

Notice of Meeting of the Water Utility Advisory Board of the City of Georgetown, Texas January 8, 2026

The Georgetown Water Utility Advisory Board will meet on January 8, 2026 at 2:00 PM at West Side Service Center, 5501 Williams Drive.

The City of Georgetown is committed to compliance with the Americans with Disabilities Act (ADA). If you require assistance in participating at a public meeting due to a disability, as defined under the ADA, reasonable assistance, adaptations, or accommodations will be provided upon request. Please contact the City Secretary's Office, at least three (3) days prior to the scheduled meeting date, at (512) 930-3652 or City Hall at 808 Martin Luther King Jr. Street, Georgetown, TX 78626 for additional information; TTY users route through Relay Texas at 711.

Public Wishing to Address the Board

On a subject that is posted on this agenda: Please fill out a speaker registration form which can be found on the table at the entrance to the meeting room. Clearly print your name and the letter of the item on which you wish to speak and present it to the Board Liaison prior to the start of the meeting. You will be called forward to speak when the Board considers that item. Only persons who have delivered the speaker form prior to the meeting being called to order may speak. Speakers will be allowed up to three minutes to speak. If you wish to speak for six minutes, it is permissible to use another requestor's granted time to speak. No more than six minutes for a speaker may be granted. The requestor granting time to another speaker must also submit a form and be present at the meeting.

On a subject not posted on the agenda: A request must be received by the Advisory Board or Commission Liaison prior to the day the agenda for this meeting is posted. Each speaker will be given three minutes to address the Board or Commission members. No action can be taken.

At the time of posting, no one signed up to speak.

Regular Session

1.A Call to Order

Call to Order -- Ron Garland, Chair

1.B Introduction of Board Members, Staff Members, and Visitors

Introduction of Board Members, Staff Members, and Visitors -- Ron Garland, Chair

1.C Minutes of the November 13, 2025 Meeting

Review and possible action to approve the minutes from the November 13, 2025 meeting of the Georgetown Water Utility Advisory Board -- Rebecca Fisher, Board Liaison

1.D Updates from Directors

Any updates will be highlighted at the meeting. The CIP updates are attached. The Director's Report will be presented at the meeting. -- Chelsea Solomon, PE, Water Utility Director

1.E 2025 Year In Review

Presentation and discussion of 2025 Year In Review -- Chelsea Solomon, PE, Water Utility Director

- 1.F [First Amendment to Northlands Professional Services Agreement 25-0125-PSA](#)
Consideration and possible recommendation to City Council to approve the First Amendment to the Professional Services Agreement (PSA) 25-0125-PSA with Freese and Nichols of Austin, Texas, for professional engineering services for the Northlands Wastewater Treatment Facility in the amount of \$10,991,205.00 -- Wesley Wright, P.E., Systems Engineering Director, and David Herzog, CIP Manager
- 1.G [Third Amendment to the Interceptor Lift Station Decommissioning and Interceptor Improvements Project Task Order KPA-25-001](#)
Consideration and possible recommendation to City Council to approve a Third Amendment to Task Order KPA-25-001 with Kasberg, Patrick and Associates, LP for professional services related to the Interceptor Lift Station Decommissioning and Interceptor Improvements Project in the amount of \$743,500.00 -- Wesley Wright, PE, Systems Engineering Director

Adjournment

Certificate of Posting

I, Robyn Densmore, City Secretary for the City of Georgetown, Texas, do hereby certify that this Notice of Meeting was posted at City Hall, 808 Martin Luther King Jr. Street, Georgetown, TX 78626, a place readily accessible to the general public as required by law, on the _____ day of _____, 2025, at _____, and remained so posted for at least 72 continuous hours preceding the scheduled time of said meeting.

Robyn Densmore, City Secretary

**City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026**

SUBJECT:

At the time of posting, no one signed up to speak.

SUGGESTED ACTION:

ITEM SUMMARY:

FINANCIAL IMPACT:

SUBMITTED BY:

Deniece Sesma, Water Utility Department

ATTACHMENTS:

N/A

**City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026**

SUBJECT:

Call to Order

SUGGESTED ACTION:

Call to Order -- Ron Garland, Chair

ITEM SUMMARY:

FINANCIAL IMPACT:

SUBMITTED BY:

Deniece Sesma, Water Utility Department

ATTACHMENTS:

N/A

City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026

SUBJECT:

Introduction of Board Members, Staff Members, and Visitors

SUGGESTED ACTION:

Introduction of Board Members, Staff Members, and Visitors -- Ron Garland, Chair

ITEM SUMMARY:

FINANCIAL IMPACT:

SUBMITTED BY:

Deniece Sesma, Water Utility Department

ATTACHMENTS:

N/A

City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026

SUBJECT:

Minutes of the November 13, 2025 Meeting

SUGGESTED ACTION:

Review and possible action to approve the minutes from the November 13, 2025 meeting of the Georgetown Water Utility Advisory Board -- Rebecca Fisher, Board Liaison

ITEM SUMMARY:

FINANCIAL IMPACT:

SUBMITTED BY:

Deniece Sesma, Water Utility Department

ATTACHMENTS:

[GWUAB Meeting Minutes - November 13, 2025.pdf](#)

Minutes of the Water Utility Advisory Board City of Georgetown, Texas Thursday, November 13, 2025

The Georgetown Water Utility Advisory Board met on Thursday, November 13, 2025 at 2:00 PM at West Side Service Center, 5501 Williams Drive.

The City of Georgetown is committed to compliance with the Americans with Disabilities Act (ADA). If you require assistance in participating at a public meeting due to a disability, as defined under the ADA, reasonable assistance, adaptations, or accommodations will be provided upon request. Please contact the City Secretary's Office, at least three (3) days prior to the scheduled meeting date, at (512) 930-3652 or City Hall at 808 Martin Luther King, Jr Street for additional information; TTY users route through Relay Texas at 711.

The following Members were in attendance:

Present were: Ron Garland, Kevin Pitts, Ercel Brashear, William C Gedney, Randy Hartford

Public Wishing to Address the Board

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On a subject not posted on the agenda: A request must be received by the Advisory Board or Commission Liaison prior to the day the agenda for this meeting is posted. Each speaker will be given three minutes to address the Board or Commission members. No action can be taken.

At the time of posting, no one signed up to speak.

No one was present. No action required.

1. Regular Session

1.A Call to Order

Call to Order -- Ron Garland, Chair

Chair Garland called meeting to order at 2:00 p.m.

1.B [Introduction of Board Members, Staff Members, and Visitors](#)

Introduction of Board Members, Staff Members, and Visitors -- Ron Garland, Chair
Chair Garland led introductions of all present. Karen Frost, Deputy City Secretary, thanked Board members on behalf of Mayor and Council for their service.

1.C [Minutes of the October 9, 2025 Meeting](#)

Review and possible action to approve the minutes from the October 9, 2025 meeting of the Georgetown Water Utility Advisory Board -- Deniece Sesma, Board Liaison

Moved by Ercel Brashear; seconded by Randy Hartford to Approve .

Motion Approved: 5- 0

Voting For: Ron Garland, Kevin Pitts, Ercel Brashear, William C Gedney, Randy Hartford

Voting Against: None

1.D [Updates from Directors](#)

Any updates will be highlighted at the meeting. The Director's Report and CIP updates are attached -- Chelsea Solomon, PE, Water Utility Director
Solomon presented Director's Report. Herzog reviewed CIP updates currently in construction.

1.E [Terracon Task Order TCI-26-001 for Pecan Branch Package Plant Materials Testing](#)

Consideration and possible recommendation to City Council to approve Task Order TCI-26-001 with Terracon Consultants Inc., of Round Rock, Texas, for materials testing and inspection services for the Pecan Branch Wastewater Treatment Package Plant in the amount of \$69,980.00 -- Wesley Wright, PE, Systems Engineering Director

Moved by Kevin Pitts; seconded by Randy Hartford to Approve .

Motion Approved: 5- 0

Voting For: Ron Garland, Kevin Pitts, Ercel Brashear, William C Gedney, Randy Hartford

Voting Against: None

1.F [Change Order #2 with Matous Construction for San Gabriel Wastewater Rehabilitation Project](#)

Consideration and possible recommendation to City Council to approve Change Order #2 to the San Gabriel Wastewater Treatment Plant (WWTP) Rehab project with Matous Construction of Belton, Texas, for the Pecan Branch Package Plant Project in the amount of \$4,800,000.00 -- Wesley Wright, P.E., Systems Engineering Director, and David Herzog, Assistant CIP Manager

Moved by Ercel Brashear; seconded by William C Gedney to Approve .

Motion Approved: 5- 0

Voting For: Ron Garland, Kevin Pitts, Ercel Brashear, William C Gedney, Randy Hartford

Voting Against: None

- 1.G [First Amendment to Three Forks Professional Services Agreement 25-0029-PSA](#)
Consideration and possible recommendation to City Council to approve the First Amendment to the Professional Services Agreement (PSA) 25-0029-PSA with CDM Smith of Austin, Texas, for professional engineering services for the Three Forks Reclamation Facility (WRF) in the amount of \$16,827,477.00 -- Wesley Wright, P.E., Systems Engineering Director, and David Herzog, Assistant CIP Manager

Moved by Randy Hartford; seconded by Ercel Brashear to Approve .

Motion Approved: 5- 0

Voting For: Ron Garland, Kevin Pitts, Ercel Brashear, William C Gedney, Randy Hartford

Voting Against: None

Adjournment

Chair Garland adjourned the meeting at 2:54 p.m.

These minutes were approved at the meeting of _____

Chair

Attest

City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026

SUBJECT:

Updates from Directors

SUGGESTED ACTION:

Any updates will be highlighted at the meeting. The CIP updates are attached. The Director's Report will be presented at the meeting. -- Chelsea Solomon, PE, Water Utility Director

ITEM SUMMARY:

FINANCIAL IMPACT:

SUBMITTED BY:

Deniece Sesma, Water Utility Department

ATTACHMENTS:

[January 2026 CIP Update - Water Wastewater.pdf](#)

CIP UPDATE

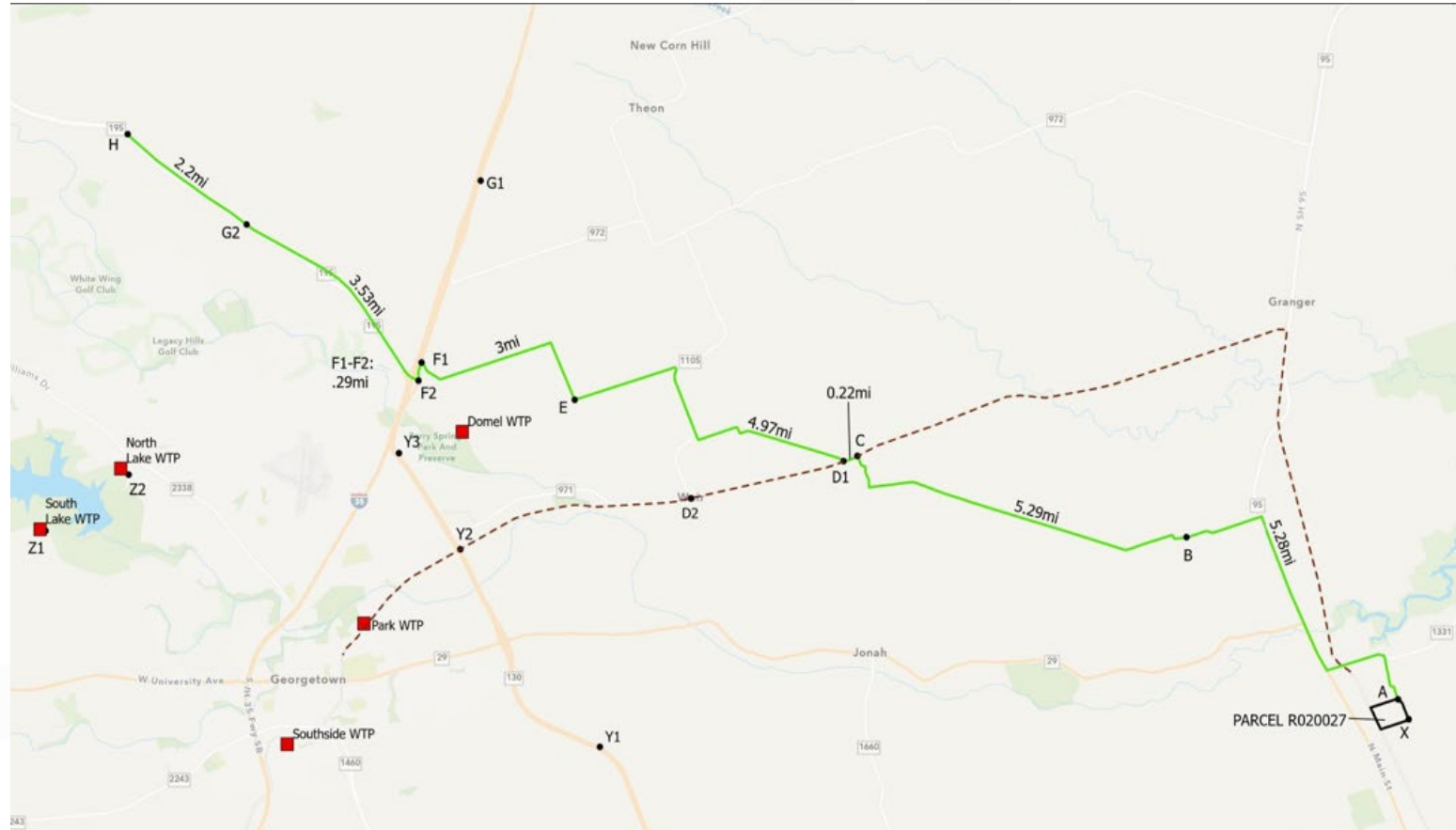
Water & Wastewater

January 2026

In Design- Water

Ground Water Supply from the East

- Owners' advisor contract was awarded to CDM Smith at Council in November
- Kick Off meeting was held on 12/16
- Working on securing the plant sites



In Design- Water

Ronald Reagan to Braun Waterline

- Adding a 30" waterline that will reduce pressures in the existing infrastructure and allow multiple pumps to run simultaneously at SLWTP
- 60% plans have been received, and review meeting is being scheduled
- All ROE license agreements have been obtained
- Preliminary metes and bounds have been received and shared with COG Real Estate
- Working with purchasing on procuring all the waterline due to lead-time

PRJ Budget	\$8,803,636
OPCC 30%	\$7,100,000
Construction EST	1/17/25 – 7/1/26



In Design- Water

PRJ Budget	\$202,980
OPCC 30%	1,227,105
Construction EST	2/22/26 – 7/26/26

Carriage Oaks EST Rehab

- Kick off meeting with Engineer was held on 5/23
- 6/20 internal and external tank inspection was conducted
- Technical Memo has been reviewed and sent back to engineer
- 60% plans have been received and comments sent back; engineer is progressing to 90%



In Design- Water

Lake Water Treatment Plant Zebra Mussel Mitigation

- Task order for design and Construction services were awarded at Council on 4/22/25
- Kick off meeting was held on 6/26 with city staff to discuss Copper Ion vs EarthTec
- Cooper Ion was the recommended choice by city treatment staff
- MacroTech(SLWTP) and ONG Cion are the manufactures used on price estimate
- 60% design has been received, and review meeting is scheduled for January 6th

PRJ Budget	\$2,450,000
OPCC 30%	\$3,300,000 - \$4,400,000
Construction EST	7/3/26 – 7/5/27



In Design- Water

Cedar Hollow WL Improvements

- Replacement of old, undersized lines that experience frequent breaks
- Drone and topographical survey has been completed
- 60% plans have been received, and comments sent back
- Engineer is progressing to 90% Plans

PRJ Budget	\$14,525,000
OPCC 60%	\$10,130,000
Construction EST	8/2/26 – 6/1/27



In Design- Water

CR 228 WL Improvements

- Replaces approximately 17,000 LF of existing undersized 6" waterline with a 12" waterline
- Survey on the additional line added has been completed
- Engineer is verifying existing waterline within the existing easement
- 60% plans have been received and comments sent back to engineer

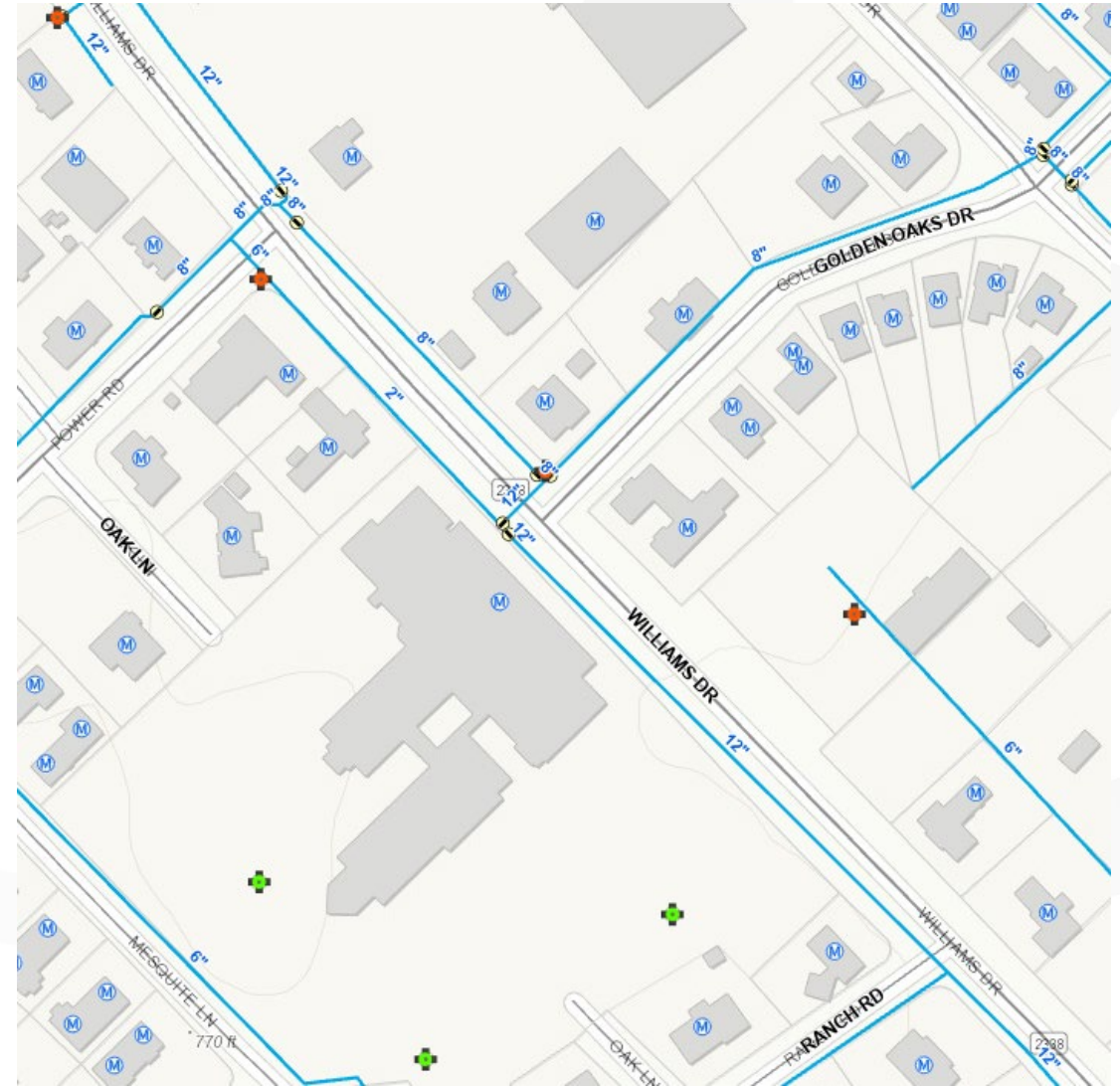
PRJ Budget	\$6,785,000
OPCC 30%	\$6,800,000
Construction EST	3/1/26 – 11/1/26



In Design- Water

Williams Drive Waterline Improvements

- Water line improvements along Williams Drive – DB Wood to 35
- Survey work has been completed for areas in existing ROW
- Rights of entry have been secured
- Working on delivering the metes and bounds for easements
- 30% waterline plans have been received, and comments sent back



In Design - Water

Williamson County Regional Raw Waterline Phase III Pumps

- BRA driven project, cost participation only
- Scope development with CDM Smith
- Design began June 2025
- 30% design submitted to BRA in December 2025
- Construction expected to begin June 2027 and be completed December 2029

In Design- Wastewater

Wolf Ranch Lift Station Rehab and LS Assessment

- Assessment will be for
 - River Road LS's 1&2
 - Katy LS
 - Country Club LS
 - Lakeside LS
- Engineer is progressing plans to 30%

PRJ Budget	\$341,300
OPCC %	\$2,861,000
Construction EST	FY27



In Design - Wastewater

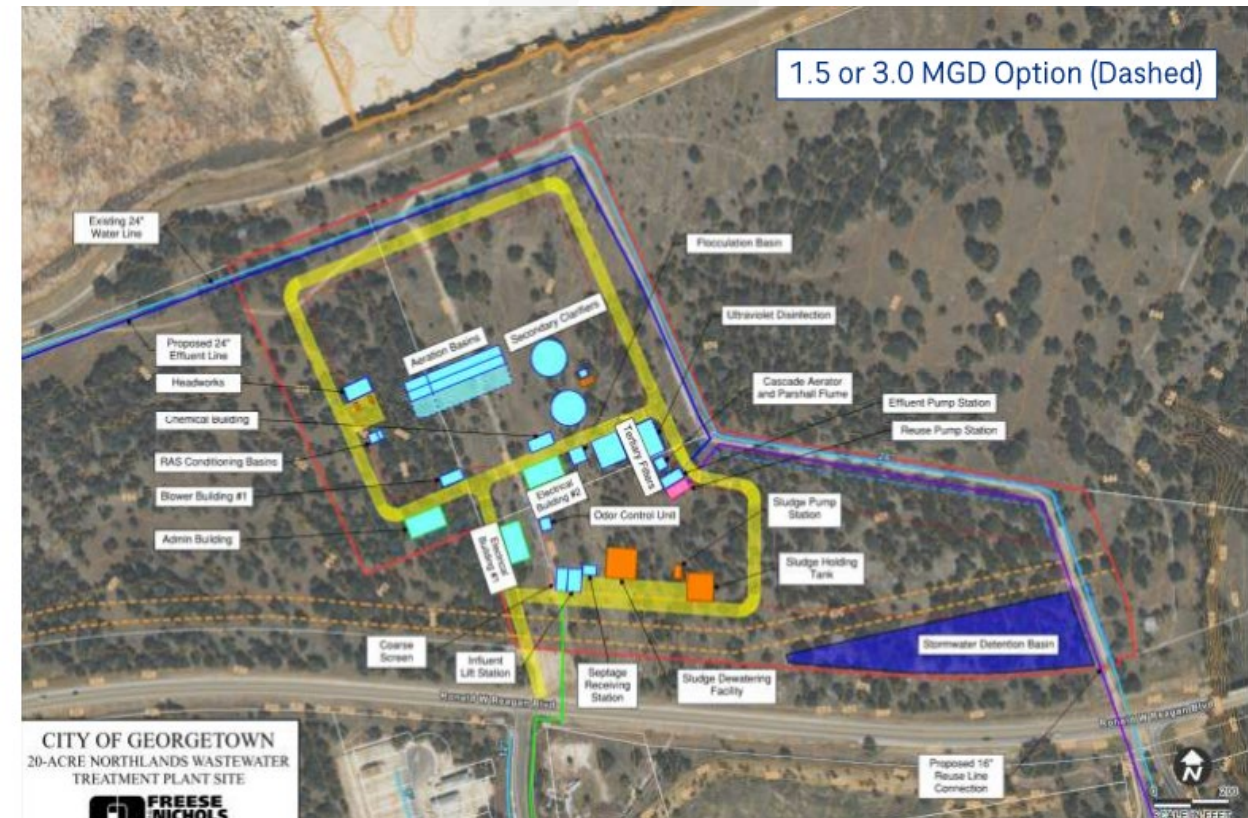
Northlands Wastewater Treatment Plant – 3MGD

- All ROE have been acquired for survey and environmental
- Environmental survey has been completed
- Design is underway
- City staff and engineer are working on equipment selection
- Working to finalize CMAR Contract Documents for advertising
- Odor logger was installed at Sun City LS, to help on mitigation for the new Cowan Creek LS
- Working with facilities and city staff on administration building layout
- Engineer PSA Amendment for final design will be going to Council 1/27

PRJ Budget \$110,500,000

OPCC % \$110,000,000

Construction EST



In Design- Wastewater

PRJ Budget	\$516,800,000
OPCC %	\$400,000,000
Construction EST	

Three Forks Wastewater Treatment Plant

- TCEQ Draft Permit has been received
- Geotech bores for the outfall and plant site have been completed
- Working on easements for the plant and effluent pipeline
- Package Plant purchase and electrical work has been approved by Council
- Matous change order for Package Plant Civil was approved at Council
- Package Plant Geologic assessment has been completed
- Package Plant site work has begun; contractor has installed silt fence and started grading the site
- City staff and engineer are working on process equipment selection
- Working to finalize CMAR Contract Documents for advertising
- Working with facilities and city staff on administration building layout

