within drainage basin/outfail area = 0.71 L _{M THIS BASIN} = 3003 Ibs.	THIS DRAWING MAY NOT BE MODIFIED WITHOUT THE EXPRESS WRITEN CONSENT OF THE ENGINEER, AND THEN ONLY IN ACCORDANCE WITH THE RULES OF THE TEXAS ENGINEERING PRACTICE ACT. JOB NO. 18-021 © 2019 HEA, Inc.
5.0 ENTRY/ENT	Proposed BMP = Sand Filter Removal efficiency = 89 percent Bioretention Contech StormFilter Contech StormFilter Contech Wetland	DATE SIGNED: 10/04/2019 ISSUED FOR: AGENCY REVIEW
	Extended Detention Grassy Swale Retention / Irrigation Sand Filter Stormoeptor Vecetated Filter Strips	
	Vortechs Wet Basin Wet Vault BC 348 Page 3 33 Equation 3.7. L = (BMP efficiency) x P x (A, x 34.6 + A, x 0.54)	
N/ NRWC 1 OPRIVC	where: CONTRACTOR FIELD SET This plan sot shall associate the set of the se	S S
	on the site or subdivision $A_c = 4.88$ acres premises for the life of the $A_i = 3.45$ acres project and shall be utilized $A_p = 1.43$ acres for any and all impression and $L_R = 3422$ lbs	EMENT NN HWAY
5. C	Contained herein. alculate Fraction of Annual Runoff to Treat the drainage basin / outfall area Desired L _{M THIS BASIN} = 2655 ¹ lbs	APROVI DDITIC TE HIG X 7866
<u>6. c</u>	F = 0.78 . alculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36	IENT IN MCA A ERSTA OCK, 1
	Rainfall Depth = 1.00 inches Post Development Runoff Coefficient = 0.51 .51 On-site Water Quality Volume = 9082 cubic feet Calculations from RG-348 Pages 3-36 to 3-37	ELOPM ASCO Y TH IN1 UND R
	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	I NGR
The The Sector	Storage for Sediment = 1816 Total Capture Volume (required water quality volume(s) x 1.20) = 10899 cubic feet following sections are used to calculate the required water quality volume(s) for the selected BMP. values for BMP Types not selected in cell C45 will show NA. liter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63	1 80
	<u>9A. Full Sedimentation and Filtration System</u> Water Quality Volume for sedimentation basin = 10899 cubic feet Minimum filter basin area = 505 ¹ square feet	
 ENTRY/BAT P	Maximum sedimentation basin area = 4541 square feet For minimum water depth of 2 feet Minimum sedimentation basin area = 1135 square feet For maximum water depth of 8 feet 9B. Partial Sedimentation and Filtration System 5 5 5	
T WHOUGHT IRON	Water Quality Volume for combined basins = 10899 cubic feet Minimum filter basin area = 908 square feet Maximum sedimentation basin area = 3633 square feet	
STORA CONC-7	Detention Pond Depth v. Storage v. Outflow	
	Elevation Depth Accumul. Area Volume Accumul. allow.rel Outflow Remarks [ft] [ft] Depth [ft] [sq. ft] [cu. Ft.] Volume [cu.ft.] [cfs] [cfs] 741 0 0 0.0 0.0 0.00 0.00 741.1 0.1 359.5 36.0 36.0 0.17	
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[*] 24 (DISTURBED) 	741.6 0.1 0.6 2137.0 213.7 753.0 1.22 741.7 0.1 0.7 2516.5 251.7 1006.6 1.58 741.8 0.1 0.8 2876.0 287.6 1294.2 1.94 741.9 0.1 0.9 3235.5 323.6 1617.8 2.30	TION
	742 0.1 1 3595.0 359.5 1977.3 2.00 742.1 0.1 1.1 3664.2 366.4 2343.7 3.02 742.2 0.1 1.2 3733.4 373.3 2717.0 3.38 742.3 0.1 1.3 3802.6 380.3 3097.3 3.74	DESCRIP
	742.4 0.1 1.4 3871.8 387.2 3484.5 4.10 742.5 0.1 1.5 3941.0 394.1 3878.6 4.46 742.6 0.1 1.6 4010.2 401.0 4279.6 4.98 742.7 0.1 1.7 4079.4 407.9 4687.5 5.49	DATE
	742.8 0.1 1.8 4148.6 414.9 5102.4 6.01 742.9 0.1 1.9 4217.8 421.8 5524.2 6.52 743 0.1 2 4287.0 428.7 5952.9 7.04 743.1 0.1 2.1 4340.1 434.0 6386.0 7.55	HEA PROJECT NO. 18-021
lemarks N.Q. pond	743.2 0.1 2.2 4393.2 439.3 6826.2 8.07 743.3 0.1 2.3 4446.3 444.6 7270.8 8.58 743.4 0.1 2.4 4499.4 449.9 7720.8 9.10	DEVELOPED DRAINAGE AREA
o Ex. Channnel Detention Pond Detention Pond	143.5 0.1 2.5 455.3 8176.0 9.61 743.6 0.1 2.6 4605.6 460.6 8636.6 10.37 743.7 0.1 2.7 4658.7 465.9 9102.4 11.13 743.8 0.1 2.8 4711.8 471.2 9573.6 11.89	MAP
Ex. Channel Ex. Channel	743.9 0.1 2.9 4764.9 476.5 10050.1 12.65 744 0.1 3 4818.0 481.8 10531.9 13.42 744.1 0.1 3.1 4818.0 481.8 11013.7 14.18 744.12 0.02 3.12 4818.0 96.4 11110.1 14.33 14.24 100 year	C50B
Detention Pond	744.2 0.08 3.2 4818.0 385.4 11495.5 14.94 744.25 0.05 3.25 4818.0 240.9 11736.4 15.45	14 SITE PLAN NO. SDP1904-0001

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CONTRACTOR FIELD SET This plan set shall remain on the site or subdivision premises for the life of the Project and shall b project and shall be utilized for any and all improvements contained herein.

900 E. Main Street Round Rock, TX 78664 Phone (512) 244-1546 Fax (512) 244-1010 www.heaeng.com TBPE Registration No. F-12709 TE OF * TERRY R. HAGOOD 52960

J. P. GISTERE? NAL ONAL Om Rissont

HAGOOD

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960 THIS DRAWING MAY NOT BE MODIFIED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE ENGINEER, AND THEN ONLY IN ACCORDANCE WITH THE RULES OF THE TEXAS ENGINEERING PRACTICE ACT. JOB NO.18-021 © 2019 HEA, Inc. DATE SIGNED: 10/04/2019 ISSUED FOR: AGENCY REVIEW

DEVELOPMENT IMPROVEMENTS CHASCO YMCA ADDITION NORTH INTERSTATE HIGHWAY 35 ROUND ROCK, TX 78664 ž SITE 801

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35

HEA PROJECT NO.18-02 ISSUED DATE: 10/04/2019 STORM SEWER PROFILES SHEET NO. **C52**

16

SITE PLAN NO. SDP1904-0001

02 WASTEWATER PROFILES

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HAGOOD 900 E. Main Street Round Rock, TX 78664 Phone (512) 244-1546 Fax (512) 244-1010 www.heaeng.com TBPE Registration No. F-12709 × TERRY R. HAGOOD 52960 SISTER A Omy Risyort THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY TERRY R. HAGOOD, P.E. 52960 THIS DRAWING MAY NOT BE MODIFIED WITHOUT TH EXPRESS WRITTEN CONSENT OF THE ENGINEER, AND THEN ONLY IN ACCORDANCE WITH THE RULES OF TH TEXAS ENGINEERING PRACTICE ACT. JOB NO.18-021 © 2019 HEA, Inc. DATE SIGNED: 1/15/2020 ISSUED FOR: AGENCY REVIEW r Improvements A Addition Tate Highway 35 <, TX 78664

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-40.34 LF OF 6 150 PSI PRESSURE RATED PIPE AT 1.00% 013120-2 CONTRACTOR FIELD SET This plan set shall remain on the site or subdivision premises for the life of the project and shall be utilized for any and all improvements contained herein.

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EVELOPMENT II CHASCO YMCA / ORTH INTERSTA ROUND ROCK, '

SITE

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 $\bigtriangledown \blacksquare$ IEA PROJECT NO.18-0 ISSUED DATE: 10/31/2019 UTILITY PROFILES SHEET NO. **C61** SITE PLAN NO. SDP1904-0001

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THESE RECORD DRAWINGS ARE A COMBINATION OF THE SEALED LANDSCAPE ARCHITECTURE CONTRACT DRAWINGS FOR THIS PROJECT, MODIFIED BY ADDENDA, CHANGE ORDER, FIELD ORDER AND/OR INFORMATION FURNISHED BY THE CONTRACTOR AND/OR OTHERS NOT ASSOCIATED WITH THE LANDSCAPE ARCHITECT AND HAVE NOT BEEN FIELD VERIFIED BY THE LANDSCAPE ARCHITECT FOR ACCURACY OR COMPLETENESS.

RECORD DRAWINGS PREPARED BY - CHASCO, THE CONTRACTOR ON 09/24/2020

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			TREE	SURVEY			TREE	SURVEY	
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\sim		2,748	ĝ	9.00"	LIVE OAK	2,787	7.	7.00"	HACKBERRY
		2,749	13	13.00"	LIVE OAK	2,788	7	7.00*	HACKBERRY
		2,750	23	23.00*	OAK TWIN	2,789	7	7.00"	HACKBERRY
		2,751	12	12.00"	LIVE OAK	2,790	18.7	18.70"	OAK TWIN
		2,752	19	19.00"	LIVE OAK	2,791	28	28.00*	OAK
		2,753	24	24.00*	LIVE OAK	2,792	15	15.00"	OAK
		2,754	13	13.00"	LIVE OAK	2,793	12	12.00*	OAK
		2,755	14.5	14.50"	LIVE OAK	2,794	6	6.00"	HACKBERRY
		2,756	15.5	15.50"	LIVE OAK	2,795	22.45	22.45"	OAK CLUSTER
		2,757	18.5	18.50"	OAK TWIN	2,796	8	8.00"	OAK
		2,758	13.5	13.50"	LIVE OAK	2,797	10	7.00	
<u></u>		2,759	1/./	17.70	LIVE OAK	2,790	12	12.00	DAK
		2,761	13	13.00"	LIVE OAK	2,800	6	6.00"	ELM
15 dr. m		2,762	7	7.00*	LIVE OAK	2,801	6.5	6.50"	HACKBERRY
		2,763	10.5	10.50"	LIVE OAK	2,802	7.5	7.50*	HACKBERRY
		2,764	16.2	16.20"	OAK TWIN	2,803	9	9.00*	CHINABERRY
		2,765	25.2	25.20"	OAK TWIN	2,804	8.5	8.50*	RED OAK
		2,766	22.2	22.20"	OAK TWIN	2,805	12	12.00*	RED OAK
		2,767	24	24.00"	LIVE OAK	* 2,804	8.5	8.50*	RED OAK
		2,768	6	6.00"	LIVE OAK	* 2,805	12	12.00"	RED OAK
		2,769	<u></u> 11	11.00*	LIVE OAK	* 2,806	8	8.00*	CEDAR
		2,770	10	10.00"	LIVE OAK	* 2,807	8	8.00"	CEDAR
		2,771	16.5	16.50"	LIVE OAK	2,808	13	13.00"	CEDAR
		2,112	13.5	13.50"	DAK TUNK	+ 2,009	0	10.00" a.no*	CEDAR
		* 2.774	19.2 26 1	19.20 26.10*	LIVE OAK	+ 2.811	10	10.00*	CEDAR
		2.775	17.5	17.50"	LIVE OAK	* 2.812	8	8.00*	CEDAR
		2.776	13	13.00*	LIVE OAK	* 2,813	<u></u>	11.00*	CEDAR
		2,777	18"	0.00*	LIVE OAK	* 2,814	9.5	9.50*	CEDAR
		2,779	27.7	27.70"	OAK TWN	* 2,815	14.5	14.50"	CEDAR
		2,780	22.5	22.50*	OAK TWIN	* 2,816	8	8.00*	CEDAR
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11/2	KEY LEGEND
	NOTE: ITEMS LISTED BELO
$\left \right $	CONTRACTOR SHALL VERI
	① (861 SF) DECOR
	② (115 LF) STEEL B
	③ EXISTING CURB

PLANT SCI	HEDUL	E		
TREES	QTY	COMMON NAME / BOTANICAL NAME	CAL	DESCRIPTION
⊕	6	CEDAR ELM / ULMUS CRASSIFOLIA	65 GAL 3"CAL	10'-12'H X 5'-6'W 6' TRUNK HT.
	10	MONTERREY OAK / QUERCUS POPLYMORPHA	65 GAL 3"CAL	10°-12'H X 5°-6'W, 6' TRUNK HT.
SHRUBS	QTY	COMMON NAME / BOTANICAL NAME	DESCRIPTION	SPACING
*	10	BIG MUHLY / MUHLENBERGIA LINDHEIMERI	5 GAL PER TNLA STANDARDS & SPECS	36" O.C.
	18	HAMELN DWARF FOUNTAIN GRASS / PENNISETUM ALOPECUROIDES 'HAMELN'	1 GAL PER TNLA STANDARDS & SPECS	36" O.C.
*	147	MEXICAN FEATHERGRASS / STIPA TENUISSIMA	1 GAL PER TNLA STANDARDS & SPECS	36" O.C.
٢	15	SOFTLFEAF YUCCA / YUCCA RECURVIFOLIA	5 GAL PER TNLA STANDARDS & SPECS	36" O.C.
(,)	17	TEXAS SOTOL / DASYLIRION TEXANUM	5 GAL PER TNLA STANDARDS & SPECS	36" O.C.
۲	47	RED YUCCA / HESPERALOE PARVIFLORA	5 GAL PER TNLA STANDARDS & SPECS	36" O.C.
GROUND COVERS	QTY	COMMON NAME / BOTANICAL NAME	DESCRIPTION	SPACING
	42 CY	WASHED GRANITE GRAVEL MULCH 1/2" - 1" WITH NO FINES	3" DEPTH W/ WEED BARRIER. PROVIDE SAMPLE PRIOR TO STARTING CONSTRUCTION	
	106	SILVER PONYFOOT / DICHONDRA ARGENTEA	1 GAL PER TNLA STANDARDS & SPECS	24" O.C.
	53 LF	STEEL EDGING	3 16" RYERSON OR APPROVED EQUAL	

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LANDSCAPE PERMIT PLAN SDP 1904-0001

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2,782 15

2,784 6.5

2,785 9.5

-24x36

SCALE: 1"=30'-0"

15 30

03.08.2019 CODE ANALYSIS / SD PRICING SET 06.07.2019 SDP #1 SUBMITTAL 07.22.2019 SDP #2 SUBMITTAL

SDP #3 SUBMITTAL 09.17.2019

CEDAR

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10.50*

8.50*

8.50°

8.5

15.00" HACKBERRY * 2,818 10.5

6.50" HACKBERRY

2,786 9.5 9.50" HACKBERRY • - DENOTES TREE TO BE REMOVED

-12x18-60'

60

* 2,819

9.50" HACKBERRY * 2,821 13.5 13.50"

* 2,820 8.5

	APPROVED TREE TIE SYSTEM (SEE NOTES)	L	ANDSCAPE NUTES.
1	ORDER TO PREVENT SCARING, CUTTING, GIRDLING, OR OTHER DAMAGE TO TREE	1.	COMPLETE ALL LANDSCAPE PLANTING AND RELATED EARTHWORK INCLUDING ALL PRODUCTS, EQUIPMENT AND LABOR, FOR THE LANDSCAPE AREAS SHOWN ON THE DRAWING AND DESCRIBED IN THE SPECIFICATIONS.
2	STEEL STUDDED FENCE POST-STUDS MUST FACE AWAY FROM TREE	2.	ALL QUESTIONS SHOULD BE REFERRED TO THE PROJECT LANDSCAPE ARCHITECT.
3) APPROVED TREE TIE SYSTEM (SEE NOTES)	3.	INFORMATION PROVIDED ON THIS PLAN IS GENERAL IN NATURE. DIMENSIONS, LOCATIONS, AND AREAS ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO BIDDING & INSTALLATION.
4) EDGE OF TREE PIT	4.	QUANTITIES SHOWN FOR PLANT MATERIALS ARE APPROXIMATE. ACTUAL INSTALLED QUANTITIES OF PLANT
(5) TREE TRUNK		MATERIALS MAY VARY FROM THE PLAN AND SHOULD BE FIELD DETERMINED ACCORDING TO THE GIVEN SPACING AND FIELD CONDITIONS AND THE PLAN WHICH LIMIT THE CONTRACTOR
6) STUDDED STEEL FENCE POST, MIN. 8' LONG, EXTEND STAKE 18" BELOW GRADE		SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
(7	ONTRACTOR TO LEAVE 6" MIN. ROOT FLARE UNCOVERED BY MULCH, SOIL, AND PLANTING MIX	5.	BY BIDDING, THE CONTRACTOR ACKNOWLEDGES THAT THEY HAVE SATISFIED THEMSELVES AS TO THE NATURE AND LOCATION OF THE WORK AND TO THE QUALITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES INSOFAR AS THIS DATA IS REASONABLY ASCERTAINABLE FROM AN INSPECTION OF THE SITE. ANY FAILURE BY THE
8) PLACE TOP OF ROOT FLARE 2" ABOVE FINISH GRADE		CONTRACTOR TO ACQUAINT THEMSELVES WITH THE AVAILABLE INFORMATION WILL NOT RELIEVE THEM FROM
9) EXCAVATE HOLE 2X ROOT BALL DIAMETER		AS DESCRIBED.
(10	NEVER CUT LEADER-THIN UP TO 1/3 OF BRANCHES) RETAINING NATURAL SHAPE OF TREE - DO NOT LEAVE STUBS	6.	INSTALLATION OF ALL LANDSCAPING MUST BE COORDINATED WITH THE INSTALLATION OF RELATED IRRIGATION, SITE WORK, AND GRADING.
(11) APPROVED TIE SYSTEM ABOVE BOTTOM BRANCH	7.	UNLESS SPECIFICALLY NOTED, INSTALL ALL MASSED PLANTING UTILIZING EQUILATERAL TRIANGULAR SPACING.
(12) STAKE ALL TREES USING METAL STAKES-3 PER TREE	8.	EVENLY APPLY 3" OF MULCH TO ALL CONTINUOUS PLANTING BEDS. MULCH TO BE TRANSPORTED AND INSTALLED BY
-	DO NOT BREAK ROOT BALL. IF ROOT BALL		THE CONTRACTOR.
(13	BURLAP FROM TOP OF ROOT BALL	9.	SUBSTITUTIONS OF PLANT SPECIES, SIZES, OR OTHER SPECIFIED MATERIALS WILL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT.
(14) 3" MULCH LAYER AS SPECIFIED	10.	PLANT MATERIAL AND LAYOUT MUST BE APPROVED BY THE PROJECT LANDSCAPE ARCHITECT PRIOR TO
(15) 4" HT. SAUCER AROUND PLANTING PIT		INSTALLATION.
(16	ROUGHEN SURFACE TO IMPROVE ROOT PENETRATION	11.	ALL IDENTIFICATION TAGS PROVIDED BY GROWERS AND PLACED ON TREES AND SHRUBS ARE TO REMAIN ON THE PLANTS THROUGH THE PUNCH-LIST INSPECTION. TAGS ARE TO BE REMOVED PRIOR TO FINAL ACCEPTANCE, OR UPON REQUEST OF THE PROJECT LANDSCARE ARCHITECT.
(17) PLANTING SOIL MIX AS SPECIFIED		REQUEST OF THE PROJECT LANDSCAPE ARCHITECT.
(18) MIN. 3 STAKES PER TREE PAINTED BLACK STEEL	12.	SEED MIX/SOLID SOD WILL BE APPLIED TO ALL CONSTRUCTION-DAMAGED GROUND SURFACES NOT OTHERWISE PLANTED. CONTRACTOR SHALL REVIEW RELATED CONSTRUCTION DRAWINGS FOR LIMITS OF CONSTRUCTION AND
(19) FINISH GRADE		SHALL ALSO BE RESPONSIBLE FOR COORDINATING WITH OTHER SITE CONTRACTORS TO DETERMINE ACTUAL AREAS
	SCALE: NTS	40	
(1	CONTRACTOR TO LEAVE 6" MIN. ROOT FLARE UNCOVERED BY MULCH, SOIL, AND PLANTING MIX	13.	FULL 6" OF PREPARED SOIL AND 3" MULCH LAYER. CLEAN, NATIVE TOPSOIL REMOVED FROM THESE BEDS MAY BE SPREAD ON NEARBY AREAS TO BE SODDED OR SEEDED. STONES LARGER THAN 1" DIAMETER SHALL BE REMOVED
2) EXCAVATE HOLE 2X ROOT BALL DIAMETER		AND DISPOSED OF OFF SITE. FOLLOWING EXCAVATION, PLACE PREPARED SOIL IN THESE PLANT BEDS. PREPARED SOIL SHALL CONSIST OF 4" IMPORTED "CHOCOLATE" LOAM TOPSOIL AND 2" ORGANIC COMPOST SOIL CONDITIONER
3	NEVER CUT LEADER - THIN UP TO 1/3 OF BRANCHES RETAINING NATURAL SHAPE OF TREE - DO NOT LEAVE STUBS		(SUCH AS "LIVING EARTH TECHNOLOGIES", "BACK-TO-EARTH" OR OTHER APPROVED MANUFACTURER), THOROUGHLY BLENDED TOGETHER. THIS MIX SHALL ALSO BE USED TO BACKFILL PLANTING PITS OF ALL TREES AND PLANTING BEDS. CONTRACTOR SHALL SUBMIT PLANTING SOIL MATERIAL TO THE LANDSCAPE ARCHITECT FOR APPROVAL.
4	ATTACH GUY WIRE & HOSE ABOVE BOTTOM BRANCH.	14.	ALL PLANTING BEDS INDICATED WILL BE IRRIGATED WITH AN UNDERGROUND AUTOMATIC IRRIGATION SYSTEM.
(5	STAKE ALL TREES USING METAL STAKES-3 PER TREE		AND REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS AND SPECIFICATIONS FOR
6	PLACE TOP OF ROOT FLARE 2" ABOVE FINISH GRADE		IRRIGATION SYSTEM INCLUDING PIPE SIZES AND LOCATIONS.
7	DO NOT BREAK ROOT BALL. IF ROOT BALL IS BROKEN PLANT WILL BE REJECTED. REMOVE BURLAP FROM TOP OF ROOT BALL	15.	ALL NON-IRRIGATED SEEDING AREAS DISTURBED BY CONSTRUCTION SHALL BE TEMPORARILY IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT TEN-DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURENCES OF 1/2 INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK, RESTORATION
8	3" MULCH LAYER AS SPECIFIED		SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1-1/2 INCHES HIGH WITH 95% COVERAGE, PROVIDED
9	4" HT. SAUCER AROUND PLANTING PIT		NO BARE SPOTS LARGER THAN 16 SQUARE FEET EXIST.
(10	FINISH GRADE	16.	REGULAR MAINTENANCE IS REQUIRED OF ALL LANDSCAPE AREAS AND PLANT MATERIALS MUST BE MAINTAINED IN A VIGOROUS AND HEALTHY CONDITION, FREE FROM DISEASES, PEST WEEDS, AND LITTER. THIS MAINTENANCE SHALL
(11	PLANTING SOIL MIX AS SPECIFIED		INCLUDE WEEDING, WATERING, FERTILIZATION, PRUNING, MOWING, EDGING, MULCHING OR OTHER NEEDED MAINTENANCE. IN ACCORDANCE WITH GENERALLY ACCEPTED HORTICULTURAL PRACTICES UNTIL THE PROJECT HAS
(12	HEAVY DUTY, METAL STAKE TO BE MINIMUM 8'-0" LONG STAKE TO BE 18" BELOW FINISH GRADE		BEEN ACCEPTED BY THE PROJECT LANDSCAPE ARCHITECT.
(13	LACE HOSE GUARDS TOGETHER WITH SINGLE WIRE	17.	THE OWNERS OF THE LANDSCAPED PROPERTY, OR THE MANAGER OR AGENT OF THE OWNER, SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL LANDSCAPE AREAS. SAID AREAS SHALL BE MAINTAINED SO AS TO
(14	MIN. 3 STAKES PER TREE PAINTED BLACK STEEL STAKE 3 LARGEST STEMS ON TREE		PRESENT A HEALTHY, NEAT AND ORDERLY APPERARANCE AT ALL TIMES AND SHALL BE KEPT FREE OF REFUSE AND DEBRIS. ALL PLANTING BEDS SHALL BE PROVIDED WITH A READILY AVAILABLE WATER SUPPLY AND WATERED AS NECESSARY TO ENSURE CONTINUOUS HEALTHY GROWTH AND DEVELOPMENT. MAINTENANCE SHALL INCLUDE THE REPLACEMENT OF ALL DEAD PLANT MATERIAL IF THAT MATERIAL WAS USED TO MEET THE REQUIREMENTS OF THE ORDINANCE.
		18.	NO TOPSOIL SHALL BE PLACED UNTIL SUBGRADE IS APPROVED BY LANDSCAPE ARCHITECT. CONTRACTOR TO
	SCALE: NTS		TOPSOIL TO A SMOOTH UNIFORM SURFACE AND COMPACT FIRMLY. FEATHER TOPSOIL INTO UNDISTURBED AREAS
1	CONCRETE PAVING		CREATING A SMOOTH, EVEN TRANSITION. SPREAD ADDITIONAL TOPSOIL IN UNDISTURBED AREAS TO ELIMINATE WATER PONDING
2	GRASSES (AS SPECIFIED)	10	
3	SHRUB (AS SPECIFIED)	19.	OCCUR WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES. ANY WORK WITHIN THE CRZ MUST BE DONE BY HAND.

