MEETING AGENDA
City Council
REGULAR SESSION CITY COUNCIL
February 4, 2025

HAL BALDWIN MUNICIPAL COMPLEX COUNCIL CHAMBERS
1400 SCHERTZ PARKWAY BUILDING #4
SCHERTZ, TEXAS 78154

CITY OF SCHERTZ CORE VALUES
Do the right thing
Do the best you can
Treat others the way you want to be treated
Work cooperatively as a team

AGENDA
TUESDAY, FEBRUARY 4, 2025 at 6:00 p.m.

Call to Order

Opening Prayer and Pledges of Allegiance to the Flags of the United States and State of Texas. (Councilmember Mark Davis)

Discussion and Action Items

Appointment of Mayor Pro-Tem - Discussion, consideration, and/or action regarding the confirmation, appointment, or election of the Mayor Pro-Tem. (Mayor/Council)

Proclamations

San Antonio Stock Show and Rodeo (Ms. Barbara Hall)

Employee Introductions

- **Engineering**: Donald Moreno-Engineering Inspector
- **Police Department:** Adam Rodriguez - Police Officer
- **Public Works-Streets**: Abel Valdez-Streets Maintenance Worker 1
- **Public Works-Utilities**: Dean Fickling - Water/Wastewater Worker 1; Mark Shadle - Water/Wastewater Worker1

Presentations

Presentation of the FY 23-24 Parks & Recreation Annual Report (S.Gonzalez/L.Shrum)

City Events and Announcements

- Announcements of upcoming City Events (B. James/S. Gonzalez)
- Announcements and recognitions by the City Manager (S. Williams)
- Announcements and recognitions by the Mayor (R. Gutierrez**)**

Hearing of Residents

*This time is set aside for any person who wishes to address the City Council. Each person should fill out the speaker's register prior to the meeting. Presentations should be limited to no more than **3** minutes.*

All remarks shall be addressed to the Council as a body, and not to any individual member thereof. Any person making personal, impertinent, or slanderous remarks while addressing the Council may be requested to leave the meeting.

All handouts and/or USB devices must be submitted to the City Secretary no later than noon on the Monday preceding the meeting. Handouts will be provided to each Councilmember prior to the start of the meeting by the City Secretary. All USB devices will be vetted by City IT staff to ensure City property is protected from malware.

Discussion by the Council of any item not on the agenda shall be limited to statements of specific factual information given in response to any inquiry, a recitation of existing policy in response to an inquiry, and/or a proposal to place the item on a future agenda. The presiding officer, during the Hearing of Residents portion of the agenda, will call on those persons who have signed up to speak in the order they have registered.

Consent Agenda Items

The Consent Agenda is considered self-explanatory and will be enacted by the Council with one motion. There will be no separate discussion of these items unless they are removed from the Consent Agenda upon the request of the Mayor or a Councilmember.

1. **Minutes** - Approval of the minutes from the Council Meeting on January 21, 2025, and the minutes from the Special Meeting-Canvassing the Runoff Election on January 28, 2025 (S.Edmondson/S.Courney)

2. **Resolution 25-R-016 -** Authorizing a Public Library Interlocal Agreement for mutual access to CloudLibrary digital resources (S.Gonzalez/M.Uhlhorn)

3. **Resolution 25-R-018** – Authorizing the City Manager to sign and submit a Notice of Intent for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) under the Texas Pollutant Discharge Elimination System (TPDES) Phase II MS4 General Permit TXR040000 for the City and other matters in connection therewith (B.James/K.Woodlee)

4. **Resolution 25-R-019** Authorizing the submission of a Special Projects Grant application to the Texas State Library and Archives Commission (TSLAC) for a Library Outreach Vehicle (S.Gonzalez/M.Uhlhorn)

5. **Resolution 25-R-013** - Granting signature authority to the City Manager to enter into and sign certain contracts and documents on behalf of the City (S.Williams/S.Gonzalez/J.Kurz)

6. **Resolution 25-R-020** - Authorizing a pro-rata agreement for the Saddlebrook Development (S.Williams/B.James)

7. **Resolution 25-R-014** - Authorizing the Schertz Police Department to accept equipment from the Alamo Area Council of Governments (AACOG) RECONYX Illegal Dumping Cameras Program (J. Lowery)

8. **Resolution 25-R-002** – Authorizing a professional services agreement with Unintech Consulting Engineers, Inc. for the design of the Boenig Drive Reconstruction Project (B. James/K. Woodlee/J. Nowak)

9. **Resolution 25-R-009** - Authorizing an expenditure with SAMES Bastrop Ford for the acquisition of 7 police vehicles (B.James/D.Hardin/C.Hernandez)

Discussion and Action Items

10. **Ordinance 25-S-005** Adopting a Compensation Schedule and Procedure for the City Council (R.Gutierrez/S.Williams)

11. **Resolution 25-R-017** - Establishing a date for a Public Hearing on Amendments to the Land Use Assumptions, Capital Improvement Plans, and Impact Fees for Water and Wastewater Utilities (B.James/K.Woodlee)

12. **Resolution 25-R-005** - Approving a Utility Service Extension Request for the Woman Hollering Townhomes (B.James/K.Woodlee)

13. **Ordinance 25-S-004** - Consider amendments to Part III of the Schertz Code of Ordinances, Unified Development Code (UDC), to Article 11, Section 21.11.6 Prohibited Signs and Section 21.11.17 Temporary Signs (B.James/L.Wood/E.Delgado)

14. **Resolution 25-R-021 -** Authorizing the approval of a Development Agreement with BFR LLC for the approximately 30 acre tract at FM 1518 and Woman Hollering Road (S.Williams/B.James)

Public Hearings

15. **Ordinance 25-F-006** - Conduct a public hearing and consider an amendment to Ordinance 14-F-20 amending the Drought Contingency and Water Emergency Response Plan which is incorporated adopted by reference in the Schertz Code or Ordinances, Chapter 90 Utilities, Article IV Mandatory Water Conservation, Section 90-119 Drought Contingency and Emergency Response Plan Adopted (B.James/L.Busch/Z.Eaton)

Workshop

16. Workshop Discussion on the Integration of Space Force into Veterans Memorial Plaza (S.Gonzalez/L.Shrum)

17. Workshop Discussion on the upcoming Request For Proposal for Municipal Solid Waste (S.Williams/S.Gonzalez)

Information available in City Council Packets - NO DISCUSSION TO OCCUR

18. Monthly Update - Major Projects In Progress/CIP (B.James/K.Woodlee)

19. Update on EcoBrite Cleaning Contract Changes

Requests and Announcements

- Requests by Mayor and Councilmembers for updates or information from Staff
- Requests by Mayor and Councilmembers that items or presentations be placed on a future City Council agenda
- City and Community Events attended and to be attended (Council)

Adjournment

CERTIFICATION

I, SHEILA EDMONDSON, CITY SECRETARY OF THE CITY OF SCHERTZ, TEXAS, DO HEREBY CERTIFY THAT THE ABOVE AGENDA WAS PREPARED AND POSTED ON THE OFFICIAL BULLETIN BOARDS ON THIS THE 30TH DAY OF JANUARY 2025 AT12:00 P.M., WHICH IS A PLACE READILY ACCESSIBLE TO THE PUBLIC AT ALL TIMES AND THAT SAID NOTICE WAS POSTED IN ACCORDANCE WITH CHAPTER 551, TEXAS GOVERNMENT CODE.

SHEILA EDMONDSON

I CERTIFY THAT THE ATTACHED NOTICE AND AGENDA OF ITEMS TO BE CONSIDERED BY THE CITY COUNCIL WAS REMOVED BY ME FROM THE OFFICIAL BULLETIN BOARD ON _____DAY OF _____, 2025.
TITLE: _____

This facility is accessible in accordance with the Americans with Disabilities Act. Handicapped parking spaces are available. If you require special assistance or have a request for sign interpretative services or other services, please call 210-619-1030.

The City Council for the City of Schertz reserves the right to adjourn into closed session at any time during the course of this meeting to discuss any of the matters listed above, as authorized by the Texas Open Meetings Act.

Closed Sessions Authorized: This agenda has been reviewed and approved by the City's legal counsel and the presence of any subject in any Closed Session portion of the agenda constitutes a written interpretation of Texas Government Code Chapter 551 by legal counsel for the governmental body and constitutes an opinion by the attorney that the items discussed therein may be legally discussed in the closed portion of the meeting considering available opinions of a court of record and opinions of the Texas Attorney General known to the attorney. This provision has been added to this agenda with the intent to meet all elements necessary to satisfy Texas Government Code Chapter 551.144(c) and the meeting is conducted by all participants in reliance on this opinion.

COUNCIL COMMITTEE AND LIAISON ASSIGNMENTS

Mayor Gutierrez Member Audit Committee Investment Advisory Committee Main Street Committee Liaison Board of Adjustments Senior Center Advisory Board-Alternate	**Councilmember Davis– Place 1** Member Interview Committee Main Street Committee - Chair TIRZ II Board Liaison Parks & Recreation Advisory Board Schertz Housing Authority Board Transportation Safety Advisory Board
Councilmember Watson-Place 2 Member Audit Committee Liaison Library Advisory Board Senior Center Advisory Board	**Councilmember Macaluso – Place 3** Member Interview Committee Hal Baldwin Scholarship Committee Liaison TIRZ II Board

Cibolo Valley Local Government Corporation-Ex-Officio	Animal Services Advisory Committee
Councilmember – Place 4 Member Hal Baldwin Scholarship Committee Investment Advisory Committee Liaison Schertz Historical Preservation Society	**Councilmember Westbrook – Place 5** Liaison Schertz-Seguin Local Government Corporation (SSLGC) Planning and Zoning Commission Schertz Historical Preservation Society Cibolo Valley Local Government Corporation (CVLGC)-Alternate
Councilmember Heyward – Place 6 Member Animal Services Advisory Committee Audit Committee Interview Committee-Chair Investment Advisory Committee Main Street Committee Liaison Building and Standards Commission Economic Development Corporation - Alternate Senior Center Advisory Board	**Councilmember Brown – Place 7** Member Main Street Committee Schertz-Seguin Local Government Corporation (SSLGC) Liaison Economic Development Corporation

Agenda No.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**City Secretary**
Subject:	**Appointment of Mayor Pro-Tem - Discussion, consideration, and/or action regarding the confirmation, appointment, or election of the Mayor Pro-Tem. (Mayor/Council)**

BACKGROUND

On August 28, 2018, City Council amended their Rules of Conduct and Procedure (Ordinance 18-M-30) regarding the appointment of the Mayor Pro Tem.

Below is the amended article: Article 5 Section 5.1 Appointment Procedure for the Mayor Pro Tem.

a. The Council will discuss, and with a majority vote, appoint the Councilmember to serve as the Mayor Pro Tem for the City.

b. The appointed Mayor Pro Tem must be a Councilmember and must meet the qualifications of Section 4.02 of the City Charter. In addition, to be appointed to the position of Mayor Pro Tem, a Councilmember must be an elected member of Council and a member in good standing.

c. Term dates for the Mayor Pro Tem position will begin in February and August of each year (the election dates offset by three (3) months). Terms will sequentially rotate according to Councilmember place.

d. If the Councilmember that is up for appointment as Mayor Pro Tem is vacant or is held by a Councilmember who is not qualified to serve as Mayor Pro Tem, the Mayor Pro Tem appointment will go to the next qualified Councilmember.e. The position will have a term of office of six (6) months.f. The appointed Mayor Pro Tem may be removed by Council by a two-thirds (2/3) majority vote of the members of Council at any time during his or her term.g. Council reserves the right to alter this procedure at any time by resolution or rule. City Charter Section. Section 4.02

Qualifications.

The Mayor and each Councilmember must have attained the age of eighteen or older on the first day of the term of office applied for, be a registered voter of the City of Schertz, and have been a resident of the City for at least twelve consecutive months immediately preceding the deadline for filing for an application for a place on the ballot.

Section 4.05 Mayor and Mayor Pro-Tem.

The Mayor shall be the official head of the City government. He or she shall be the chairperson and shall preside at all meetings of the City Council. The Mayor may vote only in the event of a tie. He or she shall, unless another signatory is otherwise designated by the City Council, sign all official documents such as ordinances, resolutions, conveyances, grant agreements, official plats, contracts, and bonds. He or she shall appoint special committees as instructed by the City Council, with committee membership to be composed of nominees by the City Council. He or she shall perform such other duties consistent with this Charter or as may be imposed upon him or her by the City Council. The Mayor shall not have veto powers.

The Mayor Pro-Tem shall be a Councilmember appointed by the City Council for a term and pursuant to procedures established by the City Council from time to time. The Mayor Pro- Tem shall act as Mayor during the absence or disability of the Mayor and in this capacity shall have the rights conferred upon the Mayor. While acting as Mayor, the Mayor Pro-Tem may vote on any matter before the City Council.

RECOMMENDATION Council will discuss and consider the appointment of the next Mayor Pro-Tem regarding the above qualifications. Next in line to serve is Councilmember Heyward. If appointed, Councilmember Heyward will be sworn in as the new Mayor Pro-Tem on February 4, 2025.

Agenda No.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**City Secretary**
Subject:	**San Antonio Stock Show and Rodeo (Ms. Barbara Hall)**

Attachments

San Antonio Stock and Rodeo

City of Schertz

Proclamation

"OFFICIAL RODEO SEASON"
AND
"LETS RODEO SAN ANTONIO"
2025

WHEREAS, the 76th annual San Antonio Stock Show & Rodeo, one of the largest and most prestigious events in the Alamo City, will be held February 6 – 23, 2025 at the Freeman Coliseum; and

WHEREAS, the San Antonio Stock Show & Rodeo is "A volunteer organization that emphasizes agriculture and education to develop the youth of Texas"; and

WHEREAS, since inception over $267 million has been committed by the organization to the youth of Texas in the form of scholarships, grants, endowments, auctions, calf scramble program and show premiums, with $12 million committed in 2024 impacting 18,000 students; and

WHEREAS, the lifeblood of the organization is the over 7,000 volunteers, the corporate partners ad patrons who support the event and mission; and

WHEREAS, in 2024, over 1.5 million visitors enjoyed exciting activates such as world-class entertainment, a carnival, educational exhibits, family activities and attractions, livestock and horse shows and sales, Mutton Bustin', Calf Scramble, Xtreme Bulls and shopping for the entire family to enjoy.

WHEREAS, on February 6, 2025, the San Antonio Stock Show & Rodeo will kick off with its livestock show to support its mission of educating future generations.

NOW, THEREFORE, BE IT RESOLVED that the City of Schertz through its Mayor, Ralph Gutierrez, and the City Council, hereby recognizes and proclaims **February 6-23, 2025 as "Official Rodeo Season"** and **February 6, 2025 "Official Dress Western Day"** in San Antonio, Texas

IN WITNESS WHEREOF, I hereunto set my hand and caused the seal of Schertz to be affixed this 4th day of February 2025.

_____

Ralph Gutierrez, Mayor

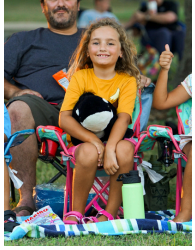
Agenda No.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**City Secretary**
Subject:	**Presentation of the FY 23-24 Parks & Recreation Annual Report (S.Gonzalez/L.Shrum)**

Attachments

FY 23-24 Parks & Recreation Annual Report

























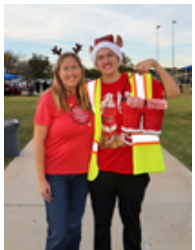












SCHERTZ PARKS & RECREATION FUN

FY 23-24

ANNUAL REPORT












SCHERTZ
PARKS &
RECREATION
FUN


EXIT







WHO WE ARE















21
FULL TIME STAFF

2
PART TIME STAFF

2
SEASONAL STAFF

250+
 # OF VOLUNTEERS

PARKS & RECREATION LEADERSHIP

Lauren Shrum, Director
Jared Montney, Park Superintendent
Cassie Paddock, Recreation Manager
Erin Matlock, Civic Center Manager
Robert Dobratz, Park Supervisor

TEAM ACCOMPLISHMENTS

CITY MANAGER COINS

Parks Crew- Wendy Swan
Sydney Paredes- Programming

AWARDS

Lauren Shrum: Terry Hershey Award
Larry May: Truck & Trailer 3rd Place
Cole Moody: Truck & Trailer 3rd Place
Ian King: Backhoe Competition 6th Place
WSMP: Excellence in Maintenance
Johnie McDow: Individual of the Year
Foam Party: Photography Award

SERVICE PINS

Traci Paprocki: 20 Years
Albert Orosco : 15 Years
Sydney Paredes: 1 Year
Kat Scheel: 1 Year
Daniel Delong: 1 Year
Jeremy Jacoway: 1 Year
Lonnie Corso: 1 Year

Certifications

Archery Trainer
- Sydney Paredes

Archery Instructor
- Cassie Paddock
- Cody Harkins
- Aubrey McCardle

PROFESSIONAL DEVELOPENT

Lauren Shrum:
- TRAPS Central Region Director
- Emerging Leaders Mentor
- AAPRA Mentor

Erin Matlock:
- TxAFV Treasurer

Cassie Paddock:
- TRAPS F&YP Chair
- NRPA YPN Chair
- NRPA Young Professional Fellowship

Jared Montney:
- Emerging Leaders Mentor

Sydney Paredes:
- F&YP Central Region Rep
- Emerging Leaders
- Texas Master Naturalist Class

Kathryn Scheel:
- Emerging Leaders
- TRAPS C- Region Awards Committee
- TRAPS State Awards Committee

Albert Orosco:
- Emerging Leaders















BOARDS & COMMITTEES



PARKS AND RECREATION ADVISORY BOARD

Johnie McDow, Chair
William Bosch, Vice Chair
Reginna Agee
Sally Macias
Robert Sheridan III
Brad Snow
James Garvin
Elizabeth Wiley
Penny Jennings
Christopher Castoro
Tim Dusek

SCHERTZ YOUTH SOCCER ALLIANCE

Sabrina Sheridan
Jason Hernandez
Michelle Hernandez
Dora Boyle
Damani Phillips
Demetrius Hopson
Cassie Paddock
Jared Montney
Sydney Paredes

BUFFALO VALLEY YOUTH ASSOCIATION

Jason Hahn
Barton Bowers
Daniel Hernandez
Gerald Connell
Matt Netherton
Ashley Underwood
Lillian Redus
Brad Marshall
Nick Morales
Jay Walkup

SENIOR CENTER ADVISORY BOARD

Christopher Castoro
Mary Wigle
Linda Powell
Adela Lugo
Della Morgan
Tess Daniels

FRIENDS OF CRESCENT BEND

Debby Arnold
Gary Arnold
Bill Skinner
Sandi Wheeler
Branch Archer
Ardell Winters
Paula Oliver
Ann Mallard
Steve Layton
Clare Layton



WHAT WE DO


4
WATER ACCESS POINTS


SCHERTZ
1
DOG PARK


27
PARKS


457
ACRES OF PARKLAND


H-E-B
13
SPONSORS


2
COMMUNITY CENTERS

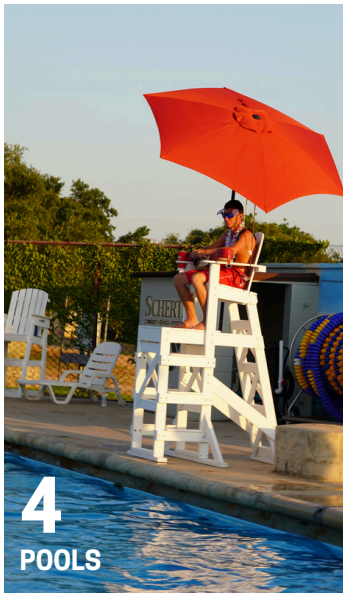

12
PAVILIONS & PICNIC AREAS


7
MULTIPURPOSE COURTS


12
BASEBALL & SOFTBALL FIELDS


36
PLAYSCAPE UNITS


2
SPLASH PADS


4
POOLS


12
SOCCER FIELDS


41
EVENTS


1
CIVIC/CONVENTION CENTER


1
SENIOR CENTER


12
PARTNER ORGANIZATIONS


4
ADULT SOCIAL LEAGUES


25
NATURE PROGRAMS


1
SKATE PARK


25.6
MILES OF HIKE & BIKE TRAILS


995
CIVIC CENTER BOOKINGS

THE YEAR IN NUMBERS

PARK RENTALS

Ashley Park Pavilion	21
Crescent Bend Group Campsite	3
Gutierrez Garden Park Gazebo	3
Pickrell Park- Large Pavilion	158
Pickrell Park- Aero Pavilion	58
Pickrell Park- Oak Pavilion	82
Pickrell Park- Poplar Pavilion	63
Pickrell Park- Picnic Area A	10
Pickrell Park- Picnic Area B	9
Pickrell Park- Picnic Area C	11
Pickrell Park- Picnic Area D	9
Rhine Valley Park Pavilion	8
Wendy Swan Pavilion A	2
Woodland Oaks Gazebo	3
Veterans Memorial Plaza	1

RECREATION

Events	41
Event Participants	28,426
Programs	123
Program Participants	1,750
Leagues	5
League Participants	540
Sponsorships	$58,050
Volunteer Hours	579

CIVIC CENTER RENTALS

Grand Ballroom	194
Bluebonnet Hall	236
Community Center	299
North Center	199

AQUATICS- PICKRELL POOL

Visits	18,362
Admissions	$22,244
Season Passes	$5,768



YOUTH SPORT PARTICIPANTS

Baseball (BVYA)	936
Softball (BVYA)	291
Basketball (BVYA)	255
Volleyball (BVYA)	89
Swimming (BVYA)	140
Soccer (SYSA)	1,329
Volunteer Hours	22,220

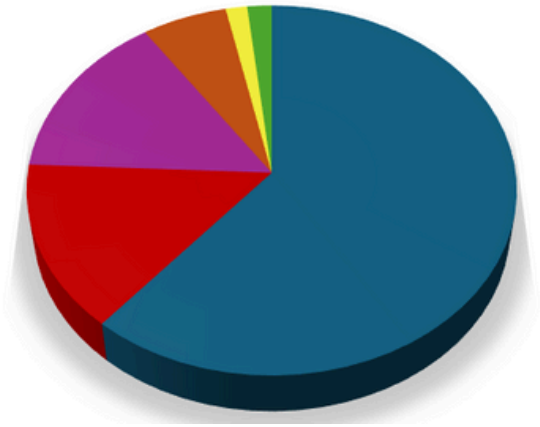
SENIOR CENTER

Building Scan Ins	31,327
Lunch Scan Ins	15,904
Memberships	816
Lunch Memberships	715
Volunteer Hours	1,875.5



BUDGET EXPENSES

Budget:	Actual:
$4,377,880.02	$4,614,183.96



- 460- Parks (Parks and Recreation)
- 463- Swim Pool (Pickrell Park Pool & Splash Pad)
- 464- Event Facilities (Civic Center)
- 901- City's Assistance (Senior Center)
- 106- Special Events Fund (Kick Cancer and Hal Baldwin Golf Tournament)
- 317- Park Fund
- 319- Tree Mitigation

460- Parks (Parks and Recreation)

	Budget	Actual
Personnel Services	$ 1,278,079.02	$ 1,322,151.35
Operating	$ 648,860.00	$ 759,127.02
Repairs and Maintenance	$ 312,276.00	$ 308,167.55
Capital Improvements	$ 385,000.00	$ 432,439.85
Expense Total:	$ 2,624,215.02	$ 2,821,855.77

463- Swim Pool (Pickrell Pool & Splash Pad)

	Budget	Actual
Operating	$ 82,500.00	$ 103,146.89
Contract Services	$ 587,052.00	$ 568,771.35
Expense Total:	$ 669,552.00	$ 671,771.35

464- Event Facilities (Civic Center)

	Budget	Actual
Personnel Services	$ 547,772.00	$ 543,478.03
Operating	$ 85,069.00	$ 85,251.04
Capital Improvements	$ 60,000.00	$ 54,191.55
Expense Total:	$ 692,841.00	$ 682,920.62

901- City's Assistance (Senior Center)

	Budget	Actual
Repairs and Maintenance	$ 10,000.00	$ 18,269.77
Contract Services	$ 250,000.00	$ 266,286.22
Expense Total:	$ 260,000.00	$ 284,555.99

106- Special Events Fund (KC & HB)

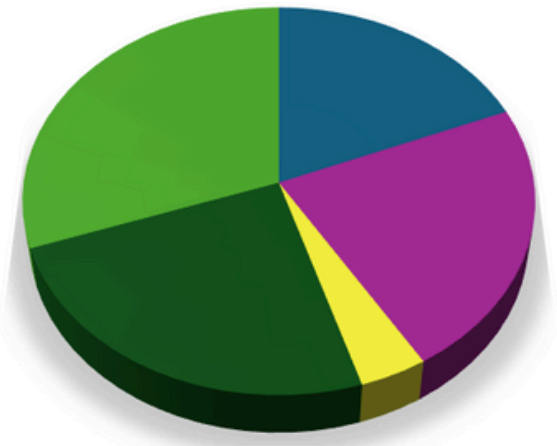
	Budget	Actual
Operating	$ 45,000.00	$ 71,651.23
Expense Total:	$ 45,000.00	$ 71,651.23

317- Park Fund

	Budget	Actual
Capital Improvements	$ 100,000.00	$ 0.00
Expense Total:	$ 100,000.00	$ 0.00

319- Tree Mitigation

	Budget	Actual
Trees	$ 75,000.00	$ 81,429.00
Expense Total:	$ 75,000.00	$ 81,429.00



BUDGET REVENUES

Revenue From All Parks Department Funds

	Budget	Actual
Parks and Rec Fees	$ 263,800.00	$ 342,623.41
Civic Center Fees	$ 326,500.00	$ 412,082.15
Special Event Fund Fees	$ 45,000.00	$ 71,651.23
Parkland Dedication Fees	$ 100,000.00	$ 446,137.50
Tree Mitigation Fees	$ 50,000.00	$ 555,380.00
Revenue Total:	$ 785,300.00	$ 1,827,874.29

FUNDING OUR PARKS

TEXAS PARKS AND WILDLIFE LOCAL PARK GRANT

$1.5 M

The Department secured a $750,000 local park grant from TPWD in early February of 2024. This grant requires a $750,000 value match from the City, which will be provided through a combined effort from area homeowners associations valued at $493,000, labor from the South Texas Off Road Mountain-Bikers valued at $15,000, and $241,100 from the parks and recreation budget. Plans for the Hilltop Park project include accessible concrete trails, an overlook area, a new playground, trails and other amenities.

ALAMO AREA METROPOLITAN PLANNING ORGANIZATION

$1.25 M

The Department secured $1,000,000 in funds from AAMPO for the West Dietz Creek Trail project. This grant requires a $250,000 match from the city, which will come from dedicated trail development funds in the parks and recreation budget. The project includes the construction of a 1.76 mile long, 10 foot wide concrete trail beginning south of Wiederstein Road, crossing Savannah Drive and Maske Road, and ending at Schertz Parkway where it can connect with the Campus Exercise Trail behind the Hal Baldwin Municipal Complex.

SCHERTZ ECONOMIC DEVELOPMENT CORPORATION

$12 M

The SEDC voted to invest nearly $12 million dollars in quality of life projects. The first tranche of funding will allocate $1.7 million in FY 2024-25 for the installation of field lights on 10 soccer fields at the Schertz Soccer Complex. In future years, the partnership with SEDC will focus on the development of Hilltop Park, a new nature-centric park in northern Schertz that will include the city's first overlook/observation platform, a nature-based playscape, picnic pavilions, walking and biking trails, and a fishing pier. Finally, the most significant investment will be made to Community Circle Park located behind the Hal Baldwin Municipal Complex. This new park will combine the Johnie McDow Sports Complex, the dog park, skate park, and many exciting new features to create a large recreational complex for the community.



IMPROVING OUR PARKS



SENIOR CENTER GARDEN ADDITON

The Senior Center Garden Addition is officially complete with a new patio extension and additional raised beds that are now fully operational, providing our seniors with beautiful spaces to gather, socialize, and enjoy nature.

Looking ahead to early FY 24-25, we are excited to introduce the final touches, including the installation of memorial tree art and the planting of fruit trees. These additions will further enhance the garden's beauty and functionality.

CYPRESS POINT PARK



In 2024, a ribbon cutting was hosted at Cypress Point Park for 2 added Shade Structures. This much needed shade was added to Cypress Point Park courtesy of grant funding from the San Antonio Council on Alcohol and Drug Awareness.



HILLTOP PHASE 1

We are pleased to report that we have accepted the parkland dedication for what will be Phase 1 of the future Hilltop Park, situated in the Homestead neighborhood. This initial phase includes a loop trail and a pond equipped with a fishing pier, enhancing the recreational offerings for our community. Looking forward, we anticipate an official ribbon-cutting ceremony in early 2025 to celebrate this addition to our park system.

PROST MASTER PLAN

This spring, we started the process of updating the Parks, Recreation, Open Space, and Trails (PROST) Master Plan. The PROST Master Plan is a 10-year plan that establishes a community vision, helps guide decisions, and create an action plan for our parks. We hosted stakeholder meetings and obtained additional feedback about our parks through an online mapping tool, survey, and public input events. The plan will be fully adopted in November of 2024.





ODDS AND ENDS

This year, we've made several improvements across our parks to enhance both safety and usability. Insulated backflow covers were installed to protect against freezing, and additional safety surfacing was added at multiple parks. At Crescent Bend Nature Park, we focused on removing dead trees, while significant irrigation system repairs were completed across several locations. We also striped pickleball court lines on three multipurpose courts and added new benches, picnic tables, and trash cans to improve amenities.

RECREATION

SUMMER LIKE NEVER BEFORE

This summer was like never before! We hosted an incredible 20 summer camps, with 12 facilitated by our own staff and 8 by partner organizations. For the first time ever, we hired 2 Recreation Instructors who played a key role in conducting these camps, along with other programs and events. In comparison, Summer 2023 saw just 3 camps, with only 1 run by our staff. Our special events also saw a huge boost in attendance—Parks and Rec Month attracted nearly 1,200 participants, even with one event rained out, compared to last year's 300. Movies and Music in the Park more than doubled its attendance, soaring from 405 to 920!

THE RISE OF PICKLEBALL

This year marked the rise of pickleball in our community! We kicked off with our first-ever Pickleball Tournament, the Blizzard Paddle Battle, in December, featuring 11 teams. We also launched our first Pickleball League in the spring with 47 players and held our inaugural in-house Pickleball Camp in July with 17 participants. Our partner, Skyhawks, also hosted a pickleball program with 11 participants, and our Parks and Rec Month Pickleball Open Play saw 43 enthusiastic players.







DID SOMEONE SAY MURDER?

On April 26, 2024, we hosted our first-ever "Murder Mystery Party" titled "The Greatest Murder on Earth," a circus-themed interactive event for adults. Unlike a show, participants took on assigned roles in a mystery that unfolded throughout the evening. Guests received their character details a week in advance, allowing them to fully immerse by dressing the part. This event was developed in response to community feedback, highlighting a demand for more adult-focused programming and increased activities in Northern Schertz.The event was a resounding success, selling out with a waitlist.

Expanding Opportunities Through New Partnerships

This year, we've welcomed several new partner organizations to offer even more diverse programs for Schertz residents. Monster's Vale brings live-action role-playing fun with weekly park days and fighter practice. KidCreate Studio sparks creativity with art programs for kids, while Evember offers Floral Design Classes for adults. Cake Poppin with Lex teaches cookie decorating, and Girls with Grit empowers participants by teaching skilled trades through hands-on projects. These partnerships are expanding our offerings and bringing exciting new opportunities to the community!

CIVIC & COMMUNITY CENTERS



TEAMWORK MAKES THE DREAM WORK

In FY23-24, the Civic Center really stepped up to support our community events like never before, jumping into their new role in the Parks, Recreation, and Community Services department. From decking the halls for Breakfast with Santa to checking in vendors at the Kris Kringle Market, we were all hands on deck. We even transformed the space for the Daddy Daughter Dance in under two hours with everyone's help. The biggest highlight? Assisting with Jubilee, our largest event of the year. The teamwork and energy from the Civic Center team were incredible, showcasing the true spirit of our department!

PROCESS IMPROVEMENTS

Staff has taken time this year to reevaluate our processes to ensure we are operating efficiently and have adequate resources to train staff. This included revamping our Safety Data Sheets and creating an Event Attendant S.O.P Manual focusing on operating equipment and handling inventory,



NEW FACES AND FOND FAREWELLS

In spring 2024, we welcomed Dawn Williams as our new Event Coordinator, bringing fresh energy and excitement to our team. As we embraced this new chapter, we also celebrated the career of Traci Paprocki, our Administrative Assistant, who retired at the end of the summer after 20 years of service.

VIRTUAL TOURS

The Civic Center, Community Center, and North Center all officially have virtual tours available to view on the Schertz website, complete with an outside view of the facility and close-ups of all the rooms inside. This addition allows customers to easily see if the facility meets their needs without having to schedule an in person tour.



SOCIAL ENGAGEMENT

Total Followers:
Facebook: 8,373
Instagram: 1,477

New Followers:
Facebook: 1,301
Instagram: 203

Total Posts
Facebook: 387
Instagram: 349

Page Visits:
Facebook: 36,670
Instagram: 1,718

Total Post Reach:

586,933

Facebook: 538,839
Instagram: 48,094

Total Comments:

1,062

Facebook: 1,010
Instagram: 52

Demographics

Female	83%
Male	17%
25-34 years old:	20%
25-44 years old:	40%
45-54 years old:	24%

Total Likes:

9,523

Facebook: 6,332
Instagram: 3,191

Total Shares

1,386

Facebook: 1,025
Instagram: 361

Residency of Followers

Schertz	25.4%
San Antonio	19.5%
Cibolo	12.6%
Converse	3.8%



FB Biggest Reach:
Paws in the Pool Photos
Reach: 6,339
Interactions: 54



Instagram Biggest Reach:
"We're Back" Reel
Reach: 1,316
Interactions: 56



Best Preforming Paid Ad:
Archery Camp
Reach: 13,993
Interactions: 48

THANK YOU TO OUR 2023-24 SPONSORS & PARTNERS













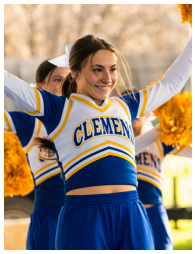


CATERPILLAR
CAKE POPPIN WITH LEX
EVEMBER
GIRLS WITH GRIT
GUADALUPE MASTER NATURALISTS
GVEC
HEB
ICODE
KIDCREATE STUDIO
METHODIST HOSPITAL NORTHEAST
MONSTER'S VALE
RIVER CITY COMMUNITY CHURCH
SAMCO CAPITAL MARKETS
SA ASTRONOMICAL ASSOCIATION
SA ZOO
SCHERTZ BANK AND TRUST
SCHERTZ-CIBOLO EMERGENCY CLINIC
SCUCISD
SKYHAWKS
STATE FARM- NATHAN OBREGON
THE CROSSVINE
THE CHAMBER
THE PURPOSE CHURCH
UT HEALTH SAN ANTONIO
YMCA







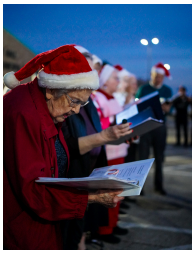



















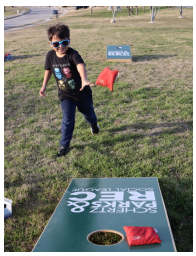













Agenda No. 1.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**City Secretary**
Subject:	**Minutes - Approval of the minutes from the Council Meeting on January 21, 2025, and the minutes from the Special Meeting-Canvassing the Runoff Election on January 28, 2025 (S.Edmondson/S.Courney)**

Attachments

Draft minutes 01-28-2025 Canvassing the Runoff Election

CC Minutes - 1/21/2025 DRAFT

MINUTES
SPECIAL SESSION COUNCIL MEETING
January 28, 2025

A Special Session Meeting was held by the Schertz City Council of the City of Schertz, Texas, on January 28, 2025, at 5:30 p.m. in the Hal Baldwin Municipal Complex Council Chambers, 1400 Schertz Parkway, Building #4, Schertz, Texas. The following members present to-wit:

Present:	Mayor Ralph Gutierrez; Mayor Pro-Tem Robert Westbrook; Councilmember Mark Davis; Councilmember Paul Macaluso; Councilmember Allison Heyward; Councilmember Tim Brown
Absent:	Councilmember Michelle Watson; Councilmember Place 4-Vacant
Staff present:	City Manager Steve Williams; Deputy City Manager Brian James; Assistant City Manager Sarah Gonzalez; City Secretary Sheila Edmondson; Deputy City Secretary Sheree Courney

Call to Order

Mayor Gutierrez called the meeting to order at 5:30 p.m.

Opening Prayer and Pledges of Allegiance to the Flags of the United States and State of Texas. (Mayor Gutierrez)

Mayor Gutierrez provided the opening prayer and led the Pledges of Allegiance to the Flags of the United States and State of Texas.

Hearing of Residents

*This time is set aside for any person who wishes to address the City Council. Each person should fill out the speaker's register prior to the meeting. Presentations should be limited to no more than **3** minutes.*

All remarks shall be addressed to the Council as a body, and not to any individual member thereof. Any person making personal, impertinent, or slanderous remarks while addressing the Council may be requested to leave the meeting.

All handouts and/or USB devices must be submitted to the City Secretary no later than noon on the Monday preceding the meeting. Handouts will be provided to each Councilmember prior to the start of the meeting by the City Secretary. All USB devices will be vetted by City IT staff to ensure City property is protected from malware.

Richard A. Kunz, 2960 Red Tip, Schertz, TX 78108, congratulated Councilmember Ben Guerrero and thanked those who ran for office, giving the City of Schertz a choice. Mr. Kunz also thanked the Guadalupe County Elections Office for their efforts in making the elections happen. He also thanked the voters who voted this election season.

Discussion and Action Items

1. **Resolution 25-R-010**-Approving a Resolution to canvass the returns and declare the results of the January 18, 2025, Runoff Election, and other matters in connection therewith. (Mayor/Council/S.Edmondson)

   City Secretary Sheila Edmondson brought forward Resolution 25-R-010 Canvassing the January 18, 2025 Runoff Election. The Runoff Election was held in the City of Schertz, on the January 18, 2025 to elect a Councilmember Place 4 and serve the rest of the three-year term ending November 2026. During the Early Voting there were 518 votes cast, 213 absentee votes and on Election Day 179 votes.The total number of votes cast in this election was 910.

   Mr. Tim Dusk received a total of 447 votes for a 49.12 percentage
   Mr. Ben Guerrero received a total of 463 votes for 50.88 percentage

   With the following vote count, the City Council finds that the results of the special election reflect that Mr. Ben Guerrero is hereby declared elected to the Office of the Councilmember Place 4.

   Moved by Councilmember Mark Davis, seconded by Councilmember Allison Heyward

   AYE: Mayor Pro-Tem Robert Westbrook, Councilmember Mark Davis, Councilmember Paul Macaluso, Councilmember Allison Heyward, Councilmember Tim Brown

   Passed

2. **Oath of Office** (S.Edmondson)

   - Officer-Oath of Office

     City Secretary Sheila Edmondson administered the Oath of Office to newly-elected Councilmember Place 4 Ben Guerrero.

   - Comments

     Councilmember Ben Guerrero thanked Team Guerrero who supported him throughout the 2024 Election Season. He also thanked several family members who came from out of town to support him.

Adjournment

Mayor Gutierrez adjourned the meeting at 5:44 p.m.

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

D R A F T

MINUTES
REGULAR MEETING
January 21, 2025

A Regular Meeting was held by the Schertz City Council of the City of Schertz, Texas, on January 21, 2025, at 6:00 p.m. in the Hal Baldwin Municipal Complex Council Chambers, 1400 Schertz Parkway, Building #4, Schertz, Texas. The following members present to-wit:

Present:	Mayor Ralph Gutierrez; Mayor Pro-Tem Robert Westbrook; Councilmember Mark Davis; Councilmember Michelle Watson; Councilmember Paul Macaluso; Councilmember Allison Heyward; Councilmember Tim Brown
Absent:	Councilmember Place 4 (Vacant)
Staff present:	City Manager Steve Williams; City Attorney Daniel Santee; Deputy City Manager Brian James; City Secretary Sheila Edmondson; Deputy City Secretary Sheree Courney

Call to Order
Mayor Gutierrez called the meeting to order at 6:00 p.m.

Opening Prayer and Pledges of Allegiance to the Flags of the United States and State of Texas. (Councilmember Tim Brown)
Councilmember Tim Brown provided the opening prayer and led the Pledges of Allegiance to the Flags of the United States and State of Texas.

Proclamations

School Board Recognition Month (Councilmember Westbrook)
Mayor Pro-Tem Robert Westbrook presented the School Board Recognition Month Proclamation to Schertz-Cibolo-Universal City Independent School District (SCUCISD) Superintendent Paige Meloni, and Board of Trustee members: President Mr. Ed Finley, Secretary Belinda Evans, Assistant Secretary Amy Thomas, and Trustees Mr. Jerry Perkins, Ms. Margaret Carlin, and Mr. Dan Swart and Judson Independent School District Board President Ms. Suzanne Kenoyer.

Presentations

Presentation of the FY 23-24 Parks & Recreation Annual Report (S.Gonzalez/L.Shrum)

Presentation of the FY 23-24 Parks & Recreation Annual Report was postponed.

Discussion and consideration of forthcoming financing of Schertz/Seguin Local Corporation Bond Issuance (S.Gonzalez/J.Walters)

Deputy City Manager Brian James introduced Mr. Andrew Friedman, Senior Managing Director with Public Finance with SAMCO Capital Markets. Mr. Friedman explained that since Schertz and Seguin are each 50% owners of the corporation, SSLGC must seek approval from both to borrow money to make capital improvements through bond sales. Tonight's presentation was to provide information on the proposed action to borrow an amount not to exceed $15 million dollars for improvements to the system. They will return to Council with a request for formal approval on February 18, 2025.

City Events and Announcements

- Announcements of upcoming City Events (B. James/S. Gonzalez)
  Deputy City Manager Brian James announced upcoming city events.

- Announcements and recognitions by the City Manager (S. Williams)
  City Manager Steve Williams thanked the City Staff for their hard work in planning for the bad weather day. He extended kudos to the Fire personnel, John Perry, Carl Schultze, Patricio Wilson, Tyler Wencka, and Amanda Mathews who were deployed for two weeks to Los Angeles to assist with the wildfires.

  Mr. Williams thanked the Chamber for allowing Schertz to host the 2025 Chamber Leadership Core Class, where staff and participants were able to talk about municipal government and engage in a mock city council meeting.

- Announcements and recognitions by the Mayor (R. Gutierrez**)**
  Mayor Gutierrez conveyed special gratitude to the crew who are assisting with the California fires.

  Mayor Gutierrez thanked everyone who participated in recent elections and congratulated successful candidates, including President Trump, Senator Cruz, Congressman Cuellar, Congressman Casar, Texas State Senator Donna Campbell, and Texas State Representative Alan Schoolcraft.

Hearing of Residents

*This time is set aside for any person who wishes to address the City Council. Each person should fill out the speaker's register prior to the meeting. Presentations should be limited to no more than **3** minutes.*

All remarks shall be addressed to the Council as a body, and not to any individual member thereof. Any person making personal, impertinent, or slanderous remarks while addressing the Council may be requested to leave the meeting.

All handouts and/or USB devices must be submitted to the City Secretary no later than noon on the Monday preceding the meeting. Handouts will be provided to each Councilmember prior to the start of the meeting by the City Secretary. All USB devices will be vetted by City IT staff to ensure City property is protected from malware.

Mayor Pro-Tem Robert Westbrook recognized the following residents:

Ben Guerrero, 506 Capot Court Ln, thanked residents who came out to vote in the Special Election and the Runoff Election. He also thanked Guadalupe County Conservative Republicans, the Schertz Police Association, and Mr. Roy Richard for their endorsements.

Josh Pollock, 128 Summit, addressed council regarding item 7 of the agenda. He stated they were present to answer any questions regarding the upcoming executive session.

Maggie Titterington, 1730 Schertz Parkway, provided an update on upcoming Chamber events.

Consent Agenda Items

The Consent Agenda is considered self-explanatory and will be enacted by the Council with one motion. There will be no separate discussion of these items unless they are removed from the Consent Agenda upon the request of the Mayor or a Councilmember.

1. **Minutes** - Approval of the minutes from the Council Workshop Meeting and regular Council Meeting on January 7, 2025 (S.Edmondson/S.Courney)

2. **Appointments, Re-appointments, and Resignations** - City of Schertz Boards, Commissions and Committees

   Resignations

   - EDC-Henry Hayes

3. **Resolution 25-R-007-** Authorizing the Schertz Police Department to apply for a Bullet-Resistant Shield Grant (J.Lowery)

4. **Resolution 25-R-001**- Authorizing the Schertz Police Department to apply for a Rifle-Resistant Body Armor Grant through the Office of the Governor for the Fiscal Year 2026 (J.Lowery)

5. **Resolution 25-R-012** - Authorizing the Schertz Police Department to apply for the FY 2026 Project Safe Neighborhood Grant Program (J.Lowery)

   No items were removed for separate action.

   Mayor Gutierrez asked for a motion to approve Consent Agenda Items #1 - 5.

Moved by Councilmember Michelle Watson, seconded by Councilmember Allison Heyward

AYE: Mayor Pro-Tem Robert Westbrook, Councilmember Mark Davis, Councilmember Michelle Watson, Councilmember Paul Macaluso, Councilmember Allison Heyward, Councilmember Tim Brown

Passed

Discussion and Action Items

6. **Ordinance 25-S-004** - Consider amendments to Part III of the Schertz Code of Ordinances, Unified Development Code (UDC), to Article 11, Section 21.11.6 Prohibited Signs and Section 21.11.17 Temporary Signs. (B.James/L.Wood/E.Delgado)

   Staff requested this item be tabled.

7. **Resolution 25-R-005** - Approving a Utility Service Extension Request for the Woman Hollering Townhomes (B.James/K.Woodlee)

   Mayor Gutierrez postponed discussion on Item #7 for discussion with City Attorney to be conducted in Executive Session.

   Following the Executive Session, Mayor Gutierrez announced this item was tabled.

Mayor Gutierrez recessed to Closed Session at 6:21 p.m.

Closed Session

8. The City Council will meet in closed session in accordance with Texas Government Code Section 551.071 to consult with legal counsel regarding the City's legal rights and obligations within its certificated utility service areas lying in its extraterritorial jurisdiction.

Reconvene into Regular Session

Mayor Gutierrez reconvened Regular Session at 7:14 p.m.

9. Take any action based on discussion held in Closed Session under Agenda Item #8.

   Mayor Gutierrez stated the discussion for Closed Session Agenda Item #8 started at 6:27 p.m. and ended at 7:11 p.m.

   No action was taken.

Workshop

10. Workshop Discussion on the Integration of Space Force into Veterans Memorial Plaza (S.Gonzalez/L.Shrum)

This time was postponed until next scheduled meeting.

11. January 2025 Quarterly Streets Update

Mayor Gutierrez recognized Streets Superintendent Robert Martinez who briefed Council on the status of streets in light of the winter storm. He then provided a presentation utilizing the Streets Maintenance Dashboard showing completed and pending projects, including potholes, street issues, sidewalk issues, and other issues such as defaced or faded signs. Public Works Director Larry Busch added clarification on the work being done and included an update on the asset management software implementation.

Assistant City Engineer John Nowak provided an update on the 2024 SPAM projects (Resurfacing Project, Rehabilitation Project, and Project Modifications) and concluded with a brief presentation of the 2025 SPAM Projects and other Street Projects.

No Council discussion occurred.

Information available in City Council Packets - NO DISCUSSION TO OCCUR

Requests and Announcements

- Requests by Mayor and Councilmembers for updates or information from Staff
  No requests from Mayor or Councilmembers for updates or information from Staff.

- Requests by Mayor and Councilmembers that items or presentations be placed on a future City Council agenda
  No requests from Mayor or Councilmembers for items or presentations to be placed on a future City Council agenda.

- City and Community Events attended and to be attended (Council)
  Councilmember Allison Heyward attended the following events: 89th Legislative Swearing In Ceremony for Texas Representative Alan Schoolcraft; the TML Legislative Update; the American Public Works Association Webinar on Life-cycle Modeling for Local Government; the TML Region 8 Meeting as TML President; and she served as emcee for the TML Traps for the Unwary Seminar.

Adjournment
Mayor Gutierrez adjourned the meeting at 7:41 p.m.

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

Agenda No. 2.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Library**
Subject:	**Resolution 25-R-016 - Authorizing a Public Library Interlocal Agreement for mutual access to CloudLibrary digital resources (S.Gonzalez/M.Uhlhorn)**

BACKGROUND

Note: An ILA is currently in effect per Council action in 2019; however, Bibliotheca, the company that owned cloudLibrary and the cloudLink platform, sold this portion of their business to OCLC in 2024. This updated ILA reflects the new ownership. The following is updated background information from the original 2019 resolution.

The Schertz Public Library began offering e-books and e-audiobooks to our community more than 15 years ago. Digital resources are no longer a novelty, but an essential and in-demand service libraries provide to their customers. It is a service, however, that comes with some challenges. On the upside, digital content:

- Offers flexibility to our customers. eBooks and eAudiobooks are one more way to fit reading into busy lives.
- Provides access to reading materials to people who aren't able to physically come into the library. From deployed military personnel, to children at home with an illness, to shut-in elderly persons, reading can still be part of life even when access to physical materials is limited.
- Makes it easy to update content or provide access to digital-only or out-of-print content. This is particularly important when providing non-fiction and educational materials.
- Allows libraries with limited space for physical collections to maintain minimum materials per capita levels when they run out of room.

On the downside, digital content:

- Costs far more for a library to provide than regular print materials. The average cost of an eBook to libraries is around $50 vs. $29 for print. Digital audiobooks average around $70.
- Is difficult for customers to discover without a platform for viewing it and the ability to integrate the titles into regular library catalogs.
- Is proving to be almost impossible to build robust collections over time because publishers are metering the content. Metering is the practice of requiring a library to purchase a copy of a book over and over again because the license only lasts for 26 or 52 check-outs. Other metering models are based on unlimited check-outs for a limited period of time, such as 12 or 24 months. Some publishers allow libraries to purchase titles with a perpetual license, meaning that the library owns the title forever. A perpetual license title can cost more than $100, but fewer and fewer titles have perpetual licenses.

In 2017, eleven public libraries in the Dallas area, discouraged by the unfavorable terms of their digital consortium, the high cost of providing digital content, and their inability to build up the number of titles in their digital collections even after significant investment, began looking for a way to share their digital content with each other. Their idea was to create a system based on the way libraries share their physical collections through interlibrary loan. Each library in the group would own its own content (unlike most consortia which own titles collectively) and let other libraries

borrow a title when its own customers weren't using it. They formed a coordinating committee, partnered with Bibliotheca (formerly known as 3M), one of the largest digital content providers to public libraries, to create a platform that allowed title sharing, and created an interlocal agreement. Once the libraries began sharing their content through this digital interlibrary loan system, they all saw dramatic increases in usage and decreases in wait time for their customers. Library customers immediately had access to more than 10 times the number of titles they had previously. Several months later, Bexar County's Bibliotech library joined the group and the number of titles available to customers skyrocketed. Since its beginnings in 2017, the group has grown to almost 70 libraries across Texas. The number of shareable copies available to customers is currently more than 300,000.

The initial length of the agreement was 10 years and is still set to expire in 2027. Once a library joins the group, the interlocal agreement is in place until a library dissolves the relationship with written notice, violates the terms and is voted out of the group by the coordinating committee, or the CloudLibrary Cloudlinking program is no longer available.

GOAL

Our goal in being a member of this consortium is to greatly expand the number of eBook and and eAudiobook titles available to our customers at minimal cost. This is keeping with our policy values of enhancing quality of life for our residents and being fiscally sustainable. The minimum threshold spend of $10,000 required to be a part of the consortium purchases about 140 eBook titles and about 50 eAudiobook titles. If we were to purchase these titles and made them available on our own non-shared platform, customers would never have more than a few thousand titles to choose from due to metering as explained in the Background section. By being part of the consortium, our customers have access to the titles we purchase as well as an additional 300,000+ titles.

COMMUNITY BENEFIT

Being a part of the consortium through this interlocal agreement greatly expands the amount of digital content available to our library customers, as well as greatly leveraging the amount of money we spend on digital content.

SUMMARY OF RECOMMENDED ACTION

Recommend approval of Resolution 25-R-016 to update the Coudlink interlocal agreement.

FISCAL IMPACT

The interlocal agreement does require each participating library to spend a minimum amount per year on content, as well as a $1,000 annual Cloudlink fee. The requirement is to spend a minimum of $10,000 or 10% of a library's materials budget, whichever is less, in order to have a robust collection for users. For the Schertz Public Library, this means we must meet an expenditure level of $10,000 per year, a number that we already surpass. We have increased our spending with Cloud in the years since joining the consortium as it gives us more content for our money. In FY24, we spent approximately $26,000 on Cloud digital content and $10,000 on digital content in our other digital platform, Overdrive. The Texas State Library and Archives Commission also provides the digital platform, Boundless, to accredited public libraries through a program called eRead Texas. Boundless is powered by a Baker & Taylor product called Axis 360. Use of this platform is free to us, but we do not control any of the content, meaning we can't add anything our customers may want to read. Having access to all three major platforms is desirable as not all published titles are available through every vendor. We purchase print titles from multiple vendors for the same reason. We consider Cloud to be our primary platform, but Overdrive is necessary as it is currently the only vendor licensed to provide Kindle format titles to public library users. Money for digital content is already a part of our materials budget--this interlocal agreement update does not require us to spend anything additional to what we

are already spending.

RECOMMENDATION

This Interlocal agreement is advantageous to our customers in that they will have access to many more unique titles than we can afford to provide on our own. They will also have access to more copies of titles, driving down wait times. Staff recommends adoption of this Resolution authorizing the Public Library Interlocal Agreement for Mutual Access to CloudLibrary Digital Resources

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Attachments

Resolution 25-R-016 with attachments

RESOLUTION NO. 25-R-016

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING A PUBLIC LIBRARY INTERLOCAL AGREEMENT FOR MUTUAL ACCESS TO CLOUDLIBRARY DIGITAL RESOURCES, AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, the City Council (the "City Council") of the City of Schertz (the "City") has determined that it is in the best interest of the City to enter into a Public Library Interlocal Agreement with other local governments which have executed an Interlocal Agreement for Mutual Access to cloudLibrary Digital Resources (the "Parties"), permitting the citizens of the City to utilize the cloudLibrary digital resources of the Parties and vice versa; now, therefore,"

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes the City Manager to execute and deliver the Public Library Interlocal Agreement for Mutual Access to cloudLibrary Digital Resources in substantially the form set forth on Exhibit A.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this _____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

(CITY SEAL)

EXHIBIT A

CloudLibrary/CloudLink Interlocal Agreement

THIRD AMENDED AND RESTATED INTERLOCAL AGREEMENT FOR MUTUAL ACCESS TO CLOUDLIBRARY DIGITAL RESOURCES

This Third Amended and Restated Interlocal Agreement for Mutual Access to CloudLibrary Digital Resources (the "Agreement") is made and entered into by and among the local governments which have executed it ("Parties"). The Parties, acting by and through their authorized officers execute this Agreement pursuant to Texas Government Code, Chapter 791, known as the Interlocal Cooperation Act (the "Act").

WHEREAS, the Parties are local governments engaged in promotion of public health and welfare by providing easy access to the broad range of public library services to their citizens, including cloudLibrary digital resources operated by OCLC, Inc.; and

WHEREAS, the Parties desire to further expand public access to digital content by sharing their respective Cloud Resources, as hereinafter defined, among their respective libraries; and

WHEREAS, the cloudLibrary cloudLink service allows libraries using the service to share their Cloud Resources with each other; and

WHEREAS, the Act provides authorization for local governments to contract with one another to provide governmental functions and services; and

WHEREAS, provision of public library services are governmental functions and services under the terms of the Act; and

WHEREAS, the governing body of each local government believes that the Agreement is necessary for the benefit of the public and that each party has the legal authority to provide governmental functions and services that are the subject of the Agreement; and

WHEREAS, the Parties originally entered into the original Interlocal Agreement for Mutual Access to CloudLibrary Digital Resources in 2017 (the "Original Agreement"), which was then amended by the Parties in 2017 and 2018 (the "First and Second Amendments"); and

WHEREAS, the Parties now wish to update the Original Agreement, as amended by the First and Second Amendments, by incorporating the First and Second Amendments as well as the additional amendments included herein, to create this Agreement; and

WHEREAS, the Parties agree that this Agreement shall supersede and replace any existing agreement among the Parties regarding the subject matter set forth herein.

NOW, THEREFORE, upon and for the mutual consideration stated herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereto agree as follows:

ARTICLE I
Definitions

Unless the context clearly indicates otherwise, the following words and phrases used in this Agreement shall have the following meaning:

"**Cloud Resources**" shall mean all library content provided by the Parties for upload into the OCLC Inc. cloudLibrary for the mutual benefit, access and/or use of the Parties and their Libraries.

"**Coordinating Committee**" shall mean the representatives selected to represent each Party from the participating Parties in this Agreement.

"**Library or Libraries**" shall mean the library/ies and resources thereof of the Parties.

"**Local Government**" shall have the meaning given in Section 791.003 of the Act, as amended.

ARTICLE II
Term

2.1 The initial term of this Agreement shall be for a period of ten (10) years beginning on May 31, 2017, unless sooner terminated as provided herein ("Initial Term"). The Initial Term may be extended by written agreement of the Parties for one or more five (5) year renewal terms (each a "Renewal Term"); provided that any such renewal occurs not less than 30 days prior to the end of the then current term.

ARTICLE III
Responsibilities of the Parties

3.1 Access. Each Library shall allow cardholders of the other Libraries to access and check out its Cloud Resources through the cloudLink service under the terms and conditions of the cardholder's Library, unless otherwise specified in the Agreement.

3.2 Policies and Procedures. The current policies and procedures of each Library shall remain in effect, with no coordination or standardization required, except that the following procedures shall be followed for shared Cloud Resources:

a. Cloud Resources may only be placed on hold by cardholders of the Library which owns the Cloud Resource in question.

b. Available Cloud Resources may be checked out by any cardholder of a participating Library.

c. The circulation period of the Cloud Resources are determined by the circulation policies of the cardholder's Library and may vary among Libraries.

d. Each Library shall track the number of items checked out from their respective Libraries and create an annual report by fiscal year of such data for review by the Coordinating Committee. These reports shall be provided to the Coordinating Committee annually by not later than January 1st.

e. Each Library shall submit an annual report of expenditures on Cloud Resources in the preceding fiscal year as set by that Party to the Coordinating Committee annually by not later than January 1st.

f. Each Library shall submit an annual report of their overall materials budget if their expenditure on Cloud Resources is less than $10,000 per fiscal year. This report shall be provided to the Coordinating Committee annually by not later than January 1st.

3.3 Liaison Designated. By this Agreement, each Party designates its director of library services or equivalent, as listed on each Party's signature page hereto attached, to act on behalf of the Party to ensure the performance of all duties and obligations of the designee's Party as herein stated, to serve as a liaison for the Party with and among the Parties, and, if necessary, to serve on the Coordinating Committee.

3.4 Participation Requirements. Each Library shall spend a minimum of $10,000 or 10% of its overall materials budget, whichever is less, on Cloud Resources during each fiscal year as set by that Party. Compliance with this section will not be required for any fiscal year during which a Party did not participate in this Agreement for the entire fiscal year. Compliance with this and other requirements will be determined by the Coordinating Committee on an annual basis, based on reports required by Article III.

3.5 Addition of Members. Any local government in the state of Texas which has contracted for the use of the cloudLibrary cloudLink service and agrees to abide by the terms of this Agreement may join this Agreement as a Party upon approval by a majority of all of the members of the Coordinating Committee. If approval is given, the new participating entity shall join the Parties by adopting and executing this Agreement through an action of the Party's governing body.

3.6 Cost. Each Party will bear its own cost of performance under this Agreement.

ARTICLE IV
The Coordinating Committee

4.1 Coordinating Committee.

a. The Coordinating Committee membership shall be the designated liaisons from the following local governments:

   i. City of Lewisville
   ii. City of Burleson
   iii. City of Carrollton
   iv. City of Colleyville
   v. City of Coppell
   vi. City of Euless
   vii. Town of Flower Mound
   viii. City of McKinney
   ix. City of Sachse
   x. City of Southlake
   xi. Town of Little Elm
   xii. Bexar County

b. The Coordinating Committee shall have only the duties specifically outlined in this Agreement. The Coordinating Committee shall have the authority to adopt its own rules of procedure that are consistent with Article III, Section 3.2 and in compliance with terms of this Agreement.

c. A simple majority of all members of the Coordinating Committee shall constitute a quorum to perform. A quorum of the Coordinating Committee must participate in any decision made by the Coordinating Committee under this Agreement.

d. The Coordinating Committee shall meet at least once every six (6) months. Meetings shall be held in person, by conference call, or by another live remote meeting access service.

e. A simple majority vote of all members of the Coordinating Committee shall select a member to receive any reports and send any notices required under this Agreement. This individual's name and contact information shall be provided to all Parties within thirty (30) days of the individual's selection.

f. A simple majority vote of the Coordinating Committee members present shall select a member to draft minutes outlining the items discussed and decisions made by the Coordinating Committee at any given meeting. The minutes shall be sent to the Coordinating Committee for approval within thirty (30) days of the meeting, and must be approved by a majority of all members of the Coordinating Committee within thirty (30) days of its distribution. The minutes may be distributed and approval of the minutes provided to the drafter via e-mail. These minutes shall be distributed to all Parties within ten (10) days of their approval.

g. The Parties understand and agree that the Coordinating Committee shall not be construed as a board or committee appointed by a governing body and shall not be required to comply with the provisions of the Texas Open Meetings Act, Chapter 551 of the Texas Government Code.

ARTICLE V
Termination

5.1 This Agreement may be terminated as follows:

a. Any Party may choose to terminate its participation in the Agreement with sixty (60) days' written notice to each of the members of the Coordinating Committee at the notice address provided in this Agreement. The termination of a Party's participation in this Agreement shall not affect the continuation of this Agreement in full force and effect with respect to the remaining Parties.

b. A Party's participation in the Agreement may be terminated for any reason, including failure to comply with the terms of this Agreement, by an affirmative vote of two-thirds (2/3) of all of the members of the Coordinating Committee to remove the Party. Upon termination under this section, the Coordinating Committee shall provide thirty (30) days' written notice to the Party which has been removed following the Committee's decision. The Coordinating Committee will contact OCLC, Inc. and notify them of the Party's removal.

c. In the event that the cloudLibrary cloudLink program is no longer available, this Agreement shall automatically terminate.

5.2 Upon termination, each Party will retain its rights, title and interest to all Cloud Resources purchased by the Party during its time as a Party to this Agreement.

ARTICLE VI
Liability and Immunity

6.1 Liability and Immunity.

a. *Handling of Claims*. The Parties agree, to the extent authorized under the constitution and laws of the State of Texas and without waiving any immunity, right, protection, or defense therein, that each shall be individually responsible for any and all claims for damages, cost, and expenses to person or persons and property that may arise out of or be occasioned by the intentional or negligent act or omission of its respective

officials, agents, representatives, and employees in the performance of this Agreement, including but not limited to their acts of negligence or omission in the provision of public library services, including the cloud based services that are the subject to this Agreement. The Parties agree that each shall be liable only for damages, including attorneys' fees and costs, related to or arising out of the intentional or negligent act or omission of their respective officials, agents, representatives, and employees in the performance of this Agreement.

b. *Joint Liability.* In the event of joint or concurrent negligence of the Parties, responsibility, if any, shall be apportioned comparatively in accordance with the laws of the State of Texas without, however, waiving any governmental immunity, right, protection, or defense available to any party individually under Texas law. The provisions of this section are solely for the benefit of the Parties hereto and are not intended to create or grant any rights, contractual or otherwise, to any other person or entity.

c. *No Waiver of Immunity.* It is expressly understood and agreed that in execution of this Agreement, no Party waives, nor shall be deemed to have waived, immunity or defense that would otherwise be available to it against claims arising in the exercise of governmental powers and functions. By entering into this Agreement, the Parties do not create any obligations, express or implied, other than those set forth herein, and this Agreement shall not create any rights in parties not signatories hereto.

ARTICLE VII
Miscellaneous

7.1 Assignment. This Agreement may not be assigned by any Party hereto without the prior written unanimous consent of the other parties. No assignment, delegation of duties or subcontract under this Agreement shall be effective without the prior written unanimous consent of all Parties hereto.

7.2 Governing Law. The validity of this Agreement and any of its terms and provisions, as well as the rights and duties of the parties, shall be governed by the laws of the State of Texas; and venue for any action arising as a result of this Agreement shall be in the state court of Denton County, Texas, except when state law requires otherwise.

7.3 Legal Construction. In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the other provisions, and the Agreement shall be construed as if such invalid, illegal or unenforceable provisions had never been contained in this Agreement.

7.4 Amendment. This Agreement may be amended by a simple majority vote of all members of the Coordinating Committee.

7.5 Entire Agreement. This Agreement represents the entire Agreement among the Parties with respect to the subject matter covered by this Agreement.

7.6 No Relationship Created. The Parties agree and acknowledge that no Party is an agent of any other Party under this Agreement and that each Party is responsible for its own acts, forbearance, negligence, and deeds, and for those of its agents or employees. The purposes for which each Party has entered into this Agreement are separate and distinct. It is not the intent of any of the Parties that a joint enterprise relationship is being entered into and the Parties hereto specifically disclaim such relationship.

7.7 Rights of Third Parties. Nothing contained in this Agreement shall be construed to create, and the Parties do not intend to create, any rights in or for the benefit of third parties.

7.8 Force Majeure. In the event that any party shall be prevented from performing any of its obligations under this Agreement by any act of God, war, right, civil commotion, strikes, fires, flood or by the occurrence of any other event beyond the control of such party, then such party shall be excused from the performance of the obligations in this Agreement but only during such periods of Force Majeure.

7.9 Current Revenues. All costs or expenses incurred by any Party as result of this Agreement shall be paid from the current revenues available to the Party.

7.10 Recitals. The recitals of this Agreement are incorporated herein.

7.11 Severability. The provisions of this Agreement are severable. If any paragraph, section, subdivision, sentence, clause, or phrase of this Agreement is for any reason held by a court of competent jurisdiction to be contrary to law or contrary to any rule or regulation having the force and effect of the law, the remaining portions of the Agreement shall be enforced as if the invalid provision had never been included.

7.12 Notice. All notices pertaining to this Agreement shall be in writing and shall be deemed delivered (i) when received at a Party's address if hand delivered or sent via overnight delivery service by way of USPS, UPS, FedEx, or similar carrier, or (ii) on the third (3rd) business day after being deposited in the United States mail, postage prepaid, certified mail, return receipt requested, addressed to the Parties at the respective notice addresses set forth below or at other addresses as may have been previously specified by written notice delivered in accordance with this Agreement.

[SIGNATURE PAGES ATTACHED]

APPROVED BY THE GOVERNING BODY OF PARTICIPATING ENTITY, CITY OF SCHERTZ, GUADALUPE COUNTY, TEXAS, this ___ day of _____, 2025.

EXECUTED BY:

_____
STEVE WILLIAMS, CITY MANAGER

ATTEST:

_____
SHEILA EDMONDSON, CITY SECRETARY

Liaison:
Melissa Uhlhorn
Library Director

Notice to:
Schertz Public Library
798 Schertz Pkwy
Schertz, TX 78154
Attn: Melissa Uhlhorn
210.619.1701

APPROVED AS TO FORM:

_____
CITY ATTORNEY

Agenda No. 3.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Engineering**
Subject:	**Resolution 25-R-018 – Authorizing the City Manager to sign and submit a Notice of Intent for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4) under the Texas Pollutant Discharge Elimination System (TPDES) Phase II MS4 General Permit TXR040000 for the City and other matters in connection therewith (B.James/K.Woodlee)**

BACKGROUND

The Federal Water Pollution Control Act was passed in 1972. After the law was amended in 1977, it became commonly known as the Clean Water Act. The Clean Water Act (The Act) established the structure for federal regulation of pollutant discharges into the waters of the United States, authorized the Environmental Protection Agency (EPA) to implement pollution control program, extended the requirements to establish standards or surface water contaminants, and made it unlawful to discharge unpermitted point source pollutants into navigable water. The Act also established funding for construction of sewage treatment plants and promoted planning to address non-point source pollution. In order to reduce stormwater pollution, amendments were made to the Clean Water Act in 1987, requiring stormwater discharges to be permitted in two phases.

Phase 1 applied, among other things, to large cities with separate stormwater sewer systems. The regulations required these cities to obtain National Pollutant Discharge Elimination System (NPDES) permits. The permit process imposed controls on the cities to reduce pollution in stormwater discharges.

Phase 2 applies to smaller cities. In 1990, the EPA issued final regulations for Phase 2. The Texas Commission on Environmental Quality (TCEQ) issued the Texas Pollutants Discharge Elimination System (TPDES) General Permit Number TXR040000 (General Permit) for Phase 2 Stormwater on August 13, 2007 in order to create a mechanism for non-Phase 1 Texas cities with populations of over 1,000 to come into compliance with the federal regulations.

On August 13, 2024, TCEQ issued the latest revision to General Permit TXR040000. With the new General Permit all Small MS4s are defined by levels based on the population served in and Urban Area (UA) according to the 2020 decennial census. The population of the City of Schertz was 42,002, defining the community as a Level 3 Small MS4.

The process of applying for coverage under and maintaining conformance to the General Permit begins with submitting a Notice of Intent (NOI) to the TCEQ. The NOI confirms the request to be covered by and intent to comply with TPDES General Permit TXR040000. Resolution 25-R-018 authorizes the City Manager to sign and submit the NOI to TCEQ in accordance with statutory signature requirements of 30 TAC Section 305.44.

GOAL

The goal of this resolution is to authorize the City Manager to sign and submit a Notice of Intent to the Texas Commission on Environmental Quality (TCEQ) to comply with General Permit TXR040000.

COMMUNITY BENEFIT

Part of the requirements to comply with the General Permit is the implementation of a Stormwater Management Program (SWMP) proposed to reduce pollution by increasing the city's control of stormwater pollution sources. Implementation of the SWMP proposes the means to develop, implement, and enforce a plan to reduce the discharge of pollutants to the maximum extent practicable (MEP). This furthers the City's efforts to achieve a healthy, safe community for citizens.

SUMMARY OF RECOMMENDED ACTION

Staff recommends that Council approve Resolution 25-R-018 authorizing the City Manager to sign the NOI for the MS4 General Permit.

RECOMMENDATION

Approve Resolution 25-R-018.

Attachments

Resolution 25-R-018

2024 MS4 General Permit

RESOLUTION NO. 25-R-018

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING THE CITY MANAGER TO SIGN AND SUBMIT A NOTICE OF INTENT FOR STORMWATER DISCHARGES FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4) UNDER THE TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PHASE II MS4 GENERAL PERMIT TXR040000 FOR THE CITY AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, The Federal Water Pollution Control Act was passed in 1972. After the law was amended in 1977, it became commonly known as the Clean Water Act[1]. The Clean Water Act (The Act) established the structure for federal regulation of pollutant discharges into the waters of the United States, authorized the Environmental Protection Agency (EPA) to implement pollution control program, extended the requirements to establish standards or surface water contaminants, and made it unlawful to discharge unpermitted point source pollutants into navigable water. In order to reduce stormwater pollution, amendments were made to the Clean Water Act in 1987, requiring stormwater discharges to be permitted in two phases; and

WHEREAS, Phase 1 applied, among other things, to large cities with separate stormwater sewer systems. The regulations required these cities to obtain National Pollutant Discharge Elimination System (NPDES) permits. The permit process imposed controls on the cities to reduce pollution in stormwater discharges; and

WHEREAS, In 1990, the EPA issued final regulations for Phase 2. The Texas Commission on Environmental Quality (TCEQ) issued the Texas Pollutant Discharge Elimination System (TPDES) General Permit Number TXR040000 (General Permit) for Phase 2 stormwater on August 13, 2007 in order to create a mechanism for non-Phase 1 Texas cities with populations of over 1,000 to come into compliance with the federal regulations; and

WHEREAS, On August 15, 2024, TCEQ issued the latest revision to General Permit TXR040000. With the new General Permit all Small MS4s are defined by levels based on the population served in and Urban Area (UA) according to the 2020 decennial census. Schertz' population was 42,002 defining the community as a Level 3 Small MS4; and

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes the City Manager to execute a Notice of Intent (NOI) to be covered under and comply with TPDES General Permit TXR040000 to the TCEQ.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this ____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Guttierez, Mayor

ATTEST:

_____
Sheila Edmonson, City Secretary

(CITY SEAL)

Texas Commission on Environmental Quality

GENERAL PERMIT TO DISCHARGE UNDER THE

TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM

under provisions of
402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

This permit supersedes and replaces
TPDES General Permit No. TXR040000, issued January 24, 2019

Small (Phase II) Municipal Separate Storm Sewer Systems located in the State of Texas may discharge directly to surface water in the state only according to requirements and conditions set forth in this Comprehensive General Permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ or Commission), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this general permit does not grant to the permittee the right to use private or public property for conveyance of stormwater and certain non-stormwater discharges along the discharge route. This includes property belonging to but not limited to any individual, partnership, corporation, or other entity. Neither does this general permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This general permit and the authorization contained herein shall expire at midnight, five years after the permit effective date.

EFFECTIVE DATE: August 15, 2024

ISSUED DATE: August 15 2024

For the Commission

TCEQ GENERAL PERMIT NUMBER TXR040000
RELATING TO DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

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Part I. Definitions

Arid Areas – Areas with an average annual rainfall of less than ten inches.

Benchmarks – A benchmark pollutant value is a guidance level indicator that helps determine the effectiveness of chosen best management practices (BMPs). This type of monitoring differs from "compliance monitoring" in that exceedances of the indicator or benchmark level are not permit violations, but rather indicators that can help identify problems at the Municipal Separate Storm Sewer System (MS4) with exposed or unidentified pollutant sources; or control measures that are either not working correctly, whose effectiveness need to be re-considered, or that need to be supplemented with additional BMP(s).

Best Management Practices (BMPs) – Schedules of activities, prohibitions of practices, maintenance procedures, structural controls, local ordinances, and other management practices to prevent or reduce the discharge of pollutants. BMPs also include treatment requirements, operating procedures, and practices to control runoff, spills or leaks, waste disposal, or drainage from raw material storage areas.

Catch Basins – Storm drain inlets and curb inlets to the storm drain system. Catch basins typically include a grate or curb inlet that may accumulate sediment, debris, and other pollutants.

Classified Segment – A water body that is listed and described in Appendix A or Appendix C of the Texas Surface Water Quality Standards, at 30 Texas Administrative Code (TAC) § 307.10.

Clean Water Act (CWA) – The Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972, Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. 96-483, and Pub. L. 97-117, 33 U.S.C. 1251 et. seq.

Common Plan of Development or Sale – A construction activity that is completed in separate stages, separate phases, or in combination with other construction activities. A common plan of development or sale is identified by the documentation for the construction project that identifies the scope of the project, and may include plats, blueprints, marketing plans, contracts, building permits, a public notice or hearing, zoning requests, or other similar documentation and activities.

Construction Activity – Soil disturbance, including clearing, grading, excavating, and other construction related activities (e.g., stockpiling of fill material and demolition); and not including routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site (e.g., the routine grading of existing dirt roads, asphalt overlays of existing roads, the routine clearing of existing right-of-ways, and similar maintenance activities). Regulated construction activity is defined in terms of small and large construction activity.

> **Small Construction Activity** is construction activity that results in land disturbance of equal to or greater than one acre and less than five acres of land. Small construction activity also includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres of land.
>
> **Large Construction Activity** is construction activity that results in land disturbance of equal to or greater than five acres of land. Large construction activity also includes the disturbance of less than five acres of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than five acres of land.

Construction Site Operator – The entity or entities associated with a small or large construction project that meet(s) either of the following two criteria:

(a) The entity or entities that have operational control over construction plans and specifications (including approval of revisions) to the extent necessary to meet the requirements and conditions of this general permit; or

(b) The entity or entities that have day-to-day operational control of those activities at a construction site that are necessary to ensure compliance with a stormwater pollution prevention plan (SWP3) for the site or other permit conditions (for example they are authorized to direct workers at a site to carry out activities required by the SWP3 or comply with other permit conditions).

Control Measure – Any BMP or other method used to prevent or reduce the discharge of pollutants to water in the state.

Conveyance – Curbs, gutters, man-made channels and ditches, drains, pipes, and other constructed features designed or used for flood control or to otherwise transport stormwater runoff.

Discharge – When used without a qualifier, refers to the discharge of stormwater runoff or certain non-stormwater discharges as allowed under the authorization of this general permit.

Edwards Aquifer – As defined in 30 TAC § 213.3 (relating to the Edwards Aquifer), that portion of an arcuate belt of porous, water-bearing, predominantly carbonate rocks known as the Edwards and Associated Limestones in the Balcones Fault Zone trending from west to east to northeast in Kinney, Uvalde, Medina, Bexar, Comal, Hays, Travis, and Williamson Counties; and composed of the Salmon Peak Limestone, McKnight Formation, West Nueces Formation, Devil's River Limestone, Person Formation, Kainer Formation, Edwards Formation, and Georgetown Formation. The permeable aquifer units generally overlie the less-permeable Glen Rose Formation to the south, overlie the less-permeable Comanche Peak and Walnut Formations north of the Colorado River, and underlie the less-permeable Del Rio Clay regionally.

Edwards Aquifer Recharge Zone – Generally, that area where the stratigraphic units constituting the Edwards Aquifer crop out, including the outcrops of other geologic formations in proximity to the Edwards Aquifer, where caves, sinkholes, faults, fractures, or other permeable features would create a potential for recharge of surface waters into the Edwards Aquifer. The recharge zone is identified as that area designated as such on official maps located on the TCEQ website or in the offices of the TCEQ.

Final Stabilization – A construction site where any of the following conditions are met:

(a) All soil disturbing activities at the site have been completed and a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent (%) of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

(b) For individual lots in a residential construction site by either:

  (1) The homebuilder completing final stabilization as specified in condition (a) above; or

  (2) The homebuilder establishing temporary stabilization for an individual lot prior to the time of transfer of the ownership of the home to the buyer and after informing the homeowner of the need for, and benefits of, final stabilization.

(c) For construction activities on land used for agricultural purposes (for example pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to a surface water and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization conditions of condition (a) above.

(d) In arid, semi-arid, and drought-stricken areas only, all soil disturbing activities at the site have been completed and both of the following criteria have been met:

(1) Temporary erosion control measures (e.g., degradable rolled erosion control product) are selected, designed, and installed along with an appropriate seed base to provide erosion control for at least three years without active maintenance by the operator, and

(2) The temporary erosion control measures are selected, designed, and installed to achieve 70 percent (%) vegetative coverage within three years.

General Permit – A permit issued to authorize the discharge of waste into or adjacent to water in the state for one or more categories of waste discharge within a geographical area of the state or the entire state as provided by Texas Water Code (TWC) § 26.040.

Groundwater Infiltration – For the purposes of this permit, groundwater that enters a municipal separate storm sewer system (including sewer service connections and foundation drains) through such means as defective pipes, pipe joints, connections, or manholes.

High Priority Facilities – High priority facilities are facilities with a high potential to generate stormwater pollutants. These facilities must include, at a minimum, the MS4 operator's maintenance yards, hazardous waste facilities, fuel storage locations, and other facilities where chemicals or other materials have a high potential to be discharged in stormwater. Among the factors that must be considered when giving a facility a high priority ranking are: the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of pollutant(s) of concern to impaired water(s).

Hyperchlorinated Water – Water resulting from hyperchlorination of waterlines or vessels, with a chlorine concentration greater than 10 milligrams per liter (mg/L).

Illicit Connection – Any man-made conveyance connecting an illicit discharge directly to a municipal separate storm sewer.

Illicit Discharge – Any discharge to an MS4 that is not entirely composed of stormwater, except discharges pursuant to this general permit or a separate authorization and discharges resulting from emergency fire-fighting activities.

Impaired Water – A surface water body that is identified as impaired on the latest U.S. Environmental Protection Agency (EPA) approved Clean Water Act (CWA) § 303(d) List or waters with an EPA approved or established TMDL that are found on the latest EPA approved *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* which lists the category 4 and 5 water bodies.

Implementation Plan (I-Plan) – A detailed plan of action that describes the measures or activities necessary to achieve the pollutant reductions identified in the total maximum daily load (TMDL).

Indian Country – Defined in 18 U.S.C. § 1151 as:

(a) All land within the limits of any Indian reservation under the jurisdiction of the United States (U.S.) Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation;

(b) All dependent Indian communities within the borders of the U.S. whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a state; and

(c) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe.

Indicator Pollutant – An easily measured pollutant, that may or may not impact water quality that indicates the presence of other stormwater pollutants.

Industrial Activity – Any of the ten categories of industrial activities included in the definition of "stormwater discharges associated with industrial activity" as defined in 40 Code of Federal Regulations (CFR) § 122.26(b)(14)(i)-(ix) and (xi).

Infeasible – For the purpose of this permit, infeasible means not technologically possible, or not economically practicable and achievable in light of best industry practices. The TCEQ notes that it does not intend for any small MS4 general permit requirement to conflict with state water right laws.

Maximum Extent Practicable (MEP) – The technology-based discharge standard for MS4s to reduce pollutants in stormwater discharges that was established by the CWA § 402(p). A discussion of MEP as it applies to small MS4s is found in 40 CFR § 122.34.

MS4 Operator – For the purpose of this permit, the public entity or the entity contracted by the public entity, responsible for management and operation of the small municipal separate storm sewer system that is subject to the terms of this general permit.

Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(a) Owned or operated by the U.S., a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over the disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under the CWA § 208 that discharges to surface water in the state;

(b) That is designed or used for collecting or conveying stormwater;

(c) That is not a combined sewer; and

(d) That is not part of a publicly owned treatment works (POTW) as defined in 40 CFR § 122.2.

Non-traditional Small MS4 – A small MS4 that often cannot pass ordinances and may not have the enforcement authority like a traditional small MS4 would have to enforce the stormwater management program. Examples of non-traditional small MS4s include counties, transportation authorities (including the Texas Department of Transportation), municipal utility districts, drainage districts, military bases, prisons, and universities.

Notice of Change (NOC) – A written notification from the permittee to the executive director providing changes to information that was previously provided to the agency in a Notice of Intent.

Notice of Intent (NOI) – A written submission to the executive director from an applicant requesting coverage under this general permit.

Notice of Termination (NOT) – A written submission to the executive director from a permittee authorized under a general permit requesting termination of coverage under this general permit.

Outfall – A point source at the point where a small MS4 discharges to Waters of the U.S. and does not include open conveyances connecting two municipal separate storm sewers, or pipes, tunnels, or other conveyances that connect segments of the same stream or other Waters of the U.S. and are used to convey Waters of the U.S. For the purpose of this permit, sheet flow leaving a linear transportation system without channelization is not considered an outfall. Point sources such as curb cuts; traffic or right-of-way barriers with drainage slots that drain into open culverts, open swales, or an adjacent property, or otherwise not actually discharging into Waters of the U.S. are not considered an outfall.

Permittee – The MS4 operator authorized under this general permit.

Point Source – (from 40 CFR § 122.22) any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant(s) of Concern (POCs) – For the purpose of this permit, includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from an MS4. (Definition from 40 CFR § 122.32(e)(3)).

Redevelopment – Alterations of a property that changed the “footprint” of a site or building in such a way that there is a disturbance of equal to or greater than one acre of land. This term does not include such activities as exterior remodeling, routine maintenance activities, and linear utility installation.

Semiarid Areas – Areas with an average annual rainfall of at least ten inches, but less than 20 inches.

Small Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

(a) Owned or operated by the U.S., a state, city, town, borough, county, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under CWA § 208;

(b) Designed or used for collecting or conveying stormwater;

(c) Which is not a combined sewer;

(d) Which is not part of a POTW as defined in 40 CFR § 122.2; and

(e) Which was not previously regulated under a National Pollutant Discharge Elimination System (NPDES) or a Texas Pollutant Discharge Elimination System (TPDES) individual permit as a medium or large municipal separate storm sewer system, as defined in 40 CFR §§ 122.26(b)(4) and (b)(7).

This term includes systems similar to separate storm sewer systems at military bases, large hospitals or prison complexes, and highways and other thoroughfares. This term does not include separate storm sewers in very discrete areas, such as individual buildings. For the purpose of this permit, a very discrete system also includes storm drains associated with certain municipal offices and education facilities serving a nonresidential population, where those storm drains do not function as a system, and where the buildings are not physically interconnected to a small MS4 that is also operated by that public entity.

Stormwater and Stormwater Runoff – Rainfall runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity – Stormwater runoff from an area where there is either a large construction or a small construction activity.

Stormwater Management Program (SWMP) – A comprehensive program to manage the quality of discharges from the MS4.

Structural Control (or Practice) – A pollution prevention practice that requires the construction of a device, or the use of a device, to capture or prevent pollution in stormwater runoff. Structural controls and practices may include but are not limited to wet ponds, bioretention, infiltration basins, stormwater wetlands, silt fences, earthen dikes, drainage swales, vegetative lined ditches, vegetative filter strips, sediment traps, check dams, subsurface drains, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins.

Surface Water in the State – Lakes, bays, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, wetlands, marshes, inlets, canals, the Gulf of Mexico inside the territorial limits of the state (from the mean high water mark (MHWM) out 10.36 miles into the Gulf), and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, navigable or nonnavigable, and including the beds and banks of all water courses and bodies of surface water, that are wholly or partially inside or bordering the state or subject to the jurisdiction of the state. Waters in treatment systems which are authorized by state or federal law, regulation, or permit, and which are created for the purpose of waste treatment are not considered to be water in the state.

Total Maximum Daily Load (TMDL) – The total amount of a substance that a water body can assimilate and still meet the Texas Surface Water Quality Standards.

Traditional Small MS4 – A small MS4 that can pass ordinances and have the enforcement authority to enforce the stormwater management program. An example of traditional MS4s includes cities.

Urban Area – A statistical geographic entity consisting of a densely settled core created from census blocks and contiguous qualifying territory that together have at least 2,000 housing units or 5,000 persons as defined and used by the U.S. Census Bureau in the 2020 Decennial Census.

Urbanized Area (UA) – A retired statistical geographic entity type consisting of a densely settled core created from census tracts or blocks and adjacent densely settled territory that together have a minimum population of 50,000 people which was used by the U.S. Census Bureau in the 2000 and the 2010 Decennial Census.

Waters of the United States – Waters of the United States or Waters of the U.S. means the term as defined in 40 CFR § 122.2.

Part II. Permit Applicability and Coverage

This Comprehensive General Permit provides authorization for stormwater and certain non-stormwater discharges from small (Phase II) municipal separate storm sewer systems (MS4) to surface water in the state. The general permit contains the required permit terms and conditions along with clear, specific, and measurable requirements applicable to all small MS4s that are eligible for coverage under this general permit (see 40 CFR § 122.28(d)(1)).

Section A. Small MS4s Eligible for Authorization under this General Permit

Discharges from a small MS4 must be authorized if any of the following criteria are met and may be authorized under this general permit if coverage is not otherwise prohibited.

1. Small MS4s Located in an Urban Area with a Population of at Least 50,000 People

Operators of small MS4s that are fully or partially located within an urban area with a population of at least 50,000 people, as determined by the 2000,2010, or 2020 Decennial Censuses by the U.S. Census Bureau, must obtain authorization for the discharge of stormwater runoff and are eligible for coverage under this general permit unless otherwise prohibited.

NOTE: Urban areas with a population of at least 50,000 people were referred to as Urbanized Areas in the 2000 and 2010 Decennial Censuses by the U.S. Census Bureau. The term Urbanized Area was retired in the 2020 Decennial Census by the U.S. Census Bureau.

2. Designated Small MS4s

A small MS4 that is outside an urban area with a population of at least 50,000 people that is *designated* by TCEQ based on evaluation criteria as required by 40 CFR §§ 122.32(a)(2) or 122.26(a)(1)(v) and adopted by reference in 30 TAC § 281.25, is eligible for coverage under this general permit. The criteria that the executive director may consider is as follows:

- The location of the discharge with respect to Waters of the U.S. as defined at 40 CFR § 122.2;
- The size of the discharge;
- The quantity and nature of the pollutants discharged to Waters of the U.S.; and
- Other relevant factors.

Following designation, operators of small MS4s must obtain authorization under this general permit or apply for coverage under a TPDES individual stormwater permit within 180 days of notification of their designation.

3. Regulated Portion of Small MS4

The portion of the small MS4 that is required to meet the conditions of this general permit are those portions that are located within the urban area with a population of at least 50,000 people as defined and used by the U.S. Census Bureau in the 2000, 2010, or 2020 Decennial Censuses, as well as any portion of the small MS4 that is designated by TCEQ.

For the purpose of this permit, the regulated portion of a small MS4 for a transportation entity is the land owned by the permittee within the urban area with a population of at least 50,000 people which functions as or is integral to a transportation system with drainage conveyance. Non-contiguous property that does not drain into the transportation drainage system is not subject to this general permit.

Section B. Categories of Regulated Small MS4s

This general permit defines small MS4 operators by the following categories, or levels, based on the population served by the MS4 within the 2020 urban area with a population of at least 50,000 people. The level of an MS4 is based on population in the most recent Decennial Census at the time of permit issuance. A national Census held during a permit term will not affect the level of an MS4 until the next permit renewal.

For the purpose of this section, "serve a population" means the residential population within the *regulated* portion of the small MS4 based on the population data from the 2020 Decennial Census, except for non-traditional small MS4s listed in Level 2b below.

The level of a small MS4 may change during the permit term based on the MS4 operator acquiring or giving up regulated area(s), such as by annexing land or if land is annexed away. However, the level of a small MS4 will not change during the permit term based on other population fluctuations.

- Level 1: Operators of traditional small MS4s that serve a population of less than 10,000 within an "urban area with a population of at least 50,000 people".
- Level 2a: Operators of traditional small MS4s that serve a population of at least 10,000 but less than 40,000 within an "urban area with a population of at least 50,000 people".
- Level 2b: Operators of all non-traditional small MS4s such as counties, drainage districts, transportation entities, military bases, universities, colleges, correctional institutions, municipal utility districts and other special districts regardless of population served within the "urban area with a population of at least 50,000 people", unless the non-traditional MS4 can demonstrate that it meets the criteria for a waiver from permit coverage based on the population served.
- Level 3: Operators of traditional small MS4s that serve a population of at least 40,000 but less than 100,000 within an "urban area with a population of at least 50,000 people".
- Level 4: Operators of traditional small MS4s that serve a population of 100,000 or more within an "urban area with a population of at least 50,000 people".

Section C. Available Waivers from Coverage

The TCEQ may waive permitting requirements for regulated small MS4 operators if the criteria are met for Waiver Option 1 or Option 2 below. To obtain Waiver Option 1 or Option 2, the MS4 operator must submit the request on the appropriate waiver form submitted electronically via the NPDES Electronic Reporting Tool for MS4s (NeT-MS4) online electronic permitting (e-permitting) system, unless the MS4 operator requested and obtained an Electronic Reporting Waiver as described in Part II.F.11. MS4 operators that are granted an Electronic

Reporting Waiver shall submit the request for a waiver from permit coverage on a paper Waiver Option 1 or Option 2 form, as applicable, provided by the executive director.

NOTE: To obtain Waiver Option 2, the MS4 operator must contact the executive director and coordinate the activities required to meet the waiver conditions prior to preparing and submitting the Waiver Option 2 form.

Provisional coverage begins upon electronic submittal of the appropriate waiver form that is administratively complete via the NeT-MS4 online e-permitting system available through the TCEQ website. Alternatively, for paper applications with an approved Electronic Reporting Waiver provisional coverage begins 30 days after an administratively complete paper waiver form is postmarked for delivery to TCEQ.

Following review of the small MS4's waiver form, the executive director may:

(1) determine that the waiver form is technically complete and approve the waiver by providing a notification and a waiver number;

(2) determine that the waiver form is incomplete and deny the waiver until a technically completed waiver form is submitted; or

(3) deny the waiver and require that permit coverage be obtained by submitting an application.

If the conditions of an approved waiver are not met by the MS4 operator, then the MS4 operator must submit an application for coverage under this general permit or a separate TPDES individual permit application.

At any time, TCEQ may require a previously waived MS4 operator to comply with this general permit or another TPDES permit if circumstances change so that the conditions of the waiver are no longer met. Changed circumstances can also allow a regulated MS4 operator to request a waiver at any time.

The TCEQ can request to review any waivers granted to MS4 operators to determine whether any of the information required for granting the waiver has changed, at any time. At a minimum TCEQ will review all waivers when MS4 operators submit their renewal waiver applications.

For the purpose of obtaining an Option 1 or Option 2 Waiver, the population served refers to:

- the residential population within the regulated portion of the small MS4 for
    - traditional small MS4s, and
    - certain non-traditional small MS4s with a residential population (such as counties and municipal utility districts), or
- the number of people using the small MS4 on an average operational day for certain non-traditional small MS4s without a residential population.

1. Waiver Option 1:

The small MS4 serves a population of less than 1,000 within an urban area with a population of at least 50,000 people and meets the following criteria:

(a) The small MS4 is not contributing substantially to the pollutant loadings of a physically interconnected MS4 that is regulated by the NPDES / TPDES stormwater program (40 CFR § 122.32(d)); and

(b) If the small MS4 discharges any pollutant(s) that have been identified as a cause of impairment of any water body to which the small MS4 discharges, stormwater controls

are not needed based on waste load allocations that are part of an EPA approved or established Total Maximum Daily Load (TMDL) that addresses the pollutant(s) of concern (POCs).

2. Waiver Option 2:

The small MS4 serves a population under 10,000 within an urban area with a population of at least 50,000 people and meets the following criteria:

(a) The TCEQ has evaluated all Waters of the U.S., including small streams, tributaries, lakes, and ponds, that receive a discharge from the small MS4;

(b) For all such waters, the TCEQ has determined that stormwater controls are not needed based on waste load allocations that are part of an approved or established TMDL that addresses the POCs or, if a TMDL has not been developed or approved, an equivalent analysis that determines sources and allocations for the POCs;

(c) The TCEQ has determined that future discharges from the small MS4 do not have the potential to exceed Texas Surface Water Quality Standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts; and

(d) For the purpose of Waiver Option 2, the POCs include biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids (TSS), turbidity or siltation), pathogens, oil and grease, and any pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the small MS4.

Section D. Allowable Non-Stormwater Discharge

The following non-stormwater sources may be discharged from the small MS4 and are not required to be addressed in the small MS4's Illicit Discharge and Detection or other minimum control measures, unless they are determined by the permittee or TCEQ to be significant contributors of pollutants to the small MS4, or they are otherwise prohibited by the MS4 operator:

1. Water line flushing (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);
2. Runoff or return flow from landscape irrigation, lawn irrigation, and other irrigation utilizing potable water, groundwater, or surface water sources;
3. Discharges from potable water sources that do not violate Texas Surface Water Quality Standards;
4. Diverted stream flows;
5. Rising ground waters and springs;
6. Uncontaminated ground water infiltration;
7. Uncontaminated pumped ground water;

8. Foundation and footing drains;
9. Air conditioning condensation;
10. Water from crawl space pumps;
11. Individual residential vehicle washing;
12. Flows from wetlands and riparian habitats;
13. Dechlorinated swimming pool discharges that do not violate Texas Surface Water Quality Standards;
14. Street wash water excluding street sweeper wastewater;
15. Discharges or flows from emergency fire-fighting activities (emergency fire-fighting activities do not include washing of trucks, runoff water from training activities, test water from fire suppression systems, and similar activities);
16. Other allowable non-stormwater discharges listed in 40 CFR § 122.26(d)(2)(iv)(B)(1);
17. Non-stormwater discharges that are specifically listed in the TPDES Multi-Sector General Permit (MSGP) TXR050000 or the TPDES Construction General Permit (CGP) TXR150000;
18. Discharges that are authorized by a TPDES or NPDES permit or that are not required to be permitted; and
19. Other similar occasional incidental non-stormwater discharges such as spray park water, unless the TCEQ develops permits or regulations addressing these discharges.

Section E. Limitations on Permit Coverage

1. Discharges Authorized by Another TPDES Permit

Discharges authorized by an individual or other general TPDES permit may be authorized under this TPDES general permit only if the following conditions are met:

(a) The discharges meet the applicability and eligibility requirements for coverage under this general permit;

(b) A previous application or permit for the discharges has not been denied, terminated, or revoked by the executive director as a result of enforcement or water quality related concerns. The executive director may provide a waiver to this provision based on new circumstances at the regulated small MS4; and

(c) The executive director has not determined that continued coverage under an individual permit is required based on consideration of an approved TMDL model and TMDL Implementation Plan, anti-backsliding policy, history of substantive non-compliance or other 30 TAC Chapter 205 considerations and requirements, or other site-specific considerations.

2. Discharges of Stormwater Mixed with Non-Stormwater

Stormwater discharges that combine with sources of non-stormwater are not eligible for coverage by this general permit, unless either the non-stormwater source is described in Part II.D of this general permit or the non-stormwater source is authorized under a separate TPDES permit.

3. Compliance with Texas Surface Water Quality Standards

Discharges to surface water in the state that would cause, has the reasonable potential to cause, or contribute to a violation of Texas Surface Water Quality Standards (30 TAC Chapter 307) or that would fail to protect and maintain existing designated uses are not eligible for coverage under this general permit except as described in Part III. The executive director may require an application for a TPDES individual permit or alternative general permit to authorize discharges to surface water in the state if the executive director determines that an activity will cause has the reasonable potential to cause, or contribute to, a violation of Texas Surface Water Quality Standards or is found to cause, have the reasonable potential to cause, or contribute to the impairment of a designated use of surface water in the state. The executive director may also require an application for a TPDES individual permit based on factors described in Part II.G.2.

4. Discharges to the Edwards Aquifer Recharge Zone

Discharges of stormwater from regulated small MS4s, and other non-stormwater discharges, are not authorized by this general permit where those discharges are prohibited by 30 TAC Chapter 213 (Edwards Aquifer Rule). New discharges located within the Edwards Aquifer Recharge Zone, or within that area upstream from the recharge zone and defined as the Contributing Zone, must meet all applicable requirements of, and operate according to, 30 TAC Chapter 213 (Edwards Aquifer Rule) in addition to the provisions and requirements of this general permit.

For existing discharges, the requirements of the TCEQ approved Water Pollution Abatement Plan (WPAP) under the Edwards Aquifer Rule are in addition to the requirements of this general permit. BMPs and maintenance schedules for structural stormwater controls, for example, may be required as a provision of the rule. All applicable requirements of the Edwards Aquifer Rule for reductions of suspended solids in stormwater runoff are in addition to the effluent limitation requirements found in Part VII.E.7. of this general permit.

The permittee's TCEQ approved WPAPs that are required by the Edwards Aquifer Rule must be referenced in the SWMP. Additional TCEQ approved WPAPs received after the SWMP submittal must be recorded in the annual report required by this general permit for each respective permit year. For discharges originating from the small MS4 permitted area and located on or within ten stream miles upstream of the Edwards Aquifer recharge zone, applicants must also submit a copy of the MS4 Notice of Intent (NOI) to the appropriate TCEQ Regional Office with each WPAP application.

Counties: Comal, Bexar, Medina, Uvalde, and Kinney

Contact:

TCEQ, Water Program Manager

San Antonio Regional Office

14250 Judson Road

San Antonio, Texas 78233-4480

(210) 490-3096

Counties: Williamson, Travis, and Hays

Contact:

TCEQ, Water Program Manager

Austin Regional Office
12100 Park 35 Circle, Bldg. A, Rm 179
Austin, Texas 78753
(512) 339-2929

5. Discharges to Specific Watersheds and Water Quality Areas

Discharges of stormwater from regulated small MS4s and other non-stormwater discharges are not authorized by this general permit where prohibited by 30 TAC Chapter 311 (relating to Watershed Protection) for water quality areas and watersheds.

6. Protection of Streams and Watersheds by Home Rule Municipalities

This general permit does not limit the authority of a home-rule municipality established in Texas Statue.

7. Indian Country Lands

Stormwater runoff from small MS4s that occur on Indian Country lands are not under the authority of the TCEQ and are not eligible for coverage under this general permit. If discharges of stormwater require authorization under federal NPDES regulations, authority for these discharges must be obtained from EPA.

8. Endangered Species Act

Discharges that would adversely affect a listed endangered or threatened species or its critical habitat are not authorized by this general permit. Federal requirements related to endangered species apply to all TPDES permitted discharges, and site-specific controls may be required to ensure that protection of endangered or threatened species is achieved. If a permittee has concerns over potential impacts to listed species, the permittee shall contact TCEQ for additional information prior to submittal of the NOI. If adverse impact is determined after submittal of the NOI, the permittee shall contact TCEQ immediately to determine corrective action.

Section F. Obtaining Authorization

1. Application for Coverage

Applicants seeking authorization to discharge under this general permit must prepare a SWMP as described in Part II.F.5 and Part IV prior to submitting a complete NOI and application fee for coverage as described in Part II.F.4 to the executive director. The NOI must be submitted electronically via the NeT-MS4 online e-permitting system, unless the MS4 operator requested and obtained an Electronic Reporting Waiver as described in Part II.F.11. MS4 operators that are granted an Electronic Reporting Waiver shall submit the request on a paper NOI form provided by the executive director.

Following review of the NOI, the executive director may: 1) determine that the submission is complete and approve the NOI; 2) determine that the NOI is incomplete, deny coverage, and require that a new complete NOI be submitted; 3) determine that the NOI needs revisions, provide a written description of the required revisions along with any compliance schedule(s), and approve the NOI after revisions are complete; or 4) deny coverage under this general permit

and provide a deadline by which the small MS4 operator must submit an application for a TPDES individual permit.

Following approval of the NOI by the executive director, either with or without changes, the applicant is authorized to discharge upon notification by TCEQ. Denial of coverage under this general permit is subject to the requirements of 30 TAC § 205.4(c).

2. Application Deadlines

Application deadlines are as follows:

(a) Small MS4s Located in a 2000 or 2010 urban area with a population of at least 50,000 people (Previously Regulated Small MS4s)

(1) Operators of small MS4s described in Part II.A.1 that applied for authorization under the 2019 TPDES Small MS4 General Permit TXR040000 based on the 2000 and 2010 urban areas with a population of at least 50,000 people shall submit an NOI within 180 days following the effective date of this general permit.

(2) Operators of small MS4s described in Part II.A.1 that did not submit an application for authorization under the 2019 TPDES Small MS4 General Permit TXR040000 and were required to obtain permit coverage based on the 2000 and 2010 urban areas with a population of at least 50,000 people shall submit an NOI immediately.

(b) Designated and Newly Regulated Small MS4s Located in a 2000, 2010, or 2020 urban area with a population of at least 50,000 people as defined by the U.S. Census Bureau

(1) Following designation, operators of small MS4s described in Part II.A.2 shall develop and maintain a SWMP and submit an NOI, or apply for coverage under a TPDES individual permit, within 180 days of being notified in writing by the TCEQ of the need to obtain permit coverage.

(2) Operators of small MS4s newly regulated under this general permit due to a change in ownership or operational control shall develop and maintain a SWMP and submit an NOI, or apply for coverage under a TPDES individual permit, within 180 days of obtaining ownership or operational control of a small MS4 in a regulated area.

(3) Operators of small MS4s newly regulated under this general permit due to the new or expanded urban areas with a population of at least 50,000 people in the 2020 Decennial Census shall develop and maintain a SWMP and submit an NOI, or apply for coverage under a TPDES individual permit, within 180 days following the effective date of this general permit.

(c) Individual Permit Alternative

If an operator of a small MS4 described in Part II.A.1 of this general permit elects to apply for a TPDES individual permit, the application must be submitted within 90 days following the effective date of this general permit.

3. Late Submission of the NOI

If an NOI is submitted by a small MS4 operator after the deadlines established in Part II.F.2, then this general permit provides authorization only for discharges that occur after permit coverage is obtained. The TCEQ reserves the right to take appropriate enforcement actions for any unpermitted discharges.

4. Contents of the NOI

The NOI must contain the following minimum information:

(a) MS4 Operator Information

(1) The name, mailing address, electronic mail (email) address, telephone number, and facsimile (fax) number of the MS4 operator; and

(2) The legal status of the MS4 operator (for example, federal government, state government, county government, city government, or other government).

(b) Site Information

(1) The name, physical location description, and latitude and longitude of the approximate center of the regulated portion of the small MS4;

(2) County or counties where the small MS4 is located;

(3) An indication if all or a portion of the small MS4 is located on Indian Country Lands;

(4) The name, mailing address, telephone number, email (if available) and fax number of the designated person(s) responsible for implementing or coordinating implementation of the SWMP;

(5) A signature and certification on the NOI, according to 30 TAC § 305.44, that a SWMP has been developed according to the provisions of this general permit;

(6) The name of each classified segment that receives discharges, directly or indirectly, from the small MS4. If one or more of the discharge(s) is not directly to a classified segment, then the name of the first classified segment that those discharges reach must be identified;

(7) The name of any MS4 receiving the discharge prior to discharge into Waters of the U.S.;

(8) The name of all surface water(s) receiving discharges from the small MS4 that are on the latest EPA-approved CWA § 303(d) List of impaired waters;

(9) An indication of whether the small MS4 discharges within the Recharge Zone, the Contributing Zone or the Contributing Zone within the Transition Zone of the Edwards Aquifer; and

(10) Any other information deemed necessary by the executive director.

(c) General Characteristics

(1) An indication of the activities/BMPs and measurable goals to be implemented in the SWMP for each MCM;

(2) An indication of the activities/BMPs and measurable goals to be implemented in the SWMP for impaired water bodies, if applicable;

(3) For small MS4 operators participating in a coalition to implement a shared SWMP:

a. The names of all participating small MS4 operators;

b. An indication of which small MS4 operator is responsible for each activity/BMP and measurable goal to be implemented in the SWMP;

(4) Any other information deemed necessary by the executive director.

5. SWMP General Requirements

A SWMP must be developed for eligible discharges that will reach Waters of the U.S., including discharges from the regulated small MS4 to other MS4s or to privately-owned separate storm sewer systems that subsequently drain to Waters of the U.S. The SWMP must be developed according to the requirements of Part IV of this general permit prior to submitting an NOI to obtain authorization to discharge.

The SWMP must include, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action throughout the permit term.

New elements in the SWMP must be completely implemented within five years of the effective date of this general permit, or within five years of being designated for those small MS4s which are designated following their permit authorization issuance. Previously regulated MS4s shall assess existing SWMP elements set forth in the previous permit term, modify as necessary, and develop and implement new elements, as necessary, to continue reducing the discharge of pollutants from the small MS4 to the maximum extent practicable (MEP).

6. Changes to the NOI Submitted and SWMP

Changes to the NOI and SWMP that are made after TCEQ approval of the NOI may be made by submittal and approval of a Notice of Change (NOC) unless the changes are non-substantial. Changes may be made as follows:

(a) Changes to the SWMP that do not require an NOC

The following changes may be implemented without submitting an NOC. The changes may be made immediately following revision of the SWMP.

Minor modifications to the SWMP that include administrative or non-substantial changes as follows:

(1) A change in personnel, or a reorganization of departments responsible for implementing the SWMP or portions of the SWMP;

(2) Minor clarifications to the existing BMPs;

(3) Correction of typographical errors; or

(4) Other similar administrative or non-substantive comments.

(b) Changes to the NOI and SWMP that require an NOC

Modifications to the NOI and SWMP that include, but are not limited to, the following changes require submittal of an NOC. The changes may be implemented once the permittee receives TCEQ approval of the NOC.

(1) Changing one or more contacts listed in the NOI or updating their contact information;

(2) Adding components, controls, or requirements to the SWMP;

(3) Adding areas such as by annexing land, or otherwise acquire additional land that expands the boundary of the small MS4, or subtracting areas, such as by de-annexing lands;

(4) Adding impaired water bodies that are identified pursuant to Part III.;

(5) Adding more frequent monitoring or reporting by the permittee; or

(6) Replacing a BMP specifically identified in the NOI and SWMP with an alternative BMP, (for example, replacing a structural BMP with a non-structural BMP would be considered a replacement). The SWMP must include documentation for changes as described below:

a. For changes to BMPs for impaired water bodies with a TMDL, document the following:

(i) an analysis of why the BMP is ineffective or infeasible (including cost prohibitive);

(ii) expectations of the effectiveness of the replacement BMP; and

(iii) an analysis of why the replacement BMP is expected to achieve the goals of the BMP to be replaced.

b. For all other BMP changes, document the reason for the change.

7. Notice of Change (NOC)

If the small MS4 operator becomes aware that it failed to submit any relevant facts, or submitted incorrect information in the NOI, the correct information must be provided to the executive director in an NOC within 30 days after discovery. If any information provided in the NOI changes, an NOC must be submitted within 30 days from the time the permittee becomes aware of the change. The NOC must be submitted electronically via the NeT-MS4 online e-permitting system, unless the MS4 operator requested and obtained an Electronic Reporting Waiver as described in Part II.F.11. MS4 operators that are granted an Electronic Reporting Waiver shall submit the request on a paper NOC form provided by the executive director.

Any revisions that are made to the SWMP must be made in accordance with Parts II.F.6 and Part IV.A-B. Changes that are made to the NOI and SWMP following NOI approval must be made using an NOC form, in accordance with Part II.F.6.

8. Change in Operational Control of a Small MS4

If the operational control of the regulated small MS4 changes, the previous small MS4 operator must submit a Notice of Termination (NOT) and the new small MS4 operator must prepare a SWMP and submit an NOI. The NOT and NOI must be submitted concurrently not more than ten calendar days after the change occurs. Existing permittees who are expanding coverage of their MS4 area (e.g., city annexes part of unincorporated county MS4) are not required to submit a new NOI but must submit an NOC and update the SWMP in accordance with Part II.F.7 and Part IV.C.1.(c).

9. Notice of Termination (NOT)

A permittee may terminate coverage under this general permit by submitting an NOT electronically via the NeT-MS4 online e-permitting system, unless the permittee requested and obtained an Electronic Reporting Waiver as described in Part II.F.11. Permittees that are granted an Electronic Reporting Waiver shall submit the request on a paper NOT form provided by the executive director.

Authorization to discharge terminates immediately following confirmation of receipt of the electronic NOT form by the TCEQ or at midnight on the day that a paper NOT is postmarked

for delivery to the TCEQ. An NOT must be submitted within 30 days after the small MS4 operator obtains coverage under an individual permit.

10. Signatory Requirement for NOI, NOT, NOC, and Waiver Forms

All NOI, NOT, NOC, Waiver Option 1 or Option 2, and Electronic Reporting Waiver forms must be signed and certified consistent with 30 TAC § 305.44(a) and (b) (relating to Signatories to Applications).

11. Electronic Reporting Waiver

To request a waiver from electronic reporting, small MS4 operators must contact the TCEQ Stormwater Team to obtain the Request for Electronic Reporting Waiver Form (TCEQ-20754). This form must be submitted along with submittal of a paper application (NOI, NOT, NOC, Waiver Option 1 and 2) for authorization under this general permit.

A waiver from electronic reporting may be granted to small MS4 operators in limited cases, such as for lack of internet access, or when additional training to submit applications electronically is needed. Electronic Reporting Waivers are not transferrable and expire on the same date as the authorization to discharge except for waivers granted to small MS4 operators who need additional training to submit applications electronically which will expire after one year.

12. Fees

An application fee of $400.00 must be submitted with each NOI. A fee is not required for submission of the following forms: Waiver Option 1, Waiver Option 2, NOT, or NOC.

A permittee authorized under this general permit must pay an annual Water Quality fee of $100.00 as authorized under TWC § 26.0291 and 30 TAC Chapter 205 (relating to General Permits for Waste Discharges).

13. Permit Expiration

(a) This general permit is effective for five years from the permit effective date. Authorizations for discharge under the provisions of this general permit will continue until the expiration date of the general permit. This general permit may be amended, revoked, or canceled by the commission or renewed by the TCEQ for an additional term not to exceed five years.

(b) If the executive director proposes to reissue this general permit before the expiration date, the general permit will remain in effect until the date on which the commission takes final action on the proposal to reissue this general permit. For existing permittees, general permit coverage will remain in effect after the expiration date of the existing general permit, in accordance with 30 TAC Chapter 205. No new NOIs will be accepted, and no new authorizations will be processed under the general permit after the expiration date.

(c) Following issuance of a renewed or amended general permit, all permittees, including those covered under the expired general permit, may be required to submit an NOI according to the requirements of the new general permit or to obtain a TPDES individual permit for those discharges. The renewed permit will include a deadline to apply for coverage, and authorization for existing permittees will be automatically extended until the deadline to apply for coverage, or until an application is submitted for renewal, whichever occurs first.

(d) If TCEQ does not propose to reissue this general permit within 90 days before the expiration date, permittees must apply for authorization under a TPDES individual permit or an alternative general permit. If the application for an individual permit is submitted before the expiration date of this general permit, authorization under this expiring general permit remains in effect until the issuance or denial of an individual permit.

14. Suspension of Permit Coverage

The executive director may suspend an authorization under this general permit for the reasons specified in 30 TAC § 205.4(d) by providing the discharger with written notice of the decision to suspend that authority, and the written notice will include a brief statement of the basis for the decision. If the decision requires an application for an individual permit or an alternative general permit, the written notice will also include a statement establishing the deadline for submitting an application. The written notice will state that the authorization under this general permit is either suspended on the effective date of the commission's action on the permit application, unless the commission expressly provides otherwise, or immediately, if required by the executive director.

Section G. Permitting Options

1. Authorization Under the General Permit

An operator of a small MS4 is required to obtain authorization either under this general permit, or under a TPDES individual permit if the MS4 is located in an urban area with a population of at least 50,000 people or designated by the TCEQ as per Part II.A.2. Multiple small MS4s with separate operators must individually submit an NOI to obtain coverage under this general permit, regardless of whether the systems are physically interconnected, located in the same urban area with a population of at least 50,000 people, or are located in the same watershed.

Coalition Participants

Multiple small MS4s that are physically interconnected, located in the same urban area with a population of at least 50,000 people, or are located in the same watershed may combine or share efforts as a coalition in meeting one or more of the BMP requirements described in the general permit. Each regulated small MS4 will be required to submit an individual NOI and be issued a distinct permit authorization number. MS4 operators in a coalition that share

SWMP development and implementation responsibilities must meet the following conditions:

(a) The SWMP must clearly list the name and permit number for each MS4 operator that chooses to contribute to development or implementation of the SWMP, and provide written confirmation that the contributing MS4 operator(s) has/have agreed to contribute. If a contributing small MS4 has submitted an NOI to TCEQ, but has not yet received written notification of approval, along with the accompanying permit authorization number, a copy of the submitted NOI form must be made readily available or be included in the SWMP.

(b) Each permittee is entirely responsible for meeting SWMP requirements within the boundaries of its small MS4. Where a separate MS4 operator is contributing to implementation of the SWMP, the SWMP must clearly define each minimum control measure and the component(s) each entity agrees to implement, within which MS4 area(s) each entity agrees to implement and clearly identify the contributing MS4

operator. The obligation and written acceptance for each coalition participant shall be described and maintained as part of the SWMP.

2. Alternative Coverage Under an Individual TPDES Permit

A small MS4 operator eligible for coverage under this general permit may alternatively be authorized under a TPDES individual permit according to 30 TAC Chapter 305 (relating to Consolidated Permits). The executive director may require a small MS4 operator, authorized by this general permit, to apply for a TPDES individual permit because of: the conditions of an approved TMDL or TMDL implementation plan (I-Plan); a history of substantive non-compliance; or other 30 TAC Chapter 205 considerations and requirements; or other site-specific considerations. The executive director shall deny or suspend a facility's authorization for disposal under this general permit based on a rating of "unsatisfactory performer" according to commission rules in 30 TAC § 60.3, Use of Compliance History. An applicant who owns or operates a facility classified as an "unsatisfactory performer" is entitled to a hearing before the commission prior to having its coverage denied or suspended, in accordance with TWC § 26.040(h).

Part III. Impaired Water Bodies and Total Maximum Daily Load (TMDL) Requirements

Discharges of the POCs to impaired water bodies for which there is a TCEQ and EPA approved TMDL are not eligible for this general permit unless they are consistent with the approved TMDL. A water body is impaired for purposes of the permit if it has been identified, pursuant to the latest TCEQ and EPA approved CWA § 303(d) List or the *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* which lists the category 4 and 5 water bodies, as not meeting Texas Surface Water Quality Standards.

The permittee shall check annually, in conjunction with preparation of the annual report, whether an impaired water body within its permitted area has been added to the latest EPA approved CWA § 303(d) List or the *Texas Integrated Report of Surface Water Quality for CWA Sections 305(b) and 303(d)* which lists the category 4 and 5 water bodies. Within two years following the approval date of the new list(s) of impaired waters, the permittee shall comply with the requirements of Part III.B (with the exception of 1.(c), and shall identify any newly listed waters in the annual report (consistent with Part V.B.2.f) and SWMP (consistent with Part IV.C.2.f).

The permittee shall control the discharges of POCs parameters to impaired waters and waters with approved TMDLs as provided in Sections A and B below, and shall assess the progress in controlling those pollutants.

Section A. Discharges to Water Quality Impaired Water Bodies with an Approved TMDL

If the small MS4 discharges to an impaired water body with an approved TMDL, where stormwater has the potential to cause or contribute to the impairment, the permittee shall include in the SWMP controls targeting the POCs along with any additional or modified controls required in the TMDL and this section.

The SWMP and required annual reports must include information on implementing any targeted controls required to reduce the POCs as described below:

1. Targeted Controls

The SWMP must include a detailed description of all targeted controls to be implemented, including at a minimum, expanding or modifying the following:

(a) existing Public Education and Outreach and Public Involvement/Participation programs to reduce the discharge of POCs,

(b) existing Illicit Discharge Detection and Elimination program to specifically address the POCs, and

(c) existing ordinances or other regulatory mechanisms to require the reduction or control of POCs, enforcement procedures for noncompliance, and develop additional ordinances, or other regulatory mechanisms, as necessary.

2. Measurable Goals

For each targeted control, the SWMP must include a measurable goal and an implementation schedule describing activities/BMPs to be implemented during each year of the permit term.

3. Identification of Benchmarks

The SWMP must identify a benchmark for the POCs. Benchmarks are designed to assist in determining if the BMPs established are effective in addressing the POCs in stormwater discharge(s) from the MS4 to the MEP. The BMPs addressing the POC must be re-evaluated on an annual basis for progress towards the benchmarks and modified as necessary within an adaptive management framework. These benchmarks are not numeric effluent limitations or permit conditions but intended to be guidelines for evaluating progress towards reducing pollutant discharges consistent with the benchmarks. The exceedance of a benchmark is not a permit violation and does not in itself indicate a violation of instream water quality standards.

The benchmark must be determined based on only one of the following options:

(a) If the small MS4 is subject to a TMDL that identifies a Waste Load Allocation(s) (WLA) for permitted MS4 stormwater sources, then the SWMP may identify it as the benchmark. Where an aggregate allocation is used as a benchmark, all affected MS4 operators are jointly responsible for progress in meeting the benchmark and shall (jointly or individually) develop a monitoring/assessment plan as required in Part III.A.6.

(1) When TCEQ revises a TMDL WLA identified by the MS4 to decrease the load, permittees must revise the SWMP and submit an NOC to identify the revised WLA within 90 days of TCEQ publishing the change.

(2) When TCEQ revises a TMDL WLA identified by the MS4 to increase the load, permittees are not required to update the SWMP or submit an NOC to identify the revised WLA until the next permit term.

(b) Alternatively, if multiple small MS4s are discharging into the same impaired water body with an approved TMDL, with an aggregate WLA for all permitted stormwater MS4s, then the MS4s may combine or share efforts to determine an alternative sub-benchmark value for the POCs (e.g., bacteria) for their respective small MS4. The SWMP must clearly define this alternative approach and must describe how the sub-benchmark value would cumulatively support the aggregate WLA. Where an aggregate benchmark has been broken into sub-benchmark values for individual

MS4s, each permittee is only responsible for progress in meeting its sub-benchmark value.

4. Annual Report

The annual report must include an analysis of how the selected activities/BMPs will be effective in contributing to achieving the benchmark value.

5. Impairment for Bacteria

If the POC is bacteria, the permittee shall implement BMPs addressing each of the below areas, as applicable, in the SWMP and implement as appropriate. If a TMDL I-Plan is available, the permittee must do one of the following: (1) refer to the I-Plan for appropriate BMPs, or (2) implement alternative equivalent BMPs. Table 1 below includes the appropriate alternative equivalent BMPs to implement for item (2) above or when a TMDL I-Plan is not available. Where BMPs included in the TMDL I-Plan for item (1) above are completed or where the I-Plan does not address all the below areas, the permittee shall refer to Table 1 for the appropriate BMPs to implement so that each of the areas below are addressed, as applicable.

The SWMP and annual report must include the selected BMPs. Permittees may not exclude BMPs associated with the minimum control measures (MCMs) required under 40 CFR § 122.34 from their list of BMPs.

The BMPs shall, as appropriate, address the following including Table 1.:

(a) Sanitary Sewer Systems

(1) Make improvements to sanitary sewers to reduce overflows;

(2) Address lift station inadequacies;

(3) Improve reporting of overflows; and

(4) Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease.

(b) On-site Sewage Facilities (for entities with appropriate jurisdiction)

(1) Identify and address failing systems; and

(2) Address inadequate maintenance of on-site sewage facilities (OSSFs) (i.e., septic systems).

(c) Illicit Discharges and Dumping

Place additional effort to reduce waste sources of bacteria, for example, from OSSFs, grease traps, and grit traps.

(d) Animal Sources

Expand existing management programs to identify and target animal sources such as zoos, pet waste, and horse stables.

(e) Residential Education

Increase focus to educate residents on:

(1) Bacteria discharging from a residential site either during runoff events or directly;

(2) Fats, oils, and grease clogging sanitary sewer lines and resulting overflows;

(3) Maintenance and operation of decorative ponds; and

(4) Proper disposal of pet waste.

Table 1: Alternative Equivalent BMPs for Bacteria Impaired Water Bodies

Activity/BMP	**Measurable Goal**
Sanitary Sewer Systems as described by Part III.A.5.(a).	Conduct a review of 100% of the sanitary sewer system in the MS4 area within the impairment watershed to identify areas for improvement within the first two years of the permit term. Initiate all feasible improvement projects by the end of the permit term. Conduct weekly lift station inspections at 100% of the MS4 owned and operated lift stations in the MS4 area within the impairment watershed each year. Investigate and address 100% of sanitary sewer overflow complaints identified through the public reporting mechanism implemented by the MS4 each year. Strengthen sanitary sewer use requirements to reduce blockage from fats, oils, and grease by reviewing and updating ordinances or other regulatory mechanisms and inspection programs at least one time annually.
On Site Sewage Facilities (OSSFs) as described by Part III.A.5.(b).	Develop and implement procedures to screen 20% of the MS4 area within the impairment watershed annually to identify failing OSSFs. • Maintain an inventory of 100% of the identified OSSFs and their status each year. ○ Review and update this inventory at least one time each year to address changes or additions. • Address 100% of failing OSSFs each year by requiring the responsible party to perform all necessary corrective actions to eliminate the illicit discharge. Investigate and address 100% of OSSF complaints identified through the public reporting mechanism implemented by the MS4 each year.
Illicit Discharges and Dumping as described by Part III.A.5.(c).	Ensure 100% of procedures and ordinances or other regulatory mechanisms established for BMPs in MCM 3: Illicit Discharge Detection and Elimination address discharges that may contribute bacteria including from OSSFs, grease traps, and grit traps.

Activity/BMP	Measurable Goal
Animal Sources as described by Part III.A.5.(d).	Implement at least one of the following: • Provide and maintain at least one pet waste station in 100% of public parks or similar greenspaces in the MS4 area within the impairment watershed each year. • Assess and address, if feasible, 100% of complaints received about feral hogs in the MS4 area within the impairment watershed each year. If infeasible to address the complaint, maintain documentation of the reason. Prohibit the feeding of ducks and geese in 100% of public parks or similar greenspaces the MS4 area within the impairment watershed each year. • Develop and distribute educational materials related to animal sources of bacteria to 75% of the intended audiences identified by the MS4 in MCM 1: Public Education and Outreach each year. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.
Residential Education as described by Part III.A.5.(e).	Implement at least one additional BMP from MCM 1: Public Education and Outreach and Table 4 annually (e.g., a Level 1 small MS4 operator must implement at least four total BMPs under MCM 1 each year in the permit cycle instead of the three BMPs required by Part IV.D.1.(a)3.b). In addition, ensure at least one of the BMPs implemented for MCM 1: Public Education and Outreach focuses on at least one of the following: • Bacteria discharging from a residential site either during runoff events or directly; • Fats, oils, and grease clogging sanitary sewer lines and resulting overflows; • Identifying and reporting illicit discharges or illegal dumping; • Maintenance and operation of decorative ponds; and • Proper disposal of pet waste.

6. Monitoring or Assessment of Progress

The permittee shall develop a Monitoring/Assessment Plan to monitor or assess progress in achieving benchmarks and determine the effectiveness of BMPs, and shall include documentation of this monitoring or assessment in the SWMP and annual reports. In addition, the SWMP must include methods to be used.

(a) The permittee may use either of the following methods to evaluate progress towards the benchmark and improvements in water quality in achieving the water quality standards as follows:

(1) Evaluating Program Implementation Measures

The permittee may evaluate and report progress towards the benchmark by describing the activities and BMPs implemented, by identifying the appropriateness of the identified BMPs, and by evaluating the success of implementing the measurable goals.

The permittee may assess progress by using program implementation indicators such as: (1) number of sources identified or eliminated; (2) decrease in the number of illegal dumpings; (3) increase in illegal dumping reporting; (4) number of educational opportunities conducted; (5) reductions in sanitary sewer overflows (SSOs); or (6) increase in illegal discharge detection through dry screening, etc.

(2) Assessing Improvements in Water Quality

The permittee may assess improvements in water quality by using available data for segment and assessment units of water bodies from other reliable sources, or by proposing and justifying a different approach such as collecting additional instream or outfall monitoring data, etc. Data may be acquired from TCEQ, local river authorities, partnerships, or other local efforts as appropriate.

(b) Progress towards achieving the benchmark shall be reported in the annual report. Annual reports shall report the benchmark and the year(s) during the permit term that the MS4 conducted additional sampling or other assessment activities.

7. Observing No Progress Towards the Benchmark

If, by the end of the third year from the effective date of the permit, the permittee observes no progress toward the benchmark either from SWMP implementation or water quality assessments as described in Part III.A.6, the permittee shall identify alternative focused BMPs that address new or increased efforts towards the benchmark or, as appropriate, shall develop a new approach to identify the most significant sources of the POCs and shall develop alternative focused BMPs for those sources (this may also include information that identifies issues beyond the MS4's control). These revised BMPs must be included in the SWMP and subsequent annual reports.

Where the permittee originally used a benchmark value based on an aggregated WLA, the permittee may combine or share efforts with other MS4s discharging to the same watershed to determine an alternative sub-benchmark value for the POCs for their respective small MS4s, as described in Part III.A.3(b) above. Permittees must document, in their SWMP for the next permit term, the proposed schedule for the development and subsequent adoption of alternative sub-benchmark value(s) for the POCs for their respective MS4s and associated assessment of progress in meeting those individual benchmarks.

Section B. Discharges Directly to Water Quality Impaired Water Bodies Without an Approved TMDL

The permittee shall also determine whether the permitted discharge is directly to one or more water quality impaired water bodies where a TMDL has not yet been approved by TCEQ and EPA. If the permittee discharges directly into an impaired water body without an approved TMDL, the permittee shall perform the following activities:

1. Discharging a Pollutant of Concern

(a) The permittee shall determine whether the small MS4 may be a source of the POCs by referring to the CWA § 303(d) List and then determining if discharges from the MS4 would be likely to contain the POCs at levels of concern.

(b) If the permittee determines that the small MS4 may discharge the POCs, the permittee shall ensure that the SWMP includes focused BMPs, along with corresponding measurable goals, that the permittee will implement, to reduce, the discharge of POCs that contribute to the impairment of the water body.

(c) In addition, the permittee shall submit an NOC to amend the SWMP in accordance with Part II.F.6 to include any additional BMPs to address the POCs. This requirement does not apply to BMPs implemented to address impaired waters that are listed after a small MS4's permit authorization pursuant to Part III.

2. Impairment for Bacteria

Where the impairment is for bacteria, the permittee shall identify potential significant sources and develop and implement focused BMPs for those sources. The permittee must implement the BMPs listed in Part III.A.5 and Table 1 for the identified sources.

3. Annual Report

The annual report must include information on compliance with the Discharges Directly to Water Quality Impaired Water Bodies Without an Approved TMDL section, including results of any sampling conducted by the permittee.

Part IV. Stormwater Management Program (SWMP)

To the extent allowable under state and local law, a SWMP must be developed, implemented, and enforced according to the requirements of Part II.F.5 and Part IV of this general permit for stormwater discharges that reach Waters of the U.S., regardless of whether the discharge is conveyed through a separately operated storm sewer system. The SWMP must be developed, implemented, and enforced to reduce the discharge of pollutants from the small MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the CWA and the TWC.

A permittee that implements activities/BMPs and measurable goals consistent with the provisions of this general permit fulfills the requirements to reduce pollutants to the MEP and will be deemed in compliance with Part IV of this permit. This general permit does not extend any compliance deadlines set forth under the 2019 TPDES Small MS4 General Permit TXR040000.

Section A. SWMP Review

The permittee shall participate in an annual review of its SWMP in conjunction with preparation of the annual report required in Part V.B.2. Results and date(s) of the review shall be documented in the annual report.

Section B. SWMP Updates Required by TCEQ

Changes may be made to the SWMP during the permit term. The TCEQ may notify the permittee of the need to modify the SWMP to be consistent with the general permit, in which

case the permittee will have 90 days to finalize such changes to the SWMP, unless otherwise directed by TCEQ.

Section C. Developing a Stormwater Management Program (SWMP)

1. SWMP Development and Schedule

(a) Existing Regulated Small MS4s

Permittees who were regulated under the 2019 TPDES Small MS4 General Permit TXR040000, shall develop and update the SWMP under this general permit prior to submittal of the NOI for coverage.

Existing small MS4 operators shall ensure full implementation of any new elements in the revised SWMP as soon as practicable, but no later than five years from the permit effective date. Permittees authorized under any previous TPDES Small MS4 General Permit TXR040000 shall continue to implement existing elements in their latest TCEQ approved SWMP until the renewal NOI has been approved.

(b) Designated and Newly Regulated Small MS4s

Small MS4 operators that operate either:

- a designated small MS4 as per Part II.A.2, or
- a newly regulated small MS4 under this general permit,

must develop a SWMP under this general permit prior to submittal of the NOI for coverage and achieve full implementation of the SWMP as soon as practicable, but no later than five years from designation or obtaining ownership or operational control of a newly regulated small MS4, as applicable.

(c) Transfer of Ownership, Operational Authority, or Responsibility

The permittee that has been transferred ownership, operational authority, or responsibility of an MS4 area located in an urban area with a population of at least 50,000 people or designated by TCEQ shall implement the SWMP:

(1) on all new areas added to its portion of the small MS4 (or where the permittee becomes responsible for implementation of stormwater quality controls) as expeditiously as possible, but no later than three years from addition of the new area. Implementation may be accomplished in a phased manner to allow additional time for controls that cannot be implemented immediately; and

(2) within ninety (90) days of a transfer of ownership, operational authority, or responsibility for SWMP implementation, the permittee shall have a plan for implementing the SWMP in all affected areas. The plan must include schedules for implementation, and information on all new annexed areas. Any resulting updates required to the SWMP shall be submitted in the annual report.

2. Contents of the SWMP

At a minimum, the permittee shall include the following information in its SWMP:

(a) A description of MCMs with measurable goals, including, as appropriate, the months and years when the permittee will undertake required actions, including interim milestones and the frequency of the action for each required MCM and if selected, the optional 8th MCM described in Part IV.D;

(b) A measurable goal that includes the development of ordinances or other regulatory mechanisms allowed by state, federal and local law, providing the legal authority necessary to implement and enforce the requirements of this permit, including information on any limitations to the legal authority;

(c) The measurable goals selected by the permittee must be clear, specific, and measurable (40 CFR §122.34);

(d) A summary of written procedures (e.g., periodic review of ordinances or other enforcement mechanisms, tracking of SWMP implementation by relevant departments, etc.) describing how the permittee will implement the provisions in Parts III and IV of this general permit;

(e) A description of a program or a plan of compliance with the impaired water bodies and TMDL requirements in Part III; and

(f) Identification of any impaired waters that have been added in accordance with Part III.

3. Legal Authority

(a) Traditional small MS4s, such as cities:

(1) Within two years from the permit effective date, the permittee shall review and revise, if needed, its relevant ordinance(s) or other regulatory mechanism(s), or shall adopt a new ordinance(s) or other regulatory mechanism(s) that provide the permittee with adequate legal authority to control pollutant discharges into and from its small MS4 in order to meet the requirements of this general permit.

(2) To be considered adequate, this legal authority must, at a minimum, address the following:

a. Authority to prohibit illicit discharges and illicit connections;

b. Authority to respond to and contain other releases e.g., control the discharge of spills, and prohibit dumping or disposal of materials other than stormwater into the small MS4);

c. Authority to require compliance with conditions in the permittee's ordinances, permits, contracts, or orders;

d. Authority to require installation, implementation, and maintenance of control measures;

e. Authority to receive and collect information, such as stormwater plans, inspection reports, and other information deemed necessary to assess compliance with this permit, from operators of construction sites, new or redeveloped land, and industrial and commercial facilities;

f. Authority, as needed, to enter and inspect private property including facilities, equipment, practices, or operations related to stormwater discharges to the small MS4;

g. Authority to respond to non-compliance with BMPs required by the small MS4;

h. Authority to assess penalties, including monetary, civil, or criminal penalties; and

i. Authority to enter into interagency or interlocal agreements or other maintenance agreements, as necessary.

(b) Non-traditional small MS4s, such as counties, drainage districts, transportation entities, municipal utility districts, military bases, prisons, and universities:

(1) Where the permittee lacks the authority to develop ordinances or to implement enforcement actions, the permittee shall exert enforcement authority as required by this general permit for its facilities, employees, contractors, and any other entity over which it has operational control within the portion of the urban area with a population of at least 50,000 people under the jurisdiction of the permittee. For discharges from third party actions, the permittee shall perform inspections and exert enforcement authority to the MEP.

(2) If the permittee does not have inspection or enforcement authority and is unable to meet the goals of this general permit through its own powers, then, unless otherwise stated in this general permit, the permittee shall perform the following actions in order to meet the goals of the permit:

a. Enter into interlocal agreements with municipalities where the small MS4 is located. These interlocal agreements must state the extent to which the municipality will be responsible for inspections and enforcement authority in order to meet the conditions of this general permit; or

b. If it is not feasible for the permittee to enter into interlocal agreements, the permittee shall report discharges or incidents that it cannot itself enforce against to an adjacent MS4 operator with enforcement authority or the appropriate TCEQ Regional Office. In determining feasibility for entering into interlocal agreements, the permittee shall consider all factors, including, without limitations, financial considerations and the willingness of the municipalities in which the small MS4 is located.

4. Resources

It is the permittee's responsibility to ensure that it has adequate resources and funding to implement the requirements of this general permit.

5. Effluent Limitations

The controls and activities/BMPs included in the SWMP constitute effluent limitations for the purposes of compliance with state rules. This includes the requirements of 30 TAC Chapter 319, Subchapter B (Hazardous Metals), which lists the maximum allowable concentrations of hazardous metals for discharge to water in the state.

6. Enforcement Measures

Permittees with enforcement authority (i.e., traditional small MS4s) shall develop a standard operating procedure (SOP) to respond to violations to the extent allowable under state and local law. When the permittee does not have enforcement authority over the violator, and the violations continue after violator has been notified by the permittee, or the source of the illicit discharge is outside the small MS4's boundary, the permittee shall notify either the adjacent MS4 operator with enforcement authority or the appropriate TCEQ Regional Office.

7. General Requirements

Permittees shall provide information in the SWMP documenting the development and implementation of the small MS4 program. At a minimum, the documentation must include:

(a) A list of all small MS4 operators contributing to the development and implementation of the SWMP, including a clear description of the role and responsibilities of each small MS4 operator, if applicable;

(b) A list of any public or private entities assisting with the development or implementation of the SWMP, including a clear description of the relationship, role, and responsibilities of each entity, if applicable;

(c) A list of all activities/BMPs and measurable goals for each of the MCMs;

(d) A schedule for the implementation of all SWMP requirements. The schedule must include, as appropriate, the months and years in which the permittee will undertake required actions, including interim milestones and the frequency of the action throughout the permit term;

(e) A description of how each measurable goal will be evaluated; and

(f) A rationale statement that addresses the overall program, including an overall statement describing how the activities/BMPs and measurable goals were selected.

Section D. Minimum Control Measures (MCMs)

Operators of small MS4s seeking coverage under this general permit shall develop, implement, and maintain a SWMP that includes the following eight MCMs, as applicable.

- MCMs 1-6 apply to all small MS4s regardless of their level as described in Part II.B.
- MCM 7 only applies to Level 4 small MS4s.
- MCM 8 is optional.
- Specific program elements under each MCM shall be implemented by all MS4 operators, unless otherwise noted as applicable for certain levels of small MS4s.

Existing permittees shall assess program elements that were described in their previous TCEQ approved SWMP. Permittees must modify their SWMP as necessary to develop and implement new elements or revise existing BMPs to comply with the requirements in this general permit and continue reducing the discharge of pollutants from the small MS4 to the MEP.

Permittees shall provide justification within the SWMP for any requirements that were not implemented because they were not applicable as described in each MCM. For example, where a small MS4 operator does not have OSSFs in their MS4 area, the requirement to inspect these facilities is not applicable to that small MS4 operator.

1. Public Education and Outreach

(a) The small MS4 operator shall implement a public education and outreach program to distribute educational materials to the community and conduct equivalent outreach about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

(1) The public education and outreach program shall at a minimum include the following target audiences, as applicable:

a. *Traditional MS4s* and counties shall address the residents being served;

b. *Non-traditional MS4s* (other than counties) shall address the community served by the MS4 as listed below:

(i) Universities shall target the faculty, other staff, and students;

(ii) Military bases shall target military personnel (and dependents), and employees (including contractors);

(iii) Prison complexes or other multi-building complexes shall target staff and contractors;

(iv) Municipal Utility Districts and other special districts shall target residents served, staff, and contractors; and

(v) Transportation authorities shall address staff, contractors, and users.

c. Small MS4 operators shall address additional target audiences within the small MS4 service area (such as but not limited to, those listed in Table 2) as listed below:

(i) Levels 1, 2a, and 2b: No requirement for additional audiences;

(ii) Level 3: A minimum of one additional audience; or

(iii) Level 4: A minimum of two additional audiences.

Table 2: Additional Target Audiences

Additional Target Audiences
Schools, educational organizations, or youth service and youth groups
Businesses, including commercial facilities, home-base and mobile businesses
Institutions or formal organizations such as churches, hospitals, and service organizations
Developers or construction site operators
Homeowner or neighborhood associations
Industrial facilities
Visitors/tourists

(2) Small MS4 operators shall target specific pollutant(s) in the permittee's education program (such as, but not limited to, those listed in Table 3). Each small MS4 shall have a minimum of one target pollutant for each target audience from Part IV.D.1(a)(1).a-c of this permit. Small MS4s may implement more than one target pollutant where desired or appropriate to address pollutants in stormwater discharges to the MEP. The target pollutant must be appropriate for the target audience. The same pollutant may be used for more than one target audience and the target pollutant(s) may change annually as needed.

Table 3: Pollutants and Sources

Pollutants and Sources
Grass clippings and leaf litter
Fertilizer and pesticides
Litter, trash containment, balloon releases

Pollutants and Sources
Dumping of solid waste
Illegal disposal of household hazardous waste
Pet waste
Failing septic systems
Swimming pool discharge, including saltwater pools
De-icing/rock salt usage/ storage
Oil, grease, fluids from vehicles
Sediment runoff from construction activities
Unauthorized discharge of restaurant waste
Vehicle washing
Washwater/grey water

(3) Small MS4 operators must use appropriate educational resources as BMPs (materials, events, activities, etc.) in conjunction with the selected pollutants for the selected audiences. The message delivered by these BMPs must be applicable to the target audience and relate to the target pollutant (such as a newsletter article about updated illegal dumping and discharge ordinances distributed to auto mechanic businesses or a hazardous household waste disposal flyer when applying for trash or recycling services). BMPs which are ongoing throughout the year or permit term may be counted as one annual BMP. Permittees shall explain how each BMP relates to the target pollutant and target audience. Small MS4 operators may change BMPs during the permit cycle if determined appropriate through annual reviews and a different BMP may be more effective for the small MS4's target pollutant or target audience. Any changes shall be reflected in the SWMP and explained in the annual report.

a. If the permittee has a public website, the permittee shall post its SWMP and the annual reports required under Part V.B.2 or a summary of the annual report on the permittee's website.

(i) The SWMP must be posted no later than 30 days after the NOI or NOC approval date; and

(ii) The annual report no later than 30 days after the due date.

b. Over the permit term, small MS4 operators shall implement a minimum number of public education and outreach BMPs from Table 4, as follows:

(i) Level 1: three BMPs;

(ii) Levels 2a and 2b: four BMPs; or

(iii) Levels 3 and 4: five BMPs.

Table 4: Required Public Education and Outreach BMPs

Activity/BMP	**Measurable Goals**
Information on the MS4 operator's website.	Maintain a webpage with current and accurate information and working links. • All links shall be checked, and the page shall be updated as necessary at a minimum of once annually. • Must be maintained for the full year, each year.
Social media posts, social media campaign.	Post a minimum of four times each year on a minimum of one social media platform. • The message shall address ways attendees can minimize or avoid adverse stormwater impacts or practices to improve the quality of stormwater runoff. • The messages shall be seasonally appropriate. • Must make a minimum of one post per quarter and all quarterly posts must be visible by attendees for the full year, each year.
Maintain or mark storm drains and inlets with, "No Dumping – Drains to Creek" or a similar message.	Placard, stencil, or paint a minimum of 10% of all known stormwater inlets in either high-impact areas identified by the small MS4 operator or impairment watersheds within the MS4 area each year. Where all known stormwater inlets have been marked, inspect, and maintain the markers for a minimum of 15% of all known stormwater inlets in either high-impact areas identified by the small MS4 operator or impairment watersheds within the MS4 area each year.
Media/advertising campaign/public service announcements in areas of high visibility: Billboard/poster; Bus shelter/bench; radio/television/movie theatre; and kiosks.	Develop topics that address activities or pollutants of concern. Advertisement must be active for a minimum of three weeks each year; or must have an estimated public exposure for the duration of the advertising campaign that is equal to twice the population for the small MS4 area (based on the most recent U.S. Census Bureau decennial population value for the small MS4 area).
Publish articles in local newspaper or newsletter, may be electronic.	Develop article topics that are group specific and address activities or pollutants of concern at a seasonally appropriate time. A minimum of two articles must be published or emailed to target audience groups each year.

Activity/BMP	Measurable Goals
Fact sheets/brochures/ utility bill inserts/door hangers.	Develop material topics that are group specific and address activities or pollutants of concern. Fact sheets, brochures, bill inserts, door hangers, or handouts shall be distributed each year for at least 75% of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.
Permanent stormwater related signage.	Place signage in a location where the message is relevant, and highly visible to target audience. Signage will count as an annual BMP for the year it was put in place and for each subsequent year of this permit cycle as long as each of those years, the permittee inspects and maintains, as necessary, 100% of the signage once annually.
Promote, host, or develop educational meetings, seminar, or trainings.	Hold, host, or promote a minimum of one event for level 1 and 2 MS4s or two events for level 3 and 4 MS4s annually. • The events shall address ways attendees can minimize or avoid adverse impacts to stormwater or practices to improve the quality of stormwater runoff. • These events may address different pollutants and audiences.
Targeted education campaign via mail, email, or in person.	Minimum of one campaign annually distributed to at least 75% of the intended audience, or with a specific event advertised to at least 75% of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness. (Examples: Sediment control with small building permit; leaf litter email during street sweeping season, or education brochure to all businesses conducting certain activity)

c. Small MS4 operators shall create/host or support the public education and outreach BMP(s) in Part IV.D.1.(a)(3) and Table 4. To be considered support given to the coordinating groups, the small MS4 operator shall at minimum conduct at least one of the following or similar:

(i) Plan, or assist with planning, the distribution of materials;

(ii) Coordinate volunteers;

(iii) Contribute supplies, materials, tools, or equipment;

(iv) Provide assistance from MS4 staff to distribute the materials; or

(v) Provide financial support.

d. Small MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required outreach.

2. Public Involvement/Participation

All permittees, except prisons/correctional facilities, shall involve the public, and, at minimum, comply with any state and local public notice requirements in the planning and implementation activities related to developing and implementing the SWMP. The small MS4 operator must create opportunities, or support activities that are coordinated by citizen groups, for residents and others to become involved with the SWMP. The activities/BMPs must demonstrate an impact on stormwater runoff by improving water quality.

(a) Over the permit term, small MS4 operators shall implement a minimum number of public involvement/participation activities and measurable goals from Table 5 as follows:

(1) Level 1 small MS4: two BMPs;

(2) Levels 2a and 2b small MS4: three BMPs; or

(3) Levels 3 and 4 small MS4: four BMPs.

Table 5: Public Involvement/Participation BMPs

Activity/BMP	**Measurable Goals**

Stream/lake or watershed clean-up events; litter/trash clean-up events such as Adopt-A-Highway, Adopt-A-Spot, Adopt-A-Street, Adopt-A-Stream, etc.	Host or support at a minimum one event for level 1 and 2 MS4s or two events for level 3 and 4 MS4s annually.
	• To be considered an event, the land area cleaned must be a minimum of:
	  ○ two acres,
	  ○ 400 yards of steam/streambank/riparian area, or
	  ○ two miles of roadside
	• These may be combined (such as one acre of land and 200 yards of stream).

Habitat improvement; Tree planting; Invasive Vegetation removal; Stream restoration.	Host or support at a minimum one event for level 1 and 2 MS4s or two events for level 3 and 4 MS4s annually. • To be considered an event, the project must be a minimum of 0.5 acres or 25 yards. • An event may take place in streams, parks, areas adjacent to public waterways, or other green space. • An event may be a combination of locations and areas.
Volunteer water quality monitoring such as Texas Stream Team.	Host or support a minimum one event annually. To be considered an event, the monitoring must be conducted at minimum once each year.

Activity/BMP	Measurable Goals
Stormwater related speaker series.	Provide or support a minimum of one session for level 1 and 2 MS4s or two sessions for level 3 and 4 MS4s each year. These may be different speakers or audiences.
MS4 area-wide stormwater survey for input on program implementation.	Provide or support a minimum of one public survey annually for input on the program implementation to be distributed to at least 75% of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.
Hold events to train residents, or work a project for homeowner associations (HOAs), or other public groups to cover stormwater topics such as: Building rain barrels; Fertilizer application training; Rain garden/bio retention creation or maintenance; How to recognize illicit discharge activities and communicate observations to appropriate MS4 staff.	Provide or support at minimum one project or training annually.
Educational display/booth at a school, public event, or similar event to provide information or displays that work to improve public understanding of issues related to water quality.	Provide or support one booth or display at minimum annually. The booth or display must be staffed during the time which the event is open to the public.
Public meeting for input on the program implementation such as a city council meeting, board meeting, or stakeholder meeting.	Host or support a minimum of one meeting annually for input on the program implementation to be advertised to at least 75% of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness.

(b) Small MS4 operators shall create/host or support the public involvement/participation BMP(s) in Part IV.D.2.(a) and Table 5. To be considered support given to the coordinating groups the small MS4 operator shall at minimum conduct at least one of the following or similar:

(1) Plan, or assist with planning, the event or activity;

(2) Contribute supplies, materials, tools, or equipment;

(3) Provide assistance from MS4 staff during the activity;

(4) Provide assistance with recruiting volunteers for events;

(5) Make a space available for projects, meetings, or events;

(6) Advertisement for the events;

(7) Supply disposal services;

(8) Arrange land or stream access;

(9) Provide financial support; or

(10) Provide donations of goods and services such as food.

(c) Small MS4 operators may partner with other MS4 operators to maximize the program and cost effectiveness of the required public involvement/participation activities.

3. Illicit Discharge Detection and Elimination (IDDE)

(a) Program Development

(1) All permittees shall develop, implement, and enforce a program to investigate, detect, and eliminate illicit discharges into the small MS4. The program must include a plan to detect and address non-stormwater discharges, including illegal dumping to the small MS4.

The Illicit Discharge Detection and Elimination (IDDE) program must include the following:

a. A current and accurate MS4 map (see Part IV.D.3.(c)(1));

b. Methods for informing and training MS4 field staff (see Part IV.D.3.(c)(2));

c. Methods for facilitating public reporting of illicit discharges and illegal dumping (see Part IV.D.3.(c)(3));

d. Procedures for responding to illicit discharge, illegal dumping, and spills (see Part IV.D.3.(c)(4));

e. Procedures for tracing the source of an illicit discharge and illegal dumping (see Part IV. D.3.(c)(5));

f. Procedures for removing the source of the illicit discharge and illegal dumping (see Part IV.D.3.(c)(5));

g. Conduct inspections in response to complaints including follow-up inspections, and procedures for inspections (see Part IV.D.3.(c)(6));

h. For Levels 2, 3 and 4, if applicable, procedures to prevent and correct any leaking on-site sewage disposal systems that discharge into the small MS4;

i. For Level 4, procedures for identifying priority areas within the small MS4 likely to have illicit discharges and illegal dumping, and a list of all such areas identified in the small MS4 (see Part IV.D.3.(e)(1));

j. For Level 4, dry weather field screening to detect illicit discharges and illegal dumping (see Part IV.D.3.(e)(2)); and

k. For Level 4, procedures to reduce the discharge of floatables in the small MS4 (see Part IV.D.3.(e)(3)).

(2) For non-traditional small MS4s, if illicit connections, illegal dumping, or illicit discharges are observed related to another operator's MS4, the permittee shall notify the other MS4 operator within 48 hours of discovery. If notification to the other MS4 operator is not practicable, then the permittee shall notify the appropriate TCEQ Regional Office of the possible illicit connection, illegal dumping, or illicit discharge.

(3) If another MS4 operator notifies the permittee of an illegal connection, illegal dumping, or illicit discharge to the small MS4, then the permittee shall follow the requirements specified in Part IV.D.3.(c)(5).

(b) Allowable Non-Stormwater Discharges

Non-stormwater discharges listed in Part II.D do not need to be considered by the permittee as an illicit discharge requiring elimination unless the permittee or the TCEQ identifies the discharge as a significant source of pollutants to the small MS4.

(c) Requirements for All Permittees

All permittees shall meet all the following requirements, including Table 6.

(1) MS4 Mapping

All permittees shall maintain a current and accurate MS4 map, which must be located on site and available for review by TCEQ. The MS4 map must show at a minimum the following information:

a. The location of all small MS4 outfalls that are operated by the permittee and that discharge into Waters of the U.S.;

b. The location and name of all surface waters receiving discharges from the small MS4 outfalls; and

c. Priority areas identified under Part IV.D.3.(e)(1), if applicable.

(2) Education and Training

All permittees shall implement a method for informing or training all the permittee's field staff that may come into contact with or otherwise observe an illicit discharge, illegal dumping, or illicit connection to the small MS4 as part of their normal job responsibilities. Training program materials and attendance lists must be maintained onsite and made available for review by the TCEQ.

(3) Public Reporting of Illicit Discharges and Spills

All permittees shall publicize and facilitate public reporting of illicit discharges, illegal dumping, or water quality impacts associated with discharges into or from the small MS4. The permittee shall provide a central contact point to receive reports; for example, by including a telephone number for complaints and spill reporting.

(4) All permittees shall develop and maintain onsite procedures for responding to illicit discharges, illegal dumping, and spills.

(5) Source Investigation and Elimination

a. Minimum Investigation Requirements – Upon becoming aware of an illicit discharge or illegal dumping, all permittees shall conduct an investigation to identify and locate the source of such illicit discharge or illegal dumping as soon as practicable.

(i) All permittees shall prioritize the investigation of discharges based on their relative risk of pollution. For example, sanitary sewage may be considered a high priority discharge.

(ii) All permittees shall report to the TCEQ immediately upon becoming aware of the occurrence of any illicit flows believed to be an immediate threat to human health or the environment.

(iii) All permittees shall track all investigations and document, at a minimum, the date(s) the illicit discharge or illegal dumping was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.

b. Identification and Investigation of the Source of the Illicit Discharge –All permittees shall investigate and document the source of illicit discharges and illegal dumping where the permittees have jurisdiction to complete such an investigation. If the source of illicit discharge or illegal dumping extends outside the permittee's boundary, all permittees shall notify the adjacent permitted MS4 operator or the appropriate TCEQ Regional Office.

c. Corrective Action to Eliminate Illicit Discharge

If and when the source of the illicit discharge or illegal dumping has been determined, all permittees shall immediately notify the responsible party of the problem, and shall require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge and illegal dumping.

(6) Inspections – The permittee shall conduct inspections, in response to complaints, and shall conduct follow-up inspections to ensure that corrective measures have been implemented by the responsible party.

The permittee shall develop written procedures describing the basis for conducting inspections in response to complaints and conducting follow-up inspections.

Table 6: Required IDDE BMPs

Activity/BMP	**Measurable Goals**
Maintain a current and accurate MS4 map as described in Part IV.D.3.(c)(1).	Review and update, as necessary, at least one time annually to include features which have been added, removed, or changed.
Conduct training for all the permittee's field staff as described in Part IV.D.3.(c)(2). Training may be conducted in person or using self-paced training materials such as videos or reading materials.	Conduct a minimum of one training annually for 100% of MS4 field staff that may come into contact with or otherwise observe an illicit discharge, illegal dumping, or illicit connection to the small MS4 as part of their normal job responsibilities.