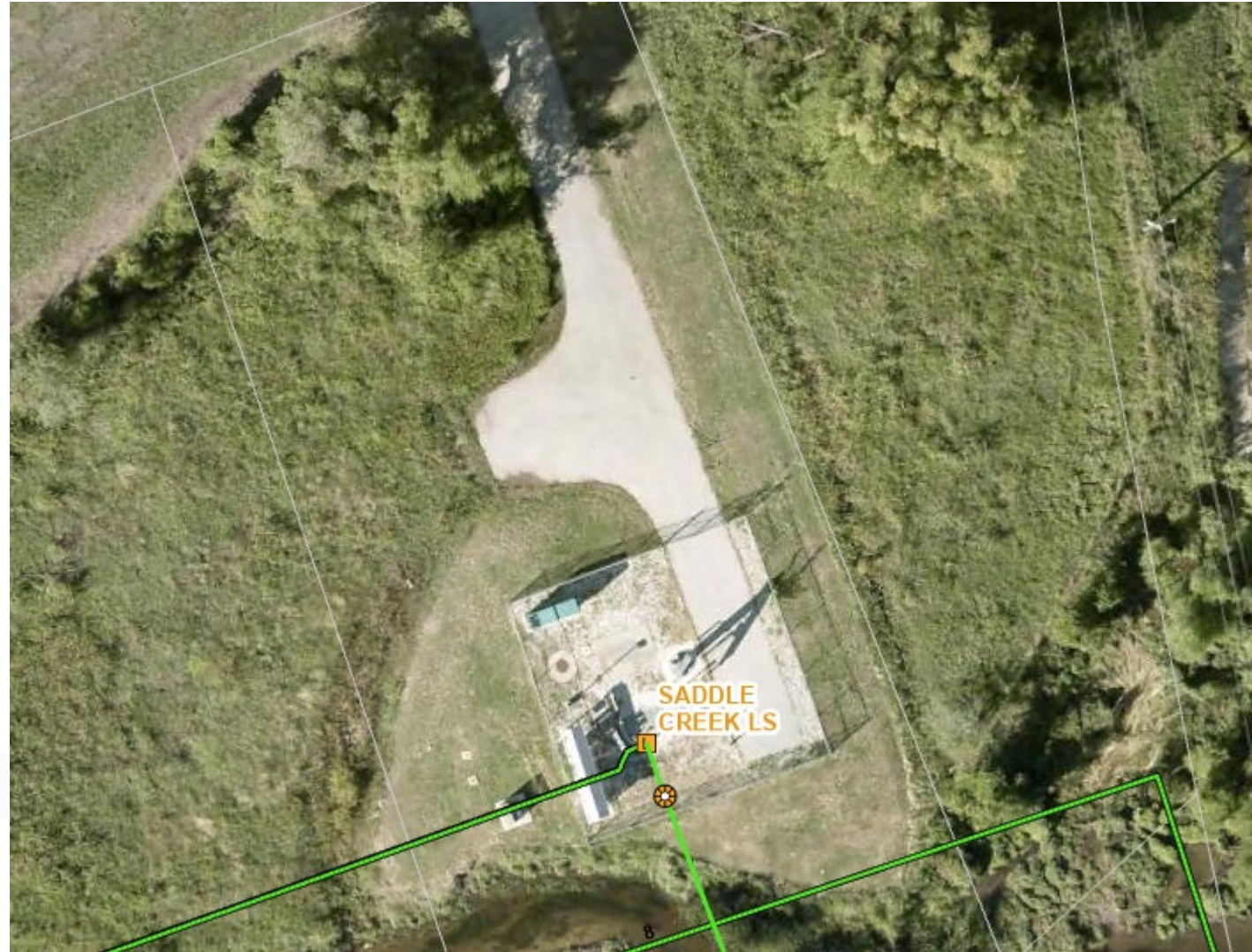


In Design- Wastewater

Saddle Creek Lift Station Expansion

- Adds third pump and associated electrical
- Increases firm pumping capacity
- Engineer completed pump design capacity
- Engineer has submitted the technical memo
- We are scheduled to receive 90% plans on 1/19

PRJ Budget	\$1,750,000
OPCC 60%	\$246,000
Construction EST	5/2/26 – 1/2/27

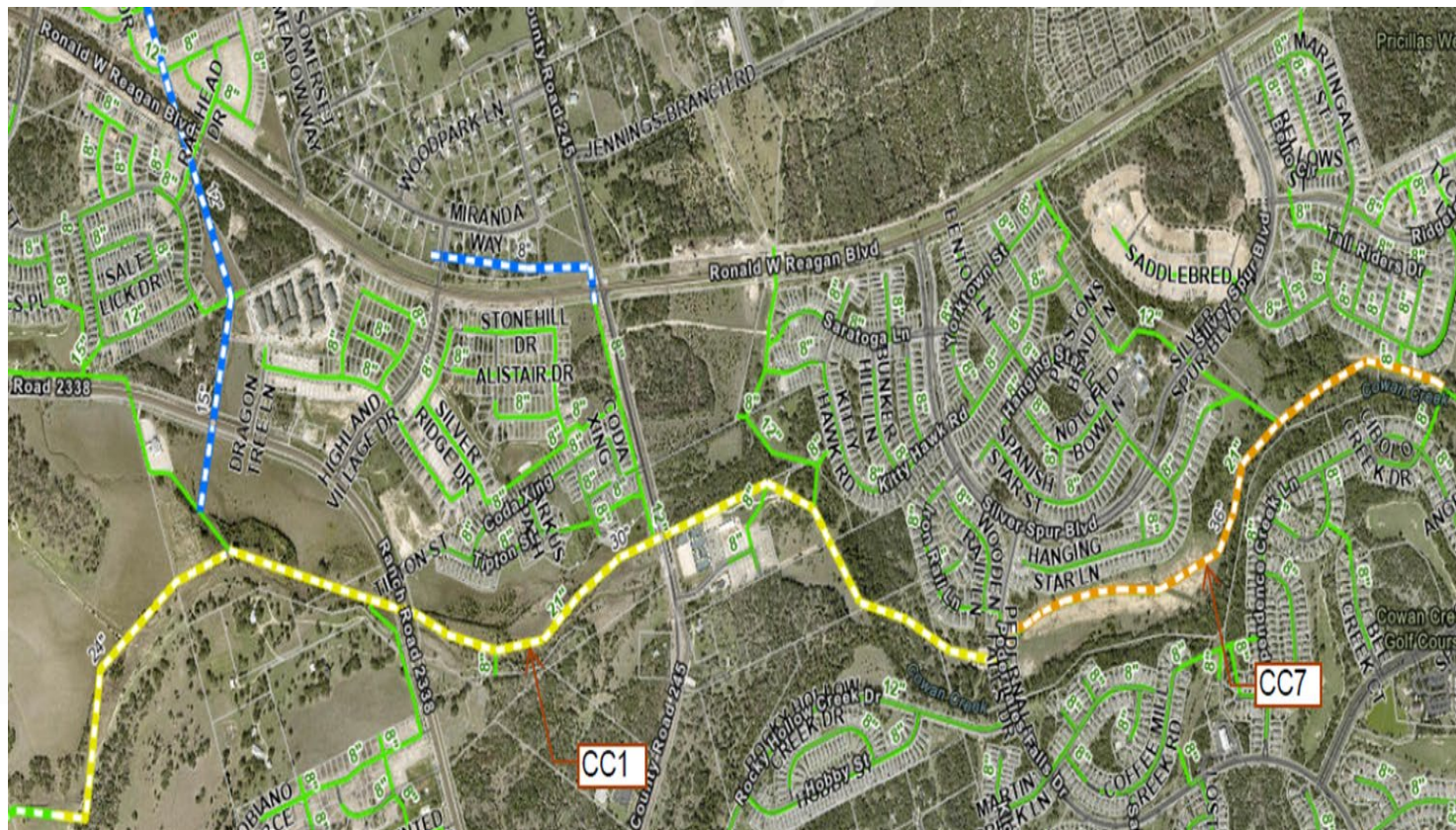


In Design- Wastewater

PRJ Budget	\$28,500,000
OPCC 60&90%	\$9,900,000
Construction EST	5-28-26 – 3-1-27

Cowan Creek Interceptors

- WW Interceptors (CC1 and CC7)
- North Lake, Williams/Reagan Area (parallel 21")
- Parallel line to be installed, design is underway
- Engineer has begun reaching out to property owners for ROE
- 90% plans for CC7 have been received and under review
- 90% plans for CC1 received and are under review
- Engineer is working on metes and bounds for the additional easements needed

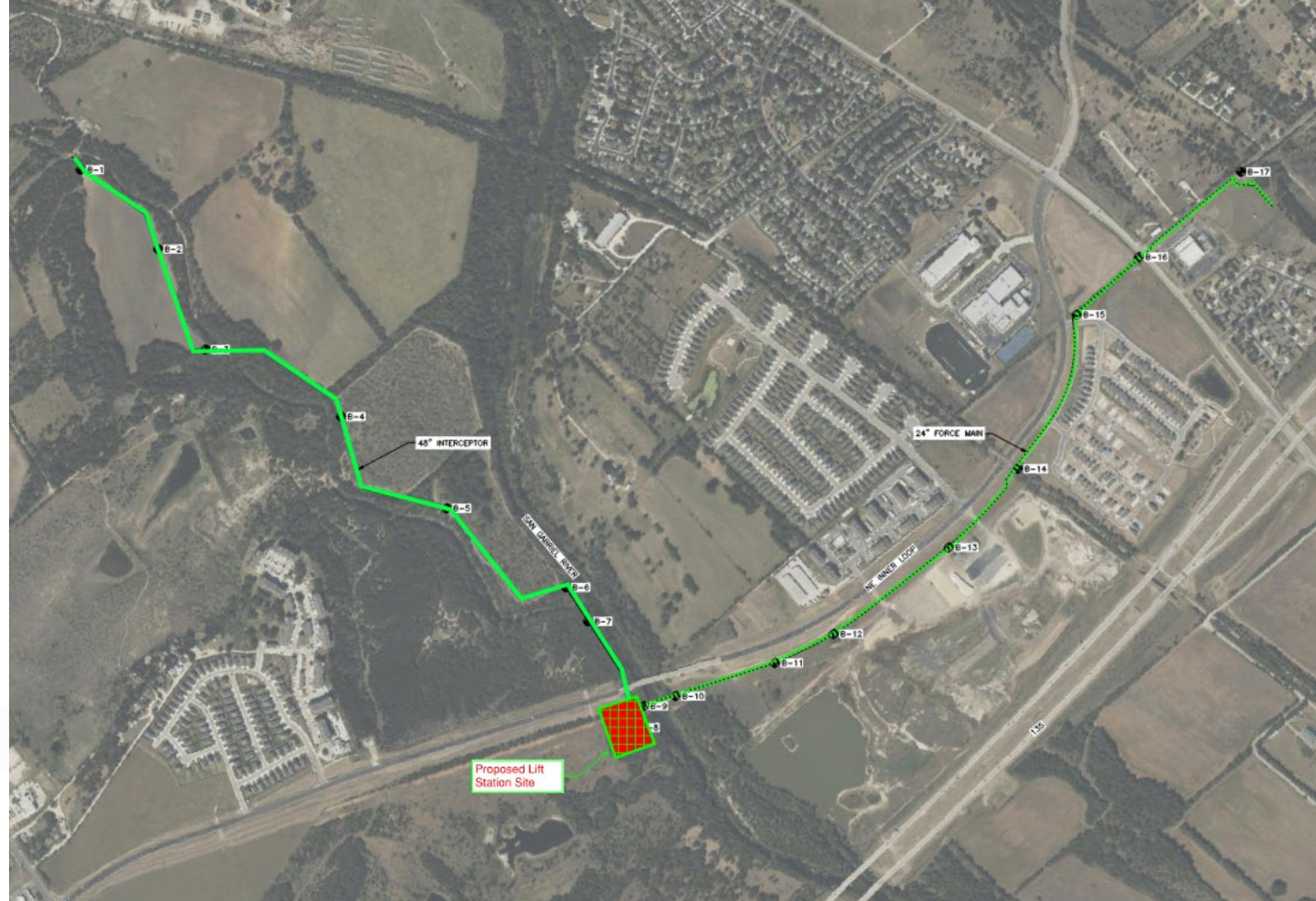


In Design - Wastewater

PRJ Budget	\$52,751,055
OPCC %	\$54,600,000
Construction EST	FY27

San Gabriel Interceptor II

- All right of entries have been obtained
- Topographic and tree survey has been completed across the Southwestern property
- THC Permit has been approved
- Geotechnical work has been completed on all sites
- It has been identified that we will need permanent easements from 2 landowners
- Engineer working on getting the Metes and Bounds
- 30% Plans received and comments sent back to engineer
- Working with engineer and development engineer on the lift station size and layout



In Design - Wastewater

PRJ Budget	\$23,092,361
OPCC 90&90%	\$10,600,000
Construction EST	

Cimarron Hills WWTP / Lift Station

- Plant Rehab, new lift station, force and gravity main
- All ROE have been obtained
- Offers for easements have been made
- Utility Crossing Permit was submitted on 12/23/25
- Once easements are secured, we will submit for the TCEQ permit
- Potholing for Enterprise gas line has been completed
- 90% plans have been received, and comments have been sent back to the engineer
- 100% have been reviewed, we will bid the plant work out once the line is further along in design



In Design-Wastewater

Church Street Wastewater Line Improvements

- Eliminates wastewater line running behind customers homes
- Survey has been completed on the additional area out to 18th street
- 60% plans have been reviewed and comments sent back
- License agreements have been drafted and currently under review
- Meeting with Landowners on 1/6 to discuss the project

PRJ Budget	\$1,200,000
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OPCC 60%	\$1,320,290
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Construction EST	FY27
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Existing

Proposed



PRJ Budget	\$2,425,682.15+BCI
OPCC 60%	\$10,500,000
Construction EST	FY27

In Design-Wastewater

Interceptor Lift station Demo and Wastewater line

- Design of a new 24" wastewater line that will allow us to decommission the Interceptor LS
- Initial manhole survey data has been completed
- 90% plans have been reviewed and comments sent back to engineer
- Metes and Bounds have been received from the engineer and easement acquisition has started



In Design– Water Ops

Water Treatment Plants EOMIS/SOP

- Engineers field operational specialists have conducted several site visits to coordinate with operations staff
- Southside's OMIS and SOPs have been completed
- North Lake has been completed
- Domel is approximately 75% complete and Park Plant OMIS and SOP is 100% complete
- Initial documents have been collected at South Lake WTP, SOPs will start once Domel is completed and South Lake is online

In Construction -Wastewater

Contract Amount	\$14,673,000.00
NTP	3/1/24
Final Completion	1/30/26

Dove Spring WWTP Rehab

- Package Plant is in operation
- Blower pads have been completed for treatment train #1 and #2
- Blowers have been placed
- Canopy installation has been completed
- Generator and E-house have been placed
- Installation of switchgear in E-House has been completed
- Train 1 has been put back into operation
- Train 2 is being pumped down, and our treatment team is scheduling Wastewater Transport to get it cleaned
- Duct banks being installed throughout project



In Construction- Wastewater

Contract Amount	\$2,712,290.00
NTP	1/3/24
Final Completion	8/26/25

Smith Branch Lift Station

- Contractor has completed the new CMU E-House building
- Line stop work has been completed
- New check valves have been installed
- Wet well has been coated and new rails installed
- Lift station is off bypass and running off submersible pumps
- City staff removed wanted items from old electrical building
- Old electrical building has been demoed
- Contractor has removed the weir wall
- New entry gate has been installed
- Working with operations and the contractor to get operational functions adjusted



In Construction- Water

Daniels Mountain to Hoover WL

- Easement acquisition is n-going
- Contract awarded at council on 11/25
- Precon was held on 12/10
- Contractor is sending in submittals
- Contractor has begun clearing the pipeline route

Contract Amount	\$16,891,148.50
NTP	12/10/25
Final Completion	11/2/2026



In Construction– Water

Contract Amount	\$12,840,889.37
NTP	11-10-25
Final Completion	11/2/26

SH138 Waterline

- We need 1 Permanent easement
- Pre Construction was held on 11/10
- Contractor is sending in submittals for review
- Contractor continues to pothole the existing utilities
- Silt fence is being installed throughout
- Contractor has begun clearing the waterline route and installing temporary fencing
- Pipe is being delivered



In Construction- Water

West 1240 Elevated Storage Tank

- TCEQ WPAP has been approved
- Construction cost and reimbursement agreement amendment has been executed
- Pre Construction was held on 11/12
- NTP was issued 12/8
- Contractor to mobilize in February
- Contractor is sending in submittals



In Construction - Water

Contract Amount	\$1,855,065.81
NTP	8/1/25
Final Completion	3/1/26

IH35 16" Waterline

- NTP was issued August 1st
- Submittals are being sent in and reviewed
- Erosion control is being installed through the waterline route
- All bores have been completed
- Waterline has been tied in and valved off until testing is completed
- PRV Vault has been installed
- Contractor is working on hydrostatic pressure tests and Bac T's



In Construction - Water

Contract Amount	\$4,509,116
NTP	5/13/25
Final Completion	3/10/26

Package 5 South Lake Finished Waterline

- ROW acquisition is complete
- Contractor sending in submittals
- Contractor has installed silt fence and construction fencing
- Contractor has begun potholing and installed the temporary sidewalk
- Waterline bore for the LHISD driveways ongoing
- Waterline material is on-site



Contract Amount	\$9,955,000.00
NTP	2/10/25
Final Completion	7/13/27

In Construction- Water



System Resiliency Ph II

- Includes portable generators and quick connects
- Erosion control has been installed and being maintained
- Contractor has installed electrical duct banks and electrical manholes
- Contractor has installed all the duct banks and electrical manholes at Rabbit Hill GST
- Contractor has started at Pastor PS working on electrical duct bank

In Construction - Water

Contract Amount	\$2,503,400.00
NTP	12/2/24
Final Completion	5/30/26

Domel GST Rehabilitation

- Contractor has removed the existing roof and installed (2) manways
- Survey for geodesic roof has been completed
- Sand blasting the exterior has been completed and exterior coating has begun
- Interior sandblasting will begin in mid-January
- Roof has been installed and tested for leaks



In Construction - Water

Contract Amount	\$2,503,400.00
NTP	12/2/24
Final Completion	5/30/26

Rabbit Hill Rehabilitation

- Contractor has removed the existing roof
- Manways has been installed
- Contractor has started to remove and replace the upper 4' of the tank shell
- The replacement of 12" valve on the outside of the tank is being scheduled with operations and the contractor



In Construction - Water



Contract Amount	\$11,583,000.00
NTP	9/30/24
Final Completion	1/5/28

Daniels Mountain PS

- Contractor is maintaining erosion control
- Chemical pad #1 and #2 are complete
- 24' waterline has been installed
- Electrical duct banks are being installed
- Electrical and Chemical building structures have been completed
- Contractor has completed the pump pads and installed the pumps
- Contractor completed the chemical containment coating
- Contractor working on a plan to get the generator set

In Construction - Water

Contract Amount	\$175,284,946.00
NTP	3/24/22
Final Completion	9/10/26

Southlake WTP – 44MGD Plant

- Phase 1 went into operation on June 2nd
- HS pumps are being utilized to push water to the 1178 pressure plane
- Phase 1 substantial walk through was completed on July 22nd and engineer is sending in the punch list
- Phase 1 of the plant is running Auto
- Electrical contractor is working on wire terminations for Phase 2
- High Service Pump test are being scheduled with contractor and COG Operation staff
- Belt Filter Press startup has been completed and currently in operation
- Contractor has installed sand and anthracite in phase 2 filters
- Filter testing is on-going
- Topsoil and hydromulch is being applied throughout the site
- Phase 2 substantial walk through is being scheduled



In Construction - Water

Contract Amount	\$16,184,876.00
NTP	7/11/23
Final Completion	1/17/26

System Resiliency - Lake WTP EPSS

- Electrical manholes have been installed
- VFDs are scheduled to arrive late-May 2026
- Fencing has been installed around the transformers at the raw water Electrical building
- Contractor has placed concrete where duct banks crossed road
- All generators and enclosers have been placed
- E-House and gear has been delivered and placed



Substantially Complete -Water

Contract Amount	\$2,016,025.00
NTP	7/21/25
Final Completion	2/16/26

Shell Road 16" Waterline Ph II

- All waterline has been installed, tested and in service
- Contractor is working on revegetation
- Roadway repairs have been completed



Substantially Complete - Water

Contract Amount	\$2,930,899.50
NTP	8/4/23
Final Completion	12/8/24

Stonewall Ranch Pump Station

- Fill Control Valve is installed with new flow meter
- Pump #3 is available to be placed into service
- Contractor has started on site restoration
- CPUSA and COG SCADA walk thru was on 9/22
- Walk thru with Pump manufacturer and city staff was held on 10/1
- VFD Training was held on 10/30 with City staff
- Generator Transfer test has been completed



Substantially Complete - Water

Daniels Mountain Water Line

- All Waterline has been installed, tested and in service
- Substantial walk through was completed on August 19th
Contractor is working on revegetation



Substantially Complete - Water

Contract Amount	\$4,110,765.00
NTP	12/5/24
Final Completion	7/11/25



Carriage Oaks 16"/24" Waterline

- Waterline is installed, tested, and in service
- Contractor working on vegetation

Substantially Complete - Water



Southside – 3.6MGD Membrane Facility (Austin Ave)

- Plant in Operation
- Working on proposals to complete outstanding work

Substantially Complete - Wastewater

Contract Amount	\$1,441,104.25
NTP	8/12/24
Final Completion	10/11/25

Southlake to Southfork WW Improvements – Lift Stations

- Both Lift Stations have been put into operation and are in use
- Punch list has been generated, and contractor is working on addressing those items identified



Substantially Complete - Wastewater

Southlake to Southfork WW Improvements – WW Line

- All wastewater line has been installed, tested, passed, and is in service
- Walk through has been completed and contractor is working on revegetation

Contract Amount	\$11,050,171.00
NTP	4/12/24
Final Completion	10/11/25



Substantially Complete - Wastewater

Berry Creek Interceptor

- All wastewater line has been installed, tested, and placed into service
- Contractor working on punch list and revegetation throughout the pipeline route

Contract Amount	\$61,838,620.62
NTP	2/5/24
Final Completion	2/27/26



Substantially Complete - Wastewater

Contract Amount	\$19,511,050.00
NTP	7/1/23
Final Completion	9/28/25

San Gabriel (Park) WWTP Rehab

- Substantial walk through was held on July 28th and punch list generated
- Contractor is working on site restoration
- Contractor working on the grit chamber and other punchlist items



Substantially Complete - Wastewater

Park LS to SGWWTP FM

- All tie ins have been completed, and the force main is in use
- Contractor working on revegetation



In operation - Water

Northlake WTP Expansion

- Cunningham Constructors Contract – 8.8MGD Expansion
- Administration building remains to be completed
- HVAC startup for Admin building is completed
- Repair needed for all 6 sludge valves
- Punch list for I&C and Electrical remains to be completed
- Civil and structural punch list remains to be completed
- Plant is in operation
- Working on proposals to complete outstanding work
- Administration Building work is underway, and contractor is sending in submittals



**City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026**

SUBJECT:

2025 Year In Review

SUGGESTED ACTION:

Presentation and discussion of 2025 Year In Review -- Chelsea Solomon, PE, Water Utility Director

ITEM SUMMARY:

FINANCIAL IMPACT:

SUBMITTED BY:

Deniece Sesma, Water Utility Department

ATTACHMENTS:

[2025 Year In Review Presentation.pdf](#)

2025 Year In Review

Agenda

- A look at the past 3 calendar years for comparison purposes
- System Improvements
- Environmental Factors
- Retained and Transfer
- Growth
- Demand and Capacity
- Projects
 - Sensus AMI
 - Conservation
 - Regulatory

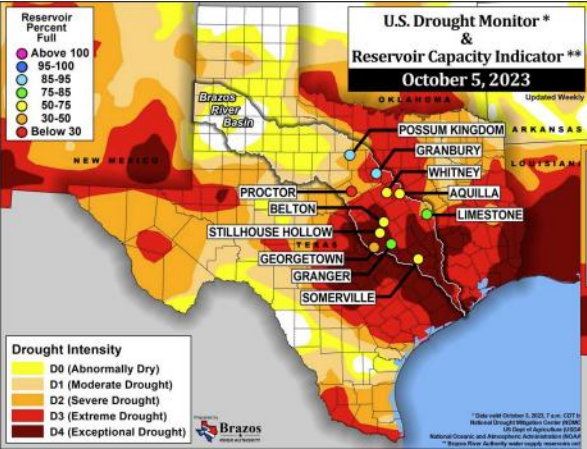
Recent History

- 2021 was the last full summer that we were in 2 day per week watering
- 6/28/2022 entered Drought Contingency Stage 2 - 1 day per week watering due to system capacity triggers and lake levels
- 7/14/2023 entered Drought Contingency Stage 3, infrastructure construction projects were delayed that served the west side of service territory.
- June 2025, returned to 2 days per week irrigation. South Lake Phase 1 completed
- Annual Rate increases
- Impact Fee Evaluation

