

**FULTON COUNTY BOARD OF COMMISSIONERS
FIRST REGULAR MEETING**

March 5, 2025
10:00 AM



Fulton County Government Center
Assembly Hall
141 Pryor Street SW
Atlanta, Georgia 30303



A G E N D A

CALL TO ORDER: Chairman Robert L. Pitts

ROLL CALL: Tonya R. Grier, Clerk to the Commission

Robert L. Pitts, Chairman (At-Large)
Bridget Thorne, Commissioner (District 1)
Bob Ellis, Vice-Chairman (District 2)
Dana Barrett, Commissioner (District 3)
Mo Ivory, Commissioner (District 4)
Marvin S. Arrington, Jr., Commissioner (District 5)
Khadijah Abdur-Rahman, Commissioner (District 6)

INVOCATION: Reverend Clifton Dawkins, Jr., County Chaplain

PLEDGE OF ALLEGIANCE: Recite in unison

ANNOUNCEMENTS

PLEASE SWITCH ALL ELECTRONIC DEVICES (CELL PHONES, PAGERS, PDAs, ETC.) TO THE SILENT POSITION DURING THIS MEETING TO AVOID INTERRUPTIONS.

IF YOU NEED REASONABLE MODIFICATIONS DUE TO A DISABILITY, INCLUDING COMMUNICATIONS IN AN ALTERNATE FORMAT PLEASE CONTACT THE OFFICE OF THE CLERK TO THE COMMISSION. FOR TDD/TTY OR GEORGIA RELAY SERVICE ACCESS DIAL 711.

CONSENT AGENDA**25-0141 Board of Commissioners**

Adoption of the Consent Agenda - All matters listed on the Consent Agenda are considered routine by the County Commission and will be enacted by one motion. No separate discussion will take place on these items. If discussion of any Consent Agenda item is desired, the item will be moved to the First Regular Meeting Agenda for separate consideration.

25-0142 Board of Commissioners

Proclamations for Spreading on the Minutes.

Proclamation recognizing "Ben Howard Remembrance Day."
(Abdur-Rahman/BOC)
February 18, 2025

Proclamation recognizing "Zeta Phi Beta Sorority, Inc. Appreciation Day." **(Pitts)**
February 23, 2025

Proclamation recognizing "Black Heroes Day." **(Arrington)**
February 28, 2025

Commissioners' District Board Appointments**25-0143 Board of Commissioners****FULTON COUNTY ARTS COUNCIL**

The Arts Council shall be composed of fifteen (15) residents of the county. Initially, each member of the Board of Commissioners shall appoint two persons to serve on the council, one person to serve for a one-year term and one person to serve a two-year term. No term of any member shall extend beyond the term of the District Commissioner who appointed the member to serve on the Arts Council Board; thereafter, each year, each member of the Board of Commissioners shall appoint one member for a two-year term. Each member may continue to serve beyond his/her term until replaced. The Chairman of the Arts Council shall be appointed to a two-year term by a majority vote of the Board of Commissioners. The Council shall elect a vice-Chairman and a secretary from its membership.

Term = 2 years

Term below expired: 12/31/2023
Vacant **(Ivory)**

Commissioner Ivory has nominated Fahamu Pecou for a District appointment to a term ending December 31, 2025.

25-0144 Board of Commissioners**FULTON COUNTY CITIZENS COMMISSION ON THE ENVIRONMENT**

The Fulton County Citizens Commission on the Environment shall consist of citizens from throughout Fulton County to be appointed by the Members of the Board of Commissioners. There shall be fourteen (14) members to serve on the Commission. In making such appointments, the Fulton County Board of Commissioners shall ensure that the terms of appointment are staggered. Each District Commissioner shall appoint one Commission member to a four (4) year term. Each District Commissioner shall also appoint one Commission member to a two (2) year term to ensure staggered terms. After the expiration of each appointee's initial term, the regular term of office for such an appointee shall be four (4) years. No term of any member shall extend beyond the term of the District Commissioner who appointed the member to serve on the Fulton County Citizens Commission on the Environment; however, each member may continue to serve beyond his/her term until replaced. After the expiration of any appointee's initial term, the Commission may recommend to the Fulton County Board of Commissioners a list of eligible persons for consideration as appointees to the Commission. The Appointing member of the Fulton County Board of Commissioners may remove his/her appointee(s) to this Commission at any time and within the sole discretion of that individual of the Fulton County Board of Commissioners.

Term = 4 Years

Term below expired: 12/31/2018

Richard Johnson **(At-Large)**

Chairman Pitts has nominated Richard Johnson for a District reappointment to a term ending December 31, 2026.

25-0145 Board of Commissioners**FULTON COUNTY HOMELESS CONTINUUM OF CARE (CoC)**

One (1) representative will be nominated by each of the Commission Districts for a total of seven (7) members; this includes one representative from District 1, 2, 3, 4, 5, 6, 7. Each representative will serve a two-year term and could be re-appointed to serve additional terms. Notwithstanding the foregoing, no term of any member nominated by a District Commissioner shall extend beyond the term of the District Commissioner who nominates that member.

Term = 2 Years

Term below expired: 12/31/2024

Lucy Hall **(Pitts)**

Chairman Pitts has nominated Lucy Hall for a District reappointment to a term ending December 31, 2026.

25-0146 **Board of Commissioners**
COMMISSION ON ELDER AFFAIRS

Seven (7) appointees by the Board of Commissioners (one for each District); three (3) appointees from each of the non-profit umbrella agencies, which the County contracts with for aging services; and three (3) senior citizens elected by seniors in the three geographical areas of the County. The terms of such members appointed by the Board of Commissioners shall end at the end of the term of the appointing District Commissioner. Such members may continue to serve beyond his/her term until a successor is appointed.

Term = Shall end at the end of the term of the appointing District Commissioner

Term below expires: 12/31/2026
Vacant (**Barrett**)

Commissioner Barrett has nominated Gary Uitvlugt for a District appointment to an unexpired term ending December 31, 2026.

Open & Responsible Government

25-0147 **Purchasing and Contract Compliance**

Request approval to correct the record for agenda item 24-0599, in order to reflect the correct name of the entity, the County is contracting with for 24RFP050124C-MH (Vision), Employee Healthcare Benefit Plan, so the approval specifies the contractor is "Superior Vision Services, Inc, a wholly owned independent subsidiary of Metropolitan Life Insurance Company (MetLife)". Effective upon BOC approval.

25-0148 **Real Estate and Asset Management**

Request approval of a Sanitary Sewer System Ownership, Operation, Maintenance, and Repair Agreement between Fulton County, a political subdivision of the State of Georgia, and Morning Creek Partners, LLC, for the purpose of granting Fulton County legal access to extend and maintain the sanitary sewer system at 0 Ripple Way, South Fulton, Georgia 30349 (the Development).

25-0149 **Real Estate and Asset Management**

Request approval of a Sewer Easement Dedication of 42,633 square feet to Fulton County, a political subdivision of the State of Georgia, from JBGL Atlanta Development 2014, LLC, individuals, for the purpose of constructing the Iveybrooke Project at 0 Davis Drive, Alpharetta, Georgia 30009.

25-0150 **Real Estate and Asset Management**

Request approval of a Sewer Easement Dedication of 0.327 acres (14,244.12 square feet) to Fulton County, a political subdivision of the State of Georgia, from JBGL Atlanta Development 2014, LLC, individuals, for the purpose of constructing the Byers Park Project at 2325 Old Milton Parkway, Alpharetta, Georgia 30009.

25-0151 **Real Estate and Asset Management**

Request approval of a Sewer Easement Dedication of 4,328 square feet to Fulton County, a political subdivision of the State of Georgia, from the Bridges Alpharetta, LLC, for the purpose of constructing the Bridges Project at 4430 Webb Bridge Road, Alpharetta, Georgia 30005.

25-0152 **Real Estate and Asset Management**

Request approval of a Water Easement Dedication of 5,227 square feet to Fulton County, a political subdivision of the State of Georgia, from the Bridges Alpharetta, LLC for the purpose of constructing the Bridges Project at 4430 Webb Bridge Road, Alpharetta, Georgia 30005.

25-0153 **Real Estate and Asset Management**

Request approval of a Water Easement Dedication of 42,633 square feet to Fulton County, a political subdivision of the State of Georgia, from JBGL Atlanta Development 2014, LLC, individuals, for the purpose of constructing the Iveybrooke Project at 0 Davis Drive, Alpharetta, Georgia 30009.

25-0154 **Real Estate and Asset Management**

Request approval of an Indemnification, Maintenance, and Land Use Agreement for Private Improvement (Indemnification Agreement) between Fulton County, a political subdivision of the State of Georgia, and Morning Creek Partners, LLC for the purpose granting conditional approval to allow stormwater infrastructure to remain within a portion the County's existing sanitary sewer easement at 0 Ripple Way, South Fulton, Georgia 30349.

25-0155 **Real Estate and Asset Management**

Request approval of an Indemnification, Maintenance, and Land Use Agreement for Private Improvement (Indemnification Agreement) between Fulton County and JBGL Atlanta Development 2014, LLC for the purpose of granting conditional approval to allow stormwater infrastructure to remain within a portion of the County's existing water line easement area at 132 Brook Street and 51 Thompson Street, Alpharetta, Georgia 30009.

25-0156 **Real Estate and Asset Management**

Request approval to rescind an award - Department of Real Estate and Asset Management, Sourcewell Contract RFP #032824-CER, Equipment, Product, or Services with Certified Stainless Service, Inc. dba West-Mark through Sourcewell's Authorized Representative Vacutek, LLC (Austell, GA), for the purchase and delivery of one (1) Hydro Sewer Jetting Truck, Aquatech SJR-1500 (steel water tank), with a 1,500 gallon capacity for the Fulton County Public Works Department. Effective upon BOC approval.

Health and Human Services**25-0157 Senior Services**

Request approval to amend a contract - Services for Seniors Services, 23RFQ138337A-CJC, Cosmetology and Aesthetic Services at no cost with Katylady Building Maintenance Services to adjust the scope of work menu costs to provide on-site cosmetology and aesthetic services for seniors aged 55 and older in the four senior multipurpose facilities. Effective upon BOC approval.

25-0158 Department for HIV Elimination

Request approval to extend two existing "Ryan White Part A" service contracts for a three-month period from March 1, 2025, through May 31, 2025, and, subject to federal funding, amend these two existing contracts to increase the spending authority of "Ryan White Part A" subrecipients in the amount of \$610,886.00 pursuant to the Health Resources and Services Administration "Ryan White Part A" award H89HA00007. Contracts are 100% grant funded with no Fulton County match. Request authorization for the Chairman to execute contracts with subrecipients. To protect the interest of the County, the County Attorney is authorized to approve the contracts as to form and make any necessary modifications thereto prior to execution by the Chairman.

FIRST REGULAR MEETING AGENDA**25-0159 Board of Commissioners**

Adoption of the First Regular Meeting Agenda.

25-0160 Clerk to the Commission

Ratification of Minutes.

First Regular Meeting Minutes, February 5, 2025

Second Regular Meeting Post Agenda Minutes, February 19, 2025

25-0161 Board of Commissioners

Presentation of Proclamations and Certificates.

Proclamation recognizing "Developmental Disabilities Awareness Month."
(Ellis/BOC)

Proclamation recognizing "Atlanta Women's Foundation Appreciation Day."
(Barrett/BOC)

Proclamation recognizing "Harold D. Lamar Appreciation Day."
(Abdur-Rahman/Pitts)

PUBLIC HEARINGS**25-0162 Board of Commissioners**

Public Comment - Citizens are allowed to voice County related opinions, concerns, requests, etc. during the Public Comment portion of the Commission meeting. **Priority for public comment will be given to Fulton County citizens and those individuals representing businesses or organizations located within Fulton County, including their employees, whether such persons are commenting in-person, via emails or via Zoom or other electronic media (i.e., phone call). Non-Fulton County citizens will only be heard after all in-person Fulton County citizens, representatives of business and organizations located within Fulton County, including their employees, have been heard and the time allotted for public comment has not expired, except as otherwise provided in this code section. County staff shall verify the residency of each public speaker prior to such person being heard by the board. Speakers will be granted up to two minutes each. Members of the public will not be allowed to yield or donate time to other speakers. The Public Comment portion of the meeting will not exceed sixty (60) minutes at the First Regular Meeting, nor will this portion exceed sixty (60) minutes at the Second Regular Meeting.** In the event the 60-minute time limit is reached prior to public comments being completed, public comment will be suspended and the business portion of the BOC meeting will commence. Public comment will resume at the end of the meeting. For more information or to arrange a speaking date, contact the Clerk's Office.

COUNTY MANAGER'S ITEMS**Open & Responsible Government****25-0163 Finance**

Request approval of a Resolution of the Board of Commissioners of Fulton County, Georgia Authorizing the Issuance and Sale of Fulton County, Georgia General Fund Tax Anticipation Notes; Authorizing the Distribution and Use of a (a) Request for Bids and/or (b) Preliminary Official Statement and Notice of Sale, in each case relating to such Tax Anticipation Notes and the Solicitation of Offers for the purchase of the Notes and related matters.

25-0164 Real Estate and Asset Management

Request approval to utilize cooperative purchasing - Department of Real Estate and Asset Management, Sourcewell Contract RFP #101221-VTR, Sewer Vacuum, Hydro-Excavation, and Municipal Pumping Equipment with Related Accessories and Supplies in the amount of \$313,255.00 with Vactor Manufacturing through Sourcewell's Authorized Representative Environmental Products Group, Inc. (Atlanta, GA), for the purchase and delivery of one (1) Vactor Ramjet Sewer Cleaner, Single Engine mounted on a Heavy Duty Truck Chassis, 1500 gallon Water Tank for the Public Works Department. Effective upon BOC approval. This is a one-time procurement.

Health and Human Services**25-0165 Public Works**

Request approval and adoption of the North Fulton Water Distribution Masterplan.

25-0166 Public Works

Request approval of an Intergovernmental Agreement (IGA) between Fulton County and the City of Johns Creek, GA, for the adjustment of the water valve and sanitary sewer manhole and relocation of the fire hydrant associated with the intersection improvement project on Jones Bridge Road, from Sargent Road to Douglas Road, in the City of Johns Creek, GA, in an estimated amount of \$109,000.00.

COMMISSIONERS' ACTION ITEMS**25-0167 Board of Commissioners**

Request approval of a Resolution approving a Ground Lease Agreement between Fulton County, Georgia (landlord) and the City of College Park, Georgia (tenant) for the purpose of leasing real property at Camp Truitt for the purpose of developing a botanical garden; authorizing the Chairman to execute the Ground Lease Agreement and related documents; authorizing the County Attorney to approve the Ground Lease Agreement and related documents as to form and to make necessary modifications thereto prior to execution; and for other purposes. **(Pitts)**

COUNTY MANAGER'S PRESENTATION AND DISCUSSION ITEMS**Open & Responsible Government****25-0168 External Affairs**

Presentation: 2025 State Legislative Session Update.

EXECUTIVE SESSION**25-0169 Board of Commissioners**

Executive **(CLOSED)** Sessions regarding litigation **(County Attorney)**, real estate **(County Manager)**, and personnel **(Pitts)**.

ADJOURNMENT



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0141

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Adoption of the Consent Agenda - All matters listed on the Consent Agenda are considered routine by the County Commission and will be enacted by one motion. No separate discussion will take place on these items. If discussion of any Consent Agenda item is desired, the item will be moved to the First Regular Meeting Agenda for separate consideration.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0142

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Proclamations for Spreading on the Minutes.

Proclamation recognizing “Ben Howard Remembrance Day.” **(Abdur-Rahman/BOC)**
February 18, 2025

Proclamation recognizing “Zeta Phi Beta Sorority, Inc. Appreciation Day.” **(Pitts)**
February 23, 2025

Proclamation recognizing “Black Heroes Day.” **(Arrington)**
February 28, 2025



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0143

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

FULTON COUNTY ARTS COUNCIL

The Arts Council shall be composed of fifteen (15) residents of the county. Initially, each member of the Board of Commissioners shall appoint two persons to serve on the council, one person to serve for a one-year term and one person to serve a two-year term. No term of any member shall extend beyond the term of the District Commissioner who appointed the member to serve on the Arts Council Board; thereafter, each year, each member of the Board of Commissioners shall appoint one member for a two-year term. Each member may continue to serve beyond his/her term until replaced. The Chairman of the Arts Council shall be appointed to a two-year term by a majority vote of the Board of Commissioners. The Council shall elect a vice-Chairman and a secretary from its membership.

Term = 2 years

Term below expired: 12/31/2023

Vacant (**Ivory**)

Commissioner Ivory has nominated Fahamu Pecou for a District appointment to a term ending December 31, 2025.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0144

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

FULTON COUNTY CITIZENS COMMISSION ON THE ENVIRONMENT

The Fulton County Citizens Commission on the Environment shall consist of citizens from throughout Fulton County to be appointed by the Members of the Board of Commissioners. There shall be fourteen (14) members to serve on the Commission. In making such appointments, the Fulton County Board of Commissioners shall ensure that the terms of appointment are staggered. Each District Commissioner shall appoint one Commission member to a four (4) year term. Each District Commissioner shall also appoint one Commission member to a two (2) year term to ensure staggered terms. After the expiration of each appointee's initial term, the regular term of office for such an appointee shall be four (4) years. No term of any member shall extend beyond the term of the District Commissioner who appointed the member to serve on the Fulton County Citizens Commission on the Environment; however, each member may continue to serve beyond his/her term until replaced. After the expiration of any appointee's initial term, the Commission may recommend to the Fulton County Board of Commissioners a list of eligible persons for consideration as appointees to the Commission. The Appointing member of the Fulton County Board of Commissioners may remove his/her appointee(s) to this Commission at any time and within the sole discretion of that individual of the Fulton County Board of Commissioners.

Term = 4 Years

Term below expired: 12/31/2018

Richard Johnson **(At-Large)**

Chairman Pitts has nominated Richard Johnson for a District reappointment to a term ending December 31, 2026.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0145

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*
FULTON COUNTY HOMELESS CONTINUUM OF CARE (CoC)

One (1) representative will be nominated by each of the Commission Districts for a total of seven (7) members; this includes one representative from District 1, 2, 3, 4, 5, 6, 7. Each representative will serve a two-year term and could be re-appointed to serve additional terms. Notwithstanding the foregoing, no term of any member nominated by a District Commissioner shall extend beyond the term of the District Commissioner who nominates that member.

Term = 2 Years

Term below expired: 12/31/2024

Lucy Hall (**Pitts**)

Chairman Pitts has nominated Lucy Hall for a District reappointment to a term ending December 31, 2026.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0146

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*
COMMISSION ON ELDER AFFAIRS

Seven (7) appointees by the Board of Commissioners (one for each District); three (3) appointees from each of the non-profit umbrella agencies, which the County contracts with for aging services; and three (3) senior citizens elected by seniors in the three geographical areas of the County. The terms of such members appointed by the Board of Commissioners shall end at the end of the term of the appointing District Commissioner. Such members may continue to serve beyond his/her term until a successor is appointed.

Term = Shall end at the end of the term of the appointing District Commissioner

Term below expires: 12/31/2026

Vacant (**Barrett**)

Commissioner Barrett has nominated Gary Uitvlugt for a District appointment to an unexpired term ending December 31, 2026.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0147

Meeting Date: 3/5/2025

Department

Purchasing & Contract Compliance

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Request approval to correct the record for agenda item 24-0599, in order to reflect the correct name of the entity, the County is contracting with for 24RFP050124C-MH (Vision), Employee Healthcare Benefit Plan, so the approval specifies the contractor is "Superior Vision Services, Inc, a wholly owned independent subsidiary of Metropolitan Life Insurance Company (MetLife)". Effective upon BOC approval.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☒
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

Yes

Summary & Background On September 18, 2024, the Board of Commissioners approved agenda item 24-0599 for 24RFP050124C-MH (Vision), Employee Healthcare Benefit Plan with Metropolitan Life Insurance Company (MetLife), to administer vision benefits on a self-insured basis to eligible employees, retirees, beneficiaries and their covered dependents.

When the agreements were forwarded to the County, the agreement for Vision had a different name than what was presented and approved by the Board of Commissioners. On December 19, 2024, the County representatives confirmed with MetLife the correct contracting entity. The MetLife legal rep confirmed this delay in providing the signed contract back would not delay the start of services

Agenda Item No.: 25-0147

Meeting Date: 3/5/2025

effective January 1, 2025.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0148

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of a Sanitary Sewer System Ownership, Operation, Maintenance, and Repair Agreement between Fulton County, a political subdivision of the State of Georgia, and Morning Creek Partners, LLC, for the purpose of granting Fulton County legal access to extend and maintain the sanitary sewer system at 0 Ripple Way, South Fulton, Georgia 30349 (the Development).

Requirement for Board Action

Pursuant to FCC § 34-509, any building, residence, or other facility designed or used for human occupancy or congregation must provide a sewerage system within the building and that system must be connected to the public system in most situations, including the current development. In addition, pursuant to FCC § 1-117, the Board of Commissioners are vested with exclusive jurisdiction to direct and control all the property in the County, according to law. Finally, O.C.G.A. § 36-10-1 requires that all contracts entered into by a county governing authority on behalf of a county be in writing and entered on the governing authority's minutes.

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☐
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☒
- District 6 ☐

Is this a purchasing item?

No

Summary & Background

Scope of Work: The Department of Real Estate and Asset Management, DREAM, and the

Department of Public Works, in accordance with County Policy and the Statue of Frauds, request the approval of the Fulton Board of Commissioners to execute a Sanitary Sewer System Ownership, Operation, Maintenance, and Repair Agreement with Morning Creek Partners, LLC.

Environmental Protection Division, EPD regulations require that where a permitted public sanitary sewer system is available, developments and a property requiring sanitary sewer services shall obtain sanitary sewer service through an extension of the public service system.

Morning Creek Partners, LLC, the Owner of the real property located at 0 Ripple Way, South Fulton, Georgia 30349, has agreed to provide Fulton County easement access for the purpose of maintaining and expanding the county's sewer system within their Development.

The purpose of the Sanitary Sewer System Ownership, Operation, Maintenance, and Repair Agreement is to formalize maintenance responsibilities and conditions for legal access for Fulton County, Morning Creek Partners, LLC, and future owners that may acquire the Development at 0 Ripple Way, South Fulton, Georgia 30349.

Community Impact: The Department of Public Works has confirmed that if this Agreement is approved, the County's sewer system will not be adversely impacted and can continue to be properly maintained.

Department Recommendation: The Department of Real Estate and Asset Management accepts the Department of Public Works' conclusion to accept the Sanitary Sewer System Ownership, Operation, Maintenance, and Repair Agreement and recommends its approval.

Project Implications: Approval of this Agreement will not restrict sewer services or access to the sewer line for necessary maintenance.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Approval of the Agenda Item does not involve the receipt or payment of funding.

Cross Reference:

Book 66786 Page 62

Book 67896 Page 34

After recording, please return to:

Fulton County
c/o Fulton County Department of Real Estate and Asset Management
Land Division
141 Pryor Street, SW, Ste. 8021
Atlanta, Georgia 30303

SPACE ABOVE THIS LINE FOR RECORDER'S USE ONLY

**SANITARY SEWER SYSTEM OWNERSHIP, OPERATION, MAINTENANCE
AND REPAIR AGREEMENT**

This SANITARY SEWER SYSTEM OWNERSHIP, OPERATION, MAINTENANCE AND REPAIR AGREEMENT ("Agreement") is made and entered into this _____ day of _____, 2024, by and between _____ Morning Creek Partners, LLC (hereinafter referred to as the "Owner") and **FULTON COUNTY, GEORGIA**, a political subdivision of the State of Georgia (hereinafter referred to as the "County") (the words "Owner" and "County" to include their respective heirs, successors and assigns where the context requires or permits).

WITNESSETH:

WHEREAS, Owner is the owner of certain real property located on Land Lot 128, of the 13th District of Fulton County, Georgia being more particularly described in **Exhibit "A"** attached hereto and incorporated herein by this reference (hereinafter referred to as the "Development"); and

WHEREAS, Owner wishes to make improvements to the Development so as to provide for public and private use of the Development; and

WHEREAS, a portion of said improvements includes the installation of a sanitary sewer system to provide potable sanitary sewer to serve the users of and visitors to the Development; and

WHEREAS, County is the owner and operator of the Fulton County Sanitary Sewer System (herein after "System") which is permitted by the Georgia Environmental Protection Division (hereinafter "EPD") as a Public Sanitary Sewer System allowed to provide sanitary sewer service to the public through a distribution system of sanitary sewer pipe lines and appurtenances; and

WHEREAS, EPD regulations require that where a permitted public sanitary sewer system is available, development and property requiring potable sanitary sewer shall receive sanitary sewer service through an extension of the public service system; and

WHEREAS, Owner, for its own convenience and interests, intends to install, or has installed, a sanitary sewer system that does not conform to County standards with respect to accessibility for maintenance and repair and/or other standards not believed to affect the quality of the sewer system; and

WHEREAS, Owner intends to install, or has installed, a sanitary sewer system primarily on private property as opposed to within the public right-of-way where public sanitary sewer systems are more commonly installed with adequate access for operation, maintenance and repair; and

WHEREAS, the foregoing conditions require more explicit definitions of the responsibilities of both County and Owner, as well as future property owners within the Development that will be served by the Sanitary Sewer System.