Activity/BMP	Measurable Goals
Maintain and publicize a public reporting method for the public to report illicit discharges, illegal dumping, or water quality impacts associated with discharges into or from the small MS4 such as a reporting hotline, online form, or other similar mechanism as described in Part IV.D.3.(c)(3).	Maintain a minimum of one public reporting mechanism 100% of the time during the permit term. Publicize the public reporting mechanism a minimum of two times annually in a method designed to reach the majority of the intended audience. Develop and implement a tracking system to estimate what percentage of the intended audience is reached for determining BMP effectiveness. In addition, if the MS4 operator has a public website, the public reporting mechanism must be publicized on the public website 100% of the time during the permit term.
Develop and maintain procedures for responding to illicit discharges, illegal dumping, and spills as described in Part IV.D.3.(c)(4).	Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable.
Source investigation and elimination of illicit discharges and illegal dumping as described in Part IV.D.3.(c)(5).	Respond to 100% of known illicit discharges and illegal dumping incidents each year to investigate sources (or some Level 2b MS4s must notify the appropriate agency with the authority to act). Respond to 100% of high priority discharges each year, such as sanitary sewer discharges within 24 hours (or some Level 2b MS4s must notify the appropriate agency with the authority to act). For 100% of known illicit discharges or illegal dumping incidents where the small MS4 does not have jurisdiction, notify the adjacent MS4 operator or the applicable TCEQ regional office each year. Notify TCEQ immediately of 100% of illicit flows believed to be an immediate threat to human health or the environment throughout the permit term.
Corrective action to eliminate illicit discharges and illegal dumping as described in Part IV.D.3.(c)(5).	For 100% of illicit discharges or illegal dumping where a source has been determined, notify the responsible party of the problem within 24 hours. Require the responsible party to perform all necessary corrective actions to eliminate the illicit discharge.
Inspection Procedures as described in Part IV.D.3.(c)(6).	Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable.

Activity/BMP	Measurable Goals
Inspections in response to complaints as described in Part IV.D.3.(c)(6).	Conduct inspections in response to 100% of complaints each year according to the established procedures (or some Level 2b MS4s must notify the appropriate agency with the authority to act). Conduct follow up inspections in 100% of cases each year where necessary as described in the established procedures (except for some Level 2b MS4s without the appropriate authority to act).

(d) Additional Requirements for Levels 3 and 4 small MS4s

In addition to the requirements described in Parts IV.D.3.(c), permittees who operate Levels 3 or 4 small MS4s shall meet the following requirements, including those described in Table 7.

Source Investigation and Elimination

Permittees who operate Levels 3 or 4 small MS4s shall upon being notified that the discharge has been eliminated, conduct a follow-up investigation or field screening, consistent with Part IV.D.2.(e)(2), to verify that the discharge has been eliminated. Follow-up investigations shall be completed within five business days, on average. The permittee shall document its follow-up investigation. The permittee may seek recovery and remediation costs from responsible parties consistent with Part IV.C.3, and require compensation-related costs. Resulting enforcement actions must follow the procedures for enforcement action in Part IV.C.3 and 6. If the suspected source of the illicit discharge is authorized under an NPDES/TPDES permit or the discharge is listed as an authorized non-stormwater discharge, as described in Part II.D, no further action is required.

Table 7: Additional Required IDDE BMPs for Levels 3 and 4 small MS4s

Activity/BMP	Measurable Goals
Conduct follow-up investigations or field screenings when notified that a discharge has been eliminated.	Conduct follow-up investigations or field screening in response to 100% of notifications each year. Complete the follow-up investigations within five business days, on average.

(e) Additional Requirements for Level 4 Small MS4s

In addition to the requirements described in Parts IV.D.3.(c)-(d) above, permittees who operate Level 4 small MS4s shall meet the following requirements including Table 8:

(1) Identification of Priority Areas

Permittees who operate Level 4 small MS4s shall identify priority areas likely to have illicit discharges or illegal dumping, shall document the basis for the

selection of each priority area, and shall create a list of all priority areas identified. This priority area list must be available for review by the TCEQ.

(2) Dry Weather Field Screening

By the end of the permit term, permittees who operate Level 4 small MS4s shall develop and implement a written dry weather field screening program to assist in detecting and eliminating illicit discharges and illegal dumping to the small MS4. Dry weather field screening program must consist of (1) field observations; and (2) field screening as described below.

For dry weather field screening, at a minimum, the permittee shall:

a. Conduct dry weather field screening in priority areas as identified by the permittee in Part IV.D.3.(e)(1). By the end of the permit term, all of those priority areas, although not necessarily all individual outfalls, must be screened.

b. Field observation requirements – The permittee shall develop written procedures for observing flows from outfalls when there has been at least 72 hours of dry weather. The written procedures must include the basis used to determine which outfalls will be observed. The permittee shall record visual observations such as odor, color, clarity, floatables, deposits, or stains.

c. Field screening requirements – The permittee shall develop written procedures to determine which dry weather flows will be screened, based on results of field observations or complaint from the public or the permittee's trained field staff. At a minimum, when visual observations indicate a potential problem such as discolored flows, foam, surface sheen, and other similar indicators of contamination, the permittee shall conduct a field screening analysis for selected indicator pollutants. The basis for selecting the indicator pollutants must be described in the written procedures. Screening methodology may be modified based on experience gained during the actual field screening activities. The permittee shall document the method used.

(3) Reduction of Floatables

The permittee shall implement a program to reduce the discharge of floatables (for example, litter and other human-generated solid refuse) in the small MS4. The permittee shall include source controls at a minimum and structural controls and other appropriate controls where necessary.

The permittee shall maintain two locations where floatable material can be removed before the stormwater is discharged to or from the small MS4. Floatable material shall be collected at the frequency necessary for maintenance of the removal devices, but not less than twice per year. The amount of material collected shall be estimated by weight, volume, or by other practical means. Results shall be included in the annual report.

Table 8: Additional Required IDDE BMPs for Level 4 small MS4s

Activity/BMP	**Measurable Goals**
Identification of priority areas as described in Part IV.D.3.(e)(1).	Develop and maintain a list of 100% of the priority areas identified by the small MS4 operator each year. At a minimum, small MS4 operators must consider the following in developing the priority areas: • Sanitary sewer lines • Industrial areas • Commercial areas • Areas with history of past illicit discharges or illegal dumping Review and update the list at least one time annually to include new, removed, or changed areas based on the criteria established by the small MS4 for identifying priority areas.
Dry weather field screening as described in Part IV.D.3.(e)(2).	Develop and implement written procedures to determine which dry weather flows will be screened, based on results of field observations or complaint from the public or the permittee's trained field staff. Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable. • New Level 4 small MS4s shall develop the procedures within one year of obtaining their authorization under this general permit. Develop and implement written procedures for observing flows from outfalls when there has been at least 72 hours of dry weather. Review and update the procedures at least one time annually to address changes and make improvements to the established procedures where applicable. New Level 4 small MS4s shall develop the procedures within one year of obtaining their authorization under this general permit. Conduct dry weather field screening in 100% of the priority areas as identified by the permittee in Part IV.D.2.(e)(1) by the end of the permit term with interim milestones established for screening each year.

Activity/BMP	Measurable Goals
Floatable Reduction as described in Part IVI.D.3.(e)(3).	Develop and implement at least two source controls each year to address floatables such as, but not limited to, establishing and maintaining waste collection sites, clean-up events, and anti-littering campaigns. Develop and implement at least two structural controls each year such as, but not limited to, inlet protections, boom sites, hazardous materials traps, trash racks, outfall netting, and catch basins. Annually maintain at least two locations where floatable material can be removed before the stormwater is discharged to or from the small MS4. These locations may be the same as the areas where source controls and structural controls are implemented. Floatable material shall be collected at the frequency necessary for maintenance of the removal devices, but not less than two times per year.

4. Construction Site Stormwater Runoff Control

(a) Requirements and Control Measures

All permittees shall develop, implement, and enforce a program requiring operators of small and large construction activities to select, install, implement, and maintain stormwater control measures that prevent illicit discharges to the MEP. The program must include the development and implementation of an ordinance or other regulatory mechanism, as well as sanctions to ensure compliance to the extent allowable under state, federal, and local law, to require erosion and sediment control.

If TCEQ waives requirements for stormwater discharges associated with small construction from a specific site(s), the permittee is not required to enforce the program to reduce pollutant discharges from such site(s).

(b) Requirements for All Permittees

All permittees shall meet the following requirements including Table 9.

(1) All permittees shall require that construction site operators implement appropriate erosion and sediment control BMPs. The permittee's construction program must ensure erosion and sediment controls, soil stabilization, and BMP requirements are effectively implemented for all small and large construction activities discharging to its small MS4 consistent with the TPDES CGP, TXR150000.

(2) Prohibited Discharges - The following discharges are prohibited:

a. Wastewater from washout of concrete and wastewater from water well drilling operations, unless managed by an appropriate control;

b. Wastewater from washout and cleanout of stucco, paint, from release oils, and other construction materials;

c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;

d. Soaps or solvents used in vehicle and equipment washing; and

e. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, unless managed by appropriate BMPs.

(3) Construction Plan Review Procedures

To the extent allowable by state, federal, and local law, all permittees shall maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction. For those permittees without legal authority to enforce site plan reviews, this requirement is limited to those sites operated by the permittee and its contractors and located within the permittee's regulated area. The site plan procedures must meet the following minimum requirements:

a. The site plan review procedures must incorporate consideration of potential water quality impacts.

b. The permittee may not approve any plans unless the plans contain appropriate site-specific construction site control measures that, at a minimum, meet the requirements described in the TPDES CGP, TXR150000.

The permittee may require and accept a plan, such as a stormwater pollution prevention plan (SWP3), that has been developed pursuant to the TPDES CGP, TXR150000.

(4) Construction Site Inspections and Enforcement

To the extent allowable by state, federal, and local law, all permittees shall implement procedures for inspecting large and small construction projects. Permittees without legal authority to inspect construction sites shall at a minimum conduct inspection of sites operated by the permittee or its contractors and that are located in the permittee's regulated area.

a. The permittee shall conduct inspections based on the evaluation of factors that are a threat to water quality, such as: soil erosion potential; site slope; project size and type; sensitivity of receiving water bodies; proximity to receiving water bodies; non-stormwater discharges; and past record of non-compliance by the operators of the construction site.

b. Inspections must occur during the active construction phase.

(i) All permittees shall develop and implement updated written procedures outlining the inspection and enforcement requirements. These procedures must be maintained on-site or in the SWMP and be made available to TCEQ.

(ii) Inspections of construction sites must, at a minimum:

1. Determine whether the site has appropriate coverage under the TPDES CGP, TXR150000. If no coverage exists, notify the permittee of the need for permit coverage;

2. Conduct a site inspection to determine if control measures have been selected, installed, implemented, and maintained according to the small MS4's requirements;
3. Assess compliance with the permittee's ordinances and other regulations; and
4. Provide a written or electronic inspection report.

c. Based on site inspection findings, all permittees shall take all necessary follow-up actions (for example, follow-up-inspections or enforcement) to ensure compliance with permit requirements and the SWMP. These follow-up and enforcement actions must be tracked and documentation maintained for review by the TCEQ.

For non-traditional small MS4s with no enforcement powers, the permittee shall notify the adjacent MS4 operator with enforcement authority or the appropriate TCEQ Regional Office.

(5) Information Submitted By the Public

All permittees shall develop, implement, and maintain procedures for receipt and consideration of information submitted by the public.

(6) MS4 Staff Training

All permittees shall ensure that all staff whose primary job duties are related to implementing the construction stormwater program (including permitting, plan review, construction site inspections, and enforcement) are informed or trained to conduct these activities. The training may be conducted by the permittee or by outside trainers.

Table 9: Required Construction Site Stormwater Runoff Control BMPs

Activity/BMP	**Measurable Goals**
Develop and maintain an ordinance or other regulatory mechanism as described in Part IV.D.4.(a).	Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.
Prohibit discharges as described in Part IV.D.4.(b)(2).	Develop and maintain an ordinance or other regulatory mechanism to prohibit these discharges. Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.
Maintain and implement site plan review procedures that describe which plans will be reviewed as well as when an operator may begin construction as described in Part IV.D.4.(b)(3).	Review and update site plan review procedures at least one time annually to address changes and make improvements to the established procedures where applicable. Implement site plan review procedures for 100% of new construction site plans received each year.

Activity/BMP	Measurable Goals
Implement procedures for inspecting large and small construction projects as described in Part IV.D.4.(b)(4).	Review and update inspection procedures at least one time annually to address changes and make improvements to the established procedures where applicable.
Conduct construction site inspections as described in Part IV.D.4.(b)(4).	Conduct inspections at a minimum of 80% of active construction sites annually according to the established procedures (or some Level 2b small MS4s must notify the appropriate agency with the authority to act). Each year, conduct follow up inspections in 100% of cases where necessary as described in the established procedures (except for some Level 2b small MS4s without the appropriate authority to act).
Develop, implement, and maintain procedures for receipt and consideration of information submitted by the public as described in Part IV.D.4.(b)(5).	Review and update procedures for the receipt and consideration of information submitted by the public at least one time annually to address changes and make improvements to the established procedures where applicable. Maintain one webpage, hotline, or similar method for receipt of information submitted by the public throughout the permit term.
Conduct training for all the MS4 staff whose primary job duties are related to implementing the construction stormwater program as described in Part IV.D.4.(b)(6). Training may be conducted in person or using self-paced training materials such as videos or reading materials.	Conduct a minimum of one training annually for 100% of MS4 staff whose primary job duties are related to implementing the construction stormwater program.

(c) Additional Requirements for Levels 3 and 4 small MS4s

In addition to the requirements described in Parts IV.D.4.(b) above, permittees who operate Levels 3 or 4 small MS4s shall meet the following requirements including Table 10.

Construction Site Inventory

Permittees who operate Levels 3 or 4 small MS4s shall maintain an inventory of all TPDES permitted active public and private construction sites in the small MS4 area, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale. Notification to the small MS4 must be made by submittal of a copy of an NOI or a

small construction site notice, as applicable. The permittee shall make this construction site inventory in the small MS4 area available to the TCEQ upon request for review.

Table 10: Additional Required Construction Site Stormwater Runoff Control BMPs for Levels 3 and 4 Small MS4s

Activity/BMP	**Measurable Goals**
Maintain a Construction Site inventory as described in Part IV.D.4.(c).	Maintain an annual inventory of 100% of TPDES permitted active public and private construction sites in the small MS4 area, that result in a total land disturbance of one or more acres or that result in a total land disturbance of less than one acre if part of a larger common plan or development or sale. • New Levels 3 or 4 small MS4s shall develop the inventory within one year of obtaining their authorization under this general permit.

5. Post Construction Stormwater Management in New Development and Redevelopment

(a) Post-Construction Stormwater Management Program

All permittees shall meet the requirements below including Table 11.

(1) All permittees shall develop, implement, and enforce a program, to the extent allowable under state, federal, and local law, to control stormwater discharges from new development and redeveloped sites that discharge into the small MS4 that disturb one acre or more, including projects that disturb less than one acre that are part of a larger common plan of development or sale. The program must be established for private and public development sites. The program may utilize an offsite mitigation and payment in lieu of components to address this requirement.

(2) All permittees shall use, to the extent allowable under state, federal, and local law and local development standards, an ordinance or other regulatory mechanism to address post-construction runoff from new development and redevelopment projects. The permittees shall establish, implement, and enforce a requirement that owners or operators of new development and redeveloped sites design, install, implement, and maintain a combination of structural and non-structural BMPs appropriate for the community and that protects water quality. If the construction of permanent structures is not feasible due to space limitations, health and safety concerns, cost effectiveness, or highway construction codes, the permittee may propose an alternative approach to TCEQ.

(b) Requirements for All Permittees

All permittees shall meet all the following requirements including Table 11.

(1) All permittees shall document and maintain records of enforcement actions and make them available for review by the TCEQ.

(2) Long-Term Maintenance of Post-Construction Stormwater Control Measures

All permittees shall, to the extent allowable under state, federal, and local law, ensure the long-term operation and maintenance of structural stormwater control measures installed through one or both of the following approaches:

a. Maintenance performed by the permittee. (See Part IV.D.6)

b. Maintenance performed by the owner or operator of a new development or redeveloped site under a maintenance plan. The maintenance plan must be filed in the real property records of the county in which the property is located. The permittee shall require the owner or operator of any new development or redeveloped site to develop and implement a maintenance plan addressing maintenance requirement for any structural control measures installed on site. The permittee shall require operation and maintenance performed is documented and retained on site, such as at the offices of the owner or operator, and made available for review by the small MS4.

Table 11: Required Post Construction Stormwater Management in New Development and Redevelopment BMPs

Activity/BMP	**Measurable Goals**
Develop and maintain an ordinance or other regulatory mechanism as described in Part IV.D.5.(a)(2).	Review and update the ordinance or other regulatory mechanism at least one time during the permit term to address changes and make improvements to the ordinance where applicable.
Document and maintain records of enforcement actions and make them available for review by the TCEQ as described in Part IV.D.5.(b)(1).	Maintain records of 100% of enforcement actions taken each year. Make 100% of enforcement records available to TCEQ for review within 24 hours of request.
Ensure the long term operation and maintenance of structural stormwater control measures installed as described in Part IV.D.5.(b)(2).	Each year, implement a maintenance plan and schedule established by the small MS4 operator addressing 100% of stormwater control measures where the small MS4 operator is responsible for maintenance. Each year, require 100% of the owners or operators of any new development or redeveloped sites to develop and implement a maintenance plan addressing maintenance requirement for any structural control measures installed on site. Require the site owner or operators to maintain documentation, such as a tracking log, onsite of 100% of the maintenance performed and made available for review by the small MS4 operator or TCEQ within 24 hours of the request.

(c) Additional Requirements for Level 4 small MS4s

In addition to the requirements described in Parts IV.D.5.(b)(1)-(2), permittees who operate Level 4 small MS4s shall meet the following requirements including Table 12.

(1) Inspections – Permittees who operate Level 4 small MS4s shall develop and implement an inspection program to ensure that all post construction stormwater control measures are operating correctly and are being maintained as required consistent with its applicable maintenance plan. For small MS4s with limited enforcement authority, this requirement applies to the structural controls owned and operated by the small MS4 or its contractors that perform these activities within the small MS4's regulated area.

(2) Inspection Reports – The permittee shall document its inspection findings in an inspection report and make them available for review by the TCEQ.

Table 12: Additional Required Post Construction Stormwater Management in New Development and Redevelopment BMPs for Level 4 Small MS4s

Activity/BMP	**Measurable Goals**
Develop and implement an inspection program as described in Part IV.D.5.(c)(1).	Develop and implement an inspection program to ensure that of post construction stormwater control measures in the small MS4 area are operating correctly and are being maintained as required consistent with its applicable maintenance plan each year. At a minimum, the small MS4 operator must inspect 20% of the post construction stormwater controls in the small MS4 area each year, or more if required by the MS4 maintenance plan. For small MS4s with limited enforcement authority, this requirement applies only to 100% of the structural controls owned and operated by the small MS4 or its contractors that perform these activities within the small MS4's regulated area each year. New Level 4 small MS4s shall develop the inspection program within one year of obtaining their authorization under this general permit.
Maintain Inspection Reports as described in Part IV.D.5.(c)(2).	Document inspection findings in an inspection report for 100% of inspections performed each year. Make 100% of inspection reports available to TCEQ staff for review within 24 hours of request.

6. Pollution Prevention and Good Housekeeping for Municipal Operations

(a) Program Development

All permittees shall develop and implement an operation and maintenance program (O&M), including an employee training component that has the ultimate goal of preventing or reducing pollutant runoff from municipal activities and municipally owned areas including but not limited to: park and open space maintenance; street, road, or highway maintenance; fleet and building maintenance; stormwater system

maintenance; new construction and land disturbances; municipal parking lots; vehicle and equipment maintenance and storage yards; waste transfer stations; and salt/sand storage locations.

(b) Requirements for All Permittees

All permittees shall meet the requirements described below including Table 13.

(1) Permittee-owned Facilities and Control Inventory

All permittees shall develop and maintain an inventory of facilities and stormwater controls that it owns and operates within the regulated area of the small MS4. The inventory must include all applicable permit numbers, registration numbers, and authorizations for each facility or controls. The inventory must be available for review by TCEQ and must include, but is not limited, to the following, as applicable:

a. Composting facilities;

b. Equipment storage and maintenance facilities;

c. Fuel storage facilities;

d. Hazardous waste disposal facilities;

e. Hazardous waste handling and transfer facilities;

f. Incinerators;

g. Landfills;

h. Materials storage yards;

i. Pesticide storage facilities;

j. Buildings, including schools, libraries, police stations, fire stations, and office buildings;

k. Parking lots;

l. Golf courses;

m. Swimming pools;

n. Public works yards;

o. Recycling facilities;

p. Salt storage facilities;

q. Solid waste handling and transfer facilities;

r. Street repair and maintenance sites;

s. Vehicle storage and maintenance yards; and

t. Structural stormwater controls.

(2) Training and Education

All permittees shall inform or train appropriate employees involved in implementing pollution prevention and good housekeeping practices. All permittees shall maintain a training attendance list for review by TCEQ when requested.

(3) Disposal of Waste Material – Waste materials removed from the small MS4 must be disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable.

(4) Contractor Requirements and Oversight

a. Any contractors hired by the permittee to perform maintenance activities on permittee-owned facilities must be contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures described in Parts IV.D.6.(b)(2)-(6).

b. All permittees shall provide oversight of contractor activities to ensure that contractors are using appropriate control measures and SOPs. Oversight procedures must be maintained on-site and made available for inspection by TCEQ.

(5) Municipal Operation and Maintenance Activities

a. Assessment of permittee-owned operations

All permittees shall evaluate operation and maintenance (O&M) activities for their potential to discharge pollutants in stormwater, including but not limited to:

(i) Road and parking lot maintenance, including such areas as pothole repair, pavement marking, sealing, and re-paving;

(ii) Bridge maintenance, including such areas as re-chipping, grinding, and saw cutting;

(iii) Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and

(iv) Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.

b. All permittees shall identify pollutants of concern that could be discharged from the above O&M activities (for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash).

c. All permittees shall develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the above activities. These pollution prevention measures must include at least two the following:

(i) Replacing materials and chemicals with more environmentally friendly materials or methods;

(ii) Tracking application of deicing and anti-icing compounds;

(iii) Using suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips and other pollutants generated by regular bridge maintenance; and

(iv) Placing barriers around or conducting runoff away from deicing chemical storage areas to prevent discharge into surface waters.

d. Inspection of pollution prevention measures - All pollution prevention measures implemented at permittee-owned facilities must be visually inspected to ensure they are working properly. The permittee shall develop written procedures that describes frequency of inspections occurring at least one time annually and how they will be conducted. A log of inspections must be maintained and made available for review by the TCEQ upon request.

(6) Structural Control Maintenance

If BMPs include structural controls, maintenance of the controls must be performed by the permittee and consistent with maintaining the effectiveness of the BMP. The permittee shall develop written procedures that define the frequency of inspections occurring at least one time annually and how they will be conducted.

Table 13: Required Pollution Prevention and Good Housekeeping for Municipal Operations BMPs

Activity/BMP	**Measurable Goals**
Permittee-owned Facilities and Control Inventory as described by Part IV.D.6.(b)(1).	Develop and maintain an annual inventory for 100% of the small MS4 owned and operated facilities and controls in the small MS4 area. Review and update the inventory at least one time annually to address changes or additions to the facilities and controls where applicable.
Training and Education as described in Part IV.D.6.(b)(2). Training may be conducted in person or using self-paced training materials such as videos or reading materials.	Conduct a minimum of one training annually for 100% of employees involved in implementing pollution prevention and good housekeeping practices. For small MS4s which use only contractors to implement pollution prevention and good housekeeping practices, ensure training of 100% of applicable contract staff is conducted at least one time annually using contract language or another similar method.
Disposal of Waste Material as described in Part IV.D.6.(b)(3).	Ensure that 100% of waste from the MS4 is disposed of in accordance with 30 TAC Chapters 330 or 335, as applicable each year.

Activity/BMP	Measurable Goals
Contractor Requirements and Oversight as described in Part IV.D.6.(b)(4).	Each year, ensure that 100% of contractors hired by the MS4 to perform maintenance activities on permittee-owned facilities is contractually required to comply with all of the stormwater control measures, good housekeeping practices, and facility-specific stormwater management operating procedures described in Parts IV D.6.(b)(2)-(6). Implement oversight procedures of contractor activities in 100% of contracts to ensure that contractors are using appropriate control measures and SOPs each year. Oversight procedures must be maintained on-site 100% of the time and made available for review by TCEQ within 24 hours of request.
Assessment of permittee-owned operations as described in Part IV.D.6.(b)(5)a.	Evaluate 100% of O&M activities, in conjunction with procedure reviews if appropriate, for their potential to discharge pollutants in stormwater annually including but not limited to: • Road and parking lot maintenance, including such areas as pothole repair, pavement marking, sealing, and re-paving; • Bridge maintenance, including such areas as re-chipping, grinding, and saw cutting; • Cold weather operations, including plowing, sanding, and application of deicing and anti-icing compounds and maintenance of snow disposal areas; and • Right-of-way maintenance, including mowing, herbicide and pesticide application, and planting vegetation.
Identify pollutants of concern as described in Part IV.D.6.(b)(5)b.	Identify pollutants of concern that could be discharged from all of the O&M activities described in Part IV.D.6.(b)(5)b and maintain a list of 100% of the pollutants identified. Including for example, metals; chlorides; hydrocarbons such as benzene, toluene, ethyl benzene, and xylenes; sediment; and trash. Review and update the pollutants of concern list at least one time annually to address changes or additions to the O&M activities where applicable.

Activity/BMP	Measurable Goals
Pollution Prevention Measures as described in Part IV.D.6.(b)(5)c.	Develop and implement a set of pollution prevention measures that will reduce the discharge of pollutants in stormwater from the permittee-owned operations. Implement at least two of the following pollution prevention measures: • Replace at least 50% of the MS4's materials and chemicals with more environmentally friendly materials or methods by the end of the permit term; • Track 100% of the application of deicing and anti-icing compounds in the MS4 area and record the amount of compound used for each application annually; • Use suspended tarps, booms, or vacuums to capture paint, solvents, rust, paint chips and other pollutants during 80% of regular bridge maintenance each year; and • Place barriers around or conduct runoff away from 100% of deicing chemical storage areas to prevent discharge into surface waters each year.
Inspection of Pollution Prevention Measures as described in Part IV.D.6.(b)(5)d.	At least one time annually, visually inspect 100% of pollution prevention measures implemented at permittee-owned facilities to ensure they are working properly. Develop and maintain written procedures that describe the frequency of inspections and how they will be conducted. Review and update the inspection procedures at least one time annually to address changes or additions to the pollution prevention measures. Maintain a log of 100% of the inspections conducted annually and make the log available for review by the TCEQ within 24 hours of a request.
Structural Control Maintenance as described by Part IV.D.6.(b)(6).	At least one time annually, perform maintenance of 100% of the structural controls which require maintenance. Maintenance must follow a plan and schedule developed by the small MS4 operator to be consistent with maintaining the effectiveness of the BMP. The permittee shall develop and maintain written procedures that define the frequency of inspections and how they will be conducted. Review and update the maintenance procedures at least one time annually to address changes or additions to the pollution prevention measures.

(c) Additional Requirements for Levels 3 and 4 small MS4s:

In addition to the requirements described in Part IV.D.6.(b) above, permittees who operate Levels 3 or 4 small MS4s shall meet the following requirements including Table 14.

(1) Storm Sewer System Operation and Maintenance

a. Permittees who operate Levels 3 or 4 small MS4s shall develop and implement an O&M program to reduce to the MEP the collection of pollutants in catch basins and other surface drainage structures.

b. Permittees who operate Levels 3 or 4 small MS4s shall develop a list of potential problem areas. The permittees shall identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping).

(2) Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads

Permittees who operate Levels 3 or 4 small MS4s shall implement an O&M program that includes at least one of the following: a street sweeping and cleaning program, or an equivalent BMP such as an inlet protection program, which must include an implementation schedule and a waste disposal procedure. The basis for the decision must be included in the SWMP. If a street sweeping and cleaning program is implemented, the permittee shall evaluate the following permittee-owned and operated areas for the program: streets, road segments, and public parking lots including, but not limited to, high traffic zones, commercial and industrial districts, sport and event venues, and plazas, as well as areas that consistently accumulate high volumes of trash, debris, and other stormwater pollutants.

a. Implementation schedules – If a sweeping program is implemented, the permittee shall sweep the areas in the program (for example, the streets, roads, and public parking lots) in accordance with a frequency and schedule determined in the permittee's O&M program to address at a minimum 75% of the areas in the program annually.

b. For areas where street sweeping is technically infeasible (for example, streets without curbs), the permittee shall focus implementation of other trash and litter control procedures, or provide inlet protection measures to minimize pollutant discharges to storm drains and creeks.

c. Sweeper Waste Material Disposal – If utilizing street sweepers, the permittee shall develop a procedure to dewater and dispose of street sweeper waste material and shall ensure that water and material will not reenter the small MS4.

(3) Mapping of Facilities

Permittees who operate Levels 3 or 4 small MS4s shall, on a map of the area regulated under this general permit, identify where the permittee-owned and operated facilities and stormwater controls are located.

(4) Facility Assessment

Permittees who operate Levels 3 or 4 small MS4s shall perform the following facility assessment in the regulated portion of the small MS4 operated by the permittee:

a. Assessment of Facilities' Pollutant Discharge Potential – The permittee shall review the facilities identified in Part IV.D.6.(b)(1) once per permit term for their potential to discharge pollutants into stormwater.

b. Identification of *high priority* facilities – Based on the assessment above, the permittee shall identify as *high priority* those facilities that have a high potential to generate stormwater pollutants and shall develop and maintain a list of these facilities. Among the factors that must be considered in giving a facility a high priority ranking are the amount of urban pollutants stored at the site, the identification of improperly stored materials, activities that must not be performed outside (for example, changing automotive fluids, vehicle washing), proximity to water bodies, proximity to sensitive aquifer recharge features, poor housekeeping practices, and discharge of POCs to impaired water(s). High priority facilities must include, at a minimum, the permittee's maintenance yards, hazardous waste facilities, fuel storage locations, and any other facilities at which chemicals or other materials have a high potential to be discharged in stormwater.

c. Documentation of Assessment Results – The permittee shall document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the assessments. The documentation must include the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.

(5) Development of Facility-Specific Procedures

Permittees who operate Levels 3 or 4 small MS4s shall develop facility-specific stormwater management SOPs. The permittee may utilize existing plans or documents that may contain the following required information:

a. For each high priority facility identified in Part IV.D.6.(c)(4)b, the permittee shall develop a SOP that identifies BMPs to be installed, implemented, and maintained to minimize the discharge of pollutants in stormwater from each facility.

b. A hard or electronic copy of the facility-specific stormwater management SOP (or equivalent existing plan or document) must be maintained and be available for review by the TCEQ. The SOP must be kept onsite when possible and must be kept up-to-date.

(6) Stormwater Controls for High Priority Facilities

Permittees who operate Levels 3 or 4 small MS4s shall implement the following stormwater controls at all high priority facilities identified in Part IV.D.6.(c)(4)b. A description of BMPs developed to comply with this requirement must be included in each facility specific SOP:

a. General good housekeeping – Material with a potential to contribute to stormwater pollution must be sheltered from exposure to stormwater.

b. De-icing and anti-icing material storage – The permittee shall ensure, to the MEP, that stormwater runoff from storage piles of salt and other de-icing

and anti-icing materials is not discharged; or shall ensure that any discharges from the piles are authorized under a separate discharge permit.

c. Fueling operations and vehicle maintenance – The permittee shall develop SOPs (or equivalent existing plans or documents) that address spill prevention and spill control at permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities.

d. Equipment and vehicle washing – The permittee shall develop SOPs that address equipment and vehicle washing activities at permittee-owned and operated facilities. The discharge of equipment and vehicle wash water to the small MS4 or directly to receiving waters from permittee-owned facilities is not authorized under this general permit. To ensure that wastewater is not discharged under this general permit, the permittee's SOP may include installing a vehicle wash reclaim system, capturing and hauling the wastewater for proper disposal, connecting to sanitary sewer (where applicable and approved by local authorities), ceasing the washing activity, or applying for and obtaining a separate TPDES permit.

(7) Inspections

Permittees who operate Levels 3 or 4 small MS4s shall develop and implement an inspection program, which at a minimum must include periodic inspections of high priority permittee-owned facilities. The results of the inspections and observations must be documented and available for review by the TCEQ.

Table 14: Additional Required Pollution Prevention and Good Housekeeping for Municipal Operations BMPs for Levels 3 and 4 Small MS4s:

Activity/BMP	**Measurable Goals**
Storm Sewer System Operation and Maintenance Program as described by Part IV.D.6.(c)(1)a.	Develop and implement an O&M program to reduce to the MEP the collection of pollutants in catch basins and other surface drainage structures each year. Implement at least two of the following: • Inspect at least 25% of the small MS4 owned and operated detention basins each year. • Inspect at least 20% of the small MS4 owned and operated stormwater inlets in problem areas identified by the small MS4 operator (for example, areas with recurrent illegal dumping) each year. • Inspect and clean at least 20% of the small MS4 owned and operated surface drainage system in problem areas identified by the small MS4 operator (for example, areas with recurrent illegal dumping) each year. • Collect and dispose of or recycle used oil and other household hazardous waste (HHW) from the public in at least three events each year. An event is any day in which the public has an opportunity to dispose of or recycle HHW either through collection or drop off

Activity/BMP	**Measurable Goals**
Storm Sewer System Operation and Maintenance Problem Areas as described by Part IV.D.6.(c)(1)b.	Develop a list of 100% of the identified potential problem areas. Identify and prioritize problem areas for increased inspection (for example, areas with recurrent illegal dumping). Review and update the list of potential problem areas at least one time annually to address changes or additions to the list.

Operation and Maintenance Program to Reduce Discharges of Pollutants from Roads as described by Part IV.D.6.(c)(2).	Implement the following:
	• A street sweeping and cleaning program to address 75% of the MS4 area where street sweeping is technically feasible annually.
	  ○ Ensure 100% of the MS4 area where street sweeping is technically feasible is addressed at least two times by the end of the permit term.
	• One or a combination of the following non-street sweeping controls:
	  ○ an inlet protection program addressing 100% of the small MS4 area where street sweeping is technically infeasible by the end of the permit term, which must include an implementation schedule and a waste disposal procedure, or
	  ○ Ensure that trash receptacles, or similar trash capturing devices are provided and maintained in 100% of the areas identified as high trash generating areas within the areas where street sweeping is technically infeasible (such as areas near parks, event spaces, etc.).

Mapping of Facilities as described by Part IV.D.6.(c)(3).	On a map of the area regulated under this general permit, identify where 100% of the permittee-owned and operated facilities and stormwater controls are located. Review and update the map at least one time annually to address changes or additions to the facilities and controls.
Assessment of Facilities' Pollutant Discharge Potential as described by Part IV.D.6.(c)(4)a.	Review 100% of the facilities identified in Part IV.D.6.(b) at least one time per permit term for their potential to discharge pollutants into stormwater.

Activity/BMP	**Measurable Goals**
Identification of high priority facilities as described by Part IV.D.6.(c)(4)b.	Based on the assessment in Part IV.D.6.(c)(4)a., the permittee shall identify as *high priority* those facilities that have a high potential to generate stormwater pollutants. A list of 100% of the identified facilities must be developed and maintained each year. Review and update the list of high priority facilities at least one time annually to address changes or additions to the facilities.
Documentation of Assessment Results as described by Part IV.D.6.(c)(4)c.	Document the results of all the assessments and maintain copies of 100% of the site evaluation checklists used to conduct the assessments each year. The documentation must include: • the results of the permittee's initial assessment, and any identified deficiencies and corrective actions taken.
Development of Facility-Specific SOPs as described by Part IV.D.6.(c)(5).	Develop facility-specific stormwater management SOPs for 100% of the MS4 owned and operated facilities. A description of 100% of the BMPs developed to comply with Part IV.D.6.(c)(6) must be included in each facility-specific SOP. Review and update the facility-specific SOPs at least one time annually to address changes or additions to the facilities. If requested, SOPs must be made available to TCEQ within 24 hours of the request for review.
Stormwater Controls for High Priority Facilities, General Good Housekeeping as described by Part IV.D.6.(c)(6)a.	Shelter from exposure to stormwater 100% of material with a potential to contribute to stormwater pollution (such as, fertilizers, solvents, paints, cleaners, automotive products, etc.) each year.
Stormwater Controls for High Priority Facilities, De-icing and anti-icing material storage as described by Part IV.D.6.(c)(6)b.	Implement one or a combination of the following: Ensure that 100% of stormwater runoff from storage piles of salt and other de-icing and anti-icing materials is not discharged each year. Or ensure that 100% of discharges from the piles are authorized under a separate discharge permit each year.
Stormwater Controls for High Priority Facilities, Fueling and vehicle maintenance as described by Part IV.D.6.(c)(6)c.	Develop and implement SOPs that address spill prevention and spill control at 100% of permittee-owned and operated vehicle fueling, vehicle maintenance, and bulk fuel delivery facilities each year. Review and update the facility specific SOPs at least one time annually to address changes or additions to the facilities.

Activity/BMP	Measurable Goals
Stormwater Controls for High Priority Facilities, Equipment and vehicle washing as described by Part IV.D.6.(c)(6)d.	Develop and implement SOPs that address equipment and vehicle washing activities at 100% of the permittee-owned and operated facilities where washing occurs. To ensure that wastewater is not discharged under this general permit, the permittee's SOP must include one or more of the following: • installing a vehicle wash reclaim system, • capturing and hauling the wastewater for proper disposal, • connecting to sanitary sewer (where applicable and approved by local authorities), • ceasing the washing activity, or • applying for and obtaining a separate TPDES permit. Review and update the facility specific SOPs at least one time annually to address changes or additions to the facilities.
Inspections as described by Part IV.D.6.(c)(7).	Develop and implement an inspection program, which at a minimum must include inspections of 100% of high priority permittee-owned facilities one time per year. The results of 100% of the inspections and observations must be documented and available for review by the TCEQ each year.

(d) Additional Requirements for Level 4 small MS4s:

In addition to all the requirements described in Parts IV.D.6.(b)-(c) above, permittees who operate Level 4 small MS4s shall meet the following requirements including Table 15.

(1) Pesticide, Herbicide, and Fertilizer Application and Management

a. Landscape maintenance – The permittee shall evaluate the materials used and activities performed on public spaces owned and operated by the permittee such as parks, schools, golf courses, easements, public rights of way, and other open spaces for pollution prevention opportunities. Maintenance activities for the turf landscaped portions of these areas may include mowing, fertilization, pesticide application, and irrigation. Typical pollutants include sediment, nutrients, hydrocarbons, pesticides, herbicides, and organic debris.

b. The permittee shall implement the following practices to minimize landscaping-related pollutant generation with regard to public spaces owned and operated by the permittee:

(i) Educational activities, permits, certifications, and other measures for the permittee's applicators and distributors;

(ii) Pest management measures that encourage non-chemical solutions where feasible. Examples may include:

(a) Use of native plants or xeriscaping;

(b) Keeping clippings and leaves out the small MS4 and the street by implementing mulching, composting, or landfilling;

(c) Limiting application of pesticides and fertilizers if precipitation is forecasted within 24 hours, or as specified in label instructions; and

(d) Reducing mowing of grass to allow for greater pollutant removal, but not jeopardizing motorist safety.

c. The permittee shall develop schedules for chemical application in public spaces owned and operated by the permittee that minimize the discharge of pollutants from the application due to irrigation and expected precipitation; and

d. The permittee shall ensure collection and proper disposal of the permittee's unused pesticides, herbicides, and fertilizers.

(2) Evaluation of Flood Control Projects

The permittee shall assess the impacts of the receiving water(s) for all flood control projects. New flood control structures must be designed, constructed, and maintained to provide erosion prevention and pollutant removal from stormwater. The retrofitting of existing structural flood control devices to provide additional pollutant removal from stormwater shall be implemented to the MEP.

Table 15: Additional Required Pollution Prevention and Good Housekeeping for Municipal Operations BMPs for Level 4 Small MS4s:

Activity/BMP	**Measurable Goals**
Pesticide, Herbicide, and Fertilizer applicator and distributor measures as described by Part IV.D.6.(d)(1)b.(i).	Require 100% of pesticide, herbicide, and fertilizer applicators and distributors working in the public spaces owned and operated by the permittee, including contract workers, to demonstrate at least one of the following each year: • Training in application or distribution • Permit to apply or distribute • Certification for application or distribution

Activity/BMP	Measurable Goals
Landscape maintenance as described by Part IV.D.6.(d)(1)a.	Evaluate at least one time each year the materials used, and activities performed on 100% of the public spaces owned and operated by the permittee for pollution prevention opportunities such as: • parks, • schools, • golf courses, • easements, • public rights of way, and • other open spaces.
Non-chemical solutions as described by Part IV.D.6.(d)(1)b.(ii).	Utilize at least one of the following non-chemical solutions each year in 100% of the public spaces owned and operated by the permittee: • Use of native plants or xeriscaping in 10% of each public space's landscaping area; • Keep clippings and leaves out the small MS4 and the street by implementing mulching, composting, or landfilling; • Limit application of pesticides and fertilizers if precipitation is forecasted within 24 hours, or as specified in label instructions; or • Reduce mowing of grass frequency to allow for greater pollutant removal, but not jeopardizing motorist safety. If it is not feasible for the small MS4 operator to implement at least one of these measures in one or more public spaces owned and operated by the permittee, written documentation of the reason must be maintained and made available to the TCEQ upon request.
Schedules for chemical application as described by Part IV.D.6.(d)(1)c.	Develop and implement chemical application schedules for use in 100% of applicable public spaces owned and operated by the permittee each year. Schedules must minimize the discharge of pollutants from the chemical application due to irrigation and expected precipitation.
Collection and disposal of pesticides, herbicides, and fertilizers as described by Part IV.D.6.(d)(1)d.	Ensure collection and proper disposal of 100% of the permittee's unusable pesticides, herbicides, and fertilizers each year.

Activity/BMP	Measurable Goals
Evaluation of Flood Control Projects as described by Part IV.D.6.(d)(2).	Assess the impacts of the receiving water(s) for 100% of the flood control projects each year. 100% of new flood control structures must be designed, constructed, and maintained to provide erosion prevention and pollutant removal from stormwater. The retrofitting of 20% of the existing structural flood control devices each year to provide additional pollutant removal from stormwater shall be implemented unless infeasible. • If it is not feasible for the small MS4 operator to retrofit 20% of the existing control devices each year, written documentation of the reason must be maintained and made available to the TCEQ for review upon request.

7. Industrial Stormwater Sources

Permittees operating a Level 4 small MS4 shall meet the requirements below including Table 16.

(a) Permittees who operate Level 4 small MS4s shall identify and control pollutants in stormwater discharges to the small MS4 from the permittee's landfills; other treatment, storage, or disposal facilities for municipal waste (for example, transfer stations and incinerators); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the small MS4.

(b) The program must include priorities and procedures for inspections and for implementing control measures for such industrial discharges.

Table 16: Required Industrial Stormwater Sources BMPs for Level 4 Small MS4s

Activity/BMP	Measurable Goals
Industrial facilities as described by Part IV.D.7.(a).	Identify and control pollutants in stormwater discharges to the small MS4 from 100% of the permittee's landfills; other treatment, storage, or disposal facilities for municipal waste (for example, transfer stations and incinerators); hazardous waste treatment, storage, disposal and recovery facilities and facilities that are subject to Emergency Planning and Community Right-to-Know Act (EPCRA) Title III, Section 313; and any other industrial or commercial discharge the permittee determines are contributing a substantial pollutant loading to the small MS4.

Activity/BMP	Measurable Goals
Inspections as described by Part IV.D.7.(b).	Inspect 100% of small MS4 owned and operated facilities described by Part IV.D.7.(a) at least one time annually. Inspect 100% of industrial facilities permitted under the TPDES MSGP, TXR050000, and located within the small MS4 area at least one time annually.
Priorities and Procedures as described by Part IV.D.7.(b).	Develop and implement SOPs for 100% of inspections of facilities as described by Part IV.D.7.(b) and industrial facilities permitted under the TPDES MSGP, TXR050000, and within the small MS4 area. Review and update the facility inspection SOPs at least one time annually to address changes or additions.

8. Authorization for Construction Activities where the Small MS4 is the Site Operator

The development of this MCM for construction activities, where the small MS4 is the construction site operator, is optional and provides an alternative to the MS4 operator seeking coverage under TPDES CGP, TXR150000, for each construction activity. Permittees that choose to develop and implement this MCM will be authorized to discharge stormwater and certain non-stormwater from construction activities only where the MS4 operator meets the definition of a construction site operator. This MCM only authorizes the small MS4 operator and does not provide authorization for other construction site operators at a municipal project.

When developing this measure, permittees are required to meet all requirements of, and be consistent with the following: (1) applicable effluent limitation guidelines for the Construction and Development industry (40 CFR Part 450), (2) TPDES CGP TXR150000, (3) Part IV.D.4 and Part VII of this general permit.

The authorization to discharge under this MCM is limited to the small MS4's regulated area, such as the portion of the small MS4 located within an urban area with a population of at least 50,000 people or the area designated by TCEQ as requiring coverage. However, an MS4 operator may also utilize this MCM over additional portions of their small MS4 that are also in compliance with all of the MCMs listed in this general permit.

This MCM must be developed as a part of the SWMP. If this MCM is developed after submitting the initial NOI, an NOC must be submitted notifying the executive director of this change, and identifying the geographical area or boundary where the activities will be conducted under the provisions of this general permit.

Utilization of this MCM does not preclude a small MS4 from obtaining coverage under the TPDES CGP, TXR150000, or under a TPDES individual permit.

Controls required under this MCM must be implemented prior to discharge from a municipal construction site into surface water in the state.

The MCM must include:

(a) A description of how construction activities will generally be conducted by the permittee taking into consideration local conditions of weather, soils, and other site-specific considerations;

(b) A description of the area that this MCM will address and where the permittee's construction activities are covered (for example within the boundary of the urban area with a population of at least 50,000 people, the corporate boundary, a special district boundary, an extra territorial jurisdiction, or other similar jurisdictional boundary);

(c) Either a description of how the permittee will supervise or maintain oversight over contractor activities to ensure that the SWP3 requirements are properly implemented at the construction site; or how the permittee will make certain that contractors have a separate authorization for stormwater discharges;

(d) A general description of how a SWP3 will be developed for each construction site, according to Part VII of this general permit; and

(e) Records of municipal construction activities authorized under this optional MCM, in accordance with Part VII of this general permit.

Part V. Recordkeeping and Reporting

Section A. Recordkeeping

1. The permittee shall retain all records, a copy of this TPDES general permit (maintained physically or electronically), and records of all data used to complete the application (NOI) for this general permit, for a period of at least three years, or for the remainder of the term of this general permit, whichever is longer. This period may be extended by request of the executive director at any time.
2. The permittee shall submit the records to the executive director only when specifically asked to do so. The SWMP required by this general permit must be retained at a location accessible to the TCEQ for review upon request.
3. The permittee shall make the NOI and the SWMP available to the public at reasonable times during regular business hours, if requested to do so in writing. Copies of the SWMP must be made available within ten working days of receipt of a written request. Other records must be provided in accordance with the Texas Public Information Act. However, all requests for records from federal facilities must be made in accordance with the Freedom of Information Act.
4. The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

Section B. Reporting

1. General Reporting Requirements

(a) Noncompliance Notification

According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment, must be reported by the permittee to the TCEQ.

Report of such information must be provided orally or by fax to the TCEQ Regional Office within 24 hours of becoming aware of the noncompliance. A written report must be provided by the permittee to the appropriate TCEQ Regional Office and to the TCEQ Enforcement Division (MC-224) within five working days of becoming aware of the noncompliance. The written report must contain:

(1) A description of the noncompliance and its cause;

(2) The potential danger to human health or safety, or the environment;

(3) The period of noncompliance, including exact dates and times;

(4) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(5) Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

(b) Other Information

When the permittee becomes aware that it either submitted incorrect information or failed to submit complete and accurate information requested in an NOI, NOT, NOC, Option 1 Waiver, Option 2 Waiver, or any other report, the permittee shall promptly submit the facts or information to the executive director.

2. Annual Report

The small MS4 operator shall submit a concise annual report to the executive director by March 31st of each year for the previous calendar year.

The first annual report for this general permit shall address the period beginning on the day that authorization is obtained and ending on December 31 of that same year.

The small MS4 operator shall make a copy of the annual report readily available for review by TCEQ personnel upon request.

The annual report must include:

(a) The status of the compliance with permit conditions, an assessment of the appropriateness of the identified activities/BMPs, progress towards achieving the statutory goal of reducing the discharge of pollutants to the MEP, the measurable goals for each of the MCMs, and an evaluation of the success of the implementation of the measurable goals;

(b) A summary of the results of information collected and analyzed, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP;

(c) If applicable for receiving water bodies, a summary of any activities taken to address the discharge to impaired water bodies, including a summary of the small MS4s BMPs used to address the pollutant of concern, and if sampling was conducted include the sampling results;

(d) A summary of the stormwater activities the small MS4 operator plans to undertake during the next reporting year;

(e) Proposed changes to the SWMP, including changes to any activities/BMPs or any identified measurable goals that apply to the program elements;

(f) A description and schedule for implementation of additional activities/BMP's that may be necessary, based on monitoring results, to ensure compliance with applicable TMDLs and implementation plans. For water bodies that are listed as impaired after discharge authorization pursuant to Part III., include a list of such water bodies and the pollutant(s) causing the impairment, and a summary of any actions taken to comply with the requirements of Part III.;

(g) Notice that the small MS4 operator is relying on another government entity to satisfy some of its permit obligations (if applicable);

(h) The number of construction activities where the small MS4 is the operator and authorized under the optional 8th MCM, including the total number of acres disturbed; and

(i) The number of construction activities that occurred within the jurisdictional area of the small MS4 (as noticed to the permittee by the construction operator), and that were not authorized under the optional 8th MCM.

Small MS4s authorized under the 2019 TPDES Small MS4 General Permit must prepare an annual report whether or not the NOI has been approved by the TCEQ. If the permittee has either not implemented the SWMP or not begun to implement the SWMP because it has not received approval of the NOI, then the annual report may include that information.

The annual report must be signed (in accordance with 30 TAC § 305.128 relating to Signatories to Reports) and submitted using the online electronic reporting system, NeT - MS4, available through the TCEQ website unless the permittee requests and obtains an Electronic Reporting Waiver.

If the permittee obtains an Electronic Reporting Waiver, the annual report must be submitted with the appropriate paper annual report forms provided by the executive director and submitted to the following locations:

- Original – TCEQ Austin Headquarters Office c/o the Stormwater Team (MC-148), and
- Copy – The TCEQ Regional Office that serves the area of the regulated small MS4.

If permittees share a common SWMP (*i.e.*, coalitions), they shall contribute to a single system-wide annual report for all participating members and the designated coalition participant shall submit the annual report. At a minimum, each permittee shall sign and certify the annual report in the NeT-MS4 electronic system in accordance with 30 TAC § 305.128 (relating to Signatories to Reports). If the coalition participant designated to submit the annual report changes during the permit term, all participating members must submit an NOC to update the designated member.

Part VI. Standard Permit Conditions

A. The permittee has a duty to comply with all permit conditions. Failure to comply with any permit condition is a violation of the general permit and statutes under which it was issued, and is grounds for enforcement action, for terminating coverage under this general permit, or for requiring a discharger to apply for and obtain a TPDES individual permit.

B. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

C. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

D. Authorization under this general permit may be suspended or revoked for cause. Filing a notice of planned changes or anticipated non-compliance by the permittee does not stay any permit condition. The permittee shall furnish to the executive director, upon request and within a reasonable timeframe, any information necessary for the executive director to determine whether cause exists for modifying, revoking, suspending, reissuing, or terminating authorization under this general permit. Additionally, the permittee shall provide to the executive director, upon request, copies of all records that the permittee shall maintain as a condition of this general permit.

E. The permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used to achieve compliance with the conditions of this permit and with the condition of the permittee's SWMP. Proper O&M also includes adequate laboratory controls and appropriate quality assurance procedures. Proper O&M requires the operation of backup or auxiliary facilities or similar systems, installed only when the operation is necessary to achieve compliance with the conditions of this permit.

F. Inspection and entry shall be allowed under the TWC Chapters 26-28, Health and Safety Code §§ 361.032-361.033 and 361.037, and 40 CFR § 122.41(i). The statement in TWC § 26.014 that commission entry of a facility shall occur according to an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the facility or site, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.

G. The discharger is subject to administrative, civil, and criminal penalties, as applicable, under the TWC, Chapters 26 - 28, and the Texas Health and Safety Code, Chapter 361 for violations including but not limited to the following:

1. Negligently or knowingly violating CWA §§ 301, 302, 303, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under CWA § 402; and
2. Knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.

H. All reports and other information requested by or submitted to the executive director must be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

I. Authorization under this general permit does not convey property or water rights of any sort and does not grant any exclusive privilege.

J. Nothing in Part II of the general permit is intended to negate any person's ability to assert the force majeure (act of God, war, strike, riot, or other catastrophe) defenses found in 30 TAC § 70.7.

K. This permit does not transfer liability for the act of discharging without, or in violation of, a NPDES or a TPDES permit from the operator of the discharge to the permittee(s).

Part VII. Authorization for Municipal Construction Activities – Applicable only if the Optional 8th MCM is Selected

The small MS4 operator may obtain authorization under TPDES CGP, TXR150000, to discharge stormwater runoff from each construction activity performed by the small MS4 operator that results in a land disturbance of one acre or more of land or less than one acre of land, if the construction activity is part of a larger common plan of development or sale that would disturb one acre or more. Alternatively, the small MS4 operator may develop the SWMP to include the optional 8th MCM listed in Part IV.D.8 of this general permit if the eligibility requirements in Part VII.A. below are met.

Even if a small MS4 operator has developed the optional 8th MCM, the small MS4 operator may apply under TPDES CGP, TXR150000, for authorization for certain municipal construction activities including those activities that occur during periods of low potential for erosion (for which no SWP3 must be developed).

Section A. Eligible Construction Sites

Discharges from construction activities within the regulated area where the small MS4 operator meets the definition of construction site operator are eligible for authorization under this general permit. Discharges from construction activities outside of the regulated area, where the small MS4 operator meets the definition of construction site operator, are only eligible for authorization under this general permit in those areas where the small MS4 operator meets all the requirements of Parts IV.D.1-8. of this general permit.

Section B. Discharges Eligible for Authorization

1. Stormwater Associated with Construction Activity

Discharges of stormwater runoff from small and large construction activities may be authorized under this general permit.

2. Discharges of Stormwater Associated with Construction Support Activities

Discharges of stormwater runoff from construction support activities, including concrete batch plants, asphalt batch plants, equipment staging areas, material storage yards, material borrow areas, and excavated material disposal areas may be authorized under this general permit provided:

(a) The activity is located within a one-mile distance from the boundary of the permitted construction site and directly supports the construction activity;

(b) A SWP3 is developed according to the provisions of this general permit and includes appropriate controls and measures to control sediment and erosion and discharge of pollutants in stormwater runoff from the supporting construction activity site;

(c) The construction support activity either does not operate beyond the completion date of the construction activity or obtains separate TPDES permit authorization for discharges as required; and

(d) The discharge of stormwater from concrete production facilities meets the requirements in Section F below.

3. Non-Stormwater Discharges

This general permit authorizes the following non-stormwater discharges from construction sites authorized under this general permit:

(a) Discharges from emergency fire-fighting activities (emergency fire-fighting activities do not include washing of trucks, runoff water from training activities, test water from fire suppression systems, and similar activities);

(b) Uncontaminated fire hydrant flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life), which include flushings from systems that utilize potable water, surface water, or groundwater that does not contain additional pollutants (uncontaminated fire hydrant flushings do not include systems utilizing reclaimed wastewater as a source water);

(c) Water from the routine external washing of vehicles, the external portion of buildings or structures, and pavement, where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed; and if local state, or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, or dust;

(d) Uncontaminated water used to control dust;

(e) Potable water sources including waterline flushings (excluding discharges of hyperchlorinated water, unless the water is first dechlorinated and discharges are not expected to adversely affect aquatic life);

(f) Uncontaminated air conditioning condensate; and

(g) Uncontaminated groundwater or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

4. Other Permitted Discharges

Any discharge authorized under a separate TPDES or TCEQ permit may be combined with discharges from construction sites operated by the small MS4, provided the discharge complies with the associated permit.

Section C. Limitations on Permit Coverage

Discharges that occur after construction activities have been completed, and after the construction site and any supporting activity site have undergone final stabilization, are not eligible for coverage under Part VII of the general permit.

Section D. Stormwater Pollution Prevention Plan (SWP3) Requirements

Operators of municipal construction activities that qualify for coverage under this general permit and that discharge stormwater associated with construction activities into surface water in the state must:

(a) Develop a SWP3 according to the provisions of this general permit that covers the entire site and begin implementation of that plan prior to commencing construction activities (NOTE: small MS4 operators may develop and implement a shared SWP3 with other operators covered under the TPDES CGP, TXR150000);

(b) Post a signed copy of the applicable TCEQ approved site notice form in a location at the construction site where it is readily available for viewing prior to commencing construction activities and maintain the notice in that location until completion of the construction activity and final stabilization of the site;

(c) Ensure the project specifications allow or provide that adequate BMPs may be developed and modified as necessary to meet the requirements of this general permit and the SWP3;

(d) Ensure all contractors are aware of the SWP3 requirements, are aware that municipal personnel are responsible for the day-to-day operations of the SWP3, and who to contact concerning SWP3 requirements; and

(e) Ensure that the SWP3 identifies the municipal personnel responsible for implementation of control measures described in the plan.

Section E. Contents of SWP3

The SWP3 must include, at a minimum, the information described in this section.

1. Site Description

A site description, or project description, which must include:

(a) A description of the nature of the construction activity, potential pollutants and sources;

(b) A description of the intended schedule or sequence of major activities that will disturb soils for major portions of the site;

(c) The number of acres of the entire construction site property and the total number of acres of the site where construction activities will occur, including off-site material storage areas, overburden and stockpiles of dirt, and borrow areas;

(d) Data describing the soil type or the quality of any discharge from the site;

(e) A map showing the general location of the site (*e.g.*, a portion of a city or county map);

(f) A detailed site map indicating the following:

(1) Drainage patterns and approximate slopes anticipated after major grading activities;

(2) Areas where soil disturbance will occur;

(3) Locations of all major structural controls either planned or in place;

(4) Locations where temporary or permanent stabilization practices are expected to be used;

(5) Locations of construction support activities, including off-site activities that are authorized under the permittee's NOI, including material, waste, borrow, fill, or equipment storage areas;

(6) Surface waters (including wetlands) either at, adjacent, or in close proximity to the site;

(7) Locations where stormwater discharges from the site directly to a surface water body or an MS4; and

(8) Vehicle wash areas.

(g) The location and description of asphalt plants and concrete plants (if any) providing support to the construction site and that are also authorized under this general permit;

(h) The name of receiving waters at or near the site that will be disturbed or that will receive discharges from disturbed areas of the project; and

(i) A copy of Part VII of this TPDES general permit.

2. Structural and non-structural controls

The SWP3 must describe the structural and the non-structural controls (BMPs) that will be used to minimize pollution in runoff. The description must identify the general timing or sequence for implementation and the party responsible for implementation. At a minimum, the description must include the following components:

Erosion and Sediment Controls

(a) Erosion and sediment controls must be designed to retain sediment on-site to the MEP with consideration for local topography and rainfall.

(b) Control measures must be properly selected, installed, and maintained according to the manufacturer's or designer's specifications. If periodic inspections or other information indicates a control has been used incorrectly, or that the control is performing inadequately, the operator must replace or modify the control.

(c) Sediment must be removed from sediment traps and sedimentation ponds no later than the time that design capacity has been reduced by 50%.

(d) If sediment escapes the site, accumulations must be removed at a frequency to minimize further negative effects and, whenever feasible, prior to the next rain event.

(e) Controls must be developed to limit offsite transport of litter, construction debris, and construction materials by stormwater runoff.

3. Stabilization Practices

The SWP3 must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans must ensure that existing vegetation is preserved where possible.

(a) Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, and other similar measures.

(b) The following records must be maintained and either attached to or referenced in the SWP3 and made readily available upon request to the parties in Part VII.J of this general permit:

(1) The dates when major grading activities occur;

(2) The dates when construction activities temporarily or permanently cease on a portion of the site; and

(3) The dates when stabilization measures are initiated.

(c) Stabilization measures must be initiated immediately in portions of the site where construction activities have temporarily or permanently ceased, and will not resume for a period exceeding 14 calendar days, except as provided in (1) and (2) below.

(1) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practicable.

(2) Where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practicable. These conditions exist in arid areas, semiarid areas, and areas experiencing drought conditions.

4. Structural Control Practices

The SWP3 must include a description of any structural control practices used to divert flows away from exposed soils, to limit the contact of runoff with disturbed areas, or to lessen the off-site transport of eroded soils.

(a) Sites with a drainage area of ten or more acres:

(1) A sediment basin is required, where feasible, for a common drainage location that serves an area with ten or more acres disturbed at one time. A sedimentation basin may be temporary or permanent, but must provide sufficient storage to contain a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained. When calculating the volume of runoff from a 2-year, 24-hour storm event, it is not required to include the flows from off-site areas and flow from on-site areas that are either undisturbed or have already undergone final stabilization, if these flows are diverted around both the disturbed areas of the site and the sediment basin. Capacity calculations must be included in the SWP3.

(2) Where rainfall data is not available or a calculation cannot be performed, the sedimentation basin must provide at least 3,600 cubic feet of storage per acre drained until the site reaches final stabilization.

(3) If a sedimentation basin is not feasible, then the permittee shall provide equivalent control measures until the site reaches final stabilization. In determining whether installing a sediment basin is feasible, the permittee may consider factors such as site soils, slope, available area, public safety, precipitation pattern, site geometry, site vegetation, infiltration capacity, geotechnical factors, depth to groundwater, and other similar considerations. The permittee shall document the reason that the sediment basins are not feasible, and shall utilize equivalent control measures, which may include a series of smaller sediment basins.

(4) Perimeter Controls – At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(b) Controls for sites with drainage areas less than ten acres:

(1) Sediment traps and sediment basins may be used to control solids in stormwater runoff for drainage locations serving less than ten acres. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area, and for those side slope boundaries deemed appropriate as dictated by individual site conditions.

(2) Alternatively, a sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm from each disturbed acre drained may be utilized. Where rainfall data is not available or a calculation cannot be performed, a temporary or permanent sediment basin providing 3,600 cubic feet of storage per acre drained may be provided. If a calculation is performed, then the calculation shall be included in the SWP3.

5. Permanent Stormwater Controls

A description of any measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed must be included in the SWP3. Permittees are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site.

6. Other Controls

(a) Off-site vehicle tracking of sediments and the generation of dust must be minimized.

(b) The SWP3 must include a description of construction and waste materials expected to be stored onsite and a description of controls to reduce pollutants from these materials.

(c) The SWP3 must include a description of pollutant sources from areas other than construction (including stormwater discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

7. Effluent Limitations

The federal Effluent Limitations Guidelines at 40 CFR § 450.21 apply to all regulated construction activities under the optional 8th MCM, where the small MS4 is the operator.

8. Approved State and Local Plans

(a) The permittee shall ensure the SWP3 is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by federal, state, or local officials.

(b) All SWP3s must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment erosion site plans or site permits, or stormwater management site plans or site permits approved by state or local official for whom the permittee receives written notice.

9. Maintenance

All erosion and sediment control measures and other protective measures identified in the SWP3 must be maintained in effective operating condition. If through inspections the permittee determines that BMPs are not operating effectively, maintenance must be performed before the next anticipated storm event or as necessary to maintain the continued effectiveness of stormwater controls. If maintenance prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.

10. Inspections of Controls

(a) Inspection Requirements. Personnel provided by the permittee must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, discharge locations, and structural controls for evidence of, or the potential for, pollutants entering the drainage system. Personnel conducting these inspections must be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWP3 for the site. Sediment and erosion control measures identified in the SWP3 must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking.

(b) Inspection Frequency.

(1) Inspections must be conducted at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater.

a. If a storm event produces 0.5 inches or more of rain within a 24-hour period (including when there are multiple, smaller storms that alone produce less than 0.5 inches but together produce 0.5 inches or more in 24 hours), you are required to conduct one inspection within 24 hours of when 0.5 inches of rain or more has fallen. When the 24-hour inspection time frame occurs entirely outside of normal working hours, you must conduct an inspection by no later than the end of the next business day.

b. If a storm event produces 0.5 inches or more of rain within a 24-hour period on the first day of a storm and continues to produce 0.5 inches or more of rain on subsequent days, you must conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the last day of the storm that produces 0.5 inches or more of rain (i.e., only two inspections would be required for such a storm event). When the 24-hour inspection time frame occurs entirely outside of normal working hours, you must conduct an inspection by no later than the end of the next business day.

(2) Where sites have been finally or temporarily stabilized or where runoff is unlikely due to winter conditions (e.g., site is covered with snow, ice, or frozen ground exists), inspections must be conducted at least once every month.

(3) In arid or semi-arid, or drought-stricken areas, inspections must be conducted at least once every month and within 24 hours after the end of a storm event of 0.5 inches or greater.

(4) As an alternative to the above-described inspection schedule of once every 14 calendar days and within 24 hours of a storm event of 0.5 inches or greater, the SWP3 may be developed to require that these inspections will occur at least once every seven calendar days. If this alternative schedule is developed, then the inspection must occur on a specifically defined day, regardless of whether or not there has been a rainfall event since the previous inspection.

(5) The inspections may occur on either schedule provided that the SWP3 reflects the current schedule and that any changes to the schedule are conducted in accordance with the following provisions: the schedule may be changed a maximum of one time each month, the schedule change must be implemented at the beginning of a calendar month, and the reason for the schedule change must be documented in the SWP3 (e.g., end of “dry” season and beginning of “wet” season).

(6) In the event of flooding or other adverse conditions that prohibit access to the inspection sites, inspections must be conducted as soon as access is practicable.

(d) Utility line installation, pipeline construction, and other examples of long, narrow, linear construction activities may provide inspection personnel with limited access to the areas described in Part VII.E.10.(a) above.

(1) Inspection of these areas could require that vehicles compromise temporarily or even permanently stabilized areas, cause additional disturbance of soils, and increase the potential for erosion. In these circumstances, controls must be inspected at least once every 14 calendar days and within 24 hours of the end of a storm event of 0.5 inches, but representative inspections may be performed.

(2) For representative inspections, personnel must inspect controls along the construction site for 0.25 miles above and below each access point where a roadway, undisturbed right-of-way, or other similar feature intersects the construction site and allows access to the areas described in Part VII.E.10.(a) above.

(3) The conditions of the controls along each inspected 0.25 miles portion may be considered as representative of the condition of controls along that reach extending from the end of the 0.25 miles portion to either the end of the next 0.25 miles inspected portion, or to the end of the project, whichever occurs first.

(e) Requirements for inspections may be temporarily suspended for adverse conditions. Adverse conditions are conditions that are either dangerous to personnel (e.g., high wind, excessive lightning) or conditions that prohibit access to the site (e.g., flooding, freezing conditions). Adverse conditions that result in the temporary suspension of a permit requirement to inspect must be documented and included as part of the SWP3. Documentation must include:

(1) the date and time of the adverse condition,

(2) names of personnel that witnessed the adverse condition, and

(3) a narrative for the nature of the adverse condition.

(f) The SWP3 must be modified based on the results of inspections, as necessary, to better control pollutants in runoff. Revisions to the SWP3 must be completed within seven calendar days following the inspection. If existing BMPs are modified or if additional BMPs are necessary, an implementation schedule must be described in the SWP3 and wherever possible those changes implemented before the next storm event. If implementation before the next anticipated storm event is impracticable, these changes must be implemented as soon as practicable.

(g) A report summarizing the scope of the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWP3 must be made and retained as part of the SWP3. Major observations should include: The locations of discharges of sediment or other pollutants from the site; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

Actions taken as a result of inspections must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit.

The report must be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

(h) The names and qualifications of personnel making the inspections for the permittee may be documented once in the SWP3 rather than being included in each report.

11. Observation and Evaluation of Dewatering Controls

(a) Personnel provided by the permittee must observe and evaluate dewatering controls at a minimum of once per day on the days where dewatering discharges from the construction site occur. Personnel conducting these evaluations must be knowledgeable of this general permit, the construction activities at the site, and the SWP3 for the site. Personnel conducting these evaluations are not required to have signatory authority for reports under 30 TAC § 305.128 (relating to Signatories to Reports).

(b) Requirements for Observations and Evaluations

(1) A report summarizing the scope of any observation and evaluation must be completed within 24-hours following the evaluation. The report must also include, at a minimum, the following:

a. date of the observations and evaluation;

b. name(s) and title(s) of personnel making the observations and evaluation;

c. approximate times that the dewatering discharge began and ended on the day of evaluation, or if the dewatering discharge that continues after normal business hours, indicate that the discharge is continuous (this information can be reported by personnel initiating the dewatering discharge);

d. estimates of the rate (in gallons per day) of discharge on the day of evaluation;

e. whether or not any indications of pollutant discharge were observed at the point of discharge (e.g., foam, oil sheen, noticeable odor, floating solids, suspended sediments, or other obvious indicators of stormwater pollution); and

f. major observations, including: the locations of where erosion and discharges of sediment or other pollutants from the site have occurred; locations of BMPs that need to be maintained; locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and locations where additional BMPs are needed.

(2) Actions taken as a result of evaluations, including the date(s) of actions taken, must be described within, and retained as a part of, the SWP3. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWP3 and this permit. The report must be retained as part of the SWP3 and signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

(3) The names and qualifications of personnel making the evaluations for the permittee may be documented once in the SWP3 rather than being included in each report.

12. Pollution Prevention Measures

The SWP3 must identify and ensure the implementation of appropriate pollution prevention measures for all eligible non-stormwater components of the discharge.

Section F. Stormwater Runoff from Concrete Batch Plant

Discharges of stormwater runoff from concrete batch plants at construction sites authorized under this general permit may be authorized under the provisions of this general permit provided that the requirements in this section are met. If discharges of stormwater runoff from concrete batch plants are not covered under this general permit, then discharges must be authorized under an alternative general permit or an individual permit. This general permit does not authorize the discharge or land disposal of any wastewater from concrete batch plants at construction sites authorized under this general permit. Authorization for these wastes must be obtained under an individual permit or an alternative general permit.

1. Benchmark Sampling Requirements

(a) Small MS4 operated concrete batch plants authorized under this section must sample the stormwater runoff from the concrete batch plants according to the requirements of this section of the general permit, and must conduct evaluations of the effectiveness of the SWP3 based on the following benchmark monitoring values:

Table 17. Benchmark Monitoring

Benchmark Parameters (*1)	**Benchmark Value**	**Sampling Frequency** (*2)(*3)	**Sample Type** (*4)
Oil and Grease	15 mg/L	1/quarter	Grab
Total Suspended Solids	50 mg/L	1/quarter	Grab
pH	6.0-9.0 S.U.[1]	1/quarter	Grab
Total Iron	1.3 mg/L	1/quarter	Grab

[1]Standard Units (S.U)

(*1) Analytical data intended for compliance with benchmark monitoring requirements must be analyzed by a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory based on state rules located in 30 TAC Chapter 25. Analysis must be performed using sufficiently sensitive methods for analysis that comply with the rules located in 40 CFR §§ 136.1(c) and 122.44(i)(1)(iv).

(*2) When discharge occurs. Sampling is required within the first 30 minutes of discharge. If it is not practicable to take the sample, or to complete the sampling, within the first 30 minutes, sampling must be completed within the first hour of discharge. If sampling is not completed within the first 30 minutes of discharge, the reason must be documented and attached to all required reports and records of the sampling activity.

(*3) Sampling must be conducted at least once during each of the following periods. The first sample must be collected during the first full quarter that a stormwater discharge occurs from a concrete batch plant authorized under this general permit.

- January through March

- April through June
- July through September
- October through December

For projects lasting less than one full quarter, a minimum of one sample shall be collected, provided that a stormwater discharge occurred at least once following submission of the small MS4 NOI.

(*4) A grab sample shall be collected from the stormwater discharge resulting from a storm event that is at least 0.1 inches of measured precipitation that occurs at least 72 hours from the previously measurable storm event. The sample shall be collected downstream of the concrete batch plant, and where the discharge exits any BMPs utilized to handle the runoff from the batch plant, prior to commingling with any other water authorized under this general permit.

(b) The permittee shall compare the results of sample analyses to the benchmark values above, and must include this comparison in the overall assessment of the SWP3's effectiveness. Analytical results that exceed a benchmark value are not a violation of this permit, as these values are not numeric effluent limitations. Results of analyses are indicators that modifications of the SWP3 should be assessed and may be necessary to protect water quality. The operator must investigate the cause for each exceedance and must document the results of this investigation in the SWP3 by the end of the quarter following the sampling event.

The small MS4 operator's investigation must identify the following:

(1) Any additional potential sources of pollution, such as spills that might have occurred;

(2) Necessary revisions to good housekeeping measures that are part of the SWP3;

(3) Additional BMPs, including a schedule to install or implement the BMPs; and

(4) Other parts of the SWP3 that may require revisions in order to meet the goal of the benchmark values.

Background concentrations of specific pollutants may also be considered during the investigation. If the operator is able to relate the cause of the exceedance to background concentrations, then subsequent exceedances of benchmark values for that pollutant may be resolved by referencing earlier findings in the SWP3. Background concentrations may be identified by laboratory analyses of samples of stormwater runoff on to the permitted facility, by laboratory analyses of samples of stormwater runoff from adjacent non-industrial areas, or by identifying the pollutant is a naturally occurring material in soils at the site.

2. BMPs and SWP3 Requirements for Concrete Batch Plants

The following are required for concrete batch plants in addition to other SWP3 requirements listed in this section:

(a) Description of Potential Pollutant Sources – The SWP3 must provide a description of potential sources (activities and materials) that may reasonably be expected to affect the quality of stormwater discharges associated with concrete batch plants authorized under this permit. The SWP3 must describe practices that that will be used to reduce the pollutants in these discharges to assure compliance with this general permit,

including the protection of water quality, and must ensure the implementation of these practices. The following must be developed, at a minimum, in support of developing this description:

(1) Drainage – The site map must include the following information:

a. The location of all outfalls for stormwater discharges associated with concrete batch plants that are authorized under this permit;

b. A depiction of the drainage area and the direction of flow to the outfall(s);

c. Structural controls used within the drainage area(s);

d. The locations of the following areas associated with concrete batch plants that are exposed to precipitation: vehicle and equipment maintenance activities (including fueling, repair, and storage areas for vehicles and equipment scheduled for maintenance); areas used for the treatment, storage, or disposal of wastes listed in the TPDES CGP, TXR150000; liquid storage tanks; material processing and storage areas; and loading and unloading areas; and

e. The locations of the following: any bag house or other dust control device(s); recycle or sedimentation pond, clarifier or other device used for the treatment of facility wastewater (including the areas that drain to the treatment device); areas with significant materials; and areas where major spills or leaks have occurred.

(2) Inventory of Exposed Materials – A list of materials handled at the concrete batch plant that may be exposed to stormwater and that have a potential to affect the quality of stormwater discharges associated with concrete batch plants that are authorized under this general permit.

(3) Spills and Leaks – A list of significant spills and leaks of toxic or hazardous pollutants that occurred in areas exposed to stormwater and that drain to stormwater outfalls associated with concrete batch plants authorized under this general permit must be developed, maintained, and updated.

(4) Sampling Data – A summary of existing stormwater discharge sampling data must be maintained, if available.

(b) Measures and Controls - The SWP3 must include a description of management controls to regulate pollutants identified in the SWP3's "Description of Potential Pollutant Sources" from Part VII.F.2.(a) of this permit, and a schedule for implementation of the measures and controls. This must include, at a minimum:

(1) Good Housekeeping – Good housekeeping measures must be developed and implemented in the area(s) associated with concrete batch plants.

a. Operators must prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), settled dust, or other significant materials from paved portions of the site that are exposed to stormwater.

Measures used to minimize the presence of these materials may include regular sweeping or other equivalent practices. These practices must be conducted at a frequency that is determined based on consideration of the amount of industrial activity occurring in the area and frequency of precipitation, and shall occur at least once per week when cement or aggregate is being handled or otherwise processed in the area.

b. Operators must prevent the exposure of fine granular solids, such as cement, to stormwater. Where practicable, these materials must be stored in enclosed silos, hoppers or buildings, in covered areas, or under covering.

(2) Spill Prevention and Response Procedures – Areas where potential spills that can contribute pollutants to stormwater runoff, and the drainage areas from these locations, must be identified in the SWP3. Where appropriate, the SWP3 must specify material handling procedures, storage requirements, and use of equipment. Procedures for cleaning up spills must be identified in the SWP3 and made available to the appropriate personnel.

(3) Inspections – Qualified facility personnel (for example, a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) must be identified to inspect designated equipment and areas of the facility specified in the SWP3. The inspection frequency must be specified in the SWP3 based upon a consideration of the level of concrete production at the facility, but must be a minimum of once per month while the facility is in operation. The inspection must take place while the facility is in operation and must, at a minimum, include all areas that are exposed to stormwater at the site, including material handling areas, above ground storage tanks, hoppers or silos, dust collection or containment systems, truck wash down and equipment cleaning areas. Follow-up procedures must be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections must be maintained and be made readily available for review upon request by the agencies and officials in Part VII.J of this general permit.

(4) Employee Training – An employee training program must be developed to educate personnel responsible for implementing any component of the SWP3, or personnel otherwise responsible for stormwater pollution prevention, with the provisions of the SWP3. The frequency of training must be documented in the SWP3, and at a minimum, must consist of one training prior to the initiation of operation of the concrete batch plant.

(5) Record Keeping and Internal Reporting Procedures – A description of spills and similar incidents, plus additional information that is obtained regarding the quality and quantity of stormwater discharges, must be included in the SWP3. Inspection and maintenance activities must be documented and records of those inspection and maintenance activities must be incorporated in the SWP3.

(6) Management of Runoff – The SWP3 shall contain a narrative consideration for reducing the volume of runoff from concrete batch plants by diverting runoff or otherwise managing runoff, including use of infiltration, detention ponds, retention ponds, or reusing of runoff.

(c) Comprehensive Compliance Evaluation – At least once per year, one or more qualified personnel (for example, a person or persons with knowledge of this general permit, the concrete batch plant, and the SWP3 related to the concrete batch plant(s) for the site) shall conduct a compliance evaluation of the plant. The evaluation must include the following:

(1) Visual examination of all areas draining stormwater associated with regulated concrete batch plants for evidence of, or the potential for, pollutants entering the drainage system. These include but are not limited to: cleaning areas, material handling areas, above ground storage tanks, hoppers or silos, dust collection or

containment systems, and truck wash down and equipment cleaning areas. Measures implemented to reduce pollutants in runoff (including structural controls and implementation of management practices) must be evaluated to determine if they are effective and if they are implemented in accordance with the terms of this permit and with the small MS4's SWP3. The operator shall conduct a visual inspection of equipment needed to implement the SWP3, such as spill response equipment.

(2) Based on the results of the evaluation, the following must be revised as appropriate within two weeks of the evaluation: the description of potential pollutant sources identified in the SWP3 (as required in Part VII.F.2(a), "Description of Potential Pollutant Sources"); and pollution prevention measures and controls identified in the SWP3 (as required in Part VII.F.2.(b) "Measures and Controls"). The revisions may include a schedule for implementing the necessary changes.

(3) The permittee shall prepare and include in the SWP3 a report summarizing the scope of the evaluation, the personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the SWP3, and actions taken in response to the findings of the evaluation. The report must identify any incidents of noncompliance. Where the report does not identify incidences of noncompliance, the report must contain a statement that the evaluation did not identify any incidence(s), and the report must be signed according to 30 TAC § 305.128, relating to Signatories to Reports.

(4) The Comprehensive Compliance Evaluation may substitute for one of the required inspections required in Part VII.F.2.(b)(3) of this general permit.

3. Concrete Truck Wash Out Requirements

This general permit authorizes the wash out of concrete trucks at construction sites authorized under this general permit, provided the following requirements are met. Authorization is limited to the land disposal of wash out water from concrete trucks. Any other direct discharge of concrete production wastewater must be authorized under a separate TCEQ general permit or individual permit.

(a) Direct discharge of concrete truck washout water to surface water in the state, including discharge to storm sewers, is prohibited by this general permit.

(b) Concrete truck washout water shall be discharged to areas at the construction site where structural controls have been established to prevent direct discharge to surface waters or to areas that have a minimal slope that allow infiltration and filtering of wash out water to prevent direct discharge to surface waters. Structural controls may consist of temporary berms, temporary shallow pits, temporary storage tanks with slow rate release, or other reasonable measures to prevent runoff from the construction site.

(c) Wash out of concrete trucks during rainfall events shall be minimized. The direct discharge of concrete truck washout water is prohibited at all times, and the operator shall insure that its BMPs are sufficient to prevent the discharge of concrete truck washout as the result of rain.

(d) The discharge of wash out water shall not cause or contribute to groundwater contamination.

(e) The SWP3 shall include concrete wash out areas on the associated map.

Section G. Effective Date of Coverage

Construction activities may not commence under this section until the small MS4 NOI is approved in writing by the TCEQ. Following approval of the NOI, operators of construction activities eligible for coverage under this general permit are authorized to discharge stormwater associated with construction activity immediately upon posting the signed applicable TCEQ approved construction site notice form required under this MCM.

Section H. Deadlines for SWP3 Preparation and Compliance

The SWP3 must:

1. Be completed and initially implemented prior to commencing construction activities that result in soil disturbance;
2. Be updated as necessary to reflect the changing conditions of new contractors, new areas of responsibility, and changes in BMPs; and
3. Provide for compliance with the terms and conditions of this general permit.

Section I. Plan Review and Making Plans Available

The SWP3 must be retained onsite at the construction site or made readily available at the time of an onsite inspection to: the executive director; a federal, state, or local agency approving sediment and erosion plans, grading plans, or stormwater management plans; and to local government officials.

Section J. Keeping Plans Current

The permittee shall amend the SWP3 whenever either of the following occurs:

1. There is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants and that has not been previously addressed in the SWP3; or
2. Results of inspections or investigations by site operators, authorized TCEQ personnel, or a federal, state or local agency approving sediment and erosion plans indicate the SWP3 is proving ineffective in eliminating or significantly minimizing pollutants in discharges authorized under this general permit.

Section K. Delegation of Signatory Authority

If signatory authority is delegated by an authorized representative, then a Delegation of Signatory form must be submitted as required by 30 TAC § 305.128 (relating to Signatories to Reports) using the State of Texas Environmental Electronic Reporting System (STEERS), TCEQ's online permitting system, unless the permittee requested and obtained an Electronic Reporting Waiver. A new Delegation of Signatory form must be submitted if the delegation changes to another individual or position during the permit term.

Section L. Additional Retention of Records

The permittee shall retain the following records for a minimum period of three years from the date that final stabilization has been achieved on all portions of the site. Records include:

1. A copy of the SWP3; and
2. All reports and actions required by this section, including copies of the approved TCEQ construction site notice forms.

Agenda No. 4.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Library**
Subject:	**Resolution 25-R-019 Authorizing the submission of a Special Projects Grant application to the Texas State Library and Archives Commission (TSLAC) for a Library Outreach Vehicle (S.Gonzalez/M.Uhlhorn)**

BACKGROUND

In late November 2024, the Texas State Library and Archives Commission (TSLAC) opened a Special Projects grant opportunity for library projects intended to expand library services to all members of a library's community. The grant enables libraries to develop programs for populations with special needs or those having difficulty using the library. Schertz Public Library's grant request is for a library outreach vehicle to provide programs, services, and materials to community members who cannot easily access services at the library. Up to $75,000 is available for the project.

GOAL

The goal of this resolution is to authorize City staff to apply for a TSLAC Special Projects grant, and for the City to accept the funds if awarded.

COMMUNITY BENEFIT

The Library is a community hub and a heavily used resource for residents. But because it is centrally located, residents in north and south Schertz are inconvenienced by the distance they must drive to the library. An outreach vehicle would allow us to take the library to them. It would also make it possible to take library services to the senior housing communities, assisted living facilities, schools, daycares, and to the homebound. This would help make library services accessible to a much larger group of residents and could be considered as a mobile “branch” library until such time as the City can build actual branch libraries. An outreach vehicle was an identified need and high priority recommendation in the Matrix staffing study in conjunction with the addition of an Outreach Librarian as a way of improving the reach of the library into the community. These outcomes are in alignment with the City's strategic plan "Sense of Community" goal, in particular the objective of "Grow quality of life programs and facilities." Receiving these grant funds does not obligate adding the Outreach Librarian position - staff will continue to request this position and it will be prioritized with all other requests throughout the budget process.

SUMMARY OF RECOMMENDED ACTION

City staff recommends approval of Resolution 25-R-019.

FISCAL IMPACT

This reimbursement grant provides funds up to $75,000 for a library project with no requirement for cost sharing, matching funds, or cost participation. The amount of the grant is expected to cover the cost of the vehicle and customization. However, if the funds are awarded and an outreach vehicle is purchased, there will be recurring fuel, insurance and maintenance costs, roughly estimated at approximately $3,000 annually. The project, from implementation to conclusion, will take place between July 2025 to June 2026, so these ongoing costs will begin in the second half of FY26. As for staffing, current staff will oversee the project and operate the vehicle to begin with, but the goal is to add an Outreach Librarian position (weighted salary approximately $80,000/yr) to develop a robust outreach program for the community and make full use of the opportunities the vehicle provides. Receiving these grant funds does not obligate adding the Outreach Librarian position - staff will continue to request this position and it will be prioritized with all other requests throughout the budget process.

RECOMMENDATION

City staff recommends approval of Resolution 25-R-019.

Attachments

Resolution 25-R-019 with attachments

Special Projects Grant Announcement

Application Signature Form

RESOLUTION NO. 25-R-019

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING THE CITY MANAGER TO SUBMIT A SPECIAL PROJECTS GRANT APPLICATION, AND ACCEPT GRANT FUNDS IF AWARDED, FROM THE TEXAS STATE LIBRARY AND ARCHIVES COMMISSION (TSLAC) FOR A LIBRARY OUTREACH VEHICLE, AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, the City staff of the City of Schertz (the "City") has recommended that the City submit an application for a $75,000 reimbursement grant for the purchase of a Library Outreach Vehicle; and

WHEREAS, the Schertz City Council finds it in the best interest of the citizens of the City of the Schertz to submit an application for the FY 2026 TSLAC Special Projects Grant.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes City staff to apply for the FY 2026 TSLAC Special Projects Grant as described in Exhibit A for a Library Outreach Vehicle, and accept funds if awarded.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this _____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____

Mayor, Ralph Gutierrez

ATTEST:

_____

City Secretary, Sheila Edmondson

(CITY SEAL)

Exhibit A

TSLAC Special Projects Grant Announcement

TEXAS STATE LIBRARY AND ARCHIVES COMMISSION

Notice of Funding Opportunity

State Fiscal Year (SFY) 2026

Special Projects Grant Program Guidelines



Application Due Date:
Wednesday, February 10, 2025

Library Development & Networking Division
October 2024

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Comments regarding the programs and services of the
Texas State Library and Archives Commission can be addressed to:
Director and Librarian

P. O. Box 12927 ◆ Austin, Texas 78711-2927
512-463-5460 ◆ 512-463-5436 fax

Cover image: Courtesy of Bigstock Photo.

A. Program Description

Goals and Purposes

This grant program provides funds for programs that expand library services to include all members of the library's community. It enables libraries to develop programs for populations with special needs or those having difficulty using the library. Programs focusing on community engagement or involving collaboration with other community organizations are strongly encouraged. Programs must emphasize improved services by the library to its customers.

These programs must meet the following LSTA goals as identified in the 2023-2027 LSTA 5-Year Plan (https://www.tsl.texas.gov/sites/default/files/public/tslac/ld/pubs/lstaplan/IMLS%20LSTA%20Five-Year%20Plan%202023-2027%20-%20Texas%20-%20FINAL.pdf):

Goals

- Through Texas libraries, Texans will have access to digital resources and services needed to help them navigate the digital information landscape successfully.
- Texans will have access to library materials and services that support literacy and educational attainment, especially early childhood and family literacy, workforce readiness, and lifelong learning.
- Texans will receive library services from trained library staff that effectively respond to community needs.

The purpose of this grant program is not for collection development or other activities primarily focused on the acquisition of library materials or resources, or digitization projects.

Applications for FY 2026 may be submitted in one of two Special Projects programs — ***Special Projects 25*** *or* ***Special Projects 75.*** Applicants may not apply for both programs in the same program year.

Special Projects 25 will support eligible projects for a single year with grant funding up to $25,000. Projects will not be eligible for additional TSLAC grant funding beyond the initial grant period.

Special Projects 75 will support larger projects implemented over multiple years within the TSLAC guidelines. Single year funding may not exceed $75,000. Successful applicants will be eligible to apply for additional grant funds to support work on the project for up to two consecutive years following the initial year of funding.

B. Award Information

Approximately $750,000 is expected to be available for Special Projects Grants, subject to approval by the Texas State Library and Archives Commission and the availability of funds. Funding is provided by the U.S. Institute of Museum and Library Services (IMLS) as a subaward of IMLS' Grants to States Program under the Library Services and Technology Act.

Assistance Listing Number/Title: 45.310 Grants to States

Maximum Award

Applications of all sizes are encouraged. While the request may be part of a larger program, awards will not exceed $25,000 for Special Projects 25 or $75,000 for Special Projects 75.

Length of Funding

Funding will be for one year (July 1, 2025–June 30, 2026). Successful applicants under the Special Projects 75 grant are eligible to apply for grant funds to support work on the same project for up to two consecutive years following the initial grant period for a total of three consecutive years of funding.

C. Eligibility Information

Through their governing authority, accredited public libraries, local public library systems, libraries that are members of the TexShare Library Consortium, or nonprofit organizations that are applying on behalf of accredited libraries and/or TexShare members, are eligible to apply for funds.

An applicant that is a nonprofit organization is eligible only if the organization's organizational charter, operating guidelines, or mission statement includes providing direct support for affiliated library activities and goals as a defined objective. Public library applicants must be accredited by the Texas State Library and Archives Commission for the fiscal year in which the grant contracts are issued.

Applicants may only submit one application for consideration under the Special Projects grant program per funding cycle.

As noted above, successful applicants under the Special Projects 75 grant are eligible to apply for grant funds under the same program for the two consecutive years following the initial grant year. Funding in the initial or a subsequent grant period does not guarantee funding in future grant periods. The second- and third-year applications will be evaluated on the same criteria as new applications. No applicant will be eligible for a fourth year of funding for the same project.

Eligible Expenses

This grant program may fund costs for staff, equipment**, capital expenditures, supplies, professional services, indirect costs, and other typical expenses, as permitted by the Texas Grant Management Standards (TxGMS). The purpose of this grant is **not** for collection development, or other activities primarily focused on the acquisition of library materials or resources outside of the proposed program, or digitization projects, except as noted in the grant guidelines.

There is no requirement for cost sharing, matching funds, or cost participation with this grant program.

***** *Equipment costing $10,000 or more per unit will require approval from IMLS before purchase.*

Ineligible Expenses

Except as provided in grant guidelines, competitive grants may NOT fund the following expenses:

a. Capital expenditures related to the purchase of real property or buildings
b. Capital expenditures related to the construction or expansion of facilities, including fixtures and services
c. Capital expenditures related to renovation costs, including fixtures and services
d. Food, beverages, or food delivery equipment or services
e. Awards, honoraria, prizes, gifts, or incentives
f. Equipment or technology not specifically needed to carry out the goals of the grant
g. Transportation/travel for project participants or non-grant funded personnel

h. Databases currently offered or similar to ones offered by the agency (i.e., a magazine index database may not be purchased if a comparable one is provided by the agency)
i. Collection development purchases not targeted directly to the grant goals nor integral to the service program
j. Advertising or public relations costs not directly related to promoting awareness of grant-funded activities
k. Performers or presenters whose purpose is to entertain rather than to educate
l. Other expenses as excluded in the grant guidelines

D. Application and Submission Information

TSLAC strongly encourages potential applicants to review the TSLAC grants webpage (https://www.tsl.texas.gov/ldn/grants) to learn more about the grant programs and process. Additional guidance on applying for a TSLAC grant is available via video on YouTube (*How to Apply for a TSLAC Grant*).

Project Development and Draft Review

The Texas State Library and Archives Commission (TSLAC) recommends that applicants discuss their projects with TSLAC staff before developing a proposal. TSLAC consultants are available to help throughout application development and in determining the best grant program for your project. For more information, contact the TSLAC Grants Team via e-mail at grants@tsl.texas.gov.

TSLAC also strongly encourages applicants to submit a draft of the proposal to TSLAC for review. TSLAC has created a Microsoft® Word® grant application template, available on the TSLAC website at https://www.tsl.texas.gov/ldn/grants/programs. Applicants may use this template when preparing a draft, which can then be used to populate the online application. Please note that the online application will not accept tables, charts, or images.

To allow adequate time to review the draft proposal, submit the draft via e-mail to grants@tsl.texas.gov, with the subject line "2026 Draft Proposal," **by Monday, January 6, 2025.**

Grant Management System (GMS) Access

TSLAC uses a grant management system or GMS that enables applicants to apply for grants electronically through a web portal at https://grants.tsl.texas.gov. Applications and required documents must be submitted in GMS by the due date to be eligible for consideration. To submit your application online, you must have an active GMS account. To create or activate an account, please have your library director submit a completed GMS Import Template (https://www.tsl.texas.gov/ldn/grants/forms-tools) to grants@tsl.texas.gov. The e-mail should reference "GMS Access" in the subject line. TSLAC staff will review the request and grant appropriate access.

If needed because of difficulty using the Internet or for other accessibility reasons, potential applicants may request paper copies of materials from the TSLAC Grants Team via e-mail at grants@tsl.texas.gov.

Application Components

The grant application consists of the following MANDATORY components to be submitted in GMS by the deadline:

1. Application certification form (print, sign, and upload)
2. Program narrative and budget
3. Children's Internet Protection Act (CIPA) certification form (print, sign, and upload)

4. Letters of cooperation (if applicable) — If the project is collaborative in nature, letters of cooperation indicating commitment of time, funds, volunteers, or other resources must be submitted from all participating organizations. Letters should be addressed to TSLAC Grants Team, TSLAC, P. O. Box 12927, Austin, Texas 78711-2927. Applicants are encouraged to upload letters in GMS.

Letters of support are optional. A maximum of three (3) letters of general support may also be submitted. Letters should be addressed to TSLAC Grants Team, TSLAC, P. O. Box 12927, Austin, Texas 78711-2927. Applicants are encouraged to upload letters in GMS.

Additional information about application components may be found at TSLAC Grants FAQ.

Other requirements

Before submitting an application, applicant organizations must have a current and active federal Unique Entity ID (UEI). The federal government uses a unique identifier for each entity (company, nonprofit, organization, etc.) that does business with the federal government.

If you are currently registered in SAM.gov, you've been assigned a SAM Unique Entity ID. It's viewable on your entity registration record in SAM.gov. If you have never registered at SAM.gov or have never applied for a grant with TSLAC or other state or federal agency, you will need to initiate the process of obtaining a SAM UEI at SAM.gov.

To get started registering your entity, to renew your registration, or for more information, visit SAM.gov or to refer to the *Quick Start Guide for Getting a Unique Entity ID*, published by the U.S. General Services Administration (GSA).

Who can submit the online application?

Any individual authorized to use GMS and having the correct security role will be able to submit the application in GMS. Applicants will still be required to submit the signed application certification form in GMS. The application certification form must be signed by an individual authorized to enter into contracts with the State of Texas (e.g., county judge, city manager, etc.).

Deadline and Submission

Completed applications and ***all*** required documents must be submitted in GMS **by 11:59 p.m. Central Time, Monday, February 10, 2025.** *Please note that technical support will not be available after 5 p.m.*

If you are unable to submit your application and/or required documentation via GMS, you may submit documents via mail, e-mail, or fax. Please send to the attention of: **2026 Grants, Library Development & Networking Division,** via e-mail to grants@tsl.texas.gov, fax at 512-936-2306, or mail to Library Development & Networking Division, TSLAC, P. O. Box 12927, Austin, TX 78711, (TSLAC street address: 1201 Brazos, Austin, TX 78701). *Required items must be postmarked no later than February 10, 2025.*

Late submissions may be considered for review on a case-by-case basis following the TSLAC protest procedures as outlined in Section F (13 TAC §2.55) and decision by the Director and Librarian.

Program Timeline

November 2024	Guidelines released and application opens
January 6, 2025	Last day to submit draft proposals to TSLAC for comment (optional)
February 10, 2025	Applications and required forms due in GMS

Feb-April 2025	Application packets evaluated by Grant Review Panel
April 2025	Applicants notified of Grant Review Panel recommendations
June 2025	Commission meets and approves projects
July 1, 2025	Projects begin
May 31, 2026	Final day to encumber grant funds
June 30, 2026	Projects end
July 31, 2026	Last day to submit final request for funds and documentation

E. Application Review Information

Criteria for Award

This grant program is competitive. The Library Services and Technology Act (LSTA) Grant Review Panel will score proposals on the eight criteria listed below (13 TAC §2.412). The maximum number of points for each category is shown.

Additional points will be awarded to applicants who meet the following criteria:

- Applicant library will receive 5 points if they have not received a TSLAC grant in the past 5 years.
- Applicant library will receive 5 points if they serve a community with a population of 30,000 or less.

These points are cumulative. Libraries will be awarded points for each criterion they meet.

The detailed scoring rubric that will be used by the LSTA Grant Review Panel is provided on the following pages.

1. Needs Assessment (15 points)

- Describe why the program is needed, the program goals, and the targeted audience.
- Describe the greater community to be served using demographic statistics, library records, or surveys to support these statements.
- Attach letters of cooperation demonstrating commitment to the project from all agencies involved.

2. Program Design (20 points)

- Thoroughly describe the services, programs, and activities; describe the location where they will be offered.
- Explain how these services will attract shared library users.
- Collaborative projects have priority and inclusion of relevant community organizations is encouraged.

3. Project Impact (15 points)

- Describe the impact your project will have on library services and users regionally or statewide. This may include how the proposed project is a model program that would benefit other communities.

4. Personnel (5 points)

- Identify who will administer the funds and which positions will provide the services.

- List how much time will be spent in each position on assigned duties.
- List how the qualifications of each person relate to their job duties. Full job descriptions are required for new hires.

5. Timetable (5 points)

- Present a timetable for project activities within the project year (state fiscal year) (i.e., a list of actions with a date by which they will be accomplished).
- Provide verification that facilities will be available, equipment and materials delivered.
- Explain how staff will be hired and trained in time to carry out the services as planned.

6. Evaluation (10 points)

- Set achievable, measurable outcomes and present a reasonable method to collect data.
- Present a method to count users of the services, as well as measure the effectiveness of the service.
- Funded programs will also be required to evaluate their programs in accordance with Legislative Budget Board (LBB) measures and IMLS tools.

7. Budget (20 points)

- Provide a complete budget for the proposed project and fully justify the budget by describing how budgeted items will contribute to the project.
- Identify a source for the stated costs (e.g., city pay classification for staff, catalog, city/county bid list for equipment, or vendor quote).
- Explain how costs are reasonable to achieve project objectives. If new staff members are to be hired, grant applicants should consider the time for a realistic hiring process to occur. There is no requirement for cost sharing, matching funds, or cost participation with this grant program.

8. Sustainability (10 points)

- Describe the resources that will be used to support the services developed through the grant in the future. A written commitment of future support from governing bodies is desirable, but not required.

Peer Review (13 TAC §2.113)

(a) To be eligible for review, each application must be submitted by the specified deadlines with all required components and all necessary authorization signatures.

(b) Agency staff will review each application for the following:

a. Legal eligibility of the institution to participate in a grant program and appropriate authorizing signature;
b. Conformance to the federal and state regulations pertaining to grants;
c. Inclusion of unallowable costs;
d. Errors in arithmetic or cost calculations;
e. Submission of all required forms;
f. Compliance with submissions procedures and deadlines; and
g. Relevance and appropriateness of the project design and activities to the purpose of the grant program.

(c) Agency staff will raise issues and questions regarding the needs, methods, staffing and costs of the applications. Staff will also raise concerns regarding the relevance and appropriateness of the project

design and activities to the purpose of the grant program. Staff comments will be sent to the review panel with the applications for consideration by the panel.

(d) Applicants will be sent a copy of the staff comments to give applicant an opportunity to respond in writing. Applicants may not modify the proposal in any way; however, applicants' responses to staff comments will be distributed to the panel.

a. Applicatiosn with significant errors, omissions, or eligibility problems will note be rated. Applications in which the project design and activities are not relevant and appropriate to the purpose of the grant program will be ineligible.

b. Agency staff will be available to offer technical assistance to reviewers.

(e) The agency may use peer review panels to evaluate applications in competitive grant programs.

(1) Peer reviewers may include professionals, citizens, community leaders, and agency and library staff to evaluate grant applications. Peer reviewers must have appropriate training or service on citizen boards in an oversight capacity and may not evaluate grant applications in which there is, or is a possible appearance of, a conflict of interest.

(2) The agency staff will distribute selected applications to reviewers and will provide written instructions or training for peer reviewers. Reviewers must complete any training prior to reviewing applications.

(3) The reviewers will score each application according to the review criteria and requirements stated in the grant guidelines.

(4) Each evaluation of an application for competitive grants shall be appropriately documented by the peer reviewer conducting the evaluation. The documentation shall include the scores assigned by the peer reviewer. The peer reviewer may also include comments that may be shared with the applicant.

(f) Applications will be scored using the following process:

(1) The peer reviewers will review all complete and eligible grant applications forwarded to them by agency staff and complete a rating form for each. Each reviewer will evaluate the proposal in relation to the specific requirements of the criteria and will assign a value, depending on the points assigned to each criterion.

(2) No reviewer who is associated with an applicant or who stands to benefit directly from an application will serve on the review panel for the grant program in which the application is submitted for that grant cycle. Any reviewer who is associated with a potential applicant in the respective category must inform the agency and their organization about a potential conflict of interest. Any reviewer who feels unable to evaluate a particular application fairly may choose not to review that application.

(3) Reviewers will consider and assess the strengths and weaknesses of any proposed project only on the basis of the documents submitted. Considerations of geographical distribution, demographics, type of library, or personality will not influence the assessment of a proposal by the review panel. The panel members must make their own individual decisions regarding the applications. The panel may discuss applications, but the panel's recommendations will be compiled from the individual assessments, not as the result of a collective decision or vote.

(4) Reviewers may not discuss proposals with any applicant before the proposals are reviewed. Agency staff is available to provide technical assistance to reviewers. Agency staff will conduct all negotiations and communication with the applicants.

(5) Reviewers may recommend setting conditions for funding a given application or group of applications (e.g., adjusting the project budget, revising project objectives, modifying the timetable, amending evaluation methodology, etc.). The recommendation must include a

statement of the reasons for setting such conditions. Reviewers who are ineligible to evaluate a given proposal will not participate in the discussion of funding conditions.

(6) Reviewers will submit their evaluation forms to the agency. In order to be counted, the forms must arrive before the specified due date.

Funding Decisions (13 TAC §2.114)

(a) The agency staff will submit a recommended priority-ranked list of applicants for possible funding. Final approval of a grant award will be made by the commission in an open meeting.

(b) Applications for grant funding will be evaluated only upon the information provided in the written application, including attachments, if any.

(c) The agency staff may negotiate with selected applicants to determine the terms of the award. To receive an award, the applicant must accept any additional or special terms and conditions listed in the grant contract and any changes in the grant application.

(d) The agency staff will notify unsuccessful applicants in writing.

(e) The agency has the right to reject applications or cancel or modify a grant solicitation at any point before a contract is signed. The award of any grant is subject to the availability of funds.

Grant Recommendation and Award Process (13 TAC §2.115)

To be considered eligible for funding, any application must receive a minimum adjusted mean score of more than 60 percent of the maximum points available. However, eligibility does not guarantee funding. The commission may also choose to award extra points to libraries that have not received funding within a specified time frame to be determined by the agency or that have limited resources. To reduce the impact of scores that exceedingly high or low, or otherwise outside the range of scores from other reviewers, agency staff will tabulate the panel's work using calculations such as an adjusted mean score.

(1) Applications will be ranked in priority order by score for consideration by the commission.

(2) If insufficient funds remain to fully fund the next application, the staff may negotiate a reduced grant with the next ranked applicant.

(3) If the panel recommends funding an application that, for legal, fiscal, or other reason, is unacceptable to the staff, a contrary recommendation will be made. The applicant will be informed of this situation prior to presentation to the commission and may negotiate a revision to the application. A positive recommendation to the commission will be contingent upon successfully completing these negotiations prior to the commission meeting.

If the panel is unable to produce a set of recommendations for funding, the agency staff will use the same evaluation procedures to develop recommendations to the commission.

Multiple Applications (13 TAC §2.119)

Applicants for competitive grants may submit more than one grant application in the same grant cycle only if:

(1) the applications are for different projects in different grant programs and the applications are not the same, or nearly the same; or

(2) the grant program has specified separate categories for application and the proposals submitted are not the same, or nearly the same, project.

Scoring Rubric

Project Scoring Total in Eight Areas: 100 points		
Relevance and appropriateness of the project design and activities to the goals and purpose of the Special Projects grant program will be considered in the scoring of all criteria. Members of the LSTA Grant Review Panel may score each criterion as follows: **0-1 points:** Project does not meet the goals and purposes of the Special Projects grant program. **2-3 points:** Project partially meets the goals and purposes of the Special Projects grant program. **4-5 points:** Project is a clear fit for the goals and purposes of the Special Projects grant program.		
Abstract		
• Overview and summary of project • Concise (1,000 characters) • Includes: who, what, where, when, why, for whom		
1. Needs Assessment (Points: Raw score = 5 max, weight = 3; Final score = 15 max)		
• Applicant should describe why the program is needed, the program goals and audience. • They should describe the greater community to be served and include demographic statistics, library records, or surveys to support these statements. • They attach letters of cooperation showing commitment to the project from agencies to be involved.		
0-1 points	2-3 points	4-5 points
• Provides no evidence of need for program. • Program goals and audience are not defined. • Does not describe needs assessment process and/or how need was determined (i.e., no description of community served, demographic statistics, library records or evidence or surveys). • If partners are part of the Project, no letters of support are provided.	• Provides partial/some evidence of need for program. • Program goals and audience are defined but show little to no connection to description of need. • Needs assessment process seems vague and incompletely describes how stated need was determined. • If partners are part of the Project, letters of support are provided.	• Provides clear and convincing evidence of need for program and why they are best suited to meet this need. • Program goals and audience are clearly connected to description of need. • Clearly describes needs assessment process including how stated need was determined (e.g., statistics, records, surveys). • If partners are part of the Project, letters of support are provided that clearly define roles and responsibilities of partnering agencies.

2. Program Design (Points: Raw score = 5 max, weight = 4; Final score = 20 max)		
• Applicant thoroughly describes the services, programs, and activities; describe the location where they will be offered. • Explain how these services will attract shared library users. • Collaborative projects have priority and inclusion of relevant community organizations is encouraged.		
0-1 points	2-3 points	4-5 points
• Services, programs and activities lack definition and are unclear. Project appears to lack direction and planning and does not relate to described needs. • Does not describe location(s) where project will be offered or is vague. • Does not describe how project services will attract library users. • Issue of collaboration not addressed.	• Services, programs and activities are defined. Project has direction and some relationship to described needs. • Location where services will be offered is described but does not clearly relate to project activities and described needs. • Describes how project services will attract library users. • Issue of collaboration addressed, even if not a collaborative project.	• Services, programs and activities are clearly defined, including timelines and resources required. Project shows evidence of clear direction and planning and strong relationship to described needs. • Location where services will be offered is described and clearly relates to project activities and described needs. • Clearly describes how project services will attract library users and ties to project activities and described needs. • Collaborative project; collaboration clearly addressed and described in full.
3. Project Impact (Points: Raw score = 5 max, weight = 3; Final score = 15 max)		
• Applicant describes the impact their project will have on library services and users locally as well as regionally or statewide. • This may include how the proposed project is a model project that would benefit other regions of the state.		
0-1 points	2-3 points	4-5 points
• Does not address any of the impacts the project may have on library services and library users. • Does not address larger issues that the project may address.	• Describes impact of the project but doesn't show an association with the library services and library users. • Addresses larger issues but does not tie these issues to local project.	• Describes both impact and measurable benefits the project will have on library services and library users. • Addresses larger issues clearly and ties them to local project.
4. Personnel (Points: Raw score = 5 max, weight = 1; Final score = 5 max)		

- Applicant identifies who will administer the funds and which positions will provide the services.
- Applicant lists how much time will be spent in each position on assigned duties.
- Applicant lists how the qualifications of each person relate to their job duties. Full job descriptions are required for new hires. Provide verification that facilities will be available, equipment and materials delivered.

0-1 points	2-3 points	4-5 points
• Does not identify fiscal agent and which positions will provide services. • No description of time spent in each position. on assigned duties • No description of qualifications of key personnel. • No job descriptions for new hires.	• Fiscal agent identified without explanation and positions briefly described. • Time spent on project by each staff member briefly identified. • Some description of qualifications of key personnel. • Partial or seemingly incomplete job descriptions available for new hires.	• Fiscal agent identified with full explanation and positions that will provide the services fully described. • Time spent on project by each staff member identified and justified. • Describes qualifications of key personnel in detail, including experience with similar projects, and how each will contribute to the project's success. • Full job descriptions provided for new hires.

5. Timetable (Points: Raw score = 5 max, weight = 1; Final score = 5 max)

- Applicants presents a timetable for project activities within the fiscal year (i.e., a list of actions with a date by which they will be accomplished).
- Applicant provides verification that facilities will be available, equipment and materials delivered.
- Applicants explain how staff will be hired and trained in time to carry out the services as planned.

0-1 points	2-3 points	4-5 points
• Timetable is missing or incomplete (i.e., does not include a list of actions with specific target dates for completion). • No verification regarding facilities, equipment and/or materials. • No explanation of hiring or training of staff to carry out project in project period.	• Timetable exists but is not clearly relevant to achieving the project goals. • Timetable seems unachievable within the project period. • Some verification regarding facilities, equipment and/or materials, but not clearly related to project. • Brief or incomplete explanation of hiring or training of staff to carry out project in project period. • No time given for staff to be hired, if applicable.	• Timetable includes a list of actions with specific target dates and is clearly relevant to achieving the established objectives. • Timetable seems achievable within the project period. • Use of facilities, equipment and/or materials fully explained and relevant to project and project goals. • Full explanation of hiring or training of staff that will allow project to be carried out during the project period. • Realistic timeline given for hiring of new staff, if applicable.

6. Evaluation (Points: Raw score = 5 max, weight = 2; Final score = 10 max)

- Applicants set achievable, measurable outcomes, and present a reasonable method to collect data.
- Applicants present a method to count users of the services as well as measure the effectiveness of the services using IMLS tools and LBB measures.

Note: Some projects will not lend themselves to outcomes-based evaluation (OBE). TSLAC strongly encourages the use of OBE, we do not require it for proposals, and points should not be deducted from strong evaluation plans that use outputs instead of outcomes when it is reasonable not to employ OBE.

0-1 points	2-3 points	4-5 points
• Does not include either project outputs or outcomes. • No method to collect data provided. • No method to count users of services or measure effectiveness of services. • Will not determine success of the project.	• Provides project outputs and/or outcomes but do not clearly relate to project. • Method to collect data provided. • Method to count users of services provided, but not to measure effectiveness of services. • Provides some indication of the success of the project.	• Clearly describes appropriate project outputs and/or outcomes. • Method to collect data is provided that clearly relates to project services and documented need. • Method to count users of services and measure effectiveness of services provided. • Will effectively determine success of the project and its impact. • Project evaluation can be used as model for other similar projects. • Project evaluation incorporates "best practices" from other similar projects.

7. Budget (Points: Raw score = 5 max, weight = 4; Final score = 20 max)

- Applicants provide a complete budget for the proposed project.
- Applicant fully justifies the budget by describing how budgeted items will contribute to the project and identifies a source for the stated costs (e.g., city pay classification for staff, catalog or city/county bid list for equipment).
- The costs are reasonable to achieve project objectives.
- If new staff members are to be hired, applicants consider the time for a realistic hiring process to occur.

0-1 points	2-3 points	4-5 points
• Budget table is incomplete. • Provides no narrative description (justification), beyond the budget column, of how funds will be spent.	• Budget table is complete. • Budget narrative description exists but does not clearly relate to the project and sources for costs are not stated.	• Budget table is complete and clearly describes how the dollars will be used for the project. • Clearly identifies source of stated costs and justification for their reasonableness.

	• Items listed in the budget description do not match those in the budget form. • Costs do not seem reasonable, and description is unclear.	• Items listed in the budget description match those in the budget form.
8. Sustainability (Points: Raw score = 5 max, weight = 2; Final score = 10 max)		
• Applicants describe the resources that will be used to support and sustain the services developed through the grant in the future. • A written commitment of future support from governing bodies is desirable, but not required.		
0-1 points	2-3 points	4-5 points
• Description of resources used to support and sustain the project after grant completion is vague and unspecific.	• Some evidence of future support and sustainability described.	• Clear evidence of sustainability described. • A written commitment of future support from governing bodies is provided, if applicable.
9. Extra Points – Up to 10 Extra Points		
5 points: Awarded if applicant library serves a community with a population of 30,000 or less. 5 points: Awarded if applicant library has not received a TSLAC grant in the past 5 years.		

F. Award Administration Information

Notice of Award

Applicants will be notified of the grant review panel's recommendations via e-mail. The notification will include the applicant rankings, panel recommendation, panel comments and scores relevant to respective applications, and protest procedures, which are also included in this notice.

The panel recommendations will be submitted to the Texas State Library and Archives Commission at its August meeting for consideration and approval. Once the awards have been approved, successful applicants will receive instructions on how to proceed and mandatory training required for all TSLAC competitive grant recipients.

Protest Procedure — Texas State Library and Archives Commission, 13 TAC §2.55

(a) An aggrieved person who is not satisfied with a decision, procedure, or service received from the staff of the Texas State Library and Archives Commission or who is an actual or prospective bidder, grantee, or contractor aggrieved in connection with a solicitation, evaluation, or award may file a protest with the Director and Librarian in accordance with this rule.

(b) A protest must be submitted to the Director and Librarian within 21 days after the person knows or should have known of the matter which is protested. The Director and Librarian has the discretion to allow a protest filed after 21 days if the protestant shows good cause for the late filing or if the protest raises an issue significant to the general policies and procedures of the commission.

(c) The protestant shall mail or deliver a copy of the protest to all interested persons. The Director and Librarian will furnish a list of interested persons to a protestant. For protests of a competitive selection (bid, contract, or grant), interested persons shall include all persons who have submitted a bid, proposal, or application.

(d) A protest must be in writing and identified as a protest under this section, and contain the following:

(1) A description of the protestant's interest in the matter
(2) The issue(s) to be resolved and remedy(s) requested
(3) The protestant's argument supporting the protest, including a statement of relevant facts and applicable law, specifying the statutes, rules, or other legal authority alleged to have been violated
(4) The protestant's affirmation that facts set forth in the protest are true
(5) A certification that a copy of the protest has been mailed or delivered to all interested persons

(e) Upon receipt of a protest conforming to the requirements of this section, the commission shall not proceed with the solicitation, award, or contract until the protest is resolved, unless the Director and Librarian makes a written determination that delay would harm the substantial interests of the state.

(f) The Director and Librarian has the authority to decide, settle, or resolve the protest and will make a written determination. The Director and Librarian may solicit written responses to the protest from other parties. The Director and Librarian shall inform the protesting party and other interested parties by letter of his determination, and how to appeal the determination to the commission.

(g) An interested party may appeal the determination of the Director and Librarian. An appeal must be in writing and conform to paragraphs (1) - (3) of this subsection:

(1) The appeal must be received in the office of the Director and Librarian no later than 15 days after the date the determination is mailed to interested parties;
(2) A copy of the appeal must be mailed or delivered by the appealing party to all interested parties and contain a certification of mailing or delivery;
(3) The appealing party must state whether or not an opportunity is requested to make an oral presentation to the commission in open meeting.

(h) The Director and Librarian shall refer the matter to the commission for their consideration at an open meeting.

(i) The chair of the commission has the discretion to allow an appeal filed more than 15 days after the Director and Librarian's determination if the appealing party shows good cause for the late filing or if the appeal raises an issue significant to the general policies or procedures of the commission.

(j) An interested party may file a response to an appeal of the determination of the Director and Librarian no later than seven days after the appeal is mailed or delivered.

(k) Copies of the appeal and responses of interested parties, if any, shall be mailed to the commission by the Director and Librarian.

(l) The chair of the commission has the discretion to decide whether or not a request for oral presentations will be granted and will set the order and amount of time for oral presentations that are allowed. The chair also has the discretion to decide whether presentations and written documents presented by Commission staff and interested parties will be allowed.

(m) The commission will determine properly filed appeals and make its decision in open meeting. The commission shall vote to uphold or reverse the decision of the Director and Librarian. Failing a majority vote of a quorum of the commission, the Director and Librarian’s decision is upheld. The

commission's decision is final and not subject to judicial review under the statutes governing the commission.

(n) A decision issued either by the commission in open meeting or in writing by the Director and Librarian shall be the final administrative action of the commission.

(o) Documentation concerning a protest of a competitive selection is part of the commission's records series for that selection and is retained in accordance with the commission's approved records retention schedule.

Policy Requirements

TSLAC competitive grant recipients are subject to the Texas Grant Management Standards (TxGMS) (https://comptroller.texas.gov/purchasing/docs/grant-management-reader.pdf) and federal Office of Management and Budget (OMB) Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (also known as the Uniform Guidance) *(https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200).*

Reporting

Grantees must submit financial and performance reports at scheduled intervals throughout the reporting period as will be outlined in the grant contract. Reports will be submitted electronically through TSLAC's Grant Management System (GMS).

G. Contacts

TSLAC staff members are available during regular business hours (8 a.m.-5 p.m., Central) to assist with competitive grants.

Dominic Gonzales, Grants Administrator
Phone: 512-463-5581
Fax: 512-936-2306
E-mail: grants@tsl.texas.gov

Taylor Gardner, Grants Coordinator
Phone: 512-463-5468
Fax: 512-936-2306
E-mail: grants@tsl.texas.gov

State Fiscal Year

FY 2026

Grant Program *

Special Projects 75 2026

Project Title *

Schertz Public Library Outreach Vehicle

Application Number

3100

Organization Name

Schertz Public Library

798 Schertz Pkwy Schertz TX 78154-1954

Project Manager *

Melissa Uhlhorn

Phone Number:

210-619-1701

Email:

muhlhorn@schertz.com

Legal Entity

City of Schertz

798 Schertz Pkwy Schertz TX 78154-1954

EIN:

Federal Unique Entity ID:

WP19CJPW5PK5

SAM Exp. Date:

State House District:

44

State Senate District:

25

US Congress District:

15

Modified On

1/23/2025 7:18 PM

I certify, to the best of my knowledge, that the statements made in this application are true, that the information provided is correct, and that I am authorized to enter into legally binding commitments on behalf of the applicant organization.

Application Approved by (name):

Job Title:

Date:

Signature:

TEXAS STATE LIBRARY AND ARCHIVES COMMISSION

Notice of Funding Opportunity

State Fiscal Year (SFY) 2026

Special Projects Grant Program Guidelines



Application Due Date:
Wednesday, February 10, 2025

Library Development & Networking Division
October 2024

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Comments regarding the programs and services of the
Texas State Library and Archives Commission can be addressed to:
Director and Librarian

P. O. Box 12927 ◆ Austin, Texas 78711-2927
512-463-5460 ◆ 512-463-5436 fax

Cover image: Courtesy of Bigstock Photo.

A. Program Description

Goals and Purposes

This grant program provides funds for programs that expand library services to include all members of the library's community. It enables libraries to develop programs for populations with special needs or those having difficulty using the library. Programs focusing on community engagement or involving collaboration with other community organizations are strongly encouraged. Programs must emphasize improved services by the library to its customers.

These programs must meet the following LSTA goals as identified in the 2023-2027 LSTA 5-Year Plan (https://www.tsl.texas.gov/sites/default/files/public/tslac/ld/pubs/lstaplan/IMLS%20LSTA%20Five-Year%20Plan%202023-2027%20-%20Texas%20-%20FINAL.pdf):

Goals

- Through Texas libraries, Texans will have access to digital resources and services needed to help them navigate the digital information landscape successfully.
- Texans will have access to library materials and services that support literacy and educational attainment, especially early childhood and family literacy, workforce readiness, and lifelong learning.
- Texans will receive library services from trained library staff that effectively respond to community needs.

The purpose of this grant program is not for collection development or other activities primarily focused on the acquisition of library materials or resources, or digitization projects.

Applications for FY 2026 may be submitted in one of two Special Projects programs — ***Special Projects 25*** *or* ***Special Projects 75.*** Applicants may not apply for both programs in the same program year.

Special Projects 25 will support eligible projects for a single year with grant funding up to $25,000. Projects will not be eligible for additional TSLAC grant funding beyond the initial grant period.

Special Projects 75 will support larger projects implemented over multiple years within the TSLAC guidelines. Single year funding may not exceed $75,000. Successful applicants will be eligible to apply for additional grant funds to support work on the project for up to two consecutive years following the initial year of funding.

B. Award Information

Approximately $750,000 is expected to be available for Special Projects Grants, subject to approval by the Texas State Library and Archives Commission and the availability of funds. Funding is provided by the U.S. Institute of Museum and Library Services (IMLS) as a subaward of IMLS' Grants to States Program under the Library Services and Technology Act.

Assistance Listing Number/Title: 45.310 Grants to States

Maximum Award

Applications of all sizes are encouraged. While the request may be part of a larger program, awards will not exceed $25,000 for Special Projects 25 or $75,000 for Special Projects 75.

Length of Funding

Funding will be for one year (July 1, 2025–June 30, 2026). Successful applicants under the Special Projects 75 grant are eligible to apply for grant funds to support work on the same project for up to two consecutive years following the initial grant period for a total of three consecutive years of funding.

C. Eligibility Information

Through their governing authority, accredited public libraries, local public library systems, libraries that are members of the TexShare Library Consortium, or nonprofit organizations that are applying on behalf of accredited libraries and/or TexShare members, are eligible to apply for funds.

An applicant that is a nonprofit organization is eligible only if the organization's organizational charter, operating guidelines, or mission statement includes providing direct support for affiliated library activities and goals as a defined objective. Public library applicants must be accredited by the Texas State Library and Archives Commission for the fiscal year in which the grant contracts are issued.

Applicants may only submit one application for consideration under the Special Projects grant program per funding cycle.

As noted above, successful applicants under the Special Projects 75 grant are eligible to apply for grant funds under the same program for the two consecutive years following the initial grant year. Funding in the initial or a subsequent grant period does not guarantee funding in future grant periods. The second- and third-year applications will be evaluated on the same criteria as new applications. No applicant will be eligible for a fourth year of funding for the same project.

Eligible Expenses

This grant program may fund costs for staff, equipment**, capital expenditures, supplies, professional services, indirect costs, and other typical expenses, as permitted by the Texas Grant Management Standards (TxGMS). The purpose of this grant is **not** for collection development, or other activities primarily focused on the acquisition of library materials or resources outside of the proposed program, or digitization projects, except as noted in the grant guidelines.

There is no requirement for cost sharing, matching funds, or cost participation with this grant program.

***** *Equipment costing $10,000 or more per unit will require approval from IMLS before purchase.*

Ineligible Expenses

Except as provided in grant guidelines, competitive grants may NOT fund the following expenses:

a. Capital expenditures related to the purchase of real property or buildings
b. Capital expenditures related to the construction or expansion of facilities, including fixtures and services
c. Capital expenditures related to renovation costs, including fixtures and services
d. Food, beverages, or food delivery equipment or services
e. Awards, honoraria, prizes, gifts, or incentives
f. Equipment or technology not specifically needed to carry out the goals of the grant
g. Transportation/travel for project participants or non-grant funded personnel

h. Databases currently offered or similar to ones offered by the agency (i.e., a magazine index database may not be purchased if a comparable one is provided by the agency)
i. Collection development purchases not targeted directly to the grant goals nor integral to the service program
j. Advertising or public relations costs not directly related to promoting awareness of grant-funded activities
k. Performers or presenters whose purpose is to entertain rather than to educate
l. Other expenses as excluded in the grant guidelines

D. Application and Submission Information

TSLAC strongly encourages potential applicants to review the TSLAC grants webpage (https://www.tsl.texas.gov/ldn/grants) to learn more about the grant programs and process. Additional guidance on applying for a TSLAC grant is available via video on YouTube (*How to Apply for a TSLAC Grant*).

Project Development and Draft Review

The Texas State Library and Archives Commission (TSLAC) recommends that applicants discuss their projects with TSLAC staff before developing a proposal. TSLAC consultants are available to help throughout application development and in determining the best grant program for your project. For more information, contact the TSLAC Grants Team via e-mail at grants@tsl.texas.gov.

TSLAC also strongly encourages applicants to submit a draft of the proposal to TSLAC for review. TSLAC has created a Microsoft® Word® grant application template, available on the TSLAC website at https://www.tsl.texas.gov/ldn/grants/programs. Applicants may use this template when preparing a draft, which can then be used to populate the online application. Please note that the online application will not accept tables, charts, or images.

To allow adequate time to review the draft proposal, submit the draft via e-mail to grants@tsl.texas.gov, with the subject line "2026 Draft Proposal," **by Monday, January 6, 2025.**

Grant Management System (GMS) Access

TSLAC uses a grant management system or GMS that enables applicants to apply for grants electronically through a web portal at https://grants.tsl.texas.gov. Applications and required documents must be submitted in GMS by the due date to be eligible for consideration. To submit your application online, you must have an active GMS account. To create or activate an account, please have your library director submit a completed GMS Import Template (https://www.tsl.texas.gov/ldn/grants/forms-tools) to grants@tsl.texas.gov. The e-mail should reference "GMS Access" in the subject line. TSLAC staff will review the request and grant appropriate access.

If needed because of difficulty using the Internet or for other accessibility reasons, potential applicants may request paper copies of materials from the TSLAC Grants Team via e-mail at grants@tsl.texas.gov.

Application Components

The grant application consists of the following MANDATORY components to be submitted in GMS by the deadline:

1. Application certification form (print, sign, and upload)
2. Program narrative and budget
3. Children's Internet Protection Act (CIPA) certification form (print, sign, and upload)

4. Letters of cooperation (if applicable) — If the project is collaborative in nature, letters of cooperation indicating commitment of time, funds, volunteers, or other resources must be submitted from all participating organizations. Letters should be addressed to TSLAC Grants Team, TSLAC, P. O. Box 12927, Austin, Texas 78711-2927. Applicants are encouraged to upload letters in GMS.

Letters of support are optional. A maximum of three (3) letters of general support may also be submitted. Letters should be addressed to TSLAC Grants Team, TSLAC, P. O. Box 12927, Austin, Texas 78711-2927. Applicants are encouraged to upload letters in GMS.

Additional information about application components may be found at TSLAC Grants FAQ.

Other requirements

Before submitting an application, applicant organizations must have a current and active federal Unique Entity ID (UEI). The federal government uses a unique identifier for each entity (company, nonprofit, organization, etc.) that does business with the federal government.

If you are currently registered in SAM.gov, you've been assigned a SAM Unique Entity ID. It's viewable on your entity registration record in SAM.gov. If you have never registered at SAM.gov or have never applied for a grant with TSLAC or other state or federal agency, you will need to initiate the process of obtaining a SAM UEI at SAM.gov.

To get started registering your entity, to renew your registration, or for more information, visit SAM.gov or to refer to the *Quick Start Guide for Getting a Unique Entity ID*, published by the U.S. General Services Administration (GSA).

Who can submit the online application?

Any individual authorized to use GMS and having the correct security role will be able to submit the application in GMS. Applicants will still be required to submit the signed application certification form in GMS. The application certification form must be signed by an individual authorized to enter into contracts with the State of Texas (e.g., county judge, city manager, etc.).

Deadline and Submission

Completed applications and ***all*** required documents must be submitted in GMS **by 11:59 p.m. Central Time, Monday, February 10, 2025.** *Please note that technical support will not be available after 5 p.m.*

If you are unable to submit your application and/or required documentation via GMS, you may submit documents via mail, e-mail, or fax. Please send to the attention of: **2026 Grants, Library Development & Networking Division,** via e-mail to grants@tsl.texas.gov, fax at 512-936-2306, or mail to Library Development & Networking Division, TSLAC, P. O. Box 12927, Austin, TX 78711, (TSLAC street address: 1201 Brazos, Austin, TX 78701). *Required items must be postmarked no later than February 10, 2025.*

Late submissions may be considered for review on a case-by-case basis following the TSLAC protest procedures as outlined in Section F (13 TAC §2.55) and decision by the Director and Librarian.

Program Timeline

November 2024	Guidelines released and application opens
January 6, 2025	Last day to submit draft proposals to TSLAC for comment (optional)
February 10, 2025	Applications and required forms due in GMS

Feb-April 2025	Application packets evaluated by Grant Review Panel
April 2025	Applicants notified of Grant Review Panel recommendations
June 2025	Commission meets and approves projects
July 1, 2025	Projects begin
May 31, 2026	Final day to encumber grant funds
June 30, 2026	Projects end
July 31, 2026	Last day to submit final request for funds and documentation

E. Application Review Information

Criteria for Award

This grant program is competitive. The Library Services and Technology Act (LSTA) Grant Review Panel will score proposals on the eight criteria listed below (13 TAC §2.412). The maximum number of points for each category is shown.

Additional points will be awarded to applicants who meet the following criteria:

- Applicant library will receive 5 points if they have not received a TSLAC grant in the past 5 years.
- Applicant library will receive 5 points if they serve a community with a population of 30,000 or less.

These points are cumulative. Libraries will be awarded points for each criterion they meet.

The detailed scoring rubric that will be used by the LSTA Grant Review Panel is provided on the following pages.

1. Needs Assessment (15 points)

- Describe why the program is needed, the program goals, and the targeted audience.
- Describe the greater community to be served using demographic statistics, library records, or surveys to support these statements.
- Attach letters of cooperation demonstrating commitment to the project from all agencies involved.

2. Program Design (20 points)

- Thoroughly describe the services, programs, and activities; describe the location where they will be offered.
- Explain how these services will attract shared library users.
- Collaborative projects have priority and inclusion of relevant community organizations is encouraged.

3. Project Impact (15 points)

- Describe the impact your project will have on library services and users regionally or statewide. This may include how the proposed project is a model program that would benefit other communities.

4. Personnel (5 points)

- Identify who will administer the funds and which positions will provide the services.

- List how much time will be spent in each position on assigned duties.
- List how the qualifications of each person relate to their job duties. Full job descriptions are required for new hires.

5. Timetable (5 points)

- Present a timetable for project activities within the project year (state fiscal year) (i.e., a list of actions with a date by which they will be accomplished).
- Provide verification that facilities will be available, equipment and materials delivered.
- Explain how staff will be hired and trained in time to carry out the services as planned.

6. Evaluation (10 points)

- Set achievable, measurable outcomes and present a reasonable method to collect data.
- Present a method to count users of the services, as well as measure the effectiveness of the service.
- Funded programs will also be required to evaluate their programs in accordance with Legislative Budget Board (LBB) measures and IMLS tools.

7. Budget (20 points)

- Provide a complete budget for the proposed project and fully justify the budget by describing how budgeted items will contribute to the project.
- Identify a source for the stated costs (e.g., city pay classification for staff, catalog, city/county bid list for equipment, or vendor quote).
- Explain how costs are reasonable to achieve project objectives. If new staff members are to be hired, grant applicants should consider the time for a realistic hiring process to occur. There is no requirement for cost sharing, matching funds, or cost participation with this grant program.

8. Sustainability (10 points)

- Describe the resources that will be used to support the services developed through the grant in the future. A written commitment of future support from governing bodies is desirable, but not required.

Peer Review (13 TAC §2.113)

(a) To be eligible for review, each application must be submitted by the specified deadlines with all required components and all necessary authorization signatures.

(b) Agency staff will review each application for the following:

a. Legal eligibility of the institution to participate in a grant program and appropriate authorizing signature;
b. Conformance to the federal and state regulations pertaining to grants;
c. Inclusion of unallowable costs;
d. Errors in arithmetic or cost calculations;
e. Submission of all required forms;
f. Compliance with submissions procedures and deadlines; and
g. Relevance and appropriateness of the project design and activities to the purpose of the grant program.

(c) Agency staff will raise issues and questions regarding the needs, methods, staffing and costs of the applications. Staff will also raise concerns regarding the relevance and appropriateness of the project

design and activities to the purpose of the grant program. Staff comments will be sent to the review panel with the applications for consideration by the panel.

(d) Applicants will be sent a copy of the staff comments to give applicant an opportunity to respond in writing. Applicants may not modify the proposal in any way; however, applicants' responses to staff comments will be distributed to the panel.

a. Applicatiosn with significant errors, omissions, or eligibility problems will note be rated. Applications in which the project design and activities are not relevant and appropriate to the purpose of the grant program will be ineligible.

b. Agency staff will be available to offer technical assistance to reviewers.

(e) The agency may use peer review panels to evaluate applications in competitive grant programs.

(1) Peer reviewers may include professionals, citizens, community leaders, and agency and library staff to evaluate grant applications. Peer reviewers must have appropriate training or service on citizen boards in an oversight capacity and may not evaluate grant applications in which there is, or is a possible appearance of, a conflict of interest.

(2) The agency staff will distribute selected applications to reviewers and will provide written instructions or training for peer reviewers. Reviewers must complete any training prior to reviewing applications.

(3) The reviewers will score each application according to the review criteria and requirements stated in the grant guidelines.

(4) Each evaluation of an application for competitive grants shall be appropriately documented by the peer reviewer conducting the evaluation. The documentation shall include the scores assigned by the peer reviewer. The peer reviewer may also include comments that may be shared with the applicant.

(f) Applications will be scored using the following process:

(1) The peer reviewers will review all complete and eligible grant applications forwarded to them by agency staff and complete a rating form for each. Each reviewer will evaluate the proposal in relation to the specific requirements of the criteria and will assign a value, depending on the points assigned to each criterion.

(2) No reviewer who is associated with an applicant or who stands to benefit directly from an application will serve on the review panel for the grant program in which the application is submitted for that grant cycle. Any reviewer who is associated with a potential applicant in the respective category must inform the agency and their organization about a potential conflict of interest. Any reviewer who feels unable to evaluate a particular application fairly may choose not to review that application.

(3) Reviewers will consider and assess the strengths and weaknesses of any proposed project only on the basis of the documents submitted. Considerations of geographical distribution, demographics, type of library, or personality will not influence the assessment of a proposal by the review panel. The panel members must make their own individual decisions regarding the applications. The panel may discuss applications, but the panel's recommendations will be compiled from the individual assessments, not as the result of a collective decision or vote.

(4) Reviewers may not discuss proposals with any applicant before the proposals are reviewed. Agency staff is available to provide technical assistance to reviewers. Agency staff will conduct all negotiations and communication with the applicants.

(5) Reviewers may recommend setting conditions for funding a given application or group of applications (e.g., adjusting the project budget, revising project objectives, modifying the timetable, amending evaluation methodology, etc.). The recommendation must include a

statement of the reasons for setting such conditions. Reviewers who are ineligible to evaluate a given proposal will not participate in the discussion of funding conditions.

(6) Reviewers will submit their evaluation forms to the agency. In order to be counted, the forms must arrive before the specified due date.

Funding Decisions (13 TAC §2.114)

(a) The agency staff will submit a recommended priority-ranked list of applicants for possible funding. Final approval of a grant award will be made by the commission in an open meeting.

(b) Applications for grant funding will be evaluated only upon the information provided in the written application, including attachments, if any.

(c) The agency staff may negotiate with selected applicants to determine the terms of the award. To receive an award, the applicant must accept any additional or special terms and conditions listed in the grant contract and any changes in the grant application.

(d) The agency staff will notify unsuccessful applicants in writing.

(e) The agency has the right to reject applications or cancel or modify a grant solicitation at any point before a contract is signed. The award of any grant is subject to the availability of funds.

Grant Recommendation and Award Process (13 TAC §2.115)

To be considered eligible for funding, any application must receive a minimum adjusted mean score of more than 60 percent of the maximum points available. However, eligibility does not guarantee funding. The commission may also choose to award extra points to libraries that have not received funding within a specified time frame to be determined by the agency or that have limited resources. To reduce the impact of scores that exceedingly high or low, or otherwise outside the range of scores from other reviewers, agency staff will tabulate the panel's work using calculations such as an adjusted mean score.

(1) Applications will be ranked in priority order by score for consideration by the commission.

(2) If insufficient funds remain to fully fund the next application, the staff may negotiate a reduced grant with the next ranked applicant.

(3) If the panel recommends funding an application that, for legal, fiscal, or other reason, is unacceptable to the staff, a contrary recommendation will be made. The applicant will be informed of this situation prior to presentation to the commission and may negotiate a revision to the application. A positive recommendation to the commission will be contingent upon successfully completing these negotiations prior to the commission meeting.

If the panel is unable to produce a set of recommendations for funding, the agency staff will use the same evaluation procedures to develop recommendations to the commission.

Multiple Applications (13 TAC §2.119)

Applicants for competitive grants may submit more than one grant application in the same grant cycle only if:

(1) the applications are for different projects in different grant programs and the applications are not the same, or nearly the same; or

(2) the grant program has specified separate categories for application and the proposals submitted are not the same, or nearly the same, project.

Scoring Rubric

Project Scoring Total in Eight Areas: 100 points		
Relevance and appropriateness of the project design and activities to the goals and purpose of the Special Projects grant program will be considered in the scoring of all criteria. Members of the LSTA Grant Review Panel may score each criterion as follows: **0-1 points:** Project does not meet the goals and purposes of the Special Projects grant program. **2-3 points:** Project partially meets the goals and purposes of the Special Projects grant program. **4-5 points:** Project is a clear fit for the goals and purposes of the Special Projects grant program.		
Abstract		
• Overview and summary of project • Concise (1,000 characters) • Includes: who, what, where, when, why, for whom		
1. Needs Assessment (Points: Raw score = 5 max, weight = 3; Final score = 15 max)		
• Applicant should describe why the program is needed, the program goals and audience. • They should describe the greater community to be served and include demographic statistics, library records, or surveys to support these statements. • They attach letters of cooperation showing commitment to the project from agencies to be involved.		
0-1 points	2-3 points	4-5 points
• Provides no evidence of need for program. • Program goals and audience are not defined. • Does not describe needs assessment process and/or how need was determined (i.e., no description of community served, demographic statistics, library records or evidence or surveys). • If partners are part of the Project, no letters of support are provided.	• Provides partial/some evidence of need for program. • Program goals and audience are defined but show little to no connection to description of need. • Needs assessment process seems vague and incompletely describes how stated need was determined. • If partners are part of the Project, letters of support are provided.	• Provides clear and convincing evidence of need for program and why they are best suited to meet this need. • Program goals and audience are clearly connected to description of need. • Clearly describes needs assessment process including how stated need was determined (e.g., statistics, records, surveys). • If partners are part of the Project, letters of support are provided that clearly define roles and responsibilities of partnering agencies.

2. Program Design (Points: Raw score = 5 max, weight = 4; Final score = 20 max)		
• Applicant thoroughly describes the services, programs, and activities; describe the location where they will be offered. • Explain how these services will attract shared library users. • Collaborative projects have priority and inclusion of relevant community organizations is encouraged.		
0-1 points	2-3 points	4-5 points
• Services, programs and activities lack definition and are unclear. Project appears to lack direction and planning and does not relate to described needs. • Does not describe location(s) where project will be offered or is vague. • Does not describe how project services will attract library users. • Issue of collaboration not addressed.	• Services, programs and activities are defined. Project has direction and some relationship to described needs. • Location where services will be offered is described but does not clearly relate to project activities and described needs. • Describes how project services will attract library users. • Issue of collaboration addressed, even if not a collaborative project.	• Services, programs and activities are clearly defined, including timelines and resources required. Project shows evidence of clear direction and planning and strong relationship to described needs. • Location where services will be offered is described and clearly relates to project activities and described needs. • Clearly describes how project services will attract library users and ties to project activities and described needs. • Collaborative project; collaboration clearly addressed and described in full.
3. Project Impact (Points: Raw score = 5 max, weight = 3; Final score = 15 max)		
• Applicant describes the impact their project will have on library services and users locally as well as regionally or statewide. • This may include how the proposed project is a model project that would benefit other regions of the state.		
0-1 points	2-3 points	4-5 points
• Does not address any of the impacts the project may have on library services and library users. • Does not address larger issues that the project may address.	• Describes impact of the project but doesn't show an association with the library services and library users. • Addresses larger issues but does not tie these issues to local project.	• Describes both impact and measurable benefits the project will have on library services and library users. • Addresses larger issues clearly and ties them to local project.
4. Personnel (Points: Raw score = 5 max, weight = 1; Final score = 5 max)		

- Applicant identifies who will administer the funds and which positions will provide the services.
- Applicant lists how much time will be spent in each position on assigned duties.
- Applicant lists how the qualifications of each person relate to their job duties. Full job descriptions are required for new hires. Provide verification that facilities will be available, equipment and materials delivered.

0-1 points	2-3 points	4-5 points
• Does not identify fiscal agent and which positions will provide services. • No description of time spent in each position. on assigned duties • No description of qualifications of key personnel. • No job descriptions for new hires.	• Fiscal agent identified without explanation and positions briefly described. • Time spent on project by each staff member briefly identified. • Some description of qualifications of key personnel. • Partial or seemingly incomplete job descriptions available for new hires.	• Fiscal agent identified with full explanation and positions that will provide the services fully described. • Time spent on project by each staff member identified and justified. • Describes qualifications of key personnel in detail, including experience with similar projects, and how each will contribute to the project's success. • Full job descriptions provided for new hires.

5. Timetable (Points: Raw score = 5 max, weight = 1; Final score = 5 max)

- Applicants presents a timetable for project activities within the fiscal year (i.e., a list of actions with a date by which they will be accomplished).
- Applicant provides verification that facilities will be available, equipment and materials delivered.
- Applicants explain how staff will be hired and trained in time to carry out the services as planned.

0-1 points	2-3 points	4-5 points
• Timetable is missing or incomplete (i.e., does not include a list of actions with specific target dates for completion). • No verification regarding facilities, equipment and/or materials. • No explanation of hiring or training of staff to carry out project in project period.	• Timetable exists but is not clearly relevant to achieving the project goals. • Timetable seems unachievable within the project period. • Some verification regarding facilities, equipment and/or materials, but not clearly related to project. • Brief or incomplete explanation of hiring or training of staff to carry out project in project period. • No time given for staff to be hired, if applicable.	• Timetable includes a list of actions with specific target dates and is clearly relevant to achieving the established objectives. • Timetable seems achievable within the project period. • Use of facilities, equipment and/or materials fully explained and relevant to project and project goals. • Full explanation of hiring or training of staff that will allow project to be carried out during the project period. • Realistic timeline given for hiring of new staff, if applicable.

6. Evaluation (Points: Raw score = 5 max, weight = 2; Final score = 10 max)

- Applicants set achievable, measurable outcomes, and present a reasonable method to collect data.
- Applicants present a method to count users of the services as well as measure the effectiveness of the services using IMLS tools and LBB measures.

Note: Some projects will not lend themselves to outcomes-based evaluation (OBE). TSLAC strongly encourages the use of OBE, we do not require it for proposals, and points should not be deducted from strong evaluation plans that use outputs instead of outcomes when it is reasonable not to employ OBE.

0-1 points	2-3 points	4-5 points
• Does not include either project outputs or outcomes. • No method to collect data provided. • No method to count users of services or measure effectiveness of services. • Will not determine success of the project.	• Provides project outputs and/or outcomes but do not clearly relate to project. • Method to collect data provided. • Method to count users of services provided, but not to measure effectiveness of services. • Provides some indication of the success of the project.	• Clearly describes appropriate project outputs and/or outcomes. • Method to collect data is provided that clearly relates to project services and documented need. • Method to count users of services and measure effectiveness of services provided. • Will effectively determine success of the project and its impact. • Project evaluation can be used as model for other similar projects. • Project evaluation incorporates "best practices" from other similar projects.

7. Budget (Points: Raw score = 5 max, weight = 4; Final score = 20 max)

- Applicants provide a complete budget for the proposed project.
- Applicant fully justifies the budget by describing how budgeted items will contribute to the project and identifies a source for the stated costs (e.g., city pay classification for staff, catalog or city/county bid list for equipment).
- The costs are reasonable to achieve project objectives.
- If new staff members are to be hired, applicants consider the time for a realistic hiring process to occur.

0-1 points	2-3 points	4-5 points
• Budget table is incomplete. • Provides no narrative description (justification), beyond the budget column, of how funds will be spent.	• Budget table is complete. • Budget narrative description exists but does not clearly relate to the project and sources for costs are not stated.	• Budget table is complete and clearly describes how the dollars will be used for the project. • Clearly identifies source of stated costs and justification for their reasonableness.

	• Items listed in the budget description do not match those in the budget form. • Costs do not seem reasonable, and description is unclear.	• Items listed in the budget description match those in the budget form.
8. Sustainability (Points: Raw score = 5 max, weight = 2; Final score = 10 max)		
• Applicants describe the resources that will be used to support and sustain the services developed through the grant in the future. • A written commitment of future support from governing bodies is desirable, but not required.		
0-1 points	2-3 points	4-5 points
• Description of resources used to support and sustain the project after grant completion is vague and unspecific.	• Some evidence of future support and sustainability described.	• Clear evidence of sustainability described. • A written commitment of future support from governing bodies is provided, if applicable.
9. Extra Points – Up to 10 Extra Points		
5 points: Awarded if applicant library serves a community with a population of 30,000 or less. 5 points: Awarded if applicant library has not received a TSLAC grant in the past 5 years.		

F. Award Administration Information

Notice of Award

Applicants will be notified of the grant review panel's recommendations via e-mail. The notification will include the applicant rankings, panel recommendation, panel comments and scores relevant to respective applications, and protest procedures, which are also included in this notice.

The panel recommendations will be submitted to the Texas State Library and Archives Commission at its August meeting for consideration and approval. Once the awards have been approved, successful applicants will receive instructions on how to proceed and mandatory training required for all TSLAC competitive grant recipients.

Protest Procedure — Texas State Library and Archives Commission, 13 TAC §2.55

(a) An aggrieved person who is not satisfied with a decision, procedure, or service received from the staff of the Texas State Library and Archives Commission or who is an actual or prospective bidder, grantee, or contractor aggrieved in connection with a solicitation, evaluation, or award may file a protest with the Director and Librarian in accordance with this rule.

(b) A protest must be submitted to the Director and Librarian within 21 days after the person knows or should have known of the matter which is protested. The Director and Librarian has the discretion to allow a protest filed after 21 days if the protestant shows good cause for the late filing or if the protest raises an issue significant to the general policies and procedures of the commission.

(c) The protestant shall mail or deliver a copy of the protest to all interested persons. The Director and Librarian will furnish a list of interested persons to a protestant. For protests of a competitive selection (bid, contract, or grant), interested persons shall include all persons who have submitted a bid, proposal, or application.

(d) A protest must be in writing and identified as a protest under this section, and contain the following:

(1) A description of the protestant's interest in the matter
(2) The issue(s) to be resolved and remedy(s) requested
(3) The protestant's argument supporting the protest, including a statement of relevant facts and applicable law, specifying the statutes, rules, or other legal authority alleged to have been violated
(4) The protestant's affirmation that facts set forth in the protest are true
(5) A certification that a copy of the protest has been mailed or delivered to all interested persons

(e) Upon receipt of a protest conforming to the requirements of this section, the commission shall not proceed with the solicitation, award, or contract until the protest is resolved, unless the Director and Librarian makes a written determination that delay would harm the substantial interests of the state.

(f) The Director and Librarian has the authority to decide, settle, or resolve the protest and will make a written determination. The Director and Librarian may solicit written responses to the protest from other parties. The Director and Librarian shall inform the protesting party and other interested parties by letter of his determination, and how to appeal the determination to the commission.

(g) An interested party may appeal the determination of the Director and Librarian. An appeal must be in writing and conform to paragraphs (1) - (3) of this subsection:

(1) The appeal must be received in the office of the Director and Librarian no later than 15 days after the date the determination is mailed to interested parties;
(2) A copy of the appeal must be mailed or delivered by the appealing party to all interested parties and contain a certification of mailing or delivery;
(3) The appealing party must state whether or not an opportunity is requested to make an oral presentation to the commission in open meeting.

(h) The Director and Librarian shall refer the matter to the commission for their consideration at an open meeting.

(i) The chair of the commission has the discretion to allow an appeal filed more than 15 days after the Director and Librarian's determination if the appealing party shows good cause for the late filing or if the appeal raises an issue significant to the general policies or procedures of the commission.

(j) An interested party may file a response to an appeal of the determination of the Director and Librarian no later than seven days after the appeal is mailed or delivered.

(k) Copies of the appeal and responses of interested parties, if any, shall be mailed to the commission by the Director and Librarian.

(l) The chair of the commission has the discretion to decide whether or not a request for oral presentations will be granted and will set the order and amount of time for oral presentations that are allowed. The chair also has the discretion to decide whether presentations and written documents presented by Commission staff and interested parties will be allowed.

(m) The commission will determine properly filed appeals and make its decision in open meeting. The commission shall vote to uphold or reverse the decision of the Director and Librarian. Failing a majority vote of a quorum of the commission, the Director and Librarian’s decision is upheld. The

commission's decision is final and not subject to judicial review under the statutes governing the commission.

(n) A decision issued either by the commission in open meeting or in writing by the Director and Librarian shall be the final administrative action of the commission.

(o) Documentation concerning a protest of a competitive selection is part of the commission's records series for that selection and is retained in accordance with the commission's approved records retention schedule.

Policy Requirements

TSLAC competitive grant recipients are subject to the Texas Grant Management Standards (TxGMS) (https://comptroller.texas.gov/purchasing/docs/grant-management-reader.pdf) and federal Office of Management and Budget (OMB) Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (also known as the Uniform Guidance) *(https://www.ecfr.gov/current/title-2/subtitle-A/chapter-II/part-200).*

Reporting

Grantees must submit financial and performance reports at scheduled intervals throughout the reporting period as will be outlined in the grant contract. Reports will be submitted electronically through TSLAC's Grant Management System (GMS).

G. Contacts

TSLAC staff members are available during regular business hours (8 a.m.-5 p.m., Central) to assist with competitive grants.

Dominic Gonzales, Grants Administrator
Phone: 512-463-5581
Fax: 512-936-2306
E-mail: grants@tsl.texas.gov

Taylor Gardner, Grants Coordinator
Phone: 512-463-5468
Fax: 512-936-2306
E-mail: grants@tsl.texas.gov

State Fiscal Year

FY 2026

Grant Program *

Special Projects 75 2026

Project Title *

Schertz Public Library Outreach Vehicle

Application Number

3100

Organization Name

Schertz Public Library

798 Schertz Pkwy Schertz TX 78154-1954

Project Manager *

Melissa Uhlhorn

Phone Number:

210-619-1701

Email:

muhlhorn@schertz.com

Legal Entity

City of Schertz

798 Schertz Pkwy Schertz TX 78154-1954

EIN:

Federal Unique Entity ID:

WP19CJPW5PK5

SAM Exp. Date:

State House District:

44

State Senate District:

25

US Congress District:

15

Modified On

1/23/2025 7:18 PM

I certify, to the best of my knowledge, that the statements made in this application are true, that the information provided is correct, and that I am authorized to enter into legally binding commitments on behalf of the applicant organization.

Application Approved by (name):

Job Title:

Date:

Signature:

Agenda No. 5.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Purchasing & Asset Management**
Subject:	**Resolution 25-R-013 - Granting signature authority to the City Manager to enter into and sign certain contracts and documents on behalf of the City (S.Williams/S.Gonzalez/J.Kurz)**

BACKGROUND

There appears to be some ambiguity as it relates to signature authority in the City Charter. Section 4.05 of the City Charter states that unless another signatory is otherwise designated by the City Council, the Mayor will sign all official documents such as ordinances, resolutions, conveyances, grant agreements, contracts, and bonds. Section 5.03(k) of the Charter grants the City Manager the authority to sign documents in the name of the City as authorized by the City Council. While most agenda items have explicit language authorizing the City Manager to execute an agreement once approved by Council, this will provide authority in the event that specific language is not included in the resolution.

Additionally, this Council action (resolution) simply seeks to clearly delineate and delegate signature authority. As proposed, the Mayor would continue to sign all ordinances, resolutions, bonds and other documents which they are legally obligated to sign. The City Manager would have signature authority to execute all contracts approved by City Council, as well as, any other type of document or contract provided that the funding for the contract is contained in an approved budget and subject to the monetary limits already established (i.e. procurement contracts less than $50,000, revenue-generating agreements, association agreements, etc.).

This is not a change to current process or procedures; it simply formalizes signatory authority of the City Manager and eliminates any ambiguity. The City Attorney reviewed the resolution and did not identify any potential issues or conflicts.

GOAL

Formalize signatory authority of the City Manager

COMMUNITY BENEFIT

Section 5.03(b) of the Charter grants the City Manager the authority to direct and supervise the administration of all departments, offices and agencies of the City, except as otherwise provided by the Charter or by law. This formal designation of signatory authority will allow the City Manager to effectively conduct City business without undue delay.

SUMMARY OF RECOMMENDED ACTION

Approval of Resolution 25-R-013

RECOMMENDATION

Approval of Resolution 25-R-013

Attachments

Resolution 25-R-013

RESOLUTION NO. 25-R-013

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS GRANTING SIGNATURE AUTHORITY TO THE CITY MANAGER TO ENTER INTO AND SIGN CERTAIN CONTRACTS AND DOCUMENTS ON BEHALF OF THE CITY AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, Section 4.05 of the City of Schertz Charter ("Charter") states that unless another signatory is otherwise designated by the City Council, the Mayor will sign all official documents such as ordinances, resolutions, conveyances, grant agreements, contracts, and bonds; and

WHEREAS, Section 5.03(b) of the Charter grants the City Manager the authority to direct and supervise the administration of all departments, offices and agencies of the City, except as otherwise provided by the Charter or by law; and

WHEREAS, Section 5.03(k) of the Charter grants the City Manager the authority to sign documents in the name of the City as authorized by the City Council; and

WHEREAS, Texas Local Government Code § 252.021 allows Council to delegate contracting authority and the City Manager has general authority to contract for expenditure without further approval of the Council for all budgeted items not exceeding limits set by the Council; and

WHEREAS, the City enters into many contracts, agreements, and similar documents that are routine in nature or are for certain categories or types of items that have already been approved through the budgeting process, and the City Manager (or designee) should be authorized to negotiate and execute, in accordance with the guidelines established herein, in the interest of efficiency of administrative governmental operations in the City; and

WHEREAS, the Mayor shall continue to sign the City Council ordinances, resolutions, bonds, and documents which they are obligated by state law to sign;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby grants authority to the City Manager to sign on behalf of the City of Schertz all lawful acts of the Council, as approved, other than the ordinances, resolutions and bonds of the Council, as permitted by law. This authority includes the approval of all procurement documents that require Council action and executing all contracts and agreements approved by Council. Subject to compliance with any state law that requires approval by Council, the City Manager is authorized to initiate and approve any purchase approved in the annual budget.