- 20. FROM APRIL 1 TO SEPTEMBER 30, ONLY CONTAINER GROWN TREES MAY BE PLANTED. FROM OCTOBER 1 TO MARCH 31, EITHER CONTAINER GROWN OR BALL AND BURLAPPED TREES MAY BE PLANTED.
- STEEL EDGING

SCALE: NTS

(1) ADJACENT TURF OR AGGREGATE

(3) STEEL LANDSCAPE EDGING 3/16" X 6"

(5) PLANTING SOIL MIX AS SPECIFIED

(2) 8" STEEL STAKE

(4) 3" LAYER OF MULCH

(6) GEOTEXTILE FABRIC

(7) UNDISTURBED SUBGRADE

LANDSCAPE MAINTENANCE NOTES:

PROPERTY LANDSCAPING SHALL BE MAINTAINED AT ALL TIMES. THE QUALITY OF THE LANDSCAPE MAINTENANCE SHALL MEET STANDARDS OF PERFORMANCE PROVIDED BY LANDSCAPE COMPANIES IN THE REGION. LANDSCAPE AREAS WILL AT ALL TIMES HAVE A NEAT, CLEAN, HEALTHY, MANICURED APPEARANCE

1. TURF AREAS

- A. MOWING & EDGING OF ALL TURF AREAS SHALL BE PERFORMED AT LEAST ONCE PER WEEK. B. PERENNIAL GRASS OVERSEEDING SHALL BE SEPARATE & MUST BE APPROVED BY THE OWNER PRIOR TO START. OVERSEEDING SHALL BE SPREAD AT A RATE TO INSURE A LUSH, THICK CONSISTENT WINTER TURF. TRIMMING & EDGING OF TURF AREAS TO BE PERFORMED AT LEAST
- ONCE A WEEK. C. ALL TURF AREAS ARE TO BE FERTILIZED A MINIMUM OF FOUR TIMES PER YEAR W/ A HIGH QUALITY SLOW RELEASE FERTILIZER FROM A REPUTABLE MANUFACTURER
- D. CONTRACTOR SHALL APPLY APPROPRIATE FUNGICIDES AS NECESSARY & PRE-EMERGENT HERBICIDE TWO TIMES PER YEAR & POST-EMERGENT HERBICIDE AT THE TIME DEEMED MOST EFFICIENT & FAVORABLE BY CONTRACTOR
- TURF TO BE TREATED AS NECESSARY W/ APPROPRIATE INSECTICIDE TO CONTROL SOIL PESTS. F. RAKING TO BE PERFORMED AS NEEDED TO MAINTAIN APPEARANCE. DE-THATCH & AERATE TURF ONCE DURING THE YEAR IN CONJUNCTION W/ CEREAL RYE OVERSEEDING. IF OWNER OPTS TO NOT PERFORM OVERSEED, DE-THATCHING & AERATING TO BE PERFORMED IN EARLY SPRING.
- G. BAG TURF TRIMMINGS WITHIN 45 FEET OF BUILDINGS, DRIVEWAYS, & SIDEWALKS.

2. SHRUBS, GROUND COVER, BEDS & ANNUALS

- A. TO BE MAINTAINED WEED FREE, AS NEEDED USING APPROPRIATE HERBICIDES & MANUAL WEEDING USE A MINIMUM OF TWO PRE-EMERGENT APPLICATIONS & MANUALLY WEED EACH VISIT B. TO BE FERTILIZED FOUR TIMES PER YEAR W/ A BALANCED HIGH QUALITY, SLOW RELEASE
- FERTILIZER, APPROPRIATE TO THE SHRUBS ON THE PROJECT.
- C. SHRUBBERY TO BE HAND TRIMMED AS SPECIFIED TO MAINTAIN A MANICURED APPEARANCE OR AS OTHERWISE REQUESTED BY OWNER. USE ONLY SKILLED PERSONNEL W/ SIGNIFICANT EXPERIENCE IN CLASS A PROPERTIES. NO SHEARING, ALL TO BE DONE W/ SELECTIVE HAND PRUNING TO KEEP PLANT WITHIN BOUNDS BUT TO MAINTAIN A NATURAL SHAPE & APPEARANCE.
- D. TO BE INSPECTED WEEKLY BY QUALIFIED SUPERVISOR, FOLLOWED BY A WRITTEN REPORT OF PROBLEMS DISCOVERED & ACTIONS TO BE TAKEN.
- AREAS TO BE SPRAYED W/ APPROPRIATE INSECTICIDES & FUNGICIDES, AS NECESSARY F. ANNUALS TO BE CHANGED OUT FOUR (4) TIMES PER YEAR USING FOUR (4) INCH POTS & FERTILIZED AT EACH CHANGE. MONITOR & APPLY FUNGICIDES & INSECTICIDES TO INSURE MAXIMUM VIGOR.
- G. APPLY SHREDDED HARDWOOD MULCH TO A DEPTH OF THREE INCHES, A MINIMUM OF THREE TIMES ANNUALLY. IF MULCH DEPTH ACCUMULATION BECOMES SO EXCESSIVE AS TO BE DETRIMENTAL TO PLANT HEALTH, RAKE OUT & DISPOSE OF EXCESS QUANTITIES OF THE OLDEST MATERIAL. OFF-SITE
- H. ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE & CLEAR FROM ALL BUSHES/SHRUBS, ETC I. A THREE-FOOT CLEAR ZONE AROUND ALL FIRE HYDRANTS SHALL BE MAINTAINED

3. LANDSCAPE TREES (4" CALIPER OR LESS)

- A. TO BE LIGHTLY PRUNED AS NECESSARY (AT LEAST ONCE A MONTH DURING GROWING SEASON). TO BE PRUNED & SHAPED ONCE DURING WINTER MONTHS. PRUNE TO CLASS I STANDARDS. NOTIFY B MANAGEMENT PRIOR TO & IMMEDIATELY FOLLOWING PRUNING ACTIVITY. PRUNING TO BE DONE BY QUALIFIED TREE CARE FIRM, SUBJECT TO MANAGEMENT APPROVAL
- C. DEEP ROOT FERTILIZE ALL LANDSCAPE TREES ONE TIME PER YEAR. SUBMIT INFORMATION ON MATERIALS, APPLICATION METHODS & APPLICATOR QUALIFICATION ONE WEEK PRIOR TO PERFORMING WORK TO OWNER'S REPRESENTATIVE
- D. ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE OF TREE LIMBS & BRANCHES

4. LARGE TREES (GREATER THAN 4" CALIPER)

- A. CONTRACTOR SHALL INSPECT FOR INSECT, DISEASE INFESTATIONS & TREE DAMAGE SUCH AS LIGHTNING OR VEHICULAR DAMAGE, CONTRACTOR SHALL NOTIFY MANAGEMENT IMMEDIATELY OF SUCH DANGER OR DISEASE SO THAT CORRECTIVE ACTION CAN BE TAKEN.
- B. WHEN PRUNING IS REQUIRED TO REMOVE DEAD OR DAMAGED LIMBS, WORK IS TO BE DONE BY QUALIFIED TREE CARE FIRM. MANAGEMENT APPROVAL IS REQUIRED PRIOR TO PRUNING.
- C. ANY FERTILIZING RECOMMENDED BY QUALIFIED TREE CARE FIRM IS SUBJECT TO APPROVAL.
- D. ALL TRAFFIC & DIRECTIONAL SIGNAGE TO BE KEPT FREE OF TREE LIMBS & BRANCHES

5. DEBRIS & LITTER

A. NORMAL TRASH & LITTER WILL BE REMOVED FROM ALL LAWN & LANDSCAPED AREAS WEEKLY. B. ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE CLEANED UP IMMEDIATELY.

BE MAINTAINED IN A 6. PAVED AREAS

- A. AT PARKING LOT PERIMETERS & PAVING JOINTS, WEEDS & GRASSES ARE TO BE CONTROLLED W/ CONTACT HERBICIDE SPRAYS & MANUAL WEEDING AS REQUIRED.
- B. ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE CLEANED UP IMMEDIATELY.

7. IRRIGATION

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING & OPERATING ALL IRRIGATION SYSTEMS AT THE PROPERTY EXCEPT AS MAY BE OTHERWISE NOTED.
- B. IRRIGATION SYSTEMS MUST BE INSPECTED MONTHLY & A REPORT MUST BE SUBMITTED TO MANAGEMENT. MANAGEMENT MUST APPROVE REPAIRS GREATER THAN \$250.00.
- C. CONTRACTOR WILL ENSURE THAT WATERING CYCLES ARE IN COMPLIANCE W/ ANY CITY GUIDELINES AS A RESULT OF WATER RATIONING OR WATER CONSERVATION. ANY FEES OR PENALTIES INCURRED BY VIOLATION OF ORDINANCES WILL BE BILLED TO CONTRACTOR
- D. ALL HEADS & NOZZLES BROKEN BY LANDSCAPE MAINTENANCE OPERATIONS WILL BE REPAIRED OR REPLACED IMMEDIATELY AT CONTRACTOR EXPENSE, ALL NOZZLES WILL BE CLEANED MONTHLY IF NECESSARY, & ALL HEADS WILL BE ADJUSTED AS NEEDED.

8. GENERAL

- A. CONTRACTOR SHALL PROVIDE ADEQUATE SUPERVISION TO ASSURE THAT ALL WORK WILL BE DONE IN ACCORDANCE W/ THIS AGREEMENT & GENERALLY ACCEPTED GOOD PRACTICE. A WEEKLY VISIT BY A QUALIFIED SUPERVISOR IS A MINIMUM REQUIREMENT. ADEQUATE TIME SHALL BE ALLOWED FOR A THOROUGH & COMPLETE EXAMINATION OF THE ENTIRE PROPERTY.
- B. CONTRACTOR SHALL REPLACE AT CONTRACTOR'S EXPENSE ANY PLANT MATERIAL THAT DIES DUE TO DAMAGE BY LAWN MAINTENANCE, EQUIPMENT OR CONTRACTOR'S NEGLIGENCE
- C. ALL WORK SHALL BE PERFORMED BY CONTRACTOR'S EMPLOYEES; NO WORK SHALL BE PERFORMED BY SUBCONTRACTORS WITHOUT WRITTEN CONSENT OF MANAGEMENT
- EMPLOYEES TO WEAR UNIFORMS & PROVIDE NEAT APPEARANCE & PROFESSIONAL BEHAVIOR. E. CREW MEMBERS WILL OBSERVE ALL OSHA REGULATIONS. ALL EQUIPMENT WILL BE PROPERLY
- MAINTAINED & KEPT IN A SAFE OPERATING CONDITION. F. ALL DEBRIS RESULTING FROM ANY & ALL LANDSCAPE WORK SHALL BE IMMEDIATELY CLEANED UP REMOVED FROM SITE. USE OF AN ON-SITE DUMPSTER IS PROHIBITED.
- G. ADDITIONAL PROJECTS, LANDSCAPE UPGRADES, ETC. WILL BE NEGOTIATED AS NEEDED. H. POTS OR SIDEWALK PLANTERS AT PROPERTY SHALL BE MAINTAINED IN ACCORDANCE W/ ALL
- SPECS NOTED ABOVE. IRRIGATION SHALL BE MAINTAINED OR HAND WATER AS NEEDED CUDMICCIONIC | DEV/ICIONIC

SUBMISSIONS REVISIONS::								
03.08.2019	CODE ANALYSIS / SD PRICING SET							
06.07.2019	SDP #1 SUBMITTAL							
07.22.2019	SDP #2 SUBMITTAL							
09.17.2019	SDP #3 SUBMITTAL							
10.04.2019	ASAP							

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kah architecture 1517 e palm valley blvd round rock,texas,78664 p:: 512.255.9690

owner : YMCA OF GREATER WILLIAMSON COUNTY

1812 North Mays Street Round Rock, TX 78664

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sheet information ::

16.239 project # 10.04.2019 date : designed bs, bab drawn checked approved :: bab

_A5.01

LANDSCAPE

NOTES & DETAILS SDP 1904-0001

As-Built

Schedule	2										
Symbol	Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens per Lamp	LLF	Wattage
E.	S1	7	Visionaire Lighting LLC	VLX-1-T3-128LC-5- 4K-UNV_CLS-	38 in. L x 17 in. W x 10 in. H		192	VLX_1_T3_128LC_5 _4K-UNV_CLS.IES	87	0.92	215
	S 2	5	Visionaire Lighting LLC	VLX-1-T3-128LC-5- 4K-UNV	36 in. L. X 15.5 in. W. X 14 in. H. LED LUMINAIRE		1	VLX- 1_T3_128LC_5_4K.I ES	22333	0.92	406

Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
ARKING AREA		2.0 fc	7.3 fc	0.0 fc	N/A	N/A

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0.6	1.0	1.7	3.0	5.9		6.7	4.8	2.6	1.8	1.6	1.7	1.2	0.8	0.9	1.2	1.6	1.7	1.8	1.8	1.8
0.9	1.3	1.8	3.1	4.6	4.8	5.9	3.4	2.0	1.7	1.8	1.9	1.3	0.8	0.7	1,1	1.5	1.7	1.8	1.8	1.6
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1.0	1.6	3.1	6.2		6.3	4.4	2.3	1.7	1.7	2,3	1.9	1.0	0.7	1.1	1.7	2.9	4.0	4.5	4.5	2.0
1.0	1,5	2.8	4.2	4.8	6.0	3.2	2.0	1,6		1.6	1.0	0.7	0.7	1.0	1.4	1.7	2,3	2,2	2.1	1.6
0.8	, 1.1	1.6	2.2	2.7	2.9	2.5	21	1.9	1.8	1.5	1.0	0.8	0.9	1.2	1.3	1,3	1.5	1.4	1.4	1.3
0.4	0.7	0.9	1-2	1.6	2.1	2.4	2.9	2.9	2.6	2.0	1.4	1.2	1.2	1.4	1.4	-15	1.5	14	1.5	1.7
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Organized Sewage Collection System Application

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(c), 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.

Regulated Entity Name: YMCA METRO OFFICES

 Attachment A – SCS Engineering Design Report. This Engineering Design Report is provided to fulfill the requirements of 30 TAC Chapter 217, including 217.10 of Subchapter A, §§217.51 – 217.70 of Subchapter C, and Subchapter D as applicable, and is required to be submitted with this SCS Application Form.

Customer Information

 The entity and contact person responsible for providing the required engineering certification of testing for this sewage collection system upon completion (including private service connections) and every five years thereafter to the appropriate TCEQ region office pursuant to 30 TAC §213.5(c) is:

Contact Person: JEFF ANDRESEN Entity: YMCA OF CENTRAL TEXAS Mailing Address: 1812 N. MAYS STREET City, State: ROUND ROCK, TX Zip: 78664 Telephone: 512.615.5555 Fax: _____ Email Address: RCARLTON@YMCACTX.ORG The appropriate regional office must be informed of any changes in this information within 30 days of the change.

3. The engineer responsible for the design of this sewage collection system is:

Contact Person: <u>TERRY R HAGOOD</u> Texas Licensed Professional Engineer's Number: <u>52960</u> Entity: <u>HAGOOD ENGINEERING ASSOCIATES, INC</u> Mailing Address: <u>900 E. MAIN STREET</u> City, State:<u>ROUND ROCK, TX</u> Zip: <u>78664</u> Telephone:<u>512.244.1546</u> Fax:____ Email Address:TERRYH@HEAENG.COM

Project Information

4. Anticipated type of development to be served (estimated future population to be served, plus adequate allowance for institutional and commercial flows):

Residential: Number of single-family lots:
Multi-family: Number of residential units:
🔀 Commercial
Industrial
Off-site system (not associated with any development)
Other:

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

<u>100</u> % Domestic	<u>8500</u> gallons/day
% Industrial	gallons/day
% Commingled	gallons/day
Total gallons/day:	

- 6. Existing and anticipated infiltration/inflow is _____ gallons/day. This will be addressed by:
- 7. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.