NOW, THEREFORE, for and in consideration of the benefits to the Development and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Owner and County do hereby agree, covenant and declare the following terms and conditions to apply to the Development. These terms and conditions shall be binding on all persons claiming under and through Owner.

1. Grant of System Ownership: Owner does hereby grant, bargain, convey, sell, assign and transfer, free and clear of all claims and encumbrances, representation or recourse, to the County all of Owner's right, title and interest in and to the sanitary sewer system as an extension of County's sanitary sewer system, including without limitation all mains, taps and connections, and related appurtenances. The foregoing transfer also includes all of Owner's right, title and interest in and to all manufacturers' warranties express or implied for the sanitary sewer system.
2. Extent of System: Owner agrees that for purposes of this Agreement, the sanitary sewer system begins at the publicly owned road right-of-way on which the Development fronts and in existence prior to initiation of the Development, or at the County installed sanitary sewer outfall servicing the Development. The system extends along and to, but not beyond, the end of each sanitary sewer main (normally 8 inches or larger), to each and to any County furnished sanitary sewer service. Where service laterals are furnished by the Owner, the system shall end at the system connection to the residential cleanout.
3. Warranty: Owner agrees that they or their contractor(s) shall maintain the installed sanitary sewer mains and appurtenances for a period of fifteen (15) months from the date of FINAL approval or until the END OF MAINTENANCE INSPECTION shows no defects or deficiencies in the system by correcting all defects or deficiencies in materials and workmanship. Owner assumes all liability associated with any defects in either construction practices or materials used during the warranty period, including cost-recovery for any repairs facilitated by Fulton County made necessary by defects that resulted in loss of customer

service. Owner further agrees that the warranty period shall be extended an additional four (4) years when the defects are a direct result of the installation of non-conforming materials or the application of non-specified construction practices or methods. Owner shall release, indemnify, defend and hold harmless Fulton County, its officers, employees, assigns and agents, from and against any losses, claims, damages, liabilities, costs and expenses arising from said installation due to the negligence of Owner, its contractor(s), their agents, or employees.

4. Access: Owner agrees to provide the County with unrestricted access to the sanitary sewer system for any purpose related to the operation and/or maintenance of the system. Owner does hereby grant, bargain, sell, and convey to County and to County's successors and assigns a perpetual non-exclusive easement to access, use, maintain, repair, upgrade, replace, relocate and remove underground sanitary sewer lines and associated facilities in the private roads located on any recorded plat(s) (hereinafter the "Plats") of said Development as described on **Exhibit "A"**. County's right to access the Easement shall include methods for gaining entry through any locked gates or fencing for the purpose of handling emergency repairs 24 hours a day, 7 days a week as well as for any other action related to the Sanitary Sewer System. The County's access rights shall be formalized in a permanent easement agreement that is recorded and dedicated to Fulton County in **Deed Book 67896, Page(s) 34**, Fulton County, Georgia Real Estate Records. If applicable, sanitary sewer system easements shall be depicted on the final plat.
5. Sanitary Sewer Quality, Monitoring, and Reports: The County shall provide and maintain sanitary sewer service of a quality that, at a minimum, meets State and Federal regulations and shall monitor and report the quality of the sanitary sewer system as required by such regulations. With respect to commercial and/or mixed-use developments, the County reserves the right to take samples internal to the system and require improvements including, but not limited to, sampling stations and flushing units as needed to maintain sanitary sewer quality.
6. Reservation of Rights: Owner reserves the right to use the Easement as described in **Deed Book 67896 Page 34** for any and all lawful purposes, except that such use may not unreasonably interfere with the exercise by County of its rights in the Easement granted hereby. Without limiting the generality of the foregoing: (i) Owner may grant and establish other easements in all or any part of the Easement, so long as the grant is lawful and does not materially interfere with the rights hereby granted to County, and (ii) Owner may construct within the Easement, streets, roads, parking lots, sidewalks, fences, landscaping, signage, lighting and other architectural or entry features that may be used in conjunction with the development or use of the Association's land, of which the Easement forms a part, however, such improvements may not cause damage to the sanitary sewer lines and associated facilities within the Easement. County shall use its best efforts not to interfere with or negatively impact the quiet enjoyment of Owner's members in the exercise by County of its rights pursuant to this Agreement. During periods of maintenance and repair, County shall endeavor to provide reasonable access for Owner and Owner's members and invitees across the Easement.

7. Responsibility for Maintenance and Repair:

(a) Residential-only Developments:

(i) Multi-family: Multi-family residential developments are those developments which do not meet the minimum requirements set forth in the Fulton County Subdivision Regulations in regard to street design. Owner shall promptly notify County of any identified system failures or needed maintenance or repairs. The County shall perform or cause to be performed through a contractor, maintenance, repairs and improvements to the sanitary sewer system as needed or as may be required to meet the requirements of State and Federal regulations. Owner shall bear sole responsibility for the cost of all such maintenance, repairs and improvements. The cost shall be added to the fee for providing sanitary sewer service and billed to the account(s) servicing the Development; singularly for any single account serving the development or divided equally among all active accounts should a singular account not exist. Costs shall be established as accrued in the County's work order system for County performed work or as charged by a contractor using fees established through the County's procurement system. Such costs shall include the cost to restore the Easement to as near to its original condition as is feasible, in accordance with Fulton County Standard details. Notwithstanding any other remedies available to the County pursuant to applicable state and/or local law, Owner's failure to pay the cost of such maintenance or repair may result in the interruption of sanitary sewer service. Notwithstanding the foregoing, sanitary sewer meters installed by the County shall be the County's responsibility to maintain and repair. Any work performed by County pursuant to this Agreement shall be done in a good workmanlike manner.

(ii) Single-family: Single-family residential developments are those developments built in accordance with the Fulton County Subdivision Regulations in regard to street design. Owner shall promptly notify County of any identified system failures or needed maintenance or repairs. The County, at County's cost and expense, shall perform or cause to be performed through a Contractor; maintenance, repairs and improvements to the sanitary sewer system as needed or as may be required to meet the requirements of State and Federal regulations. County hereby covenants and agrees that it shall be responsible for and carry out any and all maintenance or repair to the Easement necessitated or caused by the use of the Easement by County, its agents, contractors and employees for the specific purpose defined in this Agreement. After any exercise of County's rights under this Agreement, County shall, at its expense, promptly restore the Easement to as near to its original condition as is feasible, in accordance with Fulton County Standard details. Maintenance responsibly by County for individual sanitary sewer service lines shall extend only to the end of the sanitary sewer mains (normally 8-inches or larger). Responsibility for any maintenance beyond the clean-out will be borne by the individuals being served.

Any work performed by County pursuant to this Agreement shall be done in a good workmanlike manner.

- (b) **Commercial/Mixed-Use Developments:** Commercial/Mixed-Use developments are those developments which are not solely residential in nature. Owner shall promptly notify County of any identified system failures or needed maintenance or repairs. Owner shall be responsible for the performance and cost of all maintenance, repairs and improvements to the sanitary sewer system, including emergency repairs, as directed by the County or as may be required to meet the requirements of State and Federal regulations. All such effort shall be performed in compliance with applicable Fulton County Standards and building codes with respect to materials and methods and be performed by a licensed utility contractor or plumber where applicable. Owner shall provide timely notice to County and provide opportunity for County to observe and inspect Owner provided maintenance, repairs or improvements so County may determine that such maintenance, repairs or improvements to the system are in compliance with County Standards and applicable codes or regulations. Owner shall provide a report to County of all maintenance, repairs, or modifications to the system, to include materials and methods of construction and description of the work performed within 72 hours of performance. Notwithstanding the foregoing, the sanitary sewer system facilities installed by the County shall be the County's responsibility to maintain and repair.
- (c) Street Maintenance. The Owner shall be responsible for the adjustment to all sanitary sewer and sewer appurtenances (manhole covers, etc.) affected by street maintenance including repaving, seal coating, patching, crack sealing, topping, and etc. The Owner shall adjust sanitary sewer and sewer appurtenances to fit flush with the street surface. All sewer appurtenances shall be cleaned of asphalt at the time of paving. Adjustments to take place a minimum of 24-hours to a maximum of 120-hours after maintenance. Any curbing that is replaced shall be remarked with the appropriate symbol showing the location of sewer laterals (S) in the shoulder or pavement of the road. Sewer symbols shall be painted orange. Any adjustment to the shoulder grade will also require adjustments of all sewer appurtenances affected by the adjustment to the shoulder grade. The Owner will be responsible for the adjustment of the appurtenances to the new grade.

The Owner shall be responsible to promptly notify Fulton County Department of Public Works, Sanitary sewer Resources Unit at 404-612-3421 of any proposed maintenance. Fulton County personnel shall inspect and approve all work performed by the Owner that affects sanitary sewer and sewer appurtenances. All work shall be done in accordance with Fulton County Standards and Specifications to the satisfaction of Fulton County personnel.

8. Notification to Future Owners: Owner shall make known to future owners of Development or any portions thereof of the requirements of this Agreement. Owner shall cause the following language to be included in all sales contracts for first owner occupants of developed property and on all plats and deeds associated with Development or subdivided parcels: "The owner and developer of this property has entered into a SANITARY SEWER SYSTEM OWNERSHIP, OPERATION, MAINTENANCE AND REPAIR AGREEMENT with Fulton County which describes certain obligations associated with the sanitary sewer system that are responsibilities of property owners within this development. The sanitary sewer system servicing this property and any subdivided parcels shall be owned by Fulton County for the purposes of providing sanitary sewer service of a quality meeting State and Federal Regulations. The owners of property served by the sanitary sewer system may be responsible for the cost of any and all maintenance and/or repair of the sanitary sewer system. The provision of an easement allowing Fulton County access to the sanitary sewer system for any reason shall not relieve property owners of their possible responsibility for the cost of maintenance and/or repair of the sanitary sewer system."
9. Billing: Where a master meter is provided by County, Owner shall meter individual services on the sanitary sewer system using County standard meters and shall bill and collect fees for sanitary sewer usage by individual services. Individual services shall be billed based on County standard sanitary sewer service rates. Owner may incorporate a reasonable administrative fee for reading meters, calculating and transmitting bills, and collecting the fees for usage. Owner shall be responsible for any differential between master meter registered sanitary sewer usage and the sum of individual service sanitary sewer usage. Such usage shall be reconciled and billed on an annual basis or as otherwise deemed appropriate by County.
10. Indemnification: Owner, its successors and assigns, hereby agree to release, indemnify, defend and hold harmless the County, its Commissioners, officers, agents, employees, successors, assigns, elected officials, and any other person acting on its behalf, from and against any and all losses (including death), claims, demands, debts, damages, accounts, settlements, obligations, liabilities, costs, judgments and claims for attorney's fees and/or expenses of litigation, and causes of action of any kind or nature, at law or in equity, arising out of the existence, installation, maintenance, repair, alteration, modification, deterioration or failure of any sanitary sewer systems or pipes located within Development. Said Owner hereby waives for itself, its successors and assigns all rights to any further compensation or claim to damages on account of the construction, access, upgrade or maintenance of said sanitary sewer line for the use of the property as herein agreed.
11. Notices. All notices and communications required or permitted hereunder shall be in writing. Any notices or demands shall be deemed to have been duly and sufficiently given if a copy thereof has been personally served, forwarded by expedited messenger or recognized overnight courier service with evidence of delivery or mailed by United States registered or certified mail in an envelope properly stamped and addressed to the applicable party at the addresses identified below or at such other address as such party may theretofore have furnished to the other party by written notice. The effective date

of such notice shall be the date of actual delivery, except that if delivery is refused, the effective date of notice shall be the date delivery is refused. Notices shall be addressed as follows:

Owner:

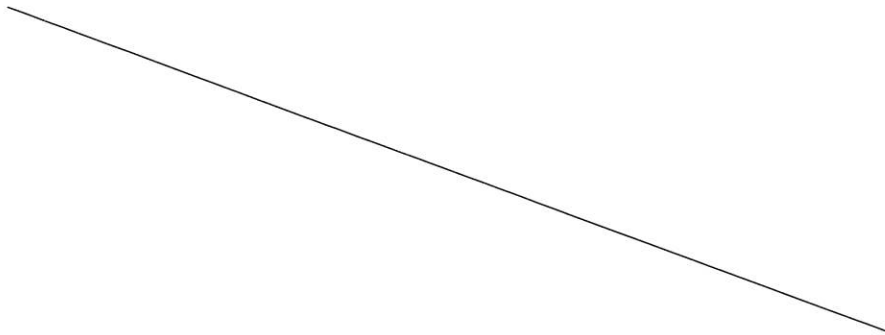
Morning Creek Partners, LLC
810 Sanders Road
Cumming, GA 30041

County:

David Clark, P.E.
Director, Department of Public Works
141 Pryor Street, S.W.
Suite 6001
Atlanta, GA 30303

12. Covenants Running with the Land: The provisions of this Agreement shall be deemed covenants running with the land for the benefit of the County and its assigns and shall pass to and be binding on Owner's heirs, assigns and successors in title to the Development or any subdivided portion thereof. Owner shall further include the provisions of this Agreement in the establishment of any other entity which may obtain ownership rights to any portion of the Development or the land thereof such as a Homeowners Association which shall own common area, or purchaser of any individual residential lot, or any tract of land for any purpose.
13. Joint and Several Liability: Owner and its successors and assigns, hereby agree that to the extent permitted by law, they shall be jointly and severally liable for all obligations defined in this Agreement, and the taking of any actions required under this Agreement.
14. Modification: This Agreement may not be modified except by written agreement between the County and all parties subject to this agreement or an entity such as a Homeowners Association representing all affected parties.
15. Governing Law: This Agreement, and the rights and obligations of the parties hereunder, shall be governed by, and construed and interpreted in accordance with the laws of the State of Georgia.
16. Severability: If any provision of this Agreement shall be invalid or unenforceable to any extent, the remainder of this Agreement shall not be affected thereby and shall be enforced to the greatest extent permitted by law.
17. Entire Agreement: This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof. Neither this Agreement nor any provision hereof may be changed, waived, discharged, modified or terminated orally, except by a written instrument signed by the party against whom enforcement is sought.

18. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed an original, but all of which, together, shall constitute but one and the same instrument.
19. Interpretation: No provision of this Agreement shall be construed against or interpreted to the disadvantage of any party hereto by any court or other governmental or judicial authority by reason of such party having or being deemed to have structured or dictated such provision. For all purposes of interpretation or construction of this Agreement, the singular shall include the plural, the plural shall include the singular, and the use of any gender shall be applicable to all genders.
20. Third Party Beneficiaries. This Agreement does not and is not intended to confer any rights or remedies upon any person other than the parties.
21. Waiver. Nothing in this Agreement shall be construed as a waiver of sovereign immunity.
22. Miscellaneous. This Agreement may not be modified orally or in any manner other than by a written agreement signed by the parties hereto. This Agreement shall inure to the benefit of and be binding upon the parties hereto, their successors and assigns. Time is of the essence in this Agreement. This Agreement shall be governed by the laws of the State of Georgia without regard to the conflict of law's provisions thereof.
23. Effective Date. This Agreement will become effective upon approval by the Fulton County Board of Commissioners of their interest in the Easement and will be recorded by County as soon as practicable after such approval and execution by County.
24. Recitals: All recitals contained herein are hereby incorporated by reference into this Agreement and made a part hereof
25. Recording: County shall record this document with the Clerk of the Fulton County Superior Court in the Land Records with a copy of the recorded documents provided to the Department of Public Works, Water Resources Division, and Owner.

A long, thin diagonal line starting from the left side of the page and extending towards the right side, positioned below the list of items.

IN WITNESS WHEREOF, the parties have executed this Agreement at Atlanta, Georgia, as of the day and year first above written.

Signatures:

Signed sealed and delivered in the presence of

Bandy Dempsey

Unofficial Witness

Frances M. Taylor

Notary Public

My Commission Expires: 7-30-26

(Notary Seal)

(Notary Stamp)

Attest:

Clerk of Commission

APPROVED AS TO CONTENT:

David E. Clark

David E. Clark, Director
Department of Public Works

OWNER

Morning Creek Partners, LLC

[Signature]
Signature (Authorized Party to Bind Owner Entity)

Tommy Owings, President

Signatory's Name and Title (printed)

Owner's Address: _____

810 Sanders Road

Cumming, GA 30041

FULTON COUNTY, GEORGIA

By: _____

Chairman, Board of Commissioners

APPROVED AS TO FORM:

Y. Soo Jo, County Attorney

EXHIBIT "A"

(attach legal description and/or plat of the easement area)

LEGAL DESCRIPTION – Ripple Loop (Access/Utility Easement)

ALL THAT TRACT or parcel of land lying and being in Land Lot 128, 13th District, City of South Fulton, Fulton County, Georgia and being more particularly described as follows:

Commencing from the intersection of the Northern Right-of-Way of Buffington Road (Right-of-Way Varies) and the Eastern Right-of-Way of Ripple Way (Private 50' Right-of-Way);

Thence leaving said intersection and following said Western Right-of-Way of Ripple Way, South 25 degrees 31 minutes 57 seconds West, a distance of 26.04 feet to a point;

Thence continuing along said Right-of-Way, South 17 degrees 02 minutes 48 seconds East, a distance of 133.72 feet to a point;

Thence continuing along said Right-of-Way, along an arc of a curve to the left, an arc length of 62.38 feet, having a radius of 197.00 feet, being subtended by chord bearing of South 26 degrees 07 minutes 07 seconds East, a chord distance of 62.12 feet to a point;

Thence South 54 degrees 48 minutes 35 seconds West, a distance of 50.00 feet to a point;

Thence along an arc of a curve to the left, an arc length of 84.69 feet, having a radius of 256.20 feet, being subtended by chord bearing of South 45 degrees 03 minutes 28 seconds East, a chord distance of 84.30 feet to a point;

Thence South 54 degrees 33 minutes 09 seconds East, a distance of 121.72 feet to a point;

Thence along an arc of a curve to the left, an arc length of 117.97 feet, having a radius of 175.00 feet, being subtended by a chord bearing of South 35 degrees 29 minutes 09 seconds East, a chord distance of 115.75 feet to a point;

Thence South 16 degrees 08 minutes 58 seconds East, a distance of 197.32 feet to a point, said point being the **POINT OF BEGINNING**;

Thence South 16 degrees 08 minutes 58 seconds East, a distance of 74.20 feet to a point;

Thence along an arc of a curve to the left, an arc length of 19.63 feet, with a radius of 12.50 feet, being subtended by a chord bearing of North 61 degrees 08 minutes 08 seconds West, a chord distance of 17.68 feet to a point;

Thence South 73 degrees 51 minutes 49 seconds West, a distance of 59.03 feet to a point;

Thence along an arc of a curve to the left, an arc length of 118.74 feet, with a radius of 175.00 feet, being subtended by a chord bearing of South 54 degrees 25 minutes 34 seconds West, a chord distance of 116.47 feet to a point;

Thence South 34 degrees 58 minutes 20 seconds West, a distance of 44.93 feet to a point;

Thence along an arc of a curve to the left, an arc length of 117.81 feet, with a radius of 75.00 feet, being subtended by a chord bearing of South 10 degrees 00 minutes 41 seconds East, a chord distance of 106.07 feet to a point;

Thence South 55 degrees 00 minutes 41 seconds East, a distance of 167.50 feet to a point;

Thence along an arc of a curve to the left, an arc length of 19.63 feet, with a radius of 12.50 feet, being subtended by a chord bearing of North 79 degrees 59 minutes 19 seconds East, a chord distance of 17.68 feet to a point;

Thence South 34 degrees 59 minutes 19 seconds West, a distance of 75.00 feet to a point;

Thence along an arc of a curve to the left, an arc length of 19.63 feet, with a radius of 12.50 feet, being subtended by a chord bearing of North 10 degrees 00 minutes 41 seconds West, a chord distance of 17.68 feet to a point;

Thence North 55 degrees 00 minutes 41 seconds West, a distance of 167.50 feet to a point;

Thence along an arc of a curve to the right, an arc length of 196.35 feet, with a radius of 125.00 feet, being subtended by a chord bearing of North 10 degrees 00 minutes 41 seconds West, a chord distance of 176.78 feet to a point;

Thence North 34 degrees 58 minutes 20 seconds East, a distance of 44.93 feet to a point;

Thence along an arc of a curve to the right, an arc length of 152.66 feet, with a radius of 225.00 feet, being subtended by a chord bearing of North 54 degrees 25 minutes 34 seconds East, a chord distance of 149.75 feet to a point;

Thence North 73 degrees 51 minutes 49 seconds East, a distance of 59.03 feet to a point;

Thence along an arc of a curve to the left, an arc length of 18.84 feet, with a radius of 12.50 feet, being subtended by a chord bearing of North 30 degrees 41 minutes 24 seconds East, a chord distance of 17.11 feet to a point, said point being the **POINT OF BEGINNING**.

The herein described area of land contains 29,594 Square Feet or 0.68 Acres.

LEGAL DESCRIPTION – Ripple Way (Access/Utility Easement)

ALL THAT TRACT or parcel of land lying and being in Land Lot 128, 13th District, City of South Fulton, Fulton County, Georgia and being more particularly described as follows:

Commencing from the intersection of the Northern Right-of-Way of Buffington Road (Right-of-Way Varies) and the Eastern Right-of-Way of Ripple Way (Private 50' Right-of-Way);

Thence leaving said intersection and following said Western Right-of-Way of Ripple Way, South 25 degrees 31 minutes 57 seconds West, a distance of 26.04 feet to a point;

Thence continuing along said Right-of-Way, South 17 degrees 02 minutes 48 seconds East, a distance of 133.72 feet to a point;

Thence continuing along said Right-of-Way, along an arc of a curve to the left, an arc length of 62.38 feet, having a radius of 197.00 feet, being subtended by chord bearing of South 26 degrees 07 minutes 07 seconds East, a chord distance of 62.12 feet to a point, said point being the **POINT OF BEGINNING**;

Thence along an arc of a curve to the left, an arc length of 67.90 feet, having a radius of 206.20 feet, being subtended by chord bearing of South 45 degrees 07 minutes 10 seconds East, a chord distance of 67.60 feet to a point;

Thence South 54 degrees 33 minutes 08 seconds East, a distance of 121.37 feet to a point;

Thence along an arc of a curve to the right, an arc length of 151.72 feet, having a radius of 225.00 feet, being subtended by a chord bearing of South 35 degrees 29 minutes 09 seconds East, a chord distance of 148.86 feet to a point;

Thence South 16 degrees 08 minutes 58 seconds East, a distance of 307.42 feet to a point;

Thence along an arc of a curve to the right, an arc length of 49.13 feet, having a radius of 225.00 feet, being subtended by a chord bearing of South 09 degrees 52 minutes 49 seconds East, a chord distance of 49.04 feet to a point;

Thence South 03 degrees 37 minutes 28 seconds East, a distance of 109.78 feet to a point;

Thence along an arc of a curve to the right, an arc length of 151.63 feet, having a radius of 225.00 feet, being subtended by a chord bearing of South 15 degrees 40 minutes 56 seconds West, a chord distance of 148.78 feet to a point;

Thence South 34 degrees 59 minutes 19 seconds West, a distance of 224.08 feet to a point;

Thence North 55 degrees 00 minutes 16 seconds West, a distance of 50.00 feet to a point;

Thence North 34 degrees 59 minutes 19 seconds East, a distance of 224.07 feet to a point;

Thence along an arc of a curve to the left, an arc length of 117.94 feet, having a radius of 175.00 feet, being subtended by a chord bearing of North 15 degrees 40 minutes 56 seconds East, a chord distance of 115.72 feet to a point;

Thence North 03 degrees 37 minutes 28 seconds West, a distance of 109.78 feet to a point;

Thence along an arc of a curve to the left, an arc length of 38.22 feet, having a radius of 175.00 feet, being subtended by a chord bearing of North 09 degrees 52 minutes 49 seconds West, a chord distance of 38.14 feet to a point;

Thence North 16 degrees 08 minutes 58 seconds West, a distance of 307.41 feet to a point;

Thence along an arc of a curve to the left, an arc length of 117.97 feet, having a radius of 175.00 feet, being subtended by a chord bearing of North 35 degrees 29 minutes 09 seconds West, a chord distance of 115.75 feet to a point;

Thence North 54 degrees 33 minutes 09 seconds West, a distance of 121.72 feet to a point;

Thence along an arc of a curve to the right, an arc length of 84.69 feet, having a radius of 256.20 feet, being subtended by chord bearing of North 45 degrees 03 minutes 28 seconds West, a chord distance of 84.30 feet to a point;

Thence North 54 degrees 48 minutes 21 seconds East, a distance of 50.00 feet to a point, said point being the **POINT OF BEGINNING.**

The herein described area of land contains 57,622 Square Feet or 1.32 Acres.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0149

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of a Sewer Easement Dedication of 42,633 square feet to Fulton County, a political subdivision of the State of Georgia, from JBGL Atlanta Development 2014, LLC, individuals, for the purpose of constructing the Iveybrooke Project at 0 Davis Drive, Alpharetta, Georgia 30009.