Section 2. The Council grants expenditure authority to the City Manager (or designee) to execute transactions, purchase orders, contracts and similar documents in connection with the making and awarding of contracts for the acquisition of goods and services in an amount not to exceed $50,000 and change orders not greater than either the lesser of $50,000 or 25% of the original contract.

Section 3. The authority granted to the City Manager herein with respect to signing or entering into any contracts shall also include the authority to terminate such contracts as permitted under the contract and to sign amendments to such contracts when the amount of the amendment when added to the original amount of the contract does not exceed $50,000 or when the amount of the amendment does not exceed 25% of the original amount of the contract, whichever amount is less.

Section 4. The Council hereby grants signature authority to the City Manager to sign any other type of document and bind the City for those contracts, provided that the funding for the contract is contained in an approved budget and subject to the monetary limits set forth in Section 3 above. These types of documents include, but are not limited to, revenue-generating agreements, association agreements, conveyances, and grant agreements.

Section 5. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 6. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 7. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 8. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 9. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 10. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this _____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____

Mayor, Ralph Gutierrez

ATTEST:

_____

City Secretary, Sheila Edmondson

(CITY SEAL)

Agenda No. 6.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Executive Team**
Subject:	**Resolution 25-R-020 - Authorizing a pro-rata agreement for the Saddlebrook Development (S.Williams/B.James)**

BACKGROUND

Jen Texas 32, LLC (Ashton Woods) is the developer of the Saddlebrook Residential Development located on the north side of Lower Seguin Road approximately 4,800 feet east of FM 1518. The developer is seeking approval of an amended pro-rata agreement for the sewer lift station and associated force main (the Saddlebrook Lift Station) with the City. The City Council initially authorized the entering into of a pro-rata agreement, along with other agreements, on April 16, 2024 by Resolution 24-R-40.

Since that time, the excess capacity in the Saddlebrook lift station has increased substantially as a result of it being able to connect into the OJR Sewer Plant without having to account for all of the flows from the Croton Lift Station. It had previously been understood that CCMA, the operator of the OJR Sewer Plant, would only allow one lift station force main connection, which would have required the rerouting of the flows from the existing Croton Lift Station into the Saddlebrook Lift Station in order for the Saddlebrook Lift Station force main connection to replace the Croton Lift Station force main connection.

As a result, there will now be approximately 2,000 excess Equivalent Development Units (EDUs) of capacity instead of 725. City Staff is restructuring the agreement to be a more typical agreement, but the City is proposing to pay to reserve 360 EDUs of capacity to allow flexibility for existing rights of capacity into the Croton Lift Station, allocate 250 EDUs of capacity to the Rumpf/ Brady Tract based on the Development Agreement, allocate 127 EDUs to Carmel Ranch, allocate 420 EDUs to the Judah Ranch (Bauman tract) and the rest on a first come first served basis.

GOAL

Provide for the orderly development of infrastructure within the City of Schertz.

COMMUNITY BENEFIT

Provide for development of infrastructure in a timely, cost-effective manner.

SUMMARY OF RECOMMENDED ACTION

Approval of Resolution 25-R-020 authorizing the City Manager to enter into a Pro-Rata Agreement for the lift station with Jen Texas 32, LLC.

FISCAL IMPACT

The City would have to pay the developer $688,791.60 within 90 days of execution of this agreement/acceptance of the lift station for the 360 EDUs of capacity. This is down from the $1,387,149.75 in the previously approved agreement. These funds would come from the Water & Sewer Reserve Fund.

RECOMMENDATION

Approval or Resolution 25-R-020.

Attachments

Resolution 25-R-020 with attachment

RESOLUTION NO. 25 -R-020

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING A PRO-RATA AGREEMENT WITH JEN TEXAS 32, LLC FOR CONSTRUCTION OF A SEWER LIFT STATION AND ASSOCIATED FORCE MAIN IN THE CITY OF SCHERTZ, TEXAS, AND RELATED MATTERS IN CONNECTION THEREWITH.

WHEREAS, the Developer of Saddlebrook is constructing a sewer lift station and associated force main to serve their development; and

WHEREAS the Developer constructed the sewer lift station and associated force main with more capacity than is required by the Saddlebrook development; and

WHEREAS, there is a benefit to oversizing the lift station and associated force main to serve other properties; and

WHEREAS, the City has agreed to acquire a portion of the excess capacity in the sewer lift station and associated force main; and

WHEREAS, the City Council finds that it is in the best interest of the City to enter into the Pro-Rata Agreement with the Developer of the Saddlebrook development.

NOW THEREFORE, BE IT RESOLVED, THAT THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes the City Manager to execute the agreement generally in the form attached subject to approval of minor changes approved by the City Attorney as shown on Exhibit "A".

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this ____th day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City

Exhibit A

Pro Rata Agreement

After Recording, Please Return To:
City of Schertz.
1400 Schertz Parkway
Schertz, Texas 78154
Attention: City Manager

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

PRO-RATA AGREEMENT
SADDLEBROOK

This PRO-RATA AGREEMENT (this "Agreement") is by and between Jen Texas 32, LLC, a Texas limited liability company (the "Owner"), and the CITY OF SCHERTZ, a Texas municipal corporation (the "City") (sometimes collectively referred to as the "Parties") and is effective upon the execution of this Agreement by the Owner and the City (the "Effective Date").

WHEREAS, the Owner is the owner of that certain real property located in the City of Schertz, Bexar County, Texas, more specifically described on **Exhibit "A"**, attached hereto and made a part hereof for all purposes (the "Property" or "Saddlebrook"); and

WHEREAS, the Owner seeks to develop a residential subdivision on the Property that requires the construction of certain public improvements: and

WHEREAS, the Owner seeks to construct sewer lines, a sewer lift station and force main (the "Saddlebrook Lift Station Improvements") to provide sewer service necessary for the development of the Property; and

WHEREAS, an existing sewer lift station and force main, the Croton Lift Station (the "Croton Lift Station"), is located near the Property and connects to the CCMA OJR Regional Water Reclamation Plant (the "Plant"); and

WHEREAS, rights-of-first refusal to capacity (the "Allocated Capacity") in the Croton Lift Station have been granted to property owners per the Third Agreement Regarding Sewer Facilities; and

WHEREAS, it was initially understood that the Plant did not have the ability for an additional sewer force main to connect the Plant; and

WHEREAS, the Owner had designed and constructed the Saddlebrook Lift Station Improvements to accommodate a portion of the existing and Allocated Capacity flows from the existing Croton Lift Station (the "Croton Additional Flows") in order to be able to utilize the existing Croton Lift Station connection to the Plant; and

WHEREAS, the Owner constructed more capacity in the Saddlebrook Lift Station Improvements than was required to accommodate the Croton Ultimate Flows and anticipated flows from the development of the Property; and

WHEREAS, the Owner seeks to be reimbursed for a portion of the cost of designing and constructing the Saddlebrook Lift Station Improvements (the "Saddlebrook Lift Station Improvement Costs") from landowners seeking to utilize this excess capacity.

NOW THEREFORE, in consideration of the agreements set forth herein and for other reciprocal good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged and stipulated by the Parties, the Owner and the City agree as follows:

1. Definitions: The following terms and phrases used in this Agreement shall have the meanings ascribed hereto:

a) "Agreement" means this agreement, including any amendments hereto, between the City and Developer.

b) "Contractor" shall mean a person, firm, corporation, partnership, association, or other entity awarded the contact by Developer for the construction and installation of the Improvements.EDU Sewer Facility Reimbursement Fee" shall mean the cost per EDU of Pro-rata due to the Owner for utilizing one of the remaining 2,000 EDUs of capacity in the Saddlebrook Lift Station.

c) "Excess EDUs of Capacity shall mean the 2,000 EDus of capacity of the Saddlebrook Lift Station Improvements out of the 2,700 EDUs of total capacity minus the capacity reserved for the Owner of the Property and the Croton Ultimate Flows.

d) "Saddlebrook Lift Station Improvement Costs" shall mean the verified costs to construct the Saddlebrook Lift Station Improvements. improvements described on **Exhibit "B"** and Section 3(a) below.

e) "Saddlebrook Lift Station Improvements" shall mean the improvements described on **Exhibit "C"** and Section 3 (a) below.

2. Ownership of the Property. The Owner hereby represents and warrants that, as of the Effective Date, it has not conveyed, assigned, or transferred all or any portion of its interest in the Property to any other person or entity.

3. Construction of Improvements; Covenants. The Owner and the City covenant and agree to the following:

a) The Owner is obligated by Section 21.12.10 of the City's Unified Development Code to construct, or cause to be constructed, sanitary sewer improvements more particularly described as the Saddlebrook Lift Station

Improvements shown on the Construction Plans approved June 2, 2023 (the "Construction Plans") and that are included as part of the application for final plat approval for the subdivision titled Saddlebrook Subdivision Unit 1B.

b) The cost of the Saddlebrook Lift Station Improvements is estimated to be **Five Million One Hundred Sixty-Five Thousand Nine Hundred Thirty-Nine Dollars and Thirty-Five Cents ($5,165,939.35)** (the "Saddlebrook Lift Station Improvements Cost Estimate"), as more particularly shown on **Exhibit "C"** attached hereto and made a part hereof for all purposes. The Owner and the City agree that the amount of the Saddlebrook Lift Station Improvement Cost Estimate set forth herein is a commercially reasonable estimate of the cost to complete the Improvements.

4. Allocation of the Rights to the EDUs in the Saddlebrook Lift Station Improvements. The Parties hereby allocate rights to the EDUs of capacity in the Saddlebrook Lift Station Improvements, which are proposed to have 2,700 EDUs of capacity, as follows:

a) The right to utilize up to Seven Hundred (700) EDUs of capacity in the Saddlebrook Lift Station Improvements is hereby assigned to the Owner for the Property (the Saddlebrook Subdivision) (the "Saddlebrook Property EDUs").

b) The Remaining EDUs of Capacity in the Saddlebrook Lift Station Improvements (the "Excess EDUs of Capacity"), which are estimated to be approximately Two Thousand (2,000) EDUs of capacity, are allocated as follows:

(i) 360 EDUS are allocated to the City of Schertz. Schertz can choose to allocated these EDUs as they choose.

(ii) 250 EDUs are allocated to the Rumpf/Brady Tract.

(iii) 127 EDUs are allocated to the Carmel Ranch Development.

(iv) 420 EDUs are allocated to the Judah Ranch (Baumann) Tract.

(v) The remaining estimated 843 EDUs of capacity, which actual number may vary due to usage patterns, shall be available for use by other property located within the service area of the lift station and within the City of Schertz on a first-come, first-served basis. Such EDUs of capacity will be allocated, if available, at the time of preliminary plat approval and paid prior to recordation of the final plat.

a) Rights Run with the Land. The Parties agree that the allocation right to the Saddlebrook Property EDUs shall run with title of the Property and shall

not be assignable by the Owner without the prior written consent of the City.

5. EDU Sewer Facility Reimbursement Fee. A sewer facility reimbursement fee (the "SFR Fee") of **One Thousand Nine Hundred Thirteen Dollars and Thirty-One Cents ($1,913.31)** per EDU of capacity in the Saddlebrook Lift Station Improvements, which number was calculated by dividing the approved cost to construct the Saddlebrook Lift Station Improvements, as documented in **Exhibit "C"** by the estimated Two Thousand Seven Hundred (2,700) EDUs of capacity in the Saddlebrook Lift Station Improvements, shall be due and payable upon conveyance of any of the Excess EDUs of Capacity in the Saddlebrook Lift Station Improvements to a property owner. The Owner is exempt from paying the SFR Fee for the Saddlebrook Property EDUs.

a) As used in this Section 5, "conveyance" of EDUs of capacity in the Sewer Facilities shall be deemed to occur upon recordation of a final plat.

(b) The City agrees to use commercially reasonable efforts to collect the SFR Fees from property owners at the time of conveyance of EDUs of capacity in the Upgraded Sewer Facilities. Within thirty (30) calendar days of the City's receipt of SFR Fees associated with the Upgraded Sewer Facilities, the City shall pay the Owner the amount of the SFR Fees collected by the City.

6. The City agrees to pay for the 360 EDUs of Capacity within 90 days of acceptance of the Saddlebrook Lift Station Improvements.

7. Approval of Agreement. The City has approved the execution and delivery of this Agreement pursuant to Section 21.4.15(C.) (2.) of the City's Unified Development Code, and the Owner represents and warrants that it has taken all necessary action to authorize its execution and delivery of this Agreement.

8. Governmental Immunity. The City does not waive or relinquish any immunity or defense on behalf of itself, its officers, employees, Councilmembers, and agents as a result of the execution of this Agreement and the performance of the covenants and actions contained herein.

9. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns.

10. Counterparts. This Agreement may be executed in any number of counterparts with the same effect as if all signatory parties had signed the same document. All counterparts shall be construed together and shall constitute one and the same Agreement.

11. Integration. This Agreement is the complete agreement between the Parties as to the subject matter hereof and cannot be varied except by the written agreement of the

Owner and the City. The Owner and the City each agrees that there are no oral agreements, understandings, representations or warranties which are not expressly set forth herein.

12. Notices. Any notice or communication required or permitted hereunder shall be deemed to be delivered (i) upon receipt, if hand delivered or delivered by express delivery service or (ii) three (3) days after such notice is deposited in the United States mail, postage fully prepaid, registered or certified mail return receipt requested, and addressed to the intended recipient at the address shown herein. Any address for notice may be changed by written notice delivered as provided herein. All notices hereunder shall be in writing and served as follows:

If to the Owner:

Jen Texas 32, LLC
8023 Vantage Drive, Suite 220
San Antonio, TX 78230
Attention: Trey Marsh

If to the City:

CITY OF SCHERTZ
1400 Schertz Parkway
Schertz, Texas 78154
Attention: City Manager

With copy to:

Denton Navarro Rocha Bernal & Zech, P.C.
2517 N. Main Avenue
San Antonio, Texas 78212
Attention: T. Daniel Santee

13. Legal Construction. If any provision in this Agreement is for any reason unenforceable, to the extent the unenforceability does not destroy the basis of the bargain among the Parties, such unenforceability will not affect any other provision hereof, and this Agreement will be construed as if the unenforceable provision had never been a part of this Agreement. Whenever the context requires, the singular will include the plural and neuter include the masculine or feminine gender, and vice versa. Article and section headings in this Agreement are for reference only and are not intended to restrict or define the text of any section. This Agreement will not be construed more or less favorably between the Parties by reason of authorship or origin of language.

14. Recitals; Exhibits. Any recitals in this Agreement are represented by the Parties hereto to be accurate, constitute a part of the Parties' substantive agreement, and are fully incorporated herein as matters of contract and not mere recitals. Further, any

exhibits to this Agreement are incorporated herein as matters of contract and not mere exhibits.

15. No Joint Venture. It is acknowledged and agreed by the Parties that the terms hereof are not intended to, and shall not be deemed to, create a partnership or joint venture among the Parties.

16. Choice of Law. This Agreement will be construed under the laws of the State of Texas without regard to choice-of-law rules of any jurisdiction. Venue shall be in the State District Courts of Guadalupe County, Texas with respect to any lawsuit arising out of or construing the terms and provisions of this Agreement. No provision of this Agreement shall constitute consent by suit by any Party.

[Signatures and acknowledgments on the following pages]

Signature Page to
Improvement Agreement

This Agreement has been executed by the Parties as of the dates of the Acknowledgments to be effective as of the Effective Date.

Owner:

Jen Texas 32, LLC

By: _____

Name: _____

Title: _____

Date: _____

THE STATE OF TEXAS §
§
COUNTY OF _____ §

This instrument was acknowledged before me on the ____ day of _____, 2025 by _____, the_____of Jen Texas 32, LLC, on behalf of said limited liability company.

(SEAL)

_____
Notary Public in and for
The State of Texas

My Commission Expires:_____

Signature Page to
Improvement Agreement

This Agreement has been executed by the Parties as of the dates of the Acknowledgments to be effective as of the Effective Date.

City:

CITY OF SCHERTZ,
a Texas municipal corporation

By: _____

Name: Steve Williams, its City Manager

Date: _____

THE STATE OF TEXAS §
§
COUNTY OF GUADALUPE §

This instrument was acknowledged before me on the ____ day of _____, 2025 by Steve Williams, City Manager of the City of Schertz, Texas, a Texas municipal corporation, on behalf of said City.

(SEAL)

_____
Notary Public in and for
The State of Texas

My Commission Expires:_____

EXHIBIT "A"

The Property

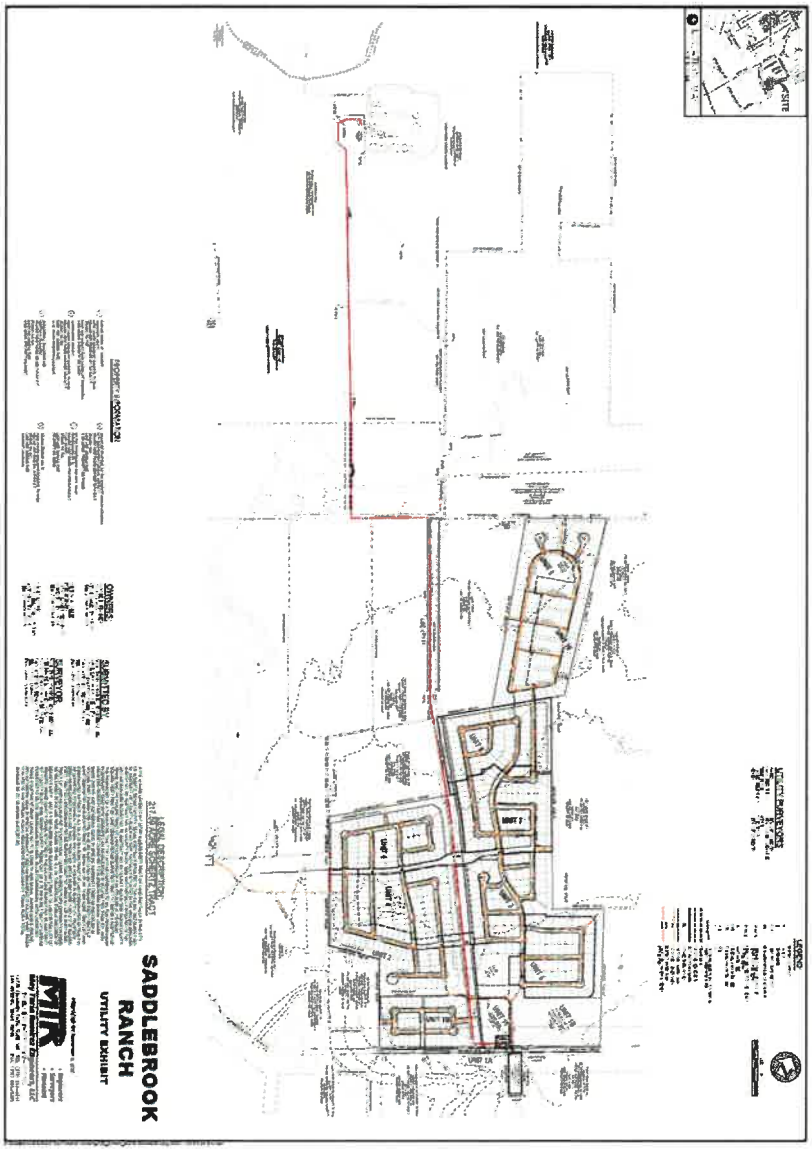


EXHIBIT "B"

The Saddleborok Lift Station Improvement Costs

11/13/2023
Job No.-20080

SADDLEBROOK SEWER LIFT STATION OPCS
SANITARY SEWER IMPROVEMENTS

ITEM	DESCRIPTION	UNIT	EST/QTY	$/UNIT	AMOUNT
1	Lift Station	L.S.	1	$ 3,419,977.02	$ 3,419,977.02
2	Force Main	L.S.	1	$ 1,576,002.53	$ 1,576,002.53
				TOTAL CONSTRUCTION COST	$ 4,995,979.55
				Estimated Permit Fees	$ 49,959.80
				Engineering	$ 120,000.00
				TOTAL COST	$ 5,165,939.35
				TOTAL CAPACITY (EDUs):	2,700
				COST PER EDU	$ 1,913.31

EXHIBIT "C"

The Saddlebrook Lift Station Improvements

[See attached]

Agenda No. 7.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Police Department**
Subject:	**Resolution 25-R-014 - Authorizing the Schertz Police Department to accept equipment from the Alamo Area Council of Governments (AACOG) RECONYX Illegal Dumping Cameras Program (J. Lowery)**

BACKGROUND

The Environmental Conservation Program from AACOG contacted local government agencies to announce the opportunity to apply for grant-funded RECONYX cameras. These cameras provide cellular-enabled surveillance of specific sites prone to illegal dumping. The purpose is to allow successful identification of subjects dumping items in places and to allow for investigation and eventual successful prosecution or citation. The goal of the program is to ensure the continued beauty, safety, and health of our communities.

GOAL

The goal of this resolution is to formally accept two RECONYX cameras as part of the AACOG Environmental Protection Program to combat illegal dumping. The Schertz Police Department will work with city departments to use these cameras to identify suspects and/or suspect vehicles for investigation and prosecution.

COMMUNITY BENEFIT

The community will benefit from this program due to active investigation of dumping sites. This will ensure continued beautification of public areas.

SUMMARY OF RECOMMENDED ACTION

The Schertz Police Department recommends approval of this resolution.

RECOMMENDATION

The Schertz Police Department recommends approval of this resolution.

Attachments

Accouncement Flyer

Resolution 25-R-014

Submitted Application for Program

AACOG
Alamo Area Council of Governments

Illegal Dumping Camera Program

RECONYX
Est. 2002
SEE WHAT YOU'VE BEEN MISSING...

Brought to you by

The Environmental Conservation Program

Deter and document illegal dumping in critical areas.

Apply for

FREE

Camera Kit

While Supplies Last



Kit Includes

- Reconyx Camera
- Solar Panel
- Swivel Kit
- Cellular Service

Requires

- Pass Application
- Sign Agreement
- Reconyx App
- Quarterly Reports

Help preserve our communities' beauty, safety, and health.

★ Made In The USA

★ BuckView Software Included

★ 50’ Night Vision

★ Five Year Warranty

★ Capture License Plates



Find application online at

aacog.gov/ec

For details, contact:

sduff@aacog.gov

210-362-5243

Available for Entities in the AACOG Region. Kits do not include additional batteries or accessories. Any additional services, accessories, expenses, repairs not covered under warranty, ongoing maintenance, or unforeseen costs associated with the use of the equipment shall be the recipient's sole responsibility. Recipients are advised to review all potential costs associated with the equipment's operation and maintenance and plan for these expenses accordingly.

RESOLUTION NO. 25-R-014

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING THE SCHERTZ POLICE DEPARTMENT TO ACCEPT EQUIPMENT FROM THE ALAMO AREA COUNCIL OF GOVERNMENTS RECONYX ILLEGAL DUMPING CAMERA PROGRAM

WHEREAS, The Schertz City Council finds it in the best interest of the citizens of the City of Schertz that the City of Schertz, and the Schertz Police Department by extension, accept two RECONYX cameras to assist with illegal dumping operations.

WHEREAS, this equipment will assist in the investigation of illegal dumping sites and ensure the City of Schertz uses these tools to ensure the environment is protected.

WHEREAS, the approval covers two locations within the City of Schertz- the area of Pecan Grove Trailer Park and 100 FM 78. Additional locations can be authorized with justification.

WHEREAS, the Schertz City Council is informed that there is no matching funds required for said project. The Schertz Police Department will still be required to cover any maintenance costs during the program operation. These costs are not determined at this time.

WHEREAS, the Schertz City Council agrees that in the event of loss or misuse of the Office of the Governor funds, the Schertz City Council assures that the cameras will be returned to the Alamo Area Council of Governments (AACOG).

WHEREAS, the Schertz City Council designates the City Manager as the grantees's authorized official. The authorized official is given the power to apply for, accept, reject, alter, or terminate the grant on behalf of the applicant agency.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1.The City Council hereby approves the acceptance of the AACOG RECONYX cameras and designates Steve Williams, Schertz City Manager, as the Authorized Official to accept, decline, modify, or cancel the program application.

Section 2.James Lowery, Schertz Police Chief, is designated as the Program Director. There are no financial reports due, so no Financial Official is named. Quarterly operational reports will be submitted by the Schertz Police Department.

Section 3.The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 4.All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 5.This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 6.If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 7.It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 8.This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this _____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____

Mayor, Ralph Gutierrez

ATTEST:

_____

City Secretary, Sheila Edmondson

(CITY SEAL)

AACOG
Alamo Area Council of Governments

Application Form for Grant-Funded Illegal Dumping Cameras

Applicant Information

City/County/Entity Name: City of Schertz

Department/Division: Police Department

Department/Division Address: 1400 Schertz Parkway, Building 6

Schertz, TX 78133

Department/Division Phone: 210-619-1200

Primary Applicant/ Contact 1:

- Name: Phillip E. Waller
- Position: Assistant Chief of Police
- Email: pwaller@schertz.com
- Phone Number: 210-619-1243

Secondary Applicant/ Contact 2:

- Name: Henry Fahnert
- Position: Training Coordinator
- Email: hfahnert@schertz.com
- Phone Number: 210-619-1252

Camera Request Details:

Number of Camera Packages Requested: 3

Location Details

Location 1:

- Address/Coordinates: Cut Off Park- 700 block of FM 1518, Schertz, TX 78154
- Description of the area: A city-owned public park between FM 1518 and Aviation Blvd.
- Data/Proof of Need (upload photos, documents, etc.): No photos were taken at the time of clean up or complaint. Unable to locate specific cost of clean up from the City of Schertz.
- Plan/Justification for Camera Use: The Schertz Police Department will use the awarded camera at this location to assist with monitoring traffic to ensure no illegal dumping occurs. It is the hope of the Schertz Police Department, the enforcement of illegal dumping laws will keep the park an ecological preserve for public use and a welcome area for everyone to use. With the use of the camera in this area, if illegal dumping does occur, the Schertz Police Department will have better intelligence on identifying a suspect or suspects in the hopes of successful prosecution of Texas

state laws.

- Explanation of how the camera will help prevent illegal dumping at this location:
  The camera will be placed at locations where illegal dumping has already occurred in an effort to monitor areas known for past incidents of illegal dumping. By using the camera, the Schertz Police Department aims to identify suspects and use footage as investigative leads or as evidence to aid in successful prosecution.

Location 2:

- Address/Coordinates: 29.55270505464674, -98.26248224147082.
- Description of the area: Wooded area near Pecan Grove Trailer Park
- Data/Proof of Need (upload photos, documents, etc.): See Attachment 'A"
- Plan/Justification for Camera Use: The Schertz Police Department will use the awarded camera at this location to assist with monitoring traffic to ensure no illegal dumping occurs. It is the hope of the Schertz Police Department, the enforcement of illegal dumping laws will keep the park an ecological preserve for public use and a welcome area for everyone to use. With the use of the camera in this area, if illegal dumping does occur, the Schertz Police Department will have better intelligence on identifying a suspect or suspects in the hopes of successful prosecution of Texas state laws.
- Explanation of how the camera will help prevent illegal dumping at this location:
  The camera will be placed at locations where illegal dumping has already occurred in an effort to monitor areas known for past incidents of illegal dumping. By using the camera, the Schertz Police Department aims to identify suspects and use footage as investigative leads or as evidence to aid in successful prosecution.

Location 3:

- Address/Coordinates: 100 FM 78
- Description of the area: Area between Aztec Way and Palm Park
- Data/Proof of Need (upload photos, documents, etc.): See Attachment "B"
- Plan/Justification for Camera Use: The Schertz Police Department will use the awarded camera at this location to assist with monitoring traffic to ensure no illegal dumping occurs. Over the past two year, the City of Schertz has removed approximately 20,000 pounds of trash from this location. It is the hope of the Schertz Police Department, the enforcement of illegal dumping laws will keep the park an ecological preserve for public use and a welcome area for everyone to use. With the use of the camera in this area, if illegal dumping does occur, the Schertz Police Department will have better intelligence on identifying a suspect or suspects in the hopes of successful prosecution of Texas state laws.
- Explanation of how the camera will help prevent illegal dumping at this location:
  The camera will be placed at locations where illegal dumping has already occurred in an effort to monitor areas known for past incidents of illegal dumping. By using the camera, the Schertz Police Department aims to identify suspects and use footage as investigative leads or as evidence to aid in successful prosecution.

Additional Comments or Information:

There may be additional locations where the camera may be deployed after the camera is awarded. Due to the nature of illegal dumping and the wide, rural area of the City of Schertz, we cannot predict where issues may occur. Once a new issue is identified, the camera will be deployed in with the same plan and explanation of use at the locations listed above. Any

unnamed locations will be added in any report given to AACOG.

If this grant is approved by AACOG, the City of Schertz will require City Council approval prior to implementation.

I/We have read the Camera Set User Agreement, understand and agree to all information therein, and wish to apply for the aforementioned camera package(s).

Primary Applicant/Contact Signature: [signature]

Date: 1/2/25

Secondary Applicant/Contact Signature: [signature]

Date: 1-2-25

Attachment "A"













Attachment "B"









Agenda No. 8.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Engineering**
Subject:	**Resolution 25-R-002 – Authorizing a professional services agreement with Unintech Consulting Engineers, Inc. for the design of the Boenig Drive Reconstruction Project (B. James/K. Woodlee/J. Nowak)**

BACKGROUND

Boenig Drive started out as a County Road and later became part of the City of Schertz. The pavement section does not meet the current minimum standards for a City street. While the original pavement section served the community well for many years, as residential development occurred in the vicinity of the street, the pavement section began to deteriorate rapidly. The existing pavement section is not adequate to support the current traffic on the street. Additionally, the street is relatively narrow and should be widened slightly to provide for minimum driving lane widths.

Staff identified the need to improve Boenig some time ago, but funding was not available for the proposed improvements. Originally, Staff estimated, based on historical knowledge/recollection of the existing pavement section that the existing pavement section could be "salvaged" and the street "rehabilitated" with some minor widening. Until funding for a comprehensive improvement project could be secured, Public Works has performed various repairs to the street to keep it in serviceable condition. Previously, the City had geotechnical sampling done on Boenig and several other streets in the City to verify the current pavement sections and determine an appropriate course of action to improve them. The results of this analysis indicated that the existing section was less substantial than assumed and the street would need to be fully reconstructed.

In developing the scope of work for the project, Staff also noted that the current intersection of Boenig with Ware Seguin Road is less than ideal. This intersection is immediately adjacent to the Hallie Heights and Ware Seguin Road intersection and is located in a curve in Ware Seguin Rd. Since the street needed to be fully reconstructed, it would also be prudent to look at improving these intersections to make things function more efficiently and safely. The project scope includes analyzing these two intersections and reconstructing them to create a new, single intersection with Ware Seguin Rd. This project is included in the approved CIP and funding is available for it in this fiscal year.

With funding now available, Staff contacted one of the City's on-call Engineering Firms, Unintech, and requested they provide a scope and fee to design and create the bid package for this project. Staff has reviewed the scope and fee proposal for the project and has determined it is appropriate for the design and bid package development for the project. Staff recommends City Council authorize the City Manager to execute the attached Task Order for the design and bid package creation for the project.

GOAL

Have Council Authorize the City Manager to execute a Task Order for Unintech for design and bid package for the Boenig Drive Reconstruction project.

COMMUNITY BENEFIT

Reconstruction of the Boenig from Ware Seguin Road to Graytown Road will provide a wider, stronger pavement section. The stronger pavement section will be sufficient to handle the traffic on the street. The new street will be smoother and provide for better vehicle travel down the street. The Public Works Department will not need to perform additional, multiple repairs as they have had to on the existing section to keep the street "serviceable" to residents. Overall, access to the residential subdivisions along this section of Boenig Drive will be improved. Modifying the intersections of Hallei Heights and Boenig into a single intersection will provide for safer, more efficient access to Ware Seguin Road.

SUMMARY OF RECOMMENDED ACTION

Approval of the Task Order with Unintech Consulting Engineers for $267,312.00 and a not to exceed amount of $290,00.00 for the Boenig Drive Reconstruction project.

FISCAL IMPACT

Funding for the Task Order is available from Bond proceeds earmarked for streets. In the approved CIP, there is $1,600,000.00 of Bond proceeds allocated to this project. The recommended not to exceed design cost of $290,000.00 leaves $1,310,000.00 for construction. The preliminary construction estimate provided by Unintech with their scope and fee proposal is about $2,951,000.00. This indicates we will likely need more funding for construction of the project. The large difference between what Staff estimated and Unitech's estimate is likely due to increased construction costs from when Staff's estimate was created and differences in construction scope between what Staff Assumed and Unintech assumed. During the design process, any differences in construction scope will be resolved and more accurate construction cost estimates will be created. As part of the normal CIP review and update process, Staff will identify if additional funding can be allocated to this project for construction due to other projects being delayed or construction of this project needs to be delayed in order to secure additional funding for it.

RECOMMENDATION

Approval of Resolution 25-R-002.

Attachments

CIP Project List Boenig

Resolution 25-R-002

Boenig OPCC

CITY OF SCHERTZ
CAPITAL IMPROVEMENT PROJECT SHEET

Project Type: Transportation **Project Code:**

Project Title: Boenig, Ware Seguin to Graytown rehabilitation

Project Manager: Engineering

Location Description: Boenig, Ware Seguin to Graytown

Project Summary: The existing pavement section will be removed and replaced with a stronger pavement section capable of accommodating the existing and future traffic on the streets.

Start Date: Jan-25

Completion Date: Fall 2025

Project Forecast

	Prior Appropriation	2023-24	2024-25	2025-26	2026-27	2027-28	2028-33	Total Cost
Funding Source								
Bonds	$ -	$ -	$ 1,600,000	$ -	$ -	$ -	$ -	$ 1,600,000
	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ -	$ -	$ -		$ -	$ -	$ -	$ -
Total Funding Source	$ -	$ -	$ 1,600,000	$ -	$ -	$ -	$ -	$ 1,600,000
Expenditure								
Land Purchase	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Professional Services	$ -	$ -	$ 160,000	$ -	$ -	$ -	$ -	$ 160,000
Construction	$ -	$ -	$ 1,440,000	$ -	$ -	$ -	$ -	$ 1,440,000
Total Expenditure	$ -	$ -	$ 1,600,000	$ -	$ -	$ -	$ -	$ 1,600,000

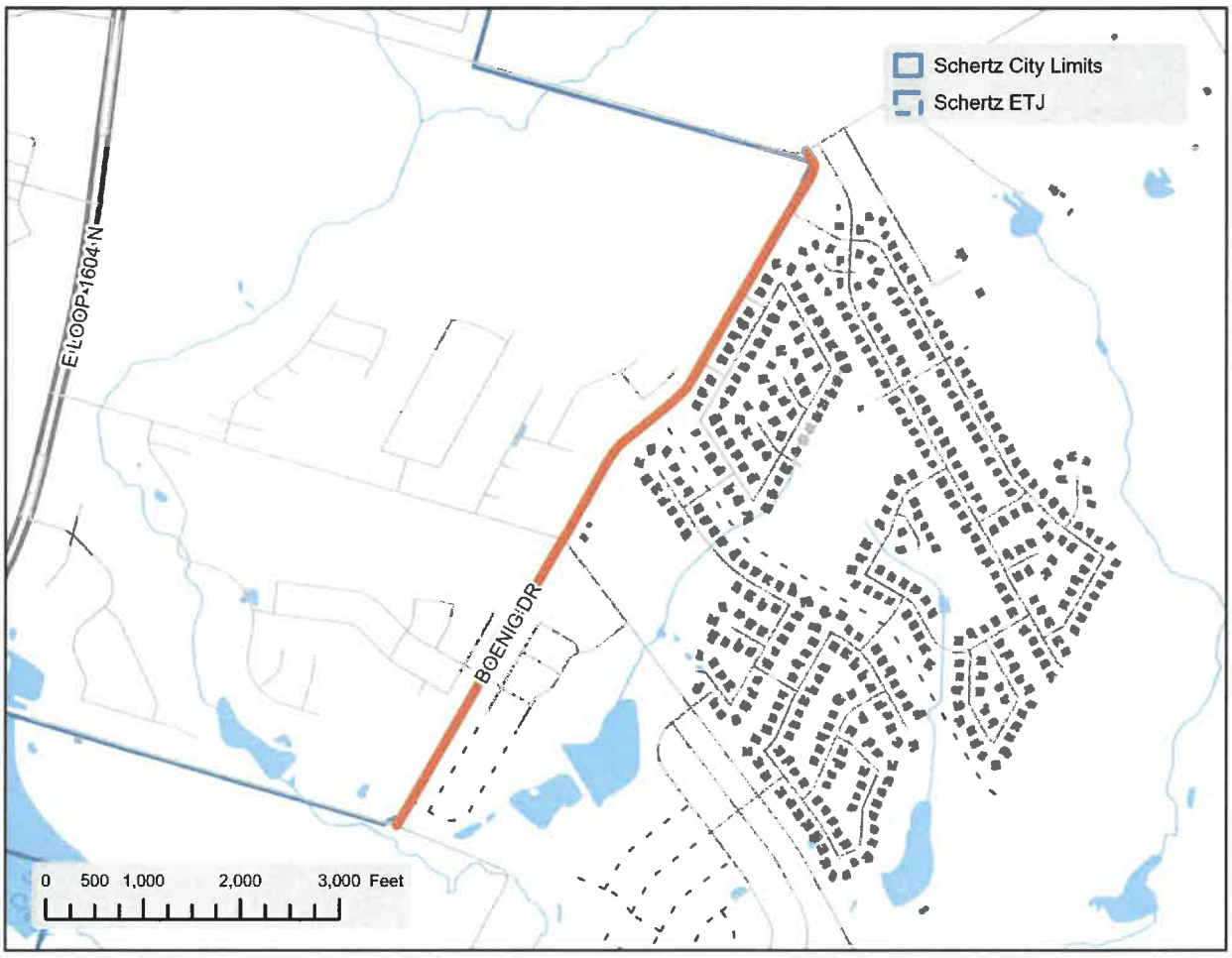
CITY OF SCHERTZ
CAPITAL IMPROVEMENT PROJECT SHEET

Project Type: Transportation **Project Code:** 0

Project Title: Boenig, Ware Seguin to Graytown rehabilitation

Location:

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.



N

BOENIG RECONSTRUCTION

SCHERTZ
COMMUNITY * SERVICE * OPPORTUNITY

RESOLUTION NO. 25-R-002

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING EXPEDITURES WITH UNINTECH CONSULTING ENGINEERS INC., TOTALING NO MORE THAN $290,000, FOR PROFESSIONAL ENGINEERING-RELATED SERVICES ON THE BOENIG DRIVE RECONSTRUCTION PROJECT, AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, the City staff of the City of Schertz (the "City") has determined that the City requires professional services relating to engineering and design for the Boenig Drive Reconstruction Project; and

WHEREAS, City staff has determined that Unintech Consulting Engineers, Inc. is uniquely qualified to provide such services for the City; and

WHEREAS, Unintech Consulting Engineers, Inc. is an approved On-Call Engineering Firm for the City of Schertz; and

WHEREAS, pursuant to Section 252.022(a)(4), the City is not required to seek bids or proposals with respect to a procurement for personal, professional, or planning purposes; and

WHEREAS, the City Council has determined that it is in the best interest of the City to contract with Unintech Consulting Engineers, Inc. pursuant to the On-Call Task Order Agreement attached hereto as Exhibit A (the "Agreement") up to a maximum total aggregate amount of $290,000.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes the City Manager to execute and deliver the Task Order Agreement with Unintech Consulting Engineers, Inc. in accordance with their approved Master Agreement in substantially the form set forth on Exhibit A in the amount of $267,312 and authorize the City Manager to execute and deliver the Task Order in a not to exceed total aggregate amount of $290,000.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this _____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

(CITY SEAL)

EXHIBIT A

TASK ORDER NO. 001 SERVICES AGREEMENT

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the specific Agreement between Owner and Engineer, and the controlling Laws and Regulations.

EJCDC® E-505, Agreement between Owner and Engineer for Professional Services—Task Order Edition, is published in four parts: (1) the Main Agreement (general provisions governing all Task Orders); (2) the Exhibits to Main Agreement; (3) the Task Order Form (see below); and (4) the Exhibits to Task Order. The Main Agreement contains a Guidelines for Use section that pertains to all four parts of E-505.

AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES— TASK ORDER EDITION

PART 3 OF 4: TASK ORDER FORM

Prepared by

EJCDC®
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

ACEC
AMERICAN COUNCIL OF ENGINEERING COMPANIES

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

NSPE® NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

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National Society of Professional Engineers

1420 King Street, Alexandria, VA 22314-2794

(703) 684-2882

www.nspe.org

American Council of Engineering Companies

1015 15th Street N.W., Washington, DC 20005

(202) 347-7474

www.acec.org

American Society of Civil Engineers

1801 Alexander Bell Drive, Reston, VA 20191-4400

(800) 548-2723

www.asce.org

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TASK ORDER NO. 001

This is Task Order No. **001**, consisting of 6 pages.

In accordance with Paragraph 1.01, Main Agreement, of the Agreement Between Owner and Engineer for Professional Services—Task Order Edition dated **,** Owner and Engineer agree as follows:

1. TASK ORDER DATA

a.	Effective Date of Task Order:	
b.	Owner:	**City of Schertz**
c.	Engineer:	**Unintech Consulting Engineers, Inc.**
d.	Specific Project (title)	**Boenig Drive Reconstruction**
e.	Specific Project (description):	Civil and Survey Engineering design services for the reconstruction of Boenig Drive from Ware Seguin Road to North Graytown Rd
f.	Related Task Orders Supplemented by this Task Order: Superseded by this Task Order:	

2. BASELINE INFORMATION

Baseline Information. Owner has furnished the following Specific Project information to Engineer as of the Effective Date of the Task Order. Engineer's scope of services has been developed based on this information. As the Specific Project moves forward, some of the information may change or be refined, and additional information will become known, resulting in the possible need to change, refine, or supplement the scope of services.

Specific Project Title:	Boenig Drive Reconstruction
Type and Size of Facility:	Local Type A Class Road – approximately 5100 LF
Description of Improvements:	Reconstruct the street with a new residential street section. Re-grade the barrow ditches to help things drain better and replace the

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	concrete low water crossing with culverts. Modify the intersection at Ware-Seguin Rd. by combining the two streets so there is only one intersection; re-aligning Boenig.
Expected Construction Start:	July 2025
Prior Studies, Reports, Plans:	Geotechnical Engineering Report by Terracon, dated 4-15-2022
Facility Location(s):	City of Schertz. From Ware Seguin Road to North Graytown Road
Current Specific Project Budget:	$2,952,000.00
Funding Sources:	CIP
Known Design Standards:	City of Schertz Public Works Design Guide, AASHTO Guide for Design of Pavement Structures 1993 Edition
Known Specific Project Limitations:	Boenig Drive from Ware Seguin Road to North Graytown Road.
Specific Project Assumptions:	Residential street to be a local street with 30-foot pavement width, new curbs, and with new sidewalk on east side of road to connect from Hallie Heights to the existing sidewalk along Boenig and continue existing sidewalk down to N Graytown. Wheelchair ramps to be installed at each intersection. The existing low water crossing from the Willow View subdivision in Converse to the Reserve at Schertz II is to be replaced with a multi box culvert crossing. Realign intersection of Ware Seguin Road to connect Boeing with Hallie Heights. This will require some right of way acquisition.
Other Pertinent Information:	Project is not in the Edwards Aquifer Regulated Zones, is not within an area known for environmentally sensitive features, is not located within a FEMA designated flood hazard area. Existing 8” waterline to remain; no anticipated improvements. Existing sanitary sewer crosses Boenig near the existing low water crossing; no anticipated improvements. A geotechnical sampling and report will be required.

3. SERVICES OF ENGINEER (“SCOPE”)

A. The specific Basic Services to be provided or furnished by Engineer under this Task Order are:

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☐ Exhibit A to Task Order, "Engineer's Services for Task Order," as attached to this specific Task Order.

B. All the services included above comprise Basic Services for purposes of Engineer's compensation under this Task Order, with the exception of Resident Project Representative Services, if any, which are compensated separately.

C. Resident Project Representative (RPR) Services:

1. If the Scope established in Paragraph 2.A above includes RPR services, then Exhibit D to Task Order is expressly incorporated in this Task Order by reference.

D. Additional Services: Services not expressly set forth as Basic Services in Paragraph 3.A above, and necessary services listed as not requiring Owner's written authorization, or requiring additional effort in an immediate, expeditious, or accelerated manner as a result of unanticipated construction events or Specific Project conditions, are Additional Services, and will be compensated by the method indicated for Additional Services in this Task Order. All other Additional Services require mutual agreement and may be authorized by amending the Task Order as set forth in Paragraph 8.05.B.2 of the Main Agreement, with compensation for such other Additional Services as set forth in the amending instrument.

4. DELIVERABLES SCHEDULE

A. In submitting required Documents and taking other related actions, Engineer and Owner will comply with Exhibit B to Task Order, attached to this specific Task Order.

5. ADDITIONS TO OWNER'S RESPONSIBILITIES

A. Owner shall have those responsibilities set forth in Article 2 of the Main Agreement, and the following supplemental responsibilities that are specific to this Task Order:

1. **Deliver and obtain Right of Entry to property owners within the limits of the project, but outside of existing right of way, that require access for the engineer or subconsultants.**

2. **Provide easement and right of way acquisition negotiation.**

6. TASK ORDER SCHEDULE

A. In addition to any schedule provisions provided in Exhibit B or elsewhere, the parties shall meet the following schedule: **Not Applicable**

Date	Action / Milestone	Comment

7. ENGINEER'S COMPENSATION

A. The terms of payment are set forth in Article 4 of the Main Agreement.

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B. Owner shall pay Engineer for services rendered under this Task Order as follows:

Description of Service	Amount	Basis of Compensation
1. Basic Services		
a. Preliminary Design Phase	$119,654.00	**LUMP SUM**
b. Final Design Phase	$96,595.00	**LUMP SUM**
c. Bid Phase	$7,731.00	**LUMP SUM**
d. Construction	$17,726.00	**LUMP SUM**
e. Closeout	$2,406.00	**LUMP SUM**
2. Resident Project Representative Services*	**N/A**	**N/A**
TOTAL COMPENSATION (items 1 and 2)	$244,112.00	
3. Additional Services under Section 3.D above	**$23,200.00**	
ROW Exhibit and Field Notes (max 2)	$4,600.00	**LUMP SUM**
Platting Services	$7,500.00	**LUMP SUM**
SUE Level A Locates (6.1-10 ft) (Estimated 1 @$3,100/ea)	$3,100.00	**LUMP SUM**
SUE Level B (lump sum) (Estimated 300 feet)	$8,000.00	**LUMP SUM**

*Based on an **8**-month continuous construction period.

C. Compensation items and totals based in whole or in part on Hourly Rates or Direct Labor are estimates only. Lump sum amounts and estimated totals included in the breakdown by phases incorporate Engineer's labor, overhead, profit, reimbursable expenses (if any), and Subconsultants' charges, if any. For lump sum items, Engineer may alter the distribution of compensation between individual phases (line items) to be consistent with services actually rendered but shall not exceed the total lump sum compensation amount unless approved in writing by the Owner.

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8. ENGINEER'S PRIMARY SUBCONSULTANTS FOR TASK ORDER, AS OF THE EFFECTIVE DATE OF THE TASK ORDER:

A. **Underground Services, Inc (SoftDIG)**

9. EXHIBITS AND ATTACHMENTS:

A. Exhibit A to Task Order—Engineer's Services Under Task Order

B. Exhibit B to Task Order—Task Order Deliverables Schedule

C. Exhibit D to Task Order—Duties, Responsibilities, and Limitations of Authority of Resident Project Representative Under Task Order

D. Exhibit E to Task Order-EJCDC® C-626, Notice of Acceptability of Work (Form)

E. Other:

Execution of this Task Order by Owner and Engineer makes it subject to the terms and conditions of the Main Agreement and its exhibits and appendices, which Main Agreement, exhibits, and appendices are incorporated by this reference.

OWNER:	ENGINEER:
By: _____	By: Mark B Hill
Print Name: _____	Print Name: Mark B Hill
Title: _____	Title: Director and Shareholder
	Engineer's License or Firm's Certificate No. (if required): 94904
	State of: Texas
DESIGNATED REPRESENTATIVE FOR TASK ORDER:	DESIGNATED REPRESENTATIVE FOR TASK ORDER:
Name: _____	Name: Mark B Hill
Title: _____	Title: Director and Shareholder
Address: _____	Address: 2431 E. Evans Rd
_____	San Antonio, Texas

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E-Mail Address:		E-Mail Address:	mhill@unintech.com
Phone:		Phone:	210-590-4777
Date:		Date:	1-9-2025

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AGREEMENT BETWEEN OWNER AND ENGINEER FOR PROFESSIONAL SERVICES— TASK ORDER EDITION

PART 4 OF 4: EXHIBITS TO TASK ORDER

Prepared by

EJCDC®
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

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National Society of Professional Engineers

1420 King Street, Alexandria, VA 22314-2794

(703) 684-2882

www.nspe.org

American Council of Engineering Companies

1015 15th Street N.W., Washington, DC 20005

(202) 347-7474

www.acec.org

American Society of Civil Engineers

1801 Alexander Bell Drive, Reston, VA 20191-4400

(800) 548-2723

www.asce.org

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EXHIBITS TO TASK ORDER

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1.

Article 1 of the Main Agreement, Services of Engineer, is supplemented to include the following provisions:

Engineer shall provide Basic and Additional Services as set forth below.

ARTICLE 1—BASIC SERVICES

1.01 Management of Engineering Services

A. See Main Agreement, Paragraph 1.03.

1.02 Study and Report Phase

~~A. Engineer shall:~~

~~1. Consult with Owner to define and clarify Owner's requirements for the Specific Project, including design objectives and constraints, space, capacity and performance requirements, flexibility, and expandability, and any budgetary limitations, and identify available data, information, reports, facilities plans, and site evaluations.~~

~~a. If Owner has already identified one or more potential solutions to meet its Specific Project requirements, then proceed with the study and evaluation of the Owner-identified potential solutions listed here:~~

~~1) **[List the specific potential solutions to be studied and evaluated here].**~~

~~b. If Owner has not identified specific potential solutions for study and evaluation, then assist Owner in determining whether Owner's requirements, and available data, reports, plans, and evaluations, point to a single potential solution for Engineer's study and evaluation, or are such that it will be necessary for Engineer to identify, study, and evaluate multiple potential solutions.~~

~~c. If it is necessary for Engineer to identify, study, and evaluate multiple potential solutions, then identify **[insert specific number]** alternative solutions potentially~~

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available to Owner, unless Owner and Engineer mutually agree that some other specific number of alternatives should be identified, studied, and evaluated.

2. Identify potential solution(s) to meet Owner's Specific Project requirements, as needed.

3. Study and evaluate the potential solution(s) to meet Owner's Specific Project requirements.

4. Visit the Site, or potential Specific Project sites, to review existing conditions and facilities, unless such visits are not necessary or applicable to meeting the objectives of the Study and Report Phase.

5. Assess initially available Specific Project information and data, including the Baseline Information set forth at the beginning of this Exhibit A.

6. Advise Owner of any need for Owner to obtain, furnish, or otherwise make available to Engineer additional Specific Project-related information and data, for Engineer's use in the study and evaluation of potential solution(s) to Owner's Specific Project requirements, and preparation of a related report.

7. After consultation with Owner, recommend the solution(s) which in Engineer's judgment meet Owner's requirements for the Specific Project.

8. Identify, consult with, and analyze requirements of authorities having jurisdiction to permit or approve construction or operation of the portions of the Specific Project to be designed or specified by Engineer, including but not limited to impacts and mitigating measures identified in previously prepared environmental assessments for the Specific Project provided to the Engineer or being concurrently prepared for Owner by others.

9. Advise the Owner of any need for Owner to provide data or services of the types described in Article 2 of the Agreement, for use in Specific Project design, or in preparation for Contractor selection and construction.

10. Assist Owner in evaluating the possible use of building information modeling; civil integrated management; geotechnical baselining of subsurface conditions at the Site; innovative design, contracting, or procurement strategies; project delivery method; or other strategies, technologies, or techniques for assisting in the design, construction, and operation of Owner's facilities. The subject matter of this paragraph will be referred to in Exhibit A as "Specific Project Strategies, Technologies, and Techniques."

11. Assist Owner in identifying opportunities for enhancing the sustainability of the Specific Project, and pursuant to Owner's instructions, plan for the inclusion of sustainable features in the design.

12. Review with Owner the thresholds established in applicable codes, standards, and design criteria specifically governing the ability of the proposed facilities or improvements to perform, and to absorb or avoid damage without suffering complete or substantial failure. As part of the review, identify additional risk assessment studies or tools that are available to evaluate the susceptibility of the facilities or improvements to natural and man-made events beyond the applicable established thresholds. Upon Owner request, as an additional service, perform additional risk assessment studies or tools to further evaluate system resiliency beyond the applicable established thresholds.

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13. Utilities, including Underground Facilities

    a. Review any utility mapping and surveys and other utilities documentation made available by Owner. Take note of observable utilities during Site visit.

    b. Identify, in a preliminary manner and to the extent determinable by such mapping or other information provided by Owner, and by observations at the Site, those utilities (whether above-ground utilities of any type, or Underground Facilities) likely to be affected by the Specific Project construction and additional utility facilities or extensions that will be needed to serve the Specific Project.

    c. If the impact on existing utilities or the need for additional utility facilities or extensions cannot reasonably be determined in a preliminary manner from mapping or other information provided by Owner, or such information was not available from Owner, then assist Owner in evaluating the need to either obtain additional utility mapping and utility documentation during the Study and Report Phase, or undertake other alternative approaches and contingencies to account for utility uncertainties in this phase.

    d. Advise Owner of additional utility documentation and coordination needed during the design and construction phases to adequately assess, mitigate, and manage the impact of the Specific Project (including any additional utility facilities or extensions needed to serve the Specific Project) on existing utilities.

    e. Use ASCE 38, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data" as a means to advise the Owner regarding the extent and identification and mapping of existing Underground Facilities during the design and construction phases.

        1) If Owner has retained a land surveyor, utility engineer, or utility consultant, collaborate with such individuals or entities regarding the application of ASCE 38.

14. Inquire regarding survey methodologies and technologies that would aid in addressing Owner's Specific Project requirements. Develop a scope of work and survey limits for any topographic and other surveys necessary for design. For recommended survey deliverables, specify a) required technical specifications; b) pertinent datum; c) survey limits, and d) formats of deliverables. Collaborate with land surveyor, when separately retained by Owner or third party, to develop such scope of work.

15. Prepare a report (the "Report") which will, as appropriate, contain schematic layouts, sketches, and conceptual design criteria with appropriate exhibits to indicate the agreed-to requirements, considerations involved, and Engineer's recommended solution(s).

    a. For each recommended solution, Engineer will separately tabulate Total Project Cost, itemizing those items and services included within the definition of Total Project Costs.

    b. Engineer will meet with Owner to discuss the draft Report and receive Owner's comments.

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16. Perform or provide the following other Study and Report Phase tasks or deliverables:

    a. **[List any such tasks or deliverables here]**.

17. Furnish the Report and any other Study and Report Phase deliverables to Owner pursuant to the requirements of the Deliverables Schedule in Exhibit B, and review the deliverables with Owner.

18. Revise the Report and any other Study and Report Phase deliverables in response to Owner's comments, as appropriate, and submit revised deliverables pursuant to the Deliverables Schedule.

B.A. Engineer's services under the Study and Report Phase will be considered complete on the date when Engineer has delivered to Owner the final Report (as revised) and any other Study and Report Phase deliverables.Not included in this task order

1.03 Preliminary Design Phase

A. After acceptance by Owner of the Report and any other Study and Report Phase deliverables (if Engineer's services under this Agreement included Study and Report Phase services); selection by Owner of a recommended solution; issuance by Owner of any instructions for use of Specific Project Strategies, Technologies, and Techniques, or for inclusion of sustainable features in the design, or enhanced resiliency of the design; indication by Owner of any specific modifications or changes in the scope, extent, character, or design requirements of the Specific Project desired by Owner; and any necessary changes, refinements, and supplementation of the Baseline Information set forth at the beginning of this Exhibit A, Engineer and Owner shall discuss, resolve, and document in writing any necessary revisions to Engineer's scope of services, compensation (through application of the provisions regarding Additional Services, or otherwise), and the time for completion of Engineer's services, resulting from the selected solution, related Specific Project Strategies, Technologies, or Techniques, sustainable design and resiliency instructions, specific modifications to the Specific Project, or changes, refinements, or supplementation of the Baseline Information.

B. Upon written authorization from Owner, Engineer shall:

1. Review and assess all available Specific Project information and data, including any pertinent reports or studies (whether prepared by Engineer or others) and any related instructions from Owner.

2. Based on the threshold review and assessment of available information and data, advise Owner of any need for Owner to obtain, furnish, or otherwise make available to Engineer any additional information and data, for Engineer's use in the preparation of a Preliminary Design Phase Report.

3. Prepare a Preliminary Design Phase Report in the following format

    a. **narrative report with calculations and summary of design decisions as described below**

    b. **assemblage of preliminary construction plans**.

4. The Preliminary Design Phase Report will consist of final design criteria, preliminary drawings, a preliminary list of expected specifications, and written descriptions of the

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Specific Project. The Preliminary Design Phase Report will consider the following matters to the extent applicable to the Specific Project and as necessary to establish the basis of design for proceeding to final design and construction:

a. The Specific Project concept, intent, performance criteria, desired outcomes, Owner's standards and Owner directed improvements and facility elements as established in the Study and Report Phase and as expressly set forth in the Baseline Information section of this Exhibit A (collectively the "Specific Project Goals").

b. Recommended appropriate design criteria for each primary portion and significant discipline of the design necessary to address the Specific Project Goals.

c. Site conditions and characterization as known at the time of, or to be determined during, the Preliminary Design Phase, including topography; subsurface information; Constituents of Concern; cultural, historical, and archaeological resources at the Site; wetlands information; and evaluations of flora and fauna that may be affected by the Specific Project.

d. The time schedule for completion of the Specific Project in accordance with Specific Project Goals, including any recommended changes to the time required to complete the Final Design Phase (as set forth in Exhibit B, Deliverables Schedule) and estimated schedule(s) for construction.

e. Identification of major items of materials and equipment, rationale for selection with consideration of quality, suitability, pricing, sourcing, regulatory, and bidding issues affecting recommended selection.

f. Revised opinions of probable Construction Cost.

g. The impact of Specific Project Strategies, Technologies, and Techniques, sustainable features, and enhanced resiliency selected by Owner for inclusion in the Specific Project on the Specific Project Goals, schedule and probable Construction Cost, including impact of multiple prime construction contracts, separate procurement of materials or equipment, and other alternate project delivery methods when the Specific Project Goals necessitate and Owner authorizes;

h. Construction Phase quality assurance and quality control needs affecting development of Drawings and Specifications and other Final Design and Bidding Phase documents.

i. The effect of permits and authorizations by other entities and utility coordination needs on the Specific Project.

j. Other matters and information pertinent to addressing the Specific Project Goals.

5. In preparing the Preliminary Design Phase Report, use any specific applicable Specific Project Strategies, Technologies, and Techniques authorized by Owner during or following the Study and Report Phase, and include sustainable features and enhanced resiliency, as appropriate, pursuant to Owner's instructions.

6. Visit the Site as needed to prepare the Preliminary Design Phase Report.

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7. If at any point in the Preliminary Design Phase it becomes apparent to Engineer that additional reports, data, information, or services of the types described in Article 2 are necessary, then so advise Owner, and assist Owner in obtaining such reports, data, information, or services.

8. Above-Ground Utilities

    a. Review above-ground utilities information obtained from Owner and from observations at the Site.

    b. Make recommendations regarding any further identification, investigation, and mapping of above-ground utilities at or adjacent to the Site, for Engineer's design purposes or otherwise.

    c. Account for above-ground utilities, based on available information, when advancing design during the Preliminary Design Phase.

9. Underground Facilities

    a. Review Underground Facilities data furnished by Owner. Assist Owner in reducing and managing risks associated with Underground Facilities by working together with Owner to jointly establish a procedure ("Underground Facilities Procedure") for the further identification, investigation, and mapping of Underground Facilities at or adjacent to the Site, using ASCE 38, "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data," as a basis for establishing such Underground Facilities Procedure.

    b. Such Underground Facilities Procedure must take into account the Site and the nature of the Specific Project.

    c. Use the Underground Facilities Procedure to aid in the performance of design services:

        1) Account for Underground Facilities, based on available information, when advancing the design during the Preliminary Design Phase.

        2) The Underground Facilities Procedure will include a plan to keep Underground Facilities information current as Engineer proceeds with the provision of design services, and to add new or relocated Underground Facilities information to the base utility or Site drawings.

        3) To manage the potential impact of design changes on Underground Facilities, Engineer shall work together with Owner to modify or reapply the Underground Facilities Procedure as the design progresses and changes.

10. Mitigation of Utilities Conflicts

    a. Identify potential conflicts between the Specific Project (including existing and new facilities and structures) and above-ground utilities and Underground Facilities as reviewed in Exhibit A Paragraphs 1.03.B.8 and 9 above, and advise Owner regarding the need for resolution of such conflicts with utility and Underground Facilities owners and permit agencies. Identify the potential need for the relocation of existing above-ground utilities and Underground Facilities.

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b. Update the Underground Facilities Procedure as necessary for any Underground Utilities conflicts and relocations.

c. Working together with Owner, jointly identify which specific parties or other entities will be responsible for implementation of the various specific parts of the Underground Facilities Procedure (including those parts that address resolution of Underground Facilities conflicts), and for resolution of above-ground utilities conflicts. Such identification will take into account Owner's authority and standing, as owner of the Site, with respect to Underground Facilities and above-ground utilities.

1) To the extent that Owner and Engineer agree that in addition to performing the design-related obligations set forth in Exhibit A Paragraphs 1.03.B.8 and 9, Engineer will also implement any non-design part of the Underground Facilities Procedure (including resolution of Underground Facilities conflicts), or undertake resolution of above-ground utilities conflicts, such additional duties will be Additional Services under Article 2 of this Exhibit A.

11. Surveys, Topographic Mapping, and Utility Documentation

a. Coordinate with Owner's utility engineer, utility consultant, or land surveyor for the necessary field surveys, topographic mapping, and utility documentation required for Engineer's design purposes, or by the Underground Facilities Procedure.

b. If no scope of work and procedure for utility documentation has been established, selected, or authorized, then at a minimum Engineer will contact utility owners and obtain available information. Except as otherwise provided in this Agreement, Owner acknowledges that the information gathered from utility owners may be incorrect, incomplete, outdated, or otherwise flawed, and as to Engineer, bidders, and Contractor, the Owner accepts all associated risks. Owner reserves all associated rights as to recourse against the sources of such flawed information and against third parties.

12. Prepare initial draft of a comprehensive permit document that identifies Owner's permit duties, Engineer's permit duties, and Contractor's permit duties, and the schedule for permitting activities.

13. Continue to assist Owner with Specific Project Strategies, Technologies, and Techniques that Owner has chosen to implement in Exhibit A Paragraph 1.03.A.

14. Obtain Owner's instructions regarding Owner's procurement of construction services (including ~~instructions regarding advertisements for bids,~~ instructions to bidders, and requests for proposals, as applicable), Owner's construction contract practices and requirements, insurance and bonding requirements, electronic transmittals during construction, and other information necessary for the finalization of Owner's Bidding/Proposal Documents and Front-End Construction Contract Documents.

a. Also obtain copies of Owner's standard Bidding/Proposal Documents and Front-End Construction Contract Documents (~~if other than~~modified version of the EJCDC ~~2018~~ Construction Series documents), and any other related documents or content

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for Engineer to include in drafts of the Specific Project-specific Bidding/Proposal Documents and Front-End Construction Contract Documents, when applicable.

b. Review Owner's instructions regarding procurement, bidding and contracting of construction services with respect to effects on the Specific Project design, schedule and construction and address as needed in the Preliminary Design Phase deliverables.

15. Prepare the Preliminary Design Phase Report. This Report will consist of, as appropriate, separate or combined submittals in whole or summary, the Preliminary Design Phase documents listed in Exhibit A Paragraph 1.03.B.4, and Engineer's findings and recommendations for advancing the Specific Project to the Final Design Phase (including Engineer's findings and recommendations, if any, regarding permitting, utilities, and Underground Facilities). The submittal will be in the format of a report, or otherwise organized and assembled for ease and practicality of use.

    a. Based on the information contained in the Preliminary Design Phase documents, prepare a revised opinion of probable Construction Cost, and on the basis of information furnished by Owner, assist Owner in tabulating the various cost categories which comprise Total Project Costs.

    b. Engineer will meet with Owner to discuss the draft Preliminary Design Phase submittal and receive Owner's comments.

16. Perform or provide the following other Preliminary Design Phase tasks or deliverables:

    a. **Topographic Survey: Establish primary control for the length of the project. Provide survey quality level C utility locates, develop an existing conditions model for the width of the anticipated right of way**

    b. **Roadway Design: Provide typical existing and proposed roadway sections following City of Schertz Design Criteria. Establish a proposed roadway horizontal and vertical profiles. Provide plan and profile for the street at a 1:20 scale on 22"x34" plan sheets. Provide cross sections of the proposed roadway at 50-foot per City design criteria. Provide a summary of driveway improvements.**

    c. **Drainage Design: Provide a drainage area map and model existing and proposed hydrology per the city design criteria. Appropriately size and situate culvert design at stream crossings. Provide culvert plans and sections.**

    d. **Utility Design: Coordinate with non- City maintained utilities located within the construction limits. Provide plans and profiles, as appropriate, for relocation of existing water utilities as necessary.**

    e. **Temporary Traffic Control Design: Provide Preliminary plans for construction phasing, traffic control sections and construction phasing layout.**

17. Furnish the Preliminary Design Phase Report, opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables to Owner pursuant to the requirements of the Deliverables Schedule in Exhibit B, and review the deliverables with Owner.

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18. Revise the Report and any other deliverables in response to Owner's comments, as appropriate, and submit revised deliverables pursuant to the Deliverables Schedule.

C. Engineer's services under the Preliminary Design Phase will be considered complete on the date when Engineer has delivered to Owner the final Preliminary Design Phase Report (as revised) and associated documents, revised opinion of probable Construction Cost, and any other Preliminary Design Phase deliverables.

1.04 Final Design Phase

A. After acceptance by Owner of the Preliminary Design Phase Report and any other Preliminary Design Phase deliverables; issuance by Owner of any instructions for specific modifications or changes in the scope, extent, character, or design requirements of the Specific Project desired by Owner; and any necessary changes, refinements, and supplementation of the Baseline Information set forth at the beginning of this Exhibit A, Engineer and Owner shall discuss, resolve, and document any necessary revisions to Engineer's scope of services, compensation (through application of the provisions regarding Additional Services, or otherwise), and the time for completion of Engineer's services, resulting from specific modifications to the Specific Project, or changes, refinements, or supplementation of the Baseline Information.

1. The number of prime contracts for Work designed or specified by Engineer upon which the Engineer's compensation has been established under this Agreement is **one (1)** If more prime contracts are awarded, Engineer shall be entitled to an equitable increase in its compensation under this Agreement.

2. If more than one prime construction contract is to be awarded for the Work designed or specified by Engineer, then Owner shall define and set forth (in an exhibit to this Agreement, or in a subsequent document) the duties, responsibilities, and limitations of authority of a person or entity that will have authority and responsibility for coordinating the activities among the various prime Contractors, and any resulting changes in the duties, responsibilities, and authority of Engineer.

3. In the event that the Work designed or specified by Engineer is to be performed or furnished under more than one prime construction contract, or if Engineer's services are to be separately sequenced with the work of one or more separate design professional consultants or prime Contractors (such as in the case of fast-tracking), Owner and Engineer shall, prior to commencement of the Final Design Phase, develop a schedule for performance of Engineer's services during the Final Design, Bidding/Proposal, Construction, and Post-Construction Phases in order to sequence and coordinate properly such services as are applicable under such separate prime construction contracts. This schedule is to be prepared and included in or become an amendment to Exhibit A whether or not the work under such construction contracts is to proceed concurrently.

B. Upon written authorization from Owner, Engineer shall prepare final Drawings and Specifications indicating the scope, extent, and character of the Work to be performed and furnished by Contractor, in accordance with the Preliminary Design Phase Report (as revised) and other Preliminary Design Phase deliverables. As part of the preparation of the Drawings and Specifications, Engineer shall prepare interim drafts and final Drawings and Specifications as follows, pursuant to the Deliverables Schedule in Exhibit B:

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1. First Final Design Phase draft of all Drawings and Specifications.

~~2. Second Final Design Phase draft of all Drawings and Specifications, addressing Owner comments and including appropriate design advancement.~~

~~3.~~2. Final Drawings and Specifications that address Owner comments; complete the design; are suitable for estimating and pricing by prospective Contractors; and are complete and ready for construction.

C. In preparing the Specifications (and any bidding, contract, or other documents that are part of Engineer's scope of services), Engineer shall obtain from Owner or Owner's legal counsel any relevant constraints such as requirements for use of domestic steel and iron, other domestic purchasing requirements, statutory restrictions on utilizing proprietary specifying methods, and the like, and comply with or account for such constraints in drafting Specifications, Bidding/Proposal Documents, and other Specific Project documents.

D. Engineer shall prepare or assemble draft Bidding/Proposal Documents and Front-End Construction Contract Documents as follows:

1. Such documents will be based on the 2018 EJCDC Construction Documents, and on the specific bidding or Contractor selection-related instructions and forms, contract forms, text, or other content received from Owner.

2. When Engineer is required to use other than the 2018 EJCDC Construction Documents, then as required in the Preliminary Design Phase Owner will furnish to Engineer a copy of the required documents to be used for the Specific Project's Bidding/Proposal Documents and Front-End Construction Contract Documents. Prior to the first Final Design Phase submittal, Engineer will review the bidding and contracting documents furnished by Owner and provide comments to Owner. Engineer will meet with Owner to discuss Engineer's comments. Owner will consider Engineer's recommendations to revise Owner's documents for the Specific Project.

3. Engineer will furnish to Owner, for review by Owner's legal counsel, the draft Bidding/Proposal Documents and Front-End Construction Contract Documents. Owner and Owner's legal counsel must transmit to Engineer, in a timely manner, one coordinated set of comments and revisions to the draft documents.

E. During the Final Design Phase the Engineer shall continue to account for above-ground utilities and Underground Facilities as the design advances and is finalized. This may include:

1. performing the services assigned to Engineer under the Underground Facilities Procedure described in Exhibit A Paragraph 1.03 above, including but not limited to the design-related tasks in Exhibit A Paragraph 1.03.B.9.

2. addressing required and proposed activities or mitigations identified in the analysis of utilities and by the Underground Facilities Procedure as having an impact on the final design, and considering such in preparing the Drawings and Specifications.

F. Engineer shall perform or furnish the following other Final Design Phase services:

1. Visit the Site as needed to assist in preparing the final Drawings and Specifications.

2. Assist with or prepare applications for permits and approvals, as follows:

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a. Update comprehensive permit document created in Preliminary Design Phase for Final Design detail.

b. Prepare the following applications for Owner's submittal to authorities having jurisdiction over the construction or operation of the Specific Project:

1) **Texas Department of Licensing and Regulation for ADA Compliance and permitting if the monetary amount of pedestrian improvements exceeds $50,000.**

c. Confer with Owner regarding revisions, if any, to the application(s), and make appropriate revisions to the application(s) for Owner's resubmittal to the authority having jurisdiction.

d. Provide technical criteria, written descriptions, and design data for Owner's use in filing applications for permits from or approvals of the authorities having jurisdiction listed above, including applications for review or approval of the final design.

e. Identify and indicate in the Construction Contract Documents the permits and approvals for which Contractor will be responsible, including work permits, building permits, and other permits and approvals that will be Contractor's responsibility; and, in addition, indicate those permits initially obtained by Owner for which Contractor will be a co-permittee, together with associated requirements.

f. Unless expressly indicated otherwise, Engineer's scope and budget includes attending one meeting or conference call with each permit and approval-issuing agency to discuss the Specific Project and receive the agency's comments on the application.

g. Engineer does not guarantee issuance of any required permit or approval.

h. Fees charged by authorities having jurisdiction for such permits or approvals are the responsibility of Owner.

3. Advise Owner of any recommended adjustments to the opinion of probable Construction Cost. Furnish to Owner an updated opinion of probable Construction Cost with the interim and final deliverables of the Drawings and Specifications.

4. After consultation with Owner, include in the Front-End Construction Contract Documents any Electronic Document Protocol addressing specific protocols for the transmittal of Specific Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Specific Project website.

5. Assist Owner in assembling known reports and drawings of Site conditions, and in identifying the technical data contained in such reports and drawings upon which bidders or other prospective contractors may rely.

6. Review the preliminary schedule for the Construction Phase and advise Owner when initial understanding of the Construction Contract Times must or should be revised, and furnish Owner with recommendations on revisions to the proposed Construction Contract Times.

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7. Engineer's project manager and other appropriate staff will participate in the following meetings and conference calls:

   a. First draft design review meeting at Owner's office.

   ~~b. Second draft design review meeting at Owner's office.~~

   ~~c. **[Indicate others as appropriate for the Specific Project]**.~~

   ~~d.~~b. Engineer will prepare and distribute minutes of each such meeting and conference call, indicating attendees, topics discussed, decisions made, and action items for follow-up.

8. Perform or provide the following other Final Design Phase activities or deliverables:

   a. **Roadway Design: Provide typical existing and proposed roadway sections following City of Schertz Design Criteria. Establish a proposed roadway horizontal and vertical profiles. Provide plan and profile for the street at a 1:20 scale on 22"x34" plan sheets. Provide cross sections of the proposed roadway at 50-foot per City design criteria. Provide a summary of driveway improvements.**

   b. **Drainage Design: Provide a drainage area map and model existing and proposed hydrology per the city design criteria. Appropriately size and situate culvert design at stream crossings. Provide culvert plans and sections. Provide a final storm water report.**

   c. **Utility Design: Coordinate with non- City maintained utilities located within the construction limits. Provide plans and profiles, as appropriate, for relocation of existing water utilities as necessary.**

   d. **Temporary Traffic Control Design: Provide Preliminary plans for construction phasing, traffic control sections and construction phasing layout. Provide a traffic detour layout and barricade plan**

   e. **Pavement Marking Plans: Provide pavement marking plans compliant with local and state standards.**

   f. **SWPPP- Provide an erosion control plan, narrative, and appropriate details for facilitate the submittal of a Notice of Intent by the contractor.**

   g. **Provide a tree mitigation plans for the removal of existing trees.**

G. Engineer shall complete the Final Design Phase as follows:

1. Pursuant to the requirements of the Deliverables Schedule in Exhibit B, furnish for review by Owner, its legal counsel, and other advisors, the final Drawings and Specifications (as set forth in Exhibit A Paragraph 1.04.B.3 above); assembled drafts of other Construction Contract Documents including the draft Front-End Construction Contract Documents; the draft Bidding/Proposal Documents; the most recent opinion of probable Construction Cost; and any other Final Design Phase deliverables, and review the deliverables with Owner.

2. Revise the final Design Phase deliverables in response to Owner's comments, as appropriate, and submit revised deliverables pursuant to the Deliverables Schedule.

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3. Engineer's services under the Final Design Phase will be considered complete on the date when Engineer has delivered to Owner the final Drawings and Specifications; assembled drafts of the Front-End Construction Contract Documents; the draft Bidding/Proposal Documents; and any other Final Design Phase deliverables, as revised.

1.05 Bidding/Proposal Phase

A. After acceptance by Owner of the final Drawings and Specifications; assembled drafts of other Construction Contract Documents, including the draft Front-End Construction Contract Documents; the draft Bidding/Proposal Documents; the most recent opinion of probable Construction Cost as determined in the Final Design Phase, and any other Final Design Phase deliverables, and upon written authorization by Owner to proceed, Engineer shall:

1. Assist Owner in advertising for and obtaining bids or proposals for the Work; assist Owner in issuing assembled Bidding/Proposal Documents and proposed Construction Contract Documents to prospective contractors; if applicable, maintain a record of prospective contractors to which documents have been issued; attend pre-bid conferences, if any; and receive and process contractor deposits or charges, if any, for the issued documents.

a. **Owner's procurement website**

2. Prepare and issue addenda as appropriate to clarify, correct, or change the issued documents.

3. If the issued documents require, the Engineer shall evaluate and determine the acceptability of "or equals" and substitute materials and equipment proposed by prospective contractors, provided that such proposals are allowed by the bidding-related documents (or requests for proposals or other construction procurement documents) prior to award of contracts for the Work. Services under this paragraph are subject to the provisions of Exhibit A Paragraph 2.01.A.2.

4. Attend the bid opening; prepare bid tabulation sheets; and assist Owner in evaluating bids or proposals, assembling final Construction Contracts for the Work for execution by Owner and Contractor, and in preparing notices of award to be issued by Owner for such contracts.

5. Provide information or assistance needed by Owner in the course of any review of bids, proposals, or negotiations with prospective contractors.

6. Consult with Owner as to the qualifications of prospective contractors.

7. Consult with Owner as to the qualifications of subcontractors, suppliers, and other individuals and entities proposed by prospective contractors, for those portions of the Work as to which review of qualifications is required by the issued documents.

8. If Owner engages in negotiations with bidders or proposers, assist Owner with respect to technical and engineering issues that arise during the negotiations.

9. Perform or provide the following other Bidding/Proposal Phase tasks or deliverables:

a. **none**

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10. The Bidding/Proposal Phase will be considered complete upon award of Construction Contracts for the Work and commencement of the Construction Phase, or upon cessation of negotiations with prospective contractors.

1.06 Construction Phase

A. After completion of the Final Design Phase and concurrent with the Bidding/Proposal Phase, and after issuance by Owner of any instructions for specific modifications or changes in the scope, extent, character, design, schedule, number of prime construction contracts, and other construction requirements of the Specific Project during the Construction Phase desired by Owner, the Engineer and Owner shall discuss, resolve, and document any necessary revisions to Engineer's scope of services or compensation (through application of the provisions regarding Additional Services, or otherwise), or the time for completion of Engineer's services, resulting from specific modifications to the Specific Project.

1. Engineer shall be responsible only for those Construction Phase services expressly required of Engineer in Exhibit A Paragraph 1.06, as duly modified. With the exception of such expressly required services, Engineer shall have no design, Submittal (including Shop Drawing) review, or other obligations during construction, and Owner assumes all responsibility for providing or arranging for all other necessary Construction Phase administrative, engineering, and professional services.

2. Owner waives all claims against Engineer and its officers, directors, members, partners, agents, employees, and Subconsultants, and Engineer's Subcontractors, that may be connected in any way to Construction Phase administrative, engineering, or professional services except for those services that are expressly required of Engineer in Exhibit A. Notwithstanding the foregoing waiver, Engineer shall be responsible for any professional opinions and interpretations provided by Engineer to Owner during the Construction Phase or Post-Construction Phase, including interpretations or clarifications of the Construction Contract Documents.

B. Upon successful completion of the Bidding/Proposal Phase, and upon written authorization from Owner, Engineer shall provide the following services:

1. General Administration of Construction Contract: Consult with Owner and act as Owner's representative as provided in this Agreement and the Construction Contract. Unless otherwise set forth in the scope of Basic Services (as duly modified), the extent and limitations of the duties, responsibilities, and authority of Engineer shall be as assigned in EJCDC® C-700, Standard General Conditions of the Construction Contract (2018) or other construction general conditions specified in this Agreement. Except as otherwise provided in the Construction Contract, Owner's communications to Contractor will be issued through Engineer.

a. If the responsibilities of Engineer as set forth in the Construction Contract are greater than those Construction Phase services expressly required of Engineer in Exhibit A Paragraph 1.06, as duly modified, then Owner shall either (1) expand the scope of the Construction Phase services to match those of the Construction Contract, and compensate Engineer for any related increases in the cost to provide Construction Phase services, pursuant to the provisions for compensating Additional Services, or (2) identify a qualified individual or entity (other than

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Engineer) responsible for the additional responsibilities in the Construction Contract.

b. If Owner, or Owner and Contractor, modify the duties, responsibilities, and authority of Engineer in the Construction Contract, or modify other terms of the Construction Contract having a direct bearing on Engineer, or if Owner requires Engineer's services for construction that extends longer than the anticipated Construction Contract Times, then Owner shall compensate Engineer for any related increases in the cost to provide Construction Phase services, pursuant to the provisions for compensating Additional Services.

c. Engineer shall not be required to furnish or perform services contrary to Engineer's responsibilities as a licensed professional.

2. Field Office: ~~**[Delete or edit as applicable to the Specific Project]** Engineer and Resident Project Representative (if any) will be based in a field office at the Site. The field office will be furnished and maintained at Owner's expense, and will include reasonable furnishings, all required temporary utilities (including internet service) and facilities, and be secured for Engineer's (and RPR's) exclusive use.~~**Deleted**

3. ~~Resident Project Representative (RPR): Provide the services of an RPR at the Site to assist Engineer and to provide more extensive observation of Contractor's Work. Duties, responsibilities, and authority of the RPR are as set forth in Exhibit D. The furnishing of such RPR's services will not limit, extend, or modify Engineer's responsibilities or authority except as expressly set forth in Exhibit D. **[If Engineer will not be providing RPR services under the specific Task Order, then delete this Paragraph 3 by inserting the word "DELETED" after the paragraph title; do not include Exhibit D as an exhibit to the specific Task Order; and do not include RPR compensation in Paragraph 7 of the Exhibit specific Task Order**~~Deleted~~.]~~

4. Selection of Independent Testing Laboratory: Assist Owner in the selection of an independent testing laboratory to perform required testing services.

5. Pre-Construction Conference: Participate in a pre-construction conference prior to commencement of Work at the Site; prepare and distribute agenda for the conference and prepare and distribute minutes of such conference.

6. Electronic Transmittal Protocols: If the Construction Contract does not establish protocols for transmittal of Electronic Documents by Electronic Means, then Owner, Engineer, and Contractor shall jointly develop such protocols.

7. Original Documents: If requested by Owner to do so, maintain and safeguard during the Construction Phase at least one original printed record version of the Construction Contract Documents, including Drawings and Specifications signed and sealed by Engineer and other design professionals in accordance with applicable Laws and Regulations. Throughout the Construction Phase, make such original printed record version of the Construction Contract Documents available to Contractor and Owner for review.

8. Schedules: Receive, review, and, and, subject to the criteria of the Construction Contract, determine the acceptability of any and all schedules that Contractor is required to submit to Engineer, including the progress schedule, schedule of submittals,

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and schedule of values. Advise Contractor in writing of Engineer's comments or acceptance of schedules.

a. Schedules will be acceptable to Engineer as to form and substance:

1) Progress Schedule: if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2) Contractor's Schedule of Submittals: if it provides a workable arrangement for reviewing and processing the required Submittals.

3) Contractor's Schedule of Values: if it provides a reasonable allocation of the Contract Price to the component parts of the Work.

9. Baselines and Benchmarks: As appropriate, establish baselines and benchmarks for locating the Work which in Engineer's judgment are necessary to enable Contractor to proceed.

10. Permits: Provide Owner with copies of technical information and supporting data previously obtained or developed by Engineer for Owner's use, or for Owner to provide to Contractor, in obtaining required permits and licenses delegated to Contractor by Owner.

11. Visits to Site and Observation of Construction: In connection with observations of Contractor's Work while it is in progress:

a. Make visits to the Site at intervals appropriate to the various stages of the Work, as Engineer deems necessary, to observe as an experienced and qualified design professional, the progress of Contractor's executed Work. Such visits and observations by Engineer, including its RPR, if any, are not intended to be exhaustive or to extend to every aspect of the Work or to involve detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement and the Construction Contract Documents, but rather are to be limited to spot checking, selective sampling, and similar methods of general observation of the Work based on Engineer's exercise of professional judgment, as assisted by its RPR, if any. Based on information obtained during such visits and observations, Engineer will determine in general if the Work is proceeding in accordance with the Construction Contract Documents, and Engineer shall keep Owner informed of the progress of the Work. Engineer will make a report of Engineer's visit, summarizing Engineer's general observations and any significant findings.

b. The purpose of Engineer's visits to the Site, and representation by the Resident Project Representative, if any, at the Site, will be to enable Engineer to better carry out the duties and responsibilities assigned to by this Agreement and undertaken by Engineer during the Construction Phase, and, in addition, by the exercise of Engineer's efforts as an experienced and qualified design professional, to provide for Owner a greater degree of confidence that the completed Work will conform in general to the Construction Contract Documents and that Contractor has

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implemented and maintained the integrity of the design concept of the completed Specific Project as a functioning whole as indicated in the Construction Contract Documents. Engineer will not, during such visits or as a result of such observations of the Work, supervise, direct, or have control over the Work, nor will Engineer have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to any Constructor's work in progress, for the coordination of the Constructors' work or schedules, nor for any failure of any Constructor to comply with Laws and Regulations applicable to furnishing and performing of its work. Accordingly, Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish or perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents.

12. Defective Work: If, on the basis of Engineer's observations or as indicated in documentation available to Engineer, Engineer believes that any part of the Work is defective under the terms and standards set forth in the Construction Contract Documents, Engineer will promptly issue written notice to Contractor (with copy to Owner) of such defective Work. Such notice will communicate the scope, extent (to Engineer's understanding) of defect, and associated provisions of the Construction Contract Documents.

    a. Provide recommendations to Owner regarding whether Contractor should correct such Work or remove and replace such Work, or whether Owner should consider accepting the defective Work in accordance with the provisions of the Construction Contract Documents. Engineer shall give notice to Contractor regarding whether the defective Work should be repaired, replaced, or will be accepted by Owner.

    b. However, Engineer's authority to provide this information to Owner or Engineer's decision to exercise or not exercise such authority will not give rise to a duty or responsibility of the Engineer to Contractors, Subcontractors, material and equipment suppliers, their agents or employees, or any other person(s) or entities performing any of the Work, including but not limited to any duty or responsibility for Contractors' or Subcontractors' safety precautions and programs incident to the Work.

13. Compatibility with Design Concept: If Engineer has express knowledge that a specific part of the Work that is not defective under the terms and standards set forth in the Construction Contract Documents is nonetheless not compatible with the design concept of the completed Specific Project as a functioning whole, then inform Owner of such incompatibility, and provide recommendations for addressing such Work.

14. Clarifications and Interpretations: Accept from Contractor and Owner submittal of all matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. With reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Construction Contract Documents.

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15. Non-reviewable Matters: If a submitted matter in question concerns the Engineer's performance of its duties and obligations, or terms and conditions of the Construction Contract Documents that do not involve (a) the performance or acceptability of the Work under the Construction Contract Documents, (b) the design (as set forth in the Drawings, Specifications, or otherwise), or (c) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer will not provide a decision or interpretation.

16. Field Orders: Subject to any limitations in the Construction Contract Documents, Engineer may prepare and issue Field Orders requiring minor changes in the Work.

17. Change Orders and Work Change Directives: Recommend Change Orders and Work Change Directives to Owner, as appropriate, and prepare Change Orders and Work Change Directives as required.

18. Change Proposals and Claims

    a. Review and respond to Change Proposals. Review each duly submitted Change Proposal from Contractor and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions must be in writing, with a copy provided to Owner and Contractor. If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer will not resolve the Change Proposal.

    b. Provide information or data to Owner regarding engineering or technical matters pertaining to Claims.

19. Differing Site Conditions: Respond to any notice from Contractor of differing site conditions, including conditions relating to Underground Facilities such as utilities, and hazardous environmental conditions. Promptly conduct reviews and prepare findings, conclusions, and recommendations for Owner's use subject to limitations of Engineer's obligations under this Agreement.

20. Contractor's Submittals: Review and approve or take other appropriate action with respect to required Contractor Submittals, but only to determine if the items covered by the Submittals will, after installation or incorporation in the Work, comply with the requirements of the Construction Contract Documents, and for compatibility with the design concept of the completed Specific Project as a functioning whole as indicated by the Construction Contract Documents. Such reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto. Engineer shall meet any Contractor's Submittal schedule that Engineer has accepted.

21. Substitutes and "Or-equals": Evaluate and determine the acceptability of substitute or "or-equal" materials and equipment proposed by Contractor, but subject to the provisions of Exhibit A Paragraph 2.01.A.2.

22. Inspections and Tests

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a. Receive and review all certificates of inspections, tests, and approvals required by Laws and Regulations or the Construction Contract Documents. Engineer's review of such certificates will be for the purpose of determining whether the results certified indicate compliance with the Construction Contract Documents and will not constitute an independent evaluation that the content or procedures of such inspections, tests, or approvals comply with the requirements of the Construction Contract Documents. Engineer shall be entitled to rely on the results of such inspections and tests.

b. Reply to Contractor requests for written concurrence that specific portions of the Work that are to be inspected, tested, or approved may be covered.

c. Issue written requests to Contractor that specific portions of the Work remain uncovered.

d. As deemed reasonably necessary, request that Contractor uncover Work that is to be inspected, tested, or approved.

e. Pursuant to the terms of the Construction Contract, require additional inspections or testing of the Work, whether or not the Work is fabricated, installed, or completed.

23. Contractor's Applications for Payment: Based on Engineer's observations as an experienced and qualified design professional and on review of Applications for Payment and accompanying supporting documentation:

a. Determine the amounts that Engineer recommends Contractor be paid. Recommend reductions in payment (set offs) based on the provisions for set offs stated in the Construction Contract. Such recommendations of payment will be in writing and will constitute Engineer's representation to Owner, based on such observations and review, that, within the limits of Engineer's knowledge, information and belief, Contractor's Work has progressed to the point indicated, the Work is generally in accordance with the Construction Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Construction Contract Documents, and to any other qualifications stated in the recommendation), and the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work. In the case of unit price Work, Engineer's recommendations of payment will include final determinations of quantities and classifications of the Work (subject to any subsequent adjustments allowed by the Construction Contract Documents).

b. By recommending payment, Engineer shall not thereby be deemed to have represented that observations made by Engineer to check the quality or quantity of Contractor's Work as it is performed and furnished have been exhaustive, extended to every aspect of Contractor's Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in this Agreement. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment including final payment will impose on Engineer responsibility to

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supervise, direct, or control the Work, or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or Contractor's compliance with Laws and Regulations applicable to Contractor's furnishing and performing the Work. It will also not impose responsibility on Engineer to make any examination to ascertain how or for what purposes Contractor has used the money paid to Contractor by Owner; to determine that title to any portion of the Work, including materials or equipment, has passed to Owner free and clear of any liens, claims, security interests, or encumbrances; or that there may not be other matters at issue between Owner and Contractor that might affect the amount that should be paid.

24. Contractor's Completion Documents: Receive from Contractor, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance required by the Construction Contract Documents, certificates of inspection, tests and approvals, and Shop Drawings, Samples, and other data approved as provided under Exhibit A Paragraph 1.06.B.20. Receive from Contractor, review, and transmit to Owner the annotated record documents which are to be assembled by Contractor in accordance with the Construction Contract Documents to obtain final payment. The extent of Engineer's review of record documents will be to check that Contractor has submitted a complete set of those documents that Contractor is required to submit.

25. Substantial Completion: Promptly after notice from Contractor that Contractor considers the entire Work ready for its intended use, visit the Site in company with Owner and Contractor to review the Work and determine the status of completion. Follow the procedures in the Construction Contract regarding the preliminary certificate of Substantial Completion, punch list of items to be completed, Owner's objections, notice to Contractor, and issuance of a final certificate of Substantial Completion. Assist Owner regarding any remaining engineering or technical matters affecting Owner's use or occupancy of the Work following Substantial Completion.

26. Other Tasks: Perform or provide the following other Construction Phase tasks or deliverables:

    a. **none**

27. Completion and Acceptability of the Work: After notice from Contractor that the Work is complete:

    a. visit the Site with Owner and Contractor to determine if the Work is in fact complete and acceptable;

    b. notify Contractor of any part of the Work that is found during the visit to be incomplete or defective, and subsequently confirm that Contractor has corrected any such deficiencies;

    c. follow the procedures in the Construction Contract regarding review and response to Contractor's application for final payment and accompanying documentation; and

    d. if Engineer is satisfied that the Work is complete and acceptable, provide a notice to Owner and Contractor using EJCDC® C-626, Notice of Acceptability of Work

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(attached as Exhibit E), stating that the Work is acceptable (subject to the provisions of the Notice and this Exhibit A) within the limits of Engineer's knowledge, information, and belief, and based on the extent of the services provided by Engineer under this Agreement.

28. Standards for Certain Construction-Phase Decisions: Engineer will render decisions regarding the requirements of the Construction Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth in the Construction Contract for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

C. Duration of Construction Phase: The Construction Phase will commence with the execution of the first Construction Contract for the Specific Project or any part thereof and will terminate upon written recommendation by Engineer for final payment to Contractor. If the Specific Project involves more than one prime contract as indicated in Exhibit A Paragraph 1.04.A.1, then Construction Phase services may be rendered at different times in respect to the separate contracts. Subject to the provisions of Article 3, Engineer shall be entitled to an equitable increase in compensation if Construction Phase services (including Resident Project Representative services, if any) are required after the original date for completion and readiness for final payment of Contractor as set forth in the Construction Contract.

1.07 Post-Construction Phase

A. Upon written authorization from Owner during the Post-Construction Phase, Engineer shall:

1. Together with Owner, visit the Specific Project to observe any apparent defects in the Work, make recommendations as to replacement or correction of defective Work, if any, or the need to repair of any damage to the Site or adjacent areas, and assist Owner in consultations and discussions with Contractor concerning correction of any such defective Work and any needed repairs.

2. Together with Owner, visit the Specific Project within one month before the end of the Construction Contract's correction period to ascertain whether any portion of the Work or the repair of any damage to the Site or adjacent areas is defective and therefore subject to correction by Contractor.

3. Perform or provide the following other Post-Construction Phase tasks or deliverables:

a. **Attend TDLR inspection walkthrough**

b. **Prepare a plan of record based on Contractor redlines approved by the City Inspector.**

B. The Post-Construction Phase services may commence during the Construction Phase and, if not otherwise modified in this Exhibit A, will terminate 12 months after the commencement of the Construction Contract's correction period.

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ARTICLE 2—ADDITIONAL SERVICES

2.01 Additional Services Not Requiring Owner's Written Authorization

A. Engineer shall advise Owner that Engineer is commencing to perform or furnish the Additional Services of the types listed below. For such Additional Services, Engineer need not request or obtain specific advance written authorization from Owner. Engineer shall cease performing or furnishing such Additional Services upon receipt of written notice to cease from Owner. These services are not included as part of Basic Services and will be paid for by Owner as indicated in Paragraph 7 of the governing Task Order.

1. Substantive design and other technical services in connection with Work Change Directives, Change Proposals, and Change Orders to reflect changes requested by Owner.

2. Services essential to the orderly progress of the Bidding/Proposal and Construction Phases and not wholly quantifiable prior to those Phases or otherwise dependent on the actions of prospective individual bidders or contractors and including:

   a. making revisions to Drawings and Specifications occasioned by the acceptance of substitute materials or equipment other than "or equal" items;

   b. services after the award of the Construction Contract in evaluating and determining the acceptability of a proposed "or equal" or substitution which is found to be inappropriate for the Specific Project;

   c. evaluation and determination of an excessive number of proposed "or equals" or substitutions, whether proposed before or after award of the Construction Contract; and

   d. providing to the Contractor or Owner additional or new information not previously prepared or developed by the Engineer for their use in applying for or obtaining required permits and licenses, in responding to agency comments on such applications, or in the administration of any such permits or licenses.

3. Services resulting from significant delays, changes, or price increases occurring as a direct or indirect result of materials, equipment, or energy shortages.

4. Additional or extended services arising from (a) the presence at the Site of any Constituent of Concern or items of historical or cultural significance, (b) emergencies or acts of God endangering the Work, (c) damage to the Work by fire or other causes during construction, (d) a significant amount of defective, neglected, or delayed Work, (e) acceleration of the progress schedule involving services beyond normal working hours, or (f) default by Contractor.

5. Implement coordination of Engineer's services with other parts of the Specific Project that are not planned or designed by Engineer or its Subconsultants, unless Owner furnished to Engineer substantive information about such other parts of the Specific Project prior to the parties' entry into this Agreement, in the Baseline Information section of this Exhibit A, or otherwise in Exhibit A; if such substantive information has been so provided, coordination of Engineer's services will be part of Basic Services.

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6. Implement the specific parts of an Underground Facilities Procedure that are assigned to Engineer, or above-ground utilities tasks that are assigned to Engineer as the Specific Project progresses (but not including the design-related services already assigned to Engineer as a Basic Service).

7. Services (other than Basic Services during the Post-Construction Phase) in connection with any partial utilization of the Work by Owner prior to Substantial Completion.

8. Evaluating unreasonable or frivolous requests for interpretation or information (RFIs), Change Proposals, or other demands from Contractor or others in connection with the Work, or an excessive number of RFIs, Change Proposals, or demands.

9. Reviewing a Shop Drawing or other Contractor submittal more than three times, as a result of repeated inadequate submissions by Contractor.

10. While at the Site, compliance by Engineer and its staff with those terms of Owner's or Contractor's safety program provided to Engineer subsequent to the Effective Date that exceed those normally required of engineering personnel by federal, State, or local safety authorities for similar construction sites.

11. To the extent the Specific Project is subject to Laws and Regulations governing public or government records disclosure or non-disclosure, Engineer will comply with provisions applicable to Engineer, and Owner will compensate Engineer as Additional Services for Engineer's costs to comply with any disclosure or non-disclosure obligations beyond those identified in the Basic Services.

12. Services directly attributable to changes in Engineer's Electronic Documents obligations after the effective date of the Agreement.

2.02 Additional Services Requiring Owner's Written Authorization

A. If authorized in writing by Owner, Engineer shall provide Additional Services of the types listed below. These services are not included as part of Basic Services and will be paid for by Owner as indicated in Paragraph 7 of the governing Task Order.

1. Obtain or provide specified additional Specific Project-related information and data to enable Engineer to complete its Basic and Additional Services.

2. Preparation of special and customized reporting, invoicing, and related support documentation in addition to that identified to be provided under Basic Services.

3. Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the Specific Project; preparation or review of environmental assessments and impact statements; review and evaluation of the effects on the design requirements for the Specific Project of any such statements and documents prepared by others; and assistance in obtaining approvals of authorities having jurisdiction over the anticipated environmental impact of the Specific Project.

4. Services to make measured drawings of existing conditions or facilities, to conduct tests or investigations of existing conditions or facilities, or to verify the accuracy of drawings or other information furnished by Owner or others.

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5. Services resulting from significant changes in the scope, extent, or character of the portions of the Specific Project designed or specified by Engineer, or the Specific Project's design requirements, including, but not limited to, changes in size, complexity, Owner's schedule, character of construction, or method of financing; and revising previously accepted studies, reports, Drawings, Specifications, or Construction Contract Documents when such revisions are required by changes in Laws and Regulations enacted subsequent to the Effective Date or are due to any other causes beyond Engineer's control.

6. Services resulting from Owner's request to evaluate additional Study and Report Phase alternative solutions beyond those agreed to in Exhibit A Paragraph 1.02.A.1.

7. Services required as a result of Owner's providing incomplete or incorrect Specific Project information to Engineer.

8. Providing renderings or models for Owner's use, including development, management, and other services in support of building information modeling or civil integrated management.

9. Undertaking investigations and studies including, but not limited to:

    a. All-hazards risk assessments and other studies to evaluate the feasibility of enhancing the resiliency of the design;

    b. detailed consideration of operations, maintenance, and overhead expenses;

    c. the preparation of feasibility studies (such as those that include projections of output capacity, utility project rates, project market demand, or project revenues) and cash flow analyses, provided that such services are based on the engineering and technical aspects of the Specific Project, and do not include rendering advice regarding municipal financial products or the issuance of municipal securities;

    d. preparation of appraisals;

    e. with respect to proprietary systems or processes requiring licensing, providing services necessary to assist Owner in obtaining such licensing.

    f. detailed quantity surveys of materials, equipment, and labor; and

    g. audits or inventories required in connection with construction performed or furnished by Owner.

10. Furnishing services of Subconsultants or Engineer's Subcontractors for other than Basic Services.

11. Providing data or services of the types described in Article 2, when Owner retains Engineer to provide such data or services instead of Owner furnishing the same.

12. Providing the following services:

    a. Services attributable to more prime construction contracts than specified in Exhibit A Paragraph 1.04.A.1.

    b. Services to arrange for performance of construction services for Owner by contractors other than the principal prime Contractor, and administering Owner's contract for such services.

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13. Services during out-of-town travel required of Engineer, other than for visits to the Site or Owner's office as required in Basic Services (Article 1 of Exhibit A).

14. Preparing for, coordinating with, participating in and responding to structured independent review processes, including, but not limited to, construction management, cost estimating, project peer review, value engineering, and constructability review requested by Owner; and performing or furnishing services required to revise studies, reports, Drawings, Specifications, or other documents as a result of such review processes.

15. Preparing additional bidding-related documents (or requests for proposals or other construction procurement documents); preparing pre-qualification procedures and documents, and participating in pre-qualifying prospective Bidders; and preparing Construction Contract Documents for alternate bids.

16. Assistance in connection with bid protests, rebidding, or renegotiating contracts for construction, materials, equipment, or services.

17. Preparing conformed Construction Contract Documents that incorporate and integrate the content of all addenda and any amendments negotiated by Owner and Contractor.

18. Services to assist Owner in developing or modifying protocols for transmittal of Electronic Documents by Electronic Means after the effective date of this Agreement, either by revising or adapting Exhibit F to the Specific Project or implementing other Electronic Documents protocols among Specific Project participants.

19. Any services by Engineer in connection with Owner or Engineer providing a Document to a Requesting Party under Exhibit F Paragraph 1.01.D (see Exhibit F, Electronic Documents Protocol), or any other distribution of a Document to a third party. Such services may include but are not limited to preparing the data contained in the requested Document in a manner deemed appropriate by Engineer; creating or otherwise preparing and distributing the Document in a format necessary to respond to Owner's direction or decision to provide the Document to a requesting party, including Contractor, in a format other than that required for deliverables from Engineer to Owner; and services in connection with obtaining required releases from the third parties to which the Documents will be distributed. Compensation for these Additional Services is not contingent upon Owner's reimbursement from the requesting party.

20. Providing Construction Phase services beyond the original date for completion and readiness for final payment of Contractor, but only if such services increase the total quantity of services to be performed in the Construction Phase, rather than merely shifting performance of such services to a later date.

21. Preparing Record Drawings, and furnishing such Record Drawings to Owner.

22. Supplementing Record Drawings with information regarding the completed Specific Project, Site, and immediately adjacent areas obtained from field observations, Owner, utility companies, and other reliable sources.

23. Conducting surveys, investigations, and field measurements to verify the accuracy of Record Drawing content obtained from Contractor, Owner, utility companies, and other sources; revise and supplement Record Drawings as needed.

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24. Preparation of operation, maintenance, and staffing manuals.
25. Protracted or extensive assistance in refining and adjusting of Specific Project equipment and systems (such as initial startup, testing, and balancing).
26. Assistance to Owner in training Owner's staff to operate and maintain Specific Project equipment and systems.
27. Assistance to Owner in developing systems and procedures for (a) control of the operation and maintenance of Specific Project equipment and systems, and (b) related recordkeeping.
28. Preparing to serve or serving as a consultant or witness for, or producing documents for or on behalf of, Owner in any litigation, arbitration, mediation, lien or bond claim, or other legal or administrative proceeding involving the Specific Project (but not including disputes between Owner and Engineer).
29. Overtime work requiring higher than regular rates.
30. Providing construction surveys and staking to enable Contractor to perform its work other than as required under Exhibit A Paragraph 1.06.B.9; any type of property surveys or related engineering services needed for the transfer of interests in real property; providing construction and property surveys to replace reference points or property monuments lost or destroyed during construction; and providing other special field surveys.
31. Providing more extensive services required to enable Engineer to issue notices or certifications requested by Owner.
32. Extensive services required during any correction period, or with respect to monitoring Contractor's compliance with warranties and guarantees called for in the Construction Contract (except as agreed to under Basic Services).
33. Other additional services performed or furnished by Engineer not otherwise provided for in this Agreement.

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EXHIBIT B—TASK ORDER DELIVERABLES SCHEDULE

Paragraphs 2.04.E, 3.02.A, and Exhibit A of the Main Agreement are supplemented by the following paragraph and table.

Under the governing Task Order the Engineer shall furnish Documents to Owner as required in Column 2 of the following table (and as further described in Exhibit A), according to the schedule in Column 4. Owner shall comment or take other identified actions with respect to the Documents as indicated in Column 2 (and as further described in Exhibit A), according to the schedule in Column 4.

Party	Action	Exhibit A Reference	Schedule
Engineer	Submit **one (1)** review copies of the Preliminary Design Report, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables to Owner.	1.03.B.17	Within **70** days of Owner's authorization to proceed with Preliminary Design Phase services.
Owner	Submit comments regarding Preliminary Design Report, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables to Engineer.	1.03.B.18	Within **10** days of the receipt from Engineer of Preliminary Design Report, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables.
Engineer	Submit **one (1)** copies of the revised Preliminary Design Report, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables to Owner.	1.03.B.18	Within **5** days of the receipt of Owner's comments regarding the Preliminary Design Report, opinion of probable Construction Cost, and other Preliminary Design Phase deliverables.
Engineer	Submit **one (1)** copy of the first Final Design Phase draft of Drawings and Specifications to Owner.	1.04.B.1	Within **30** days of Owner's authorization to proceed with Final Design Phase services.
Owner	Submit comments and instructions regarding the first Final Design Phase draft of Drawings and Specifications to Engineer.	1.04.B.1	Within **15** days of the receipt of the first final Design Phase drafts of Drawings and Specifications from Engineer.
Engineer	Submit **one (1)** copies of the final, completed, pricing-ready and construction-ready Drawings and Specifications to Owner.	1.04.B.3 and 1.04.G.1	Within **30** days of the receipt of Owner's comments and instructions regarding the second Final Design Phase drafts of Drawings and Specifications.
Owner	Submit comments and instructions regarding the final, completed, pricing-ready and construction-ready Drawings and Specifications to Engineer.	1.04.G.2	Within **10** days of the receipt from Engineer of the final, completed, pricing-ready and construction-ready Drawings and Specifications.
Owner	Submit comments and instructions regarding drafts of Bidding/Proposal and Front-End Construction Contract Documents, and any other Final Design Phase deliverables (other than Drawings and Specifications) to Engineer.	1.04.D.3; 1.04.F.8	Concurrent with Owner's submittal of comments and instructions regarding the final, completed, pricing-ready and construction-ready Drawings and Specifications.

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Party	Action	Exhibit A Reference	Schedule
Engineer	Submit to Owner: **One (1)** copies of the revised final, completed, pricing-ready and construction-ready Drawings and Specifications; and **One (1)** copies of assembled Bidding/Proposal and Front-End Construction Contract Documents, and any other Final Design Phase deliverables.	1.04.G.2; 1.04.G.3	Within **5** days of receipt of Owner's final comments and instructions regarding the regarding the final, completed, pricing-ready and construction-ready Drawings and Specifications, the Bidding/Proposal and Front-End Construction Contract Documents, and any other Final Design Phase deliverables.
Engineer	Submit **One (1)** copies of Bidding/Proposal Phase deliverables (if any) identified in Exhibit A Paragraph 1.05.A.9.a to Owner.	1.05.A.9.a	Within **5** days of written authorization by Owner to proceed with Bidding/Proposal Phase services.

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EXHIBIT C—RESERVED

Guidance Notes—Exhibit C

1. See Exhibit C—Amendment to Main Agreement, in E-505 Part 2 of 4: Exhibits to Main Agreement.

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EXHIBIT D—DUTIES, RESPONSIBILITIES, AND LIMITATIONS OF AUTHORITY OF RESIDENT PROJECT REPRESENTATIVE UNDER TASK ORDER

ARTICLE 1—RESIDENT PROJECT REPRESENTATIVE SERVICES

Article 1 of the Main Agreement, Services of Engineer, and Exhibit A, Engineer's Services Under Task Order, are supplemented to include Exhibit D Paragraphs 1.01, 1.02, and 1.03, as follows:

1.01 Resident Project Representative

A. Engineer shall furnish a Resident Project Representative ("RPR") to observe progress and quality of the Work. RPR is Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.

B. The RPR will provide full-time representation **[revise if representation will be less than full time]**.

C. Subject to the scope of RPR's observations of the Work, which may include field checks of materials and installed equipment, Engineer shall endeavor to identify defects and deficiencies in the Work. However, Engineer shall not, as a result of such RPR observations of the Work, supervise, direct, inspect, or have control over the Work, nor shall Engineer (including the RPR) have authority over or responsibility for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, for security or safety at the Site, for safety precautions and programs incident to the Work or any Constructor's work in progress, for the coordination of the Constructors' work or schedules, or for any failure of any Constructor to comply with Laws and Regulations applicable to the performing and furnishing of its work. The Engineer (including RPR) neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform the Work, or any portion of the Work, in accordance with the Construction Contract Documents. In addition, the specific terms set forth in Exhibit A Paragraph 1.06 are applicable.

1.02 Duties and Responsibilities of RPR

A. The duties and responsibilities of the RPR are as follows:

1. General: RPR's dealings in matters pertaining to the Work in general will be with Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.

2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, schedule of values, and other schedules prepared by Contractor and consult with Engineer concerning acceptability of such schedules.

3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings (but not including Contractor's safety meetings), and as appropriate prepare and circulate copies of minutes thereof.

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4. Safety Compliance: Comply with Site safety programs, as they apply to RPR, and if required to do so by such safety programs, receive safety training specifically related to RPR's own personal safety while at the Site.

5. Liaison

    a. Serve as Engineer's liaison with Contractor. Working principally through Contractor's authorized representative or designee, assist in providing information regarding the provisions and intent of the Construction Contract Documents.

    b. Assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's on-Site operations.

    c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.

6. Clarifications and Interpretations: Receive from Contractor submittal of any matters in question concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. Report to Engineer regarding such RFIs. Report to Engineer when clarifications and interpretations of the Construction Contract Documents are needed, whether as the result of a Contractor RFI or otherwise. Transmit Engineer's clarifications, interpretations, and decisions to Contractor.

7. Shop Drawings, Samples, and other Submittals

    a. Receive Samples that are furnished at the Site by Contractor.

    b. Receive Contractor-approved Shop Drawings.

    c. Receive other Submittals from Contractor.

    d. Record date of receipt of Samples, Contractor-approved Shop Drawings, and other Submittals.

    e. Notify Engineer of availability of Samples for examination, and forward Contractor-approved Shop Drawings and other Submittals to Engineer. When appropriate recommend distribution of Submittal to specified Subconsultants.

    f. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal, if RPR believes that the submittal has not been received from Contractor, or has not been approved by Contractor or Engineer.

8. Proposed Modifications: Consider and evaluate Contractor's suggestions for modifications to the Drawings or Specifications, and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit Engineer's response (if any) to such suggestions to Contractor.

9. Review of Work; Defective Work

    a. Report to Engineer whenever RPR believes that any part of the Work is defective under the terms and standards set forth in the Construction Contract Documents, and provide recommendations as to whether such Work should be corrected,

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removed and replaced, or accepted as provided in the Construction Contract Documents.

b. Inform Engineer of any Work that RPR believes is not defective under the terms and standards set forth in the Construction Contract Documents, but is nonetheless not compatible with the design concept of the completed Project as a functioning whole, and provide recommendations to Engineer for addressing such Work.

c. Advise Engineer of that part of the Work that RPR believes should be uncovered for observation, or requires special testing, inspection, or approval.

10. Inspections, Tests, and System Start-ups

a. Consult with Engineer in advance of scheduled inspections, tests, and systems start-ups.

b. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.

c. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.

d. Observe whether Contractor has arranged for inspections required by Laws and Regulations, including but not limited to those to be performed by public or other agencies having jurisdiction over the Work.

e. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Work, record the results of these inspections, and report to Engineer.

f. Nothing in this Agreement will be construed to require RPR to conduct inspections.

11. Records

a. Maintain at the Site orderly files for correspondence, reports of job conferences, copies of Construction Contract Documents including all Change Proposals, Change Orders, Field Orders, Work Change Directives, Addenda, additional Drawings issued subsequent to the execution of the Construction Contract, RFIs, Engineer's clarifications and interpretations of the Construction Contract Documents, progress reports, approved Shop Drawing and Sample submittals, and other Project-related documents.

b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Proposals, Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.

c. Upon request from Owner to Engineer, photograph or video Work in progress or Site conditions.

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d. Record and maintain accurate, up-to-date lists of the company names and points of contact for Contractors, Subcontractors, and major Suppliers of materials and equipment.

e. Maintain records for use in preparing Project documentation.

f. Upon completion of the Work, furnish original set of all RPR Project documentation to designated recipients.

12. Reports

a. Furnish periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.

b. Draft responses to or make recommends on Change Proposals, Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.

c. Furnish to Engineer and Owner copies of all inspection, test, and system start-up reports.

d. Immediately inform appropriate parties of the occurrence of any Site accidents, emergencies, natural catastrophes endangering the Work, possible force majeure or delay events, damage to property by fire or other causes, or the discovery of any potential differing site condition or Constituent of Concern.

13. Payment Requests: Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.

14. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

15. Completion

a. Participate in Engineer's visits to the Site regarding Substantial Completion, assist in the determination of Substantial Completion, and prior to the issuance of a Certificate of Substantial Completion submit a punch list of observed items requiring completion or correction.

b. Participate in Engineer's visit to the Site in the company of Owner and Contractor, to determine completion of the Work, and prepare a final punch list of items to be completed or corrected by Contractor.

c. Observe whether all items on the final punch list have been completed or corrected, and make recommendations to Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work (Exhibit E).

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~~1.03 Limitations of Authority~~

~~A. Resident Project Representative shall not:~~

~~1. Authorize any deviation from the Construction Contract Documents or substitution of materials or equipment (including "or-equal" items).~~

~~2. Exceed limitations of Engineer's authority as set forth in this Agreement.~~

~~3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers, or any Constructor.~~

~~4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of the Work, by Contractor or any other Constructor.~~

~~5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.~~

~~6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.~~

~~7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.~~

~~8. Authorize Owner to occupy the Project in whole or in part.~~

Omitted

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NOTICE OF ACCEPTABILITY OF WORK (EJCDC® C-626 2018)

Owner:	Owner's Project No.:
Engineer:	Engineer's Project No.:
Contractor:	Contractor's Project No.:
Project:	
Contract Name:	
Notice Date:	Effective Date of the Construction Contract:

The Engineer hereby gives notice to the Owner and Contractor that Engineer recommends final payment to Contractor, and that the Work furnished and performed by Contractor under the Construction Contract is acceptable, expressly subject to the provisions of the Construction Contract's Contract Documents ("Contract Documents") and of the Agreement between Owner and Engineer for Professional Services dated **[date of professional services agreement]** ("Owner-Engineer Agreement"). This Notice of Acceptability of Work (Notice) is made expressly subject to the following terms and conditions to which all who receive and rely on said Notice agree:

1. This Notice has been prepared with the skill and care ordinarily used by members of the engineering profession practicing under similar conditions at the same time and in the same locality.
2. This Notice reflects and is an expression of the Engineer's professional opinion.
3. This Notice has been prepared to the best of Engineer's knowledge, information, and belief as of the Notice Date.
4. This Notice is based entirely on and expressly limited by the scope of services Engineer has been employed by Owner to perform or furnish during construction of the Project (including observation of the Contractor's Work) under the Owner-Engineer Agreement, and applies only to facts that are within Engineer's knowledge or could reasonably have been ascertained by Engineer as a result of carrying out the responsibilities specifically assigned to Engineer under such Owner-Engineer Agreement.
5. This Notice is not a guarantee or warranty of Contractor's performance under the Construction Contract, an acceptance of Work that is not in accordance with the Contract Documents, including but not limited to defective Work discovered after final inspection, nor an assumption of responsibility for any failure of Contractor to furnish and perform the Work thereunder in accordance with the Contract Documents, or to otherwise comply with the Contract Documents or the terms of any special guarantees specified therein.
6. This Notice does not relieve Contractor of any surviving obligations under the Construction Contract, and is subject to Owner's reservations of rights with respect to completion and final payment.

Engineer

By (signature): _____

Name (printed): _____

Title: _____

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EXHIBIT F—RESERVED

Guidance Notes—Exhibit F

1. See Exhibit F—Electronic Documents Protocol (EDP), in E-505 Part 2 of 4: Exhibits to Main Agreement.

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EXHIBIT G—RESERVED

Guidance Notes—Exhibit G

1. See Exhibit G—Insurance, in E-505 Part 2 of 4: Exhibits to Main Agreement.

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EXHIBIT H—RESERVED

Guidance Notes—Exhibit H

1. See Exhibit H—Dispute Resolution, in E-505 Part 2 of 4: Exhibits to Main Agreement.

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EXHIBIT I—RESERVED

Guidance Notes—Exhibit I

1. See Exhibit I—Limitations of Liability, in E-505 Part 2 of 4: Exhibits to Main Agreement.

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CITY OF SCHERTZ
BOENIG DRIVE RECONSTRUCT
PRELIMINARY CONSTRUCTION ESTIMATE

12/19/2024

OVERALL PROJECT

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST
1410	TPDES -STORM WATER POLLUTION PREVENTION PLAN	LS	1	3%	$116,655.49
1502	MOBILIZATION	LS	1	10%	$388,851.64
1555	TRAFFIC CONTROL AND REGULATION	LS	1	3%	$116,655.49

STREET

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL COST
2221.1	REMOVE ASPHALT SURFACE	SY	11048	$6.00	$66,288.00
2221.4	REMOVE SIDEWALK AND DRIVEWAY	SF	880	$30.00	$26,400.00
2221.8	REMOVAL OF CURB AND GUTTER	LF	70	$5.00	$350.00
2741.1	HOT MIX ASPHALT PAVEMENT, TYPE D (3") (PG 64-22)	TON	2735	$120.00	$328,200.00
2741.2	HOT MIX ASPHALT PAVEMENT, TYPE B (6") (PG 64-22)	TON	6083	$120.00	$729,960.00
	LIME STABILIZED SUBGRAE	SY	18434	$8.00	$147,472.00
	LIME	TON	249	$229.00	$56,988.71
2743	TACK COAT	GAL	273.5	$5.00	$1,367.50
2754.1	CONCRETE DRIVEWAY (RESIDENTIAL)	SY	30	$150.00	$4,500.00
2771	CONCRETE CURB	LF	8500	$30.00	$255,000.00
2775	CONCRETE SIDEWALK	SY	890	$92.00	$81,880.00
2922	BERMUDA SODDING	SY	2833	$12.00	$33,996.00
2922	TOPSOIL	CY	314	$44.00	$13,816.00
SUP-1	BOX CULVERT - 8-FT X 6-FT	LF	180	$878.00	$158,040.00
SUP-2	CONCRETE HEADWALL/WINGWALL	CY	2	$20,000.00	$40,000.00
					$1,944,258.21

PROJECT CONSTRUCTION SUB TOTAL	$2,566,420.84
CONTINGENCY (10%)	$384,963.13
PROJECT CONSTRUCTION TOTAL	**$2,951,383.96**

Agenda No. 9.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Facility & Fleet**
Subject:	**Resolution 25-R-009 - Authorizing an expenditure with SAMES Bastrop Ford for the acquisition of 7 police vehicles (B.James/D.Hardin/C.Hernandez)**

BACKGROUND

This resolution authorizes the City to spend up to $347,900 for seven 2025 Ford Police Interceptors. These vehicles are to be used by the School Resource Officers. Per the current Interlocal Agreement (ILA) between SCUCISD and the City of Schertz, which was approved by the City Council through Resolution 24-R-64, SCUCISD will reimburse the City of Schertz over a 5-year period for each asset purchased. Since the change in State Law that led to an increase in the number of School Resource Offices required per the ILA, the Police Department has successfully filled all 7 positions and now requires the vehicles. City staff have identified the vehicles and can have them purchased and delivered within 30 to 45 days.

GOAL

To authorize the City Manager to execute the purchase orders for the purchase of the 7 police vehicles to be used by SCUCISD School Resource Officers in accordance with SCUCISD and City of Schertz ILA which was approved by City Council under Resolution 24-R-64.

COMMUNITY BENEFIT

Approval of Resolution 25-R-009 will enable City of Schertz School Resource Officers to better fulfill their roles in serving the community.

SUMMARY OF RECOMMENDED ACTION

Approval of Resolution 25-R-009 will allow the purchase of 7 police vehicles to fulfill the SRO positions authorized between the City of Schertz and SCUCISD ILA which was approved by City Council under Resolution 24-R-64.

FISCAL IMPACT

The fiscal impact of this project is $347,900.00. SCUCISD will reimburse the City of Schertz for the cost of these vehicles over a 5-year period. The initial vehicle purchase will be funded through the city's General Fund, and Finance will present a budget amendment to the Council at a later date.

RECOMMENDATION

Approval of Resolution 25-R-009

Attachments

Resolution 25-R-009 with attachment

RESOLUTION NO. 25-R-009

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AUTHORIZING EXPENDITURES WITH SAMES BASTROP FORD AND OTHER MATTERS IN CONNECTION THEREWITH.

WHEREAS, the Schertz Fleet Department has a need to purchase 7 Police Interceptor Units for the use of Schertz PD Officers and

WHEREAS, the Schertz Fleet Department has done due diligence in researching what equipment best fits the needs of the departments, to obtain the best pricing/availability, and to provide the best quality of equipment; and

WHEREAS, the City of Schertz has chosen various Group Purchasing Cooperative Vendors, for the purchase the vehicles; and

WHEREAS, purchases under the cooperative programs meet the requirements under Subchapter C, Chapter 791.025 of the Texas Government Code, which states that a local government that purchases goods and services under this section satisfies the requirement of the local government to seek competitive bids for the purchase of the goods and services; and

WHEREAS, the City Council has determined that it is in the best interest of the City to authorize the City Manager to issue Purchase Orders to the awarded vendors.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby authorizes expenditures of up to: $347,900.00 with SAMES Bastrop Ford.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this ____ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

EXHIBIT A 25-R-009

Year	Description	Hill Country Outdoor Price	Department	Co-op	Estimated Date of Delivery
2025	2025 Ford Police Interceptor	$347,900.00	Police Department	TIPS Contract #240901	6/30/2025
Total Expenditures		$347,900.00			

Agenda No. 10.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**City Manager/City Secretary**
Subject:	**Ordinance 25-S-005 Adopting a Compensation Schedule and Procedure for the City Council (R.Gutierrez/S.Williams)**

BACKGROUND

On November 5, 2024, Section 4.04 Compensation of the City of Schertz Home Rule Charter was amended as follows:

Members of the City Council shall serve with such compensation as determined by the City Council. An increase in compensation shall not be effective for any member of the City Council during the term ~~for which he or she was elected, and the increase was approved~~ in which the increase is effectuated. Payment of expenses incurred in performance of official duty may be approved by the City Council.

In light of this change and in an effort to streamline the application of this section of the Charter, I am proposing the following Ordinance outlining a fixed compensation structure for the Mayor and City Councilmembers. Under the current Ordinance, Council pay was previously adjusted according to the CPI-U and implemented on an annual basis. However, the new Charter language clarifies that such increases may only be implemented in a subsequent term of office for each member of the Council.
The proposed pay structure establishes a set amount of compensation for the Mayor and Councilmembers based on their term of office. It will be effective for the Mayor, Place 1, and Place 2 in November 2025; Place 3, Place 4, and Place 5 in November 2026; and Place 6 and Place 7 in November 2027. Any future amendments to this Ordinance will be similarly implemented in the subsequent terms for each Councilmember.

Current members of the Council will be paid commensurate to the number of terms for which they have been in office. If a person with previous experience as a City of Schertz Councilmember or Mayor is successfully elected as a Councilmember or Mayor, regardless of whether the terms are consecutive or not, he or she will receive credit for each previously completed term and will be paid accordingly. Prior terms of service are interchangeable whether they were as a Councilmember or the Mayor. In the event of a special election or appointment to fill an unexpired term, the annual compensation amount will be prorated.
The proposed compensation structure is as follows:

	Mayor Annual Compensation	**Councilmember Annual Compensation**
1st Term	$ 9,000	$ 6,000
2nd Term	11,000	8,000
3rd Term	13,000	10,000
4th & All Subsequent Terms	15,000	12,000

The way in which the Mayor and Councilmembers will be paid will not change under this ordinance. They will continue to be paid on a bi-weekly basis in the same manner as other City employees. Attached for your reference is a Policy Letter issued by City Manager Don Taylor on May 14, 2009, which outlines the current pay structure and processing.

GOAL

To streamline the application of Section 4.04 Compensation of the Charter.

COMMUNITY BENEFIT

To streamline the application of Section 4.04 Compensation of the Charter.

SUMMARY OF RECOMMENDED ACTION

Adopt Ordinance 25-S-005.

FISCAL IMPACT

There will be no fiscal impact until FY 25-26, since the new compensation amounts will not be implemented until November 2025. Once implemented, the fiscal impact will be negligible, as the total amount is only marginally higher.

RECOMMENDATION

Adopt Ordinance 25-S-005.

Attachments

Ordinance 25-S-005

Policy Letter - Don Taylor - 5-14-2009

ORDINANCE NO. 25-S-_____

AN ORDINANCE ADOPTING A COMPENSATION SCHEDULE AND AN IMPLEMENTATION PROCEDURE FOR THE CITY COUNCIL, IN ACCORDANCE WITH SECTION 4.04 COMPENSATION OF THE CHARTER OF THE CITY OF SCHERTZ, TEXAS.

WHEREAS, Section 4.04 Compensation of the Schertz City Charter (the "City") permits the City Council (the "Council") to determine compensation for its members, including the Mayor and other members of the Council; and

WHEREAS, Ordinances 74-G-38 previously provided for compensation for members of the Council for attendance at regular and special meetings of the Council, and such Ordinance was repealed by Ordinance 08-E-29; and

WHEREAS, Ordinance 08-G-31 provided that members of the Council be compensated on a monthly basis, annual adjustments be made on January 1 of each year based on the Consumer Price Index, compensation be prorated based on partial months of service, the reimbursement for out-of-pocket expenses, and the ability to refuse payment; and

WHEREAS, On November 5, 2024, Section 4.04 Compensation of the City of Schertz Home Rule Charter was amended, as follows:

Members of the City Council shall serve with such compensation as determined by the City Council. An increase in compensation shall not be effective for any member of the City Council during the term ~~for which he or she was elected, and the increase was approved~~ in which the increase is effectuated. Payment of expenses incurred in performance of official duty may be approved by the City Council.

WHEREAS, Considering this change and to streamline the application of Section 4.04 of the Charter, it is desired to adopt a fixed compensation structure for the Mayor and City Councilmembers.

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS, THAT:

Section 1. That the recitals contained in the preamble hereto are hereby found to be true and such recitals are hereby made a part of this Ordinance for all purposes and are adopted as a part of the judgment and findings of the Council.

Section 2. The proposed pay structure establishes a set amount of compensation for the Mayor and Councilmembers based on their term of office. It will be effective on the first day of the new term for the Mayor, Place 1, and Place 2 in November 2025; Place 3, Place 4, and Place 5 in November 2026; and Place 6 and Place 7 in November 2027. Any future amendments to this Ordinance will be similarly implemented in the subsequent terms for each Councilmember.

Section 3. Current members of the Council will be paid commensurate to the number of terms for which they have been in office. If a person with previous experience as a City of Schertz

Councilmember or Mayor is successfully elected as a Councilmember or Mayor, regardless of whether the terms are consecutive or not, he or she will receive credit for each previously completed term and will be paid accordingly. Prior terms of service are interchangeable whether they were as a Councilmember or the Mayor. In the event of a special election or appointment to fill an unexpired term, the annual compensation amount will be prorated.

Section 4. The proposed compensation structure is as follows:

	Mayor Annual Compensation	Councilmember Annual Compensation
1st Term	$ 9,000	$ 6,000
2nd Term	11,000	8,000
3rd Term	13,000	10,000
4th & All Subsequent Terms	15,000	12,000

Section 5. All ordinances of parts of the ordinance in force when the provisions of this Ordinance become effective which are inconsistent or in conflict with the terms and provisions contained in this Ordinance are hereby repealed only to the extent of such conflict.

Section 6. Should any part, sentence or phrase of this Ordinance be determined to be unlawful, void or unenforceable, the validity of the remaining portions of this Ordinance shall not be adversely affected. No portion of this Ordinance shall fail or become inoperative by reason of the invalidity of any other part. All provisions of this Ordinance are severable.

Section 7. That it is officially found, determined, and declared that the meeting at which this Ordinance is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this ordinance, was given, all as required by Chapter 551, as amended, Texas Government Code.

Section 8: This Ordinance shall take effect immediately from and after its passage and any publication requirements.

PASSED, APPROVED, and ADOPTED on this 21st day of January 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

1400 SCHERTZ PARKWAY
SCHERTZ, TEXAS 78154-1634
(210) 619-1016
FAX (210) 619-1050
www.schertz.com

DON E. TAYLOR
CITY MANAGER

FROM: Don E. Taylor, City Manager

TO: City Staff

DATE: 05/14/2009

RE: Policy Letter on Processing City Council Compensation

Effective May 12th, 2009, City Council places 3, 4, and 5 are eligible for compensation. The Internal Revenue Code 3401(c) states, "Elected officials are employees for income tax purposes. They are subject to a degree of control that typically makes them employees under common law, and are subject to social security and Medicare taxes."

Based on the IRC 3401(c) the following procedures will be used:

1. Each Councilmember will fill out a W-4 at the Finance Office prior to receiving the first compensation payment. A W-2 will be received at the end of the year.
2. If the Councilmember would like to have direct deposit, the bank routing information will need to be submitted to the Finance Office.
3. If the Councilmember elects, the check can be distributed by the City Secretary at the next City Council meeting.
4. The Councilmember's compensation will be calculated and paid each time the City runs payroll. This will provide consistency with reports submitted to the IRS and the Social Security Administration.
5. The Councilmember's compensation will be calculated by multiplying the monthly amount by 12 (months) and divided by 26 (pay periods). For example; $275 X 12 = 3,300, $3,300 ÷ 26 = $126.92 each pay period.
6. This memo will serve as a directive to the Finance Office to implement compensation to Councilmembers as stated by Ordinance No. 08-G-31.

Schertz
TEXAS
Corridor to the Future

ORDINANCE NO. 08-G-31

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS REGARDING COMPENSATION FOR MEMBERS OF THE CITY COUNCIL OF THE CITY

WHEREAS, Section 4.04 of the City Charter of the City of Schertz (the "City") permits the City Council (the "Council") to determine [redacted] for members of the Council, including the Mayor and the other members of the Council; and

WHEREAS, by Ordinance No. 74-G-38, the Council has previously provided for compensation for members of the Council for attendance at regular and special meetings of the Council, and such Ordinance was repealed by Ordinance No. 08-E-29; and

WHEREAS, the Council has determined that members should receive compensation for their service on the Council as set forth in this Ordinance.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

SECTION 1. (a) Members of the City Council of the City of Schertz, Texas, including the Mayor and the other members of the Council, shall receive monthly compensation for their service as members of the Council as follows:

	Base Compensation	Car Allowance	Total Compensation
Mayor	$300.00	$125.00	$425.00
Councilmembers	$200.00	$ 75.00	$275.00

Base 92.30
Vehicle 34.62
126.92

(b) Such Total Compensation shall be adjusted up or down on each January 1, commencing January 1, 2010, by a percentage equal to the percentage increase or decrease in the Consumer Price Index, All Items, Not Seasonally Adjusted, South Urban, published by the United States Department of Commerce for such January 1 compared to the preceding January 1.

(c) Such compensation shall be prorated on a daily basis for partial months of service and shall be paid for the preceding month on the second standard pay day of each month for City employees.

(d) Members of the Council may also request reimbursement for out-of-pocket expenses incurred during performance of their official duties in accordance with reimbursement policies in effect from time to time for persons with car allowances and shall be entitled to use City-provided equipment in furtherance of their official duties in accordance with procedures established from time to time.

SECTION 2. Members of the Council may at their discretion refuse to accept any or all of the compensation described in Section 1 by giving written notice thereof to the City Manager.

SECTION 3. This Ordinance shall be effective immediately from and after its final passage and any publication in accordance with the requirements of the City and the laws of the State of Texas. The terms of this Ordinance shall be implemented as to Councilmembers for Places 3, 4, and 5 elected on May 5, 2009 (or any earlier date a person shall take office by appointment to fill

a vacancy with such position) and for the Mayor and Councilmembers for Places 1 and 2 elected on May 4, 2010 (or any earlier date a person shall take office by appointment to fill a vacancy in such position).

SECTION 4. This Ordinance shall be cumulative of all other ordinances of the City and repeals Ordinance No. 08-G-29 of the City.

Approved on first reading the 1st day of July, 2008.

PASSED, APPROVED AND ADOPTED the 8th day of July, 2008.

Mayor, City of Schertz, Texas

ATTEST:

City Secretary, City of Schertz, Texas

(SEAL OF THE CITY)

Agenda No. 11.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Engineering**
Subject:	**Resolution 25-R-017 - Establishing a date for a Public Hearing on Amendments to the Land Use Assumptions, Capital Improvement Plans, and Impact Fees for Water and Wastewater Utilities (B.James/K.Woodlee)**

BACKGROUND

Related to Water and Wastewater Capital Recovery Fees, or Impact Fees - in accordance with Texas Local Government Code (TLGC) Chapter 395, the City is required to periodically evaluate land use assumptions (LUA) and capital improvement plans (CIP) to determine if amendments are warranted. Staff's evaluation of previously adopted LUA and CIP for water and wastewater utilities led to the conclusion that amendments to those documents are recommended. Subsequent to the updates of the LUA and CIP, updated Impact Fee rates are also recommended.

Staff has worked with the City's consultant, Lockwood, Andrews, and Newnam, Inc., (LAN) to prepare an updated LUA, CIP, and calculated maximum assessable water and wastewater impact fees. A final draft of the resulting report is attached. Workshops and hearings have been held with the Capital Improvement Advisory Committee and a conversation has taken place with Staff and the Economic Development Corporation to garner input on the proposed amendments. Comments from the CIAC will be presented to City Council and input from others will also be shared.

Per the TLGC, prior to adoption of amended LUA, CIP, and Impact Fees, a Public Hearing must be held and notice of the Public Hearing must be published prior to 30 days in advance of the date of the hearing. The requested action of City Council is approval of the resolution setting the date for the public hearing adopting the amended LUA, CIP, and impact fees for March 18, 2025. If approved, Staff will arrange publication of the notice prior to February 13, 2025.

RECOMMENDATION

Approval of Resolution 25-R-017.

Attachments

Resolution 25-R-017
Draft Public Notice
2024 Impact Fee Report

RESOLUTION NO. 25-R-017

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS, SETTING A DATE FOR A PUBLIC HEARING TO CONSIDER ADOPTION OF AMENDED LAND USE ASSUMPTIONS, CAPTIAL IMPROVEMENT PLANS, AND WATER AND WASTEWATER IMPACT FEES

WHEREAS, Chapter 395, Texas Local Government Code, provides procedures for preparing and amending land use assumptions, capital improvement plans, and impact fees for water and wastewater utilities; and

WHEREAS, the City of Schertz (the "City") has determined it necessary to review current plans and fees and consider amendments; and

WHEREAS, the City of Schertz has appointed a Capital Improvement Advisory Committee which is charged to advise City Council on such matters; and

WHEREAS, the City Council of Schertz desires to schedule a public hearing on proposed amendments to the land use assumptions, capital improvement plans, and water and wastewater impact fees in accordance with Chapter 395.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby schedules a public hearing on the land use assumptions, capital improvement plans, and water and wastewater impact fees for 6:00 pm, March 18, 2025, at Council Chambers, 1400 Schertz Parkway, Schertz Texas.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject

matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this __ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

(CITY SEAL)

Notice of Public Hearing

NOTICE OF PUBLIC HEARING ON AMENDMENT OF IMPACT FEES

Schertz City Hall
6:00 pm, March 18, 2025

The City Council of the City of Schertz will convene a public hearing on March 18, 2025, at 6:00 pm in City Council Chambers, 1400 Schertz Parkway, Schertz, Texas 78154, to consider amendments to land use assumptions, capital improvement plans, and impact fees for water and wastewater.

Any member of the public has the right to appear at the public hearing and present evidence for or against the amendments. More information, including the detailed report to be reviewed by the City Council, can be found at Schertz.com. Questions may be directed to Kathryn Woodlee, City Engineer (210) 619-1820.



City of Schertz 2024 Water & Wastewater Impact Fee Update

Prepared By: Lockwood, Andrews, and Newnam Inc,
215 Mary Avenue, Suite 309
Waco, Texas 76701
254-753-9585

January 2025

TBPE Firm No. 2614

SCHERTZ
COMMUNITY ★ SERVICE ★ OPPORTUNITY

EXECUTIVE SUMMARY

The City of Schertz (City) contracted Lockwood, Andrews, and Newnam Inc. (LAN) to analyze and update the Water and Wastewater Impact Fees. This report summarizes the process used to calculate the water and wastewater impact fees for the 2020 – 2030 planning period, which was done in accordance with Texas Local Government Code (TLGC) Section 395.

This study included the development of land use assumptions and growth projections, which were used to estimate future water and wastewater demands. Hydraulic models for both the water and wastewater systems were created by LAN based on data obtained from the City and the estimated future demands. The results of these models highlighted areas in both systems with insufficient capacity or would be throughout the planning period. Capital improvement plans for both systems were then developed and broken out into three separate groups: Near Term, 2030, and 2050. Projects included in the 2050 CIP are not eligible to be included in this impact fee update as TLGC Section 395 limits the planning period to 10 years. Estimated costs were developed for each project and can be found in Appendix 29. The 2030 and 2050 costs were multiplied by an average construction inflation factor to ensure estimates accurately captured the project costs in the future. Only the percentage of each project being utilized during the 10-year planning period was included to calculate the total impact fee eligible costs. Additionally, only the projects or portions of projects needed due to growth are included in the total impact fee eligible costs.

The increase in Living Unit Equivalents (LUEs) for the water and wastewater system were determined by comparing the flow results from the two hydraulic models to the existing system flows. The City of Schertz is unique in that the water and wastewater Certificates of Convenience and Necessity (CCN) do not match exactly, so the increase in LUEs for the two systems are slightly different. To obtain the maximum allowable impact fee for both systems, the total impact fee eligible costs were divided by the respective growth in LUEs. The tables below show this process for each system.

Maximum Allowable Water Impact Fee

Water Impact Fee	
Impact Fee Eligible Costs	$65,943,379
Credit (Calculated: 5.1%)	($3,365,530)
Total Impact Fee Eligible Costs	$62,577,849
Growth in LUEs	7,100
Maximum Allowable Water Impact Fee per LUE	**$8,814**

Maximum Allowable Wastewater Impact Fee

Wastewater Impact Fee	
Impact Fee Eligible Costs	$44,707,306
Credit (Calculated: 8.6%)	($4,611,802)
Total Impact Fee Eligible Costs	$40,095,504
Growth in LUEs	7,217
Maximum Allowable Wastewater Impact Fee per LUE	**$5,556**

Part of the update to the impact fees included updating the water meter types and characteristics to correspond with the new meters that the City will now be utilizing. The maximum allowable impact fees by meter type were calculated by multiplying the LUE per meter size by the maximum allowable water and wastewater impact fees shown in the tables above. The table below reflects both the update to the impact fees by meter type and the new meter characteristics.

Maximum Allowable Impact Fee by Meter Size

Meter Size	Meter Type	Maximum Flow Rate for Continuous Duty (gpm)	Proposed LUE	Maximum Allowable Water Impact Fee	Maximum Allowable Wastewater Impact Fee
5/8"	MULTI-JET	15	1.0	$8,814	$5,556
3/4"	MULTI-JET	20	1.3	$11,810	$7,445
1"	MULTI-JET	30	2.0	$17,627	$11,112
2"	ULTRASONIC	250	16.7	$146,924	$92,615
3"	ULTRASONIC	500	33.3	$293,848	$185,231
4"	ULTRASONIC	1,000	66.7	$587,607	$370,406
6"	ULTRASONIC	1,600	106.7	$940,154	$592,639
8"	ULTRASONIC	2,800	186.7	$1,645,248	$1,037,104
10"	ULTRASONIC	5,500	366.7	$3,231,708	$2,037,150
12"	ULTRASONIC	5,500	366.7	$3,231,708	$2,037,150



01/17/2025

Lockwood, Andrews & Newnam, Inc.
Texas Registered Engineering Firm F-2614

LAN F-2614

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1. BACKGROUND & REGULATIONS

Texas Local Government Code (TLGC) Section 395 provides provisions to "generate revenue for funding or recouping the costs of capital improvements or facility expansions necessitated by and attributable to the new development". Impact fees cannot be applied to existing customers. The City of Schertz (City) contracted Lockwood, Andrews, and Newnam Inc. (LAN) to analyze and update the Water and Wastewater Impact Fees. This report summarizes the process used to calculate water and wastewater impact fees for the 2020 – 2050 planning period, which was done in accordance with TLGC Section 395.

Within Section 395 there are procedures and regulations for adopting and updating water and wastewater impact fees that require an impact fee analysis be performed before the new or updated impact fees can be imposed. In accordance with Section 395, only the following items are payable by the impact fee:

- Construction Contract Price
- Surveying & Engineering Fees
- Land acquisition costs, including land purchases, court awards and costs, attorney's fees, and expert witness fees.
- Fees actually paid or contracted to be paid to an independent qualified engineer or financial consultant preparing or updating the capital improvements plan who is not an employee of the political subdivision.
- Projected interest charges and other financing costs may be included in determining the amount of impact fees only if the impact fees are used for the payment of principal and interest on bonds, notes, or other obligations issued by or on behalf of the political subdivision to finance the capital improvements or facility expansions identified in the capital improvements plan and are not used to reimburse bond funds expended for facilities that are not identified in the capital improvements plan.

Additionally, Section 395 lists the items that are not payable by the impact fee:

- Construction, acquisition, or expansion of public facilities or assets other than capital improvements or facility expansions identified in the capital improvements plan.
- Repair, operation, or maintenance of existing or new capital improvements or facility expansions.
- Upgrading, updating, expanding, or replacing existing capital improvements to serve existing development in order to meet stricter safety, efficiency, environmental, or regulatory standards.
- Upgrading, updating, expanding, or replacing existing capital improvements to provide better service to existing development.
- Administrative and operating costs of the political subdivision, except the Edwards Underground Water District or a river authority that is authorized elsewhere by state law to charge fees that function as impact fees may use impact fees to pay its administrative and operating costs.
- Principal payments and interest or other finance charges on bonds or other indebtedness, except as allowed by Section 395.012.

With these regulations in mind, LAN updated the City's land use assumptions, developed hydraulic water and wastewater models, identified capital improvement projects and their usage attributable to new development, and calculated the updated water and wastewater impact fees.

2. LAND USE ASSUMPTIONS

Land use assumptions are required to be periodically updated in accordance with TLGC Section 395.052. These assumptions form the basis for analyzing existing and future water and wastewater needs based on growth projections. This section describes how LAN performed a land use assessment, developed growth projections, and applied this data to the hydraulic water and wastewater models which are discussed later in this report.

2.1 Data Review & Methodology

2.1.1 City Provided Data

Data and resources necessary for LAN to assess current and future land uses, development projections, and Water and Wastewater service networks were provided by the City. Sources available up to December 31, 2021 were incorporated in the land use assumptions for this master plan effort. The plan was modified based on residential subdivision development information received from the City on April 8th, 2022. This includes the following:

- GIS Shapefiles
    - Received by LAN in the December 2019 data package from the City
        - Shapefiles in this data package included:
            - Comprehensive Land Use
            - Zoning Ordinances
            - Water and Wastewater infrastructure
            - CCN Service Areas
            - Municipal Boundaries
            - Customer Meters
            - Subdivision Land Use Statistics
- Residential Land Use Forecasts
    - Microsoft excel spreadsheet received by LAN in April 2020 from the City's Director of Planning and Community Development.
- 2018 City of Schertz Comprehensive Land Use Plan Map
- 2017 Roadway Impact Fee Land Use Assumption Report by Freese and Nichols, Inc.

2.1.2 AAMPO TAZ Data

Alamo Area Metropolitan Planning Organization (AAMPO) Traffic Analysis Zone (TAZ) demographic databases were used to determine the City's growth projections. TAZs are the geographic units used to inventory existing and future demographic data required for modeling purposes. TAZ data included 2020, 2025, 2035, and 2045 population, number of households, average household size, and employment inventories for the study area. Databases were downloaded from the AAMPO website in the form of GIS shapefiles and concentrated to correctly reflect the City's extent.

It should be noted that TAZ demographic data from 2020 was provided to LAN separately from the 2025-2045 projected demographic data. Because the 2020 data package was a direct result from the official 2020 Census and the projected data was calculated by AAMPO before 2020, LAN identified discrepancies in growth rates between the years 2020 and 2030 for population and employment. For the purpose of this Land Use Assessment, population and employment data between the years 2020 and 2030 was interpolated to reflect consistent growth rate throughout the

planning period. LAN has communicated with AAMPO about the data discrepancies and will update all projections accordingly for future system modeling.

At the request of City staff, the projected growth rate for each 5-year period was increased by 0.1% to be conservative. These adjusted population numbers are presented in subsequent sections.

2.1.3 Planning Period

This Comprehensive Land Use Assessment utilizes a 30-year planning period from 2020 to 2050. Because the AAMPO TAZ demographic data is limited to the year 2045, demographics were projected to 2050 by assuming the same compound annual growth rate (CAGR) established in 2045.

2.2 Summary of Comprehensive Land Use and Future Development Assumptions

2.2.1 2017 Roadway Impact Fee Land Use Assumptions by Freese and Nichols, Inc.

The 2017 Roadway Impact Fee Land Use Assumptions Report identified land use assumptions and recommendations for the City over a 10-year planning period ending in 2027. Upon completion of this 2021 Comprehensive Land Use Assessment, LAN has identified that the following assumptions from the 2017 Report will remain true for the 30-year planning period ending in 2050:

- Territories south of Randolph Air Force Base are impacted by restrictions based on Air Impact Compatible Use Zones (shown on the City's Comprehensive Land Use Plan Map as Attachment 1). Restrictions include limits on residential development densities.
- Continued commercial and residential development pressure in the North from New Braunfels will impact growth around the City.

2.2.2 Assumptions Made by LAN

A series of assumptions in relation to the City's land use and future development have been made by LAN after completing this Land Use Assessment. The following assumptions were made to initiate updates to the water master plan and CIP:

- Land uses identified in the 2018 Comprehensive Land Use Plan Map were modified based on updated residential subdivision development information received from the City on April 8th, 2022. It is assumed that these developments will remain in place for the 30-year planning period. The names and location of these updated developments are labeled on Appendix 5 and Appendix 6.
- Land use data available up to April 8th, 2022 were incorporated in the land use assumptions for this master plan effort.
- New growth throughout the 30-year planning period will expand away from the City center, where the highest densities of development currently exist.
- Continued development pressure in the North along the IH-35 corridor and from New Braunfels will result in future residential and commercial development at higher densities throughout the north, than in the south.
- Territories under delayed annexation agreements with the City will be annexed by 2025. The annexation of these territories will expand municipal boundaries.
- Regions within Municipal Boundaries that do not currently lie within City water or wastewater Certificates of Convenience and Necessity (CCN)s identified by the Public Utilities

Commission (PUC) are serviced by other authorities and will remain so throughout the 30-year planning period.

- The existing water and wastewater CCNs will remain in place for the 30-year planning period.

2.3 Land Use and Growth Projections

2.3.1 2018 Comprehensive Land Use Plan

The City's Comprehensive Land Use Plan Map is included in this report as Appendix 1 and serves as a provisional guideline for future development across the City. The land uses identified in the 2018 map provide a framework that will be reflected by the City's future development decisions. The exception is the area south of Schaeffer Rd and east of FM 1518. Recent land use plan amendments in this area include zoning changes based on data available up to October 1st, 2022.

2.3.2 Zoning

The City's existing zoning ordinances are included in this report as Appendix 2. The existing zoning ordinances were published in 2019 and serve as a means for which the 2018 Comprehensive Future Land Use Plan will be implemented. Based on land use data available up to October 1st, 2022 (including residential subdivision development information received from the City), the 2019 zoning designations were updated. It is assumed for the purposes of this study, that the zoning identified in Attachment 2 will remain in place for the 30-year planning period ending in 2050 apart from areas south of Schaeffer Rd and east of FM 1518 and areas just north of Trainer Hale Rd which are already approved for rezoning as of May 26, 2022. All existing and future subdivisions are shown in Appendix 5 & 6.

2.3.3 Delayed Annexation Agreements

Zoning ordinances were used to locate territories around the City under delayed annexation agreements. Territories under delayed annexation agreements currently exist within zones of Extra Territorial Jurisdiction (ETJ), which constrain the City's growth. These territories are primarily located throughout the Northeast corner of the City extending toward New Braunfels and in the Southeast between FM 1518 and IH-10.

2.3.3.1 Annexation Schedule

The City's Director of Planning and Community Development provided LAN with timelines for completing existing annexation agreements. The City Plans for the existing annexations to be completed by 2025.

2.3.3.2 Supported Land Uses of Territories to be Annexed

Table 1 summarizes the supported land uses of the territories under delayed annexation agreements. The annexation data provided to LAN was geographically categorized between the north and south. The location of the areas under a delayed annexation agreement is illustrated in Appendix 2 and the supported land uses for future development of these area is presented in Appendix 9 & 10.

Table 1: Land Use of Territories Under Delayed Annexation Agreements

Delayed Annexation Agreements: Parcel Land Use	Supported Land Uses[1]	Total Parcels	Total Acreage	Single-Family Residential Lots Allowed	Commercial Parcels
North Schertz	Commercial, Single-Family Residential	43	1,037	822	2
South Schertz	Commercial, Single-Family Residential	86	3,110	2,000	5

[1]For the purpose of this assessment, single-family residential land use includes Agricultural Conservation, Traditional Neighborhood Development (TND), Transit Oriented Development (TOD), and Estate Neighborhood

2.3.4 Population Projections

Table 2 uses AAMPO TAZ demographic data to summarize population projections over the 30-year planning period ending in 2050. Combining these projections with development anticipated as of October 1st, 2022, Projections suggest that population is expected to steadily increase throughout the 30-year planning period at an average compound annual growth rate (CAGR) of 1.%. Appendix 3 presents 2020 (historical) and 2050 (projected) population distribution across the City, reflecting the population increase provided in Table 2.

Table 2: Population Projections

Population Projections (Cumulative) [1]	Historical	5-Year	10-Year	15-Year	20-Year	25-Year	30-year
	2020	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Compound Annual Growth Rate	**-**	***1.8%***	***2.0%***	***2.0%***	***1.9%***	***1.9%***	***1.8%***
Population	45,719	49,985	55,187	60,933	66,946	73,553	80,416
Total Increase	(+)	4,266	5,202	5,745	6,013	6,607	6,863

[1]Total population accounts for areas of existing Extra Territorial Jurisdiction (ETJ) for which growth is constrained

2.3.5 Residential Land Use

Table 3 uses AAMPO TAZ demographic data to summarize projections for the total number of households over the 30-year planning period. Future residential development across the City is expected to reflect population growth and increased traffic along IH-35. The number of households is expected to increase throughout the 30-year planning period at an average CAGR of 2.2%. 2020 (historical) and 2050 (projected) residential housing distribution across the City are shown in Appendix 4. Because AAMPO TAZ data does not categorize residence type, the housing projections include both single-family and multi-family residences.

Table 3: Housing Projections

Housing Projections (Cumulative)	Historical	5-Year	10-Year	15-Year	20-Year	25-Year	30-year
	2020	**2025**	**2030**	**2035**	**2040**	**2045**	**2050**
Compound Annual Growth Rate[1][2]	**-**	***3.2%***	***2.4%***	***2.2%***	***2.1%***	***2.0%***	***2.0%***
Households	15,441	18,034	20,305	22,640	25,120	27,735	30,742
Total Increase	(+)	2,593	2,271	2,335	2,480	2,615	2,737

[1]Total number of households accounts for all categories of residential housing units throughout the City
[2]Total number of households accounts for all residential housing units located within areas of existing Extra Territorial Jurisdiction (ETJ) for which growth is constrained

The City's Director of Planning and Community Development provided LAN with maximum build-out estimates for existing and planned single-family and multi-family residential developments throughout the City. Appendix 5 & 6 shows the location and density of these subdivisions in comparison to the Wastewater and Water Certificates of Convenience and Necessity (CCNs) service areas. Appendix 5 & 6 serves as an exhibit of where the City is allowed to provide services and where their population may be distributed. Table 4 summarizes the maximum build-out estimates. According to this data, approximately 90% of the existing and planned residential developments are single-family residential.

Table 4: Maximum Build-Out Estimates

Residential Type Land Use Statistics	Single-Family	Multi-Family
Number of Households Expected at Maximum Build-Out for Existing and Planned Subdivisions[2]	20,102	3,339

[2]Total number of households includes subdivisions in areas of existing ETJ for which growth is constrained

2.3.5.1 Single-Family Residential Development

The Comprehensive Land Use Plan indicates that single-family is the primary type of residential land use throughout the City. Over the 30-year planning period, development pressure along IH-35 and from New Braunfels will impact the distribution of residences across the City. Single-family housing density is expected to be higher in the north throughout this corridor. However, in the southern portion of the City, west of FM 1518, residential development will primarily consist of lower density rural and estate style subdivisions. It is anticipated that additional single-family development will occur east of FM 1518 based on recent requested and authorized zoning changes.