The WPAP application for this development was approved by letter dated june 6, 2024. A copy of the approval letter is attached.

The WPAP application for this development was submitted to the TCEQ on _____, but has not been approved.

A WPAP application is required for an associated project, but it has not been submitted. There is no associated project requiring a WPAP application.

8. Pipe description:

Table 1 - Pipe Description

Pipe Diameter(Inches)	Linear Feet (1)	Pipe Material (2)	Specifications (3)
6"	61.55	PVC SDR 26	ASTM 3034
8"	390.75	PVC SDR 26	ASTM 3034

Total Linear Feet: 453

- (1) Linear feet Include stub-outs and double service connections. Do not include private service laterals.
- (2) Pipe Material If PVC, state SDR value.
- (3) Specifications ASTM / ANSI / AWWA specification and class numbers should be included.

9. The sewage collection system will convey the wastewater to the <u>Brushy Creek Regional</u> <u>Wastewater</u> (name) Treatment Plant. The treatment facility is:

Existing
Proposed

10. All components of this sewage collection system will comply with:

\boxtimes	The Cit	y of	ROUND	ROCK	standard	specification	s.
	Other.	Spe	cificatio	ns are	attached		

- 11. No force main(s) and/or lift station(s) are associated with this sewage collection system.
 - A force main(s) and/or lift station(s) is associated with this sewage collection system and the **Lift Station/Force Main System Application** form (TCEQ-0624) is included with this application.

Alignment

- 12. There are no deviations from uniform grade in this sewage collection system without manholes and with open cut construction.
- 13. There are no deviations from straight alignment in this sewage collection system without manholes.

Attachment B - Justification and Calculations for Deviation in Straight Alignment without Manholes. A justification for deviations from straight alignment in this sewage collection system without manholes with documentation from pipe manufacturer allowing pipe curvature is attached.

For curved sewer lines, all curved sewer line notes (TCEQ-0596) are included on the construction plans for the wastewater collection system.

Manholes and Cleanouts

14. Manholes or clean-outs exist at the end of each sewer line(s). These locations are listed below: (Please attach additional sheet if necessary)

			Manhole or Clean-
Line	Shown on Sheet	Station	out?
WW A	13 Of 20	1+09.17	MH
WW A	13 Of 20	1+64.82	MH
WW A	13 Of 20	2+59.00	MH
WWA	13 Of 20	3+54.37	MH
WW A	13 Of 20	3+69.15	MH
WW A	13 Of 20	4+15.92	MH
WW A-1	13 Of 20	0+36.38	MH

Table 2 - Manholes and Cleanouts

Line	Shown on Sheet	Station	Manhole or Clean- out?
	Of		
	Of		
	Of		

- 15. Manholes are installed at all Points of Curvature and Points of Termination of a sewer line.
- 16. The maximum spacing between manholes on this project for each pipe diameter is no greater than:

Pipe Diameter (inches)	Max. Manhole Spacing (feet)
6 - 15	500
16 - 30	800
36 - 48	1000
≥54	2000

- Attachment C Justification for Variance from Maximum Manhole Spacing. The maximum spacing between manholes on this project (for each pipe diameter used) is greater than listed in the table above. A justification for any variance from the maximum spacing is attached, and must include a letter from the entity which will operate and maintain the system stating that it has the capability to maintain lines with manhole spacing greater than the allowed spacing.
- 17. All manholes will be monolithic, cast-in-place concrete.
 - The use of pre-cast manholes is requested for this project. The manufacturer's specifications and construction drawings, showing the method of sealing the joints, are attached.

Site Plan Requirements

Items 18 - 25 must be included on the Site Plan.

18. \square The Site Plan must have a minimum scale of 1" = 400'.

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Site Plan Scale: 1" = <u>20</u>'.
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- 19. The Site Plan must include the sewage collection system general layout, including manholes with station numbers, and sewer pipe stub outs (if any). Site plan must be overlain by topographic contour lines, using a contour interval of not greater than ten feet and showing the area within both the five-year floodplain and the 100-year floodplain of any drainage way.
- 20. Lateral stub-outs:
 - The location of all lateral stub-outs are shown and labeled.
 - No lateral stub-outs will be installed during the construction of this sewer collection system.

- 21. Location of existing and proposed water lines:
 - \bigotimes The entire water distribution system for this project is shown and labeled.
 - If not shown on the Site Plan, a Utility Plan is provided showing the entire water and sewer systems.
 - There will be no water lines associated with this project.

22. 100-year floodplain:

- After construction is complete, no part of this project will be in or cross a 100-year floodplain, either naturally occurring or manmade. (Do not include streets or concrete-lined channels constructed above of sewer lines.)
- After construction is complete, all sections located within the 100-year floodplain will have water-tight manholes. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Table 3 - 100-Year Floodplain

Line	Sheet	Station
	of	to

23. 5-year floodplain:

- After construction is complete, no part of this project will be in or cross a 5-year floodplain, either naturally occurring or man-made. (Do not include streets or concrete-lined channels constructed above sewer lines.)
- After construction is complete, all sections located within the 5-year floodplain will be encased in concrete or capped with concrete. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Line	Sheet	Station
	of	to

- 24. \square Legal boundaries of the site are shown.
- 25. The *final plans and technical specifications* are submitted for the TCEQ's review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

Items 26 - 33 must be included on the Plan and Profile sheets.

26. All existing or proposed water line crossings and any parallel water lines within 9 feet of sewer lines are listed in the table below. These lines must have the type of pressure rated pipe to be installed shown on the plan and profile sheets. Any request for a variance from the required pressure rated piping at crossings must include a variance approval from 30 TAC Chapter 290.

] There will be no water line crossings.

There will be no water lines within 9 feet of proposed sewer lines.

Table 5 - Water Line Crossings

Line	Station or Closest Point	Crossing or Parallel	Horizontal Separation Distance	Vertical Separation Distance
WW A	1+09.17	CROSSING		EX. UNKNOWN
WW A	1+61.17	CROSSING		1'-6"
WW A	3+93	CROSSING		1'-6"

27. Vented Manholes:

No part of this sewer line is within the 100-year floodplain and vented manholes are not required by 30 TAC Chapter 217.

A portion of this sewer line is within the 100-year floodplain and vented manholes will be provided at less than 1500 foot intervals. These water-tight manholes are listed in the table below and labeled on the appropriate profile sheets.

A portion of this sewer line is within the 100-year floodplain and an alternative means of venting shall be provided at less than 1500 feet intervals. A description of the alternative means is described on the following page.

A portion of this sewer line is within the 100-year floodplain; however, there is no interval longer than 1500 feet located within. No vented manholes will be used.

Table 0 - Vented Mannoles					
Line	Manhole	Station	Sheet		

Table 6 - Vented Manholes

Line	Manhole	Station	Sheet

28. Drop manholes:

There are no drop manholes associated with this project.

Sewer lines which enter new or existing manholes or "manhole structures" higher than 24 inches above the manhole invert are listed in the table below and labeled on the appropriate profile sheets. These lines meet the requirements of 30 TAC §217.55(I)(2)(H).

Table 7 - Drop Manholes

Line	Manhole	Station	Sheet

29. Sewer line stub-outs (For proposed extensions):

] The placement and markings of all sewer line stub-outs are shown and labeled.

No sewer line stub-outs are to be installed during the construction of this sewage collection system.

30. Lateral stub-outs (For proposed private service connections):

The placement and markings of all lateral stub-outs are shown and labeled.

No lateral stub-outs are to be installed during the construction of this sewage collection system.

31. Minimum flow velocity (From Appendix A)

Assuming pipes are flowing full; all slopes are designed to produce flows equal to or greater than 2.0 feet per second for this system/line.

32. Maximum flow velocity/slopes (From Appendix A)

Assuming pipes are flowing full, all slopes are designed to produce maximum flows of less than or equal to 10 feet per second for this system/line.

Attachment D – Calculations for Slopes for Flows Greater Than 10.0 Feet per Second. Assuming pipes are flowing full, some slopes produce flows which are greater than 10 feet per second. These locations are listed in the table below. Calculations are attached.

Line	Profile Sheet	Station to Station	FPS	% Slope	Erosion/Shock Protection

Table 8 - Flows Greater Than 10 Feet per Second

33. Assuming pipes are flowing full, where flows are ≥ 10 feet per second, the provisions noted below have been made to protect against pipe displacement by erosion and/or shock under 30 TAC §217.53(I)(2)(B).

Concrete encasement shown on appropriate Plan and Profile sheets for the locations listed in the table above.

 Steel-reinforced, anchored concrete baffles/retards placed every 50 feet shown on appropriate Plan and Profile sheets for the locations listed in the table above.
 N/A

Administrative Information

- 34. The final plans and technical specifications are submitted for TCEQ review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.
- 35. Standard details are shown on the detail sheets, which are dated, signed, and sealed by the Texas Licensed Professional Engineer, as listed in the table below:

Standard Details	Shown on Sheet
Lateral stub-out marking [Required]	08 of C21
Manhole, showing inverts comply with 30 TAC §217.55(I)(2) [Required]	01 of C21
Alternate method of joining lateral to existing SCS line for potential future connections [Required]	07 of C21
Typical trench cross-sections [Required]	03 of C72
Bolted manholes [Required]	03 of C21
Sewer Service lateral standard details [Required]	02 of C72
Clean-out at end of line [Required, if used]	of
Baffles or concrete encasement for shock/erosion protection [Required, if flow velocity of any section of pipe >10 fps]	of
Detail showing Wastewater Line/Water Line Crossing [Required, if crossings are proposed]	of
Mandrel detail or specifications showing compliance with 30 TAC §217.57(b) and (c) [Required, if Flexible Pipe is used]	of

Table 9 - Standard Details

Standard Details	Shown on Sheet
Drop manholes [Required, if a pipe entering a manhole is more than 24 inches above manhole invert]	of

- 36. All organized sewage collection system general construction notes (TCEQ-0596) are included on the construction plans for this sewage collection system.
- 37. All proposed sewer lines will be sufficiently surveyed/staked to allow an assessment prior to TCEQ executive director approval. If the alignments of the proposed sewer lines are not walkable on that date, the application will be deemed incomplete and returned.
 - Survey staking was completed on this date: 02-15-23
- 38. 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.
- 39. Any modification of this SCS application will require TCEQ approval, prior to construction, and may require submission of a revised application, with appropriate fees.

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 **Organized Sewage Collection System Application** is hereby submitted for TCEQ review and executive director approval. The system was designed in accordance with the requirements of 30 TAC §213.5(c) and 30 TAC §217 and prepared by:

Print Name of Licensed Professional Engineer: TERRY R. HAGOOD

Date: <u>06/12/2024</u>

Place engineer's seal here:

Signature of Licensed Professional Engineer:

Im Ritgort

Appendix A-Flow Velocity Table

Flow Velocity (Flowing Full) All gravity sewer lines on the Edwards Aquifer Recharge Zone shall be designed and constructed with hydraulic slopes sufficient to give a velocity when flowing full of not less than 2.0 feet per second, and not greater than 10 feet per second. The grades shown in the following table are based on Manning's formula and an n factor of 0.013 and shall be the minimum and maximum acceptable slopes unless provisions are made otherwise.

Pipe Diameter(Inches)	% Slope required for minimum flow velocity of 2.0 fps	% Slope which produces flow velocity of 10.0 fps
6	0.50	12.35
8	0.33	8.40
10	0.25	6.23
12	0.20	4.88
15	0.15	3.62
18	0.11	2.83
21	0.09	2.30
24	0.08	1.93
27	0.06	1.65
30	0.055	1.43
33	0.05	1.26
36	0.045	1.12
39	0.04	1.01
>39	*	*

Table 10 - Slope Velocity

*For lines larger than 39 inches in diameter, the slope may be determined by Manning's formula (as shown below) to maintain a minimum velocity greater than 2.0 feet per second when flowing full and a maximum velocity less than 10 feet per second when flowing full.

$$v = \frac{1.49}{n} \times R_h^{0.67} \times \sqrt{S}$$

Figure 1 - Manning's Formula

Where:

v = velocity (ft/sec)
n = Manning's roughness coefficient
(0.013)
Rh = hydraulic radius (ft)
S = slope (ft/ft)

Sewage Collection System Engineering Design Report

YMCA METRO OFFICES - 1826 N. MAYS ST.

Submitted to: Texas Commission on Environmental Quality Region 11 Office 12100 Park 35 Circle Building A Room 179 Austin, TX 78753 (512) 339-2929

June 10, 2024
This engineering design report is intended to fulfil the requirements set forth in 30 TAC Chapter 217, including Chapter 217.10 of Subchapter A (Administrative Requirements) and §§217.51-217.70 of Subchapter C (Conventional Collection Systems). Subchapter D (Alternative Collection Systems) is not applicable for this report.

Site Location

The 9.73 acre site is located at 1826 N. Mays St. in Williamson County, within the City of Round Rock Corporate Limits. The project site and service area are indicated on the construction plans accompanying the SCS submittal information and is shown in general form in the Appendix of this report.

The wastewater system has been designed to convey the flow from the entire development. The proposed development will consist of 1 Commercial building with associated earthwork, paving and parking lot, sidewalks, site utilities, stormwater management system and landscaping/vegetation.

The existing buildings will also discharge into this SCS as noted in sheet ___ of the attached construction plan set.

Design Flow Determination

The wastewater flows from this site will be commercial in nature. The wastewater loading is based upon Commercial Public Facility and Swimming Pool backwash. The design flow determination is shown in the attached table. The Infiltration and Inflow rate is based upon 750 gallons per day over 9.73 acres of developed area.

				Land Use Co	ollection E Wa	Basin Paro stewater	el Areas Flow	/ Analysis						
Parcel	Existing Land Use	GFA	GFA	Loading	Unit	Quantity	Daily Volume	time period	ADWF	Peaking Factor	PDWF	18.1 ¹	PWWF	Notes
	Category	acres	sf	gal/day			gallons	hours	gpm		gpm	gpm	gpm	
WWL A														
CHASCO YMCA METRO OFFICES	COMMERCIAL	9.73	8,000.00	20	persons	10.00	200	9	0.37	4.43	1.64	5.07	6.71	Occupancy - 10 employees
CHASCO YMCA FAMILY (AQUATICS)	COMMERCIAL (POOL BACKWASH)	9.73	N/A	300	minutes	10.00	300	0.16667	30.00	3.96	118.70	5.07	123.77	Swimming Pool Backwashing
CHASCO FAMILY (AQUATICS)	COMMERCIAL (DOMESTIC)	9.73		20	persons	400.00	8000	12	11.11	4.15	46.09	5.07	51.16	Occupancy - 400
	Total	29.19					8500.00		41.48		166.43	15.20	181.63	

The flows are expected in the pipes immediately following construction completion and are not expected to increase at the end of its 50-year life. Additionally, odor control measures are not anticipated in this system.

The capacity of the existing system will be reviewed and approved by the City of Round Rock. The proposed system will gravity flow into the existing public wastewater infrastructure in May St. and will not require the use of a lift station and force main. The City of Round Rock public wastewater will convey flow to the Brushy Creek Regional Wastewater Treatment Plant. The proposed system is new construction and existing.

<u>Pipe Design</u>

The wastewater collection system has been designed to transport the peak wet weather flow from the service area, plus the inflow and infiltration as discussed above. These were designed to ensure that the peak dry weather flow shall not exceed 65% of the capacity of the pipe flowing full and also the peak wet weather flow shall not exceed 85% of the capacity of the pipe flowing full. The collection system piping consists of 391 LF of 8" SDR 26 PVC at a min. slope of 1.0%. The pipe can be seen in plan and profile in the construction drawings accompanying this report and the TCEQ Form 0582 (Organized Sewage Collection System Application).

The gravity wastewater pipe specified is a PVC SDR-26 pipe conforming to ASTM D3034 with a pipe stiffness of 115 psi. The 8" diameter pipe has an outside diameter of **8.4** inches, inside diameter of **7.92** inches, wall thickness of **0.240** inches. The permissible slopes within the Edwards Aquifer Recharge Zone, according to Appendix A of the SCS application are 0.33% to 8.40%. The velocity at the minimum and maximum slopes with the pipe flowing full is greater than 2 fps and less than 10 fps, respectively.

The detailed design of the pipe has taken the following into account: the characteristic of the wastewater conveyed, the possibility of septic conditions, the possibility of external forces, and the possibility of groundwater, internal pressure and the abrasion and corrosion resistance of the pipe material.

The separation distance for all points where a wastewater or force main line crosses a public water supply or service are:

- Vertical separation must be at least 18" in accordance with the TAC Title 30 Part 1 Chapter 290 Subchapter D Rules 290 and TAC Chapter 217
- Wastewater pipe has a minimum pressure rating of at least 150 PSI.
- One segment of wastewater pipe with minimum pressure rating of 150 psi is to be centered on water line crossing.

For wastewater or force main lines that parallel public water services:

- Vertical separation must be at least two feet from outside diameter of pipe
- Horizontal separation must be 4 feet from outside diameters of pipe
- Wastewater or force main lines must be below water lines.

Details for these crossings are noted on plan sheet C60.

This system will not be within 50 feet of an active fault. A geologic assessment has been submitted with this submittal.

The manholes are in compliance with §217.55 of the TAC. Manholes are located at points all intersections of pipes. There are clean-outs associated with this system as noted within the plan set. There will be no tunnels associated with this project. Manhole specifications and construction drawings are located in the plan sheets. The method of sealing the joints is depicted on drawing no. WW-10, as detail 11 on sheet C72 and for gasketed manholes the Owner must follow the national reference standard for the gasket type.

Structural Analysis

The SDR-26 PVC Pipe is a flexible conduit that takes advantage of the support capacity of the surrounding earth by transferring a major portion of the load directly to it. Deflection of the pipe varies with stiffness, class and density of the soil, degree of compaction, burial depth and live load.

The sewer pipe will be placed in an excavated trench and subsequently backfilled. The details of the trench can be found on the accompanying construction plans on the detail sheet. Watertight, size on size resilient connectors conforming to ASTM C-923 will be used for connecting to a manhole as shown in detail WW-10 (see accompanying construction plans). The bedding method will be compacted granular fill or densely compacted backfill and therefore will be Class C as shown in NAVFAC Design Manual DM-7.1, May 1982, Figure 18, Pg. 7.1-186. Bedding is required to establish line and grade and to provide firm pipe support. The Bedding materials will be Class IA (open-graded, clean manufactured aggregates, ASTM D 2321) with 6 in. minimum between the excavation lines ("foundation") to equalize load distributions along the invert of the pipe.

Live Load Calculation

The live loads that can be included in buried pipe are truck load, car load, train load and any other type of non-concentrated, surcharge, load (ex. equipment, piles of stored materials, debris). Vehicular loads are typically based on The American Association of State Highway and Transportation Officials (AASHTO) standard truck loadings. For calculating the soil pressure on flexible pipe, the loading is normally assumed to be an H20 (HS20) truck. A standard H20 truck has a total weight of 40,000 lbs. (20 tons). The weight is distributed with 8,000 lbs. on the front axle and 32,000 lbs. on the rear axle. The HS20 truck is a tractor and trailer unit having the same axle loadings as the H20 truck but with two rear axles. For these trucks, the maximum wheel load is found at the rear axle(s) and equals 40 percent of the total weight of the truck. The maximum wheel load may be used to represent the static load applied by either a single axle or tandem axles. The heaviest tandem axle loads normally encountered on highways are around 40,000 lbs. (20,000 lbs per wheel).



The Boussinesq Equation gives the pressure at any point in a soil mass under a concentrated surface load. The Boussinesq Equation may be used to find the pressure transmitted from a wheel load to a point that is not along the line of action of the load. Pavement effects are neglected.

$$P_L = \frac{3I_f W_w H^3}{2\pi r^5}$$

 P_L = vertical soil pressure due to live load (psf) W_w = wheel load, (20,000 lb) H = vertical depth to pipe crown, (min. 3.5 ft) I_f = impact factor (1.0) r = distance from the point of load application to pipe crown, ft



For the proposed project, H = 2.5 ft. $\mathbf{r} = (o^2 + 2.5^2)^{0.5} = 2.5$ ft. $\mathbf{P}_L = (3^*1.0^*20,000^*2.5^3) / (2^*\pi^*2.5^5) = 1527.89$ psf. = 10.61 psi

Buckling Analysis

Predicted and allowable buckling pressures must be calculated for each size of pipe and type of flexible pipe material.