Requirement for Board Action)

According to Article XXXIV. - Development Regulations, 34.4.1 Land disturbance permit prerequisites.

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☐
- District 2 ☒
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background

Scope of Work: The proposed Iveybrooke Project, a residential development, requires a connection to the County's sewer system. Fulton County development regulations require that all new sewer service line connections acknowledge Fulton County's ownership interests in the area(s) in which a connection is being made to the County's sewer system before issuing a Land Disturbance Permit. The easement area to be conveyed to the County consists of 42,633 square feet and is located in Land Lot 638, 639 & 654 of the 1st District, 2nd Section of Fulton County, Georgia.

Community Impact: The community will benefit from the extension of the County's sewer system and the addition of a residential development.

Department Recommendation: The Department of Real Estate and Asset Management recommends acceptance of the easement dedication.

Project Implications: Easement dedications by the owner of the record to Fulton County are made a part of the public record and grant Fulton County access to perform construction, maintenance, and upgrades to the County's sewer system once the proposed improvements are installed.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Acceptance of this easement dedication does not involve the expenditure or the receipt of funds.

[BLANK SPACE ABOVE THIS LINE IS FOR THE SOLE USE OF THE CLERK OF SUPERIOR COURT]

THIS DOCUMENT MAY BE RECORDED ONLY BY PERSONNEL OF THE FULTON COUNTY LAND DIVISION

Return Recorded Document to:
Fulton County Land Division
141 Pryor Street, S.W. – Suite 8021
Atlanta, Georgia 30303

Project Name : Iveybrooke
Tax Parcel Identification No.: 12 249006070310
Land Disturbance Permit No.: WRN23-095
Zoning/Special Use Permit No.:
(if applicable)

For Fulton County Use Only

Approval Date: _____
Initials: _____

**SEWER EASEMENT
(Corporate Form)**

STATE OF GEORGIA,
COUNTY OF FULTON

This indenture entered into this 23rd day of October, 2024, between
JBGL Atlanta Development 2014, LLC, a corporation duly organized under
the laws of the State of Georgia, party of the first part (hereinafter referred to as Grantor), and
FULTON COUNTY, a Political Subdivision of the State of Georgia, party of the second part.

WITNESSETH, that for and in consideration of \$1.00 cash in hand paid, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged and in consideration of the benefit which will accrue to the undersigned from the construction of a sewer line through subject property, and in consideration of the benefits which will accrue to the subject property from the construction of a sewer line through the subject property, said Grantor has granted, bargained, sold and conveyed and by these presents does grant, bargain, sell and convey to the party of the second part and to successors and assigns the right, title, and privilege of an easement on subject property located in land lot(s) 638, 639 & 654 of the
1st District, 2 Section (*if applicable*) of Fulton County, Georgia, and more particularly described as follows: To wit:

Iveybrooke

Project Name

[See Exhibit “A” attached hereto and made a part hereof]

This right and easement herein granted being to occupy such portion of my property as would be sufficient for the construction, access, maintenance and upgrade of a sewer line through my property according to the location and size of said sewer line as shown on the map and profile now on file in the office of the Public Works Department of Fulton County, and which size and location may be modified from time to time including in the future after the date of this document to accommodate said sewer line within the aforesaid boundaries of the above-described easement.

For the same consideration, Grantor(s) hereby convey and relinquish to FULTON COUNTY a right of access over Grantor's remaining lands as necessary for FULTON COUNTY to perform maintenance and repairs on said sewer line on both a routine and emergency basis.

Grantor hereby warrants that it has the right to sell and convey said sewer easement and right of access and binds itself, its successors and assigns forever to warrant and defend the right and title to the above described sewer line easement unto the said FULTON COUNTY, its successors and assigns against the claims of all persons whomever by virtue of these presents.

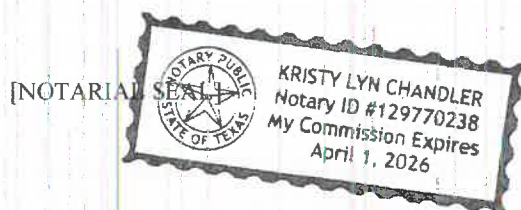
Said Grantor hereby waives for itself, its successors and assigns all rights to any further compensation or claim to damages on account of the construction, access, upgrade or maintenance of said sewer line for the use of the property as herein agreed.

IN WITNESS HEREOF said party of the first part has hereunto affixed its hand and seal on the day and year first above written.

Signed, sealed and delivered this 23
day of October, 20 24
in the presence of:

[Signature]
Witness

[Signature]
Notary Public

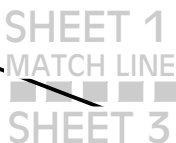
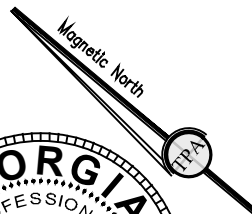


GRANTOR: JBGL Atlanta Development 2014, LLC
CORPORATE NAME

By: [Signature]
Print Name: Veronica Edwards
Title: Authorized Representative

By: _____
Print Name: _____
Title: _____

[CORPORATE SEAL]

**SANITARY SEWER EASEMENT EXHIBIT**

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

GRAPHIC SCALE - IN FEET



FIELD DATE:

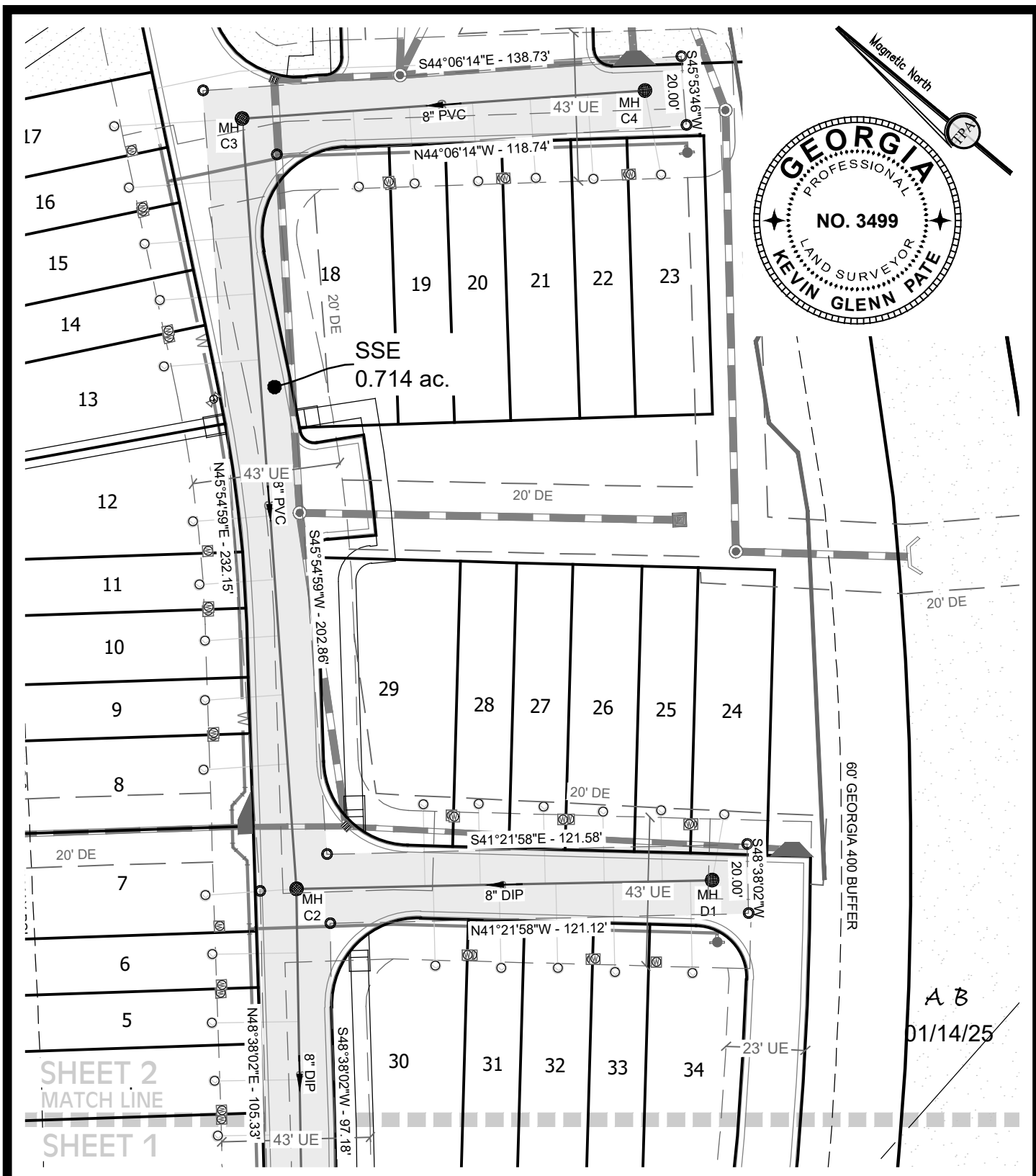
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2581

DRAWN BY: SH

SHEET NO: 1 of 5



4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

SANITARY SEWER EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

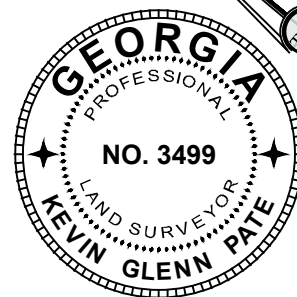
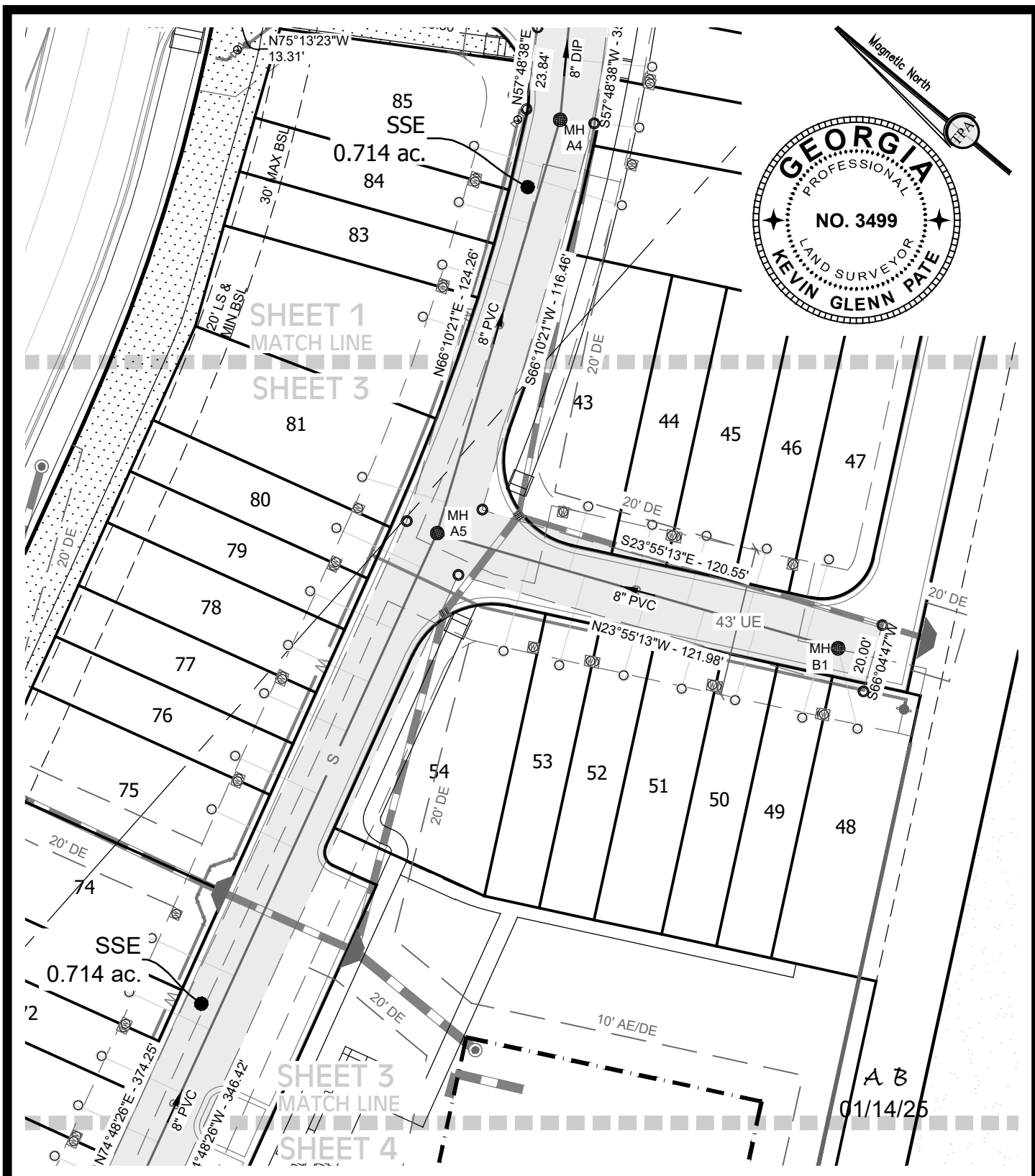
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2581

DRAWN BY: SH

SHEET NO: 2 of 5



4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

SANITARY SEWER EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

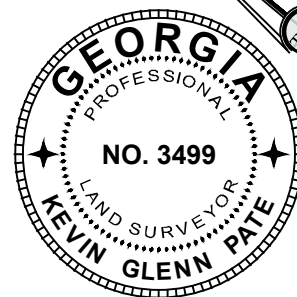
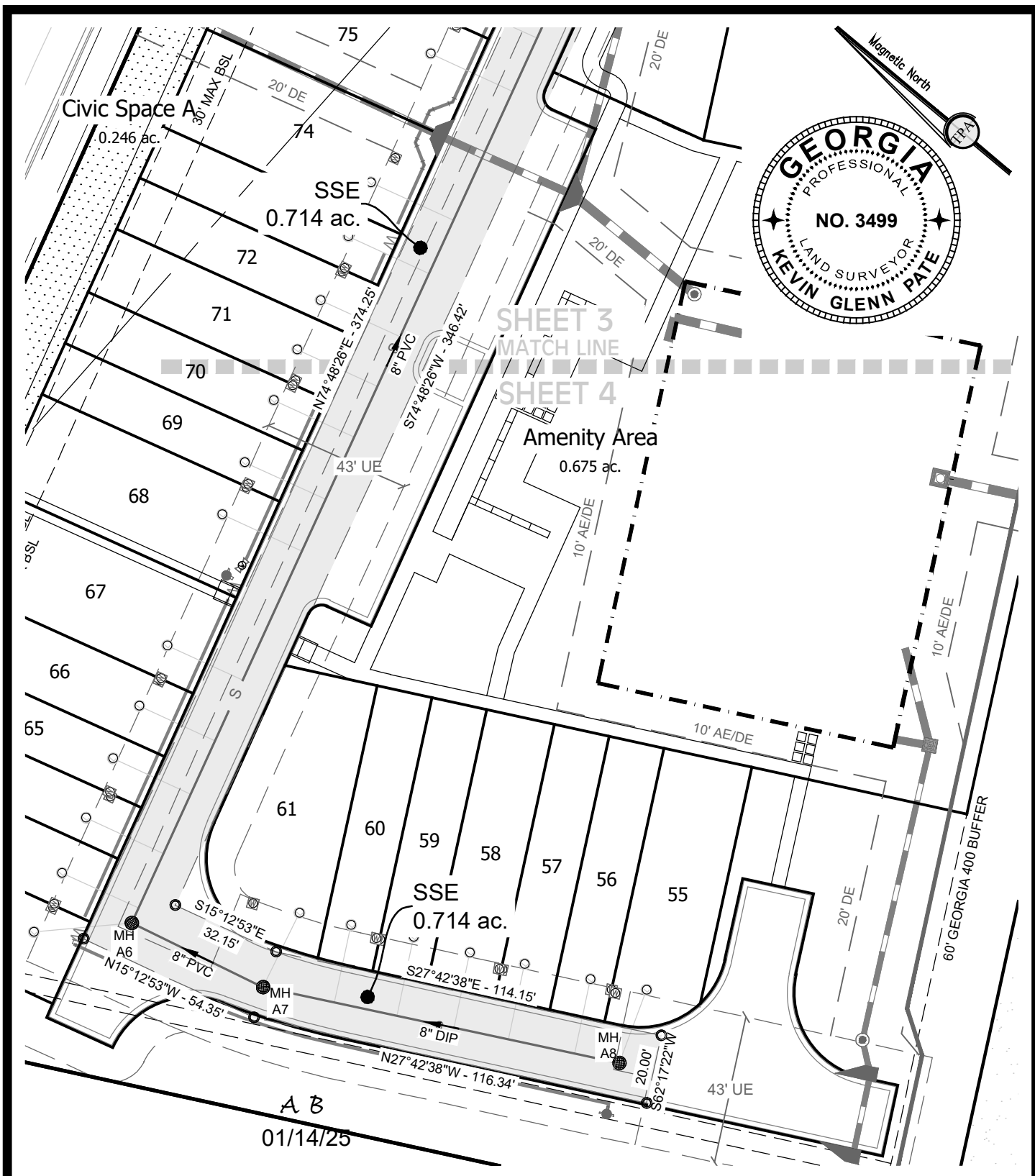
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2581

DRAWN BY: SH

SHEET NO: 3 of 5



4317 Park Drive, Suite 400
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SANITARY SEWER EASEMENT EXHIBIT

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AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

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TAX PARCEL ID: 12-249006070310

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2581

DRAWN BY: SH

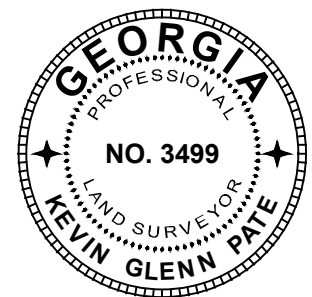
SHEET NO: 4 of 5

**DESCRIPTION OF
Iveybrooke Sanitary Easement**

All that tract or parcel of land lying and being in Land Lots 638, 639 and 654 of the 1st District, 2nd Section, City of Alpharetta, Fulton County, Georgia, being all of Parcel 2 as depicted on the Final Subdivision Plat for Rock Mill 400 recorded in Plat Book 430, Page 77, and being more particularly described as follows:

BEGINNING at a point, THENCE South 75 degrees 13 minutes 23 seconds East a distance of 1.26 feet to a point; THENCE South 32 degrees 11 minutes 22 seconds East a distance of 91.39 feet to a point; THENCE North 57 degrees 48 minutes 38 seconds East a distance of 66.36 feet to a point; THENCE North 48 degrees 38 minutes 02 seconds East a distance of 105.33 feet to a point; THENCE North 45 degrees 54 minutes 59 seconds East a distance of 232.15 feet to a point; THENCE South 44 degrees 06 minutes 14 seconds East a distance of 138.73 feet to a point; THENCE South 45 degrees 53 minutes 46 seconds West a distance of 20.00 feet to a point; THENCE North 44 degrees 06 minutes 14 seconds West a distance of 118.74 feet to a point; THENCE South 45 degrees 54 minutes 59 seconds West a distance of 202.86 feet to a point; THENCE South 41 degrees 21 minutes 58 seconds East a distance of 121.58 feet to a point; THENCE South 48 degrees 38 minutes 02 seconds West a distance of 20.00 feet to a point; THENCE North 41 degrees 21 minutes 58 seconds West a distance of 121.12 feet to a point; THENCE South 48 degrees 38 minutes 02 seconds West a distance of 97.18 feet to a point; THENCE South 57 degrees 48 minutes 38 seconds West a distance of 77.97 feet to a point; THENCE South 57 degrees 48 minutes 38 seconds West a distance of 35.31 feet to a point; THENCE South 66 degrees 10 minutes 21 seconds West a distance of 116.46 feet to a point; THENCE South 23 degrees 55 minutes 13 seconds East a distance of 120.55 feet to a point; THENCE South 66 degrees 04 minutes 47 seconds West a distance of 20.00 feet to a point; THENCE North 23 degrees 55 minutes 13 seconds West a distance of 121.98 feet to a point; THENCE South 74 degrees 48 minutes 26 seconds West a distance of 346.42 feet to a point; THENCE South 15 degrees 12 minutes 53 seconds East a distance of 32.15 feet to a point; THENCE South 27 degrees 42 minutes 38 seconds East a distance of 114.15 feet to a point; THENCE South 62 degrees 17 minutes 22 seconds West a distance of 20.00 feet to a point; THENCE North 27 degrees 42 minutes 38 seconds West a distance of 116.34 feet to a point; THENCE North 15 degrees 12 minutes 53 seconds West a distance of 54.35 feet to a point; THENCE North 74 degrees 48 minutes 26 seconds East a distance of 374.25 feet to a point; THENCE North 66 degrees 10 minutes 21 seconds East a distance of 124.26 feet to a point; THENCE North 57 degrees 48 minutes 38 seconds East a distance of 23.84 feet to a point; THENCE North 32 degrees 11 minutes 22 seconds West a distance of 83.50 feet to a point; THENCE North 75 degrees 13 minutes 23 seconds West a distance of 13.31 feet to a point; THENCE along a curve to the left with a radius of 539.08 feet and an arc length of 28.24 feet, said curve having a chord bearing of North 59 degrees 40 minutes 37 seconds East and a chord distance of 28.23 feet to a point, said point being the **TRUE POINT OF BEGINNING**.

Said tract contains 31,105 square feet or 0.71 acres.



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Norcross, Georgia 30093
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Fax: (770) 416-6759
www.travispruitt.com

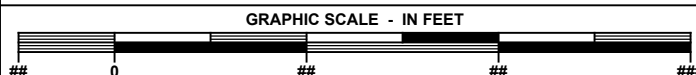
Certificate of
Authorization Number 613

SANITARY SEWER EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310



PLAT DATE: 12/13/2024

FIELD DATE:

SCALE: N/A

JN: 1-22-0530

FN: 101-A-2581

DRAWN BY: SH

SHEET NO: 5 of 5



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0150

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of a Sewer Easement Dedication of 0.327 acres (14,244.12 square feet) to Fulton County, a political subdivision of the State of Georgia, from JBGL Atlanta Development 2014, LLC, individuals, for the purpose of constructing the Byers Park Project at 2325 Old Milton Parkway, Alpharetta, Georgia 30009.

Requirement for Board Action

According to Article XXXIV. - Development Regulations, 34.4.1 Land disturbance permit prerequisites.

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☒
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background

Scope of Work: The proposed Byers Park Project, a residential development, requires a connection to the County's sewer system. Fulton County development regulations require that all new sewer service line connections acknowledge Fulton County's ownership interests in the area(s) in which a connection is being made to the County's sewer system before issuing a Land Disturbance Permit. The easement area to be conveyed to the County consists of 0.327 acres (14,244.12 square feet) and is located in Land Lot 748 of the 1st District, 2nd Section of Fulton County, Georgia.

Community Impact: The community will benefit from the extension of the County's sewer system and the addition of a residential development.

Department Recommendation: The Department of Real Estate and Asset Management recommends acceptance of the easement dedication.