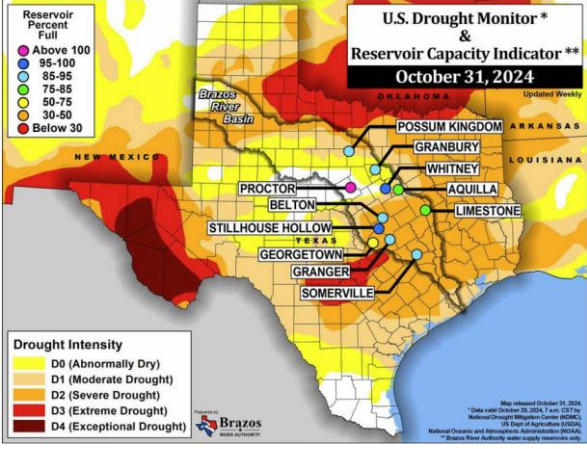
System Improvements

- Northlake Expansion (2024)– 28.6 MGD to 37.4 MGD
- Southside(2023) – Rehabilitation of existing 3.2 MGD Plant
- South Lake WTP
 - Construction of Phase 1 – 22 MGD (2025)
 - Construction of Phase 2 – 22 MGD (2026)
- Temporary Pumps – distribution of existing capacity, ability to pull Leander contracted water (2023/2024)
- Parkside (August 2024) – 3 MGD Contracted Water from Round Rock, contract till 2030

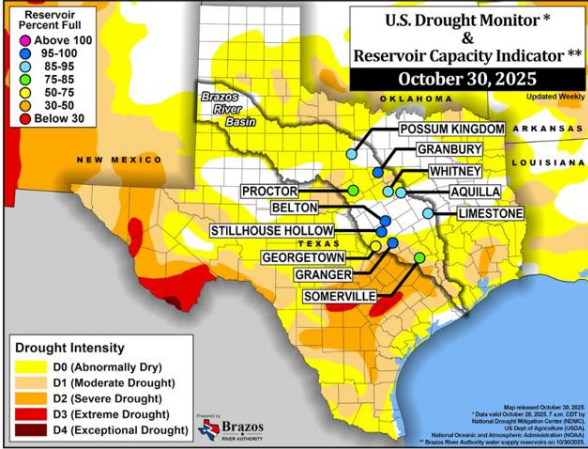
Environmental Factors



October 2023



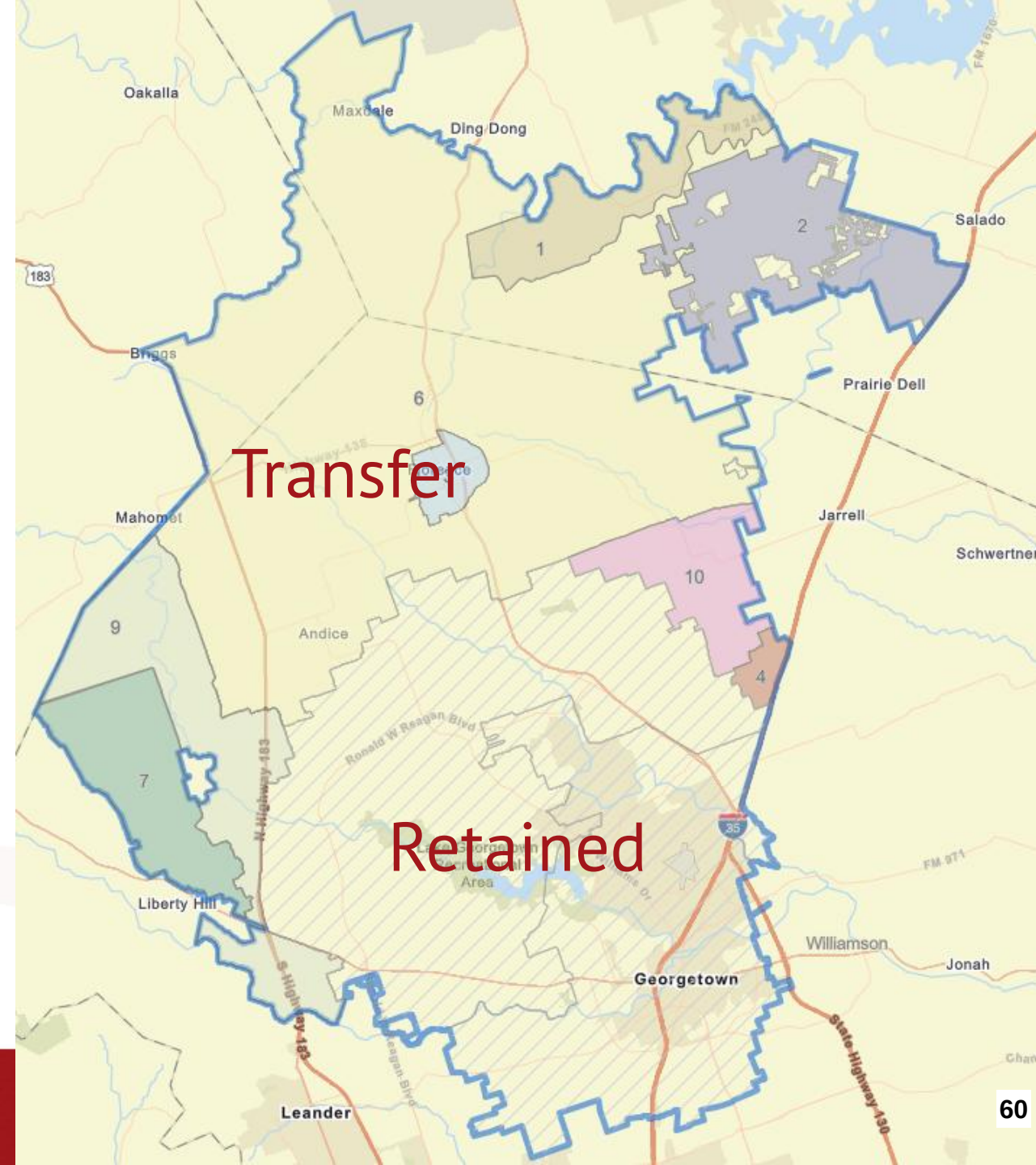
October 2024



October 2025

	Days > 100 /Hottest Day	May Avg Temp Total Rain	June Avg Temp Total Rain	July Avg Temp Total Rain	August Avg Temp Total Rain	September Avg Temp Total Rain
2023	61 days/107 deg	842.34"	95.23"	990.0"	103.04"	962.15"
2024	7 days/106 deg	866.36"	921.75"	912.31"	96.9"	920.70"
2025	4 days/101 deg	858.81"	931.78"	918.77"	942.49"	890.25"

Potential Water CCN Transfer Area



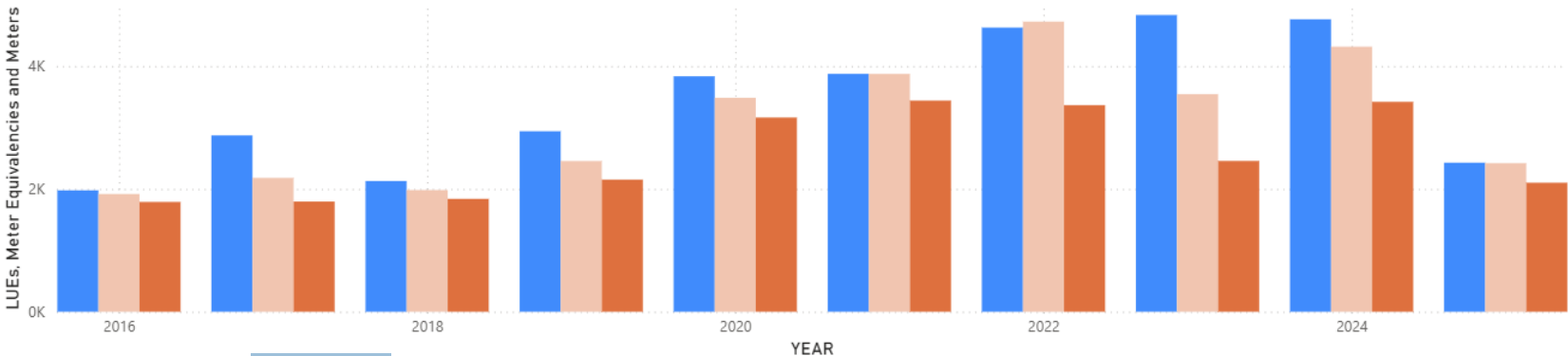
Growth

In retained City areas and in proposed transfer areas

Growth in Meters

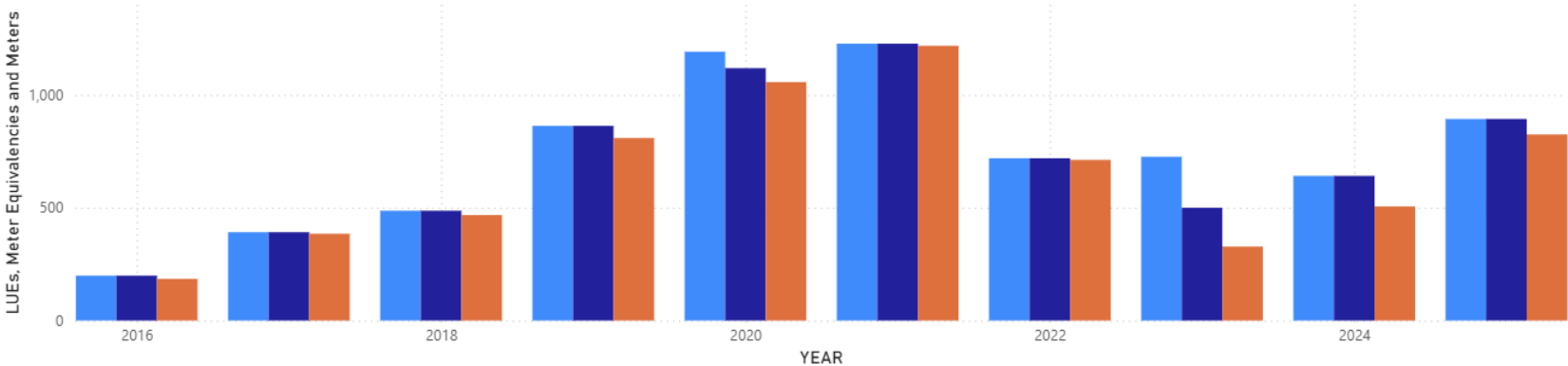
LUEs, MEs, Meters by Year, Retained Area

LUEs Meter Equivalencies Meters



LUEs, MEs, Meters by Year, Transfer Area

LUEs Meter Equivalencies Meters



Retained

Transfer

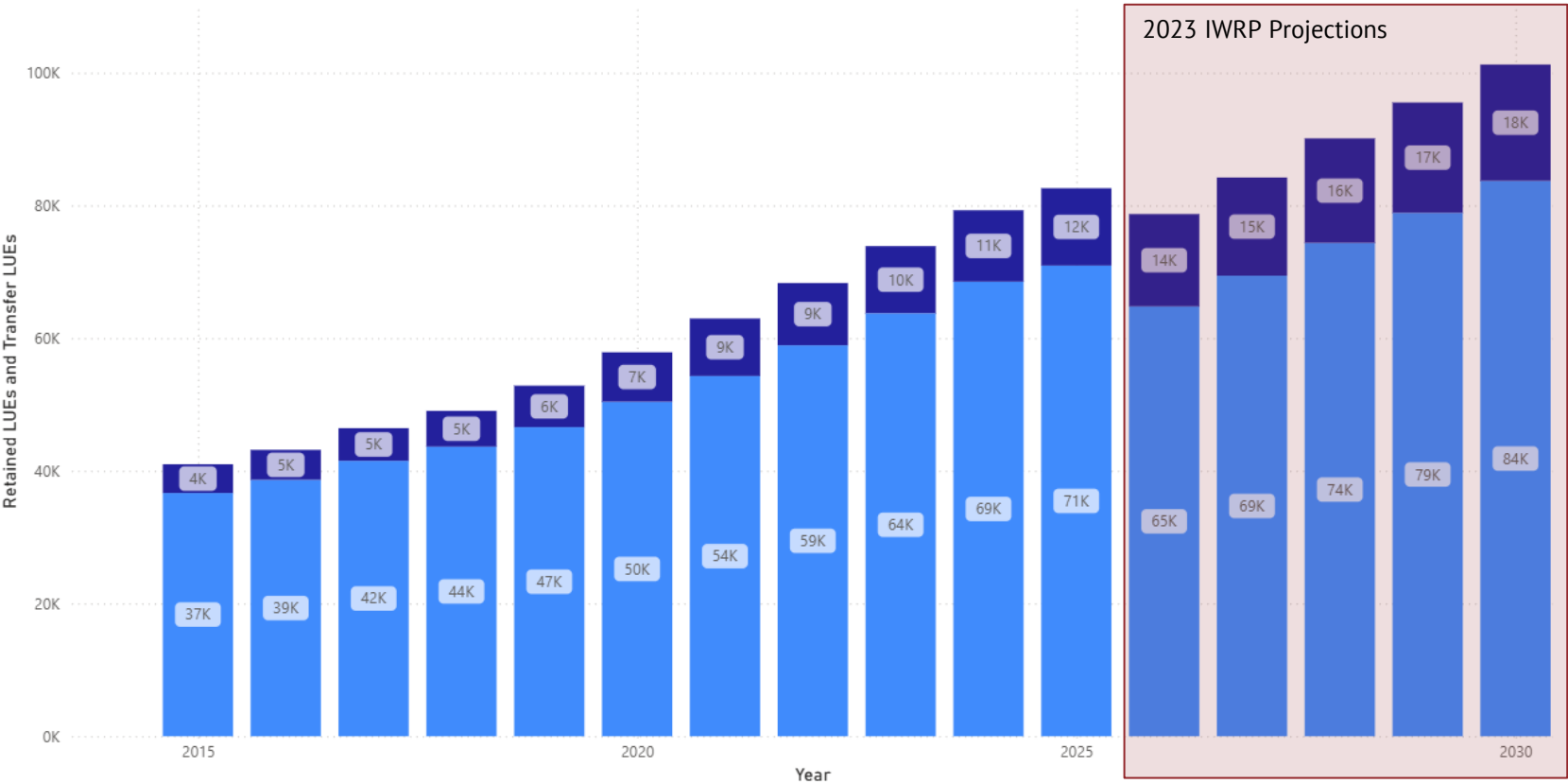
YEAR	LUEs	Meter Equivalencies	Meters
2016	1,976	1,917	1,788
2017	2,872	2,179	1,795
2018	2,128	1,981	1,838
2019	2,939	2,454	2,152
2020	3,835	3,485	3,163
2021	3,873	3,873	3,438
2022	4,628	4,725	3,363
2023	4,831	3,544	2,456
2024	4,762	4,316	3,418
2025	2,427	2,419	2,101

YEAR	LUEs	Meter Equivalencies	Meters
2016	199	199	185
2017	392	392	385
2018	487	487	468
2019	863	863	809
2020	1,191	1,119	1,057
2021	1,227	1,227	1,218
2022	719	719	712
2023	726	500	328
2024	641	641	506
2025	893	893	825

Cumulative Growth in LUEs

Retained LUEs and Transfer LUEs by Year

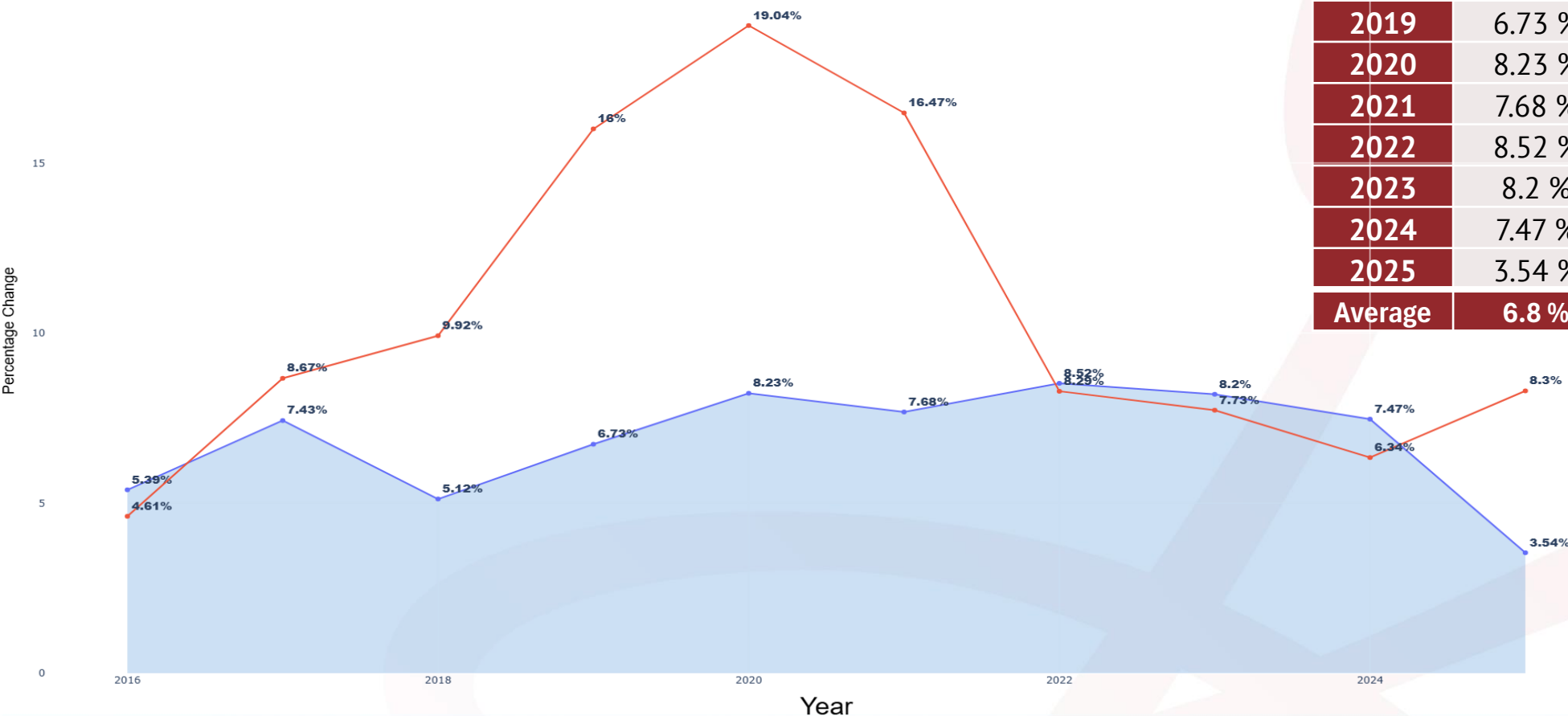
● Retained LUEs ● Transfer LUEs



Year	Transfer LUEs	Retained LUEs	Totals
2015	4,318	36,672	40,990
2016	4,516	38,648	43,164
2017	4,907	41,520	46,427
2018	5,394	43,648	49,042
2019	6,257	46,587	52,844
2020	7,449	50,422	57,871
2021	8,676	54,295	62,971
2022	9,395	58,923	68,318
2023	10,121	63,754	73,875
2024	10,763	68,516	79,279
2025	11,656	70,943	82,599
2026	13,913	64,790	78,703
2027	14,795	69,417	84,212
2028	15,741	74,365	90,106
2029	16,611	78,901	95,512
2030	17,536	83,708	101,244

Percentage Growth in LUEs

variable Retained Change Transfer Change

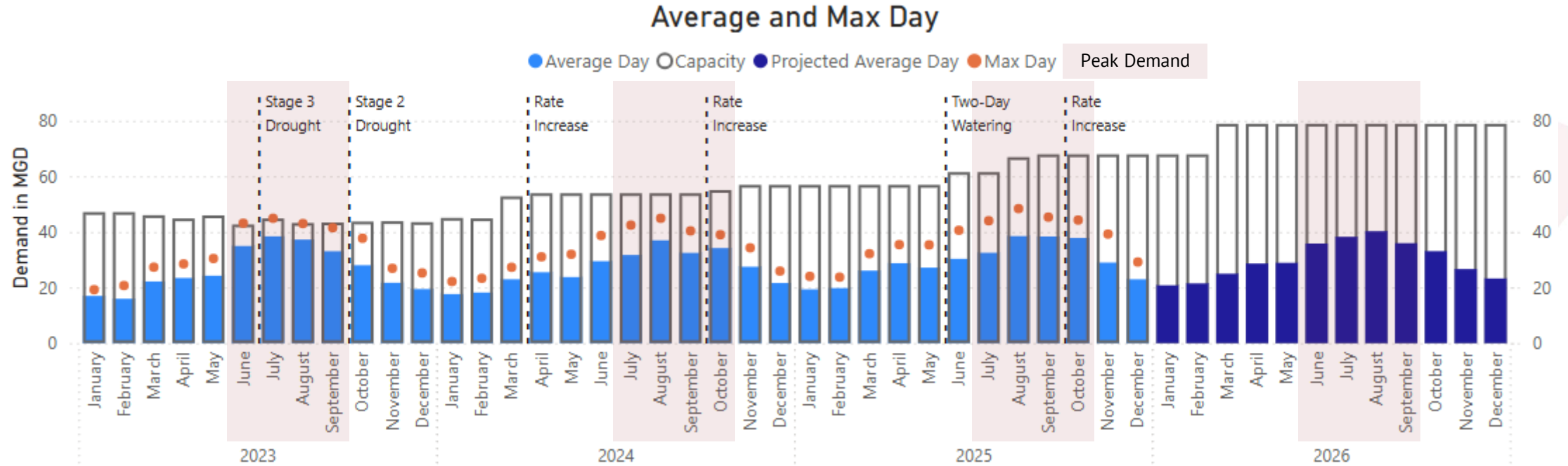


Year	Retained	Transfer	Total
2016	5.39 %	4.61 %	5.31 %
2017	7.43 %	8.67 %	7.55 %
2018	5.12 %	9.92 %	5.63 %
2019	6.73 %	16 %	7.75 %
2020	8.23 %	19.04 %	9.51 %
2021	7.68 %	16.47 %	8.81 %
2022	8.52 %	8.29 %	8.49 %
2023	8.2 %	7.73 %	8.13 %
2024	7.47 %	6.34 %	7.31 %
2025	3.54 %	8.3 %	4.21 %
Average	6.8 %	10.5 %	7.27 %

Demand and Capacity

Multi-year overview

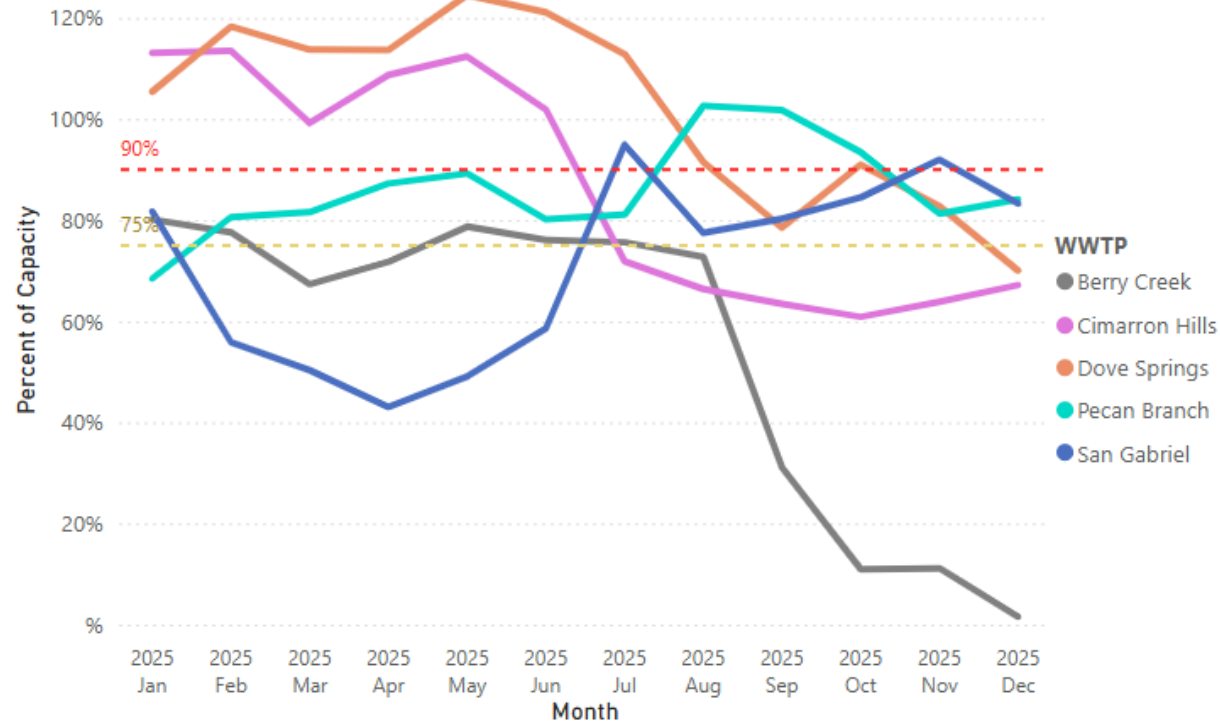
Water Demand



	2023	2024	2025
Average Day MGD	26.34	26.84	29.27
Max Day MGD	46.41	44.90	48.38

Wastewater Treatment

WWTP Monthly Flow Percent of Capacity 2025



Plant	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
● BCWW 0.3MG	80%	78%	67%	72%	79%	76%	76%	73%	31%	11%	11%	2%
● CHWW 0.24MG	113%	113%	99%	109%	112%	102%	72%	66%	63%	61%	64%	67%
● DSWW 2.5MG	105%	118%	114%	114%	125%	121%	113%	91%	79%	91%	83%	70%
● PBWW 3MG	68%	81%	82%	87%	89%	80%	81%	103%	102%	93%	81%	84%
● SGWW 2.5MG	82%	56%	50%	43%	49%	59%	95%	78%	80%	85%	92%	83%