 $q_a = 0.4* \sqrt{32*R_w^*B r_b^*(E^*I/D^3)} = 6,866.80 \text{ psi for a 8" diameter pipe}$

 $B' = \frac{1}{1 + 4^* e^{-0.065H}}$

 q_{α} = Allowable buckling pressure, pounds per square inch (psi)

- $R_w = 1$; Water buoyancy factor. If (height of water surface above the top of the pipe) $h_w = 0$.
- H = Depth of burial in feet (ft) from ground surface to crown of pipe. (2.5 feet min for the proposed project)
- B'= Empirical coefficient of elastic support
- E_b = Modulus of soil reaction for the bedding material (1,000 psi)
- E = Modulus of elasticity of the pipe material (400,000 psi min for PVC)
- I = moment of inertia of the pipe wall cross section per linear inch of pipe, inch⁴/lineal inch
- D = mean pipe diameter (8 in)

Hollow Cylindrical Cross Section: $I = \pi (d_o^4 - d_i^4) / 64 = 51.253$ in⁴ for a 8" diameter pipe Where $d_o =$ cylinder outside diameter; $d_i =$ cylinder inside diameter

	E	for Degree Pipe Zone	of Compaction Backfill, psi	n of
Soil type-pipe bedding material (Unified Classification System ⁹) (1)	Loose (2)	Slight <85% Proctor, <40% relative density (3)	Moderate 85%-95% Proctor, 40%-70% relative density (4)	High >95% Proctor, >70% relative density (5)
Fine-grained Soils (LL > 50) ^b Soils with medium to high plasticity CH, MH, CH-MH		No data avi competen Otherw	ailable; consult t soils engineer ise use E = 0	18 5
Fine-grained Soils (LL < 50) Soils with medium to no plasticity CL, ML ML-CL, with less than 25% coarse-grained particles	50	200	400	1,000
Fine-grained Soils (LL < 50) Soils with medium to no plasticity CL, ML, ML-CL, with more than 25%-coarse- grained particles Coarse-grained Soils with Fines GM, GC, SM, SC ^c contains more than 12% fines	100	400	1,000	2,000
Coarse-grained Soils with Little or No Fines GW, GP, SW, SP ^c contains less than 12% fines	200	1,000	2,000	3,000
Crushed Rock	1,000	3,000	3,000	3,000
Accuracy in Terms of Percentage Deflectiond	±2	#2	±1	±0.5
⁸ ASTM Designation D 2487, USBR Designation E-3. ^b LL = Liquid limit. ⁶ Or any borderline soil beginning with ose of these sy ⁴ For ±1% accuracy and pendicine deflection of 3%, actu Note: Values applicable only for fills less than 50 ft (predicting initial deflections only, appropriate Deflection defling falls on the borderline between two compaction Percentage Proctor based on laboratory maximum dry (598,000 J/m ³) (ASTM D 698, AASHTO T-99, USBR I	mbols (i.e. al deflectio (15 m). Tab n Lag Fact categories, density fro Designatio	, GM-GC, G n would be b ble does not i tor must be a select lower on tost stand n E-11). 1 ps	C-SC). etween 2% and 4 include any safety pplied for long-t E value or aven ards using about i = 6.9 kN/m ² .	 For use one deflections. the two value 12,500 ft-lb/cu

AVERAGE VALUES OF MODULUS OF SOIL REACTION, E' (For Initial Flexible Pipe Deflection)

Prism Load Calculations

The prism load calculations are equal to the assumed weight of soil over the pipe. The approximate dry density of the soil in the backfill as shown is 120 pcf. The total prism load is calculated by:

P = Density x Height of the soil = 120 pcf * 2.5 ft. = 300 psf = 2.083 psi

The Modified Iowa Equation is used for predicting deflection in buried flexible pipe:

%Deflection = $\frac{\%\Delta Y}{D} = \frac{(D_{L}KP+KW)(100)}{[2E/(3(DR-1)^{3})]+0.061E^{1}}$

Where:

 $D_L = Deflection Lag Factor = 1.0$ (Typical)

K = Bedding Constant=0.1 (Typical)

P = Prism Load=Weight of soil over pipe (2.083 psi, above)

W' = Live Load (10.61 psi, calculated above)

E = Modulus of Elasticity=400,000 psi minimum for PVC

DR = Dimension Ratio (OD/t) (8.40/0.240=35)

E' = Modulus of Soil Reaction (1,000 psi)

∆= 1.87%

The maximum deflection allowed is 5%. This pipe meets this specification.

 Q_p = Pressure applied to the pipe under installed conditions (psi) = Live load + Prism load

q_p= 10.61 psi+2.083 psi=**12.693** psi

 $q_{\alpha} \ge q_{p}$ for the specified pipe and is acceptable for the proposed installation.

Wall Crushing

The project does not propose any trenchless installation and no vertical curvature between manholes is anticipated. Additionally, the project does not include any horizontally curved gravity sanitary sewer piping. Should any horizontal curves be required as an immediate field change, it shall be a minimum of 300*8.40 in= 2,520 inches= 210 feet.

The curves will be provided by pipe flexure and in no case will any joint flexure be allowed. All joints will be installed fully seated per the manufacturer's recommendation.

There will be no concrete encased flexible pipe with the proposed project. If encased flexible pipe is needed in the future, it shall be installed in a rigid encasement and installed at a maximum depth of:

$$H = (24*P_{C}*A)/(\pounds*D_{O})$$

Where

 P_C =compressive stress (4,000 psi for PVC pipe)

A=surface area of the pipe wall (in 2 /ft)

 \pounds =specific weight of the soil (pcf)

 D_{O} =outside pipe diameter (in)

The flexible pipe will be installed under favorable ambient temperature conditions and no provisions will be needed to ensure adequate installation.

The conditions of this installation are such that strain related failure is not anticipated within the 50-year life.

Pressure loss in fittings

Calculations:

$$zeta = \frac{1.44}{f + (1.44 - f)^* (E_b / E_n)}$$

$$f = \frac{\frac{b}{d_a - 1}}{1.154 + 0.444^* (\frac{b}{d_a - 1})}$$

$$f = Pipe/trench width coefficient$$

$$b = Trench width (OD + 12'' = 8.4 + 12'' = 20.4'')$$

$$d_a = Pipe \text{ diameter } (8.40 \text{ in})$$

$$E_b = Modulus \text{ of soil reaction for the bedding material } (1,000 \text{ psi})$$

$$E_n = Modulus \text{ of soil reaction for the in-situ soil } (1.67 \text{ psi})$$

Pressure loss factor = Zeta = 0.0085 for 8" pipes.

Pipe Stiffness

Pipe stiffness (P_s) in psi can be determined either by parallel plate test at 5% deflection, based on manufacturer's data or national reference standards; or, calculated using the following equation. The minimum pipe stiffness for PVC pipe less than 15 inches in diameter meeting ASTM D 3034 is 115 psi for SDR 26.

$$P_s = \frac{EI}{0.149*r^3}$$

- E = modulus of elasticity of the pipe material (400 ksi)
- I = moment of inertia of the pipe wall cross section per linear inch of pipe, inch⁴/lineal inch = inch³. (51.253 in⁴/12 in=4.27)
- D = mean pipe diameter and (8 in)
- r = mean radius (4 in)

 $P_{S} = (400^{*}1.74) / (0.149^{*}3^{3}) = 179.11 \text{ psi}$

In order to ensure that the stiffness being provided to the installation has a reasonable contribution from pipe stiffness, and does not rely solely on the stiffness provided by the soil stiffness factor (SSF), the ratio of P_s/SSF must be calculated. This process must be repeated until $P_s/SSF \ge 0.15$ exists for all proposed pipe sizes and for all types of flexible pipe materials.

 $\frac{P_s}{SSF} = \frac{P_s}{0.061^* zeta^* E_b} \ge 0.15$ $P_s = Pipe \text{ stiffness (179.11 psi, above)}$ $E_b = modulus \text{ of soil reaction for the bedding material (1,000 psi)}$ zeta = 1.0, or a value calculated above, for 8" size pipe $SSF = soil \text{ stiffness factor (0.061*zeta^*E_b)}$

SSF (at zeta of value 1.0) = $0.061 \times 1 \times 1000 = 61$

Ps/SSF=179.11/61=2.93

Based upon the above calculations, the 8" SDR-26 Pipes are adequate for the proposed installation as noted on the accompanying plan sheets.



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: <u>TERRY R. HAGOOD</u>

Date: 6/12/2024

Signature of Customer/Agent:

my Rifford

Regulated Entity Name: YMCA METRO OFFICE

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. X 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: <u>ONION BRANCH</u>

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.
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.
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.
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 used in combination with other reosion and sediment controls within each 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. \square 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.

TEMPORARY STORWATER SECTION

Attachments to form TCEQ-0602

ATTACHMENT A

There are several factors that could affect surface and ground water quality. During construction, fuels and hazardous substances could spill. These spills shall be contained on-site and immediately cleaned up and properly discarded. Any spills or discharges of oil, petroleum products and used oil onto land having a volume greater than 25 gallons, and spills or discharges directly into waters of the state having a quantity sufficient enough to create a sheen, shall be reported immediately to TCEQ at (512) 339-2929 or the State Emergency Response Center at 1-800-832-8224. There are no significant factors proposed which could affect surface and ground water quality relating to the permanent use of the facility.

ATTACHMENT B

Potential Sources of Contamination:

- 1. Soil disturbance during construction.
- 2. Hydrocarbon-based fluids from Construction Equipment.
- 3. Landscaping Fertilizer and Pesticides.

ATTACHMENT C

Sequence of major activities for each phase is as follows:

- 1. The installation of Erosion/Sedimentation Controls –0.1 ac. Disturbed
- 2. Clearing, grubbing, and removal of topsoil from entire site 1.0 ac. Disturbed
- 3. Rough grading and building pad excavation 1.0 ac. Disturbed
- 4. Excavating for utilities 0.3 ac. Disturbed
- 5. Finish grading and landscaping 0.25 ac. Disturbed

ATTACHMENT D

The Temporary Best Management Practices (TBMP) for this project will consist of:

- 1. A stabilized construction entrance.
- 2. Silt fencing along North Mays ROW boundary of site.
- 3. Grate Inlet protection to prevent existing inlet from getting clogged up by silt.
- 4. A concrete washout station.

All TBMP's will be in place prior to any regulated activities commencing. The stabilized construction entrance will remove excess spoils from construction vehicles leaving the site. The silt fencing will collect silt runoff and debris during construction activities. These controls will be maintained during construction and will remain until after all construction activities are complete and permanent re-vegetation is established.

ATTACHMENT F

Due to the limited area of disturbance, the filter dike, inlet protection, concrete washout area, staging area and stabilized construction entrance/exit will provide control to retain any runoff from the exposed site.

TEMPORARY STORWATER SECTION

Attachments to form TCEQ-0602

ATTACHMENT G

Refer to the drawings, sheet EDA and PDA.

ATTACHMENT H

The total limit of construction area is 1.01 acres with a disturbed area of 1.0 acres and will not require a temporary sediment pond.

ATTACHMENT I

The contractor is required to inspect all of the erosion and sediment controls, fences, inlet protection, stabilized construction entrance and concrete washout at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six (6) inches. Records described in the SWPPP must be retained on site for 5 years beyond the date of the cover letter notifying the facility of coverage under a storm water permit, and shall be made available to the state or federal compliance inspection officer upon request. Additionally, employee training records and waste and recycling receipts or vouchers shall also be maintained.

ATTACHMENT J

Schedule of Interim Soil Stabilization Practices:

- 1. Erosion and sediment control measures including perimeter sediment controls must be in place before vegetation is disturbed and must remain in place and be maintained and repaired.
- 2. Temporary stabilization or covering of soil stockpiles and protection of stockpile located away from construction activity must be maintained
- Should construction activities cease for fifteen (15) days or more on any significant portion of the construction site, temporary stabilization is required for that portion of the site to prevent soil and wind erosion until work resumes on that portion of the site.
- 4. Should all construction activities cease for thirty days or more, the entire site must be temporarily stabilized using vegetation or a heavy mulch layer, temporary seeding or other method.

Schedule of Permanent Soil Stabilization Practices:

- 1. Stabilized any unpaved area that is final grade or remain unpaved for the next two weeks. Permanent stabilization may consist of sodding, seeding, or mulching that must be maintained to prevent erosion from the site until re-vegetation has achieved 70% coverage
- 2. Once construction is complete, remove all the pollution prevention measures that were temporary.

Agent Authorization Form For Required Signature Edwards Aquifer Protection Program Relating to 30 TAC Chapter 213 Effective June 1, 1999 _____ JEFF ANDRESEN Print Name PRESIDENT Title - Owner/President/Other of YMCA OF GREATER WILLIAMSON COUNTY Corporation/Partnership/Entity Name have authorized ______ TERRY R. DAGGE Print Name of Agent/Engineer TERRY R. HAGOOD of HAGOOD ENGINEERING ASSOCIATES, INC. Print Name of Firm

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

I also understand that:

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

SIGNATURE PAGE:

Applicant's Signature

5-30-23

Date

THE STATE OF Texas § County of Williamson §

BEFORE ME, the undersigned authority, on this day personally appeared <u>Jeff Andresen</u> 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.

Auel Mht

GIVEN under my hand and seal of office on this $3^{0^{th}}$ day of May,

ARIEL YVETTE WHITE Notary Public, State of Texas Comm. Expires 05-12-2026 Notary ID 133758664

Ariel White Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 05/12/2026

Application Fee Form

Texas Commission on Environmenta Name of Proposed Regulated Entity:	al Quality	ES	
Regulated Entity Location: <u>1826 N. N</u> Name of Customer: <u>YMCA OF CENTE</u>	<u>//AYS ROUND ROCK, T</u> RAL TEXAS	<u>X 78664</u>	
Contact Person: <u>RICH CARLTON</u>	Phone		
Customer Reference Number (if issu	ed):CN <u>601387905</u>		
Regulated Entity Reference Number	(if issued):RN		
Austin Regional Office (3373)			
Hays	Travis	🖂 Wil	liamson
San Antonio Regional Office (3362)			
Bexar	Medina	Uva	lde
 Comal	 Kinney		
Application fees must be paid by che	eck, certified check, or	money order, payable	e to the Texas
Commission on Environmental Qua	lity. Your canceled ch	eck will serve as your	receipt. This
form must be submitted with your	fee payment. This pa	, yment is being submit	ted to:
🛛 Austin Regional Office	Sa	n Antonio Regional Of	fice
Mailed to: TCEQ - Cashier	Ov	ernight Delivery to: T	CEQ - Cashier
Revenues Section	12	100 Park 35 Circle	
Mail Code 214	Bu	ilding A, 3rd Floor	
P.O. Box 13088	Au	istin, TX 78753	
Austin, TX 78711-3088	(53	12)239-0357	
Site Location (Check All That Apply)	:		
Recharge Zone	Contributing Zone	Transiti	ion Zone
Type of Plan		Size	Fee Due
Water Pollution Abatement Plan, C	ontributing Zone		
Plan: One Single Family Residential	Dwelling	Acres	\$
Water Pollution Abatement Plan, C	ontributing Zone		
Plan: Multiple Single Family Reside	ntial and Parks	Acres	\$
Water Pollution Abatement Plan, C	ontributing Zone		
Plan: Non-residential		Acres	\$
Sewage Collection System		453 L.F.	\$ 650.00
Lift Stations without sewer lines		Acres	\$
Underground or Aboveground Stor	age Tank Facility	Tanks	\$
Piping System(s)(only)		Each	\$
Exception		Each	\$
Extension of Time		Each	\$
	Signat	ure: Mm Ribyo	nt

Date: _____

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



TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission (If oth	her is checked please de	scribe in sp	ace provid	led)				
New Permit, Registration or A	uthorization (Core Data I	Form shoul	d be subm	itted with	the program applicat	ion)		
Renewal (Core Data Form sh	hould be submitted with th	he renewal	form)] Othe	r			
2. Attachments Describe	Any Attachments: (ex. 2	Title V Applic	ation, Wasi	te Transpo	orter Application, etc.)			
⊠Yes □No SCS								
3. Customer Reference Number	(if issued) Foll	low this link t	o search	4. Reg	ulated Entity Referer	nce Number <i>(if</i>	issued)	
CN 601387905	<u>101 (</u>	Central Regi	stry**	RN				
SECTION II: Customer	<u>Information</u>							
5. Effective Date for Customer In	formation Updates (mm	n/dd/yyyy)	6/13/	2019				
6. Customer Role (Proposed or Act	ual) – as it relates to the <u>Re</u>	gulated Entit	<u>y</u> listed on t	this form. I	Please check only <u>one</u> o	f the following:		
	Operator	🖂 Own	er & Opera	ator				
Occupational Licensee	Responsible Party	🗌 Volui	ntary Clea	nup Appl				
7. General Customer Information	1							
New Customer	🗌 Updat	te to Custor	mer Inform	ation	🗌 Change i	n Regulated En	tity Ownership	
Change in Legal Name (Verifiab	ole with the Texas Secret	ary of State)		🔀 <u>No Chan</u> g	<u>ge**</u>		
**If "No Change" and Section I is	complete, skip to Sect	<u>rion III – Re</u>	gulated E	intity Info	ormation.			
8. Type of Customer: Cor	poration	🗌 Indiv	ridual		Sole Proprietors	ship- D.B.A		
City Government Cou	unty Government	E Federal Government			State Government			
Other Ger	neral Partnership	🗌 Limi	ted Partne	rship	p 🛛 Other: Non profit			
9. Customer Legal Name (If an ind	lividual, print last name first:	ex: Doe, Jo	hn) <u>lf</u> be	<u>new Cus</u> elow	tomer, enter previous (<u>Customer</u>	End Date:	
YMCA OF CENTRAL T	EXAS							
1812 N. MAYS	S STREET							
10. Mailing								
City ROUNI	D ROCK	State 7	ľX	ZIP	78664	ZIP + 4		
11. Country Mailing Information	(if outside USA)		12. E	-Mail Ad	dress (if applicable)			
13. Telephone Number	14. 1	Extension	or Code		15. Fax Numb	er (if applicable)	
(512)615-5555					()			
16. Federal Tax ID (9 digits) 17. T	X State Franchise Tax I	D (11 digits)	18. DU	INS Num	iber(if applicable) 19. 1	X SOS Filing	Number (if applicable)	
56638201								
20. Number of Employees					21. Indepen	dently Owned	and Operated?	
	250 🗌 251-500 🗌] 501 and I	nigher			Yes	🖂 No	

SECTION III: Regulated Entity Information

22. General Regulated En	tity Information (If 'New Regulated Entity	" is selected below this form should be accomp	anied by a permit application)					
New Regulated Entity	Update to Regulated Entity Name	Update to Regulated Entity Information	No Change** (See below)					
	**If "NO CHANGE" is checked and Section I	is complete, skip to Section IV, Preparer Information.						
23. Regulated Entity Nam	23. Regulated Entity Name (name of the site where the regulated action is taking place)							
YMCA METRO OF	FICES							

24. Street Address	1826	5 N. MAYS								
of the Regulated										
Entity: (No P.O. Boxes)	City	ROUND F	ROCK	State	TX	ZIP	78664		ZIP + 4	
	1812	2 N. MAYS								
25. Mailing										
Address:	City		DOCK	State	ту	710	70661			
		ROUNDR	IUCK	State	ΙΛ	ZIF	/8004		ZIF † 4	
26. E-Mail Address:				09 Extensio	n ar Cada	20	Eax Number (· · · · li · · h / ·)		
	er			zo. Extensio	n or Code			applicable)		
(512)615-5555					22 Drimonu) - Codo 2'	Second	on NAK	
30. Primary SIC Code	(4 digits)	31. Second	lary SIC Co	de (4 digits)	(5 or 6 digits)	NAICS	(5	or 6 digits)	ary NAN	53 COUE
8322		6732			561110					
34. What is the Prima	ry Busi	ness of this en	tity? (Ple	ase do not rep	eat the SIC or N	AICS de	scription.)			
NON PROFIT O	FFICE	ES								
Qu	estions	34 – 37 addres	ss geograp	hic location	. Please refer	to the i	instructions for	applicab	ility.	
Qu 35. Description to Physical Location:	estions 665 F	<u>34 – 37 addres</u> T SOUTH (ss geograp OF THE	hic location	<u>. Please refer</u> ECTION O	<u>to the i</u> F ΤΕΣ	instructions for XAS AVE A	applicab ND N.	ility. MAYS	5
Qu 35. Description to Physical Location: 36. Nearest City	665 F	34 – 37 addres T SOUTH (ss geograp OF THE C	hic location INTERSI Dunty	. Please refer	to the i F TEX Si	instructions for XAS AVE A tate	applicab ND N.	ility. MAYS Nearest	S ZIP Code
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Qu 35. Description to Physical Location: 36. Nearest City ROUND ROCK 37. Latitude (N) In De	665 F	34 – 37 addres T SOUTH (30.527010	SS geograp OF THE C V	hic location INTERSI Dunty /ILLIAM	. Please refer ECTION O SON 38. Longitu	to the i F TEX Si T de (W)	instructions for XAS AVE A tate 'X In Decimal:	applicab ND N. -97.68	<u>ility.</u> MAYS Nearest 78664	ZIP Code
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SECTION IV: Preparer Information

40. Name: RAQUEL SAENZ			41. Title:	PROJECT ASSISTANT	
42. Telephone Number		43. Ext./Code	44. Fax Number	45. E-Mail A	Address
(512)224-1546			() -	RAQUE	LR@HEAENG.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 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	HAGOOD ENGINEERING Job Title: PROJEC		CT MANAGER		
Name(In Print) :	TERRY R. HAGOOD			Phone:	(512)244-1546
Signature:	Om Risson			Date:	2-28-2024



BENCHMARKS

TBM #1 - MAG NAIL. ELEV = 750.03'

NO. DATE

PLANE COORDINATE SYSTEM = TEXAS COORDINATE SYSTEM CENTRAL ZONE, NAD 83, US SURVEY FT. VERTICAL DATUM - NAVD88 (GEOID 18)

DISTANCES AND AREAS ARE SURFACE VALUES

LEGAL DESCRIPTION

LOT 1A, BLOCK A, REPLAT OF ROUND ROCK YMCA ADDITION (9.73 AC., 423,839 SF) DOC # (RECORDATION PENDING)

PLAN SUBMITTALS

COMMENTS

1	2023-03-15	50% PROGRESS SET TO OWNER
2	2024-01-16	TCEQ WPAP ADMINISTRATIVE SUBMITTAL
3	2024-02-06	100% CD TO CITY OF ROUND ROCK
4	2024-02-28	TCEQ WPAP MODIFICATION ADMINISTRATIVE UPDATE
5	2024-03-20	ISSUED FOR BID
6	2024-05-09	CITY OF ROUND ROCK ADD UPDATE #1
7	2024-05-29	TCEQ WPAP MODIFICATION NOD1 UPDATE
8	6/12/2024	TCEQ SCS SUBMITTAL
9		
10		

NOTES:

- NO PORTION OF THE ABOVE LEGALLY DESCRIBED PROPERTY IS WITHIN THE DESIGNATED .1% ANNUAL CHANCE FLOODPLAIN AREA AS DESIGNATED BY F.E.M.A. FLOOD INSURANCE RATE MAP (FIRM) ON COMMUNITY PANEL NO. 48491C0489F, DATED DECEMBER 19, 2019 FOR THE CITY OF ROUND ROCK, WILLIAMSON COUNTY, TEXAS.
- THIS PROPERTY IS WITHIN THE EDWARDS AQUIFER RECHARGE ZONE. PROJECT IS SUBJECT TO AN APPROVED WPAP.
- 3. THIS PROJECT IS PROVIDING ONSITE DETENTION AND IS NOT PARTICIPATING IN THE CITY OF ROUND ROCK RSMP.
- 4. SEE SHEET COO FOR GENERAL NOTES.