Project Implications: Easement dedications by the owner of legal record to Fulton County are made a part of the public record and grant Fulton County access to perform construction, maintenance, and upgrades to the County's sewer system once the proposed improvements are installed.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Acceptance of this easement dedication does not involve the expenditure or the receipt of funds

[BLANK SPACE ABOVE THIS LINE IS FOR THE SOLE USE OF THE CLERK OF SUPERIOR COURT]

THIS DOCUMENT MUST ONLY BE RECORDED BY PERSONNEL OF THE FULTON COUNTY LAND DIVISION

Return Recorded Document to:
Fulton County Land Division
141 Pryor Street, S.W. – Suite 8021
Atlanta, Georgia 30303

Project Name : BYERS PARK
Tax Parcel Identification No.: 12 270307480230, 12 270307480560
Land Disturbance Permit No.: WRN23-111
Zoning/Special Use Permit No.: _____
(if applicable)

For Fulton County Use Only

Approval Date: _____
Initials: _____

**SEWER EASEMENT
(Corporate Form)**

STATE OF GEORGIA,
COUNTY OF FULTON

This indenture entered into this 27th day of January, 2025, between
JBGL Atlanta Development 2014, LLC, a corporation duly organized under the
laws of the State of Georgia, party of the first part (hereinafter referred to as Grantor) and
FULTON COUNTY, a Political Subdivision of the State of Georgia, party of the second part and Grantee.

WITNESSETH, that for and in consideration of \$1.00 in hand paid, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged and in consideration of the benefits which will accrue to the undersigned from the construction of a sewer line through subject property, and in consideration of the benefits which will accrue to the subject property from the construction of a sewer line through subject property, said Grantor has granted, bargained, sold and conveyed and by these presents does grant, bargain, sell and convey to **FULTON COUNTY** and to successors and assigns the right, title, and privilege of easements through subject property located in Land Lot(s) 748,
2nd Section (if applicable) of District 1, Fulton County, Georgia, and more particularly described as follows: To wit:

BYERS PARK

Project Name

[See Exhibit "A" attached hereto and made a part hereof]

This right and easement herein granted being to occupy such portion of my property as would be sufficient for the construction, access, maintenance and upgrade of a sewer line through my property according to the location and size of said sewer line as shown on the map and profile now on file in the office of the Public Works Department of Fulton County, and which size and location may be modified from time to time including in the future after the date of this document to accommodate said sewer line within the aforesaid boundaries of the above-described easement.

For the same consideration, Grantor hereby conveys and relinquishes to FULTON COUNTY a right of access over Grantor's remaining lands as necessary for FULTON COUNTY to perform maintenance and repairs on said sewer line on both a routine and emergency basis.

Said Grantor hereby warrants that it has the right to sell and convey said sewer line easement and right of access and binds itself, its successors and assigns forever to warrant and defend the right and title to the above described sewer line easement unto the said FULTON COUNTY, its successors and assigns against the claims of all persons whomever by virtue of these presents.

Said Grantor hereby waives for itself, its successors and assigns all rights to any further compensation or claim to damages on account of the construction, access, upgrade or maintenance of said sewer line for the use of the property as herein agreed.

IN WITNESS HEREOF said party of the first part has hereunto affixed his/her hand and seal on the day and year first above written.

Signed, sealed and delivered this 27
day of January, 20 25
in the presence of:

GRANTOR: JBGL Atlanta Development 2014, LLC
CORPORATE NAME

[Signature]
Witness

By:

Print Name:

Title:

[Signature]
Veronica Edwards
Authorized Representative

By:

Print Name:

Title:

Notary Public

[NOTARIAL SEAL]



[CORPORATE SEAL]

LEGAL DESCRIPTION - 20' SEWER EASEMENT

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING IN THE LAND LOT 748 OF THE 1ST DISTRICT, 2ND SECTION, CITY OF ALPHARETTA, FULTON COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE FOUND RIGHT OF WAY MONUMENT, SAID MONUMENT COORDINATES OF NORTH: 1,480,694.28 AND EAST: 2,258,731.30, COORDINATES BASED ON NAD83 STATE PLANE COORDINATE SYSTEM, GEORGIA WEST ZONE, SAID MONUMENT LOCATED ALONG THE SOUTHERLY RIGHT OF WAY LINE OF OLD MILTON PARKWAY (A.K.A. S.R. 120) (F.K.A. DULUTH STREET) (PUBLIC VARIABLE RIGHT OF WAY), THENCE SOUTH 29 DEGREES 42 MINUTES 19 SECONDS EAST A DISTANCE OF 105.88 FEET TO A POINT; SAID POINT BEING THE TRUE POINT OF BEGINNING; FROM THE TRUE POINT OF BEGINNING AS THUS ESTABLISHED, THENCE SOUTH 89 DEGREES 58 MINUTES 02 SECONDS EAST A DISTANCE OF 187.29 FEET TO A POINT; THENCE SOUTH 00 DEGREES 01 MINUTES 58 SECONDS WEST A DISTANCE OF 20.00 FEET TO A POINT; THENCE NORTH 89 DEGREES 58 MINUTES 02 SECONDS WEST A DISTANCE OF 72.00 FEET TO A POINT; THENCE SOUTH 00 DEGREES 01 MINUTES 58 SECONDS WEST A DISTANCE OF 156.44 FEET TO A POINT; THENCE SOUTH 89 DEGREES 58 MINUTES 02 SECONDS EAST A DISTANCE OF 70.28 FEET TO A POINT; THENCE SOUTH 00 DEGREES 01 MINUTES 58 SECONDS WEST A DISTANCE OF 20.00 FEET TO A POINT; THENCE NORTH 89 DEGREES 58 MINUTES 02 SECONDS WEST A DISTANCE OF 135.91 FEET TO A POINT; THENCE SOUTH 00 DEGREES 01 MINUTES 58 SECONDS WEST A DISTANCE OF 47.68 FEET TO A POINT; THENCE SOUTH 47 DEGREES 49 MINUTES 21 SECONDS WEST A DISTANCE OF 106.45 FEET TO A POINT; THENCE SOUTH 65 DEGREES 06 MINUTES 51 SECONDS WEST A DISTANCE OF 69.77 FEET TO A POINT; THENCE NORTH 24 DEGREES 53 MINUTES 09 SECONDS WEST A DISTANCE OF 20.00 FEET TO A POINT; THENCE NORTH 65 DEGREES 06 MINUTES 51 SECONDS EAST A DISTANCE OF 66.73 FEET TO A POINT; THENCE NORTH 47 DEGREES 49 MINUTES 21 SECONDS EAST A DISTANCE OF 94.55 FEET TO A POINT; THENCE NORTH 00 DEGREES 01 MINUTES 58 SECONDS EAST A DISTANCE OF 58.82 FEET TO A POINT; THENCE SOUTH 89 DEGREES 58 MINUTES 02 SECONDS EAST A DISTANCE OF 65.63 FEET TO A POINT; THENCE NORTH 00 DEGREES 01 MINUTES 58 SECONDS EAST A DISTANCE OF 156.44 FEET TO A POINT; THENCE NORTH 89 DEGREES 58 MINUTES 02 SECONDS WEST A DISTANCE OF 95.28 FEET TO A POINT; THENCE NORTH 00 DEGREES 01 MINUTES 58 SECONDS EAST A DISTANCE OF 20.00 FEET TO A POINT AND THE TRUE POINT OF BEGINNING,

HAVING AN AREA OF 0.327 ACRES

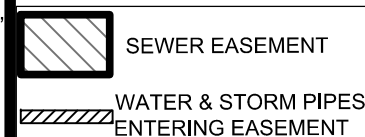


SITE MAP (NTS)

SITE DATA

ADDRESS: 2325 OLD MILTON PARKWAY,
ALPHARETTA, GA. 30005
PARCEL ID: • 12 270307480230
• 12 270307480560
SITE AREA: 4.882 AC
ZONING: DT-LW

LEGEND



CONTACT INFORMATION:

OWNER: CLINT WATERS
THE PROVIDENCE GROUP
ADDRESS: 11340 LAKEFIELD DRIVE
SUITE 140
JOHNS CREEK, GA. 30097
PHONE: 404-274-4492

ENCROACHMENT TABLE

STORMWATER PIPE:	128 SQ-FT
WATER PIPE:	229 SQ-FT
TOTAL:	357 SQ-FT



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350 RESEARCH COURT PEACHTREE CORNERS, GEORGIA 30092
(770)451-2741 WWW.PEC.PLUS
C.O.A.-LSF000004

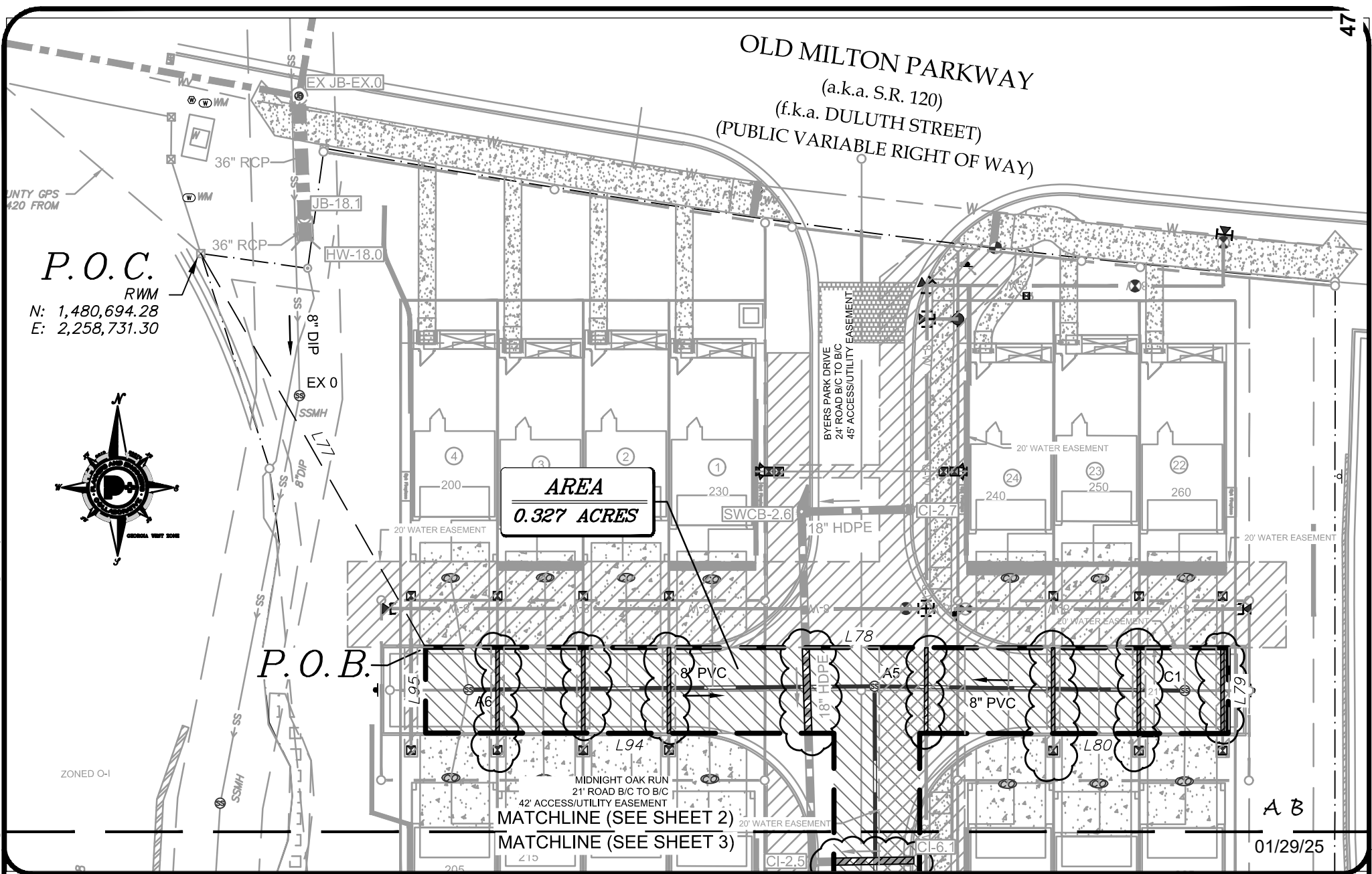
FULTON CO. PROJECT: **SEWER EASEMENT EXHIBIT "A"**
WRN23-111
COUNTY FULTON
STATE OF GEORGIA
CITY OF ALPHARETTA
LAND LOT(S) 748
DISTRICT 1st SECTION 2nd

OF
BYERS PARK



SHEET 1 OF 4

DRAWN BY: MCS
CHECKED BY: MCS
FILE NO.: 15315.01
DATE: 01/22/25
SCALE: 1"=30'



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FULTON CO. PROJECT: **SEWER EASEMENT EXHIBIT "A"**
WRN23-111

COUNTY FULTON
STATE OF GEORGIA
CITY OF ALPHARETTA
LAND LOT(S) 748
DISTRICT 1st SECTION 2nd

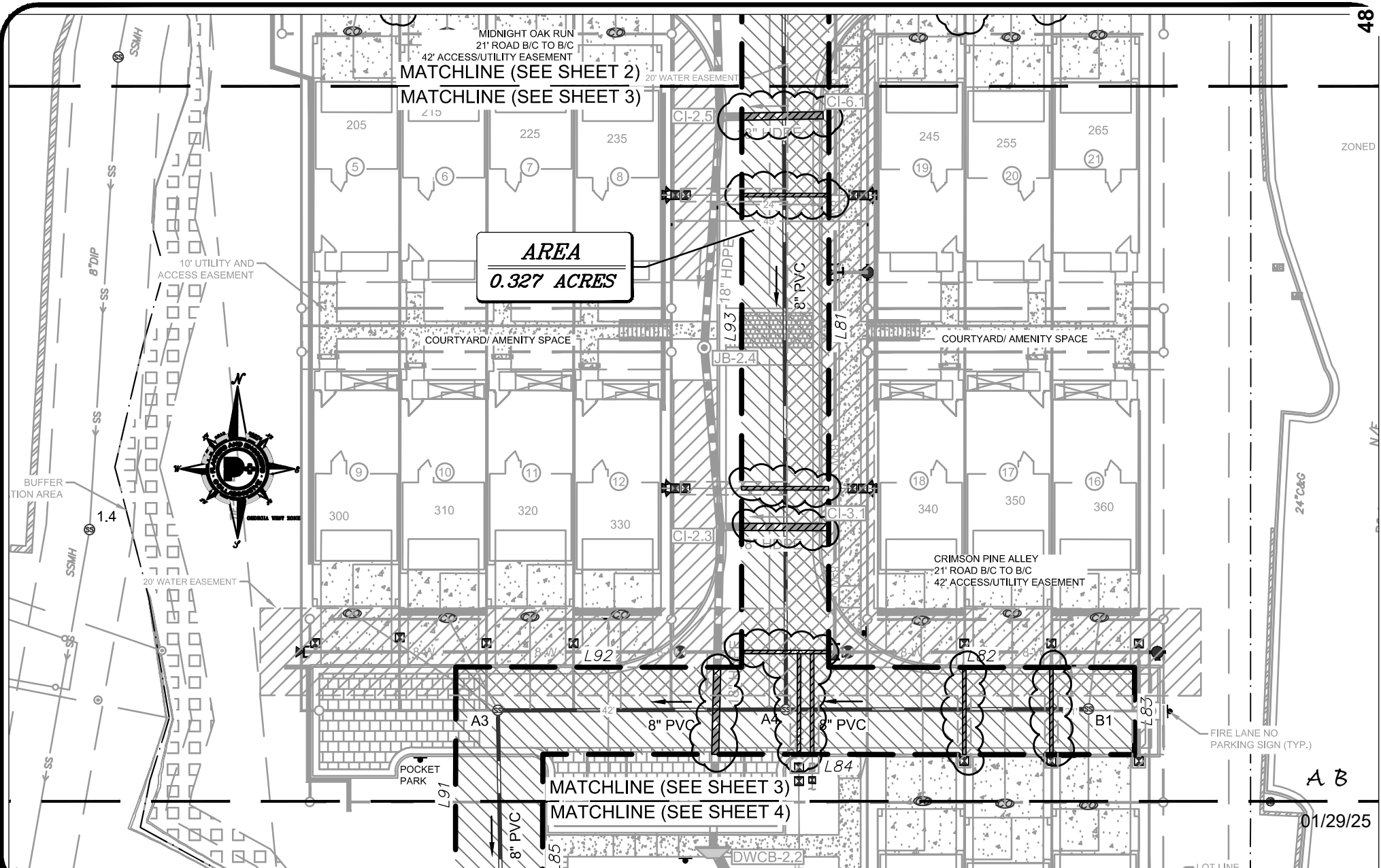
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SHEET 2 OF 4

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SCALE: 1"=30'

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(770) 451-2741 WWW.PEC.PLUS
C.O.A.-LSF000004

FULTON CO. PROJECT: **SEWER EASEMENT EXHIBIT "A"**
WRN23-111

COUNTY FULTON
STATE OF GEORGIA
CITY OF ALPHARETTA
LAND LOT(S) 748
DISTRICT 1st SECTION 2nd

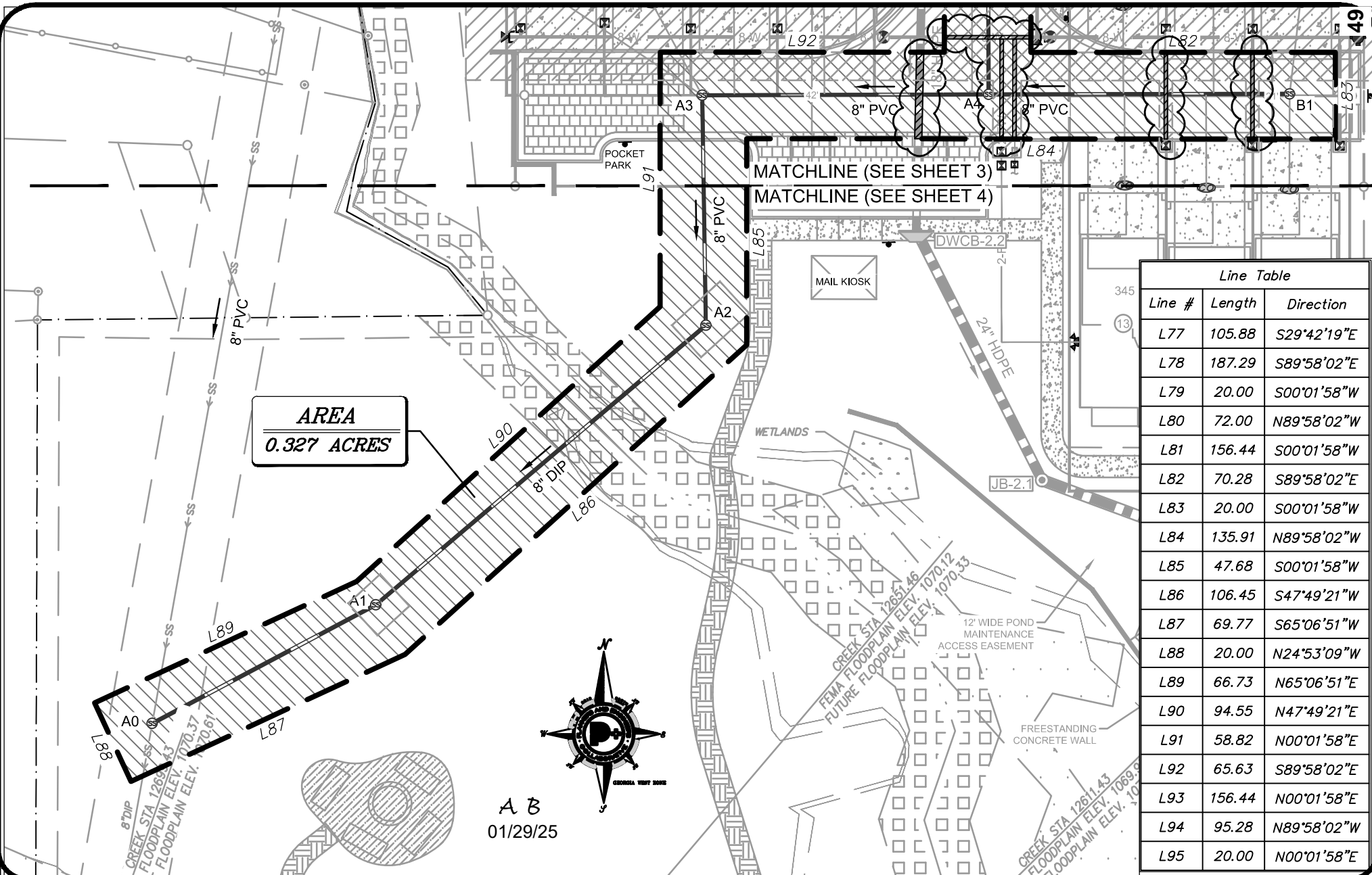
OF
BYERS PARK



SHEET 3 OF 4

DRAWN BY: MCS
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FILE NO.: 15315.01
DATE: 01/22/25
SCALE: 1"=30'

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Line Table		
Line #	Length	Direction
L77	105.88	S29°42'19"E
L78	187.29	S89°58'02"E
L79	20.00	S00°01'58"W
L80	72.00	N89°58'02"W
L81	156.44	S00°01'58"W
L82	70.28	S89°58'02"E
L83	20.00	S00°01'58"W
L84	135.91	N89°58'02"W
L85	47.68	S00°01'58"W
L86	106.45	S47°49'21"W
L87	69.77	S65°06'51"W
L88	20.00	N24°53'09"W
L89	66.73	N65°06'51"E
L90	94.55	N47°49'21"E
L91	58.82	N00°01'58"E
L92	65.63	S89°58'02"E
L93	156.44	N00°01'58"E
L94	95.28	N89°58'02"W
L95	20.00	N00°01'58"E



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ARBORISTS • LANDSCAPE ARCHITECTURE • WATER RESOURCES

350 RESEARCH COURT PEACHTREE CORNERS, GEORGIA 30092
(770)451-2741 WWW.PEC.PLUS
C.O.A.-LSF000004

FULTON CO. PROJECT: **SEWER EASEMENT EXHIBIT "A"**
WRN23-111

COUNTY FULTON
STATE OF GEORGIA
CITY OF ALPHARETTA
LAND LOT(S) 748
DISTRICT 1st SECTION 2nd

OF
BYERS PARK



SHEET 4 OF 4

DRAWN BY: MCS
CHECKED BY: MCS
FILE NO.: 15315.01
DATE: 01/22/25
SCALE: 1"=30'



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0151

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of a Sewer Easement Dedication of 4,328 square feet to Fulton County, a political subdivision of the State of Georgia, from the Bridges Alpharetta, LLC, for the purpose of constructing the Bridges Project at 4430 Webb Bridge Road, Alpharetta, Georgia 30005.

Requirement for Board Action

According to Article XXXIV. - Development Regulations, 34.4.1 Land disturbance permit prerequisites

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☒
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background

Scope of Work: The proposed the Bridges Project, a residential development, requires a connection to the County's sewer system. Fulton County development regulations require that all new sewer service line connections acknowledge Fulton County's ownership interests in the area(s) in which a connection is being made to the County's sewer system before issuing a Land Disturbance Permit. The easement area to be conveyed to the County consists of 4,328 square feet and is located in Land Lot 125 of the 1st District, 1st Section of Fulton County, Georgia.

Community Impact: The community will benefit from the extension of the County's sewer system

and the addition of a residential development.

Department Recommendation: The Department of Real Estate and Asset Management recommends acceptance of the easement dedication.

Project Implications: Easement dedications by the owner of record to Fulton County are made a part of the public record and grant Fulton County access to perform construction, maintenance, and upgrades to the County's sewer system once the proposed improvements are installed.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Acceptance of this easement dedication does not involve the expenditure or the receipt of funds.

[BLANK SPACE ABOVE THIS LINE IS FOR THE SOLE USE OF THE CLERK OF SUPERIOR COURT]

THIS DOCUMENT MUST ONLY BE RECORDED BY PERSONNEL OF THE FULTON COUNTY LAND DIVISION

Return Recorded Document to:
Fulton County Land Division
141 Pryor Street, S.W. – Suite 8021
Atlanta, Georgia 30303

Project Name : The Bridges
Tax Parcel Identification No.: 11 034001250519 & 11 034001250527
Land Disturbance Permit No.: WRN22-034 City of Alpharetta = D22042
Zoning/Special Use Permit No.: R, PH-22-04/Z-2-04/
(if applicable) The Bridges/Webb Bridge Road

For Fulton County Use Only

Approval Date: _____
Initials: _____

**SEWER EASEMENT
(Corporate Form)**

STATE OF GEORGIA,
COUNTY OF FULTON

This indenture entered into this 5th day of December, 2024, between Bridges Alpharetta, LLC, a corporation duly organized under the laws of the State of Georgia, party of the first part (hereinafter referred to as Grantor) and **FULTON COUNTY**, a Political Subdivision of the State of Georgia, party of the second part and Grantee.