Total Wastewater

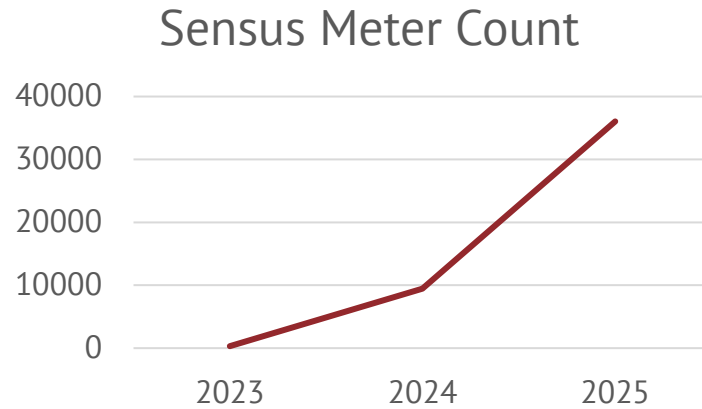
	2025
Average Day MGD	7.28
Max Day MGD	10.65
Total YTD	2,644

Reclaim Wastewater

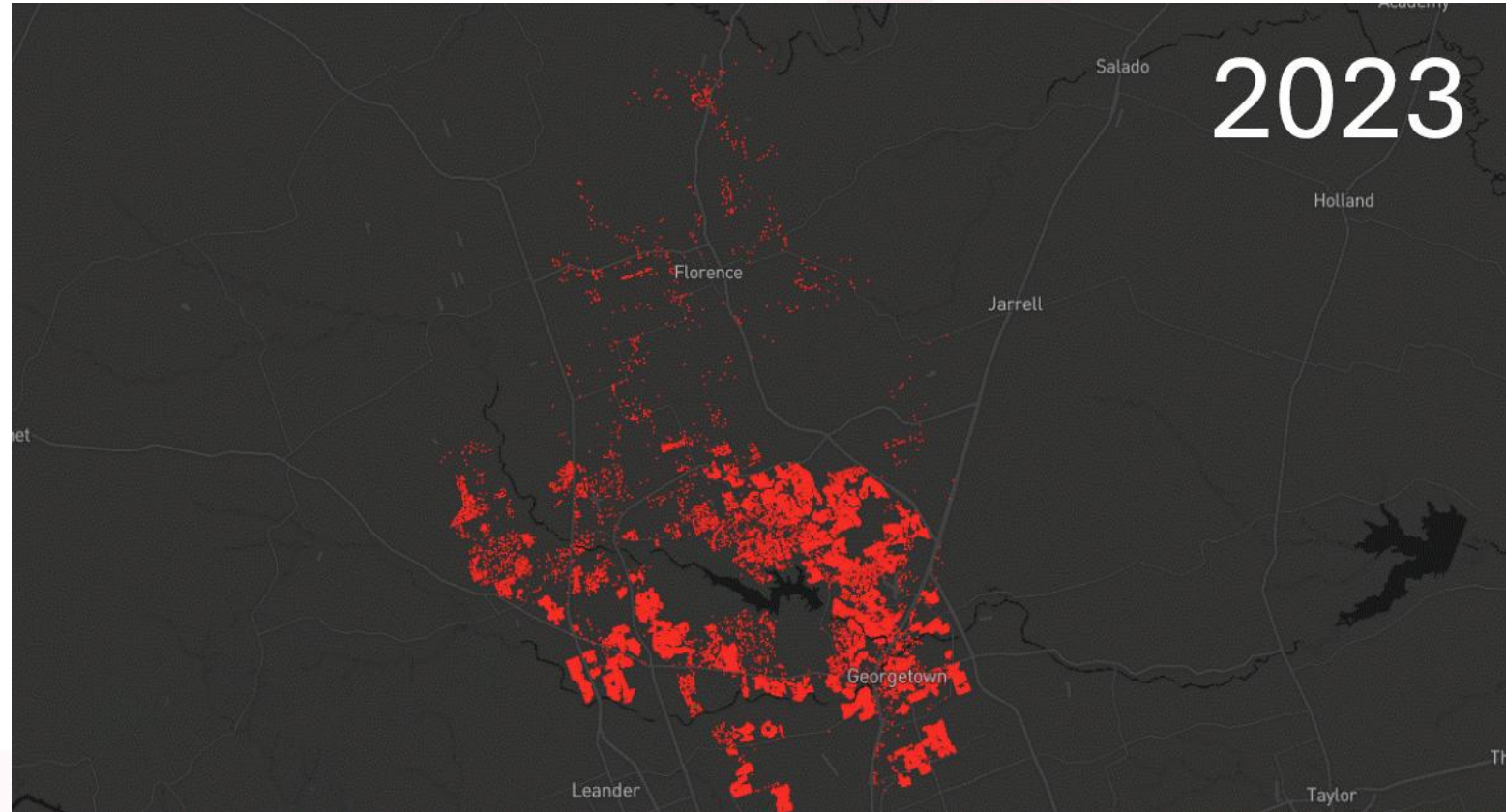
	2025
Average Day MGD	1.39
Max Day MGD	3.84
Reclaim YTD	479

Project and Team Progress

Sensus Project



	Added	Total
2023	311	311
2024	9,160	9,471
2025	25,966	36,046



Remaining non-Sensus meters: 29,370

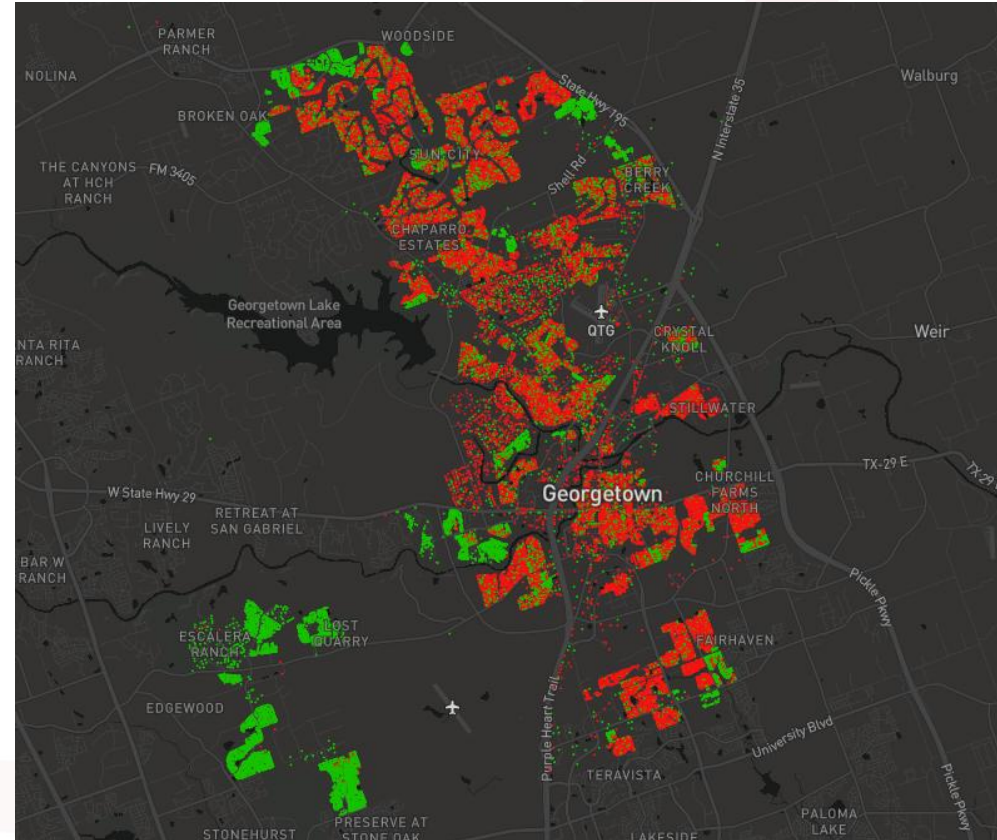
Sensus Project – Next Steps

	Completed	Remaining
Cycle 1	3,111	4,530
Cycle 2	1,960	2,260
Cycle 3	4,350	1,620
Cycle 4	2,530	7,980
Cycle 5	3,380	6,590

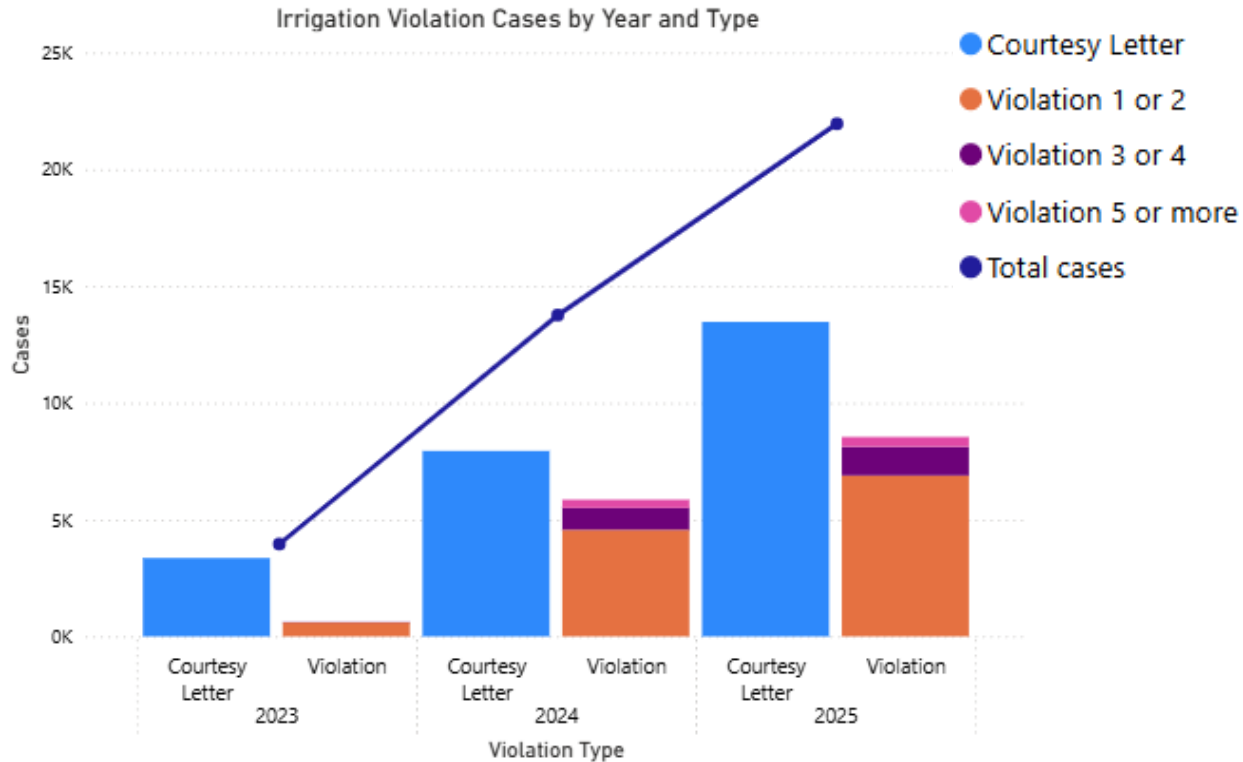
2026 Plan

- Upon completion of remaining Western District deployment, Aqua-Metric will begin mass deployment in Cycle 5 (area in and around Sun City) and Cycle 2 (Wolf Ranch area).
- City of Georgetown Staff will begin mass deployment in Cycle 4 (old town Georgetown) and Cycle 1 (Williams Drive and north).

System-wide ETA: November of 2027



Irrigation Violation Cases



- Repeat violations have not gone up at the same rate as courtesy letters from 2024 to 2025, showing that our efforts are working to change behavior
- Adding more Sensus meters means we are able to catch more violations and hopefully change the behavior of more customers

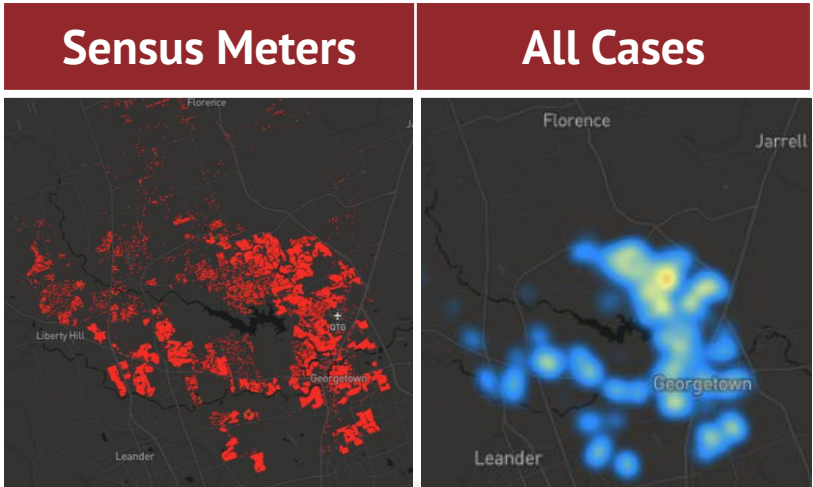
	Total Cases
2023	3,978
2024	13,804
2025	22,015

Irrigation Violation Cases

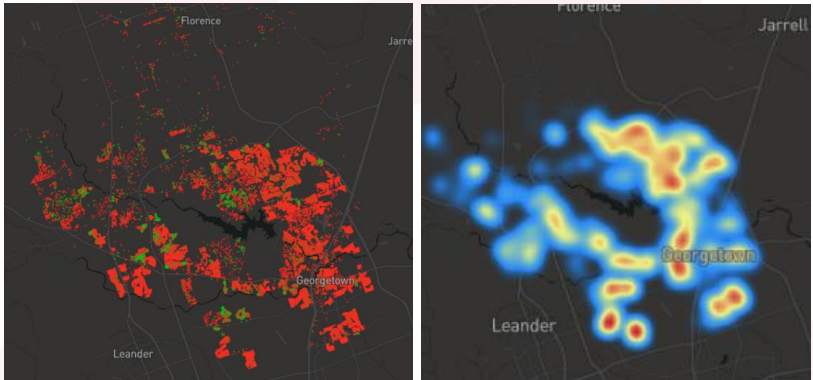
	Sensus Meters	Total Cases
2023	311	3,978
2024	9,471	13,804
2025	36,046	22,015

- More Sensus Meters installed → More irrigation violators detected

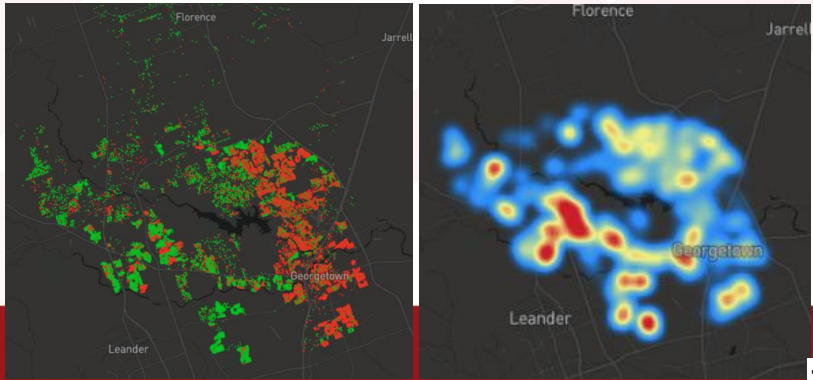
2023



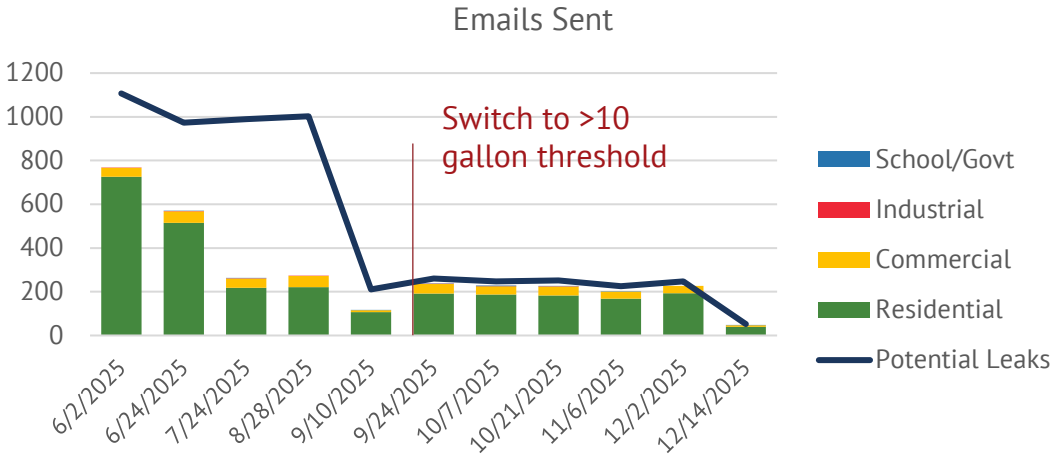
2024



2025



Leak Report



Total Potential Leaks	Total Emails Sent
5569	3157

- We are only able to detect potential leaks using the Sensus AMI interval data that we did not have before
- Once the Sensus project is complete, we will be able to analyze every meter’s hourly data in the system

Date Sent:	Potential Leaks	Residential	Commercial	Industrial	School/Govt	Totals
6/2/2025	1107	726	41	1	0	768
6/24/2025	973	515	53	1	2	571
7/24/2025	990	218	43	1	1	263
8/28/2025	1003	221	51	1	0	273
9/10/2025	211	107	9	0	1	117
9/24/2025	260	192	43	1	1	237
10/7/2025	248	188	37	1	2	228
10/21/2025	251	183	41	1	1	226
11/6/2025	226	168	33	0	1	202
12/2/2025	248	193	34	0	0	227
12/14/2025	52	39	8	0	1	45
Totals	5569	2750	393	7	10	3157

Rebate Programs

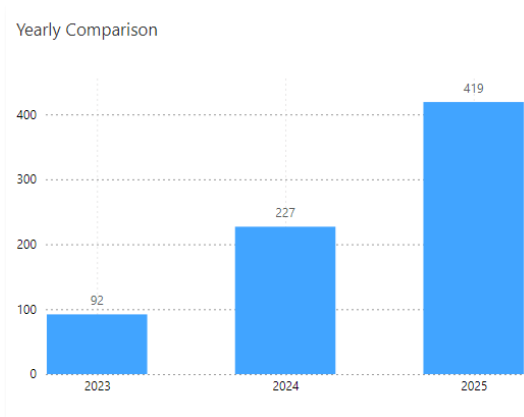
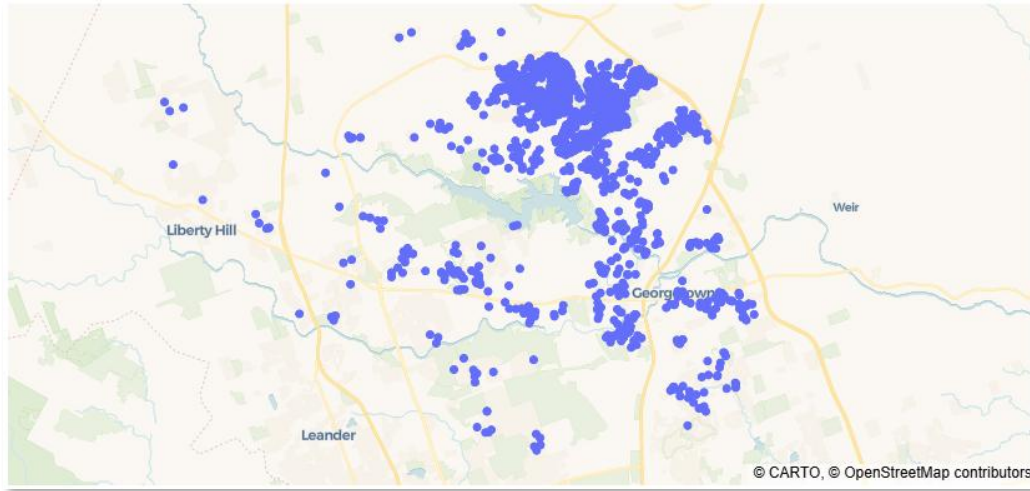
Rebate Type	Number of Rebates and Amount Spent (FY19)	Number of Rebates and Amount Spent (FY20)	Number of Rebates and Amount Spent (FY21)	Number of Rebates and Amount Spent (FY22)	Number of Rebates and Amount Spent (FY23)	Number of Rebates and Amount Spent (FY24)	Number of Rebates and Amount Spent (FY25)
Irrigation Check up	2327 \$174,525.00	580 43,500.00	2360 \$177,125.00	2594 \$194,550.00	2074 \$154,723.67	1,867 \$139,905.00	1792 \$134,295.95
Smart/Weather - Based Controller	119 \$16,655.17	42 \$5,820.47	166 \$23,829.00	192 \$28,800.00	152 \$22,320.69	129 \$16,548.41	241 \$31,189.06
Spray - to - Drip Conversion	24 \$3,447.80	8 \$1,117.15	41 \$5,762.53	40 \$6,000.00	19 \$2,780.00	20 \$3,390.07	1 \$150.00
Multi- Stream Nozzle Zone	116 \$16,551.03	28 \$3,768.53	103 \$14,603.76	146 \$21,900.00	73 \$11,142.14	114 \$33,667.71	123 \$42,094.72
Rain Barrel/ Rainwater Harvesting	5 \$125.00	1 \$25	17 \$425	25 \$625.00	16 \$375.00	100 \$2,500.00	61 \$7,506.11
Xeriscape/ Native Landscaping	N/A	N/A	N/A	32 \$17,479.52	41 \$23,581.07	93 \$52,394.22	14 \$29,593.31
Pool Cover	N/A	N/A	N/A	N/A	N/A	3 \$450.00	5 \$655.98
Hose Timer	N/A	N/A	N/A	N/A	N/A	5 \$125.00	13 \$716.84
Texas Grown Tree Rebate	N/A	N/A	N/A	N/A	N/A	N/A	18 \$7,624.44
Permanent Removal of Irrigation System	N/A	N/A	N/A	N/A	N/A	N/A	3 \$600.00
Lawn Aeration and Composting	N/A	N/A	N/A	N/A	N/A	28 \$3,150.00	42 \$4,200.00
Total	2,591 \$207,856.20	659 \$54,231.15	2,687 \$221,745.52	3,029 \$295,000	2,375 \$214,922.57	2,359 \$252,130.41	2312 \$258,701.41

FY25
\$258,701
CAP Rebates

FY25
2,327
Total Rebates

11 Programs

Controller Assistance Program



Comments

Customer Responses

A great service!!
Appreciate this service for water customers!
Customer service was extremely appreciative and informative
Great work
Help in understanding the difference types of sprayer heads and correct placement
I will notify more neighbors about this service.
Natasha was very helpful and even came back to our home to fix an irrigation leak after we purchased a part.
Please keep the program. It is very helpful and it works, at least for me.
She reset my sprinkler control box and explained how the system works and was very helpful, polite and knowledgeable. These new sprinkler systems are very complicated and complex so having her explain things to me made such a big difference. and knowledgeable and knowledgeable
She was very knowledgeable, it was my pleasure to working with her.

- Free program available to all COG Water Utility customers
- April- October
- Three Licensed Irrigation Specialists on staff
- Full irrigation system check including controller
- One of our most positively received customer programs

EGIA Rebate Processing



Paper or electronic submittal



Faster processing times



Improved customer service



Faster process for W9 reporting



Payment received by check



Own customer service support



Step by step tracking on status of rebate



Change Password

Logout

DASHBOARD

Manage Your Submissions

[Start a new application ?](#)

Customers may apply for each of the rebates once per fiscal year, which runs Oct 1 through Sept 15. All rebate applications must be submitted by September 15.

Rebates are processed on a first-come, first-served basis while funding is available. We recommend customers read through the requirements for the rebate and wait for the rebate to be approved before performing any of the work. Any application that causes the applicant to receive \$600 or more in total rebates for the calendar year requires the applicant to submit a W-9 tax document.

More information about each rebate is available at georgetowntexas.gov/waterconservation.

To start your rebate application, click on one of the blue buttons below.

Click on the rebate type to receive additional information regarding each rebate.

Residential Rebate

Digital Water Hose Timer
Irrigation Check-up Rebate
Lawn Aeration and Compost
Multi-stream Nozzle Conversion
Pool Cover Rebate
Rainwater Harvesting
Smart Controller Replacement

Residential Pre-Approval Rebate

Texas Grown Native Landscaping Rebate
Texas Grown Native Tree Rebate
Permanent Removal of Irrigation System

Commercial Pre-Approval Rebate

Median Drip Conversion
Median Irrigation Removal
Texas Grown Native Landscaping Rebate
Texas Grown Native Tree Rebate
Permanent Removal of Irrigation System

PFAS Summary Update

What are PFAS?