2.3.5.2 Multi-Family Residential Development

Currently, multi-family residential establishments are located centrally in the City and account for a small percentage of the City's residential type land uses. While the number single-family residences will continue to dominate over the 30-year planning period, data provided by the City's Director of Planning and Community Development notes a few new multi-family residential subdivisions have been planned. These developments are primarily located in the northeast between IH-35 and the Schertz City Limits, with one in the southern portion of the City. The location and density of these three developments are included in Appendix 5 & 6.

2.3.5.3 Average Household Size

Table 5 uses AAMPO TAZ demographic data to summarize the average number of persons per household over the 30-year planning period. Because AAMPO TAZ data did not categorize residence type, household size accounts for both single-family and multi-family residences. Table 5 indicates the average household size will remain close to three persons over the 30-year planning period.

Table 5: Household Size Projections

Average Household Size	Historical	5-Year	10-Year	15-Year	20-Year	25-Year	30-Year
	2020	2025	2030	2035	2040	2045	2050
Persons[1][2]	3.0	2.8	2.7	2.7	2.7	2.7	2.6

[1]All categories of residential housing throughout the City are accounted for
[2]Total number of households includes subdivisions in areas of existing ETJ for which growth is constrained

2.3.6 Commercial Land Use

The Comprehensive Land Use Plan implies that commercial type land uses will continue to exist primarily along major thoroughfares in the north surrounding IH-35, in the south surrounding IH-10, and centrally surrounding FM 3009. The number and location of existing and planned commercial-type parcels were provided by the City in the form of a GIS Shapefile, shown in Appendix 7 & 8. These exhibits show the Wastewater and Water CCN service areas, respectively, to compare where the City is allowed to provide service to where they can expect commercial development. It was determined that AAMPO TAZ data for the number of persons employed throughout the City could reflect the number of commercial-type establishments. The CAGR for employment was used to project the number of commercial establishments over the 30-year planning period. Table 6 summarizes the employment projections, CAGR, and anticipated number of commercial establishments. Increased traffic and population among the IH-35 corridor could result in a higher demand for commercial property development in the North.

Table 6: Employment & Commercial Property Projections

Employment Projections (Cumulative)	Historical[1]	5-Year	10-Year	15-Year	20-Year	25-Year	30-year
	2020	2025	2030	2035	2040	2045	2050
Compound Annual Growth Rate[2]	**-**	***0.8%***	***0.8%***	***3.0%***	***2.4%***	***2.2%***	***2.2%***
Persons Employed	21,437	22,363	23,288	24,213	27,305	30,397	33,839
Commercial Parcels	313	327	340	394	445	495	551
Total Increase in Commercial Parcels	(+)	14	14	54	50	50	56

[1]Employment and commercial projections include areas of existing Extra Territorial Jurisdiction (ETJ), for which growth is constrained

2.4 CCNs Service Area Updates

The City's existing Water and Wastewater certificates of convenience and necessity (CCNs) identified by the Public Utility Commission (PUC) were reviewed to identify areas the City is currently serving as well as resolve where the City may be servicing outside their PUC identified CCN boundaries.

Per correspondence on August 11, 2021, it was decided that the current water and wastewater CCN service areas would remain unchanged for the 30-year planning period. This conservative approach would allow the City to monitor potential CCN changes as development occurs and to adapt using the 5-year impact fee cycle in lieu of wholesale CCN change assumptions for the next 30 years.

The City is aware that some regions within their municipal City Limits currently exist outside their water and wastewater CCN service areas and will remain under the service of their existing providers throughout the 30-year planning period. Likewise, regions annexed into the City during the 30-year planning period will not be added to the City's water and wastewater CCN service areas if they are not currently located within the service areas. The existing water and wastewater CCN service areas can be seen in Appendix 9 & 10. These exhibits present the land use categories used in the development of population projection allocations, calculations of future demands, and wastewater loading development.

2.5 Future System Modeling

To develop future conditions for water and wastewater system modeling the existing system models will be modified to reflect the assumptions made in this report. Assumptions and projections made for City growth, land uses, and development are used to establish and allocate future demands and supply requirements for the required planning period. In general, the expansion of Municipal Boundaries throughout the planning period will result in City-wide growth and the extension of water and wastewater service networks. Projected residential and commercial development throughout the planning period will produce increased water and wastewater flows.

3. WATER SYSTEM EVALUATION & CIP

3.1 Modeling & Evaluating the Existing Water System

This section provides an overview of the existing system model evaluation and the assessment of the results against the TCEQ requirements for system storage capacity, supply, service capacity, and minimum pressure requirements for public water systems.

3.1.1 Updates to Existing System Model

LAN built a hydraulic model of the City's existing water distribution system in Bentley's WaterGEMS software using data provided by the City. The model and the Technical Memo with model build details and preliminary model verification results for the existing system were presented to the City at a review meeting on September 10, 2020.

After the existing water system review meeting on September 10, 2020, the following items were updated in the hydraulic model to better reflect existing conditions:

- Wholesale Customer Demands
- Residential Water Usage Patterns
- Live Oak Pressure Reducing Valve Settings
- Removal of Waterlines Not in Service

3.1.1.1 Wholesale Customer Demands

Meter usage data from the City of Selma and City of Cibolo was provided to LAN by the City and were used to identify average and peak day demands at the wholesale customers' meters. Average day demands and peak day demands were input into the existing system model at each customer meter location and are summarized in Table 7 and Table 8, respectively.

Table 7: Average Day Wholesale Customer Meter Demands

City of Selma		
EST	360	gpm
GST	70	gpm
City of Cibolo		
Mesa	10	gpm
Ripps-Kreusler	6	gpm
Cibolo Crossing	8	gpm

Table 8: Peak Day Wholesale Customer Meter Demands

City of Selma		
EST	610	gpm
GST	330	gpm
City of Cibolo		
Mesa	20	gpm
Ripps-Kreusler	14	gpm
Cibolo Crossing	14	gpm

3.1.1.2 Residential Water Usage Patterns

During the review of the existing system model with the City, it was noted that the residential water usage patterns did not reflect the observed peak hour usage for the Schertz water system. With only monthly flow monitoring data available from the City, updated representative average day and peak day water usage patterns for residential customers was developed using an American Water Works Association report.

The updated water usage patterns were developed using the 1993 American Water Works Association (AWWA) Residential Water Use Patterns report using data. The City of Norman, Oklahoma was selected to best represent residential water use patterns for the City of Schertz because of similarities in annual precipitation, average seasonal temperatures, and land use. The AWWA report provided separate usage pattern for both single and multi-family land use types and these patterns were used to update the residential and apartment demands in the existing system model.

The average day water usage patterns for Single-Family and Multi-Family use were developed using the Norman info provided in the 1993 report. The average to peak multipliers, used to develop the peak day water usage patterns for Single-Family and Multi-Family use, were calculated using the 36 months of billing data provided to LAN by the City. These average to peak multipliers are:

- Single-Family = 3.2
- Multi-Family = 2.6

The Single-Family and Multi-Family average day and peak day diurnal curves used in the existing system model are illustrated in Figure 1 and Figure 2, respectively.

Figure 1: Average & Peak Day Diurnal Patterns for Single-Family Residential Meters

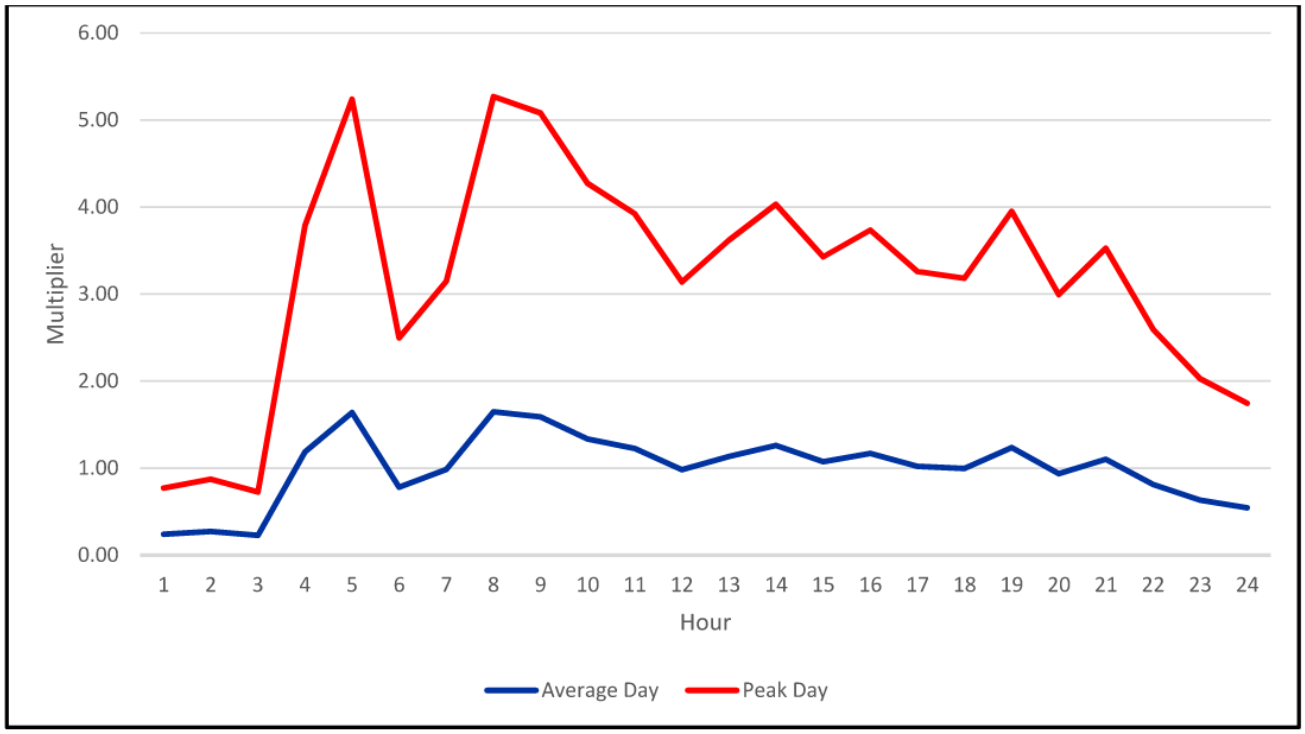
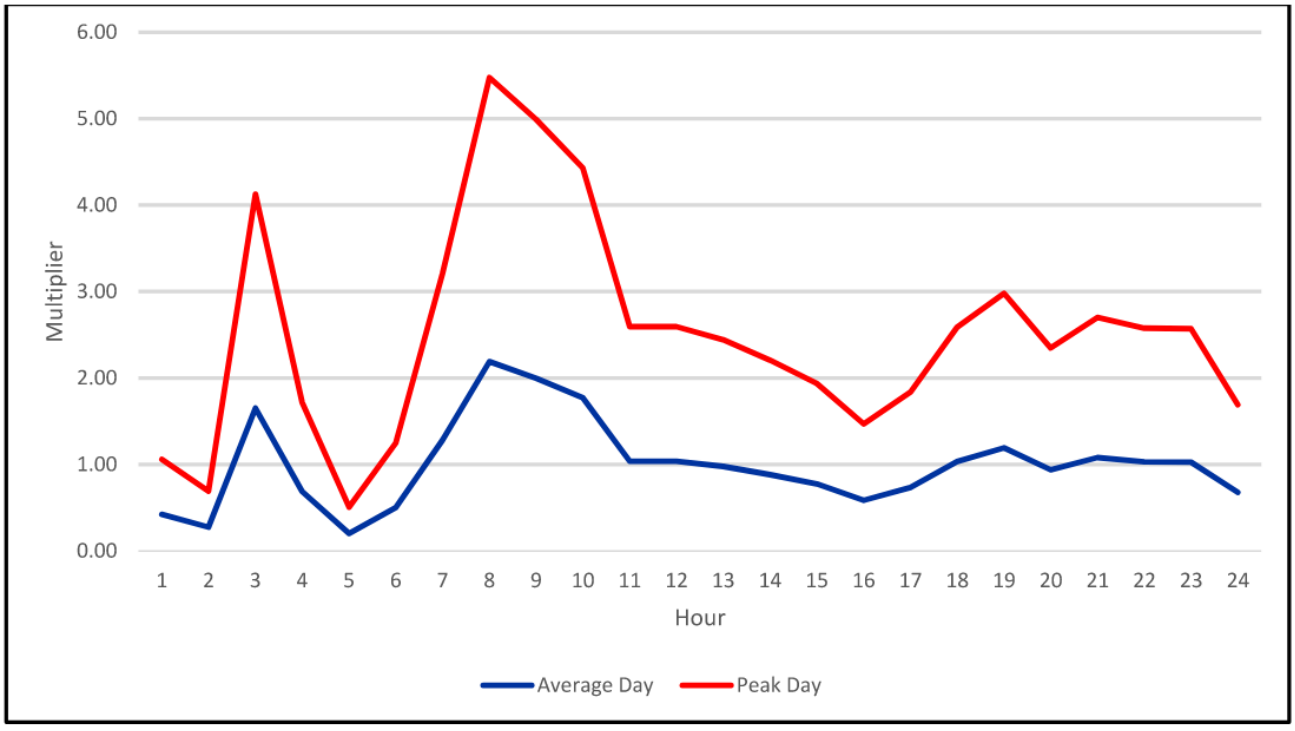


Figure 2: Average & Peak Day Diurnal Patterns for Multi-Family Residential Meters

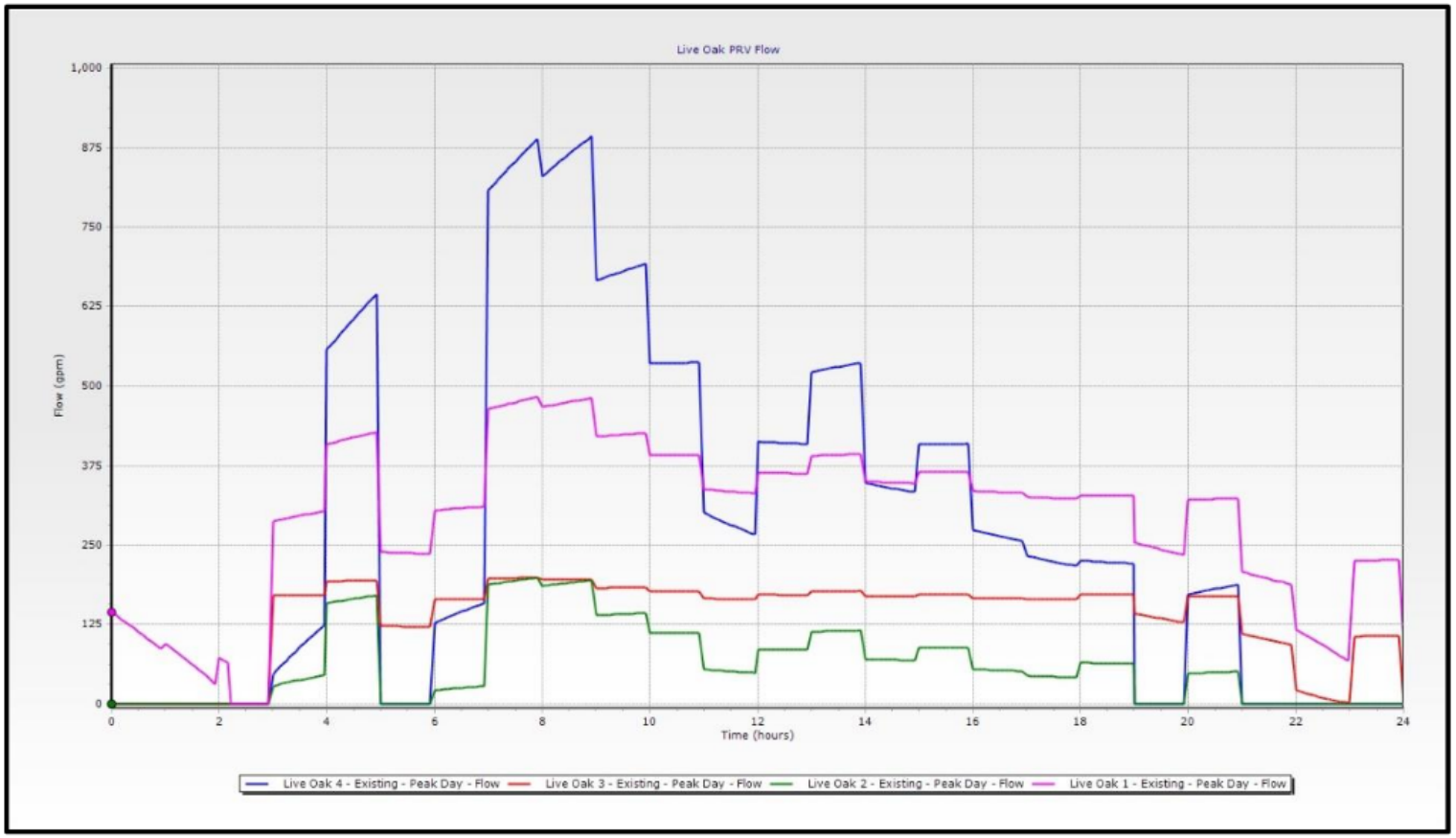


3.1.1.3 Live Oak Pressure Reducing Valve Settings

Comments provided by the City describe that the PRVs separating the Live Oak and I-35 pressure planes do not open under typical average day conditions but do open under peak day conditions. The City indicated that under peak day conditions these valves open around 4:30 am and stay open until around midnight. To simulate these conditions, the assumption was made that, all PRVs were given the same pressure setting.

On the Live Oak side of the pressure plane boundary, under peak day conditions, and with all the valves closed, observed pressures at the PRVs averaged 67-psi. Therefore, a pressure setting of 67-psi was tested in the model to see if the PRVs would open during the simulation in the window of time provided by the City. The PRV located near the corner of Mare Way and Schertz Parkway is at a lower elevation of 713-ft (approximately 14 feet lower than the other PRVs). It was assumed that it was unlikely to open in tandem with the other four PRVs on this pressure plane boundary. The results showed all PRVs were open during a window of time similar to the one provided by the City, except the PRV located near the corner of Mare Way and Schertz Parkway as assumed. Flow through the four PRVs that opened throughout a 24-hour EPS peak day scenario at a pressure setting of 67-psi is shown in Figure 3. The PRVs shown in Figure 3 are primarily open between 4:30 am and midnight. The PRV located near the corner of Mare Way and Schertz Parkway was not shown because it did not open at any time during the 24-hour EPS peak day scenario.

Figure 3: Live Oak PRV Flows



3.1.1.4 Removal of Waterlines Not in Service

The waterlines shown in Figure 4 were removed from the existing system model. While the lines are planned, the City reported that these waterline segments designated as “Active” in the waterline shapefile, were not yet in service. They will be included in the future conditions model.

Figure 4: Extent of Waterline Segment Removed from Existing System Model



3.1.2 Public Water System Evaluation Criteria

To evaluate the City’s existing system model, criteria were developed in accordance with Texas Commission on Environmental Quality (TCEQ) Public Drinking Water Rules and Regulations for Public Water Systems found in the Texas Administrative Code (TAC) Chapter 290.D. The TCEQ Rules and Regulations provide minimum capacity requirements for public water systems. The rules and regulations effective January 3, 2019 are applied in this analysis.

Several of the evaluation criteria are calculated based on the number of connections in the existing system model. The City of Schertz reports 16,434 connections in the existing water system as of December 15, 2020.

The City operates their existing water system as three pressure planes, Scenic Hills, I-35, and Live Oak. For the purposes of this evaluation the system will be assessed as one contiguous network because of the interactions between the existing pressure planes.

Extended period simulations were performed using Bentley's WaterGEMS software which provided the tools and results necessary to assess the existing system model according to the TCEQ criteria for the following:

- 24-hour Average Day Flow (ADF)
- 24-hour Peak Day Flow (PDF)
- 48-hour Peak Daily Plus Fire Flow Analysis

The key criteria for the City's existing system are summarized in Table 9. Detailed results for the evaluation criteria are discussed in the order as they appear in Table 9 throughout this section.

Table 9: TAC Criteria for the Evaluation of the City's Existing System

Category	Memo Section	Rule	Description	Results
System Storage and Supply	3.2.1	*290.45.a* & *290.45.f*	Sources of water supply can supply maximum daily demands during extended peak usage.	Field Verification Needed
	3.2.2	*290.45.e.3* & *290.45.e.1*	Minimum water system capacity requirements shall be determined by calculating the requirements based upon the number of retail customer service connections of that wholesale water supplier, if any, fire flow capacities, if required by §290.46(x) and (y) of this title and adding that amount to the maximum amount of water obligated or pledged under all wholesale contracts. Wholesalers must provide enough service pumping capacity to meet or exceed combined maximum daily commitments specified in obligations.	Field Verification Needed
	3.2.3	*290.45.b.1.D.i-iii*	System must have a minimum total storage capacity of 200 gpm gallons per connection.	**Meets Minimum Criteria**
	3.2.4	*290.45.b.1.D.iv*	System must have a minimum total elevated storage capacity of 100 gallons per connection.	**Meets Minimum Criteria**
System Service Capacity	3.2.5	*290.45.b.1.D.iii* & *290.45.b.1.D.i*	System must have a minimum total pump/well capacity of 0.6 gpm per connection.	**Meets Minimum Criteria**
System Minimum Pressure Requirements	3.2.6	*290.44.d*	System must maintain a minimum pressure of 35-psi under normal conditions.	Field Verification Needed
	3.2.7	*290.44.d*	System must maintain a minimum pressure of 20-psi under combined fire and drinking water flow conditions.	Field Verification Needed

3.1.2.1 Supply & Storage

TAC 290.45.a

"Sources of supply, both ground and surface, shall have a safe yield capable of supplying the maximum daily demands of the distribution system during extended periods of peak usage and critical hydrologic conditions. The pipelines and pumping capacities to treatment plants or distribution systems shall be adequate for such water delivery. Minimum capacities required are specified in §290.45 (relating to Minimum Water System Capacity Requirements)."

A 24-hour extended period simulation (EPS) scenario, beginning at midnight, was run for the existing system under peak day conditions. Over the 24-hour simulation, it was observed that both the I-35 elevated storage tank (EST) and the Live Oak ground storage tank (GST) water supply did not recover to at least the same percent full as it was set to at the beginning of the simulation. Figure 5 shows the I-35 EST and Live Oak GST capacities over the 24-hour simulation.

In Figure 5, the I-35 EST begins the simulation at 98% capacity and ends the simulation at 20% capacity. Likewise, the Live Oak GST begins the simulation at 83% capacity and ends the simulation at 56% capacity. Because the tanks did not recover by the end of the 24-hour simulation, the run time was lengthened to 48-hours to assess if the tanks recovered by peak hour (5:00 am) and if the decline in tank level continued throughout the second day. Figure 6 shows that neither tank recovers and the Live Oak GST almost drains completely by hour 48. The observed results indicate that the existing system model's water supply would be incapable of supplying peak day demands for an extended period as stated in TAC 290.45.a. The City did not indicate that they have issues filling the Live Oak EST or GST as severely as seen in the existing system model. A meeting was held to discuss this issue, and additional information about the system and SCADA was provided to LAN. With this information, the model was re-calibrated, and the results more closely reflected what the Live Oak EST and GST were experiencing.

Figure 5: Live Oak GST & I-35 EST Percent Full Over 24 Hours

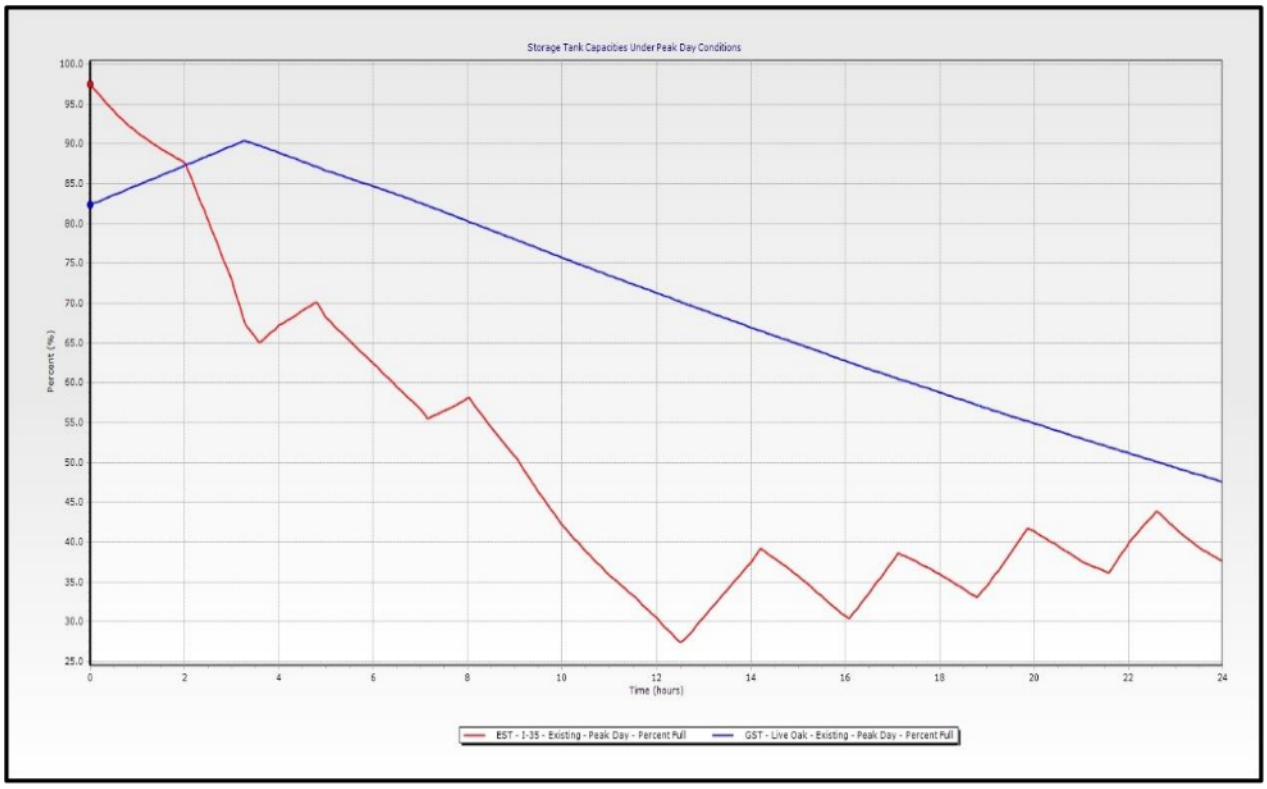


Figure 6: Live Oak GST & I-35 EST Percent Full Over 48 Hours



3.1.2.2 Wholesale Supplier Requirements

TAC 290.45.e

"The following requirements apply to systems which supply wholesale treated water to other public water supplies: Wholesalers must provide enough production, treatment, and service pumping capacity to meet or exceed the combined maximum daily commitments specified in their various obligations."

"… minimum water system capacity requirements shall be determined by calculating the requirements based upon the number of retail customer service connections of that wholesale water supplier, if any, fire flow capacities required by chapter 290.46, and adding that amount to the maximum amount of water obligated or pledged under all wholesale contracts, if required."

The minimum required water supply is of 0.6 gpm per connections. For Schertz's 16,434 connections this minimum water supply is approximately 9,860 gpm. The combination of water supplies is 10,400 gpm as shown in Table 10.

- Schertz-Seguin Local Government Corporation (SSLGC) is the main supply of water to the existing system. Based on monthly flow monitoring data provided by the City, the maximum daily supply (under peak day conditions) for Schertz from SSLGC is approximately 6,800 gpm.
- Schertz Wells - There are two Schertz wells which can supply up to 1,800 gpm each. The wells supply water directly to the Nacogdoches EST under peak day conditions.

Table 10 summarizes the system's maximum supply which **meets the minimum required capacity** for existing conditions.

Table 10: Well Capacities

Water Supply	Capacity
SSLGC	6,800 gpm
Nacogdoches 1	1,800 gpm
Nacogdoches 2	1,800 gpm
Total Peak Day Supply	**10,400 gpm**

The City of Schertz provides water to two wholesale customers, the City of Cibolo and the City of Selma. The wholesale contracts with Cibolo and Selma do not specify maximum daily commitments.

- Cibolo - from their wholesale water contracts with the City of Cibolo, the City of Schertz is to supply a combined total of 750 acre-feet of potable water per year, this includes 350 acre-feet of potable water per year designated to the Keli Heights Subdivision. 750 acre-feet per year is approximately 465 gpm.
- Selma - from their wholesale water contract with the City of Selma, the City of Schertz is to supply a total of 800 acre-feet of potable water per year. 800 acre-feet per year is approximately 496 gpm.

Table 11 summarizes contracted commitments to wholesale customers.

Table 11: Wholesale Water Commitments

Wholesale Customer	Commitment (acre-feet/year)	Commitment (gpm)
City of Cibolo	750	465
City of Selma	800	496

Under peak day conditions, the existing water system's current available supply of 10,400 gpm (from Table 10) cannot meet the minimum required supply to the City (9,860 gpm) and its wholesale customers (961 gpm, from Table 11) which totals 10,821 gpm.

3.1.2.3 Total Storage Capacity

TAC 290.45.b

"For more than 250 connections, the system must have a total storage capacity of at least 200 gallons per connection."

The minimum required storage capacity, at 200 gallons per connection, for the existing water system is 3,286,800 gallons. There are eight storage tanks within the existing water system: four elevated storage tanks and four ground storage tanks. The combined total capacity of the storage tanks is 8,500,000 gallons, meeting the minimum storage capacity requirement. Table 12 summarizes storage tank capacities.

Table 12: Storage Tank Capacities

Tank	Capacity Gallons
Northcliffe EST	1,000,000
Nacogdoches EST	500,000
Live Oak EST	1,500,000
I-35 EST	1,000,000
Deer Haven GST	1,500,000
Live Oak GST	1,500,000
Ware Seguin GST	500,000
Northcliffe GST	1,000,000
Total Storage Capacity	**8,500,000**

3.1.2.4 Elevated Storage Tank Capacity

TAC 290.45.b

"For more than 250 connections, the system must meet the following requirements: Have an elevated storage tank capacity of 100 gallons per connection or a pressure tank capacity of 20 gallons per connection. An elevated storage capacity of 100 gallons per connection is required for systems with more than 2,500 connections."

Based upon the number of connections in the existing water system, the minimum required EST capacity, at 100 gallons per connection, is 1,643,400 gallons. There are four ESTs within

the existing water system with a combined storage capacity of 4,000,000 gallons, meeting the minimum required EST capacity. Table 13 summarizes the existing water system elevated storage tank maximum capacities.

Table 13: Elevated Storage Tank Capacities

Tank	Capacity (Gallons)
Northcliffe EST	1,000,000
Nacogdoches EST	500,000
Live Oak EST	1,500,000
I-35 EST	1,000,000
Total Elevated Storage Capacity	**4,000,000**

3.1.2.5 Pumping Capacity

TAC 290.45.b

"For systems which provide an elevated storage capacity of 200 gallons per connection, two service pumps with a minimum combined capacity of 0.6 gpm per connection are required at each pump station or pressure plane. If only wells and elevated storage are provided, service pumps are not required."

Based upon the number of connections in the existing water system, the minimum required elevated storage capacity of 200 gallons per connection is 3,286,800 gallons. Schertz currently has 4,000,000 gallons of elevated storage within their system. Therefore, the minimum pumping capacity for the City is 0.6 gpm per connection based on the requirements.

The minimum required combined pumping capacity for the existing water system, at 0.6 gpm per connection, is 9,860 gpm. There are four pump stations within the existing water system housing a total of 13 pumps. Table 14 summarizes the capacities of the 13 existing water system pumps. The maximum total pumping capacity of the pumps is 23,600 gpm, meeting the minimum required capacity. The firm pump capacity (with the largest pump out of service is 20,800 gpm which also meets the minimum capacity.

Table 14: Pump Capacities

Location	Pump Details
Northcliffe 1	2,100 gpm, 232 TDH
Northcliffe 2	2,100 gpm, 232 TDH
Live Oak - HS4	2,800 gpm, 299 TDH *Goulds*
Live Oak - HS3	2,800 gpm, 295 TDH *Fairbanks Morse*
Live Oak - HS2	2,400 gpm, 295 TDH *Fairbanks Morse*
Live Oak - HS1	2,400 gpm, 295 TDH *Fairbanks Morse*
Live Oak - LS3	2,200 gpm, 145 TDH *Goulds*
Live Oak - LS2	LS - 2,200 gpm, 145 TDH
Live Oak - LS1	LS - 2,200 gpm, 145 TDH
Ware Seguin 2	600 gpm, 123 TDH
Ware Seguin 1	600 gpm, 123 TDH
Deer Haven 1	600 gpm, 172 TDH
Deer Haven 2	600 gpm, 172 TDH
Maximum Pumping Capacity	**23,600 gpm**

3.1.2.6 System Minimum Pressures

TAC 290.44.d

"… capable of providing a minimum pressure of at least 35-psi at all points within the distribution network"

In coordination with the City, LAN made assumptions about the existing water system for the hydraulic model where data was limited. While the model indicates operations concerns in the water system, these should be field verified by the City. The existing system under peak day and average day conditions was evaluated in the model using a 24-hour EPS to observe system wide minimum pressures. The TCEQ required minimum pressure of 35-psi at all points within the distribution network applies to normal operating conditions (e.g. no fire flow or line breaks) and is used as the benchmark for assessing the observed pressures for peak day and average day conditions in the existing system model.

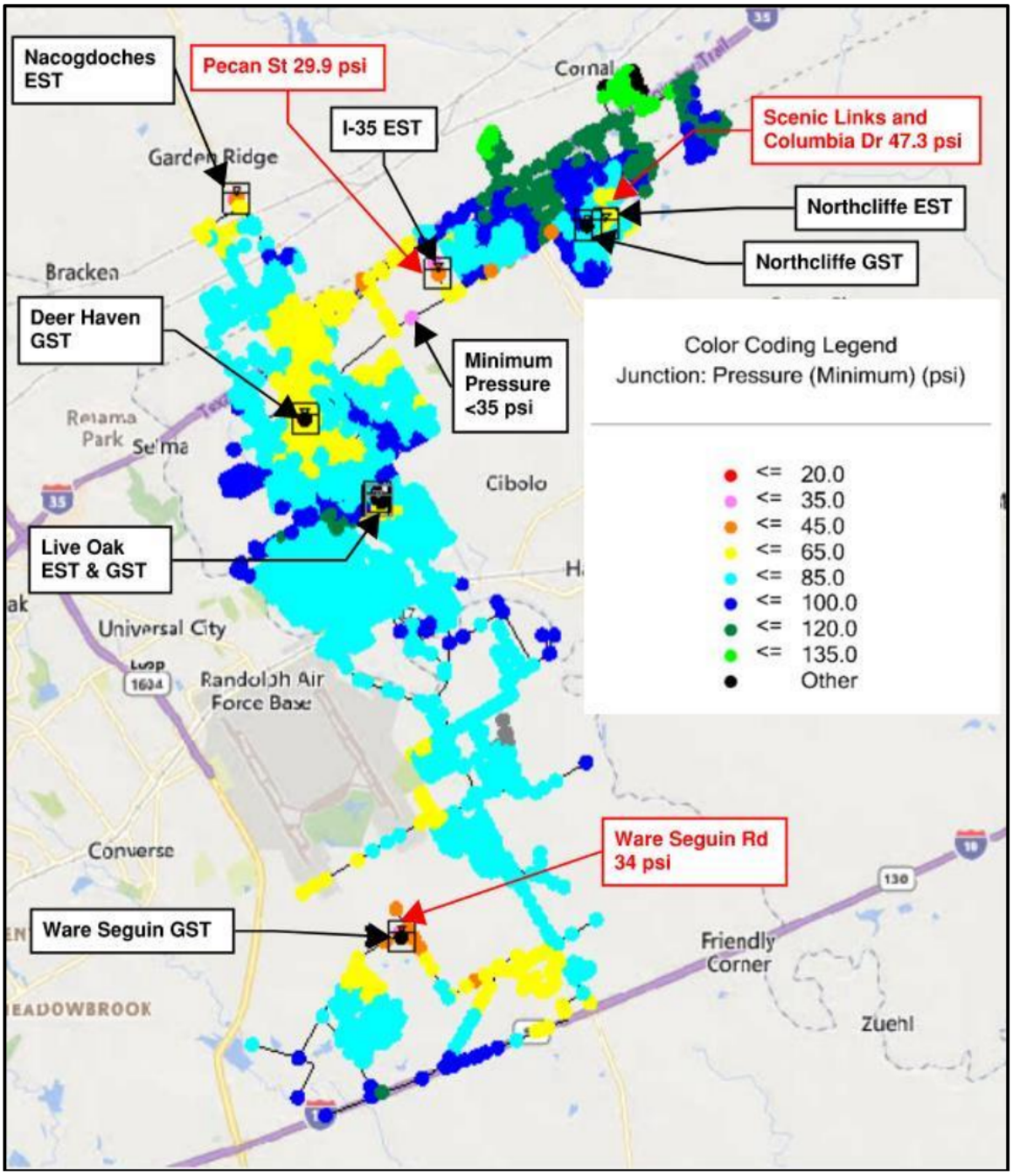
Average Day Conditions

Without detailed pressure readings across the service area, the existing system model can be used to approximate a system pressure. While the majority of the system does meet the minimum 35-psi, the results from the existing system model indicate pressure concerns under average day conditions in some areas. Observed minimum system pressures under average day conditions are summarized in Table 15. Figure 7 illustrates the observed minimum system pressures across the existing system model under average day conditions.

Table 15: Average Day Minimum Pressures Observed in Each Pressure Plane

Pressure Plane	Min. Pressure (psi)	Location	Time Step
Scenic Hills	47	Scenic Links and Columbia Dr	4 am
I-35	30	Pecan St, East of I-35 EST	12 pm
Live Oak	34	Near Ware Seguin Plant	11 pm

Figure 7: Average Day Conditions Minimum Pressures



While minimum pressures in the existing system model indicated flows approximately 1-psi below the minimum required pressure of 35-psi at the intersection of Ware Seguin Road and the Ware Seguin Plant and at high elevations adjacent to the I-35 EST, the pressures were significantly above the emergency operations threshold of 20-psi. This is a small deviation and indicates additional data collection, and analysis should be conducted by the City for verification of operations.

The Ware Seguin Plant low pressures occur near the end of the model day and could be related to the storage/capacity issues referenced above. The I-35 EST area low pressures occur near mid-day and could be related to demand patterns used in place of detailed Schertz demand data.

Peak Day Conditions

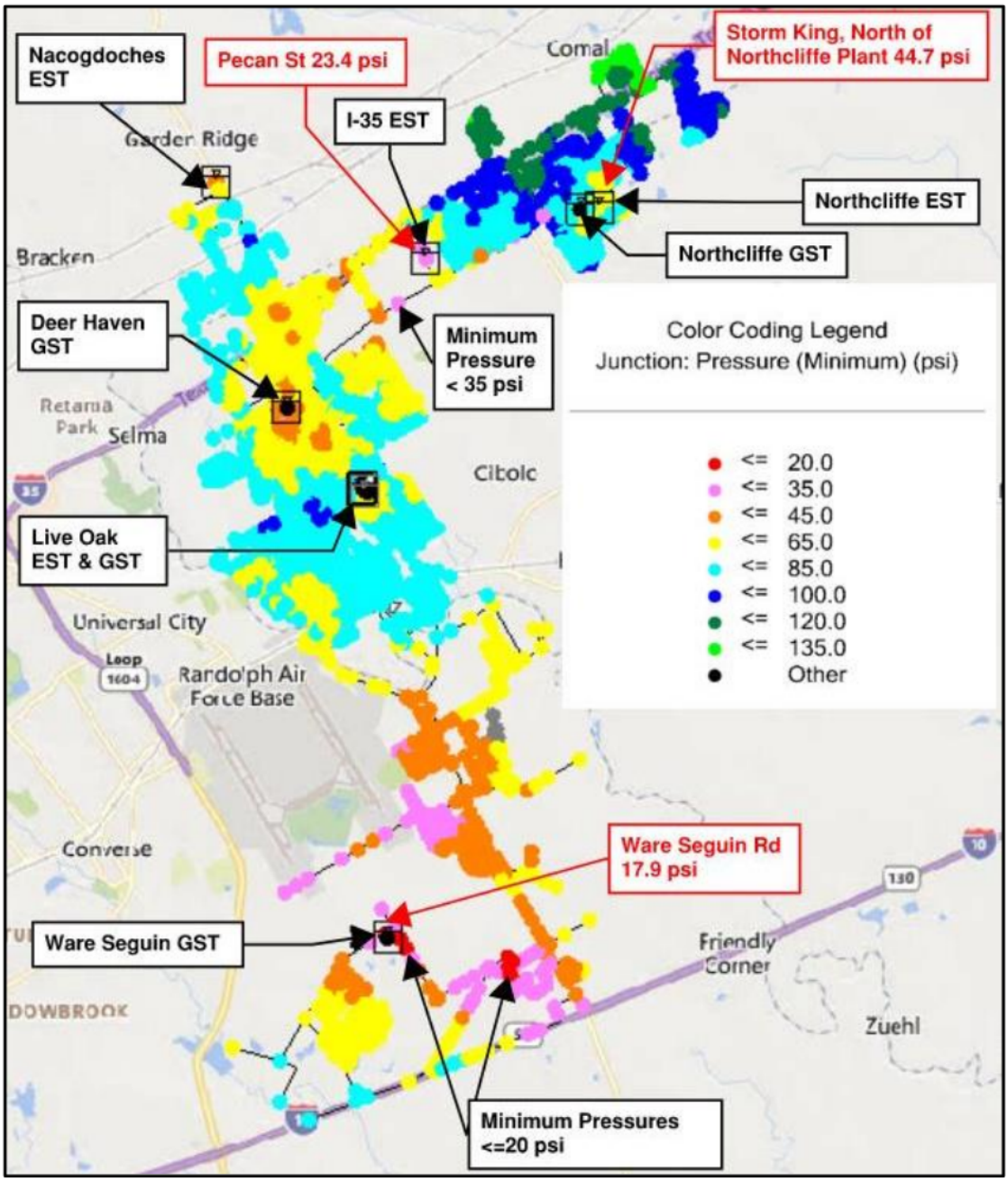
Under peak day conditions, the majority of the system does meet the minimum 35-psi. This is illustrated on Figure 8 which summarizes the observed minimum system pressures across the existing water system under peak day demand conditions. However, there were locations in the existing system model where pressures below the minimum requirement were observed, along Ware Seguin Road and near the I-35 EST at Pecan Street. The I-35 EST area low pressures occur near mid-day and could be related to demand patterns used in place of detailed Schertz demand data. These locations are noted on Figure 8.

Pressures were below the required 35-psi minimum, as well as the below the 20-psi emergency operations minimum along Ware Seguin Road and surrounding the Ware Seguin Plant. There are two factors driving the low pressure at this location, first its elevation is higher than the surrounding area by approximately 40-ft and, second, at 5 am when this low pressure occurs, the peak residential demand overlaps with irrigation demand from the HOA meters in the residential subdivisions immediately to the northeast and southwest. These low-pressure results indicate additional data collection, and analysis should be prioritized. Observed minimum system pressures under peak day conditions are summarized in Table 16.

Table 16: Peak Day Minimum Pressures Observed in Each Pressure Plane

Pressure Plane	Min. Pressure (psi)	Location	Time Step
Scenic Hills	45	Storm King, North of Northcliffe Plant	7 am
I-35	23	Pecan St, East of I-35 EST	12 pm
Live Oak	18	Near Ware Seguin Plant	5 am

Figure 8: Peak Day Conditions Minimum Pressures



3.1.2.7 Fire Flows

TAC 290.44.d.

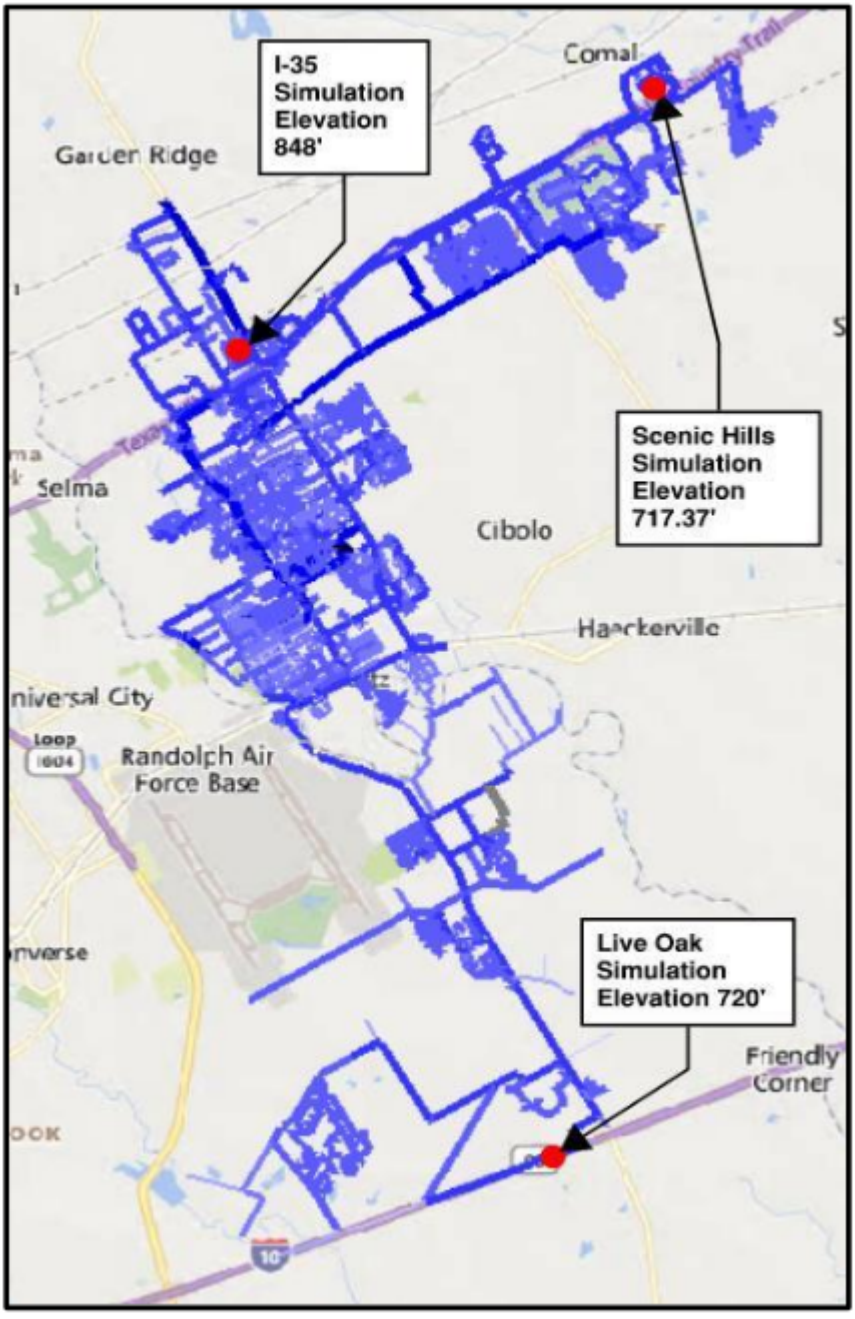
"When the system is intended to provide firefighting capability, it must also be designed to maintain a minimum pressure of 20-psi under combined fire and drinking water flow conditions."

For conservative modeling purposes, the existing water system was evaluated for three separate peak day plus fire flow scenarios (one in each pressure plane) to observe any potential interaction between the pressure planes. Fire Flow simulations were run at a commercial meter selected to provide "worst case" scenarios within each pressure plane. These specific locations for fire flows

in each pressure plane were selected because its commercial meter was at a higher elevation than other commercial meter locations in the pressure plane and were not close in proximity to an elevated storage tank or pump station. A representative Fire Flow demand of 3,500 gpm was placed at the selected meter during the corresponding simulation. Simulating worst case scenario fire flow conditions for each pressure plane provides an analysis of how the pressure planes interact while under critical conditions.

The selected locations for each simulation are shown in Figure 9. Fire Flow simulations were set to occur from 7 am to 10 am under peak day conditions. This creates a “worst case” condition where the fire flow occurs during peak hour.

Figure 9: Fire Flow Simulation Locations



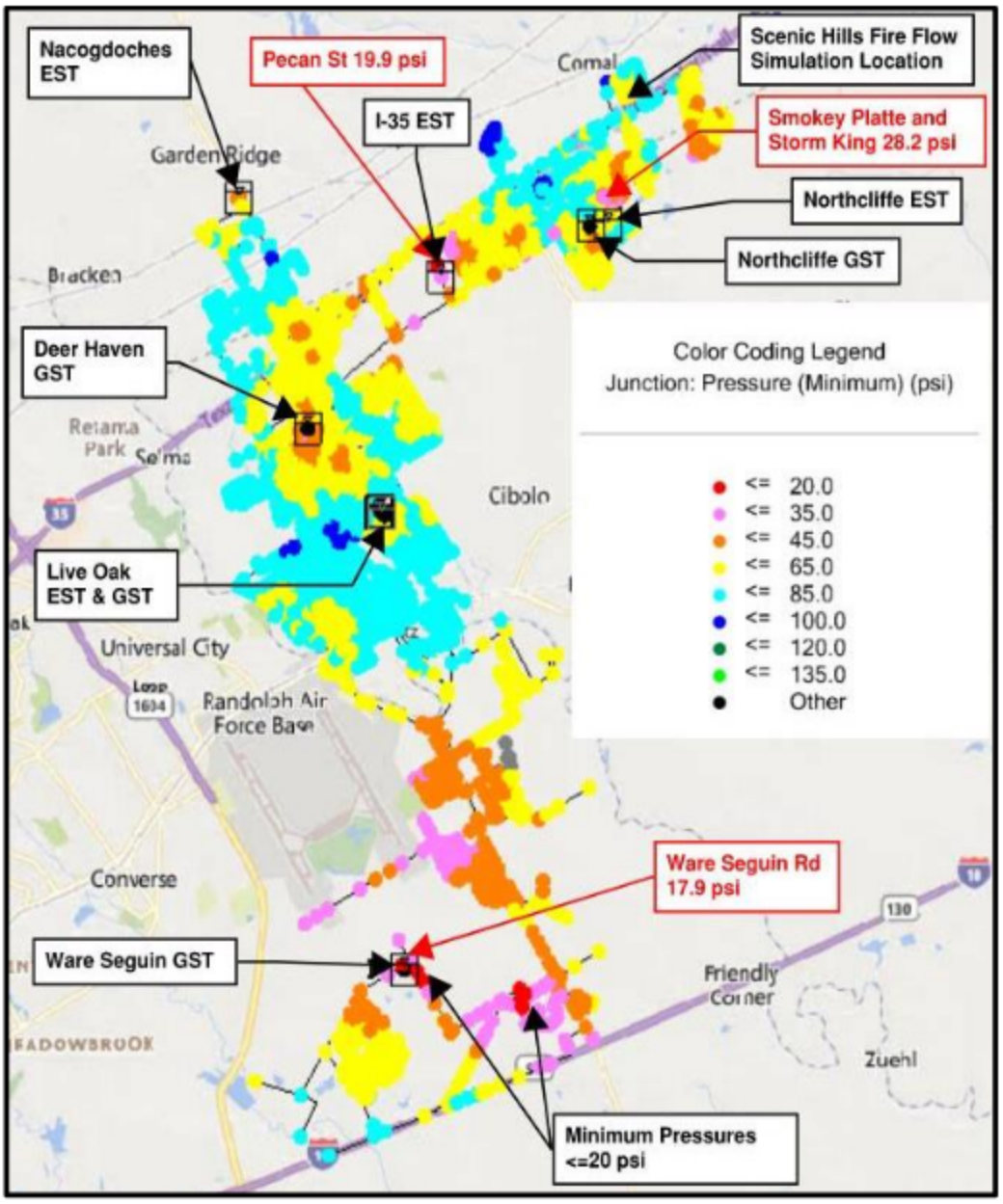
The Scenic Hills Fire Flow simulation was placed off I-35 at a commercial meter south of Baugh Lane. For the Scenic Hills Peak Day plus Fire Flow simulation, the majority of the system does meet the minimum 20-psi. However, there were locations in the existing system model where pressures below the minimum requirement were observed. The observed system minimum pressures fell below the minimum required pressure of 20-psi at high elevations along Ware Seguin Road, surrounding the Ware Seguin Plant, and at high elevations adjacent to the I-35 EST. These locations are noted on Figure 10 which summarizes the observed minimum system pressures across the existing system model under Peak Day plus Fire Flow conditions. This minimum pressure is a small deviation and systematically observed through non-fire flow conditions. It indicates additional data collection, and analysis is needed.

Observed minimum system pressures for the Scenic Hills Peak Day plus Fire Flow simulation are summarized in Table 17.

Table 17: Peak Day Plus Fire Flow Scenic Hills Simulation

Pressure Plane	Min. Pressure (psi)	Location	Time Step
Scenic Hills	28	Smokey Platte and Storm King	7 am
I-35	20	Pecan St, East of I-35 EST	5 pm
Live Oak	18	Near Ware Seguin Plant	5 am

Figure 10: Scenic Hills Fire Flow Simulation

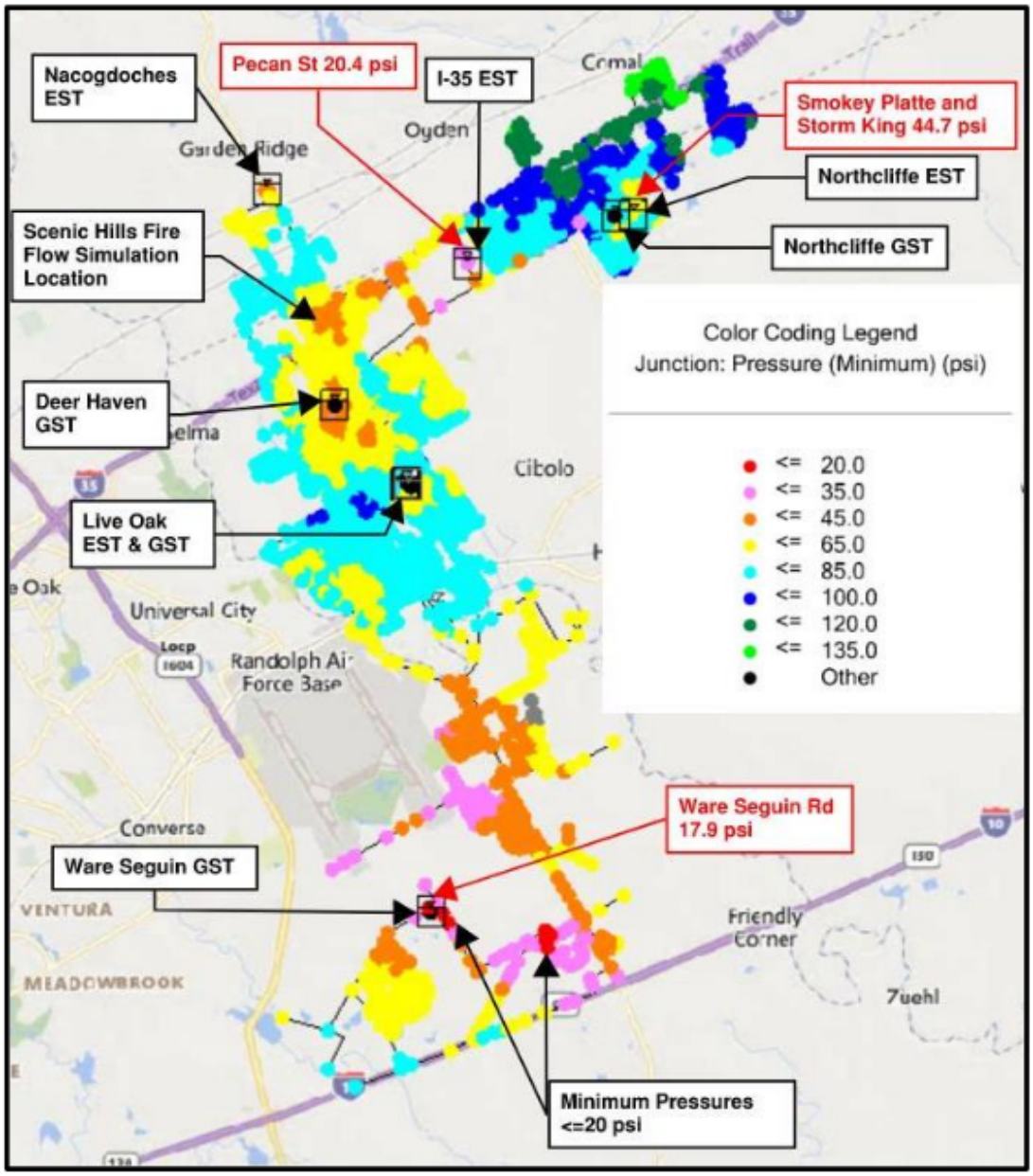


The I-35 Fire Flow simulation was placed near the intersection of I-35 and FM 3009 at a commercial meter adjacent to Corridor Parkway. For the I-35 Peak Day plus Fire Flow simulation, the majority of the system does meet the minimum 20-psi. However, there were locations in the existing system model where pressures below the minimum requirement were observed. The observed system minimum pressures fell below the minimum required pressure of 20-psi at high elevations along Ware Seguin Road and surrounding the Ware Seguin Plant. These locations are noted on Figure 11 which summarizes the observed minimum system pressures across the existing system model under Peak Day plus Fire Flow conditions. This minimum pressure is a small deviation and systematically observed through non-fire flow conditions. It indicates additional data collection, and analysis is needed. Observed minimum system pressures for the I-35 Peak Day plus Fire Flow simulation are summarized in Table 18.

Table 18: Peak Day Plus Fire Flow I-35 Simulation

Pressure Plane	Min. Pressure (psi)	Location	Time Step
Scenic Hills	45	Storm King and Smokey Platte, North of Northcliffe	7 am
I-35	20	Pecan St, East of I-35 EST	1 pm
Live Oak	18	Near Ware Seguin Plant	5 am

Figure 11: I-35 Fire Flow Simulation

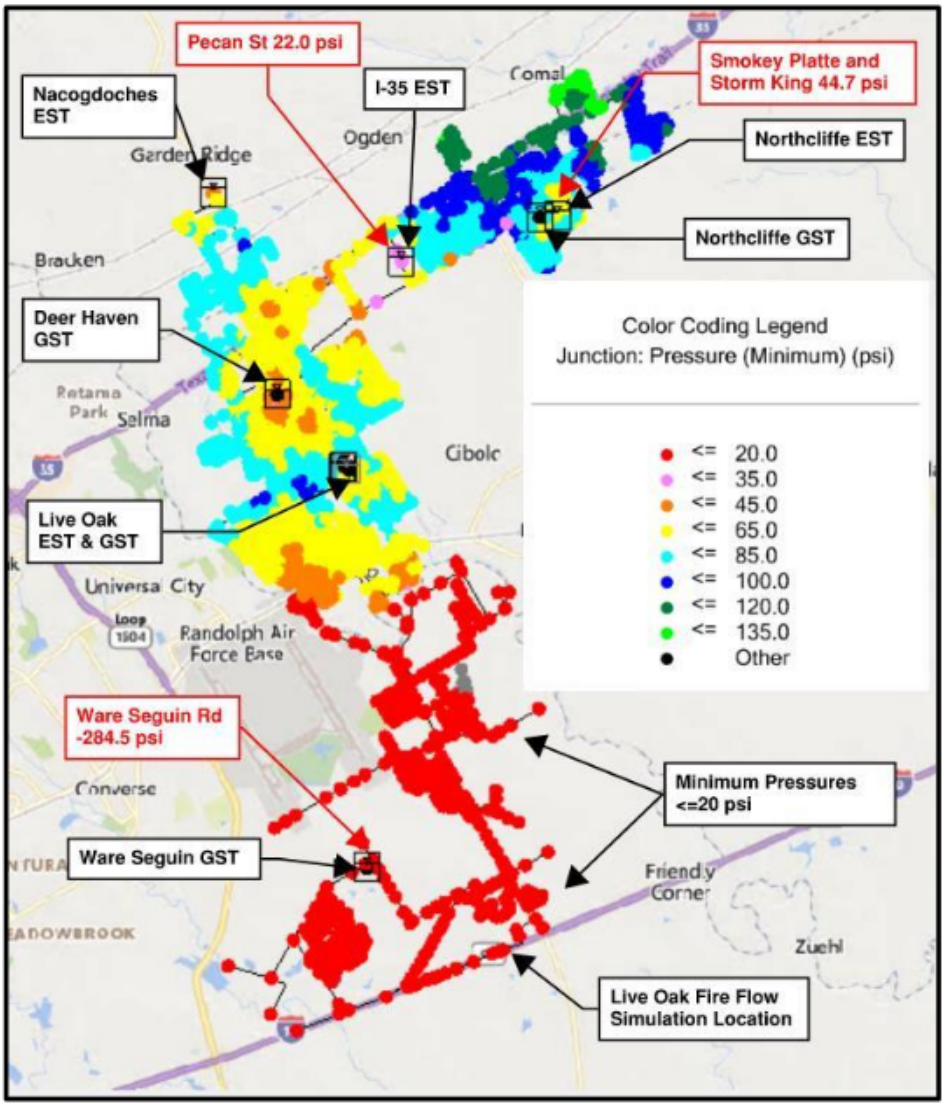


The Live Oak Fire Flow simulation was located at a commercial meter approximately 0.6 miles west of the intersection of I-10 and FM 1518. For the Live Oak Peak Day plus Fire Flow simulation, the majority of the I-35 and Scenic Hills Pressure Planes do meet the minimum 20-psi. However, the observed system minimum pressures fell below the minimum required pressure of 20-psi across the majority of the Live Oak Pressure Plane south of FM 78. These locations are noted on Figure 12 which summarizes the observed minimum system pressures across the existing system model under Peak Day plus Fire Flow conditions. These results indicate additional data collection, and analysis is needed. Observed minimum system pressures for the I-35 Peak Day plus Fire Flow simulation are summarized in Table 19.

Table 19: Peak Day Plus Fire Flow Live Oak Simulation

Pressure Plane	Min. Pressure (psi)	Location	Time Step
Scenic Hills	45	Storm King and Smokey Platte, North of Northcliffe	7 am
I-35	22	Old Wiederstein Rd, Southwest of I-35 EST	1 pm
Live Oak	Negative Pressures	Near Ware Seguin Plant	8 am

Figure 12: Live Oak FIre Flow Simulation



3.1.3 Recommendations

For the TAC Criteria where the model did not demonstrate that the minimum criteria was met, it is recommended that the City take steps to verify the behavior of the water system in the field. This section presents the steps the City can take to verify the model observations.

3.1.3.1 System Storage & Supply

Although the system meets the minimum total storage capacity, the existing system model results indicated that the system cannot supply peak day demands for an extended period of time. It is recommended that the City perform pressure and flow monitoring at all pump stations and ESTs concurrently for two weeks during a peak day period (e.g., Mid-August) to verify behavior of the water system under these conditions.

It is LAN's understanding that a second supply connection from the SSLGC will be connected to the proposed Corbett EST (located near the east dead end of Ray Corbett Dr.). This additional supply location and EST will be assessed in the Future System Evaluation effort. These future

conditions results will be considered when developing the final recommendations for storage and supply of the City's water system.

3.1.3.2 System Minimum Pressure Requirements

Because pressures below the minimum requirements for the average day, peak day, and peak day plus fire scenarios were observed in the existing system model, it is recommended that the City perform pressure monitoring at the locations were these low pressures were observed at the same time that the peak day period flow and pressure monitoring at the pump stations and ESTs is being performed.

It is recommended that the data recording equipment used be set to record pressure and flow readings at least every 15-minutes.

3.1.4 Summary

The results from this existing system evaluation were used to develop preliminary infrastructure and operational recommendations for near-term and future system improvements. These recommendations, in conjunction with currently planned improvements, are assessed in the future system evaluation and used in the development of the Capital Improvements Plan. Preliminary recommendation alternatives under consideration are (but not limited to):

- Increase in water supply
- Increased pumping capacity
- Increased storage capacity
- Changes to pump operating pressure controls or schedules

3.2 Future Water System Evaluation & CIP

The following information, criteria, and constraints were used to identify and develop proposed water system improvement projects.

- City direction for projects already in planning, design, and construction
- Minimum pipe size of 8-inches
- Minimum normal system pressure of 45 psi

3.2.1 Near Term System Evaluation

Before proceeding to model future scenarios, the system was analyzed to identify improvements needed to solve present day system issues. This analysis is referred to as 'near-term' system improvements and accounts for projects which are currently under design or construction and other projects identified in the analysis to resolve existing system deficiencies.

The near-term system water model was developed based on the existing conditions model previously developed. Projects which are currently in various stages of design and construction were provided by the City and implemented into the model. After implementing City-identified projects the model was run in average day, peak day, and fire flow conditions to identify additional improvements needed.

3.2.1.1 Fire Flow Analysis

Fire flow analysis of the existing system was performed in the development of the "Existing Water System Model Evaluation" memo published January 2021. Projects to resolve fire flow deficiencies in the existing system were identified in the near-term system evaluation and are included in the recommended Near-Term CIPs and proposed Pipe Replacement Program.

3.2.1.2 Pipe Replacement Program

In addition to the recommended CIPs identified in the model evaluation, the City also desires to replace undersized (≤6") and asbestos-cement (AC) distribution pipes within their system. The undersized distribution pipes are unable to provide fire flow and reduce the system capacity. Undersized pipes are recommended to be upsized to 8" PVC, and the AC pipes greater than or equal to 8" should be replaced with PVC pipes of the same size. Based on the pipe attributes in the hydraulic model, there are approximately 280,460 LF of AC pipe in the system and an additional 175,380 LF of undersized pipe in the system. These pipe replacement programs can be established with a goal to replace a certain amount of pipe per year. A 20-year program would include an average replacement rate of 22,800 LF per year.

3.2.1.3 Near Term CIP Projects

Recommended near-term CIPs are listed in Table 20 and illustrated in Appendix 11.

Table 20: Near Term Water CIP Project Summary

CIP Number	Description	Notes
System Improvement Projects		
NT-W1	Bubbling Springs 6" WL Replacement	City identified maintenance project.
NT-W2	Corbett Pump Station & 3.0 MG GST	Per "Corbett 3.0 MG GST Project" Preliminary Engineering Report (2021), currently underway.
NT-W3	Ware Seguin Pump Station Operational Improvement	Potentially zero cost project to improve pump station performance in this service area.
NT-W4	12" from Ware Seguin to Lower Seguin	Currently underway.
NT-W5	Fred Couples to Schwab	Complete.
NT-W6	Schwab to Eckhardt	Currently in design.
NT-W7	Graytown to Pfeil	Currently underway.
NT-W8	FM 78 Water Line Replacement	Needed for fire flow.
NT-W9	Moonlight Meadow Dr & Lost Meadow Dr WL Replacement	Needed for fire flow.
NT-W10	Robinhood Way WL Replacement	Needed for fire flow.
NT-W11	Undersized Pipe Replacement Program	Replacement of pipes ≤6".
NT-W12	Asbestos Cement Pipe Replacement Program	Replacement of AC pipes.

3.2.2 2030 System Evaluation

The 2030 planning scenario is the first future scenario that was modeled. To develop the 2030 model, the near-term model was updated to include the water demands associated with 2030 project land use. The City identified projects that were not needed until 2030 were implemented in the 2030 model and additional projects were identified to meet the 2030 system needs. The model was run in average day, peak day, and fire flow conditions to identify additional improvements needed. A TCEQ capacity analysis was completed to confirm the system would meet TCEQ criteria with the recommended 2030 projects implemented.

3.2.2.1 TCEQ capacity Analysis

An evaluation of the City's system was performed to determine if the system met the Texas Commission on Environmental Quality's (TCEQ's) minimum pumpage and storage requirements as outlined in Chapter §290.45 of the Texas Administrative Code. A summary of the applicable TCEQ minimum requirements is included below. TCEQ's requirements are based on the raw number of connections, which have been approximated based on the number of connections in the model and City GIS data.

TCEQ Minimum Requirements:

1. Well Pump Capacity: Two (2) or more wells having a total capacity of 0.6 GPM per connection.
2. Elevated Storage Capacity: Elevated storage capacity of 100 gallons per connection.
3. Elevated Storage Credit: If elevated storage capacity of 200 gallons per connection is provided, reduced service pumping requirements can be applied as discussed below.
4. Pressure Tank Capacity: For future systems, if elevated storage is not provided, a pressure tank capacity of 20 gallons per connection is required.
5. Total Storage Capacity (elevated and ground storage): Total storage capacity of 200 gallons per connection, inclusive of the 100-gallon minimum requirement listed above.
6. Service Pump Capacity:
   - 6.1 A minimum of two (2) pumps with a combined capacity of 2.0 GPM per connection, except for systems meeting one of the two requirements below.
     - 6.1.1 For systems that meet the elevated storage credit requirement listed above, a minimum of two (2) pumps with a combined capacity of 0.6 GPM per connection are required for each pump station or pressure plane.
     - 6.1.2 If only wells and elevated storage are provided, service pumps are not required.

The City's existing system is divided into three (3) pressure planes – IH-35, Scenic Hills, and Live Oak. For the TCEQ Capacity Analysis, IH-35 and Scenic Hills pressure planes have been grouped together as they receive water from the same supply point. The 2030 system meets all TCEQ capacity requirements. The number of projected connections for each pressure plane based on current number of connections and projected growth in the system is provided in Table 21, and TCEQ capacity results are summarized in Table 22 and Table 23.

Table 21: Projected 2030 Number of Connections per Pressure Plane

Pressure Plane	Existing Number of Connections	2030 Number of Connections
IH-35 + Scenic Hills	9,913	11,966
Live Oak	6,118	7,385
Total	**16,031**	**19,351**

Note: The capacity analysis in Table 22 and Table 23 below assume that all near-term and recommended 2030 projects are complete and in-service.

Table 22: 2030 TCEQ Capacity Analysis for IH-35 & Scenic Hills Pressure Planes

	IH-35 + Scenic Hills Plane Evaluation				
	TCEQ Requirements			System Check	
Total Supply Capacity [gpm]	0.6	gpm/conn	7,180	8,100	MEETS TCEQ REQUIREMENTS
Elevated Storage Capacity [gal]	100	gal/conn	1,196,000	3,500,000	MEETS TCEQ REQUIREMENTS
Elevated Storage Credit [gal]	200	gal/conn	2,393,200	3,500,000	MEETS TCEQ REQUIREMENTS
Total Storage Capacity [gal]	200	gal/conn	2,393,200	13,500,000	MEETS TCEQ REQUIREMENTS
Service Pump Capacity [gpm]	0.6	gpm/conn	7,180	11,600	MEETS TCEQ REQUIREMENTS

Table 23: 2030 TCEQ Capacity Analysis for Live Oak Pressure Plane

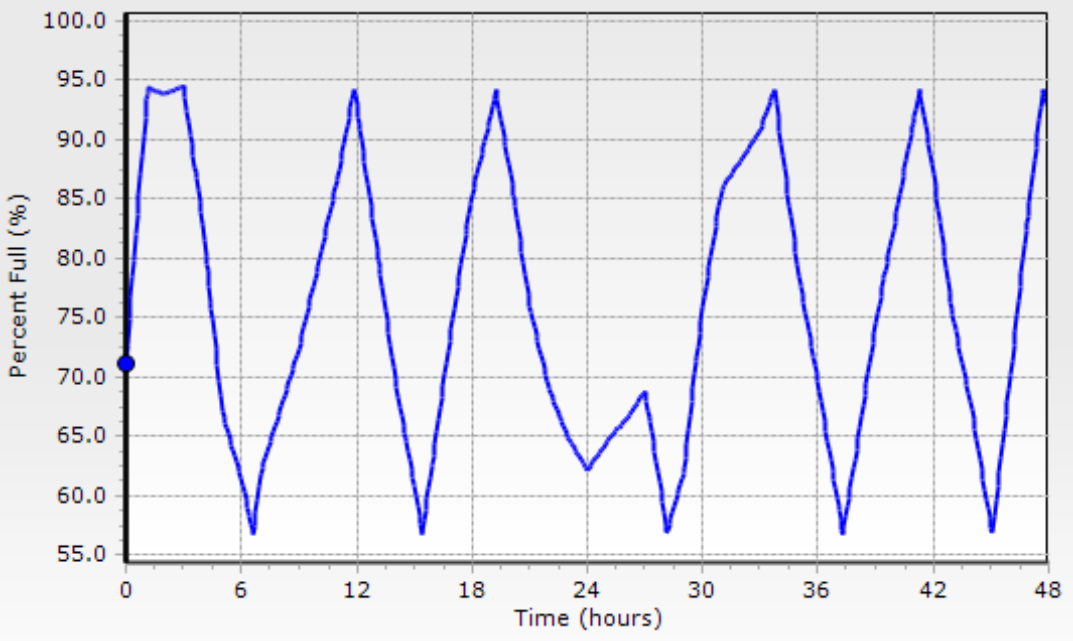
	Live Oak Pressure Plane Evaluation				
	TCEQ Requirements			System Check	
Total Supply Capacity [gpm]	0.6	gpm/conn	4,431	8,855	MEETS TCEQ REQUIREMENTS
Elevated Storage Capacity [gal]	100	gal/conn	738,500	2,500,000	MEETS TCEQ REQUIREMENTS
Elevated Storage Credit [gal]	200	gal/conn	1,477,000	2,500,000	MEETS TCEQ REQUIREMENTS
Total Storage Capacity [gal]	200	gal/conn	1,477,000	7,500,000	MEETS TCEQ REQUIREMENTS
Service Pump Capacity [GPM]	0.6	gpm/conn	4,431	12,600	MEETS TCEQ REQUIREMENTS

3.2.2.2 System Storage

The City's system includes five (5) elevated storage tanks (ESTs). Tank levels through the 2030 peak day scenario are illustrated in the following figures.

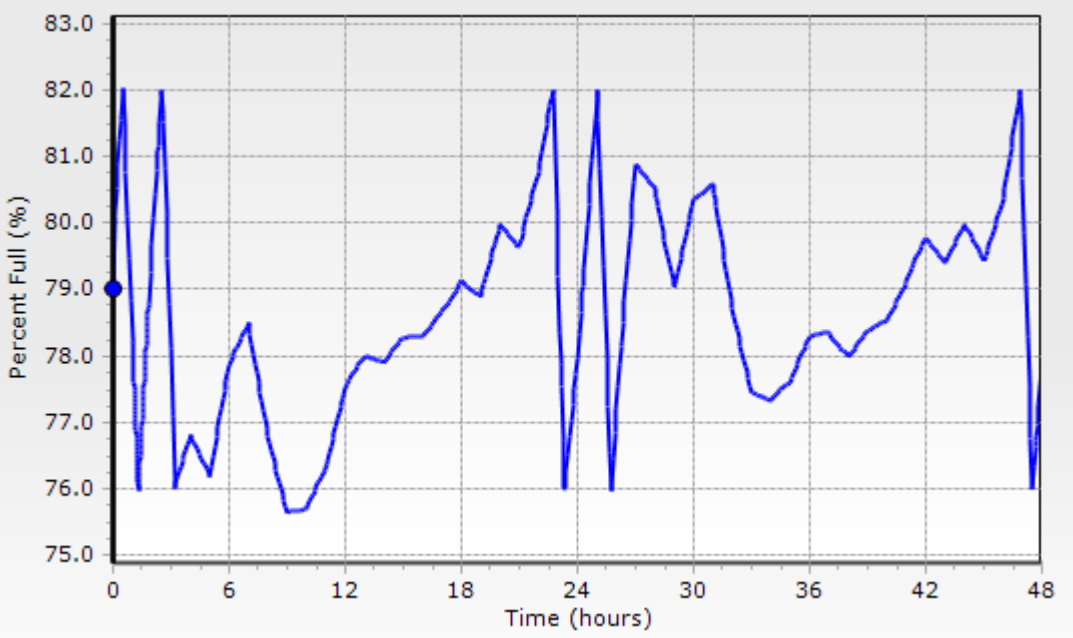
The Corbett EST is filled by the new Corbett pump station and is able to easily fill when the pump station is running. The lower water level can easily be manipulated based on the pump controls.

Figure 13: 2030 Peak Day Corbett EST Levels



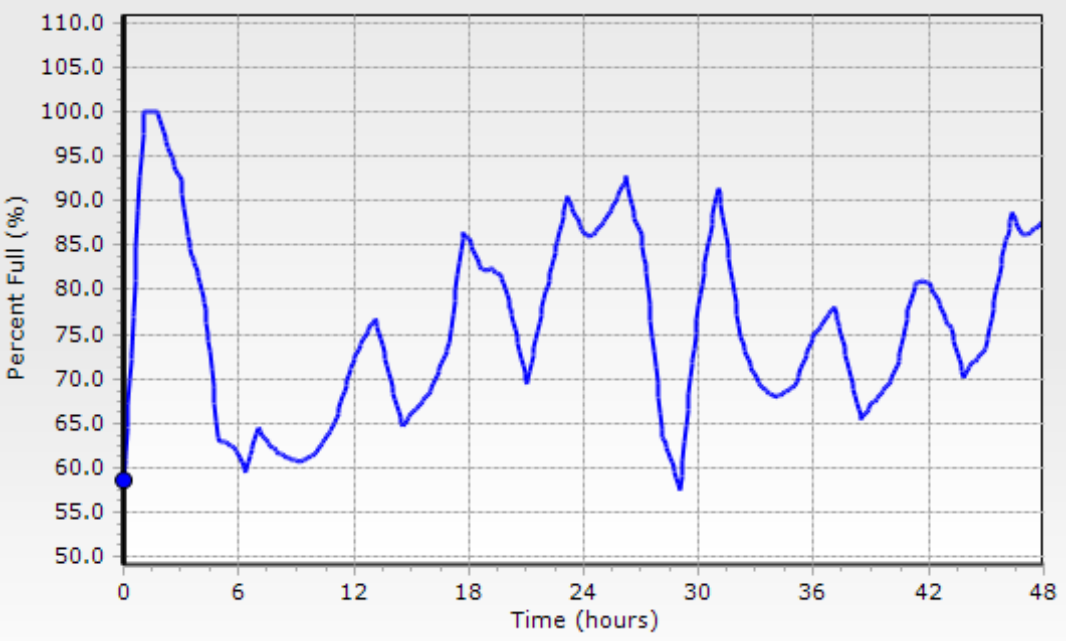
The Live Oak EST drains slightly during peak demand times of the day but is able to recover.

Figure 14: 2030 Peak Day Live Oak EST Levels



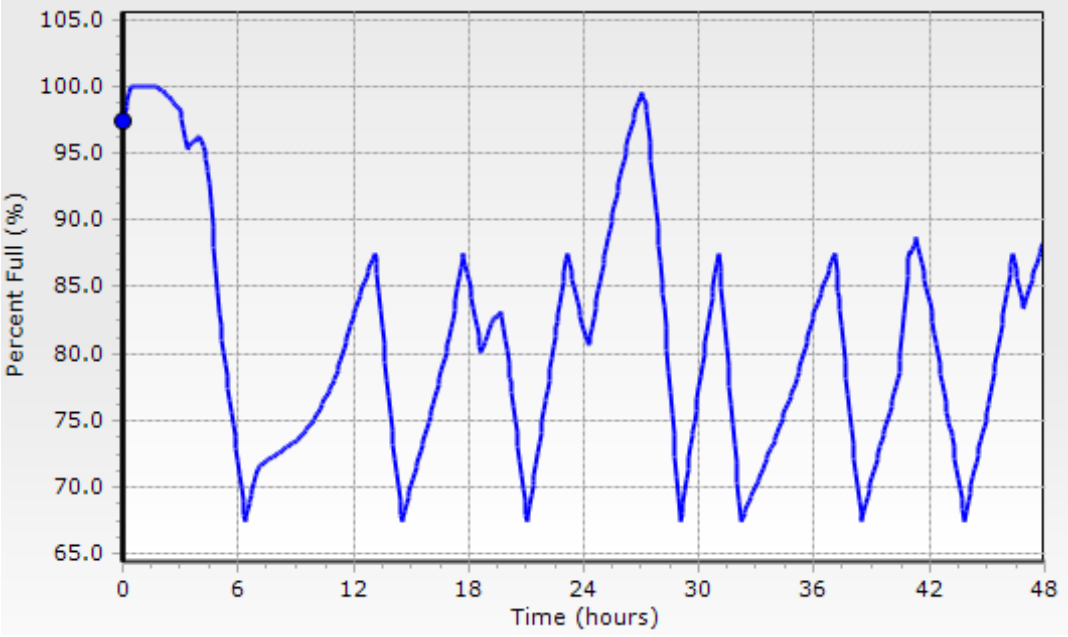
The Nacogdoches EST level fluctuates throughout the peak day simulation but is able to be filled with the well.

Figure 15: 2030 Peak Day Nacogdoches EST Levels



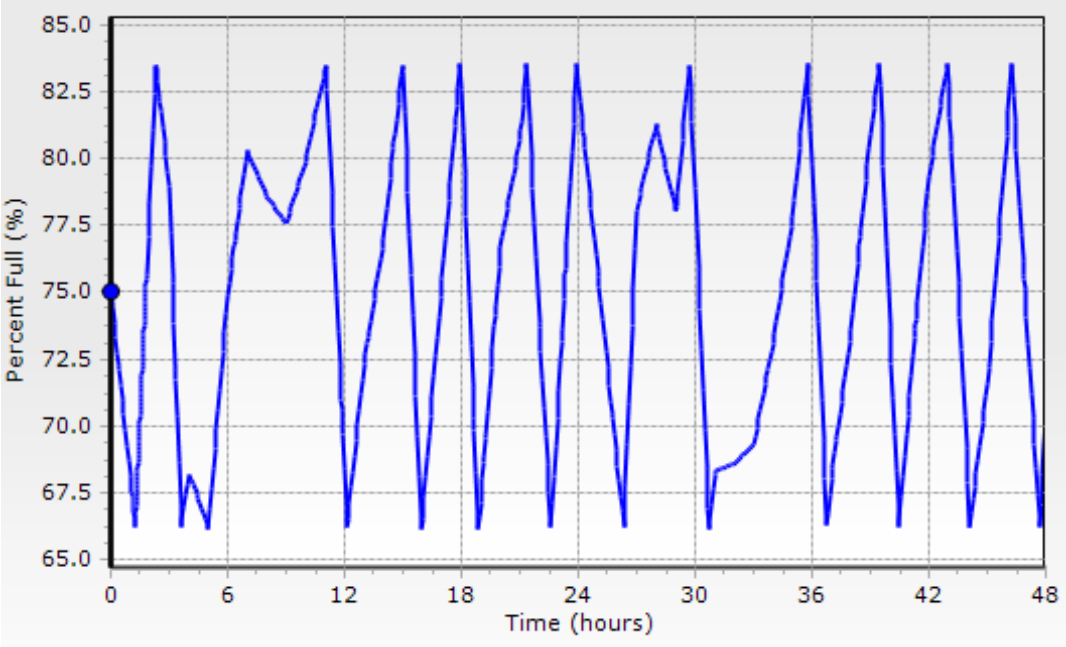
The IH-35 EST drains during the peak day simulation but is able to recover to initial levels around hour 27.

Figure 16: 2030 Peak Day IH-35 EST Levels



The Northcliffe EST levels fluctuate frequently throughout the day but can easily recover to initial levels.

Figure 17: 2030 Peak Day Northcliffe EST Levels



3.2.2.3 Fire Flow Analysis

The 2030 water system was evaluated to determine the best locations to simulate fire flow conditions for residential and commercial users. For residential fire flow, a 1,500 gpm fire flow demand was modeled. For commercial fire flow, a 3,500 gpm fire flow demand was modeled. For all fire flow analyses, a minimum system pressure of 20 psi is required per TCEQ. The fire flow nodes were selected at extremities of the system to represent the most conservative locations to achieve acceptable fire flow. The fire flow node locations are illustrated in Appendix 12. All modeled locations passed fire flow with the recommended 2030 system improvements.

3.2.2.4 2030 CIP Projects

Recommended CIPs for 2030 are listed in Table 24 and illustrated in Appendix 13.

Table 24: 2030 Water CIP Project Summary

CIP Number	Description	Notes
Growth Projects		
2030-W1	New 12" loop east of FM 3009, north of IH-35 (approximately 6,060 LF)	Serves new service area.
2030-W2	Raf Burnette Rd 12” WL Improvements	Serves new service area.
2030-W3	8” WL from Ray Corbett Dr to Lower Seguin Rd	Serves new service area.
2030-W4	Trainer Hale Rd 2” WL Replacement & 8” WL Improvement	Upgrades distribution system to current min. pipe size (8") to serve new service area.
2030-W5	Boenig Dr S 6” WL Replacement & 8” WL Improvement	Needed to meet growth in area and provide fire flow.
2030-W6	Live Oak to IH-35 24" Transmission Main	In progress, pending easement acquisition. Needed to meet growth and provide redundancy.
2030-W7	Ware Seguin Pump Station Expansion Phase 1	Needed to meet new growth in Ware Seguin area.
2030-W8	IH-10 8” WL Improvements	Needed to meet growth in area.
System Improvement Projects		
2030-W9	PRV Installation for Proposed Southwest Pressure Plane	Avoids high pressures and improves performance of Ware Seguin Pump Station.
2030-W10	River Rd 6” WL Replacement	Removes system bottleneck.
2030-W11	Undersized Pipe Replacement Program	Replacement of pipes ≤6”.
2030-W12	Asbestos Cement Pipe Replacement Program	Replacement of AC pipes.

3.2.2.5 2030 SSLGC Supply Need

As part of the modeling effort, the water supply needed from the Schertz-Seguin Limited Government Corporation (SSLGC) was evaluated. Schertz is currently contracted for 5,801 gpm (8,351 acre-ft per year). An additional 3,799 gpm SSLGC water supply capacity for a total of 9,600 gpm is recommended to meet the 2030 projected system demands.

3.2.3 2050 System Evaluation

The 2050 planning scenario is the final future scenario that was modeled. To develop the 2050 model, the 2030 model was updated to include the water demands associated with 2050 project land use. The model was run in average day, peak day, and fire flow conditions to identify improvements needed. A TCEQ capacity analysis was completed to confirm the system would meet TCEQ criteria with the recommended 2050 projects implemented.

3.2.3.1 TCEQ Capacity Analysis

The TCEQ capacity analysis was also performed for supply, storage, and pumping with recommended improvements through 2050 implemented. The 2050 system meets all TCEQ capacity requirements. The number of projected connections for each pressure plane based on

current number of connections and projected growth in the system is provided in Table 25, and TCEQ capacity results are summarized in Table 26 and Table 27.

Table 25: Projected 2050 Number of Connections per Pressure Plane

Pressure Plane	Number of Connections for TCEQ Capacity Analysis
IH-35 + Scenic Hills	16,846
Live Oak	10,397
Total	**27,243**

Note: The capacity analysis in Table 26 and Table 27 assume that all near-term, recommended 2030, and recommended 2050 projects are complete and in-service.

Table 26: 2050 TCEQ Capacity Analysis for IH-35 & Scenic Hills Pressure Planes

	IH-35 + Scenic Hills Plane Evaluation				
	TCEQ Requirements			System Check	
Total Supply Capacity [gpm]	0.6	gpm/conn	10,108	13,300	MEETS TCEQ REQUIREMENTS
Elevated Storage Capacity [gal]	100	gal/conn	1,684,600	3,500,000	MEETS TCEQ REQUIREMENTS
Elevated Storage Credit [gal]	200	gal/conn	3,369,200	3,500,000	MEETS TCEQ REQUIREMENTS
Total Storage Capacity [gal]	200	gal/conn	3,369,200	16,500,000	MEETS TCEQ REQUIREMENTS
Service Pump Capacity [gpm]	0.6	gpm/conn	10,108	13,300	MEETS TCEQ REQUIREMENTS

Table 27: 2050 TCEQ Capacity Analysis for Live Oak Pressure Plane

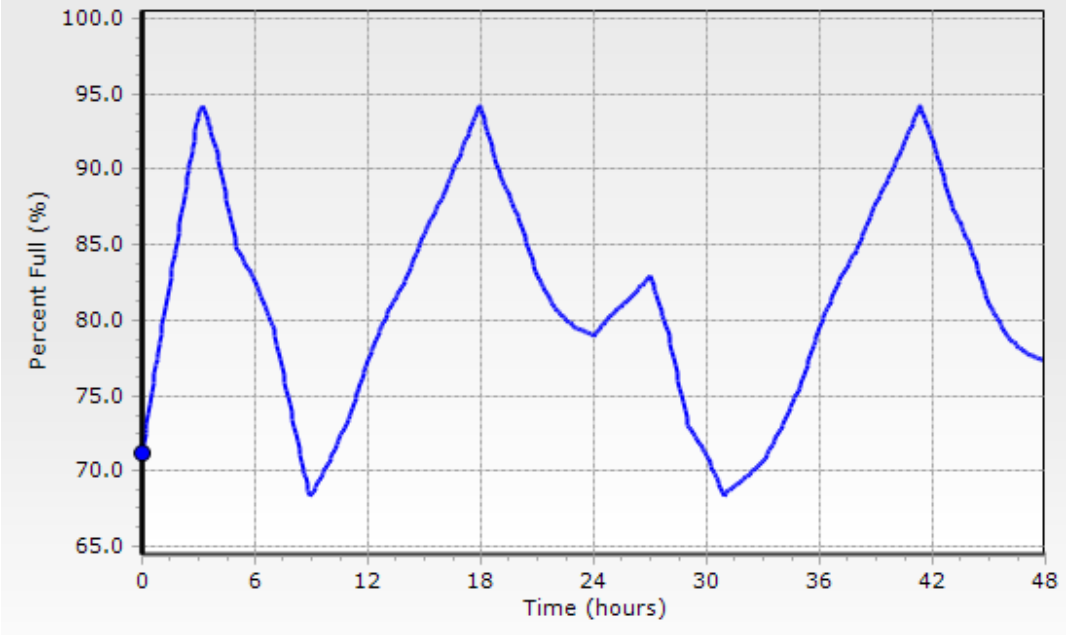
	Live Oak Pressure Plane Evaluation				
	TCEQ Requirements			System Check	
Total Supply Capacity [gpm]	0.6	gpm/conn	6,239	9,400	MEETS TCEQ REQUIREMENTS
Elevated Storage Capacity [gal]	100	gal/conn	1,039,700	2,500,000	MEETS TCEQ REQUIREMENTS
Elevated Storage Credit [gal]	200	gal/conn	2,079,400	2,500,000	MEETS TCEQ REQUIREMENTS
Total Storage Capacity [gal]	200	gal/conn	2,079,400	7,500,000	MEETS TCEQ REQUIREMENTS
Service Pump Capacity [GPM]	0.6	gpm/conn	6,239	13,000	MEETS TCEQ REQUIREMENTS

3.2.3.2 System Storage

The City's system includes five (5) elevated storage tanks (ESTs). Tank levels through the 2050 peak day scenario are illustrated in the following figures.

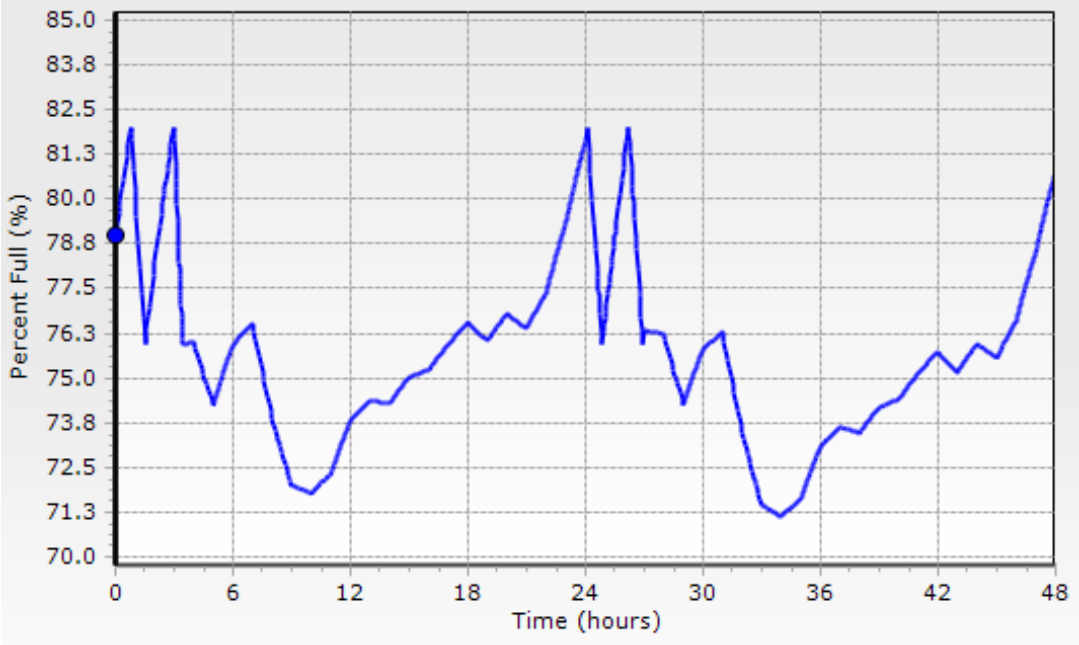
The Corbett EST is filled by the Corbett pump station and is able to easily fill when the pump station is running. The lower water level can easily be manipulated based on the pump controls.

Figure 18: 2050 Peak Day Corbett EST Levels



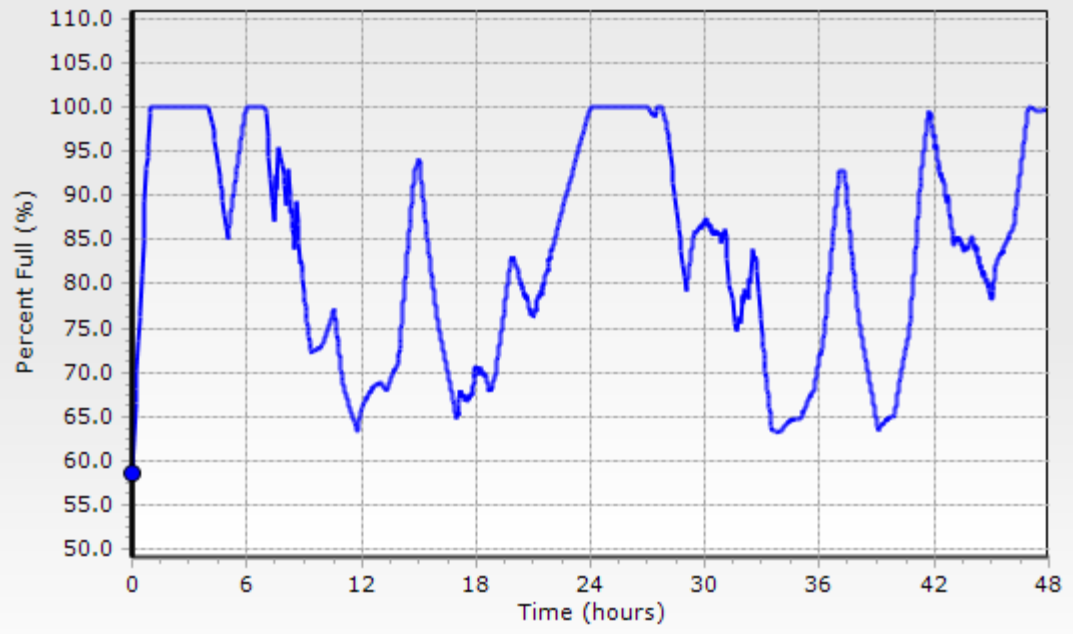
The Live Oak EST levels drop in the peak demand times but are able to recover to initial levels within 24 hours.

Figure 19: 2050 Peak Day LIve Oak EST Levels



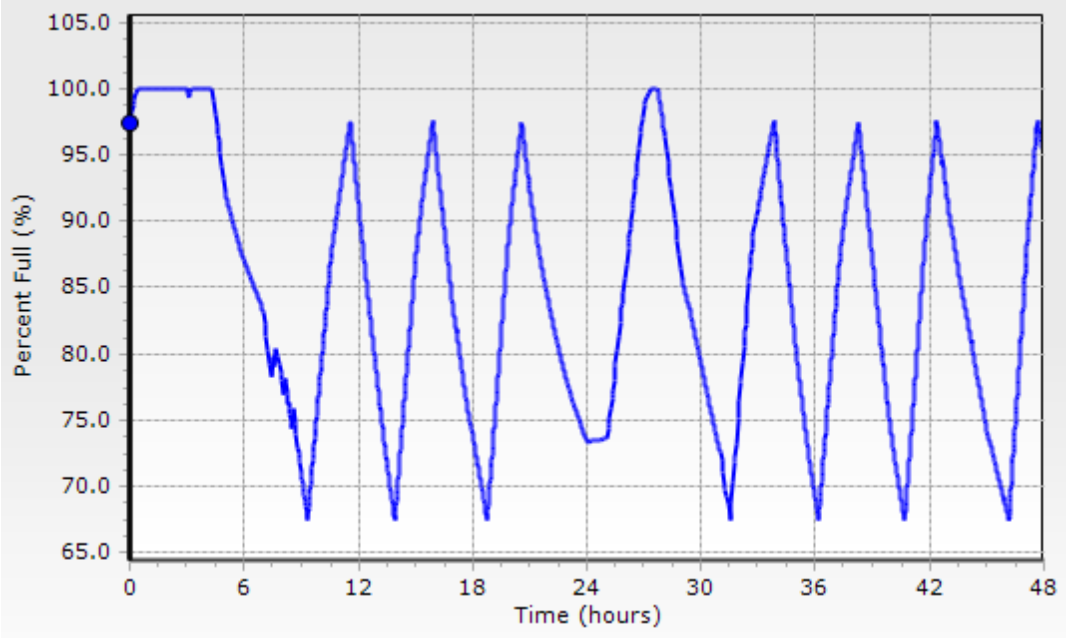
The Nacogdoches EST levels fluctuate throughout the peak day simulation but are able to easily recover.

Figure 20: 2050 Peak Day Nacogdoches EST Levels



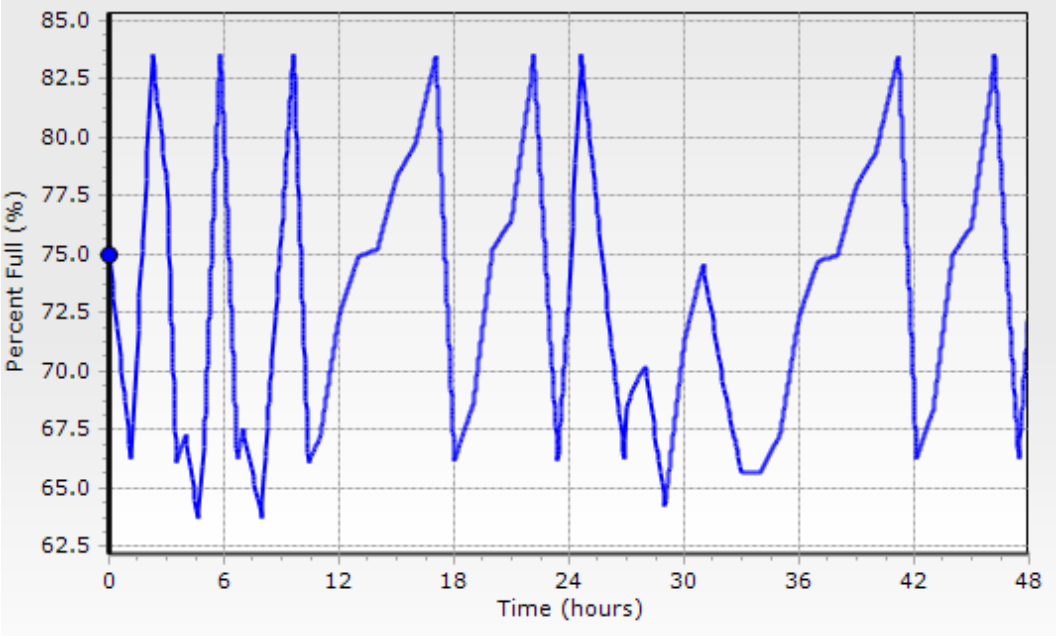
The IH-35 EST is fed by the new 2050 IH-35 pump station and is easily able to fill based on running the proposed pump station.

Figure 21: 2050 Peak Day IH-35 EST Levls



The Northcliffe EST level fluctuates frequently throughout the peak day simulation but is able to easily recover.

Figure 22: 2050 Peak Day Nortcliffe EST Levels



3.2.3.3 Fire Flow Analysis

The 2050 water system was evaluated to determine the best locations to simulate fire flow conditions for residential and commercial users. For residential fire flow, a 1,500-gpm fire flow demand was modeled. For commercial fire flow, a 3,500-gpm fire flow demand was modeled. For all fire flow analyses, a minimum system pressure of 20 psi is required per TCEQ. The fire flow nodes included all nodes included in the 2030 analysis with some additional nodes extending into new 2050 service areas. The fire flow node locations are illustrated in Appendix 14. All modeled locations passed fire flow with the recommended 2050 system improvements.

3.2.3.4 2050 CIP Projects

Recommended CIPs for 2050 are listed in Table 28 and illustrated in Appendix 15.

Table 28: 2050 Water CIP Project Summary

CIP Number	Description	Notes
Growth Projects		
2050-W1	Corbett Pump Station Expansion	Prevents low pressures throughout southern part of system
2050-W2	FM 2252 8” WL Improvements	Serves new service area
2050-W3	Ware Seguin Pump Station Improvements Phase 2	Prevents low pressures in Ware Seguin area
2050-W4	Beck St 6” WL Replacement	Upgrades distribution system to current min. pipe size (8") to serve new service area
2050-W5	Raf Burnette Rd 8” WL Improvements	Needed to meet growth in area
2050-W6	IH-35 Pump Station & 3.0 MG GST	Needed to meet growth in area
2050-W7	IH-10 and FM 1518 8” Improvements	Needed to meet growth in area
System Improvement Projects		
2050-W8	Lower Seguin Rd 8” WL Replacement	Needed for fire flow

3.2.3.5 2050 SSLGC Supply Needs

Additional water supply from SSLGC is needed for the 2050 planning scenario. A total of 16,965 gpm of SSLGC supply is recommended to meet the 2050 projected system demands.

3.2.4 Summary

The recommendations provided in this section were a collaborative effort with City staff and LAN to identify and model water system improvements to resolve near-term problems as well as meet the needs due to projected growth for the 2030 and 2050 planning periods. The water model should be maintained and updated as new projects are implemented and can be adjusted to address changes in development schedules.

4. WASTEWATER SYSTEM EVALUATION & CIP

A wastewater system model was created in Bentley Sewer GEMS by LAN using data provided by the City. LAN presented the model to the City during a meeting on September 10, 2020. Updates to the model were then made according to the comments from the City.

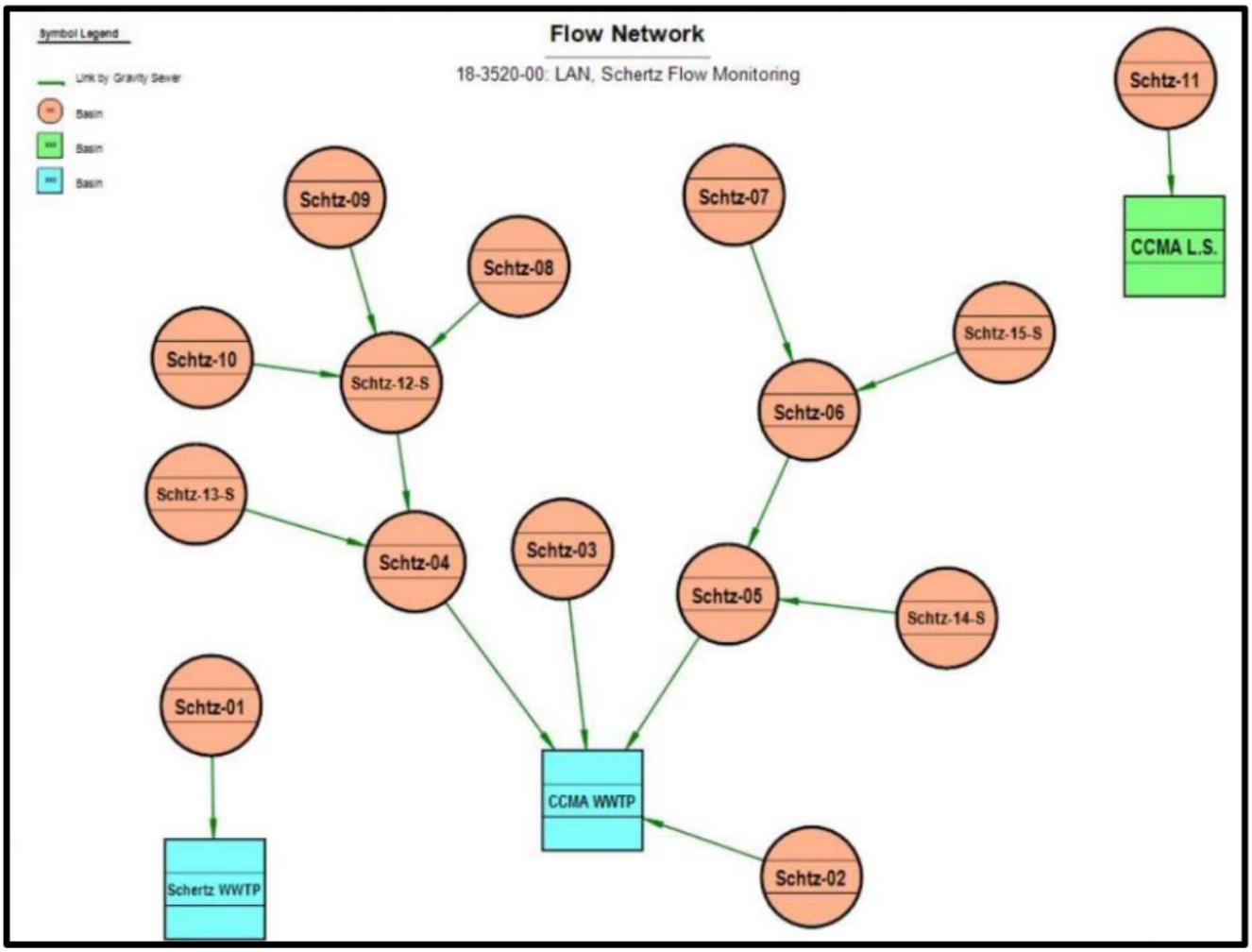
To evaluate the existing wastewater system, a reliable hydraulic model is needed. Model reliability is developed through hydraulic model calibration. Model calibration and simulation were performed using Sewer GEMS software which provided the tool and results necessary to assess the existing wastewater system under dry and wet weather conditions. The purpose of this technical memorandum (TM) is to summarize the calibration results for Average Day Flow (ADF) dry and wet weather conditions and to identify areas with hydraulic deficiencies in the City's wastewater system based on a design storm.

4.1 Modeling the Existing Wastewater System

4.1.1 Flow Monitoring and Rain Gauges

RJN Group installed 15 flow monitors in the City's wastewater system across a variety of gravity main sizes. The flow monitors recorded data in 5-minute increments from April through June of 2020. The goal of the flow monitoring was to record dry weather flows as well as wet weather flows during rain events. RJN also installed six rain gauges in concert with the flow monitors to collect the rainfall data. The rain gauges were located to capture spatial variation of rainfall across the sewer system in 5-minute increments. Appendix 16 illustrates placement of rain gauges, where the 15 flow monitors were placed in the City's sewer system and the boundaries of the corresponding sewer shed basin for each flow monitor. A schematic network of the flow monitor basins within the City's sewer system is provided in Figure 23.

Figure 23: Schematic of Flow Monitors in the City's Wastewater System



4.1.2 Dry Weather Calibration Criteria

The following guidelines were used as calibration criteria for dry weather calibration effort:

- The modeled and monitored flow hydrographs should follow closely in terms of the shape and magnitude.
- Timing of the high and low flows from the model and the flow monitors should be within 1-hour.
- The modeled and monitored peak flows should be within +/- 10% range.
- The modeled and monitored total volume should be within +/- 10% range.

4.1.3 Dry Weather Flows (DWF)

Developing base sanitary sewer loads for each sewershed basin is an iterative process. First, preliminary base loads were estimated by applying Traffic Analysis Zone (TAZ) population and employment data to each sewershed basin. A unique gallon per capita per day (gpcd) was estimated for each basin using the TAZ data and the flow monitoring data. These gpcds were then used to calculate the preliminary base load for each basin which was input into the model.

Second, Tuesday May 26, 2020, was chosen as the dry weather calibration day due to the lack of any rainstorms on that day and the consistency in the monitoring across all 15 of the flow monitors within this 24-hour period. Next, a 24-hour Extended Period Simulation was run in the model and the results were compared to the flow monitoring data collected on the chosen dry weather calibration day. Based on this comparison, adjustments were made to the base load and diurnal pattern for each basin until the model results met the dry weather calibration criteria.

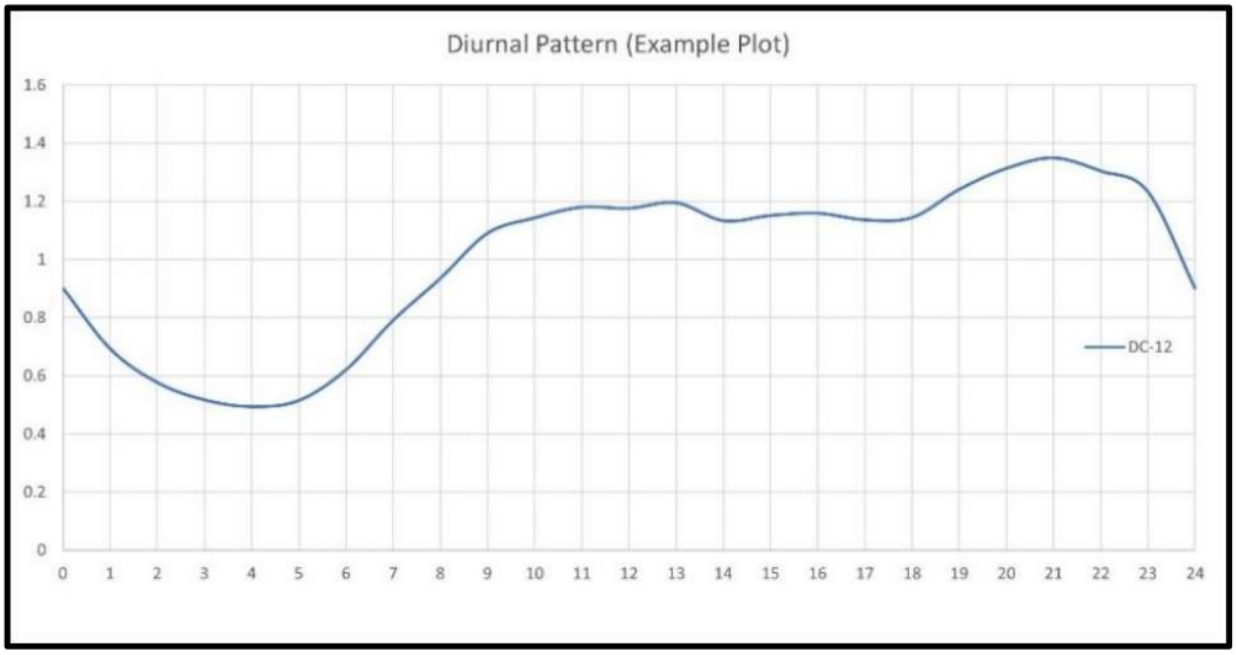
Some adjustments to the preliminary sanitary loading were significant because the TAZ polygon data which were used to calculate the initial base load estimates are on a large scale. These adjustments were needed to represent the density of load distribution more accurately in the system. To further refine the sanitary loading in the system, point loads were applied to represent significantly large contributors such as apartment buildings or schools. A summary of the adjustments made per basin is provided in Table 29.

Table 29: Dry Weather Sanitary Load & Diurnal Curve Adjustment Summary

Flow Monitor Basin	Adjustment(s) Made
FM-01	Sanitary loading reduced by 62.5%
FM-02	Diurnal curve adjusted by one timestep; Sanitary loading reduced by 20%
FM-03	Sanitary loading reduced by 20%
FM-04	None
FM-05	This basin had several added demands for one apartment building (0.1 mgd), local businesses (0.04 mgd), and two schools (0.03 mgd); Increased loading by 50%
FM-06	Added institute loading (0.1 mgd) and business loading (0.123 mgd)
FM-07	Sanitary loading increased by 15%
FM-08	Diurnal curve adjusted by one timestep; Sanitary loading increased by 20%
FM-09	Diurnal curve adjusted by one timestep; Sanitary loading increased by 25%
FM-10	Diurnal curve adjusted by half an hour; Added sanitary loading for the FedEx lift station (0.1 mgd)
FM-11	Reduced sanitary loading by 10%
FM-12	Added sanitary loading (1.15 mgd) on the manhole at the intersection of Wiederstein Rd. and Ike Ln. to represent flow from City of Selma
FM-13	None
FM-14	None
FM-15	Reduced sanitary loading by 10%

Figure 24 provides an example of a diurnal pattern developed for flow monitor basin FM-12.

Figure 24: Example Plot of Diurnal Pattern



4.1.4 Dry Weather Calibration Results

The dry weather calibration was an iterative process involving adjustment of base sanitary loadings, diurnal curves, and point loads. Eventually, the adjustment process produced results that fit the calibration criteria. Figure 25 presents a typical plot of observed versus modeled dry weather flows (FM-06). Graphs for the 15 flowmeter basins are provided in Appendix 17.

Figure 25: Sample Dry Weather Calibration Plot

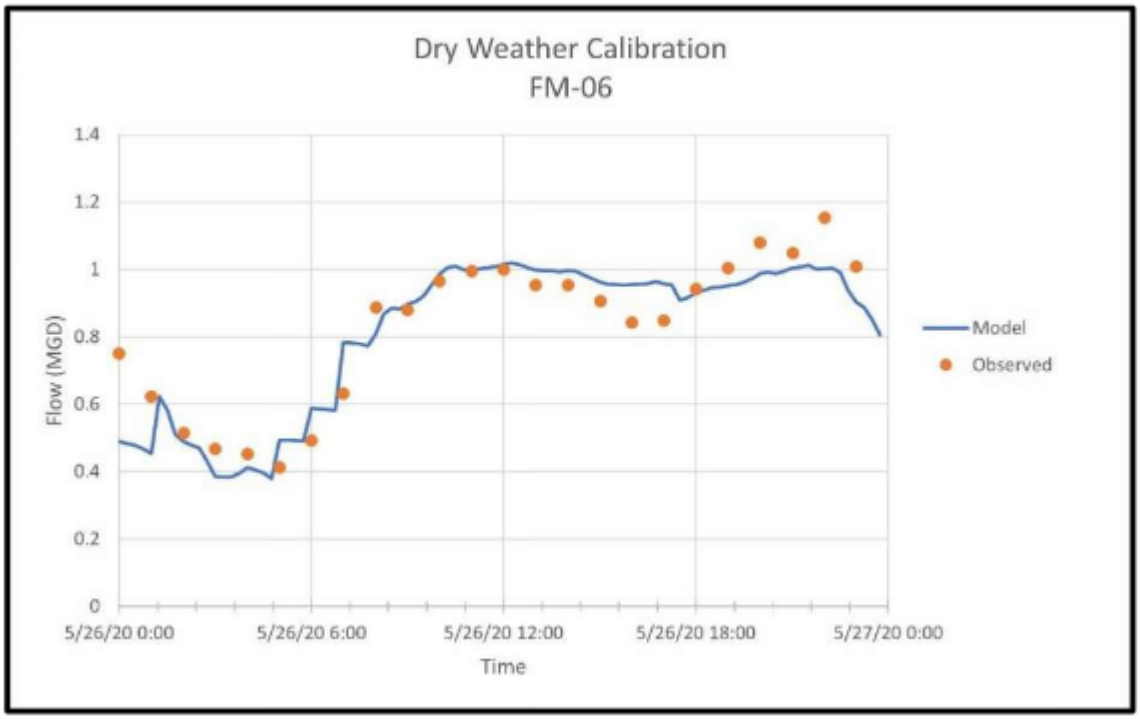


Table 30 shows the dry weather calibration results for the 15 flow monitoring locations.

Table 30: Dry Weather Calibration Results

Flow Meter Basin	Peak Flow (mgd)			Volume (Million Gallons)		
	Model	Monitor	% Difference	Model	Monitor	% Difference
FM-01	0.074	0.076	-2.7%	0.0521	0.0512	1.6%
FM-02	0.073	0.075	-2.2%	0.0554	0.0535	3.6%
FM-03	0.301	0.361	-16.6%	0.2582	0.245	5.5%
FM-04	3.561	3.525	1.0%	2.4641	2.6665	-7.6%
FM-05	1.905	1.894	0.6%	1.4374	1.3983	2.8%
FM-06	1.019	1.154	-11.7%	0.8127	0.8255	-1.6%
FM-07	0.218	0.215	1.5%	0.1751	0.1717	1.9%
FM-08	0.151	0.156	-3.2%	0.1068	0.1241	-13.9%
FM-09	0.178	0.181	-1.4%	0.1104	0.1082	2.0%
FM-10	0.628	0.533	17.9%	0.3645	0.3341	9.1%
FM-11	1.462	1.053	38.9%	0.7732	0.7980	-3.1%
FM-12	2.355	2.454	-4.0%	1.7350	1.8006	-3.6%
FM-13	0.662	0.676	-2.0%	0.5324	0.5428	-1.9%
FM-14	0.253	0.250	1.3%	0.1649	0.1635	0.8%
FM-15	0.271	0.266	1.8%	0.2185	0.2117	3.2%

As shown in Table 30, dry weather calibration reached reasonable results with most basins meeting the calibration criteria. There are few flow monitor basins that do not fully meet the criteria described above. Those basins are FM-03, FM-08, FM-10, and FM-11. All these basins have lift stations upstream of the monitoring locations which directly affect the model results. For basins FM-03 and FM-11, assumptions were made for the lift stations within the basin. Those assumptions were provided in the Existing Wastewater System TM (September 4, 2020). The FM-08 basin has eight lift stations. Without accurate pump curves and pump operations for all the lift stations in these basins, the results are satisfactory with the current level of accuracy achieved. In addition to the City-owned lift stations in basins FM-03 and FM-11, there are several privately owned lift stations that contribute to the overall sanitary loadings in the wastewater system. Pump curves for these smaller lift stations were not available, therefore pump curves were assumed for modeling purposes. The following lift stations are privately owned: Aquatic Center, FedEx, & Fire Station 3. For Basins FM-06 and FM-10, calibration was performed by assuming sanitary loadings for business and institutes in the basins (see Table 29 for the specific adjustments performed on each basin).

4.1.5 Wet Weather Calibration Criteria

Wet weather calibration is necessary along with dry weather calibration to adequately model the effects that rainfall derived inflow and infiltration (RDII) have on the wastewater system. The following guidelines were used as calibration criteria for WW calibration effort:

- The hydrographs (modeled and observed) should closely reflect the same shape and magnitude.
- The peaks and troughs of the hydrographs (modeled and observed) should be within one hour.
- The modeled and monitored peak flows should be within +/- 15% range.
- The modeled and monitored total volume should be within +/- 15% range.

4.1.6 Calibration Rainfall Event

Six rain gauges were installed for the duration of the flow monitoring period to record rainfall events. Review of the observed rainfall and flow monitoring data identified a distinct rain event with reliable flow monitoring data that could be used for wet weather calibration. Table 31 summarizes the rainfall event identified for wet weather calibration at the six rain gauges.

Table 31: Rainfall Event Properties

Rain Gauge	Date/Time	Total Precipitation (inch)
RG-01	5/24/20 8PM – 5/25/20 6AM	2.46
RG-02	5/24/20 8PM – 5/25/20 6AM	2.18
RG-03	5/24/20 8PM – 5/25/20 6AM	1.43
RG-04	5/24/20 8PM – 5/25/20 6AM	1.81
RG-05	5/24/20 8PM – 5/25/20 6AM	1.71
RG-06	5/24/20 8PM – 5/25/20 6AM	2.36

Because there were only six rain gauges for the 15 flowmeter basins, it was necessary to make assumptions as to which rain data to associate with each basin. Table 32 presents those assumptions.

Table 32: Rain Gauge Data Assumptions

Flow Meter Basin	Corresponding Rain Gauge(s)
FM-01	RG-01
FM-02	RG-O1
FM-03	RG-02 & RG-05
FM-04	RG-02 & RG-05
FM-05	RG-02
FM-06	RG-04 & RG-06
FM-07	RG06
FM-08	RG-05
FM-09	RG-05
FM-10	RG-04
FM-11	RG-03
FM-12	RG-05
FM-13	RG-05
FM-14	RG-05
FM-15	RG-06

In addition to the basins listed above, the SARA and Hallie's Cove Outfalls were associated with RG-01 data because no rain monitoring took place in those areas.

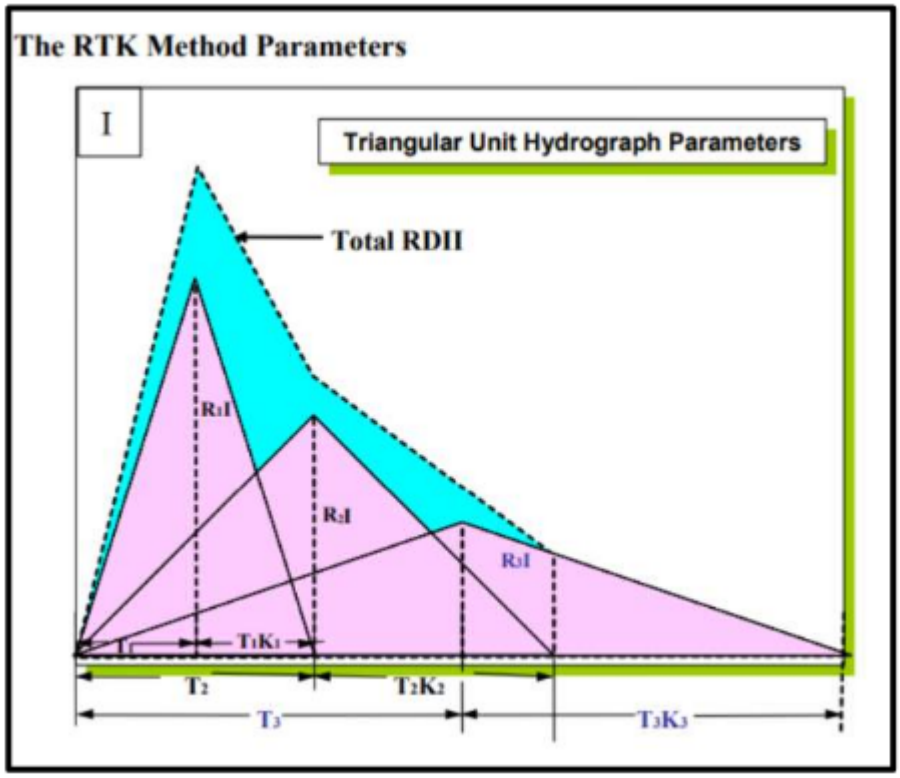
4.1.7 Wet Weather Flow Characterization

To calibrate for wet weather, the RTK Method was used in the model to predict the sanitary sewer system's short-, medium-, and long-term response to a rainfall event. These parameters, developed using the flow monitoring data recorded in the field, are applied in the model so that results are representative of field conditions. The R, T, and K parameters are defined as follows:

- R - fraction of precipitation that enters the sanitary sewer system
- T - the time to peak of the hydrograph
- K - the ratio of the 'time of recession' to the 'time to peak'.

How these parameters are used to generate the short-, medium-, and long-term unit hydrographs used in the model is illustrated in Figure 26.

Figure 26: RTK Method Parameters



The RTK method creates a triangle from the three values with a separate triangle made for each type of response (short, medium, and long). The final hydrograph is represented by the addition of the three triangles. Therefore, this method uses a total of 9 parameters (3 RTK parameter sets for each of the 3 triangles that represent the short, medium, and long-term responses.)

LAN assigned a RTK hydrograph to each of the flow monitoring locations that would represent the response to the rainfall. Then, iterative model runs were used to adjust the RTK parameters until the model outputs and flow monitoring were within tolerances specified by the calibration criteria. A 30-hour extended period simulation (EPS) scenario for wet weather calibration was created for the following period: Sunday May 24, 2020, through 6:00 AM on Monday May 25, 2020.

There can be some variations between a sewer's diurnal pattern on a weekday vs. a weekend. Because the rainfall event selected to use for wet weather calibration occurred on a weekend, the flow monitoring data was used to develop an adjusted diurnal pattern that represents the behavior of system base flows on a weekend. The weekend diurnal pattern was applied to the base sanitary loads in the system for the wet weather calibration. Accurately representing the pattern of the base flow will prevent the over or under estimation of the system's response to rainfall with the development of the RTK parameters.

4.1.8 Wet Weather Calibration Results

Using the data from the six rain gauges, the flow monitoring data and the RTK hydrographs, the model was calibrated. With the rain data collected and assigned to the separate flow monitor basins, the RTK hydrograph values were estimated for each basin. Table 33 lists calibrated RTK parameters for wet weather calibration for each flowmeter basin.

Table 33: Calibrated RTK Parameters

Meter Basin	R1	T1	K1	R2	T2	K2	R3	T3	K3
FM-01	0.001	0.5	1.6	0.001	1	2.5	-	-	-
FM-02	0.001	0.75	1.4	0.001	3.5	1.8	-	-	-
FM-03	0.002	1.75	1.2	0.001	3	1.4	-	-	-
FM-04	0.001	4	2	-	-	-	-	-	-
FM-05	0.001	0.5	1.4	0.001	4	1.6	-	-	-
FM-06	0.01	2.2	0.8	0.001	2.5	1.6	0.003	5	1.2
FM-07	0.001	0.5	1.4	0.001	3	1.6	-	-	-
FM-08	0.001	1	1	-	-	-	-	-	-
FM-09	0.001	1	1	-	-	-	-	-	-
FM-10	0.001	1	1	-	-	-	-	-	-
FM-11	0.001	1	1.4	-	-	-	0.01	4	1.75
FM-12	0.1	2	1.2	0.07	4	1.5	0.01	4	1.75
FM-13	0.5	4	1.4	0.2	5	1.6	0.1	7	1.75
FM-14	0.001	0.75	1.4	-	-	-	-	-	-
FM-15	0.001	1	1.4	0.001	3	1.6	-	-	-

Figure 27 presents a typical plot of observed versus modeled wet weather flows (FM-06). Wet weather graphs for the 15 flowmeter basins are shown in Appendix 17.

Figure 27: Sample Wet Weather Calibration Plot

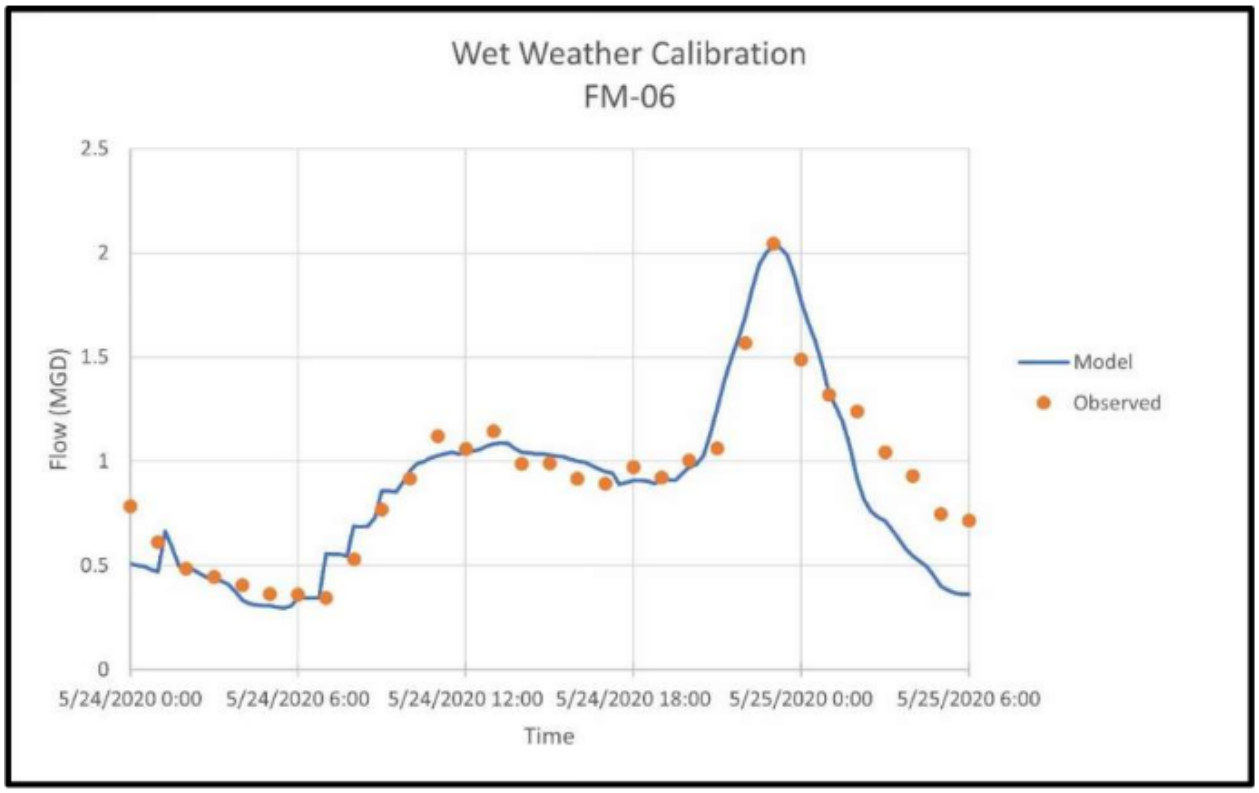


Table 34 documents the results of the wet weather calibration for all 15 flowmeter basins.

Table 34: Wet Weather Calibration Results

Flow Meter Basin	Peak Flow (mgd)			Volume (Million Gallons)		
	Model	Monitor	% Difference	Model	Monitor	% Difference
FM-01	0.078	0.08	-2.5%	0.043	0.039	10.3%
FM-02	0.103	0.095	8.4%	0.055	0.05	10.0%
FM-03	0.672	0.711	-5.5%	0.298	0.259	-15%
FM-04	6.489	5.014	29.4%	2.874	2.745	4.7%
FM-05	2.87	2.45	17.1%	1.456	1.42	2.5%
FM-06	2.031	2.043	-0.6%	0.877	0.949	-7.6%
FM-07	0.304	0.3	1.3%	0.162	0.145	11.7%
FM-08	0.1529	0.153	-0.1%	0.1	0.097	3.1%
FM-09	0.162	0.165	-1.8%	0.097	0.095	2.1%
FM-10	0.474	0.413	14.8%	0.23	0.255	-9.8%
FM-11	1.739	1.124	54.7%	0.845	0.715	18.2%
FM-12	5.261	5.396	-2.5%	2.029	1.868	8.6%
FM-13	0.738	0.754	-2.1%	0.546	0.519	5.2%
FM-14	0.259	0.263	-1.5%	0.159	0.152	4.6%
FM-15	0.273	0.298	-8.4%	0.169	0.204	-17.2%

Wet weather calibration reached reasonable results with most basins meeting the calibration criteria. There were few flow monitor basins that do not fully meet the wet weather calibration criteria. Those basins were FM-04, FM-11, and FM-15. Like dry weather calibration, inaccurate pump curves and pump operation for lift stations within these basins could adversely affect the model

results. In addition, FM-11 flowmeter data seems to be erroneous at some time periods. Looking at the FM-04 graph in Appendix 18 and comparing its peak flow with upstream contributing flowmeter basins (FM-12 and FM-13), the observed FM-04 peak flow (5 mgd) is lower than summation of peak flows at FM-12 (5.4 mgd) and FM-13 (0.75 mgd). In fact, summing up the observed peak flows at FM-12 and FM-13 (6.15 mgd) provides a peak flow closer to the modeled peak flow at FM-04. This discrepancy might be related to erroneous flowmeter data at FM 04 or there might be an unknown unmetered interconnect with leaving flows to another basin from FM 04. For FM-15, the observed flows at 5/25/20 from 0:00 to 6:00 AM seems too high, as the rain started to diminish around that time based on the recording at RG-03, which indicates flows cannot be as high as the FM-15 showed during that time period.

4.1.9 RDII Assessment

The flow monitoring data for the calibration days were used to assess the sewer system susceptibility and response to RDII. Table 35 shows the wet weather peaking factors (peak WWF/average DWF).

Table 35: Calibration Event Wet Weather Peaking Factors for Metered Basins

Flow Monitor Basin	Average DWF (mgd)	Peak WWF (mgd)	Peaking Factor
FM-01	0.05	0.08	1.6
FM-02	0.053	0.095	1.8
FM-03	0.247	0.378	1.5
FM-04	2.7	3.025	1.1
FM-05	1.4	1.894	1.4
FM-06	0.83	2.043	2.5
FM-07	0.17	0.3	1.8
FM-08	0.1	0.15	1.5
FM-09	0.11	0.165	1.5
FM-10	0.32	0.41	1.3
FM-11	0.8	1.12	1.4
FM-12	1.82	5.4	3
FM-13	0.55	0.64	1.2
FM-14	0.16	0.25	1.6
FM-15	0.21	0.27	1.3

Only FM-06 and FM-12 had substantial RDII response. The rest of the basins did not have significant RDII response based on the flow monitoring data for the calibration days.

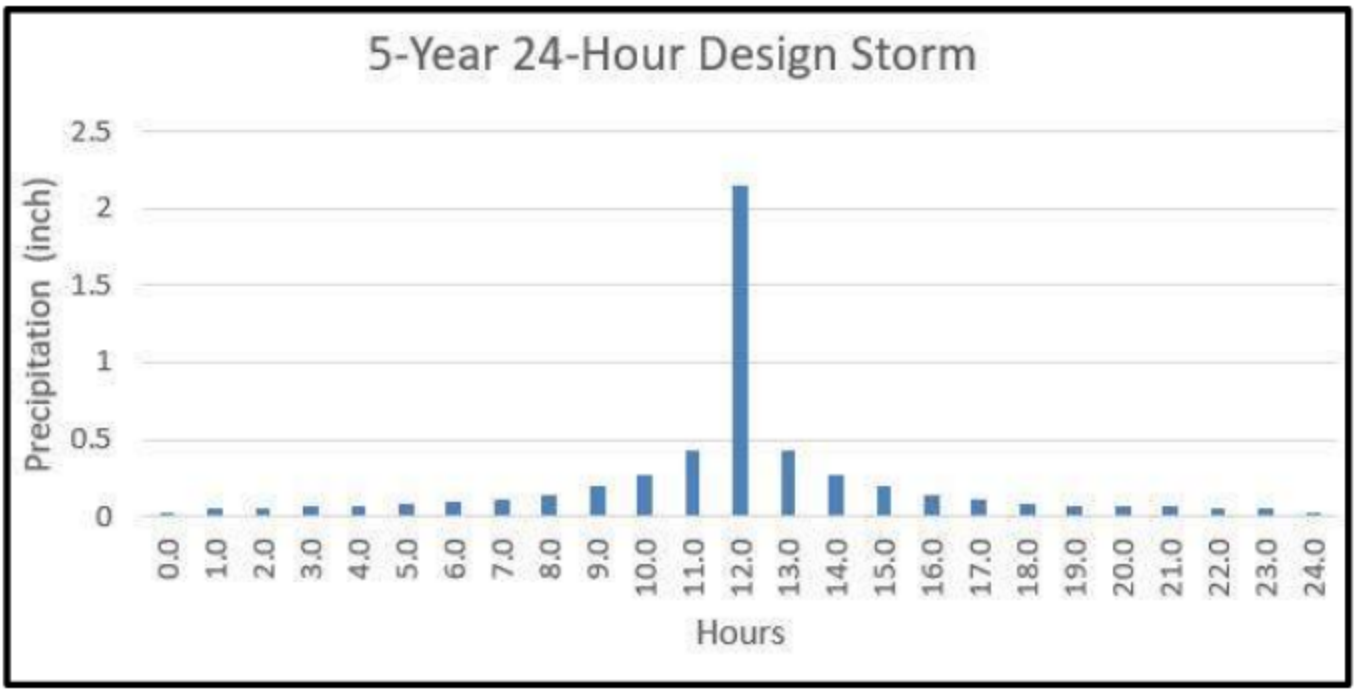
4.2 Existing Wastewater System Evaluation

4.2.1 Design Storm

To evaluate the existing wastewater system, a 5-year design storm with a 24-hour duration was applied to the calibrated model. For the City of Schertz, the rainfall depth provided in the National Oceanic and Atmospheric Association's Atlas 14 precipitation frequency estimates is 5.3-inches.

The rainfall depth was distributed over time using the Soil Conservation Service (SCS) rainfall distribution type III. Figure 28 shows the hyetograph of the design storm used for this evaluation.

Figure 28: 5-Year 24 Hour Design Storm



4.2.2 System Evaluation

The 5-year 24-hour design storm shown in Figure 28 was then applied to the City's calibrated model for system evaluation. The following criteria were used to evaluate the existing wastewater system and identify potential problem areas:

- Sanitary Sewer Overflows (SSO) at manholes
- Surcharged gravity mains

The majority of the SSOs and surcharged lines in the system are located on the 10-inch CCMA line which parallels Roy Richard Dr. and the 30-inch CCMA line which follows the drainage channel from I-35 down to the outfall at Cibolo Creek. Some surcharging and SSOs were also predicted by the model in the Northcliffe area around the I-35 corridor. The extents and locations of these SSOs and surcharged lines for the existing system evaluation results are presented in Appendix 19.

4.2.3 Summary

Using data collected from the flow monitors and rain gauges, the wastewater hydraulic model for the City of Schertz was calibrated for both dry and wet weather flows. The model calibration reached the required level of accuracy for both calibration scenarios. Further accuracy may be achieved with the provision of further data such as pump curve information and detailed customer sanitary sewer flow information for certain areas.

Following the model calibration, the City's wastewater system was evaluated based on a 5-year, 24-hour design storm for wet weather condition. The total number of SSOs found to be 21 (7 of these 21 SSOs are on lines owned by the City) which is less than 1 percent of the total number of manholes. The total length of sewer found to be capacity deficient (maximum flow greater than pipe full capacity)

was approximately 52,000-feet (of which approximately 22,500-feet is owned by the City). This is about 5.7 percent of the total existing conduits length.

The next phase of the modeling process is a future model evaluation. This phase of the modeling includes running the model with population predictions based on the future TAZ population data and recommendations for future system improvements as part of the City's capital improvement plan. This evaluation will be described in the next section.

4.3 Future Wastewater System Evaluation & CIPs

The City contracted LAN to conduct the wastewater system improvement analysis and update the Capital Improvements Plan (CIP). This effort requires developing a future sanitary sewer representation model of the City's collection system based on anticipated growth areas. Future Average Dry Weather Flow and Wet Weather Flow scenarios for 10-year and 30-year were developed. The purpose of this section is to summarize the results of the future wastewater system improvement analysis and list the 10-year and 30-year wastewater system CIPs.

4.3.1 Future Modeling Methodology

The future scenarios assumed increases in residential and commercial/industrial developments based on information about planned development projects provided by the City. LAN used the City's calibrated model for dry and wet weather scenarios as the base for this analysis and allocated wastewater sanitary loads to the wastewater hydraulic model using the projected water demands developed for the Schertz water hydraulic model. To generate the sanitary loads, a return rate of 70% was applied to water demand at each node. Then GIS tools were used to determine which demand nodes fell within the existing wastewater service areas. If a demand node fell outside an existing service area, new interceptors were recommended to connect them to an existing or future wastewater treatment plant. Using Thiessen polygon and Loadbuilder tools from SewerGEMS, the sanitary loads were allocated to the nearest manholes in the model. Table 36 presents the existing and future average dry weather flow projections.

Table 36: Dry Weather Flow Projections

Condition	Estimated Average DWF (MGD)	% Increase
Existing	5.2	-
10-yr (2030)	6.4	23.0
30-yr (2050)	7.4	42.3

Future scenarios were created in the model for the 10-year (2030) and 30-year (2050) increments, along with their respective sanitary loads to simulate the future growth anticipated by the City. Diurnal curves were developed from the field monitoring data for the existing system model and then used to distribute the future average dry weather sanitary flows over 24 hours. Analysis began on the 2030 scenario to evaluate the system and to find where the required improvements to the existing system are, besides any future projects to accommodate the new growth areas.

4.3.1.1 Hydraulic Criteria

Hydraulic criteria used for this analysis include capacity deficiency and design criteria. Capacity deficiency criteria identify the need to replace an existing facility, while design criteria determine the size of new facilities. These criteria were established based on the Texas Commission on Environmental Quality (TCEQ) and engineering best practices. Table 37 lists a summary of capacity deficiency criteria used for the existing system in this analysis.

Table 37: Capacity Deficiency Criteria for Existing Facilities

Item	Recommended Value
Maximum Allowable Flow Depth	No sanitary sewer overflows (SSOs)
Force Main Velocity	Maximum velocity of 8 ft/s under peak wet weather flow
Pump Station Capacity	Peak design flow (from 5-year, 24-hour design storm) not to exceed firm capacity (i.e., capacity with the largest pump out of service)

Table 38 lists a summary of design criteria used for new sewer facilities.

Table 38: Design Criteria for New Sewer Facilities

Item	Recommended Value
Maximum Allowable Flow Depth	Maximum depth-to-diameter (d/D) of 1.0 (full pipe) under peak design flow (from 5-year, 24-hour design storm)
Force Main Velocity	Minimum velocity of 2 ft/s (for a pump station with two pumps, with one pump in operation) Maximum velocity of 8 ft/s under peak wet weather flow
Pump Station Capacity	Peak design flow not to exceed firm capacity (i.e., capacity with the largest pump out of service)
Minimum Gravity Line Size	8-inch
Slopes for Gravity Lines	8-inch: 0.33% to 8.4% 10-inch: 0.25% to 6.23% 12-inch: 0.20% to 4.86% 15-inch: 0.15% to 3.62% 18-inch: 0.115% to 2.83% 21-inch: 0.095% to 2.30% 24-inch: 0.08% to 1.93% 27-inch: 0.07% to 1.65% 30-inch: 0.06% to 1.43% 33-inch: 0.055% to 1.26% 36-inch: 0.045% to 1.12%
Maximum Manhole Spacing	500 ft

4.3.1.2 Design Storm

For wet weather scenarios, a 5-year design storm with a 24-hour duration was applied to the model. For the City of Schertz, the rainfall depth provided in the National Oceanic and Atmospheric Association's Atlas 14 precipitation frequency estimates is 5.4 inches.

The rainfall depth was distributed over time using the Soil Conservation Service (SCS) rainfall distribution Type III, representing the rainfall temporal distribution type happening in the Gulf of Mexico and Atlantic coastal areas (TR-55 Cover (hydrocad.net)). The same hyetograph in section 4.2.1 is applicable to this evaluation.

4.3.1.3 Inflow & Infiltration Assumption

The RTK hydrographs developed from the field monitoring data for the existing system model were used to represent the inflow and infiltration (I&I) for the existing infrastructure and service areas. In addition to utilizing diurnal curves to incorporate peak dry flow, a peaking factor of 4 was applied to represent the effect of I&I for future loadings outside the existing service areas where there is no historical data is available. The assumption was that new infrastructure would meet current standards and would therefore be less susceptible to I&I.

4.3.2 Future System Analysis & CIPs

The following scenarios were created for future system analysis:

- Dry Weather 2030 Scenario
- Wet Weather 2030 Scenario
- Dry Weather 2050 Scenario
- Wet Weather 2050 Scenario

Table 39 shows a breakdown of the dry weather flow projections for each planning period by the system outfalls.

Table 39: Breakdown of Average Dry Weather Flows by Outfalls

Outfall	Estimated Average DWF (gpm)		
	Existing	2030	2050
Whisper Branch	16	16	16
NBU	19	19	60
O-4	469	707	934
SARA	22	68	92
Bubbling Springs	1,960	2,023	2,178
Aztec Way	21	21	44
O-21-22	992	1,014	1,156
Greaves WWTP	30	-	-
Corbett	61	-	-
Halley's Cove	7	-	-
CCMA S WWTP	-	586	667
Total (gpm)	3,597	4,454	5,147
Total (MGD)	5.2	6.4	7.4

4.3.2.1 Near Term CIP Projects

The near-term project list for Schertz provided by the City was incorporated into the existing system to create future scenarios along with future sanitary loadings. Each scenario includes all the currently planned projects that will be in place by that planning year. Table 40 lists currently planned projects (near-term) provided by the City (shown in Appendix 20).

Table 40: Near Term Projects Summary

CIP Number	Project Description
	Growth Projects
NT-S1	Town Creek Phase IV 24" – Section 1
NT-S2	Town Creek Phase IV 24" – Section 2
NT-S3	Town Creek Phase V 24"
NT-S4	Upsize Lookout Line
NT-S5	Upsize Tri County Line
NT-S6	Cibolo West Main
NT-S7	Woman Hollering Creek Lift Station, Gravity Line, and Force Main
	System Improvement Projects
NT SI-1	Decommission Tri County Lift Station
NT SI-2	Decommission Corbett Lift Station
NT SI-3	Decommission Sedona Lift Station & Woman Hollering Creek WWTP

It is important to note that the pipe size was undetermined for the Cibolo West Main Trunkline. Based on the available information and hydraulic model results, LAN recommends an 18-inch pipe size for the above project. In addition, LAN received the 2021 Wastewater Collection System Master Plan for the Cibolo Creek Municipal Authority (CCMA) prepared by Kimley Horn Inc. The CCMA's CIP projects affecting the Schertz sewer system were also incorporated into each scenario based on the planning year.

4.3.2.2 2030 CIP Growth Projects

The 2030 scenario included the currently planned CIP projects for the City. To serve the new development areas happening between 2022 to 2030, LAN proposes new growth CIPs as listed in Table 41. The alignments are based on the available information regarding topographic elevations, existing roads, and engineering judgment and are to be considered as preliminary. Final alignments will be determined as part of the design process.

The design criteria listed in Table 38 was used to size the new facilities. For modeling purposes, slopes for new growth CIP lines were assumed based on the TCEQ minimum slope requirement. At some locations, higher than minimum slopes were considered to prevent extra excavation. Appendix 21 shows the location of the 2030 growth CIPs.

Table 41: 2030 Growth Projects Summary

CIP Number	Project Description
NT-S1	Hope Lane 8" Gravity Line
NT-S2	Old Wiederstein Road 8"
NT-S3	Union Pacific Railroad 8" – Section 1
NT-S4	Union Pacific Railroad 8" – Section 2
NT-S5	Wiederstein Road 8"
NT-S6	Schaefer Road 8" – Section 1
NT-S7	Schaefer Road 8" – Section 2
NT-S8	Aranda 8"
NT-S9	Weir Road 10"
NT-S10	Trainer Hale Road 10"
NT-S11	Ware Seguin Road 8"
NT-S12	FM 1518 8"
NT-S13	I-10 8" – Section 1
NT-S14	Boenig Drive 8"
NT-S15	N Greytown Road 8"

4.3.2.3 Model Results Under 2030 Flows

After bringing in the 2030 new growth CIPs, the model was run with predicted 2030 dry weather flows. The modeling results for this scenario are presented in Appendix 22. The results show 98% of conduits have a maximum depth to diameter (d/D) of less than 0.5. It also shows gravity lines parallel to Friesenhahn Ln and upstream of the Friesenhahn lift station having maximum d/D of greater than 0.75, and gravity lines right upstream of Riata lift station having a maximum d/D between 0.5 and 0.75. This indicates these gravity lines (i.e., with maximum d/D greater than 0.5) may not accommodate the additional capacity needs from future flows and could require upsizing.

Since peak wet weather is crucial for analyzing a sewer system, the 2030 wet weather flow (average dry weather plus 5-year, 24-hour I&I) was used to determine areas that are susceptible to sanitary sewer overflows (SSOs). Note that the model shows SSOs at locations where the maximum hydraulic grade (HGL) rises above manhole rim elevations. The modeling results for this scenario are presented in Appendix 23. The results show a total of 11 manholes within the existing service areas are overflowing. Per the Capacity Deficiency Criteria listed in Table 37, the sewer system is capacity deficient at the locations where SSOs are reported by the model.

4.3.2.4 2030 CIP System Improvement Projects

LAN proposes several system improvement projects listed in Table 42 to address the SSOs. In addition, Belmont Park lift station is set to go offline by 2030 per City staff. Therefore, that lift station was set inactive in the model, and gravity lines were added to bypass it. LAN also determined that the Northcliffe (Town Creek) lift station needs to upgrade to a firm capacity of 4,800 gpm to meet TCEQ requirements (refer to section 2.5.3). Appendix 24 shows the location of the 2030 system improvement projects.

Table 42: 2030 System Improvement Projects Summary

CIP Number	Project Description	Purpose
2030 SI-1	Friesenhahn West Line WW Upsize	To resolve 4 SSOs upstream of Friesenhahn LS.
2030 SI-2	Fairlawn WW Upsize	To resolve an SSO upstream of Riata LS.
2030 SI-3	Cibolo Crossing WW Line Upsize	To resolve an SSO near I-35 N.
2030 SI-4	Woodland Oak Drive Replacements	To resolve an SSO near Woodland Oak Dr.
2030 SI-5	Old Wiederstein WW Upsize	To increase line capacity.
2030 SI-6	Northcliffe LS Upgrade	To follow TCEQ requirement of peak flow not to exceed firm capacity. This upgrade is based on buildout flow of 4,485 gpm.
2030 SI-7	Decommission Belmont Park Lift Station	Per City request.

4.3.2.5 2030 CCMA Recommended Projects

The results of the 2030 wet weather flow scenario showed some of the CCMA's gravity lines have capacity issues that would affect the City's sewer system performance. LAN recommends the following system improvement projects related to CCMA's gravity lines (listed in Table 43 and shown in Appendix 24). Although originally listed as 2041 CCMA CIPs (Projects 2030 C-1 & 2030 C-2) and as Buildout CCMA CIP (Project 2030 C-4) in the Wastewater Collection System Master Plan prepared by Kimley Horn Inc. in 2021, LAN currently recommends these CIP projects for inclusion in the 2030 planning period.

Table 43: 2030 CCMA System Improvement Projects Summary

CIP Number	Project Description	Purpose
2030 C-1	Roy Richard Drive Replacements	To resolve 2 SSOs near Woodland Oak Dr and Valencia Ln.
2030 C-2	Valencia Lane Replacements	To resolve 2 SSOs near Woodland Oak Dr and Valencia Ln.
2030 C-3	Savannah Drive Replacements	To resolve an SSO near Maske Rd.
2030 C-4	Build Out Project 25 – 36" Schertz Line	To resolve 2 SSOs near Maske Rd.

4.3.2.6 2050 CIP Growth Projects

To develop the 2050 scenario, the system changes proposed for 2030 were used as the base. To serve the new development areas happening between 2030 to 2050, LAN proposes new growth CIPs listed in Table 44 and shown in Appendix 25. Similar to 2030 growth CIPs, the alignments are based on the available information regarding topographic elevations, existing roads, and engineering judgment, and final alignments will be determined as part of the design process. The design criteria listed in Table 38 were used to size the new facilities.

Table 44: 2050 Growth Projects Summary

CIP Number	Project Description
2050-S1	I-35 N 8"
2050-S2	Friesenhahn Lane 8"
2050-S3	Schaefer Road 8" – Section 3
2050-S4	Corbett JH 8"
2050-S5	Lower Seguin Road 8"
2050-S6	IH-10 8" – Section 2

In addition, Schertz Pkwy, Cover's Cove, and Park lift stations are set to go offline by 2050 per City staff. Therefore, Cover's Cove and Park lift stations were set inactive in the model, and gravity lines were added to bypass that lift station. Schertz Pkwy lift station will also go offline, and its flow will be conveyed to a new CCMA line which will be built by 2050. However, due to the unavailability of information about the new CCMA's line, the Schertz Pkwy lift station was set inactive in the model and its flow was directed to a new outfall.

4.3.2.7 Model Results Under 2050 Flows

After bringing in the 2050 new growth CIPs, the model was run with predicted 2050 dry weather flows. The modeling results for this scenario are presented in Appendix 26. Similar to 2030 scenario results, 97% of conduits have a maximum depth to diameter (d/D) of less than 0.5, and only 3% of gravity lines have a maximum (d/D) of greater than 0.5. Since peak wet weather is crucial for analyzing a sewer system, the 2050 wet weather flow was used to determine areas that are susceptible to overflowing. The modeling results show no manholes are overflowing indicating the 2050 system has sufficient capacity per the Capacity Deficiency Criteria listed in Table 37. Therefore, LAN does not recommend any capacity-related CIPs for the 2050 planning period.

4.3.2.8 2050 CIP System Improvement Projects

LAN determined that Cypress Point lift station needs to upgrade to a firm capacity of 1,250 gpm to meet TCEQ requirements (refer to section 2.5.3). Table 45 describes 2050 system improvement projects shown in Appendix 27.

Table 45: 2050 System Improvement Projects Summary

CIP Number	Project Description	Purpose
2050 SI-1	Cypress Point Lift Station Upgrade	To follow TCEQ requirement of Peak flow not to exceed firm capacity. This upgrade is based on buildout flow of 1,233 gpm.
2050 SI-2	Decommission Schertz Parkway Lift Station	To convey flow to a new CCMA's line which will be built by 2050.
2050 SI-3	Decommission Park Lift Station	Per City request.
2050 SI-4	Decommission Cover's Cove Lift Station	Per City request.

4.3.2.9 Pumping Capacity Evaluation

For pumping capacity evaluation, the existing firm capacity (i.e., capacity with the largest pump off) will be compared to peak wet weather flow at each lift station. Per TCEQ requirements, peak wet weather flow should not exceed firm capacity. Table 46 shows the results of the pumping capacity evaluation. Note that this analysis has only been conducted for public existing lift stations; private lift stations have been excluded from the study.