WITNESSETH, that for and in consideration of \$1.00 in hand paid, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged and in consideration of the benefits which will accrue to the undersigned from the construction of a sewer line through subject property, and in consideration of the benefits which will accrue to the subject property from the construction of a sewer line through subject property, said Grantor has granted, bargained, sold and conveyed and by these presents does grant, bargain, sell and convey to FULTON COUNTY and to successors and assigns the right, title, and privilege of easements through subject property located in Land Lot(s) 125, 1st Section (if applicable) of District 1st, Fulton County, Georgia, and more particularly described as follows: To wit:

The Bridges

Project Name

[See Exhibit "A" attached hereto and made a part hereof]

This right and easement herein granted being to occupy such portion of my property as would be sufficient for the construction, access, maintenance and upgrade of a sewer line through my property according to the location and size of said sewer line as shown on the map and profile now on file in the office of the Public Works Department of Fulton County, and which size and location may be modified from time to time including in the future after the date of this document to accommodate said sewer line within the aforesaid boundaries of the above-described easement.

For the same consideration, Grantor hereby conveys and relinquishes to FULTON COUNTY a right of access over Grantor's remaining lands as necessary for FULTON COUNTY to perform maintenance and repairs on said sewer line on both a routine and emergency basis.

Said Grantor hereby warrants that it has the right to sell and convey said sewer line easement and right of access and binds itself, its successors and assigns forever to warrant and defend the right and title to the above described sewer line easement unto the said FULTON COUNTY, its successors and assigns against the claims of all persons whomever by virtue of these presents.

Said Grantor hereby waives for itself, its successors and assigns all rights to any further compensation or claim to damages on account of the construction, access, upgrade or maintenance of said sewer line for the use of the property as herein agreed.

IN WITNESS HEREOF said party of the first part has hereunto affixed his/her hand and seal on the day and year first above written.

Signed, sealed and delivered this 5th
day of December, 2024
in the presence of:

[Signature]
Witness

[Signature]
Notary Public

GRANTOR: Bridges Alpharetta, LLC
CORPORATE NAME

By: [Signature]
Print Name: Tori Young
Title: Manager

By: _____
Print Name: _____
Title: _____

[CORPORATE SEAL]

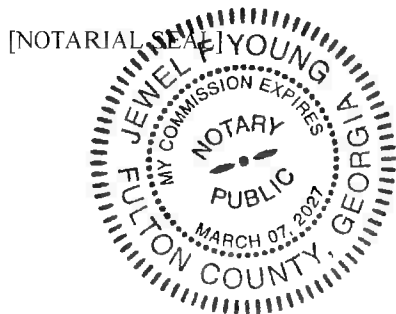


Exhibit "A"

SEWER EASEMENT:
THE BRIDGES
PROPERTY OF:
BRIDGES ALPHARETTA, LLC

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING LAND LOT 125,
1ST DISTRICT, 1ST SECTION IN THE CITY OF ALPHARETTA, FULTON
COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS
FOLLOWS:

COMMENCING AT A FOUND 5/8" REBAR AT THE NORTHEAST CORNER OF
LAND LOT 125 OF SAID DISTRICT AND SECTION, THENCE S 27°07'48" W
FOR A DISTANCE OF 487.37' TO A POINT, SAID POINT BEING THE POINT OF
BEGINNING FOR THE PARCEL HEREIN DESCRIBED;

THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF
27.16', WITH A RADIUS OF 59.97', WITH A CHORD BEARING OF S 43°07'57"
W, WITH A CHORD LENGTH OF 26.93' TO A POINT;
THENCE N 88°54'23" W A DISTANCE OF 206.01' TO A POINT;
THENCE N 01°05'37" E A DISTANCE OF 20.00' TO A POINT;
THENCE S 88°54'23" E A DISTANCE OF 224.04' TO A POINT;
WHICH IS THE POINT OF BEGINNING,
HAVING AN AREA OF SQUARE FEET, 0.099 ACRES

SAID PARCEL CONTAINS 4328 SQUARE FEET, 0.099 ACRES.

EASEMENT
ENCROACHMENT
3,691 SQ.FT.
(PERVIOUS PAVERS)

BRIDGE WAY
(50' PRIVATE ROAD)

TIE: N 27°07'48" E 487.37'
TO 5/8" RBF @ NE CORNER
OF LAND LOT 125

5

1.00 ACRES

10' AE/DE
PAVE DRAIN & TANK

N 78°30'54" W 211.32'

20' SSE
4328 Sq. Feet
0.099 Acres

N 89°32'35" W 122.47'

N 89°36'18" W 117.08'

1/2" RB FND

1/2" RB FND

6

N/F

AMANDA R. BRALLEY
AND KRISHAN BRALLEY
DB 66700/349

S 01°01'56" W 110.11'

LINE	BEARING	DISTANCE
L1	N 88°54'23" W	206.01'
L2	N 01°05'37" E	20.00'
L3	S 88°54'23" E	224.04'

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING
C1	59.97'	27.16'	26.93'	S 43°07'57" W

TAX PARCEL ID: 11 034001250519, 11 034001250527

SEWER EASEMENT EXHIBIT FOR:

THE BRIDGES

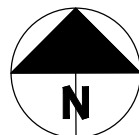
PROPERTY OF:

BRIDGES ALPHARETTA, LLC

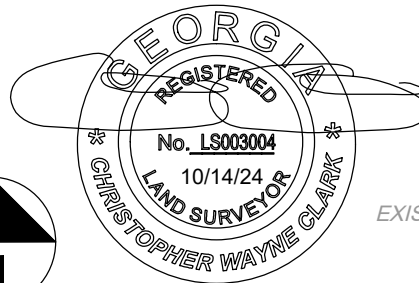
LAND LOT 125 * 1ST DISTRICT * 1ST SECTION
CITY OF ALPHARETTA - FULTON COUNTY, GEORGIA

CLARK LAND
CONSULTANTS

Chris W. Clark, PLS ~ GA: LS003004 - LSF:001420
11 Belmore Manor Drive, Suwanee, Georgia 30024
Phone: 678.727.6985
Email: Chris@Chriswclark.com



GRID NORTH-GA WEST



EXISTING MANHOLE
EX B

N 00°18'52" E 219.73'

A B
11/20/24

1/2" RB FND

N 89°40'11" W
53.95'

N 89°40'11" W 93.07'

1/2" RB FND
(ON-LINE)

N 01°01'56" E 158.70'

APPROXIMATE LAND LOT LINE



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0152

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of a Water Easement Dedication of 5,227 square feet to Fulton County, a political subdivision of the State of Georgia, from the Bridges Alpharetta, LLC for the purpose of constructing the Bridges Project at 4430 Webb Bridge Road, Alpharetta, Georgia 30005.

Requirement for Board Action

According to Article XXXIV. - Development Regulations, 34.4.1 Land disturbance permit prerequisites.

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☒
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background

Scope of Work: The proposed The Bridges Project, a residential development, requires the installation of a water service line. Fulton County development regulations require that all new water line connections acknowledge Fulton County's ownership interests in the area(s) where a water service line connection is being made before recording the Final Plat. The easement area to be conveyed consists of 5,227 square feet and is located in Land Lot 125 of the 1st District, 1st Section of Fulton County, Georgia.

Community Impact: The community will benefit from the extension of the County's water system and the addition of a residential development

Department Recommendation: The Department of Real Estate and Asset Management recommends acceptance of the easement dedication.

Project Implications: Easement dedications by the owner of legal record to Fulton County are made a part of the public record and grant Fulton County access to perform construction, maintenance, and upgrades to the County's water system once the proposed improvements are installed.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Acceptance of this easement dedication does not involve the expenditure or the receipt of funds.

[BLANK SPACE ABOVE THIS LINE IS FOR THE SOLE USE OF THE CLERK OF SUPERIOR COURT]

THIS DOCUMENT MAY BE RECORDED ONLY BY PERSONNEL OF THE FULTON COUNTY LAND DIVISION

Return Recorded Document to:
Fulton County Land Division
141 Pryor Street, S.W. – Suite 8021
Atlanta, Georgia 30303

Project Name : The Bridges
Tax Parcel Identification No.: 11 034001250519 & 11 034001250527
Land Disturbance Permit No.: WRN22-034 City of Alpharetta = D220042
Zoning/Special Use Permit No.: R, PH-22-04/Z-2-04
(if applicable) The Bridges/Webb Bridge Road

For Fulton County Use Only

Approval Date: _____
Initials: _____

**WATER LINE EASEMENT
(Corporate Form)**

STATE OF GEORGIA,
COUNTY OF FULTON

This indenture entered into this 5th day of December, 2024, between Bridges Alpharetta, LLC, a corporation duly organized under the laws of the State of Georgia, party of the first part (hereinafter referred to as Grantor) and **FULTON COUNTY**, a Political Subdivision of the State of Georgia, party of the second part and Grantee.

WITNESSETH, that for and in consideration of \$1.00 in hand paid, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged and in consideration of the benefits which will accrue to the undersigned from the construction of a water line through subject property, and in consideration of the benefits which will accrue to the subject property from the construction of a water line through the subject property, said Grantor has granted, bargained, sold and conveyed and by these presents does grant, bargain, sell and convey to FULTON COUNTY and to successors and assigns the right, title, and privilege of easements through subject property located in Land Lot(s) 125, 1st Section (if applicable) of District 1st, Fulton County, Georgia, and more particularly described as follows: To wit:

The Bridges

Project Name

[See Exhibit "A" attached hereto and made a part hereof]

This right and easement herein granted being to occupy such portion of my property as would be sufficient for the construction, access, maintenance and upgrade of a water line through my property according to the location and size of said water line as shown on the map and profile now on file in the office of the Public Works Department of Fulton County, and which size and location may be modified from time to time including in the future after the date of this document to accommodate said water line within the aforesaid boundaries of the above-described easement.

For the same consideration, Grantor hereby conveys and relinquishes to FULTON COUNTY a right of access over Grantor's remaining lands as necessary for FULTON COUNTY to perform maintenance and repairs on said water line on both a routine and emergency basis.

Said Grantor hereby warrants that it has the right to sell and convey said water line easement and right of access and binds itself, its successors and assigns forever to warrant and defend the right and title to the above described water line easement unto the said FULTON COUNTY, its successors and assigns against the claims of all persons whomever by virtue of these presents.

Said Grantor hereby waives for itself, its successors and assigns all rights to any further compensation or claim to damages on account of the construction, access, upgrade or maintenance of said water line for the use of the property as herein agreed.

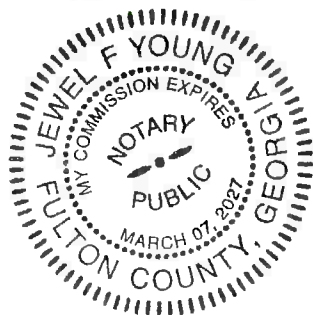
IN WITNESS HEREOF said party of the first part has hereunto affixed his/her hand and seal on the day and year first above written.

Signed, sealed and delivered this 5th
day of December 20 24
in the presence of:

[Signature]
Witness

[Signature]
Notary Public

[NOTARIAL SEAL]



GRANTOR: Bridges Alpharetta, LLC
CORPORATE NAME

By: [Signature]
Print Name: Ton Young
Title: Manager

By: _____
Print Name: _____
Title: _____

[CORPORATE SEAL]

EXHIBIT "A"

WATER EASEMENT:

THE BRIDGES

PROPERTY OF:

BRIDGES ALPHARETTA, LLC

ALL THAT TRACT OR PARCEL OF LAND LYING AND BEING LAND LOT 125, 1ST DISTRICT, 1ST SECTION IN THE CITY OF ALPHARETTA, FULTON COUNTY, GEORGIA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A FOUND 5/8" REBAR AT THE NORTHEAST CORNER OF LAND LOT 125 OF SAID DISTRICT AND SECTION, THENCE S 56°14'25" W 762.79' TO A POINT, SAID POINT BEING THE POINT OF BEGINNING FOR THE PARCEL HEREIN DESCRIBED;

THENCE N 76°53'47" E A DISTANCE OF 29.59' TO A POINT;
THENCE N 80°45'12" E A DISTANCE OF 7.23' TO A POINT;
THENCE N 00°00'04" W A DISTANCE OF 16.91' TO A POINT;
THENCE N 90°00'00" E A DISTANCE OF 5.00' TO A POINT;
THENCE S 00°00'04" E A DISTANCE OF 16.74' TO A POINT;
THENCE N 89°33'20" E A DISTANCE OF 78.43' TO A POINT;
THENCE S 89°33'40" E A DISTANCE OF 75.30' TO A POINT;
THENCE N 00°00'00" W A DISTANCE OF 17.12' TO A POINT;
THENCE N 90°00'00" E A DISTANCE OF 5.00' TO A POINT;
THENCE S 00°00'00" E A DISTANCE OF 17.16' TO A POINT;
THENCE S 89°33'40" E A DISTANCE OF 78.37' TO A POINT;
THENCE N 00°00'00" W A DISTANCE OF 1.80' TO A POINT;
THENCE S 89°33'32" E A DISTANCE OF 2.33' TO A POINT;
THENCE WITH A CURVE TURNING TO THE LEFT WITH AN ARC LENGTH OF 2.67', WITH A RADIUS OF 20.00', WITH A CHORD BEARING OF N 86°49'07" E, WITH A CHORD LENGTH OF 2.67 TO A POINT;
THENCE S 00°00'00" E A DISTANCE OF 1.97' TO A POINT;
THENCE S 89°33'40" E A DISTANCE OF 0.21' TO A POINT;
THENCE N 45°26'20" E A DISTANCE OF 3.58' TO A POINT;
THENCE WITH A CURVE TURNING TO THE LEFT WITH AN ARC LENGTH OF 20.45', WITH A RADIUS OF 19.91', WITH A CHORD BEARING OF N 45°26'20" E, WITH A CHORD LENGTH OF 19.56 TO A POINT;
THENCE N 45°26'20" E A DISTANCE OF 1.36' TO A POINT;
THENCE N 00°26'20" E A DISTANCE OF 5.00' TO A POINT;
THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 26.34', WITH A RADIUS OF 60.00', WITH A CHORD BEARING OF N 21°29'09" E, WITH A CHORD LENGTH OF 26.13 TO A POINT;
THENCE N 45°26'20" E A DISTANCE OF 23.67' TO A POINT;
THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 22.17', WITH A RADIUS OF 60.00', WITH A CHORD BEARING OF N 67°24'05" E, WITH A CHORD LENGTH OF 22.05 TO A POINT;
THENCE S 89°33'40" E A DISTANCE OF 33.31' TO A POINT;
THENCE N 31°35'13" E A DISTANCE OF 14.46' TO A POINT;
THENCE S 58°24'47" E A DISTANCE OF 5.00' TO A POINT;
THENCE S 31°35'13" W A DISTANCE OF 12.66' TO A POINT;
THENCE S 44°33'40" E A DISTANCE OF 34.64' TO A POINT;
THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 24.63', WITH A RADIUS OF 60.00', WITH A CHORD BEARING OF S 21°13'18" E, WITH A CHORD LENGTH OF 24.46 TO A POINT;
THENCE S 01°14'16" W A DISTANCE OF 17.23' TO A POINT;
THENCE S 78°30'54" E A DISTANCE OF 0.73' TO A POINT;
THENCE WITH A CURVE TURNING TO THE RIGHT WITH AN ARC LENGTH OF 20.44', WITH A RADIUS OF 60.00', WITH A CHORD BEARING OF S 16°55'22" W, WITH A CHORD LENGTH OF 20.34 TO A POINT;
(CONTINUED)

EXHIBIT "A" CONTINUED

THENCE N 88°35'24" W A DISTANCE OF 5.24' TO A POINT;
THENCE N 01°15'53" E A DISTANCE OF 46.22' TO A POINT;
THENCE N 44°33'40" W A DISTANCE OF 40.78' TO A POINT;
THENCE N 89°33'40" W A DISTANCE OF 40.86' TO A POINT;
THENCE S 45°26'20" W A DISTANCE OF 40.86' TO A POINT;
THENCE S 00°26'20" W A DISTANCE OF 20.00' TO A POINT;
THENCE S 45°26'20" W A DISTANCE OF 32.78' TO A POINT;
THENCE N 89°33'40" W A DISTANCE OF 167.95' TO A POINT;
THENCE S 89°33'20" W A DISTANCE OF 81.77' TO A POINT;
THENCE S 80°45'12" W A DISTANCE OF 6.94' TO A POINT;
THENCE S 76°54'12" W A DISTANCE OF 28.63' TO A POINT;
THENCE N 16°41'38" W A DISTANCE OF 10.02' TO THE POINT OF BEGINNING.

SAID PARCEL CONTAINS 5227 SQUARE FEET, 0.120 ACRES.

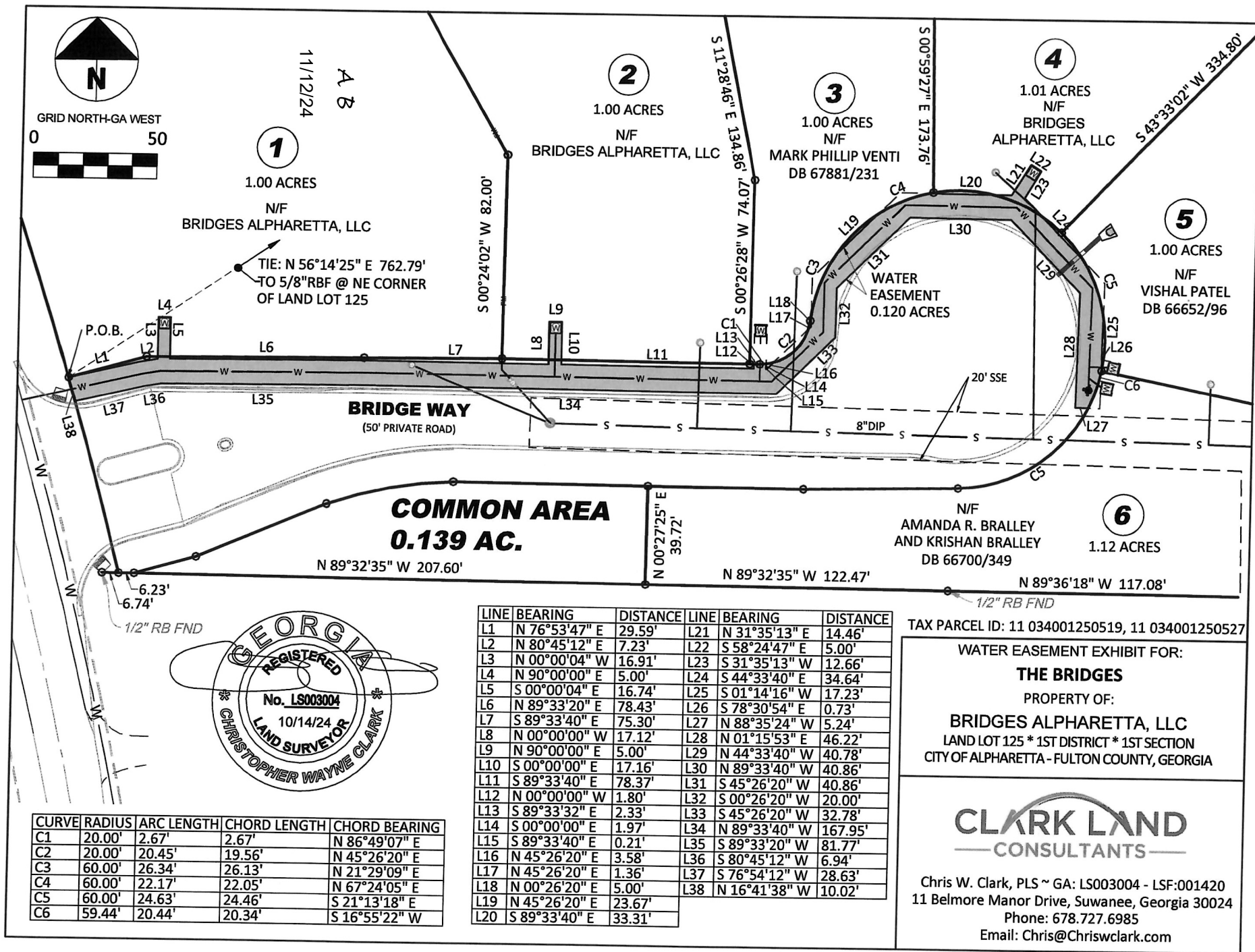


EXHIBIT A "CONTINUED"

TAX PARCEL ID: 11 034001250519, 11 034001250527

WATER EASEMENT EXHIBIT FOR:

THE BRIDGES

PROPERTY OF:

BRIDGES ALPHARETTA, LLC
LAND LOT 125 * 1ST DISTRICT * 1ST SECTION
CITY OF ALPHARETTA - FULTON COUNTY, GEORGIA

CLARK LAND CONSULTANTS

Chris W. Clark, PLS ~ GA: LS003004 - LSF:001420
11 Belmore Manor Drive, Suwanee, Georgia 30024
Phone: 678.727.6985
Email: Chris@Chriswclark.com



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0153

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of a Water Easement Dedication of 42,633 square feet to Fulton County, a political subdivision of the State of Georgia, from JBGL Atlanta Development 2014, LLC, individuals, for the purpose of constructing the Iveybrooke Project at 0 Davis Drive, Alpharetta, Georgia 30009.

Requirement for Board Action

According to Article XXXIV. - Development Regulations, 34.4.1 Land disturbance permit prerequisites.

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☐
- District 2 ☒
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

Choose an item.

Summary & Background

Scope of Work: The proposed Iveybrooke Project, a residential development, requires the installation of a water service line. Fulton County development regulations require that all new water line connections acknowledge Fulton County's ownership interests in the area(s) where a water service line connection is being made before recording the Final Plat. The easement area to be conveyed consists of 42,633 square feet and is located in Land Lot 638, 639 & 654 of the 1st District, 2nd Section of Fulton County, Georgia.

Community Impact: The community will benefit from the extension of the County's water system

and the addition of a residential development.

Department Recommendation: The Department of Real Estate and Asset Management recommends acceptance of the easement dedication.

Project Implications: Easement dedications by the owner of record to Fulton County are made a part of the public record and grant Fulton County access to perform construction, maintenance, and upgrades to the County's water system once the proposed improvements are installed.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Acceptance of this easement dedication does not involve the expenditure or the receipt of funds.

[BLANK SPACE ABOVE THIS LINE IS FOR THE SOLE USE OF THE CLERK OF SUPERIOR COURT]

THIS DOCUMENT MAY BE RECORDED ONLY BY PERSONNEL OF THE FULTON COUNTY LAND DIVISION

Return Recorded Document to:
Fulton County Land Division
141 Pryor Street, S.W. – Suite 8021
Atlanta, Georgia 30303

Project Name : Iveybrooke
Tax Parcel Identification No.: 12 249006070310
Land Disturbance Permit No.: WRN23-095
Zoning/Special Use Permit No.:
(if applicable)

For Fulton County Use Only

Approval Date: _____
Initials: _____

**WATER LINE EASEMENT
(Corporate Form)**

STATE OF GEORGIA,
COUNTY OF FULTON

This indenture entered into this 23rd day of October, 2024, between JBGL Atlanta Development 2014, LLC, a corporation duly organized under the laws of the State of Georgia, party of the first part (hereinafter referred to as Grantor) and **FULTON COUNTY**, a Political Subdivision of the State of Georgia, party of the second part and Grantee.

WITNESSETH, that for and in consideration of \$1.00 in hand paid, at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged and in consideration of the benefits which will accrue to the undersigned from the construction of a water line through subject property, and in consideration of the benefits which will accrue to the subject property from the construction of a water line through the subject property, said Grantor has granted, bargained, sold and conveyed and by these presents does grant, bargain, sell and convey to FULTON COUNTY and to successors and assigns the right, title, and privilege of easements through subject property located in Land Lot(s) 638, 639 & 654, 2nd Section (if applicable) of District 1st, Fulton County, Georgia, and more particularly described as follows: To wit:

Iveybrooke

Project Name

[See Exhibit "A" attached hereto and made a part hereof]

This right and easement herein granted being to occupy such portion of my property as would be sufficient for the construction, access, maintenance and upgrade of a water line through my property according to the location and size of said

water line as shown on the map and profile now on file in the office of the Public Works Department of Fulton County, and which size and location may be modified from time to time including in the future after the date of this document to accommodate said water line within the aforesaid boundaries of the above-described easement.

For the same consideration, Grantor hereby conveys and relinquishes to FULTON COUNTY a right of access over Grantor's remaining lands as necessary for FULTON COUNTY to perform maintenance and repairs on said water line on both a routine and emergency basis.

Said Grantor hereby warrants that it has the right to sell and convey said water line easement and right of access and binds itself, its successors and assigns forever to warrant and defend the right and title to the above described water line easement unto the said FULTON COUNTY, its successors and assigns against the claims of all persons whomever by virtue of these presents.