-  **PFAS** = *Per- and Polyfluoroalkyl Substances*
-  **Man-made chemicals** (since the 1940s)
-  Known as “**forever chemicals**”
-  Do **not break down** easily in the environment

Why PFAS Are Used

-  Heat-resistant
-  Water-repellent
-  Grease-resistant
-  Stain-resistant
-  Useful for durable, protective products

Common Products Containing PFAS

-  Non-stick cookware
-  Water-repellent clothing
-  Stain-resistant carpets & furniture
-  Food packaging
-  Firefighting foam
-  Some cosmetics & industrial uses

Why PFAS Are a Concern

-  Persist in the environment
-  Build up in the human body
-  Found in drinking water
-  Linked to health & environmental risks

PFAS Summary Update

- February 2022: Laid the foundation for enhancing data on PFAS
- June 2022: Released drinking water health advisories
- September 2022: Proposed to designate two PFAS as Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances
- March 2023: Began distributing \$10 billion in funding to address emerging contaminants under the Bipartisan Infrastructure Law (BIL)
- March 2023: Proposed a National Drinking Water Standard for PFOA and PFOS
- April 2024: Finalized the National Primary Drinking Water Regulation for six PFAS, and established the cumulative hazard index.
- April 2024: Issued a final rule under CERCLA, designating PFOA and PFOS as hazardous substances, requiring federal reporting and cleanup of contaminated sites
- May 2025: Partially rolled back aspects of the CERCLA rule by exempting utilities from liability under Superfund cleanup provisions and announced its intent to rescind four PFAS compounds from monitoring and compliance requirements.

Partial Rollback (May 14, 2025)

Compound	MCLGs	MCLs
PFOA	0 PPT	4 PPT
PFOS	0 PPT	4 PPT
PFHxS	10 PPT	10 PPT
PFNA	10 PPT	10 PPT
GenX	10 PPT	10 PPT
PFHxS	Hazard Index (HI) = 1	
GenX		
PFNA		
PFBS		

PFAS Summary Update

Violations and Enforcement

Violations

- Violations for noncompliance begin Q2 2031, based on 4 quarters of data for a rolling annual average (RAA)
- A violation can be issued from a single exceedance of 4x the MCL
- For every violation, a Tier 2 public notice must be issued within 30 days

Enforcement

- States have primacy over the rule when MCLs are in effect
- TCEQ uses a points system where > 10 points initiates formal enforcement action
- An MCL violation is worth 5 points, and a system can get an additional violation every quarter

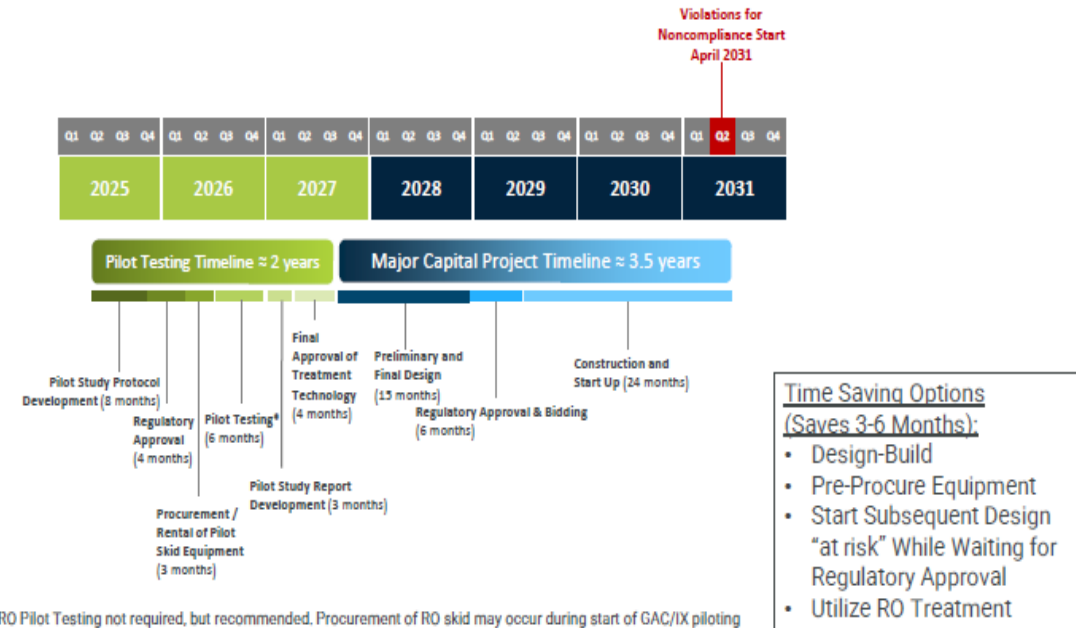
Penalties

- Enforcement actions are case-by-case, and the state can choose to issue administrative orders (instead of taking it to court)
- Per Water Code Chapter 7. Enforcement – Fees can be a maximum of **\$25,000 per day** for a water quality violation

Pilot Schedule for Park Plant

- Anticipated TCEQ approval of Pilot Study, Quarter 1 of 2026
- 6-month duration for study to be conducted, Quarters 3 & 4 of 2026
- Technology selection based on Study results, Quarter 2 of 2027
- Final Design of Treatment process, Quarter 4 of 2028
- TCEQ approval of Design, Quarter 2 of 2029
- Construction and startup, Quarter 2 of 2031

Pilot Testing and Capital Project Schedule



Removal Methods in the Study

Technology	Reasons for Pilot Recommendation
Ion Exchange	- Proven PFAS treatment technology. - Capable of removing short-chain and long-chain PFAS compounds. - Smaller footprint compared to GAC. - Higher loading capacity than GAC.
Granular Activated Carbon	- Proven PFAS treatment technology. - Media can be reactivated. - Reactivation of media reduces operational burden for disposal. - Capable of removing long-chain PFAS compounds. - Reduces media variety at the plant.
Ion Exchange and Granular Activated Carbon in Series	- Proven PFAS treatment technologies. - GAC can be regenerated. - Capable of removing both long-chain and short-chain PFAS compounds. - Combining technologies has shown to reduce DBP precursors in addition to robust PFAS removal.



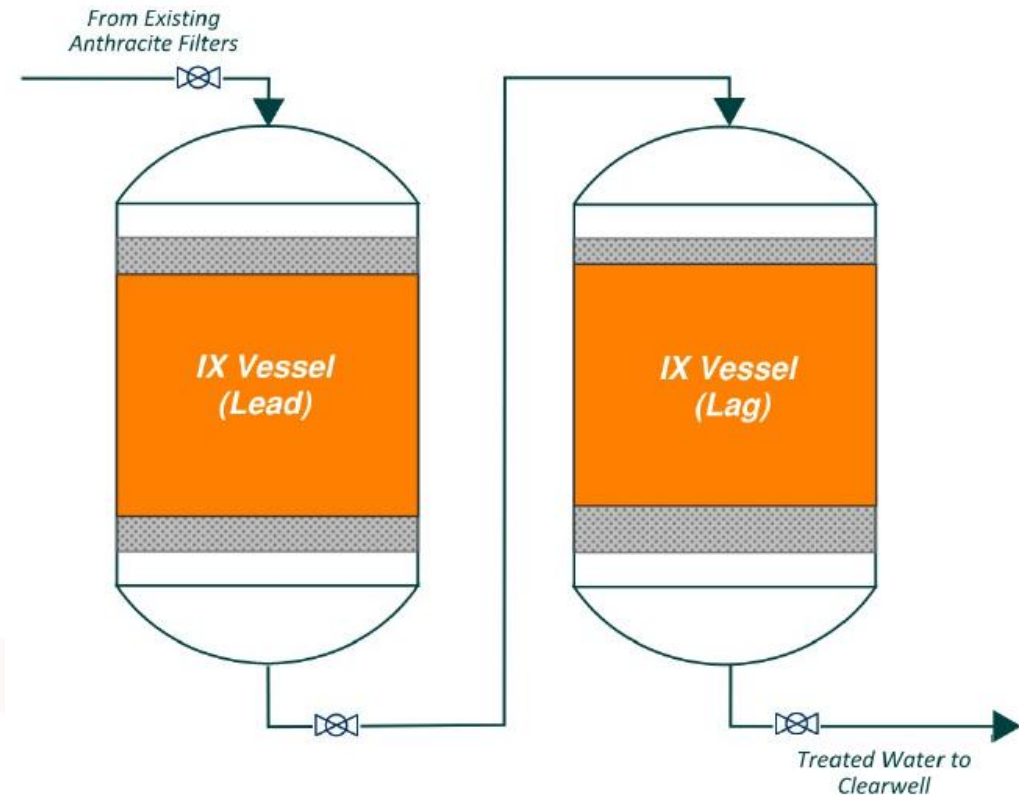
Removal Methods in the Study-Ion Exchange (IX)

✓ Pros

- Established PFAS removal technology.
- High PFAS removals reported.
- Reduced footprint size relative to GAC.
- Lower contact time (EBCT) requirements compared to GAC.

✗ Cons

- May not remove all the long-chain PFAS compounds present (to be confirmed with pilot testing).
- No widely-practiced media regeneration.
- Uncertain future media supply and cost.
- Previous FNI projects have shown IX to create DBP precursors.



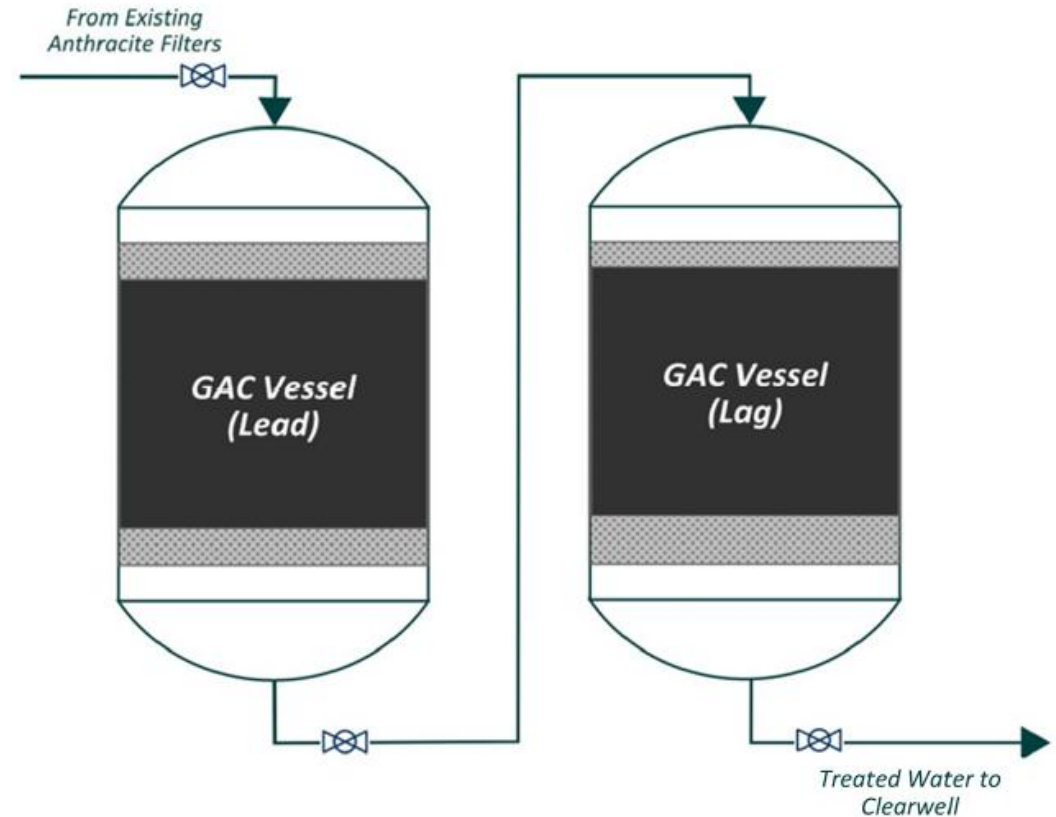
Removal Methods in the Study-Granular Activated Carbon (GAC)

✓ Pros

- Most established PFAS removal technology.
- High PFAS removal rates reported.
- Media can currently be reactivated and reused.
- Reduced disposal burden on utilities due to reactivation by media supplier.

✗ Cons

- TOC inhibition for contaminant removal.
- May not remove all short-chain PFAS compounds present (to be confirmed with pilot testing).



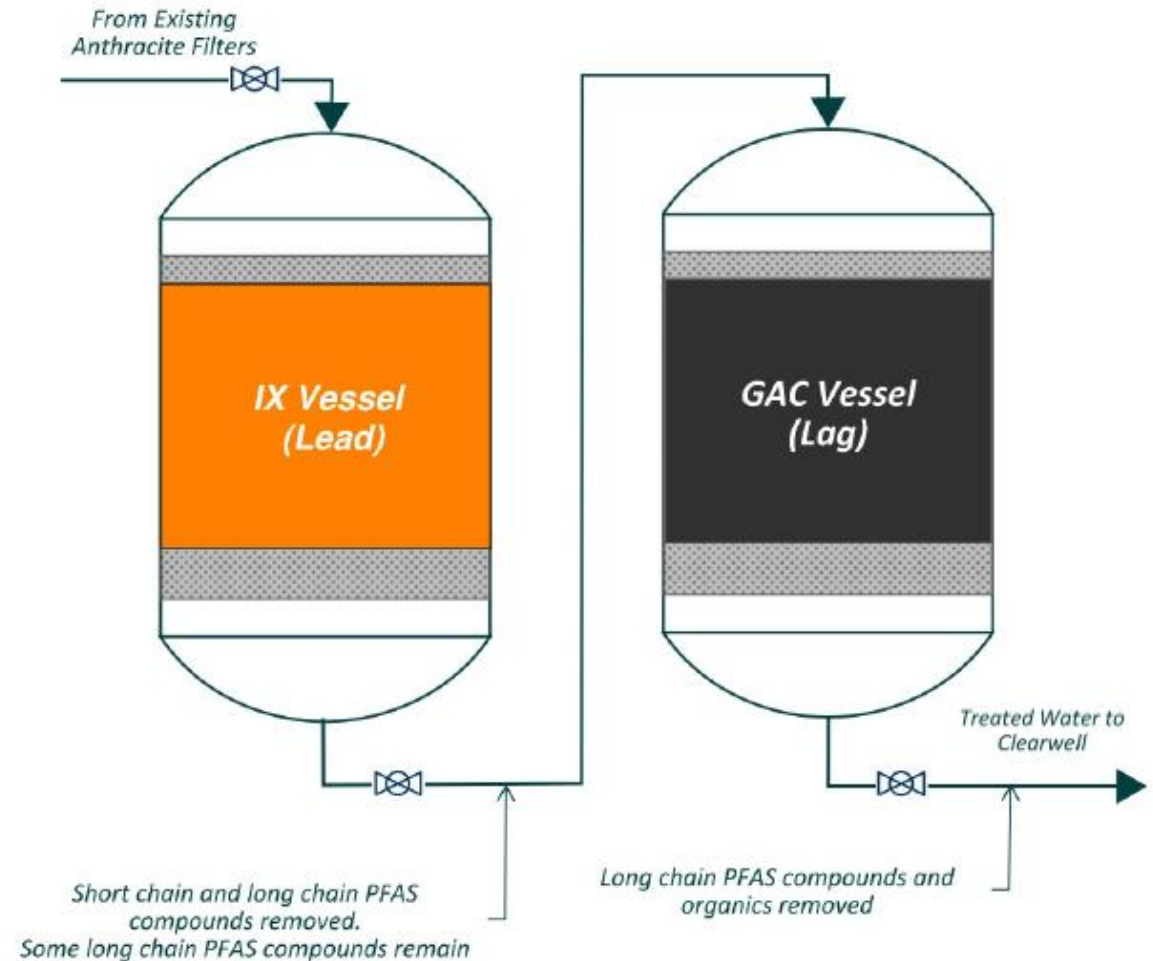
Removal Methods in the Study-GAC and IX

✓ Pros

- Established PFAS removal technologies.
- High short-chain and long-chain PFAS removals reported.
- High loading capacity for IX.
- GAC media reactivation.
- Reduced disposal burden on utilities due to GAC reactivation.
- Removal of DBP precursors that may appear from IX treatment.

✗ Cons

- Increase capital and O&M costs.
- No IX regeneration.



Lead & Copper Rule (LCR) – Protecting Public Health

What It Is:

EPA regulation to limit lead and copper in drinking water

Focuses on corrosion control, service line materials, and sampling

- Purpose: Detect lead and copper from household plumbing materials
- Sampling Method: First-draw tap samples from high-risk homes (e.g., pre-1986)
- Recent Updates:
 - LCRR (2021): Requires Lead Service Line Inventory (LSLI) by Oct 16, 2024
 - LCRI (2027): Will mandate full lead service line replacement and improved testing
 - All mandatory notifications were mailed to the customers.



Lead and Copper Update

Lead and Copper (Pb & Cu)

What Are They?

- **Lead** and **copper** are **metals** that can enter drinking water mainly through **corrosion of plumbing materials**.
- They are **not usually found naturally** in treated water when it leaves a treatment plant.
- *Key point:* The problem usually starts **inside buildings**, not at the source.

How Do They Get Into Drinking Water?

- When water **sits in pipes** (overnight or during low use)
- When **protective pipe coatings break down**
- In **older buildings** with legacy plumbing materials
-  More contact time = higher risk

How Are They Controlled?

-  **Corrosion control treatment** (adds protective chemicals)
-  **Routine water testing**
-  **Flushing taps** before use
-  **Replacing lead service lines and old fixtures**

Where Do They Come From?

Primarily from **plumbing systems**, including:

-  **Lead pipes** (older homes)
-  **Brass fixtures and faucets**
-  **Solder** used in copper pipes (especially pre-1986)
-  Water that is **corrosive** can dissolve these metals over time.

Why Are They a Concern?

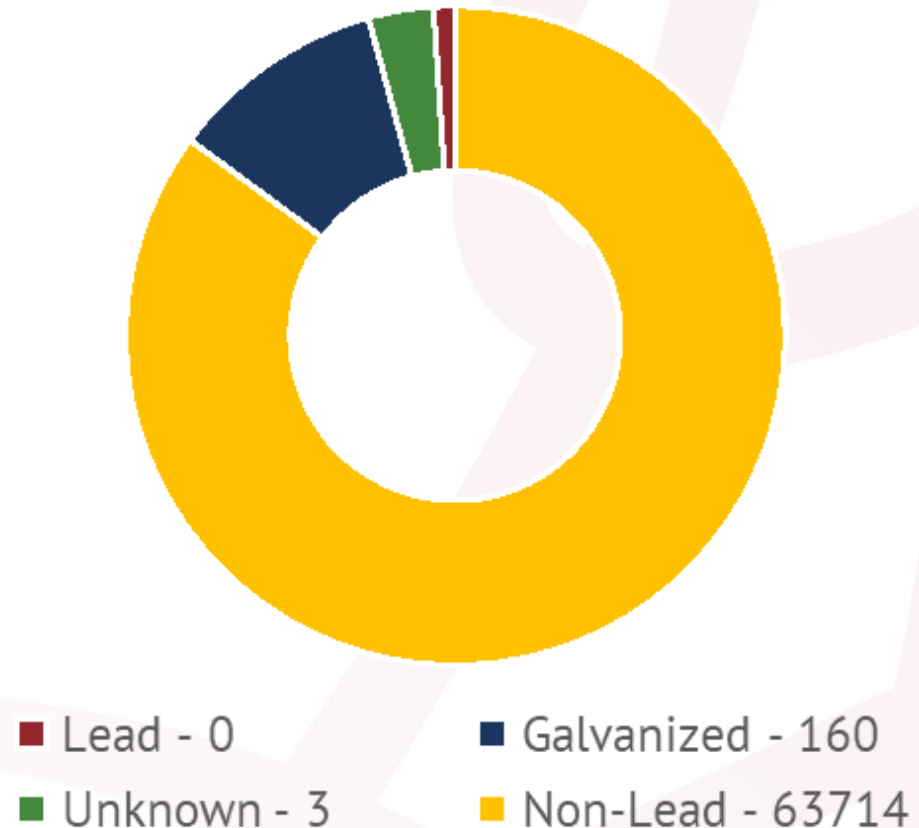
- **Lead:**
 - Harmful to brain development in **infants and children**
 - Can cause learning and behavioral problems
- **Copper:**
 - Can cause stomach upset at high levels
 - Long-term exposure may affect the liver or kidneys

Lead and Copper Update

The City of Georgetown submitted its initial Lead Service Line Inventory (LSLI) in October 2024. Annual updates are required going forward. Remaining unknown service lines must be verified, including fitting materials and connection points. All Galvanized Requiring Replacement (GRR) lines identified are on the customer side. While lead may have existed historically, no active lead service lines were found. All mandatory notifications were mailed to the customers.

[Service line inventory](#)

Service Line Materials



City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026

SUBJECT:

First Amendment to Northlands Professional Services Agreement 25-0125-PSA

SUGGESTED ACTION:

Consideration and possible recommendation to City Council to approve the First Amendment to the Professional Services Agreement (PSA) 25-0125-PSA with Freese and Nichols of Austin, Texas, for professional engineering services for the Northlands Wastewater Treatment Facility in the amount of \$10,991,205.00 -- Wesley Wright, P.E., Systems Engineering Director, and David Herzog, CIP Manager

ITEM SUMMARY:

In January 2025, City Council approved a Professional Services Agreement (PSA) with Freese and Nichols, Inc. (FNI) to provide preliminary engineering services for the Northlands Wastewater Treatment Facility (WWTF). The initial PSA included conceptual and preliminary design, evaluation of treatment alternatives, capacity planning, and development of an Opinion of Probable Construction Cost (OPCC). The PSA also included design services for the Cowan Creek Lift Station in Sun City, which will convey wastewater to the future Northlands facility.

City staff is currently preparing to issue a Construction Manager at Risk (CMAR) solicitation for the Northlands WWTF. Preliminary design has progressed to 20%, and through multiple technical workshops with FNI, the treatment plant site layout and key equipment selections have been established. Environmental services and supporting field investigations are also underway.

The amendment we are bringing forward provides additional professional engineering services necessary to advance the project through final design. This amendment includes final design for the Northlands WWTF, conceptual alignment development for the future Sun City Boulevard Extension, Secondary Effluent Outfall Study, and Texas Pollutant Discharge Elimination System (TPDES) permitting for a new outfall.

Services included for Northlands WWTF:

- Permitting (TCEQ, TDLR, TxDOT, and Georgetown)
- Pump Station Modeling
- SCADA Standardization
- Final Design Phase Project Management and Administration
- 60% Design Development
- 90% Pre-Final Design
- 100% Final Design
- CMAR Value Engineering Sessions
- Post CMAR Value Engineering Revisions
- CMAR Package Deliveries
- Resident Project Representative (RPR) Services

Services included for the Sun City Blvd Extension:

- Data Collection
- Conceptual Alignment Development
- Exhibit Preparation
- Recommendations

Services included for the Secondary Effluent Outfall Study:

- Environmental Analysis
- Geomorphic, Hydrologic, and Hydraulic Evaluation
- Up to three alternatives are being evaluated for potential future expansion of the plant. There is concern that the existing Cowan Creek outfall may not have sufficient capacity to accommodate flows beyond the currently permitted 3 MGD. Full buildout for Northlands is projected at 15.5 MGD, raising concerns regarding impacts to aquatic life.
- Preliminary feasibility analysis

Services included for the TPDES permitting for new outfall:

- Assist City in applying for TPDES Major Permit Amendment
- Coordinate with City and TCEQ
- Compile Effluent Analysis Report
- Prepare Permit Application and Transmittal Letter

Currently, early CMAR packages for long-lead materials and equipment are anticipated in mid-2026, with full construction services expected to begin in 2027. The plant is currently estimated to be completed in 2030. Once a CMAR is selected and the construction schedule is more firmly established, the schedule will require continuous coordination, monitoring, and communication among all stakeholders, as more than a dozen developments are dependent on the timely delivery of this facility.

STAFF RECOMMENDATIONS:

City staff recommends approval of the First Amendment to the Professional Services Agreement 25-0125-PSA with Freese and Nichols of Austin, Texas, for professional engineering services for the Northlands Wastewater Treatment Facility in the amount of \$10,991,205.00

FINANCIAL IMPACT:

Funds for this expenditure are available in the FY26 wastewater CIP budget – PRJ000370.

SUBMITTED BY:

Larry Taylor, Systems Engineering

ATTACHMENTS:

[Exhibit A - FNI Proposal - Final Design, Bid, EWP Construction 251027.pdf](#)

EXHIBIT A

SCOPE OF SERVICES AND RESPONSIBILITIES OF CITY

PROJECT UNDERSTANDING AND ASSUMPTIONS

The City of Georgetown (City) is experiencing rapid population growth. This growth has increased the demand for wastewater treatment capacity across the City's service area. To address this need, the City has prioritized the development of a new wastewater treatment facility, the Northlands Wastewater Treatment Facility (WWTF), which is essential to support the far northwestern portion of its service area, including Sun City. The Northlands site is situated on approximately 20 acres near Sun City Boulevard and Ronald Reagan Boulevard. In addition, City is in the process of purchasing an additional 18.9 acre site adjacent to the existing 20 acre site. This facility will be designed primarily to serve residential developments, with minimal commercial or industrial wastewater contributions.