Table 46: Lift Station Capacity Evaluation

Lift Station Name	Number of Pumps	Capacity per pump(1) (gpm)	Lift Station Firm Capacity (gpm)	Peak Existing WWF (gpm)	Peak 2030 WWF (gpm)	Peak 2050 WWF (gpm)	Note
Belmont Park	2	750	750	30	Plan to go offline by 2030		
Cover's Cove	2	75	75	4.5	5	Plan to go offline by 2050	
Cypress Point	3	915	1,012	435	997	1,233	Need upgrade by 2050 per TCEQ
Elbel	2	750	750	85	86	101	
Friesenhahn	3	1,500	1,800	772	1,293	1,610	
Homestead	2	900	900	646	737	894	
Maxfli	2	750	750	12	12	13	
Park	2	220	220	20	20	Plan to go offline by 2050	
Riata	2	750	750	660	727	728	
Schertz Pkwy	2	250	250	101	113	Plan to go offline by 2050	
Smoke Pit	2	600	600	20	20	20	
Northcliffe (Town Creek)	3	1,000	1,750	3,780	4,450	4,485	Need upgrade by 2030 per TCEQ
Corbett	2	Offline per Near-Term CIP					
Sedona	3	Offline per Near-Term CIP					
Tri-County	2	Offline per Near-Term CIP					

(1) Capacity per pump is estimated based on the pump curve for pumps within each lift station.

As seen in Table 46, except for Cypress Point and Northcliffe lift stations, all other existing lift stations have adequate capacity for existing and future peak flows since their peak flows are less than lift station firm capacities. Per TCEQ requirement, Northcliffe lift station requires an upgrade to firm capacity of 4,500 gpm based on its 2050 peak flow of 4,485 gpm, and Cypress Point lift

station needs an upgrade to firm capacity of 1,250 gpm based on its 2050 peak flow of 1,233 gpm. Northcliffe lift station upgrade should be done as early as 2030, but Cypress Point's upgrade can wait until 2050.

4.3.2.10 Force Main Capacity Evaluation

As listed in Table 37, the hydraulic criterion for force mains is not to exceed a maximum velocity of 8 ft/s under the peak wet weather flow (average dry plus 5-year, 24-hour storm flow). Higher than 8 ft/s velocities correspond to high head loss in force mains which over time scour force main interior causing premature structural failure. Table 47 shows the results of the force main capacity evaluation.

Table 47: Force Main Capacity Evaluation

Lift Station Name	Force Main Diameter (inch)	Existing		2030		2050	
		Peak* WWF (gpm)	Velocity (ft/s)	Peak* WWF (gpm)	Velocity (ft/s)	Peak* WWF (gpm)	Velocity (ft/s)
Belmont Park	6	313	3.6	Plan to go offline by 2030			
Cover's Cove	3	89	4.0	89	4.0	Plan to go offline by 2050	
Cypress Point	8	713	4.6	810	5.2	933	6.0
Elbel	6	552	6.3	552	6.3	552	6.3
Friesenhahn	16	1,242	2	1,660	2.6	1,516	2.4
Homestead	8	553	3.5	905	5.8	908	5.8
Maxfli	4	162	4.1	162	4.1	162	4.1
Park	6	100	1.1	100	1.1	Plan to go offline by 2050	
Riata	6	321	3.7	321	3.7	321	3.7
Schertz Pkwy	6	182	2.1	182	2.1	Plan to go offline by 2050	
Smoke Pit	6	232	2.6	244	2.8	244	2.8
Northcliffe (Town Creek)	18	1,753	2.2	4,050	5.1	5,115	6.4

*Peak flows in this table represent peak flows through the force mains

All existing force mains have adequate capacity for existing and future peak flows since they have velocities below the maximum criterion (8 ft/s).

4.3.3 Summary

The recommendations outlined in this section were a joint effort with City personnel and LAN to identify improvements needed for the City's sewer system. These improvements aim to address capacity limitations and accommodate the anticipated growth in the planning years of 2030 and 2050. The sewer collection system model should be maintained and updated as new projects are implemented and adjusted to address changes in development schedules.

5. IMPACT FEE DEVELOPMENT

5.1 Living Unit Equivalent

Living unit or service unit equivalents (LUEs) are "a standardized measure of consumption, use, generation, or discharge attributable to an individual unit of development calculated in accordance with generally accepted engineering or planning standards and based on historical data and trends applicable to the political subdivision in which the individual unit of development is located during the previous 10 years". Standard engineering practices equate one water LUE to a single, typical residential water meter's usage. The wastewater LUE is assumed to be 70% of a single residential water meter's usage to account for irrigation, evaporation, and other water losses associated with the wastewater system.

An analysis of the existing water and wastewater system hydraulic models determined that the water LUE is 0.17 gpm, and the wastewater LUE is 0.119 gpm. From the hydraulic water model, the total existing and future 2030 system flows for residential and "other" uses were calculated. These total flow values were divided by their respective LUE to determine the growth in each system. "Growth" in this case refers to the difference between the 2030 value and the existing value. It is important to note that the CCN boundaries for the Schertz water and wastewater system are not the same, so the growth in the respective systems is slightly different. Table 48 & Table 49 below show the process of determining the growth in LUEs for the water and wastewater systems.

Table 48: Calculations for Growth in Water LUEs

Growth in Water LUEs			
Scenario	Total Flow (gpm)	Living Unit Equivalent (gpm)	# of LUEs
Existing Residential	2,225	0.17	13,089
Existing Other	2,485		14,620
2030 Residential	3,372		19,838
2030 Other	2,545		14,971
		Growth In Residential:	***6,749***
		Growth In Other:	***351***

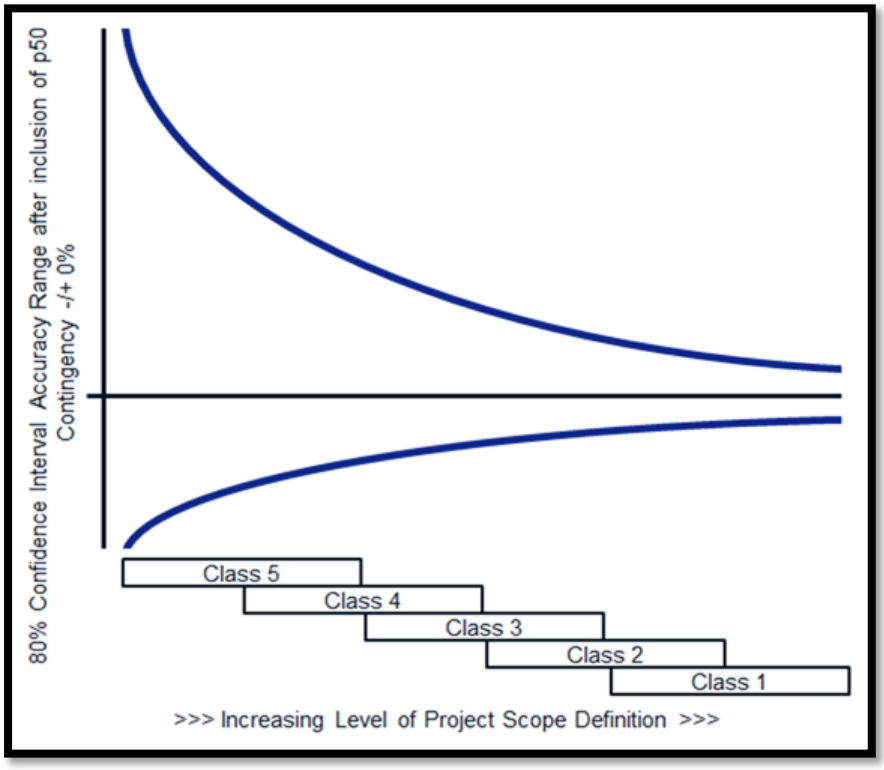
Table 49: Calculations for Growth in Wastewater LUEs

Growth in Wastewater LUEs			
Scenario	Total Flow (gpm)	Living Unit Equivalent (gpm)	# of LUEs
Existing Business	113	0.119	951
Existing Other	3,483		29,269
2030 Business	123		1,034
2030 Other	4,332		36,403
		Growth in Business:	***82***
		Growth In Other:	***7,134***

5.2 Cost Data

The Association for the Advancement of Cost Engineering (AACE) provides a cost estimate classification system that includes five classes of estimates. Each class has specific characteristics that indicate the level of detail of the cost estimate, with 5 being the least defined and 1 being the most defined. These classes are commonly used industry standards for engineers, contractors, and estimators. The accuracy range of an estimate narrows (becomes more accurate) as the project scope becomes more defined as shown in Figure 29 from AACE below. In the same figure, the approximate overlap of classes is shown as well in relation to the level of scope definition.

Figure 29: AACE Cost Estimate Clases



For this analysis, Class 4 estimating was identified as the appropriate, industry standard, estimation class. According to AACE, Class 4 estimates “are prepared for a number of purposes, such as but not limited to, detailed strategic planning, business development, project screening at more developed stages, alternative scheme analysis, confirmation of economic and/or technical feasibility and preliminary budget approval or approval to proceed to next stage”. The developed cost estimates are preliminary and rely on available information and standard preliminary engineering methods for Class 4 cost estimation. These methods were consistently applied to similar project components (e.g., pipelines, pump stations, lift stations, etc.) to facilitate comparison between different project alternatives.

Cost data for the proposed CIP projects was obtained from the following sources:

- TxDOT Online Bid Reports (past year)
- RS Means Database
- Cost Estimates from Past & Current City Projects
- Cost Estimates from Past & Current LAN Projects

Item costs were averaged from these sources and an inflation rate was applied to the costs for 2030 and 2050, which is discussed in detail in the following section. A 30% contingency factor was applied across all cost estimates, which reflects the range of accuracy of a Class 4 estimate.

For cost components that were highly variable and unpredictable at this stage of analysis, such as developing construction documents and construction management, estimates were derived from previous project experience and included as a percentage of the total construction costs.

5.3 Inflation Rate Calculation

In order to accurately capture construction prices for the future scenarios, an average yearly inflation rate was calculated and applied to the 2030 & 2050 project cost estimates. Three sources were consulted for historical inflation indexes including RS Means, Mortenson Construction Cost Indexes, and Turner Building Cost Indexes. Varying time frames of inflation were provided by these sources, but the data was not normalized to ensure that a wide range of indexes were included in the yearly inflation rate calculation. Additionally, these indexes are the average of nationwide data. Table 50 below shows the varying time frames and their associated total and yearly inflation rates. The median yearly inflation rate of this data is 3.91%, and this value was applied to the line items in the 2030 and 2050 cost estimates. See Appendix 28 for inflation rate source data.

Table 50: Yearly Inflation Rate Calculations

Time Frame	Total Inflation Rate	Yearly Inflation Rate
RS Means Historical Inflation Indexes		
2020 to 2024	128%	6.31%
2010 to 2024	169%	3.81%
2000 to 2024	251%	3.91%
1990 to 2024	309%	3.38%
1980 to 2024	454%	3.50%
Mortenson Historical Inflation Indexes		
2020 to 2023	132%	9.65%
2010 to 2023	188%	5.93%
Turner Historical Inflation Indexes		
2020 to 2023	117%	5.27%
2010 to 2023	172%	4.25%
2000 to 2023	231%	3.70%
1996 to 2024	272%	3.77%
	Average:	**4.86%**
	Median:	**3.91%**

5.4 Project Costs Eligibility

Estimates of total construction cost for the proposed water and wastewater CIP projects were developed. However, TLGC Section 395 stipulates that only certain types of projects and only the portion of the project utilized during the 10-year planning period can be included in the impact fee eligible total.

5.4.1 Eligible Project Types

There are defined items payable by the impact fee per TLGC Section 395, and these items are listed in Section 1 of this report. The proposed CIP projects were divided into "Growth" projects and "System Improvement" projects to assist in clearly identifying those projects that are eligible. Some of the projects only have a portion of the project costs listed as eligible because they serve both new growth and provide system improvements. Only the growth portions of those projects are eligible to be included in the total impact fee costs. The following types of projects are **not eligible** to be included in the total impact fee costs:

- All 2050 Projects
- Cibolo Creek Municipal Authority Projects (CCMA)

In the tables below, the projects, costs and their impact fee eligible costs are shown for the Water CIP, Wastewater CIP, and the recommended CCMA System Improvement projects. Projects denoted by two asterisks indicate that only a portion of the project costs are impact fee eligible. See Appendix 29 for individual project cost estimates.

5.4.2 Project Utilization During 10-Year Planning Period

This water and wastewater master plan includes three phases of projects: near term, 2030, and 2050. Only the projects within the 10-year planning period of 2020-2030 are eligible to be paid by impact fees in this analysis. TLGC also stipulates that only the portion of a project that is utilized during the 10-year period may be considered for impact fee eligibility. The utilization is determined by the following equation:

$$\%\ Utilization = \frac{2030\ Peak\ Flow - 2020\ Peak\ Flow}{2050\ Peak\ Flow}$$

There are some cases where proposed 2030 CIP projects utilize 100% of their build out capacity in 2030 and then in 2050 use less than the build out capacity. This occurs due to additional infrastructure being added in 2050 which takes on some of the capacity burden from those 2030 CIP projects. In these cases, the utilization is determined using the same equation as above, but with 2030 Peak Flow in the denominator:

$$\%\ Utilization\ (special\ case) = \frac{2030\ Peak\ Flow - 2020\ Peak\ Flow}{2030\ Peak\ Flow}$$

See Appendix 30 for utilization calculations.

Table 51: Near Term Water CIP Projects Estimate of Probable Costs

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Near Term CIP				
System Improvement Projects				
NT-W1**	Bubbling Springs 6" WL Replacement	$763,000	27%	$206,715
NT-W2	Corbett Pump Station & 3.0 MG GST	$8,600,000	0%	$0
NT-W3	Ware Seguin Pump Station Operational Improvement	$175,000	0%	$0
NT-W4	12" WL from Ware Seguin to Lower Seguin	$1,538,000	0%	$0
NT-W5	Fred Couples to Schwab	$455,556	0%	$0
NT-W6	Schwab to Eckhardt	$1,600,000	0%	$0
NT-W7**	Graytown to Pfeil	$1,550,000	69%	$1,077,040
NT-W8**	FM 78 Water Line Replacement	$875,000	22%	$194,778
NT-W9**	Moonlight Meadow Dr & Lost Meadow Dr WL Replacement	$3,000,000	0%	$0
NT-W10**	Robinhood Way WL Replacement	$4,650,000	0%	$0
	NEAR TERM TOTAL:	**$23,206,556**	**-**	**$1,478,532**

Note: Projects denoted by ** indicate that it has both growth & system improvement components.

Table 52: 2030 Water CIP Projects Estimate of Probable Costs

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Proposed 2030 CIP				
Growth Projects				
2030-W1	12" WL from Tri-County Extension to Cibolo Valley Drive	$4,788,000	100%	$4,788,000
2030-W2	Raf Burnette Rd 12" WL Improvements	$1,438,000	89%	$1,272,934
2030-W3	8" WL from Ray Corbett Dr to Lower Seguin Rd	$3,688,000	97%	$3,569,245
2030-W4**	Trainer Hale Rd 2" WL Replacement & 8" WL Improvement	$9,850,000	93%	$9,192,317
2030-W5**	Boenig Dr S 6" WL Replacement & 8" WL Improvement	$6,388,000	69%	$4,411,757
2030-W6	Live Oak to IH-35 24" Transmission Main	$32,075,000	100%	$32,075,000
2030-W7	Ware Seguin Pump Station Expansion Phase 1	$5,213,000	33%	$1,737,667
2030-W8	IH-10 8" WL Improvements	$6,063,000	100%	$6,063,000
	2030 Growth Subtotal:	**$69,503,000**	**-**	**$63,109,920**
System Improvement Projects				
2030-W9	PRV Installation for Proposed Southwest Pressure Plane	$413,000.0	0%	$0
2030-W10**	River Rd 6" WL Replacement	$2,325,000	58%	$1,354,926
	2030 System Improvement Projects Subtotal:	**$2,738,000**	**-**	**$1,354,926**
	2030 TOTAL:	**$72,241,000**	**-**	**$64,464,846**

Note: Projects denoted by ** indicate that it has both growth & system improvement components.

Table 53: 2050 Water CIP Projects Estimate of Probable Costs

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Proposed 2050 CIP				
Growth Projects				
2050-W1	Corbett Pump Station Expansion	$1,663,000	2050 CIP Projects are not eligible to be included in this impact fee total.	
2050-W2	FM 2252 8" WL Improvements	$8,800,000		
2050-W3	Ware Seguin Pump Station Expansion Phase 2	$2,725,000		
2050-W4	Beck St 6" WL Replacement	$5,288,000		
2050-W5	Raf Burnette Rd 8" WL Improvements	$4,438,000		
2050-W6	IH-35 Pump Station & 3.0 MG GST	$42,188,000		
2050-W7	IH-10 & FM 1518 8" WL Improvements	$3,075,000		
	2050 Growth Subtotal:	**$68,177,000**		
System Improvement Projects				
2050-W8	Lower Seguin Rd 8" WL Replacement	$4,775,000		
	2050 System Improvement Projects Subtotal:	**$4,775,000**		
	2050 TOTAL:	**$72,952,000**		

Table 54: Near Term Wastewater CIP Projects Estimate of Probable Costs

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Near Term CIP				
Growth Projects				
NT-S1	Town Creek Phase IV 24" - Section 1	$6,875,000	21%	$1,440,972
NT-S2	Town Creek Phase IV 12" - Section 2	$2,925,000	0%	$0
NT-S3	Town Creek Phase V 24"	$10,425,000	23%	$2,378,763
NT-S4**	Upsize Lookout Line	$3,838,000	20%	$771,788
NT-S5**	Upsize Tri County Line	$2,084,800	25%	$526,887
NT-S6	Cibolo West Main	$16,213,000	83%	$13,523,463
NT-S7	Woman Hollering Creek Lift Station, Gravity Lines, and Force Main	$3,400,000†	74%	$2,517,091
Near Term Growth Subtotal:		**$45,760,800**	**-**	**$21,158,965**
System Improvement Projects				
NT SI-1	Decommission Tri County Lift Station	$88,000	0%	$0
NT SI-2	Decommission Corbett Lift Station	$1,500,000	0%	$0
NT SI-3	Decommission Sedona Lift Station & Woman Hollering Creek WWTP	$175,000	0%	$0
	Near Term System Improvement Projects Subtotal:	**$1,763,000**	**-**	**$0**
	NEAR TERM TOTAL:	**$47,523,800**	**-**	**$21,158,965**

Note: Projects denoted by ** indicate that it has both growth & system improvement components.

†Original 2009 master plan cost was $9,000,000 and the 2024 construction cost was $13,000,000 resulting in a difference of $3,400,000.

Table 55: 2030 Wastewater CIP Projects Estimate of Probable Costs

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Proposed 2030 CIP				
Growth Projects				
2030-S1	Hope Lane 8" Gravity Line	$2,025,000	67%	$1,359,153
2030-S2	Old Wiederstein Road 8"	$1,338,000	5%	$68,849
2030-S3	Union Pacific Railroad 8" - Section 1	$2,563,000	10%	$249,210
2030-S4	Union Pacific Railroad 8" - Section 2	$400,000	12%	$47,722
2030-S5	Wiederstein Road 8"	$1,663,000	83%	$1,372,188
2030-S6	Schaefer Road 8" - Section 1	$4,913,000	33%	$1,613,509
2030-S7	Schaefer Road 8" - Section 2	$1,938,000	100%	$1,938,000
2030-S8	Aranda 8"	$475,000	100%	$475,000
2030-S9	Weir Road 10"	$2,525,000	100%	$2,522,465
2030-S10	Trainer Hale Road 10"	$1,038,000	100%	$1,034,756
2030-S11	Ware Seguin Road 8"	$3,113,000	97%	$3,012,264
2030-S12	FM 1518 8"	$400,000	40%	$160,000
2030-S13	I-10 8" - Section 1	$2,713,000	99%	$2,677,145
2030-S14	Boenig Drive 8"	$2,963,000	29%	$849,531
2030-S15	N Greytown Road 8"	$1,275,000	52%	$661,379
	2030 Growth Subtotal:	**$29,342,000**	**-**	**$18,041,171**
System Improvement Projects				
2030 SI-1**	Friesenhahn West Line WW Upsize	$8,175,000	22%	$1,833,143
2030 SI-2**	Fairlawn WW Upsize	$1,375,000	9%	$121,579
2030 SI-3**	Cibolo Crossing WW Line Upsize	$1,288,000	4%	$46,406
2030 SI-4**	Woodland Oak Drive Replacements	$338,000	4%	$13,741
2030 SI-5**	Old Wiederstein WW Upsize	$5,050,000	61%	$3,099,614
2030 SI-6**	Northcliffe Lift Station Upgrade	$7,838,000	5%	$392,686
2030 SI-7	Decommission Belmont Park Lift Station	$463,000	0%	$0
	2030 System Improvement Projects Subtotal:	**$24,527,000**	**-**	**$5,507,169**
	2030 TOTAL:	**$53,869,000**	**-**	**$23,548,341**

Note: Projects denoted by ** indicate that it has both growth & system improvement components.

Table 56: 2050 Wastewater CIP Projects Estimate of Probable Costs

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Proposed 2050 CIP				
Growth Projects				
2050-S1	I-35 N 8"	$9,088,000	2050 CIP projects are not eligible to be included in the impact fee total.	
2050-S2	Friesenhahn Lane 8"	$6,500,000		
2050-S3	Schaefer Road 8" - Section 3	$5,713,000		
2050-S4	Corbett JH 8"	$2,888,000		
2050-S5	Lower Seguin Road 8"	$1,338,000		
2050-S6	I-10 8" - Section 2	$3,338,000		
	2050 Growth Subtotal:	**$28,865,000**		
System Improvement Projects				
2050 SI-1	Cypress Point Lift Station Upgrade	$1,463,000		
2050 SI-2	Decommission Schertz Parkway Lift Station	$238,000		
2050 SI-3	Decommission Park Lift Station	$3,663,000		
2050 SI-4	Decommission Cover's Cove Lift Station	$238,000		
	2050 System Improvement Projects Subtotal:	**$5,602,000**		
	2050 TOTAL:	**$34,467,000**		

Table 57: CCMA 2030 System Improvement Projects Estimate of Probable Costs

Project Number	Project Name	Project Cost
Proposed 2030 CIP		
CCMA System Improvement Projects		
2030 C-1	Roy Richard Drive Replacements	$1,588,000
2030 C-2	Valencia Lane Replacements	$2,288,000
2030 C-3	Savannah Drive Replacements	$12,425,000
2030 C-4	Build Out Project 25 - 36" Schertz Line	$12,950,000
	CCMA System Improvement Projects Total:	**$29,251,000**

5.5 Water Meter Updates

Part of the update to the impact fees included updating the water meter types and characteristics to correspond with the new meters that the City will now be utilizing. The City was previously using simple, compound, and turbine type meters. Going forward, the City will be using multi-jet and ultrasonic meters. The maximum allowable impact fees by meter size were calculated by multiplying the LUE per meter by the maximum allowable water and wastewater impact fees. Table 58 shows the difference in the existing and proposed meter characteristics.

Table 58: Existing & Proposed Meter Characteristics

Meter Size	Meter Type	Maximum Flow Rate (gpm)	Normal Flow Range (gpm)	Maximum Flow Rate for Continuous Duty (gpm)	Existing LUE by Meter Size	Proposed LUE by Meter Size
5/8"	MULTI-JET	20	1-20	15	1.0	1.0
3/4"	MULTI-JET	30	2-30	20	1.5	1.3
1"	MULTI-JET	50	3-50	30	2.5	2.0
2"	ULTRASONIC	250	0.5-250	250	10.0	16.7
3"	ULTRASONIC	500	1-500	500	24.0	33.3
4"	ULTRASONIC	1,000	1.5-1,000	1,000	42.0	66.7
6"	ULTRASONIC	1,600	3-1,600	1,600	92.0	106.7
8"	ULTRASONIC	2,800	5-2,800	2,800	80.0	186.7
10"	ULTRASONIC	5,500	14-5,500	5,500	250.0	366.7
12"	ULTRASONIC	5,500	14-5,500	5,500	330.0	366.7

These meter type changes affected the maximum flow rate for continuous duty for each meter size, which established the updated LUE per meter. The LUE per meter size corresponds to the equivalent impact fees for each meter size.

See Appendix 31 for the new multi-jet and ultrasonic meter characteristics.

5.6 Maximum Allowable Impact Fees

TLGC requires that the maximum allowable impact fee may not exceed the value of the total impact fee eligible costs (identified in Section 5.4 of this report) less the required credit that reduces the overall impact fee eligible costs, divided by the growth in LUEs. This credit to the growth-related cost component of the impact fee calculation is required under Local Government Code Chapter 395 to ensure that new service units are not double charged for impact fee related capital improvements. The credit can be determined in the following ways:

- A credit for the portion of ad valorem tax and utility service revenues generated by new service units during the program period that is used for the payment of improvements, including the payment of debt, that are included in the capital improvements plan.
- In the alternative, a credit equal to 50 percent of the total projected cost of implementing the capital improvements plan.

5.6.1 Credit Analysis

The first method was used to calculate the credit and was applied as shown in Table 59 and Table 60. This credit calculation method was performed by the City's financial consultant, Willdan Financial Services. According to Wildan's report, there were seven critical assumptions made in order to determine the credits:

1) Willdan assumed a ten-year period for the calculation, FY 2025 – FY 2034, consistent with guidelines set by Chapter 395.
2) Willdan utilized Capital Improvement Plan cost estimates and percentages of each project allocable to growth developed by City staff and its consulting engineers (LAN).

3) Growth estimates were based on the latest forecasts as presented by the City's consulting engineers (LAN).
4) Terms and interest rates for new debt forecast to be issued for growth-related improvements were based on estimates used in the City's 2023 water and wastewater rate study.
5) Willdan is interpreting Chapter 395 so that the debt allocable to growth-related projects includes both principal and interest.
6) Current debt allocable to growth-related projects was based on estimates provided by City staff.
7) The totals represent Net Present Values of the ten-year cash flows utilizing a discount rate of 6.0%.

From these assumptions, the following values were calculated:

WATER Revenue Credit -- $3,365,530

WASTEWATER Revenue Credit -- $4,611,802

The full report and detailed credit calculations can be found in Appendix 32.

5.6.2 Maximum Allowable Impact Fee

After the calculated credit is applied, the total impact fee eligible costs are divided by the growth in LUEs (discussed in Sections 2 & 5.1 of this report) to obtain the maximum allowable impact fee per LUE. Table 59 and Table 60 summarize the maximum allowable impact fee calculations, including credits.

Table 59: Maximum Allowable Water Impact Fee

Water Impact Fee	
Impact Fee Eligible Costs	$65,943,379
Credit (Calculated: 5.1%)	($3,365,530)
Total Impact Fee Eligible Costs	$62,577,849
Growth in LUEs	7,100
Maximum Allowable Water Impact Fee per LUE	**$8,814**

Table 60: Maximum Allowable Wastewater Impact Fee

Wastewater Impact Fee	
Impact Fee Eligible Costs	$44,707,306
Credit (Calculated: 8.6%)	($4,611,802)
Total Impact Fee Eligible Costs	$40,095,504
Growth in LUEs	7,217
Maximum Allowable Wastewater Impact Fee per LUE	**$5,556**

As discussed in the previous section, updates were made to the meter types that the City will be using. Table 61 reflects both the update to the impact fees by meter type and the new meter characteristics. The impact fee by meter size was calculated by multiplying the proposed LUE by the maximum allowable water or wastewater impact fee for per LUE (identified in the tables above). In the last two columns of Table 61, the maximum allowable water and wastewater impact fees by meter size are presented.

Table 61: Maximum Allowable Impact Fee by Meter Size

Meter Size	Meter Type	Maximum Flow Rate for Continuous Duty (gpm)	Proposed LUE	Maximum Allowable Water Impact Fee	Maximum Allowable Wastewater Impact Fee
5/8"	MULTI-JET	15	1.0	$8,814	$5,556
3/4"	MULTI-JET	20	1.3	$11,810	$7,445
1"	MULTI-JET	30	2.0	$17,627	$11,112
2"	ULTRASONIC	250	16.7	$146,924	$92,615
3"	ULTRASONIC	500	33.3	$293,848	$185,231
4"	ULTRASONIC	1,000	66.7	$587,607	$370,406
6"	ULTRASONIC	1,600	106.7	$940,154	$592,639
8"	ULTRASONIC	2,800	186.7	$1,645,248	$1,037,104
10"	ULTRASONIC	5,500	366.7	$3,231,708	$2,037,150
12"	ULTRASONIC	5,500	366.7	$3,231,708	$2,037,150

5.7 Comparison of Local Impact Fees

Since the last water and wastewater impact fee update was performed in 2011, the City expressed interest in comparing the 2024 proposed fees with other municipalities and utility providers in the area. Table 62 provides a comparison of the impact fees imposed by local municipalities and utility providers, and the City of Schertz 2024 proposed impact fees. The City can decide to adopt lower impact fees than those established by this report, typically to spur more development, but should have a means to recoup the costs building the infrastructure to serve the developments.

Table 62: Local Impact Fee Comparison

City/Utility	Total	Water	Wastewater	Population Served (At the Time of Individual Analysis)
Pflugerville (2023)	$29,849	$14,713	$15,136	65,191
NBU (2022)	$25,692	$19,448	$6,244	90,403
Seguin (2023)	$16,558	$7,308	$9,250	29,470
Schertz (Proposed 2024)	**$14,369**	**$8,814**	**$5,556**	**45,719**
SAWS (2024)	$9,350	$5,987	$3,363	2,000,000
Austin (2023)	$7,700	$4,800	$2,900	961,000
Boerne (2023)	$7,629	$2,509	$5,120	18,232
San Marcos (2018)	$6,485	$3,801	$2,684	68,217
Schertz (Current from 2011)	**$4,603**	**$2,934**	**$1,669**	**34,754**
Cibolo (2021)	$2,712	$1,839	$873	34,000

Sources can be found in Appendix 33.

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Appendix 8 - Planned & Existing Commercial Developments Comparison to Water CCN

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APPENDIX 1 - 2018 COMPREHENSIVE LAND USE PLAN

SCHERTZ

COMMUNITY ★ SERVICE ★ OPPORTUNITY

Comprehensive Land Use Plan

Last Update: February 20, 2018

City of Schertz, GIS Coordinator: Tony McFalls, gis@schertz.com (210) 619-1184

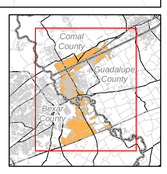
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- Schertz Municipal Boundary
- Schertz ETJ Boundary
- County Boundaries
- Railroads

Air Installation Compatible Use Zone
- APZ I
- APZ II
- Clear Zone

- Major Roads
- Minor Roads
- Proposed Roads

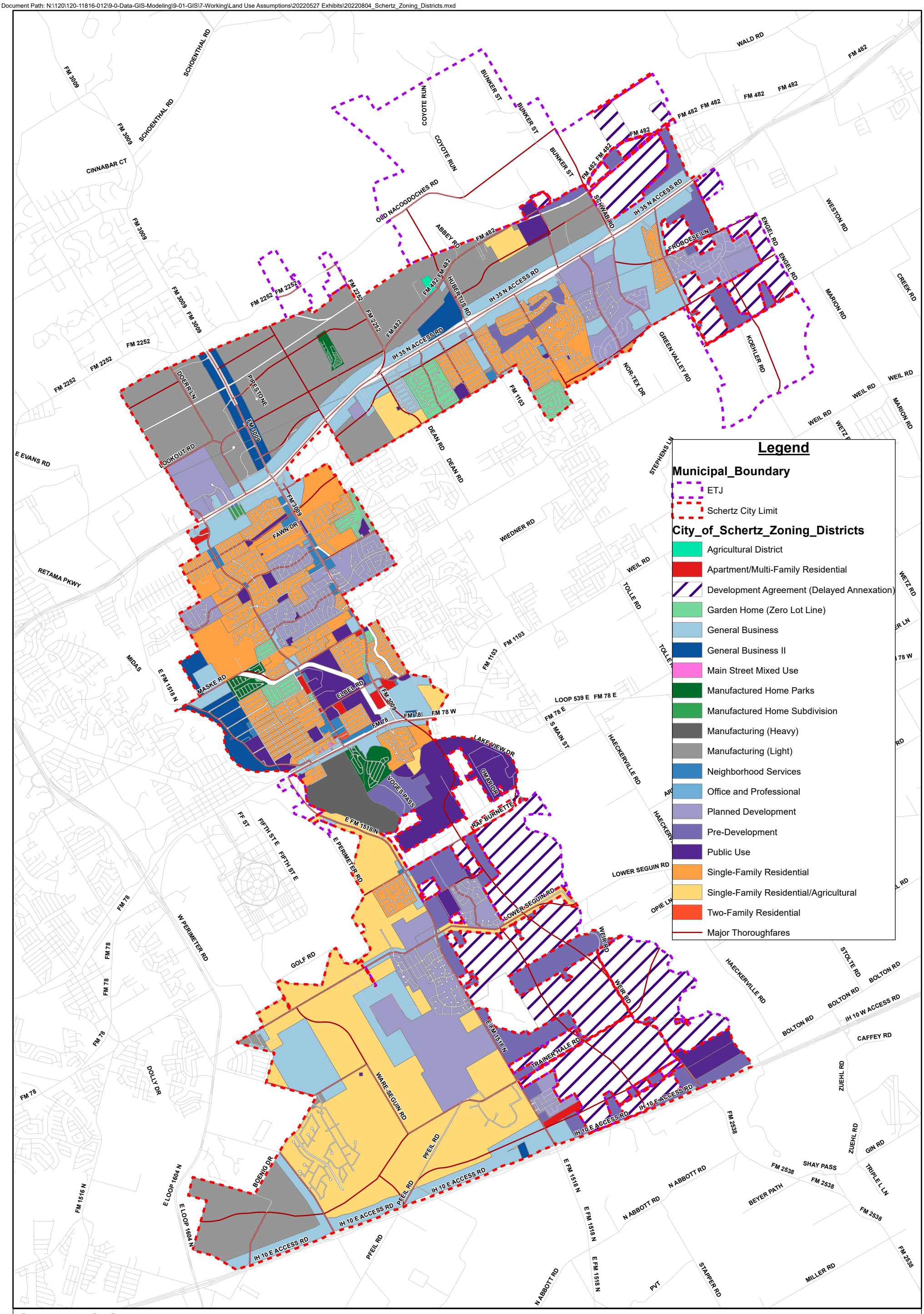
- Rural Frontage
- Sector Boundary
- Air Installation Impact
- Air Installation Compatible
- Civic, Schools
- Main Street Commercial
- Commercial Campus
- Highway Commercial
- Industrial
- Industry, Technology and R and D
- Parks, Open Space
- Agricultural Conservation
- Estate Neighborhood
- Single Family Residential
- Multi-Family Residential
- Manufactured Housing
- Mixed Use Neighborhood
- Mixed Use Core
- TND/TOD
- Transition
- 1% Annual-Chance Flood Event



0 ¼ ½ 1 1½ 2 Miles

APPENDIX 2 - ZONING MAP

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\20220527 Exhibits\20220804_Schertz_Zoning_Districts.mxd



City of Schertz Zoning Map

8/4/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

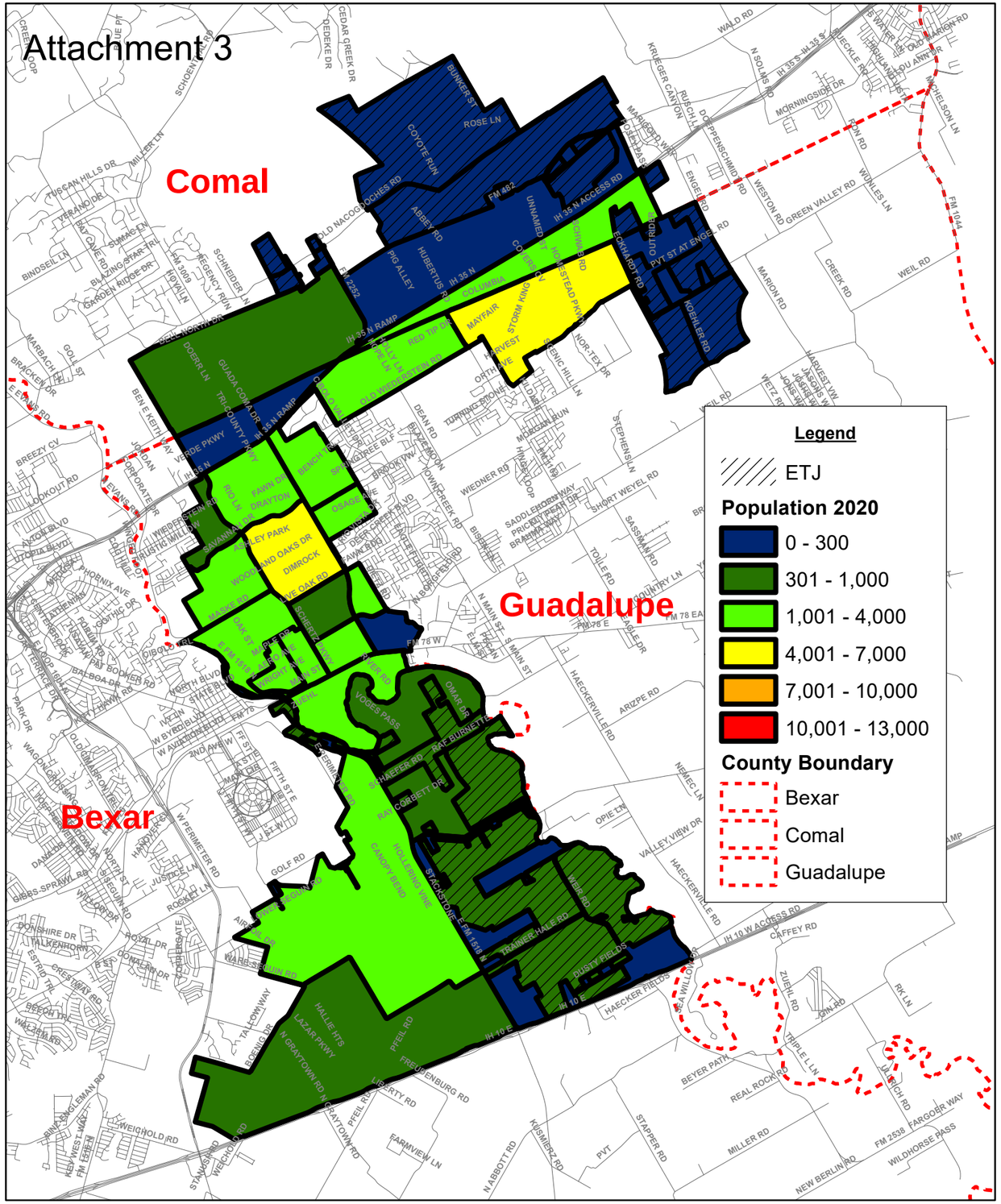
0 5,000 10,000 Feet

N W E S

APPENDIX 3 - 30 YEAR POPULATION DISTRIBUTION PROJECTIONS

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\Working Exhibits\20220804_MXD_Files\20220804_Population Projections.mxd

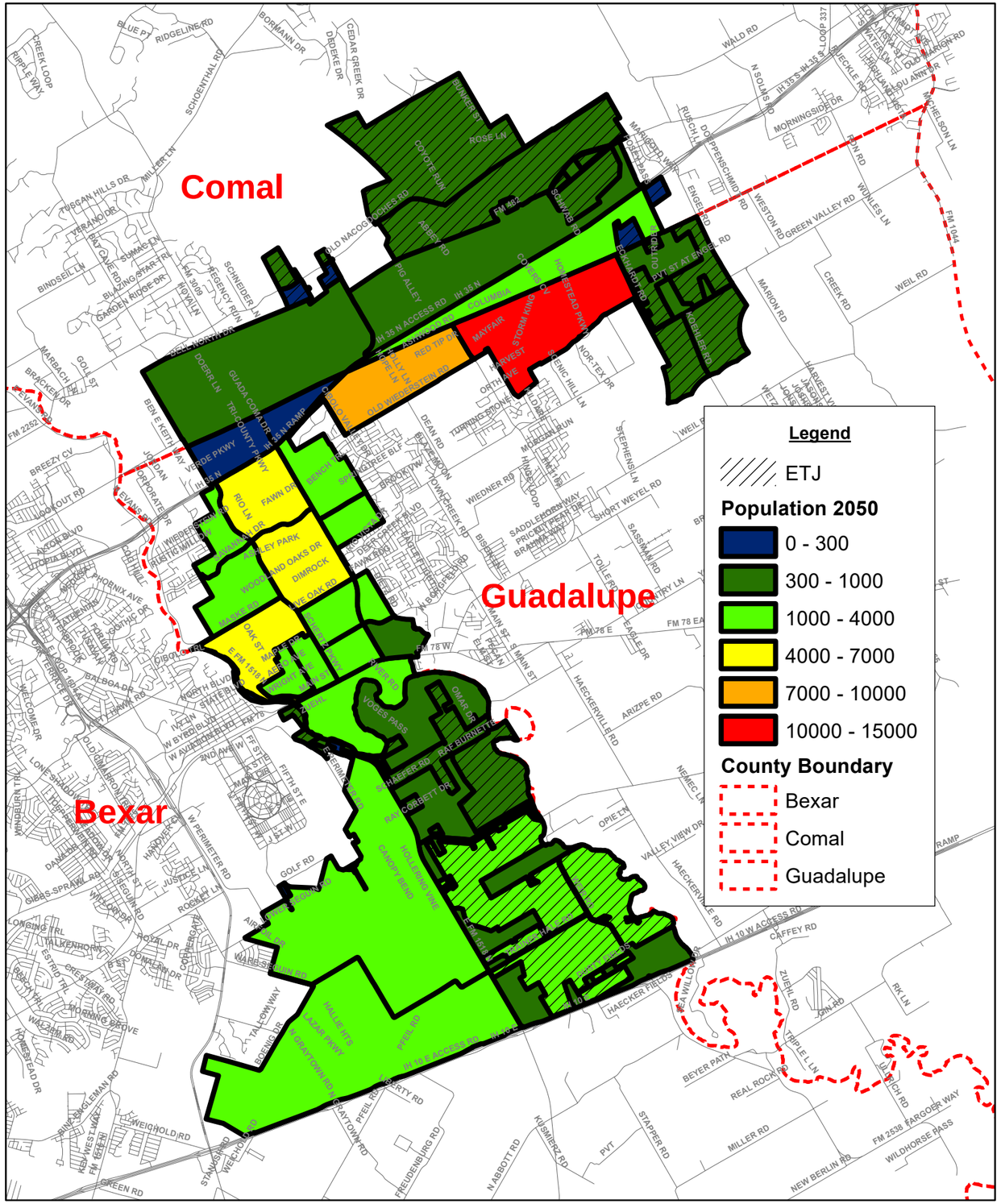
Attachment 3



Schertz 2020 Population Distribution

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

0 5,000 10,000 Feet



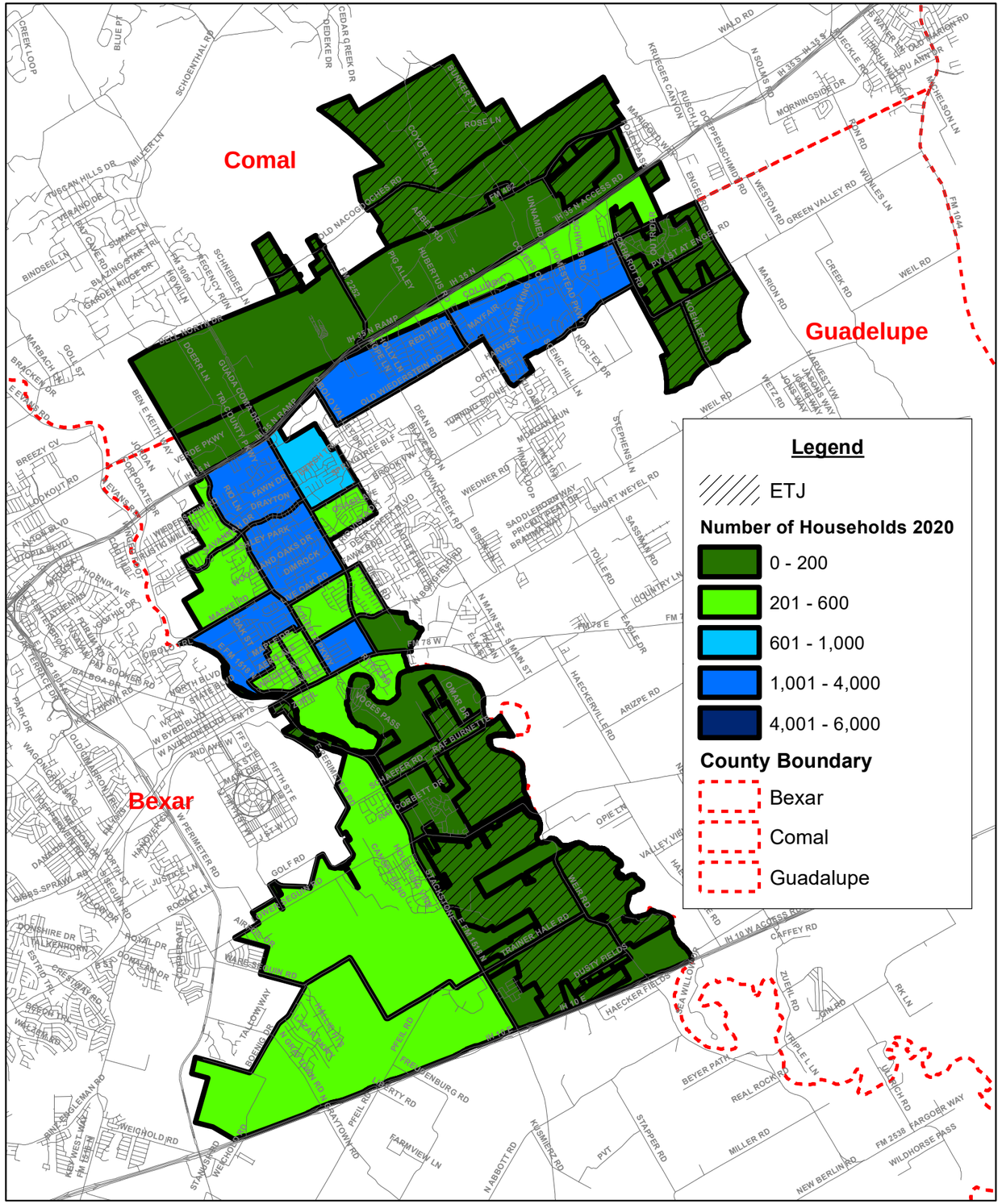
Schertz 2050 Population Distribution
8/4/2022

N W E S

0 5,000 10,000 Feet

APPENDIX 4 - 30 YEAR HOUSING DISTRIBUTION PROJECTIONS

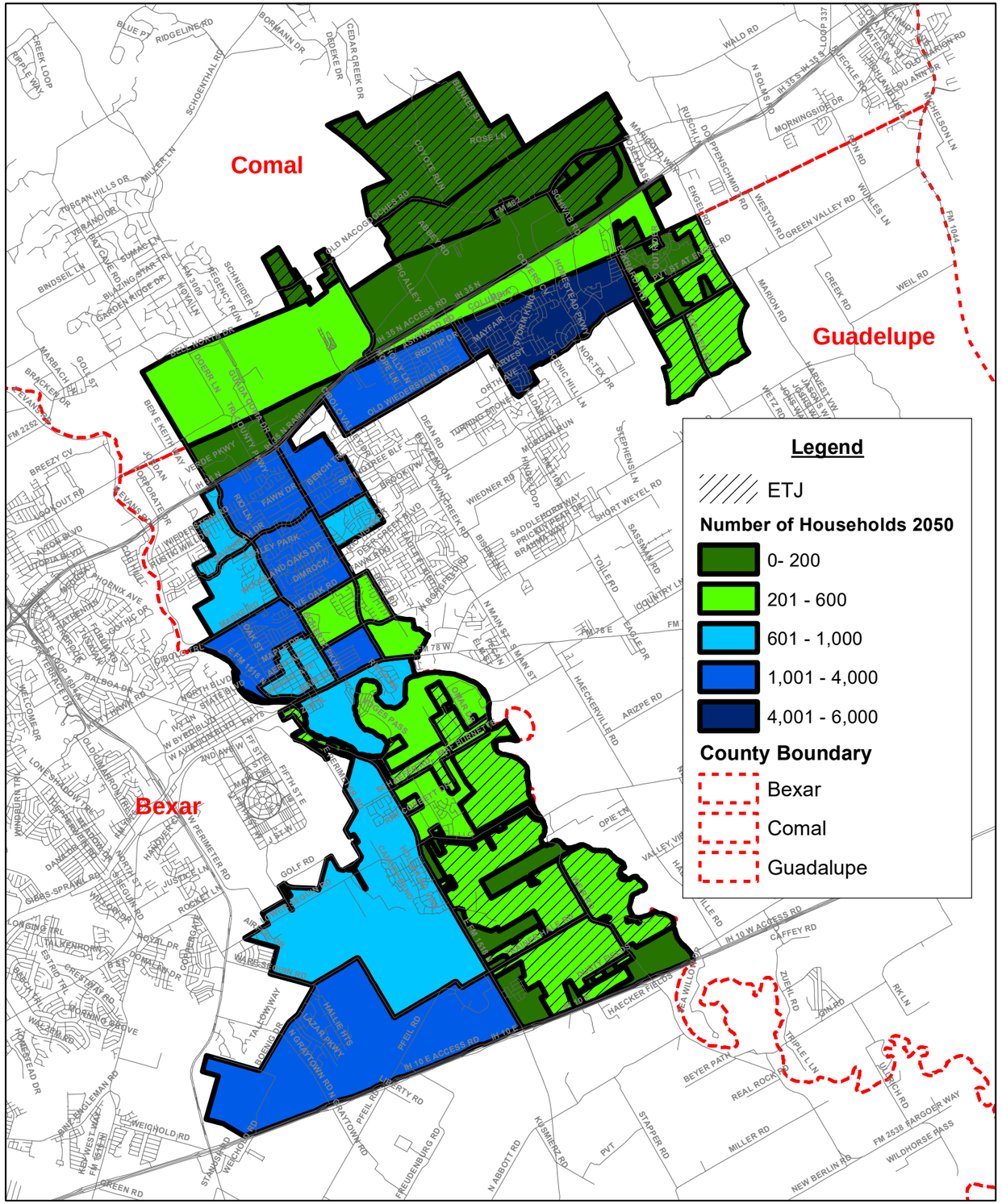
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Schertz 2020 Residential Housing Distribution

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

0 5,000 10,000 Feet



Schertz 2050 Residential Housing Distribution
1/11/2022

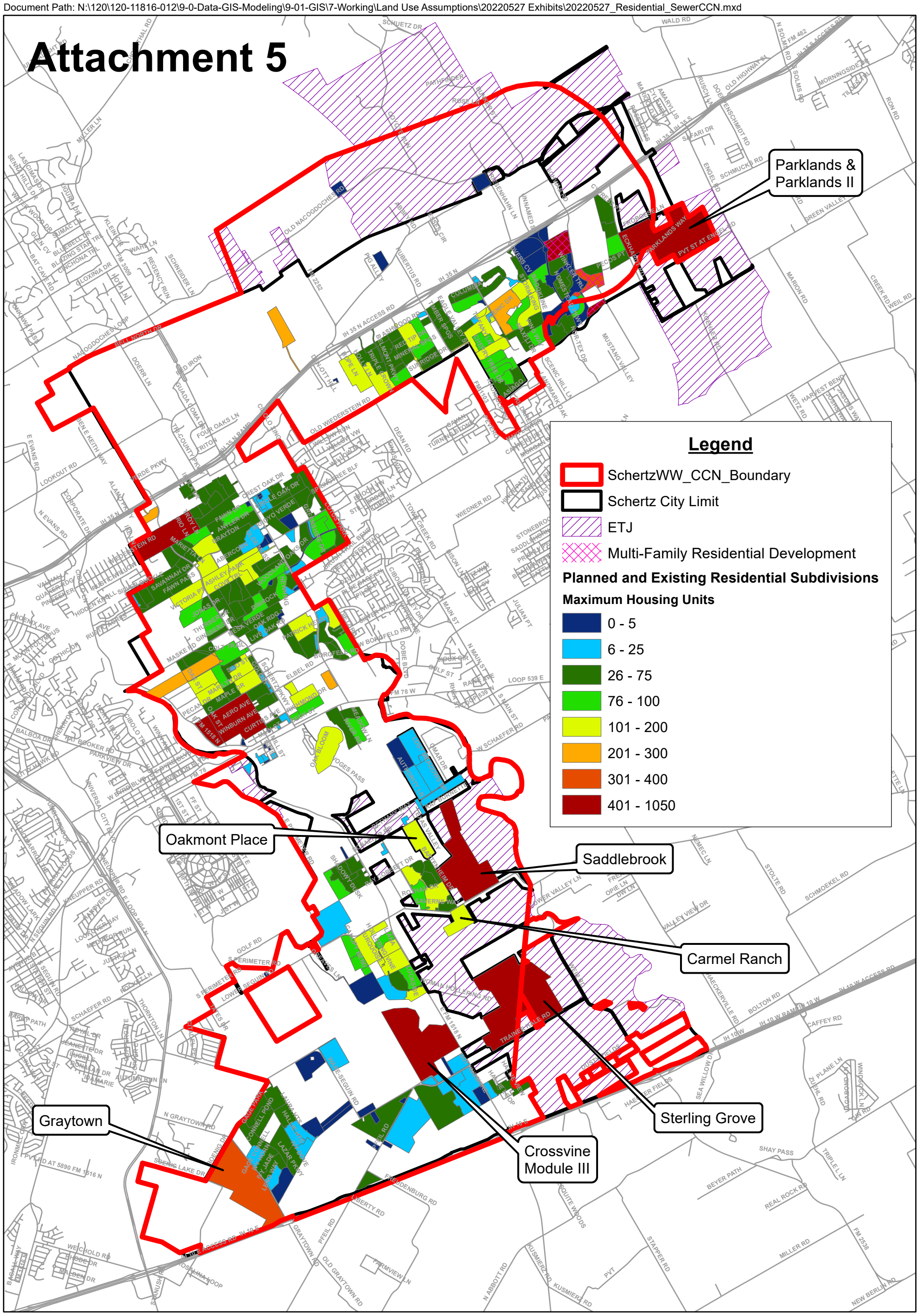
N W E S

0 5,000 10,000 Feet

APPENDIX 5 - PLANNED & EXISTING RESIDENTIAL DEVELOPMENTS COMPARISON TO WASTEWATER CCN

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\20220527 Exhibits\20220527_Residential_SewerCCN.mxd

Attachment 5



Schertz Planned and Existing Residential Developments
Comparison to Wastewater CCN Service Area
8/8/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

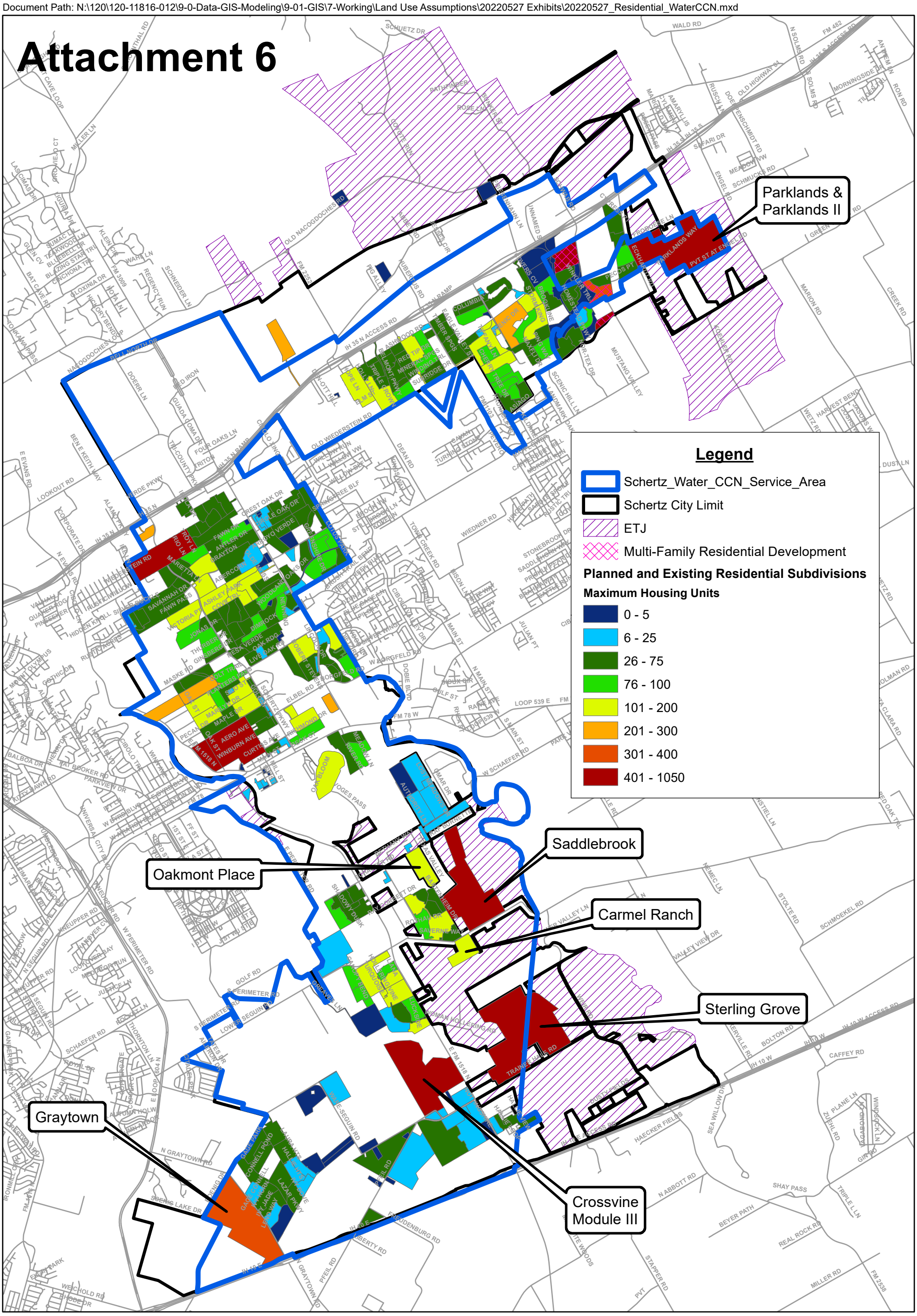
N
W E
S

0 5,000 10,000 Feet

APPENDIX 6 - PLANNED & EXISTING RESIDENTIAL DEVELOPMENTS COMPARISON TO WATER CCN

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\20220527 Exhibits\20220527_Residential_WaterCCN.mxd

Attachment 6



Schertz Planned and Existing Residential Developments
Comparison to Water CCN Service Area
8/8/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

N
W E
S

0 5,000 10,000
Feet

APPENDIX 7 - PLANNED & EXISTING COMMERCIAL DEVELOPMENTS COMPARISON TO WASTEWATER CCN

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\20220527 Exhibits\20220531_Commercial-SewerCCN.mxd

Attachment 7

Legend

- Schertz Wastewater CCN Service Area
- Schertz City Limit
- ETJ

Commercial Parcels

Planned and Existing Commercial Properties

- Commercial Parcels

Schertz Planned and Existing Commericial Developments
Comparison to Wastewater CCN Service Area
8/16/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

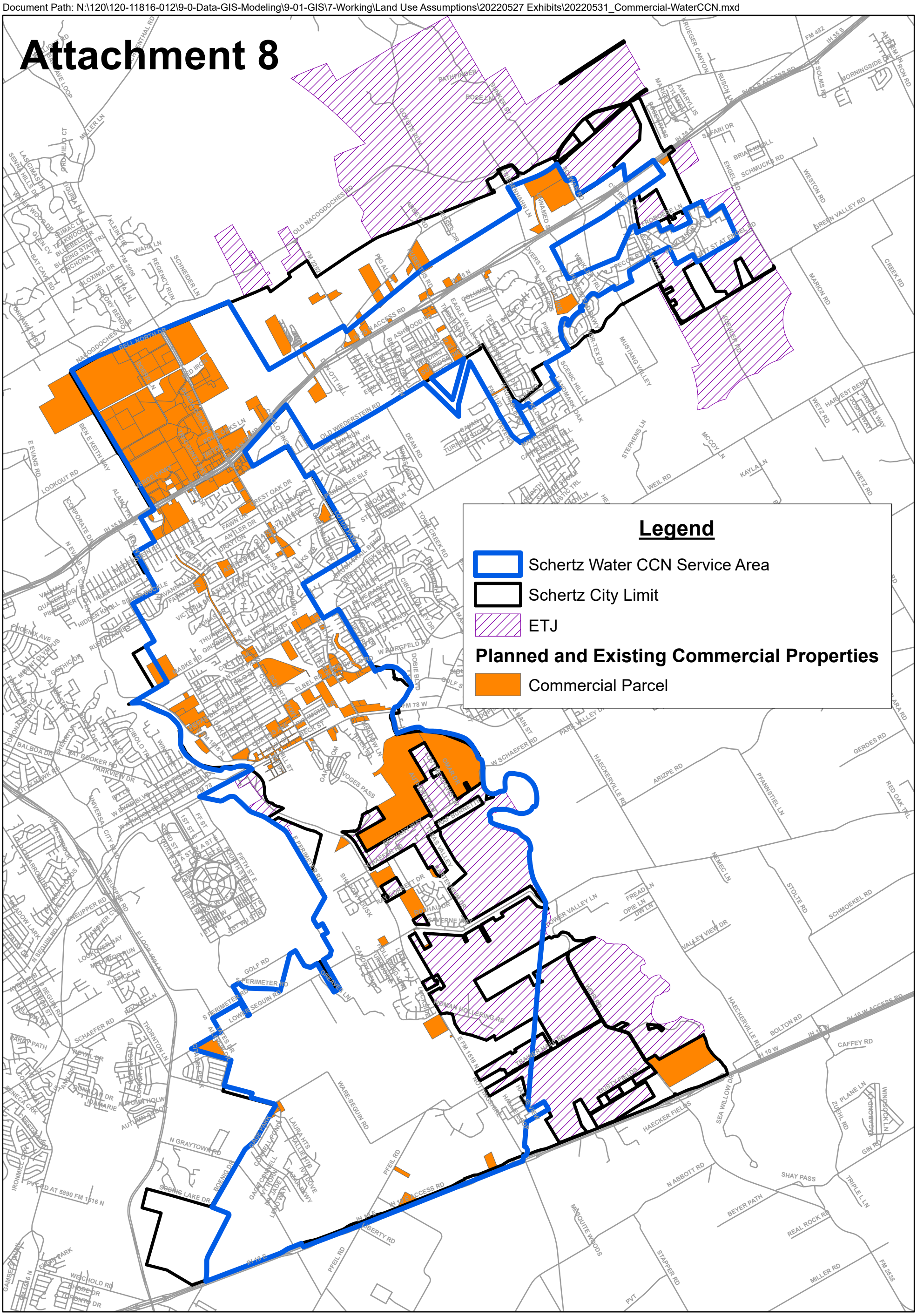
N
W E
S

0 5,000 10,000
Feet

APPENDIX 8 - PLANNED & EXISTING COMMERCIAL DEVELOPMENTS COMPARISON TO WATER CCN

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\20220527 Exhibits\20220531_Commercial-WaterCCN.mxd

Attachment 8



Schertz Planned and Existing Commericial Developments
Comparison to Water CCN Service Area
8/16/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

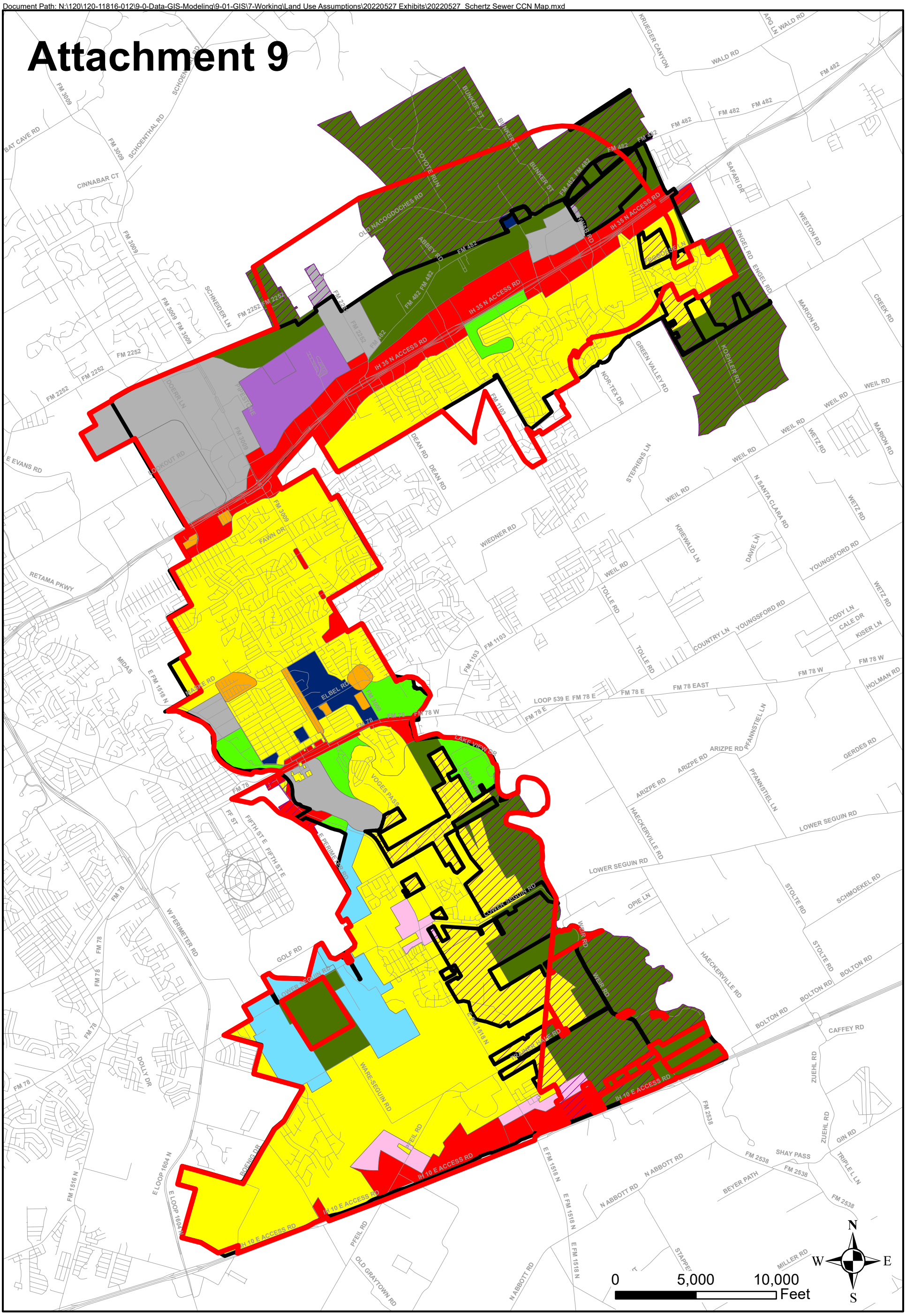
N
W E
S

0 5,000 10,000
Feet

APPENDIX 9 - WASTEWATER CCN SERVICE AREA & COMPREHENSIVE LAND USE

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\20220527 Exhibits\20220527_Schertz Sewer CCN Map.mxd

Attachment 9



Legend

ETJ

Schertz City Limit

Schertz Sewer CCN Service Area

Schertz Sewer CCN Service Area

Future Land Use

- Agricultural Conservation
- Air Installation
- Civic, Schools
- Commercial
- Industrial
- Mixed Use
- Multi-Family Residential
- Parks, Open Space
- Single Family Residential
- Transition

Schertz
CCN Sewer Service Area Map
Supported Land Uses

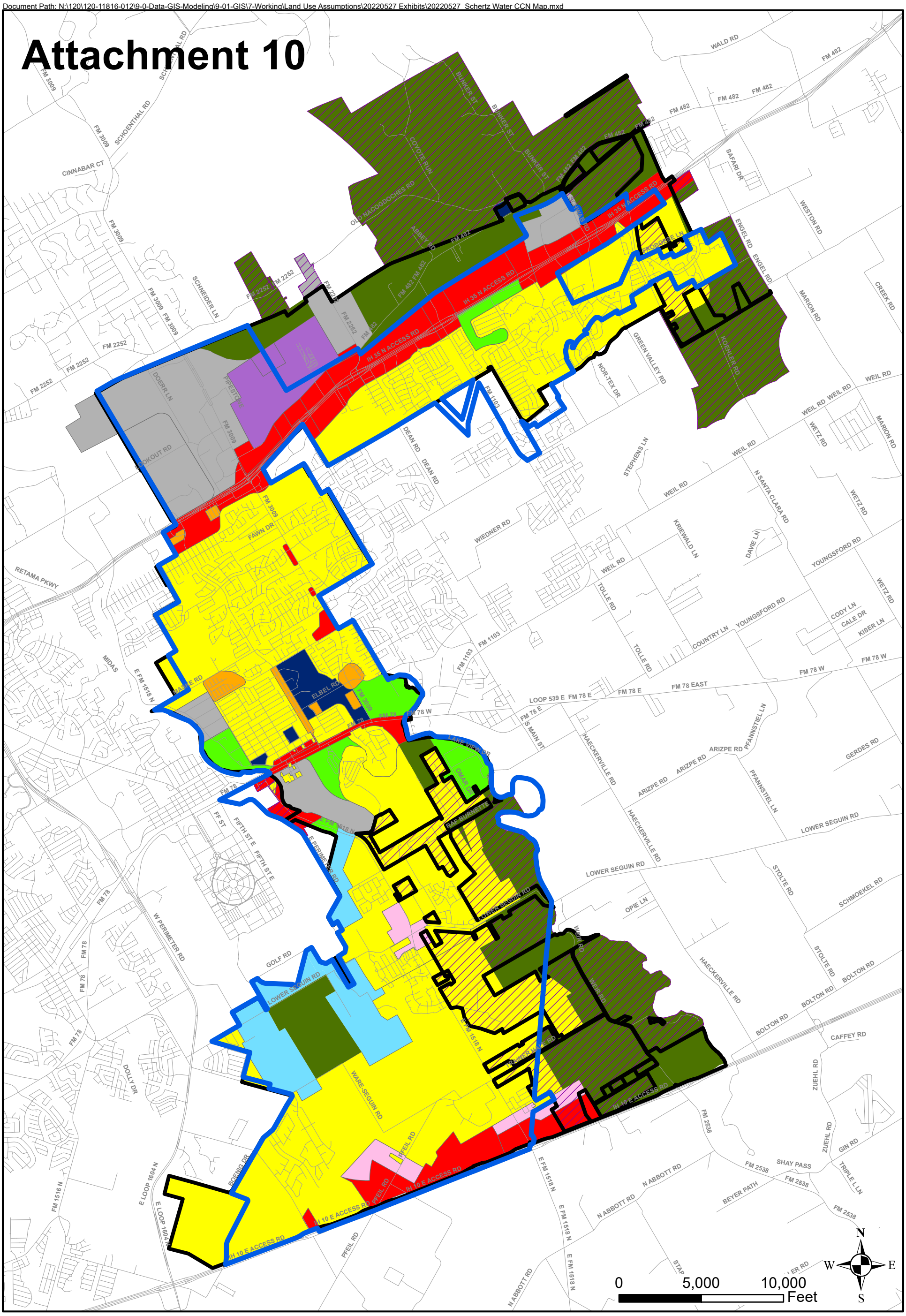
8/8/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

APPENDIX 10 - WATER CCN SERVICE AREA & COMPREHENSIVE LAND USE

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\Land Use Assumptions\20220527 Exhibits\20220527_Schertz Water CCN Map.mxd

Attachment 10



Legend

- ETJ
- Schertz City Limit

Schertz Water CCN Service Area

- Schertz Water CCN Service Area

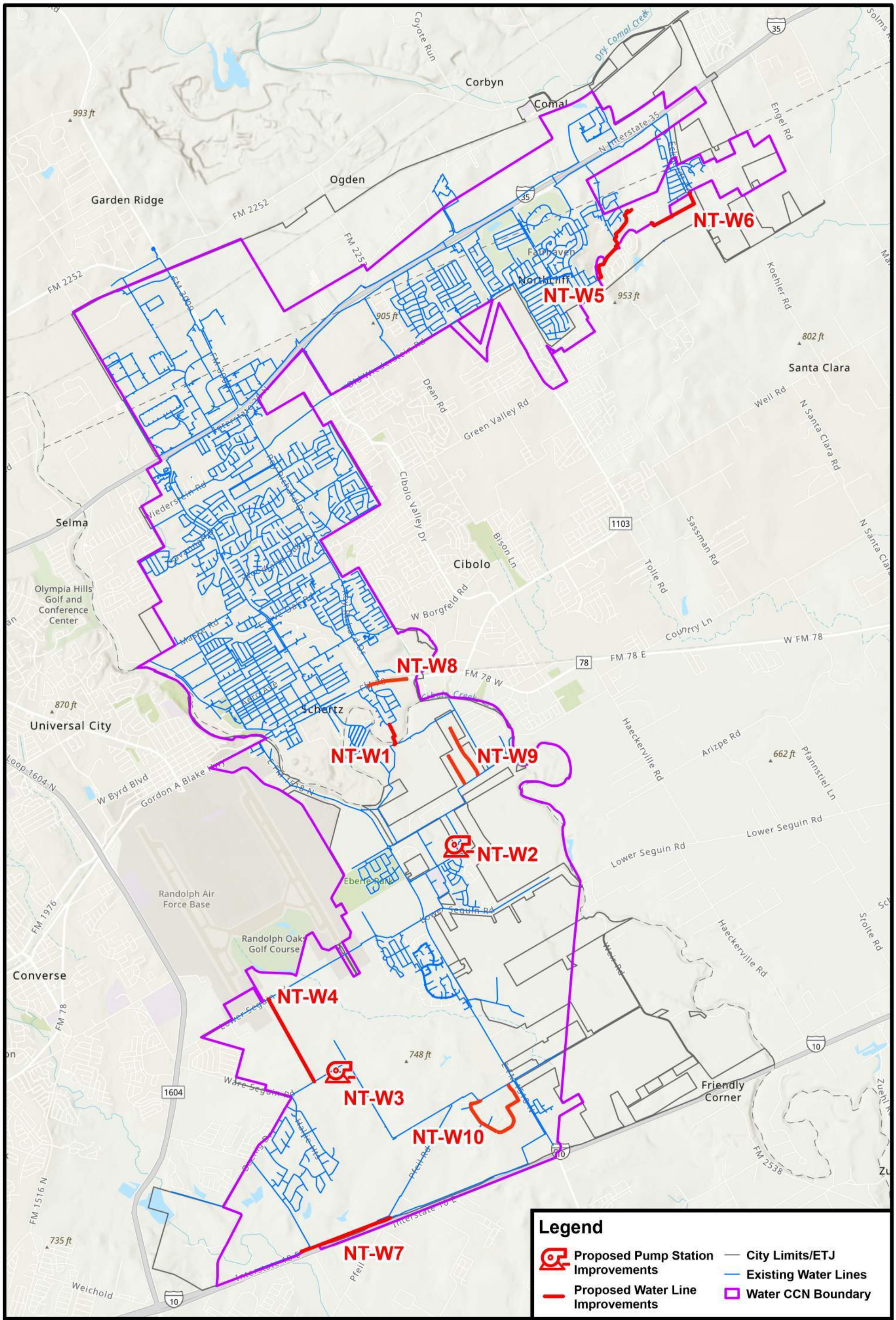
Future Land Use

- Agricultural Conservation
- Air Installation
- Civic, Schools
- Commercial
- Industrial
- Mixed Use
- Multi-Family Residential
- Parks, Open Space
- Single Family Residential
- Transition

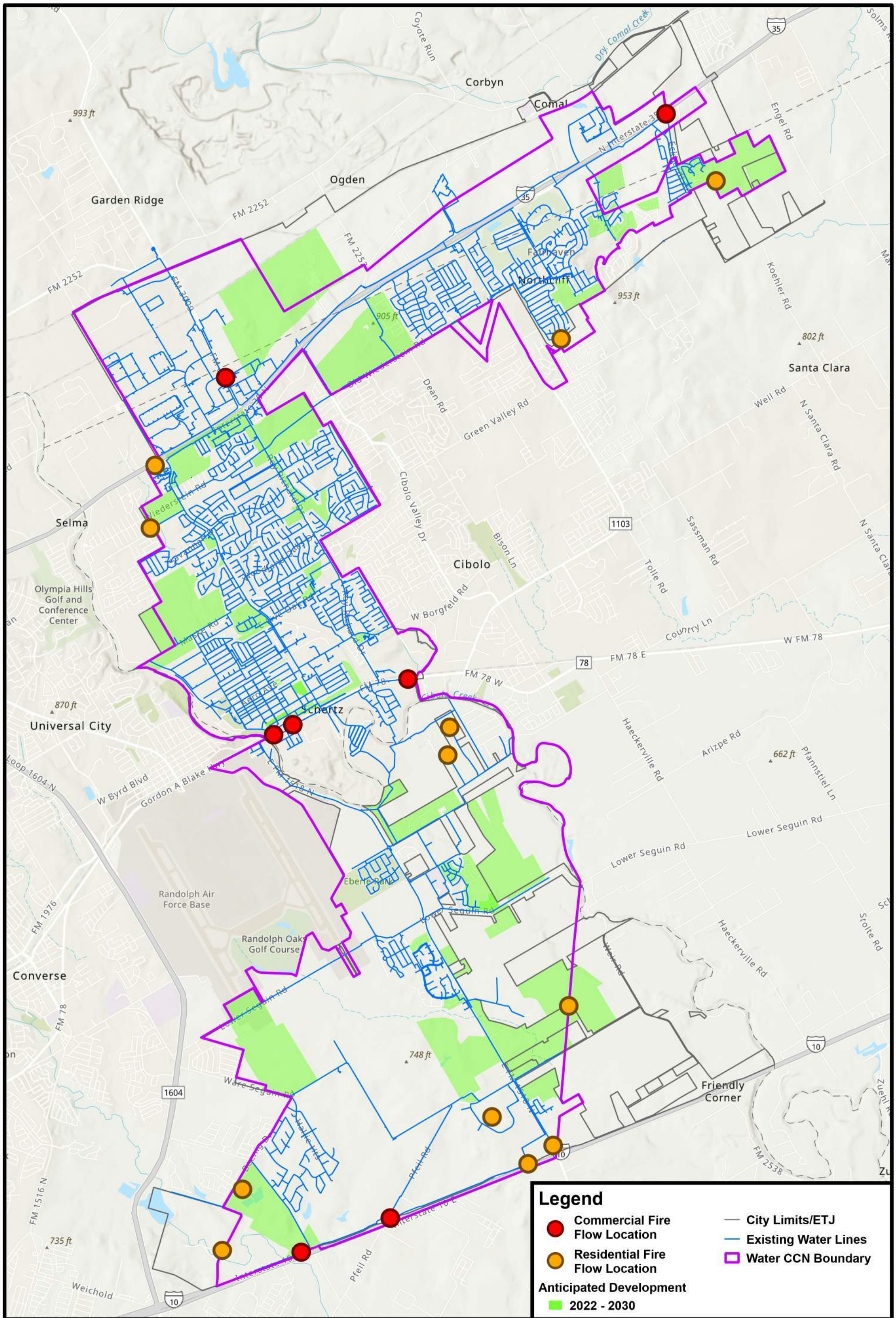
Schertz
CCN Water Service Area Map
Supported Land Uses
8/8/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

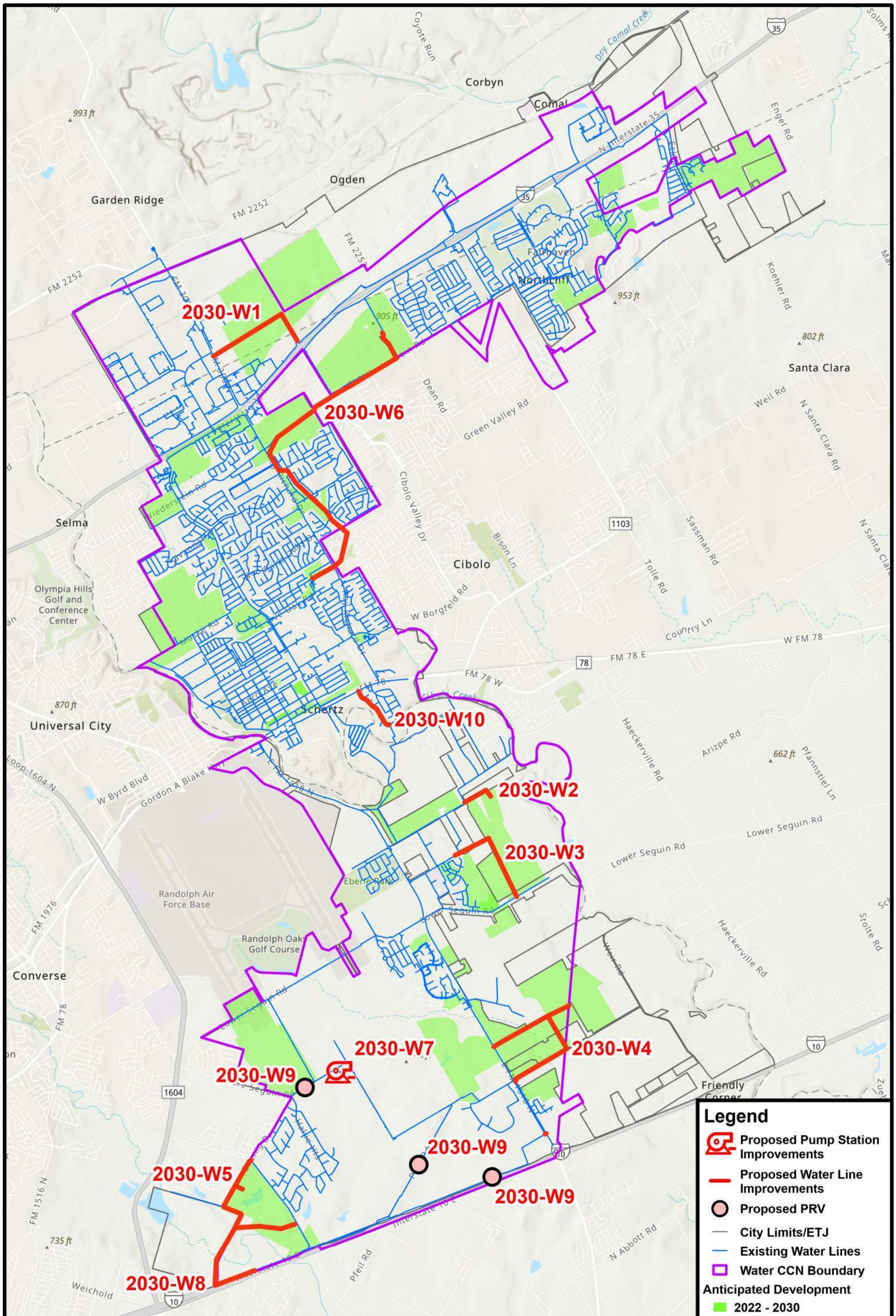
APPENDIX 11 - NEAR TERM WATER CIP MAP


NT-W6
NT-W5
NT-W8
NT-W1
NT-W9
NT-W2
NT-W4
NT-W3
NT-W10
NT-W7
Corbyn
Comal
Ogden
Garden Ridge
Selma
Cibolo
Schertz
Universal City
Converse
Santa Clara
Northcliff
Fairhaven
Olympia Hills Golf and Conference Center
Randolph Air Force Base
Randolph Oaks Golf Course
Friendly Corner
Coyote Run
Dry Comal Creek
Interstate 35
FM 2252
FM 2538
Engel Rd
Koehler Rd
Dean Rd
Green Valley Rd
Cibolo Valley Dr
Bison Ln
Sassman Rd
Tolle Rd
W Borgfeld Rd
Country Ln
W FM 78
FM 78 E
FM 78 W
Haeckerville Rd
Arizpe Rd
Pfannstiel Ln
Lower Seguin Rd
Well Rd
N Santa Clara Rd
Stolte Rd
W Byrd Blvd
Gordon A Blake Hwy
Loop 1604 N
FM 1976
FM 1516 N
Weichold
Wiedersehn Rd
Maple Rd
Pfeil Rd
Ware Seguin Rd
993 ft
905 ft
953 ft
802 ft
870 ft
748 ft
735 ft
662 ft
1604
1103
78
10
35
Legend
Proposed Pump Station Improvements
Proposed Water Line Improvements
City Limits/ETJ
Existing Water Lines
Water CCN Boundary
NEAR TERM WATER CIP MAP
Planning
Engineering
Program Management
SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.
N
W
E
S
0
3,500
7,000
14,000
Feet

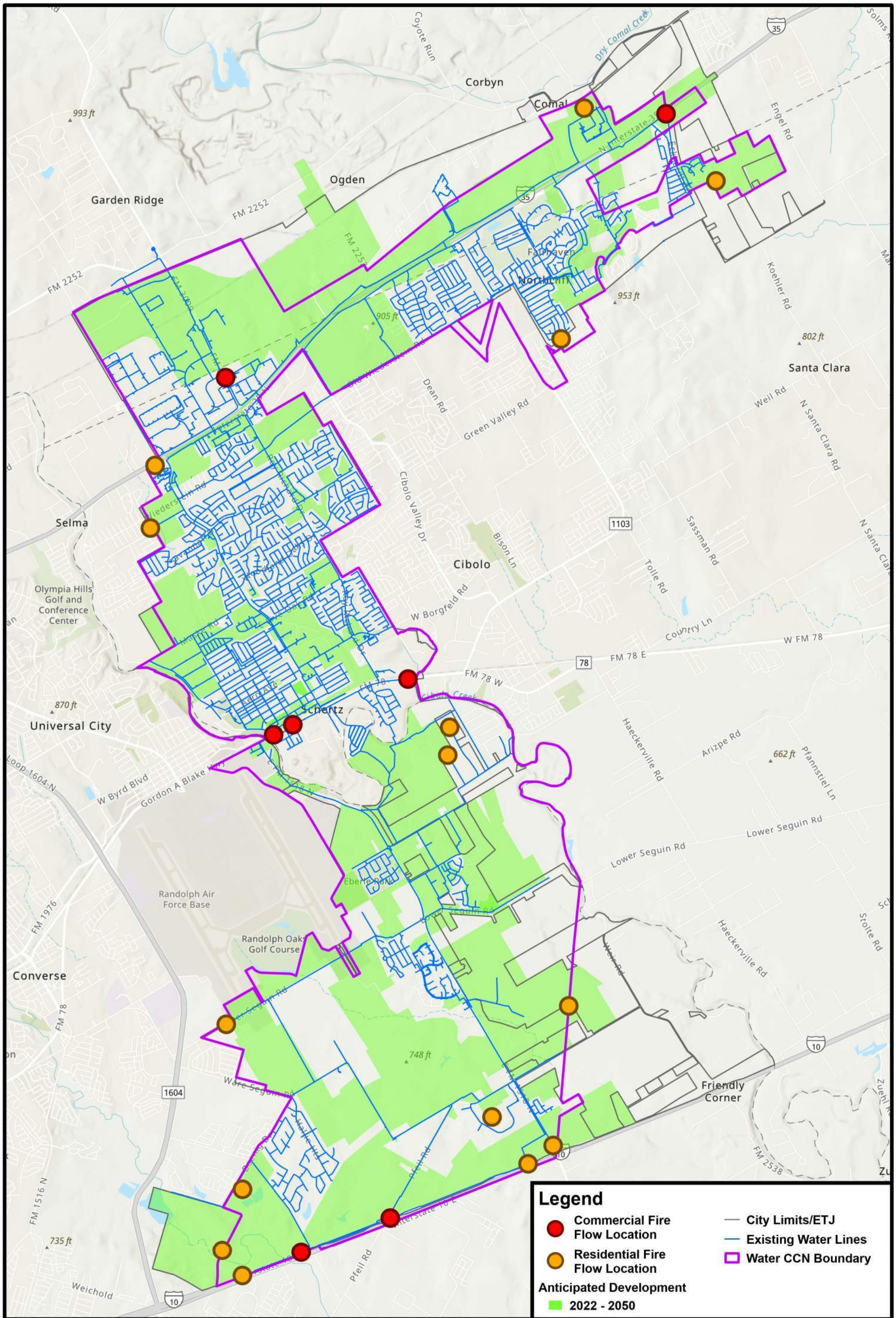
APPENDIX 12 - 2030 FIRE FLOW ANALYSIS LOCATIONS


Corbyn
Comal
Ogden
Garden Ridge
Fairhaven
Northcliff
Santa Clara
Selma
Cibolo
Olympia Hills Golf and Conference Center
Schertz
Universal City
Randolph Air Force Base
Randolph Oaks Golf Course
Converse
Friendly Corner
Coyote Run
Dry Comal Creek
Engel Rd
Koehler Rd
Dean Rd
Green Valley Rd
Cibolo Valley Dr
Bison Ln
Tolle Rd
Sassman Rd
W Borgfeld Rd
Country Ln
W FM 78
FM 78 E
FM 78 W
Haeckerville Rd
Arizpe Rd
Pfannstiel Ln
Lower Seguin Rd
Well Rd
N Santa Clara Rd
Stolte Rd
Zuehl Rd
FM 2538
Pfeil Rd
Ware Seguin Rd
Weichold
W Byrd Blvd
Gordon A Blake Hwy
Loop 1604 N
FM 1976
FM 1516 N
FM 2252
FM 2252
FM 3009
993 ft
905 ft
953 ft
802 ft
870 ft
748 ft
735 ft
662 ft
35
1103
78
1604
10
Legend
Commercial Fire Flow Location
Residential Fire Flow Location
Anticipated Development
2022 - 2030
City Limits/ETJ
Existing Water Lines
Water CCN Boundary
FIRE FLOW ANALYSIS LOCATIONS
Planning
Engineering
Program Management
SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.
N
W
E
S
0
3,500
7,000
14,000
Feet

APPENDIX 13 - 2030 WATER CIP MAP


2030-W1
2030-W6
2030-W10
2030-W2
2030-W3
2030-W4
2030-W7
2030-W9
2030-W9
2030-W5
2030-W9
2030-W8
Garden Ridge
Ogden
Corbyn
Comal
Fairhaven
Northcliff
Santa Clara
Selma
Cibolo
Olympia Hills Golf and Conference Center
Schertz
Universal City
Randolph Air Force Base
Randolph Oaks Golf Course
Converse
Friendly Corner
Weichold
Legend
Proposed Pump Station Improvements
Proposed Water Line Improvements
Proposed PRV
City Limits/ETJ
Existing Water Lines
Water CCN Boundary
Anticipated Development
2022 - 2030
2030 WATER CIP MAP
Planning
Engineering
Program Management
SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.
N
W
E
S
0
3,500
7,000
14,000
Feet

APPENDIX 14 - 2050 FIRE FLOW ANALYSIS LOCATIONS



2050 FIRE FLOW ANALYSIS LOCATIONS

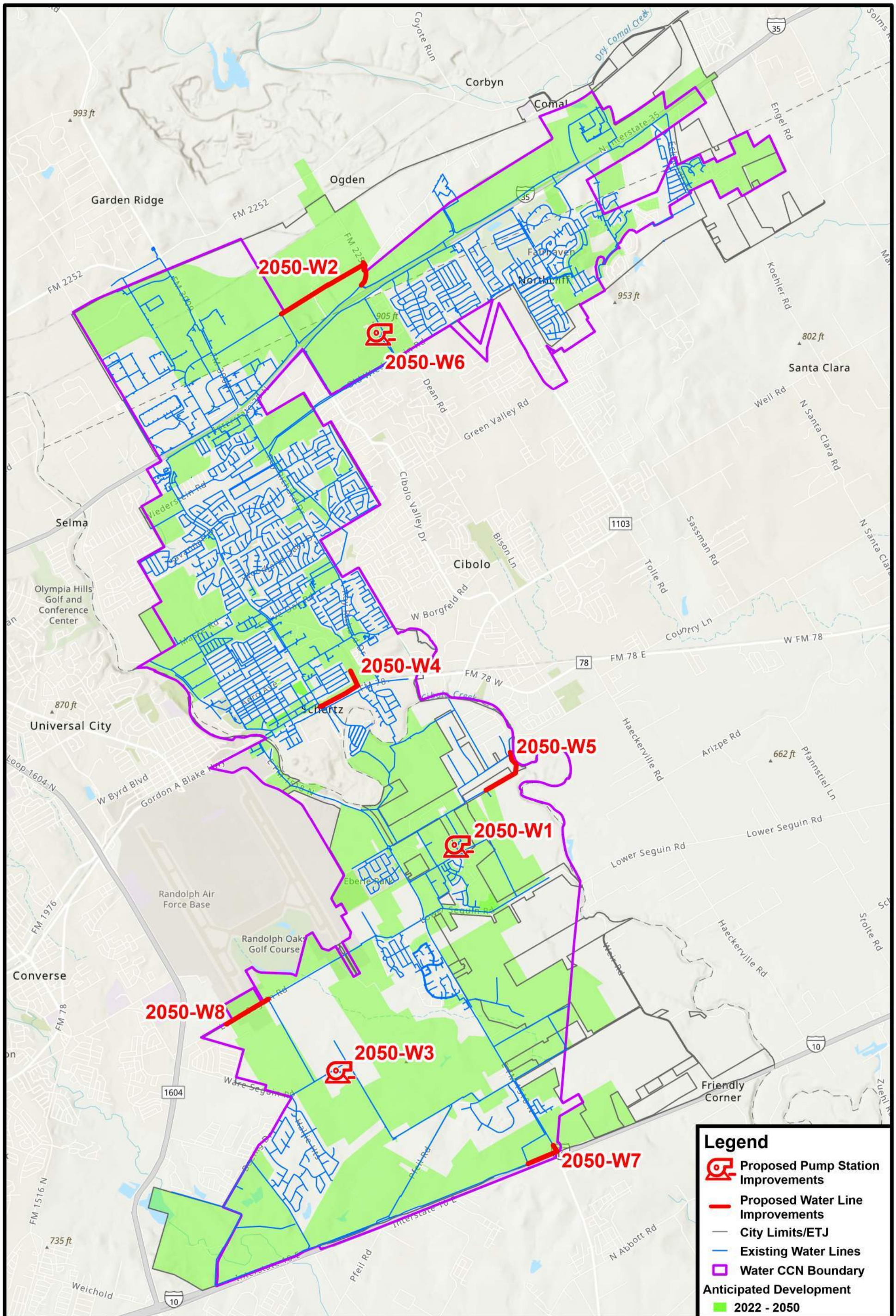
Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N
W E
S

0 3,500 7,000 14,000 Feet

APPENDIX 15 - 2050 WATER CIP MAP



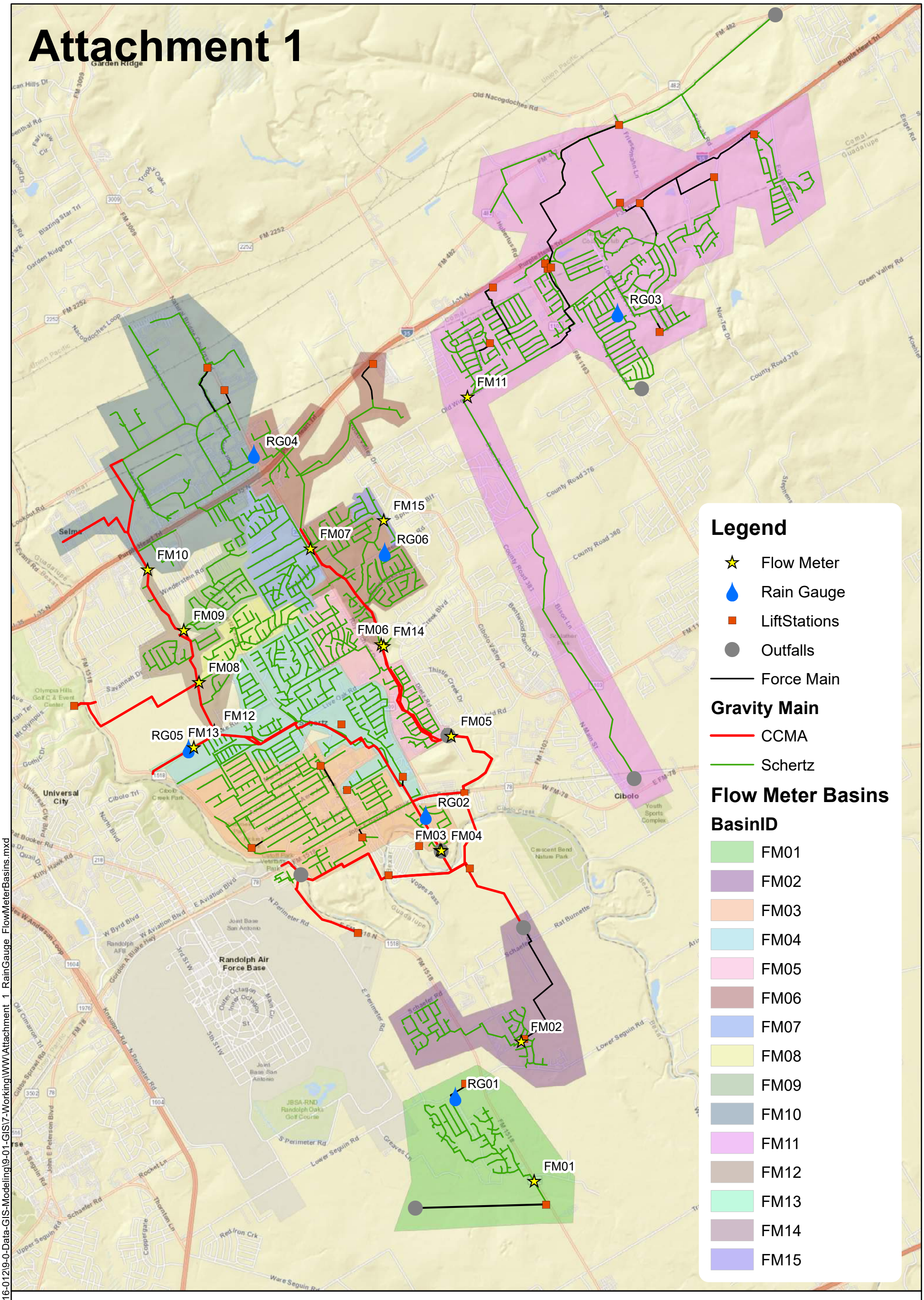
2050 WATER CIP MAP

Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

APPENDIX 16 - FLOW METER, METER BASIN, & RAIN GAUGE LOCATION MAP

Attachment 1



Flow Meter, Meter Basin, and Rain Gauge Location

8/26/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

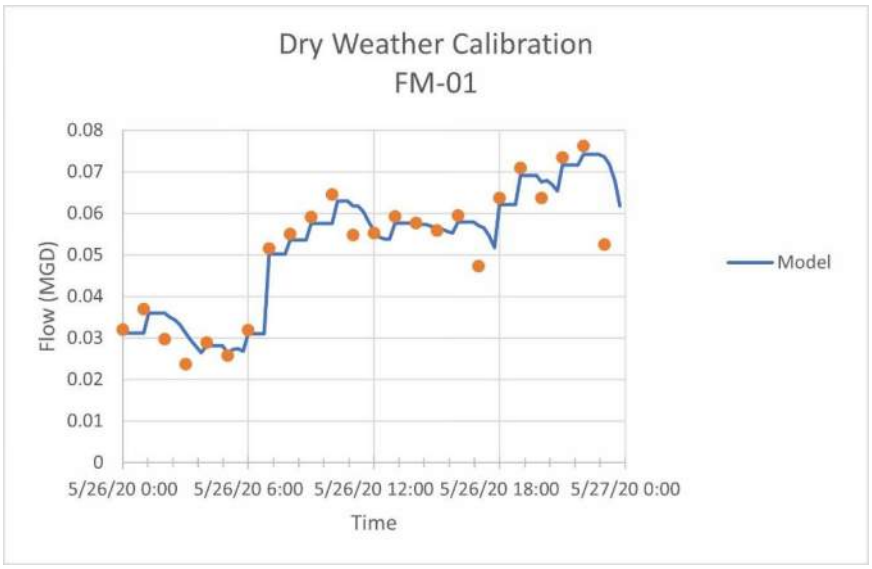
SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

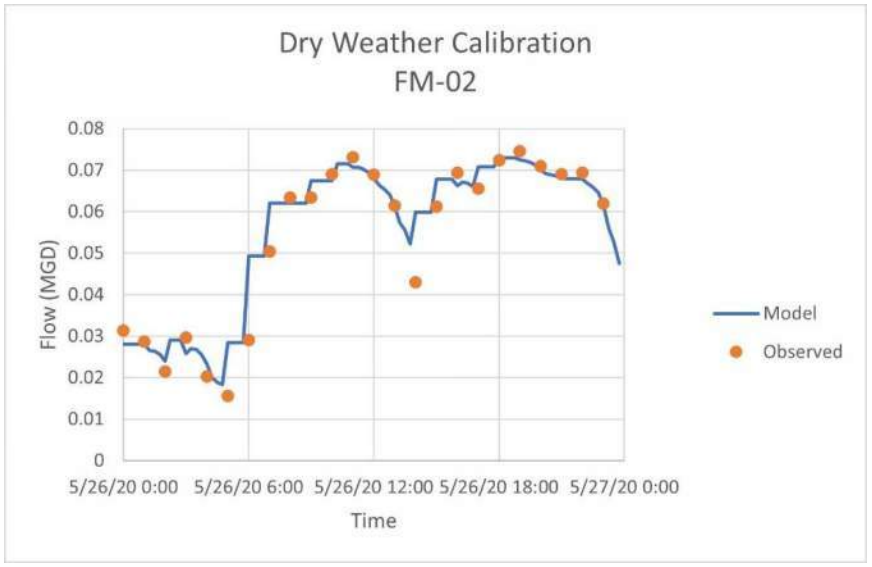
N
W E
S

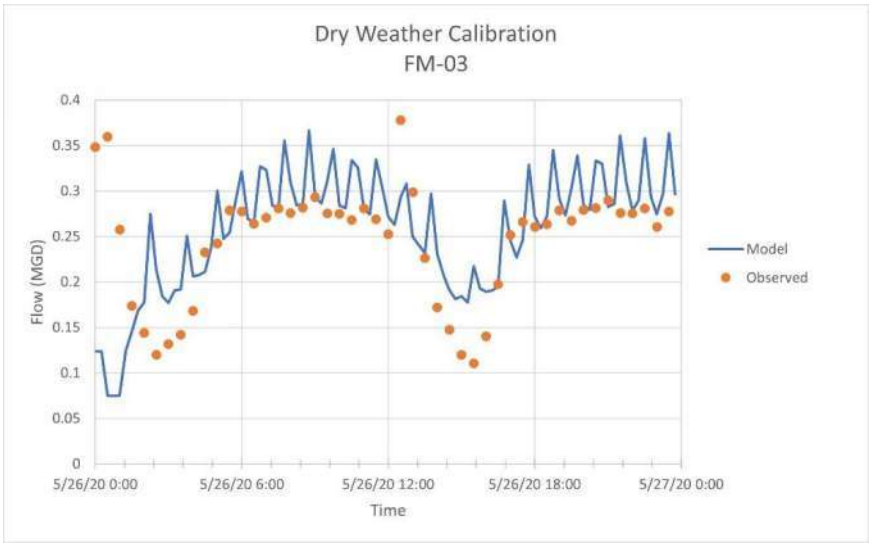
0 1 2 Miles

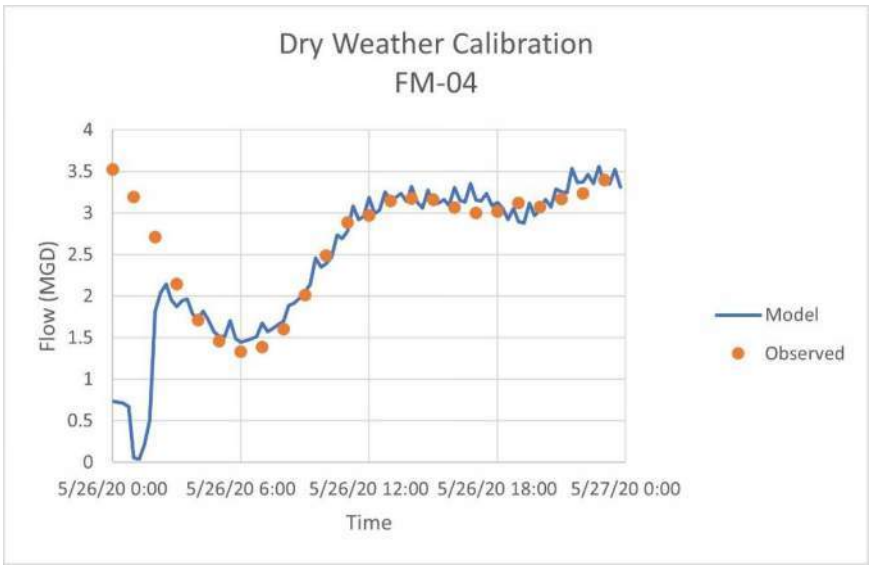
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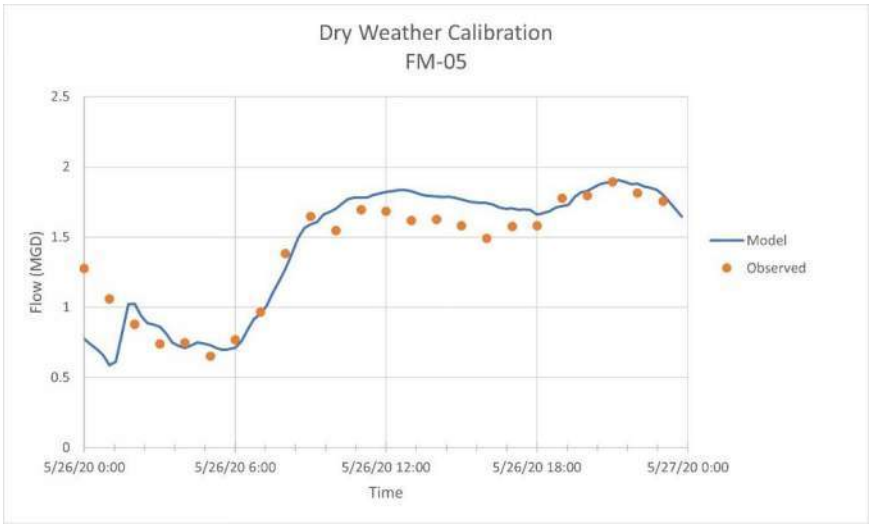
APPENDIX 17 - DRY WEATHER CALIBRATION GRAPHS

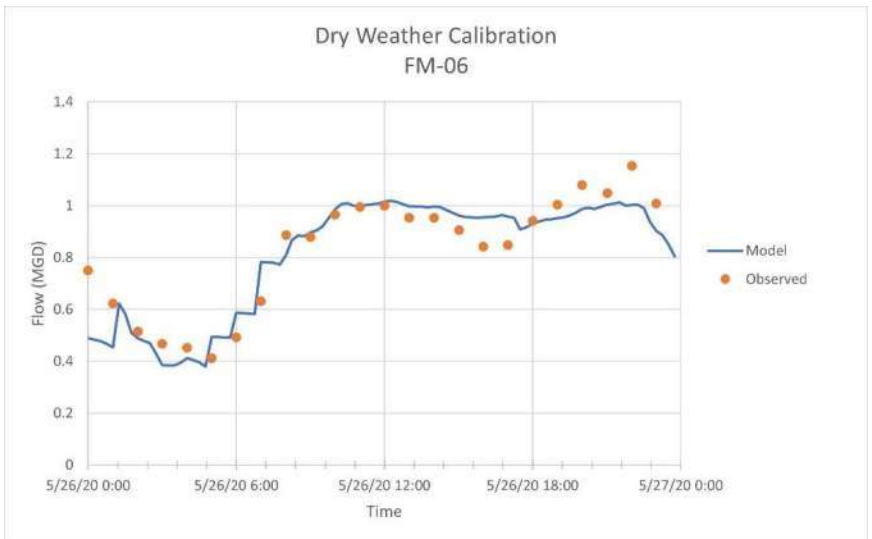

Dry Weather Calibration
FM-01
Flow (MGD)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model

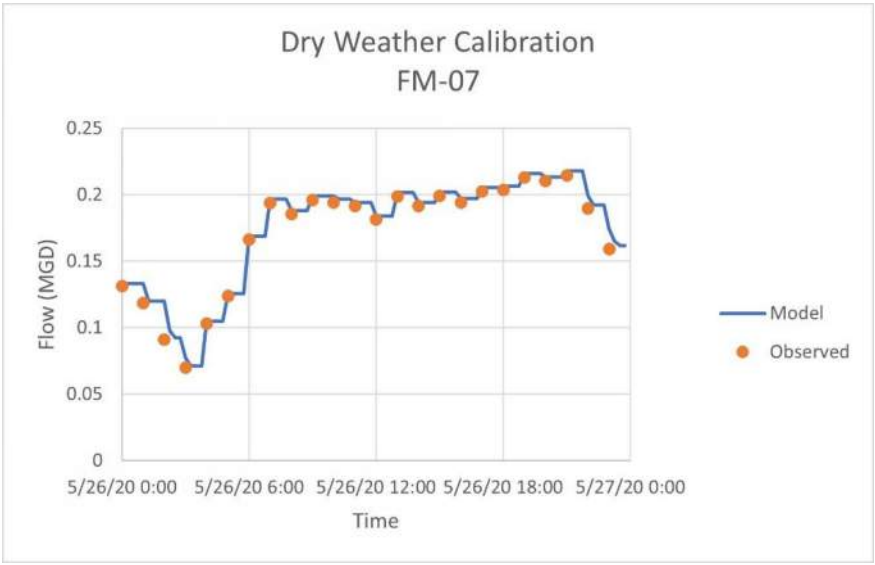

Dry Weather Calibration
FM-02
Flow (MGD)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

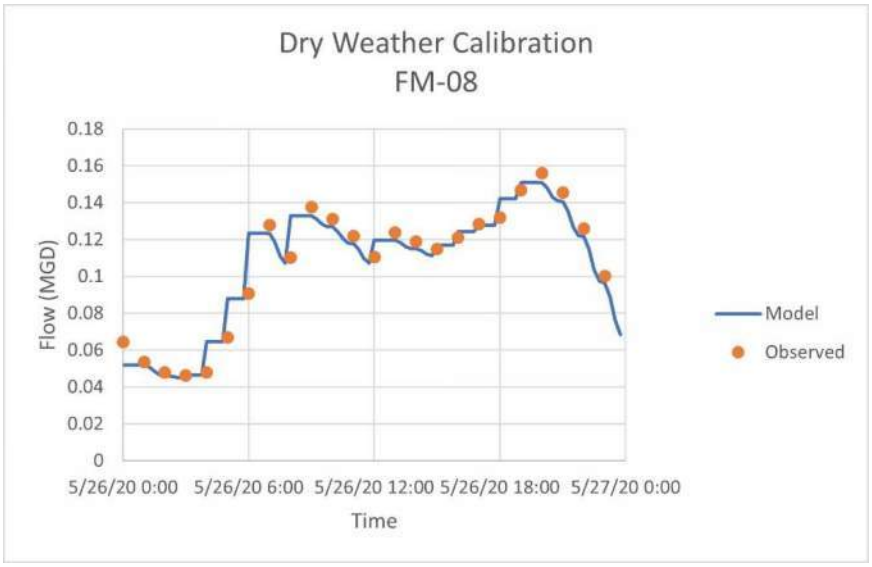

Dry Weather Calibration
FM-03
Flow (MGD)
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

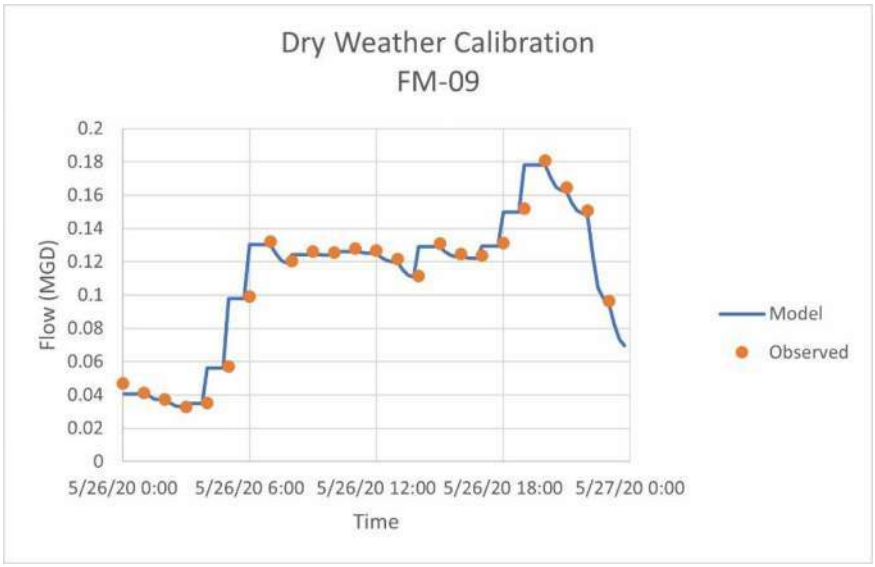

Dry Weather Calibration
FM-04
Flow (MGD)
4
3.5
3
2.5
2
1.5
1
0.5
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

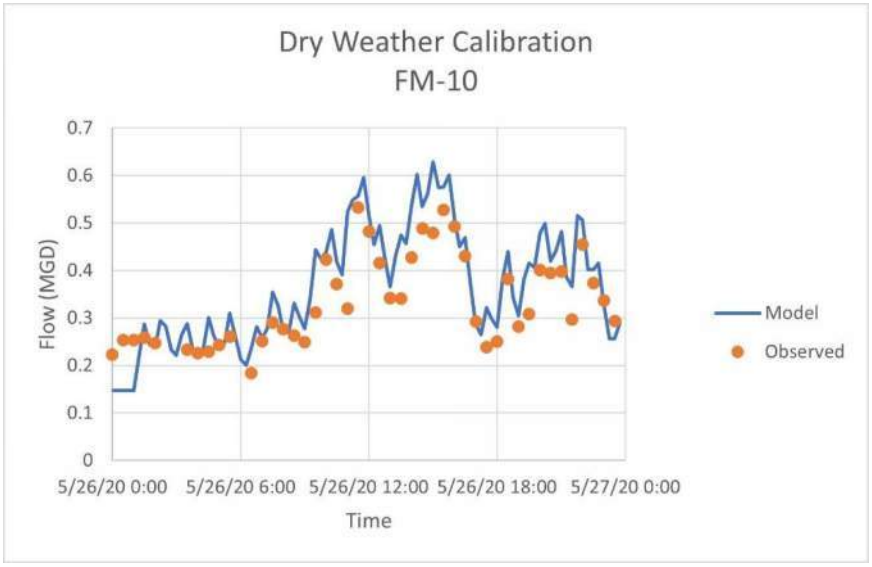

Dry Weather Calibration
FM-05
Flow (MGD)
2.5
2
1.5
1
0.5
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

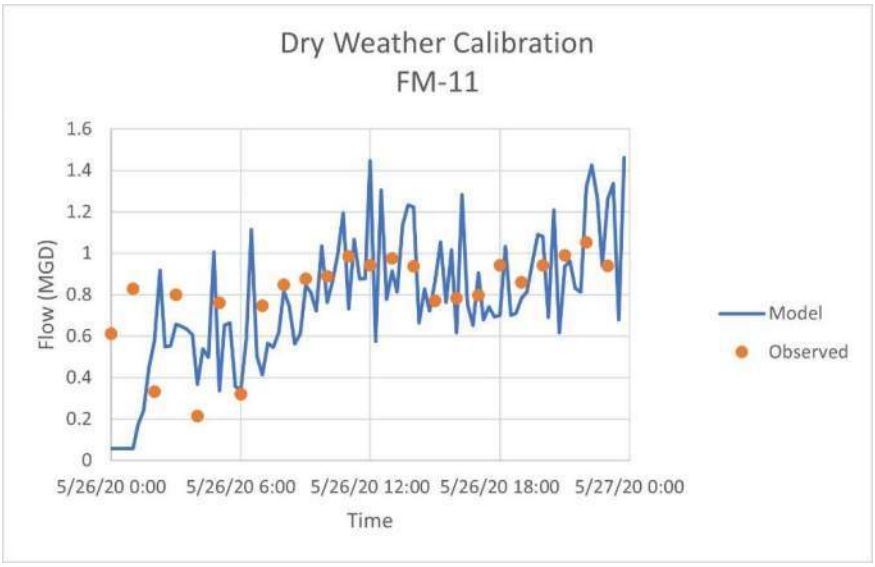

Dry Weather Calibration
FM-06
Flow (MGD)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

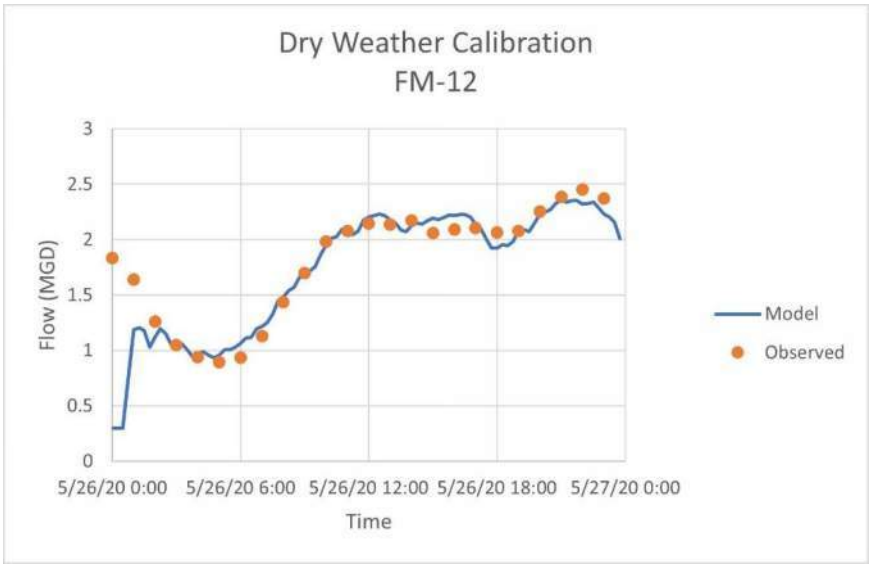

Dry Weather Calibration
FM-07
Flow (MGD)
0.25
0.2
0.15
0.1
0.05
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

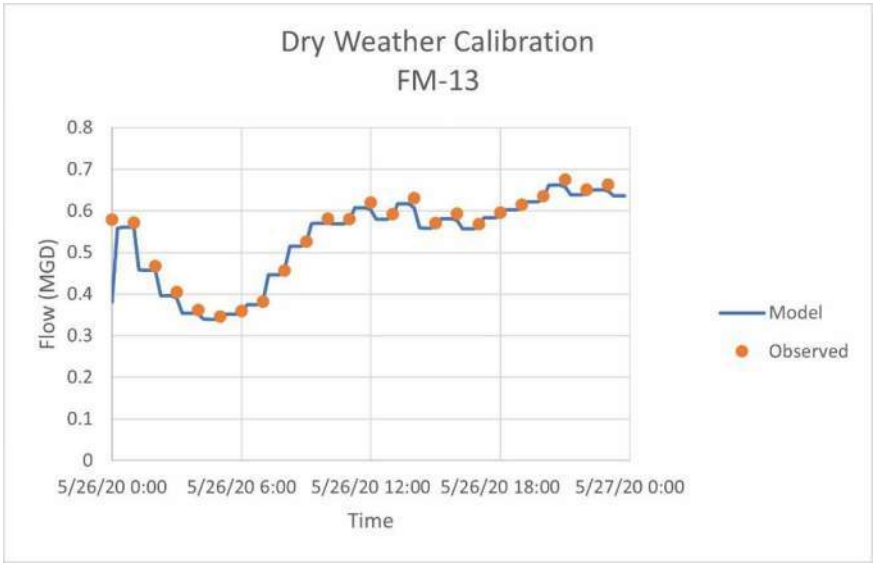

Dry Weather Calibration
FM-08
Flow (MGD)
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0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

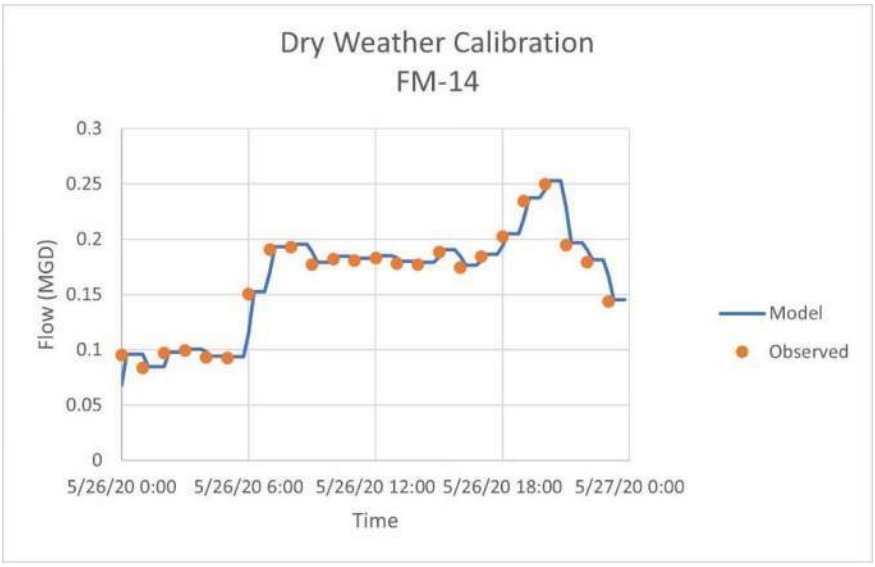

Dry Weather Calibration
FM-09
Flow (MGD)
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

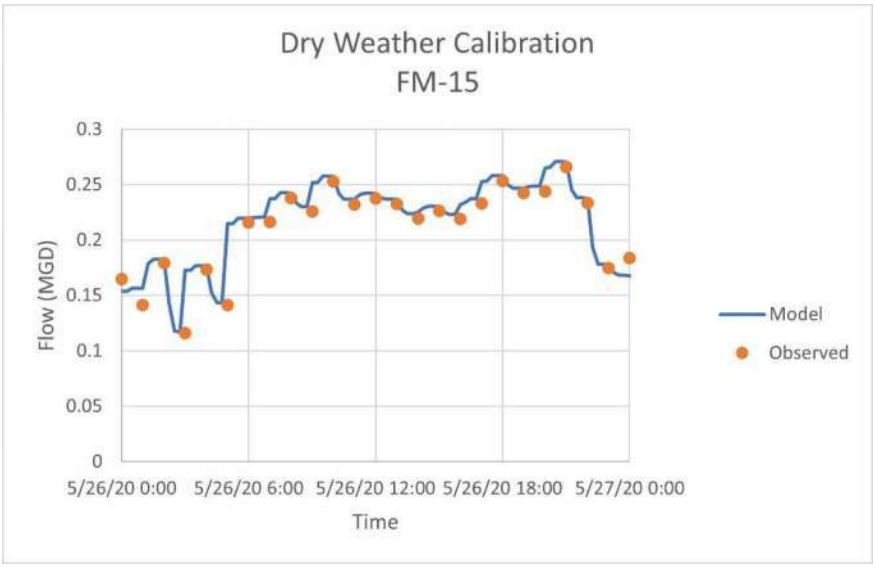

Dry Weather Calibration
FM-10
Flow (MGD)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed


Dry Weather Calibration
FM-11
Flow (MGD)
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

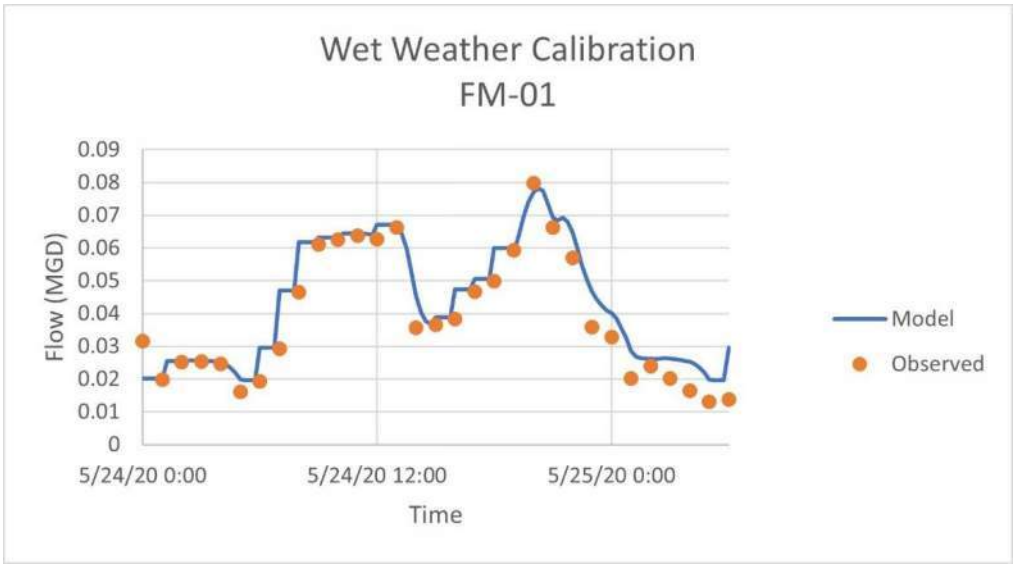

Dry Weather Calibration
FM-12
Flow (MGD)
3
2.5
2
1.5
1
0.5
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

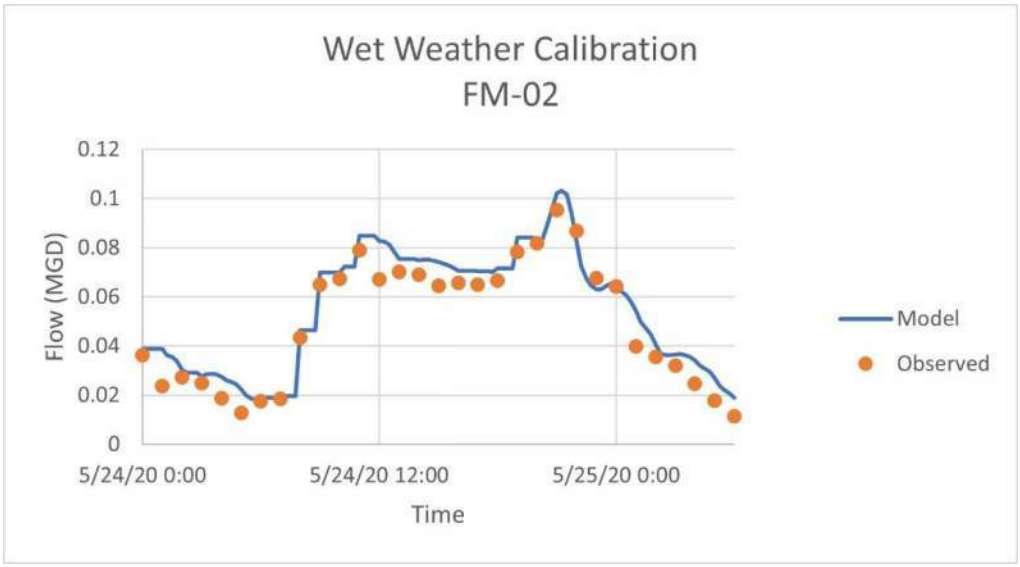

Dry Weather Calibration
FM-13
Flow (MGD)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

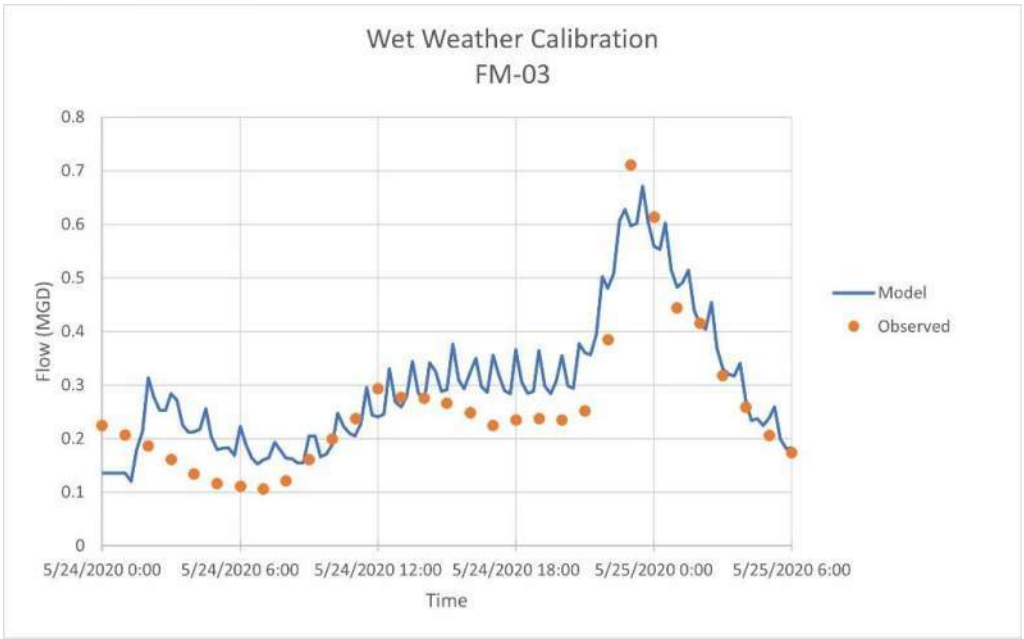

Dry Weather Calibration
FM-14
Flow (MGD)
0.3
0.25
0.2
0.15
0.1
0.05
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

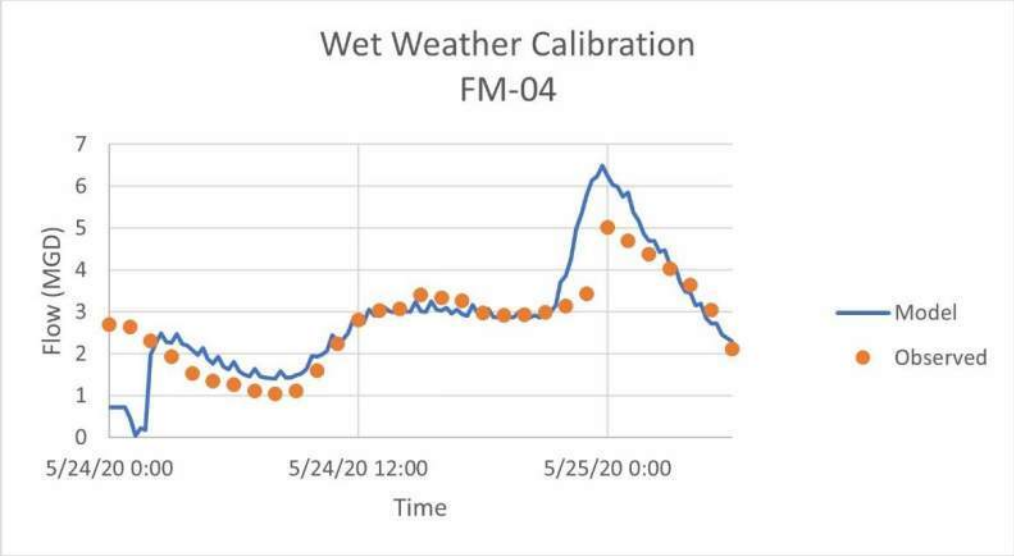

Dry Weather Calibration
FM-15
Flow (MGD)
0.3
0.25
0.2
0.15
0.1
0.05
0
5/26/20 0:00
5/26/20 6:00
5/26/20 12:00
5/26/20 18:00
5/27/20 0:00
Time
Model
Observed

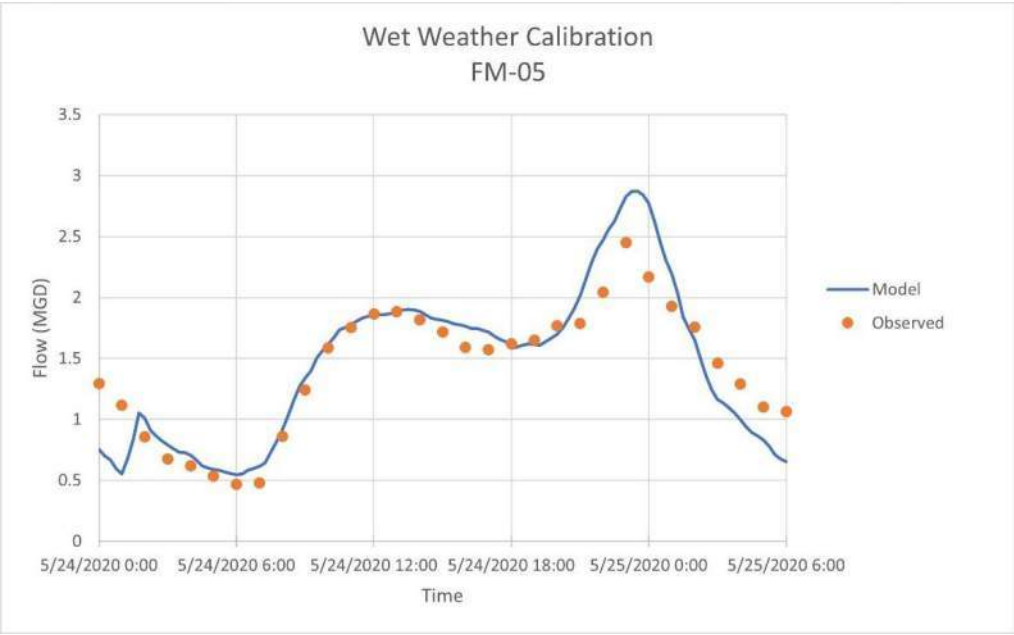
APPENDIX 18 - WET WEATHER CALIBRATION GRAPHS

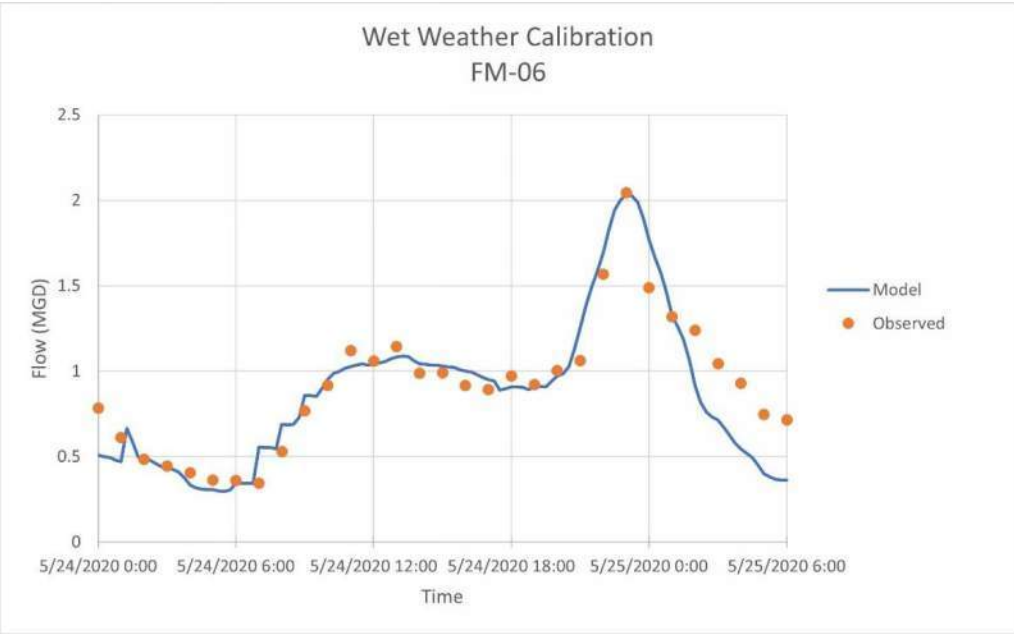

Wet Weather Calibration
FM-01
Flow (MGD)
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed

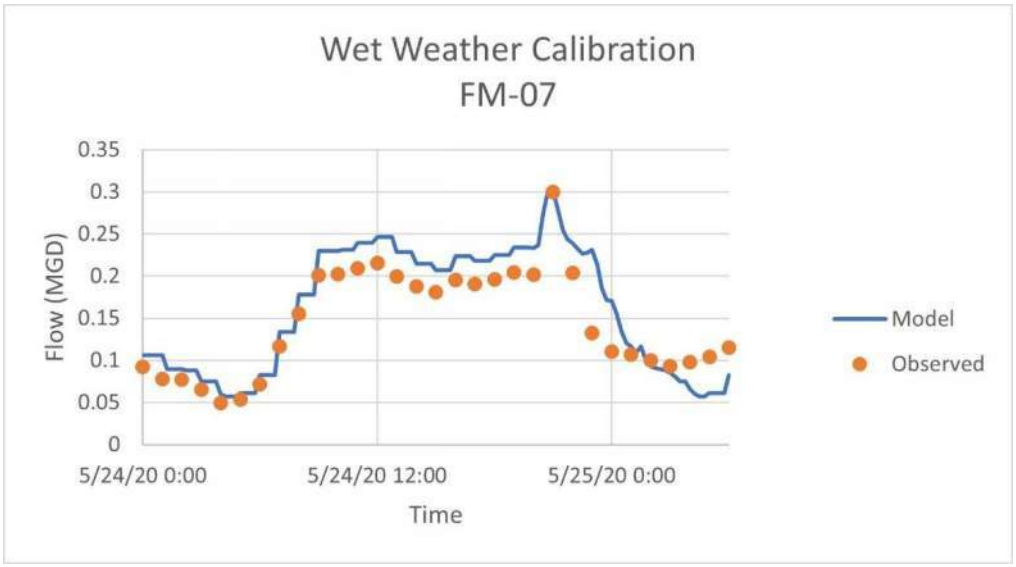

Wet Weather Calibration
FM-02
Flow (MGD)
0.12
0.1
0.08
0.06
0.04
0.02
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed

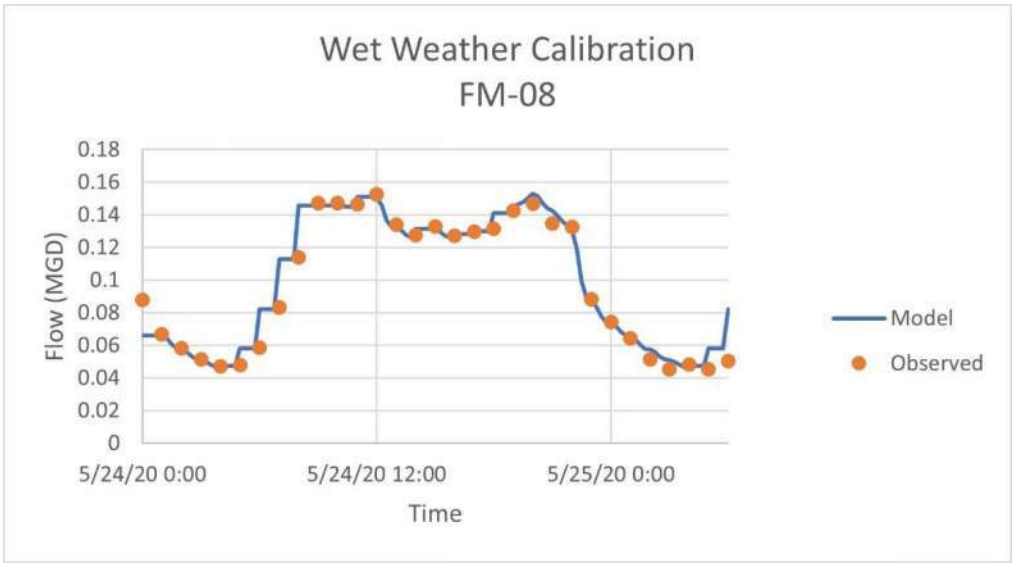

Wet Weather Calibration
FM-03
Flow (MGD)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
5/24/2020 0:00
5/24/2020 6:00
5/24/2020 12:00
5/24/2020 18:00
5/25/2020 0:00
5/25/2020 6:00
Time
Model
Observed

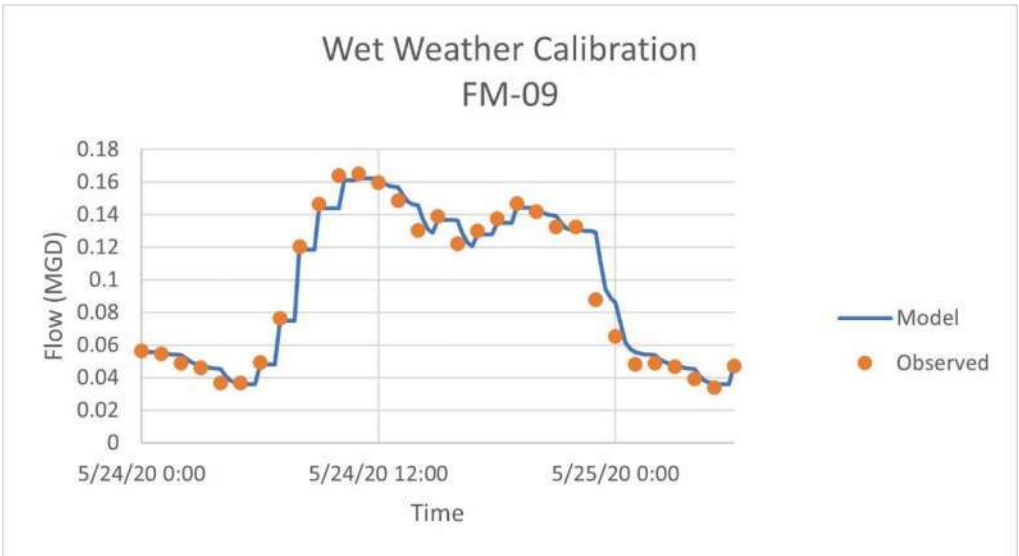

Wet Weather Calibration
FM-04
Flow (MGD)
7
6
5
4
3
2
1
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed

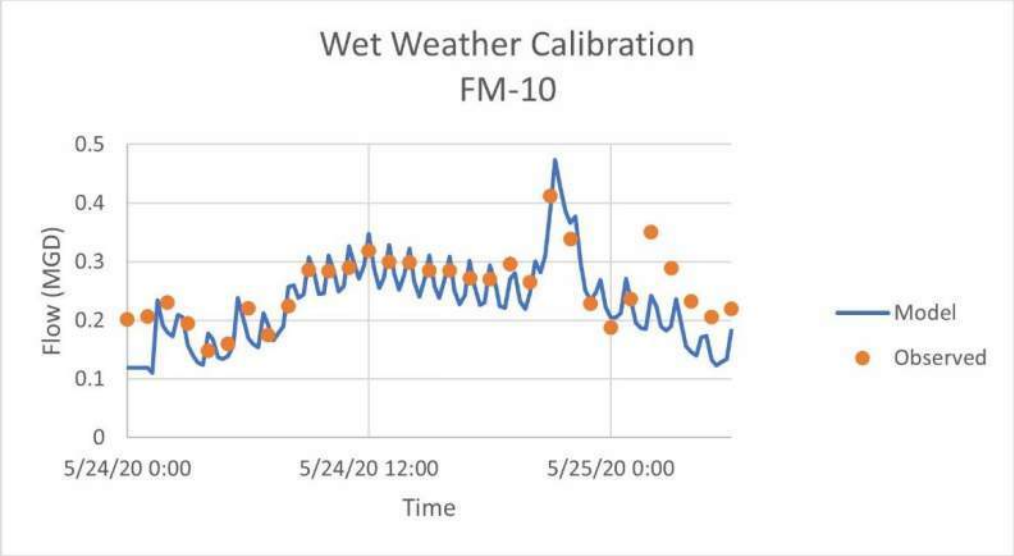

Wet Weather Calibration
FM-05
Flow (MGD)
3.5
3
2.5
2
1.5
1
0.5
0
5/24/2020 0:00
5/24/2020 6:00
5/24/2020 12:00
5/24/2020 18:00
5/25/2020 0:00
5/25/2020 6:00
Time
Model
Observed

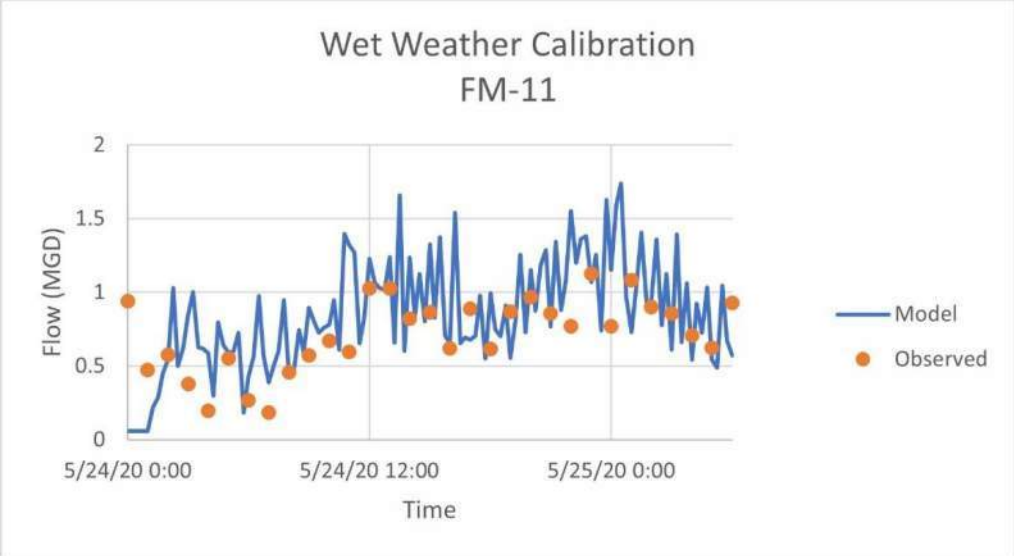

Wet Weather Calibration
FM-06
Flow (MGD)
2.5
2
1.5
1
0.5
0
5/24/2020 0:00
5/24/2020 6:00
5/24/2020 12:00
5/24/2020 18:00
5/25/2020 0:00
5/25/2020 6:00
Time
Model
Observed

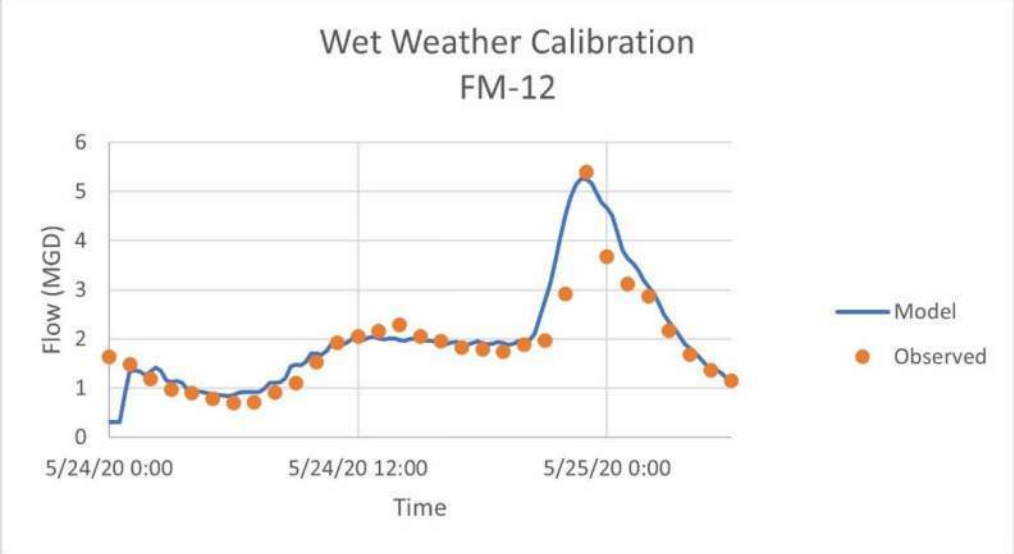

Wet Weather Calibration
FM-07
Flow (MGD)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed

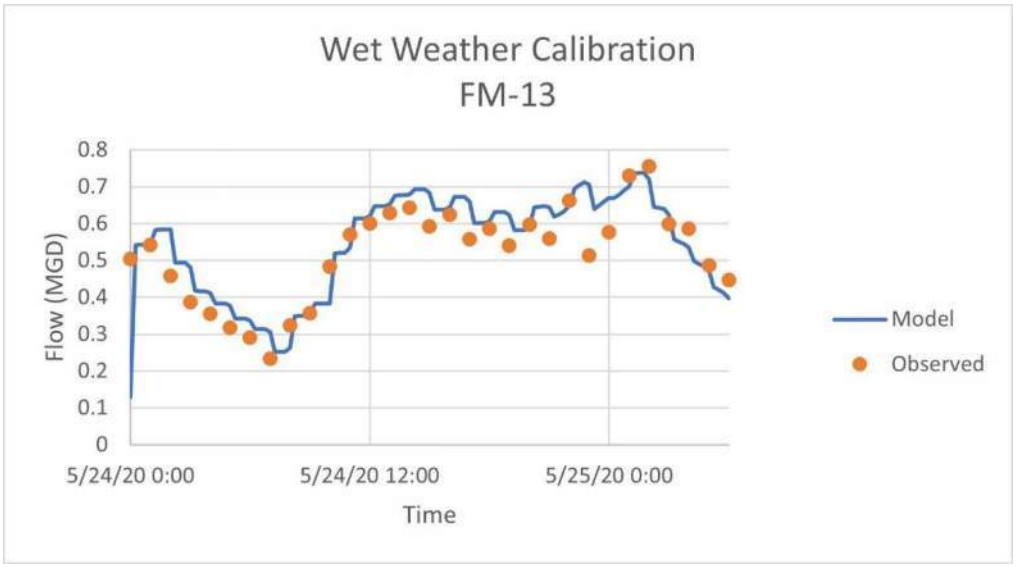

Wet Weather Calibration
FM-08
Flow (MGD)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed

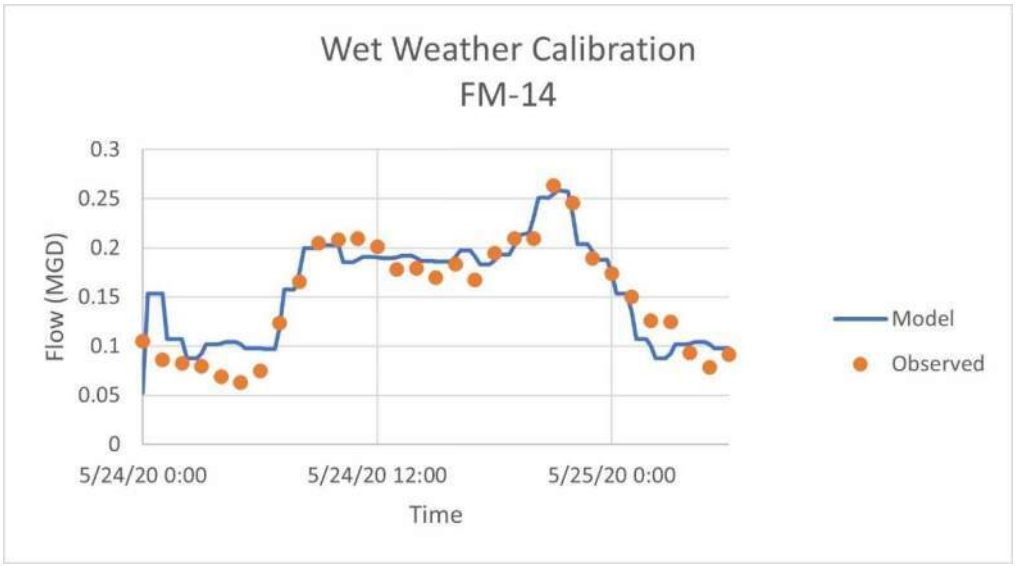

Wet Weather Calibration
FM-09
Flow (MGD)
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed

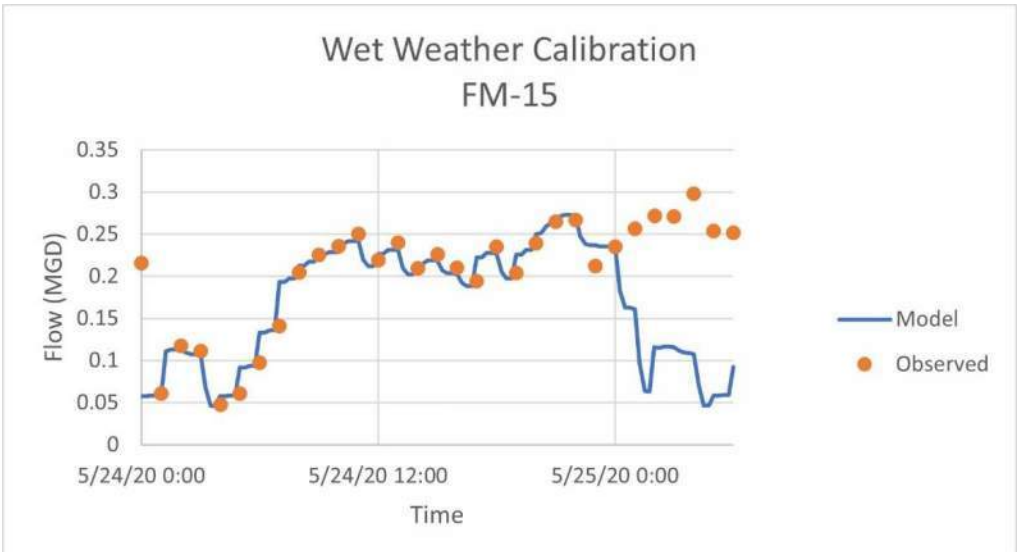

Wet Weather Calibration
FM-10
Flow (MGD)
0.5
0.4
0.3
0.2
0.1
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed


Wet Weather Calibration
FM-11
Flow (MGD)
2
1.5
1
0.5
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed


Wet Weather Calibration
FM-12
Flow (MGD)
6
5
4
3
2
1
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed


Wet Weather Calibration
FM-13
Flow (MGD)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed


Wet Weather Calibration
FM-14
Flow (MGD)
0.3
0.25
0.2
0.15
0.1
0.05
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed


Wet Weather Calibration
FM-15
Flow (MGD)
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
5/24/20 0:00
5/24/20 12:00
5/25/20 0:00
Time
Model
Observed