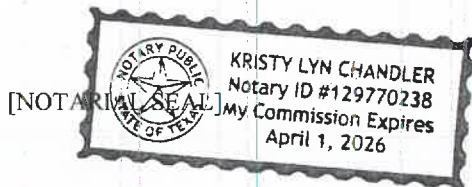
Said Grantor hereby waives for itself, its successors and assigns all rights to any further compensation or claim to damages on account of the construction, access, upgrade or maintenance of said water line for the use of the property as herein agreed.

IN WITNESS HEREOF said party of the first part has hereunto affixed his/her hand and seal on the day and year first above written.

Signed, sealed and delivered this 23
day of October, 20 24
in the presence of:

[Signature]
Witness

[Signature]
Notary Public



GRANTOR: JBGL Atlanta Development 2014, LLC
CORPORATE NAME

By: [Signature]

Print Name: Veronica Edwards

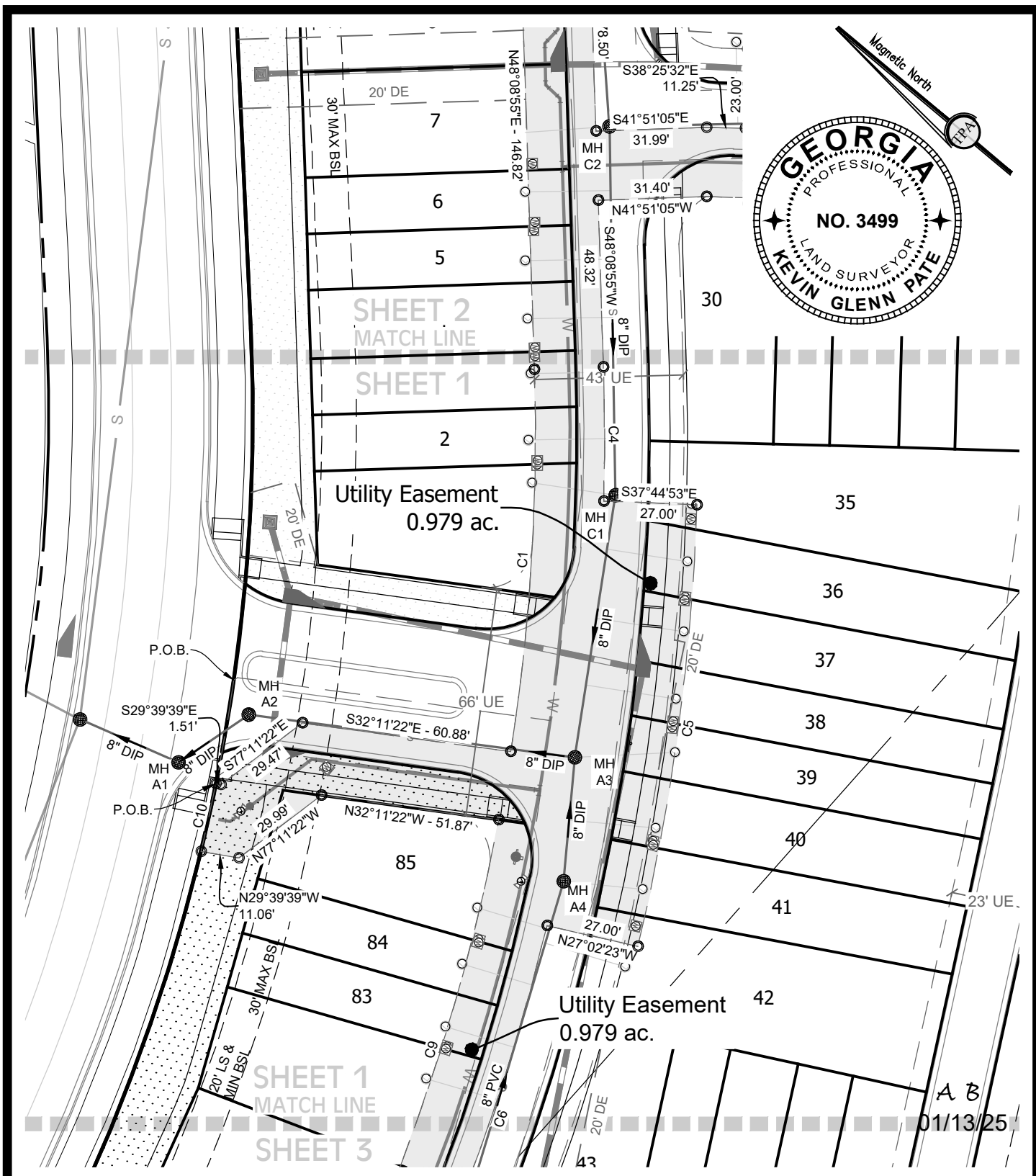
Title: Authorized Representative

By: _____

Print Name: _____

Title: _____

[CORPORATE SEAL]



4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

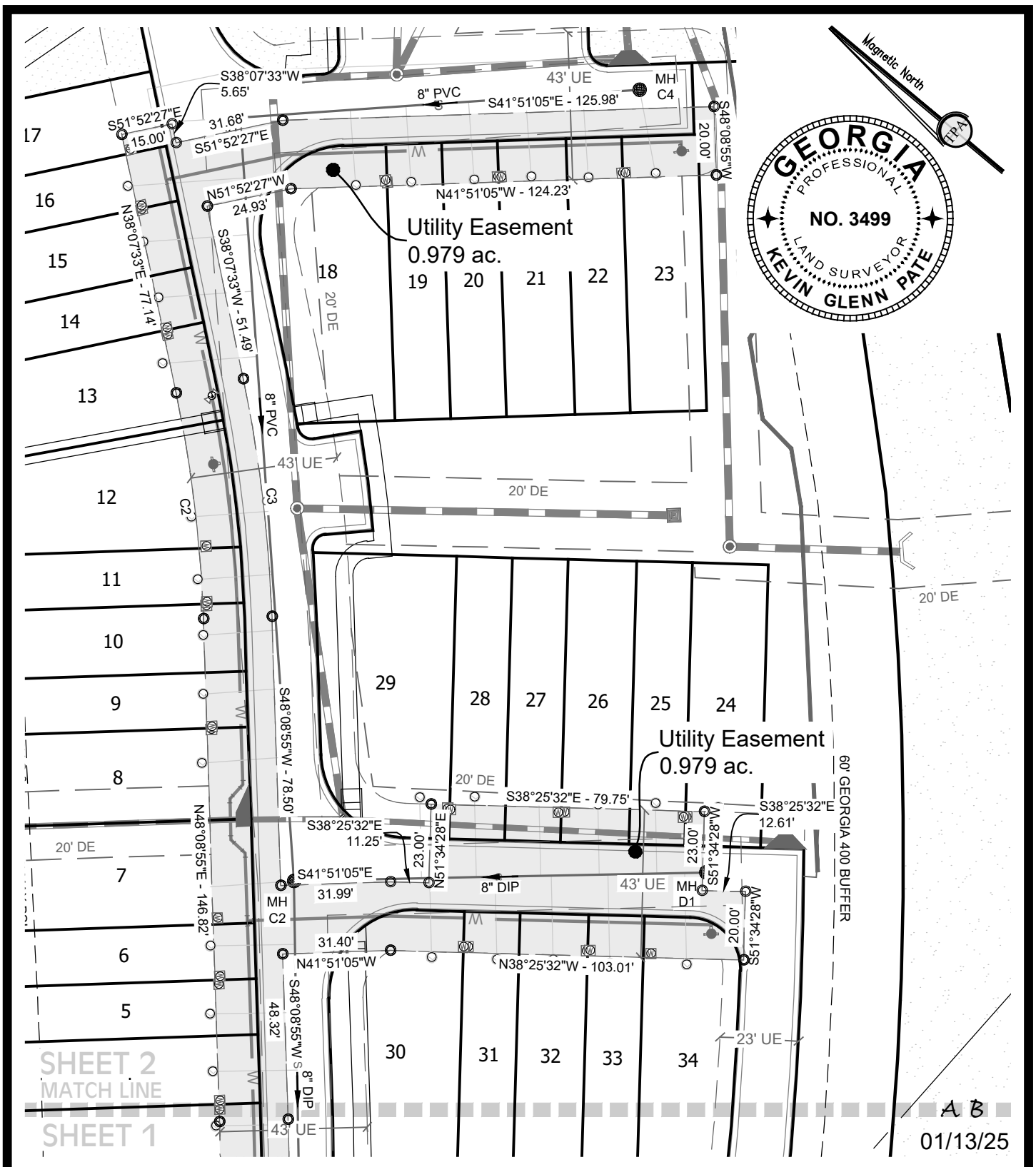
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2582

DRAWN BY: SH

SHEET NO: 1 of 6



01/13/25



4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

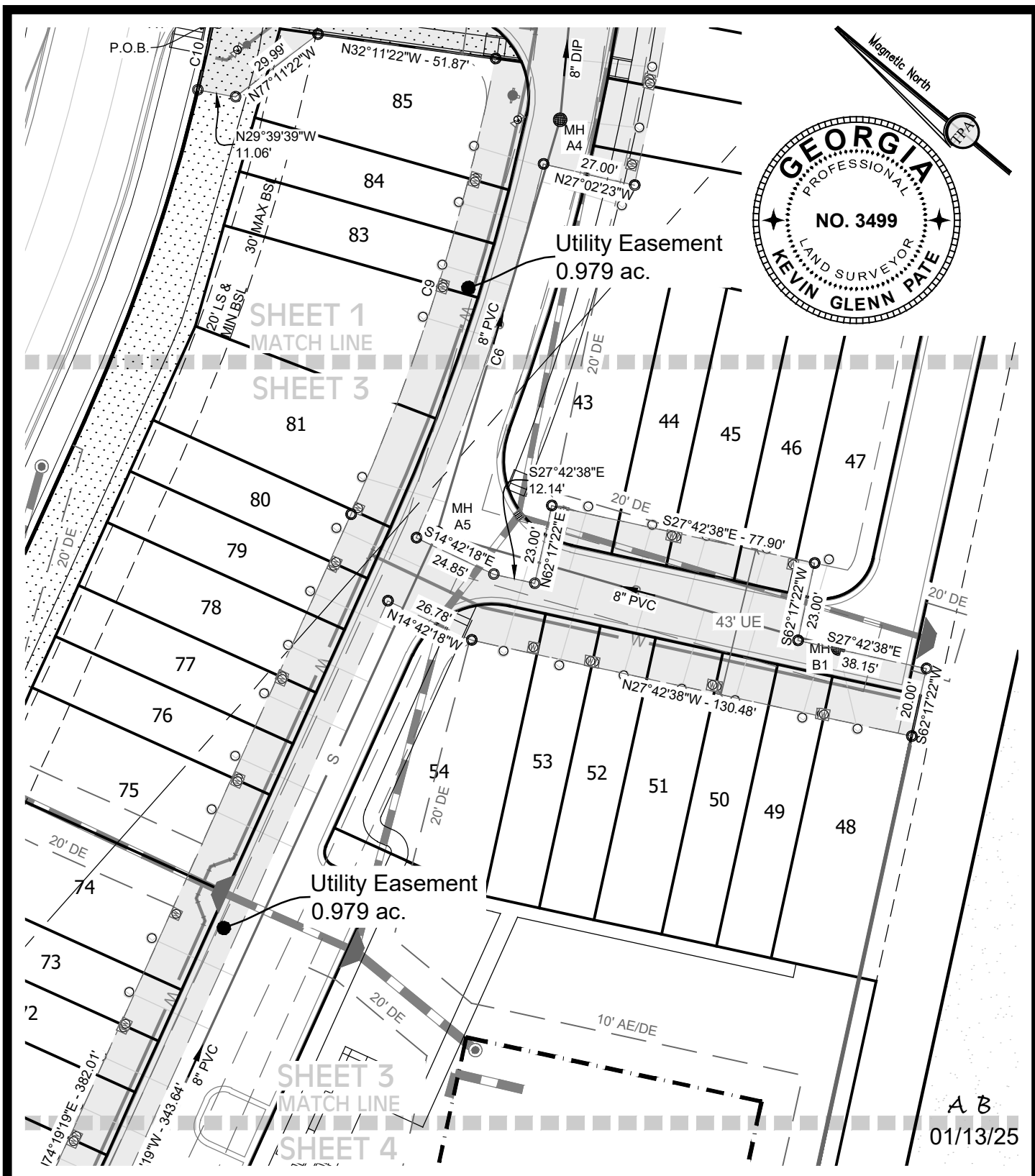
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2582

DRAWN BY: SH

SHEET NO: 2 of 6



4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

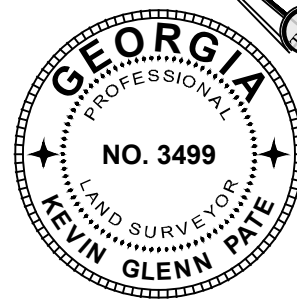
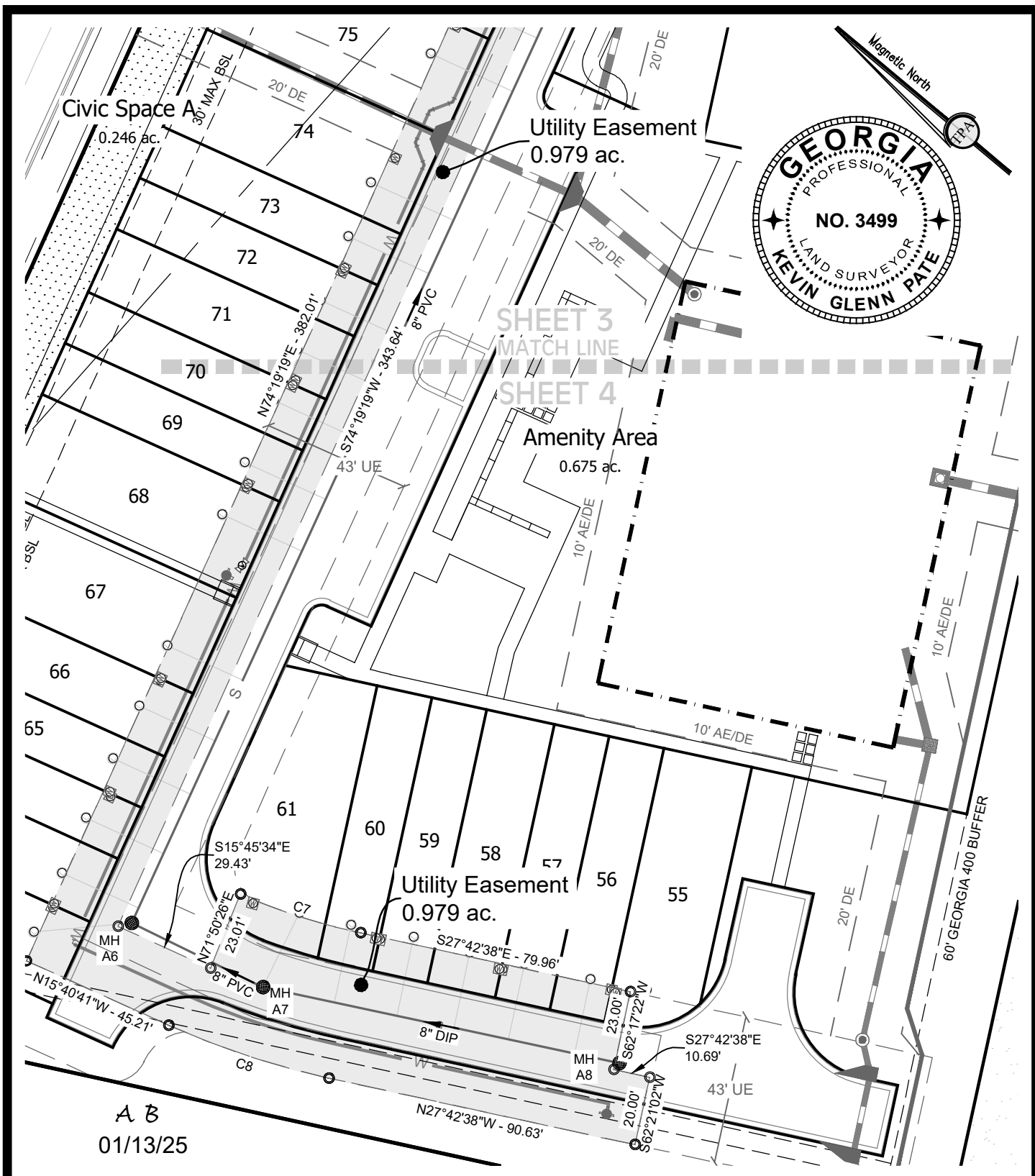
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2582

DRAWN BY: SH

SHEET NO: 3 of 6



A B
01/13/25



4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

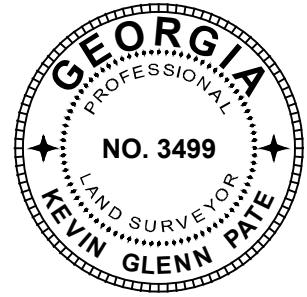
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2582

DRAWN BY: SH

SHEET NO: 4 of 6



Curve Table				
Curve #	Length	Radius	Chord Bearing	Chord
C1	110.93'	590.50'	N53°31'50"E	110.77'
C2	66.39'	379.50'	N43°08'14"E	66.30'
C3	69.88'	399.50'	S43°08'14"W	69.80'
C4	38.72'	610.50'	S49°57'56"W	38.72'
C5	129.15'	637.50'	S57°36'22"W	128.93'
C6	114.43'	610.50'	S68°47'57"W	114.26'
C7	36.67'	190.00'	S22°10'52"E	36.62'
C8	48.93'	233.00'	N21°41'39"W	48.84'
C9	138.80'	590.50'	N67°35'17"E	138.48'
C10	20.02'	539.08'	N62°28'27"E	20.01'



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Norcross, Georgia 30093
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Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

PLAT DATE: 12/13/2024

FIELD DATE:

SCALE: N/A

JN: 1-22-0530

FN: 101-A-2582

DRAWN BY: SH

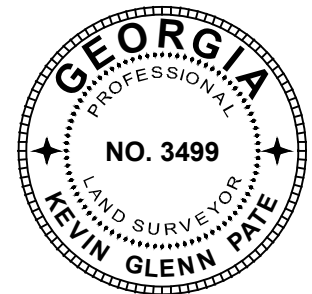
SHEET NO: 4 of 6

**DESCRIPTION OF
Iveybrooke Utility Easement**

All that tract or parcel of land lying and being in Land Lots 638, 639 and 654 of the 1st District, 2nd Section, City of Alpharetta, Fulton County, Georgia, being all of Parcel 2 as depicted on the Final Subdivision Plat for Rock Mill 400 recorded in Plat Book 430, Page 77, and being more particularly described as follows:

BEGINNING at a point, THENCE South 29 degrees 39 minutes 39 seconds East a distance of 1.51 feet to a point; THENCE South 77 degrees 11 minutes 22 seconds East a distance of 29.47 feet to a point; THENCE South 32 degrees 11 minutes 22 seconds East a distance of 60.88 feet to a point; THENCE along a curve to the left with a radius of 590.50 feet and an arc length of 110.93 feet, said curve having a chord bearing of North 53 degrees 31 minutes 50 seconds East and a chord distance of 110.77 feet to a point; THENCE North 48 degrees 08 minutes 55 seconds East a distance of 146.82 feet to a point; THENCE along a curve to the left with a radius of 379.50 feet and an arc length of 66.39 feet, said curve having a chord bearing of North 43 degrees 08 minutes 14 seconds East and a chord distance of 66.30 feet to a point; THENCE North 38 degrees 07 minutes 33 seconds East a distance of 77.14 feet to a point; THENCE South 51 degrees 52 minutes 27 seconds East a distance of 15.00 feet to a point; THENCE South 38 degrees 07 minutes 33 seconds West a distance of 5.65 feet to a point; THENCE South 51 degrees 52 minutes 27 seconds East a distance of 31.68 feet to a point; THENCE South 41 degrees 51 minutes 05 seconds East a distance of 125.98 feet to a point; THENCE South 48 degrees 08 minutes 55 seconds West a distance of 20.00 feet to a point; THENCE North 41 degrees 51 minutes 05 seconds West a distance of 124.23 feet to a point; THENCE North 51 degrees 52 minutes 27 seconds West a distance of 24.93 feet to a point; THENCE South 38 degrees 07 minutes 33 seconds West a distance of 51.49 feet to a point; THENCE along a curve to the right with a radius of 399.50 feet and an arc length of 69.88 feet, said curve having a chord bearing of South 43 degrees 08 minutes 14 seconds West and a chord distance of 69.80 feet to a point; THENCE South 48 degrees 08 minutes 55 seconds West a distance of 78.50 feet to a point; THENCE South 41 degrees 51 minutes 05 seconds East a distance of 31.99 feet to a point; THENCE South 38 degrees 25 minutes 32 seconds East a distance of 11.25 feet to a point; THENCE North 51 degrees 34 minutes 28 seconds East a distance of 23.00 feet to a point; THENCE South 38 degrees 25 minutes 32 seconds East a distance of 79.75 feet to a point; THENCE South 51 degrees 34 minutes 28 seconds West a distance of 23.00 feet to a point; THENCE South 38 degrees 25 minutes 32 seconds East a distance of 12.61 feet to a point; THENCE South 51 degrees 34 minutes 28 seconds West a distance of 20.00 feet to a point; THENCE North 38 degrees 25 minutes 32 seconds West a distance of 103.01 feet to a point; THENCE North 41 degrees 51 minutes 05 seconds West a distance of 31.40 feet to a point; THENCE South 48 degrees 08 minutes 55 seconds West a distance of 48.32 feet to a point; THENCE along a curve to the right with a radius of 610.50 feet and an arc length of 38.72 feet, said curve having a chord bearing of South 49 degrees 57 minutes 56 seconds West and a chord distance of 38.72 feet to a point; THENCE South 37 degrees 44 minutes 53 seconds East a distance of 27.00 feet to a point on the LAND LOT LINE COMMON TO LANDLOTS X and X; THENCE following said land lot line along a curve to the right with a radius of 637.50 feet and an arc length of 129.15 feet, said curve having a chord bearing of South 57 degrees 36 minutes 22 seconds West and a chord distance of 128.93 feet to a point; THENCE leaving said land lot line North 27 degrees 02 minutes 23 seconds West a distance of 27.00 feet to a point; THENCE along a curve to the right with a radius of 610.50 feet and an arc length of 114.43 feet, said curve having a chord bearing of South 68 degrees 47 minutes 57 seconds West and a chord distance of 114.26 feet to a point; THENCE South 14 degrees 42 minutes 18 seconds East a distance of 24.85 feet to a point; THENCE South 27 degrees 42 minutes 38 seconds East a distance of 12.14 feet to a point; THENCE North 62 degrees 17 minutes 22 seconds East a distance of 23.00 feet to a point; THENCE South 27 degrees 42 minutes 38 seconds East a distance of 77.90 feet to a point; THENCE South 62 degrees 17 minutes 22 seconds West a distance of 23.00 feet to a point; THENCE South 27 degrees 42 minutes 38 seconds East a distance of 38.15 feet to a point; THENCE South 62 degrees 17 minutes 22 seconds West a distance of 20.00 feet to a point; THENCE North 27 degrees 42 minutes 38 seconds West a distance of 130.48 feet to a point; THENCE North 14 degrees 42 minutes 18 seconds West a distance of 26.78 feet to a point; THENCE South 74 degrees 19 minutes 19 seconds West a distance of 343.64 feet to a point; THENCE South 15 degrees 45 minutes 34 seconds East a distance of 29.43 feet to a point; THENCE North 71 degrees 50 minutes 26 seconds East a distance of 23.01 feet to a point; THENCE along a curve to the left with a radius of 190.00 feet and an arc length of 36.67 feet, said curve having a chord bearing of South 22 degrees 10 minutes 52 seconds East and a chord distance of 36.62 feet to a point; THENCE South 27 degrees 42 minutes 38 seconds East a distance of 79.96 feet to a point; THENCE South 62 degrees 17 minutes 22 seconds West a distance of 23.00 feet to a point; THENCE South 27 degrees 42 minutes 38 seconds East a distance of 10.69 feet to a point; THENCE South 62 degrees 21 minutes 02 seconds West a distance of 20.00 feet to a point; THENCE North 27 degrees 42 minutes 38 seconds West a distance of 90.63 feet to a point; THENCE along a curve to the right with a radius of 233.00 feet and an arc length of 48.93 feet, said curve having a chord bearing of North 21 degrees 41 minutes 39 seconds West and a chord distance of 48.84 feet to a point; THENCE North 15 degrees 40 minutes 41 seconds West a distance of 45.21 feet to a point; THENCE North 74 degrees 19 minutes 19 seconds East a distance of 382.01 feet to a point; THENCE along a curve to the left with a radius of 590.50 feet and an arc length of 138.80 feet, said curve having a chord bearing of North 67 degrees 35 minutes 17 seconds East and a chord distance of 138.48 feet to a point; THENCE North 32 degrees 11 minutes 22 seconds West a distance of 51.87 feet to a point; THENCE North 77 degrees 11 minutes 22 seconds West a distance of 29.99 feet to a point; THENCE North 29 degrees 39 minutes 39 seconds West a distance of 11.06 feet to a point; THENCE along a curve to the left with a radius of 539.08 feet and an arc length of 20.02 feet, said curve having a chord bearing of North 62 degrees 28 minutes 27 seconds East and a chord distance of 20.01 feet to a point, said point being the **TRUE POINT OF BEGINNING**.