In January 2025, Freese and Nichols, Inc. (FNI) was contracted to provide Preliminary Design Services for the Northlands WWTF Project. The major components of the project include:

- Northlands WWTF
- Off-Site Infrastructure:
 - Cowan Creek Lift Station
 - Effluent Outfall Line
 - Extension of existing force main across Ronald Reagan to the Northlands WWTF
 - Extension of existing reuse line across Ronald Reagan to the Northlands WWTF

FNI submitted a Preliminary Design Summary Report (PDSR) to the City in September 2025 documenting the proposed design of the project components, including a master plan of the Northlands WWTF site. The following scope is for Final Design, Bid, and a portion of the anticipated Construction Phase Services for the Northlands WWTF Project in accordance with the PDSR and as described below. The City intends to obtain the services of a Construction Manager at Risk (CMAR) for execution of the project.

Basis of Design:

The Northlands facility will operate under Texas Pollutant Discharge Elimination System (TPDES) permit WQ0010489007. The existing TPDES permit includes two phases as summarized in Table 1.

Table 1 Summary of Northlands WWTF TPDES Permit

Parameter	Interim Phase	Final Phase
Annual Average Daily Flow (AADF)	1.5 MGD	3.0 MGD
Peak 2- Hour Flow (P2HF)	6.0 MGD	12.0 MGD
	<i>Daily Average</i>	
Carbonaceous Biochemical Oxygen Demand 5-Day (CBOD)	5 mg/L	5 mg/L
Total Suspended Solids (TSS)	5 mg/L	5 mg/L
Ammonia Nitrogen		
June - September	1.3 mg/L	1.2 mg/L
October -May	2.0 mg/L	2.0 mg/L
Total Phosphorus	0.5 mg/L	0.5 mg/L

E. coli, colony-forming units or most probable number per 100 ml	126	126
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In addition to the TPDES permit, the plant will be designed to meet all Type I reuse effluent limits.

Plant Capacity and Buildout

The City has expressed a preference to construct a 3.0 MGD AADF facility due to anticipated growth. However, the decision to construct a 1.5 or 3.0 MGD facility will be made during Final Design with further project definition and with cost input from the CMAR. FNI's scope of work assumes the design of a 3.0 MGD facility with consideration for downsizing to 1.5 MGD. According to the 2022 Wastewater Master Plan (2022 WWMP), the ultimate buildout capacity for the Northlands WWTF was identified as 15.5 MGD. The PDSR anticipated a buildout capacity of up to 16.0 MGD. An updated WWMP, which includes the Northlands WWTF site, is currently in progress and will determine the revised buildout capacity for this facility. Until the completion of that plan, the future expansion increments for this facility remain uncertain.

Future Expansion Considerations

The facility's current TPDES permit authorizes treatment up to 3.0 MGD (AADF), and an expansion beyond 3.0 MGD will require a permit amendment and/or new outfall. It is anticipated that any future permit action will result in a Total Phosphorus permit limit of 0.15 mg/l or lower in accordance with recent permit decisions by the TCEQ. To address this, a membrane bioreactor (MBR) process is planned for this project. A key constraint is the current receiving stream (Jennings Branch/Cowan Creek). The creek is near its capacity for receiving treated effluent discharge, which may preclude additional discharge from the Northlands WWTF beyond 3.0 MGD. Accordingly, an evaluation of alternative effluent outfall locations will be required to accommodate flows associated with future plant expansions. A study to determine the feasibility and location of a secondary effluent outfall is included in the scope of work as a Special Service and described in more detail below.

Preliminary Design Summary:

Based on the evaluation during the Preliminary Design, the Project Features and assumed design capacities of each facility for the Northlands WWTF Site are summarized in Table 2 and Table 3.

Table 2 Project Features – Treatment Facility Site

Project Features	Description
Coarse Screening Structure	<u>3.0 MGD Facility:</u> Two (2) 12.0 MGD Mechanical Multi-Rake Bar Screens with 0.25 in bar spacing. <u>1.5 MGD Facility:</u> One (1) 12.0 MGD Mechanical Multi-Rake Bar Screen with 0.25 in bar spacing and manual screen backup.
Odor Control	Odor control system to be sized based on preliminary odor control readings in progress. Liquid or vapor-phase odor control sized for plant capacity.

Influent Lift Station	Wetwell sized for 32 MGD capacity (8 MGD AADF Expansion). Pumps installed based on selected facility capacity. N+1 redundancy.
Headworks Facility	<u>3.0 MGD Facility:</u> • Three (3) 6.0 MGD rotary drum fine screens, with ≤ 2 mm screen opening size. • One (1) 12.0 MGD stacked tray grit system (7-tray) with fully redundant grit pumps <u>1.5 MGD Facility:</u> • Two (2) 6.0 MGD rotary drum screens • Similar grit installation with initial 4-tray configuration.
MBR Splitter Box	Splitter structure with capability to split flows between the initial two MBR trains as well as future two additional MBR trains.
Membrane Bio-Reactor (MBR) System	<u>3.0 MGD Facility:</u> Two (2) bioreactor trains (2.0 MGD each) and three (3) MBR trains. Includes associated blowers, mixers, RAS/WAS pumps, chemical CIP system, aeration control system, MBR building/canopy, and MBR electrical room. <i>The scope assumes an MBR manufacturer will be preselected prior to final design.</i> <u>1.5 MGD Facility:</u> Two (2) MBR trains (1.0 MGD each) constructed for eventual conversion to 2.0 MGD trains. Equipment and MBR basins will be reduced accordingly.
Alum Storage and Feed Area	Slab and canopy over bulk tanks with alum feed pumps and appurtenances located in manufactured enclosure skid.
Ultraviolet (UV) System, Post Aeration, and Parshall Flume	Inclined UV system that includes UV splitter box, post aeration, and effluent flow meter. <u>3.0 MGD Facility:</u> • One (or two) channel(s) with capacity of 12.0 MGD with N+1 redundancy • Type I reuse disinfection for flows <9.0 MGD <u>1.5 MGD Facility:</u> • Once channel with capacity of 6.0 MGD with N+1 redundancy

Effluent Pump Station	Effluent wetwell and pump station sized for 12.0 MGD capacity. <u>3.0 MGD facility:</u> • Pump capacity of 12.0 MGD, N+1 redundancy <u>1.5 MGD facility:</u> • -Pump capacity of 6.0 MGD, N+1 redundancy
NPW and Reuse Pump Station	Combined NPW and Reuse wetwell sized for anticipated reuse and NPW demands Reuse pump station sized for 3.0 MGD reuse flow Non-potable water pump skid sized for 3.0 MGD plant uses. <i>Design will evaluate need for reuse storage tank.</i>
Chlorine Storage and Feed Area	Slab and canopy over sodium hypochlorite bulk tank/tote storage with feed pumps and appurtenances located in manufactured enclosure skid. Chlorine system sized for reuse and NPW system residuals.
Sludge Holding Tanks	Aerated sludge holding tank(s) with coarse-bubble diffusers, blowers, and canopy for blower area. <u>3.0 MGD facility:</u> • Two (2) sludge holding tanks with 600,000 gallon total storage capacity <u>1.5 MGD facility:</u> • One (1) sludge holding tank with 300,000 gallon storage capacity
Sludge Dewatering Facility	Sludge dewatering building sized for 6.0 MGD capacity (4 volute presses). Includes volute presses, sludge feed pumps, polymer feed system, sludge conveyance, sludge storage, and electrical/control panel room. <u>3.0 MGD facility:</u>

	- Two (2) four drum volute presses (6 drum buildout capacity) <u>1.5 MGD facility:</u> - One (1) four-drum volute press (6 drum buildout capacity)
Septic Receiving Station	Concrete dump station for receiving City Vacuum Truck Waste, design to be similar to San Gabriel WWTP.
Plant Drain System	Gravity system to influent lift station with optional plant drain lift station based on site conditions.
Electrical	New electrical service with main-tie-main configuration. All required electrical infrastructure to support WWTF. Electrical service sized for 3.0 MGD facility.
Electrical Building	One new (1) main electrical building.
Instrumentation and Controls	New instrumentation and controls infrastructure for facility using “ring” configuration for plant fiber.
Security and Access Control	New security cameras and access control readers
Back-Up Power Generation	New 1,500 to 2,000 kW backup generator to support plant loads.
Administration/Laboratory Building	New ~5,000 SF administration/laboratory building
Maintenance Building	New <1,000 SF two-bay maintenance/storage facility. Assumed to be garage type facility without HVAC, primarily used for storage.
Site Civil, Roadway, Grading, and Drainage	10’ sidewalk along Ronald Reagan - Permitted access road from Ronald Reagan - Water quality/stormwater basins - Plant road and sidewalk paving - Site grading and drainage design - Potable water and fire hydrant design - Preliminary design of Sun City Blvd extension through plant - Ornamental fencing around plant and planted buffer per City Ordinance - Onsite irrigation system

Table 3 Major Project Features – Off-Site

Project Features	Description
Influent Wastewater Diversion Structure	Passive diversion structure constructed on existing 21" interceptor. Orifice plate sized for selected Northlands capacity. Replacement of 127 linear feet of existing 21" interceptor with 36" and 30" lines in accordance with WWMP.
Cowan Creek Lift Station	Triplex Pump station sized 12.0 MGD (N+1) with backup generator, including sound enclosure. Installation of only two (2) pumps if 1.5 MGD capacity selected for Northlands WWTF. Connection to existing 24" force main along Martingale Street Odor control system based on results of odor study
Force Main from Cowan Creek Lift Station	600 linear feet, 24" force main from plant influent lift station, across Ronald Reagan, to connection to existing 24" force main from Cowan Creek Lift Station
Reuse Pipeline	300 linear feet, 16" reclaimed water line from plant reuse pump station, across Ronald Reagan, to connection to existing 16" reclaimed water line
Effluent Pipeline	9,200 linear feet, 24" pressurized outfall line from plant effluent pump station to Jennings Branch outfall
Effluent Outfall	Outfall structure at Jennings Branch
Extension of 24" Water Line	Extension of 24" waterline across site in existing City utility easement along Ronald Reagan ROW

Construction Manager At Risk (CMAR)

The City intends to procure the services of a CMAR to provide pre-construction services and manage the construction of the project. FNI will work with the CMAR through final design and construction of the project. The scope of work assumes preparation and issuance of a maximum of three (3) guaranteed maximum price (GMP) proposal packages for this project. A general assumption of the scope of the proposed GMP packages is described below. The actual package breakout will be determined in the early stages of the design with input from the CMAR and City.

- GMP Package #1: Tree removal, site preparation and/or offsite utilities
- GMP Package #2: Procurement of long lead-time equipment and electrical gear
- GMP Package #3: Balance of plant construction.

It is assumed the CMAR will be under contract prior to the completion of the 30% design deliverable. The CMAR will have primary responsibility for developing and maintaining cost and schedule models for the project beginning in the 30% design phase. FNI will work with the CMAR to review the cost model and any updates and to confirm the assumptions built into the cost model are in line with anticipated remaining design development.

Final Design

FNI will provide the following final design phase services for the processes described in Table 2 and Table 3. The project will be executed using 3-D design software for major structures.

- Process Mechanical Design
- Pipeline and Lift Station Design
- Structural Design
- Electrical Design
- Instrumentation and Controls Design
- Architectural Design
- HVAC and Plumbing Design
- Drainage, Paving, and General Site Civil Design
- Landscape and Irrigation Design

Deliverables will be provided for City review at the 30%, 60%, and 90% deliverable phases. The primary deliverable at 30% will be the initial Revit designs of major unit processes including cut plan and section views, electrical one-line diagrams, and Process and Instrumentation Diagrams (P&IDs). For subsequent deliverables, a status set of drawings and specifications will be produced for review by City and the CMAR. A workshop will be conducted to collect and document all comments for inclusion in the subsequent design milestone deliverable.

Bid Phase Services

Support the City and CMAR in the bidding and procurement of equipment, materials, contracting and subcontracting services; including consolidation of plans and specifications into a single conformed set of documents for use during construction of the project. The FNI Team will assist the CMAR and City by providing Issued For Bid (IFB) documents, participating in pre-bid meetings, responding to bidder questions, and providing support to the City during the award of individual bid packages. As noted in the CMAR section above, this scope assumes the issuance of up to three (3) GMP packages.

Early-Works Packages Construction Services

The scope of Construction Phase Services to be provided by FNI, are intended to be contracted in two phases given the uncertainty of the GMP package work breakout and schedule prior to the CMAR being under contract. This scope of work assumes effort for construction phase services for the first two GMP packages to assist with expediting the project. *Construction phase services for the balance of plant GMP will be provided in a future amendment.* The base assumptions for construction phase services in this scope are included below. Detailed assumptions regarding number of submittal reviews, site visits, etc. are included in Basic Services.

- GMP Package #1: Tree removal and site preparation
 - Construction Management, General Representation, and Resident Project Representation (RPR) for a construction duration of 9 months.
- GMP Package #1 Alternative (Special Service): Off-Site Utility Work
 - In the case that the CMAR elects to issue the off-site utility work as a standalone GMP package, general representation services for off-site utility work (in total) is included as a special service of this contract (performed by CDM Smith). *Construction Management and RPR services will still be performed by FNI for the duration described above.* If off-site utility work is not issued as an early-works package, this effort may be authorized on the appropriate GMP package.
- GMP Package #2: Procurement of long lead-time equipment and electrical gear
 - Submittal reviews and document management for pre-purchased equipment

Future Expansion Effluent Outfall Study (Special Service)

The City's existing TPDES permit to Jennings Branch/Cowan Creek has a final phase capacity of 3.0 MGD. It has been noted in previous discussions that there is limited capacity (assimilative and/or hydraulic) in the receiving stream and a future expansion of the Northlands WWTF may require the permitting of a secondary outfall. This goal of this evaluation is to verify the capacity of the Jennings Branch/Cowan Creek receiving stream system and assess alternative discharge locations for future wastewater effluent flows associated with the expansion of the WWTF. The work will include evaluation of water quality, hydrologic, hydraulic, and regulatory constraints. Permitting for a secondary outfall or increase in capacity of existing outfall is also included as a service to be authorized by City separately.

Additional Project Assumptions: The scope of work, level of effort, budget and schedule is based on the following assumptions. Additional efforts may be provided as an Additional Service.

- Base design assumptions follow those documented in the PDSR. Modifications to base design assumptions are an additional services.
- The project will be self-funded by the City without state or federal funding assistance.
- Construction of the project will be delivered using a CMAR, collaborative delivery method.
- In performing these services, it is understood that FNI does not guarantee the CMAR's performance, nor is FNI responsible for the supervision of the CMAR's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by the CMAR, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.
- The CMAR will be responsible for potholing utilities at tie-in points and critical crossings, to confirm locations for construction activities or based on requests and directions provided by the FNI Team as part of their Subsurface Utility Engineering (SUE). It is further assumed that the CMAR will be responsible for obtaining permits and utility locates (Texas One-call) necessary ahead of any potholing activities.
- The CMAR will be responsible for developing Division 00 Contract Documents. FNI Team will review.
- The duration of the project will be dependent upon regulatory review by TCEQ.
- The selected MBR supplier will be pre-selected under separate contract and prior to the start of 30% design. Final design services will be for a single MBR supplier's equipment. It is assumed the MBR supplier will be consistent between the Northlands and Three Forks Projects for ease of maintenance and operation.
- Building Construction: Assume tilt-up concrete panel walls for large buildings.

- Design for building security systems, fire control, and City networking will be provided by others and incorporated in design for construction by CMAR.
- Furniture, computers, and monitors will be procured by City and installed by CMAR.

ARTICLE I

BASIC SERVICES: FNI shall render the following professional services in connection with the development of the Project:

A. PROJECT MANAGEMENT AND ADMINISTRATIVE DUTIES: Upon execution of this Professional Services Agreement (PSA) and upon receiving a Notice to Proceed from the City, FNI will provide the project management services for each phase as follows:

1. Project Controls: FNI shall manage scope, time, cost, quality, staff resources, communications, and risk as necessary. Project controls shall include the management of the following “living-documents”. Some of these project controls, as indicated below, will be the responsibility of others and FNI Team will provide a supporting role.
 - a. Comment Log – FNI will be primarily responsible for Comment log with input from CMAR and the City.
 - b. Decision Log – FNI will be primarily responsible for the Decision Log with input from CMAR and the City.
 - c. Action Item Log – FNI will be primarily responsible for the Action Item Log during design with input from CMAR and the City. During construction, the CMAR will be primarily responsible for the Action Item Log with input from FNI and the City.
 - d. Risk Register – The CMAR will be primarily responsible for the Risk Register with input from FNI and the City.
 - e. Cost Model – the CMAR will be primarily responsible for the Cost Model and maintenance of a design change trend log. FNI Team will participate in the development, monitoring, and update of the cost model as the design progresses. The scope of work assumes updates of the cost model at 30%, 60%, 90%, and Issued for Bid (100%) submittal stages and intermittently at the request of the City if major scope change is introduced into the project.
 - f. Overall Project Schedule – the CMAR will be primarily responsible for the Project Schedule Model. FNI Team will participate in the development, monitoring, and update of the schedule model as the design progresses.
2. Communication: Consult with the City throughout the project to see that the scope of services is being met and verify the City’s requirements for the project are satisfactory.
3. Invoicing: FNI will prepare and submit invoices to the City.
4. Monthly Status Reports: FNI will prepare and submit monthly status reports to the City with FNI’s monthly invoice. Monthly status reports will comprise a one to two-page summary of the progress to date on the Project, work completed during the prior month, work anticipated to be completed during the upcoming month, and discussion of any scope, schedule, or budget issues that may need to be resolved.
5. Project Design Schedule: FNI will prepare a Microsoft Project design schedule and provide monthly updates including necessary revisions to bring the Project back on schedule if needed. The project schedule will not be resource loaded.
6. Quality Assurance / Quality Control: FNI will develop, implement and monitor a QA/QC plan for the work, including:
 - a. Completion of QA reviews, coordination with Senior Advisor, and documentation of all QC activities.

- b. Quality Control reviews will include use of Engineer's Disciplinary QC checklists, provision of QC Plan Documentation and provision of comment/ response forms for documenting and responding to City comments on all submittals.
- c. Manage efforts of internal design team and subconsultants on the Project and perform Quality Control reviews of all deliverables.

B. FINAL DESIGN PHASE: FNI shall provide professional services in this phase as follows:

- 1. Meetings and Site Visits: Prepare agendas and minutes for meetings described below.
 - a. Conduct a Final Design Phase Kick-off Meeting with City: (1) to review the scope of services, (2) review project schedule, (3) discuss and understand any other requirements or expectations the City may have for the project.
 - b. Monthly Progress Meetings: Conduct monthly progress and design review meetings, up to a maximum of fourteen (14) meetings during the design phase. Meetings may extend up to full-day workshops including time for "over-the-shoulder" review of BIM models in a workshop setting. Specific meeting topics listed below are included in the total of fourteen (14) meetings.
 - i. Conduct one (1) 3D model review workshop at the 30% design level to review the 3D models, answer questions and receive comments from the City's project team.
 - ii. Conduct design review workshops (2) at the 60% and 90% design milestones to review the construction documents, answer questions and receive comments from the City's project team.
 - iii. Conduct up to two (2) Process and Instrumentation Diagram (P&ID) workshops to review the proposed instrumentation and process control concepts.
 - iv. Conduct up to two (2) Startup and Commissioning workshops to establish any special operating procedures required during construction to enable the required details to be incorporated into the construction documents.
 - c. Weekly Internal Coordination Calls: Conduct virtual meetings with subconsultants and each engineering discipline to coordinate the design development. This includes periodic virtual meetings with the Three Forks Design Team to facilitate design consistence where applicable.
 - d. Weekly Project Management Calls: Conduct virtual meetings with City PM to discuss project progress, actions, decisions, issues, and upcoming effort.
 - e. Biweekly Coordination Meetings with CMAR: Conduct virtual PM meetings with CMAR to discuss project progress and design development.
 - f. Conduct site visits by the engineering team to the project site(s), for coordination on condition assessment and design aspects for completion of the project.

- g. Attend up to six (6) public meetings including City Council Workshops/Meetings, Water Utility Advisory Board Meetings, and Public Outreach Meetings as directed by the City
- 2. The scope of work is based on the project being divided into up to three (3) GMP Packages as described in the “Project Understanding” section of this scope and below. FNI Team will provide individual sets of plans (as needed) and specifications to reflect each GMP Package.
 - a. GMP Package #1: Offsite Utilities, Site Clearing.
 - b. GMP Package #2: Procurement of long lead-time equipment and electrical gear.
 - c. GMP Package #3: Balance of plant construction.
- 3. Prepare BIM models, drawings, specifications, Construction Contract Documents, designs, and layouts of improvements to be constructed for each milestone submittal described below and for the final construction contract documents. The scope of work assumes that the Design Criteria documented in the PDSR will be incorporated into the Final Design. Detailed design elements shall be developed using AutoCAD and Autodesk Revit BIM software for modeling the plant arrangement, coordinating with the City on the detailed mechanical, equipment, and structures, and for the development of plan sheets for bidding purposes. As such, some reviews will include 3D BIM Model reviews and some will incorporate traditional 2D plan reviews.
 - a. This project assumes the use of the Front-End Documents (Div. 00) developed by the CMAR and General Conditions prepared by the City. FNI Team will use its technical standards for drawings and its technical specifications. FNI Team will review CMAR Front-End Documents and coordinate with the City and CMAR for any changes to spec standards in the Supplemental Conditions and Front-End Documents.
- 4. 30% Design/3D Model Development
 - a. Develop site plans, yard piping plans, and 3D models of all proposed process structures and plans & sections for major structures.
 - b. Develop Process and Instrumentation Diagrams (P&IDs) for all proposed processes.
 - c. Develop electrical one-line diagrams.
 - d. Develop specification list.
 - e. Conduct internal quality control (QC) of the 30% deliverable.
 - f. Review and assist CMAR with 30% cost model
 - g. Submit 30% documents described above and assist CMAR with submission of 30% cost model for City for review and comment.
 - h. Incorporate all review comments from the City and CMAR and provide 30% comment response form with the next submittal.
- 5. 60% Design:
 - a. Prepare 60% design plans and specifications
 - b. Conduct internal quality control (QC) and incorporate CMAR constructability review comments at the 60% design level.
 - c. Review and assist CMAR with 60% cost model
 - d. Submit all 60% documents described above and assist CMAR with submission of 60% cost model for City review and comment.
 - e. Incorporate all review comments from the City and CMAR and provide 60% comment response form with the next submittal.
- 6. Early-works Procurement Packages (GMP #1):

- a. Prepare bid ready plans and specifications for early-works as determined by CMAR. Examples include site preparation, clearing or off-site utilities.
7. Equipment and Materials Pre-procurement Package (GMP #2) - Develop bid-ready technical specifications for equipment and materials to be pre-procured, up to the number described below:
 - a. The level of effort assumes technical specifications for the following process mechanical equipment: (1) coarse screen, (2) influent lift pumps, (3) fine screen, (4) grit removal equipment, (5) UV modules, (6) effluent and reuse pumps and (7) belt filter/volute press, and (8) any other associated components.
 - b. The level of effort assumes technical specifications for the following electrical equipment: (1) Major (>2000 amp) breakers, (2) generators, (3) transformers, (4) switchgear, and (5) variable frequency drives, and (6) any other associated components.
8. 90% Design (Issued for Bid and Regulatory Review) (GMP #3):
 - a. Prepare 90% design plans and specifications
 - b. Conduct internal quality control (QC) and incorporate biddability and constructability review comments at the 90% design level.
 - c. Review and assist CMAR with 90% cost model
 - d. Submit signed and sealed 90% documents described above
 - e. Incorporate all review comments from the City and CMAR and provide 90% comment response form.
 - f. Issued for Bid: Upon receipt and inclusion of 90% comments from City and CMAR, the signed and sealed 90% documents shall be used for bidding and regulatory review.
9. During preparation of 90% Plans and Specifications coordinate with plant staff and CMAR to develop Preliminary Construction Sequencing and Commissioning Plans. Conduct and facilitate workshops as described above:
 - a. Preliminary Commissioning Plan. Develop preliminary commissioning plan for startup of major process components. Identify locations where temporary bypass pumping, temporary isolation, or additional piping and appurtenances may be required for commissioning and testing of process components to be incorporated into the contract documents.
10. 100% Design (Issued for Construction) (GMP #3):
 - a. Reconcile all changes made after bidding and regulatory review phase.
 - b. Prepare final Issued for Construction (IFC) design plans.
 - c. Prepare final IFC project specifications.
 - d. Review and assist CMAR with 100% cost model
 - e. Conduct internal quality control (QC) at the 100% design level.
 - f. Regulatory Review and Coordination.
11. Coordinate with utility providers whose facilities may be affected or who would provide increased service for the plant expansion as needed (namely, electrical, potable water).
12. Provide guidance to and collaboration with the CMAR for Subsurface Utility Engineering (SUE) investigation of critical areas at the treatment plant site to detect underground utilities including, but not limited to, water lines, wastewater lines, gas and/or oil lines, electric conduit and buried electrical power, phone, fiber optic and other buried infrastructure.