1516 E. PALM VALLEY BLVD., SUITE A4 **ROUND ROCK, TEXAS 78664** CHRIS HENDERSON, RPLS (512)-686-1474

SITE DEVELOPMENT IMPROVEMENTS SUBMITTED FOR YMCA - METRO OFFICES

1826 N. MAYS STREET ROUND ROCK, TEXAS 78664 SDP 23-00040

Sheet List Table					
SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION			
01	CVR	COVER			
02	PLAT	PLAT			
03	PLAT	PLAT			
04	SRV	SURVEY			
05	SP	SITE PLAN			
06	FPP	FIRE PROTECTION PLAN			
07	EDA	EXISTING DRAINAGE AREA			
08	DDA	DEVELOPED DRAINAGE AREA			
09	C00	GENERAL NOTES			
10	C10	EROSION AND SEDIMENTATION CONTROL PLAN			
11	C11	DEMOLITION PLAN			
12	C20	UTILITY PLAN & PROFILE			
13	C21	PARTIAL OVERALL UTILITY PLAN			
14	C30	DRAINAGE PLAN & PROFILE			
15	C40	GRADING PLAN			
16	C50	DIMENSION CONTROL PLAN			
17	C60	PAVING AND STRIPING PLAN			
18	C70	CONSTRUCTION & ESC DETAILS			
19	C71	STORM DETAILS			
20	C72	UTILITY DETAILS			
21	C73	DUMPSTER DETAILS			
22	LA0.00	LANDSCAPE NOTES AND SCHEDULES			
23	LA1.01	LANDSCAPE PLAN			
24	LA1.02	POND PLAN			
25	LA5.01	LANDSCAPE DETAILS			
26	E1	PHOTOMETRIC PLAN			

OWNER YMCA OF CENTRAL TEXAS

1812 N. MAYS STREET **ROUND ROCK, TEXAS 78664 RICH CARLTON** (512)-246-YMCA

SURVEYOR

ENGINEER JPH LAND SURVEYING INC. HAGOOD ENGINEERING ASSOCIATES, INC.

900 E. MAIN STREET **ROUND ROCK, TEXAS 78664** TERRY R. HAGOOD, P.E. (512)-244-1546

ARCHITECT SCHAEFER ARCHITECTURE

257 N BROADWAY WICHITA, KANSAS 67202 MATT HAMM, AIA, NCARB (316)-684-0171

LANDSCAPE ARCHITECT

STUDIO 16:19, LLC 305 W LIBERTY, SUITE 100 **ROUND ROCK, TEXAS 78664** JONATHAN WAGNER, RLA, LI, ASLA (512)-534-8680

ALL RESPONSIBILITY FOR ENGINEER WHO PREPARE ROUND ROCK MUST RELY ENGINEER.	THE ADEQUACY OF THES D THEM. IN ACCEPTING ⁻ Y UPON THE ADEQUACY (E PLANS REMAINS WITH THE THESE PLANS, THE CITY OF OF THE WORK OF THE DESIGN
STATE OF TEXAS COUNTY OF WILLIAMSON	★ ★ ★	
I, TERRY R. HAGOOD, DC DRAINAGE IMPROVEMEN COMPLIANCE WITH THE ORDINANCES AND STOR ROUND ROCK, TEXAS.) HEREBY CERTIFY THAT TH TS DESCRIBED HEREIN HA' SUBDIVISION AND BUILDI M WATER DRAINAGE POLI	HE PUBLIC WORKS AND VE BEEN DESIGNED IN NG REGULATION CY ADOPTED BY THE CITY OF
TE OF TEATS	Im Risgort	06/12/2024
TERRY R. HAGOOD		
ACCEPTED FOR CONSTRUC	TION BY:	
Planning and Developmen City of Round Rock, Texas	nt Services	Date

SITE PLA	SITE PLAN PERMIT NO.		SDP23-00040			
RECORDED FINAL PLAT DOC. NO.			C. NO.	PENDING		
TCEQ WPAP APPROVAL CASE #			SE #	9/8/2023 11003578		
TCEQ S	CS APP	ROVAL CASE	#	8/11/2023 11003579		
	IMPEI	RVIOUS COV	'ER	EXISTING		NEW
PUBLIC S GUTTER	SIDEW	ALK, STREET,	CURB AND	2,417 SF	1,737 SF	
BUILDING GROSS FLOOR AREA, BUILDING HEIGHT = 24' - 28'			AREA, 28'	2739 SF	7,906 SF	
PARKINO	G, PRIV	ATE SIDEWAI	K	19,901 SF	10	5,360.2 SF
TOTAL				22,318 SF	20	5,003.2 SF
TOTAL A	AREA C	of Disturbai	NCE (LOC)	0 SF	5	51,220 SF
BUILDIN	IG OC	CUPANCY TY	ΈE		В	
TYPE OF CONSTRUCTION			V			
				REVISIONS		
	NO.	DATE		DESCRIPTION		APPROVED BY
	1					
	2					
	3					
	4 5					
			900 E	. Main Street	JOB NO:	22-036
			Phone Fax (5	1 KOCK, 1X 7 8004 1 (512) 244-1546 1 2) 244-1010	DRAWN BY:	WSH
and the second second			nea.eng.pro Registration No. F-12709	CHECKED BY:	TRH	
			NO. 22-036 © 2024 HEA, Inc.	P.I.C.:	TRH	
	HAGOOD			FILE NO:		22-036 CVR
		ngineering i	ASSOCIATES		DATE:	06/12/2024
u dig.					SHEET:	01 OF 26







HEA PROJECT NO. 22-036 ISSUED DATE 06/12/2024 PLAT

> **PLAT** 02

SDP23-00040

WHEREAS, YMCA of Greater Williamson County, Inc. is the owner of that certain tract situated in the David Curry Survey, Abstract No. 130 in Williamson County, Texas, being all of Lot 1A and 2A, Block A, YMCA OF GREATER WILLIAMSON COUNTY ROUND ROCK BRANCH: A FINAL PLAT OF 3.209 ACRES AND A REPLAT OF LOT 2 SWEETBRIAR II ADDITION AND CLEARWATER SUBDIVISION, an addition to the City of Round Rock, recorded under Instrument Number 2007079067, of the Official Public Records of Williamson County, Texas, and being all of that tract described as 1.001 acres in a Special Warranty Deed to YMCA of Greater Williamson County, a Texas nonprofit (hereinafter referred to as 1.001 acre YMCA tract), recorded under Instrument Number 2015046464, of said Official Public Records; and WHEREAS, Young Mens Christian Association of Greater Williamson County, is the owner of that certain tract situated in the David Curry Survey, Abstract No. 130 in Williamson County, Texas, being all of Lot 2, CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION, an addition to the City of Round Rock, recorded in Cabinet L, Slide 5, of the Plat Records of Williamson County, Texas the subject tract being more particularly described as follows: BEGINNING at a 1/2 inch rebar found in the east right-of-way line of Interstate Highway 35 (a called 300' wide right-of-way as shown under Instrument Number 2007079067 of said Official Public Records), at the common west corner of said Lot 2A and Lot 1, SWEETBRIAR II ADDITION (A REPLAT OF SWEETBRIAR NURSING HOME ADDITION), an addition to the City of Round Rock, recorded in Cabinet L, Slide 281 of said Plat Records; THENCE NORTH 04° 36' 29" EAST, with the south line of said Lot 1, SWEETBRIAR II ADDITION (A REPLAT OF SWEETBRIAR NURSING HOME ADDITION), and in part with the north lines of said Lot 2A and said Lot 1A, a distance of 405.53 feet to a 1/2 inch capped rebar stamped "JPH Land Surveying" set; THENCE NORTH 23° 53' 45" WEST, a distance of 204.95 feet to a 1/2 inch rebar found in the east line of Lot 1, HANROCK, an addition to the City of Round Rock, recorded in Cabinet L, Slide 80 of said Plat Records, at the common west corner of said 1.001 acre YMCA tract and the tract described as 0.801 of an acre in a Special Warranty Deed to Peter H. Buck (hereinafter referred to as Peter Buck tract), recorded under Instrument Number 2014005705 of said Official Public Records; THENCE NORTH 68° 09' 02" EAST, with the common line of said 1.001 YMCA tract and said Peter Buck tract, a distance of 350.50 feet to a 1/2" capped rebar stamped "BAKER AICKLEN & ASSOC. INC CEDAR PARK TEXAS" found in the west line of N. Mays Street (a called 100' wide right-of-way as shown under Instrument Number 2007079067 of said Official Public Records), at the common east corner of said 1.001 YMCA tract and said Peter Buck tract; THENCE SOUTH 23° 41' 43" EAST, with the common line of said 1.001 YMCA tract and said N. Mays Street, a distance of 124.49 feet to a 1/2 inch capped rebar stamped "JPH Land Surveying" set at the common east corner of said Lot 1A and said 1.001 YMCA tract; THENCE SOUTH 23° 43' 41" EAST, with the common line of said Lot 1A and said N. Mays Street, a distance of 553.48 feet to an axle found at the common east corner of said Lot 1A and Lot 2, Block A, ONION CREEK VILLAGE, SECTION TWO, an addition to the City of Round Rock recorded in Cabinet D. Slide 35 of said Plat Records: THENCE SOUTH 81° 48' 41" WEST, with the south line of said Lot 1A, a distance of 361.54 feet to a 1/2 inch capped rebar stamped "JPH Land Surveying" set at the common north corner of Lot 2, CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION and Lot 3, Block A of said ONION CREEK VILLAGE, SECTION TWO; THENCE with the common line of said Lot 2, CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION and said Lot 3, Block A, ONION CREEK VILLAGE, SECTION TWO, the following calls: SOUTH 23° 51' 14" EAST, a distance of 23.46 feet to a 1/2 inch capped rebar stamped "JPH Land Surveying" set at the beginning of a curve to the left (concave northeast), having a radius of 349.53 feet and a chord which bears SOUTH 30° 13' 51" EAST, a distance of 76.33 feet; JPH Job/Drawing No. (see below) 2022.071.003 Chasco YMCA - 1826 N Mays, St., Round Rock, Wilco., TX-PLAT.dwg

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1516 E. Palm Valley Blvd., Ste. A4, Round Rock, Texas 78664 Telephone (817) 431-4971 www.jphlandsurveying.com TBPELS Firm #10019500

DFW | Central Texas | West Texas | Houston

2.	Along said curve to the left, an arc length of 76.48 feet to a 1/2 inch
	rebar found;

- 3. SOUTH 35° 54' 29" EAST, a distance of 100.27 feet to a 1/2 inch rebar found at the beginning of a curve to the right (concave southwest), having a radius of 346.89 feet and a chord which bears SOUTH 30° 20' 37" EAST, a distance of 76.23 feet;
- 4. Along said curve to the right, an arc length of 76.38 feet to a 1/2 inch rebar found;
- 5. SOUTH 25° 02' 27" EAST, a distance of 3.43 feet to a 1/2 inch rebar found at the beginning of a curve to the right (concave southwest), having a radius of 17.31 feet and a chord which bears SOUTH 19° 09' 25" EAST, a distance of 1.52 feet;
- THENCE Along said curve to the right, an arc length of 1.52 feet to a 1/2 inch rebar found in the north right-of-way line of Bowman Drive (a 60' wide right-of-way as shown in Cabinet L, Slide 5, of said Plat Records);
- THENCE with the common line of said Lot 2, *CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION* and said Bowman Drive, the following calls:
 - 1. SOUTH 66° 14' 46" WEST, a distance of 60.00 feet to a 1/2 inch capped rebar stamped "JPH Land Surveying" set at the beginning of a curve to the right (concave northwest), having a radius of 25.00 feet and a chord which bears SOUTH 23° 13' 11" WEST, a distance of 36.51 feet;
 - Along said curve to the right, an arc length of 40.93 feet to a 1/2 inch rebar found at the beginning of a curve to the right (concave northwest), having a radius of 230.00 feet and a chord which bears SOUTH 77° 02' 24" WEST, a distance of 56.15 feet;
 - 3. Along said curve to the right, an arc length of 56.29 feet to a 1/2 inch rebar found;
 - 4. SOUTH 84° 03' 06" WEST, a distance of 109.83 feet to a 1/2 inch rebar found at the common south corner of said Lot 2, *CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION* and Lot 1 of said *CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION*;
- THENCEwith the common line of said Lot 1 and said Lot 2 of CORRECTIONTO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION, the
following bearings and distances:
 - 1. NORTH 16° 13' 14" WEST, a distance of 81.02 feet to a metal fence corner found;
 - 2. NORTH 71° 30' 24" EAST, a distance of 46.46 feet to a metal fence corner found;
 - 3. NORTH 15° 51' 35" WEST, a distance of 42.42 feet to a metal fence corner found;
 - SOUTH 71° 24' 23" WEST, a distance of 46.70 feet to a 1/2 inch rebar found in the south line of said Lot 1A at the common north corner of said Lot 1 and said Lot 2 of CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION;
- THENCE SOUTH 82° 02' 31" WEST, with the common line of said Lot 1A and said Lot 1, CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION, a distance of 350.62 feet to a 1/2 inch rebar found in the east right-of-way line of said Interstate Highway 35 at the common west corner of said Lot 1A and said Lot 1, CORRECTION TO AMENDED PLAT OF SIRLOIN STOCKADE SUBDIVISION;
- THENCE NORTH 13° 00' 15" WEST, along the east right-of-way line of said Interstate Highway 35, in part with the west lines of said Lot 1A and said Lot 2A, a distance of 278.00 feet returning to the Point of Beginning and enclosing 9.730 acres (±423,850 square feet).

STATE OF TEXAS

COUNTY OF WILLI	AMSON

S KNOW ALL MEN BY THESE PRESENTS

That I, Chris Henderson, do hereby certify that I prepared this plat from an actual and accurate on-the-ground survey of the land and that the corner monuments shown thereon were properly placed under my personal supervision, in accordance with Chapter 4 – Subdivision Design and Construction, Part III – Zoning and Development Code, Code of Ordinances, City of Round Rock, 2018 Edition as amended.

- PRELIMINARY: THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT.
- ~RELEASED FOR REVIEW TO ON FEBRUARY 15, 2023.

Chris Henderson Registered Professional Land Surveyor No. 6831 State of Texas Date:_____

STATE OF TEXAS § 8 KNOW ALL MEN BY THESE PRESENTS	STATE OF TEXAS § 8 KNOW ALL MEN BY THESE PRESENTS
COUNTY OF WILLIAMSON §	COUNTY OF WILLIAMSON §
That YMCA of Greater Williamson County, Inc., as the owner of a portion of that certain 9.730 acre tract of land recorded under Instrument Number 2003071604 and 2015046464, of the Official Records of Williamson County, Texas do hereby dedicate to the public forever use of the streets, alleys, easements and all other lands intended for public dedication as shown hereon to be known as <i>ROUND ROCK YMCA ADDITION</i> . YMCA of Greater Williamson County, Inc.	That JP Morgan Chase Bank, N.A., the Lien Holder of that certain 4.092 acre tract of land recorded Volume 2115, Page 130, of the Deed Records of Williamson County, Texas, Lots 1A and 2A, Block "A", recorded in Cabinet DD, Slide 323-324, Plat Records of Williamson County, Texas, Save and Except the aforementioned 4.092 acre tract do hereby consent to the subdivision of that certain 9.730 acre tract of land situated in the City of Round Rock, Williamson County, Texas, and do further hereby join, approve, and consent to the dedication to the public forever use of the streets, alleys, assements and all other lands intended for public dedication as shown hereon.
By	easements and all other lands intended for public dedication as snown hereon.
Jeff Andersen	JP Morgan Chase Bank, N.A.
Title: President/CEO	By:, its
STATE OF TEXAS 8	TSTATE OF TEXAS §
\$ KNOW ALL MEN BY THESE PRESENTS COUNTY OF WILLIAMSON &	§ KNOW ALL MEN BY THESE PRESENTS COUNTY OF WILLIAMSON §
This instrument was acknowledged before me on theday of, 20, by,	This instrument was acknowledged before me on theday of, 20, by,
(Notary Public's signature) Print Name	(Notary Public's signature) Notary Public in and for the State of Texas
Notary Public in and for the State of Texas	My Commission expires on:
My Commission expires on:	
	STATE OF TEXAS § § KNOW ALL MEN BY THESE PRESENTS:
STATE OF TEXAS § § KNOW ALL MEN BY THESE PRESENTS	I, Terry R. Hagood, Registered Professional Engineer in the State of Texas, do her certify that the information contained on this plat complies with Chapter 4 – Subdivis
That Young Mens Christian Association of Greater Williamson County, as the owner of a portion of that certain 9.730 acre tract of land recorded under Instrument Number 2019067744, of the Official Records of Williamson County, Texas do hereby dedicate to the public forever use of the streets, alleys, easements and all other lands intended for public dedication as shown hereon to be known as <i>ROUND ROCK YMCA ADDITION</i> .	Design and Construction, Part III – Zoning and Development Code, Code of Ordinand City of Round Rock, 2018 Edition as amended, and the Design and Construction Standa adopted by the City of Round Rock, Texas.
Young Mens Christian Association of Greater Williamson County	Terry Hagood Licensed Professional Engineer No. 52960 State of Texas
By: Jeff Andersen	
Title: President/CEO	PLANNING & ZONING COMMISSION APPROVAL:
	Approved this day of, 2023, by the Planning and Zoning Commission of the City of Round Rock, Texas, and authorized to be filed for record by th
STATE OF TEXAS 8	County Clerk of Williamson County, Texas.
Simile of Thirds \$ \$ KNOW ALL MEN BY THESE PRESENTS COUNTY OF WILLIAMSON \$	The property covered by this Plat is within the City limits of the City of Round Rock.
This instrument was acknowledged before me on theday of, 20, by,	Rob Wendt, Chairman City of Round Rock Planning and Zoning Commission
,,	STATE OF TEXAS § § KNOW ALL MEN BY THESE PRESENTS:
(Notary Public's signature)Print NameNotary Public in and for the State of Texas	COUNTY OF WILLIAMSON §
My Commission expires on:	I, Nancy E. Rister, Clerk of the County Court of said County, do hereby certify that foregoing instrument in writing, with its certificate of authentication was filed for record
	my office on the day of, 20, A.D., at o'clock,M., and d recorded this the day of, 20, A.D., at o'clock,M., in the Office Public Records of said County in Document No
	TO CERTIFY WHICH, WITNESS my hand and seal at the County Court of said County my office in Georgetown, Texas, the date last shown above written.
	Nancy Rister, Clerk County Court of Williamson County, Texas
	By: Denuty
	SHEET 2 C

HEA PROJECT NO. 22-036 ISSUED DATE 06/12/2024 PLAT **PLAT**

> 03 SDP23-00040



DOCS

UTILITY WARNING

Unless otherwise stated, the client or client's representative did not provide JPH with plans and/or reports, and JPH did not coordinate a private utility locate request. If these Table A items are listed in the certification, the client, being aware of the factors listed above, has agreed for these Table A item(s) to be addressed from a combination of online GIS maps, markings from locate request(s) to municipalities and 811 and observed evidence of utilities. The client is aware locate quests to 811 and the like, may be ignored or result in an incomplet response, in which case utilities may not have been marked, or not completely marked, at the time the fieldwork was performed. Therefore, utilities may exist which are not shown on this survey. Lacking excavation and/or a private utility locate request, the exact location of underground features cannot be accurately, completely, and reliably depicted.