Said tract contains 42,633 square feet or 0.98 acres.



4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
TAX PARCEL ID: 12-249006070310

PLAT DATE: 12/13/2024

FIELD DATE:

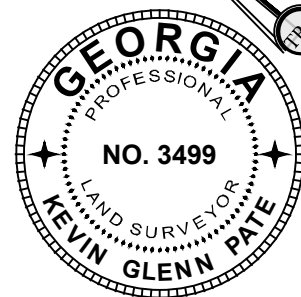
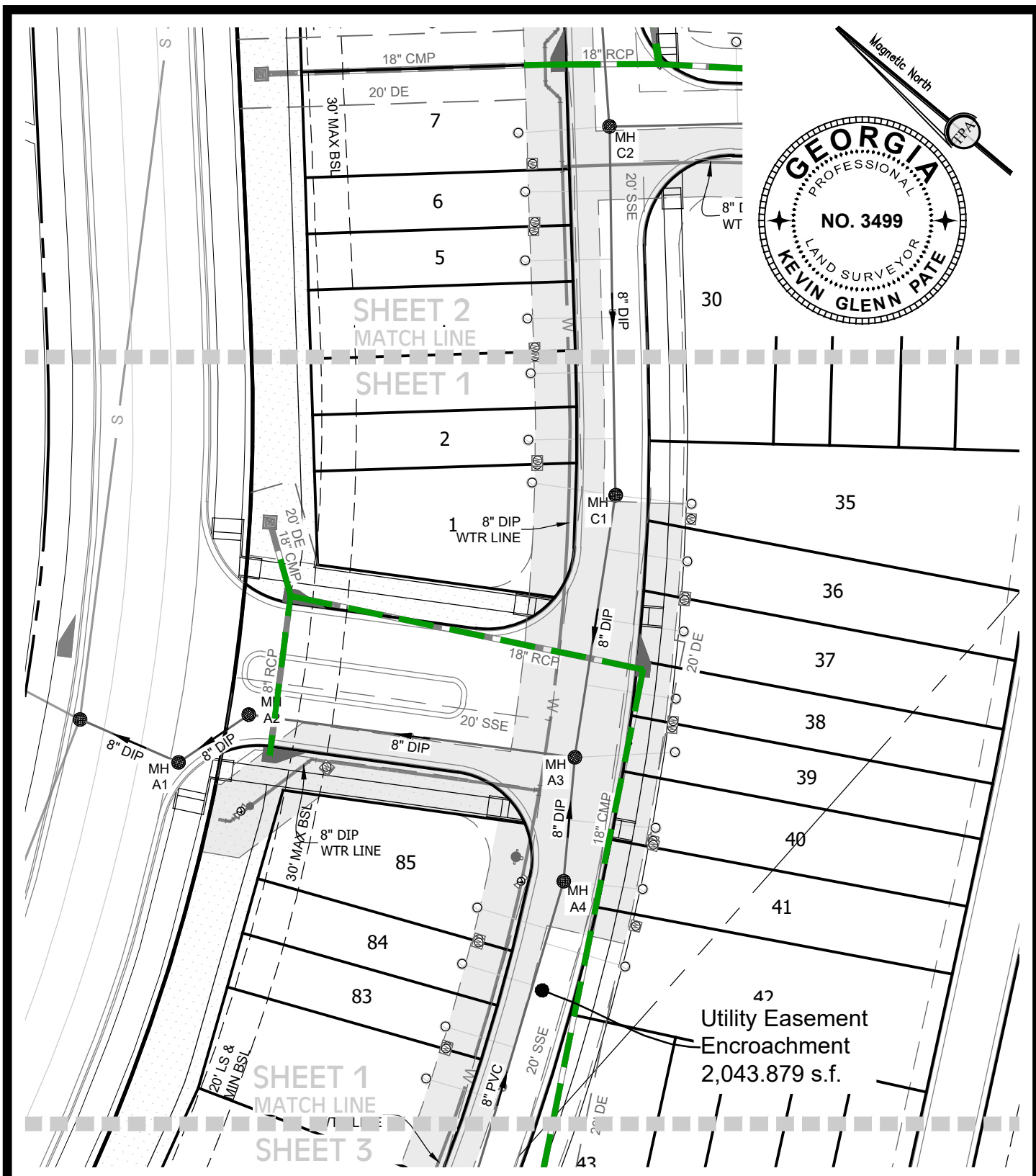
SCALE: N/A

JN: 1-22-0530

FN: 101-A-2582

DRAWN BY: SH


SHEET NO: 6 of 6



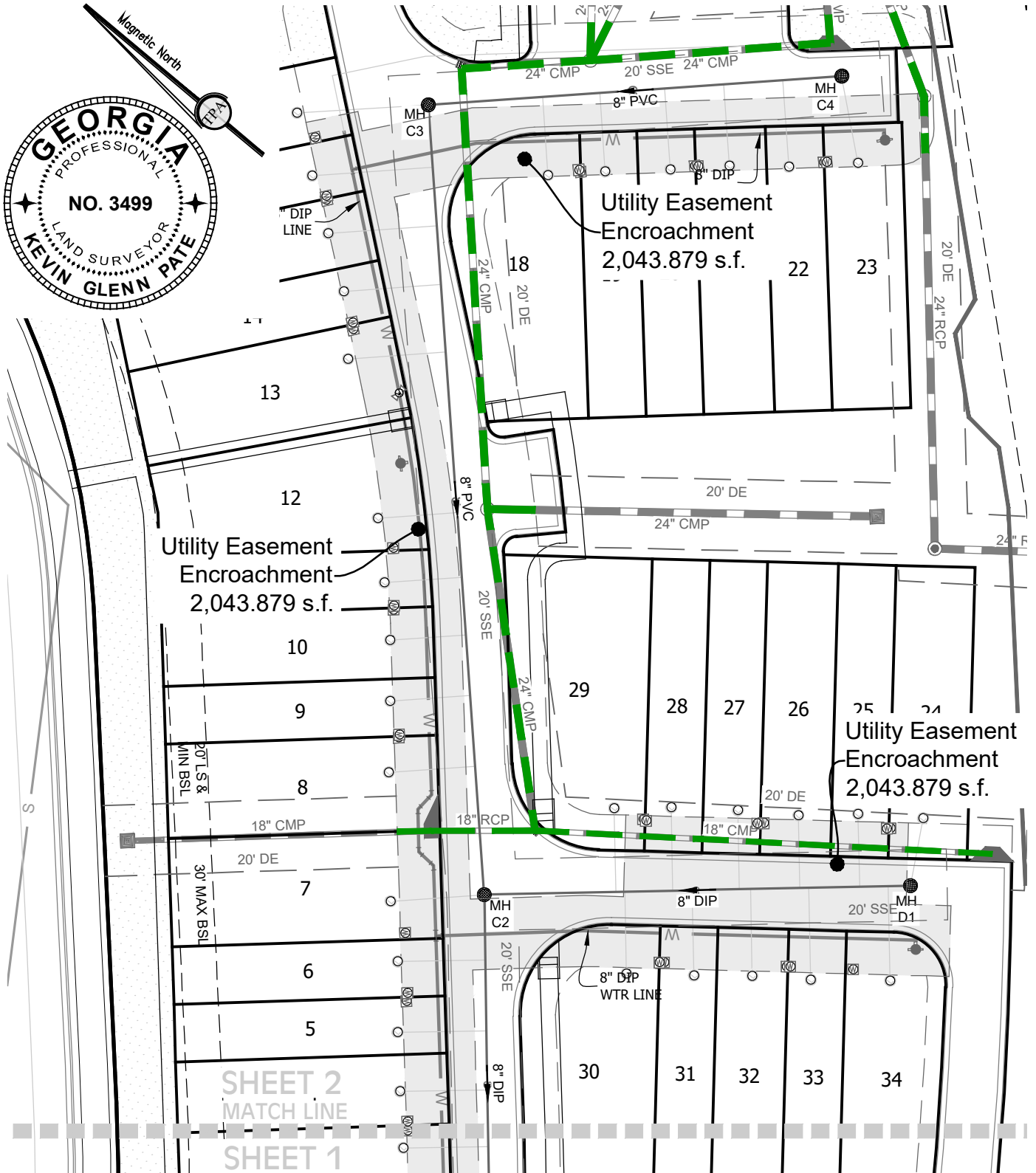
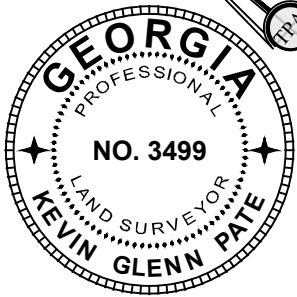


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Certificate of
Authorization Number 613

UTILITY EASEMENT ENCROACHMENT EXHIBIT	
IVEYBROOKE	
AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC	
LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA	
GRAPHIC SCALE - IN FEET	
	

PLAT DATE: 12/13/2024
FIELD DATE:
SCALE: 1" = 40'
JN: 1-22-0530
FN: 101-A-2583
DRAWN BY: SH
SHEET NO: 1 of 4



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Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
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Certificate of
Authorization Number 613

UTILITY EASEMENT ENCROACHMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

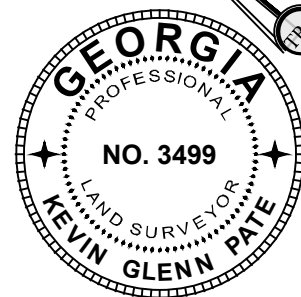
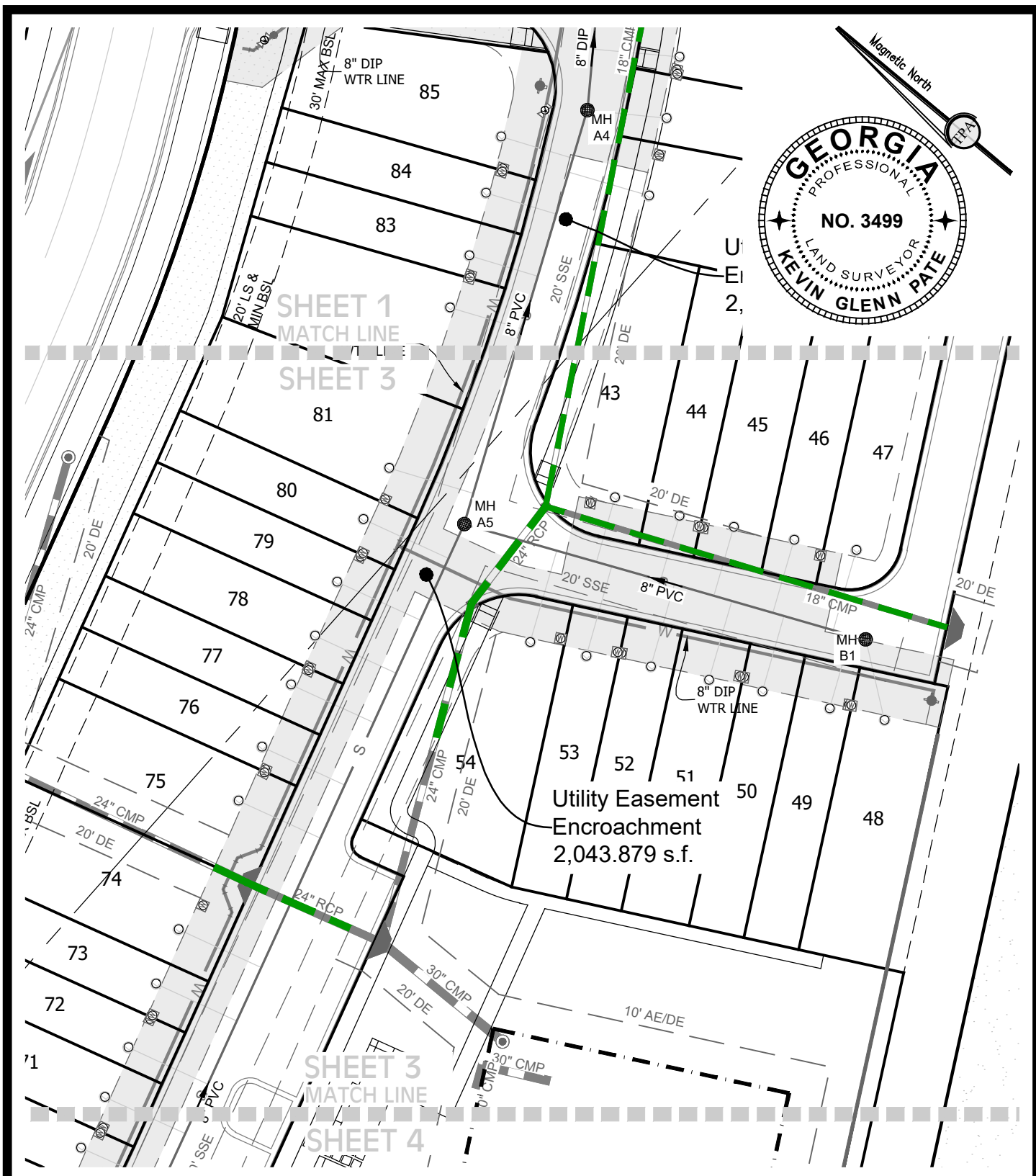
SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2583

DRAWN BY: SH

SHEET NO: 2 of 4



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Certificate of
Authorization Number 613

UTILITY EASEMENT ENCROACHMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

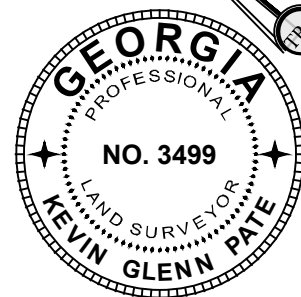
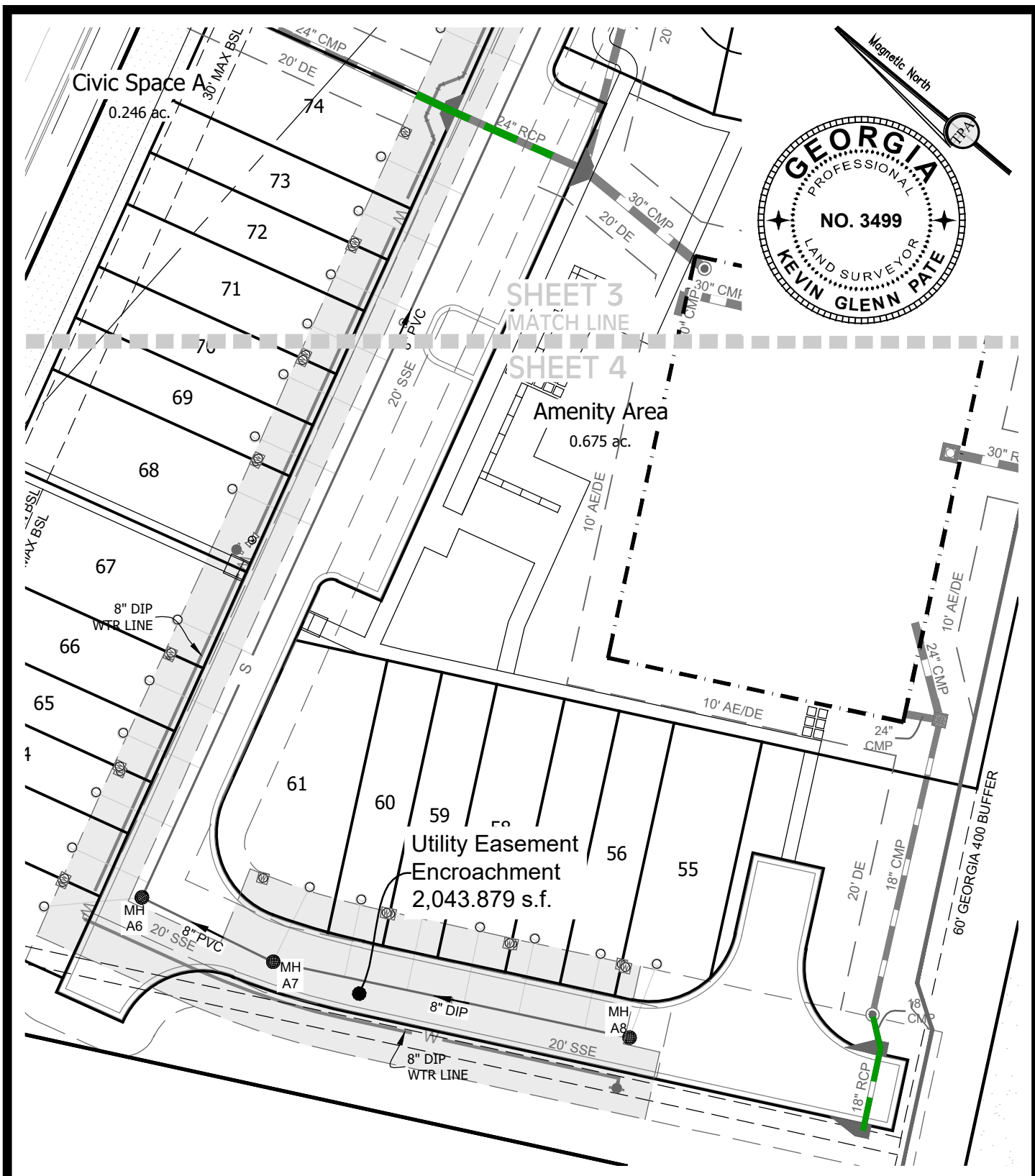
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JN: 1-22-0530

FN: 101-A-2583

DRAWN BY: SH

SHEET NO: 3 of 4



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Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT ENCROACHMENT EXHIBIT

IVEYBROOKE

AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC

LAND LOTS 638, 639, & 654 • 1st DISTRICT • 2nd SECTION
CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA

GRAPHIC SCALE - IN FEET



PLAT DATE: 12/13/2024

FIELD DATE:

SCALE: 1" = 40'

JN: 1-22-0530

FN: 101-A-2583

DRAWN BY: SH

SHEET NO: 4 of 4



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0154

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of an Indemnification, Maintenance, and Land Use Agreement for Private Improvement (Indemnification Agreement) between Fulton County, a political subdivision of the State of Georgia, and Morning Creek Partners, LLC for the purpose granting conditional approval to allow stormwater infrastructure to remain within a portion the County's existing sanitary sewer easement at 0 Ripple Way, South Fulton, Georgia 30349.

Requirement for Board Action

Fulton County is authorized to grant an encroachment on its sewer easement pursuant to Fulton County Code, Subpart B-Code of Resolutions - Appendix A - Subdivision Regulations, Article IX (Required Improvements), Section 9.5.5(c), which states the following in part: "No retaining wall, building, pole, sign or other vertical structure shall be constructed in sanitary and storm sewer easements, including vehicular access easements around structures, without approval from the [Director of Public Works]."

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☐
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☒
- District 6 ☐

Is this a purchasing item?

No

Summary & Background

Scope of Work: Morning Creek Partners, LLC, the owner of the real property located at 0 Ripple

Way, South Fulton, Georgia 30349, has requested the conditional approval of the Fulton County Board of Commissioners via an Indemnification, Maintenance, and Land Use Agreement for Private Improvement to install stormwater infrastructure within the County's existing sewer line easement area.

In accordance with County Policy and the Statue of Frauds, all amendments and edits to contractual agreements involving Fulton County are required to be in writing and approved by the Fulton County Board of Commissioners.

The purpose of the Indemnification Agreement is to formally affirm the terms of Fulton County's conditional approval of an encroachment(s) of private improvements to remain within the County's sewer line easement area.

The Fulton County Department of Real Estate and Asset Management, DREAM, and the Fulton County Department of Public Works are requesting approval to amend the terms of the County's sewer line easement as referenced and recorded in Deed Book 67896, Page 34.

At the request of Morning Creek Partners, LLC, the Department of Public Works completed an on-site assessment of the area, which is approximately 6,970 square feet, and confirmed that the County's sewer system will not be adversely impacted and can continue to be properly maintained if this encroachment is permitted.

Community Impact: As per the terms of the agreement, Fulton County retains its full access to maintain its sanitary sewer service line while granting the property owner the conditional approval to install stormwater improvements to remain within the County's sewer line easement area.

Department Recommendation: The Department of Real Estate and Asset Management, DREAM, accepts the conclusion of the Department of Public Works to formally accept the terms of the Indemnification Agreement and recommends its approval.

Project Implications: No negative impacts to sanitary sewer services or access to maintain the County's onsite sanitary sewer line will result by allowing stormwater infrastructure to remain within a portion of the County's sewer easement.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Approval of the Agenda Item does not involve the receipt or payment of funding.

After recording return to:
Michael Graham, Land Administrator
Fulton County Land Division
141 Pryor Street, SW, Suite 8021
Atlanta, GA 30303

Cross Reference

Deed/Plat Book 67896 , Page 34
Deed Book 66786 , Page 62

INDEMNIFICATION, MAINTENANCE AND LAND USE AGREEMENT FOR PRIVATE IMPROVEMENT

THIS AGREEMENT, made this ____ day of _____, 2024, between Morning Creek Partners, LLC as citizen within Fulton County, Georgia, his successors, affiliates and assigns, as Indemnitor (hereinafter, as “Owner”), and FULTON COUNTY, a political subdivision of the State of Georgia (hereinafter, “the County”).

For good and valuable consideration, receipt of which is hereby acknowledged, it is hereby agreed as follows:

1.

Owner warrants that he is the full and true owner and has clear title to that certain property known as 0 Ripple Way, South Fulton, 30349 (enter address), and as more fully described in that certain conveyance recorded in Deed Book 66786, Page 62 of Fulton County, Georgia records, on which Owner desires to install certain private improvements (the “Private Improvements”) as more fully described in Exhibit “A”, attached hereto and incorporated herein by reference.

2.

Previously, Fulton County was granted a sanitary sewer easement, as referenced in and recorded at Plat Book/Deed Book (circle one) 67896 , Page 34 of Fulton County, Georgia records, and hereby grants Owner, a License to enter within a portion of its sanitary sewer easement to construct, repair and replace, from time to time as may be needed certain private improvements at his sole cost and responsibility, said private improvements as same are more fully described in Exhibit “A” (the Private Improvements”).

3.

With respect to this License, Owner shall install and construct the Private Improvements in a good and workmanlike manner and in compliance with all state, local, and Fulton County laws and regulations, including but not limited to, all current state, local and Fulton County laws and regulations governing soil erosion and sedimentation control. Owner will at all times adhere to best management

practice procedures to protect the environment in connection with the construction, repair and/or maintenance of the Private Improvements.

4.

This License shall commence on the date of execution hereof and shall continue in full force and effect unless and until it is terminated at the will of the County.

5.

Owner may terminate this License and Agreement by written notice to the County and shall remove the Private Improvement at his sole costs and return the area to its natural vegetative state. If during the term of this License, the area containing the Private Improvements is condemned by the County or its assign, Owner shall make no claim in the condemnation proceedings for compensation for the Private Improvements.

6.

Fulton County personnel and /or agents shall have free access to and across the Private Improvements to perform routine maintenance and any emergency repairs to the existing public improvements.

7.

Owner shall be solely responsible for the maintenance, repair and replacement of the Private Improvements and the County grants Owner a right of access in order to carry out these obligations.

8.

Notwithstanding any other provisions, in the case of an emergency, Fulton County may immediately suspend or revoke the License without notice in order to protect the health, safety, and welfare of the public. In non-emergency situations, after providing at least 10 days' notice to Owner, Fulton County may suspend or revoke the License in order to carry out any necessary governmental function. In the event of the suspension or revocation of the License, Owner must cure all defects specified by the County in its notice and within the time reasonably specified by the County. Failure on the part of Owner to cure any defects within the allotted time will be grounds for the County to terminate the License. Alternately, the County may, but shall not be required to, cure any such defect at the sole cost and expense of Owner. The County may elect to terminate the License at will and remove the Private Improvements without liability for loss or damage for such removal. Fulton County shall remove the Private Improvements so as not to damage other portions of Owner's property and is granted a right of entry by Owner on the other portions of Owner's property to effectuate the repair, if necessary.

9.