Engineer will provide guidance and oversight. All field work, excavations, hydro-excavations, potholing, radar, or other methods of SUE investigation are the responsibility of the CMAR.

13. Furnish City, when requested, the engineering data necessary for applications for routine permits required by local, state and federal authorities.
 - a. Plans and Specifications will be submitted through the City's designated departments for construction permitting and approvals, including the ones listed below. The City will coordinate on obtaining all local government permits.
 - i. Planning Department: Site Development Plan, Subdivision Plat approval
 - ii. Engineering Department: Utility Evaluation approval, Drainage Study approval, Traffic Impact Analysis (TIA) approval, and Stormwater Permit (SWP)
 - iii. Fire Department: Fire Marshal approval of fire protection plan (required for Building Permits issuance)
 - iv. Electric Department: Electric Utility Services Availability Letter
 - v. Environmental Department: Heritage Tree Removal Permit (HTR), and Heritage Tree Pruning Permit (HTP), Water Quality Form (Edwards Zone)
 - vi. Building and Inspections Department: Building Permit, Sprinkler Permit, and Temporary Use Permit
 - vii. Transportation Department: Right-of-way (ROW) approval and Driveway Access Permit (DWP)
 - b. Permit applications, once determined to be complete (through a completeness check of 4 days) will be reviewed by the City within 30 days. The durations for the technical review by the City of the design documents will be as follows:
 - i. 1st Round: 4 weeks or 20 working days
 - ii. 2nd Round: 3 weeks or 15 working days
 - iii. 3rd Round: 2 weeks or 10 working days
 - iv. Subsequent rounds (if needed): 2 weeks or 10 working days
14. Submit Summary Transmittal Letter to the Texas Commission on Environmental Quality (TCEQ) for regulatory approval. As required, submit drawings, specifications, design documentation and Construction Contract Documents. No other submittals for regulatory or permitting reviews are anticipated or included in the Scope of Work.
15. Edwards Aquifer Protection Program Coordination and Documentation: perform tasks related to compliance with Edwards Aquifer Protection Program (EAPP), which is regulated by TCEQ and related to Section 401 Water Quality Certification. Compliance with the EAPP is required for projects occurring within the Edwards Aquifer Recharge or Contributing Zones. This shall include the items listed below:
 - a. The property is located within the Edwards Aquifer Recharge Zone.
 - b. Initial TCEQ coordination will be required to determine if the property will require a Water Pollution Abatement Plan (WPAP) or if a WPAP Exception Request will be allowed.

- c. Allowance of either a WPAP or WPAP Exception Request will be at the discretion of TCEQ.
- d. If the WPAP Exemption request is denied, the CONSULTANT will develop the WPAP documenting the BMPs adopted to reduce potential pollutants entering the Edwards Aquifer
- e. If the WPAP Exemption request is denied, the CONSULTANT will develop the Geologic Assessment (GA), per WPAP requirements.

16. Deliverables:

- a. 30% Design
 - i. One (1) electronic copy of 3D model outputs of major, proposed WWTF treatment units.
 - ii. One (1) PDF copy of 30% drawings
 - iii. One (1) PDF electronic copy of 30% technical specification list.
- b. 60% Design
 - i. One (1) PDF electronic copy of 60% design plans and specifications divided into up to three (3) individual packages.
 - ii. One (1) Log of comment responses.
- c. Early-works Construction Packages (GMP #1)
 - i. One (1) PDF electronic copy of plans and specifications for early-works as determined by CMAR.
- d. Equipment and Materials Pre-Procurement Package (GMP #2)
 - i. One (1) PDF electronic copy of technical specifications to be included in the Equipment and Materials Pre-procurement package.
- e. 90% Design (Issued for Bid and Regulatory Review) (GMP #3)
 - i. One (1) PDF electronic copy of 90% design plans and specifications divided into up to three (3) individual packages.
 - ii. One (1) Log of comment responses.
- f. Issued for Construction (GMP #3)
 - i. One (1) PDF electronic copy of 100% design plans and specifications divided into up to three (3) individual packages.
 - ii. One (1) Log of comment responses.

- C. BID PHASE: Bid phase services assume the project is constructed based on a Construction Manager at Risk (CMAR) project delivery method. FNI will assist the CMAR and City with the following activities during the bidding process for a total of three (3) guaranteed maximum price (GMP) proposal packages. Each GMP package will be divided by the CMAR into multiple bid packages according to the CMAR's subcontractor and vendor management plan. It is further assumed that a total of twenty-four (24) separate subcontractor bid or equipment procurement bid packages will be let by the CMAR to complete procurement of the project. FNI Team will assist the CMAR and City with the following activities during the bidding process.

1. Respond to questions and interpret bid documents. Prepare technical information to be incorporated into addenda by CMAR.
 2. Attend up to three (3) pre-bid meetings and assist CMAR in describing technical aspects of the project to prospective bidders.
 3. Generally, the CMAR tabulates and analyzes bids. However, if the CMAR elects to submit a bid in order to potentially self-perform a portion of the work, FNI will assist City to tabulate and analyze the bids received. FNI will review the qualification information provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified to construct that portion of the project.
 4. Recommend award of sub-contracts for CMAR to self-perform work components as appropriate.
 5. Incorporate addenda and prepare copies of Issued for Construction documents.
 6. Deliverables:
 - a. Electronic copies of IFC plans and specifications.
 - b. Tabulation of selection criteria for Proposers if CMAR submits a bid.
 - c. Recommendation of Award with tabulation of bids if CMAR submits a bid.
 - d. Notice of award to selected bidder if CMAR submits a bid.
- D. CONSTRUCTION PHASE SERVICES (EARLY-WORKS PACKAGES): Upon completion of the bid or negotiation phase services, FNI will proceed with the performance of construction phase services as described below. FNI will perform these services through a Construction Manager, Resident Project Representative, and the Engineering Design Team. The duration of services is estimated for GMP #1 below. Any delays resulting in an extension of construction phase services is considered an additional service. *Construction Phase Services for the Balance of Plant construction will be authorized under separate amendment.*

In performing these services, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

1. Early-Works Package (GMP #1): Estimated construction duration of 9 months
 - a. Assumptions:
 - i. CMAR delivery with an Early Works GMP addressing site activities to expedite the project prior to full design completion (e.g., tree removal, void mitigation, clearing/grubbing, erosion controls, excavation/grading, select foundations/pads, yard piping/ductbanks, off-site utilities, and similar elements determined by CMAR).
 - ii. Final Early Works content and duration will be confirmed upon receipt of CMAR's detailed schedule; scope and level of effort adjustments will be addressed with an

additional amendment. *All construction phase general representation services for off-site work has been included in Special Services.*

- b. General Representation:
 - i. Assist City and CMAR in conducting pre-construction conference(s) with the selected Contractor, review construction schedules prepared by the Contractor(s) pursuant to the requirements of the construction contract.
 - ii. Participate in up to nine (9) Monthly Construction Progress Meetings with the City and CMAR. Assist City in establishing an agenda for these meetings, facilitate meeting discussion and provide minutes for each meeting for City and Contractor comment.
 - iii. Establish communication procedures with the City and contractor. Submit monthly reports of construction progress. Reports will describe construction progress in general terms and summarize project costs, cash flow, construction schedule and pending and approved contract modifications.
 - iv. Establish and maintain a project documentation system consistent with the requirements of the construction contract documents. Monitor the processing of contractor's submittals and provide for filing and retrieval of project documentation. Produce monthly reports indicating the status of all submittals in the review process. Review contractor's submittals, including, requests for information (RFIs), modification requests, shop drawings, schedules, and other submittals in accordance with the requirements of the construction contract documents for the projects. Monitor the progress of the contractor in sending and processing submittals to see that documentation is being processed in accordance with schedules. Effort for this scope is based on the assumed number of submittals below:
 - 1. Shop Drawing – Twenty-Five (25)
 - 2. O&M Manuals – Five (5)
 - 3. RFIs – Fifteen (15)
 - v. Based on FNI's observations as an experienced and qualified design professional and review of the Payment Requests and supporting documentation submitted by Contractor, determine the amount that FNI recommends Contractor be paid on monthly and final estimates, pursuant to the General Conditions of the Construction Contract.
 - vi. Make nine (9) monthly visits to the construction site (as distinguished from the continuous services of a Resident Project Representative) to observe the progress and the quality of work and to attempt to determine in general if the work is proceeding in accordance with the Construction Contract Documents. FNI will report any observed defects or deficiencies in the work to City. Visits to the site in excess of the specified number are an Additional Service.
 - vii. Make up to two (2) additional visits to the site, non-concurrent with the monthly site visits and meetings, to provide additional specialty observation or inspection as may be required for the project.

- viii. Notify the contractor of non-conforming work observed on site visits. Recommend actions to correct defective work and recommend to City any special materials tests or performance tests needed.
- ix. Interpret the drawings and specifications for City and Contractor(s). Investigations, analyses, and studies requested by the Contractor(s) and approved by City, for substitutions of equipment and/or materials or deviations from the drawings and specifications is an additional service.
- x. Establish procedures for administering constructive changes to the construction contracts. Process contract modifications and negotiate with the contractor on behalf of the City to determine the cost and time impacts of these changes. Prepare change order documentation for approved changes for execution by the City. Documentation of field orders, where cost to City is not impacted, will also be prepared. Investigations, analyses, studies or design for substitutions of equipment or materials, corrections of defective or deficient work of the contractor or other deviations from the construction contract documents requested by the contractor and approved by the City are an additional service. Substitutions of materials or equipment or design modifications requested by the City are an additional service.
- xi. Prepare documentation for contract modifications required to implement modifications in the design of the project. Receive and evaluate notices of contractor claims and make recommendations to the City on the merit and value of the claim on the basis of information submitted by the contractor or available in project documentation. Attempt to negotiate a settlement value with the Contractor on behalf of the City if appropriate. Providing these services to review or evaluate construction contractor(s) claim(s), supported by causes not within the control of FNI are an additional service.
- xii. Conduct, in company with City's representative, a final review of the Project for conformance with the design concept of the Project and general compliance with the Construction Contract Documents. Prepare a list of deficiencies to be corrected by the contractor before recommendation of final payment. Assist the City in obtaining legal releases, permits, warranties, spare parts, and keys from the contractor. Review and comment on the certificate of completion and the recommendation for final payment to the Contractor(s). Visiting the site to review completed work in excess of two (2) trips are an Additional Service.
- c. Resident Project Representative (RPR)
 - i. Provide an on-site RPR for an assumed nine (9) months (40 hours/weeks).
 - ii. RPR duties and limitations are per FNI Attachment RPR (Rev. 11/20); RPR observes work for general conformance, documents progress, tracks tests/submittals, assists with change documentation and pay applications, and supports substantial completion/punch lists; RPR does not control means/methods, sequencing, or site safety and does not authorize deviations/substitutions.
 - iii. If Early Works extends beyond nine months or requires multi-shift/weekend coverage, RPR staffing and fee will be adjusted by amendment.

2. Long-Lead Equipment Procurement Package (GMP #2):

- a. Assumptions:
 - i. GMP #2 consists of pre-purchase of major process and electrical equipment (e.g. MBR equipment, electrical gear, generator(s)).
 - ii. Installation, field services, and commissioning to occur under a later GMP; this subtask focuses on technical submittal review and procurement coordination.
 - iii. Factory Tests (if required): Factory acceptance tests are not assumed; if directed by Owner, provide remote or in-person witness/testing support as additional services.
- b. General Representation:
 - i. Review technical submittals, including, requests for information (RFIs), modification requests, shop drawings, and other submittals in accordance with the requirements of the construction contract documents for the projects. Monitor the progress of the contractor in sending and processing submittals to see that documentation is being processed in accordance with schedules. Effort for this scope is based on the assumed number of major equipment submittals below:
 - 1. Major Equipment Shop Drawings – Fifteen (15)
 - 2. Major Equipment O&M Manuals - Fifteen (15)
 - 3. RFIs – Ten (10)

ARTICLE II

SPECIAL SERVICES: When requested by the City, FNI shall render the following professional services, which are not included in the Basic Services described above, in connection with the development of the Project:

- E. SUN CITY BOULEVARD EXTENSION EVALUATION: Prepare conceptual alignment for future Sun City Boulevard extension adjacent to Northlands WWTF to verify available land for roadway.
1. Data Collection and Review
 - a. Gather available roadway, planning, and GIS data related to the Sun City Boulevard extension.
 - b. Review property plats and boundary information for the site.
 - c. Identify applicable City of Georgetown roadway design standards, including lane configuration, right-of-way width, and roadway classification criteria.
 - d. Reference the City of Georgetown Construction Specifications and Standards Manual and the Unified Development Code (UDC) for roadway design criteria, including ROW width, design speed, and geometric constraints. Confirm arterial classification and design parameters (e.g., 135' ROW, 55 MPH design speed) per the City of Georgetown Thoroughfare Plan.
 2. Conceptual Alignment Development
 - a. Develop a conceptual horizontal alignment for the proposed extension of Sun City Boulevard across Ronald Reagan Boulevard.
 - b. Apply City of Georgetown Transportation Design Standards to establish ROW width, roadway cross-section, and up to two possible alignments.
 - c. Seek to maintain compatibility with the future planned connection at Ronald Reagan Boulevard.
 - d. Coordinate with the WWTF Design Team during the 30% design phase of the plant. Provide draft scope and exhibit for internal review and feedback.
 3. Exhibit Preparation
 - a. Prepare up to two conceptual exhibits showing the proposed alignment in relation to the NWWTP site boundary.
 - b. Provide aerial and parcel-based overlays to illustrate any ROW impacts.
 - c. Highlight areas where Northlands WWTF property may be required for the roadway corridor.
 4. Findings and Recommendations
 - a. Summarize whether ROW from the NWWTP site will be required to accommodate the proposed alignment.
 - b. Document findings in a technical memorandum with supporting exhibits.
- F. SECONDARY EFFLUENT OUTFALL STUDY:
1. Environmental Analysis: The Environmental professional services will be completed to support the study and include understanding the receiving stream's (Jennings Branch / Cowan Creek) capacity to receive effluent from an expanded Northlands WWTP. The study will include water quality assessment of the existing outfall stream as well as the alternative receiving outfall streams identified and the regulatory & environmental review support for the plant's

permitting strategy.

- a. Water Quality Assessment.
 - i. Evaluate the assimilative capacity using TCEQ's QUAL-TX model for dissolved oxygen (DO), biochemical oxygen demand (BOD), total suspended solids (TSS), and ammonia nitrogen to determine potential for additional loading to the receiving stream.
 - ii. Supplemental screenings for total dissolved solids (TDS), chlorides, and sulfates will be performed at existing and potential outfall locations.
 - b. Outfall Alternatives Environmental Evaluation: The outfall alternatives evaluation will assess environmental impacts to up to three (3) alternative receiving streams including potential options: Berry Creek / Dry Berry Creek outside the Edwards Aquifer Recharge Zone and North Fork San Gabriel River / Lake Georgetown.
 - i. Perform water quality analysis for the alternative streams similar to the scope mentioned in 2.a above.
 - ii. Perform comparative analysis of alternatives based on feasibility, permitting constraints, and environmental impacts.
 - c. Regulatory and Environmental Review
 - i. Initiate preliminary discussions with TCEQ regarding discharge capacity, permitting pathways, and effluent limit considerations.
 - ii. Identify and document other environmental or permitting constraints that may affect outfall siting and permitting.
 - iii. Provide recommendations to guide the permitting strategy for plant expansion.
 - d. Develop Environmental Analysis section for Technical Memorandum to outline Water Quality Assessment modeling and screening for the current receiving stream and potential alternative outfall locations.
2. Geomorphic, Hydrologic and Hydraulic Evaluation: Geomorphic, hydrologic and hydraulic professional services will be completed to support a study to understand the receiving stream's (Jennings Branch / Cowan Creek) capacity to receive effluent from an expanded Northlands WWTP. The receiving stream begins at the proposed WWTP outfall and ends at Cowan Creek's confluence with Berry Creek. The receiving stream is within Williamson County's Preliminary Floodplain and there are several homes within the floodplain (Map 1 and Map 2). An adverse hydraulic impact analysis will be completed to assess if the proposed effluent discharge(s) will increase flood water elevations near these homes. The study will also include identifying a secondary outfall receiving stream for the Georgetown Northlands WWTP. The proposed work will include the following tasks:
- a. Project Management
 - i. Attend external and internal kickoff meetings (two meetings)
 - ii. Bi-weekly progress meetings for the duration of the project. Project duration is 3 months (6 meetings).
 - iii. Internal management of the project.
 - b. Data Collection
 - i. Remote Data Collection
 1. Collect LiDAR data, Williamson County's preliminary hydraulic and hydrologic models, land use data and soil type data for the drainage area the will drain the proposed WWTP in Jennings Branch/Cowan Creek. If the County's models are not available and new models are needed, the work to create new models is

- considered additional work and will need an amendment before beginning.
 - 2. Obtain rainfall data from weather gauges and develop antecedent rainfall conditions leading up to the date field data is collected
 - ii. Field Data Collection
 - 1. Collect cross section data using GPS survey grade equipment. Collect twelve (12) cross sections in the receiving stream as seen in Map 1 and Map 2 near homes that are within or adjacent to the County's preliminary floodplain.
 - 2. Obtain discharge measurements at five (5) locations through the receiving stream where baseflow is observed. Calculate water depth and water velocity at these locations under the proposed effluent discharge(s).
 - 3. Leverage the bank erosion hazard index data collected during the baseline pollutant loading field visit and measure cross section topography at nine mapped eroding stream banks. Calculate water depth and water velocity at these eroding banks and predict response to new hydraulics under the proposed effluent discharge(s) hydrology.
- c. Adverse Hydraulic Impact Assessment
 - i. Duplicate Williamson County's preliminary hydrologic model. Subdivide the models' subbasins to provide the resolution needed to effectively calculate discharges at the proposed WWTP location and where there are homes within the County's preliminary floodplain.
 - ii. Correct hydrologic model input values for subdivided basins.
 - iii. Add two smaller rainfall fall events to the hydrologic model. Add the 1-year return interval rainfall event and the 0.5-year return interval rainfall event. Rainfall depths obtained from Atlas 14 online data.
 - iv. Input calculated discharges from HEC-HMS model into the County's preliminary hydraulic model. Run the preliminary hydraulic model for all calculated discharges. For each region where there are homes in or adjacent to the preliminary floodplain, extract water surface elevations.
 - v. Add proposed WWTP effluent discharges to the discharges in the hydraulic model. For budgetary purposes, it has been assumed two WWTP effluent discharge values will be studied. Run the preliminary hydraulic model under proposed conditions (i.e. with WWTP effluent discharge). Report changes in water surface elevations at locations identified in work item c.iv. above.
- d. Outfall Alternatives Hydraulic Evaluation: It is understood the City is considering other receiving streams to direct a portion of or all of the Northlands WWTP effluent to. The outfall alternatives evaluation will evaluate hydraulic impacts to two alternative receiving streams selected after the environmental analysis.
 - i. Duplicate Williamson County's preliminary hydrologic model. Subdivide the models' subbasins to provide the resolution needed to effectively calculate discharges at the proposed WWTP location. Correct the hydrologic model input values for subdivided basins
 - ii. Input calculated discharges from HEC-HMS model into the County's preliminary hydraulic model. Run the preliminary hydraulic model for all calculated discharges. Develop maps and digital files of the water surface elevations at the 100-year, 50-year and 10-year flood events.
 - iii. Add proposed WWTP effluent discharges to the discharges in the hydraulic model.

For budgetary purposes, it has been assumed two WWTP effluent discharge values will be studied. Run the preliminary hydraulic model under proposed conditions (i.e. with WWTP effluent discharge). Report changes in water surface elevations at locations identified in work item d.i. above.

e. Adverse Hydraulic Impact and Geomorphic Technical Memorandum

- i. Summarize the methodology, finding and recommendations of work items b. through d. above into a technical memorandum. Describe how the proposed hydrology (with WWTP discharge values) will impact the following:
 1. Flood water elevations
 2. Stream stability
 3. Water quality
 4. Ecological systems.
- ii. Facilitate a meeting with the City regarding the technical memorandum. Collect City comments and develop a comment resolution table.
- iii. Finalize the technical memorandum.

f. Assumptions

- i. Obtaining right of entry will be similar to how it was obtained during the baseline pollutant loading field work.
- ii. Williams County will provide the preliminary hydrologic models and hydraulic models used to map the preliminary floodplains.

3. Conduct a preliminary feasibility analysis for the secondary outfall (up to 3 alternatives) including effluent pipeline & pumps, and provide planning level cost estimates for the same. Cost options for 1 pipe material and 1 pump vendor will be considered for the analysis. Desktop environmental analysis and desktop cultural analysis for secondary outfall routes will be additional services.

G. FINAL DESIGN GEOTECHNICAL REPORT:

FNI will provide geotechnical services that includes the development of a Geotechnical Report Supplement to the existing record Geotechnical Report for all new structures anticipated for the Phase II expansion. Services will include the drilling of up to seventeen (17) bores at the proposed locations of new construction to document the subsurface conditions. Laboratory testing will be performed on the boring samples and an Engineering Analysis and report will be prepared. The geotechnical report will include recommendations for foundations, pavement, dewatering, excavation, fill, subgrade preparation, and slope stability for the proposed structures.

Obtain the services of a qualified geotechnical engineering firm (Terracon) to conduct additional geotechnical borings and provide a supplement to the existing Geotechnical Engineering Report as described below.

1. The proposed plan of borings for the plant expansion Geotechnical Study is presented in Table 4. Additional borings can be included as needed through Additional Services.

Table 4: Proposed Borings for Northlands WWTF Expansion

Planned Location ⁱ	No. of Borings	Planned Boring Depth (ft) ⁱⁱ
Sludge Dewatering Facility and Holding Tanks	5	30
Bioreactor Basins	4	30
Influent Lift Station	1	40
Effluent and Reuse Pump Stations	1	40
Equipment Buildings and Pads	6	20 ⁱⁱⁱ
Total Borings	17	
i. Borings will be supplemented by initial borings performed for the project in July 2025. ii. Below existing ground surface. iii. Borings may be shallowed to no less than 10', if at least 5' of competent limestone is sampled.		

2. Field Exploration
 - a. Provide limited pathway clearing using a Hydroaxe to access the boring locations.
 - b. Select and mark boring locations using handheld GPS equipment and notify Texas 811 to request location and marking of existing underground utilities prior to the field exploration.
 - c. Drill borings to the approximate depths shown in Table 4.
 - d. Provide an Engineer or Geologist experienced in logging borings to direct the drilling, log the borings, and handle and transport the samples. Visual classification of the subsurface stratigraphy shall be provided per the Unified Soil Classification System (USCS).
3. Geophysical Field Testing for the WWTF site
 - a. Provide a non-invasive geophysical investigation that includes 2D Electrical Resistivity (2DER) to look for subsurface anomalies that may indicate the presence of voids or karstic features over proposed critical WWTF structure locations.
 - b. The geophysical data will be collected as follows:
 - i. Five 2DER lines will be collected over proposed critical structures.
 - ii. Obstructed areas may impact the final line locations. Obstructed areas will not be tested.
 - iii. Data will be collected and processed after completion of field work.
4. Geophysical Field Testing for the Effluent Pipe Alignment
 - a. Provide geophysical exploration for the Effluent Pipe Alignment to identify any areas of potential karst development or zones. The investigation will prioritize the upper 5-10 feet of the subsurface using Ground Penetrating Radar (GPR) and Frequency Domain Electromagnetics (FDEM). Anomalies consistent with karstic activity identified from the near surface investigation will be evaluated with Electrical Resistivity Profiling (2DER).
5. Laboratory Testing
 - a. Testing shall be performed on samples obtained from the borings to determine soil classification and pertinent engineering properties of the subsurface materials. Select samples for laboratory testing, assign tests, and review the test results.