APPENDIX 19 - EXISTING SYSTEM EVALUATION RESULTS, SURCHARGE, & SSO LOCATION MAPS

Attachment 4

Surcharged lines highlighted in GREEN are owned by the City

4.A

4.B

4.C

4.D

4.E

Legend

- SSO
- LiftStations
- Outfalls
- Force Main

Hydraulic Condition

- Not Surcharged
- Surcharged

Existing System Evaluation Results - Surcharge and SSO Locations

8/26/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

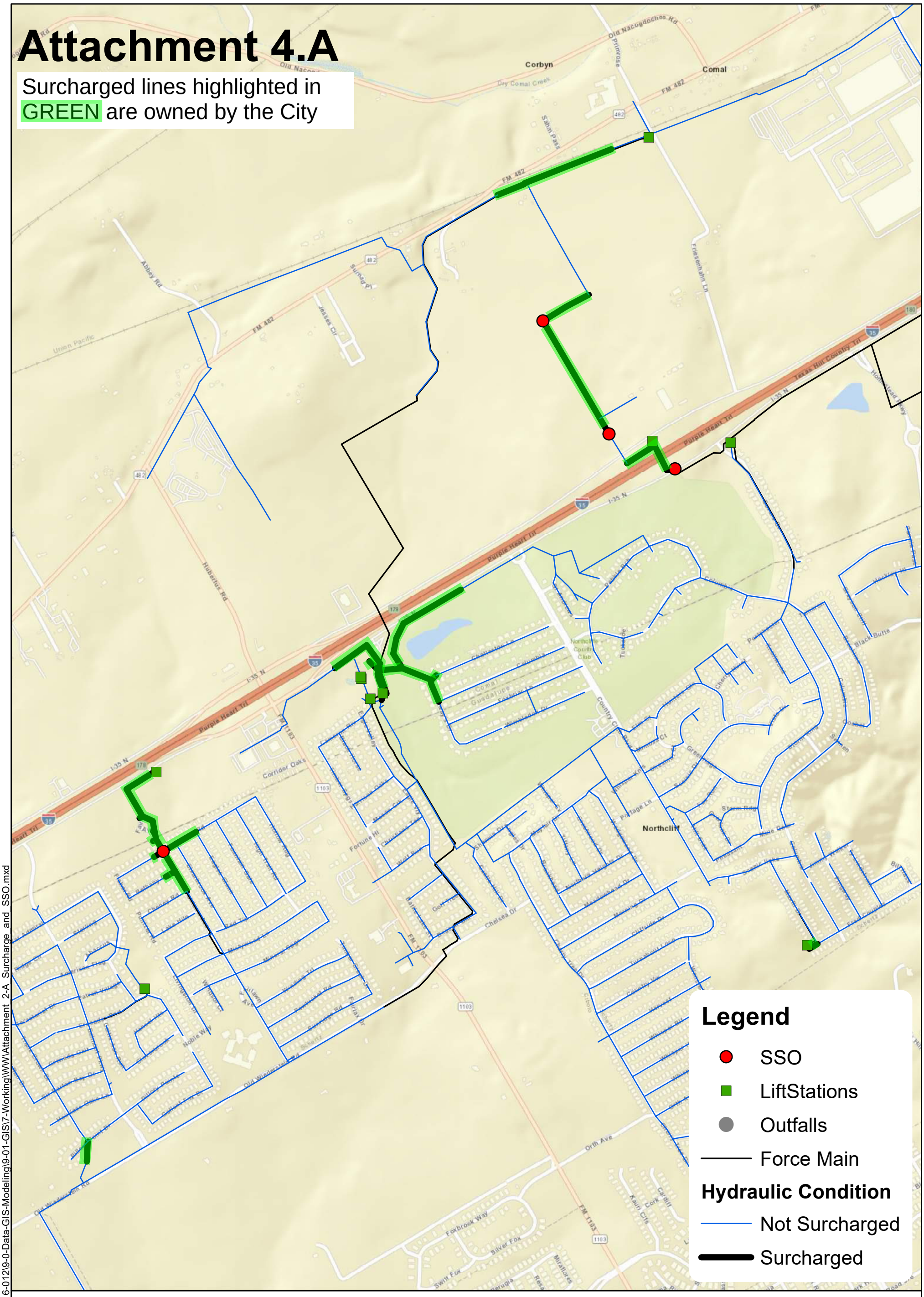
N W E S

0 1 2 Miles

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\WW\Attachment 2-A Surcharge and SSO.mxd

Attachment 4.A

Surcharged lines highlighted in GREEN are owned by the City



Existing System Evaluation Results - Surcharge and SSO Locations

8/26/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

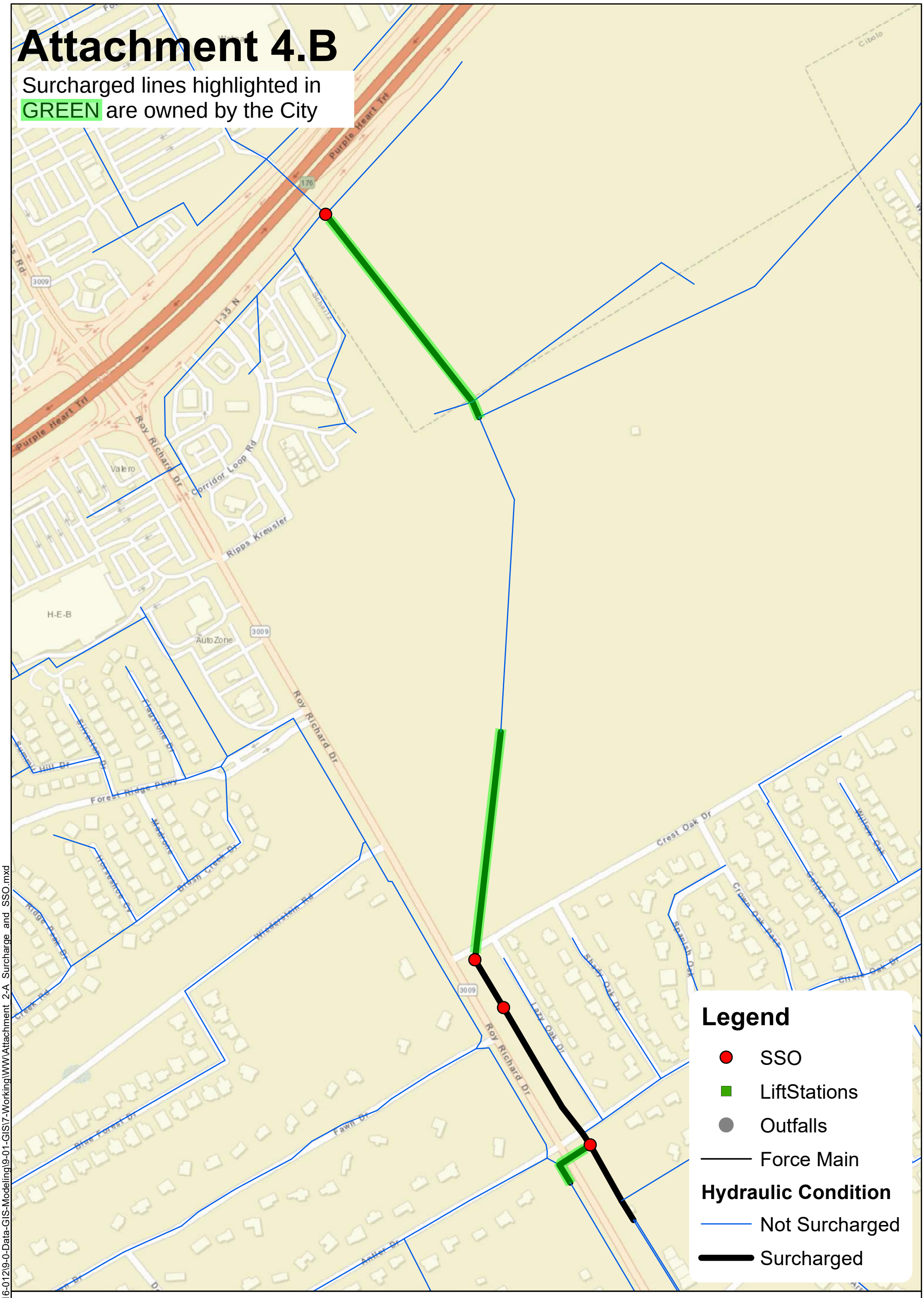
N W E S

0 0.275 0.55 Miles

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\WW\Attachment 2-A Surcharge and SSO.mxd

Attachment 4.B

Surcharged lines highlighted in GREEN are owned by the City



Existing System Evaluation Results - Surcharge and SSO Locations

8/26/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N W E S

0 0.1 0.2 Miles

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\WW\Attachment 2-A Surcharge and SSO.mxd

Attachment 4.C

Surcharged lines highlighted in GREEN are owned by the City

Legend

- SSO
- LiftStations
- Outfalls
- Force Main

Hydraulic Condition

- Not Surcharged
- Surcharged

Existing System Evaluation Results - Surcharge and SSO Locations

8/26/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

SCHERTZ
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N W E S

0 0.05 0.1 Miles

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\WW\Attachment 2-A Surcharge and SSO.mxd

Attachment 4.D

Surcharged lines highlighted in GREEN are owned by the City



Legend

- SSO
- LiftStations
- Outfalls
- Force Main

Hydraulic Condition

- Not Surcharged
- Surcharged

Existing System Evaluation Results - Surcharge and SSO Locations

8/26/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

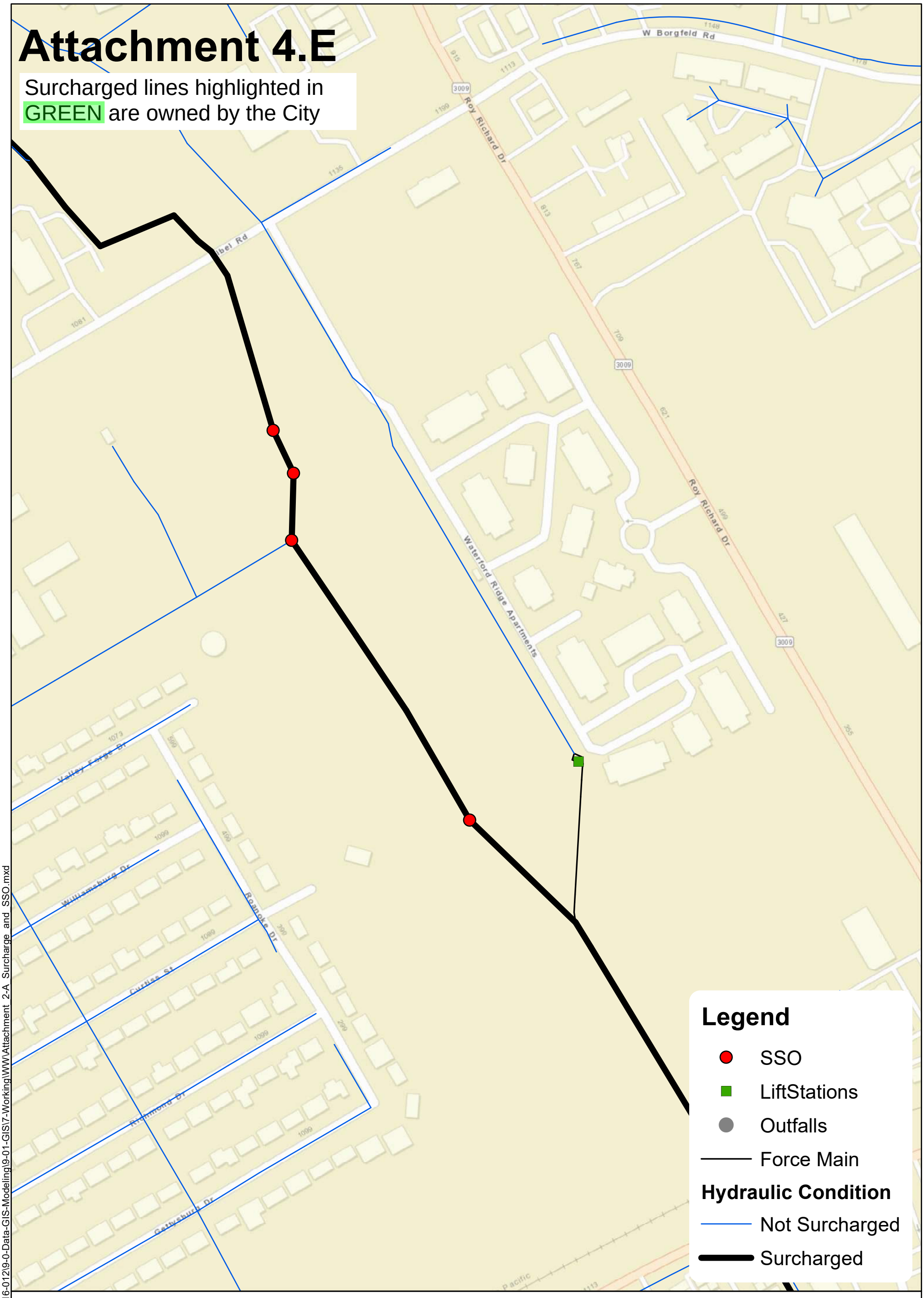
N W E S

0 0.15 0.3 Miles

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\WW\Attachment 2-A Surcharge and SSO.mxd

Attachment 4.E

Surcharged lines highlighted in GREEN are owned by the City



Existing System Evaluation Results - Surcharge and SSO Locations

8/26/2022

Lockwood, Andrews & Newnam, Inc.
A LEO A DALY COMPANY

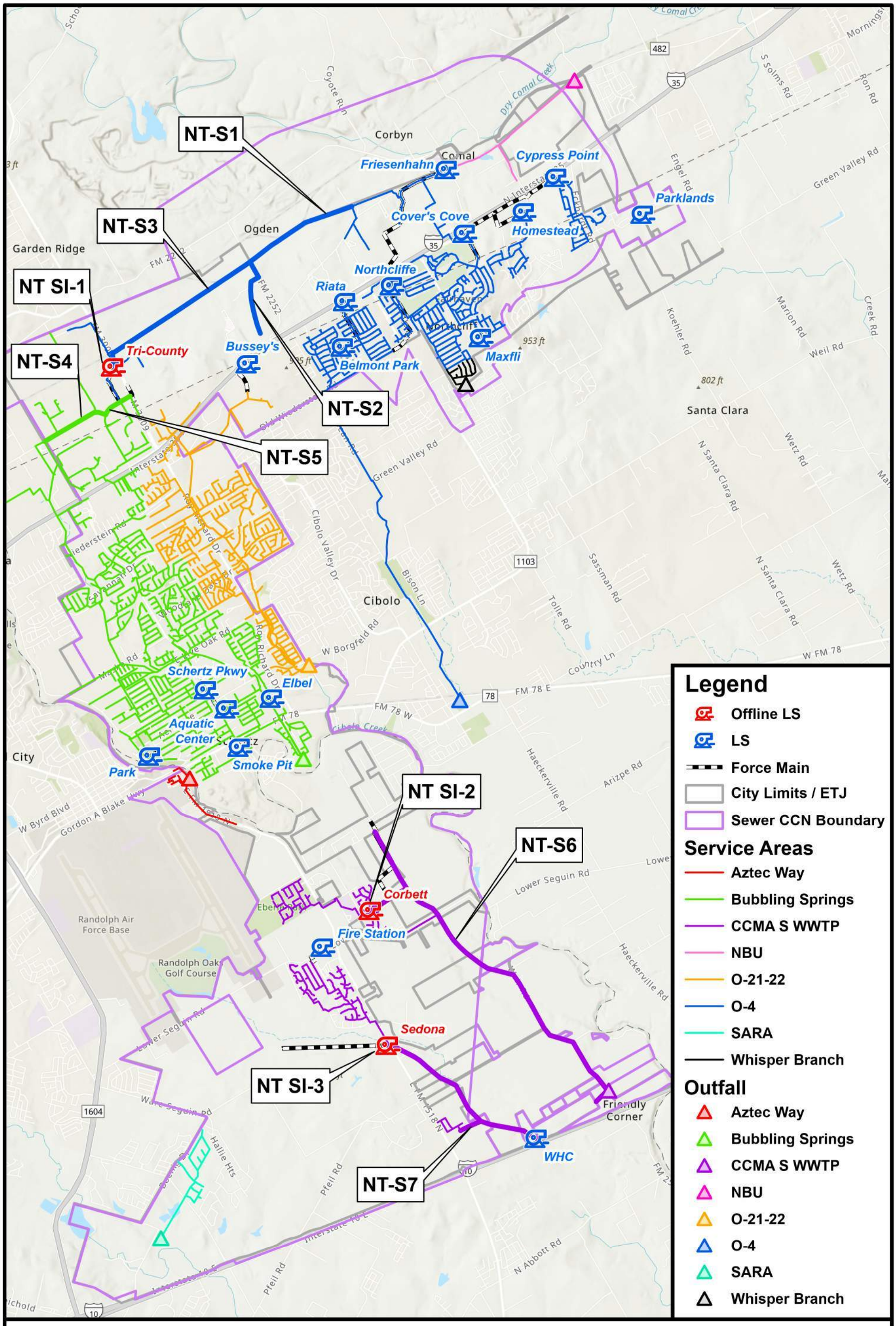
SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N W E S

0 0.05 0.1 Miles

Document Path: N:\120\120-11816-012\9-0-Data-GIS-Modeling\9-01-GIS\7-Working\WW\Attachment 2-A Surcharge and SSO.mxd

APPENDIX 20 - NEAR TERM WASTEWATER GROWTH & SYSTEM IMPROVEMENT PROJECTS



NEAR TERM WASTE WATER GROWTH & SYSTEM IMPROVEMENT PROJECTS

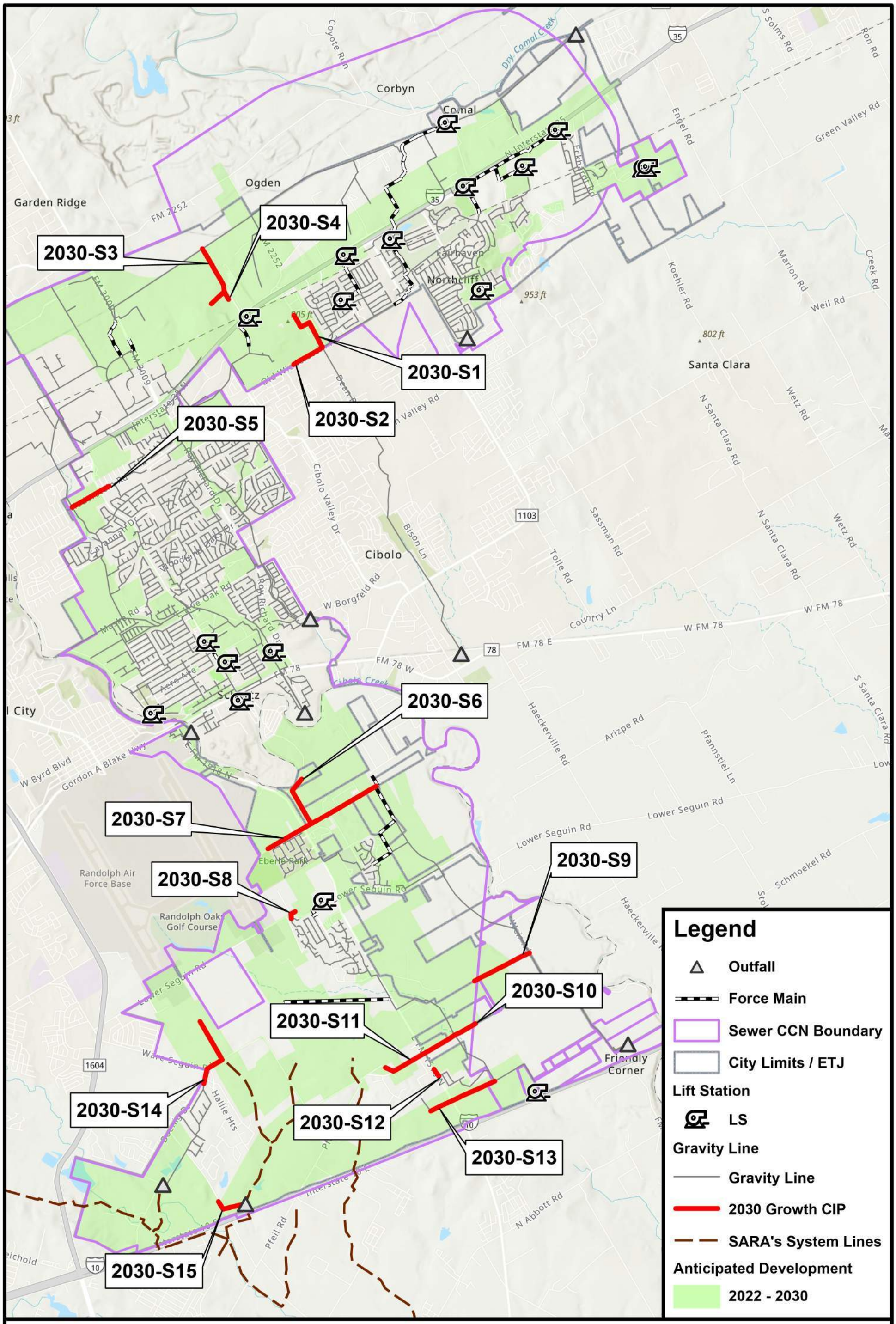
LAN
Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N
W E
S

0 3,750 7,500 15,000 Feet

APPENDIX 21 - 2030 WASTEWATER SYSTEM GROWTH PROJECTS



2030 WASTE WATER SYSTEM GROWTH PROJECTS

Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N
W E
S

0 3,750 7,500 15,000 Feet

APPENDIX 22 - MAX DEPTH TO DIAMETER WITH 2030 DRY WEATHER FLOWS

MAX DEPTH-DIAMETER (d/D) WITH 2030 DRY WEATHER FLOW

Legend

- Outfall
- Lift Station
- Force Main
- SARA's System Lines
- Sewer CCN Boundary
- City Limits / ETJ

Max (d/D)

- 0 - 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- 0.75 - 1.00

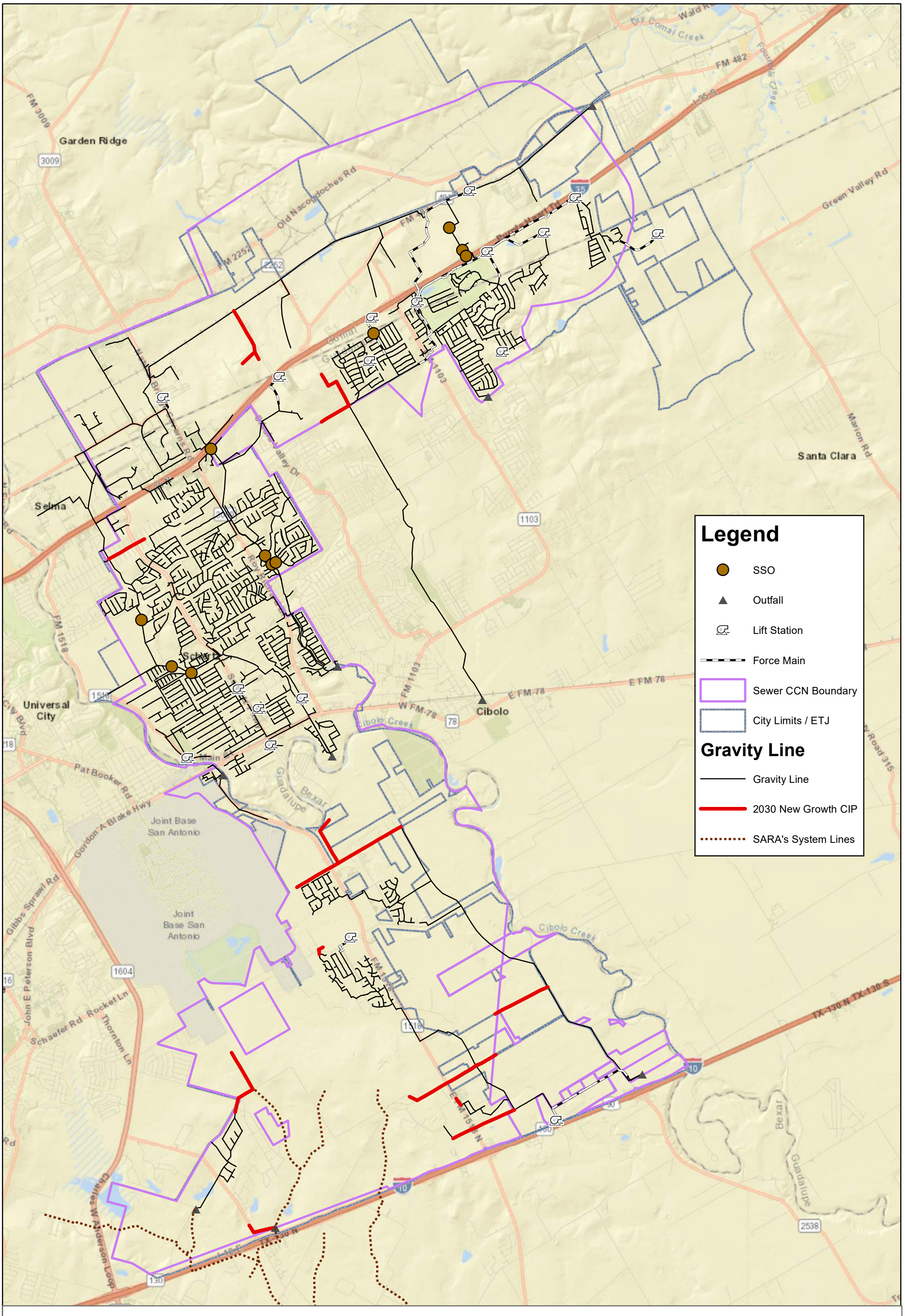
Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

0 0.75 1.5 3 Miles

N W E S

APPENDIX 23 - SANITARY SEWER OVERFLOWS WITH 2030 WET WEATHER FLOWS



SANITARY SEWER OVERFLOWS (SSO) WITH 2030 WET WEATHER FLOWS

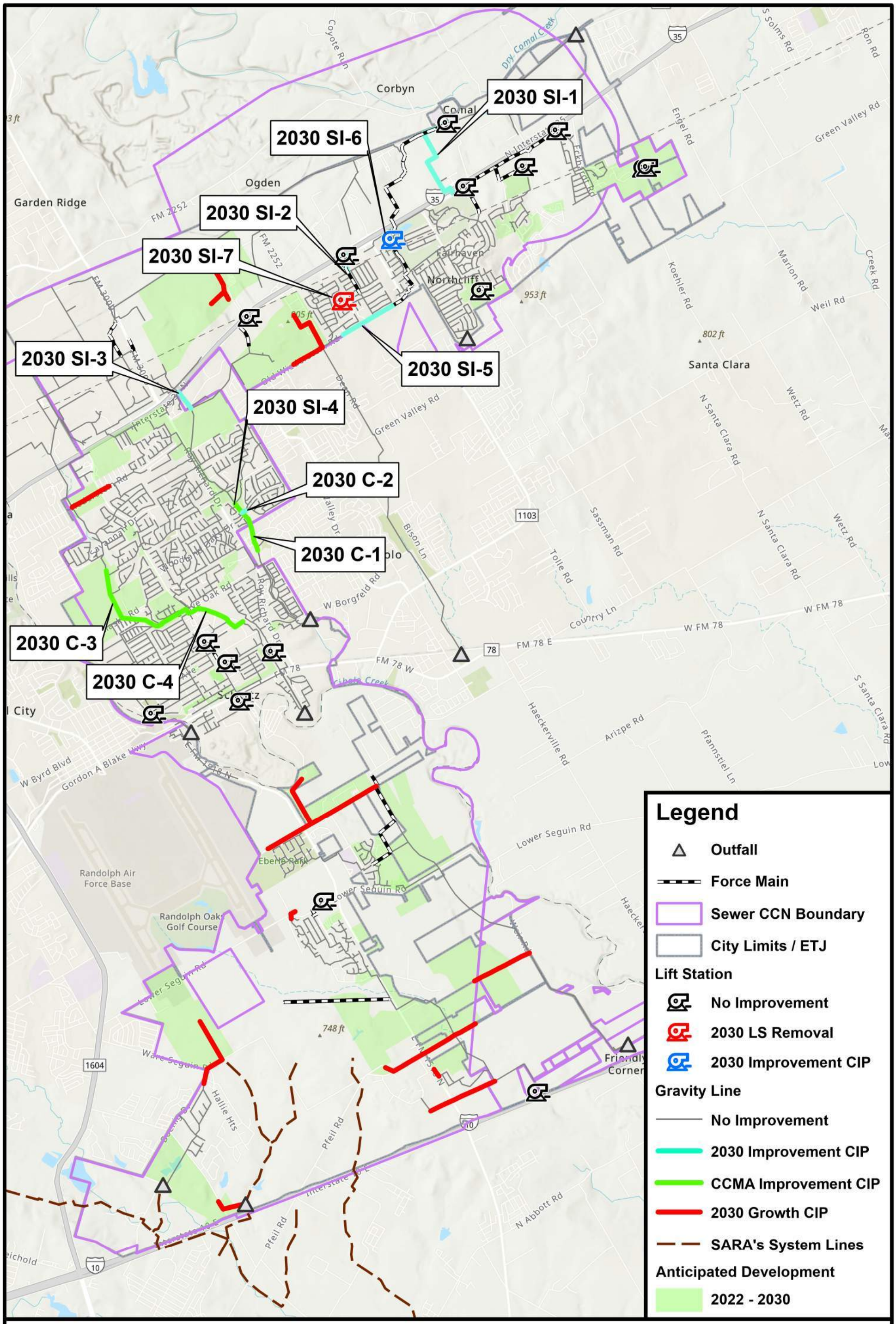
Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N
W E
S

0 0.75 1.5 3 Miles

APPENDIX 24 - 2030 WASTEWATER SYSTEM IMPROVEMENT PROJECTS



2030 WASTE WATER SYSTEM IMPROVEMENT PROJECTS

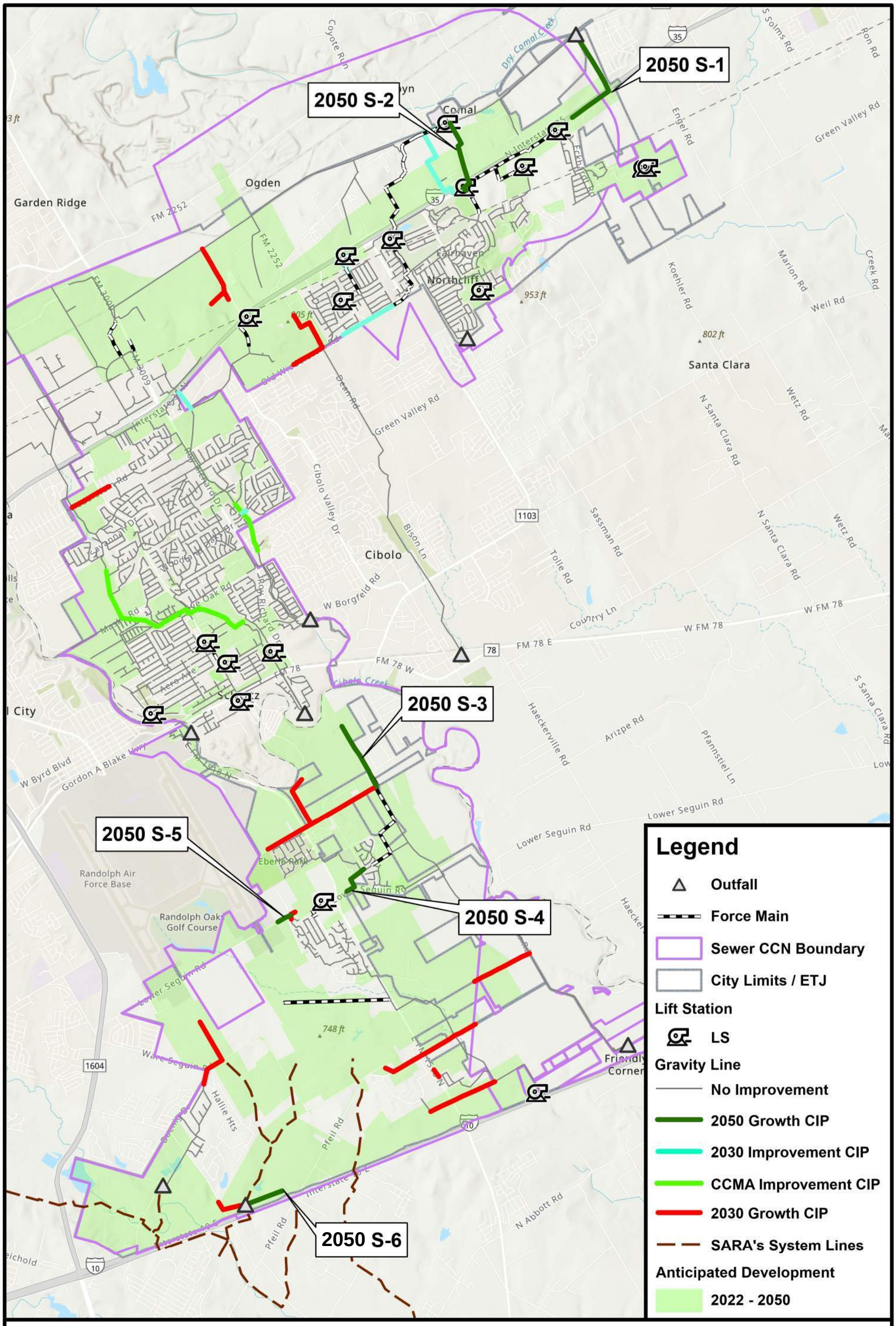
Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N
W E
S

0 3,750 7,500 15,000 Feet

APPENDIX 25 - 2050 WASTEWATER SYSTEM GROWTH PROJECTS



2050 WASTE WATER SYSTEM GROWTH PROJECTS

LAN
Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

APPENDIX 26 - MAX DEPTH TO DIAMETER WITH 2050 DRY WEATHER FLOWS

MAX DEPTH-TO-DIAMETER (d/D) WITH 2050 DRY WEATHER FLOW

Legend

- Outfall
- Lift Station
- Force Main
- Sewer CCN Boundary
- City Limits / ETJ
- SARA's System Lines

Max (d/D)

- 0 - 0.25
- 0.25 - 0.50
- 0.50 - 0.75
- 0.75 - 1.00

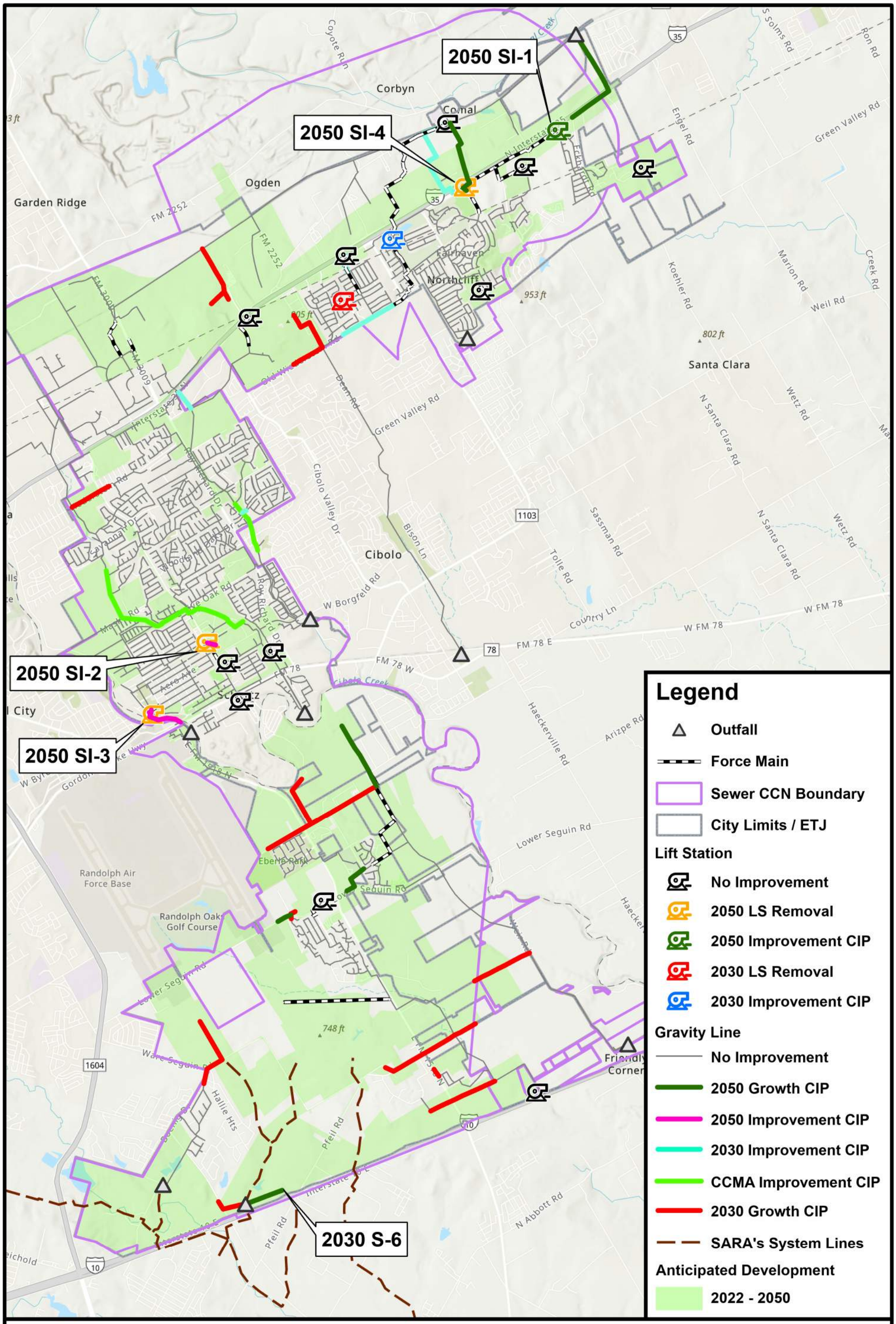
Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N
W E
S

0 0.75 1.5 3 Miles

APPENDIX 27 - 2050 WASTEWATER SYSTEM IMPROVEMENT PROJECTS



2050 WASTE WATER SYSTEM IMPROVEMENT PROJECTS

Planning
Engineering
Program Management

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

N
W E
S

0 3,750 7,500 15,000 Feet

APPENDIX 28 - INFLATION RATE CALCULATION SOURCES

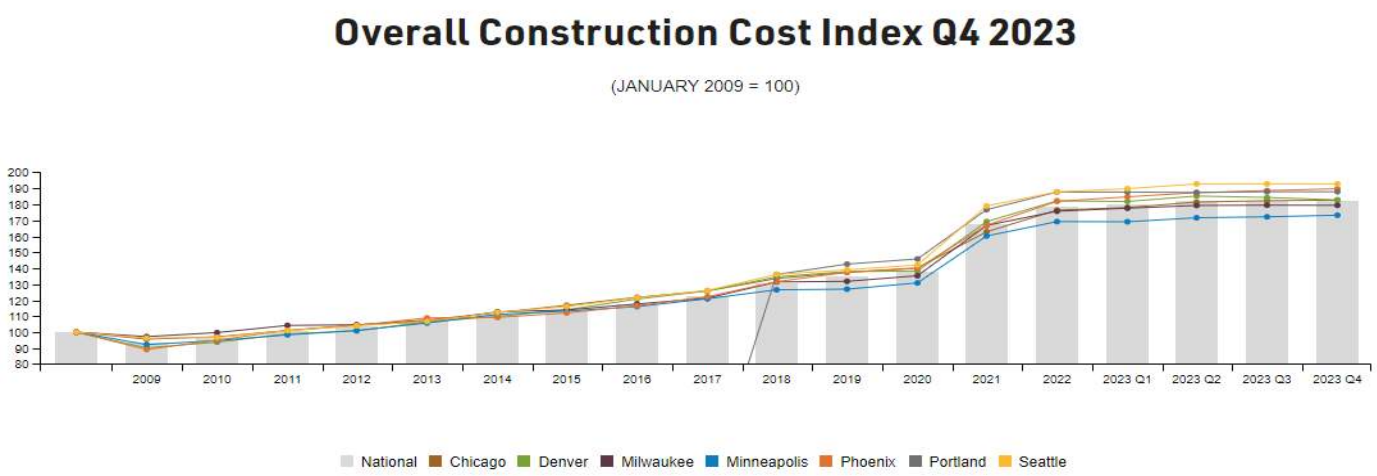
RSMeans Historical Inflation Indexes		
Year	San Antonio Index	Difference
2024	249.7	-4.7
2023	254.4	21
2022	233.4	33.9
2021	199.5	4
2020	195.5	11
2019	184.5	3.5
2018	181	5.5
2017	175.5	2.4
2016	173.1	1.3
2015	171.8	2.3
2014	169.5	5.2
2013	164.3	3.6
2012	160.7	8.1
2011	152.6	4.7
2010	147.9	26.6
2005	121.3	21.9
2000	99.4	1.4
1999	98	3.2
1998	94.8	1.4
1997	93.4	4.5
1995	88.9	8.2
1990	80.7	6.8
1985	73.9	18.9
1980	55	-

Time Frame	Total Inflation Rate	Yearly Inflation Rate
2020 to 2024	128%	6.31%
2010 to 2024	169%	3.81%
2000 to 2024	251%	3.91%
1990 to 2024	309%	3.38%
1980 to 2024	454%	3.50%

Year		National 30 City Average	Texas													
			Abi-lene	Ama-rillo	Austin	Beau-mont	Corpus Christi	Dallas	El Paso	Fort Worth	Houston	Lubbock	Odessa	San Antonio	Waco	Wichita Falls
Jan	2024	295.6	246.8	252.5	253	249.3	254.9	253.4	248.8	251.3	254	252.1	251.5	249.7	251.6	245.2
	2023	299.4	250.1	254.6	254.9	254.5	254.5	261.8	252.4	258.3	261	252.5	250.2	254.4	252.2	251.3
	2022	276.9	230.5	232.5	231.2	230.9	232.3	242.3	234.5	234.4	238.7	234.4	231.6	233.4	228.8	227.7
	2021	238.3	195.4	196.7	195.7	198.7	200.1	203.2	196.2	197.6	204.8	196.3	194.4	199.5	192.6	192.8
	2020	234.3	192.6	193.7	191.3	195.8	193.7	199.5	194.1	194.4	202.2	195.5	193.4	195.5	189.3	190.6
	2019	227.3	182.1	181.4	182.3	186.2	184.5	188.6	181.9	183.9	188.7	184.7	183.6	184.5	180.1	179.7
	2018	217.7	178.7	178.0	178.9	182.7	181.0	185.0	178.5	180.4	185.1	181.2	180.1	181.0	176.7	176.3
	2017	209.4	174.0	172.8	172.6	178.0	178.9	180.0	173.5	174.9	179.2	176.6	175.6	175.5	170.7	170.4
	2016	207.7	173.7	171.0	173.3	178.3	175.5	177.9	172.8	174.1	180.5	175.2	172.6	173.1	170.3	170.1
	2015	204.0	170.8	170.7	172.3	174.0	172.8	174.4	168.8	172.5	176.4	173.3	171.5	171.8	167.3	169.0
	2014	203.0	160.9	167.2	167.5	165.2	167.3	172.4	156.2	169.5	176.0	166.9	159.2	169.5	161.7	160.6
	2013	196.9	155.2	161.7	158.7	160.2	157.7	167.4	151.2	161.7	169.4	159.3	151.5	164.3	156.1	155.9
	2012	194.0	152.5	158.6	154.3	158.2	151.8	165.2	149.1	159.4	167.8	156.6	149.1	160.7	153.8	152.9
	2011	185.7	145.9	151.9	147.6	152.4	145.0	157.9	142.5	152.8	160.8	150.0	142.5	152.6	147.3	146.6
	2010	181.6	144.2	150.1	144.7	150.5	142.1	155.1	140.8	149.6	157.3	148.1	140.7	147.9	145.8	145.0
	2005	146.7	113.8	117.3	117.9	121.3	114.4	123.7	112.5	119.4	129.0	115.5	110.5	121.3	116.1	117.3
	2000	118.9	93.4	98.1	99.1	101.6	96.9	102.7	92.4	99.9	106.0	97.6	93.4	99.4	97.3	96.9
	1999	116.6	91.8	94.5	96.0	99.7	94.0	101.0	90.7	97.6	104.6	96.0	92.1	98.0	94.8	95.5
	1998	113.6	89.8	92.7	94.2	97.9	91.8	97.9	88.4	94.5	101.3	93.3	90.1	94.8	92.7	92.9
	1997	111.5	88.4	91.3	92.8	96.8	90.3	96.1	87.0	93.3	100.1	91.9	88.8	93.4	91.4	91.5
	1995	105.6	85.2	87.4	89.3	93.7	87.4	91.4	85.2	89.5	95.9	88.4	85.6	88.9	86.4	86.8
	1990	93.2	78.0	80.1	81.3	86.5	79.3	84.5	76.7	82.1	85.4	81.5	78.6	80.7	79.6	80.3
	1985	81.8	71.1	72.5	74.5	79.3	72.3	77.6	69.4	75.1	79.6	74.0	71.2	73.9	71.7	73.3
	1980	60.7	53.4	55.2	54.5	57.6	54.5	57.9	53.1	57.0	59.4	55.6	57.2	55.0	54.9	55.4
	1975	43.7	37.6	39.0	39.0	39.6	38.1	40.7	38.0	40.4	41.2	38.9	37.9	39.0	38.6	38.0
	1970	27.8	24.5	24.9	24.9	25.7	24.5	25.5	23.7	25.9	25.4	25.1	24.6	23.3	24.8	24.5
	1965	21.5	18.9	19.2	19.2	19.9	18.9	19.9	19.0	19.9	20.0	19.4	19.0	18.5	19.2	18.9
	1960	19.5	17.1	17.4	17.4	18.1	17.1	18.2	17.0	18.1	18.2	17.6	17.3	16.8	17.4	17.2
	1955	16.3	14.4	14.6	14.6	15.1	14.4	15.3	14.3	15.2	15.2	14.8	14.5	14.1	14.6	14.4
	1950	13.5	11.9	12.1	12.1	12.5	11.9	12.6	11.8	12.5	12.6	12.2	12.0	11.6	12.1	11.9
	1945	8.6	7.6	7.7	7.7	8.0	7.6	8.0	7.5	8.0	8.0	7.8	7.6	7.4	7.7	7.6
	1940	6.6	5.9	5.9	5.9	6.1	5.8	6.2	5.8	6.2	6.2	6.0	5.9	5.7	5.9	5.8

Mortenson Historical Inflation Indexes (Base 2009)		
Year	National Index	Difference
2023 Q4	182.5	0.1
2023 Q3	182.4	0.4
2023 Q2	182	2.3
2023 Q1	179.7	1.1
2022	178.6	11.2
2021	167.4	29.6
2020	137.8	2.8
2019	135	4.2
2018	130.8	8.5
2017	122.3	4.8
2016	117.5	3.6
2015	113.9	3
2014	110.9	3.6
2013	107.3	3.7
2012	103.6	2.6
2011	101	4.6
2010	96.4	2.6
2009	93.8	-

Time Frame	Total Inflation Rate	Yearly Inflation Rate
2020 to 2023	132%	9.65%
2010 to 2023	188%	5.93%



Turner Historical Inflation Indexes		
Year	Average Index	Difference
2023	1373	78
2022	1295	96
2021	1199	22
2020	1177	21
2019	1156	60
2018	1096	58
2017	1038	49
2016	989	46
2015	943	41
2014	902	38
2013	864	34
2012	830	18
2011	812	13
2010	799	-33
2009	832	-76
2008	908	54
2007	854	61
2006	793	76
2005	717	62
2004	655	34
2003	621	2
2002	619	6
2001	613	18
2000	595	25
1999	570	21
1998	549	24
1997	525	20
1996	505	-

Time Frame	Total Inflation Rate	Yearly Inflation Rate
2020 to 2023	117%	5.27%
2010 to 2023	172%	4.25%
2000 to 2023	231%	3.70%
1996 to 2024	272%	3.77%

Quarter	Index	△%
4th Quarter 2023	**1395**	**1.01**
3rd Quarter 2023	1381	1.17
2nd Quarter 2023	1365	1.19
1st Quarter 2023	1349	1.28

Year	Average Index	△%
2023	1373	6.0
2022	1295	8.0
2021	1199	1.9
2020	1177	1.8
2019	1156	5.5
2018	1096	5.6
2017	1038	5.0
2016	989	4.8
2015	943	4.5
2014	902	4.4
2013	864	4.1
2012	830	2.1
2011	812	1.6

The Turner Building Cost Index is determined by the following factors considered on a nationwide basis: labor rates and productivity, material prices and the competitive condition of the marketplace.

2010-1996 rates are stored online and can be provided if desired

APPENDIX 29 - CIP PROJECTS COST ESTIMATES

SCHERTZ

City of Schertz
2024 Impact Fee Update
Water CIP Estimate of Probable Cost Summary

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Near Term CIP				
System Improvement Projects				
NT-W1**	Bubbling Springs 6" WL Replacement	$763,000	27%	$206,715
NT-W2	Corbett Pump Station & 3.0 MG GST	$8,600,000	0%	$0
NT-W3	Ware Seguin Pump Station Operational Improvement	$175,000	0%	$0
NT-W4	12" WL from Ware Seguin to Lower Seguin	$1,538,000	0%	$0
NT-W5	Fred Couples to Schwab	$455,556	0%	$0
NT-W6	Schwab to Eckhardt	$1,600,000	0%	$0
NT-W7**	Graytown to Pfeil	$1,550,000	69%	$1,077,040
NT-W8**	FM 78 Water Line Replacement	$875,000	22%	$194,778
NT-W9**	Moonlight Meadow Dr & Lost Meadow Dr WL Replacement	$3,000,000	0%	$0
NT-W10**	Robinhood Way WL Replacement	$4,650,000	0%	$0
	NEAR TERM TOTAL:	**$23,206,556**	-	**$1,478,532**
Proposed 2030 CIP				
Growth Projects				
2030-W1	12" WL from Tri-County Extension to Cibolo Valley Drive	$4,788,000	100%	$4,788,000
2030-W2	Raf Burnette Rd 12" WL Improvements	$1,438,000	89%	$1,272,934
2030-W3	8" WL from Ray Corbett Dr to Lower Seguin Rd	$3,688,000	97%	$3,569,245
2030-W4**	Trainer Hale Rd 2" WL Replacement & 8" WL Improvement	$9,850,000	93%	$9,192,317
2030-W5**	Boenig Dr S 6" WL Replacement & 8" WL Improvement	$6,388,000	69%	$4,411,757
2030-W6	Live Oak to IH-35 24" Transmission Main	$32,075,000	100%	$32,075,000
2030-W7	Ware Seguin Pump Station Expansion Phase 1	$5,213,000	33%	$1,737,667
2030-W8	IH-10 8" WL Improvements	$6,063,000	100%	$6,063,000
	2030 Growth Subtotal:	**$69,503,000**	-	**$63,109,920**
System Improvement Projects				
2030-W9	PRV Installation for Proposed Southwest Pressure Plane	$413,000.0	0%	$0
2030-W10**	River Rd 6" WL Replacement	$2,325,000	58%	$1,354,926
	2030 System Improvement Projects Subtotal:	**$2,738,000**	-	**$1,354,926**
	2030 TOTAL:	**$72,241,000**	-	**$64,464,846**
Proposed 2050 CIP				
Growth Projects				
2050-W1	Corbett Pump Station Expansion	$1,663,000		
2050-W2	FM 2252 8" WL Improvements	$8,800,000		
2050-W3	Ware Seguin Pump Station Expansion Phase 2	$2,725,000		
2050-W4	Beck St 6" WL Replacement	$5,288,000		
2050-W5	Raf Burnette Rd 8" WL Improvements	$4,438,000		
2050-W6	IH-35 Pump Station & 3.0 MG GST	$42,188,000	2050 CIP Projects are not	
2050-W7	IH-10 & FM 1518 8" WL Improvements	$3,075,000	included in this impact fee total.	
	2050 Growth Subtotal:	**$68,177,000**		
System Improvement Projects				
2050-W8	Lower Seguin Rd 8" WL Replacement	$4,775,000		
	2050 System Improvement Projects Subtotal:	**$4,775,000**		
	2050 TOTAL:	**$72,952,000**		
	WATER CIP TOTAL:	**$168,399,556**		**$65,943,379**

** - Indicates that there are both growth & system improvement components to the project.

SCHERTZ

City of Schertz
2024 Impact Fee Update
Waste Water CIP Estimate of Probable Cost Summary

Project Number	Project Name	Total Project Cost	2020-2030 Growth Utilization	Impact Fee Eligible Portion
Near Term CIP				
Growth Projects				
NT-S1	Town Creek Phase IV 24" - Section 1	$6,875,000	21%	$1,440,972
NT-S2	Town Creek Phase IV 12" - Section 2	$2,925,000	0%	$0
NT-S3	Town Creek Phase V 24"	$10,425,000	23%	$2,378,763
NT-S4**	Upsize Lookout Line	$3,838,000	20%	$771,788
NT-S5**	Upsize Tri County Line	$2,084,800	25%	$526,887
NT-S6	Cibolo West Main	$16,213,000	83%	$13,523,463
NT-S7	Woman Hollering Creek Lift Station, Gravity Lines, and Force Main	$3,400,000	74%	$2,517,091
	Near Term Growth Subtotal:	**$45,760,800**	-	**$21,158,965**
System Improvement Projects				
NT SI-1	Decommission Tri County Lift Station	$88,000	0%	$0
NT SI-2	Decommission Corbett Lift Station	$1,500,000	0%	$0
NT SI-3	Decommission Sedona Lift Station & Woman Hollering Creek WWTP	$175,000	0%	$0
	Near Term System Improvement Projects Subtotal:	**$1,763,000**	-	**$0**
	NEAR TERM TOTAL:	**$47,523,800**	-	**$21,158,965**
Proposed 2030 CIP				
Growth Projects				
2030-S1	Hope Lane 8" Gravity Line	$2,025,000	67%	$1,359,153
2030-S2	Old Wiederstein Road 8"	$1,338,000	5%	$68,849
2030-S3	Union Pacific Railroad 8" - Section 1	$2,563,000	10%	$249,210
2030-S4	Union Pacific Railroad 8" - Section 2	$400,000	12%	$47,722
2030-S5	Wiederstein Road 8"	$1,663,000	83%	$1,372,188
2030-S6	Schaefer Road 8" - Section 1	$4,913,000	33%	$1,613,509
2030-S7	Schaefer Road 8" - Section 2	$1,938,000	100%	$1,938,000
2030-S8	Aranda 8"	$475,000	100%	$475,000
2030-S9	Weir Road 10"	$2,525,000	100%	$2,522,465
2030-S10	Trainer Hale Road 10"	$1,038,000	100%	$1,034,756
2030-S11	Ware Seguin Road 8"	$3,113,000	97%	$3,012,264
2030-S12	FM 1518 8"	$400,000	40%	$160,000
2030-S13	I-10 8" - Section 1	$2,713,000	99%	$2,677,145
2030-S14	Boenig Drive 8"	$2,963,000	29%	$849,531
2030-S15	N Greytown Road 8"	$1,275,000	52%	$661,379
	2030 Growth Subtotal:	**$29,342,000**	-	**$18,041,171**
System Improvement Projects				
2030 SI-1**	Friesenhahn West Line WW Upsize	$8,175,000	22%	$1,833,143
2030 SI-2**	Fairlawn WW Upsize	$1,375,000	9%	$121,579
2030 SI-3**	Cibolo Crossing WW Line Upsize	$1,288,000	4%	$46,406
2030 SI-4**	Woodland Oak Drive Replacements	$338,000	4%	$13,741
2030 SI-5**	Old Wiederstein WW Upsize	$5,050,000	61%	$3,099,614
2030 SI-6**	Northcliffe Lift Station Upgrade	$7,838,000	5%	$392,686
2030 SI-7	Decommission Belmont Park Lift Station	$463,000	0%	$0
	2030 System Improvement Projects Subtotal:	**$24,527,000**	-	**$5,507,169**
	2030 TOTAL:	**$53,869,000**	-	**$23,548,341**
Proposed 2050 CIP				
Growth Projects				
2050-S1	I-35 N 8"	$9,088,000		
2050-S2	Friesenhahn Lane 8"	$6,500,000		
2050-S3	Schaefer Road 8" - Section 3	$5,713,000		
2050-S4	Corbett JH 8"	$2,888,000		
2050-S5	Lower Seguin Road 8"	$1,338,000		
2050-S6	I-10 8" - Section 2	$3,338,000		
	2050 Growth Subtotal:	**$28,865,000**	2050 CIP projects are not eligible to be included in the impact fee total.	
System Improvement Projects				
2050 SI-1	Cypress Point Lift Station Upgrade	$1,463,000		
2050 SI-2	Decommission Schertz Parkway Lift Station	$238,000		
2050 SI-3	Decommission Park Lift Station	$3,663,000		
2050 SI-4	Decommission Cover's Cove Lift Station	$238,000		
	2050 System Improvement Projects Subtotal:	**$5,602,000**		
	2050 TOTAL:	**$34,467,000**		
	WASTE WATER CIP TOTAL:	**$135,859,800**		**$44,707,306**

** - Indicates that there are both growth & system improvement components to the project.

City of Schertz
2024 Impact Fee Update
CCMA System Improvement Projects - Estimate of Probable Cost
Summary

Project Number	Project Name	Project Cost
Proposed 2030 CIP		
CCMA System Improvement Projects		
2030 C-1	Roy Richard Drive Replacements	$1,588,000
2030 C-2	Valencia Lane Replacements	$2,288,000
2030 C-3	Savannah Drive Replacements	$12,425,000
2030 C-4	Build Out Project 25 - 36" Schertz Line	$12,950,000
	CCMA System Improvement Projects Total:	**$29,251,000**

NEAR TERM WATER CIP PROJECTS

SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Bubbling Springs 6" WL Replacement
Project Number: NT-W1**
Project Category: Water
CIP Type: System Improvement

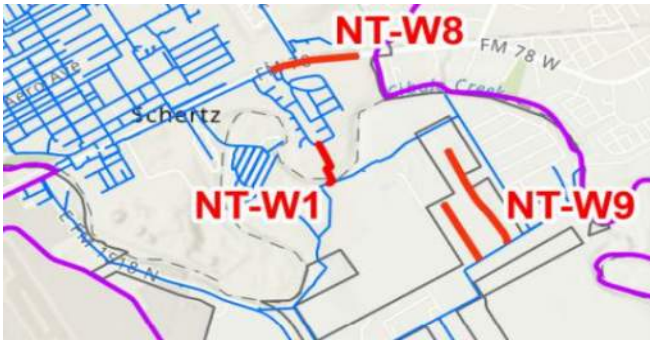
Date: August 2024
Phase: Near Term

Project Description:
Replace leaking 6" from River Rd to just south of Cibolo Creek along Bubbling Springs with 12", approximately 1,320 LF.

Justification:
City identified CIP.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	1,320	$ 135	$ 179,000
2	Gate Valve	EA	3	$ 7,000	$ 21,000
3	Fire Hydrant	EA	3	$ 8,500	$ 26,000
4	Service & System Connections	EA	27	$ 2,100	$56,700
4	Surface Replacement	LF	660	$ 196	$ 130,000
5	Traffic Control	LS	1	$ 8,000	$ 8,000
6	SWPPP	LS	1	$ 25,000	$ 25,000
				SUBTOTAL	**$ 446,000**
				MOBILIZATION (5%)	$23,000
				CONTINGENCY (30%)	$134,000
				TOTAL CONSTRUCTION	**$610,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$153,000
				ESTIMATE TOTAL PROJECT COST	**$763,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Corbett Pump Station & 3.0 MG GST
Project Number: NT-W2
Project Category: Water
CIP Type: System Improvement

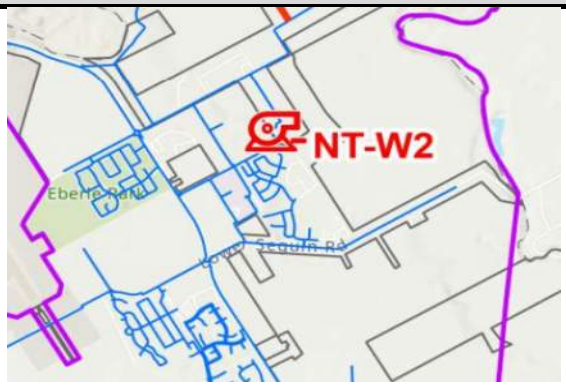
Date: August 2024
Phase: Near Term

Project Description:
Corbett Pump Station (2,000 gpm, 183 TDH firm capacity) and 3.0 MG GST.

Justification:
Per "Corbett 3.0 MG GST Project" Preliminary Engineering Report (2021), construction is currently underway.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	2,000 gpm Pump Station & 3.0 MG GST	LS	1	$ 8,600,000	$ 8,600,000
				ESTIMATE TOTAL PROJECT COST	**$ 8,600,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Ware Seguin Pump Station Operational Improvement
Project Number: NT-W3
Project Category: Water
CIP Type: System Improvement

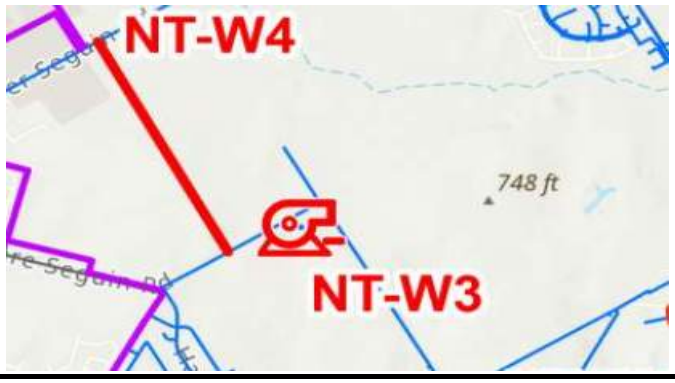
Date: August 2024
Phase: Near Term

Project Description:
Control improvements at Ware Seguin Pump Station to be per GST level rather than a timer.

Justification:
Potentially zero cost project to improve pump station performance in this service area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Controls	LS	1	$ 100,000	$ 100,000
				SUBTOTAL	**$ 100,000**
				MOBILIZATION (5%)	$5,000
				CONTINGENCY (30%)	$30,000
				TOTAL CONSTRUCTION	**$140,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$35,000
				ESTIMATE TOTAL PROJECT COST	**$175,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: 12" WL from Ware Seguin to Lower Seguin
Project Number: NT-W4
Project Category: Water
CIP Type: Growth

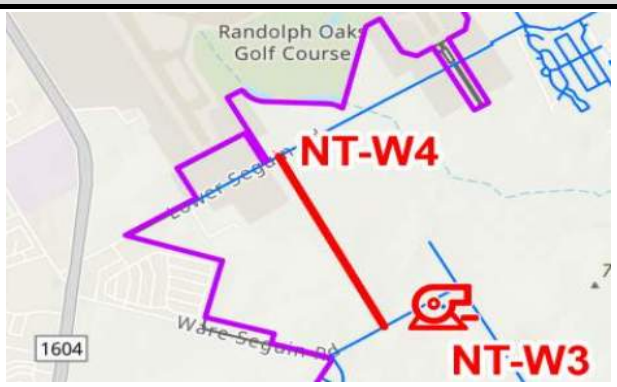
Date: August 2024
Phase: Near Term

Project Description:
Approximately 5,150 LF of 12" from Ware Seguin to Lower Seguin in open field.

Justification:
Currently in design.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	5,150	$ 135	$696,000
2	Gate Valve	EA	11	$ 7,000	$77,000
3	Fire Hydrant	EA	11	$ 8,500	$93,500
4	Traffic Control	LS	1	$ 15,000	$15,000
5	SWPPP	LS	1	$ 25,000	$25,000
				SUBTOTAL	**$ 907,000**
				MOBILIZATION (5%)	$46,000
				CONTINGENCY (30%)	$273,000
				TOTAL CONSTRUCTION	**$1,230,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$308,000
				ESTIMATE TOTAL PROJECT COST	**$1,538,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Fred Couples to Schwab
Project Number: NT-W5
Project Category: Water
CIP Type: Growth

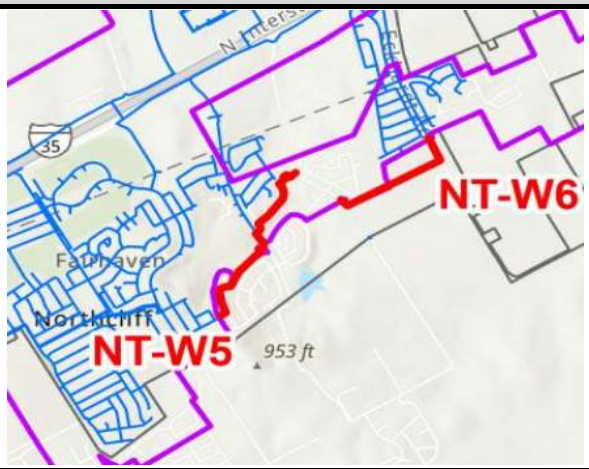
Date: August 2024
Phase: Near Term

Project Description:
Approximately 2,270 LF of 12" from Fred Couples to Schwab. Total cost shown is portion paid for by the City.

Justification:
Currently under construction.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
				ESTIMATE TOTAL PROJECT COST	$455,555.79

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Schwab to Eckhardt
Project Number: NT-W6
Project Category: Water
CIP Type: Growth

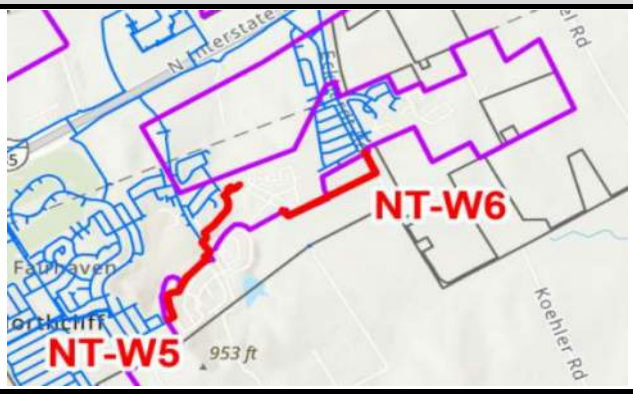
Date: August 2024
Phase: Near Term

Project Description:
Approximately 5,400 LF of 12" from Schwab to Eckhardt.

Justification:
Currently in design.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	5,400	$ 135	$729,000
2	Gate Valve	EA	11	$ 7,000	$77,000
3	Fire Hydrant	EA	11	$ 8,500	$93,500
*	Traffic Control	LS	1	$ 16,000	$16,000
6	SWPPP	LS	1	$ 25,000	$25,000
				SUBTOTAL	**$ 941,000**
				MOBILIZATION (5%)	$48,000
				CONTINGENCY (30%)	$283,000
				TOTAL CONSTRUCTION	**$1,280,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$320,000
				ESTIMATE TOTAL PROJECT COST	**$1,600,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Graytown to Pfeil
Project Number: NT-W7**
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: Near Term

Project Description:
Approximately 5,200 LF of 12" along IH-10 from N. Graytown Rd to Pfeil Rd.

Justification:
Currently in design.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	5,200	$ 135	$702,000
2	Gate Valve	EA	11	$ 7,000	$77,000
3	Fire Hydrant	EA	11	$ 8,500	$93,500
4	Traffic Control	LS	1	$ 15,000	$15,000
5	SWPPP	LS	1	$ 25,000	$25,000
				SUBTOTAL	**$ 913,000**
				MOBILIZATION (5%)	$46,000
				CONTINGENCY (30%)	$274,000
				TOTAL CONSTRUCTION	**$1,240,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$310,000
				ESTIMATE TOTAL PROJECT COST	**$1,550,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: FM 78 Water Line Replacement
Project Number: NT-W8**
Project Category: Water
CIP Type: System Improvement

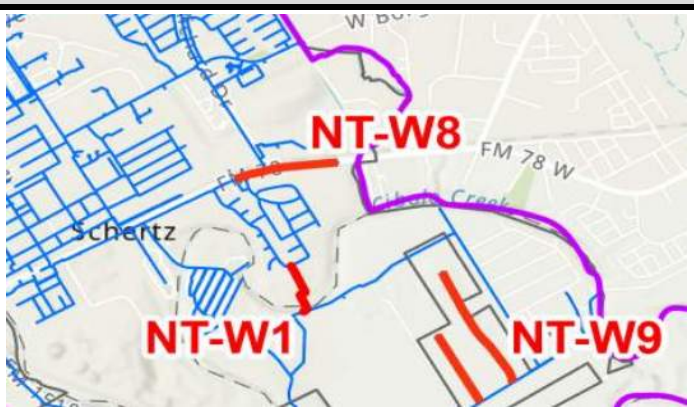
Date: August 2024
Phase: Near Term

Project Description:
Upsize existing 8"/10" to 12" along FM 78 from east of Bubbling Springs Rd to end of dead-end line, approximately 2,300 LF.

Justification:
Needed for fire flow.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	2,300	$ 135	$310,500
2	Gate Valve	EA	5	$ 7,000	$35,000
3	Fire Hydrant	EA	5	$ 8,500	$42,500
4	Service & System Connections	EA	46	$ 2,100	$96,600
5	Traffic Control	LS	1	$ 8,000	$8,000
6	SWPPP	LS	1	$ 25,000	$25,000
				SUBTOTAL	**$ 518,000**
				MOBILIZATION (5%)	$26,000
				CONTINGENCY (30%)	$156,000
				TOTAL CONSTRUCTION	**$700,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$175,000
				ESTIMATE TOTAL PROJECT COST	**$875,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Moonlight Meadow Dr & Lost Meadow Dr WL Replacement
Project Number: NT-W9**
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: Near Term

Project Description:
Upsize existing 4" to 8" along Moonlight Meadow Dr and Lost Meadows Dr north of Schaefer Rd, approximately 4,970 LF.

Justification:
Needed for fire flow.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	4,970	$ 85	$423,000
2	Gate Valve	EA	10	$ 7,000	$70,000
3	Fire Hydrant	EA	10	$ 8,500	$85,000
4	Service & System Connections	EA	100	$ 2,100	$210,000
5	Surface Replacement	LF	4,970	$ 190	$945,000
6	Traffic Control	LS	1	$ 15,000	$15,000
7	SWPPP	LS	1	$ 25,000	$25,000
				SUBTOTAL	**$ 1,773,000**
				MOBILIZATION (5%)	$89,000
				CONTINGENCY (30%)	$532,000
				TOTAL CONSTRUCTION	**$2,400,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$600,000
				ESTIMATE TOTAL PROJECT COST	**$3,000,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Robinhood Way WL Replacement
Project Number: NT-W10**
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: Near Term

Project Description:
Upsize existing 8" to 12" along Robin Hood Way, approximately 6,670 LF.

Justification:
Needed for fire flow.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	6,670	$ 135	$901,000
2	Gate Valve	EA	14	$ 7,000	$98,000
3	Fire Hydrant	EA	14	$ 8,500	$119,000
4	Service & System Connections	EA	134	$ 2,100	$281,400
5	Surface Replacement	LF	6,670	$ 196	$1,307,320
6	Traffic Control	LS	1	$ 19,000	$19,000
7	SWPPP	LS	1	$ 25,000	$25,000
				SUBTOTAL	**$2,751,000**
				MOBILIZATION (5%)	$138,000
				CONTINGENCY (30%)	$826,000
				TOTAL CONSTRUCTION	**$3,720,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$930,000
				ESTIMATE TOTAL PROJECT COST	**$4,650,000**

Project Location:



2030 WATER CIP PROJECTS

SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: 12" WL from Tri-County Extension to Cibolo Valley Drive
Project Number: 2030-W1
Project Category: Water
CIP Type: Growth

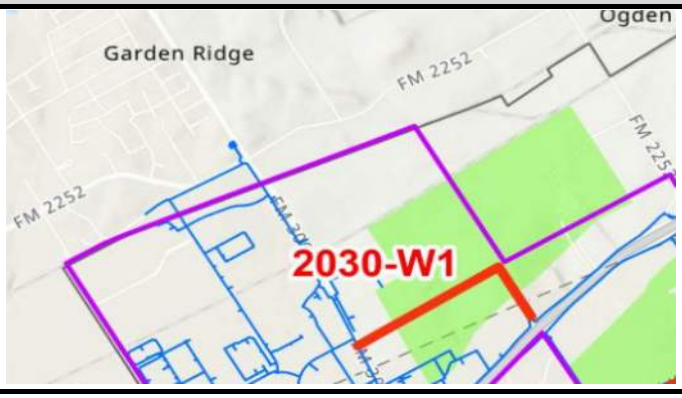
Date: August 2024
Phase: 2030

Project Description:
New 12" loop east of FM 3009, north of IH-35 (approximately 6,060 LF).

Justification:
Supplies new service area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	6,060	$ 170	$1,030,200
2	Gate Valve	EA	13	$ 8,900	$115,700
3	Fire Hydrant	EA	13	$ 10,700	$139,100
4	Surface Replacement	LF	6,060	$ 247	$1,496,000
5	Traffic Control	LS	1	$ 22,000	$22,000
6	SWPPP	LS	1	$ 32,000	$32,000
				SUBTOTAL	**$2,835,000**
				MOBILIZATION (5%)	$142,000
				CONTINGENCY (30%)	$851,000
				TOTAL CONSTRUCTION	**$3,830,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$958,000
				ESTIMATE TOTAL PROJECT COST	**$4,788,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Raf Burnette Rd 12" WL Improvements
Project Number: 2030-W2
Project Category: Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Approximately 1,750 LF of 12" along Raf Burnette east of Authority Ln.

Justification:
Supplies new service area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	1,750	$ 170	$297,500
2	Gate Valve	EA	4	$ 8,900	$35,600
3	Fire Hydrant	EA	4	$ 10,700	$42,800
4	Surface Replacement	LF	1,750	$ 247	$432,000
5	Traffic Control	LS	1	$ 7,000	$7,000
6	SWPPP	LS	1	$ 32,000	$32,000
				SUBTOTAL	**$847,000**
				MOBILIZATION (5%)	$43,000
				CONTINGENCY (30%)	$255,000
				TOTAL CONSTRUCTION	**$1,150,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$288,000
				ESTIMATE TOTAL PROJECT COST	**$1,438,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: 8" WL from Ray Corbett Dr to Lower Seguin Rd
Project Number: 2030-W3
Project Category: Water
CIP Type: Growth

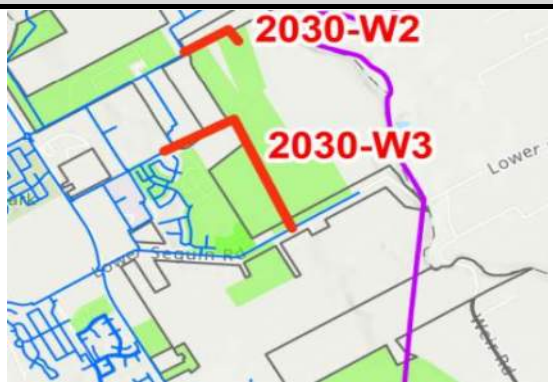
Date: August 2024
Phase: 2030

Project Description:
New 8" loop north of Lower Seguin Rd, east of Ray Corbett Dr (approximately 5,590 LF).

Justification:
Supplies new service area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	5,590	$ 110	$614,900
2	Gate Valve	EA	12	$ 3,800	$45,600
3	Fire Hydrant	EA	12	$ 10,700	$128,400
4	Surface Replacement	LF	5,590	$ 239	$1,337,000
5	Traffic Control	LS	1	$ 20,000	$20,000
6	SWPPP	LS	1	$ 32,000	$32,000
				SUBTOTAL	**$2,178,000**
				MOBILIZATION (5%)	$109,000
				CONTINGENCY (30%)	$654,000
				TOTAL CONSTRUCTION	**$2,950,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$738,000
				ESTIMATE TOTAL PROJECT COST	**$3,688,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Trainer Hale Rd 2" WL Replacement & 8" WL Improvement
Project Number: 2030-W4**
Project Category: Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Upsize approximately 2,960 LF of 2" to 12" along Trainer Hale Rd east of FM 1518; and 9,650 LF of new 8" loop north of Trainer Hale Rd, east of FM 1518.

Justification:
Upgrades distribution system to current min. pipe size (8") to supply new service area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	2,960	$ 170	$503,200
2	8" Water Line	LF	9,650	$ 110	$1,061,500
3	12" Gate Valve	EA	6	$ 8,900	$53,400
4	8" Gate Valve	EA	20	$ 3,800	$76,000
5	Fire Hydrant	EA	26	$ 10,700	$278,200
6	Service & System Connections	EA	253	$ 2,650	$670,450
7	Surface Replacement	LF	12,610	$ 247	$3,112,000
8	Traffic Control	LS	1	$ 46,000	$46,000
9	SWPPP	LS	1	$ 32,000	$32,000
				SUBTOTAL	**$5,833,000**
				MOBILIZATION (5%)	$292,000
				CONTINGENCY (30%)	$1,750,000
				TOTAL CONSTRUCTION	**$7,880,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,970,000
				ESTIMATE TOTAL PROJECT COST	**$9,850,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Boenig Dr S 6" WL Replacement & 8" WL Improvement
Project Number: 2030-W5**
Project Category: Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Upsize approximately 5,300 LF of 6" to 8" along Boenig Dr south of N Graytown Rd, and 3,300 LF new 8" along future Binz-Engleman Rd.

Justification:
Needed to meet growth in area and provide fire flow.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	8,600	$ 110	$946,000
2	Gate Valve	EA	18	$ 3,800	$68,400
3	Fire Hydrant	EA	18	$ 10,700	$192,600
4	Service & System Connections	EA	172	$ 2,650	$455,800
5	Surface Replacement	LF	8,600	$ 239	$2,057,000
6	Traffic Control	LS	1	$ 31,000	$31,000
7	SWPPP	LS	1	$ 32,000	$32,000
				SUBTOTAL	**$3,783,000**
				MOBILIZATION (5%)	$190,000
				CONTINGENCY (30%)	$1,135,000
				TOTAL CONSTRUCTION	**$5,110,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,278,000
				ESTIMATE TOTAL PROJECT COST	**$6,388,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Live Oak to IH-35 24" Transmission Main
Project Number: 2030-W6
Project Category: Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Live Oak to IH-35 24" transmission line (approximately 20,000 LF).

Justification:
In progress, pending easement acquisition. Needed to meet growth and provide redundancy.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	24" Water Line	LF	20,000	$ 570	$11,400,000
2	Gate Valve	EA	40	$ 25,700	$1,028,000
3	Fire Hydrant	EA	40	$ 10,700	$428,000
4	ARV (1")	EA	16	$ 17,700	$283,200
5	CAV (3")	EA	16	$ 23,200	$371,200
6	Surface Replacement	LF	20,000	$ 269	$5,388,000
7	Traffic Control	LS	1	$ 72,000	$72,000
8	SWPPP	LS	1	$ 32,000	$32,000
				SUBTOTAL	**$19,003,000**
				MOBILIZATION (5%)	$951,000
				CONTINGENCY (30%)	$5,701,000
				TOTAL CONSTRUCTION	**$25,660,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$6,415,000
				ESTIMATE TOTAL PROJECT COST	**$32,075,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Ware Seguin Pump Station Expansion Phase 1
Project Number: 2030-W7
Project Category: Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Ware Seguin Pump Station Improvements Phase 1 - Expand Ware Seguin to firm pumping capacity of 1,000 gpm, 105 TDH; and new groundwater well to provide supply to Ware Seguin.

Justification:
Needed to meet new growth in Ware Seguin area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	1,000 GPM GW Well	LS	1	$ 2,518,000	$2,518,000
2	1,000 GPM Pump for PS	EA	2	$ 189,000	$378,000
3	VFD	EA	1	$ 126,000	$126,000
4	Yard Piping & Other Appurtenances	LS	1	$ 63,000	$63,000
				SUBTOTAL	**$3,085,000**
				MOBILIZATION (5%)	$155,000
				CONTINGENCY (30%)	$926,000
				TOTAL CONSTRUCTION	**$4,170,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,043,000
				ESTIMATE TOTAL PROJECT COST	**$5,213,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: IH-10 8" WL Improvements
Project Number: 2030-W8
Project Category: Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
4,300 LF of new 8" along IH-10 and Scenic Lake Dr.

Justification:
Needed to meet growth in area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	4,300	$ 230	$991,000
2	Gate Valve	EA	9	$ 8,200	$73,800
3	Fire Hydrant	EA	9	$ 23,100	$207,900
4	Surface Replacement	LF	4,300	$ 515	$2,215,000
5	Traffic Control	LS	1	$ 34,000	$34,000
6	SWPPP	LS	1	$ 68,000	$68,000
				SUBTOTAL	**$3,590,000**
				MOBILIZATION (5%)	$180,000
				CONTINGENCY (30%)	$1,077,000
				TOTAL CONSTRUCTION	**$4,850,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,213,000
				ESTIMATE TOTAL PROJECT COST	**$6,063,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: PRV Installation for Proposed Southwest Pressure Plane
Project Number: 2030-W9
Project Category: Water
CIP Type: System Improvement

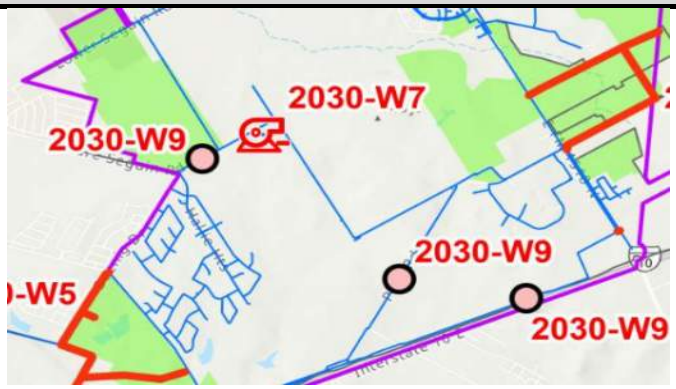
Date: August 2024
Phase: 2030

Project Description:
3 new PRVs (2-6", 1-8") to create new pressure zone in southwest part of system.

Justification:
Avoids high pressures and improves performance of Ware Seguin Pump Station.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	6" PRV	EA	2	$ 70,000	$140,000
2	8" PRV	EA	1	$ 80,000	$80,000
3	Connection/Operations Expenses	LS	1	$ 19,000	$19,000
				SUBTOTAL	**$239,000**
				MOBILIZATION (5%)	$12,000
				CONTINGENCY (30%)	$72,000
				TOTAL CONSTRUCTION	**$330,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$83,000
				ESTIMATE TOTAL PROJECT COST	**$413,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: River Rd 6" WL Replacement
Project Number: 2030-W10**
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: 2030

Project Description:
Upsize 2,590 LF of ex. 6" to 12" along River Rd from FM 78 to Bubbling Springs Rd to remove bottleneck.

Justification:
Removes system bottleneck.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	2,590	$ 170	$440,300
2	Gate Valve	EA	6	$ 8,900	$53,400
3	Fire Hydrant	EA	6	$ 10,700	$64,200
4	Service & System Connections	EA	52	$ 2,650	$137,800
5	Surface Replacement	LF	2,590	$ 247	$639,000
6	Traffic Control	LS	1	$ 10,000	$10,000
7	SWPPP	LS	1	$ 32,000	$32,000
				SUBTOTAL	**$1,377,000**
				MOBILIZATION (5%)	$69,000
				CONTINGENCY (30%)	$414,000
				TOTAL CONSTRUCTION	**$1,860,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$465,000
				ESTIMATE TOTAL PROJECT COST	**$2,325,000**

Project Location:



2050 WATER CIP PROJECTS

SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Corbett Pump Station Expansion
Project Number: 2050-W1
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: 2050

Project Description:
Corbett Pump Station Expansion - Expand Corbett to 4,000 gpm, 183 TDH firm capacity.

Justification:
Prevents low pressures throughout southern part of system.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	2,000 GPM Pump	EA	1	$ 543,000	$543,000
2	VFD	EA	1	$ 272,000	$272,000
3	Yard Piping & Other Appurtenances	LS	1	$ 163,000	$163,000
				SUBTOTAL	**$978,000**
				MOBILIZATION (5%)	$49,000
				CONTINGENCY (30%)	$294,000
				TOTAL CONSTRUCTION	**$1,330,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$333,000
				ESTIMATE TOTAL PROJECT COST	**$1,663,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: FM 2252 8" WL Improvements
Project Number: 2050-W2
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: 2050

Project Description:
Approximately 6,290 LF of 8" along FM 2252 and new loop.

Justification:
Supplies new service area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	6,290	$ 230	$1,450,000
2	Gate Valve	EA	13	$ 8,200	$106,600
3	Fire Hydrant	EA	13	$ 23,100	$300,300
4	Surface Replacement	LF	6,290	$ 515	$3,240,000
5	Traffic Control	LS	1	$ 49,000	$49,000
6	SWPPP	LS	1	$ 68,000	$68,000
				SUBTOTAL	**$5,214,000**
				MOBILIZATION (5%)	$261,000
				CONTINGENCY (30%)	$1,565,000
				TOTAL CONSTRUCTION	**$7,040,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,760,000
				ESTIMATE TOTAL PROJECT COST	**$8,800,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Ware Seguin Pump Station Expansion Phase 2
Project Number: 2050-W3
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: 2050

Project Description:
Ware Seguin Pump Station Improvements Phase 2 - Expand Ware Seguin to 1,200 gpm, 123 TDH firm capacity.

Justification:
Prevents low pressures in Ware Seguin area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	1,200 GPM Pump	EA	2	$ 461,000	$922,000
2	VFD	EA	2	$ 272,000	$544,000
3	Yard Piping & Other Appurtenances	LS	1	$ 147,000	$147,000
				SUBTOTAL	**$1,613,000**
				MOBILIZATION (5%)	$81,000
				CONTINGENCY (30%)	$484,000
				TOTAL CONSTRUCTION	**$2,180,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$545,000
				ESTIMATE TOTAL PROJECT COST	**$2,725,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Beck St 6" WL Replacement
Project Number: 2050-W4
Project Category: Water
CIP Type: System Improvement

Date: August 2024
Phase: 2050

Project Description:
Upsize 1,590 LF of 6" to 8" along Beck St east of Schertz Pkwy, 1,680 LF of new 8".

Justification:
Upgrades distribution system to current min. pipe size (8") to serve new service area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	3,270	$ 230	$754,000
2	Gate Valve	EA	7	$ 8,200	$57,400
3	Fire Hydrant	EA	7	$ 23,100	$161,700
4	Service & System Connections	EA	66	$ 5,700	$376,200
5	Surface Replacement	LF	3,270	$ 515	$1,685,000
6	Traffic Control	LS	1	$ 26,000	$26,000
7	SWPPP	LS	1	$ 68,000	$68,000
				SUBTOTAL	**$3,129,000**
				MOBILIZATION (5%)	$157,000
				CONTINGENCY (30%)	$939,000
				TOTAL CONSTRUCTION	**$4,230,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,058,000
				ESTIMATE TOTAL PROJECT COST	**$5,288,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Raf Burnette Rd 8" WL Improvements
Project Number: 2050-W5
Project Category: Water
CIP Type: Growth

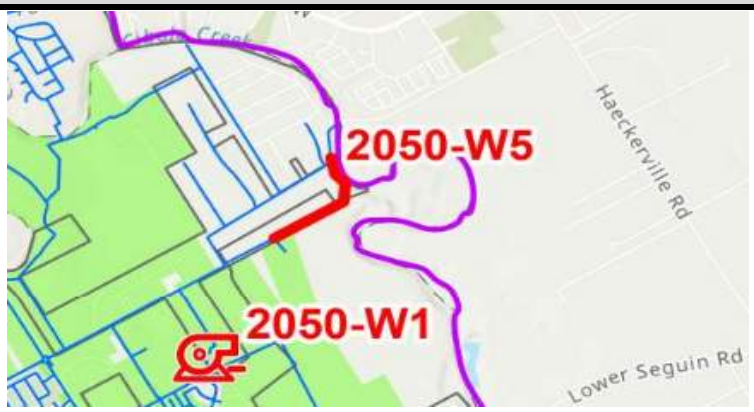
Date: August 2024
Phase: 2050

Project Description:
3,100 LF of new 8" along Raf Burnette east of Authority Ln.

Justification:
Needed to meet growth in area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	3,100	$ 230	$715,000
2	Gate Valve	EA	7	$ 8,200	$57,400
3	Fire Hydrant	EA	7	$ 23,100	$161,700
4	Surface Replacement	LF	3,100	$ 515	$1,597,000
5	Traffic Control	LS	1	$ 24,000	$24,000
6	SWPPP	LS	1	$ 68,000	$68,000
				SUBTOTAL	**$2,624,000**
				MOBILIZATION (5%)	$132,000
				CONTINGENCY (30%)	$788,000
				TOTAL CONSTRUCTION	**$3,550,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$888,000
				ESTIMATE TOTAL PROJECT COST	**$4,438,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: IH-35 Pump Station & 3.0 MG GST
Project Number: 2050-W6
Project Category: Water
CIP Type: Growth

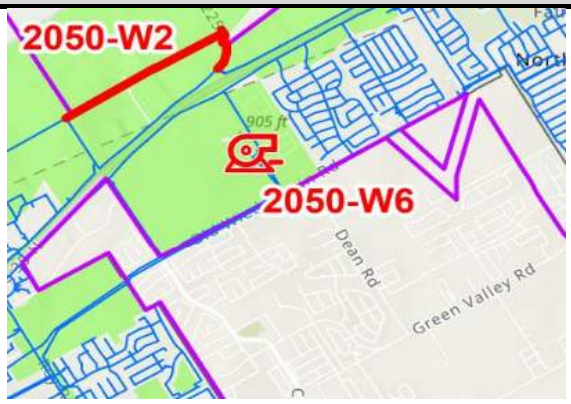
Date: August 2024
Phase: 2050

Project Description:
IH-35 Pump Station (4,000 gpm, 183 TDH firm capacity) and 3.0 MG GST, new connection from SSLGC transmission main to the Live Oak to IH-35 24" transmission main.

Justification:
Needed to meet growth in area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	3.0 MG GST	EA	1	$ 14,232,000	$14,232,000
2	Yard Piping & Pumps for GST	LS	1	$ 3,031,000	$3,031,000
3	Foundation for GST	LS	1	$ 922,000	$922,000
4	Connect to 24" Main	LS	1	$ 85,000	$85,000
5	Pump Station	LS	1	$ 6,723,000	$6,723,000
				SUBTOTAL	**$24,993,000**
				MOBILIZATION (5%)	$1,250,000
				CONTINGENCY (30%)	$7,498,000
				TOTAL CONSTRUCTION	**$33,750,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$8,438,000
				ESTIMATE TOTAL PROJECT COST	**$42,188,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: IH-10 & FM 1518 8" WL Improvements
Project Number: 2050-W7
Project Category: Water
CIP Type: Growth

Date: August 2024
Phase: 2050

Project Description:
2,110 LF of new 8" along IH-10 and FM 1518.

Justification:
Needed to meet growth in area.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Water Line	LF	2,110	$ 230	$487,000
2	Gate Valve	EA	5	$ 8,200	$41,000
3	Fire Hydrant	EA	5	$ 23,100	$115,500
4	Surface Replacement	LF	2,110	$ 515	$1,087,000
5	Traffic Control	LS	1	$ 17,000	$17,000
6	SWPPP	LS	1	$ 68,000	$68,000
				SUBTOTAL	**$1,816,000**
				MOBILIZATION (5%)	$91,000
				CONTINGENCY (30%)	$545,000
				TOTAL CONSTRUCTION	**$2,460,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$615,000
				ESTIMATE TOTAL PROJECT COST	**$3,075,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Lower Seguin Rd 8" WL Replacement
Project Number: 2050-W8
Project Category: Water
CIP Type: Capacity

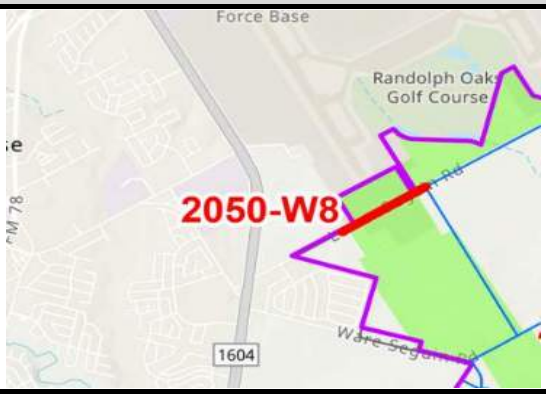
Date: August 2024
Phase: 2050

Project Description:
Upsize 2,500 LF of 8" to 12" along Lower Seguin Rd.

Justification:
Needed for fire flow.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Water Line	LF	2,500	$ 366	$915,000
2	Gate Valve	EA	5	$ 19,000	$95,000
3	Fire Hydrant	EA	5	$ 23,100	$115,500
4	Service & System Connections	EA	50	$ 5,700	$285,000
5	Surface Replacement	LF	2,500	$ 531	$1,329,000
6	Traffic Control	LS	1	$ 20,000	$20,000
7	SWPPP	LS	1	$ 68,000	$68,000
				SUBTOTAL	**$2,828,000**
				MOBILIZATION (5%)	$142,000
				CONTINGENCY (30%)	$849,000
				TOTAL CONSTRUCTION	**$3,820,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$955,000
				ESTIMATE TOTAL PROJECT COST	**$4,775,000**

Project Location:



NEAR TERM WASTEWATER CIP PROJECTS

SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Town Creek Phase IV 24" - Section 1
Project Number: NT-S1
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: Near Term

Project Description:
Town Creek Phase IV (section 1) with approximately 6,600 LF of 24-inch gravity line.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	24" Gravity Line	LF	6,600	$ 360	$ 2,376,000
2	Standard Manhole (60" DIA.)	EA	14	$ 17,000	$ 238,000
3	Surface Replacement	LF	6,600	$ 214	$ 1,413,000
4	Traffic Control	LS	1	$ 19,000	$ 19,000
5	SWPPP	LS	1	$ 25,000	$ 25,000
				SUBTOTAL	**$ 4,071,000**
				MOBILIZATION (5%)	$204,000
				CONTINGENCY (30%)	$1,222,000
				TOTAL CONSTRUCTION	**$5,500,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,375,000
				ESTIMATE TOTAL PROJECT COST	**$6,875,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Town Creek Phase IV 12" - Section 2
Project Number: NT-S2
Project Category: Waste Water
CIP Type: Growth

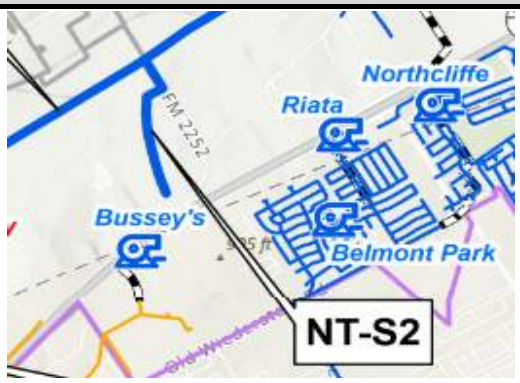
Date: August 2024
Phase: Near Term

Project Description:
Town Creek Phase IV (section 2) with approximately 4,470 LF of 12-inch gravity line.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Gravity Line	LF	4,470	$ 130	$ 582,000
2	Standard Manhole (60" DIA.)	EA	9	$ 17,000	$ 153,000
3	Surface Replacement	LF	4,470	$ 214	$ 957,000
4	Traffic Control	LS	1	$ 13,000	$ 13,000
5	SWPPP	LS	1	$ 25,000	$ 25,000
				SUBTOTAL	**$ 1,730,000**
				MOBILIZATION (5%)	$87,000
				CONTINGENCY (30%)	$519,000
				TOTAL CONSTRUCTION	**$2,340,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$585,000
				ESTIMATE TOTAL PROJECT COST	**$2,925,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Town Creek Phase V 24"
Project Number: NT-S3
Project Category: Waste Water
CIP Type: Growth

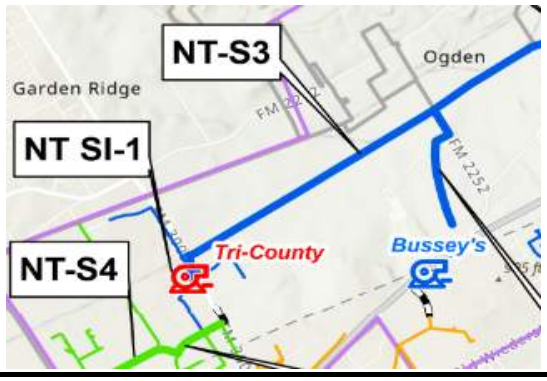
Date: August 2024
Phase: Near Term

Project Description:
Town Creek Phase V with approximately 10,060 LF of 24-inch gravity line.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	24" Gravity Line	LF	10,060	$ 360	$ 3,622,000
2	Standard Manhole (60" DIA.)	EA	20	$ 17,000	$ 343,000
3	Surface Replacement	LF	10,060	$ 214	$ 2,153,000
4	Traffic Control	LS	1	$ 29,000	$ 29,000
5	SWPPP	LS	1	$ 25,000	$ 25,000
				SUBTOTAL	**$ 6,172,000**
				MOBILIZATION (5%)	$309,000
				CONTINGENCY (30%)	$1,852,000
				TOTAL CONSTRUCTION	**$8,340,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$2,085,000
				ESTIMATE TOTAL PROJECT COST	**$10,425,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Upsize Lookout Line
Project Number: NT-S4**
Project Category: Waste Water
CIP Type: Growth

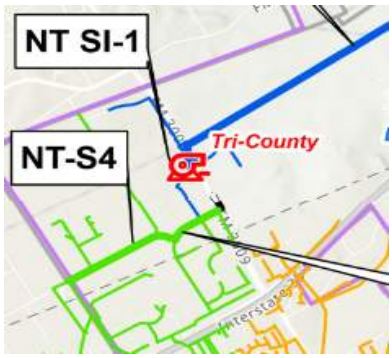
Date: August 2024
Phase: Near Term

Project Description:
Lookout Line (8") upsized to 18-inch gravity line (~ 3,910 LF).

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	18" Gravity Line	LF	3,910	$ 200	$ 782,000
2	Standard Manhole (60" DIA.)	EA	8	$ 17,000	$ 133,000
3	Lateral Lines	LF	3,128	$ 100	$ 313,000
4	Operational Expenses	LS	1	$ 203,000	$ 203,000
5	Surface Replacement	LF	3,910	$ 205	$ 802,000
6	Traffic Control	LS	1	$ 12,000	$ 12,000
7	SWPPP	LS	1	$ 25,000	$ 25,000
				SUBTOTAL	**$ 2,270,000**
				MOBILIZATION (5%)	$114,000
				CONTINGENCY (30%)	$681,000
				TOTAL CONSTRUCTION	**$3,070,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$768,000
				ESTIMATE TOTAL PROJECT COST	**$3,838,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Upsize Tri County Line
Project Number: NT-S5**
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: Near Term

Project Description:
Tri County Line upsized from 8-inch gravity line to 18-inch gravity line (~ 1,760 LF).

Note: Costs provided by City.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	18" Gravity Line	LF	3,910	$ 234	$ 916,000
2	Remaining Costs	LS	1	$ 1,168,800	$ 1,168,800
				ESTIMATE TOTAL PROJECT COST	**$2,084,800**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Cibolo West Main
Project Number: NT-S6
Project Category: Waste Water
CIP Type: Growth

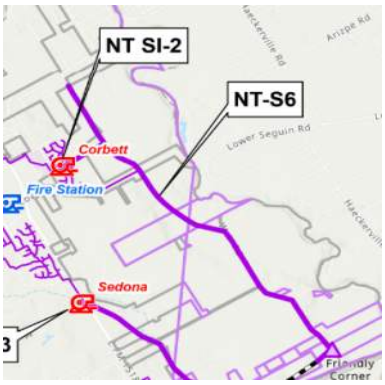
Date: August 2024
Phase: Near Term

Project Description:
Cibolo West Main with approximately 21,680 LF of 18-inch gravity line.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	18" Gravity Line	LF	21,680	$ 200	$ 4,336,000
2	Standard Manhole (60" DIA.)	EA	43	$ 17,000	$ 738,000
3	Surface Replacement	LF	21,680	$ 205	$ 4,445,000
4	Traffic Control	LS	1	$ 62,000	$ 62,000
5	SWPPP	LS	1	$ 25,000	$ 25,000
				SUBTOTAL	**$ 9,606,000**
				MOBILIZATION (5%)	$481,000
				CONTINGENCY (30%)	$2,882,000
				TOTAL CONSTRUCTION	**$12,970,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$3,243,000
				ESTIMATE TOTAL PROJECT COST	**$16,213,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Woman Hollering Creek Lift Station, Gravity Lines, and Force Main
Project Number: NT-S7
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: Near Term

Project Description:
Approximately 1,940 LF of 18-inch gravity line serving Hallie's Cove. Approximately 12,550 LF of 30-inch gravity line, approximately 5,990 LF of 14-inch force main, and WHC lift station. CostS provided by the City.

Justification:
Anticipated growth based on Land Use Plan.

*Only the cost increase between 2011 & 2024 is eligible to be included in the impact fee total.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
			ESTIMATE TOTAL PROJECT COST (2011)		$9,600,000
			ACTUAL CONSTRUCTION COST (2024)		$13,000,000
			ESTIMATE TOTAL ELIGIBLE* PROJECT COST		$3,400,000

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Decommission Tri County Lift Station
Project Number: NT SI-1
Project Category: Waste Water
CIP Type: Lift Station Removal

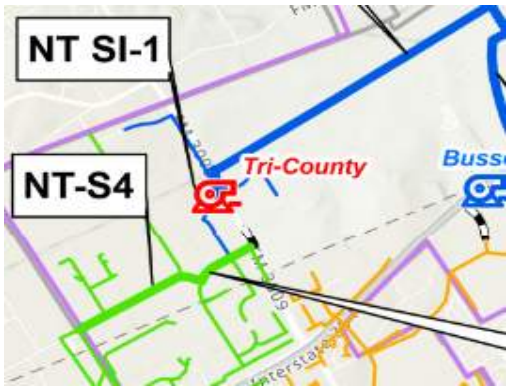
Date: August 2024
Phase: Near Term

Project Description:
Tri County LS to go offline.

Justification:
Per City request.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Decommission Lift Station	LS	1	$ 50,000	$ 50,000
				SUBTOTAL	**$ 50,000**
				MOBILIZATION (5%)	$3,000
				CONTINGENCY (30%)	$15,000
				TOTAL CONSTRUCTION	**$70,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$18,000
				ESTIMATE TOTAL PROJECT COST	**$88,000**

Project Location:



SCHIERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Decommission Corbett Lift Station
Project Number: NT SI-2
Project Category: Waste Water
CIP Type: Lift Station Removal

Date: August 2024
Phase: Near Term

Project Description:
Corbett LS to go offline. Approximately 2,410 LF of 10-inch gravity line installed to connect to existing system.

Justification:
Part of the lift station elimination plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Decommission Lift Station	LS	1	$ 50,000	$ 50,000
2	10" Gravity Line	LF	2,410	$ 105	$ 254,000
3	Standard Manhole (60" DIA.)	EA	5	$ 17,000	$ 85,000
4	Surface Replacement	LF	2,410	$ 193	$ 466,000
5	Traffic Control	LS	1	$ 8,000	$ 8,000
6	SWPPP	LS	1	$ 25,000	$ 25,000
				SUBTOTAL	**$ 888,000**
				MOBILIZATION (5%)	$45,000
				CONTINGENCY (30%)	$267,000
				TOTAL CONSTRUCTION	**$1,200,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$300,000
				ESTIMATE TOTAL PROJECT COST	**$1,500,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Decommission Sedona Lift Station & Woman Hollering Creek WWTP
Project Number: NT SI-3
Project Category: Waste Water
CIP Type: Lift Station & WWTP Removal
Date: August 2024
Phase: Near Term

Project Description:
Sedona LS to go offline and Woman Hollering Creek (WHC) WWTP decommissioned.

Justification:
Part of the lift station elimination plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Decommission Lift Station	LS	1	$ 50,000	$ 50,000
2	Decommission WWTP	LS	1	$ 50,000	$ 50,000
				SUBTOTAL	**$ 100,000**
				MOBILIZATION (5%)	$5,000
				CONTINGENCY (30%)	$30,000
				TOTAL CONSTRUCTION	**$140,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$35,000
				ESTIMATE TOTAL PROJECT COST	**$175,000**

Project Location:



2030
WASTEWATER
CIP PROJECTS

SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Hope Lane 8" Gravity Line
Project Number: 2030-S1
Project Category: Waste Water
CIP Type: Growth

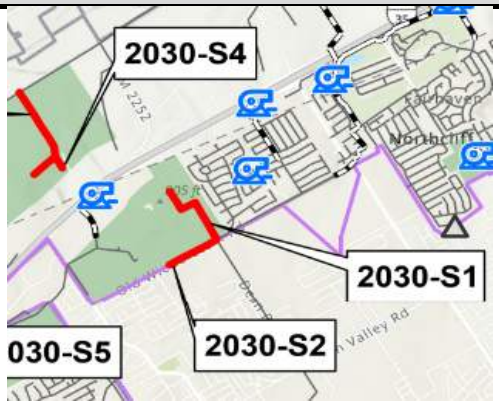
Date: August 2024
Phase: 2030

Project Description:
Approximately 2,950 LF of 8-inch gravity line north of Old Wiederstein Rd and along Hope Ln.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	2,950	$ 107	$ 316,000
2	Standard Manhole (60" DIA.)	EA	6	$ 21,400	$ 129,000
3	Surface Replacement	LF	2,950	$ 239	$ 706,000
4	Traffic Control	LS	1	$ 11,000	$ 11,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$1,194,000**
				MOBILIZATION (5%)	$60,000
				CONTINGENCY (30%)	$359,000
				TOTAL CONSTRUCTION	**$1,620,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$405,000
				ESTIMATE TOTAL PROJECT COST	**$2,025,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Old Wiederstein Road 8"
Project Number: 2030-S2
Project Category: Waste Water
CIP Type: Growth

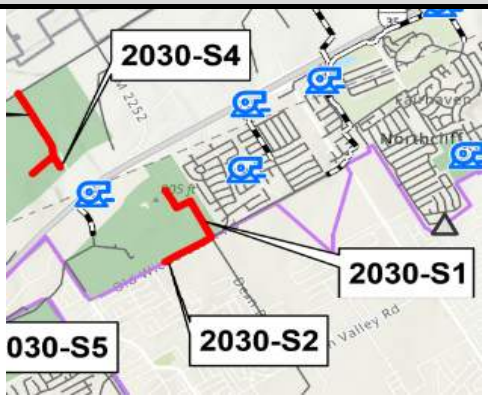
Date: August 2024
Phase: 2030

Project Description:
Approximately 1,900 LF of 8-inch gravity line along Old Wiederstein Rd from Dean Rd to vicinity of Kaylee Chase.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	1,900	$ 107	$ 204,000
2	Standard Manhole (60" DIA.)	EA	4	$ 21,400	$ 86,000
3	Surface Replacement	LF	1,900	$ 239	$ 455,000
4	Traffic Control	LS	1	$ 8,000	$ 8,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$785,000**
				MOBILIZATION (5%)	$40,000
				CONTINGENCY (30%)	$236,000
				TOTAL CONSTRUCTION	**$1,070,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$268,000
				ESTIMATE TOTAL PROJECT COST	**$1,338,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Union Pacific Railroad 8" - Section 1
Project Number: 2030-S3
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Approximately 3,750 LF of 8-inch gravity line south of Union Pacific Rail Road.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	3,750	$ 107	$ 402,000
2	Standard Manhole (60" DIA.)	EA	8	$ 21,400	$ 172,000
3	Surface Replacement	LF	3,750	$ 239	$ 897,000
4	Traffic Control	LS	1	$ 14,000	$ 14,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$1,517,000**
				MOBILIZATION (5%)	$76,000
				CONTINGENCY (30%)	$456,000
				TOTAL CONSTRUCTION	**$2,050,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$513,000
				ESTIMATE TOTAL PROJECT COST	**$2,563,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Union Pacific Railroad 8" - Section 2
Project Number: 2030-S4
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Approximately 500 LF of 8-inch gravity line south of Union Pacific Rail Road.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	500	$ 107	$ 54,000
2	Standard Manhole (60" DIA.)	EA	1	$ 21,400	$ 22,000
3	Surface Replacement	LF	500	$ 239	$ 120,000
4	Traffic Control	LS	1	$ 8,000	$ 8,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$236,000**
				MOBILIZATION (5%)	$12,000
				CONTINGENCY (30%)	$71,000
				TOTAL CONSTRUCTION	**$320,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$80,000
				ESTIMATE TOTAL PROJECT COST	**$400,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Wiederstein Road 8"
Project Number: 2030-S5
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Approximately 2,400 LF of 8-inch gravity line along Wiederstein Rd between Jupe and Quail Ln.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	2,400	$ 107	$ 257,000
2	Standard Manhole (60" DIA.)	EA	5	$ 21,400	$ 107,000
3	Surface Replacement	LF	2,400	$ 239	$ 574,000
4	Traffic Control	LS	1	$ 9,000	$ 9,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$979,000**
				MOBILIZATION (5%)	$49,000
				CONTINGENCY (30%)	$294,000
				TOTAL CONSTRUCTION	**$1,330,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$333,000
				ESTIMATE TOTAL PROJECT COST	**$1,663,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Schaefer Road 8" - Section 1
Project Number: 2030-S6
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Approximately 7,300 LF of 8-inch gravity line, along Schaefer Rd , Lisa Meadows and Voges pass.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	7,300	$ 107	$ 782,000
2	Standard Manhole (60" DIA.)	EA	15	$ 21,400	$ 321,000
3	Surface Replacement	LF	7,300	$ 239	$ 1,746,000
4	Traffic Control	LS	1	$ 27,000	$ 27,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$2,908,000**
				MOBILIZATION (5%)	$146,000
				CONTINGENCY (30%)	$873,000
				TOTAL CONSTRUCTION	**$3,930,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$983,000
				ESTIMATE TOTAL PROJECT COST	**$4,913,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Schaefer Road 8" - Section 2
Project Number: 2030-S7
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: 2030

Project Description:
Approximately 2,800 LF of 8-inch gravity line along Schaefer Rd west of FM 1518.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	2,800	$ 107	$ 300,000
2	Standard Manhole (60" DIA.)	EA	6	$ 21,400	$ 129,000
3	Surface Replacement	LF	2,800	$ 239	$ 670,000
4	Traffic Control	LS	1	$ 11,000	$ 11,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$1,142,000**
				MOBILIZATION (5%)	$58,000
				CONTINGENCY (30%)	$343,000
				TOTAL CONSTRUCTION	**$1,550,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$388,000
				ESTIMATE TOTAL PROJECT COST	**$1,938,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Aranda 8"
Project Number: 2030-S8
Project Category: Waste Water
CIP Type: Growth

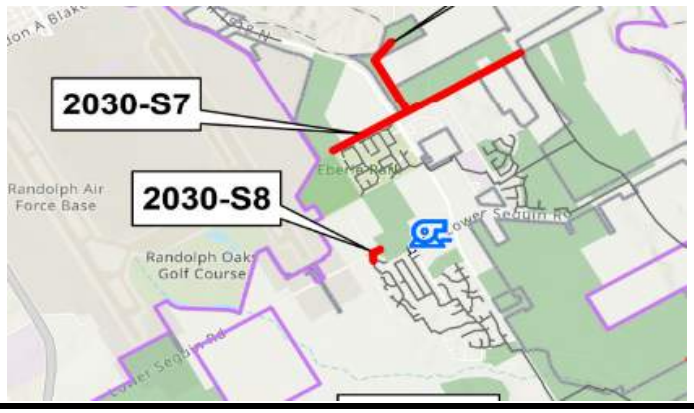
Date: August 2024
Phase: 2030

Project Description:
Approximately 550 LF of 8-inch gravity line along Aranda, north of Chalk Stem.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	550	$ 107	$ 59,000
2	Standard Manhole (60" DIA.)	EA	2	$ 21,400	$ 43,000
3	Surface Replacement	LF	550	$ 239	$ 132,000
4	Traffic Control	LS	1	$ 8,000	$ 8,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$274,000**
				MOBILIZATION (5%)	$14,000
				CONTINGENCY (30%)	$83,000
				TOTAL CONSTRUCTION	**$380,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$95,000
				ESTIMATE TOTAL PROJECT COST	**$475,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Weir Road 10"
Project Number: 2030-S9
Project Category: Waste Water
CIP Type: Growth

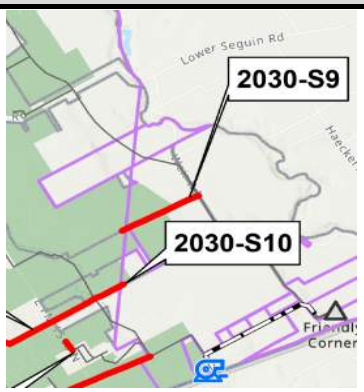
Date: August 2024
Phase: 2030

Project Description:
Approximately 3,500 LF of 10-inch gravity line west of Weir Rd and north of Trainer Hale Rd.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	10" Gravity Line	LF	3,500	$ 132	$ 463,000
2	Standard Manhole (60" DIA.)	EA	7	$ 21,400	$ 150,000
3	Surface Replacement	LF	3,500	$ 239	$ 838,000
4	Traffic Control	LS	1	$ 13,000	$ 13,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$1,496,000**
				MOBILIZATION (5%)	$75,000
				CONTINGENCY (30%)	$449,000
				TOTAL CONSTRUCTION	**$2,020,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$505,000
				ESTIMATE TOTAL PROJECT COST	**$2,525,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Trainer Hale Road 10"
Project Number: 2030-S10
Project Category: Waste Water
CIP Type: Growth

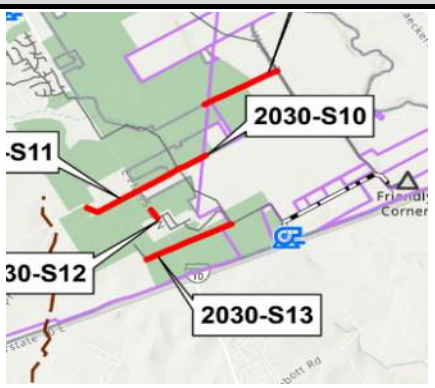
Date: August 2024
Phase: 2030

Project Description:
Approximately 1,350 LF of 10-inch gravity line along Trainer Hale Rd, east of E FM 1518 N.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	10" Gravity Line	LF	1,350	$ 132	$ 179,000
2	Standard Manhole (60" DIA.)	EA	3	$ 21,400	$ 65,000
3	Surface Replacement	LF	1,350	$ 239	$ 323,000
4	Traffic Control	LS	1	$ 8,000	$ 8,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$607,000**
				MOBILIZATION (5%)	$31,000
				CONTINGENCY (30%)	$183,000
				TOTAL CONSTRUCTION	**$830,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$208,000
				ESTIMATE TOTAL PROJECT COST	**$1,038,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Ware Seguin Road 8"
Project Number: 2030-S11
Project Category: Waste Water
CIP Type: Growth

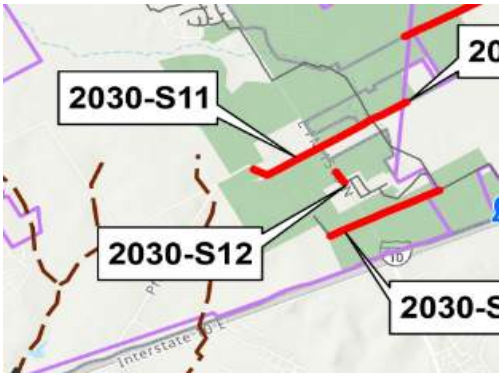
Date: August 2024
Phase: 2030

Project Description:
Approximately 4,550 LF of 8-inch gravity line along Ware Seguin Rd west of FM 1518.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	4,550	$ 107	$ 487,000
2	Standard Manhole (60" DIA.)	EA	10	$ 21,400	$ 214,000
3	Surface Replacement	LF	4,550	$ 239	$ 1,089,000
4	Traffic Control	LS	1	$ 17,000	$ 17,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$1,839,000**
				MOBILIZATION (5%)	$92,000
				CONTINGENCY (30%)	$552,000
				TOTAL CONSTRUCTION	**$2,490,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$623,000
				ESTIMATE TOTAL PROJECT COST	**$3,113,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: FM 1518 8"
Project Number: 2030-S12
Project Category: Waste Water
CIP Type: Growth

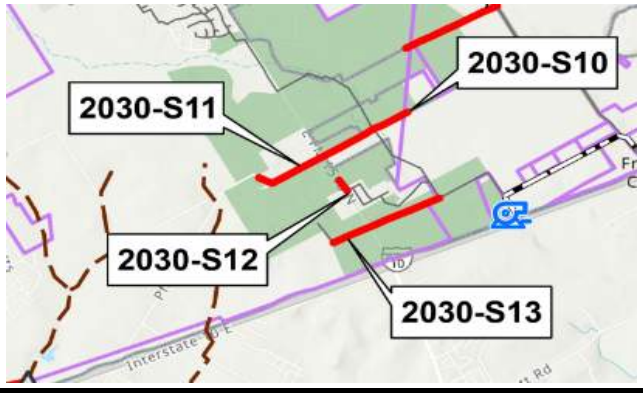
Date: August 2024
Phase: 2030

Project Description:
Approximately 500 LF of 8-inch gravity line along E FM 1518 N.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	500	$ 107	$ 54,000
2	Standard Manhole (60" DIA.)	EA	1	$ 21,400	$ 22,000
3	Surface Replacement	LF	500	$ 239	$ 120,000
4	Traffic Control	LS	1	$ 8,000	$ 8,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$236,000**
				MOBILIZATION (5%)	$12,000
				CONTINGENCY (30%)	$71,000
				TOTAL CONSTRUCTION	**$320,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$80,000
				ESTIMATE TOTAL PROJECT COST	**$400,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: I-10 8" - Section 1
Project Number: 2030-S13
Project Category: Waste Water
CIP Type: Growth

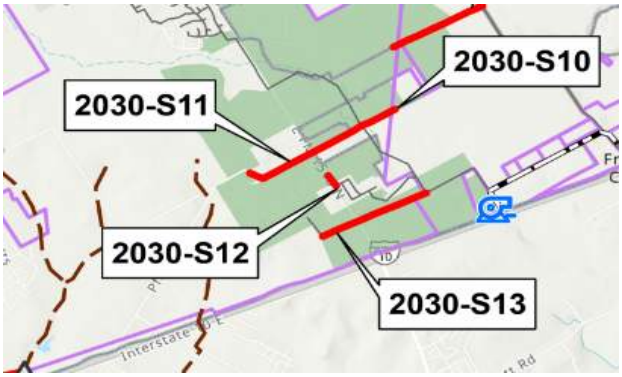
Date: August 2024
Phase: 2030

Project Description:
Approximately 4,000 LF of 8-inch gravity line north of I-10 E.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	4,000	$ 107	$ 428,000
2	Standard Manhole (60" DIA.)	EA	8	$ 21,400	$ 172,000
3	Surface Replacement	LF	4,000	$ 239	$ 957,000
4	Traffic Control	LS	1	$ 15,000	$ 15,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$1,604,000**
				MOBILIZATION (5%)	$81,000
				CONTINGENCY (30%)	$482,000
				TOTAL CONSTRUCTION	**$2,170,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$543,000
				ESTIMATE TOTAL PROJECT COST	**$2,713,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Boenig Drive 8"
Project Number: 2030-S14
Project Category: Waste Water
CIP Type: Growth

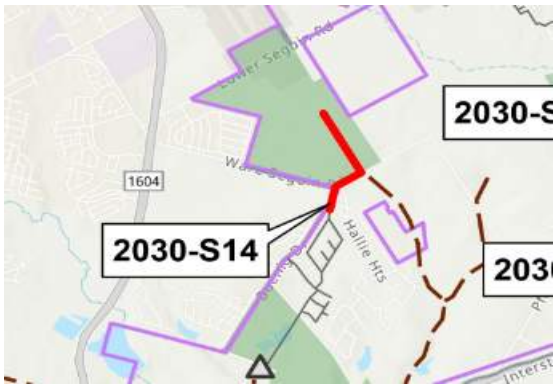
Date: August 2024
Phase: 2030

Project Description:
Approximately 4,350 LF of 8-inch gravity line along Boenig Dr and Ware Seguin Rd going north.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	4,350	$ 107	$ 466,000
2	Standard Manhole (60" DIA.)	EA	9	$ 21,400	$ 193,000
3	Surface Replacement	LF	4,350	$ 239	$ 1,041,000
4	Traffic Control	LS	1	$ 16,000	$ 16,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$1,748,000**
				MOBILIZATION (5%)	$88,000
				CONTINGENCY (30%)	$525,000
				TOTAL CONSTRUCTION	**$2,370,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$593,000
				ESTIMATE TOTAL PROJECT COST	**$2,963,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: N Greytown Road 8"
Project Number: 2030-S15
Project Category: Waste Water
CIP Type: Growth

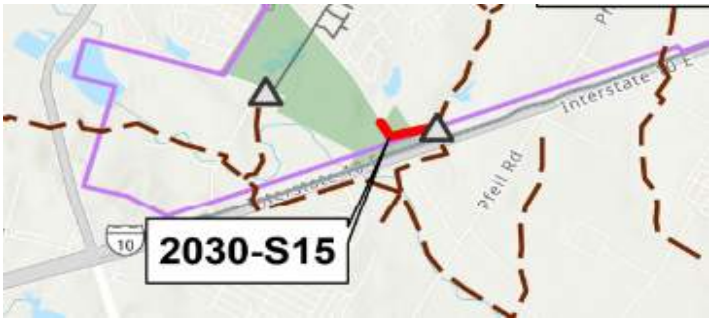
Date: August 2024
Phase: 2030

Project Description:
Approximately 1,800 LF of 8-inch gravity line north of I-10 E and along N Greytown Rd.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	1,800	$ 107	$ 193,000
2	Standard Manhole (60" DIA.)	EA	4	$ 21,400	$ 86,000
3	Surface Replacement	LF	1,800	$ 239	$ 431,000
4	Traffic Control	LS	1	$ 8,000	$ 8,000
5	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$750,000**
				MOBILIZATION (5%)	$38,000
				CONTINGENCY (30%)	$225,000
				TOTAL CONSTRUCTION	**$1,020,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$255,000
				ESTIMATE TOTAL PROJECT COST	**$1,275,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Friesenhahn West Line WW Upsize
Project Number: 2030 SI-1**
Project Category: Waste Water
CIP Type: System Improvement

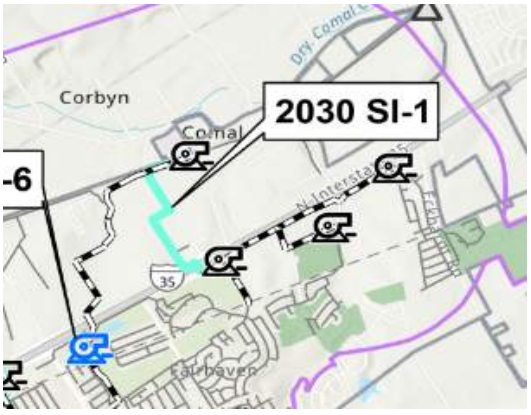
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 8-inch with 18-inch gravity line (~4,900 LF), parallel to Friesenhahn Ln and an existing 12-inch with 18-inch gravity line (~1,600 LF) immediately upstream of the Friesenhahn LS.

Justification:
To resolve 4 SSOs upstream of Friesenhahn LS.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	18" Gravity Line	LF	6,500	$ 252	$ 1,637,000
2	Standard Manhole (60" DIA.)	EA	13	$ 21,400	$ 279,000
3	Lateral Lines	LF	5,200	$ 126	$ 655,000
4	Operational Expenses	LS	1	$ 535,000	$ 535,000
5	Surface Replacement	LF	6,500	$ 258	$ 1,678,000
6	Traffic Control	LS	1	$ 24,000	$ 24,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 4,840,000**
				MOBILIZATION (5%)	$242,000
				CONTINGENCY (30%)	$1,452,000
				TOTAL CONSTRUCTION	**$6,540,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,635,000
				ESTIMATE TOTAL PROJECT COST	**$8,175,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Fairlawn WW Upsize
Project Number: 2030 SI-2**
Project Category: Waste Water
CIP Type: System Improvement

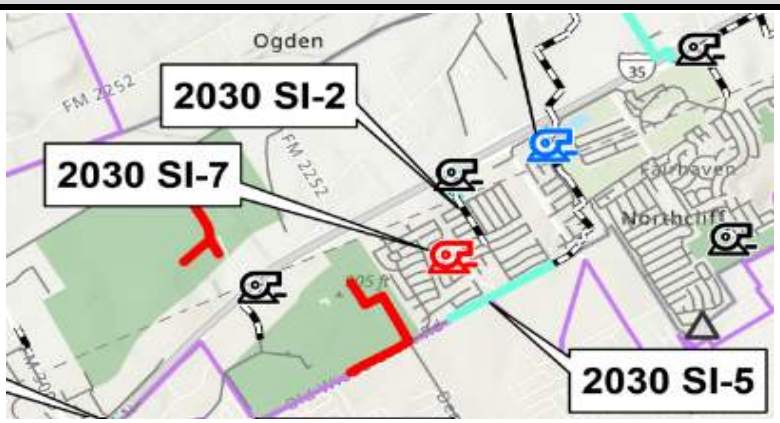
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 8-inch with 10-inch gravity line (~1,320 LF) along Fairlawn Ave from Ashwood Rd to Riata LS.

Justification:
To resolve an SSO upstream of Riata LS.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	10" Gravity Line	LF	1,320	$ 132	$ 175,000
2	Standard Manhole (60" DIA.)	EA	3	$ 21,400	$ 57,000
3	Lateral Lines	LF	1,056	$ 126	$ 133,000
4	Operational Expenses	LS	1	$ 87,000	$ 87,000
5	Surface Replacement	LF	1,320	$ 243	$ 321,000
6	Traffic Control	LS	1	$ 8,000	$ 8,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 813,000**
				MOBILIZATION (5%)	$41,000
				CONTINGENCY (30%)	$244,000
				TOTAL CONSTRUCTION	**$1,100,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$275,000
				ESTIMATE TOTAL PROJECT COST	**$1,375,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Cibolo Crossing WW Line Upsize
Project Number: 2030 SI-3**
Project Category: Waste Water
CIP Type: System Improvement

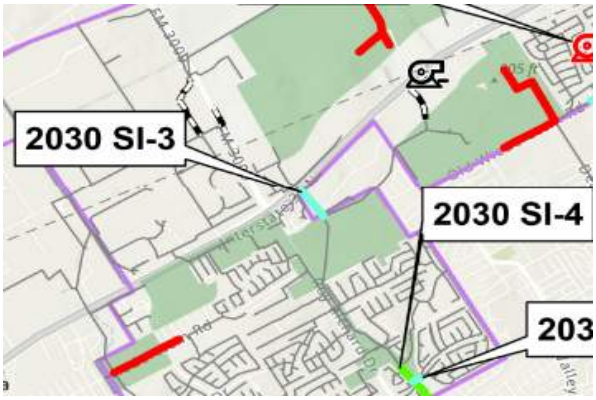
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 10-inch with 12-inch gravity line (~1,150 LF), south of I-35 N and east of Hampton Inn & Suites of Schertz.

Justification:
To resolve an SSO near I 35 N.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Gravity Line	LF	1,150	$ 164	$ 189,000
2	Standard Manhole (60" DIA.)	EA	2	$ 21,400	$ 50,000
3	Lateral Lines	LF	920	$ 126	$ 116,000
4	Operational Expenses	LS	1	$ 81,000	$ 81,000
5	Surface Replacement	LF	1,150	$ 247	$ 284,000
6	Traffic Control	LS	1	$ 8,000	$ 8,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 760,000**
				MOBILIZATION (5%)	$38,000
				CONTINGENCY (30%)	$228,000
				TOTAL CONSTRUCTION	**$1,030,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$258,000
				ESTIMATE TOTAL PROJECT COST	**$1,288,000**

Project Location:



SCHIERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Woodland Oak Drive Replacements
Project Number: 2030 SI-4**
Project Category: Waste Water
CIP Type: System Improvement

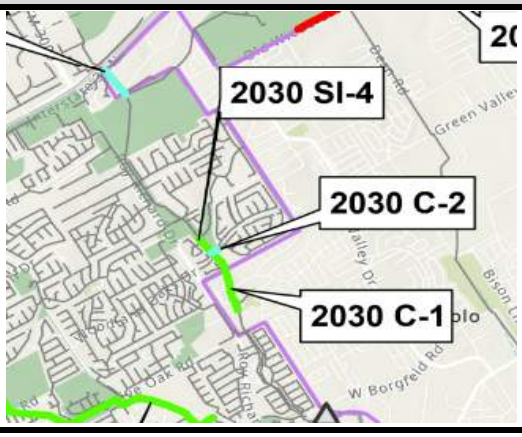
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 8-inch with 12-inch gravity line (~250 LF), near Woodland Oak Dr.

Justification:
To resolve an SSO near Woodland Oak Dr.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	12" Gravity Line	LF	250	$ 164	$ 41,000
2	Standard Manhole (60" DIA.)	EA	1	$ 21,400	$ 11,000
3	Lateral Lines	LF	200	$ 126	$ 26,000
4	Operational Expenses	LS	1	$ 18,000	$ 18,000
5	Surface Replacement	LF	250	$ 247	$ 62,000
6	Traffic Control	LS	1	$ 8,000	$ 8,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 198,000**
				MOBILIZATION (5%)	$10,000
				CONTINGENCY (30%)	$60,000
				TOTAL CONSTRUCTION	**$270,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$68,000
				ESTIMATE TOTAL PROJECT COST	**$338,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Old Wiederstein WW Upsize
Project Number: 2030 SI-5**
Project Category: Waste Water
CIP Type: System Improvement

Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 18-inch with 21-inch gravity line (~3,330 LF), along Old Wiederstein Rd.

Justification:
To increase line capacity.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	21" Gravity Line	LF	3,330	$ 378	$ 1,258,000
2	Standard Manhole (60" DIA.)	EA	7	$ 21,400	$ 143,000
3	Lateral Lines	LF	2,664	$ 126	$ 336,000
4	Operational Expenses	LS	1	$ 330,000	$ 330,000
5	Surface Replacement	LF	3,330	$ 263	$ 877,000
6	Traffic Control	LS	1	$ 12,000	$ 12,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 2,988,000**
				MOBILIZATION (5%)	$150,000
				CONTINGENCY (30%)	$897,000
				TOTAL CONSTRUCTION	**$4,040,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,010,000
				ESTIMATE TOTAL PROJECT COST	**$5,050,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Northcliffe Lift Station Upgrade
Project Number: 2030 SI-6**
Project Category: Waste Water
CIP Type: System Improvement

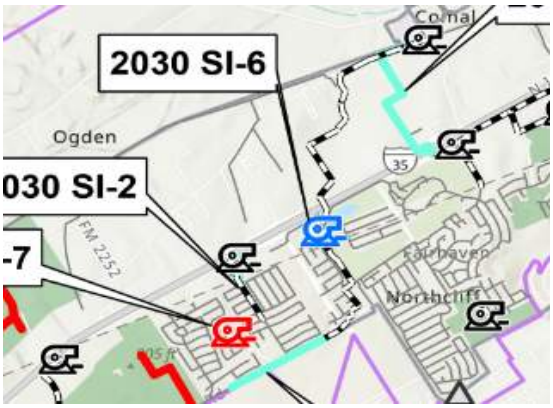
Date: August 2024
Phase: 2030

Project Description:
Northcliffe LS upgrade to firm capacity of 4,500 gpm.

Justification:
To follow TCEQ requirement of peak flow not to exceed firm capacity. This upgrade is based on buildout flow of 4,485 gpm.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Upgrade Lift Station (2,750 gpm)	LS	1	$ 4,637,000	$ 4,637,000
				SUBTOTAL	**$4,637,000**
				MOBILIZATION (5%)	$232,000
				CONTINGENCY (30%)	$1,392,000
				TOTAL CONSTRUCTION	**$6,270,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,568,000
				ESTIMATE TOTAL PROJECT COST	**$7,838,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Decommission Belmont Park Lift Station
Project Number: 2030 SI-7
Project Category: Waste Water
CIP Type: Lift Station Removal

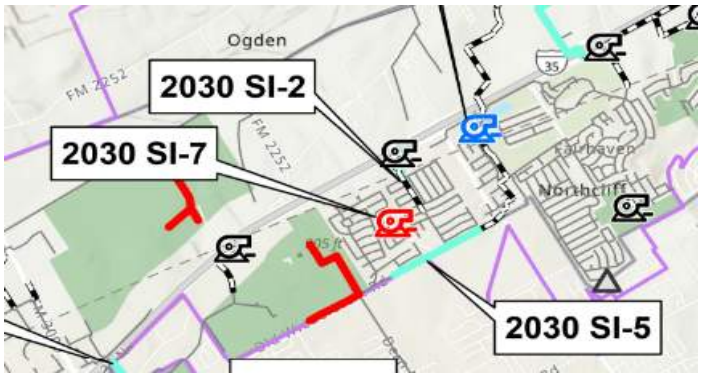
Date: August 2024
Phase: 2030

Project Description:
Belmont Park LS to go offline; install approximately 420 LF of 8-inch gravity line to connect to the line along Livingston Dr.

Justification:
Per City request.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Decommission Lift Station	LS	1	$ 63,000	$ 63,000
2	8" Gravity Line	LF	420	$ 107	$ 45,000
3	Standard Manhole (60" DIA.)	EA	1	$ 21,400	$ 22,000
4	Surface Replacement	LF	420	$ 239	$ 101,000
5	Traffic Control	LS	1	$ 8,000	$ 8,000
6	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 271,000**
				MOBILIZATION (5%)	$14,000
				CONTINGENCY (30%)	$82,000
				TOTAL CONSTRUCTION	**$370,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$93,000
				ESTIMATE TOTAL PROJECT COST	**$463,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Roy Richard Drive Replacements
Project Number: 2030 C-1
Project Category: Waste Water
CIP Type: CCMA System Capacity

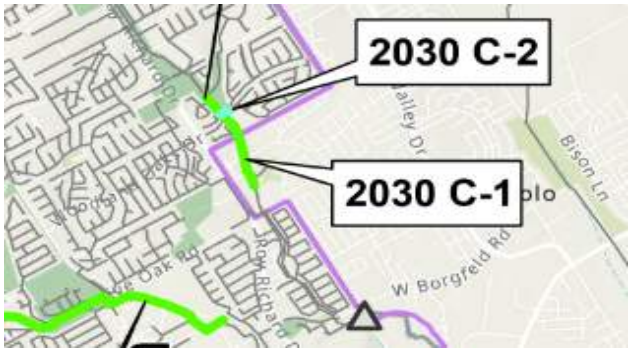
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 15-inch with 18-inch gravity line (~1,220 LF), east of Roy Richard Dr and south of Woodland Oaks Dr.

Justification:
To resolve 2 SSOs near Woodland Oak Dr and Valencia Ln.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	18" Gravity Line	LF	1,220	$ 252	$ 308,000
2	Standard Manhole (60" DIA.)	EA	2	$ 21,400	$ 53,000
3	Lateral Lines	LF	976	$ 126	$ 123,000
4	Operational Expenses	LS	1	$ 101,000	$ 101,000
5	Surface Replacement	LF	1,220	$ 258	$ 315,000
6	Traffic Control	LS	1	$ 8,000	$ 8,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 940,000**
				MOBILIZATION (5%)	$47,000
				CONTINGENCY (30%)	$282,000
				TOTAL CONSTRUCTION	**$1,270,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$318,000
				ESTIMATE TOTAL PROJECT COST	**$1,588,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Valencia Lane Replacements
Project Number: 2030 C-2
Project Category: Waste Water
CIP Type: CCMA System Capacity

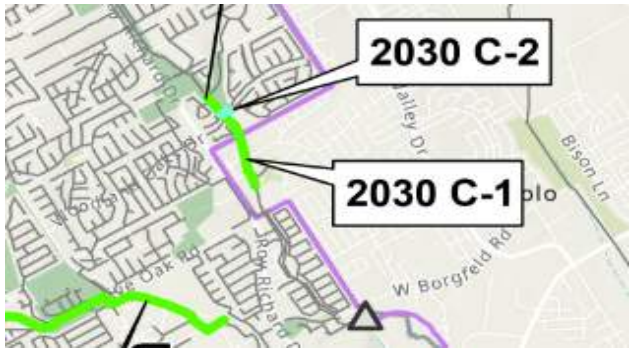
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 10-inch with 18-inch gravity line (~1,780 LF), north of Woodland Oaks Dr and east of Valencia Ln.

Justification:
To resolve 2 SSOs near Woodland Oak Dr and Valencia Ln.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	18" Gravity Line	LF	1,780	$ 252	$ 449,000
2	Standard Manhole (60" DIA.)	EA	4	$ 21,400	$ 77,000
3	Lateral Lines	LF	1,424	$ 126	$ 180,000
4	Operational Expenses	LS	1	$ 147,000	$ 147,000
5	Surface Replacement	LF	1,780	$ 258	$ 460,000
6	Traffic Control	LS	1	$ 8,000	$ 8,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 1,353,000**
				MOBILIZATION (5%)	$68,000
				CONTINGENCY (30%)	$406,000
				TOTAL CONSTRUCTION	**$1,830,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$458,000
				ESTIMATE TOTAL PROJECT COST	**$2,288,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Savannah Drive Replacements
Project Number: 2030 C-3
Project Category: Waste Water
CIP Type: CCMA System Capacity

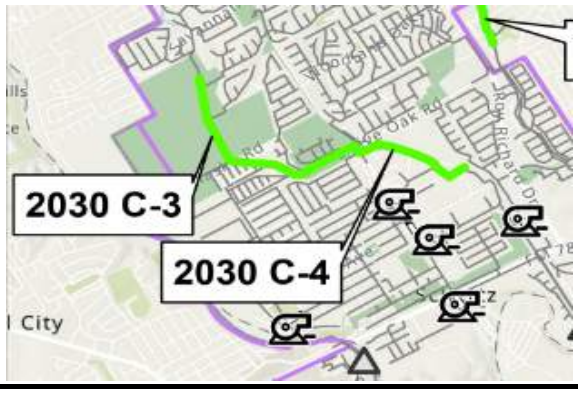
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 30-inch with 36-inch gravity line (~5,230 LF), south of Savannah Dr and north of Live Oak Rd.

Justification:
To resolve an SSO near Maske Rd.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	36" Gravity Line	LF	5,230	$ 806	$ 4,214,000
2	Standard Manhole (60" DIA.)	EA	10	$ 21,400	$ 224,000
3	Lateral Lines	LF	4,184	$ 126	$ 527,000
4	Operational Expenses	LS	1	$ 818,000	$ 818,000
5	Surface Replacement	LF	5,230	$ 292	$ 1,528,000
6	Traffic Control	LS	1	$ 19,000	$ 19,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 7,362,000**
				MOBILIZATION (5%)	$369,000
				CONTINGENCY (30%)	$2,209,000
				TOTAL CONSTRUCTION	**$9,940,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$2,485,000
				ESTIMATE TOTAL PROJECT COST	**$12,425,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Build Out Project 25 - 36" Schertz Line
Project Number: 2030 C-4
Project Category: Waste Water
CIP Type: CCMA System Capacity

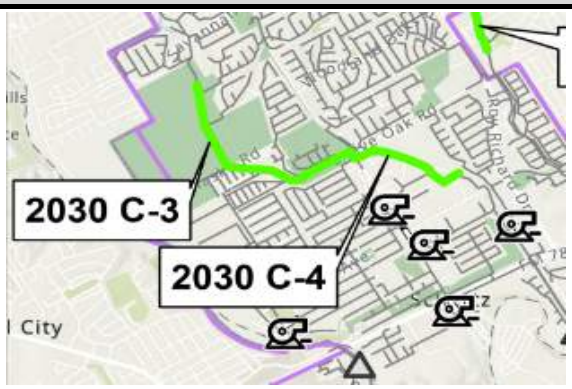
Date: August 2024
Phase: 2030

Project Description:
Replacing an existing 30-inch with 36-inch gravity line (~5,450 LF), near Community Cir, from Buffalo Dr to Live Oak Rd.

Justification:
To resolve 2 SSOs near Maske Rd.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	36" Gravity Line	LF	5,450	$ 806	$ 4,391,000
2	Standard Manhole (60" DIA.)	EA	11	$ 21,400	$ 234,000
3	Lateral Lines	LF	4,360	$ 126	$ 549,000
4	Operational Expenses	LS	1	$ 852,000	$ 852,000
5	Surface Replacement	LF	5,450	$ 292	$ 1,592,000
6	Traffic Control	LS	1	$ 20,000	$ 20,000
7	SWPPP	LS	1	$ 32,000	$ 32,000
				SUBTOTAL	**$ 7,670,000**
				MOBILIZATION (5%)	$384,000
				CONTINGENCY (30%)	$2,301,000
				TOTAL CONSTRUCTION	**$10,360,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$2,590,000
				ESTIMATE TOTAL PROJECT COST	**$12,950,000**

Project Location:



2050
WASTEWATER
CIP PROJECTS

SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: I-35 N 8"
Project Number: 2050-S1
Project Category: Waste Water
CIP Type: Growth

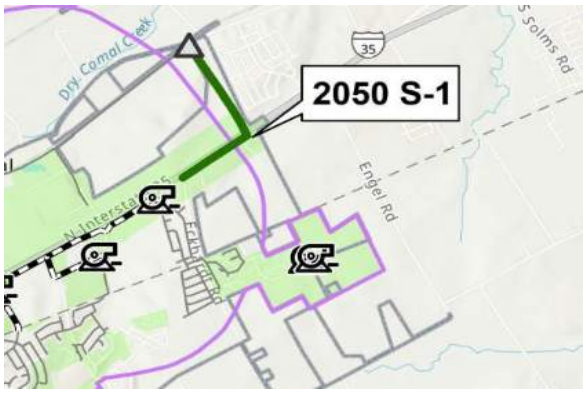
Date: August 2024
Phase: 2050

Project Description:
Approximately 6,250 LF of 8-inch gravity line north of and along I-35 N.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	6,250	$ 230	$ 1,441,000
2	Standard Manhole (60" DIA.)	EA	13	$ 46,100	$ 600,000
3	Surface Replacement	LF	6,250	$ 515	$ 3,220,000
4	Traffic Control	LS	1	$ 49,000	$ 49,000
5	SWPPP	LS	1	$ 68,000	$ 68,000
				SUBTOTAL	**$ 5,378,000**
				MOBILIZATION (5%)	$269,000
				CONTINGENCY (30%)	$1,614,000
				TOTAL CONSTRUCTION	**$7,270,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,818,000
				ESTIMATE TOTAL PROJECT COST	**$9,088,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Friesenhahn Lane 8"
Project Number: 2050-S2
Project Category: Waste Water
CIP Type: Growth

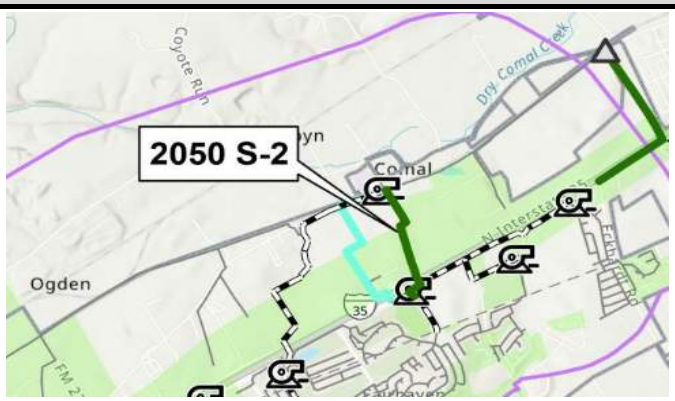
Date: August 2024
Phase: 2050

Project Description:
Approximately 4,460 LF of 8-inch gravity line, along Friesenhahn Ln.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	4,460	$ 230	$ 1,028,000
2	Standard Manhole (60" DIA.)	EA	9	$ 46,100	$ 415,000
3	Surface Replacement	LF	4,460	$ 515	$ 2,298,000
4	Traffic Control	LS	1	$ 35,000	$ 35,000
5	SWPPP	LS	1	$ 68,000	$ 68,000
				SUBTOTAL	**$ 3,844,000**
				MOBILIZATION (5%)	$193,000
				CONTINGENCY (30%)	$1,154,000
				TOTAL CONSTRUCTION	**$5,200,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,300,000
				ESTIMATE TOTAL PROJECT COST	**$6,500,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Schaefer Road 8" - Section 3
Project Number: 2050-S3
Project Category: Waste Water
CIP Type: Growth

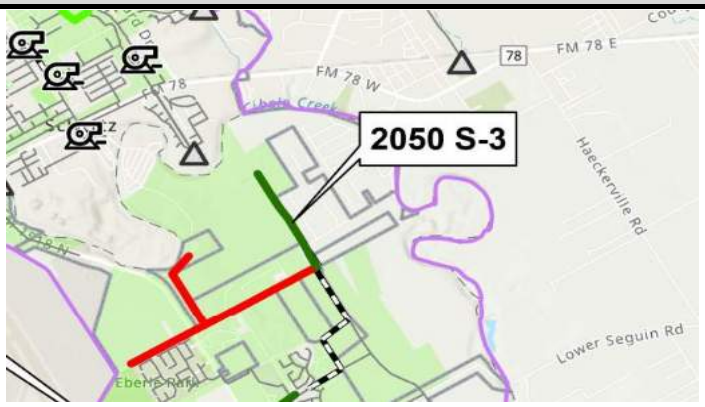
Date: August 2024
Phase: 2050

Project Description:
Approximately 3,910 LF of 8-inch gravity line from Schaefer Rd north parallel to Authority Ln.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	3,910	$ 230	$ 901,000
2	Standard Manhole (60" DIA.)	EA	8	$ 46,100	$ 369,000
3	Surface Replacement	LF	3,910	$ 515	$ 2,014,000
4	Traffic Control	LS	1	$ 31,000	$ 31,000
5	SWPPP	LS	1	$ 68,000	$ 68,000
				SUBTOTAL	**$ 3,383,000**
				MOBILIZATION (5%)	$170,000
				CONTINGENCY (30%)	$1,015,000
				TOTAL CONSTRUCTION	**$4,570,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$1,143,000
				ESTIMATE TOTAL PROJECT COST	**$5,713,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Corbett JH 8"
Project Number: 2050-S4
Project Category: Waste Water
CIP Type: Growth

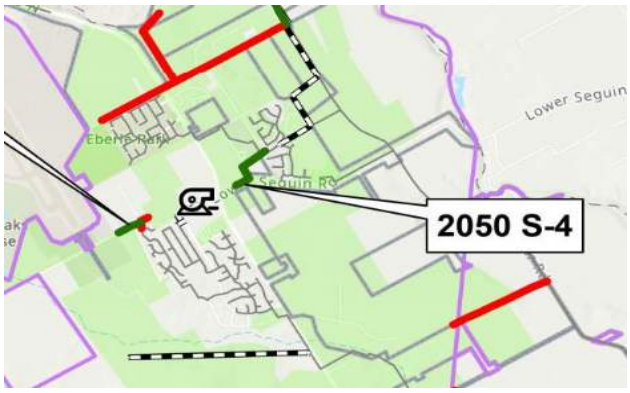
Date: August 2024
Phase: 2050

Project Description:
Approximately 1,930 LF of 8-inch gravity line, south of Corbett Junior High School and north of Lower Seguin Rd.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	1,930	$ 230	$ 445,000
2	Standard Manhole (60" DIA.)	EA	4	$ 46,100	$ 185,000
3	Surface Replacement	LF	1,930	$ 515	$ 995,000
4	Traffic Control	LS	1	$ 15,000	$ 15,000
5	SWPPP	LS	1	$ 68,000	$ 68,000
				SUBTOTAL	**$ 1,708,000**
				MOBILIZATION (5%)	$86,000
				CONTINGENCY (30%)	$513,000
				TOTAL CONSTRUCTION	**$2,310,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$578,000
				ESTIMATE TOTAL PROJECT COST	**$2,888,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Lower Seguin Road 8"
Project Number: 2050-S5
Project Category: Waste Water
CIP Type: Growth

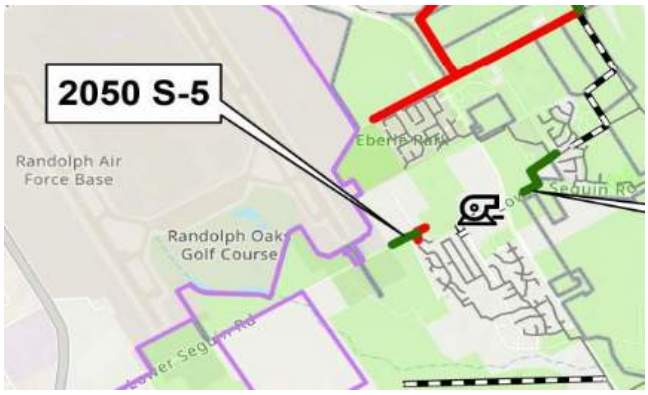
Date: August 2024
Phase: 2050

Project Description:
Approximately 830 LF of 8-inch gravity line along Lower Seguin Rd.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	830	$ 230	$ 192,000
2	Standard Manhole (60" DIA.)	EA	2	$ 46,100	$ 93,000
3	Surface Replacement	LF	830	$ 515	$ 428,000
4	Traffic Control	LS	1	$ 8,000	$ 8,000
5	SWPPP	LS	1	$ 68,000	$ 68,000
				SUBTOTAL	**$ 789,000**
				MOBILIZATION (5%)	$40,000
				CONTINGENCY (30%)	$237,000
				TOTAL CONSTRUCTION	**$1,070,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$268,000
				ESTIMATE TOTAL PROJECT COST	**$1,338,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: I-10 8" - Section 2
Project Number: 2050-S6
Project Category: Waste Water
CIP Type: Growth

Date: August 2024
Phase: 2050

Project Description:
Approximately 2,220 LF of 8-inch gravity line north of and parallel to IH-10.

Justification:
Anticipated growth based on Land Use Plan.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	8" Gravity Line	LF	2,220	$ 230	$ 512,000
2	Standard Manhole (60" DIA.)	EA	5	$ 46,100	$ 231,000
3	Surface Replacement	LF	2,220	$ 515	$ 1,144,000
4	Traffic Control	LS	1	$ 18,000	$ 18,000
5	SWPPP	LS	1	$ 68,000	$ 68,000
				SUBTOTAL	**$ 1,973,000**
				MOBILIZATION (5%)	$99,000
				CONTINGENCY (30%)	$592,000
				TOTAL CONSTRUCTION	**$2,670,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$668,000
				ESTIMATE TOTAL PROJECT COST	**$3,338,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Cypress Point Lift Station Upgrade
Project Number: 2050 SI-1
Project Category: Waste Water
CIP Type: System Improvement

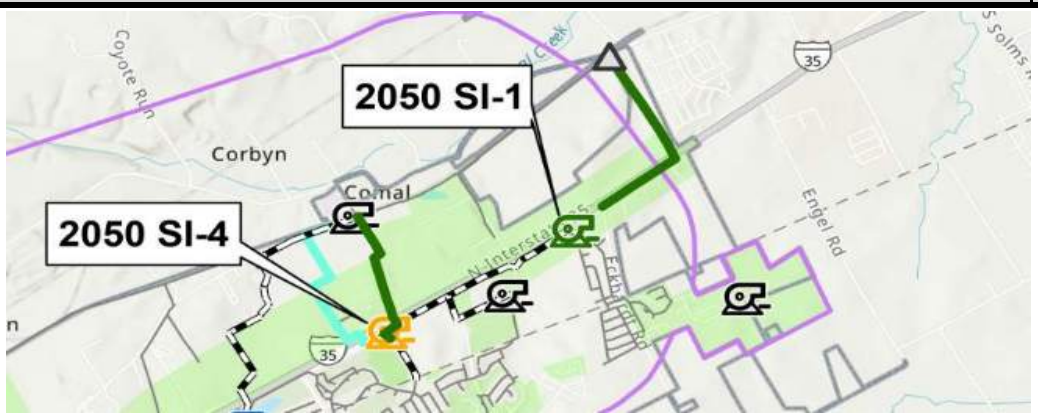
Date: August 2024
Phase: 2050

Project Description:
Cypress Point LS upgrade to firm capacity of 1,250 gpm.

Justification:
To follow TCEQ requirement of Peak flow not to exceed firm capacity. This upgrade is based on buildout flow of 1,233 gpm.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Upgrade Lift Station (~250 gpm)	LS	1	$ 865,000	$ 865,000
				SUBTOTAL	**$ 865,000**
				MOBILIZATION (5%)	$44,000
				CONTINGENCY (30%)	$260,000
				TOTAL CONSTRUCTION	**$1,170,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$293,000
				ESTIMATE TOTAL PROJECT COST	**$1,463,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Decommission Schertz Parkway Lift Station
Project Number: 2050 SI-2
Project Category: Waste Water
CIP Type: Lift Station Removal

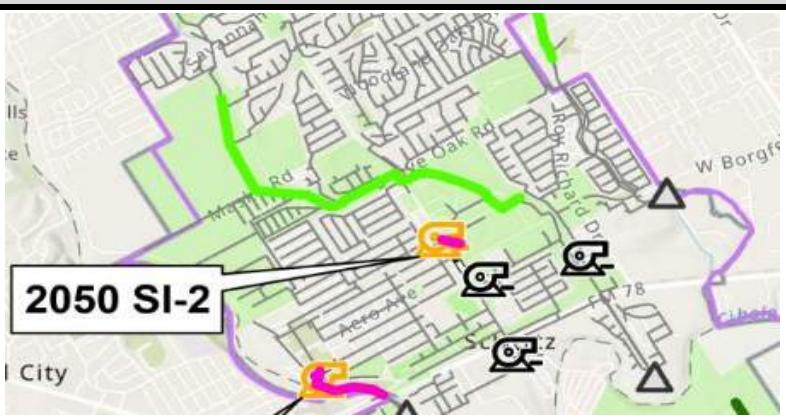
Date: August 2024
Phase: 2050

Project Description:
Schertz Pkwy LS to go offline.

Justification:
To convey flow to a new CCMA's line which will be built by 2050.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Decommission Lift Station	LS	1	$ 136,000	$ 136,000
				SUBTOTAL	**$ 136,000**
				MOBILIZATION (5%)	$7,000
				CONTINGENCY (30%)	$41,000
				TOTAL CONSTRUCTION	**$190,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$48,000
				ESTIMATE TOTAL PROJECT COST	**$238,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Decommission Park Lift Station
Project Number: 2050 SI-3
Project Category: Waste Water
CIP Type: Lift Station Removal

Date: August 2024
Phase: 2050

Project Description:
Park LS to go offline; install approximately 2,300 LF of 8-inch gravity line to connect to the line along E Aviation Blvd.