FLOOD ZONE CLASSIFICATION

This property lies within ZONE(S) X (unshaded) of the Flood Insurance Rate Map for Williamson County, Texas and Incorporated Areas, map no. 48491C0489F & 48491C0493F, dated 2019/12/20, via scaled map location and graphic plotting and/or the National Flood Hazard Layer (NFHL) Web Map Service (WMS) at http://hazards.fema.gov.

MONUN	MENTS / DATUMS / BEARING BASIS		
Moi	numents are found if not marked MNS or CRS.		
CRS 🔘 1/2"	rebar stamped "JPH Land Surveying" set		
MNS 🔘 Mag	g nail & washer stamped "JPH Land Surveying" set		
TBM 🕀 Site	benchmark (see vicinity map for general location)		
Coo	rdinate values, if shown, are US.SyFt./TxCS,'83,CZ		
Elev	vations, if shown, are NAVD'88 (Geoid 18)		
Bea	rings are based on the TxCS,'83,CZ		
Dist	ances & areas shown are represented in surface values		
	LEGEND OF ABBREVIATIONS		
US.SyFt.	United States Survey Feet		
TxCS,'83,CZ	Texas Coordinate System of 1983, Central Zone		
NAVD'88	North American Vertical Datum of 1988		
P.R.W.C.T.	Plat Records of Williamson County, Texas		
O.P.R.W.C.T.	Official Public Records of Williamson County, Texas		
D.R.W.C.T.	Deed Records of Williamson County, Texas		
VOL/PG/INST#	Volume/Page/Instrument Number		
CAB./SL.	Cabinet/Slide		
POB/POC	Point of Beginning/Point of Commencing		
ESMT/BL	Easement/Building Line		
PUE	Public Utility Easement		
PVC/RCP	Polyvinyl Chloride Pipe/Reinforced Concrete Pipe		

WATER & SEWER UTILITY MAP CLICK I HERE FOR MAP IN PDF FORMAT

9.5" HACKBERRY

15" HACKBERRY

CHAIN LINK FENCE

17" OAK-

UNABLE TO OPEN

(PARTIALLY COVERE) BY ASPHALT)

TOP OF NUT

NURSE NURSE

COVERED AREA-

YMCA OF GREATER

WILLIAMSON COUNTY

CALLED 1.001 ACRES

INST.# 2015046464



NOTE REGARDING UTILITIES:

Utility locations are per observed evidence and sources listed below: TEXAS811 - ticket number(s) 2282545216.

https://portal.texas811.org/#/ticket/2282545216

GIS MAPS - Provided by City of Round Rock interactive GIS map https://maps.roundrocktexas.gov/cityview/



Α

TBPELS Firm #10019500 DFW | Central Texas | West Texas | Houston

TEXAS811 MARKED UTILITY LEGEND

ELECTRIC	\bowtie	
ELECTRICGAS-OIL-STEA	амкэ	
COMMUNICATION-CAT	v 🕅	
WATER	\bowtie	
SEWER	K)	





1. The first site benchmark (TBM #1) is a mag nail with metal washer stamped "JPH BENCHMARK" set in a concrete curb in parking lot located on subject property, and located approximately 24 feet southwesterly from the west right-of-way line of N. Mays Street, and approximately 483 feet northwesterly from the north right-of-way line of W. Bowman Road. Benchmark Elevation = 750.03' (NAVD'88). See vicinity map for general location.

The second site benchmark (TBM #2) is a mag nail with metal washer stamped "JPH BENCHMARK" set in a concrete curb in parking lot located on subject property, and located approximately 359 feet southwesterly from the west right-of-way line of N. Mays Street, and approximately 400 feet northwesterly from the north right-of-way line of W. Bowman Road. Benchmark Elevation = 748.81' (NAVD'88). See vicinity map for general location.

- 2. The site surface is natural ground/dirt, unless noted otherwise.
- 3. This survey was performed without the benefit of a title commitment. Complete copies of the record description of the property, any record easements benefiting the property, the record easements or servitudes and covenants affecting the property ("Record Documents"), documents of record referred to in the Record Documents, and any other documents containing desired appropriate information affecting the property being surveyed and to which the survey shall make reference were not provided to this surveyor for notation on the survey. Therefore, easements, agreements, or other documents, either recorded, or unrecorded may exist that affect the subject property that are not shown on this survey.

HEA PROJECT NO. 22-036

ISSUED DATE 06/12/2024

SURVEY

SRV



- 17" BRADFORD-PEAR

W/W

15" BRADFORD-PEAR

-26" BRADFORD-PEAR

TOP OF NUT

TOP OF NUT

Κ



		0 20 40 CALE: 1"=20' EEGEND CONCRETE MONUMENT FOUND/SET CONCRETE MONUMENT FOUND/SET CONCRETE MONUMENT FOUND/SET A A NAIL FOUND/SET PIPE FOUND S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S S S STORMWATER MANHOLE (TO SCALE) PIPE FOUND S S S S S S S S S S S S S S S S S S S	Schaefer. architecture
M., Z L M., Z		100 PROPOSED CONTOUR PROPOSED CURB AND GUTTER PROPOSED CURB AND GUTTER X" GAS LINE PROPOSED ASPHALT X" STORM SEWER LINE PROPOSED X" DIA. GAS LINE X" WASTEWATER LINE PROPOSED X" DIA. STORM SEWER LINE X" WASTEWATER LINE PROPOSED X" DIA. WASTEWATER LINE X" WATER LINE EXISTING WOOD FENCE SB SETBACK LINE EXISTING OVERHEAD ELECTRIC LINE EXISTING OVERHEAD ELECTRIC LINE VIGE EXISTING OVERHEAD TELEPHONE LINE VIGE EXISTING UNDERGROUND TELEPHONE LINE VIGE EXISTING WASTEWATER LINE (SIZE VARIES) VIGE EXISTING WASTEWATER LINE (SIZE VARIES) VIGE EXISTING WASTEWATER LINE (SIZE VARIES) </th <th>Schaefer Architecture 257 N. Broadway Wichita, KS, 67202 316.684.0171 316.684.0171</th>	Schaefer Architecture 257 N. Broadway Wichita, KS, 67202 316.684.0171 316.684.0171
ACRES 0.4812 ALLC 17350	 FIRELANE STRIPING TO BE 6" WIDE RED PAINT WITH "FIRE LANE-NO PARKING" IN 4" TALL WHITE LETTERS. WORDING MAY NOT BE SPACED MORE THAN 30 FEET APART. STRIPING TO BE PAINTED ON FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON PARKING SURFACE WHEN IT IS NOT. ALL DIMENSIONS ARE TO THE FACE OF CURB, OR CENTER OF STRIPING (WHERE APPLICABLE), UNLESS OTHERWISE NOTED. ALL WEATHER ACCESS ROADS MADE OF (CONCRETE OR ASPHALT) SHALL BE IN PLACE BEFORE BRINGING COMBUSTIBLE MATERIALS ON THE JOBSITE. FIRE ACCESS ROAD MUST SUPPORT 80,000 lbs. SITE HYDRANTS SHALL ALSO BE IN-SERVICE. THE GRADE THROUGH THE FIRE LANE ACCESS SHALL NOT BE GREATER THAN > 7% PERCENT, AND THE GRADE BREAKS NOT GREATER > 3% PERCENT. 2015 IFC INTERNATIONAL FIRE CODE SEC 503.2.7 & 503.2.8 DETERMINED BY THE FIRE CODE OFFICIAL OR AHJ. 		DUDLEY WILLIAMS & ASSOCIATES, P.A STRUCTURAL ENGINEERS MIDWEST ENGINEERING, INC. MECHANICAL ENGINEERS MIDWEST ENGINEERS MIDWEST ENGINEERING, INC. ELECTRICAL ENGINEERS
	5. TURNING RADII SHALL BE A MINIMUM OF 25' FEET INSIDE & 50' FEET OUTSIDE. 2015 IFC INTERNATIONAL FIRE CODE SEC 503.2.4 AND APPENDIX D SEC 103.3 DETERMINED BY THE FIRE CODE OFFICIAL OR AHJ. PROJECT PARAMETERS BUILDING OCCUPANCY TYPE: BUSINESS B TYPE OF CONSTRUCTION: TYPE VB HEIGHT: 20'-0" FRAME: WOOD PROPOSED USAGE OFFICE ZONING C-2 PARKING REQUIREMENT TABLE BUILDING SF OFFICE 1:250 7906 PARKING COUNT TABLE EXISTING REMOVED PROPO TOTAL # OF PARKING SPACES: 0 0 34 # OF STANDARD PARKING SPACES: 0 0 34 # OF ADA PARKING SPACES: 0 0 2	TP TREE PROTECTION MS MULCH SOCK UNITS OF CONSTRUCTION	Owner Site development plans for YMCA - Metro Offices 1826 N. Mays Street Round Rock, texas 78664
M., Z L M., Z	AREA CALCULATIONS EXISTING BUILDING AREA 0 SF NEW BUILDING FOOTPRINT AREA 7,906 SF LOT ACREAGE 423,839 SF 9.73 NOTES: 1. THIS PROJECT IS CURRENTLY UNPLATTED. A SUBDIVISION PLAT APPLICATION AND PLAT HAS BEEN APPROVED AND PENDING RECORDATION. (FP 2301-003) 2. THIS PROJECT IS IN THE TCEQ EDWARDS AQUIFER RECHARGE ZONE. A WATER POLLUTION ABATEMENT PLAN HAS BEEN SUBMITTED TO TCEQ. 3. A TCEQ SEWAGE COLLECTION SYSTEM APPLICATION IS BEING SUBMITTED TO TCEQ PENDING RECEIPT OF TESTING REPORT FOR DOWNSTREAM WASTEWATER INFRASTRUCTURE ON THE LOT. 4. THIS PROJECT IS PROVIDING ONSITE DETENTION. 5. TOTAL AREA TO BE LANDSCAPED INCLUDING PARKING ISLANDS = 22,875 S.F.	30 Ac.	<text><text><text><section-header><text><text><text><text><text><text></text></text></text></text></text></text></section-header></text></text></text>







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Schaefer Architecture 257 N. Broadway Wichita, KS, 67202 316.684.0171





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REVISIONS

FIRE PROTECTION PLAN

06

FPP

SDP23-00040

TYPE OF CONSTRUCTION: TYPE VB HEIGHT: 20'-0" WOOD FRAME: PROPOSED USAGE OFFICE ZONING C-2 BUILDING PARKING REQUIREMENT TABLE SE OFFICE 1:250 7906 AREA CALCULATIONS EXISTING BUILDING AREA 0 SF NEW BUILDING FOOTPRINT AREA 7,906 SF 423,839 SF 9.730 Ac. LOT ACREAGE NOTES:

BUSINESS B

PROJECT PARAMETERS

BUILDING OCCUPANCY TYPE:

1. FIRELANE STRIPING TO BE 6" WIDE RED PAINT WITH "FIRE LANE-NO PARKING" IN 4" TALL WHITE LETTERS. WORDING MAY NOT BE SPACED MORE THAN 30 FEET APART. STRIPING TO BE PAINTED ON FACE OF CURB WHEN PRESENT AND PAINTED FLAT ON PARKING SURFACE WHEN IT IS NOT.

ALL DIMENSIONS ARE TO THE FACE OF CURB, OR CENTER OF STRIPING (WHERE APPLICABLE), UNLESS OTHERWISE NOTED.

- ALL WEATHER ACCESS ROADS MADE OF (CONCRETE OR ASPHALT) SHALL BE IN PLACE BEFORE BRINGING COMBUSTIBLE MATERIALS ON THE JOBSITE. FIRE ACCESS ROAD MUST SUPPORT 80,000 lbs. SITE HYDRANTS SHALL ALSO BE IN-SERVICE.
- THE GRADE THROUGH THE FIRE LANE ACCESS SHALL NOT BE GREATER THAN > 7% PERCENT, AND THE GRADE BREAKS NOT GREATER > 3%PERCENT. 2015 IFC INTERNATIONAL FIRE CODE SEC 503.2.7 & 503.2.8 DETERMINED BY THE FIRE CODE OFFICIAL OR AHJ.
- TURNING RADII SHALL BE A MINIMUM OF 25' FEET INSIDE & 50' FEET OUTSIDE. 2015 IFC INTERNATIONAL FIRE CODE SEC 503.2.4 AND APPENDIX D SEC 103.3 DETERMINED BY THE FIRE CODE OFFICIAL OR AHJ.