- b. Laboratory tests will be assigned based on the specific subsurface materials encountered during exploration. Test type and quantity may vary, but are expected to include:
 - i. Water content
 - ii. Unit dry weight
 - iii. Atterberg limits
 - iv. Grain size analysis
 - v. Unconfined compressive strength
 - vi. Corrosion Suite
- 6. Engineering Analysis
 - a. Prepare a Geotechnical Report to include:
 - i. Boring logs with field and laboratory data
 - ii. Stratification based on visual soil and rock classification
 - iii. Groundwater levels observed during and after the completion of drilling
 - iv. Site Location and Exploration Plans
 - v. Subsurface exploration procedures
 - vi. Description of subsurface conditions
 - vii. Recommended foundation options and engineering design parameters
 - viii. Estimated settlement of foundations
 - ix. Recommendations for design and construction of interior floor slabs
 - x. Seismic site classification
 - xi. Earthwork recommendations including site/subgrade preparation
 - xii. Lateral earth pressure recommendations for below-grade walls
 - xiii. Drainage considerations for below-grade walls and slabs
 - xiv. Discussion of open trench excavation methods and OSHA guidelines
 - xv. Backfill material and compaction recommendations for open trench excavations
 - xvi. Utility embedment and backfill recommendations
 - xvii. Recommended pavement options and design parameters
 - b. Prepare a Geophysical Field Services Report to include:
 - i. Summary of methods used during the geophysical exploration
 - ii. Site plan(s) of the areas explored
 - iii. Relevant geophysical data including, as appropriate:
 - iv. 2DER: 2DER profiles with interpretations of anomalies that may represent voids or karstic features, if any.
- H. ADDITIONAL SURVEY: Allowance of \$20,000 for additional field survey required for preparation of metes and bounds documents for easements, such as the 24" water line, stormwater outfall piping, electrical service, or off-site fiber.
- I. TPDES PERMITTING (NEW OUTFALL)
 - 1. Prepare meeting agendas and minutes and attend the following meetings:
 - a. Attend pre-application meeting with TCEQ needed for the TPDES Permitting effort.
 - b. Attend Permit Application submittal meeting with TCEQ (optional)
 - 2. Assist the CITY in applying for a TPDES Major Permit Amendment:

- a. Compile existing information and meet with CITY: FNI will obtain the current TPDES permit application forms from the Texas Commission on Environmental Quality (TCEQ). Where appropriate, FNI will use information, including pertinent maps and drawings, from the CITY's previous TPDES permit application to address questions in the current application. If necessary, FNI will meet with the CITY to review data, identify other information needed for the application, take photographs and make general observations at the facility site. CITY shall provide FNI with all previous application documents and relevant data if available.
 - b. Hold a pre-application meeting with TCEQ. FNI and CITY will meet with TCEQ to discuss the proposed improvement alternatives and anticipated limits.
 - c. Compile Effluent Analysis Results: FNI will coordinate with the CITY and its laboratory in obtaining laboratory analyses required for the permit application. FNI will provide the CITY and its designated laboratory with copies of tables from the current CITY application form for the laboratory to complete. FNI proposes that the laboratory complete these tables to reduce the risk of transcription errors. Upon receipt, FNI will review the tables for consistency with TCEQ required minimum analytical limits (MALs) and for reasonability of the results. CITY shall contract directly with the analytical laboratory as needed and provide the necessary data.
 - d. Prepare Permit Application and Transmittal Letter: FNI will provide an electronic copy of the draft permit amendment application for CITY's review. The application will include maps, engineering drawings, schematic diagrams, and other required figures. FNI will finalize the application based on the CITY's comments and deliver a final original application and three (3) copies for the CITY to transmit to the TCEQ. FNI will also provide a hard copy of the final application for the CITY's files.
 - e. Application Delivery and Meeting with TCEQ: If requested by CITY or TCEQ, FNI will meet with TCEQ staff to deliver the final application and to discuss the CITY's proposed improvements.
 - f. Following submittal of the application, FNI will answer questions and respond to requests for additional information up to 20 manhours.
- J. SUPPLEMENTAL SERVICES: Authorizes a design allowance of \$250,000 for unspecified professional services for the development of the Project. FNI shall seek prior written approval in the form of a task authorization before commencing work on any services, of which potentially could include, but not be limited to the following:
1. Value Engineering Services
 2. Construction Materials Testing
 3. Additional Public Outreach

- K. CONSTRUCTION PHASE SERVICES: OFF-SITE INFRASTRUCTURE (EWP #1 ALTERNATIVE): In the case that the off-site infrastructure work is issued as an early work package, the following general representation services will be performed by CDM Smith for an assumed duration of construction of 30 months.
1. Early-Works Package (Alternative GMP #1): Estimated construction duration of 30 months
 - a. Assumptions:
 - i. CMAR delivery with an Early Works GMP for Off-Site Infrastructure work. *As part of basic services, FNI will provide Construction Management and RPR services for the duration described (9 months). Additional RPR or CM effort will be negotiated as an amendment.*
 - b. General Representation:
 - i. Assist City and CMAR in conducting pre-construction conferences (up to 2) with the selected Contractor, review construction schedules prepared by the Contractor(s) pursuant to the requirements of the construction contract.
 - ii. Participate in up to thirty (30) Monthly Construction Progress Meetings with the City and CMAR.
 - iii. Perform a technical and functional review of shop drawings and other submittals. Review and respond to technical RFIs submitted by the CMAR. Review and comment on Change Order requests and initiate Change Order requests when appropriate. Effort for this scope is based on the assumed number of submittals below:
 1. Shop Drawing – Forty-Five (45)
 2. O&M Manuals – Twelve (12)
 3. RFIs – Thirty (30)
 - iv. Make thirty (30) monthly visits to the construction site in coordinate with construction meetings to observe the progress and the quality of work and to attempt to determine in general if the work is proceeding in accordance with the Construction Contract Documents. Report any observed defects or deficiencies in the work to City. Visits to the site in excess of the specified number are an Additional Service.
 - v. Make up to six (6) additional visits to the site, non-concurrent with the monthly site visits and meetings, to provide additional specialty observation or inspection as may be required for the project.
 - vi. Notify the CMAR of non-conforming work observed on site visits. Recommend actions to correct defective work and recommend to City any special materials tests or performance tests needed.
 - vii. Interpret the drawings and specifications for City and CMAR. Investigations, analyses, and studies requested by the CMAR and approved by City, for substitutions of equipment and/or materials or deviations from the drawings and specifications is an additional service.
 - viii. Conduct, in company with City's representative, a final review of the Project for conformance with the design concept of the Project and general compliance with the Construction Contract Documents. Prepare a list of deficiencies to be corrected by the contractor before recommendation of final payment. Review and comment on the certificate of completion and the recommendation for final payment to the CMAR.

- ix. Visiting the site to review completed work in excess of construction meetings and special meetings defined above is an additional service.
- x. Provide as-built documentation to City following substantial completion. Prepare record drawings based on CMAR's markups. Submit record drawings in electronic .pdf format.
- xi. Deliverables:
 - 1. Submittal review responses (electronic .pdf format)
 - 2. RFI responses (electronic .pdf format)
 - 3. Change Orders (electronic .pdf format)
 - 4. Site observations reports (electronic .pdf format)
 - 5. Punchlist (electronic .pdf format)
 - 6. Record drawings (electronic .pdf format)

ARTICLE III

ADDITIONAL SERVICES: Any services performed by FNI that are not included in the Basic Services or Special Services described above are Additional Services. Additional Services to be performed by FNI, if authorized by City, are described as follows:

1. Design for building security systems, fire control, and City networking
2. Field layouts or the furnishing of construction line and grade surveys.
3. Revisions to drawings, specifications or other documents when such revisions are 1) not consistent with approvals or instructions previously given by City or 2) due to other causes not solely within the control of FNI.
4. GIS mapping services or assistance with these services.
5. Providing services to investigate existing conditions or facilities, or to make measured drawings thereof, solely for the purpose of updating drawings or other information furnished by City.
6. Investigations involving consideration of operation, maintenance and overhead expenses, and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals, evaluations, assessment schedules, and material audits or inventories required for certification of force account construction performed by City.
7. Preparing applications and supporting documents for government grants, loans, or planning advances and providing data for detailed applications.
8. Conducting pilot plant studies or tests.
9. Preparing data and reports for assistance to City in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.
10. Assisting City in preparing for, or appearing at litigation, mediation, arbitration, dispute review boards, or other legal and/or administrative proceedings in the defense or prosecution of claims disputes with Contractor(s).
11. Assisting City in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this Agreement. Such services, if any, shall be furnished by FNI on a fee basis negotiated by the respective parties outside of and in addition to this Agreement.
12. Other than work required to secure TCEQ permitting, design, contract modifications, studies or analysis required to comply with local, State, Federal or other regulatory agencies that become effective after the date of this agreement.
13. Services required to resolve bid protests or to rebid the projects for any reason.
14. Providing basic or special services on an accelerated time schedule. The scope of this service include cost for overtime wages of employees and consultants, inefficiencies in work sequence

and plotting or reproduction costs directly attributable to an accelerated time schedule directed by the City.

15. Providing services made necessary because of unforeseen, concealed, or differing site conditions or due to the presence of hazardous substances in any form.
16. Preparing statements for invoicing or other documentation for billing other than for the standard invoice for services attached to this professional services agreement.
17. Providing consultation concerning the replacement of any Work damaged by fire or other cause during the construction, and providing services as may be required regarding the replacement of such Work.
18. Providing shop, mill, field or laboratory inspection of materials and equipment. Observe factory tests of equipment at any site remote to the project or observing tests required because of equipment failing the initial test.
19. Any services required because of default of the contractor(s) or the failure, for any reason, of the contractor(s) to complete the work within the contract time.
20. Providing services after the completion of the construction phase not specifically listed in Basic or Special Services.
21. Providing services to review or evaluate construction subcontractor(s) claim(s), provided said claims are supported by causes not within the control of FNI.
22. Provide follow-up professional services during Contractor's warranty period besides those included in Special Services.
23. Furnishing Special Inspections required under the International Building Code (continuous inspections beyond resident/general representation).
24. Performing investigations, studies, and analyses of substitutions of equipment and/or materials or deviations from drawings/specs.
25. Performing investigations, studies, and analyses of work proposed by construction Contractors to correct defective work.
26. Visits to the site more than the number of trips included in Basic Services.
27. Providing value engineering studies or reviews of cost savings proposed by Contractors after bids have been submitted.
28. Designing additional facilities beyond those identified in Basic Services.
29. NPDES applications services if applications become contested (only uncontested included in Basic).
30. Preparation of a Stormwater Pollution Prevention Plan (SWPPP) for the Project.
31. Providing services for pre-qualification of prospective bidders and issuing a list of eligible bidders prior to bid opening.

ARTICLE IV

TIME OF COMPLETION: FNI is authorized to commence work on the Project upon execution of this Agreement and agrees to complete the services in accordance with the schedule presented below.

- | | |
|---------------------------------|--|
| 1. 30% Submittal: | 4.5 months after NTP |
| 2. 60% Submittal: | 4 months after receipt of 30% comments |
| 3. 90% Submittal: | 4.5 months after receipt 60% comments |
| 4. Final Submittal: | 1 month after receipt of 90% comments |
| 5. Bid and Award GMP Package 1: | 2 months (estimate) |
| 6. Bid and Award GMP Package 2: | 2 months (estimate) |

If FNI's services are delayed through no fault of FNI, FNI shall be entitled to adjust contract schedule consistent with the number of days of delay. These delays may include but are not limited to delays in City or regulatory reviews, delays on the flow of information to be provided to FNI, governmental approvals, etc.

These delays may result in an adjustment to compensation.

ARTICLE V

RESPONSIBILITIES OF CITY: City shall perform the following in a timely manner so as not to delay the services of FNI:

- A. City recognizes and expects that change orders may be required to be issued during construction. The responsibility for the costs of change orders will be determined on the basis of applicable contractual obligations and professional liability standards. FNI will not be responsible for any change order costs due to unforeseen site conditions, changes made by or due to the City or Contractor, or any change order costs not caused by the negligent errors or omissions of FNI. Nothing in this provision creates a presumption that, or changes the professional liability standard for determining if, FNI is liable for change order costs. It is recommended that the City budget a minimum of 5% for new construction and a minimum of 10% for construction that includes refurbishing existing structures.
- B. Designate in writing a person to act as City's representative with respect to the services to be rendered under this Agreement. Such person shall have contract authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to FNI's services for the Project.
- C. Provide all criteria and full information as to City's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which City will require to be included in the drawings and specifications.
- D. Assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.
- E. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this Agreement.

- F. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by FNI, obtain advice of an attorney, insurance counselor and other consultants as City deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay, or cause rework in, the services of FNI.
- G. Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.
- H. Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such legal services as City may require or FNI may reasonably request with regard to legal issues pertaining to the Project including any that may be raised by Contractor(s), such auditing service as City may require to ascertain how or for what purpose any Contractor has used the moneys paid under the construction contract, and such inspection services as City may require to ascertain that Contractor(s) are complying with any law, rule, regulation, ordinance, code or order applicable to their furnishing and performing the work.
- I. Attend the pre-bid conference, bid opening, preconstruction conferences, construction progress and other job-related meetings and substantial completion inspections and final payment inspections.
- J. Give prompt written notice to FNI whenever City observes or otherwise becomes aware of any development that affects the scope or timing of FNI's services, or any defect or nonconformance of the work of any Contractor.
- K. Furnish, or direct FNI to provide, Additional Services as stipulated in Attachment SC, Article III of this Agreement or other services as required.
- L. Bear all costs incident to compliance with the requirements of this Article V.
- M. City shall provide all materials testing required for quality assurance and control during the construction phase.

ARTICLE VI

DESIGNATED REPRESENTATIVES: FNI and City designate the following representatives:

City's Designated Representative – Larry Taylor, Larry.Taylor@georgetowntx.gov, 512-930-6914

FNI's Designated Representative – Coby Gee, Coby.Gee@freese.com, 512-617-3183

FNI's Accounting Representative – Ashley O'Neil, Ashley.ONeil@freese.com, 512-737-2051

ARTICLE VII

FEES SUMMARY: The following table provides a summary of the fees for the scope described above.

Summary Fee	
BASIC SERVICES	TOTAL
A. Project Management	\$500,899
B. Final Design	\$8,209,663
30% Design	\$2,301,162
60% Design	\$2,394,131
Early Works Packages Preparation	\$213,992
90% Design	\$2,329,834
100% Design	\$970,544
C. Bid Phase	\$270,808
D. Construction Phase	\$893,973
Early Works Package #1 (9 Months, includes CM and RPR)	\$650,353
Early Works Package #2 (Long-Lead Equipment)	\$243,620
Basic Services Subtotal	\$9,875,343
SPECIAL SERVICES	
E. Sun City Boulevard Extension Evaluation	\$28,686
F. New Outfall Study	\$162,038
G. Final Design Geotechnical	\$89,940
H. Additional Survey	\$23,000
I. TPDES Permitting (New Outfall)	\$34,678
J. Supplemental Services	\$250,000
K. Early Works Package #1 Alternate (Off-Site Infrastructure)	\$527,520
Special Services Subtotal	\$1,115,862
Total	\$10,991,205

PROJECT REPRESENTATION

The Engineer will have a Resident Project Representative on the Site. In performing these services, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

- A. The duties, responsibilities, and the limitations of authority of the Resident Project Representative, and designated assistants, are as follows:
1. Resident Project Representative is Engineer's agent at the site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding Resident Project Representative's actions. Resident Project Representative's dealings in matters pertaining to the on-site Work shall in general be with Engineer and Contractor, keeping City advised as necessary. Resident Project Representative's dealings with Subcontractors shall only be through or with full knowledge and approval of Contractor. Resident Project Representative shall generally communicate with City with the knowledge of and under the direction of Engineer.
 2. These services are based on the use of EJCDC CMAR-700 General Conditions and CMAR 800 Supplementary Conditions under revision by City Attorney. Modifications to these services required by use of other general conditions or contract administration procedures are an additional service. The City agrees to include provisions in the General Conditions that require Contractor to include FNI: (1) as an additional insured and in any waiver of subrogation rights with respect to such liability insurance purchased and maintained by Contractor for the Project (except workers' compensation and professional liability policies); and (2) as an indemnified party in the Contractor's indemnification provisions where the City is named as an indemnified party.
- B. Duties and Responsibilities of Resident Project Representative:
1. Schedules: Review the progress schedule, schedule of Shop Drawing submittals and schedules of values prepared by Contractor and consult with Engineer concerning acceptability.
 2. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.

3. Liaison:
 - a. Serve as Engineer's liaison with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of Contract Documents; and assist Engineer in serving as City's liaison with Contractor when Contractor's operations affect City's on-site operations.
 - b. Assist in obtaining from City additional details or information, when required for proper execution of the Work.
4. Shop Drawings and Samples:
 - a. Record date of receipt of Shop Drawings and Samples.
 - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
 - c. Advise Engineer and Contractor of the commencement of any Work requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.
5. Review of Work, Rejection of Defective Work, Inspections and Tests:
 - a. Conduct on-site observations of the Work in progress to determine if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Report to Engineer whenever Resident Project Representative believes that any Work will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of Work the Resident Project Representative believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
 - c. Verify that tests, equipment and systems start-up and operating and maintenance training are conducted in the presence of appropriate personnel, and the Contractor maintains adequate records thereof; and observe record and report to Engineer appropriate details relative to the test procedures and start-ups.
 - d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to Engineer.
6. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

7. Request for Revisions: Consider and evaluate Contractor's suggestions for revisions to Drawings or Specifications and report with Resident Project Representative's recommendations to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
8. Records:
 - a. Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents, including all Work Change Directives, Addenda, Change Orders, Field Orders, Written Amendments, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, submittals and correspondence received from and delivered to Contractor and other Project related documents.
9. Reports:
 - a. Furnish to Engineer periodic reports as required of progress of the work and of Contractor's compliance with the progress schedule and schedule of Shop Drawings and Sample submittals.
 - b. Consult with Engineer in advance of scheduled major tests, inspections or start of important phases of the Work.
 - c. Draft proposed Written Amendments, Change Orders and Work Change Directives, obtaining backup material from Contractor and recommend to Engineer Written Amendments, Change Orders, Work Change Directives, and Field Orders.
 - d. Report immediately to Engineer and City the occurrence of any accident.
10. Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to City, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment at the Site but not incorporated in the Work.
11. Certificates, Maintenance and Operation Manuals: During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to Engineer for review and forwarding to City prior to final payment for the Work.
12. Completion:
 - a. Before Engineer issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.
 - b. Observe whether Contractor has performed inspections required by laws or regulations, ordinances, codes or order applicable to the Work, including but not limited to those to be performed by public agencies having jurisdiction over the Work.

- c. Conduct a final inspection in the company of Engineer, City and Contractor and prepare a final list of items to be completed or corrected.
- d. Observe whether all items on final list have been completed or corrected and make recommendations to Engineer concerning acceptance.

C. Limitations of Authority of Resident Project Representative:

- 1. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items), unless authorized by Engineer.
- 2. Shall not exceed limitations of Engineer's authority as set forth in Agreement or the Contract Documents.
- 3. Shall not undertake any of the responsibilities of Contractor, Subcontractor, Suppliers, or Contractor's superintendent.
- 4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.
- 5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work or any activities or operations of City or Contractor.
- 6. Shall not accept shop drawing or sample submittals from anyone other than the Contractor.
- 7. Shall not participate in specialized field or laboratory tests or inspections conducted by others, except as specifically authorized by Engineer.

City of Georgetown, Texas
Water Utility Advisory Board
January 8, 2026

SUBJECT:

Third Amendment to the Interceptor Lift Station Decommissioning and Interceptor Improvements Project Task Order KPA-25-001

SUGGESTED ACTION:

Consideration and possible recommendation to City Council to approve a Third Amendment to Task Order KPA-25-001 with Kasberg, Patrick and Associates, LP for professional services related to the Interceptor Lift Station Decommissioning and Interceptor Improvements Project in the amount of \$743,500.00 -- Wesley Wright, PE, Systems Engineering Director

ITEM SUMMARY:

City Council approved the initial Task Order for the Interceptor Lift Station Decommissioning and Interceptor Improvements Project on November 26, 2024. The original scope included two primary components: (1) decommissioning and abandonment of the Interceptor Lift Station, and (2) the design of a new gravity interceptor line to replace the existing lift station conveyance. As part of the gravity line design, the consultant (KPA) was tasked with evaluating the existing system and reviewing up to three potential alignment routes.

The Lift Station was constructed in 1986 and is approaching 40 years in service. It currently has two (2) pumps in operation with space for four (4) pumps. Over the past three (3) months, the lift station has averaged approximately 40 hours of run time per month. Additionally, the existing lift station is not adequately sized to handle build-out flows from the full build of Wolf Lakes on the west side of IH35. Rather than reconstruct and expand the existing lift station, staff recommends a gravity retrofit.

At the start of design, it was assumed that the new gravity interceptor could be constructed using traditional open-cut installation methods. However, after survey data was collected and existing manhole elevations were confirmed, it was determined that the required depths to maintain proper grade would necessitate micro-tunneling rather than open-cut trenching. Micro-tunneling provides the necessary depth while mitigating significant impacts to surface conditions and adjacent properties.

The Task Order Amendment reflects the shift from an open-cut construction approach to a micro-tunneling installation method. This change requires additional engineering design and geotechnical investigation to support final construction documents.

To support micro-tunnel design, KPA will utilize a subconsultant to perform approximately seven (7) geotechnical borings, ranging from 6 feet to 40 feet in depth, along the proposed interceptor route. The subsurface data obtained from these borings is required to properly design and specify tunnel boring methods, pipe material, jacking forces, and shaft construction.

With design modifications, this Task Order Amendment also includes additional bidding support for Competitive Sealed Proposals (CSP). We will likely utilize the CSP procurement method instead of a

traditional low bid to ensure the contractors qualifications, experience with micro-tunneling, and technical approach are evaluated in addition to cost.

Project Status:

- Surveying is complete, and the alignment has been verified.
- The excavation and installation method has been finalized as micro-tunneling.
- Construction drawings are currently at approximately 90% completion.
- Metes and bounds descriptions have been obtained for affected parcels.
- Easement acquisition efforts are now underway.
- Construction late 2026

Staff recommends approval of the Third Amendment to Task Order KPA-25-001 with Kasberg, Patrick and Associates, LP professional services related to Interceptor Lift Station Decommissioning and Interceptor Improvements Project in a lump sum payment of \$743,500.00.

ATTACHMENTS:

Task Order No. KPA-25-001

Exhibit A - 1 Original Route

Exhibit A - 2 Revised Route

Exhibit B - Fee Schedule

Exhibit C - Profile of WW Line and Elevation

Exhibit D - Pictures of Current Conditions

FINANCIAL IMPACT:

Funds for this expenditure are available in the FY26 Wastewater CIP Budget PRJ000264.

SUBMITTED BY:

Dustin Clarkson, Systems Engineering

ATTACHMENTS:

[Thrid Amendment KPA Task Order KPA-25-001.pdf](#)

EXHIBIT K, consisting of _____ pages, referred to in and part of the Master Services **Agreement between Owner and Kasberg, Patrick & Associates, LP (“Engineer”) for Professional Services – Task Order Edition** dated March 23, 2016.

Third Amendment to Task Order No. KPA-25-001-TO

1. Specific Project Data:

- A. Title: Water and Wastewater System Improvements Projects
- B. Description: The Waters Edge Lift Station Decommissioning & Interceptor Improvements project scope has increased. The original scope consisted of extending a wastewater line from Waters Edge to San Gabriel Village Boulevard. (approximately 800 linear feet) by conventional open cut methods. In order to allow gravity flow, the actual length of pipe required is 2,500 linear feet with cuts of 30-45 feet deep. The depth of installation will require the project to be constructed by micro-tunneling. Additionally, the design scope is modified to include the necessary geotechnical bores required for bidding the micro-tunneling project and the associated wastewater bypass and extended traffic control plans. Additional bidding scope is also included in this amendment. However, additional Construction Administration (CA) fees are not included at this time. A separate amendment will be prepared prior to the construction phase for the applicable CA scope, including third party on site representation.
- C. City of Georgetown Project Number: _____
- D. City of Georgetown General Ledger Account No.: _____
- E. City of Georgetown Purchase Order No.: _____
- F. Master Services Agreement, Contract Number: 22-112-MSA_____

2. Nature of Amendment [*Check those that are applicable and delete those that are inapplicable.*]

- ☒ Additional Services to be performed by Engineer
- ☐ Modifications to Services of Engineer
- ☐ Modifications to Responsibilities of Owner
- ☐ Modifications to Payment to Engineer
- ☐ Modifications to Time(s) for rendering Services
- ☐ Modifications to other terms and conditions of the Task Order

3. Description of Modifications

- A. Engineer shall perform the following Additional Services:

The original construct scope essentially covered the preliminary design of the improvements (alignments, construction considerations, costs, etc.) that allowed a 30% set of construction plans to be developed. The additional pipe length and specialized construction method require additional final design services, including the addition of geotechnical investigations to allow completion of the technical specifications. Additionally, the scope and duration of the construction administration phase are also increasing. This amendment is for the applicable final design services to take the preliminary design to 100% plans and specifications.

- B The Scope of Services currently authorized to be performed by Engineer in accordance with the Task Order and previous Amendments, if any, is modified as follows:

The scope of services remains essentially the same, except expanded based on the revised scope of the project with the following additions:

1. Final design, including coordination with micro-tunneling contractors, of an in-situ wastewater installation.
2. Geotechnical bores – 5 total (3 @ 40 ft deep, 1 @ 50 ft deep and 1 @ 60 ft deep)

- C. The responsibilities of Owner are modified as follows:

n/a

- D. For the Additional Services or the modifications to Services set forth above, Owner shall pay Engineer the following additional or modified compensation:

Lump Sum Amount of \$743,500 (See attached Exhibit B – Fee Schedule)

- E. The schedule for rendering Services is modified as follows:

The final design services will be completed within 150 days of approval of the amendment.

- F. Other portions of the Task Order (including previous Amendments, if any) are modified as follows:

4. Attachments [if any]:

Exhibit A1/A2 – Original / Revised Site Maps
Exhibit B – Fee Schedule

Terms and Conditions: Owner and Engineer hereby agree to modify the above-referenced Task Order as set forth in this Amendment. All provisions of the Agreement and the Task Order not modified by this or previous Amendments remain in effect. The Effective Date of this Task Order Amendment is _____.

OWNER:

ENGINEER:

By:

By:



Name: Nick Woolery

Name: Thomas D. Valle, PE

Title: Assistant City Manager

Title: Partner

Engineer License or Firm's
Certificate No.

F-510

State of:

Texas

Date:

December 30, 2025

APPROVED AS TO FORM:

City Attorney