Justification:
Per City request.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Decommission Lift Station	LS	1	$ 136,000	$ 136,000
2	8" Gravity Line	LF	2,300	$ 230	$ 530,000
3	Standard Manhole (60" DIA.)	EA	5	$ 46,100	$ 231,000
4	Surface Replacement	LF	2,300	$ 515	$ 1,185,000
5	Traffic Control	LS	1	$ 18,000	$ 18,000
6	SWPPP	LS	1	$ 68,000	$ 68,000
				SUBTOTAL	**$ 2,168,000**
				MOBILIZATION (5%)	$109,000
				CONTINGENCY (30%)	$651,000
				TOTAL CONSTRUCTION	**$2,930,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$733,000
				ESTIMATE TOTAL PROJECT COST	**$3,663,000**

Project Location:



SCHERTZ

Capital Improvement Plan Estimate of Probable Cost

Project Name: Decommission Cover's Cove Lift Station
Project Number: 2050 SI-4
Project Category: Waste Water
CIP Type: Lift Station Removal

Date: August 2024
Phase: 2050

Project Description:	Justification:
Cover's Cove LS to go offline.	Per City request.

ITEM NO.	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT COST	TOTAL
1	Decommission Lift Station	LS	1	$ 136,000	$ 136,000
				SUBTOTAL	**$ 136,000**
				MOBILIZATION (5%)	$7,000
				CONTINGENCY (30%)	$41,000
				TOTAL CONSTRUCTION	**$190,000**
				PS&E & CONSTRUCTION MANAGEMENT (25%)	$48,000
				ESTIMATE TOTAL PROJECT COST	**$238,000**

Project Location:



APPENDIX 30 - CIP PROJECTS UTILIZATION CALCULATIONS

City of Schertz
2024 Impact Fee Update
Water CIP Project Growth Utilization Calculations

Project Number	Project Name	Existing Peak Flow (gpm)	2030 Peak Flow (gpm)	2050 Peak Flow (gpm)	2020-2030 % Utilization
Near Term CIP					
System Improvement Projects					
NT-W1**	Bubbling Springs 6" WL Replacement	185.86	269.83	309.94	27%
NT-W2	Corbett Pump Station & 3.0 MG GST	N/A	N/A	N/A	N/A
NT-W3	Ware Seguin Pump Station Operational Improvement	N/A	N/A	N/A	N/A
NT-W4	12" WL from Ware Seguin to Lower Seguin	N/A	N/A	N/A	N/A
NT-W5	Fred Couples to Schwab	N/A	N/A	N/A	N/A
NT-W6	Schwab to Eckhardt	N/A	N/A	N/A	N/A
NT-W7**	Graytown to Pfeil	-	32.61	46.93	69%
NT-W8**	FM 78 Water Line Replacement	369.10	500.30	589.39	22%
NT-W9**	Moonlight Meadow Dr & Lost Meadow Dr WL Replacement	18.83	18.83	18.83	0%
NT-W10**	Robinhood Way WL Replacement	46.06	46.06	46.06	0%
Proposed 2030 CIP					
Growth Projects					
2030-W1	12" WL from Tri-County Extension to Cibolo Valley Drive	-	316.47	229.95	100%
2030-W2	Raf Burnette Rd 12" WL Improvements	-	177.06	200.02	89%
2030-W3	8" WL from Ray Corbett Dr to Lower Seguin Rd	-	594.20	613.97	97%
2030-W4**	Trainer Hale Rd 2" WL Replacement & 8" WL Improvement	-	530.42	568.37	93%
2030-W5**	Boenig Dr S 6" WL Replacement & 8" WL Improvement	2.43	117.51	166.63	69%
2030-W6	Live Oak to IH-35 24" Transmission Main	-	5,346.49	4,000.00	100%
2030-W7	Ware Seguin Pump Station Expansion Phase 1	600.00	1,000.00	1,200.00	33%
2030-W8	IH-10 8" WL Improvements	-	15.11	11.35	100%
System Improvement Projects					
2030-W9	PRV Installation for Proposed Southwest Pressure Plane	N/A	N/A	N/A	N/A
2030-W10**	River Rd 6" WL Replacement	115.65	311.01	335.23	58%

N/A indicates that the project is not eligble to be included for impact fees.

Utilizations in red indicate that it is an adjusted value because it was over 100% due to the build out flow occuring in 2030 instead of 2050.

City of Schertz
2024 Impact Fee Update
Wastewater CIP Project Growth Utilization Calculations

Project Number	Project Name	Existing Peak Flow (gpm)	2030 Peak Flow (gpm)	2050 Peak Flow (gpm)	2020-2030 % Utilization
Near Term CIP					
Growth Projects					
NT-S1	Town Creek Phase IV 24" - Section 1	-	33.20	158.4	21%
NT-S2	Town Creek Phase IV 12" - Section 2	-	-	11.6	0%
NT-S3	Town Creek Phase V 24"	-	33.20	145.5	23%
NT-S4**	Upsize Lookout Line	275.40	223.80	256.6	20%
NT-S5**	Upsize Tri County Line	273.90	216.00	229.1	25%
NT-S6	Cibolo West Main	-	1,052.90	1,262.3	83%
NT-S7	Woman Hollering Creek Lift Station, Gravity Lines, and Force Main	-	702.60	785.2	89%
System Improvement Projects					
NT SI-1	Decommission Tri County Lift Station	N/A	N/A	N/A	N/A
NT SI-2	Decommission Corbett Lift Station	N/A	N/A	N/A	N/A
NT SI-3	Decommission Sedona Lift Station & Woman Hollering Creek WWTP	N/A	N/A	N/A	N/A
Proposed 2030 CIP					
Growth Projects					
2030-S1	Hope Lane 8" Gravity Line	-	59.40	88.50	67%
2030-S2	Old Wiederstein Road 8"	-	0.53	10.30	5%
2030-S3	Union Pacific Railroad 8" - Section 1	-	11.60	119.30	10%
2030-S4	Union Pacific Railroad 8" - Section 2	-	5.50	46.10	12%
2030-S5	Wiederstein Road 8"	-	160.90	195.00	83%
2030-S6	Schaefer Road 8" - Section 1	-	42.30	128.80	33%
2030-S7	Schaefer Road 8" - Section 2	-	7.20	7.20	100%
2030-S8	Aranda 8"	-	3.20	3.20	100%
2030-S9	Weir Road 10"	-	597.00	597.60	100%
2030-S10	Trainer Hale Road 10"	-	31.90	32.00	100%
2030-S11	Ware Seguin Road 8"	-	122.60	126.70	97%
2030-S12	FM 1518 8"	-	9.80	24.50	40%
2030-S13	I-10 8" - Section 1	-	67.20	68.10	99%
2030-S14	Boenig Drive 8"	-	12.30	42.90	29%
2030-S15	N Greytown Road 8"	-	45.70	88.10	52%
System Improvement Projects					
2030 SI-1**	Friesenhahn West Line WW Upsize	769.20	1,114.10	1,538.10	22%
2030 SI-2**	Fairlawn WW Upsize	658.40	722.70	727.20	9%
2030 SI-3**	Cibolo Crossing WW Line Upsize	1,439.40	1,382.60	1,576.50	4%
2030 SI-4**	Woodland Oak Drive Replacements	784.00	820.60	900.30	4%
2030 SI-5**	Old Wiederstein WW Upsize	1,908.30	5,034.00	5,092.50	61%
2030 SI-6**	Northcliffe Lift Station Upgrade	3,824.00	4,048.70	4,485.00	5%
2030 SI-7	Decommission Belmont Park Lift Station	N/A	N/A	N/A	N/A

N/A indicates that the project is not eligble to be included for impact fees.

Utilizations in red indicate that it is an adjusted value because it was over 100% due to the build out flow occuring in 2030 instead of 2050.

APPENDIX 31 - OCTAVE METER SPECIFICATIONS



Master Meter's Multi-Jet meter exceeds the AWWA C708 standard. With sensitivity to measure water flowing as low as 1/8 gallon per minute and accuracy unaffected by common particulates and build-up that would freeze other types, you can count on our Multi-Jet technology.

Technical Specifications:

AWWA Standard -Meets or exceeds all sections of AWWA Standard C-708, most recent revision. Compliant with SDWA, NSF ANSI 372 and NSF ANSI 61 standards.

Register - Standard Direct Read, DIALOG® 3G AMR System registers, AccuLinx Encoder, and IP 68 Electrical Output registers available. Together, an integrated and migratable technology environment is attained; direct, proximity (touch), mobile AMR, and Fixed Network AMI.

Register Sealing - Direct Read and DIALOG registers are permanently sealed with a scratch resistant glass lens, stainless steel base and wrap-around gasket to prevent intrusion of dirt or moisture.

Features & Benefits:

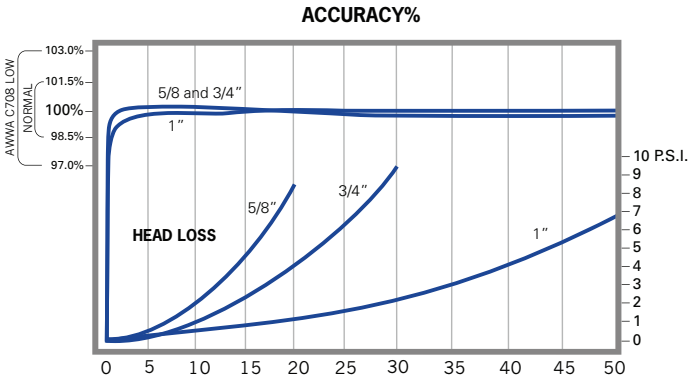
- Rugged basket strainer built from advanced polymer materials for superior wear mitigation.
- Proprietary design produces smooth, laminar flow profile for improved accuracy
- Award-winning DIALOG 3G register design houses all vital components — encoder, RF transmitter, battery and antennae — safely within the register's stainless steel and tempered glass enclosure. Free of external wires, components and connections — the #1 cause of field related issues on competitive designs.
- Assures compliance with the Safe Drinking Water Act (SDWA).
- Measures with only one moving part that is hydro-dynamically balanced on a sapphire bearing to preserve accuracy and promote a positive bottom line.
- Exceptional performance in passing entrained solids and operating in environments with high mineral content.
- Clean, elegant measurement design is highly sensitive to leaks and low flow while limiting wear for excellent revenue protection.

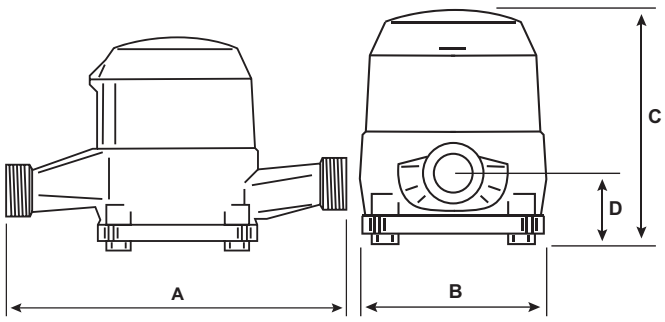
Technical Specs (Cont'd):

- **Register Unit** - Registration available in U.S. gallons, cubic feet or cubic meters.
- **Test Circle** - Large center sweep hand with one hundred (100) clearly marked gradations on the periphery of the dial face (available on Direct Read and DIALOG 3G registers).
- **Design/Operation** - Velocity-type flow measurement. Water that is evenly distributed by multiple converging inlet ports flows past an impeller in the measuring chamber, creating an impeller velocity directly proportional to water flow rate. The meter's register integrates that velocity into totalized flow. An inherent advantage for this design is unparalleled wear mitigation leading to sustained revenues. The register assembly is removable under line pressure permitting seamless, simplified upgrades in reading technology.
- **Strainer** - A rugged, 360-degree advance polymer basket strainer protects the critical measuring element from damage. The unique strainer design smoothes the flow of water entering into the meter creating a laminar flow that is gentle on the meter's internal components. Tough materials operating in a smooth, balanced environment enable the meters to perform more accurately over time. Utilities' investments last longer while capturing more revenue.
- **Measuring Chamber** - The measuring chamber housing and measurement element are built with an advanced synthetic polymer. Measurement surfaces are not wear surfaces, providing sustained accuracy despite the presence of entrained solids in the water. A long life, synthetic sapphire bearing serves as a wear surface with radially balanced water flows. The chamber housing is constructed in two parts to allow access to the impeller. Bottom plates available in Bronze, Cast Iron (CI) or Engineered Plastic.

METER OPERATING CHARACTERISTIC/DIMENSION	*5/8"*	*3/4" x 7-1/2"*	*3/4" x 9"*	*3/4" x 9" x 1"*	*1"*
Flow Rating (gpm)	**20**	**30**	**30**	**30**	**50**
Continuous Flow (gpm)	**15**	**20**	**20**	**20**	**30**
Normal Flow Range (gpm)	**1-20**	**2-30**	**2-30**	**2-30**	**3-50**
Extended Low Flow (gpm)	**1/4**	**1/2**	**1/2**	**1/2**	**3/4**
Maximum Working Pressure (psi)	**150**	**150**	**150**	**150**	**150**
Maximum Working Temperature (F)	**120**	**120**	**120**	**120**	**120**
Length (A below)	**7-1/2"**	**7-1/2"**	**9"**	**9"**	**10-3/4"**
Width (B below)	**3-5/8"**	**3-5/8"**	**3-5/8"**	**3-5/8"**	**4"**
Height, standard register with lid (C below)	**5"**	**5"**	**5"**	**5"**	**5-1/4"**
Height, bottom to center line (D below)	**1-1/2"**	**1-1/2"**	**1-1/2"**	**1-1/2"**	**1-3/4"**
Weight (lbs)	**3.95**	**4.0**	**4.1**	**4.6**	**5.25**
Packed To Carton	**6**	**6**	**6**	**4**	**4**
Carton Weight (lbs)	**25.1**	**25.4**	**26**	**19.8**	**22.4**

Accuracy and Head Loss Chart





OCTAVE® ULTRASONIC METER



Available in sizes 1.5", 2", 3", 4", 6", 8", 10", and 12"

UL Certification is available on 1.5" through 8" only.
FM Approval is available on all sizes.

Octave brings the latest in ultrasonic metering technology to Commercial/Industrial (C&I) water meters and puts precise measurement where the real flows exist. An excellent alternative to mechanical compound, single-jet, floating ball, fire-service type and turbine meters, Octave excels at maintaining sustained accuracy for the life of the meter while providing smart AMR capabilities.

Technical Specifications:

Working Pressure - 175 PSI

Liquid Temperature - 33° - 122 °F

Metrological Characteristics - Meets ANSI/AWWA Standards C715-18, C750-19, ISO 4064 rev. 2014

Configuration - Compact-Display built into unit

Power Source - 2 x D Size Lithium Thionyl Chloride batteries - 10 year warranted life time

Environmental Protection - NEMA 6P+ (IP68+), Ambient operation temp. -13 °F / +131 °F for the display

Display Units - Multi line 12 digit LCD (Programmable USG, Cubic Feet, Cubic Meters, Acre Feet for volume and GPM, Lt/s, or M³/h for rate of flow)

Output - Programmable Encoder, Pulse, 4-20, or Modbus; Optional dual output available in encoder + pulse

Features & Benefits:

- Grade 316 Stainless Steel (2"-8") or Epoxy Coated Ductile Iron (10"-12") body design provides full compliance with ANSI/NSF 372 (AB1953 or NSF61G).
- No moving parts. Minimal flow intrusion. Enduring accuracy.
- Easy to install Floating Flanges on 2"-8" and Integrated Flanges on 10"-12".
- No required strainer.
- Wide beam ultrasonic measurement sensors for high accuracy and reliable operation.
- Industry standard communication protocol for integration with most third-party AMR/AMI systems.
- Active leak, burst, reverse flow, empty pipe, measurement failure, and low battery. LCD also displays rate of flow and water temperature.
- Ruggedized NEMA 6P/IP-68+ construction; fully submersible design.
- Designed to meet standards for both North American and International C&I water meters.
- Optional flow measurements; Forward Only, Net Volume or Alternating Display (Forward and Reverse Consumption displayed separately).

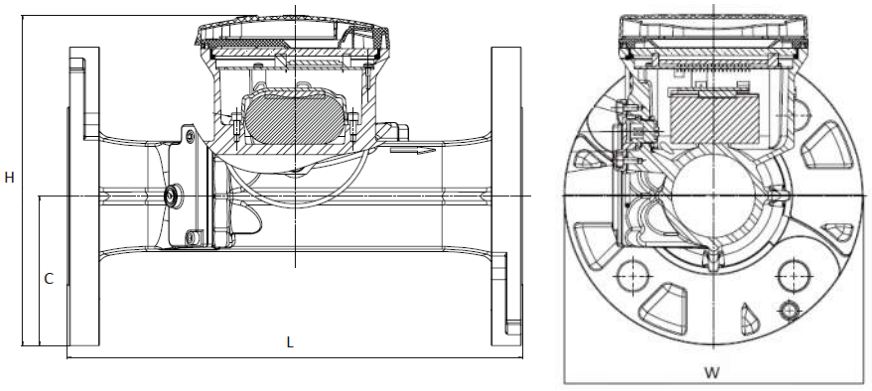
Performance Data & Dimensions

Octave Operating Characteristics and Dimensions	1.5"x13" (40 mm)	2"x10" (50 mm)	2"x15.25" (50 mm)	2"x17" (50 mm)
Safe Maximum Operating Capacity	250 GPM ($57\ m^3/h$)	250 GPM ($57\ m^3/h$)	250 GPM ($57\ m^3/h$)	250 GPM ($57\ m^3/h$)
Normal Operating Range (98.5% - 101.5% Accuracy)*	0.50 – 250 GPM ($0.11 – 57\ m^3/h$)	0.50 – 250 GPM ($0.11 – 57\ m^3/h$)	0.50 – 250 GPM ($0.11 – 57\ m^3/h$)	0.50 – 250 GPM ($0.11 – 57\ m^3/h$)
Extended Low Flow (95% - 105% Accuracy)	0.25 GPM ($0.06\ m^3/h$)	0.25 GPM ($0.06\ m^3/h$)	0.25 GPM ($0.06\ m^3/h$)	0.25 GPM ($0.06\ m^3/h$)
Length	13" (330 mm)	10" (250 mm)	15.25" (390 mm)	17" (432 mm)
Width	5-3/4" (146 mm)	5-3/4" (146 mm)	5-3/4" (146 mm)	5-3/4" (146 mm)
Height	6-3/4" (172 mm)	6-3/4" (172 mm)	6-3/4" (172 mm)	6-3/4" (172 mm)
Height from Center Pipe	2-1/8" (54 mm)	2-1/8" (54 mm)	2-1/8" (54 mm)	2-1/8" (54 mm)
Weight	20 lbs (9 kg)	15 lbs (7 kg)	22 lbs (10 kg)	24 lbs (11 kg)

* In the water temperature of 45° to 85° F (7° to 30° C), meter consumption is accurately measured at:
- +/- 1.5% in the Normal Operating Range
- +/- 5% in the Extended Low Flow

Octave Operating Characteristics and Dimensions	3" (80 mm)	4" (100 mm)	6" (150 mm)	8" (200 mm)	10" (250 mm)	12" (300 mm)
Safe Maximum Operating Capacity	500 GPM ($114\ m^3/h$)	1,000 GPM ($227\ m^3/h$)	1,600 GPM ($363\ m^3/h$)	2,800 GPM ($636\ m^3/h$)	5,500 GPM ($1,250\ m^3/h$)	5,500 GPM ($1,250\ m^3/h$)
Normal Operating Range (98.5% - 101.5% Accuracy)*	1 – 500 GPM ($0.23 – 114$ m3/h)	1.5 – 1,000 GPM ($0.34 – 227\ m^3/h$)	3 – 1,600 GPM ($0.68 – 363\ m^3/h$)	5 – 2,800 GPM ($1.5 – 636\ m^3/h$)	14 – 5,500 GPM ($3.2 – 1,250\ m^3/h$)	14 – 5,500 GPM ($3.2 – 1,250\ m^3/h$)
Extended Low Flow (95% - 105% Accuracy)	0.5 GPM ($0.11\ m^3/h$)	0.75 GPM ($0.17\ m^3/h$)	2 GPM ($0.45\ m^3/h$)	4 GPM (0.9 m3/h)	8 GPM (1.8 m3/h)	8 GPM (1.8 m3/h)
Length	12" (305 mm)	14" (356 mm)	18" (457 mm)	20" (508 mm)	17-3/4" (451 mm)	19-3/4" (502 mm)
Width	7-1/2" (190 mm)	9" (229 mm)	11" (280 mm)	13-1/2" (343 mm)	16" (406 mm)	19-3/4" (502 mm)
Height	8-1/2" (216 mm)	9-7/8" (250 mm)	10-7/8" (276 mm)	12-7/8" (327 mm)	16-1/2" (419 mm)	19-3/4" (502 mm)
Height from Center Pipe	3-1/2" (90 mm)	4-1/2" (115 mm)	5-1/8" (130 mm)	6-3/8" (162 mm)	8" (203 mm)	9-7/8" (251 mm)
Weight	23 lbs (10.5 kg)	35 lbs (16 kg)	51 lbs (23 kg)	78 lbs (35 kg)	150 lbs (68 kg)	210 lbs (96 kg)

* In the water temperature of 45° to 85° F (7° to 30° C), meter consumption is accurately measured at:
- +/- 1.5% in the Normal Operating Range
- +/- 5% in the Extended Low Flow



NOTE — For Performance charts please see **Engineering Document - Octave | Version 10.17**.

The Octave vs. Compounds & Turbines

Product Comparison Sheet

The origin of the modern day turbine meter dates back to the late 18th century and has evolved into a reliable way of measuring high volumes of water. Since 1914 compound meters have served a place in the market by capturing unaccounted for water in many applications when compared to traditional turbine meters.

While changes in both designs have improved meter accuracy there is still room for improvement due to poor low flow registration (in turbines), costly repairs, head loss, decreased accuracy in the changeover flow rates (in compounds), and short term sustained accuracy. With the introduction of the Octave ultrasonic water meter, the industry now has a meter capable of accurately measuring both high volume water usage while still capturing low flows and providing leakage alerts with none of the limitations of a compound or turbine.

Benefits:

1. **No moving parts:** Compound meters require water to be measured through 2 separate measuring elements; one for high flows and a secondary meter for low flows. In addition the compound meter requires an automatic valve mechanism for diverting flow through the appropriate measuring device. **Traditional compound meters can have upwards of 50-75 moving parts**. Turbine meters have one measuring element for capturing intermediate and high flows. **Most turbine meters can have upwards of 25 moving parts.**

   The Octave meter has absolutely no moving parts and thus eliminates the need of any maintenance or repair or the requirement of installing a strainer. However if the utility would like to prevent larger suspended particles from entering the customer's line a strainer may be installed without adversely affecting the meter.

2. **Sustained meter accuracy:** As with all mechanical devices, compound and turbine meters are subject to damage or wear which has a negative effect on meter accuracy and the utility's revenue. Using the latest in ultrasonic transit time technology **the Octave meter is capable of maintaining new meter accuracy for the life of the meter** without the need for calibration or routine maintenance.

3. **Low flow accuracy & starting flow:** With flow sensitivity starting as low as 1/16 gpm, the Octave is the only solid state meter capable of matching the minimum test flow rates of the AWWA standard for compound meters (2" – 4") and far exceeds the low flow rates of the AWWA standard for typical turbines (all sizes).

Size	Octave Low Flow	*C701 Low Flow	** C702 Low Flow
2"	¼ gpm @ 95%	4 gpm @ 98.5%	¼ gpm @ 95%
3"	½ gpm @95%	8 gpm @ 98.5%	½ gpm @ 95 %
4"	¾ gpm @95%	15 gpm @ 98.5%	¾ gpm @ 95%
6"	2 gpm @ 95%	30 gpm @ 98.5%	1 ½ gpm @ 95%
8"	4 gpm @ 95%	50 gpm @ 98.5%	2 gpm @ 95%

**C701 is the AWWA Standard for Cold Water Meters, Turbine Type*
***C702 is the AWWA Standard for Cold Water Meters, Compound Type*

4. **No changeover:** An inherent weakness with compound meters is the point when flow begins to changeover from one chamber to the other. Depending on the make and model, **meter accuracy can drop as low as 90% on older compound models and approximately 94% - 97% on newer compound models. The Octave eliminates changeover** and provides optimal meter accuracy at all flow that should result in more revenue for the utility.

5. **High flow:** Occasionally a compound is not the right meter for the job when a customer's flow demand exceeds the meter's safe maximum flow. To prevent unwanted wear to the compound the utility would typically install a turbine meter and hope the customer was not also operating below the meter's low flow capacity during non-peak demand.

   The Octave meter allows you to accurately measure both low and high flows without sacrificing meter accuracy.

Size	Octave Safe Maximum Flow	*C701 Safe Maximum Flow	*C701 % of Improvement	**C702 Safe Maximum Flow	**C702 % of Improvement
2"	250 gpm	190 gpm	24%	160 gpm	36%
3"	500 gpm	435 gpm	13%	350 gpm	30%
4"	1,000 gpm	750 gpm	25%	600 gpm	40%
6"	1,600 gpm	1,600 gpm	20%	1,350 gpm	32.5%
8"	2,800 gpm	2,800 gpm	20%	1,600 gpm	54.3%

**C701 is the AWWA Standard for Cold Water Meters, Turbine Type*
***C702 is the AWWA Standard for Cold Water Meters, Compound Type*

6. **Head loss:** With no internal parts to cause friction the Octave by design decreases head loss which in turn **lowers pumping costs for the utility and decreases the number of complaints of poor pressure by the customer.** Compared to a typical compound meter, the head loss of the Octave can decrease head loss by up to 93% at comparable flow rates and up to 90% in turbines.

Size	At C701 Safe Max Flow Turbines	vs. Octave	Improvement vs. Turbines	At C702 Safe Max Flow Compounds	vs. Octave	Improvement vs. Compounds
2"	5.08 PSI	0.80 PSI	84%	7.05 PSI	0.74 PSI	90%
3"	5.44 PSI	2.00 PSI	63%	6.88 PSI	1.15 PSI	83%
4"	7.30 PSI	3.00 PSI	59%	8.90 PSI	1.89 PSI	79%
6"	6.14 PSI	0.69 PSI	89%	8.32 PSI	0.55 PSI	93%
8"	3.48 PSI	1.87 PSI	46%	7.70 PSI	0.66 PSI	91%

#Head loss improvements are determined by taking an average head loss for each meter type at the Safe Maximum Flow per the applicable standard then comparing it to the Octave at the same rate of flow. Results vary based on the specific model when compared to the Octave.

7. **Meter Oversizing / Undersizing / Improper Application:** Lost revenue and/or meter damage can occur if the meter is not sized properly or if the meter installed is not best suited for the customer's usage profile. **The Octave operates well in almost every application, eliminating the question of which meter to use or what size to use.**

8. **Technology:** The Octave comes with built in standard display alerts such as **leak detection, flow direction, empty pipe, and battery level icon**, and offers the scalability to include **data logging, impact alerts such as tampering, backflow, theft and zero consumption** when connected to Master Meter's XTR endpoint. The technology advantages of the Octave far exceed the capabilities of today's compound and turbine meters.

9. **Weight:** Less parts needed to build a meter equates to manufacturing a meter that weighs considerably less than compounds and turbines resulting in **reducing the number of field staff and equipment needed to install or replace meters and environmental benefits such as reducing your carbon footprint.**

Size	Octave Weight	##Turbine Avg. Weight	Improvement vs. Turbine	##Compound Avg. Weight	Improvement vs. Compound
2"	26 lbs	25 lbs	+4%	39 lbs	33%
3"	36 lbs	40 lbs	10%	68 lbs	47%
4"	48.5 lbs	54 lbs	10%	86 lbs	44%
6"	99 lbs	108 lbs	8%	155 lbs	36%
8"	136 lbs	186 lbs	27%	379 lbs	64%

Comparisons of weight are between various compound and turbine models. The level of improvement was based on average weight per size and type. Results vary based on the specific model when compared to the Octave.

10. **Price:** For all of these added features you would expect to pay much more for a superior product but that is not the case. **Priced between a turbine and a compound the Octave exceeds all the advantages of a traditional compound or turbine**.

Octave Installation Guide

Category: C & I Metering

Type: Installation Manual

Issue: Operation



Version 01.19

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1.1 Introduction

Thank you for choosing Master Meter's Octave Ultrasonic Meter. This unique design delivers precise flow measurement without any moving parts for long life, sustained accuracy and exceptional performance. The following information within this guide will help you gain a better understanding of the many features and capabilities your new Octave Ultrasonic meter has to offer.

1.2 Package Contents and Documentation

- One complete Octave Ultrasonic Flow Meter (meter body with integral electronics), size as indicated on the packaging box.
- Octave User Installation Guide
- Certificate of calibration data (adhered to the inside of the meter lid)
- (Optional) If specified at the time of order; one output module

1.3 General Safety

Prior to installation of your new Octave Ultrasonic Meter please consider the following;

- Do not install, operate or maintain this flow meter without reading, understanding and following the factory-supplied instructions. Otherwise, injury or damage may result.
- Read instructions carefully before beginning installation and save them for future reference.
- Observe all warnings and instructions marked on the product.
- Consider handling and lifting instructions to avoid damage.
- If the product does not operate normally, refer to the service instructions or to a qualified Master Meter representative.
- There are no operator-serviceable parts inside this product.

1.4 Unpacking Instructions and Inspection

This product has been thoroughly inspected and tested prior to shipment and is ready for operation. After carefully unpacking the meter, inspect all contents for shipping damage before attempting to install. If here is any indication of physical damage found, immediately contact the responsible transportation service and your local Master Meter representative. **Note**: *The LCD display remains active for the life of the meter. If the display is not on, this may be an indication of damage during shipment.*

2.1 Measurement Method

The Octave's measurement method is based on an ultrasonic, transit time, dual beam sensor array which determines the length of time it takes an ultrasonic sound wave to travel the distance between the two sensors located in the meter's body. The two sensors function as both the transmitter and the receiver, each one alternating these functions so that the ultrasonic wave travels both with and against the direction of the flow. Ultrasonic waves travel slower against the flow than with the flow, thus the time difference of two waves traveling with and against the flow leads to determining the velocity and volume of the water.

Note: These sensors are ultra-sensitive; they are not designed to be modified by the user. Any modifications void warranty on this product.

- The Octave ultrasonic flow meter is a battery-powered, precision flow meter designed for linear, bidirectional flow measurement of water.
- Flow measurement data is communicated through the output module.
- The Octave can be set up for a wide range of applications.

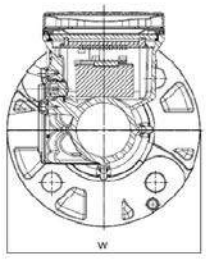
2.2 Mechanical Data

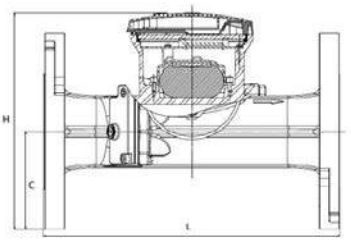
Maximum Working Pressure	175 PSI
Liquid Temperature	32.1° F - 122° F (0.1° C to 50° C)
Referenced Standards	Meets ANSI / AWWA Standard C715-18 & C750-10; ISO 4064 rev. 2005
Configuration	Compact - Display built into unit
Power Source	2 x D size Lithium Thionyl Chloride batteries - 10 year warranted life time
Environmental Protection	NEMA 6P (IP68), Ambient operation temperature -13° F to 131° F (- 25° C to 55° C)
Data Units	Multi-line 12 digit Liquid Crystal Display (LCD) - *Programmable USG, Imperial Gallons, Cubic Feet, Cubic Meters, Barrels, Acre Feet or Acre Inch for Volume and GPM, Lt/s,Lt/m or M^3/h for rate of flow.*
Volume Display Options	1. Net Volume (Forward measurement minus reverse) 2. Forward Only 3. Alternating Flow (Forward and Reverse flow displayed separately)
Flanges	ANSI / AWWA C702 • 2" Oval Type – Cast Iron Floating Flange • 3" – 8" Round Type – Cast Iron Floating Flange • 8 – 12" Round Type – Cast Iron Fixed Flange
Meter Body Construction	2" – 8" Grade 316 Stainless Steel 10" – 12" Ductile Iron Epoxy Coated
Output (optional)	1. Dual Digital Pulses (Open Drain or Dry Contact) 2. 4-20 mA (Powered loop) 3. Encoder Output (up to 8 digit encoded readings)
Certifications/Listings	• UL Certified – Safety US EX29710 on 2" – 8" Stainless Steel Floating Flange • FM Approved on 2" – 12" Stainless Steel and Ductile Iron • ANSI / NSF 372 (AB1953 or NSF61G)

2.3 Dimensions

Octave										
Model	**Floating Flanges**								**Solid Flange**	
Nominal Size	2" x 10" (50 mm)	2"x13" (50 mm)	2"x15.25" (50 mm)	2"x17" (50 mm)	3" (80 mm)	4" (100 mm)	6" (150 mm)	8" (200 mm)	10" (250 mm)	12" (300 mm)
L - Length	10" (250 mm)	13" (330 mm)	15.25" (390 mm)	17" (432 mm)	12" (305 mm)	14" (356 mm)	18" (457 mm)	20" (508 mm)	17 3/4" (451 mm)	19 3/4" (502 mm)
W - Width	5 3/4" (146 mm)	5 3/4" (146 mm)	5 3/4" (146 mm)	5 3/4" (146 mm)	7 1/2" (190 mm)	9" (229 mm)	11" (280 mm)	13 1/2" (343 mm)	16" (406 mm)	19 3/4" (502 mm)
H - Height	6 3/4" (172 mm)	6 3/4" (172 mm)	6 3/4" (172 mm)	6 3/4" (172 mm)	8 1/2" (216 mm)	9 7/8" (250 mm)	10 7/8" (276 mm)	12 7/8" (327 mm)	16 1/2" (419 mm)	19 3/4" (502 mm)
C - Center Pipe Height	2 1/8" (54 mm)	2 1/8" (54 mm)	2 1/8" (54 mm)	2 1/8" (54 mm)	3 1/2" (90 mm)	4 1/2" (115 mm)	5 1/8" (130 mm)	6 3/8" (162 mm)	8" (203 mm)	9 7/8" (251 mm)
Weight - Ductile Iron	-	-	-	-	-	-	-	-	150 lbs. (68 kg)	210 lbs. (96 kg)
Weight - Stainless Steel	15 lbs (7 kg)	20 lbs (9 kg)	22 lbs (10 kg)	24 lbs (11 kg)	23 lbs (10.5 kg)	35 lbs. (16 kg)	51 lbs. (23 kg)	78 lbs. (35 kg)	-	-

2" Octave is offered in 10" length with an optional add-on of a 3", a 5.25" or a 7" spool. Gaskets, nuts, bots, & washers are included in weights of 13", 15.25" and 17".





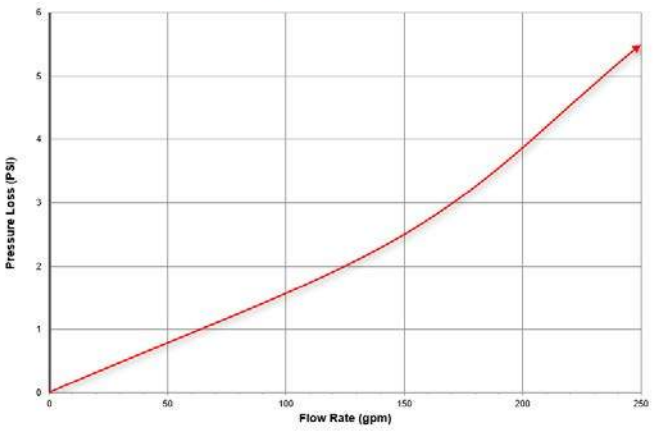
2.4 Performance Data

Octave Nominal Size inch (mm)	Extended Low Flow 95% - 105% Accuracy GPM (Lt/s)	Normal Flow Range 98.5% - 101.5% Accuracy GPM (Lt/s)	‡ Continuous Safe Max Flow GPM (Lt/s)	Linearity Range +/- 0.5% Maximum Deviation GPM (Lt/s)
2" (50mm)	1/4 (.016)	1/2 - 250 (.032 - 15.77)	250 (15.77)	4 - 200 (.25 - 12.62)
3" (80 mm)	1/2 (.032)	1 - 500 (.06 - 31.54)	500 (31.54)	5 - 350 (.32 - 22.08)
4" (100 mm)	3/4 (.047)	1-1/2 - 1,000 (.09 - 63.09)	1000 (63.09)	15 - 700 (.94 - 44.16)
6" (150 mm)	2 (.13)	3 - 1,600 (.19 - 100.94)	1,600 (100.94)	20 - 1,150 (1.26 - 72.55)
8" (200 mm)	4 (.25)	5 - 2,800 (.32 - 176.65)	2,800 (176.65)	50 - 2,000 (3.15 - 126.18)
10" (250 mm)	8 (.50)	14 - 5,500 (.88 - 346.99)	5,500 (346.99)	400 - 4,000 (25.24 - 252.36)
12" (300 mm)	8 (.50)	14 - 5,500 (.88 - 346.99)	5,500 (346.99)	400 - 4,000 (25.24 - 252.36)

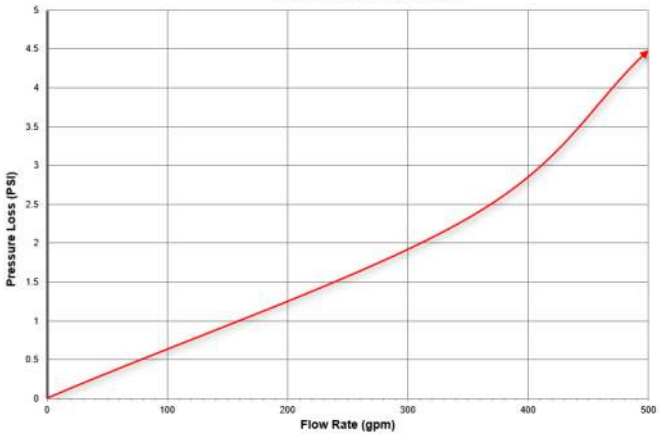
‡ Continuous Safe Max Flow ranges listed for the Octave are for accurate flow measurement only and do not limit the Octave from meeting the Short-term Deluge Flow for fire services.

2.5 Pressure Loss Charts

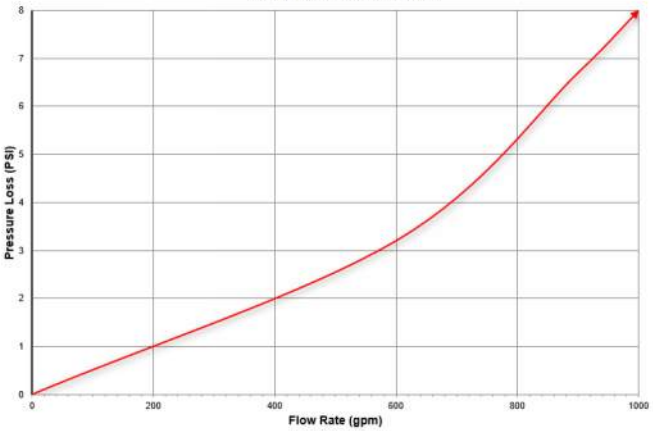
2" OCTAVE SS FF (standard ports)
Pressure Loss Performance Chart



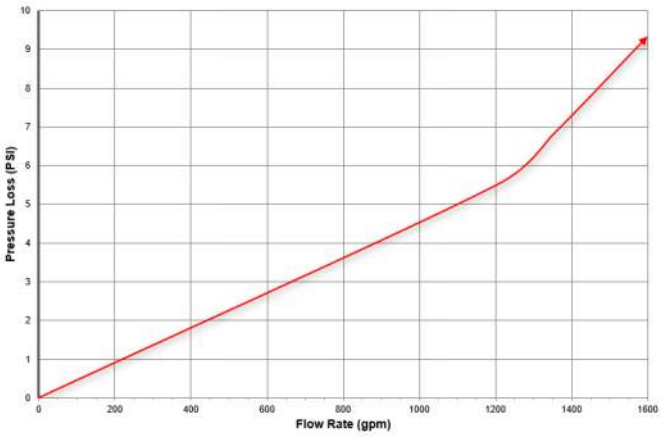
3" OCTAVE SS FF (sculpted ports)
Pressure Loss Performance Chart



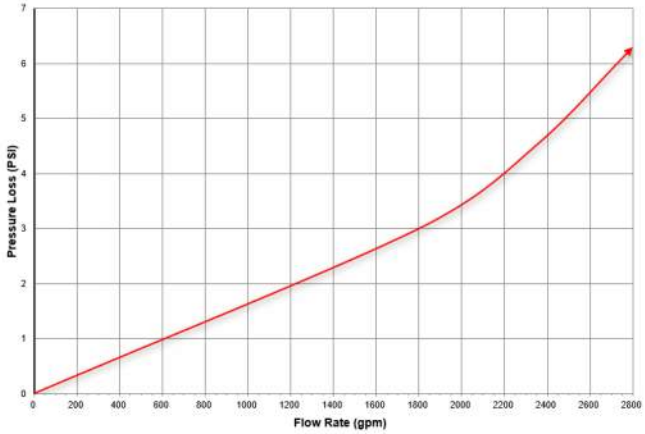
4" OCTAVE SS FF (sculpted ports)
Pressure Loss Performance Chart



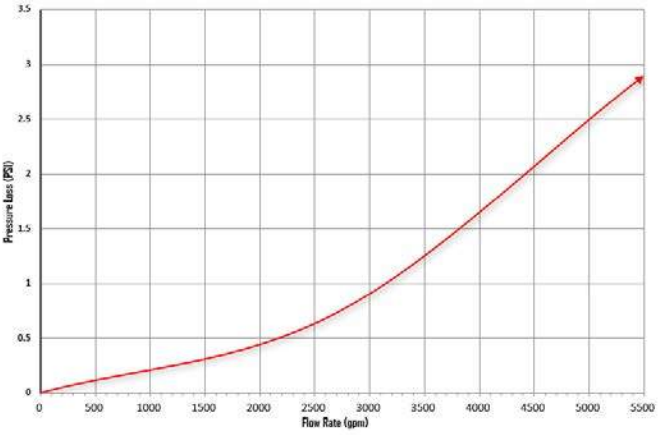
6" OCTAVE SS FF (sculpted and standard ports)
Pressure Loss Performance Chart



8" OCTAVE SS FF (sculpted ports)
Pressure Loss Performance Chart



10" and 12" OCTAVE - DUCTILE IRON
Pressure Loss Performance Chart



3.1 Pre-Installation

Prior to installation check the following:

- Flow rate and volume units are correctly programmed.
- The flow meter is correctly installed per the installation location and position recommendations.
- Output modules are correctly attached.

3.2 Handling of Octave

IMPORTANT:



- **DO NOT** use chains or wire cable to lift the Octave. To protect the epoxy coating, *only use a nylon lifting strap* with appropriate weight capacity.
- **DO NOT** lift the Octave by the electronic housing unit.
- **DO NOT** carry the Octave by its lid.
- **DO NOT** use bolt holes for grip when carrying the Octave.
- **DO NOT** position the flow meter on its electronic housing unit.
- When bolting the meter to pipe flanges, **use washers on both nuts and bolts** to protect the epoxy coating of the Octave.
- When handling the flow meter **avoid hard blows**, jolts or impact.

3.3 Installation Notes

The measuring tube should be completely full at all times for proper flow measurements. When sensors are not wet this will show a loss of signal. Though this will not cause damage to the meter, it will however not measure flow.

FLOW DIRECTION: The Octave is a bi-directional flow meter. **Note** the indicating arrow for forward and backward flows.

Master Meter recommends keeping the lid closed in case of direct sunlight exposure. However, no direct damage will occur while the lid is open temporarily.

Do not expose the meter to excessive vibration. To prevent this from occurring, support the connection pipe spools on both ends of the flow meter.

To avoid measuring errors due to air or an empty pipe, please observe the following precautions:

- Installation of the flow meter should be at the lowest point of the system, if possible, since air will be collected at the highest point of a system.
- If possible, maintain positive back pressure in meter outlet piping.
- In order to avoid cavitation, always install control valves downstream of the flow meter and never install the flow meter on a pump suction side.

3.4 Installation Location & Position

Proper Installation

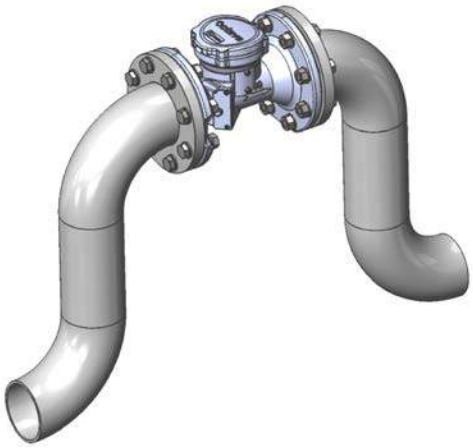




Improper Installation



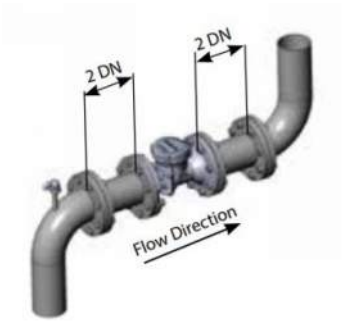
Conditional Installation



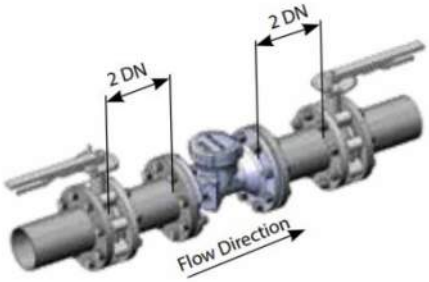
Recommended: If this is not the highest point in the system or a hydraulic jump has been installed to keep the flow meter full. **T**he system has back pressured.

Not recommended: If this is the highest point in a system or if pipeline and/or flow meter is subject to being emptied between uses avoid this installation.

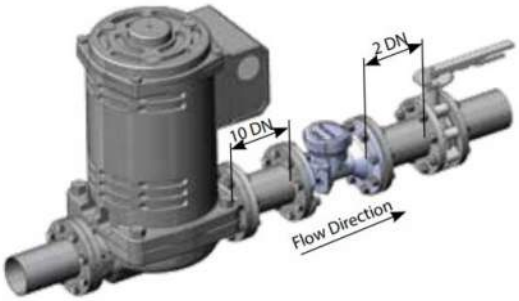
3.5 Additional installation requirements



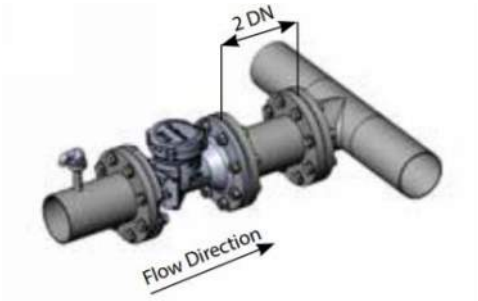
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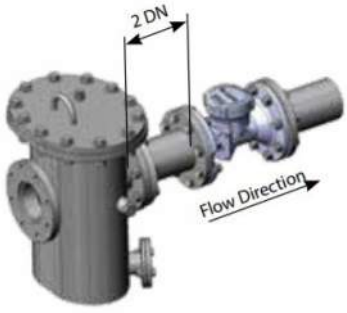
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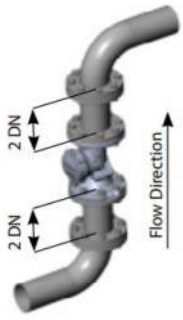
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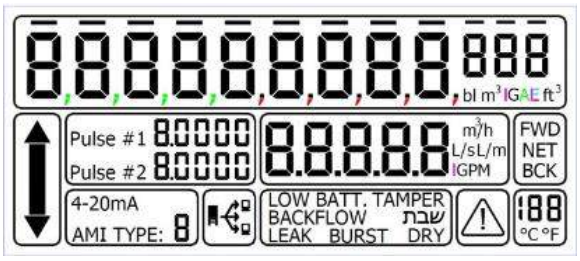


[redacted]

4.1 Digital Display

The Octave meter comes with a factory programmable digital display built to your specifications. At the time of order you can select:

- **Volume units** in US gallons, Imperial gallons, Cubic Feet, Cubic Meters, Barrels, Acre Feet or Acre Feet
  - US Gallons will display a constant GAL on the LCD
  - Imperial Gallons will display a constant IGAL on the LCD
- **Rate of flow measurement** in US Gallons per Minute, Imperial Gallons per Minute, Liters per Second, Liters per Minute or Cubic Meters per Hour
- **A programmable decimal** with flow measurement as low as 1/1000th of a measurement unit.
- **Single output mode** in either encoder (UI1203), digital pulse (open drain or dry contact), 4-20 mA, or no output mode
- **Dual output mode** (optional) in encoder + open drain digital pulse
- **Volume Display Option** in either Net Flow, Forward Only, or Alternating.
  - **Net Volume** – The meter measures both forward and reverse flow. If backward flow is detected, the totalizer will begin to decrease.
  - **Forward Flow Only** – The meter measures forward flow only. Reverse flow is disregarded.
  - **Alternating Flow** – The totalizer will display only forward flow, then toggle to display only reverse flow. The timing of the how long each measurement is displayed is programmable with this software version.





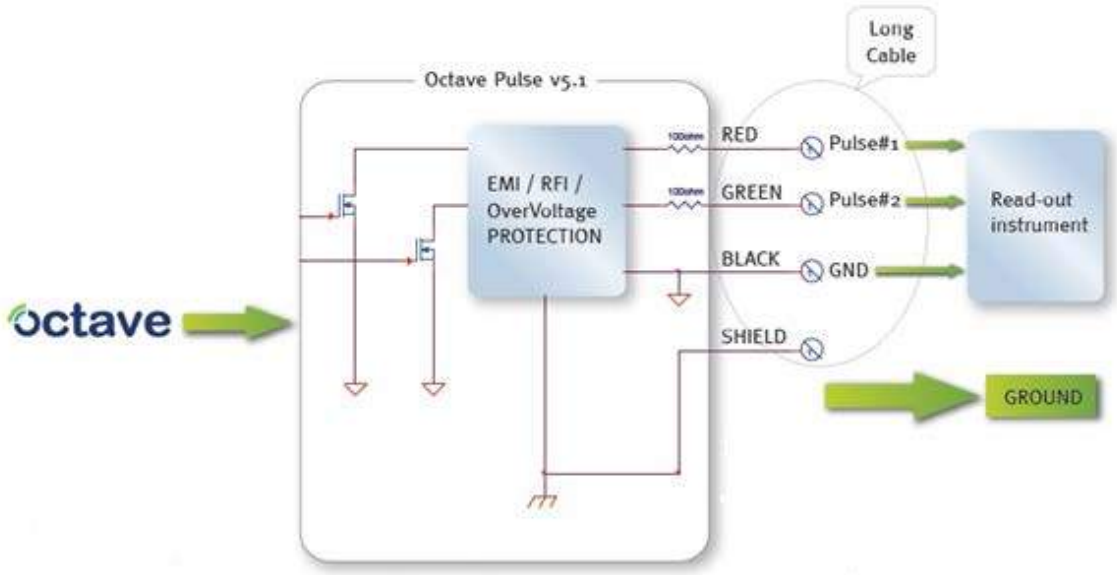




4.2 Pulse Output (Open Drain)



Pulse Type: Open Drain that allows current loading of 200 mA, and up to 30 VDC.



	Wire Color	Function
Long cable	Red	Pulse Out #1
	Green	Pulse Out #2
	Black	Common
	Bare Wire	Shield

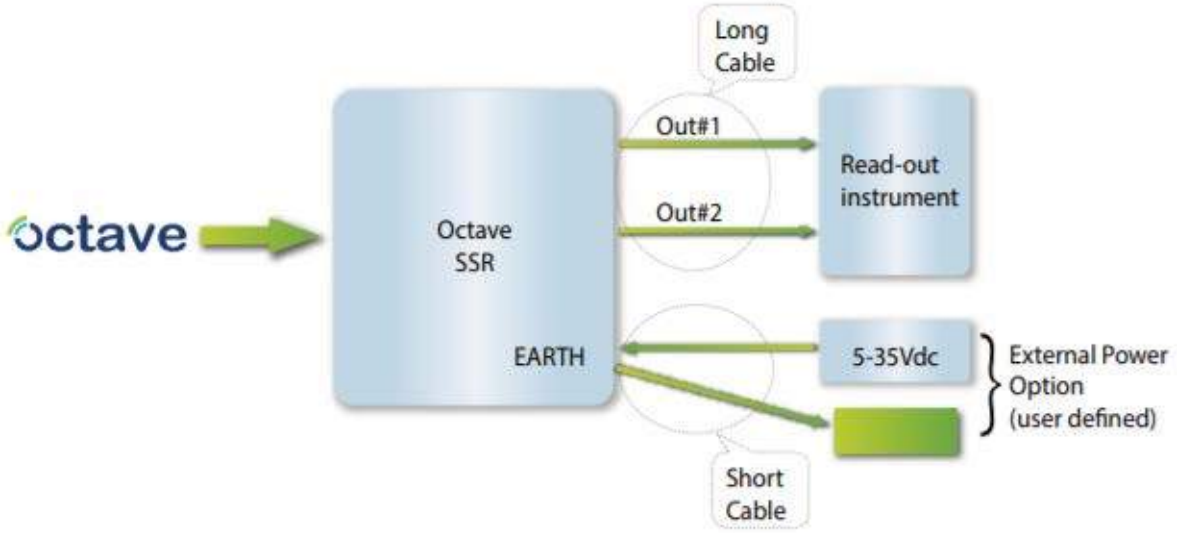
Warning: Signal connection polarity is mandatory

Output Type	Open drain
Cable Length - Supplied	9 feet
Maximum Cable Length*	1,640 feet
Maximum Supply Voltage	30 VDC

4.3 Pulse Output (SSR Dry Contact)



Pulse Type: Dry Contact that allows current loading of 120 mA, and up to 35 volts.



	Wire Color	Function
Long cable	Red	Output #1
	Orange	Output #1
	Black	Output #2
	Brown	Output #2
Short cable	Red	24V +
	Black	24V -
	Yellow	GROUND

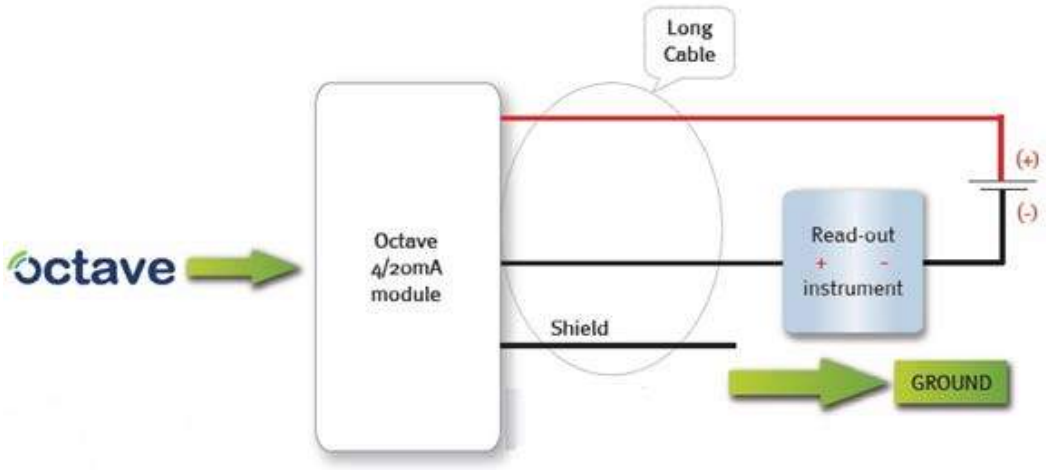
Output Type	SSR Dry Contact
Cable Length - Supplied	9 feet
Maximum Cable Length*	1,640 feet
Output Voltage max.	± 400 (V)
Output Current max.	120 mA (.12 A)
Supply Voltage	3-35 VDC

Warning: Signal Polarity is mandatory on Short Cable wires but is not mandatory on Long Cable wires.

4.4 4-20 mA Output (Analog Communication)

4-20mA

The current output is a passive 4-20 mA. Power must be provided by the customer. 4 mA is always "0" (zero) flow and the 20 mA is factory programmable according to the customer's requirements. (If the customer has not specified the 20 mA at the time of order, the Octave will be programmed with the 20 mA at the max flow of the meter.)



	Wire Color	Function
Long cable	Red	Current loop +
	Black	Current loop -
	Bare Wire	Shield

Warning: Signal connection polarity is mandatory

Output Type	4-20 mA passive current output
Cable Length - Supplied	9 feet
Maximum Cable Length*	1,640 feet
Loop Supply Voltage	12 - 24 VDC
Output Impedance	25 (mΩ) typ.

* The maximum cable length depends on: cable type, controller, and electrical noise level.

4.5 Encoder Output

AMI TYPE: 8

- UI1203 encoder open communication, with a maximum reading up to 8 digits, depending on the programming of the attached output module
- Encoder digits are represented by lines above each digit transmitted to an AMR or AMI on the volume totalizer.
- Serial communication collector
- Data output line is a solid state switch requiring external pull-up
- AMI Type for Encoder is : 0

Wire	Function
Red	**Power**
Green	**Data**
Black	**Ground**

Output Type	Encoder
Cable Length - Supplied	9 feet
Maximum Supply Voltage	15 Vdc
Maximum Power Load	.04 Vdc

4.6 No Output (Manual Read)

The Octave meter can be programmed to not send a communication signal at the customer's request; however Master Meter recommends selecting a communication mode for future migration to AMR or AMI.

4.7 Output Module Installation (Optional)

All Octave water meters are shipped with either a cover plate or communication module installed on the side of each meter. Even if the meter is not going to be read by radio or some other electronic unit, it is important to leave one of these devices installed on the Octave to prevent damage to the communication port. **Installing an Octave without a cover plate or communication module would void any warranty.**

If you received an Output Module separate from your Octave meter, please follow the steps below to ensure proper installation of the module. Read through these instructions before attempting to remove the cover plate. Your module came as a complete installation kit with the supplies shown in Pic. 1.

Octave Output Module Installation Parts



Step 1: Remove the Sealing Cap from the cover plate (Pic. 2).

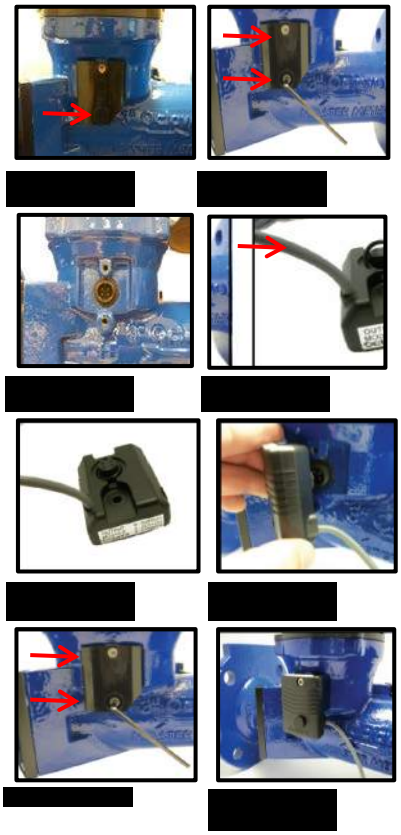
Step 2: Using the 3mm Allen Key provided, remove the cover plate (Pic. 3). Keep the cover plate and 3mm x 15mm screws for future use. The communication port is now exposed. (Pic. 4)

Step 3: Place washer around the 4-prong plug of the output module. (Pic. 5 & 6)

Step 4: Insert Output Module into the communication port (Pic. 7), with the cable pointing down. This will allow the slot inside the communication port to align with the groove on the module. Do not force the module into the communication port. This may cause damage to the pins. Secure into place using the 3mm x 20mm screws provided. Tighten until the screws stop. (Pic. 8)

Step 5: Push the Sealing Cap into the lower screw hole (Pic. 9). Lock the Sealing Cap in place by firmly pushing in into place or gently tapping it in with a small hammer.

Note: If at any time the module needs to be removed, take caution not to allow dirt or water into the communication port. If the module is going to be removed for an extended period of time, reinstall the cover plate and the 3mm x 15mm screws.



4.8 Wire Connectivity Chart

The following chart is designed to assist in wiring the Octave module to various AMR/AMI Radios. The Octave transmits up to 8 digit output encoder output. Pulse output resolution is available in resolutions of x0.1, x1, x10, x1,000, or x10,000.

By default Octave encoder modules are provided with Nicor connectors, however you may also select Itron Connectors, magnetic inductor coils for wall or pit mount, for bare wire. Nicor connectors are factory potted. All other connectors are spliced with water resistant heat shrink wrap.

Manufacturer	Model	Communication Type	Octave Red Wire	Octave Green Wire	Octave Black Wire
Aclara	Star 3000 Series	Encoder	Red	White	Black
	Star 3000 Series	Pulse	Red	N/A	Black or White
Badger	Orion	Encoder	Red	Green	Black
Datamatic	Firefly	Encoder	Red	White	Black
	Mosaic	Encoder	Red	Green	Black
Elster	MTU	Encoder	White	Red	Black
	MTU	Pulse	Red	White	Green
Hersey	Hot Rod	Encoder	Red	Green or White	Black
Itron	60w	Encoder	Green	Red	Unshielded
	60wp	Pulse	Red	N/A	White
	100w	Encoder	Grey	Brown	Yellow
Kemp Meeks	Visu-Link VL-9S	Pulse	Polarity does not matter - Connect Red and Black Wires to either terminal, disregard green wire		
	Visu-Link VL-9	Encoder	Red	Green	Black
Master Meter	Allegro PT	Encoder	Red	Green	Black
	Universal XTR	Encoder	Red	Green	Black
	Fast Pulse XTR	Pulse	Red	N/A	Black
Metron Farnier (T2)	T2 M2w	Encoder	Red	Green	Black
Neptune	R900	Encoder	Black	Red	Green
Sensus	MXU Pit Unit	Encoder	Red	Green	Black
	MXU Wall Unit	Encoder	Red	Green	Black
	Touch Pad	Encoder	Red	Green	Black

**Note – when connecting to Master Meter's Allegro PT or 3G XTR, the Octave will typically output an 8 digit reading, unless otherwise specified. When connecting to another manufacturer's radio or read device, it is recommended to confirm with that provider what the actual reading resolution of the connecting device is.*

APPENDIX 32 - WILLDAN REVENUE CREDIT CALCULATIONS & SUMMARY

November 25 2024

Mr. James Walters
Finance Director
City of Schertz
1400 Schertz Parkway Bldg. 2
Schertz TX 78154

Dear Mr. Walters:

Per your request, we have completed a calculation of the credit from utility revenues that would be generated by new service units during the ten-year period of the City's proposed water and wastewater impact fees. This credit to the growth-related cost component of the impact fee calculation is required under Local Government Code Chapter 395 to ensure that new service units are not double-charged for impact fee related capital improvements. Our scope of services is limited to this credit calculation; the City's total water and wastewater impact fees are calculated by its consulting engineers.

Summary Calculation

Our credit calculation is summarized in the model presented as **Appendix A** to this letter. As shown in the appendix, we calculate the following impact-fee direct revenue credits:

WATER Revenue Credit	--	**$3,365,530**
WASTEWATER Revenue Credit	--	**$4,611,802**

Key Assumptions

As stated above, our contribution to the City's impact fee calculations is limited to the water and wastewater revenue credit only; we bear no responsibility for the overall impact fee calculations. However, we coordinated our assumptions and calculations with City staff and the City's consulting engineers. Specifically, we relied on the following critical assumptions in developing our revenue credits:

1) We assumed a ten-year period for the calculation, FY 2025 – FY 2034, consistent with guidelines set by Chapter 395.

2) We utilized Capital Improvement Plan cost estimates and percentages of each project allocable to growth developed by City staff and its consulting engineers.

3) Growth estimates were based on the latest forecasts as presented by the City's consulting engineers.

4) Terms and interest rates for new debt forecast to be issued for growth-related improvements were based on estimates used in the City's 2023 water and wastewater rate study.

5) We are interpreting Chapter 395 so that the debt allocable to growth-related projects includes both principal and interest.

6) Current debt allocable to growth-related projects was based on estimates provided by City staff.

7) The totals represent Net Present Values of the ten year cash flows utilizing a discount rate of 6.0%.

In summary, we believe that the use of the revenue credits estimated in this summary letter and detailed in Appendix A are reasonable and in accordance with Chapter 395 guidelines.

Thank you for this opportunity to serve you and the City of Schertz. Please let me know if you have any comments or questions.

Respectfully submitted,
WILLDAN FINANCIAL SERVICES

Dan V. Jackson
Vice President

APPENDIX A

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

			1	2	3	4	5	6	7	8	9	10
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue Credit Summary Calculation												
Scenario:		***2023 11 21 -- Scenario 1***										
WATER REVENUE CREDIT CALCULATION												
WATER LUEs												
Total LUEs			30,182	31,054	31,951	32,875	33,825	34,802	35,808	36,843	37,908	39,003
New LUEs												
Annual			848	872	897	923	950	978	1,006	1,035	1,065	1,096
Cumulative			848	1,720	2,617	3,541	4,491	5,468	6,474	7,509	8,574	9,669
WATER Debt Service												
Current												
Principal			$ 1,057,500	$ 880,000	$ 450,000	$ 470,000	$ 492,500	$ 515,000	$ 537,500	$ 560,000	$ 562,500	$ 495,000
Interest			382,755	338,481	306,869	286,019	265,281	243,956	221,931	200,019	178,519	157,806
Reserve			-	-	-	-	-	-	-	-	-	-
Total			1,440,255	1,218,481	756,869	756,019	757,781	758,956	759,431	760,019	741,019	652,806
Future												
Principal			-	185,227	190,784	884,493	911,028	2,049,721	2,111,213	2,174,549	2,239,786	2,306,979
Interest			-	149,314	143,757	692,627	666,092	1,534,643	1,473,151	1,409,814	1,344,578	1,277,384
Reserve			-	-	-	-	-	-	-	-	-	-
Total			-	334,541	334,541	1,577,120	1,577,120	3,584,364	3,584,364	3,584,364	3,584,364	3,584,364
Total												
Principal			1,057,500	1,065,227	640,784	1,354,493	1,403,528	2,564,721	2,648,713	2,734,549	2,802,286	2,801,979
Interest			382,755	487,795	450,625	978,645	931,373	1,778,599	1,695,082	1,609,833	1,523,097	1,435,190
Reserve			-	-	-	-	-	-	-	-	-	-
Total			1,440,255	1,553,022	1,091,409	2,333,139	2,334,901	4,343,320	4,343,795	4,344,382	4,325,382	4,237,170
Utility Revenue Credit Calculation												
Total Debt Service			$ 1,440,255	$ 1,553,022	$ 1,091,409	$ 2,333,139	$ 2,334,901	$ 4,343,320	$ 4,343,795	$ 4,344,382	$ 4,325,382	$ 4,237,170
Total LUEs			30,182	31,054	31,951	32,875	33,825	34,802	35,808	36,843	37,908	39,003
Debt Service Per LUE												
Annual			$ 47.72	$ 50.01	$ 34.16	$ 70.97	$ 69.03	$ 124.80	$ 121.31	$ 117.92	$ 114.10	$ 108.64
Monthly			$ 3.98	$ 4.17	$ 2.85	$ 5.91	$ 5.75	$ 10.40	$ 10.11	$ 9.83	$ 9.51	$ 9.05
New LUEs -- Cumulative			848	1,720	2,617	3,541	4,491	5,468	6,474	7,509	8,574	9,669
Water Revenue Credit												
Current Dollars		**$ 4,108,768**	$ 40,454	$ 86,018	$ 89,408	$ 251,296	$ 310,005	$ 682,462	$ 785,375	$ 885,445	$ 978,303	$ 1,050,448
Net Present Value	6.0%	**$ 3,365,530**										

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

		1	2	3	4	5	6	7	8	9	10
		2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Revenue Credit Summary Calculation											
Scenario:	***2023 11 21 -- Scenario 1***										
WASTEWATER REVENUE CREDIT CALCULATION											
WASTEWATER LUEs											
Total LUEs		32,744	33,631	34,543	35,479	36,440	37,428	38,442	39,484	40,554	41,653
New LUEs											
Annual		864	887	911	936	961	988	1,014	1,042	1,070	1,099
Cumulative		864	1,751	2,663	3,599	4,560	5,548	6,562	7,604	8,674	9,773
WASTEWATER Debt Service											
Current											
Principal		$ 642,500	$ 680,000	$ 710,000	$ 745,000	$ 782,500	$ 815,000	$ 847,500	$ 880,000	$ 892,500	$ 835,000
Interest		508,655	477,156	444,043	409,818	374,955	340,380	307,705	276,343	244,887	213,493
Reserve		-	-	-	-	-	-	-	-	-	-
Total		1,151,155	1,157,156	1,154,043	1,154,818	1,157,455	1,155,380	1,155,205	1,156,343	1,137,387	1,048,493
Future											
Principal		-	846,752	872,155	1,771,533	1,824,679	2,726,171	2,807,956	2,892,195	2,978,961	3,068,330
Interest		-	682,576	657,174	1,334,916	1,281,770	1,909,606	1,827,821	1,743,582	1,656,817	1,567,448
Reserve		-	-	-	-	-	-	-	-	-	-
Total		-	1,529,329	1,529,329	3,106,449	3,106,449	4,635,777	4,635,777	4,635,777	4,635,777	4,635,777
Total											
Principal		642,500	1,526,752	1,582,155	2,516,533	2,607,179	3,541,171	3,655,456	3,772,195	3,871,461	3,903,330
Interest		508,655	1,159,732	1,101,216	1,744,734	1,656,725	2,249,986	2,135,526	2,019,925	1,901,703	1,780,941
Reserve		-	-	-	-	-	-	-	-	-	-
Total		1,151,155	2,686,485	2,683,371	4,261,266	4,263,904	5,791,157	5,790,982	5,792,120	5,773,164	5,684,270
Utility Revenue Credit Calculation											
Total Debt Service		$ 1,151,155	$ 2,686,485	$ 2,683,371	$ 4,261,266	$ 4,263,904	$ 5,791,157	$ 5,790,982	$ 5,792,120	$ 5,773,164	$ 5,684,270
Total LUEs		32,744	33,631	34,543	35,479	36,440	37,428	38,442	39,484	40,554	41,653
Debt Service Per LUE											
Annual		$ 35.16	$ 79.88	$ 77.68	$ 120.11	$ 117.01	$ 154.73	$ 150.64	$ 146.70	$ 142.36	$ 136.47
Monthly		$ 2.93	$ 6.66	$ 6.47	$ 10.01	$ 9.75	$ 12.89	$ 12.55	$ 12.22	$ 11.86	$ 11.37
New LUEs -- Cumulative		864	1,751	2,663	3,599	4,560	5,548	6,562	7,604	8,674	9,773
Wastewater Revenue Credit											
Current Dollars	**$ 5,540,163**	$ 30,373	$ 139,895	$ 206,847	$ 432,245	$ 533,604	$ 858,409	$ 988,529	$ 1,115,461	$ 1,234,800	$ 1,333,688
Net Present Value 6.0%	**$ 4,611,802**										

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Current	1	2	3	4	5	6	7	8	9	10
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
LUE and Account Totals											
Scenario: ***2023 11 21 -- Scenario 1***											
WATER LUES											
Forecast Annual Growth Rate		2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%	2.9%
Total LUEs	29,334	30,182	31,054	31,951	32,875	33,825	34,802	35,808	36,843	37,908	39,003
Annual New LUEs											
New LUEs		848	872	897	923	950	978	1,006	1,035	1,065	1,096
Cumulative		848	1,720	2,617	3,541	4,491	5,468	6,474	7,509	8,574	9,669
Monthly Bills	352,008	362,181	372,648	383,418	394,498	405,899	417,630	429,699	442,118	454,895	468,041
WASTEWATER LUES											
Forecast Annual Growth Rate		2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
Total LUEs	31,880	32,744	33,631	34,543	35,479	36,440	37,428	38,442	39,484	40,554	41,653
Annual New LUEs											
New LUEs		864	887	911	936	961	988	1,014	1,042	1,070	1,099
Cumulative		864	1,751	2,663	3,599	4,560	5,548	6,562	7,604	8,674	9,773
Monthly Bills	382,561	392,929	403,577	414,514	425,747	437,285	449,136	461,307	473,809	486,649	499,837

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service											
Scenario:	***2023 11 21 -- Scenario 1***										
1 Series: 2013 GO Refunding Bonds											
1A Total Bond	$ 2,160,000										
Principal	$ 215,000	$ 215,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest		2,774	-	-	-	-	-	-	-	-	-
Reserve		-	-	-	-	-	-	-	-	-	-
Total		$ 217,774	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
1B Percent Water/WW											
Water		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Wastewater		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1C Water Debt Service											
Principal		$ 215,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest		2,774	-	-	-	-	-	-	-	-	-
Reserve		-	-	-	-	-	-	-	-	-	-
Total		$ 217,774	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
1D Water Percent Growth and Replacement											
Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1E Water Growth-Related Debt Service											
Principal		$ 215,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest		2,774	-	-	-	-	-	-	-	-	-
Reserve		-	-	-	-	-	-	-	-	-	-
Total		217,774	-	-	-	-	-	-	-	-	-
1F Wastewater Debt Service											
Principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest		-	-	-	-	-	-	-	-	-	-
Reserve		-	-	-	-	-	-	-	-	-	-
Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
1G Wastewater Percent Growth and Replacement											
Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
1H Wastewater Growth-Related Debt Service											
Principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest		-	-	-	-	-	-	-	-	-	-
Reserve		-	-	-	-	-	-	-	-	-	-
Total		-	-	-	-	-	-	-	-	-	-

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

		Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service												
Scenario:		***2023 11 21 -- Scenario 1***										
2	**Series:**	**2018 CO's**										
2A	Total Bond	$ 10,440,000										
	Principal	$ 2,910,000	$ 235,000	$ 250,000	$ 260,000	$ 275,000	$ 290,000	$ 300,000	$ 310,000	$ 320,000	$ 330,000	$ 340,000
	Interest		162,049	149,925	137,174	123,799	109,674	96,424	85,774	76,324	66,368	55,687
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 397,049	$ 399,925	$ 397,174	$ 398,799	$ 399,674	$ 396,424	$ 395,774	$ 396,324	$ 396,368	$ 395,687
2B	Percent Water/WW											
	Water		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Wastewater		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2C	Water Debt Service											
	Principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		-	-	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
2D	Water Allocation Percentages											
	Growth		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Replacement		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2E	Water Growth-Related Debt Service											
	Principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		-	-	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		-	-	-	-	-	-	-	-	-	-
2F	Wastewater Debt Service											
	Principal		$ 235,000	$ 250,000	$ 260,000	$ 275,000	$ 290,000	$ 300,000	$ 310,000	$ 320,000	$ 330,000	$ 340,000
	Interest		162,049	149,925	137,174	123,799	109,674	96,424	85,774	76,324	66,368	55,687
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 397,049	$ 399,925	$ 397,174	$ 398,799	$ 399,674	$ 396,424	$ 395,774	$ 396,324	$ 396,368	$ 395,687
2G	Wastewater Allocation Percentages											
	Growth		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Replacement		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
2H	Wastewater Growth-Related Debt Service											
	Principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		-	-	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		-	-	-	-	-	-	-	-	-	-

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

		Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service												
Scenario:		***2023 11 21 -- Scenario 1***										
3	**Series:**	**2018 GO and Refunding Bonds**										
3A	Total Bond	$ 8,570,000										
	Principal	$ 885,000	$ 435,000	$ 450,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		33,375	11,250	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 468,375	$ 461,250	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3B	Percent Water/WW											
	Water		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Wastewater		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
3C	Water Debt Service											
	Principal		$ 435,000	$ 450,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		33,375	11,250	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 468,375	$ 461,250	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3D	Water Allocation Percentages											
	Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
3E	Water Growth-Related Debt Service											
	Principal		$ 435,000	$ 450,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		33,375	11,250	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		468,375	461,250	-	-	-	-	-	-	-	-
3F	Wastewater Debt Service											
	Principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		-	-	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3G	Wastewater Allocation Percentages											
	Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
3H	Wastewater Growth-Related Debt Service											
	Principal		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Interest		-	-	-	-	-	-	-	-	-	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		-	-	-	-	-	-	-	-	-	-

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

		Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service												
Scenario:		***2023 11 21 -- Scenario 1***										
4	**Series:**	**2019 CO's**										
4A	Total Bond	$ 7,495,000										
	Principal	$ 1,730,000	$ 145,000	$ 155,000	$ 160,000	$ 165,000	$ 170,000	$ 175,000	$ 180,000	$ 185,000	$ 195,000	$ 200,000
	Interest		87,100	81,100	74,800	68,300	62,875	58,125	52,800	47,325	41,625	35,700
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 232,100	$ 236,100	$ 234,800	$ 233,300	$ 232,875	$ 233,125	$ 232,800	$ 232,325	$ 236,625	$ 235,700
4B	Percent Water/WW											
	Water		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Wastewater		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
4C	Water Debt Service											
	Principal		$ 72,500	$ 77,500	$ 80,000	$ 82,500	$ 85,000	$ 87,500	$ 90,000	$ 92,500	$ 97,500	$ 100,000
	Interest		43,550	40,550	37,400	34,150	31,438	29,063	26,400	23,663	20,813	17,850
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 116,050	$ 118,050	$ 117,400	$ 116,650	$ 116,438	$ 116,563	$ 116,400	$ 116,163	$ 118,313	$ 117,850
4D	Water Allocation Percentages											
	Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
4E	Water Growth-Related Debt Service											
	Principal		$ 72,500	$ 77,500	$ 80,000	$ 82,500	$ 85,000	$ 87,500	$ 90,000	$ 92,500	$ 97,500	$ 100,000
	Interest		43,550	40,550	37,400	34,150	31,438	29,063	26,400	23,663	20,813	17,850
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		116,050	118,050	117,400	116,650	116,438	116,563	116,400	116,163	118,313	117,850
4F	Wastewater Debt Service											
	Principal		$ 72,500	$ 77,500	$ 80,000	$ 82,500	$ 85,000	$ 87,500	$ 90,000	$ 92,500	$ 97,500	$ 100,000
	Interest		43,550	40,550	37,400	34,150	31,438	29,063	26,400	23,663	20,813	17,850
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 116,050	$ 118,050	$ 117,400	$ 116,650	$ 116,438	$ 116,563	$ 116,400	$ 116,163	$ 118,313	$ 117,850
4G	Wastewater Allocation Percentages											
	Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
4H	Wastewater Growth-Related Debt Service											
	Principal		$ 72,500	$ 77,500	$ 80,000	$ 82,500	$ 85,000	$ 87,500	$ 90,000	$ 92,500	$ 97,500	$ 100,000
	Interest		43,550	40,550	37,400	34,150	31,438	29,063	26,400	23,663	20,813	17,850
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		116,050	118,050	117,400	116,650	116,438	116,563	116,400	116,163	118,313	117,850

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

		Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service												
Scenario:		***2023 11 21 -- Scenario 1***										
5	**Series:**	**2021 GO Refunding Bonds**										
5A	Total Bond	$ 6,015,000										
	Principal	$ 1,650,000	$ 160,000	$ 165,000	$ 175,000	$ 180,000	$ 190,000	$ 195,000	$ 205,000	$ 210,000	$ 170,000	$ -
	Interest		45,450	38,950	32,150	25,950	20,400	14,625	9,650	5,500	1,700	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 205,450	$ 203,950	$ 207,150	$ 205,950	$ 210,400	$ 209,625	$ 214,650	$ 215,500	$ 171,700	$ -
5B	Percent Water/WW											
	Water		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Wastewater		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
5C	Water Debt Service											
	Principal		$ 80,000	$ 82,500	$ 87,500	$ 90,000	$ 95,000	$ 97,500	$ 102,500	$ 105,000	$ 85,000	$ -
	Interest		22,725	19,475	16,075	12,975	10,200	7,313	4,825	2,750	850	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 102,725	$ 101,975	$ 103,575	$ 102,975	$ 105,200	$ 104,813	$ 107,325	$ 107,750	$ 85,850	$ -
5D	Water Allocation Percentages											
	Growth		33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
	Replacement		67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
5E	Water Growth-Related Debt Service											
	Principal		$ 26,400	$ 27,225	$ 28,875	$ 29,700	$ 31,350	$ 32,175	$ 33,825	$ 34,650	$ 28,050	$ -
	Interest		7,499	6,427	5,305	4,282	3,366	2,413	1,592	908	281	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		33,899	33,652	34,180	33,982	34,716	34,588	35,417	35,558	28,331	-
5F	Wastewater Debt Service											
	Principal		$ 80,000	$ 82,500	$ 87,500	$ 90,000	$ 95,000	$ 97,500	$ 102,500	$ 105,000	$ 85,000	$ -
	Interest		22,725	19,475	16,075	12,975	10,200	7,313	4,825	2,750	850	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 102,725	$ 101,975	$ 103,575	$ 102,975	$ 105,200	$ 104,813	$ 107,325	$ 107,750	$ 85,850	$ -
5G	Wastewater Allocation Percentages											
	Growth		33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
	Replacement		67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%	67.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
5H	Wastewater Growth-Related Debt Service											
	Principal		$ 26,400	$ 27,225	$ 28,875	$ 29,700	$ 31,350	$ 32,175	$ 33,825	$ 34,650	$ 28,050	$ -
	Interest		7,499	6,427	5,305	4,282	3,366	2,413	1,592	908	281	-
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		33,899	33,652	34,180	33,982	34,716	34,588	35,417	35,558	28,331	-

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

		Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service												
Scenario:		***2023 11 21 -- Scenario 1***										
6	**Series:**	**2022 CO's**										
6A	Total Bond	$ 9,390,000										
	Principal	$ 2,095,000	$ 165,000	$ 175,000	$ 185,000	$ 195,000	$ 205,000	$ 215,000	$ 225,000	$ 235,000	$ 245,000	$ 250,000
	Interest		141,837	133,337	124,337	114,837	104,837	94,337	83,337	73,012	64,637	57,212
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 306,837	$ 308,337	$ 309,337	$ 309,837	$ 309,837	$ 309,337	$ 308,337	$ 308,012	$ 309,637	$ 307,212
6B	Percent Water/WW											
	Water		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Wastewater		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
6C	Water Debt Service											
	Principal		$ 82,500	$ 87,500	$ 92,500	$ 97,500	$ 102,500	$ 107,500	$ 112,500	$ 117,500	$ 122,500	$ 125,000
	Interest		70,919	66,669	62,169	57,419	52,419	47,169	41,669	36,506	32,319	28,606
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 153,419	$ 154,169	$ 154,669	$ 154,919	$ 154,919	$ 154,669	$ 154,169	$ 154,006	$ 154,819	$ 153,606
6D	Water Allocation Percentages											
	Growth		42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%
	Replacement		57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
6E	Water Growth-Related Debt Service											
	Principal		$ 35,144	$ 37,274	$ 39,404	$ 41,534	$ 43,663	$ 45,793	$ 47,923	$ 50,053	$ 52,183	$ 53,248
	Interest		30,210	28,400	26,483	24,459	22,329	20,093	17,750	15,551	13,767	12,186
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		65,354	65,673	65,886	65,993	65,993	65,886	65,673	65,604	65,950	65,434
6F	Wastewater Debt Service											
	Principal		$ 82,500	$ 87,500	$ 92,500	$ 97,500	$ 102,500	$ 107,500	$ 112,500	$ 117,500	$ 122,500	$ 125,000
	Interest		70,919	66,669	62,169	57,419	52,419	47,169	41,669	36,506	32,319	28,606
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 153,419	$ 154,169	$ 154,669	$ 154,919	$ 154,919	$ 154,669	$ 154,169	$ 154,006	$ 154,819	$ 153,606
6G	Wastewater Allocation Percentages											
	Growth		42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%	42.6%
	Replacement		57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%	57.4%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
6H	Wastewater Growth-Related Debt Service											
	Principal		$ 35,144	$ 37,274	$ 39,404	$ 41,534	$ 43,663	$ 45,793	$ 47,923	$ 50,053	$ 52,183	$ 53,248
	Interest		30,210	28,400	26,483	24,459	22,329	20,093	17,750	15,551	13,767	12,186
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		65,354	65,673	65,886	65,993	65,993	65,886	65,673	65,604	65,950	65,434

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

		Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service												
Scenario:		***2023 11 21 -- Scenario 1***										
7	**Series:**	**2022A CO's**										
7A	Total Bond	$ 18,530,000										
	Principal	$ 4,365,000	$ 345,000	$ 365,000	$ 380,000	$ 400,000	$ 420,000	$ 445,000	$ 465,000	$ 490,000	$ 515,000	$ 540,000
	Interest		418,825	401,075	382,450	362,950	342,450	320,825	298,075	274,200	249,075	222,700
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 763,825	$ 766,075	$ 762,450	$ 762,950	$ 762,450	$ 765,825	$ 763,075	$ 764,200	$ 764,075	$ 762,700
7B	Percent Water/WW											
	Water		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Wastewater		50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
7C	Water Debt Service											
	Principal		$ 172,500	$ 182,500	$ 190,000	$ 200,000	$ 210,000	$ 222,500	$ 232,500	$ 245,000	$ 257,500	$ 270,000
	Interest		209,413	200,538	191,225	181,475	171,225	160,413	149,038	137,100	124,538	111,350
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 381,913	$ 383,038	$ 381,225	$ 381,475	$ 381,225	$ 382,913	$ 381,538	$ 382,100	$ 382,038	$ 381,350
7D	Water Allocation Percentages											
	Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
6E	Water Growth-Related Debt Service											
	Principal		$ 172,500	$ 182,500	$ 190,000	$ 200,000	$ 210,000	$ 222,500	$ 232,500	$ 245,000	$ 257,500	$ 270,000
	Interest		209,413	200,538	191,225	181,475	171,225	160,413	149,038	137,100	124,538	111,350
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		381,913	383,038	381,225	381,475	381,225	382,913	381,538	382,100	382,038	381,350
7E	Wastewater Debt Service											
	Principal		$ 172,500	$ 182,500	$ 190,000	$ 200,000	$ 210,000	$ 222,500	$ 232,500	$ 245,000	$ 257,500	$ 270,000
	Interest		209,413	200,538	191,225	181,475	171,225	160,413	149,038	137,100	124,538	111,350
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		$ 381,913	$ 383,038	$ 381,225	$ 381,475	$ 381,225	$ 382,913	$ 381,538	$ 382,100	$ 382,038	$ 381,350
7F	Wastewater Allocation Percentages											
	Growth		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	Replacement		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
6H	Wastewater Growth-Related Debt Service											
	Principal		$ 172,500	$ 182,500	$ 190,000	$ 200,000	$ 210,000	$ 222,500	$ 232,500	$ 245,000	$ 257,500	$ 270,000
	Interest		209,413	200,538	191,225	181,475	171,225	160,413	149,038	137,100	124,538	111,350
	Reserve		-	-	-	-	-	-	-	-	-	-
	Total		381,913	383,038	381,225	381,475	381,225	382,913	381,538	382,100	382,038	381,350

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Current Debt Service											
Scenario:	***2023 11 21 -- Scenario 1***										
11 Series:	**Total Current Debt Service**										
11A	**Total Current Debt Service**										
	Principal	$ 1,700,000	$ 1,560,000	$ 1,160,000	$ 1,215,000	$ 1,275,000	$ 1,330,000	$ 1,385,000	$ 1,440,000	$ 1,455,000	$ 1,330,000
	Interest	891,410	815,637	750,911	695,836	640,236	584,336	529,636	476,361	423,405	371,299
	Reserve	-	-	-	-	-	-	-	-	-	-
	Total	$ 2,591,410	$ 2,375,637	$ 1,910,911	$ 1,910,836	$ 1,915,236	$ 1,914,336	$ 1,914,636	$ 1,916,361	$ 1,878,405	$ 1,701,299
	Water Total Debt Service										
	Principal	$ 1,057,500	$ 880,000	$ 450,000	$ 470,000	$ 492,500	$ 515,000	$ 537,500	$ 560,000	$ 562,500	$ 495,000
	Interest	382,755	338,481	306,869	286,019	265,281	243,956	221,931	200,019	178,519	157,806
	Reserve	-	-	-	-	-	-	-	-	-	-
	Total	$ 1,440,255	$ 1,218,481	$ 756,869	$ 756,019	$ 757,781	$ 758,956	$ 759,431	$ 760,019	$ 741,019	$ 652,806
	Water Growth-Related Debt Service										
	Principal	$ 956,544	$ 774,499	$ 338,279	$ 353,734	$ 370,013	$ 387,968	$ 404,248	$ 422,203	$ 435,233	$ 423,248
	Interest	326,821	287,164	260,413	244,366	228,358	211,981	194,780	177,221	159,398	141,386
	Reserve	-	-	-	-	-	-	-	-	-	-
	Total	$ 1,283,365	$ 1,061,663	$ 598,691	$ 598,100	$ 598,371	$ 599,950	$ 599,028	$ 599,424	$ 594,631	$ 564,634
	Wastewater Total Debt Service										
	Principal	$ 642,500	$ 680,000	$ 710,000	$ 745,000	$ 782,500	$ 815,000	$ 847,500	$ 880,000	$ 892,500	$ 835,000
	Interest	508,655	477,156	444,043	409,818	374,955	340,380	307,705	276,343	244,887	213,493
	Reserve	-	-	-	-	-	-	-	-	-	-
	Total	$ 1,151,155	$ 1,157,156	$ 1,154,043	$ 1,154,818	$ 1,157,455	$ 1,155,380	$ 1,155,205	$ 1,156,343	$ 1,137,387	$ 1,048,493
	Wastewater Growth-Related Debt Service										
	Principal	$ 306,544	$ 324,499	$ 338,279	$ 353,734	$ 370,013	$ 387,968	$ 404,248	$ 422,203	$ 435,233	$ 423,248
	Interest	290,672	275,914	260,413	244,366	228,358	211,981	194,780	177,221	159,398	141,386
	Reserve	-	-	-	-	-	-	-	-	-	-
	Total	$ 597,216	$ 600,413	$ 598,691	$ 598,100	$ 598,371	$ 599,950	$ 599,028	$ 599,424	$ 594,631	$ 564,634

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

Input Area -- UNFUNDED Capital Improvement Plan
Scenario: 2023 11 21 -- Scenario 1

WATER CIP

		Percent Growth	Percent Replacement	Total CIP/ Project	Total Growth	Total Replacement	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
NT-W1	Bubbling Springs 6" WL Replacement	27.0%	73.0%	$ 763,000	$ 206,010	$ 556,990	$ 254,333	$ 254,333	$ 254,333	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NT-W2	Corbett Pump Station and 3.0 MGD GST	0.0%	100.0%	8,600,000	-	8,600,000	2,866,667	2,866,667	2,866,667	-	-	-	-	-	-	-
NT-W3	Ware - Seguin and Pump Station Operation Ir	0.0%	100.0%	175,000	-	175,000	58,333	58,333	58,333	-	-	-	-	-	-	-
NT-W4	12" WL from Ware Seguin to Lower Seguin	0.0%	100.0%	1,538,000	-	1,538,000	512,667	512,667	512,667	-	-	-	-	-	-	-
NT-W5	Fred Couples to Schwab	0.0%	100.0%	455,556	-	455,556	151,852	151,852	151,852	-	-	-	-	-	-	-
NT-W6	Schwab to Eckhardt	0.0%	100.0%	1,600,000	-	1,600,000	533,333	533,333	533,333	-	-	-	-	-	-	-
NT-W7	Graytown to Pfeil	69.0%	31.0%	1,550,000	1,069,500	480,500	516,667	516,667	516,667	-	-	-	-	-	-	-
NT-W8	FM 78 Water Line Replacement	22.0%	78.0%	875,000	192,500	682,500	291,667	291,667	291,667	-	-	-	-	-	-	-
NT-W9	Moonlight Meadow Dr & Lost Meadow WL Re	0.0%	100.0%	3,000,000	-	3,000,000	1,000,000	1,000,000	1,000,000	-	-	-	-	-	-	-
NT-W10	Robinhood Way WL Replacement	0.0%	100.0%	4,650,000	-	4,650,000	1,550,000	1,550,000	1,550,000	-	-	-	-	-	-	-
2030-W1	12" WL from Tri-County Extension	100.0%	0.0%	4,788,000	4,788,000	-	-	-	-	1,596,000	1,596,000	1,596,000	-	-	-	-
2030-W2	Raf Burnette Rd 12" WL Imp	89.0%	11.0%	1,438,000	1,279,820	158,180	-	-	-	479,333	479,333	479,333	-	-	-	-
2030-W3	8" WL from Ray Corbett DL to Lower Seguin	97.0%	3.0%	3,688,000	3,577,360	110,640	-	-	-	1,229,333	1,229,333	1,229,333	-	-	-	-
2030-W4	Trainer Hale Rd 2" WL Replace & Imp	93.0%	7.0%	9,850,000	9,160,500	689,500	-	-	-	3,283,333	3,283,333	3,283,333	-	-	-	-
2030-W5	Boenig Dr 6" WL Replace & Imp	69.0%	31.0%	6,388,000	4,407,720	1,980,280	-	-	-	2,129,333	2,129,333	2,129,333	-	-	-	-
2030-W6	Live Oak to IH-35 24" Trans Main	100.0%	0.0%	32,075,000	32,075,000	-	-	-	-	10,691,667	10,691,667	10,691,667	-	-	-	-
2030-W7	Ware Seguin Pump Station Expansion I	33.0%	67.0%	5,213,000	1,720,290	3,492,710	-	-	-	1,737,667	1,737,667	1,737,667	-	-	-	-
2030-W8	IH-10 8" WL Imp	100.0%	0.0%	6,063,000	6,063,000	-	-	-	-	2,021,000	2,021,000	2,021,000	-	-	-	-
2030-W9	PRV Installation for SW Pressure Plane	0.0%	100.0%	413,000	-	413,000	-	-	-	137,667	137,667	137,667	-	-	-	-
2030-W10	River Rd WL Replace	58.0%	42.0%	2,325,000	1,348,500	976,500	-	-	-	775,000	775,000	775,000	-	-	-	-
2030-W11	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2030-W12	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2030-W13	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2030-W14	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2030-W15	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
2030-W16	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	100.0%	0.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Unfunded Water CIP			**95,447,556**	**65,888,200**	**29,559,356**	**7,735,519**	**7,735,519**	**7,735,519**	**24,080,333**	**24,080,333**	**24,080,333**	**-**	**-**	**-**	**-**
					69.0%	**31.0%**										
				95,447,556	68,347,605											

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Percent Growth	Percent Replacement	Total CIP/ Project	Total Growth	Total Replacement	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- UNFUNDED Capital Improvement Plan															
Scenario: 2023 11 21 -- Scenario 1															
Water and Sewer Fund 202 -- Financing															
Beginning Balance						$ 3,320,378	$ 5,171,777	$ 150,601	$ 21,052,750	$ 313,247	$ 21,029,856	$ 448,524	$ 3,412,973	$ 6,551,639	$ 9,872,214
Plus Interest						99,611	155,153	4,518	631,582	9,397	630,896	13,456	102,389	196,549	296,166
Impact Fee Revenue															
Estimated Impact Fee						$ 2,934	$ 2,934	$ 2,934	$ 2,934	$ 2,934	$ 2,934	$ 2,934	$ 2,934	$ 2,934	$ 2,934
Annual LUEs						848	872	897	923	950	978	1,006	1,035	1,065	1,096
Total Impact Fees						2,487,306	2,559,189	2,633,150	2,709,248	2,787,545	2,868,105	2,950,993	3,036,277	3,124,026	3,214,310
Plus Contributions from Developers						-	-	-	-	-	-	-	-	-	-
Plus ARP						-	-	-	-	-	-	-	-	-	-
Plus Contributions from Water Impact Fees						-	-	-	-	-	-	-	-	-	-
Plus Contributions from Sewer Impact Fees						-	-	-	-	-	-	-	-	-	-
Plus Conributions from Water Reserves						-	-	-	-	-	-	-	-	-	-
Plus Conributions from Sewer Reserves						-	-	-	-	-	-	-	-	-	-
Plus Amount Funded by W/WW Rate Revenue						-	-	-	-	-	-	-	-	-	-
Plus Funded from EDC						-	-	-	-	-	-	-	-	-	-
Plus Funded from TxDOT						-	-	-	-	-	-	-	-	-	-
Sub-Total						5,907,295	7,886,119	2,788,269	24,393,580	3,110,190	24,528,857	3,412,973	6,551,639	9,872,214	13,382,690
Plus Amount Funded by Long-Term Debt						7,000,000	-	26,000,000	-	42,000,000	-	-	-	-	-
Total Funds Available						12,907,295	7,886,119	28,788,269	24,393,580	45,110,190	24,528,857	3,412,973	6,551,639	9,872,214	13,382,690
Less Capital Improvement Plan			**95,447,556**	**65,888,200**	**29,559,356**	**7,735,519**	**7,735,519**	**7,735,519**	**24,080,333**	**24,080,333**	**24,080,333**	**-**	**-**	**-**	**-**
Ending Balance						5,171,777	150,601	21,052,750	313,247	21,029,856	448,524	3,412,973	6,551,639	9,872,214	13,382,690

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

Input Area -- UNFUNDED Capital Improvement Plan
Scenario: 2023 11 21 -- Scenario 1

WASTEWATER CIP

		Percent Growth	Percent Replacement	Total CIP/ Project	Total Growth	Total Replacement	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
NT-S1	Town Creek Phase IV 24" Section 1	21.0%	79.0%	$ 6,875,000	$ 1,443,750	$ 5,431,250	$ 2,291,667	$ 2,291,667	$ 2,291,667	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NT-S2	Town Creek Phase IV 12" Section 2	0.0%	100.0%	2,925,000	-	2,925,000	975,000	975,000	975,000	-	-	-	-	-	-	-
NT-S3	Town Creek V 24"	23.0%	77.0%	10,425,000	2,397,750	8,027,250	3,475,000	3,475,000	3,475,000	-	-	-	-	-	-	-
NT-S4	Upsize Lookout Line	20.0%	80.0%	3,838,000	767,600	3,070,400	1,279,333	1,279,333	1,279,333	-	-	-	-	-	-	-
NT-S5	Upsize Tri County Line	25.0%	75.0%	2,084,800	521,200	1,563,600	694,933	694,933	694,933	-	-	-	-	-	-	-
NT-S6	Cibolo West Main	83.0%	17.0%	16,213,000	13,456,790	2,756,210	5,404,333	5,404,333	5,404,333	-	-	-	-	-	-	-
NT-S7	Woman Hollering Creek Lift Station, Gravity Li	89.0%	11.0%	13,000,000	11,570,000	1,430,000	4,333,333	4,333,333	4,333,333	-	-	-	-	-	-	-
NT-SI-1	Decommission Tri County Lift Station	0.0%	100.0%	88,000	-	88,000	29,333	29,333	29,333	-	-	-	-	-	-	-
NT-SI-2	Decommission Corbett Lift Station	0.0%	100.0%	1,500,000	-	1,500,000	500,000	500,000	500,000	-	-	-	-	-	-	-
NT-SI-3	Decommission Sedona Lift Station	0.0%	100.0%	175,000	-	175,000	58,333	58,333	58,333	-	-	-	-	-	-	-
2030-S1	Hope Lane 8" Gravity Line	67.0%	33.0%	2,025,000	1,356,750	668,250	-	-	-	675,000	675,000	675,000	-	-	-	-
2030-S2	Old Wiederstein Rd 8"	5.0%	95.0%	1,338,000	66,900	1,271,100	-	-	-	446,000	446,000	446,000	-	-	-	-
2030-S3	Union Pacific RR 8" - Sec 1	10.0%	90.0%	2,563,000	256,300	2,306,700	-	-	-	854,333	854,333	854,333	-	-	-	-
2030-S4	Union Pacific RR 8" - Sec 2	12.0%	88.0%	400,000	48,000	352,000	-	-	-	133,333	133,333	133,333	-	-	-	-
2030-S5	Wiederstein Rd -- 8"	83.0%	17.0%	1,663,000	1,380,290	282,710	-	-	-	554,333	554,333	554,333	-	-	-	-
2030-S6	Schaefer Rd 8" Sec 1	33.0%	67.0%	4,913,000	1,621,290	3,291,710	-	-	-	1,637,667	1,637,667	1,637,667	-	-	-	-
2030-S7	Schaefer Rd 8" Sec 2	100.0%	0.0%	1,938,000	1,938,000	-	-	-	-	646,000	646,000	646,000	-	-	-	-
2030-S8	Aranda 8"	100.0%	0.0%	475,000	475,000	-	-	-	-	158,333	158,333	158,333	-	-	-	-
2030-S9	Weir Rd 10"	100.0%	0.0%	2,525,000	2,525,000	-	-	-	-	841,667	841,667	841,667	-	-	-	-
2030-S10	Trainer Hale Rd 10"	100.0%	0.0%	1,038,000	1,038,000	-	-	-	-	346,000	346,000	346,000	-	-	-	-
2030-S11	Ware Seguin Rd 8"	97.0%	3.0%	3,113,000	3,019,610	93,390	-	-	-	1,037,667	1,037,667	1,037,667	-	-	-	-
2030-S12	FM 1518 8"	40.0%	60.0%	400,000	160,000	240,000	-	-	-	133,333	133,333	133,333	-	-	-	-
2030-S13	I-10 8" Section 1	99.0%	1.0%	2,713,000	2,685,870	27,130	-	-	-	904,333	904,333	904,333	-	-	-	-
2030-S14	Boenig Drive 8"	29.0%	71.0%	2,963,000	859,270	2,103,730	-	-	-	987,667	987,667	987,667	-	-	-	-
2030-S15	N Greytown Rd 8"	52.0%	48.0%	1,275,000	663,000	612,000	-	-	-	425,000	425,000	425,000	-	-	-	-
2030-SI - 1	Friesenhahn West Line WW Upsize	22.0%	78.0%	8,175,000	1,798,500	6,376,500	-	-	-	2,725,000	2,725,000	2,725,000	-	-	-	-
2030-SI - 2	Fairlawn WW Upsize	9.0%	91.0%	1,375,000	123,750	1,251,250	-	-	-	458,333	458,333	458,333	-	-	-	-
2030-SI - 3	Cibolo Crossing WW Line Upsize	4.0%	96.0%	1,288,000	51,520	1,236,480	-	-	-	429,333	429,333	429,333	-	-	-	-
2030-SI - 4	Woodland Oak Drive Replacement	4.0%	96.0%	338,000	13,520	324,480	-	-	-	112,667	112,667	112,667	-	-	-	-
2030-SI - 5	Old Wiederstein WW Upsize	61.0%	39.0%	5,050,000	3,080,500	1,969,500	-	-	-	1,683,333	1,683,333	1,683,333	-	-	-	-
2030-SI - 6	Northcliffe Lift Station Upgrade	5.0%	95.0%	7,838,000	391,900	7,446,100	-	-	-	2,612,667	2,612,667	2,612,667	-	-	-	-
2030-SI - 7	Decommission Belmont Park Lift Station	0.0%	100.0%	463,000	-	463,000	-	-	-	154,333	154,333	154,333	-	-	-	-
	Future Project	0.0%	100.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	0.0%	100.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Future Project	0.0%	100.0%	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total Unfunded Wastewater CIP			**110,992,800**	**53,710,060**	**57,282,740**	**19,041,267**	**19,041,267**	**19,041,267**	**17,956,333**	**17,956,333**	**17,956,333**	**-**	**-**	**-**	**-**
				110,992,800												

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Percent Growth	Percent Replacement	Total CIP/ Project	Total Growth	Total Replacement	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- UNFUNDED Capital Improvement Plan															
Scenario: 2023 11 21 -- Scenario 1															
Water and Sewer Fund 202 -- Financing															
Beginning Balance						$ 3,320,378	$ 17,819,793	$ 793,244	$ 16,296,010	$ 389,990	$ 16,049,104	$ 221,454	$ 1,919,947	$ 3,715,243	$ 5,611,490
Plus Interest						99,611	534,594	23,797	488,880	11,700	481,473	6,644	57,598	111,457	168,345
Impact Fee Revenue															
Estimated Impact Fee						$ 1,668	$ 1,668	$ 1,668	$ 1,668	$ 1,668	$ 1,668	$ 1,668	$ 1,668	$ 1,668	$ 1,668
Annual LUEs						864	887	911	936	961	988	1,014	1,042	1,070	1,099
Total Impact Fees						1,441,071	1,480,124	1,520,235	1,561,433	1,603,748	1,647,210	1,691,849	1,737,698	1,784,790	1,833,158
Plus Contributions from Developers						-	-	-	-	-	-	-	-	-	-
Plus ARP						-	-	-	-	-	-	-	-	-	-
Plus Contributions from Water Impact Fees						-	-	-	-	-	-	-	-	-	-
Plus Contributions from Sewer Impact Fees						-	-	-	-	-	-	-	-	-	-
Plus Conributions from Water Reserves						-	-	-	-	-	-	-	-	-	-
Plus Conributions from Sewer Reserves						-	-	-	-	-	-	-	-	-	-
Plus Amount Funded by W/WW Rate Revenue						-	-	-	-	-	-	-	-	-	-
Plus Funded from EDC						-	-	-	-	-	-	-	-	-	-
Plus Funded from TxDOT						-	-	-	-	-	-	-	-	-	-
Sub-Total						4,861,060	19,834,511	2,337,276	18,346,323	2,005,438	18,177,787	1,919,947	3,715,243	5,611,490	7,612,993
Plus Amount Funded by Long-Term Debt						32,000,000	-	33,000,000	-	32,000,000	-	-	-	-	-
Total Funds Available						36,861,060	19,834,511	35,337,276	18,346,323	34,005,438	18,177,787	1,919,947	3,715,243	5,611,490	7,612,993
Less Capital Improvement Plan			**110,992,800**	**53,710,060**	**57,282,740**	**19,041,267**	**19,041,267**	**19,041,267**	**17,956,333**	**17,956,333**	**17,956,333**	**-**	**-**	**-**	**-**
Ending Balance						17,819,793	793,244	16,296,010	389,990	16,049,104	221,454	1,919,947	3,715,243	5,611,490	7,612,993

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Percent Growth	Percent Replacement	Total CIP/ Project	Total Growth	Total Replacement	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- UNFUNDED Capital Improvement Plan															
Scenario: 2023 11 21 -- Scenario 1															
Total CIP															
Total Water Unfunded CIP			$ 95,447,556	$ 65,888,200	$ 29,559,356	$ 7,735,519	$ 7,735,519	$ 7,735,519	$ 24,080,333	$ 24,080,333	$ 24,080,333	$ -	$ -	$ -	$ -
Total Wastewater Unfunded CIP			110,992,800	53,710,060	57,282,740	19,041,267	19,041,267	19,041,267	17,956,333	17,956,333	17,956,333	-	-	-	-
Total Unfunded CIP			**206,440,356**	**119,598,260**	**86,842,096**	**26,776,785**	**26,776,785**	**26,776,785**	**42,036,667**	**42,036,667**	**42,036,667**	**-**	**-**	**-**	**-**
Water and Sewer Fund 202 -- Financing															
Beginning Balance						$ 6,640,756	$ 22,991,570	$ 943,845	$ 37,348,760	$ 703,237	$ 37,078,961	$ 669,978	$ 5,332,920	$ 10,266,883	$ 15,483,704
Plus Interest						199,223	689,747	28,315	1,120,463	21,097	1,112,369	20,099	159,988	308,006	464,511
Impact Fee Revenue															
Estimated Impact Fee						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Annual LUEs						NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Impact Fees						3,928,377	4,039,313	4,153,385	4,270,681	4,391,293	4,515,315	4,642,843	4,773,975	4,908,815	5,047,468
Plus Contributions from Developers						-	-	-	-	-	-	-	-	-	-
Plus ARP						-	-	-	-	-	-	-	-	-	-
Plus Contributions from Water Impact Fees						-	-	-	-	-	-	-	-	-	-
Plus Contributions from Sewer Impact Fees						-	-	-	-	-	-	-	-	-	-
Plus Conributions form Water Reserves						-	-	-	-	-	-	-	-	-	-
Plus Conributions form Sewer Reserves						-	-	-	-	-	-	-	-	-	-
Plus Amount Funded by W/WW Rate Revenue						-	-	-	-	-	-	-	-	-	-
Plus Funded from EDC						-	-	-	-	-	-	-	-	-	-
Plus Funded from TxDOT						-	-	-	-	-	-	-	-	-	-
Sub-Total						10,768,355	27,720,630	5,125,545	42,739,904	5,115,627	42,706,644	5,332,920	10,266,883	15,483,704	20,995,683
Plus Amount Funded by Long-Term Debt						**39,000,000**	**-**	**59,000,000**	**-**	**74,000,000**	**-**	**-**	**-**	**-**	**-**
Total Funds Available						49,768,355	27,720,630	64,125,545	42,739,904	79,115,627	42,706,644	5,332,920	10,266,883	15,483,704	20,995,683
Less Capital Improvement Plan			206,440,356	119,598,260	86,842,096	26,776,785	26,776,785	26,776,785	42,036,667	42,036,667	42,036,667	-	-	-	-
Ending Balance						**22,991,570**	**943,845**	**37,348,760**	**703,237**	**37,078,961**	**669,978**	**5,332,920**	**10,266,883**	**15,483,704**	**20,995,683**

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Debt Financing Variables											
Issuing Cost Percentage	1.0%										
Initial Reserve Cost Percentage	2.0%										
Interest Rate	3.00%										
Term (Years)	20										
Annual Reserve Years Funded	-										
Debt Issues											
Total											
Water	$ 75,000,000	$ 7,000,000	$ -	$ 26,000,000	$ -	$ 42,000,000	$ -	$ -	$ -	$ -	$ -
Wastewater	97,000,000	32,000,000	-	33,000,000	-	32,000,000	-	-	-	-	-
Total	172,000,000	39,000,000	-	59,000,000	-	74,000,000	-	-	-	-	-
Percent Growth-Related		69.0%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%	69.0%
Growth-Related Debt Issues											
Water	$ 51,773,091	$ 4,832,155	$ -	$ 17,948,005	$ -	$ 28,992,931	$ -	$ -	$ -	$ -	$ -
Wastewater	66,959,864	22,089,852	-	22,780,160	-	22,089,852	-	-	-	-	-
Total	**118,732,955**	**26,922,007**	**-**	**40,728,165**	**-**	**51,082,783**	**-**	**-**	**-**	**-**	**-**

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series: 2025											
Principal	$ 26,922,007	$ -									
Issuing/Initial Reserve Costs	807,660										
Total Debt	27,729,668										
Interest Rate	3.0%										
Term	20										
P&I	1,863,869										
			1	2	3	4	5	6	7	8	9
Beginning Principal			27,729,668	26,697,688	25,634,750	24,539,923	23,412,251	22,250,750	21,054,403	19,822,166	18,552,962
Interest			831,890	800,931	769,042	736,198	702,368	667,522	631,632	594,665	556,589
Principal			$ 1,031,979	$ 1,062,939	$ 1,094,827	$ 1,127,672	$ 1,161,502	$ 1,196,347	$ 1,232,237	$ 1,269,204	$ 1,307,280
Interest			831,890	800,931	769,042	736,198	702,368	667,522	631,632	594,665	556,589
Annual Reserve			-	-	-	-	-	-	-	-	-
Total			$ 1,863,869	$ 1,863,869	$ 1,863,869	$ 1,863,869	$ 1,863,869	$ 1,863,869	$ 1,863,869	$ 1,863,869	$ 1,863,869
Percent Water/WW											
Water			17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%	17.9%
Wastewater			82.1%	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%	82.1%
Total			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water Debt Service											
Principal			$ 185,227	$ 190,784	$ 196,507	$ 202,403	$ 208,475	$ 214,729	$ 221,171	$ 227,806	$ 234,640
Interest			149,314	143,757	138,033	132,138	126,066	119,812	113,370	106,735	99,901
Annual Reserve			-	-	-	-	-	-	-	-	-
Total			$ 334,541	$ 334,541	$ 334,541	$ 334,541	$ 334,541	$ 334,541	$ 334,541	$ 334,541	$ 334,541
Wastewater Debt Service											
Principal			$ 846,752	$ 872,155	$ 898,319	$ 925,269	$ 953,027	$ 981,618	$ 1,011,066	$ 1,041,398	$ 1,072,640
Interest			682,576	657,174	631,009	604,060	576,302	547,711	518,262	487,930	456,688
Annual Reserve			-	-	-	-	-	-	-	-	-
Total			$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329
Total Less Principal			682,576	657,174	631,009	604,060	576,302	547,711	518,262	487,930	456,688

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2026**										
Principal	$ -										
Issuing/Initial Reserve Costs	-										
Total Debt	-										
Interest Rate	3.0%										
Term	20										
P&I	-										
				1	2	3	4	5	6	7	8
Beginning Principal				-	-	-	-	-	-	-	-
Interest				-	-	-	-	-	-	-	-
Principal				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest				-	-	-	-	-	-	-	-
Annual Reserve				-	-	-	-	-	-	-	-
Total				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Percent Water/WW											
Water				0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wastewater				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total				100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water Debt Service											
Principal				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest				-	-	-	-	-	-	-	-
Annual Reserve				-	-	-	-	-	-	-	-
Total				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Wastewater Debt Service											
Principal				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Interest				-	-	-	-	-	-	-	-
Annual Reserve				-	-	-	-	-	-	-	-
Total				$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Total Less Principal		-		-	-	-	-	-	-	-	-

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2027**										
Principal	$ 40,728,165										
Issuing/Initial Reserve Costs	1,221,845										
Total Debt	41,950,010										
Interest Rate	3.0%										
Term	20										
P&I	2,819,700										
					1	2	3	4	5	6	7
Beginning Principal					41,950,010	40,388,811	38,780,775	37,124,499	35,418,534	33,661,391	31,851,533
Interest					1,258,500	1,211,664	1,163,423	1,113,735	1,062,556	1,009,842	955,546
Principal					$ 1,561,199	$ 1,608,035	$ 1,656,276	$ 1,705,965	$ 1,757,144	$ 1,809,858	$ 1,864,154
Interest					1,258,500	1,211,664	1,163,423	1,113,735	1,062,556	1,009,842	955,546
Annual Reserve					-	-	-	-	-	-	-
Total					$ 2,819,700	$ 2,819,700	$ 2,819,700	$ 2,819,700	$ 2,819,700	$ 2,819,700	$ 2,819,700
Percent Water/WW											
Water					44.1%	44.1%	44.1%	44.1%	44.1%	44.1%	44.1%
Wastewater					55.9%	55.9%	55.9%	55.9%	55.9%	55.9%	55.9%
Total					100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water Debt Service											
Principal					$ 687,986	$ 708,626	$ 729,884	$ 751,781	$ 774,334	$ 797,564	$ 821,491
Interest					554,593	533,954	512,695	490,798	468,245	445,015	421,088
Annual Reserve					-	-	-	-	-	-	-
Total					$ 1,242,579	$ 1,242,579	$ 1,242,579	$ 1,242,579	$ 1,242,579	$ 1,242,579	$ 1,242,579
Wastewater Debt Service											
Principal					$ 873,213	$ 899,410	$ 926,392	$ 954,184	$ 982,809	$ 1,012,293	$ 1,042,662
Interest					703,907	677,711	650,728	622,937	594,311	564,827	534,458
Annual Reserve					-	-	-	-	-	-	-
Total					$ 1,577,120	$ 1,577,120	$ 1,577,120	$ 1,577,120	$ 1,577,120	$ 1,577,120	$ 1,577,120
Total Less Principal					703,907	677,711	650,728	622,937	594,311	564,827	534,458

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2028**										
Principal	$ -										
Issuing/Initial Reserve Costs	-										
Total Debt	-										
Interest Rate	3.0%										
Term	20										
P&I	-										
						1	2	3	4	5	6
Beginning Principal						-	-	-	-	-	-
Interest						-	-	-	-	-	-
Principal						$ -	$ -	$ -	$ -	$ -	$ -
Interest						-	-	-	-	-	-
Annual Reserve						-	-	-	-	-	-
Total						$ -	$ -	$ -	$ -	$ -	$ -
Percent Water/WW											
Water						0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Wastewater						100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total						100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Water Debt Service											
Principal						$ -	$ -	$ -	$ -	$ -	$ -
Interest						-	-	-	-	-	-
Annual Reserve						-	-	-	-	-	-
Total						$ -	$ -	$ -	$ -	$ -	$ -
Wastewater Debt Service											
Principal						$ -	$ -	$ -	$ -	$ -	$ -
Interest						-	-	-	-	-	-
Annual Reserve						-	-	-	-	-	-
Total						$ -	$ -	$ -	$ -	$ -	$ -
Total Less Principal						-	-	-	-	-	-

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2029**										
Principal	$ 51,082,783										
Issuing/Initial Reserve Costs	1,532,483										
Total Debt	52,615,267										
Interest Rate	3.0%										
Term	20										
P&I	3,536,572										
							1	2	3	4	5
Beginning Principal							52,615,267	50,657,152	48,640,294	46,562,931	44,423,246
Interest							1,578,458	1,519,715	1,459,209	1,396,888	1,332,697
Principal							$ 1,958,114	$ 2,016,858	$ 2,077,364	$ 2,139,684	$ 2,203,875
Interest							1,578,458	1,519,715	1,459,209	1,396,888	1,332,697
Annual Reserve							-	-	-	-	-
Total							$ 3,536,572	$ 3,536,572	$ 3,536,572	$ 3,536,572	$ 3,536,572
Percent Water/WW											
Water							56.8%	56.8%	56.8%	56.8%	56.8%
Wastewater							43.2%	43.2%	43.2%	43.2%	43.2%
Total							100.0%	100.0%	100.0%	100.0%	100.0%
Water Debt Service											
Principal							$ 1,111,362	$ 1,144,703	$ 1,179,044	$ 1,214,415	$ 1,250,848
Interest							895,882	862,541	828,200	792,828	756,396
Annual Reserve							-	-	-	-	-
Total							$ 2,007,244	$ 2,007,244	$ 2,007,244	$ 2,007,244	$ 2,007,244
Wastewater Debt Service											
Principal							$ 846,752	$ 872,155	$ 898,319	$ 925,269	$ 953,027
Interest							682,576	657,174	631,009	604,060	576,302
Annual Reserve							-	-	-	-	-
Total							$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329	$ 1,529,329
Total Less Principal							682,576	657,174	631,009	604,060	576,302

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2030**										
Principal	$ -										
Issuing/Initial Reserve Costs	-										
Total Debt	-										
Interest Rate	3.0%										
Term	20										
P&I	-										
								1	2	3	4
Beginning Principal								-	-	-	-
Interest								-	-	-	-
Principal								$ -	$ -	$ -	$ -
Interest								-	-	-	-
Annual Reserve								-	-	-	-
Total								$ -	$ -	$ -	$ -
Percent Water/WW											
Water								0.0%	0.0%	0.0%	0.0%
Wastewater								100.0%	100.0%	100.0%	100.0%
Total								100.0%	100.0%	100.0%	100.0%
Water Debt Service											
Principal								$ -	$ -	$ -	$ -
Interest								-	-	-	-
Annual Reserve								-	-	-	-
Total								$ -	$ -	$ -	$ -
Wastewater Debt Service											
Principal								$ -	$ -	$ -	$ -
Interest								-	-	-	-
Annual Reserve								-	-	-	-
Total								$ -	$ -	$ -	$ -
Total Less Principal								-	-	-	-

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2031**										
Principal	$ -										
Issuing/Initial Reserve Costs	-										
Total Debt	-										
Interest Rate	3.0%										
Term	20										
P&I	-										
									1	2	3
Beginning Principal									-	-	-
Interest									-	-	-
Principal									$ -	$ -	$ -
Interest									-	-	-
Annual Reserve									-	-	-
Total									$ -	$ -	$ -
Percent Water/WW											
Water									0.0%	0.0%	0.0%
Wastewater									100.0%	100.0%	100.0%
Total									100.0%	100.0%	100.0%
Water Debt Service											
Principal									$ -	$ -	$ -
Interest									-	-	-
Annual Reserve									-	-	-
Total									$ -	$ -	$ -
Wastewater Debt Service											
Principal									$ -	$ -	$ -
Interest									-	-	-
Annual Reserve									-	-	-
Total									$ -	$ -	$ -
Total Less Principal									-	-	-

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2032**										
Principal	$ -										
Issuing/Initial Reserve Costs	-										
Total Debt	-										
Interest Rate	3.0%										
Term	20										
P&I	-										
										1	2
Beginning Principal										-	-
Interest										-	-
Principal										$ -	$ -
Interest										-	-
Annual Reserve										-	-
Total										$ -	$ -
Percent Water/WW											
Water										0.0%	0.0%
Wastewater										100.0%	100.0%
Total										100.0%	100.0%
Water Debt Service											
Principal										$ -	$ -
Interest										-	-
Annual Reserve										-	-
Total										$ -	$ -
Wastewater Debt Service											
Principal										$ -	$ -
Interest										-	-
Annual Reserve										-	-
Total										$ -	$ -
Total Less Principal										-	-

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series:	**2033**										
Principal	$ -										
Issuing/Initial Reserve Costs	-										
Total Debt	-										
Interest Rate	3.0%										
Term	20										
P&I	-										
											1
Beginning Principal											-
Interest											-
Principal											$ -
Interest											-
Annual Reserve											-
Total											$ -
Percent Water/WW											
Water											0.0%
Wastewater											100.0%
Total											100.0%
Water Debt Service											
Principal											$ -
Interest											-
Annual Reserve											-
Total											$ -
Wastewater Debt Service											
Principal											$ -
Interest											-
Annual Reserve											-
Total											$ -
Total Less Principal											-

Date: 11/25/2024

CITY OF SCHERTZ
WATER/WW IMPACT FEE UTILITY REVENUE CREDIT CALCULATION

	Input Area	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034
Input Area -- Future Debt Service											
Scenario: 2023 11 21 -- Scenario 1											
Series: Total Future Debt Service											
Water Future Debt Service											
Total											
Principal		$ -	$ 185,227	$ 190,784	$ 884,493	$ 911,028	$ 2,049,721	$ 2,111,213	$ 2,174,549	$ 2,239,786	$ 2,306,979
Interest		-	149,314	143,757	692,627	666,092	1,534,643	1,473,151	1,409,814	1,344,578	1,277,384
Annual Reserve		-	-	-	-	-	-	-	-	-	-
Total		-	334,541	334,541	1,577,120	1,577,120	3,584,364	3,584,364	3,584,364	3,584,364	3,584,364
Wastewater Future Debt Service											
Total											
Principal		$ -	$ 846,752	$ 872,155	$ 1,771,533	$ 1,824,679	$ 2,726,171	$ 2,807,956	$ 2,892,195	$ 2,978,961	$ 3,068,330
Interest		-	682,576	657,174	1,334,916	1,281,770	1,909,606	1,827,821	1,743,582	1,656,817	1,567,448
Annual Reserve		-	-	-	-	-	-	-	-	-	-
Total		-	1,529,329	1,529,329	3,106,449	3,106,449	4,635,777	4,635,777	4,635,777	4,635,777	4,635,777

APPENDIX 33 - IMPACT FEE COMPARISON SOURCES

CITY OF BOERNE - 2023

EXHIBIT C

SCHEDULE OF MAXIMUM IMPACT FEES

UTILITY	CALCULATED FEE	RATE CREDIT	MAXIMUM FEE
WATER	$3,294	$786	$2,509
WASTEWATER	$5,637	$517	$5,120

EXHIBIT C1
IMPACT FEES BY METER SIZE
ASSESSED BEGINNING May 23, 2023

METER SIZE	LUE'S PER METER	WATER FEE	WASTEWATER FEE	TOTAL FEE
5/8"	1.0	$2,509.00	$5,120.00	$7,629.00
3/4"	1.5	$3,763.50	$7,680.00	$11,443.50
1"	2.5	$6,272.50	$12,800.00	$19,072.50
1 1/2"	5.0	$12,545.00	$25,600.00	$38,145.00
2" Non-turbine	8.0	$20,072.00	$40,960.00	$61,032.00
2" Compound	8.0	$20,072.00	$40,960.00	$61,032.00
2" Turbine	10.0	$25,090.00	$51,200.00	$76,290.00
3" Compound	16.0	$40,144.00	$81,920.00	$122,064.00
3" Turbine	25.0	$62,725.00	$128,000.00	$190,725.00
4" Compound	25.0	$62,725.00	$128,000.00	$190,725.00
4" Turbine	42.0	$105,378.00	$215,040.00	$320,418.00
6" Compound	50.0	$125,450.00	$256,000.00	$381,450.00
6" Turbine	92.0	$230,828.00	$471,040.00	$701,868.00
8" Turbine	160.0	$401,440.00	$819,200.00	$1,220,640.00
10" Turbine	250.0	$627,250.00	$1,280,000.00	$1,907,250.00
12" Turbine	330.0	$827,970.00	$1,689,600.00	$2,517,570.00

EXHIBIT C2
IMPACT FEES BY METER SIZE
ASSESSED DECEMBER 10, 2019, to May 22, 2023

METER SIZE	LUE'S PER METER	WATER FEE	WASTEWATER FEE	TOTAL FEE
5/8"	1.0	$5,743.00	$3,814.00	$9,557.00
3/4"	1.5	$8,614.50	$5,721.00	$14,335.50
1"	2.5	$14,357.50	$9,535.00	$23,892.50
1 1/2"	5.0	$28,715.00	$19,070.00	$47,785.00
2" Non-turbine	8.0	$45,944.00	$30,512.00	$76,456.00
2" Compound	8.0	$45,944.00	$30,512.00	$76,456.00
2" Turbine	10.0	$57,430.00	$38,140.00	$95,570.00

NEW BRAUNFELS UTILITIES - 2022

EXECUTIVE SUMMARY

In 2021, New Braunfels Utilities (NBU), authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis on the water and wastewater systems. The purpose of this report is to summarize the methodology used in the development and calculation of water and wastewater impact fees for NBU. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the update of water and wastewater impact fees.

As part of this study, land use assumptions, growth projections, and water/wastewater loading criteria from the *2021 Water & Wastewater Master Plan Update* by FNI were used to develop 10-year load projections for both the water and wastewater systems. Impact fee capital improvements plans (CIP) were developed for both systems to serve projected growth through 2032. The hydraulic models of the water and wastewater systems, along with pumping and storage planning criteria developed by FNI, were employed to calculate the percentage of each project's capacity projected to be utilized in the 10-year planning period (2022-2032). A summation of each project's estimated cost, including financing costs less credits for existing projects partially funded through rate increases, multiplied by the percentage of that project being utilized in the 10-year planning period was used to calculate a total impact fee eligible CIP cost for both water and wastewater. These costs were divided by the projected growth in living unit equivalents (LUE) for water and wastewater, respectively, to determine the maximum allowable impact fees. **Table ES-1** and **Table ES-2** summarize the maximum allowable impact fee calculations for water and wastewater, respectively. **Table ES-3** shows the maximum allowable impact fee for each meter size distributed by NBU.

Table ES-1 Maximum Water Impact Fee Calculation

Water Impact Fee	
Total Eligible Capital Improvement Costs	$228,540,978
Total Eligible Financing Costs	$168,389,936
Total Eligible Impact Fee Costs	$396,930,914
Total Impact Fee Credits	($837,433)
Maximum Allowable Cost	$396,093,481
Growth in Service Units	20,367
Maximum Allowable Water Impact Fee	**$19,448**

Table ES-2 Maximum Wastewater Impact Fee Calculation

Wastewater Impact Fee	
Total Eligible Capital Improvement Costs	$85,710,012
Total Eligible Financing Costs	$37,415,837
Total Eligible Impact Fee Costs	$123,125,849
Total Impact Fee Credits	($2,813,220)
Maximum Allowable Cost	$120,312,629
Growth in Service Units	19,269
Maximum Allowable Wastewater Impact Fee	**$6,244**

Table ES-3 Maximum Allowable Impact Fee by Meter Size

Meter Size	Maximum Flow Rate for Continuous Duty (gallons per minute)	Service Unit Equivalent	Maximum Allowable Water	Maximum Allowable Wastewater	Maximum Allowable Total
5/8"	10	1.0	$19,448	$6,244	$25,692
1"	25	2.5	$48,620	$15,610	$64,230
1 1/2"	50	5.0	$97,240	$31,220	$128,460
2"	80	8.0	$155,584	$49,952	$205,536
3"	175	17.5	$340,340	$109,270	$449,610
4"	300	30.0	$583,440	$187,320	$770,760
6"	675	67.5	$1,312,740	$421,470	$1,734,210
8"	2,400	240.0	$4,667,520	$1,498,560	$6,166,080
10"	3,500	350.0	$6,806,800	$2,185,400	$8,992,200

CITY OF SEGUIN - 2023

EXECUTIVE SUMMARY

1.0 Background

In August 2022, the City of Seguin, Texas (City), authorized Freese and Nichols, Inc. (FNI) to perform an impact fee analysis on the City's water and wastewater systems, including a portion of the Spring Hills Water Supply Corporation (SHWSC) Service Area that will be transferred to the City as part of the ongoing Certificate of Convenience and Necessity (CCN) Transfer. The purpose of this report is to summarize the methodology used in the development and calculation of water and wastewater impact fees for the City of Seguin. The methodology used herein satisfies the requirements of the Texas Local Government Code Section 395 for the establishment and update of water and wastewater impact fees.

2.0 Land Use Assumptions

Population and land use are important elements in the analysis of water and wastewater systems. Through collaboration between FNI and the City, FNI developed growth projections using land use assumptions from the ongoing Seguin Comprehensive Plan and proposed development according to the City's Planning Department to estimate service connections for the 2023 and 2033 planning periods. **Table ES-1** presents the growth projections for the City of Seguin Water and Wastewater Service Areas including the CCN area to be transferred from SHWSC to the City, hereafter referred to as the "Transfer Area."

Table ES-1: Growth Projections

Service Area	2023 Connections	2033 Connections	Growth Rate
Existing Water	*8,272*	*11,012*	*2.90%*
Transfer Area	*1,305*	*7,370*	*18.90%*
Water Total	**9,577**	**18,382**	**6.74%**
Wastewater Total	**10,741**	**28,319**	**10.18%**

3.0 Capital Improvement Plan

Water and wastewater impact fee capital improvement plans (CIP) were developed for the City of Seguin based on the land use assumptions and growth projections. The recommended improvements will provide the required capacity to meet projected water demands and wastewater flows through 2033. The CIPs are based on recommendations from the 2022 Water and Wastewater Master Plans and include improvements identified to provide service to the Transfer Area. For each existing or proposed project, the impact fee eligible cost is calculated as a percentage of the project cost, based upon the portion of

the project's capacity required to serve growth projected to occur between 2023 and 2033, the 10-year period used for impact fee analysis. The cost associated with the portion of projects required to serve growth beyond this 10-year period are not included in the current impact fee calculations but will be eligible for impact fee cost recovery in the next impact fee update. The total cost for each eligible project includes the project's capital cost to serve 10-year growth, the projected finance cost for the capital improvements, and the consultant cost for preparing and updating the CIP. **Table ES-2** shows a summary of the total capital cost and impact fee-eligible cost for all Impact Fee CIP projects for the Water and Wastewater Service Areas.

Table ES-2: CIP Cost Summary

Service Area	Total Capital Cost of Impact Fee Eligible Projects	Total 10-Year (2023-2032) Cost of Impact Fee Eligible Projects
Water	$173,881,062	$87,766,441
Wastewater	$339,567,626	$194,769,279

4.0 Impact Fee Analysis

According to Chapter 395 of the Texas Local Government Code, the maximum impact fee may not exceed the amount determined by dividing the cost of required capital improvements by the total number of service units attributed to new development during the impact fee eligibility period. A water service unit is defined as the service equivalent to a water-only connection or a water/wastewater connection for a single-family residence. A wastewater service unit is defined as the service unit equivalent to a water/wastewater connection for a single-family residence. The current impact fee ordinance was adopted in 2020. This ordinance set the water impact fee for a single-family meter at $1,386.86 including a pass-through fee of $354.54 from Schertz-Seguin Local Government Corporation (SSLGC) and the wastewater impact fee for a single-family meter at $7,757.77. This project is an update to the 2020 ordinance. **Table ES-3** displays the updated maximum allowable impact fee per service unit for the Water and Wastewater Service Areas, including the $354.54 SSLGC pass-through fee.

Table ES-3: Maximum Allowable Impact Fees

Service Area	Maximum Allowable Impact Fee Per Service Unit
Water	$7,308
Wastewater	$9,250
Sub-Total	**$16,558**
SSLGC Water Supply Impact Fee	$354
Total Maximum Allowable Impact Fee	**$16,912**

CITY OF SAN MARCOS - 2018

Table 8.
Derivation of Alternative Maximum Water and Wastewater Impact Fee Amounts

Item	Capital Cost of New Service per LUE	Optional Adjustments		Option A	Option B	Highest of Option A or B
		Option A Rate Credit	Option B 50% Cost Adjustment			
WATER						
Supply	$ 2,495	$ 208	$ 1,247	$ 2,287	$ 1,247	
Treatment	609	10	305	599	305	
Pumping	128	18	64	110	64	
Ground Storage	298	1	149	297	149	
Elevated Storage	163	8	82	155	82	
Transmission	455	113	228	342	228	
Allocated Impact Fee Study Cost	10			10	10	
Total Water	$4,159	$358	$2,074	$3,801	$2,085	**$3,801**
WASTEWATER						
Treatment	$ 1,470	$ 86	$ 735	$ 1,385	$ 735	
Pumping	705	78	352	627	352	
Interceptors	774	112	387	662	387	
Allocated Impact Fee Study Cost	10			10	10	
Total Wastewater	$2,960	$276	$1,475	$2,684	$1,485	**$2,684**
TOTAL WATER/WASTEWATER	$7,119	$634	$3,549	$6,485	$3,570	**$6,485**

The fee methodology was replicated for each major facility type in the utility system (e.g., supply, treatment, pumping, elevated storage, ground storage, and transmission) so that the total fee amount is the sum of the component facility fees. This provides a basis for extending the fee to wholesale customers of the City or granting fee offsets if a developer cost-participates with the City on CIP projects.

For comparison purposes, the current impact fees of other near-by cities are listed in Table 9.

CITY OF AUSTIN - 2023

I. INTRODUCTION

Austin Water (AW) has developed this periodic impact fee update in close collaboration with the Austin City Council appointed Impact Fee Advisory Committee (IFAC) and other City of Austin (City) departments in accordance with state law. This required 5-year update takes a fresh look at Land Use Assumptions (LUA) and the impact fee Capital Improvement Plan (CIP) that will serve new development in the next 10 years. The basic requirements for determining the costs "Necessitated by and attributed to" new development are prescribed in the Impact Fee Act, Section 395.016 of the Texas Local Government Code. These requirements state that facility capacity that will be used by new growth and its cost are determined by first projecting the demand on the system (the LUA), and then deriving the facility plan for serving that demand (the CIP). The end-products are the maximum allowable impact fees for water and wastewater, which reflect the calculated cost of serving new growth that is not recouped in new customer rate payments. The law also sets the terms of fee assessment for a given tract of land.

The actual fees collected, up to the maximum allowable fee, are the purview of the Austin City Council. AW is proposing new collected fees for consideration via the public hearing mandated by the impact fee regulations. These proposed fees are presented in Section III. Subsequent to the hearing, Austin City Council will consider enacting an ordinance adopting new fees and, if approved, that ordinance will be appended to this document.

As detailed in the LUA section of this report, Austin continues to be one of the fastest growing cities in the country, with the projected 10-year growth estimated to be approximately 88,000 service units, in an impact fee service area that has not changed significantly from the 2018 update.

As detailed in the CIP section of this report, Austin's investments in infrastructure necessitated by and attributed to growth are planned to exceed $678M for water and $524M for wastewater, a combined increase of 24% over the 2018 10-year capital improvements program plan, which includes a notable investment in new wastewater treatment plant capacity.

An additional factor in calculating the new maximum allowable fees is a credit for growth project revenues AW is projected to collect from projected 10-year growth customers for receiving water and wastewater services, which, within the context of impact fees, may be referred to as a rate revenue credit. To avoid double charging new customers, the law requires that monies paid by new users toward the growth projects in the form of rates be subtracted from the 10-year growth project costs. Similar to the previous update in 2018, the rate revenue credit amount is calculated for Austin-specific conditions resulting in a credit of approximately 41% and is detailed in the CIP document.

The final maximum allowable fee for a single service unit was calculated to be $4,882 for water and $2,969 for wastewater.

II. ASSESSED FEES

The Impact Fee Act provides what is called fee assessment in order to set the timing for establishing fees for a given tract of land. It states that impact fees must be assessed on all property no later than the time of subdivision (with certain exceptions where development occurs without the need for subdivision). Accordingly, the assessed fees for a particular lot are those in effect at the time of subdivision recordation. After 1990 the impact fee update reports and ordinances included the assessed fee separate from the maximum allowable and collected fees. The assessed fee remained constant until the 2007 update. Since then, the assessed fee is deemed to be the maximum allowable amount, thereby keeping open the option of setting collected fees up to the maximum allowable fee in effect at the time a subdivision plat is recorded.

III. COLLECTED FEES

After the required public hearing and Austin City Council's adoption of the LUA and CIP periodic update, Council considers the adoption of the ordinance that sets the impact fees to be assessed and collected at the time of tap sale for water meter purchase and/or wastewater service. The collected fees are generally referred to as Austin's water and wastewater impact fees. Historically, the collected amounts have been set by ordinance at amounts lower than the maximum allowable fees. The collected fees are proposed to be $4,800 for water and $2,900 for wastewater.

SAWS - 2024

March 18, 2024

TO INTERESTED PARTIES:

Texas Local Government Code Chapter 395 necessitates the updating of the San Antonio Water System (SAWS) impact fees by June 2024. The Capital Improvements Advisory Committee (CIAC), SAWS staff, and consultant Carollo Engineers began the update process for all water and wastewater impact fees in July 2023, and the CIAC finalized its recommendations in a findings report on January 31, 2024. The findings report and all other CIAC meeting documents are available at: www.saws.org/CIAC .

The update involves a projection of increased demand and resulting increased capacity in the water and wastewater systems for the next ten-year planning period. The costs associated with the capacity necessary to serve the projected growth determine the impact fee rate. The CIAC recommended impact fees are show below.

SUMMARY OF RECOMMENDED IMPACT FEES

Impact Fee Component	Impact Fee ($/EDU)		Fee Change	
	Current	Recommended	$	%
Water Supply	$ 2,706	$ 2,592	$ (114)	-4%
Water Flow	$ 1,188	$ 1,368	$ 180	15%
Water System Development				
High Elevation	$ 1,203	$ 2,027	$ 824	68%
Middle Elevation	$ 1,014	$ 1,744	$ 730	72%
Low Elevation	$ 855	$ 1,510	$ 655	77%
Wastewater Treatment				
Medio Creek	$ 1,222	$ 1,527	$ 305	25%
Clouse / Leon Creek	$ 651	$ 1,105	$ 454	70%
Wastewater Collection				
Medio Creek	$ 861	$ 1,836	$ 976	113%
Upper Medina	$ 1,422	$ 1,702	$ 280	20%
Lower Medina	$ 520	$ 768	$ 248	48%
Upper Collection	$ 2,800	$ 4,436	$ 1,636	58%
Middle Collection	$ 2,013	$ 2,792	$ 779	39%
Lower Collection	$ 902	$ 1,138	$ 236	26%
Totals	**$ 7,227**	**$ 8,919**	**$ 1,692**	**23%**

The recommended impact fees were approved by the SAWS Board of Trustees on March 5, 2024. It is anticipated that the San Antonio City Council will hold a public hearing and consider adoption of the recommended impact fees on May 16, 2024. When the recommended impact fees are approved by the San Antonio City Council, they are expected to become effective on June 1, 2024.

The determination on whether current impact fees or the recommended impact fees will be charged for service to a particular property is based on the date of plat recordation. In accordance with current state law, the impact fees in effect at the time the plat is recorded are the fees that will be charged. An individual may pay current impact fees for a property prior to plat recordation under the following conditions:

- The plat has been approved by the Planning Commission,
- All impact fees are paid prior to the effective date of the new impact fees.

If you have any questions concerning the update process, please do not hesitate to contact me at tlehmann@saws.org, 210-233-3492, or Bob Johnson at bobby.johnson@saws.org, 210-233-3493.

Sincerely,

Tracey B. Lehmann, P.E.
Interim Vice President
Engineering and Construction

CITY OF PFLUGERVILLE - 2023

Impact Fees

Effective January 10, 2023

Reference Ordinance No. 1577-23-01-10

Listed below are the Water and Wastewater Impact Fees, the water meter deposits and the Water and Wastewater tap fees

Meter Size	Service Units
5/8" Displacement	1.0
3/4" Displacement	1.7
1" Displacement	2.7
1 1/2" Displacement	3.3
2" Displacement	6.7
3" Compound	21.3
4" Compound	33.3
4" Combination	46.7
6" Compound	66.7
6" Combination	106.7
8" Combination	186.7
10” Combination	293.3

Service Area	Maximum Allowable Impact Fee Per Service Unit
Water	$14,713
Wastewater Service Area 1	$1,316
Wastewater Service Area 2	$15,136
Total in Wastewater Service Area 1	**$16,029**
Total in Wastewater Service Area 2	**$29,849**

City of Pflugerville Water and Wastewater Tap Fees:

Water Meter Deposit	$ 125
Water Tap Fee	$ 250
Wastewater Tap Fee	$ 250

Agenda No. 12.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**City Secretary**
Subject:	**Resolution 25-R-005 - Approving a Utility Service Extension Request for the Woman Hollering Townhomes (B.James/K.Woodlee)**

BACKGROUND

When a property within the City Limits of the City of Schertz is proposed for development and is within the City's area of Certificate of Convenience and Necessity (CCN), the connection to the City's water and/or wastewater utilities is reviewed and processed through established procedures of the platting process. In the past, when a property outside the City Limits was proposed for development and there was a need for City water and/or wastewater service, it was required that the property be annexed into the City. Subsequent to annexation, the platting process would take place. The City cannnot require annexation as a condition to provide utility services to a property within its CCN. As a result the UDC was amended via Ordinance 24-S-14 to instead require that the developer submit a request for Utility Service Extension. According to the UDC, authority to approve the request lies with City Council. Once approved, the developer may submit for permits to construct the necessary improvements in order to be served by the City's utility infrastructure.

The proposed development is approximately 30.48 acres situated along FM 1518 on the north side of its intersection with Woman Hollering Road (12535 Woman Hollering Road). The developer proposes to construct **a multifamily or townhome development** with up to 230 living unit equivalents (LUEs) and desires to connect to public water and wastewater systems. Staff has evaluated the request based on existing water and wastewater facilities, flows expected to be generated by the proposed development, and the projection of other future flows from the vicinity. Adequate capacity in both the water distribution system and the wastewater collection system currently exists to serve the development. The following criteria should be considered for final action determination.

1. Whether the proposed development to be served by the extension is consistent with the Comprehensive Land Plan.
   The property lies within areas designated as Complete Neighborhood and Local Corridor. A mixture of housing types and multifamily developments are identified as appropriate in those areas.
2. Whether the extension is proposed to be constructed in accordance with all applicable City ordinances, resolutions, regulations, and standards.
   The utility extensions and connections will be constructed in accordance with applicable City standards.
3. Whether it is feasible to annex the property, and any intervening property which is needed for utility rights-of-way, into the City.
   If requested by the property owner, the property could be annexed into the City. No additional rights-of-way across the property are currently identified as being needed. It is also of note that the property owner proposes to enter into an agreement for annexation after certain milestones occur.
4. Whether the utility extension would compromise the City's ability to timely provide adequate

water or wastewater facilities to property inside the City.

The proposed extensions are not expected to compromise the City's ability to provide timely and adequate water or wastewater facilities to property inside the City Limits.

5. Whether the utility extension will lead to premature development that cannot be served efficiently and timely by roadway, drainage, or park facilities.

The proposed extensions will not lead to premature development that cannot be served by existing roadway, drainage, or park facilities.

6. Whether the utility extension is financially feasible given the proposed means of financing the extension.

The proposed extensions will be paid for by the developer.

7. Whether the utility extension will lead to significant degradation of water quality or other environmental resources, either from construction of the water or wastewater improvements, development of the property owner's land, or development of other land that may be served through the extended facilities.

The proposed extensions are not expected to lead to significant degradation of environmental resources.

8. Whether the property owner proposes to extend wastewater facilities without utilizing City water facilities.

The property owner proposes to extend and be served by both City wastewater and City water facilities.

9. The extent to which the proposed agreement promotes the health, safety, or general welfare of the City and the safe, orderly, efficient and healthful development of the City.

By following City standards and extending utilities to provide for future extension beyond the proposed development, the extensions and proposed development of the property will allow for orderly development and is not expected to jeopardize the safe, efficient, and healthful development of the City. A development agreement is also being proposed to include annexation of the property after certain milestones of development have been met.

In conjunction with this item, staff has worked with the property owner on a Development Agreement, Resolution 25-R-021.

GOAL

The goal of the resolution is the approval of the water and wastewater Utility Extension Request for the proposed development known as the Woman Hollering Townhomes.

COMMUNITY BENEFIT

By allowing the extension of public utilities to the proposed Woman Hollering Townhome development, a short extension of the sanitary sewer main will be constructed to provide a connection point for several parcels within the City's CCN and the City Limits. Also, without approval of the service extension request, the property might still be developed, although at a lower density but with on-site septic facilities which are not desirable if public facilities are nearby and accessible. The property owner has also agreed to be annexed into the City Limits once certain development steps are completed.

SUMMARY OF RECOMMENDED ACTION

Staff recommends that Council approve the request for Utility Service Extension for City of Schertz Public Water and Wastewater infrastructure to the proposed Woman Hollering Townhomes project along with the proposed development agreement with the property owner.

RECOMMENDATION

Approve Resolution 25-R-005.

Attachments

Resolution 25-R-005
Vicinity Map
Utility Service Extension Request

RESOLUTION NO. 25-R-005

A RESOLUTION BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS, APPROVING A UTILITY SERVICE EXTENSION REQUEST FOR WATER AND WASTEWATER UTILITIES TO THE PROJECT KNOWN AS THE WOMAN HOLLERING TOWNHOMES

WHEREAS, the City of Schertz (the "City") provides retail water and wastewater service under Certificates of Convenience and Necessity (CCNs) issued by the Public Utility Commission of Texas (PUC) to certain areas in Bexar County; and

WHEREAS, the property on the north side of the intersection of Woman Hollering Road and FM 1518 is outside the City Limits of the City but within the City's water and wastewater CCNs; and

WHEREAS, the developer of the property on the north side of the intersection of Woman Hollering Road and FM 1518 (12535 Woman Hollering Road) proposes a project known as the Woman Hollering Townhomes and has submitted a Utility Service Extension Request to be served by City water and wastewater without being annexed into the City; and

WHEREAS, the City Council has determined that the criteria for approval of the Utility Service Extension Request as set forth in Unified Development Code (UDC) Section 21.4.11 are being met.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1.The City Council hereby approves the Utility Service Extension Request for the project known as the Woman Hollering Townhomes thereby allowing the submittal of applications for, construction of, and connection to City water and wastewater utilities for up to 230 living unit equivalents (LUEs).

Section 2.The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3.All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4.This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5.If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6.It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7.This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this __ day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____

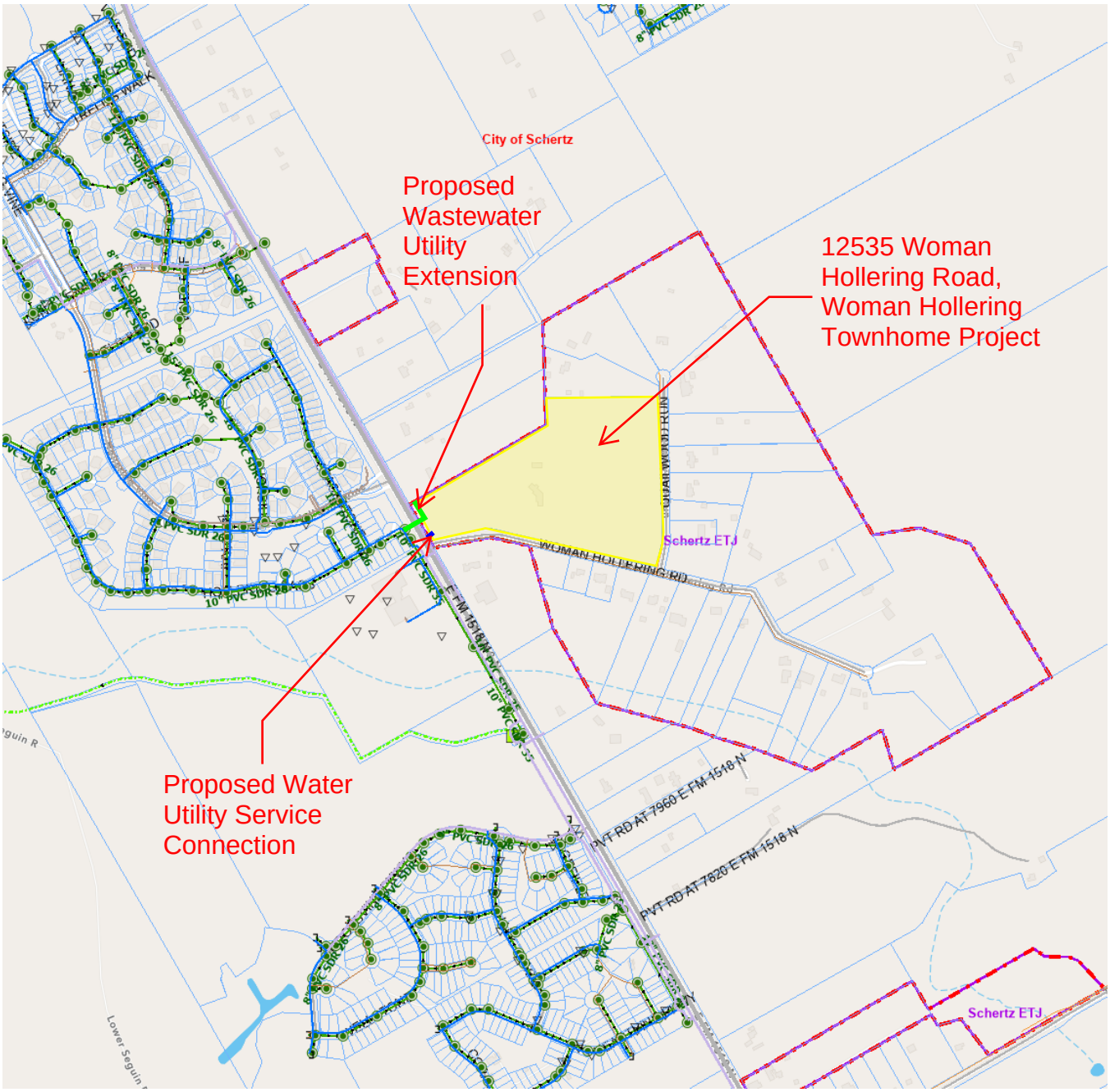
Ralph Gutierrez, Mayor

ATTEST:

_____

Sheila Edmondson, City Secretary

(CITY SEAL)



RESOLUTION 25-R-005
UTILITY SERVICE EXTENSION REQUEST (WATER AND WASTEWATER) FOR WOMAN HOLLERING TOWNHOMES

MALONE ★ WHEELER
SINCE INC. 1995

CIVIL ENGINEERING ★ DEVELOPMENT CONSULTING ★ PROJECT MANAGEMENT

May 21st, 2024

City of Schertz
Attn: Kathryn Woodlee
City Engineer
11 Commercial Place
Schertz, TX 78154

Re: Woman Hollering Townhomes – Service Extension Request (SER)

Ms. Woodlee,

The Woman Hollering project is located in a 30.48-acre tract at 12535 Woman Hollering Road, in the Extraterritorial Jurisdiction of the City of Schertz, Texas. The property is located west of FM 1518 and north of Woman Hollering Road, a private roadway owned by a third-party individual in the Tom Williams subdivision. The subject tract used to have an existing single-family home that was recently demolished. The property is currently vacant/undeveloped and is proposed to be developed with up to 230 residential units, which could be townhomes or apartments with a proposed clubhouse, which would equal but not exceed 230 LUEs. No subdivision of the land is being proposed; the City of Schertz issued a "Certificate of Determination" in March 13, 2023 acknowledging that the City will not require platting given that the property is located in the ETJ.

This letter is being submitted to serve as the Service Extension Request (SER) for water (domestic, irrigation and fire flow) and wastewater services for this project. Per previous discussions with City staff, no water line extension will be required along Woman Hollering Road, a private dead-end road, where an existing 4" water line is already in place serving the properties in the cul-de-sac, and where no additional development is feasible due to the nature of the lot and street layout. A water meter is proposed to connect to the existing City of Schertz 12" water line on the west side of FM 1518 to serve the proposed Woman Hollering development; the proposed water meter size will be determined with site plan design when fixture unit counts become available. For wastewater service, an 8" wastewater line is proposed to be extended along the property's frontage on the west side of FM 1518 and connect to the existing City of Schertz wastewater system on the east side of FM 1518. Per the wastewater analysis performed, the proposed 8" line will have adequate capacity to handle the 230 LUEs and estimated I&I (16,100 gpd) for the Woman Hollering development. An exhibit showing the proposed wastewater line extension and water meter is included with this submittal.

A "Will Serve Letter" was issued by the City of Schertz on December 6th, 2022, confirming the City's availability to provide water and wastewater services for the Woman Hollering project. This SER is being submitted as the next step in the development process to show the proposed public improvements and confirm that water and wastewater capacity will be reserved in the City's public utility systems for the requested 230 LUEs that are anticipated for the project.

Should there be any questions or comments, please do not hesitate to contact me via email at claudiam@malonewheeler.com or by phone at 512-618-0437. Thank you for your efforts on this project.

Sincerely,
Malone Wheeler, Inc.