DATE SIGNED: 06/12/2024 ISSUED FOR: AGENCY REVIEW



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1 2 4

				TR-55 SCS Loc Ti	me (hours		100		00/11/	Elow Sum	mary	,					
Segment #1		Segment #2		Segment #3	ne (nours	Segment #1		Segment #5		Area	Tc	Cn	On	Q10	025	0.50	Q100
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Manninas "n"						Manninas "n"		Mannings "n"		0.62	0.083	80	2.33	3.97	5.1	5.99	6.92
Length (ft)		Length (ft)		Length (ft)		Length (ft)		Length (ft)		Impervio	us Cvr =	26.2%	2.00			•	
Slope (%)		Slope (%)		Slope (%)		Slope (%)		Slope (%)									
2-yr, 24 hr rainfall						Velocity (fps)		Velocity (fps)									
segment total	n/a	segment total	n/a	segment total	n/a	segment total	n/a	segment total	n/a								
USER DEFINED								time of conc.(hrs)	0.083	SCS Lag	Time (.	6 x Tc]=	0.0498	hours	3.0	minutes	
				ATLAS 14	HEC-I	HMS HYDRC	DLO(GIC ROUTING	SUMA	ARY fo	or DA	2					
				TR-55 SCS Tc	(hours)							Flow Sumr	nary				
Segment #1		Segment #2		Segment #3		Segment #4		Segment #5		Area	Tc	Cn	Q2	Q10	Q25	Q50	Q100
Sheet Flow		Shallow Concent		Shallow Concent		Channelized		Channelized		acres	hours	-	cfs	cfs	cfs	cfs	cfs
Manninas "n"	<u> </u>					Manninas "n"	1	Manninas "n"		0.069	0.083	80	0.37	0.54	0.66	0.75	0.85
Length (ft)		Length (ft)		Length (ft)		Length (ft)		Length (ft)		Impervio	us Cvr =	94.7%	0.07	0.01	0.00		0.00
Slope (%)		Slope (%)		Slope (%)		Slope (%)		Slope (%)				,,					
2-yr, 24 hr rainfall						Velocity (fps)		Velocity (fps)									
segment total	n/a	segment total	n/a	segment total	n/a	segment total	n/a	segment total	n/a								
USER DEFINED				.=				time of conc.(hrs)	0.083	SCS Lag	Time (6 x Tc)=	0.0498	hours	3.0	minutes	
USER DEFINED				ATLAS 14 TR-55 SCS Lag Tin	HEC-1 me (hours	HMS HYDRC	0100	time of conc.(hrs) GIC ROUTING	0.083 SUMN	SCS Lag	or DA	6 x TcJ= 3 Flow Sumr	0.0498 nary	hours	3.0	minutes	
USER DEFINED		Segment #2		ATLAS 14 TR-55 SCS Lag Tin Segment #3	HEC-1 me (hours	HMS HYDRC	0100	<i>time of conc.(hrs)</i> GIC ROUTING Segment #5	0.083 5 SUMN	SCS Lag	o r DA Tc	6 x Tc)= 3 Flow Sumr Cn	0.0498 nary Q2	Q10	3.0 Q25	Q50	Q100
USER DEFINED Segment #1 Sheet Flow		Segment #2 Shallow Concent		ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent	HEC-1 me (hours	HMS HYDRC) Segment #4 Channelized	0100	<i>time of conc.(hrs)</i> GIC ROUTING Segment #5 Channelized	0.083 5 SUMN	SCS Lag	Time (For DA Tc hours	6 x Tc)= 3 Flow Sumr Cn -	0.0498 nary Q2 cfs	Q10 cfs	3.0 Q25 cfs	Q50 cfs	Q100 cfs
Segment #1 Sheet Flow Mannings "n"		Segment #2 Shallow Concent Unpaved		ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved	HEC-1 me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n"		GIC ROUTING Segment #5 Channelized Mannings "n"	0.083 SUMN	Area 0.617	Time (or DA Tc hours 0.083	<i>3</i> Flow Sumr Cn - 80	0.0498 nary Q2 cfs 2.757	Q10 cfs 4.11	3.0 Q25 cfs 4.99	Q50 cfs 5.71	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ft)		Segment #2 Shallow Concent Unpaved Length (ft)		ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft)	HEC-I	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft)		GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft)	0.083 5 SUMN	Area 0.617 <i>Imperviou</i>	Time (or DA Tc hours 0.083 us Cvr =	<i>3</i> Flow Sumr Cn - 80 90.7%	0.0498 mary Q2 cfs 2.757	Q10 cfs 4.11	3.0 Q25 cfs 4.99	Q50 cfs 5.71	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%)		Segment #2 Shallow Concent Unpaved Length (ft) Slope (%)		ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%)	HEC-1	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%)		Segment #5 Channelized Mannings "n" Length (ft) Slope (%)	0.083 5 SUMN	Area 0.617	Time (or DA Tc hours 0.083 ws Cvr =	<i>3</i> Flow Sumr Cn - 80 90.7%	0.0498 nary Q2 cfs 2.757	Q10 cfs 4.11	225 Cfs 4.99	Q50 cfs 5.71	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 2.4 hr rainfall		Segment #2 Shallow Concent Unpaved Length (ft) Slope (%)		ATLAS 14 TR-55 SCS Lag Tin Segment #3 Shallow Concent Unpaved Length (ft) Slope (%)	HEC-I	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps)		Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps)	0.083 S SUMN	Area Area 0.617 Imperviou	Time (or DA Tc hours 0.083 us Cvr =	<i>3</i> Flow Sumr Cn - 80 90.7%	0.0498 nary Q2 cfs 2.757	Q10 cfs 4.11	Q25 cfs 4.99	Q50 cfs 5.71	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ff) Slope (%) 2-yr, 24 hr rainfall segment total	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total	n/a	ATLAS 14 TR-55 SCS Lag Tin Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total	HEC-1 me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total	DLOC n/a	<i>Segment #5</i> Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total	0.083	Area Area 0.617 Imperviou	Time (Tor DA Tc hours 0.083 us Cvr =	<i>3</i> Flow Sumr Cn - 80 90.7%	0.0498 mary Q2 cfs 2.757	Q10 cfs 4.11	Q25 cfs 4.99	Q50 cfs 5.71	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total	HEC-1 me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total	n/a	<i>time of conc.(hrs)</i> GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total <i>time of conc.(hrs)</i>	0.083 5 SUMN 	SCS Lag	Time (Tc hours 0.083 us Cvr =	<i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> =	0.0498 nary Q2 cfs 2.757 0.0498	Q10 cfs 4.11	3.0 Q25 cfs 4.99 3.0	Q50 cfs 5.71 minutes	Q100 cfs 6.47
USER DEFINED Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total	n/a	ATLAS 14 TR-55 SCS Lag Tin Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total	HEC-1 me (hours n/a	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ff) Slope (%) Velocity (fps) segment total	n/a	time of conc. (hrs) GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) CROUTING S	0.083 5 SUMN n/a 0.083 UMMA	Area Area acres 0.617 Imperviou SCS Lag RY for	Time (or DA Tc hours 0.083 us Cvr = Time (<i>6 x TcJ</i> = <i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i>	0.0498 nary Q2 cfs 2.757 0.0498	Q10 cfs 4.11	3.0 Q25 cfs 4.99 3.0	Q50 cfs 5.71 minutes	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HL TR-55 SCS Lag Tir	HEC-1 me (hours n/a EC-HM me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total (S HYDROLC)	n/a	Time of conc. (hrs) GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) C ROUTING S	0.083 5 SUMM 	Area Area acres 0.617 Imperviou SCS Lag	Time (Tc hours 0.083 us Cvr = Time (<i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr	0.0498 nary Q2 cfs 2.757 0.0498 nary	Q10 cfs 4.11	3.0 Q25 cfs 4.99 3.0	Q50 cfs 5.71 minutes	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HL TR-55 SCS Lag Tir Segment #3	HEC-1 me (hours n/a	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total AS HYDROLC) Segment #4	n/a	time of conc. (hrs) GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) C ROUTING S Segment #5	0.083 5 SUMN 	SCS Lag	Time (Tc hours 0.083 us Cvr = Time (OFF L Tc	<i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr Cn	0.0498 nary Q2 cfs 2.757 0.0498 mary Q2	Q10 cfs 4.11	3.0 Q25 cfs 4.99 3.0 Q25	minutes Q50 cfs 5.71 minutes	Q100 cfs 6.47
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED Segment #1 Sheet Flow	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total Segment total	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HL TR-55 SCS Lag Tir Segment #3 Shallow Concent	HEC-1 me (hours n/a EC-HN me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total AS HYDROLC) Segment #4 Channelized	n/a	Time of conc. (hrs) GIC ROUTING GIC ROUTING Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) CROUTING S Segment #5 Channelized	0.083	Area acres 0.617 Imperviou SCS Lag RY for Area acres	Time (or DA Tc hours 0.083 us Cvr = Time (OFF L Tc hours	<i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr Cn -	0.0498 nary Q2 cfs 2.757 0.0498 mary Q2 cfs	Q10 Cfs 4.11 hours hours Q10 Cfs	3.0 Q25 cfs 4.99 3.0 Q25 cfs	minutes Q50 cfs 5.71 minutes Q50 cfs	Q100 cfs 6.47 Q100 cfs
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED Segment #1 Sheet Flow Mannings "n"	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total Segment total Segment #2 Shallow Concent Unpaved	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HI TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved	HEC-1 me (hours n/a EC-HN me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total AS HYDROLC) Segment #4 Channelized Mannings "n"		Time of conc. (hrs) GIC ROUTING GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) CROUTING S Segment #5 Channelized Mannings "n"	0.083	SCS Lag Area acres 0.617 Imperviou SCS Lag RY for Area acres 0.07	Time (or DA Tc hours 0.083 us Cvr = Time (OFF L C hours 0.083	<i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr Cn - 80	0.0498 mary Q2 cfs 2.757 0.0498 mary Q2 cfs 0.34	Q10 Cfs 4.11 6 hours Q10 Cfs Q10 Cfs Q10 Cfs Q10 Cfs Q10 Q10 Q10 Q10 Q10 Q10 Q10 Q10	3.0 Q25 cfs 4.99 3.0 Q25 cfs 0.52	minutes Q50 cfs 5.71 minutes Q50 cfs 0.733	Q100 cfs 6.47 Q100 cfs 0.831
USER DEFINED Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED Segment #1 Sheet Flow Mannings "n" Length (ft)	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total Segment total Segment #2 Shallow Concent Unpaved Length (ft)	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HL TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft)	HEC-1 me (hours n/a EC-HN me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total (Mannings) Segment #4 Channelized Mannings "n" Length (ft)		Time of conc. (hrs) GIC ROUTING GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) CROUTING S Segment #5 Channelized Mannings "n" Length (ft)	0.083	SCS Lag ARRY fo Area acres 0.617 Imperviou SCS Lag RY for Area acres 0.07 Imperviou	Time (or DA Tc hours 0.083 us Cvr = Time (OFF L C hours 0.083 us Cvr =	<i>6 x TcJ</i> = <i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr Cn - 80 78.8%	0.0498 mary Q2 cfs 2.757 0.0498 mary Q2 cfs 0.34	Q10 Cfs 4.11 6 hours Q10 Cfs Q10 Cfs Q10 Cfs Q10 Cfs Q10 Q10 Q10 Q10 Q10 Q10 Q10 Q10	3.0 Q25 cfs 4.99 3.0 Q25 cfs 0.52	minutes Q50 cfs 5.71 minutes Q50 cfs 0.733	Q100 cfs 6.47 Q100 cfs 0.831
USER DEFINED Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%)	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total Segment total Shallow Concent Unpaved Length (ft) Slope (%)	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HL TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%)	HEC-1 me (hours n/a EC-HN me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total AS HYDROLC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%)		time of conc. (hrs) GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) CROUTING S Segment #5 Channelized Mannings "n" Length (ft) Slope (%)	0.083	SCS Lag ARRY fo Area acres 0.617 Imperviou SCS Lag RY for Area acres 0.07 Imperviou	Time (or DA Tc hours 0.083 us Cvr = Time (OFF L C hours 0.083 us Cvr =	<i>6 x TcJ</i> = <i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr Cn - 80 78.8%	0.0498 mary Q2 cfs 2.757 0.0498 mary Q2 cfs 0.34	Q10 cfs 4.11 6 hours Q10 cfs Q10 cfs 0.52	3.0 Q25 cfs 4.99 3.0 Q25 cfs 0.52	minutes Q50 cfs 5.71 minutes Q50 cfs 0.733	Q100 cfs 6.47 Q100 cfs 0.831
Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED Slope flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total Segment #2 Shallow Concent Unpaved Length (ft) Slope (%)	n/a	ATLAS 14 TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HL TR-55 SCS Lag Tir Segment #3 Shallow Concent Unpaved Length (ft) Slope (%)	HEC-1 me (hours n/a EC-HN me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total AS HYDROLC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps)		Time of conc. (hrs) GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) C ROUTING S Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps)	0.083	SCS Lag	Time (or DA Tc hours 0.083 us Cvr = Time (OFF L C hours 0.083 us Cvr =	<i>6 x TcJ</i> = <i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr Cn - 80 78.8%	0.0498 mary Q2 cfs 2.757 0.0498 mary Q2 cfs 0.34	Q10 cfs 4.11 6 hours Q10 cfs Q10 cfs 0.52	3.0 Q25 cfs 4.99 3.0 Q25 cfs 0.52	minutes Q50 cfs 5.71 minutes Q50 cfs 0.733	Q100 cfs 6.47 Q100 cfs 0.831
USER DEFINED Segment #1 Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total USER DEFINED Sheet Flow Mannings "n" Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total Length (ft) Slope (%) 2-yr, 24 hr rainfall segment total	n/a	Segment #2 Shallow Concent Unpaved Length (ft) Slope (%) segment total Segment total Shallow Concent Unpaved Length (ft) Slope (%) segment total	n/a	ATLAS 14 TR-55 SCS Lag Tin Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total ATLAS 14 HL TR-55 SCS Lag Tin Segment #3 Shallow Concent Unpaved Length (ft) Slope (%) segment total	HEC-I me (hours n/a EC-HN me (hours	HMS HYDRC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total AS HYDROLC) Segment #4 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total		time of conc. (hrs) GIC ROUTING Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total time of conc. (hrs) CROUTING S Segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment #5 Channelized Mannings "n" Length (ft) Slope (%) Velocity (fps) segment total	0.083	SCS Lag	Time (Tc hours 0.083 us Cvr = Time (OFF L Tc hours 0.083 us Cvr =	<i>6 x TcJ</i> = <i>3</i> Flow Sumr Cn - 80 90.7% <i>6 x TcJ</i> = <i>DA 1</i> Flow Sumr Cn - 80 78.8%	0.0498 mary Q2 cfs 2.757 0.0498 mary Q2 cfs 0.34	Q10 cfs 4.11 6 hours Q10 cfs Q10 cfs 0.52	3.0 Q25 cfs 4.99 3.0 Q25 cfs 0.52	Q50 cfs 5.71 minutes Q50 cfs 0.733	Q100 cfs 6.47 Q100 cfs 0.831



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REVISIONS

AREA

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SDP23-00040



															_									<u> </u>	- SF
7					ATLAS 14 H	HEC-HN	IS HYDROLO	GIC ROUTING SU	MMARY for	DA 1															- RB R
-			N	RCS TR-55	SCS Time of Conce	entration Tim	e (hours)		Flow Summary																-IP —— I
	Segment #1		Segment #2		Segment #3		Segment #4	Segment #5	Area Tc	Cn	Q2	Q10	Q25 Q50	Q100											- TP T
_	Sheet Flow	(Shallow Concent		Shallow Concent		Mappings "p"	O Mannings "n"	0 18 0 0833	- 80	CTS 1	CTS	CTS CTS	CTS											- MS ۸
	Length (ft)	(0 Length (ft)		Length (ft)	0	Length (ft)	0 Length (ft) 0	Impervious Cvr =	100.0%		1.07	1.00 1.72	2.10											1 66 — - 1
_/	Slope (%)	0	0 Slope (%)		Slope (%)	0	Slope (%)	0 Slope (%)		1001070															
_!	2-yr, 24 hr rainfo	dl					Velocity (fps)	0 Velocity (fps) 0																	
_/	segment total	n/a	segment total	n/a	segment total	n/a	segment total n/a	segment total n/a																	
	USER DEFINED	0						Tc min = 0.0833	SCS Lag Time (.	6 x Tc)=	0.05	hours	3.0 minute	5											
Γ															1										
					AILAS 14 F	HEC-HN	IS HYDROLO	GIC ROUTING SU	MMARY for	DA 2															
	C 1#1		N	RCS TR-55	5 SCS Time of Conce	entration Tim	e (hours)	C 1.4/		Flow Sum	mary	010	005 055	0100											
-	Segment #1		Segment #2	-	Segment #3		Segment #4	Segment #5	Area Ic	Cn	Q2	Q10	Q25 Q50												
-	Sheet Flow		Shallow Concent		Shallow Concent		Channelized	Channelized	acres nours	-	CIS	CIS	CIS CIS	CIS											
-	Mannings "n"		Unpaved		Unpaved		Mannings "n"	Mannings "n"	0.31 0.0833	80	1.4	2.19	2./3 3.1.	3.62											
-	Length (ft)		Length (ft)		Length (ft)		Length (ft)	Length (ft)	Impervious Cvr =	57.1%								PLEASE REF	ER TO SHEE	T C73					
4	2-yr 24 br rainfo	dl	Slope (%)		Slope (%)		Velocity (fps)	Velocity (fps)	-									FOR TCEQ	CALCULATIO	ONS					
_/	segment total	n/a	segment total	n/a	segment total	n/a	segment total n/a	segment total n/a	-									AND BMP	DETAILS						
_	USER DEFINED	1					tin	e of conc. (hrs) 0.0833	SCS Lag Time (.	6 x Tc]=	0.04998	hours	3.0 minute	5	1			L							
					ATLAS 14 F	HEC-HN	IS HYDROLO	GIC ROUTING SU	MMARY for	DA 3								TO							
			Ν	RCS TR-55	SCS Time of Conce	entration Tim	e (hours)			Flow Sum	mary														
_/	Segment #1		Segment #2		Segment #3		Segment #4	Segment #5	Area Tc	Cn	Q2	Q10	Q25 Q50	Q100				Existing	IC	Project	Project	Cum. BMP	Cum. BMP	Percent	BMP
_!	Sheet Flow		Shallow Concent		Shallow Concent		Channelized	Channelized	acres hours	-	cfs	cfs	cfs cfs	cfs	Year	Project Name	Project Area		Inc/Dec	Total IC	ic I	Area	IC	IC	Tupo
_/	Mannings "n"		Unpaved		Unpaved		Mannings "n"	Mannings "n"	0.19 0.0833	80	0.6	1.16	1.51 1.79	2.09					IIIC/DEC	Totaric		Aica			туре
	Length (ff)		Length (ff)		Length (ff)		Length (ff)	Length (ff)	Impervious Cvr =	4.8%	0 11	0 48	0.043	1 1 2 1 2	1995	Best Western	1.563	0	1.49	1.49	95.33%	1.56	1.49	95.33%	sed/fil
	2-yr, 3 hr rainfall		Slope (76)		Stope (76)		Velocity (fps)	Velocity (fps)	Peak Storage (ac-ft =	0.077	0.147	0.181 0.2	.1 1.213 18 0.266	1996	Damons	3 31	0	21	21	63 44%	4 88	3 59	73 52%	sed/fil
	segment total	n/a	segment total	n/a	segment total	n/a	segment total n/a	segment total n/a	Water Surface El	ev (ft) =	750.11	751.27	751.73 752.	05 752.40	2007		0.01		0.20	2.1	74.2004	1.00	0.05	70.0270	
-	USER DEFINED						tin	e of conc. (hrs) 0.0833	SCS Lag Time (.	6 x Tc]=	0.04998	hours	3.0 minute	5	2007	Y - IVIOd	3.31	2.1	0.26	2.36	/1.30%	4.88	3.85	/8.84%	sed/fil
-					ATLAS 14 H	HEC-HN	IS HYDROLO	GIC ROUTING SU	MMARY for	DA 4					2007	Y Exc Req	4.092	3.689	(0.18)	3.51	85.78%	8.98	7.36	82.01%	sed/fil
-			Ν	RCS TR-55	SCS Time of Conce	entration Time	e (hours)			Flow Sum	mary				2019	Y Exc Reg	3 31	2 19	(0.08)	2 11	63 75%	8 98	7 28	81 11%	sed/fil
-	Segment #1		Segment #2		Segment #3		Segment #4	Segment #5	Area Tc	Cn	Q2	Q10	Q25 Q50	Q100	2013		0.01	5.10	(0.00)		05.7576	0.50	7.20		
4	Sheet Flow		Shallow Concent		Shallow Concent		Channelized	Channelized	acres hours	-	cfs	cfs	cfs cfs	cfs	2023	ExcReq	6.52	5.79	(0.25)	5.543	85.02%	8.98	7.03	/8.36%	sed/fil
_/	Mannings "n"		Unpaved		Unpaved		Mannings "n"	Mannings "n"	0.245 0.0833	80	1.1	1./1	2.13 2.4	2.81	2024	YMCA Mod	1.001	0.52	0.04	0.558	55.74%	9.98	7.07	70.88%	jellyfish
!	Lengin (II)		Lengin (ff)		Lengin (ff)		Lengin (ff)	Lengin (II)	impervious Cvr =	57.7%								•	I	•			•		1
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	SCALE:1"=20'
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• 0	IRON ROD FOUND/SET
	CONCRETE MONUMENT FOUND/SET
•	PIPE FOUND
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S 0	JUNCTION BOX (TO SCALE)
	GRATE INLET (TO SCALE)
	WASTEWATER CLEANOUT
۵	GAS TEST STATION
G	GAS METER
	SIGNAL LIGHT POLE
Ø	UTILITY POLE
© ↓ ↓	TELEPHONE MANHOLE
-⊕ _{EX.FH} - - ⊗ ⊗	FIRE HYDRANT GATE VALVE
SEX ₩ S	IRRIGATION CONTROL VALVE
	WATER METER
100 <u>99</u>	EXISTING CONTOURS
100	PROPOSED CONTOUR
	PROPOSED CURB AND GUTTER
X" GAS LINE	PROPOSED ASPHALT
X" STORM SEWER LINE	PROPOSED X" DIA. GAS LINE
X" WASTEWATER LINE	PROPOSED X" DIA. WASTEWATER LINE
X" WATER LINE	PROPOSED X" DIA. WATER LINE
· — — — — — —	EXISTING CHAIN LINK FENCE
· — —x— — — · — —0— — —	EXISTING WIRE FENCE
– — SB — —	SETBACK LINE
— <u> </u>	EASEMENT LINE
— — — # — — –	EXISTING ASPHALT
— — UGE — — –	EXISTING UNDERGROUND ELECTRIC LINE
— — ОНТ— — –	EXISTING OVERHEAD TELEPHONE LINE
— — UGT— — –	EXISTING UNDERGROUND TELEPHONE LINE
w	EXISTING WATER LINE (SIZE VARIES)
— — FM — — —	EXISTING FORCE MAIN (SIZE VARIES)
— — FOC — — -	EXISTING FIBER OPTIC LINE
— — GAS— — -	EXISTING GAS LINE (SIZE VARIES)
	BENCHMARK LOCATION
(\cdot)	EXISTING TREE TO REMAIN (SIZE VARIES)
\sim	
(\cdot)	(SIZE VARIES)
any	
Ens	MONARCH/HERITAGE TREE (SIZE VARIES)
7	PARKING COUNT
	PARCEL LINES
	HANDICAP ACCESS LINES
 	CONCRETE PAVING
	ASPHALT PAVING
<u> যে জালা লোক লোক ল</u>	
	CONCRETE SIDEWALK
	CONCRETE WASHOUT
	STABILIZED CONSTRUCTION ENTRANCE
SF	SILT FENCE
	 KOCK BERM INLET PROTECTION
TP	TREE PROTECTION
	MULCH SOCK
— 62	LIMITS OF CONSTRUCTION



PLEASE REFER TO SHEET C73
FOR TCEQ CALCULATIONS
AND BMP DETAILS



8

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REVISIONS

HEA PROJECT NO.

HEA PROJECT NO.22-036

ISSUED DATE: 06/12/2024

AREA

08

DDA

SDP23-00040

GENERAL NOTES:

- . ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK STANDARD SPECIFICATIONS
- 2. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC., NOT PLANNED FOR DEMOLITION OR REMOVAL THAT ARE DAMAGED OR REMOVED SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL BE BROUGHT IMMEDIATELY TO THE ATTENTION OF THE ENGINEER WHO SHALL BE RESPONSIBLE FOR REVISING THE PLANS AS APPROPRIATE.
- 4. MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL PAVING CONSTRUCTION.
- THE CONTRACTOR SHALL GIVE THE CITY OF ROUND ROCK 48 HOURS NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. TELEPHONE 512-218-5428 (PLANNING AND DEVELOPMENT SERVICES DEPARTMENT).
- ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AS WELL AS THE STANDARD SPECIFICATIONS MANUAL SERIES 600. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING, AT THE CONTRACTOR'S OPTION. HOWEVER, THE TYPE OF REVEGETATION MUST EQUAL OR EXCEED THE TYPE OF VEGETATION PRESENT BEFORE CONSTRUCTION.
- PRIOR TO ANY CONSTRUCTION, THE ENGINEER SHALL CONVENE A PRECONSTRUCTION CONFERENCE BETWEEN THE CITY OF ROUND ROCK, HIMSELF, THE CONTRACTOR, OTHER UTILITY COMPANIES, ANY AFFECTED PARTIES AND ANY OTHER ENTITY THE CITY OR ENGINEER MAY REQUIRE.
- 8. THE CONTRACTOR AND THE ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. ANY DEVIATIONS SHALL BE INCORPORATED INTO A REVISION AND APPROVED BY PLANNING AND DEVELOPMENT SERVICES. THE ENGINEER SHALL FURNISH THE CITY OF ROUND ROCK ACCURATE "AS-BUILT RECORD" DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS-BUILT RECORD" DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT PRIOR TO FINAL ACCEPTANCE.
- 9. THE CITY OF ROUND ROCK SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.
- 10. WHEN CONSTRUCTION IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO WITHIN THE PERMANENT AND ANY TEMPORARY EASEMENTS. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT AND TEMPORARY EASEMENTS. CLEAN-UP SHALL BE TO THE SATISFACTION OF THE PLANNING AND DEVELOPMENT SERVICES INSPECTOR.
- 11. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
- 12. AVAILABLE BENCHMARKS THAT MAY BE UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT ARE DESCRIBED AS FOLLOWS:

TBM #1 - MAG NAIL (SEE SP1)

PLANE COORDINATE SYSTEM = TEXAS COORDINATE SYSTEM CENTRAL ZONE, NAD 83, US. SURVEY FT. ELEV = 750.03'NAVD'88 (GEOID 18)

TRENCH SAFETY NOTES

- IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. A SITE SPECIFIC ENGINEERED TRENCH SAFETY SYSTEM, ACCEPTED BY PLANNING AND DEVELOPMENT SERVICES, SHALL BE UTILIZED FOR THIS PROJECT.
- 2. IN ACCORDANCE WITH THE U. S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4 FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
- 3. IF TRENCH SAFETY SYSTEM DETAILS WERE NOT PROVIDED IN THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN 5 FEET IN DEPTH AND DURING CONSTRUCTION IT IS FOUND THAT TRENCHES ARE IN FACT 5 FEET OR MORE IN DEPTH OR OR TRENCHES LESS THAN 5 FEET IN DEPTH ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE ENGINEER NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE RETAINED AND COPIES SUBMITTED TO THE CITY OF ROUND ROCK.

STREET AND DRAINAGE NOTES

- ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE CITY INSPECTOR AND HE SHALL BE GIVEN A MINIMUM OF 24 HOURS NOTICE PRIOR TO ANY TESTING.
- 2. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANULAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 3" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT LIFE.
- 3. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE TV, WATER SERVICES, ETC., SHALL BE A MINIMUM OF 30" BELOW SUBGRADE.
- 4. STREET RIGHTS-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OF-WAY AT 1/4" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS MADE TO AND ACCEPTED BY THE CITY OF ROUND ROCK PLANNING AND DEVELOPMENT SERVICES DEPARTMENT.
- BARRICADES BUILT TO CITY OF ROUND ROCK STANDARDS SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND AS NECESSARY DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
- 6. ALL R.C.P. SHALL BE MINIMUM CLASS III.
- 7. THE SUBGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BY: _____RABA KISTNER____ IN A REPORT DATED MAY 19, 2023 , AND THE PAVING SECTIONS DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF ROUND ROCK DESIGN CRITERIA. THE PAVING SECTIONS ARE TO BE CONSTRUCTED AS FOLLOWS: SEE DETAIL SHEET C70 FLEX BASE HMAC LIME STAB
 - STREET <u>THICKNESS</u> THICKNESS <u>THICKNESS</u> N/A
- THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISION OF THE CONSTRUCTION PLANS.

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WHERE PLASTICITY INDEX (PI) OVER 20, SUBGRADES MUST BE STABILIZED UTILIZING A METHOD ACCEPTABLE TO THE CITY ENGINEER. ANY LIME SHALL BE APPLIED TO THE SUBGRADE SOIL IN SLURRY FORM UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. THE GEOTECHNICAL ENGINEER SHALL RECOMMEND AN APPROPRIATE SUBGRADE STABILIZATION IF SULFATES ARE DETERMINED TO BE PRESENT.

4 **CITY OF ROUND ROCK GENERAL CONSTRUCTION NOTES**

WATER AND WASTEWATER NOTES:

- TREE PROTECTION NOTES: 1. PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 200), OR DUCTILE IRON (AWWA C100, MIN. 1. ALL TREES NOT LOCATED WITHIN THE LIMITS OF CONSTRUCTION AND OUTSIDE OF DISTURBED AREAS SHALL BE PRESERVED. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL TREES TO BE PRESERVED FROM HIS ACTIVITIES. CLASS 200). WATER SERVICES (2" OR LESS) SHALL BE POLYETHYLENE TUBING (BLACK, 200 PSI, DR9).
- PIPE MATERIAL FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 150), SDR 26 HIGHER PRESSURE RATED (150+ PSI), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). PIPE MATERIAL FOR GRAVITY WASTEWATER MAINS SHALL BE PVC (ASTM D2241 OR D3034, MAX. DR-26), DUCTILE IRON (AWWA C-100, MIN. CLASS 200).
- 3. UNLESS OTHERWISE ACCEPTED BY THE CITY ENGINEER, DEPTH OF COVER FOR ALL LINES OUT OF THE PAVEMENT SHALL BE 42" MINIMUM AND DEPTH OF COVER FOR ALL LINES UNDER PAVEMENT SHALL BE A MINIMUM OF 30" BELOW SUBGRADE.
- 4. ALL FIRE HYDRANT LEADS SHALL BE DUCTILE IRON PIPE (AWWA C-100, MIN. CLASS 200).
- 5. ALL IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-MIL POLYETHYLENE AND SEALED WITH DUCT TAPE OR EQUAL ACCEPTED BY THE CITY ENGINEER.
- THE CONTRACTOR SHALL CONTACT THE CITY OF ROUND ROCK CIVIL INSPECTOR TO COORDINATE UTILITY TIE-INS AND NOTIFY HIM AT LEAST 48 HOURS PRIOR TO CONNECTING TO EXISTING LINES.
- 7. ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL HAVE BOLTED COVERS. TAPPING OF FIBERGLASS MANHOLES SHALL NOT BE ALLOWED.
- 8. THE CONTRACTOR MUST OBTAIN A BULK WATER PERMIT OR PURCHASE AND INSTALL A WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER.
- 9. LINE FLUSHING OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE SCHEDULED WITH THE CITY OF ROUND ROCK INSPECTOR.
- 10. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIAL), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY CITY OF ROUND ROCK PERSONNEL. WATER SAMPLES WILL BE COLLECTED BY THE CITY OF ROUND ROCK TO VERIFY EACH TREATED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PPM WHERE MEANS OF FLUSHING IS NECESSARY, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FLUSHING DEVICES AND REMOVE SAID DEVICES PRIOR TO FINAL ACCEPTANCE BY THE CITY OF ROUND ROCK.
- 11. SAMPLING TAPS SHALL BE BROUGHT UP TO 3 FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE FOR CITY PERSONNEL. AT THE CONTRACTOR'S REQUEST, AND IN HIS PRESENCE, SAMPLES FOR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY THE CITY OF ROUND ROCK NOT LESS THAN 24 HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF THE CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY. THE CONTRACTOR SHALL SUPPLY A CHECK OR MONEY ORDER, PAYABLE TO THE CITY OF ROUND ROCK, TO COVER THE FEE CHARGED FOR TESTING EACH WATER SAMPLE. CITY OF ROUND ROCK FEE AMOUNTS MAY BE OBTAINED BY CALLING THE PLANNING AND DEVELOPMENT SERVICES DEPARTEMENT AT 512-218-5428.
- 12. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE PIPE HYDROSTATIC TESTING OF ALL WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES AND LABOR NECESSARY TO PERFORM THE TESTS. QUALITY AND PRESSURE TESTING SHALL BE MONITORED BY CITY OF ROUND ROCK PERSONNEL.
- 13. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF ROUND ROCK CIVIL INSPECTOR AND PROVIDE NO LESS THAN 24 HOURS NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING OR PRESSURE TESTING.
- 14. THE CONTRACTOR SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS AUTHORIZED BY THE CITY OF ROUND ROCK.
- 15. ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
- 16. ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY MARKED "(THROUGH CHISELING AND PAINTING)" AS FOLLOWS:

WATER SERVICE "W" ON TOP OF CURB WASTEWATER SERVICE "S" ON TOP OF CURB "V" ON FACE OF CURB VALVE

TOOLS FOR MARKING THE CURB SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF MARKING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF MARKING SHALL BE AS SPECIFIED BY THE ENGINEER AND ACCEPTED BY THE CITY OF ROUND ROCK.

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- 17. CONTACT THE CITY OF ROUND ROCK PLANNING AND DEVELOPMENT SERVICES DEPARTMENT AT 512-218-5428 FOR ASSISTANCE IN OBTAINING EXISTING WATER AND WASTEWATER LOCATIONS.
- 18. THE CITY OF ROUND ROCK FIRE DEPARTMENT SHALL BE NOTIFIED 48 HOURS PRIOR TO TESTING OF ANY BUILDING SPRINKLER PIPING IN ORDER THAT THE FIRE DEPARTMENT MAY MONITOR SUCH TESTING.
- 19. SAND, AS DESCRIBED IN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE USED AS BEDDING FOR WATER AND WASTEWATER LINES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, PEA GRAVEL AND IN LIEU OF SAND, A NATURALLY OCCURRING OR MANUFACTURED STONE MATERIAL CONFORMING TO ASTM C33 FOR STONE QUALITY AND MEETING THE FOLLOWING GRADATION SPECIFICATION. SIEVE SIZE F

TCATION.	
SIZE PERCENT	RETAINED BY WEIGH
1/2"	0
3/8"	0-2
#4	40-85
#10	95-100

- 20. THE CONTRACTOR IS HEREBY NOTIFIED THAT CONNECTING TO, SHUTTING DOWN, OR TERMINATING EXISTING UTILITY LINES, MAY HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS AND POSSIBLY BETWEEN 12 A.M. AND 6 A.M. "ANY WATER SHUTDOWN OR TIE-IN MUST BE SCHEDULED TEN (10) DAYS IN ADVANCE"
- 21. ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS, 30 TAC CHAPTER 213 AND 217, AS APPLICABLE. WHENEVER TCEQ AND CITY OF ROUND ROCK SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.

TRAFFIC MARKING NOTES:

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

EROSION AND SEDIMENTATION CONTROL NOTES: EROSION CONTROL MEASURES, SITE WORK AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF

ROUND ROCK EROSION AND SEDIMENTATION CONTROL ORDINANCE.

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- 2. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES OR GROUND COVER SUITABLE TO THE AREA AND SEASON IN WHICH THEY ARE APPLIED.
- 3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. SUCH INSTALLATION SHALL BE REGULARLY INSPECTED BY THE CITY OF ROUND ROCK FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY ENGINEER, THEY ARE WARRANTED.
- REVEGETATE DISTURBED AREAS OR COMPLETE A DEVELOPERS CONTRACT FOR THE RE-VEGETATION ALONG WITH THE ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL FINAL INSPECTION AND APPROVAL OF THE ENGINEERS CONCURRENCE LETTER. PROJECT BY THE ENGINEER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE EACH STRUCTURE AS APPROVED BY THE ENGINEER.

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- 5. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.
- 6. ONCE REVEGETATION REQUIREMENTS HAVE BEEN MET, ALL TEMPORARY SEDIMENT CONTROLS (E.G. SILT FENCE, ROCK BERMS, INLET PROTECTION, ETC.) SHALL BE REMOVED FROM THE SITE AND DISPOSED. ANY DISTURBED AREAS SHALL BE CLEANED OF DIRT AND DEBRIS AND PROPERLY RAKED AND GRADED.

- 2. ALL TREES SHOWN TO BE RETAINED WITHIN THE LIMITS OF CONSTRUCTION ON THE PLANS, SHALL BE PROTECTED DURING CONSTRUCTION WITH FENCING. SEE: TREE PROTECTION TREE WELLS (EC-06), TREE PROTECTION TREE LOCATION (EC-07) AND TREE PROTECTION FENCE-CHAIN LINK (EC-08).
- 3. TREE PROTECTION FENCES SHALL BE ERECTED ACCORDING TO CITY STANDARDS FOR TREE PROTECTION, INCLUDING TYPES OF FENCING AND SIGNAGE.
- 4. TREE PROTECTION FENCES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING, OR GRADING) AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
- 5. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIPLINES.
- 6. FENCES SHALL COMPLETELY SURROUND THE TREE OR CLUSTERS OF TREES, LOCATED AT THE OUTERMOST LIMITS OF THE TREE BRANCHES (DRIPLINE) OR CRITICAL ROOT ZONE (CRZ), WHICHEVER IS GREATER; AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROJECT IN ORDER TO PREVENT THE FOLLOWING:
- 6.1. SOIL COMPACTION IN CRZ AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIAL CRZ DISTURBANCES DUE TO GRADE CHANGES OR TRENCHING NOT REVIEWED AND UTHORIZED BY THE FORESTRY MANAGER. 6.2.
- 6.3. WOUNDS TO EXPOSED ROOTS, TRUNK, OR LIMBS BY MECHANICAL EQUIPMENT OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CONCRETE TRUCK CLEANING, AND FIRES. 6.4.
- 7. EXCEPTIONS TO INSTALLING TREE FENCES AT THE TREE DRIPLINES OR CRZ, WHICHEVER IS GREATER, MAY BE PERMITTED IN THE FOLLOWING CASES:
- 7.1. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, OR TREE WELL; HERE PERMEABLE PAVING IS TO BE INSTALLED, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA.
- HERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE NO CLOSER THAN 6 FEET TO THE BUILDING. 7.3. 7.4. HERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE FORESTRY MANAGER TO DISCUSS ALTERNATIVES.
- 8. HERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE THAT IS CLOSER THAN 5 FEET TO A TREE TRUNK, THE TRUNK SHALL BE PROTECTED BY STRAPPED-ON PLANKING TO A HEIGHT OF 8 FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
- 9. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN AREAS OF UNPROTECTED ROOT ZONES UNDER THE DRIPLINE OR CRZ, WHICHEVER IS GREATER, THOSE AREAS SHOULD BE COVERED WITH 4 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION.
- 10. ALL GRADING WITHIN CRZ AREAS SHALL BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE. PRIOR TO GRADING, RELOCATE PROTECTIVE FENCING TO 2 FEET BEHIND THE GRADE CHANGE AREA.
- 11. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL AND BACKFILLED WITH GOOD QUALITY TOP SOIL WITHIN TWO DAYS. IF EXPOSED ROOT AREAS CANNOT BE BACKFILLED WITHIN 2 DAYS, AN ORGANIC MATERIAL WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION SHALL BE PLACED TO COVER THE ROOTS UNTIL BACKFILL CAN OCCUR.
- 12. PRIOR TO EXCAVATION OR GRADE CUTTING WITHIN TREE DRIPLINES, A CLEAN CUT SHALL BE MADE WITH A ROCK SAW OR SIMILAR EQUIPMENT, IN A LOCATION AND TO A DEPTH APPROVED BY THE FORESTRY MANAGER, TO MINIMIZE DAMAGE TO REMAINING roots.
- 13. TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES WILL BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS ARE TO BE SPRAYED WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON LEAVES.
- 14. WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, A PLASTIC VAPOR BARRIER SHALL BE PLACED BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE CRZ.
- 15. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
- 16. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN FOUR (4) INCHES SHALL BE PERMITTED WITHIN THE DRIPLINE OR CRZ OF TREES, WHICHEVER IS GREATER. NO TOPSOIL IS PERMITTED ON ROOT FLARES OF ANY TREE.
- 17. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC, AND CONSTRUCTION EQUIPMENT SHALL TAKE PLACE BEFORE CONSTRUCTION BEGINS. ALL PRUNING MUST BE DONE ACCORDING TO CITY STANDARDS AND AS OUTLINED IN LITERATURE PROVIDED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA PRUNING TECHNIQUES).
- 18. ALL OAK TREE CUTS, INTENTIONAL OR UNINTENTIONAL, SHALL BE SEALED WITH AN APPROVED PRUNING SEALER IMMEDIATELY (WITHIN 10 MINUTES). TREE PAINT MUST BE KEPT ON SITE AT ALL TIMES.
- 19. THE FORESTRY MANAGER HAS THE AUTHORITY TO REQUIRE ADDITIONAL TREE PROTECTION BEFORE OR DURING CONSTRUCTION.
- 20. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED. REFER TO THE CITY OF ROUND ROUND ROCK TREE TECHNICAL MANUAL FOR APPROPRIATE REMOVAL METHODS.
- 21. PRIOR TO CONSTRUCTION, ALL LOWER TREE LIMBS OVER ROADWAYS MUST BE PRUNED TO A HEIGHT OF 14 FEET USING THE TECHNIQUES DESCRIBED IN THE CITY OF ROUND ROCK TREE TECHNICAL MANUAL
- 22. DEVIATIONS FROM THE ABOVE REQUIREMENTS AND NEGLIGENT DAMAGE TO TREES MAY BE CONSIDERED AS ORDINANCE VIOLATIONS.

SEQUENCE OF CONSTRUCTION:

- A. INSTALL EROSION CONTROLS AS INDICATED ON APPROVED SITE PLAN.
- B. INSTALL TREE PROTECTION AS NOTED ON APPROVED SITE PLAN.
- C. SCHEDULE PRE CONSTRUCTION MEETING WITH THE CITY OF ROUND ROCK INSPECTION DEPT., CONTRACTOR, UTILITY CONTRACTOR, AND ENGINEER. 218-6607.
- D. EVALUATION OF TEMPORARY EROSION CONTROL INSTALLATION. REVIEW CONSTRUCTION SCHEDULE AND THE EROSION CONTROL PLAN.
- BEGIN SITE CLEARING.
- INSTALL TEMPORARY SEDIMENTATION PONDS AND ROUGH GRADE SITE. INSPECT AND MAINTAIN ALL CONTROLS AS PER GENERAL NOTES.
- G. CONSTRUCT SITE UTILITIES.
- H. MID-CONSTRUCTION ON-SITE MEETING TO COORDINATE CHANGES IN CONSTRUCTION SCHEDULE AND EVALUATE EFFECTIVENESS OF EROSION CONTROL PLAN (CITY INSPECTOR, PROJECT ENGINEER, GENERAL CONTRACTOR).
- I. CONSTRUCT PAVING, PARKING AND BUILDINGS.
- COMPLETE CONSTRUCTION AND INSTALL LANDSCAPING
- PROVIDE AS-BUILTS TO ENGINEER.
- M. PROJECT ENGINEER INSPECTS JOB AND WRITES CONCURRENCE LETTER TO THE CITY, FINAL INSPECTION IS SCHEDULED UPON RECEIPT OF THE LETTER

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- N. RECEIVE CITY CLEARANCE FOR OCCUPANCY.
- O. REMOVE TEMPORARY EROSION/SEDIMENTATION CONTROLS.

NOTICE MUST INCLUDE: THE NAME OF THE APPROVED PROJECT; THE ACTIVITY START DATE; AND

- APPROVAL LETTER.
- TO WATER QUALITY.
- SENSITIVE FEATURE.
- BEEN PERMANENTLY STABILIZED.

- SITE.
- 11. UPON REQUEST:

- - AUSTIN REGION 12100 PARK 3 AUSTIN, TEXAS PHONE (512) FAX (512) 339-



TCEQ WPAP NOTES

(REV. 7/15/15) TEXAS COMMISSION ON ENVIRONMENTAL QUALITY WATER POLLUTION ABATEMENT PLAN GENERAL CONSTRUCTION NOTES

A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS

THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.

ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND

IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINK HOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS

NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150 FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR

PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE

ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THE NEXT RAIN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.

SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN TCEQ-0592 WHEN IT OCCUPIES 50% OF THE BASIN'S DESIGN CAPACITY.

LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.

ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER

10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR INCLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ

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

	SAN ANTONIO REGIONAL OFFICE
5 CIRCLE, BLDG. A	14250 JUDSON ROAD
S 78753	SAN ANTONIO, TEXAS 78233-4480
339-2929	PHONE (210) 490-3096
-3795	FAX (210) 545-4329

SUMMARY TABLES



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THE S DM	y Rifford
THIS DRAWING MAY EXPRESS WRITTEN C THEN ONLY IN ACCO TEXAS ENG	52960 (NOT BE MODIFIED WITHOUT THE ONSENT OF THE ENGINEER, AND DRDANCE WITH THE RULES OF THE INEERING PRACTICE ACT.
DATE SIGNED: ISSUED FOR:	06/12/2024 AGENCY REVIEW

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REVISIONS

HEA PROJECT NO.

HEA PROJECT NO.22-036

ISSUED DATE: 06/12/2024

GENERAL NOTES







CONTRACTOR TO ENSURE AT ALL TIMES, CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THROUGH A STABILIZED CONSTRUCTION ENTRANCE.

- ALL DIRT, MUD, ROCKS, DEBRIS, ETC. SPILLED, TRACKED, OR OTHERWISE DEPOSITED ON ANY EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.
- 3. CONTRACTOR TO IMPLEMENT TRAFFIC CONTROL MEASURES AS REQUIRED WHEN NECESSARY.
- 4. EROSION CONTROLS SHALL BE IN PLACE PRIOR TO ANY DEMOLITION
- THE CONTRACTOR SHALL CONSTRUCT AN ALL WEATHER SURFACE ACCESS DRIVE PRIOR TO GOING VERTICAL WITH THE BUILDING STRUCTURE. DIRT WORK AND FOUNDATION WORK MAY BE DONE PRIOR TO THE CONSTRUCTION OF THIS REQUIREMENT. ALL WEATHER SURFACE IS DEFINED AS ASPHALT, CONCRETE OR CHIP SEAL OVER AN ENGINEERED COMPACTED BASE.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AND ESTABLISHED PER CITY OF ROUND ROCK AND TCEQ REQUIREMENTS PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BY THE SITE INSPECTOR.



Schaefer Architecture 257 N. Broadway Wichita, KS, 67202

316.684.0171



DUDLEY WILLIAMS & ASSOCIATES, P.A. STRUCTURAL ENGINEERS MIDWEST ENGINEERING, INC. MECHANICAL ENGINEERS MIDWEST ENGINEERING, INC. ELECTRICAL ENGINEERS

Owner Site Development Plans For Ymca - Metro Offices 1826 N. Mays Street Round Rock, Texas 78664

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REVISIONS

HEA PROJECT NO.

HEA PROJECT NO.22-036 ISSUED DATE: 06/12/2024

EROSION AND SEDIMENTATION CONTROL PLAN

CONTROL PLAN

C10

SDP23-00040




























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x P)		
elopment = 80% of inc	reased load	
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