Claudia Morlotti, E.I.T.
Assistant Project Manager

Agenda No. 13.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Planning & Community Development**
Subject:	**Ordinance 25-S-004 - Consider amendments to Part III of the Schertz Code of Ordinances, Unified Development Code (UDC), to Article 11, Section 21.11.6 Prohibited Signs and Section 21.11.17 Temporary Signs (B.James/L.Wood/E.Delgado)**

BACKGROUND

Background from January 7, 2025 City Council meeting:

At the January 7, 2025 City Council meeting staff gave a presentation and made a recommendation on Unified Development Code Amendments for Article 11, Section 21.11.6 Prohibited Signs to explicitly state that wind driven signs including feather flags and inflatable / balloon signs are prohibited regardless of size. Staff also recommended amending Section 21.11.17 Temporary Signs to increase the maximum area and maximum height for temporary signage to 36 square feet and 6 feet in height on all types of streets. However, during the discussion, City Council indicated that the proposed amendment language was not desired as written. The explicit prohibition of wind driven signs to include feather flags was not the previous intention. During the January 7th discussion, City Council confirmed the desire to prohibit inflatable / balloon signs, but there was a desire to allow feather flags in some capacity. Based on the discussion, City Council ultimately tabled the item in order for staff to provide changes to the proposed UDC amendment language.

City staff has created an updated draft UDC Amendment language outlined below that will be discussed at the February 4, 2025 meeting in order to have City Council evaluate and modify. From that discussion, staff will finalize the UDC Amendment for action.

Proposed Amendments

Staff is proposing modifications to the following UDC Article 11, Section 21.11.6 Prohibited Signs and UDC Article 11, Section 21.11.17 Temporary Signs based on the discussion had at the January 7th City Council meeting:

Article	UDC Section	Current UDC	Proposed Amendment
11	21.11.6 Prohibited Signs	Currently, the UDC does not directly prohibit inflatable / balloon signs.	Balloon Signs including inflatable signs are prohibited regardless of size. Feather Flags are the only type of wind driven signs allowed.
11	21.11.17.B Maximum Area	Areas with Limited Access: 32 sq.ft. per face or ten percent (10%) of the building facade, whichever is less Areas with Unlimited Access:	Twenty Four Square Feet (24 sq.ft.) except that feather flags are limited to Sixteen Square Feet (16 sq.ft.)

		24 sq.ft. per face or seven percent (7%) of the building facade, whichever is less All Other Streets: 16 sq.ft. per face or five percent (5%) of the building facade, whichever is less	
11	21.11.17.C Maximum Height	Areas with Limited Access: 6 feet Areas with Unlimited Access: 4 feet All Other Streets: 3 feet	Four Feet (4ft.) except that feather flags are limited to Eight Feet (8')

Staff is proposing to treat feather flags as temporary signs. Feather flags are the only type of wind driven sign allowed. Feather flags can be four feet taller (8' vs 4') but have less area (16 sq ft vs 24 sq ft). Each business/tenant can have no more than 3 temporary signs up at one time (can be all feather flags or freestanding or a combination 2 of one and 1 of the other). The total number of days they can have temporary signs up is 120 and that is cumulative. So they can have one sign up for 120 days or 3 signs up for 40 days or some combination of that. Temporary signs will be issued for 30 day increments, except that it can be shortened if they hit their maximum time. For example, they can have 3 temporary signs up for 30 days and then one sign up for 30 days. We will also issue a "recurring event permit" that is issued in two day increments for up to 15 times per year. The applicant must identify which 15 two day increments they want when applying for the initial permit (these can be adjusted as dates change).

In summary businesses would be able to have feather flags, but not inflatable signs. They can have up to 3 temporary signs up at any one time, but they can only have 120 instances of temporary signs. There is also the provision for short recurring event temporary signs. The idea is to create a consistent framework to limit complexity and confusion.

Staff is requesting that at the February 4th City Council meeting that feedback and direction can be provided if this proposal or some variation of it is desirable.
Additionally, in light of the extensive conversation on temporary signs and feedback received, staff has started drafting a full UDC Article 11 Signs rewrite. The goal of this rewrite will be to have sign regulations that are more easily understood, and to ensure that the signs that are being permitted are desired by City Council. In light of this upcoming UDC Amendment for Article 11, which staff anticipates having to the City Council in April, staff is requesting that no formal action be taken on Ordinance 25-S-004. Rather than adopting a small change in Article 11 and then in the upcoming couple of months making a full Article 11 rewrite, it seems more appropriate to provide direction on Temporary Signs using this ordinance presentation, not take action on the Ordinance itself and then the desired changes for Temporary Signs will be incorporated into the overall Article 11 rewrite.

Previous Background from the January 7, 2025 City Council meeting:
As per Unified Development Code Section 21.4.7, City Council from time to time, or on its own motion, or at the recommendation of City Staff can recommend amendments, change or modify any portion of the UDC to establish and maintain sound and stable development.

At the November 12, 2024, City Council Workshop Meeting, the Planning Division gave a presentation / workshop regarding updating the Ordinance for blowup signs and flags for advertising.

As a follow-up, the Planning Division gave an additional workshop / presentation at the November 19, 2024, City Council meeting to discuss proposed amendments to UDC Article 11, Section 21.11.17 Temporary Signs. Both of these workshops / discussions can be reviewed via YouTube. Based on these two workshops, it was discussed that the current regulations for temporary signs should be modified to increase the maximum height and maximum area in order to allow greater flexibility (larger signage regardless of the property location and adjacent roadway classification) for businesses / customers to utilize temporary signs. In addition, the Unified Development Code should explicitly prohibit wind driven signs such as feather flag signs and inflatable signs.

The Planning and Zoning Commission held a public hearing and made a recommendation of approval at the December 4, 2024, Planning and Zoning Commission meeting. A Public Hearing notice was published in the San Antonio Express on December 18th for the Public Hearing at the January 7, 2025, City Council meeting.

GOAL

To receive direction on the proposed amendments to the Unified Development Code Article 11, Section 21.11.6 Prohibited Signs to explicitly state that inflatable / balloon signs are prohibited regardless of size and Section 21.11.17 Temporary Signs to increase the maximum area and maximum height for temporary signage and to modify the requirements for feather flags.

COMMUNITY BENEFIT

It is the City's desire to promote safe, orderly, efficient development and ensure compliance with the City's vision of future growth.

SUMMARY OF RECOMMENDED ACTION

When staff evaluates Unified Development Code Amendments, they use section 21.4.7.D Criteria for approval. The criteria are listed below.

1. The proposed amendment promotes the health, safety, and general welfare of the City;

The City Council requests and staff proposes UDC amendments from time to time to proactively better the Unified Development Code that governs development within the City of Schertz. The proposed amendments allow greater flexibility / larger temporary signs regardless of where the business location is and the associated roadway classification. By increasing the maximum height and maximum area for temporary signage it promotes orderly and efficient development. With the proposed amendments, businesses will still be required to obtain a temporary sign permit which also ensures orderly development of the City. Additionally, by providing clarity on prohibited signs it will ensure consistency and efficiency with the sign permitting process throughout the City.

2. The proposed amendment is consistent with the goals, objectives, and policies of the UDC and the City;

The proposed amendments are consistent with the goals and desires of the City Council as discussed at the November 19, 2024 City Council workshop. Additionally, increasing the maximum height and maximum area allows greater flexibility, which is consistent with other UDC Amendments that have been approved. Recent UDC amendments have been made to add clarity on requirements and desires of the City Council. By creating a UDC amendment that clearly prohibits inflatable signage, it is more clear for business owners and applicants on what is allowed as a temporary sign in the City of Schertz.

3. The proposed amendment corrects an error, meets the challenge of changing conditions, or is in response to changes in state law; and

The proposed amendments will meet the changing conditions / desires of the City Council in relation to allowing larger temporary signs. Additionally, the amendment adds clarity on temporary signs that are not desired and more clearly prohibits the use of inflatable signs. The Operational Values of the City include being proactive and service-oriented. By implementing the proposed UDC amendment, it will proactively allow businesses to have larger temporary signs and to have consistent height and area maximums for all businesses regardless of the property location.

4. Other factors which are deemed relevant and important in the consideration of the amendment.

Staff has ensured all UDC requirements have been met for the proposed Unified Development Code Amendments. The City Council Workshops at the November 12th and November 19th City Council, as well as the January 7, 2025 City Council meetings should be reviewed as it provides additional information as to the insight of why these UDC Amendments have been requested and proposed.

RECOMMENDATION

Staff Recommendation

As previously stated in this City Council report staff is requesting that at the February 4th City Council meeting that feedback and direction be provided about whether the proposed changes are desirable. Staff is requesting that no formal action be taken on Ordinance 25-S-004 but rather include these changes into the full rewrite of Article 11 that will be brought to the Planning and Zoning Commission and City Council in the next couple of months.

Planning and Zoning Commission Recommendation

The Planning and Zoning Commission met on December 4, 2024, held a public hearing, and made a recommendation of approval to City Council with a 6-0 vote. The UDC Amendment that the Planning and Zoning Commission recommended included the following UDC Amendment language which differs from what is proposed with this UDC Amendment.

- Prohibit wind driven signs including feather flags and inflatable / balloon signs
- Increase maximum area to 36 square feet
- Increase maximum height to 6 feet

Attachments

Ordinance 25-S-004 with Attachments

Proposed UDC Amendment Redlines

City Council Presentation Slides

ORDINANCE NO. 25-S-004

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AMENDING PART III SCHERTZ CODE OF ORDINANCES, THE UNIFIED DEVELOPMENT CODE (UDC) ARTICLE 11 SECTION 21.11.6 PROHIBITED SIGNS AND ARTICLE 11 SECTION 21.11.17 TEMPORARY SIGNS

WHEREAS, pursuant to Ordinance No. 10-S-06, the City of Schertz (the "City") adopted and Amended and Restated the Unified Development Code on April 13, 2010, as further amended (the "Current UDC"); and

WHEREAS, City Staff has reviewed the Current UDC and have recommended certain revisions and updates to, and reorganization of, the Current UDC; and

WHEREAS, on December 4, 2024, the Planning and Zoning Commission conducted a public hearing and, after considering the Criteria, made a recommendation to City Council of approval; and

WHEREAS, on January 7, 2025, the City Council conducted a public hearing and after considering the Criteria and recommendation by the Planning and Zoning Commission, determined that the proposed amendments are appropriate and are in the interest of the public safety, health, and welfare.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The Current UDC is hereby amended as set forth on Exhibit A hereto.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Ordinance for all purposes and are adopted as a part of the judgment and findings of the Council.

Section 3. All ordinances and codes, or parts thereof, which are in conflict or inconsistent with any provision of this Ordinance are hereby repealed to the extent of such conflict, and the provisions of this Ordinance shall be and remain controlling as to the matters resolved herein.

Section 4. This Ordinance shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Ordinance or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Ordinance and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City hereby declares that this Ordinance would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Ordinance is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Ordinance, was given, all as required by Chapter 551, as amended, Texas Government Code.

Section 7. This Ordinance shall be effective upon the date of final adoption hereof and any publication required by law.

Section 8. This Ordinance shall be cumulative of all other ordinances of the City of Schertz, and this Ordinance shall not operate to repeal or affect any other ordinances of the City of Schertz except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this Ordinance, in which event such conflicting provisions, if any, are hereby repealed.

PASSED, APPROVED and ADOPTED ON this _____ of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
Sheila Edmondson, City Secretary

(city seal)

Exhibit “A”
Proposed Unified Development Code (UDC) Amendments

Sec. 21.11.6. Prohibited Signs.

A. *Obscene Signs.* No person shall erect or display on any site a sign in which the dominant theme of material taken as a whole appeals to the prurient interest in sex, and is patently offensive because it affronts current community standards relating to the description or representation of sexual matters, and is utterly without redeeming social literary, artistic, political, and scientific value, according to contemporary community standards.

B. *Obstructing Doors, Windows or Fire Escapes.* No person shall erect or display on any site any sign that prevents free ingress to or egress from any door, window or fire escape.

C. *Obstructing Vision/Sight Triangle.* No person shall erect or display on any site any sign in such a manner as to obstruct free and clear vision of moving vehicles at any location, street intersection, or driveway. All signs placed at any intersection shall prevent such problem by observing a visibility triangle (see definition of visibility triangle).

D. *Interference With Traffic.* No sign shall be permitted which interferes with vehicular or pedestrian traffic as a result of the position, size, shape, movement, color, fashion, manner, or intensity of illumination, or any other characteristics causing such interference. No person shall erect or allow to be displayed any sign in such a manner as to interfere with, obstruct the view of, or be confused with any authorized traffic sign, signal, or device, including, signs making use of the words "stop", "go", "look", "slow", "danger", or any other similar word, phrase, symbol or character. No person shall employ any red, yellow, green, or other colored lamp or light in such a manner as to cause confusion or otherwise interfere with vehicular or pedestrian traffic.

E. *Over Public Property or Public Right-of-Way.* It shall be prohibited to erect or display any type of sign on or over public ROW or other public property, unless the same is erected by the City, County, State or other authorized governmental agency, or with the permission of the City (in its sole discretion), for public purposes.

F. *Signs on Utility Poles.* No person shall erect or display any sign except as specifically authorized by section 21.11.5 on any utility pole located upon any public right-of-way or utility easement.

G. *Private Property.* No sign shall be located on private property without the consent of the owner of the premises, including signs located on trees, light poles or mail boxes.

H. *Dilapidated Signs.* No sign shall be permitted which is deteriorated, dilapidated or in danger of falling or otherwise unsafe.

I. *Signs in Violation.* No sign shall be permitted that does not comply with any applicable provisions of the building code, this UDC, or any other applicable laws, ordinances, codes or regulations of the City.

J. *Home Occupation Signs.* No exterior home occupation signs shall be permitted unless otherwise specifically authorized in another applicable section of this UDC.

K. *Non-Motorized or Portable Signs.* No trailer type, non-motorized signs using wheels and axles as the primary support shall be permitted.

L. *Off Premise Signs.* Except as set forth elsewhere in this Article, all off premise signs not legally existing on February 19, 2008 are prohibited except that the following signs may be permitted provided they otherwise meet the applicable requirements of this Article:

1. Community Service Signs;
2. Garage Sale Signs;
3. Official Government Signs;
4. Historical Markers and Plaques;

5. Political Signs;
6. Real Estate Signs;
7. Temporary Signs;
8. Traffic Signs;

M. *Bandit Signs.*

N. *Painted Signs.* No sign shall be permitted which is painted on the wall of any building or on any part of a building.

O. *Other Signs.* Except as set forth elsewhere in this Article, any signs not specifically permitted by this Article are prohibited within the City and its ETJ.

P. Balloon Signs including inflatable signs are prohibited regardless of size. Feather Flags are the only type of wind driven signs allowed.

Sec. 21.11.17. Temporary Signs.

A. *General.* Notwithstanding any other provisions of this Article, this section shall be applicable to all temporary signs identified in this Article.

B. *Maximum Area.* The maximum area permitted for temporary signs shall not exceed Twenty-Four Square Feet (24 sq.ft.) except that Feather Flags are limited to Sixteen Square Feet (16 sq.ft.).

C. *Maximum Height.* The maximum height permitted for temporary signs shall not exceed Four Feet (4ft.) except that Feather Flags are limited to Eight Feet (8').

D. *Minimum Setback.* The minimum setback for all temporary signs shall be fifteen feet (15') from any property line.

E. *Time Limitations.* Temporary signs shall be permitted for a maximum of 120 days per calendar year. Temporary Sign permits will be issued for thirty (30) day increments. The cumulative total number of days for which all temporary sign issued for a property or business shall not exceed 120 calendar days.

F. *Number of Signs.* No more than three (3) temporary signs shall be permitted per business or tenant at any given time.

G. *Recurring Event Permit.* A Recurring Event Permit is for temporary signs that will be issued in two-day increments for up to fifteen (15) times per year. The applicant requesting a Recurring Event Permit must identify which 15 two day increments they intend to have the temporary signs when applying for the initial permit. The selected dates can be modified as dates change with prior approval.

Sec. 21.11.6. Prohibited Signs.

A. *Obscene Signs.* No person shall erect or display on any site a sign in which the dominant theme of material taken as a whole appeals to the prurient interest in sex, and is patently offensive because it affronts current community standards relating to the description or representation of sexual matters, and is utterly without redeeming social literary, artistic, political, and scientific value, according to contemporary community standards.

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C. *Obstructing Vision/Sight Triangle.* No person shall erect or display on any site any sign in such a manner as to obstruct free and clear vision of moving vehicles at any location, street intersection, or driveway. All signs placed at any intersection shall prevent such problem by observing a visibility triangle (see definition of visibility triangle).

D. *Interference With Traffic.* No sign shall be permitted which interferes with vehicular or pedestrian traffic as a result of the position, size, shape, movement, color, fashion, manner, or intensity of illumination, or any other characteristics causing such interference. No person shall erect or allow to be displayed any sign in such a manner as to interfere with, obstruct the view of, or be confused with any authorized traffic sign, signal, or device, including, signs making use of the words "stop", "go", "look", "slow", "danger", or any other similar word, phrase, symbol or character. No person shall employ any red, yellow, green, or other colored lamp or light in such a manner as to cause confusion or otherwise interfere with vehicular or pedestrian traffic.

E. *Over Public Property or Public Right-of-Way.* It shall be prohibited to erect or display any type of sign on or over public ROW or other public property, unless the same is erected by the City, County, State or other authorized governmental agency, or with the permission of the City (in its sole discretion), for public purposes.

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H. *Dilapidated Signs.* No sign shall be permitted which is deteriorated, dilapidated or in danger of falling or otherwise unsafe.

I. *Signs in Violation.* No sign shall be permitted that does not comply with any applicable provisions of the building code, this UDC, or any other applicable laws, ordinances, codes or regulations of the City.

J. *Home Occupation Signs.* No exterior home occupation signs shall be permitted unless otherwise specifically authorized in another applicable section of this UDC.

K. *Non-Motorized or Portable Signs.* No trailer type, non-motorized signs using wheels and axles as the primary support shall be permitted.

L. *Off Premise Signs.* Except as set forth elsewhere in this Article, all off premise signs not legally existing on February 19, 2008 are prohibited except that the following signs may be permitted provided they otherwise meet the applicable requirements of this Article:

1. Community Service Signs;
2. Garage Sale Signs;
3. Official Government Signs;
4. Historical Markers and Plaques;

5. Political Signs;
6. Real Estate Signs;
7. Temporary Signs;
8. Traffic Signs;

M. *Bandit Signs.*

N. *Painted Signs.* No sign shall be permitted which is painted on the wall of any building or on any part of a building.

O. *Other Signs.* Except as set forth elsewhere in this Article, any signs not specifically permitted by this Article are prohibited within the City and its ETJ.

P. Balloon Signs including inflatable signs are prohibited regardless of size. Feather Flags are the only type of wind driven signs allowed.

Sec. 21.11.17. Temporary Signs.

A. *General.* Notwithstanding any other provisions of this Article, this section shall be applicable to all temporary signs identified in this Article.

B. *Maximum Area.* The maximum area permitted for temporary signs shall not exceed Twenty Four Square Feet (24 sq.ft.) except that Feather Flags are limited to Sixteen Square Feet (16 sq.ft.). ~~the following:~~

~~Table 21.11.17A~~ ~~Maximum Area of Temporary Signs~~	
~~Areas with Limited Access~~	~~32 sq. ft. per face or ten percent (10%) of the building façade, whichever is less~~
~~Areas with Unlimited Access~~	~~24 sq. ft. per face or seven percent (7%) of the building façade, whichever is less~~
~~All Other Streets~~	~~16 sq. ft. per face or five percent (5%) of the building façade, whichever is less~~

C. *Maximum Height.* The maximum height permitted for temporary signs shall not exceed Four Feet (4ft.) except that Feather Flags are limited to Eight Feet (8'). ~~the following:~~

~~Table 21.11.17B~~ ~~Maximum Height of Temporary Signs~~	
~~Areas with Limited Access~~	~~6 feet~~
~~Areas with Unlimited Access~~	~~4 feet~~
~~All Other Streets~~	~~3 feet~~

D. *Minimum Setback.* The minimum setback for all temporary signs shall be fifteen feet (15') from any property line.

E. *Time Limitations.* Temporary ~~freestanding~~ signs shall be permitted for a maximum of 120 ~~180~~ days per calendar year. Temporary Sign permits will be issued for thirty (30) day increments. ~~No additional temporary sign permit shall be issued for the same property or business for a period of fourteen (14) days after the expiration of the previous permit. There shall be no limit to the number of temporary sign permits that may be issued for a particular property or business.~~ The cumulative total number of days for which all temporary sign ~~permits~~ issued for a property or business shall not exceed ~~180~~ 120 calendar days.

F. *Number of Signs.* No more than three (3) ~~two (2) types of~~ temporary signs shall be permitted per business or tenant at any given time.

G. *Recurring Event Permit.* A Recurring Event Permit is for temporary signs that will be issued in two-day increments for up to fifteen (15) times per year. The applicant requesting a Recurring Event Permit must identify which 15 two day increments they intend to have the temporary signs when applying for the initial permit. The selected dates can be modified as dates change with prior approval.

Ordinance 25-S-004

UDC Amendment for Article 11 Section 21.11.6 Prohibited Signs and Section 21.11.17 Temporary Signs

Emily Delgado | Planning Manager

SCHERTZ
COMMUNITY. SERVICE. OPPORTUNITY.

Background

- At the November 12, 2024, City Council Workshop meeting, the Planning Division gave a presentation / workshop regarding updating the UDC for blowup signs and flags for advertising.
- At the November 19, 2024, City Council meeting staff gave an additional workshop / presentation to further discuss proposed UDC amendments.
- Public Hearing Notice was published on December 18th for the January 7th City Council meeting.

- At the January 7th City Council meeting staff proposed the following UDC Amendmets:
  - Prohibition on wind driven signs including feather flags and inflatable / balloon signs regardless of size.
  - Increase Maximum Area to Thirty-Six Square Feet (36sq.ft.)
  - Increase Maximum Height to Six Feet (6ft.)

- At the January 7th meeting it was made clear that there was a desire amongst City Council to allow feather flags and that staff needed to revise the proposed UDC Amendment.

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Types of Temporary Signs:

Wind Sign



"A" Frame Sign



Balloon Sign



Banner Sign



Bandit Sign



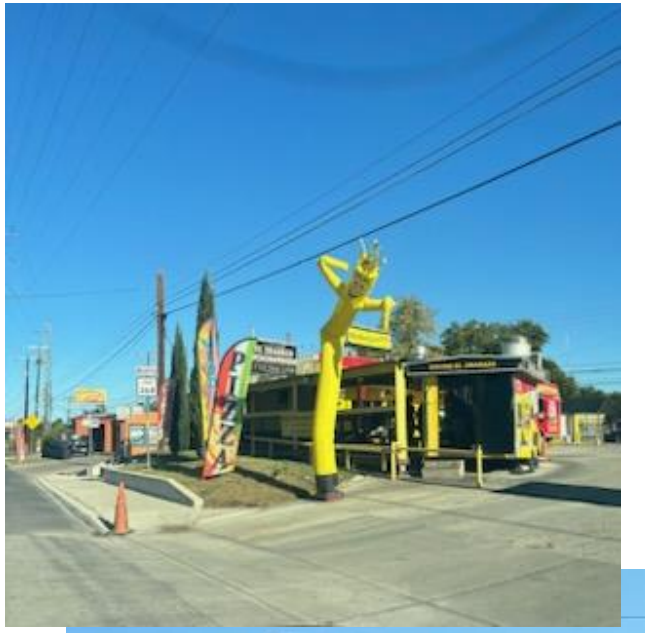
SCHERTZ
COMMUNITY ★ SERVICE ★ OPPORTUNITY

Examples of signage













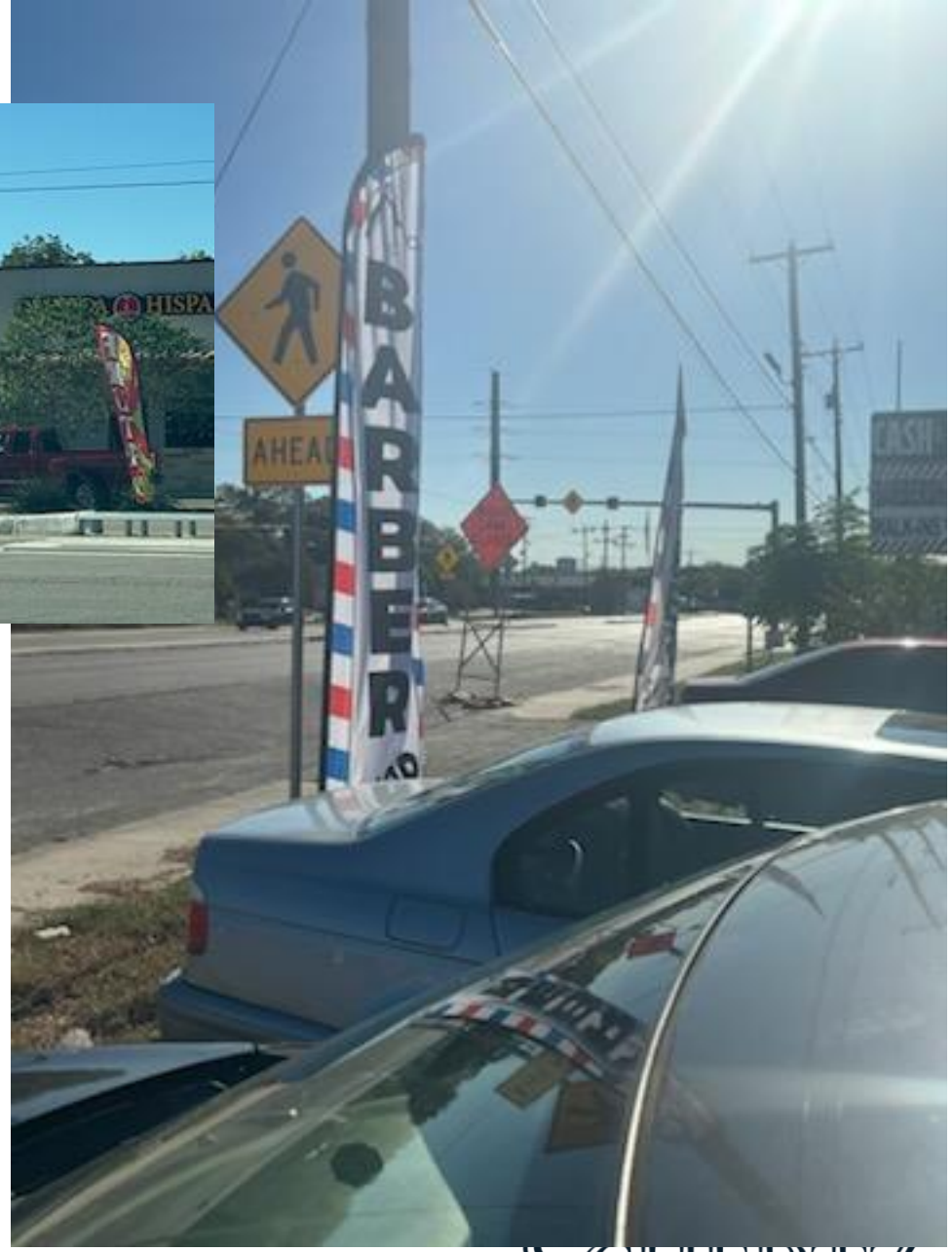
SCHERTZ
COMMUNITY ★ SERVICE ★ OPPORTUNITY

Examples of signage









Proposed UDC Amendments:

Article	UDC Section	Current UDC	Proposed Amendment
11	21.11.6- Prohibited Signs	Currently inflatable / balloon signs are not in the listed of Prohibited Signs.	Balloon Signs including inflatable signs are prohibited regardless of size. Feather Flags are the only type of wind driven signs allowed.
11	21.11.17.B Maximum Area	• Areas with Limited Access: 32 sqft per face or 10% of the building façade, whichever is less. • Areas with Unlimited Access: 24 sqft per face or 7% of the building façade, whichever is less. • All Other Streets: 16 sqft per face or 5% of the building façade, whichever is less.	Twenty- Four Square Feet (24 sq. ft.) except that Feather Flags are limited to Sixteen Square Feet (16 sq.ft.)
11	21.11.17C Maximum Height	• Areas with Limited Access: 6 feet • Areas with Unlimited Access: 4 feet • All Other Streets: 3 feet	Four Feet (4ft.) except that Feather Flags are limited to Eight Feet (8ft.)

Proposed UDC Amendments:

Sec. 21.11.6. Prohibited Signs.

P. Balloon Signs including inflatable signs are prohibited regardless of size. Feather Flags are the only type of wind driven signs allowed.

Sec. 21.11.17. Temporary Signs.

A. *General.* Notwithstanding any other provisions of this Article, this section shall be applicable to all temporary signs identified in this Article.

B. *Maximum Area.* The maximum area permitted for temporary signs shall not exceed Twenty Four Square Feet (24 sq.ft.) except that Feather Flags are limited to Sixteen Square Feet (16 sq.ft.). ~~the following:~~

~~Table 21.11.17A Maximum Area of Temporary Signs~~	
~~Areas with Limited Access~~	~~32 sq. ft. per face or ten percent (10%) of the building façade, whichever is less~~
~~Areas with Unlimited Access~~	~~24 sq. ft. per face or seven percent (7%) of the building façade, whichever is less~~
~~All Other Streets~~	~~16 sq. ft. per face or five percent (5%) of the building façade, whichever is less~~

C. *Maximum Height.* The maximum height permitted for temporary signs shall not exceed Four Feet (4ft.) except that Feather Flags are limited to Eight Feet (8'). ~~the following:~~

~~Table 21.11.17B Maximum Height of Temporary Signs~~	
~~Areas with Limited Access~~	~~6 feet~~
~~Areas with Unlimited Access~~	~~4 feet~~
~~All Other Streets~~	~~3 feet~~

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COMMUNITY ★ SERVICE ★ OPPORTUNITY

Proposed UDC Amendments:

D. *Minimum Setback.* The minimum setback for all temporary signs shall be fifteen feet (15') from any property line.

E. *Time Limitations.* Temporary ~~freestanding~~ signs shall be permitted for a maximum of 120 ~~180~~ days per calendar year. Temporary Sign permits will be issued for thirty (30) day increments. ~~No additional temporary sign permit shall be issued for the same property or business for a period of fourteen (14) days after the expiration of the previous permit. There shall be no limit to the number of temporary sign permits that may be issued for a particular property or business.~~ The cumulative total number of days for which all temporary sign ~~permits~~ issued for a property or business shall not exceed ~~180~~ 120 calendar days.

F. *Number of Signs.* No more than three (3) ~~two (2) types of~~ temporary signs shall be permitted per business or tenant at any given time.

G. *Recurring Event Permit.* A Recurring Event Permit is for temporary signs that will be issued in two-day increments for up to fifteen (15) times per year. The applicant requesting a Recurring Event Permit must identify which 15 two day increments they intend to have the temporary signs when applying for the initial permit. The selected dates can be modified as dates change with prior approval.

Proposed UDC Amendments:

Sec. 21.11.6. Prohibited Signs.

P. Balloon Signs including inflatable signs are prohibited regardless of size. Feather Flags are the only type of wind driven signs allowed.

Sec. 21.11.17. Temporary Signs.

A. *General.* Notwithstanding any other provisions of this Article, this section shall be applicable to all temporary signs identified in this Article.

B. *Maximum Area.* The maximum area permitted for temporary signs shall not exceed Twenty-Four Square Feet (24 sq.ft.) except that Feather Flags are limited to Sixteen Square Feet (16 sq.ft.).

C. *Maximum Height.* The maximum height permitted for temporary signs shall not exceed Four Feet (4ft.) except that Feather Flags are limited to Eight Feet (8').

D. *Minimum Setback.* The minimum setback for all temporary signs shall be fifteen feet (15') from any property line.

E. *Time Limitations.* Temporary signs shall be permitted for a maximum of 120 days per calendar year. Temporary Sign permits will be issued for thirty (30) day increments. The cumulative total number of days for which all temporary sign issued for a property or business shall not exceed 120 calendar days.

F. *Number of Signs.* No more than three (3) temporary signs shall be permitted per business or tenant at any given time.

G. *Recurring Event Permit.* A Recurring Event Permit is for temporary signs that will be issued in two-day increments for up to fifteen (15) times per year. The applicant requesting a Recurring Event Permit must identify which 15 two day increments they intend to have the temporary signs when applying for the initial permit. The selected dates can be modified as dates change with prior approval.

Key Changes

- Staff is proposing to treat feather flags as temporary signs. Feather flags are the only type of wind driven sign allowed.

- Feather flags can be four feet taller (8' vs 4') than other temporary signs but have less area (16 sq ft vs 24 sq ft).

- Each business/tenant can have no more than 3 temporary signs up at one time (can be all feather flags or freestanding or a combination 2 of one and 1 of the other). This is a proposed increase to the overall number of temporary signs.

- The total number of days they can have temporary signs up is 120 cumulative days.
    - Example: can have one sign up for 120 days or 3 signs up for 40 days or some combination of that.

- Temporary signs will be issued for two-day increments, except that it can be shortened if they hit their maximum time.
    - Example, they can have 3 temporary signs up for 30 days and then one sign up for 30 days.

Key Changes

- Creation of a "recurring event permit" that is issued in two day increments for up to 15 times per year. The applicant must identify which 15 two day increments they want when applying for the initial permit (these can be adjusted as dates change).

- In summary
  - Businesses would be able to have feather flags, but not inflatable signs
  - They can have up to 3 temporary signs up at any one time, but they can only have 120 instances of temporary signs.
  - There is also the provision for short recurring event temporary signs.

- The idea is to create a consistent framework to limit complexity and confusion.

Background

- Staff is requesting that at the February 4th City Council meeting that feedback and direction can be provided if the proposal or some variation of it is desirable.

- Additionally, in light of the extensive conversation on temporary signs and feedback received, staff has started drafting a full UDC Article 11 Signs rewrite. The goal of this rewrite will be to have sign regulations that are more easily understood, and to ensure that the signs that are being permitted are desired by City Council.

- With this upcoming UDC Amendment for Article 11, which staff anticipates having to the City Council in April, staff is requesting that no formal action be taken on Ordinance 25-S-004.

- Rather than adopting a small change in Article 11 and then in the upcoming couple of months making a full Article 11 rewrite, it seems more appropriate to provide direction on Temporary Signs using this ordinance presentation, not take action on the Ordinance itself and then the desired changes for Temporary Signs will be incorporated into the overall Article 11 rewrite.

UDC SECTION 21.4.7.D Criteria for Approval

1. The proposed amendment promotes the health, safety, or general welfare of the City.

- The proposed amendments
  - allow greater flexibility / larger temporary signs
  - increases the maximum height and maximum area for temporary
  - businesses will still be required to obtain a temporary sign permit which also ensures orderly development of the City
  - increase clarity on prohibited signs

2. An amendment to the text is consistent with the goals, objectives and policies of this UDC and the City

- Consistent with the goals and desires of the City Council as discussed at the previous City Council workshops and meetings.
- Allows greater flexibility, which is consistent with other UDC Amendments that have been approved.
- UDC amendment that clearly prohibits inflatable signage, it is clearer for business owners and applicants on what is allowed as a temporary sign in the City of Schertz.

UDC SECTION 21.4.7.D Criteria for Approval

3. The proposed amendment corrects an error, meets the challenge of changing conditions, or is in response to changes in state law;

- Meets the changing conditions / desires of the City Council
- Adds clarity on temporary signs that are not desired
- More clearly prohibits the use of inflatable signs
- Proactively will allow businesses to have larger temporary signs and to have consistent height and area maximums for all businesses regardless of the property location.

4. Other factors which are deemed relevant and important in the consideration of the amendment.

- Staff has ensured all UDC requirements have been met for the proposed Unified Development Code Amendments.

Recommendation

Staff Recommendation:

- Staff is requesting that at the February 4th City Council meeting that feedback and direction be provided about whether the proposed changes are desirable.
- Staff is requesting that no formal action be taken on Ordinance 25-S-004 but rather include these changes into the full rewrite of Article 11 that will be brought to the Planning and Zoning Commission and City Council in the next couple of months.

Planning & Zoning Commission Recommendation:

- The Planning and Zoning Commission met on December 4, 2024, held a public hearing, and made a recommendation of approval to City Council with a 6-0 vote on the UDC Amendment proposed which would:
  - prohibit wind driven signs including feather flags and inflatable / balloon signs
  - increase maximum area to 36 square feet
  - increase maximum height to 6 feet

Current UDC Article 11 Section 21.11.17 Temporary Signs:

- Maximum Area based on street classification:

Areas with Limited Access	32 sq. ft. per face or 10% of the building façade, whichever is less
Areas with Unlimited Access	24 sq. ft. per face or 7% of the building façade, whichever is less
All Other Streets	16 sq. ft. or 5% of the building façade, whichever is less

- Maximum Height based on street classification:

Areas with Limited Access	6 Feet
Areas with Unlimited Access	4 Feet
All Other Streets	3 Feet

Examples of Limited Access: IH 35 and IH 10

Examples of Unlimited Access: FM 78, FM 482, FM 1103, FM 1518, FM 2252, FM 3009, Schertz Parkway

Current UDC Art. 11 Sect. 21.11.17 Temporary Signs Continued:

- Minimum Setback:
  - Setback for all temporary signs shall be fifteen feet (15') from any property line.
- Time Limitations:
  - Temporary freestanding signs shall be permitted for a maximum of 180 days per calendar year.
  - No additional temporary sign permit shall be issued for the same property or business for a period of fourteen (14) days after the expiration of the previous permit.
  - There shall be no limit to the number of temporary sign permits that may be issued for a particular property or business.
  - The cumulative total number of days for which all temporary sign permits issued for a property or business shall not exceed 180 calendar days.
- Number of Signs:
  - No more than two (2) types of temporary signs shall be permitted per business or tenant at any given time.

UDC Article 16 Definitions:

- Temporary Sign: Any sign identified by this UDC which is intended to be displayed for seasonal or brief activities including, but not limited to, sales, specials, promotions, holidays, auctions, and/or business grand openings.

- Wind Sign: Any display or series of displays, banners, flags, pennants or other such objects designed and fashioned in such a manner as to move when subjected to wind pressure. Wind signs shall only be permitted as temporary signs.

- "A" Frame Sign: A temporary sign constructed in such a manner as to form an "A" or a tent-like shape, hinged or not hinged at the top with each angular face held at an appropriate distance so as to be adequately secured by a supporting member. These signs may also be referred to as sandwich board signs.

SCHERTZ
COMMUNITY ★ SERVICE ★ OPPORTUNITY

UDC Article 16 Definitions:

- Balloon Sign: One or more inflatable devices filled with lighter-than-air gas used as a temporary sign for the purpose of directing attention to any location, event, person, product, good, service, activity, institution or business.

- Banner Sign: A temporary sign constructed of a natural or man-made flexible material including, but not limited to, cloth, canvas, vinyl, or fabric which can be easily folded or rolled that is mounted with or without an enclosing framework that is attached or tethered to the building or structures.

- Pennant: Any long, narrow, usually triangular flag composed primarily of cloth, paper, fabric or other similar non-rigid material which may be used as a temporary sign to announce grand openings and/or special events.

- Bandit Sign: Any temporary ground sign announcing a subdivision, new development or builder. *(Bandit Signs are Prohibited per UDC Section 21.11.6)*

Agenda No. 14.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Executive Team**
Subject:	**Resolution 25-R-021 - Authorizing the approval of a Development Agreement with BFR LLC for the approximately 30 acre tract at FM 1518 and Woman Hollering Road (S.Williams/B.James)**

BACKGROUND

Staff is recommending City Council authorize a Development Agreement with BFR LLC. The agreement commits the City to providing water and sewer service to their property, an approximately 30 acre tract located at the northeast corner of Woman Hollering Road and FM 1518, that is currently in the City's Extraterritorial Jurisdiction (ETJ) and to limit city water and sewer impact fees to the amount currently being charged. Additionally, it provides that the proposed use of the property, a multi-family complex, be an allowed use. The owner agrees to petition for voluntary annexation once the project has been constructed.
In an effort to keep this item and the request for water and sewer service moving forward, staff has placed this item and agreement on the agenda prior to a full review having been completed by the owner and the City Attorney. As such updates may be provided prior to the meeting.

GOAL

Authorize a Development Agreement to provide for the orderly growth and development of property.

COMMUNITY BENEFIT

Provides for the orderly growth and development of property that allows for the City to better plan for infrastructure needs.

SUMMARY OF RECOMMENDED ACTION

Approval of Resolution 25-R-021 authorizing a Development Agreement with BFR LLC the owner of an approximately 30 acre tract at the corner of FM 1518 and Woman Hollering Road.

RECOMMENDATION

Approval of Resolution 25-R-021.

Attachments

Resolution 25-R-021 with attachment

RESOLUTION NO. 25-R-021

A RESOLUTION OF THE CITY COUNCIL OF SCHERTZ, TEXAS AUTHORIZING THE APPROVAL OF A DEVELOPMENT AGREEMENT WITH SCHERTZ BFR LLC FOR APPROXIMATELY 30.5 ACRES OF LAND AND OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, the City staff of the City of Schertz (the "City") has worked with Schertz BFR LLC ("Owner") to enter into a Development Agreements for approximately 30.5 acres of land located on the east side of FM 1518, approximately 165 feet south of Hollering Vine after recognizing the mutual benefits of doing so; and

WHEREAS, Texas Local Government Code Section 212.172 allows the City to enter into an agreement with an owner of land that is located in the extraterritorial jurisdiction of the municipality; and

WHEREAS, the City staff has recommended that the development agreement for the property be approved.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS:

Section 1. The City Council hereby authorizes the City Manager to execute and deliver the Development Agreement with Schertz BFR LLC (Owner) generally per the attached Exhibit A, subject to changes approved by the City Manager and City Attorney.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Resolution for all purposes and are adopted as a part of the judgment and findings of the City Council.

Section 3. All resolutions, or parts thereof, which are in conflict or inconsistent with any provision of this Resolution are hereby repealed to the extent of such conflict, and the provisions of this Resolution shall be and remain controlling as to the matters resolved herein.

Section 4. This Resolution shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Resolution or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Resolution and the application of

such provision to other persons and circumstances shall nevertheless be valid, and the City Council hereby declares that this Resolution would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Resolution is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Resolution, was given, all as required by Chapter 551, Texas Government Code, as amended.

Section 7. This Resolution shall be in force and effect from and after its final passage, and it is so resolved.

PASSED AND ADOPTED, this ____th day of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

_____
City Secretary, Sheila Edmondson

(CITY SEAL)

Exhibit A
Development Agreement

DEVELOPMENT AGREEMENT

SCHERTZ BFR LLC

This DEVELOPMENT AGREEMENT ("Agreement") is entered into effective as of the ___ day of_____, 2025, by and between the City of Schertz, Texas, a Texas Municipal Corporation ("City") and Schertz BFR LLC ("Owner"). The City and the Owner may be individually referred to herein as "Party" or collectively as the "Parties".

WHEREAS, the Owner owns approximately 30.35 acres located on the east side of FM 1518 and approximately 165 feet south of Hollering Vine within the City of Schertz Extraterritorial Jurisdiction ("Property"), as further described in **Exhibit "A"**; and

WHEREAS, the Owner is proposing to develop the property as a residential community (the "Project"); and

WHEREAS, Section 212.172 of the Texas Local Government Code provides that a municipality may make a written contract with the owner of land in the extraterritorial jurisdiction to guarantee the continuation of extraterritorial status, extend planning authority over the land by providing for a development plan, authorize enforcement of certain municipal land use and development regulations, authorize enforcement of land use and development regulations other than those that apply within the municipality's boundaries, provide for infrastructure for the land, provide annexation as whole or in parts and to provide for the terms of annexation, if agreed to by both parties, specify the uses and development of the land before and after annexation if annexation is agreed to by both parties, and include other lawful terms and consideration the parties consider appropriate; and

WHEREAS, the owner is made aware by this disclosure that the owner is not required to enter into this agreement, the City may annex an area per Section 43.0671 if each land owner in the area requests annexation after the City accepts the petition for annexation, provides notice of the annexation and holds a public hearing to consider annexation within the required timeframe, the procedures to enter into this agreement and submit for voluntary annexation require the owners' consent and the municipality makes no waivers to immunity to suit beyond what is provided in State Law; and

WHEREAS, the Property is located within the City's water and sewer certificates of convenience and necessity ("CCN") and are seeking water and sewer service from the City; and

WHEREAS, the Project is anticipated to have impacts on the City's water and sewer system and in order to better plan for and anticipate future infrastructure needs, there is benefit to the City in annexing the property so as to be able to plan for an anticipate future land uses and their corresponding impact on infrastructure; and

WHEREAS, in recognition of the mutual benefits to be derived from the controlled and planned development of the Property, Developer and City desire to enter into this Agreement; and

WHEREAS, the City of Schertz City Council authorized and approved this Agreement at a regularly scheduled council meeting subject to the Open Meetings Act in compliance with the laws of the State of Texas and the ordinances of the City on February 4, 2025; and

NOW THEREFORE, in consideration of the terms and conditions described herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and Developer agree as follows:

I. GENERAL TERM AND CONDITIONS

1.01 Agreement. The Owners agree that the Properties shall be annexed into the City immediately following completion of the Project, as further defined in Section 1.07 herein.

1.02 Completion of the Project. The Project shall be deemed complete ("Project Completion") when all infrastructure improvements have been properly and completely permitted, and constructed and when a residential structure has been properly and completely permitted and constructed.

1.03 Zoning. The Owners acknowledge and agree that the City may zone the Properties in a manner consistent with the uses hereunder contemplated, but this Agreement does not constitute a contract for specific zoning.

1.04 Conforming Use Status. The City agrees that the Project, shall be considered a conforming use.

1.05 Water and Sewer Service. The City hereby agrees to allow the Developer to connect the project to City water and sewer infrastructure and provide water and sewer service to the project.

1.06 City Capital Recovery Fees. The City agrees that the Project will pay a City water impact fee of $2,934 per Land Use Equivalent ("LUE") and a City sewer impact fee of $1,668 per LUE regardless of any increase in the City impact fee rates. The Project will pay impact fees as may be due to other entities per the fee schedule in effect at time of connection.

1.07 Annexation. As consideration for this Agreement the Owner agrees to full purpose annexation of the Property at the times described herein.

1.07.1 Within Six months of receipt of a certificate of occupancy or the equivalent approval from the permitting authority, which is Bexar County, to occupy a building, the Owners of said property shall be deemed to have submitted a petition for full-purpose, voluntary annexation to the City for the Property. A copy of the form of Annexation Petition is attached as Exhibit "B". If a certificate of occupancy or the equivalent is not provided within 3 years of the date of approval of this Agreement, the owner of the Property shall be deemed to have submitted a petition for full-purpose, voluntary annexation to the City for and the City may annex the property. Concurrent with annexation of the Property, the City, with the Owner's consent, shall initiate a zoning change to establish a zoning district that as closely as possible reflects the terms and conditions of this Agreement.

1.08 Term. The term of this Agreement will commence on the Effective Date and continue for thirty (30) years thereafter ("Initial Term"), unless sooner terminated under this Agreement. After the Initial Term, the Agreement may be extended for a fifteen (15) year period by Owners, with City's approval, by delivering written notice of such election to the City on or before the expiration of the then-current term.

1.09 Enforcement and Default. If either Party defaults in its obligations under this Agreement, the other Party must, prior to exercising a remedy available to that Party due to the default, give written notice to the defaulting Party, specifying the nature of the alleged default and the manner in which it can be satisfactorily cured, and extend to the defaulting Party at least thirty (30) days from receipt of the notice to cure the default. If the nature of the default is such that it cannot reasonably be cured within the thirty (30) day period, the commencement of the cure within the thirty (30) day period and the diligent prosecution of the cure to completion will be deemed a cure within the cure period.

1.09.1 This Agreement may be enforced by the Owners, including successors and assigns, or the City by any proceeding at law or in equity. Failure to do so shall not be deemed a waiver to enforce the provisions of this Agreement thereafter.

1.10 Remedies for Default. If either Party defaults under this Agreement and fails to cure the default within the applicable cure period, the non-defaulting Party will have all rights and remedies available under this Agreement or applicable law, including the right to institute legal action to cure any default, to enjoin any threatened or attempted violation of this Agreement or to enforce the defaulting Party's obligations under this Agreement by specific performance or writ of mandamus, or to terminate this Agreement or other enforcement remedies the City may possess under its municipal regulatory authority.

1.10.1 Notwithstanding anything herein to the contrary, no party shall be deemed to be in default hereunder until the passage of ten (10) business days after receipt by such party of notice of default from the other party. Upon the passage of ten (10)

business days without cure of the default, such party shall be deemed to have defaulted for purposes of this Agreement.

II. MISCELLANEOUS PROVISIONS

Section 2.1. Covenant Running With the Land. This Agreement shall be recorded in the Official Property Records of Bexar County and shall be a covenant running with the land binding upon all parties having any right, title or interest in the Property or any part thereof, including their heirs, successors and assigns.

Section 2.2. Provisions Severable. If a court of competent jurisdiction determines that any covenant of this Addendum is void or unenforceable, then the remainder of this Addendum shall remain in full force and effect.

Section 2.3. Enforcement. This Agreement may be enforced by the Owner, including successors and assigns, or the City by any proceeding at law or in equity. Failure to do so shall not be deemed a waiver to enforce the provisions of this Addendum thereafter.

Section 2.4. Governmental Powers. It is understood that by execution of this Agreement, the City does not waive or surrender any of its governmental powers.

Section 2.5. Modification of Agreement. This Agreement cannot be modified or amended without the written consent of the Parties hereto and attached and made a part of this Addendum.

Section 2.6. Governing Law and Venue. Venue shall be in the state courts located in Bexar County, Texas or the United States District Court for the Western District of Texas, San Antonio Division and construed in conformity with the provisions of the Texas Local Government Code. In the event that a Party initiates a cause of action in court, the prevailing party shall be entitled to reasonable and necessary attorney's fees and costs of court.

EXECUTED to this day of___, 2025

SIGNATURE PAGES TO FOLLOW

CITY:

The City of Schertz,
a Texas Municipal Corporation.

By: _____

Name: _____

Title: _____

STATE OF TEXAS §
§
COUNTY OF GUADALUPE §

This instrument was acknowledged before me on the_____day of_____, 2025, by_____, the_____ of the City of Schertz, on behalf of said City.

_____
Notary Public, State of Texas

OWNER:

XXXXXXXX

_____

XXXXXX

STATE OF TEXAS §
§
COUNTY OF_____ §

This instrument was acknowledged before me on the_____day of_____, 2025, by _____, who acknowledged that he is authorized to execute this document on its behalf.

_____

Notary Public, State of Texas

EXHIBIT A
The Property

EXHIBIT B
Annexation Petition

Agenda No. 15.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Public Works**
Subject:	**Ordinance 25-F-006 - Conduct a public hearing and consider an amendment to Ordinance 14-F-20 amending the Drought Contingency and Water Emergency Response Plan which is incorporated adopted by reference in the Schertz Code or Ordinances, Chapter 90 Utilities, Article IV Mandatory Water Conservation, Section 90-119 Drought Contingency and Emergency Response Plan Adopted (B.James/L.Busch/Z.Eaton)**

BACKGROUND

The City is required to review and resubmit a compliant drought contingency plan every 5 years. As part of the resubmittal process, the City was notified of deficiencies in the plan regarding provisions for pro rata curtailment and wholesale customers.

This amendment to the previously adopted Ordinance 13-F-26 will bring the Plan into compliance with TCEQ 30 TAC §288 and Texas Water Code §11.039. These sections require the following (from 30 TAC 288.22):

- "The drought contingency plan must include a provision in every wholesale water contract entered into or renewed after adoption of the plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039."
- "Pro rata curtailment of water deliveries to or diversions by wholesale water customers as provided in Texas Water Code, §11.039"

Public hearing and approval of this ordinance is required for staff to resubmit the Drought Contingency and Water Emergency Response Plan to the Texas Water Development Board.

GOAL

The goal of the proposed amended Code Chapter 90 Drought Contingency and Water Emergency Response Plan is to provide an updated Code that is compliant with regulations in Texas Water Code §11.039, and applicable requirements of the Texas Commission of Environmental Quality 30 TAC §288.

COMMUNITY BENEFIT

The amended Code Chapter 90 benefits the community by maintaining compliance with Texas Water Code §11.039, TCEQ 30 TAC §288.

SUMMARY OF RECOMMENDED ACTION

Approval of Ordinance 25-F-006, an amendment to Ordinance 14-F-20 amending the Drought Contingency and Water Emergency Response Plan which is incorporated adopted by reference in the Schertz Code or Ordinances, Chapter 90 Utilities, Article IV Mandatory Water Conservation, Section 90-119 Drought Contingency and Emergency Response Plan.

FISCAL IMPACT

Fiscal impact will vary depending on the specific stage of restrictions that are activated in the Plan. The surcharge rate is included in each applicable section of the Plan.

RECOMMENDATION

Approval of Ordinance 25-F-006.

Attachments

Ordinance 25-F-006 with attachment

Redline of Drought Plan

ORDINANCE NO. 25-F-006

AN ORDINANCE BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS AMENDING ORDINANCES 09-F-17, 09-F-21 AND 13-F-26 TO AMEND THE DROUGHT CONTIGNECY AND WATER EMERGENCY RESPONSE PLAN AS INCORPORATED INTO CHAPTER 90 OF THE SCHERTZ CODE OF ORDINANCES, SECTION 90-119; REPEALING ALL ORDINANCES OR PARTS OF ORDINANCES IN CONFLICT WITH THIS ORDINANCE; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, pursuant to Ordinance 09-F-17, the City of Schertz (the "City") adopted as amended and restated Code of Ordinances Chapter 90, Article IV on May 26, 2009, as further amended by Ordinance 09-F-21, Ordinance 13-F-26 and Ordinance14-F-20 (the "Current Code") the Drought Contingency and Water Emergency Response Plan and Water Conservation Plan; and

WHEREAS, Section 11.1272 & 11.039 of the Texas Water Code and applicable rules of the Texas Commission of Environmental Quality along with requirements of 30 TAC 288 require all public water supply systems in Texas to prepare a drought contingency and water conservation plan; and

WHEREAS, City staff have reviewed the Drought Contingency and Water Emergency Response Plan and have recommended certain revisions and updates to, and reorganization of, portions of the Drought Contingency and Water Emergency Response Plan; and

WHEREAS, as authorized under law, and in the best interests of the residents of Schertz, Texas, the City Council deems it expedient and necessary to amend the City's rules and policies for the orderly and efficient management of limited water supplies continually and more aggressively during drought and other water supply emergencies;

WHEREAS, on February 4, 2025, the City Council conducted a public hearing and after considering the matter, determined that the proposed amendments are appropriate and in the best interests of the public safety, health, and welfare; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SCHERTZ, TEXAS THAT:

Section 1. The City Council hereby amends the Drought Contingency and Water Emergency Response Plan as adopted and amended by Ordinances 09-F-17, 09-F-21,13-F-26 and 14-F-20 as incorporated by Chapter 90 Section 90-119 in the Schertz Code of Ordinances as set forth on Exhibit "A" hereto.

Section 2. The recitals contained in the preamble hereof are hereby found to be true, and such recitals are hereby made a part of this Ordinance for all purposes and are adopted as a part of the judgment and findings of the Council.

Section 3. All ordinances and codes, or parts thereof, which are in conflict or inconsistent with any provision of this Ordinance are hereby repealed to the extent of such conflict, and

the provisions of this Ordinance shall be and remain controlling as to the matters resolved herein.

Section 4. This Ordinance shall be construed and enforced in accordance with the laws of the State of Texas and the United States of America.

Section 5. If any provision of this Ordinance or the application thereof to any person or circumstance shall be held to be invalid, the remainder of this Ordinance and the application of such provision to other persons and circumstances shall nevertheless be valid, and the City hereby declares that this Ordinance would have been enacted without such invalid provision.

Section 6. It is officially found, determined, and declared that the meeting at which this Ordinance is adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this Ordinance, was given, all as required by Chapter 551, as amended, Texas Government Code.

Section 7. This Ordinance shall be effective upon the date of final adoption hereof and any publication required by law.

Section 8. This Ordinance shall be cumulative of all other ordinances of the City of Schertz, and this Ordinance shall not operate to repeal or affect any other ordinances of the City of Schertz except insofar as the provisions thereof might be inconsistent or in conflict with the provisions of this Ordinance, in which event such conflicting provisions, if any, are hereby repealed.

PASSED, APPROVED and ADOPTED ON this _____ of _____, 2025.

CITY OF SCHERTZ, TEXAS

_____
Ralph Gutierrez, Mayor

ATTEST:

Sheila Edmondson, City Secretary

(city seal)

Exhibit “A”

Drought Contingency and Water Emergency Response Plan
For
The City of Schertz

Public Water Supply

DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN FOR THE CITY OF SCHERTZ

Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Schertz hereby adopts the following Drought Contingency and Water Emergency Response Plan (the Plan).

Water uses regulated or prohibited under the Plan are considered to be non-essential, and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XII and XIII of the Plan.

Section II: Public Involvement

Opportunity for the public and wholesale customers to provide input into the preparation of the Plan was provided by the City of Schertz by means of scheduling and providing public notice of a public meeting to accept input on the Plan.

Section III: Public Education

The City of Schertz will periodically provide the public and wholesale customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of the City web site, newsletter and utility bill messages.

Section IV: Coordination with Regional Water Planning Groups

The service area of the City of Schertz is located within the Schertz Seguin Local Government Corporation (SSLGC) and Edwards Aquifer Authority. The City of Schertz has provided a copy of this Plan to the Edwards Aquifer Authority, Texas Water Development Board, SSLGC and San Antonio River Authority representing Region "L" for the State.

Section V: Authorization

The City Manager or his/her designee is hereby authorized and directed to implement the applicable provisions of the Plan upon determination that such implementation is necessary to protect public health, safety and welfare. The City Manager, or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

Section VI: Application

Provisions of the Plan shall apply to all persons, customers, and property utilizing water provided by the City of Schertz. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

Section VII: Definitions

For the purposes of the Plan**,** the following definitions shall apply:

Aesthetic Water Use: Water used for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Athletic Field: A sports play field including playgrounds whose essential feature is a grass turf, other than a golf course.

(a) Conforming athletic field – An athletic field with an approved groundwater conservation plan under section XI of this Plan.

(b) Non-conforming athletic field – Any other athletic field that is not a conforming athletic field.

Commercial and Institutional Water Use: Water use which is integral to the operations of commercial and non-profit establishments and governmental entities, public or private schools, retail establishments, hotels and motels, restaurants, office buildings and Homeowner/Neighborhood Associations.

Conservation: Those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.

Customer: Any person, company, or organization using water supplied by City of Schertz.

Domestic Water Use: Water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Golf Course: An area of land used for the game of golf.

(a) Conforming Golf Course – A golf course with an approved groundwater conservation plan pursuant to Section X of this Plan.

(b) Non-conforming golf course – Any other golf course that is not a conforming golf course.

Hand-held Watering: A hose or bucket physically attended by a person, fitted with a manual or automatic shutoff nozzle.

Industrial Water Use: The use of water in processes designed to convert materials of lower value into forms having greater usability and value.

Landscape irrigation use: Water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians, but does not include:

(a) Non-discretionary use without waste of groundwater by a commercial nursery to the extent the water is used for production rather than decorative landscaping;

(b) Application of groundwater without waste to a non-commercial family garden or orchard, the produce of which is for household consumption only;

(c) Application of groundwater by means of hand-held bucket, hand-held hose; soaker hose or properly installed drip irrigation system; and

(d) Application of groundwater by means of a soaker hose, hand-held hose, or properly installed drip irrigation system immediately next to a concrete foundation solely for the purpose of preventing, to the extent the watering is necessary, substantial damage to the foundation of the structure caused by movement of the foundation.

Mobile Home Communities: Property owned by an individual or commercial establishment who rents such property for mobile or manufactured homes placement; must comply with the requirements and restrictions as a "Customer" in this section.

Non-essential Water Use: Water uses that are not essential or required for the protection of public, health, safety, and welfare, including:

(a) Irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
(c) Use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
(d) use of water to wash down buildings or structures for purposes other than immediate fire protection;
(e) flushing gutters or permitting water to run or accumulate in any gutter or street;
(f) use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
(g) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
(h) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and

(i) use of water from hydrants for construction purposes or any other purposes other than fire fighting.

Private Water Well: Well on private property that is not inter-connected with the City's water.

Pro Rata Water Allocation: In Accordance with Texas Water Code Section 11.039, The Director of Public Works or their designee is hereby authorized to initiate allocation of water supplies on a pro rata basis. Pro-rata curtailment will be conducted in accordance with Texas Water Code §11.039. Additionally, all new, renewed, or extended wholesale supply contracts will include a provision stipulating that water distribution will occur on a pro-rata basis in the event of a water shortage resulting from drought. Enforcement actions for non-compliance with either the Water Conservation Plan or pro-rata water reductions by wholesale customers will be determined based on the specifics outlined in each wholesale customer's contract.

Re-Use Water: A treated non-potable water source used for irrigation.

Wasting Water: Watering a non-pervious surface or landscape watering that goes beyond a customer's property. Waste of water also includes, but is not limited to, allowing water to run off into a gutter, ditch or drain, or failing to repair a controllable leak.

Wholesale: A specific contractual agreement between an individual and/or entity that, for compensation, supplies water to another for resale to the public for human consumption. Every wholesale water contract entered into or renewed after adoption of the Plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039. Wholesale customers are required to adopt and follow a state-approved Drought Contingency Plan. This Plan must require its customers to reduce use in the event that The City of Schertz enters into a drought restriction stage. In the absence of a state-approved Drought Contingency Plan, wholesale customers must follow The City of Schertz drought contingency plan.

Section VIII: Triggering Criteria for Initiation and Termination of Drought Restriction Stages

The City Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Public notification of the initiation or termination of drought response stages shall be by means of publication in local newspaper and/or signs posted in public places.

The triggering criteria described below are based on the analysis of system capability and the rules of the Gonzales Underground Water Conservation District (GCUWCD) and SSLGC. In the event that SSLGC can not provide water, the City of Schertz will immediately implement Stage 4 restrictions.

Stage 1 – Restrictions—MILD Water Shortage Conditions

Requirements for Initiation – It is mandatory that customers conserve water and adhere to the prescribed restrictions on certain water uses, defined in Section VII – Definitions, when one or all of the following are reached

(a) City of Schertz receives notification from the General Manager of SSLGC of Stage 1 conditions.
(b) Water demand is projected to approach 100% of the monthly limit of the GCUWCD permitted supply.
(c) Annual Monthly Average Drawdown as measured by GCUWCD rules equals 85% of allowable.
(d) The City's water system has malfunctioned, but is still able to keep up with demand.

Requirements for Termination - Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee.

Stage 2 – Restrictions -- MODERATE Water Shortage Conditions

Requirements for Initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section VII of the Plan when one or all of the following are reached:

(a) City of Schertz receives notification from the General Manager of SSLGC of Stage 2 conditions.
(b) Water demand is projected to approach 110% of the monthly limit of the GCUWCD permitted supply.
(c) Annual Monthly Average Drawdown as measured by GCUWCD rules equals 95% of allowable.
(d) The City's water system has malfunctioned, and cannot keep up with demand.

Requirements for Termination - Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee. Upon termination of Stage 2, Stage 1 becomes operative.

Stage 3 – Restrictions -- SEVERE Water Shortage Conditions

Requirements for Initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of the Plan when one or all of the following are reached:

(a) City of Schertz receives notification from the General Manager of SSLGC of Stage 3 conditions.
(b) Water demand is projected to approach 120% of the monthly limit of the GCUWCD permitted supply.

(c) Annual Monthly Average Drawdown as measured by GCUWCD rules equals 100% of allowable.
(d) Water quality is less than normal or is polluted. Health and safety standards may be jeopardized.
(e) The imminent or actual failure of a major component of the City's water system would cause immediate health and safety hazard.

Requirements for Termination - Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee. Upon termination of Stage 3, Stage 2 becomes operative.

Stage 4 – Emergency Restrictions -- CRITICAL Water Shortage Conditions Including System or Water Quality Failure

Requirements for Initiation - Customers shall be required to comply with the requirements and restrictions for Stage 4 of the Plan when the Mayor, or his/her designee, determines that a water supply emergency exists based on:

(a) The General Manager of SSLGC, with concurrence of the SSLGC Executive Committee or Board of Directors, finds that conditions warrant the declaration of Stage 4.
(b) Water demand exceeds 125% of the monthly limit of the GCUWCD permitted supply.
(c) Annual Monthly Average Drawdown as measured by GCUWCD rules exceeds 115% of allowable.
(d) Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability of the City to provide water service.
(e) Natural or man-made contamination of the water supply source(s).

Requirements for Termination – Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days, or when items (d) and (e) above have been repaired.

Water Rationing

Requirements for Initiation - Customers shall be required to comply with the water rationing allocation plan prescribed in Section XIII of the Plan when the Mayor and City Council determine that the water supply emergency exists and comply with the requirements and restrictions for Stage 4 of the Plan when:

(a) Extreme drought conditions exist;

(b) Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; **or**

(c) Natural or man-made contamination of the water supply source occurs.

Requirements for Termination – Water rationing may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee.

Section IX:

1. Wasting Water:

(a) It shall be unlawful for any person or customer to waste water.

(b) Year round outdoor watering between 10:00 am – 8:00 pm is prohibited.

(c) It shall be a violation if a person or customer allows water to run off into a non-pervious ditch, or failure to repair a controllable leak.

(d) Re-use water usage is exempt from the plan.

(e) Customers using water from a private water well must comply with all requirements of the plan.

2. Drought Response Stages

The City Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section VIII of the Plan, shall determine that Stage 1, 2, 3 or 4 conditions exist and shall implement the following actions upon publication of notice in a newspaper of general circulation and/or signs posted in public places and city web site:

Stage 1 – Restrictions -- MILD Water Shortage Conditions

Goal: Achieve a mandatory ten percent (10%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall be responsible for overseeing the reduction or discontinued flushing of water mains, activation and use of an alternative supply source(s), use of reclaimed water for non-potable purposes, and blending of alternate sources.

Water Use Restrictions: Under the threat of penalty for violation, the following water use restrictions shall apply to all persons:

(a) Water customers shall comply with mandatory limits of irrigation of landscape areas. Watering days will be based on the last digit of the address:

0-1 - Monday

2-3 - Tuesday
4-5 - Wednesday
6-7 - Thursday
8-9 - Friday

(b) Athletic Fields and Golf Courses –
Conforming 10% reduction in watering as per Section X & XI.
Non-conforming 15% reduction in watering as per Section X & XI.

(c) Commercial/Industrial/Schools/Institutional landscape watering is permitted on Wednesday only.

(d) Watering of landscape is permitted only between the hours of 12:00 am to 10:00 am and 8:00 pm to midnight on designated watering days.

(e) All operations of the City of Schertz shall adhere to water use restrictions prescribed for Stage 1 of the Plan.

(f) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

(g) Handheld, bucket or drip system is allowed.

(h) New landscape may have 3 weeks variance for establishment. All variances must be reviewed and approved by the City Manager or Director of Public Works or their designee.

(i) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a re-circulation system.

Stage 2 – Restrictions -- MODERATE Water Shortage Conditions

Goal: Achieve a fifteen percent (15%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall see that reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of blending an alternative supply source(s); use of reclaimed water for non-potable purposes.

Water Use Restrictions: Under threat of penalty for violation, the following water use restrictions shall apply to all persons, along with previous restrictions from Stage 1:

(a) Water customers shall comply with mandatory limits of irrigation of landscape

areas. Watering days will be based on the last digit of the address:

0-1- Monday
2-3 - Tuesday
4-5 - Wednesday
6-7 - Thursday
8-9 - Friday

(b) Athletic Fields and Golf Courses-
Conforming: 15% reduction watering as per Section X & XI.
Non-conforming: 20% reduction watering as per Section X & XI.

(c) Commercial/Industrial/Schools/Institutional landscape watering is permitted on Wednesday only.

(d) Watering of landscape is permitted only between the hours of 3:00 am to 8:00 am and 8:00 pm to 10:00 pm.

(e) Filling of all new and existing swimming pools is prohibited, unless at least 30% of the water is obtained from a source other than the aquifer. Groundwater may be used to replenish swimming pools to maintenance levels. Draining of swimming pools is permitted only onto a pervious surface or onto a pool deck where the water is transmitted directly to a pervious surface, and only if necessary to:

(1) Remove excess water from the pool due to rain to lower the water to the maintenance level;
(2) Repair, maintain, or replace a pool component that has become hazardous; or
(3) Repair a pool leak.

(f) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(g) Use of water from fire hydrants shall be limited to fire fighting and related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the City of Schertz.

(h) All restaurants are prohibited from serving water to its patrons except when requested.

(i) The following uses of water are defined as non-essential and are prohibited:

1. Wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;

2. Use of water to wash down buildings or structures for purposes other than immediate fire protection;
3. Use of water for dust control;
4. Flushing gutters or permitting water to run or accumulate in any gutter or street; and
5. Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Stage 3 – Restrictions -- SEVERE Water Shortage Conditions

Goal: Achieve a twenty-five percent (25%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall see that reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of blending an alternative supply source(s); use of reclaimed water for non-potable purposes.

Water Use Restrictions: All requirements of Stages 1 & 2 shall remain in effect during Stage 3 except:

(a) Landscape watering is prohibited except by handheld watering or drip irrigation during designated watering days as described in Stage 1 & 2.

(b) The watering of golf course is prohibited unless the golf course utilizes a reuse water source.

(c) The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

(d) The filling, refilling, or adding of water to swimming pools, wading pools, and jacuzzi-type pools are prohibited.

(e) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(f) No applications for additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.

(g) Application of groundwater in the morning before 8:00 am and in the evening after 8:00 pm by means of a handheld bucket, handheld hose, soaker hose or properly installed drip irrigation system, immediately next to a concrete foundation solely for the purpose of preventing, and to the extent the watering is necessary to prevent,

substantial damage to the foundation or the structure caused by movement of the foundation.

(h) Athletic field - Conforming 25% reduction watering as in Section XI
Non-conforming 30% reduction watering as in Section XI.

Stage 4 – Emergency Restrictions -- CRITICAL Water Shortage Conditions

Goal: Achieve a forty percent (40%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall see that reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of blending an alternative supply source(s); use of reclaimed water for non-potable purposes.

Water Use Restrictions: All requirements of Stages 1,2, and 3 shall remain in effect during Stage 4 except:

(a) Irrigation of landscaped areas is absolutely prohibited.

(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

(c) Implementation of additional drought contingency measures may be applied at the direction of the City of Schertz.

Section X: Golf Courses

Notwithstanding any other language in the Plan, the owners of golf courses that are applicants or customers of an applicant shall be required to submit a groundwater conservation plan and shall be defined as "conforming" and "non- conforming" and shall reduce usage of aquifer groundwater under the following terms:

1. It shall be unlawful to water any golf course between the hours of 10:00 am and 8:00 pm.

2. A conforming golf course is one that achieves enhanced conservation by utilizing a computer controlled irrigation system ("CCIS"), or similar system, which may be comprised of a computer controller (digital operating system), software, interface modules, satellite, field controller, soil sensors, weather station, or similar devices, which is capable of achieving maximum efficiency and conservation in the application of water to the golf course, must accomplish the following restrictions listed in subparagraphs (A)-(C) of this paragraph:

(A) Stage 1 Restrictions – 10% reduction in the replacement of daily evapotranspiration rate ("ET rate") or daily soil holding capacity; or use of not more than 95% of the metered amount for that corresponding month.

(B) Stage 2 Restrictions – 15% reduction in the replacement of daily (ET) rate or daily soil holding capacity; or use of not more than 90% of the metered amount for that corresponding month.

(C) Stage 3 Restrictions - 25% reduction in the replacement of daily (ET) rate or daily soil holding capacity, or use of not more than 75% of the metered amount for that corresponding month.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate or daily soil holding capacity not to exceed 60% of metered amount.

(3) A non-conforming golf course shall comply with the following reduction measures listed in paragraphs (A)-(C) of this subsection:

(A) Stage 1 Restrictions - 15% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 95% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS;

(B) Stage 2 Restrictions - 20% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 90% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS;

(C) Stage 3 Restrictions - 30% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 85% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 60% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS;

(4) The owner or operator of a golf course must comply with all rules relating to Stage 3 and 4.

(5) The owner or operator of a golf course must maintain daily water use records which must be available for inspection upon request.

(6) The owner or operator of a conforming golf course or a golf course with a CCIS must maintain daily water use records of their ET rate or daily soil holding capacity, which must be available for inspection upon request.

(7) All daily records must be kept on site.

Section XI: Athletic Fields

Notwithstanding any other language in the Plan, the owners of athletic fields that are applicants or customers of an applicant shall be required to submit a groundwater conservation plan and shall be defined as "conforming" or "non- conforming" and shall reduce usage of City supplied groundwater under the following terms:

1. It shall be unlawful to water any athletic field between the hours of 10:00 am and 8:00 pm

2. A conforming athletic field is one that achieves enhanced conservation by utilizing a CCIS, or similar system, which may be comprised of a computer controller (digital operating system), software, interface modules, satellite, field controller, soil sensors, weather station, or similar devices, which is capable of achieving maximum efficiency and conservation in the application of water to the athletic field, must accomplish the following restrictions listed in subparagraphs (A)-(C) of this paragraph:

(A) Stage 1 Restrictions – 10% reduction in the replacement of daily evapotranspiration rate ("ET rate") or daily soil holding capacity, or use of not more than 95% of the metered amount for that corresponding month.

(B) Stage 2 Restrictions – 15% reduction in the replacement of daily ET rate or daily soil holding capacity; or use of not more than 90% of the metered amount for that corresponding month,

(C) Stage 3 Restrictions - 25% reduction in the replacement of daily ET rate or daily soil holding capacity, or use of not more than 75% of the metered amount for that corresponding month.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate or daily soil holding capacity, not to exceed 60% of metered amount.

(3) A non-conforming athletic field shall comply with the foI1owing reduction measures listed in paragraphs (A)-(C) of this subsection:

(A) Stage 1 Restrictions - 15% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS, or use of not more than 95% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS;

(B) Stage 2 Restrictions - 20% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS, or use of not more than 90% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS;

(C) Stage 3 Restrictions - 30% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS, or use of not more than 85% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 60% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS.

(4) The owner or operator of an athletic field must comply with all rules relating to Stage 3 and 4.

(5) The owner or operator of an athletic field must maintain daily water use records, which must be available for inspection upon request.

(6) The owner or operator of a conforming athletic field or an athletic field with a CCIS must maintain daily water use records of their ET rate or daily soil holding capacity, which must be available for inspection upon request.

(7) All daily records must be kept on site.

Section XI.2: Single-Pass Cooling System Connections and Non-Recirculating Systems Prohibited

Single-pass cooling system connections and non-recirculating systems for commercial laundry facilities, carwash facilities, and other business activities shall be prohibited in all facilities built or remodeled after August 20, 2013 the effective date of Ordinance 13-F-26.

Section XII: Water Rationing

In the event that water shortage conditions threaten public health, safety, and welfare, the Mayor is hereby authorized to require water ration watering according to the following water allocation plan:

Single-Family Residential Customers

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

Persons per Household	Gallons per Month
1 or 2	6,000
3 or 4	7,000
5 or 6	8,000
7 or 8	9,000
9 or 10	10,000

11 or more	12,000

"Household" means the residential premises served by the customer's meter. "Persons per household" includes only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two (2) persons unless the customer notifies the City of Schertz of a greater number of persons per household on a form prescribed by the Director of Public Works. The Director of Public Works shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Schertz offices to complete and sign the form claiming more than two (2) persons per household. New customers may claim the number of persons per household at the time of applying for water service on the form prescribed by the Director of Public Works. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the City of Schertz on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the City of Schertz in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the Director of Public Works shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a household or fails to timely notify the City of Schertz of a reduction in the number of person in a household shall be fined not less than $200.00. Residential water customers shall pay the following surcharges:

$2.00 for the first 1,000 gallons over allocation.
$3.00 for the second 1,000 gallons over allocation.
$4.00 for the third 1,000 gallons over allocation.
$5.00 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Master-Metered Multi-Family Residential Customers

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (e.g., apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the City of Schertz of a greater number on a form prescribed by the Director of Public Works. The Director of Public Works shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Schertz offices to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim only those occupying the dwelling unit at the time of applying for water service on the form prescribed by the Director of Public Works. If the number of dwelling units served by a master meter is reduced, the customer shall notify the City of Schertz in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the Director of Public Works shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal

negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the City of Schertz of a reduction in the number of person in a household shall be fined not less than $200.00. Customers billed from a master meter under this provision shall pay the following monthly surcharges:

$2.00 for the first 1,000 gallons over allocation.
$3.00 for the second 1,000 gallons over allocation.
$4.00 for the third 1,000 gallons over allocation.
$5.00 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Commercial Customers

A monthly water usage allocation shall be established by the Director of Public Works, or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately seventy-five percent (75%) of the customer's usage for corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. The Director of Public Works shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Schertz to determine the allocation. Upon request of the customer or at the initiative of the Director of Public Works, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Manager. Nonresidential commercial customers shall pay the following surcharges:

$2.00 per thousand gallons for the first 1,000 gallons over allocation.
$3.00 per thousand gallons for the second 1,000 gallons over allocation.
$4.00 per thousand gallons for the third 1,000 gallons over allocation.
$5.00 per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative. As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

Industrial Customers and Commercial Nurseries

A monthly water usage allocation shall be established by the Director of Public Works, or his/her designee, for each industrial customer, which uses water for processing purposes. The industrial

customer's and commercial nurseries allocation shall be approximately ninety percent (90%) of the customer's water usage baseline. Ninety (90) days after the initial imposition of the allocation for industrial customers and commercial nurseries, the industrial customer's and commercial nurseries allocation shall be further reduced to 85% percent of the customer's water usage baseline. The industrial customer's and commercial nurseries water usage baseline will be computed on the average water usage for the 12 month period ending prior to the date of implementation of Stage 2 of the Plan. If the industrial water customer's and commercial nurseries billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists. The Director of Public Works shall give his/her best effort to see that notice of each industrial customer and commercial nurseries allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Schertz to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the Director of Public Works, the allocation may be reduced or increased, (1) if the designated period does not accurately reflect the customer's normal water usage because the customer had shut down a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shut down or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce usage is limited, (5) the customer agrees to transfer part of its allocation to another industrial customer and commercial nurseries, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Manager. Industrial customers and commercial nurseries shall pay the following surcharges:

Customers whose allocation is 90% of their twelve month average.

$ 2.00 per thousand gallons for the first 1,000 gallons over allocation.
$ 3.00 per thousand gallons for the second 1,000 gallons over allocation.
$ 4.00 per thousand gallons for the third 1,000 gallons over allocation.
$ 5.00 per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative. As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

Wholesale Customers

The provisions of this Plan shall apply to all customers utilizing water provided by the City on a wholesale basis. Every wholesale water contract entered into, renewed or modified after official adoption of this Plan shall include language relating to the City of Schertz Drought Contingency Plan and shall require the imposition of similar restrictions, surcharges or rationing measures on their customers. To the extent of its legal authority, the City of Schertz shall require its wholesale

customers to implement outdoor watering restrictions similar to those of the City for each drought response stage or adopt the City of Schertz Drought Contingency Plan. The City requires that any contract for the resale of water furnished to wholesale water contractors shall contain a similar condition.

In the event that the triggering criteria specified, the City Manager, or designee, is hereby authorized to implement allocation of water supplies on a pro rata basis to raw water and treated wholesale customers in accordance with Texas Water Code §11.039. The initiation of pro rata allocation preparations shall begin during Stage 3. A provision will be included in every wholesale water contract entered into or renewed after adoption of the Plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code §11.039.
A wholesale treated water customer's monthly allocation shall be a percentage of the customer's water usage baseline. The percentage will be set by resolution of the City Council based on the Gonzales Underground Water Conservation District (GCUWCD) and Schertz Seguin Local Government Corporation (SSLGC)'s allocation to the City and the Director of Public Works' assessment of the severity of the water shortage condition and the need to curtail water diversions and deliveries and may be adjusted periodically by resolution of the City Council as conditions warrant. Once pro rata allocation is in effect, water diversions by deliveries to each wholesale treated water customer shall be limited to the allocation established for each month.

During any period when pro rata allocation of available water supplies is in effect, wholesale customers shall pay the following surcharges on excess water consumption:

• 1.25 times the normal water rate per unit in excess of the monthly allocation up through 5% above the monthly allocation.
• 1.5 times the normal water rate in excess of the monthly allocation from 5% through 10% above the monthly allocation.
• 1.75 times the normal water rate in excess of the monthly allocation from 10% through 15% above the monthly allocation.
• 2.0 times the normal water rate more than 15% above the monthly allocation.

Section XIII: Enforcement

(a) No person shall knowingly or intentionally allow the use of water from the City of Schertz for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the City Manager, or his/her designee, in accordance with provisions of this Plan.

(b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction, shall be punished by a fine up to $200.00. Each day that one or more of the provisions in the Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the Director of Public Works shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at $150.00, and any other costs incurred by the City of Schertz in discontinuing service. In addition, suitable assurance must be given to the Director of Public Works that the same action shall not be repeated while the Plan is in effect. Compliance with this Plan may also be sought through injunctive relief in the district court.

(c) Any person, including a person classified as a water customer of the City of Schertz, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.

(d) Any police officer, code enforcement officer, or other City of Schertz employee designated by the Director of Public Works, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on or before the 14th day following the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear in municipal court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

Section XIV: Variances

The City Manager, or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

(a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.

(b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the City of Schertz within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the Director of Public Works, or his/her designee, and shall include the following:

(a) Name and address of the petitioner(s).
(b) Purpose of water use.
(c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
(d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
(e) Description of the relief requested.
(f) Period of time for which the variance is sought.
(g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
(h) Other pertinent information.

Variances granted by the City of Schertz shall be subject to the following conditions, unless waived or modified by the City Manager or his/her designee:

(a) Variances granted shall include an acceptable timetable for compliance.
(b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Section XV: Severability

It is hereby declared to be the intention of the City of Schertz that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable and, if any phrase, clause, sentence, paragraph, or section of the Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of the Plan, since the same would not have been enacted by the City of Schertz without the incorporation into the Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

Drought Contingency and Water Emergency Response Plan
For
The City of Schertz

Public Water Supply

Proposed Chapter 90 Amendments Red Lines

DROUGHT CONTINGENCY AND WATER EMERGENCY RESPONSE PLAN FOR THE CITY OF SCHERTZ

Section I: Declaration of Policy, Purpose, and Intent

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the City of Schertz hereby adopts the following Drought Contingency and Water Emergency Response Plan (the Plan).

Water uses regulated or prohibited under the Plan are considered to be non-essential, and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section XII and XIII of the Plan.

Section II: Public Involvement

Opportunity for the public and wholesale customers to provide input into the preparation of the Plan was provided by the City of Schertz by means of scheduling and providing public notice of a public meeting to accept input on the Plan.

Section III: Public Education

The City of Schertz will periodically provide the public and wholesale customers with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of the City web site, newsletter and utility bill messages.

Section IV: Coordination with Regional Water Planning Groups

The service area of the City of Schertz is located within the Schertz Seguin Local Government Corporation (SSLGC) and Edwards Aquifer Authority. The City of Schertz has provided a copy of this Plan to the Edwards Aquifer Authority, Texas Water Development Board, SSLGC and San Antonio River Authority representing Region "L" for the State.

Section V: Authorization

The City Manager or his/her designee is hereby authorized and directed to implement the applicable provisions of the Plan upon determination that such implementation is necessary to protect public health, safety and welfare. The City Manager, or his/her designee, shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this Plan.

Section VI: Application

Provisions of the Plan shall apply to all persons, customers, and property utilizing water provided by the City of Schertz. The terms "person" and "customer" as used in the Plan include individuals, corporations, partnerships, associations, and all other legal entities.

Section VII: Definitions

For the purposes of the Plan**,** the following definitions shall apply:

Aesthetic Water Use: Water used for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.

Athletic Field: A sports play field including playgrounds whose essential feature is a grass turf, other than a golf course.

(a) Conforming athletic field – An athletic field with an approved groundwater conservation plan under section XI of this Plan.

(b) Non-conforming athletic field – Any other athletic field that is not a conforming athletic field.

Commercial and Institutional Water Use: Water use which is integral to the operations of commercial and non-profit establishments and governmental entities, public or private schools, retail establishments, hotels and motels, restaurants, office buildings and Homeowner/Neighborhood Associations.

Conservation: Those practices, techniques, and technologies that reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water or increase the recycling and reuse of water so that a supply is conserved and made available for future or alternative uses.

Customer: Any person, company, or organization using water supplied by City of Schertz.

Domestic Water Use: Water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.

Golf Course: An area of land used for the game of golf.

(a) Conforming Golf Course – A golf course with an approved groundwater conservation plan pursuant to Section X of this Plan.

(b) Non-conforming golf course – Any other golf course that is not a conforming golf course.

Hand-held Watering: A hose or bucket physically attended by a person, fitted with a manual or automatic shutoff nozzle.

Industrial Water Use: The use of water in processes designed to convert materials of lower value into forms having greater usability and value.

Landscape irrigation use: Water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians, but does not include:

(a) Non-discretionary use without waste of groundwater by a commercial nursery to the extent the water is used for production rather than decorative landscaping;

(b) Application of groundwater without waste to a non-commercial family garden or orchard, the produce of which is for household consumption only;

(c) Application of groundwater by means of hand-held bucket, hand-held hose; soaker hose or properly installed drip irrigation system; and

(d) Application of groundwater by means of a soaker hose, hand-held hose, or properly installed drip irrigation system immediately next to a concrete foundation solely for the purpose of preventing, to the extent the watering is necessary, substantial damage to the foundation of the structure caused by movement of the foundation.

Mobile Home Communities: Property owned by an individual or commercial establishment who rents such property for mobile or manufactured homes placement; must comply with the requirements and restrictions as a "Customer" in this section.

Non-essential Water Use: Water uses that are not essential or required for the protection of public, health, safety, and welfare, including:

(a) Irrigation of landscape areas, including parks, athletic fields, and golf courses, except otherwise provided under this Plan;
(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
(c) Use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
(d) use of water to wash down buildings or structures for purposes other than immediate fire protection;
(e) flushing gutters or permitting water to run or accumulate in any gutter or street;
(f) use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
(g) use of water in a fountain or pond for aesthetic or scenic purposes except where necessary to support aquatic life;
(h) failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
(i) use of water from hydrants for construction purposes or any other purposes other than fire fighting.

Private Water Well: Well on private property that is not inter-connected with the City's water.

Pro Rata Water Allocation: In Accordance with Texas Water Code Section 11.039, The Director of Public Works or their designee is hereby authorized to initiate allocation of water supplies on a pro rata basis. Pro-rata curtailment will be conducted in accordance with Texas Water Code §11.039. Additionally, all new, renewed, or extended wholesale supply contracts will include a provision stipulating that water distribution will occur on a pro-rata basis in the event of a water shortage resulting from drought. Enforcement actions for non-compliance with either the Water Conservation Plan or pro-rata water reductions by wholesale customers will be determined based on the specifics outlined in each wholesale customer's contract.

Re-Use Water: A treated non-potable water source used for irrigation.

Wasting Water: Watering a non-pervious surface or landscape watering that goes beyond a customer's property. Waste of water also includes, but is not limited to, allowing water to run off into a gutter, ditch or drain, or failing to repair a controllable leak.

Wholesale: A specific contractual agreement between an individual and/or entity that, for compensation, supplies water to another for resale to the public for human consumption. Every wholesale water contract entered into or renewed after adoption of the Plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code, §11.039. Wholesale customers are required to adopt and follow a state-approved Drought Contingency Plan. This Plan must require its customers to reduce use in the event that The City of Schertz enters into a drought restriction stage. In the absence of a state-approved Drought Contingency Plan, wholesale customers must follow The City of Schertz drought contingency plan.

Section VIII: Triggering Criteria for Initiation and Termination of Drought Restriction Stages

The City Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and shall determine when conditions warrant initiation or termination of each stage of the Plan. Public notification of the initiation or termination of drought response stages shall be by means of publication in local newspaper and/or signs posted in public places.

The triggering criteria described below are based on the analysis of system capability and the rules of the Gonzales Underground Water Conservation District (GCUWCD) and SSLGC. In the event that SSLGC can not provide water, the City of Schertz will immediately implement Stage 4 restrictions.

Stage 1 – Restrictions—MILD Water Shortage Conditions

Requirements for Initiation – It is mandatory that customers conserve water and adhere to the prescribed restrictions on certain water uses, defined in Section VII – Definitions, when one or all of the following are reached

(a) City of Schertz receives notification from the General Manager of SSLGC of Stage 1 conditions.
(b) Water demand is projected to approach 100% of the monthly limit of the GCUWCD permitted supply.
(c) Annual Monthly Average Drawdown as measured by GCUWCD rules equals 85% of allowable.
(d) The City's water system has malfunctioned, but is still able to keep up with demand.

Requirements for Termination - Stage 1 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee.

Stage 2 – Restrictions -- MODERATE Water Shortage Conditions

Requirements for Initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in Section VII of the Plan when one or all of the following are reached:

(a) City of Schertz receives notification from the General Manager of SSLGC of Stage 2 conditions.
(b) Water demand is projected to approach 110% of the monthly limit of the GCUWCD permitted supply.
(c) Annual Monthly Average Drawdown as measured by GCUWCD rules equals 95% of allowable.
(d) The City's water system has malfunctioned, and cannot keep up with demand.

Requirements for Termination - Stage 2 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee. Upon termination of Stage 2, Stage 1 becomes operative.

Stage 3 – Restrictions -- SEVERE Water Shortage Conditions

Requirements for Initiation - Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of the Plan when one or all of the following are reached:

(a) City of Schertz receives notification from the General Manager of SSLGC of Stage 3 conditions.
(b) Water demand is projected to approach 120% of the monthly limit of the GCUWCD permitted supply.
(c) Annual Monthly Average Drawdown as measured by GCUWCD rules equals 100% of allowable.
(d) Water quality is less than normal or is polluted. Health and safety standards may be jeopardized.
(e) The imminent or actual failure of a major component of the City's water system would cause immediate health and safety hazard.

Requirements for Termination - Stage 3 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee. Upon termination of Stage 3, Stage 2 becomes operative.

Stage 4 – Emergency Restrictions -- CRITICAL Water Shortage Conditions Including System or Water Quality Failure

Requirements for Initiation - Customers shall be required to comply with the requirements and restrictions for Stage 4 of the Plan when the Mayor, or his/her designee, determines that a water supply emergency exists based on:

(a) The General Manager of SSLGC, with concurrence of the SSLGC Executive Committee or Board of Directors, finds that conditions warrant the declaration of Stage 4.
(b) Water demand exceeds 125% of the monthly limit of the GCUWCD permitted supply.
(c) Annual Monthly Average Drawdown as measured by GCUWCD rules exceeds 115% of allowable.
(d) Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability of the City to provide water service.
(e) Natural or man-made contamination of the water supply source(s).

Requirements for Termination – Stage 4 of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days, or when items (d) and (e) above have been repaired.

Water Rationing

Requirements for Initiation - Customers shall be required to comply with the water rationing allocation plan prescribed in Section XIII of the Plan when the Mayor and City Council determine that the water supply emergency exists and comply with the requirements and restrictions for Stage 4 of the Plan when:

(a) Extreme drought conditions exist;

(b) Major water line breaks, or pump or system failures occur, which cause unprecedented loss of capability to provide water service; **or**

(c) Natural or man-made contamination of the water supply source occurs.

Requirements for Termination – Water rationing may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of thirty (30) consecutive days or when rescinded by the City Manager or his/her designee.

Section IX:

1. Wasting Water:

(a) It shall be unlawful for any person or customer to waste water.

(b) Year round outdoor watering between 10:00 am – 8:00 pm is prohibited.

(c) It shall be a violation if a person or customer allows water to run off into a non-pervious ditch, or failure to repair a controllable leak.

(d) Re-use water usage is exempt from the plan.

(e) Customers using water from a private water well must comply with all requirements of the plan.

2. Drought Response Stages

The City Manager, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in Section VIII of the Plan, shall determine that Stage 1, 2, 3 or 4 conditions exist and shall implement the following actions upon publication of notice in a newspaper of general circulation and/or signs posted in public places and city web site:

Stage 1 – Restrictions -- MILD Water Shortage Conditions

Goal: Achieve a mandatory ten percent (10%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall be responsible for overseeing the reduction or discontinued flushing of water mains, activation and use of an alternative supply source(s), use of reclaimed water for non-potable purposes, and blending of alternate sources.

Water Use Restrictions: Under the threat of penalty for violation, the following water use restrictions shall apply to all persons:

(a) Water customers shall comply with mandatory limits of irrigation of landscape areas. Watering days will be based on the last digit of the address:

0-1 - Monday
2-3 - Tuesday
4-5 - Wednesday
6-7 - Thursday
8-9 - Friday

(b) Athletic Fields and Golf Courses –
Conforming 10% reduction in watering as per Section X & XI.

Non-conforming 15% reduction in watering as per Section X & XI.

(c) Commercial/Industrial/Schools/Institutional landscape watering is permitted on Wednesday only.

(d) Watering of landscape is permitted only between the hours of 12:00 am to 10:00 am and 8:00 pm to midnight on designated watering days.

(e) All operations of the City of Schertz shall adhere to water use restrictions prescribed for Stage 1 of the Plan.

(f) Water customers are requested to practice water conservation and to minimize or discontinue water use for non-essential purposes.

(g) Handheld, bucket or drip system is allowed.

(h) New landscape may have 3 weeks variance for establishment. All variances must be reviewed and approved by the City Manager or Director of Public Works or their designee.

(i) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a re-circulation system.

Stage 2 – Restrictions -- MODERATE Water Shortage Conditions

Goal: Achieve a fifteen percent (15%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall see that reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of blending an alternative supply source(s); use of reclaimed water for non-potable purposes.

Water Use Restrictions: Under threat of penalty for violation, the following water use restrictions shall apply to all persons, along with previous restrictions from Stage 1:

(a) Water customers shall comply with mandatory limits of irrigation of landscape areas. Watering days will be based on the last digit of the address:

0-1- Monday
2-3 - Tuesday
4-5 - Wednesday
6-7 - Thursday
8-9 - Friday

(b) Athletic Fields and Golf Courses-
Conforming: 15% reduction watering as per Section X & XI.
Non-conforming: 20% reduction watering as per Section X & XI.

(c) Commercial/Industrial/Schools/Institutional landscape watering is permitted on Wednesday only.

(d) Watering of landscape is permitted only between the hours of 3:00 am to 8:00 am and 8:00 pm to 10:00 pm.

(e) Filling of all new and existing swimming pools is prohibited, unless at least 30% of the water is obtained from a source other than the aquifer. Groundwater may be used to replenish swimming pools to maintenance levels. Draining of swimming pools is permitted only onto a pervious surface or onto a pool deck where the water is transmitted directly to a pervious surface, and only if necessary to:

(1) Remove excess water from the pool due to rain to lower the water to the maintenance level;
(2) Repair, maintain, or replace a pool component that has become hazardous; or
(3) Repair a pool leak.

(f) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(g) Use of water from fire hydrants shall be limited to fire fighting and related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the City of Schertz.

(h) All restaurants are prohibited from serving water to its patrons except when requested.

(i) The following uses of water are defined as non-essential and are prohibited:

1. Wash down of any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
2. Use of water to wash down buildings or structures for purposes other than immediate fire protection;
3. Use of water for dust control;
4. Flushing gutters or permitting water to run or accumulate in any gutter or street; and
5. Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Stage 3 – Restrictions -- SEVERE Water Shortage Conditions

Goal: Achieve a twenty-five percent (25%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall see that reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of blending an alternative supply source(s); use of reclaimed water for non-potable purposes.

Water Use Restrictions: All requirements of Stages 1 & 2 shall remain in effect during Stage 3 except:

(a) Landscape watering is prohibited except by handheld watering or drip irrigation during designated watering days as described in Stage 1 & 2.

(b) The watering of golf course is prohibited unless the golf course utilizes a reuse water source.

(c) The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

(d) The filling, refilling, or adding of water to swimming pools, wading pools, and jacuzzi-type pools are prohibited.

(e) Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.

(f) No applications for additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be allowed or approved.

(g) Application of groundwater in the morning before 8:00 am and in the evening after 8:00 pm by means of a handheld bucket, handheld hose, soaker hose or properly installed drip irrigation system, immediately next to a concrete foundation solely for the purpose of preventing, and to the extent the watering is necessary to prevent, substantial damage to the foundation or the structure caused by movement of the foundation.

(h) Athletic field - Conforming 25% reduction watering as in Section XI
Non-conforming 30% reduction watering as in Section XI.

Stage 4 – Emergency Restrictions -- CRITICAL Water Shortage Conditions

Goal: Achieve a forty percent (40%) reduction in daily water demand.

Supply Management Measures:

Director of Public Works shall see that reduced or discontinued flushing of water mains, reduced or discontinued irrigation of public landscaped areas; use of blending an alternative supply source(s); use of reclaimed water for non-potable purposes.

Water Use Restrictions: All requirements of Stages 1,2, and 3 shall remain in effect during Stage 4 except:

(a) Irrigation of landscaped areas is absolutely prohibited.

(b) Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

(c) Implementation of additional drought contingency measures may be applied at the direction of the City of Schertz.

Section X: Golf Courses

Notwithstanding any other language in the Plan, the owners of golf courses that are applicants or customers of an applicant shall be required to submit a groundwater conservation plan and shall be defined as "conforming" and "non- conforming" and shall reduce usage of aquifer groundwater under the following terms:

1. It shall be unlawful to water any golf course between the hours of 10:00 am and 8:00 pm.

2. A conforming golf course is one that achieves enhanced conservation by utilizing a computer controlled irrigation system ("CCIS"), or similar system, which may be comprised of a computer controller (digital operating system), software, interface modules, satellite, field controller, soil sensors, weather station, or similar devices, which is capable of achieving maximum efficiency and conservation in the application of water to the golf course, must accomplish the following restrictions listed in subparagraphs (A)-(C) of this paragraph:

(A) Stage 1 Restrictions – 10% reduction in the replacement of daily evapotranspiration rate ("ET rate") or daily soil holding capacity; or use of not more than 95% of the metered amount for that corresponding month.

(B) Stage 2 Restrictions – 15% reduction in the replacement of daily (ET) rate or daily soil holding capacity; or use of not more than 90% of the metered amount for that corresponding month.

(C) Stage 3 Restrictions - 25% reduction in the replacement of daily (ET) rate or daily soil holding capacity, or use of not more than 75% of the metered amount for that corresponding month.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate or daily soil holding capacity not to exceed 60% of metered amount.

(3) A non-conforming golf course shall comply with the following reduction measures listed in paragraphs (A)-(C) of this subsection:

(A) Stage 1 Restrictions - 15% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 95% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS;

(B) Stage 2 Restrictions - 20% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 90% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS;

(C) Stage 3 Restrictions - 30% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 85% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 60% of the metered amount for that corresponding month for golf courses that are not equipped with a CCIS;

(4) The owner or operator of a golf course must comply with all rules relating to Stage 3 and 4.

(5) The owner or operator of a golf course must maintain daily water use records which must be available for inspection upon request.

(6) The owner or operator of a conforming golf course or a golf course with a CCIS must maintain daily water use records of their ET rate or daily soil holding capacity, which must be available for inspection upon request.

(7) All daily records must be kept on site.

Section XI: Athletic Fields

Notwithstanding any other language in the Plan, the owners of athletic fields that are applicants or customers of an applicant shall be required to submit a groundwater conservation plan and shall be defined as "conforming" or "non- conforming" and shall reduce usage of City supplied groundwater under the following terms:

1. It shall be unlawful to water any athletic field between the hours of 10:00 am and 8:00 pm

2. A conforming athletic field is one that achieves enhanced conservation by utilizing a CCIS, or similar system, which may be comprised of a computer controller (digital operating system), software, interface modules, satellite, field controller, soil sensors, weather station, or similar devices, which is capable of achieving maximum efficiency and conservation in the application of water to the athletic field, must accomplish the following restrictions listed in subparagraphs (A)-(C) of this paragraph:

(A) Stage 1 Restrictions – 10% reduction in the replacement of daily evapotranspiration rate ("ET rate") or daily soil holding capacity, or use of not more than 95% of the metered amount for that corresponding month.

(B) Stage 2 Restrictions – 15% reduction in the replacement of daily ET rate or daily soil holding capacity; or use of not more than 90% of the metered amount for that corresponding month,

(C) Stage 3 Restrictions - 25% reduction in the replacement of daily ET rate or daily soil holding capacity, or use of not more than 75% of the metered amount for that corresponding month.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate or daily soil holding capacity, not to exceed 60% of metered amount.

(3) A non-conforming athletic field shall comply with the foI1owing reduction measures listed in paragraphs (A)-(C) of this subsection:

(A) Stage 1 Restrictions - 15% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS, or use of not more than 95% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS;

(B) Stage 2 Restrictions - 20% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS, or use of not more than 90% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS;

(C) Stage 3 Restrictions - 30% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS, or use of not more than 85% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS.

(D) Stage 4 Restrictions – 40% reduction in the replacement of daily ET rate as monitored by a properly operating CCIS or use of not more than 60% of the metered amount for that corresponding month for athletic fields that are not equipped with a CCIS.

(4) The owner or operator of an athletic field must comply with all rules relating to Stage 3 and 4.

(5) The owner or operator of an athletic field must maintain daily water use records, which must be available for inspection upon request.

(6) The owner or operator of a conforming athletic field or an athletic field with a CCIS must maintain daily water use records of their ET rate or daily soil holding capacity, which must be available for inspection upon request.

(7) All daily records must be kept on site.

Section XI.2: Single-Pass Cooling System Connections and Non-Recirculating Systems Prohibited

Single-pass cooling system connections and non-recirculating systems for commercial laundry facilities, carwash facilities, and other business activities shall be prohibited in all facilities built or remodeled after August 20, 2013 the effective date of Ordinance 13-F-26 ~~this Section XI.2~~.

Section XII: Water Rationing

In the event that water shortage conditions threaten public health, safety, and welfare, the Mayor is hereby authorized to require water ration watering according to the following water allocation plan:

Single-Family Residential Customers

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

Persons per Household	Gallons per Month
1 or 2	6,000
3 or 4	7,000
5 or 6	8,000
7 or 8	9,000
9 or 10	10,000
11 or more	12,000

"Household" means the residential premises served by the customer's meter. "Persons per household" includes only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two (2) persons unless the customer notifies the City of Schertz of a greater number of persons per household on a form prescribed by the Director of Public Works. The Director of Public Works shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Schertz offices to complete and sign the form

claiming more than two (2) persons per household. New customers may claim the number of persons per household at the time of applying for water service on the form prescribed by the Director of Public Works. When the number of persons per household increases so as to place the customer in a different allocation category, the customer may notify the City of Schertz on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the City of Schertz in writing within two (2) days. In prescribing the method for claiming more than two (2) persons per household, the Director of Public Works shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of persons in a household or fails to timely notify the City of Schertz of a reduction in the number of person in a household shall be fined not less than $200.00. Residential water customers shall pay the following surcharges:

$2.00 for the first 1,000 gallons over allocation.
$3.00 for the second 1,000 gallons over allocation.
$4.00 for the third 1,000 gallons over allocation.
$5.00 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Master-Metered Multi-Family Residential Customers

The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (e.g., apartments, mobile homes) shall be allocated 6,000 gallons per month for each dwelling unit. It shall be assumed that such a customer's meter serves two dwelling units unless the customer notifies the City of Schertz of a greater number on a form prescribed by the Director of Public Works. The Director of Public Works shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the City of Schertz offices to complete and sign the form claiming more than two (2) dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim only those occupying the dwelling unit at the time of applying for water service on the form prescribed by the Director of Public Works. If the number of dwelling units served by a master meter is reduced, the customer shall notify the City of Schertz in writing within two (2) days. In prescribing the method for claiming more than two (2) dwelling units, the Director of Public Works shall adopt methods to insure the accuracy of the claim. Any person who knowingly, recklessly, or with criminal negligence falsely reports the number of dwelling units served by a master meter or fails to timely notify the City of Schertz of a reduction in the number of person in a household shall be fined not less than $200.00. Customers billed from a master meter under this provision shall pay the following monthly surcharges:

$2.00 for the first 1,000 gallons over allocation.
$3.00 for the second 1,000 gallons over allocation.
$4.00 for the third 1,000 gallons over allocation.
$5.00 for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Commercial Customers

A monthly water usage allocation shall be established by the Director of Public Works, or his/her designee, for each nonresidential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately seventy-five percent (75%) of the customer's usage for corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. The Director of Public Works shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Schertz to determine the allocation. Upon request of the customer or at the initiative of the Director of Public Works, the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Manager. Nonresidential commercial customers shall pay the following surcharges:

$2.00 per thousand gallons for the first 1,000 gallons over allocation.
$3.00 per thousand gallons for the second 1,000 gallons over allocation.
$4.00 per thousand gallons for the third 1,000 gallons over allocation.
$5.00 per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative. As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

Industrial Customers and Commercial Nurseries

A monthly water usage allocation shall be established by the Director of Public Works, or his/her designee, for each industrial customer, which uses water for processing purposes. The industrial customer's and commercial nurseries allocation shall be approximately ninety percent (90%) of the customer's water usage baseline. Ninety (90) days after the initial imposition of the allocation for industrial customers and commercial nurseries, the industrial customer's and commercial nurseries allocation shall be further reduced to 85% percent of the customer's water usage baseline. The industrial customer's and commercial nurseries water usage baseline will be computed on the average water usage for the 12 month period ending prior to the date of implementation of Stage 2 of the Plan. If the industrial water customer's and commercial nurseries billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no billing history exists. The Director of Public Works shall give his/her best effort to see

that notice of each industrial customer and commercial nurseries allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the City of Schertz to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the Director of Public Works, the allocation may be reduced or increased, (1) if the designated period does not accurately reflect the customer's normal water usage because the customer had shut down a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shut down or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce usage is limited, (5) the customer agrees to transfer part of its allocation to another industrial customer and commercial nurseries, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the City Manager. Industrial customers and commercial nurseries shall pay the following surcharges:

Customers whose allocation is 90% of their twelve month average.

$ 2.00 per thousand gallons for the first 1,000 gallons over allocation.
$ 3.00 per thousand gallons for the second 1,000 gallons over allocation.
$ 4.00 per thousand gallons for the third 1,000 gallons over allocation.
$ 5.00 per thousand gallons for each additional 1,000 gallons over allocation.

The surcharges shall be cumulative. As used herein, "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

Wholesale Customers

The provisions of this Plan shall apply to all customers utilizing water provided by the City on a wholesale basis. Every wholesale water contract entered into, renewed or modified after official adoption of this Plan shall include language relating to the City of Schertz Drought Contingency Plan and shall require the imposition of similar restrictions, surcharges or rationing measures on their customers. To the extent of its legal authority, the City of Schertz shall require its wholesale customers to implement outdoor watering restrictions similar to those of the City for each drought response stage or adopt the City of Schertz Drought Contingency Plan. The City requires that any contract for the resale of water furnished to wholesale water contractors shall contain a similar condition.

In the event that the triggering criteria specified, the City Manager, or designee, is hereby authorized to implement allocation of water supplies on a pro rata basis to raw water and treated wholesale customers in accordance with Texas Water Code §11.039. The initiation of pro rata

allocation preparations shall begin during Stage 3. A provision will be included in every wholesale water contract entered into or renewed after adoption of the Plan, including contract extensions, that in case of a shortage of water resulting from drought, the water to be distributed shall be divided in accordance with Texas Water Code §11.039.
A wholesale treated water customer's monthly allocation shall be a percentage of the customer's water usage baseline. The percentage will be set by resolution of the City Council based on the Gonzales Underground Water Conservation District (GCUWCD) and Schertz Seguin Local Government Corporation (SSLGC)'s allocation to the City and the Director of Public Works' assessment of the severity of the water shortage condition and the need to curtail water diversions and deliveries and may be adjusted periodically by resolution of the City Council as conditions warrant. Once pro rata allocation is in effect, water diversions by deliveries to each wholesale treated water customer shall be limited to the allocation established for each month.

During any period when pro rata allocation of available water supplies is in effect, wholesale customers shall pay the following surcharges on excess water consumption:

- 1.25 times the normal water rate per unit in excess of the monthly allocation up through 5% above the monthly allocation.
- 1.5 times the normal water rate in excess of the monthly allocation from 5% through 10% above the monthly allocation.
- 1.75 times the normal water rate in excess of the monthly allocation from 10% through 15% above the monthly allocation.
- 2.0 times the normal water rate more than 15% above the monthly allocation.

Section XIII: Enforcement

(a) No person shall knowingly or intentionally allow the use of water from the City of Schertz for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the City Manager, or his/her designee, in accordance with provisions of this Plan.

(b) Any person who violates this Plan is guilty of a misdemeanor and, upon conviction, shall be punished by a fine up to $200.00. Each day that one or more of the provisions in the Plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this Plan, the Director of Public Works shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at $150.00, and any other costs incurred by the City of Schertz in discontinuing service. In addition, suitable assurance must be given to the Director of Public Works that the same action shall not be repeated while the Plan is in effect. Compliance with this Plan may also be sought through injunctive relief in the district court.

(c) Any person, including a person classified as a water customer of the City of Schertz, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parents' control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this Plan and that the parent could not have reasonably known of the violation.

(d) Any police officer, code enforcement officer, or other City of Schertz employee designated by the Director of Public Works, may issue a citation to a person he/she reasonably believes to be in violation of this Ordinance. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on or before the 14th day following the date the citation was issued. The alleged violator shall be served a copy of the citation. Service of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this Plan. If the alleged violator fails to appear in municipal court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

Section XIV: Variances

The City Manager, or his/her designee, may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and if one or more of the following conditions are met:

(a) Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.

(b) Alternative methods can be implemented which will achieve the same level of reduction in water use.

Persons requesting an exemption from the provisions of this Ordinance shall file a petition for variance with the City of Schertz within 5 days after the Plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the Director of Public Works, or his/her designee, and shall include the following:

(a) Name and address of the petitioner(s).
(b) Purpose of water use.
(c) Specific provision(s) of the Plan from which the petitioner is requesting relief.
(d) Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
(e) Description of the relief requested.
(f) Period of time for which the variance is sought.
(g) Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
(h) Other pertinent information.

Variances granted by the City of Schertz shall be subject to the following conditions, unless waived or modified by the City Manager or his/her designee:

(a) Variances granted shall include an acceptable timetable for compliance.
(b) Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.

No variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Section XV: Severability

It is hereby declared to be the intention of the City of Schertz that the sections, paragraphs, sentences, clauses, and phrases of this Plan are severable and, if any phrase, clause, sentence, paragraph, or section of the Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of the Plan, since the same would not have been enacted by the City of Schertz without the incorporation into the Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

Agenda No. 16.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**City Secretary**
Subject:	**Workshop Discussion on the Integration of Space Force into Veterans Memorial Plaza (S.Gonzalez/L.Shrum)**

BACKGROUND

The Schertz Veterans Memorial Plaza was officially dedicated to the city on November 11, 2014 after an extensive fundraising effort by a citizens' committee. At the time, there were only 5 branches of the military and the traditional pentagon shape was chosen for the plaza design. In 2019, the Space Force Branch was created and thus there is a need to incorporate the new branch permanently into the plaza. Currently, a temporary freestanding flag pole for the Space Force is brought into the plaza for the Memorial Day and Veterans Day ceremonies, respectively.

City staff began working with the landscape architect firm, LUCK Design Group, to facilitate incorporating the Space Force Branch into the plaza in a meaningful and appropriate way. The design challenge of incorporating 6 branches into a pentagon shape and maintaining a balanced plaza that is pleasing to the eye, was difficult, and various iterations were discussed. City staff did not want to eliminate the work that was done by the citizen committee with the 5-point pentagon and 5-point star design in the pavers, so it was ultimately decided the best course of action was to add an equivalent break on each side of the pentagon to match the two sides that already had a break with a sidewalk entrance. This way, all sides of the pentagon would have an equidistant break in the middle of the side and two additional monuments would be added instead of just 1 monument for Space Force, so there will now be 8 granite monuments with 8 flags immediately behind each monument.

City staff discussed the design proposal with two different citizen groups to gather feedback - The Chamber Military Affairs Committee (MAC) at their meeting on November 6, 2024 and the Parks & Recreation Advisory Board at their meeting on November 18, 2024. Both groups had positive feedback on the proposed design and the MAC Committee assisted city staff with appropriate order and wording of monuments.
The original order discussed was:
1. POW/MIA
2. Army
3. Navy
4. Marine Corps
5. Air Force
6. Space Force
7. Coast Guard
8. Gold Star

After having these discussions with the MAC Committee, staff realized that the POW/MIA flag was already in the center of the plaza and moving that flag out of the center, would then cause an imbalance in the centered flags in the middle of the pentagon. Thus, city staff is proposing that we incorporate a monument and flag for Purple Heart recipients.

The new proposed order is:
1. Army
2. Navy
3. Marine Corps
4. Air Force
5. Space Force
6. Coast Guard
7. Purple Heart
8. Gold Star

GOAL

Incorporate the Space Force Branch into the Veterans Memorial Plaza in a way that makes sense for the design of the plaza.

COMMUNITY BENEFIT

The Schertz Veterans Memorial Plaza honors the men and women who serve or have served in the Armed Forces of the United States of America - past, present, and future. The community regards veterans in high esteem and hosts Memorial Day and Veterans Day ceremonies at the plaza, respectively, as well as occasional JROTC activities.

SUMMARY OF RECOMMENDED ACTION

Approval of the proposed design to incorporate the Space Force branch into the Schertz Veterans Memorial Plaza.

RECOMMENDATION

Approval of the proposed design to incorporate the Space Force branch into the Schertz Veterans Memorial Plaza.

Attachments

Veterans Plaza Space Force Addition presentation

VETERANS MEMORIAL PLAZA SPACE FORCE ADDITION



City Council Meeting – January 21, 2025

Lauren Shrum| Director | Parks, Recreation and Community Services

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Landscape Architect:

- LUCK Design Team

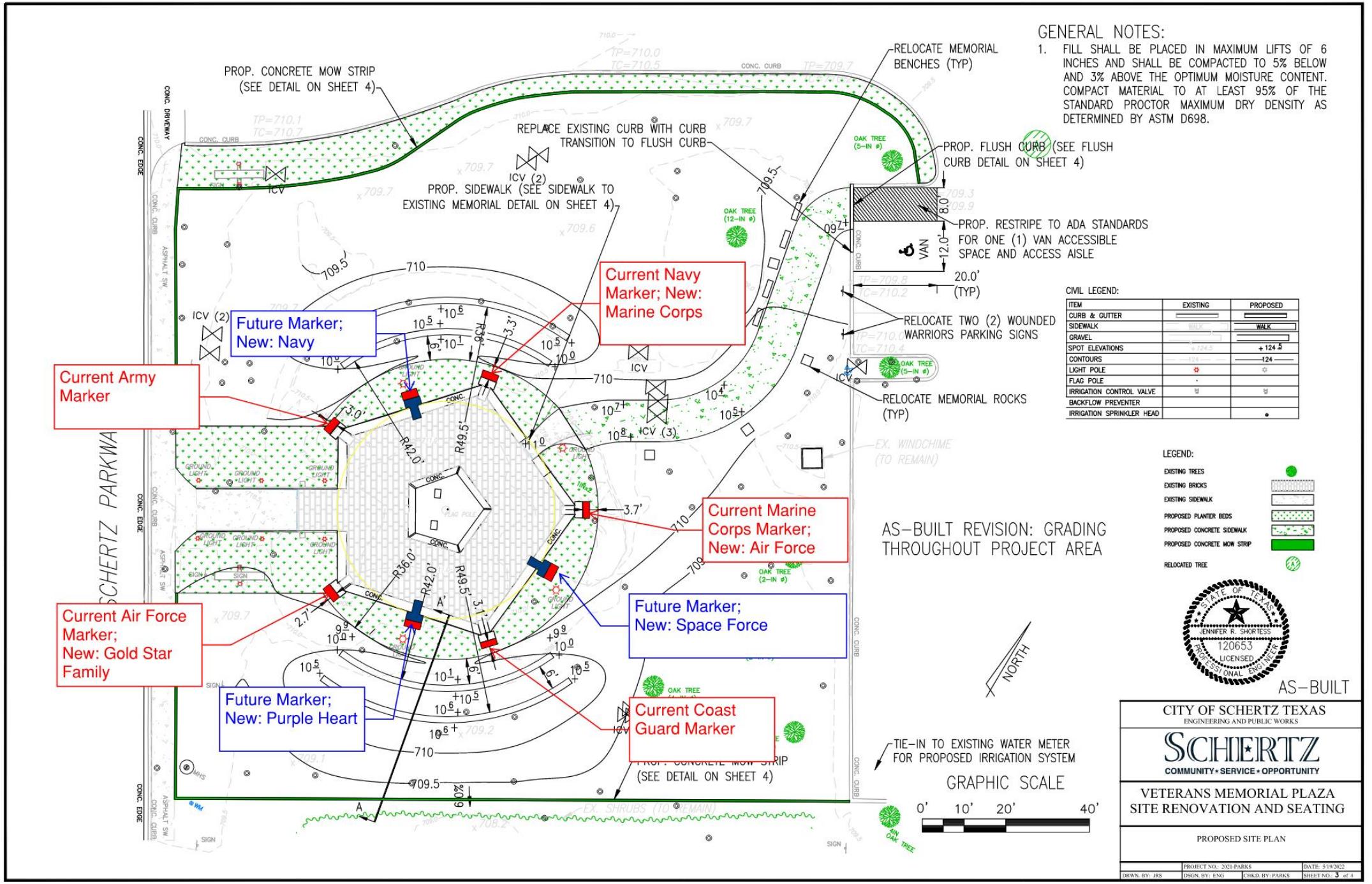
Focus Groups:

- The Chamber Military Affairs Committee (MAC) – November 6, 2024
- Parks & Recreation Advisory Board – November 18, 2024
- Ruth Tienor & Original Committee – via emails
- City Council – January 21, 2025



1. Army
2. Navy
3. Marine Corps
4. Air Force
5. Space Force
6. Coast Guard
7. Purple Heart
8. Gold Star

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GENERAL NOTES:
1. FILL SHALL BE PLACED IN MAXIMUM LIFTS OF 6 INCHES AND SHALL BE COMPACTED TO 5% BELOW AND 3% ABOVE THE OPTIMUM MOISTURE CONTENT. COMPACT MATERIAL TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.
PROP. CONCRETE MOW STRIP (SEE DETAIL ON SHEET 4)
REPLACE EXISTING CURB WITH CURB TRANSITION TO FLUSH CURB
PROP. SIDEWALK (SEE SIDEWALK TO EXISTING MEMORIAL DETAIL ON SHEET 4)
RELOCATE MEMORIAL BENCHES (TYP)
PROP. FLUSH CURB (SEE FLUSH CURB DETAIL ON SHEET 4)
PROP. RESTRIPE TO ADA STANDARDS FOR ONE (1) VAN ACCESSIBLE SPACE AND ACCESS AISLE
VAN
20.0' (TYP)
RELOCATE TWO (2) WOUNDED WARRIORS PARKING SIGNS
RELOCATE MEMORIAL ROCKS (TYP)
Current Navy Marker; New: Marine Corps
Future Marker; New: Navy
Current Army Marker
Current Marine Corps Marker; New: Air Force
Future Marker; New: Space Force
Current Air Force Marker; New: Gold Star Family
Future Marker; New: Purple Heart
Current Coast Guard Marker
AS-BUILT REVISION: GRADING THROUGHOUT PROJECT AREA
TIE-IN TO EXISTING WATER METER FOR PROPOSED IRRIGATION SYSTEM
(SEE DETAIL ON SHEET 4)
EX. WINDCHIME (TO REMAIN)
EX. SHRUBS (TO REMAIN)
CIVIL LEGEND:
ITEM | EXISTING | PROPOSED
CURB & GUTTER
SIDEWALK
GRAVEL
SPOT ELEVATIONS
CONTOURS
LIGHT POLE
FLAG POLE
IRRIGATION CONTROL VALVE
BACKFLOW PREVENTER
IRRIGATION SPRINKLER HEAD
LEGEND:
EXISTING TREES
EXISTING BRICKS
EXISTING SIDEWALK
PROPOSED PLANTER BEDS
PROPOSED CONCRETE SIDEWALK
PROPOSED CONCRETE MOW STRIP
RELOCATED TREE
NORTH
GRAPHIC SCALE
0' 10' 20' 40'
STATE OF TEXAS
JENNIFER R. SHORTESS
120653
LICENSED
PROFESSIONAL ENGINEER
AS-BUILT
CITY OF SCHERTZ TEXAS
ENGINEERING AND PUBLIC WORKS
SCHERTZ
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VETERANS MEMORIAL PLAZA
SITE RENOVATION AND SEATING
PROPOSED SITE PLAN
PROJECT NO.: 2021-PARKS
DATE: 5/19/2022
DRWN. BY: JRS
DSGN. BY: ENG
CHK'D. BY: PARKS
SHEET NO.: 3 of 4

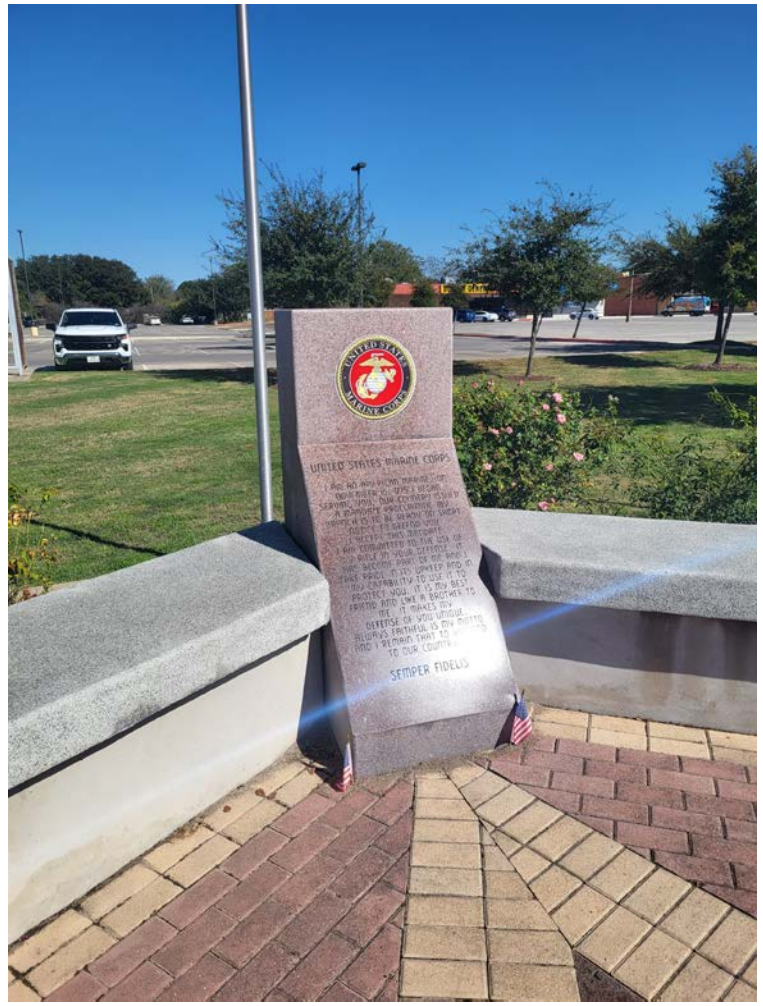
COST AND TIMELINE

Estimated cost is $60,000

- Funded through Parks General Fund
- Granite memorials (3 pedestal stones, inset medallions, engraving, freight) - $50,000
- Pink granite from Vermillion Bay, Ontario, Canada
- Concrete, 3 additional flag poles and flags - $10,000

Timeline: 17 weeks

- Pushing for Completion by Memorial Day 2025



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COMMENTS AND QUESTIONS

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Agenda No. 17.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Executive Team**
Subject:	**Workshop Discussion on the upcoming Request For Proposal for Municipal Solid Waste (S.Williams/S.Gonzalez)**

BACKGROUND

The City of Schertz has a franchise agreement with Republic Services to provide the collection, hauling and disposal of municipal solid waste. The City of Schertz will be issuing a Request for Proposal (RFP) for this service at the beginning of February, as the current agreement ends on June 30, 2025.

This workshop discussion will review the history of solid waste services in Schertz, an overview of what services are currently provided, the timeline of the RFP process and what Council can expect going forward.

Attachments

City Council Presentation Slides

Workshop Discussion: Upcoming Request for Proposal for Municipal Solid Waste

City Council Meeting, February 4, 2025

Sarah Gonzalez | Assistant City Manager

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WORKSHOP OVERVIEW

- History of Solid Waste Services
- Overview of services currently provide
- RFP Process
- Communication/Next Steps

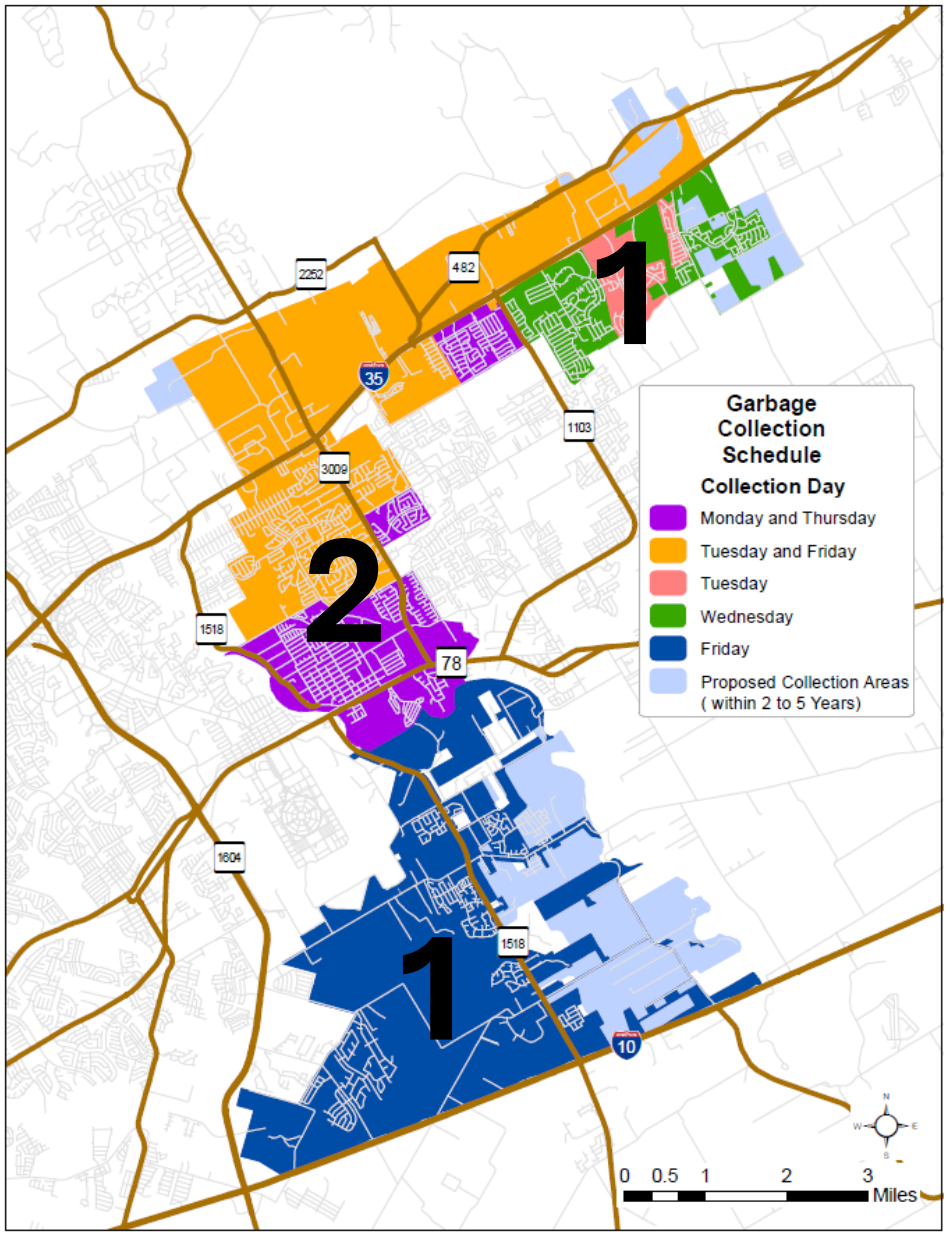
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History

- **2001** – Established renewing franchise relationship with Bexar Waste
  - Ordinance Nos 01-F-2, 03-F-22, 07-F-07, and 11-F-35
- **2013** – Awarded a seven-year franchise agreement to Bexar Waste
  - Ordinance No. 13-F-03
- **2015** – Awarded a ten-year franchise agreement to Bexar Waste
  - Ordinance No. 15-F-18
- **2017** – Bexar Waste sold to Republic Services; Request made to Council to approve assignment of the City's solid waste franchise agreement to Republic Services
  - Resolution 17-R-41
- **2017 – Present Day** – Republic Services has been provider; operating under existing, legacy contract
- **June 30, 2025** – Contract expires

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Current Services Provided - Residential



- Zone 1 – approx. 5,200 accounts
  - Solid Waste
    - Once a week pick-up
    - 96-gallon poly-cart provided to customer
  - Recycle
    - Once a week pick-up
    - 18-gallon bin provided to customer

- Zone 2 – Approx. 9,300 accounts
  - Solid Waste
    - Twice a week pick-up
    - Hand collect and/or customer provides small container (32 gallon or less)
  - Recycle
    - Once a week pick-up on second day
    - 18-gallon bin provided to customer

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Current Services Provided - Residential

- All Accounts Receive:
  - Brush/Bulk Pick-Up – 12 times per calendar year
  - Spring and Fall Clean-Ups
    - 16 Days
    - Temporary Collection Point at 125 Pecan Drive
    - Hazardous Items/Tires Drop Off on last weekend

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Current Services Provided - Commercial

- All Accounts Option to Receive:
  - Roll-offs
  - Dumpsters
  - Front-End Loaders
  - Recycle (non-exclusive)

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Residential Rates

Garbage Collection Fees	2007-08	2008-09 - 2009-10	2010-11	2011-12 - 2012-13	2013-14 - 2014-15	2015-16	2016-17	2017-18 - 2024-25
Residential:								
Zone I: Once a week pick up								
One 96 gallon cart provided by franchisee, per month	$10.41	$10.81	$11.08	$11.36	$11.70	$12.05	$12.05	$12.41
Recycling Fee, per month/container	$1.25	$1.25	$1.87	$1.87	$1.93	$1.99	$1.99	$2.05
Zone 2: Single Family, twice per week pick up, per month, no cart provided	$15.21	$15.79	$16.18	$16.59	$17.08	$17.59	$12.05	$12.41
Recycling Fee, per month/container	$1.25	$1.25	$1.87	$1.87	$1.93	$1.99	$1.99	$2.05
Front Porch Pick Up							$17.59	$18.11
Recycling Fee, per month/container	$1.25	$1.25	$1.87	$1.87	$1.93	$1.99	$1.99	$2.05

- No rate change in 7 years

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RFP Process

- Working with Solid Waste Specialists:
  - Firm Expertise: Specializes in assisting cities in Texas, Oklahoma, and Arkansas with solid waste service RFPs.
  - Principals:
    - Lynn Lantrip: 40 years in municipal services with a large collection firm.
    - Richard Rozier: Former Mayor of DeSoto, TX; current Tax Assessor-Collector for Ellis County.
    - George Wheatley: Former Mayor of Magnolia, AR; former long-time employee of a large collection firm.
  - Milestone: Serving the City of Schertz marks the firm's 25th engagement since starting 7 years ago.

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RFP Process & Key Dates

January 21, 2025

- Conducted meeting with city staff to gather information and receive direction on preparation of the RFP and Contract

February 5, 2025

- Publish RFP

February 11, 2025

- Mandatory Pre-Proposal Conference

March 5, 2025

- RFP submittals due

April 1, 2025

- Award of new contract by City Council

July 1, 2025

- New solid waste services contract begins

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Residential Collection Options – Solid Waste

Solid Waste Options:

- Once a week collection in 96-gallon cart
- Twice a week collection in a 96-gallon cart

Recycling Options

- Once a week collection in 96-gallon cart
- Every Other Week collection in a 96-gallon cart

Brush & Bulk Options

- Once a week collection of 3 cubic yards
- Every Other Week collection of 3 cubic yards

Optional On Call **Household Hazardous Waste** Collection

All options will allow for **unusual accumulation collection** (special collection larger than requirements for bulk) for a predetermined fee.

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Commercial and Roll-Off Collection

No large changes

- Rates to be submitted based on size of container and frequency of collection (same as current contract)
- Facility services for City to continue, free of charge
- New containers will be required

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General Provisions & Requirements

- All poly-carts provided by the Contractor will be new
- Equipment to be used by the Contractor will be no older than four-years at the start of the contract
- Liquidated Damages to be included to allow the City to charge vendor for specific failures
- GPS-tracking software and camera equipment will be required of all firms submitting an RFP
- Reports will be required to be sent to the City daily

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Communication/Next Steps

- Next Steps
- Comprehensive Trash Campaign

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COMMENTS AND QUESTIONS

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Agenda No. 18.

CITY COUNCIL MEMORANDUM

City Council Meeting: **February 04, 2025**
Department: **Engineering**
Subject: **Monthly Update - Major Projects In Progress/CIP (B.James/K.Woodlee)**

Attachments

2-4-25 Council Update

Informational Only

CITY COUNCIL MEMORANDUM

City Council Meeting: **February 4, 2025**

Department: **City Manager**

Subject: **Update on Major Projects in Progress**

Background

This is the monthly update on large projects that are in progress or in the planning process. This update is being provided so Council will be up to date on the progress of these large projects. If Council desires more information on any project or on projects not on this list, please reach out to staff and that information will be provided.

Facilities Projects:

1. **Fleet Building Parking Lot**
   Project Description – Pave the open grassy area located at 27 Commercial Place
   - Project Status: Site Plan Development and Construction Design
   - Projected Completion: To be determined
   - Consultant: Unintech Consulting Engineers, Inc.
   - Contractor: To be determined

   Project Update: No change from previous update. The Site Plan process is nearing completion. The next step will be the submittal of construction plans for permitting.

2. **Digital Sign Replacement in Front of City Hall**
   Project Description- Replacement of the broken electronic marquee sign that sits in front of City Hall
   - Project Status: Pending permits filed by Ezzi Signs
   - Projected Completion: TBD
   - Project Cost: $78,000
   - Contractor: Ezzi Signs, Inc

   Project Update: Contractor came out to measure and mark the new location of the sign. Electrical contract completed removing and moving the power supply to the new location of the sign. Installation of the sign is scheduled to take place during the week of January 27th-31st.

Drainage Projects:

1. **FM 78 South Channel Silt Removal**
   Project Description – Silt removal for the existing FM 78 South Drainage channel to include permitting, easement acquisition and construction.
   - Project Status: Easement Acquisition
   - Projected Completion: Summer 2025
   - Project Cost: Design $32,100, Drainage Report $4,600
   - Consultant: Unintech Consulting Engineers, Inc.

- Contractor: TBD

Project Update: Design of the project is complete and Unintech continues to work on acquiring necessary easements for the project. After easements are acquired, the project will be rebid, and construction will proceed.

Water and Wastewater Projects:

1. **Woman Hollering Creek Wastewater Interceptor Main and Lift Station**

Project Description – Design and construction of a sanitary sewer system to collect and convey wastewater to the future CCMA water reclamation plant off Trainer Hale Road in Southern Schertz. The system will consist of approximately 19,000 linear feet of 30" gravity wastewater line running generally along Woman Hollering Creek from the existing Sedona lift station on FM 1518 to a new lift station on IH 10 and approximately 6,000 feet of force main from the lift station to CCMA plant. It will also include an additional 18" gravity line approximately 1,500 feet in length that will first serve the Hallie's Cove Subdivision. The system is necessary for the new CCMA plant to begin operation and to allow the existing Woman Hollering Lift Station at Sedona to be taken out of service.

- Project Status: Construction
- Projected Completion: Winter 2025
- Project Cost: Engineering/Design $1,187,594, Land purchases, ROW, legal and advertising $700,810, Construction $11,100,000, totaling $12,988,404
- Design Engineer: Cobb Fendley & Associates, Inc.
- Owner's Representative: AGCM, Inc.
- Contractor: Thalle Construction Co, Inc.

Project Update: The project is nearing completion. Staff continues to work with the contractor, design professionals, and CPS to adjust electrical equipment that needs to be elevated further than installed due to the location within the area of special flood hazard (100-year floodplain). Once the adjustments are made, further testing will take place and if successful, the contractor will move to transfer flow of actual wastewater from the Sedona lift station to the Woman Hollering Lift Station. Staff and the contractor will work closely with CCMA as this will also mark the startup of the CCMA South Water Reclamation Plant. It is expected to have the plant operational in February 2025.

2. **Riata Lift Station Relocation**

Project Description – Relocation of the Riata Lift Station ahead of TxDOT's IH 35 NEX project to remove it from conflict with the proposed highway improvements. The design phase included identification of a new site for the list station, design of new lift station and design of the abandonment of the existing lift station. Property and easement acquisitions were required. The new lift station is needed to maintain sewer services.

- Project Status: Begin Construction 4th Quarter of 2024.
- Projected Completion: Summer 2026
- Project Cost: Design & Acquisition of easements and existing lift station $478,000; Construction: $2,545,375
- Consultant: Utility Engineering Group, PLLC
- Contractor: Keystone Construction
- Project Update: Keystone continues construction of the lift station. Material submittals are continuing to be reviewed by UEG and city staff. Long lead items like electrical equipment are

being reviewed, approved, and ordered as soon as possible to avoid and/or minimize project delays. Installation of the relocated gravity main to the lift station has begun.



3. FM 1518 Utility Relocations

Project Description – Relocation of water and sewer utilities to avoid conflicts as part of the TxDOT FM 1518 Improvement Project.

- Project Status: Construction
- Projected Completion: The City's utility relocation portion of the project is expected to be completed in the summer of 2025.
- Project Cost: Design NTE $980,000, Construction Joint Bid $8,986,837/Aztec 16" Line $884,270
- Consultant: Halff Associates
- Contractor: SER Construction Partners (TxDOT's General Contractor)/Qro Mex Construction (Aztec 16" Line)

Project Update: SER continues the installation of water and sewer as part of the joint bid work. They are installing water near the FM 1518 CCMA lift station and continuing north toward FM 78. CC Carlton and Capital Excavation are working to complete water line installations from the Founders School to the south limits of Crossvine. Once this is installed, SER can complete the abandonment of the old 12" water line along this section of FM 1518. Qro Mex has completed the bore under the creek and Aztec Lane. They have also completed installation of the section of line near the tie-in point along FM 78. Barring any further delays with the creek crossing, Qro Mex should be substantially complete in February 2025. This will allow SER to complete all their work for the City relocations up to the FM 1518/FM 78 intersection.

4. **Corbett Ground Storage Tank**

Project Description – Construction of a new 3-million-gallon Ground Storage Tank (GST). The GST will be used to fill the existing Corbett Elevated Storage Tank and provide additional water storage capacity. This new GST will receive water directly from the Schertz Seguin Local Government Corporation.

- Project Status: Construction Phase
- Projected Completion: Fall 2025
- Project Cost: Design $466,265, Construction $7,360,054
- Consultant: Unintech Consulting Engineers
- Contractor: Pesado Construction Co.

Project Update: Pesado is just about complete with electrical conduit installation. The cold weather delayed scheduled concrete pours, but the overall project schedule is not impacted. As soon as the main drain from the tank is completed, the initial filling of the storage tank will be finally scheduled. The funds from the $3.5 million grant from the EPA awarded for this project have been received by the City.

5. **Water Loop Lines**

Project Description – Install 12" water main lines to provide a looped distribution system from Ware Seguin to Lower Seguin and Pfeil Road to N Graytown Road.

- Project Status: Design
- Projected Completion: Spring 2026
- Project Cost: Design NTE $200,000, Construction Estimate $4,400,000

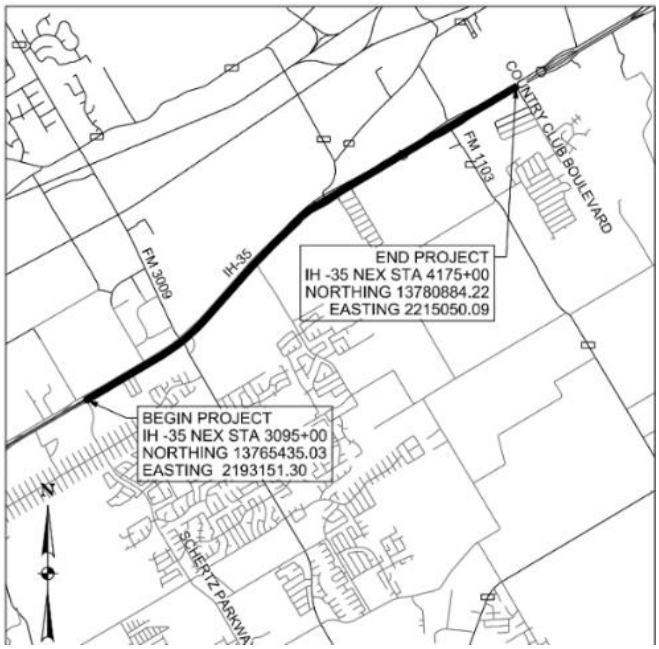
Project Update: Unintech and their subconsultant is beginning to make offers to landowners for needed easements for construction and operation of the lines. Once all easements have been acquired the project will be bid and proceed into construction.

6. **IH 35 NEX-North Utility Relocations**

Project Description – Relocation of water and sewer utilities to avoid conflicts as part of the TxDOT IH 35 NEX project.

- Project Status: Design
- Projected Completion: Joint Bid Construction is planned for End of 2026
- Project Cost: Design & Easement Acquisition Services - $1,250,000
- Consultant: Halff Associates

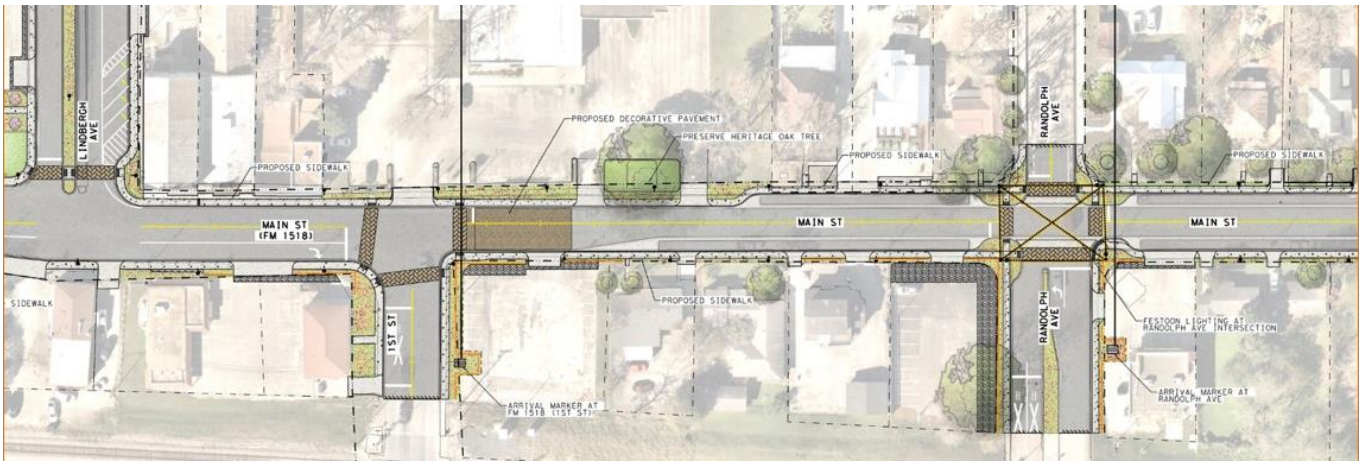
Project Update: No significant change from previous update - Halff is continuing completion of the sewer design of the project. This will be bid separately from the water relocations which will be joint bid with the highway construction efforts. Halff is working to secure the necessary easements for the sewer installation. Once all easements have been acquired the project will be bid and proceed to construction. Staff has also been working with TXDOT and the utility coordinators to complete the relocation agreements that need to be in place for the City to be reimbursed by TxDOT for these relocations associated with an interstate highway project.



Street Projects:

1. **Main Street Improvements Project**
   Project Description – The project will improve sidewalks, provide street lighting, way-finding signage, landscaping, utility relocations, and architectural elements such as decorative concrete, decorative lighting, screening, and area signage. This project will also replace aging water and sanitary sewer mains and reconstruct the street with a new, stronger pavement section. Additionally, Lindbergh between Main and Exchange will be reconstructed.
   - Project Status: Design
   - Projected Completion: Fall 2027
   - Project Cost: Design NTE $2,173,905, Construction $24,600,000
   - Consultant: Kimley- Horn Associates

   Project Update: We're continuing to coordinate with GVEC on potential utility conflicts. GVEC is very close to having their 60% plans completed, which also us to finish out water and sewer replacement plans. Staff expects to have the water and sewer line replacement bid this Spring, with construction starting this Summer. GVEC expects to start doing some overhead line replacement/upgrading along Exchange Avenue this Summer. These replacements/upgrades are necessary for the planned removal of all the overhead lines in Main Street.



2. **Lookout Road Reconstruction**

Project Description – The project involves reconstruction of Lookout Road from Schertz Parkway to Doerr Lane. A traffic signal at the Lookout Road/Schertz Parkway intersection will also be installed. The project also includes the replacement and upsizing the existing sanitary sewer main in Lookout Road from Doerr Lane to Schertz Parkway.

- Project Status: Design
- Projected Completion: January 2026
- Project Cost: Design $571,000 ($20,000 from Selma), Construction estimate $6,738,092 ($100,000 from Selma)
- Design Consultant: Halff Associates

Project Update: Right-of-way documents have been created, and Staff is working with the consultant to acquire the right-of-way parcels for the widening at the Schertz Parkway and Doerr Lane intersections.

3. **Lower Seguin Road Reconstruction**

Project Description – The project includes the development of a preliminary design and secure environmental clearance for a 2.9-mile segment of Lower Seguin Road to widen and improve the street to the section identified in the Master Thoroughfare Plan. The results of this project will be used to acquire needed right-of-way; develop final construction plans; and secure federal funding to assist with construction costs.

- Project Status: Design
- Projected Completion: January 2027
- Project Cost: Preliminary Design $985,000
- Consultant: Halff & Associates

Project Update: Staff and the consultant continue having meetings with Randolph staff to coordinate on the project. Most recently, we met with "security forces" on the base to inform them of the project and gain insight into the south gate operations. The meeting was very productive and provided us with important information on how the future construction activity should be scheduled/coordinated with base activities. We have also met recently with the civil engineering and environmental group to help facilitate the final data gathering needed to complete the environmental assessment for the project. The consultant continues to refine the preliminary plans to provide more details, incorporate feedback from the base, and reduce the right-of-way needs for the project. This month, the final design Task Order will be presented to Council for approval. The project is still on schedule to be ready to apply for the Federal funding for construction in June of this year.

4. **2024 SPAM Resurfacing and Rehabilitation**

Project Description – The project includes the performance of prep work (base repairs, crack sealing, level up, etc.) and application of a slurry seal to the surface of various streets in the City. Work on other streets includes removal of existing asphalt surface; cement stabilization of base material; and application of a new layer of asphalt on street surface for other various City streets. PCI data was used to select the streets in the project.

- Project Status: Design and Construction
- Projected Completion: Summer 2025
- Project Cost: $3,220,000 (estimated total)
- Design Consultant: Kimley-Horn Associates
- Contractor: R.L. Jones LP (Resurfacing Project)

Project Update: Prep work continues in the Kensington Ranch and Savannah Bluff areas. The recent cold weather has caused some delays in getting the work completed. The contractor expects to have this prep work completed by early February and will then start doing prep work in other project areas.



5. Buffalo Valley South Resurfacing and Rehabilitation and Utility Replacements

Project Description – Water and sanitary sewer main replacements and street rehabilitation of Buffalo Valley South, specifically Mill Street, 1st St, 2nd St, Bowman St, Lee St, Church St, Zuehl St, and Wuest. PCI data was used to select the streets in the project. Project will be funded with a combination of SPAM funding (for the street rehabilitation) and ARP funding for the utility replacement.

- Project Status: Construction
- Projected Completion: Design Summer 2024; Construction Fall 2025
- Project Cost: $5,300,000 (estimated total)
- Design Consultant: Unintech Consulting Engineering
- Contractor: E-Z Bel Construction, LLC

Project Update: The contractor plans to start construction on March 17th. We will be holding a pre-construction meeting with the contractor in mid-February. Staff will also be doing some public outreach to the neighborhood, informing them of the project and the anticipated construction start.



Parks & Recreation Projects:

1. **Parks, Recreation, Open Space, and Trails Master Plan (PROST)**

   Project Description – As a continuation of the Comprehensive Plan, staff and consultants are embarking on a planning process to create a 10-year vision for the parks & recreation system. The process includes inventory and analysis of the current system, public input via stakeholder meetings and social pinpoint feedback site, Parks & Recreation Advisory Board meetings check-ins, and a statistically valid survey.

   - Project Status: Completion
   - Projected Completion: December 2024
   - Project Cost: $85,000 (NTE)
   - Contractor: Freese & Nichols

   Project Update: The final plan version was approved by the Parks & Recreation Advisory Board at their special-called meeting on October 21. The final plan version was approved by the Planning and Zoning Commission on December 4. The final plan was approved by City Council at the December 17 meeting.

2. **Schertz Soccer Complex Irrigation Water Storage Project**

   Project Description – Upgrading electrical components, upsizing well pump and piping, and adding storage capacity for irrigation of the Schertz Soccer Complex.

   - Project Status: Bidding Phase III
   - Projected Completion: Summer 2025
   - Project Cost: $107,036.90
   - Consultant: Unintech Engineering
   - Contractor: TBD

   Project Update: The project was put back out to bid and received one qualified bid. The bid will be presented to council for approval at a future meeting in February.

3. **Schertz Soccer Complex Lighting Project**

   Project Description – Adding lights and accompanying infrastructure to Fields 3-12. Replacing metal halide lighting on Fields 1 and 2 with upgraded LED lighting for energy efficiency and color consistency.

   - Project Status: Construction
   - Projected Completion: Spring 2025
   - Project Cost: $1,843,000 (estimated total)
   - Contractor: Musco Lighting w/subcontractor Master's Electrical

   Project Update: Construction of light poles and installation of control cabinets has been completed. Trenching is now underway to connect all light poles to power. New conduit runs to Field 12 will start the week of January 27. Project is on track to be completed by February 14 so the spring season can begin on March 1.

I.T. Projects:

1. **Asset Management- Work Order System – Open Gov**
   Project Description- Replace the current work order and asset management systems
   - Project Status: In progress
   - Projected Completion: Fall 2025
   - Project Cost: Approximately $470,000
   - Contractor: Open Gov

   Project Update: The staff successfully completed the startup workshop January 21-23. Staff must complete assigned spreadsheets provided by OpenGov with asset information, workflow information, labor, resources, etc. This information will be built into the software system. There are weekly check-in sessions that occur on Fridays to ensure we stay on track with assignments given.

Studies and Plans:

1. **Water and Wastewater Master Plan Update and Impact Fee Study**
   Project Description – Collect, review data from the City and provide updated data for the Land Use Plan, Water and Wastewater System Model, Master Plan, CIP, Water/Wastewater Impact Fees, and Flow monitoring.
   - Project Status: Study
   - Projected Completion: Spring 2025
   - Project Cost: $500,000
   - Consultant: Lockwood, Andrews & Newnam

   Project Update: A draft of the Water and Wastewater Master Plan, Land Use Assumptions, Capital Improvement Plan, and Impact Fee Update Report was provided to City Council in January as an informational item. Workshops and Hearings were held with the Capital Improvement Advisory Committee in January and comments are being drafted as a result of those meetings. Staff also had a presentation and conversation with the Schertz Economic Development Corporation Board to gather feedback to be shared with Council. Staff and LAN are putting together the CIAC comments and other feedback to present to Council. In accordance with Texas Local Government Code Chapter 395, a resolution is being proposed for action at the February 4, 2025, regular Council meeting for a date to be set for a public hearing of the Land Use Assumptions, Capital Improvement Plans, and Impact Fee Updates. At the subsequent public hearing, Council will consider adoption of the plans and rates.

TxDOT Roadway Projects:
Note: If links do not work, please contact engineering@schertz.com

1. **FM 1103 Improvement Project:** Construction officially began in November 2022 and was originally expected to be complete in fall 2026. Minor progress is being made on the roadway while utility relocation continues. General project updates are available by signing up at this link: FM 1103 Construction Newsletter

2. **FM 1518 Improvement Project:** SER Construction, LLC, formally began construction on April 9, 2024. The contractor has leased property owned by the City on Schaefer Road to stage construction activities. The first few months of the project will be mainly underground utility construction and will mostly take place outside travel lanes. While there may be some delays, major traffic disruptions should not be experienced much during this phase of the project. The project is currently anticipated to be completed in 2028. Updates regarding the FM 1518 project are available by visiting and subscribing at the following link: FM 1518 Expansion

3. **IH-35 NEX (I-410 South to FM 1103):** The central segment of the I-35 Northeast Expansion project continues with Alamo NEX Construction handling the design-build project. The central section runs from 410 N to FM 3009. Utility coordination work for the northern segment of the project is underway. TxDOT consultants have met with Public Works and Engineering Staff to begin establishing relocation needs. The City will be reimbursed for the costs of all relocations needed except for any upsizing or improvements above current conditions. Updates about the project can be obtained by signing up at the following link: I 35 NEX Project Updates

4. **IH-10 Graytown Road to Guadalupe County Line: Work** for the widening of the main lanes and utility relocations continues. Work on the FM 1518 bridge over IH 10 continues and will involve numerous episodes of the rerouting of traffic including shifting lanes and detours as necessary. Updates regarding the IH 10 project are available by signing up at the following link: IH 10 Expansion Information

Agenda No. 19.

CITY COUNCIL MEMORANDUM

City Council Meeting:	**February 04, 2025**
Department:	**Facility & Fleet**
Subject:	**Update on EcoBrite Cleaning Contract Changes**

BACKGROUND

On January 22, 2025, EcoBrite, the current cleaning contractor, informed the City that the company is unable to meet the expectations outlined in the scope of work for cleaning services for the City of Schertz. On January 28, EcoBrite plans to submit a request to terminate their services, providing the City with a 30-day notice. Facilities Services Staff is working with the Purchasing Department to issue a new RFP.