Owner hereby agrees to indemnify Fulton County and hold Fulton County harmless from any and all damages which Fulton County may suffer and from any and all liability, claims, penalties, forfeitures, suits, and costs and expenses incident to the granting of the License and this Agreement (including cost of defense, settlement, and reasonable attorney's fees), which it may hereafter incur, become responsible for, or pay out as a result of the death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violations of governmental laws, regulations, or orders caused in whole or in

part by the negligent act, negligent omission or willful misconduct of Owner, his employees, subcontractors, or assigns in the performance of this License or Agreement.

10.

Owner agrees to repair or replace in a manner acceptable to the County and/or the owner thereof any public utilities damaged by its employees or subcontractors during performance of this License and Agreement or resulting from the failure of the Private Improvements. At its election the County may repair or replace the damaged utility and assess all costs against Owner.

11.

The License conveyed to Owner by this Agreement shall be binding upon Owner, his assigns, affiliates, and successors. This Agreement shall be governed by and construed in accordance with the laws of the State of Georgia. If any provision of this agreement is held to be unenforceable for any reason, the unenforceability thereof shall not affect the remainder of the Agreement, which shall remain in full force and effect, and enforceable in accordance with its terms.

12.

The License conveyed to Owner by this Agreement shall constitute a covenant running with the land and shall be recorded in the real property records of Fulton County, Georgia and shall be binding upon all subsequent transferees of said property.

13.

All notices, consents, request, demands or other communications to or upon the respective party shall be in writing and shall be effective for all purposes upon receipt, including, but not limited to, in the case of (i) personal delivery; (ii) delivery by messenger, express or air courier or similar courier; or (iii) delivery by United States first class certified or registered mail, postage prepaid and addressed as follows:

COUNTY: Fulton County
Director of Public Works
141 Pryor Street, SW, 6Th. Floor
Atlanta, GA. 30303

with a copy to: County Attorney
Office of the County Attorney
141 Pryor Street, SW, Suite 4038
Atlanta, GA. 30303

OWNER: Morning Creek Partners, LLC
6621 Bay Circle, Suite 170
Peachtree Corners, GA 30071

Re: 13th District Section, Land Lot(s) 128

Parcel Number: 13-0128-LL2254

IN WITNESS WHEREOF, the parties have executed this Agreement at Atlanta, Georgia, as of the day and year first above written.

Signatures:

Signed sealed and delivered in the presence of

OWNER (Authorized Party to Bind Said Entity)

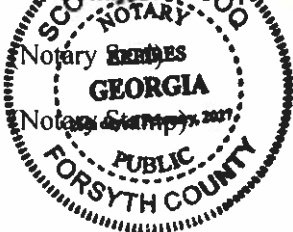
James M. Tylor
Unofficial Witness

[Signature]
Owner Signature

Notary Public
My Commission Expires: 2/26/2027

Owner's Address:

490 BRISCOE BLVD
Lawrenceville, GA 30046



Attest:

FULTON COUNTY, GEORGIA

Clerk of Commission

By: _____
Chairman, Board of Commissioners

APPROVED AS TO CONTENT:

APPROVED AS TO FORM:

David E. Clark, Director
Department of Public Works

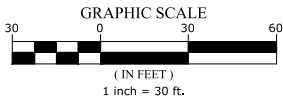
County Attorney

LEGEND:

RFB	REINFORCING BAR FOUND	SSE	SANITARY SEWER EASEMENT
RBS	REINFORCING BAR SET	POB	POINT OF BEGINNING
OTP	OPEN TOP PIPE	POC	POINT OF COMMENCEMENT
CTP	CRIMP TOP PIPE	PI	POINT OF INTERSECTION
SIB	SOLID IRON BAR	BSL	BUILDING SETBACK LINE
CMF	CONCRETE MONUMENT FOUND	DE	DRAINAGE EASEMENT
CL	CENTERLINE	CB	CATCH BASIN
R/W	RIGHT-OF-WAY	UM	UTILITY MANHOLE (SPECIFY TYPE)
LL	LAND LOT	DI	DROP INLET
LLL	LAND LOT LINE	HW	HEAD WALL
L	LINE	FES	FLARED END SECTION (FES)
A	ARC	TP	TELEPHONE PEDESTAL
R	RADIUS	TB	TELEPHONE BOX
CH	CHORD	SC	SEWER CLEANOUT
C	CURVE	WS	WATER SEEP
CONC	CONCRETE	WSP	WATER SPIGOT
GP	GUY POLE	WV	WATER VALVE
GV	GAS VALVE	WM	WATER METER
GM	GAS METER	WH	WATER HOLE
GMK	GAS MARKER	W	WETLAND FLAG
LP	LAMP POLE		
PP	POWER POLE		
FOM	FIBER OPTIC MARKER		
ICV	IRRIGATION CONTROL VALVE		
MW	MONITORING WELL		
PRV	PRESSURE RELEASE VALVE		
PST	POWER STUB		
ETM	ELECTRIC METER		
WFL	WETLAND FLAG		
CMF	CORRUGATED METAL PIPE		
RCP	REINFORCED CONCRETE PIPE		
CD	CROSS DRAIN		
SS	SANITARY SEWER		
X	FENCE		
U	OVERHEAD UTILITY LINE(S)		

GENERAL NOTES:

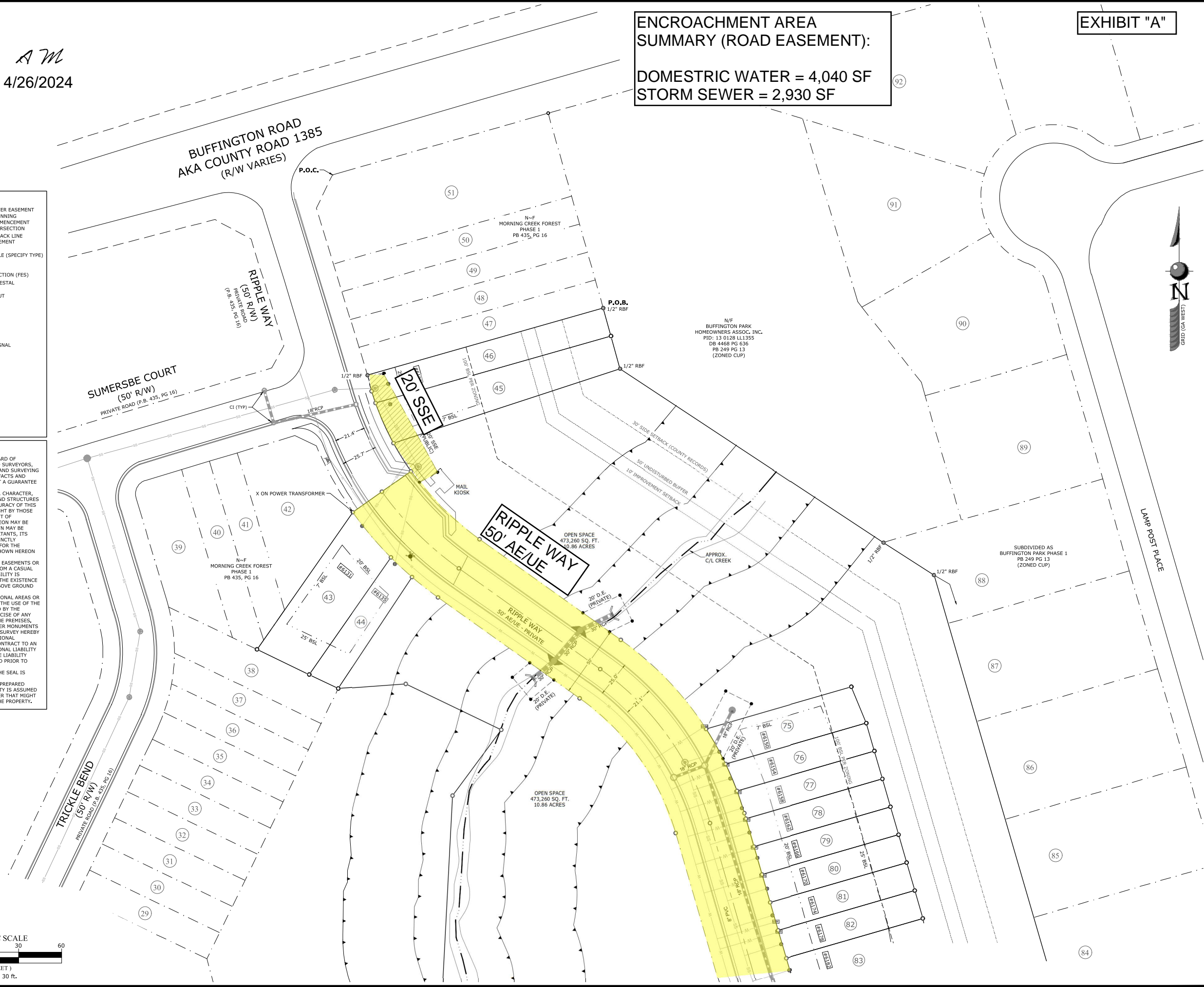
- PURSUANT TO RULE 180-6.09 OF THE GEORGIA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS, THE TERM "CERTIFY" OR "CERTIFICATION" RELATING TO LAND SURVEYING SERVICES SHALL MEAN A SIGNED STATEMENT BASED ON FACTS AND KNOWLEDGE KNOWN TO THE LAND SURVEYOR AND IS NOT A GUARANTEE OR WARRANTY, EITHER EXPRESSED OR IMPLIED.
- INFORMATION REGARDING THE REPUTED PRESENCE, SIZE, CHARACTER, AND LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS SHOWN HEREON. THERE IS NO CERTAINTY OF THE ACCURACY OF THIS INFORMATION AND IT SHALL BE CONSIDERED IN THAT LIGHT BY THOSE RELYING ON THIS PLAT, THE LOCATION AND ARRANGEMENT OF UNDERGROUND UTILITIES AND STRUCTURES SHOWN HEREON MAY BE INACCURATE AND UTILITIES AND STRUCTURES NOT SHOWN MAY BE ENCOUNTERED. THE OWNER, ITS EMPLOYEES, ITS CONSULTANTS, ITS CONTRACTORS, AND/OR ITS AGENTS SHALL HEREBY DISTINCTLY UNDERSTAND THAT THE SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OR SUFFICIENCY OF THIS INFORMATION SHOWN HEREON AS TO SUCH UNDERGROUND INFORMATION.
- UNLESS OTHERWISE STATED HEREON, ONLY EVIDENCE OF EASEMENTS OR STRUCTURES THERETO WHICH ARE READILY APPARENT FROM A CASUAL ABOVE GROUND VIEW OF PREMISES ARE SHOWN. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO THE EXISTENCE OF ANY EASEMENT NOT DISCOVERED FROM MY CASUAL ABOVE GROUND VIEW OF THE PREMISES.
- UNLESS STATED OTHERWISE, GOVERNMENTAL JURISDICTIONAL AREAS OR NEGATIVE EASEMENTS, IF ANY, WHICH MIGHT IMPACT ON THE USE OF THE PREMISES WERE NOT LOCATED. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR ANY LOSS RESULTING FROM THE EXERCISE OF ANY GOVERNMENTAL JURISDICTION AFFECTING THE USE OF THE PREMISES.
- ACCEPTANCE OF THIS SURVEY PLAT OR USE OF THE CORNER MONUMENTS FOUND OR SET DURING THE PERFORMANCE OF THE FIELD SURVEY HEREBY LIMIT THE UNDERSIGNED LIABILITY RELATED TO PROFESSIONAL NEGLIGENCE ACTS, ERRORS, OMISSIONS OR BREACH OF CONTRACT TO AN AMOUNT NOT TO EXCEED THE FEE CHARGED. FOR ADDITIONAL LIABILITY COVERAGE FROM THE UNDERSIGNED, A FEE OF 2% OF THE LIABILITY AMOUNT REQUESTED MUST BE PAID TO THE UNDERSIGNED PRIOR TO COMMENCEMENT OF THIS PROJECT.
- REPRODUCTIONS OF THIS PLAT ARE NOT VALID UNLESS THE SEAL IS SIGNED WITH A "LIVE" SIGNATURE.
- UNLESS OTHERWISE STATED HEREON, THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF AN ABSTRACT OF TITLE. NO LIABILITY IS ASSUMED BY THE UNDERSIGNED FOR LOSS RELATING TO ANY MATTER THAT MIGHT BE DISCOVERED BY AN ABSTRACT OR TITLE SEARCH OF THE PROPERTY.



A M

4/26/2024

THIS BLOCK RESERVED FOR SUPERIOR COURT CLERK



ENCROACHMENT AREA
SUMMARY (ROAD EASEMENT):

DOMESTRIC WATER = 4,040 SF
STORM SEWER = 2,930 SF

EXHIBIT "A"



PLAT INFORMATION		ISSUED DESCRIPTION		DATE	
No	REVISER PER COMMENTS	No	REVISER PER COMMENTS	1/22/24	2/2/24
1		2			

ALL MATTERS OF TITLE ARE EXCEPTED © COPYRIGHT 2020 | MEMBER OF THE SURVEYING & MAPPING SOCIETY OF GEORGIA (SAMSGO)

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS AN ANGULAR ERROR OF .001. ALL SECTIONS PRE-ANGLE POINT METHOD. THIS PLAT HAS BEEN CALCULATED FOR A 1/4" = 1' SCALE. THE TOTAL LENGTH OF THE PLAT IS 1,000.00 FEET. THE TOTAL AREA OF THE PLAT IS 1,000.00 ACRES. THIS PLAT DOES NOT EXTEND TO ANY UNLAWFUL ENCROACHMENT. THIS PLAT DOES NOT EXTEND TO ANY UNLAWFUL ENCROACHMENT. THIS PLAT DOES NOT EXTEND TO ANY UNLAWFUL ENCROACHMENT.

RESIDENTIAL FINAL PLAT FOR:

**MORNING CREEK FOREST
PHASE III**

LOCATED IN:

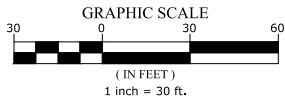
LAND LOT 128, 134th DISTRICT, CITY OF SOUTH FULTON,
FULTON COUNTY, GEORGIA



Project No.:	1124-18-133
Surveyed By:	B. COVENEY
Field Date:	10/27/2023
Drafted By:	J. WOODS
Issue Date:	12/06/2023

THIS BLOCK RESERVED FOR SUPERIOR COURT CLERK

AM
4/26/2024



APPROX.
C/L CREEK

RIPPLE LOOP
50' AE/UE

RIPPLE WAY
50' AE/UE

EXHIBIT "A"



RESIDENTIAL FINAL PLAT FOR:

**MORNING CREEK FOREST
PHASE III**

LOCATED IN:

LAND LOT 128, 134th DISTRICT, CITY OF SOUTH FULTON,
FULTON COUNTY, GEORGIA

Project No.:	1124-18-133
Surveyed By:	B. COVENEY
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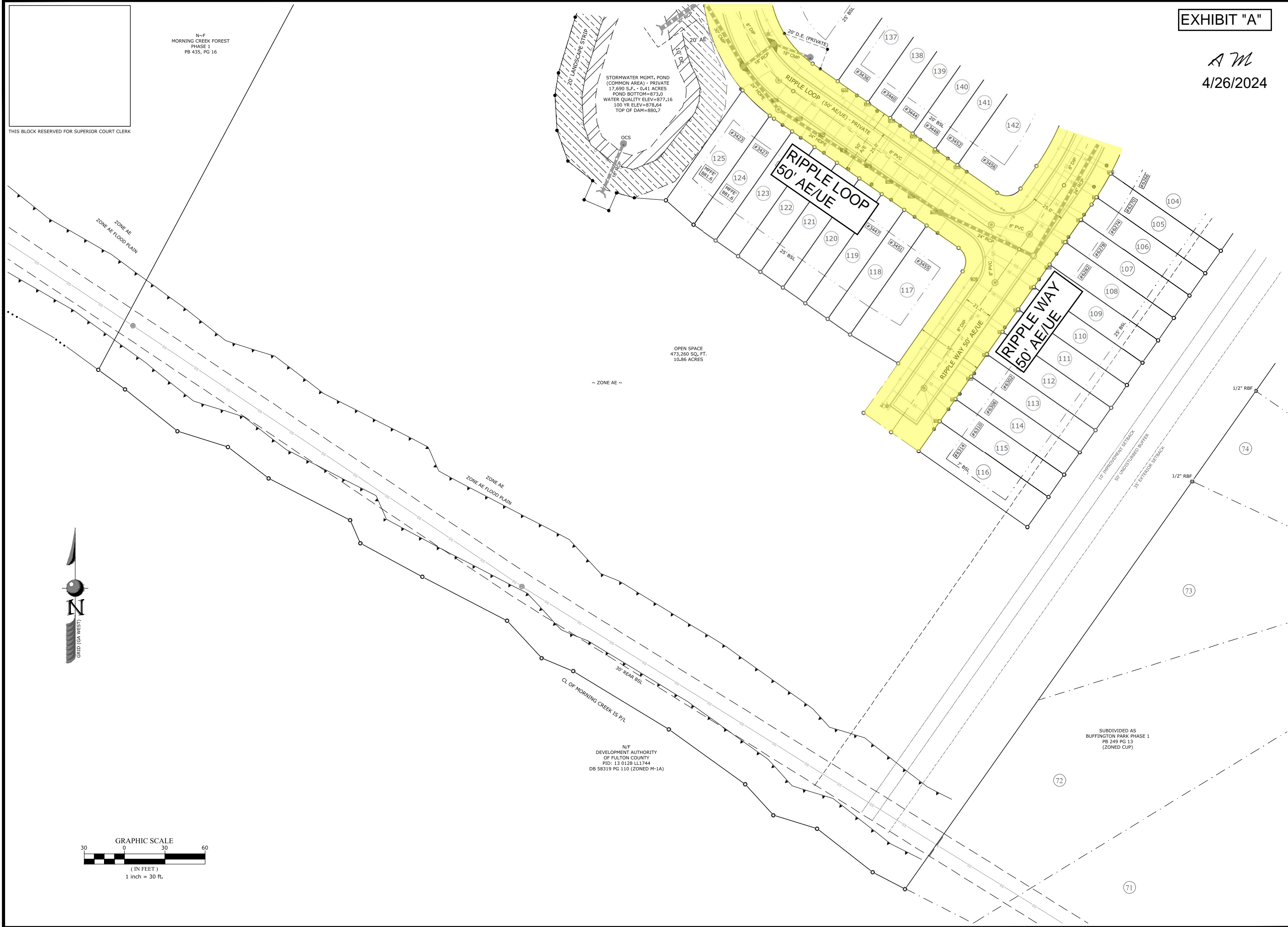
SEI
SOUTHEASTERN ENGINEERING, INC.
2410 Sandy Plains Road Marietta, Georgia 30066
tel: 770-321-3936 fax: 770-321-3035
www.seengineering.com
LSF NO. 000913

[illegible]

PLAT INFORMATION

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS AN ANGULAR ERROR OF 1 FOOT IN 51,266 FEET AND A CIRCULAR ERROR OF 31 SECONDS PER ANGLE POINT AND WAS ADJUSTED USING THE LEAST SQUARES METHOD. THIS PLAT HAS BEEN CALCULATED FOR CLOSURE AND FOUND TO BE ACCURATE TO 1 FOOT IN 100,000 FEET. AN ELECTRONIC TOTAL STATION WAS USED TO GATHER THE INFORMATION USED IN THE PREPARATION OF THIS PLAT.

THE EXCLUSIVE USE OF PERSONS OR ENTITY NAMED HEREIN, THIS PLAT DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS OR ENTITY WITHOUT EXPRESS RECONFESSION BY THE SURVEYOR NAMED SAID PERSON, PERSONS OR ENTITY.



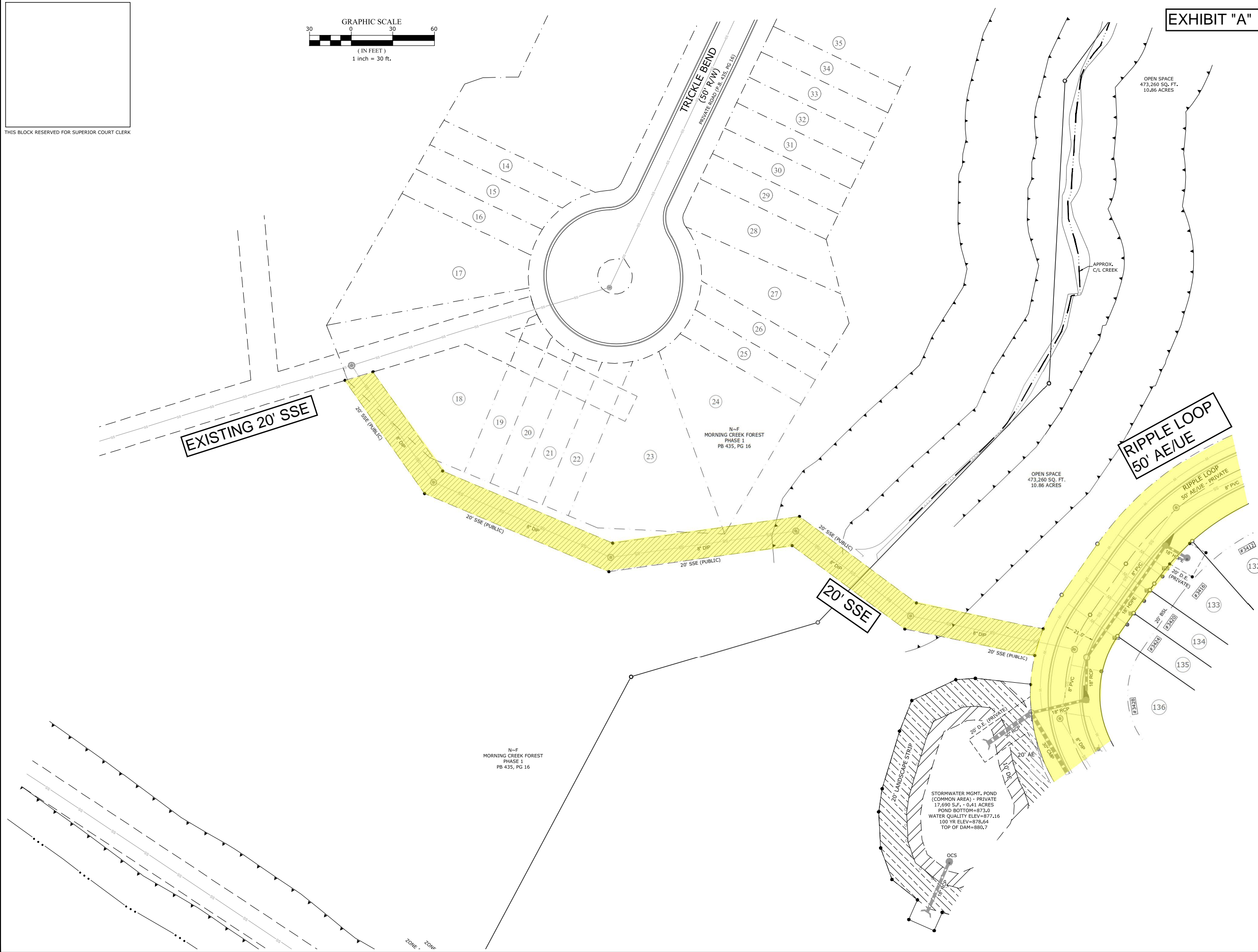
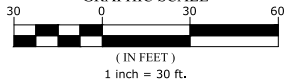
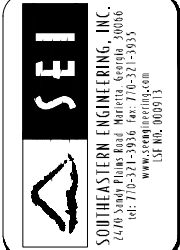


EXHIBIT "A"

[illegible]

PLAT INFORMATION

THE FIELD DATA UPON WHICH THIS PLAT IS BASED HAS A CLOSURE OF 1 FOOT IN $\pm 51,265$ FEET AND AN ANGULAR ERROR OF ± 1.1 SECONDS PER ANGLE POINT. THE AREA OF THIS PLAT HAS BEEN CALCULATED BY METHODS THAT ARE BELIEVED TO BE ACCURATE TO $\pm 100,000$ FEET. AN ELECTRONIC TOTAL STATION WAS USED TO GATHER THE INFORMATION USED IN THE PREPARATION OF THIS PLAT. FOR THE EXCLUSIVE USE OF THE PERSONS, PERSONS OR ENTITY NAMED HEREON, THIS PLAT DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS OR ENTITY WHOEVER EXPRESS RECERTIFICATION BY THE SURVEYOR NAMING SAID PERSON, PERSONS OR ENTITY.

RESIDENTIAL FINAL PLAT FOR:
**MORNING CREEK FORE
PHASE III**
LOCATED IN:
LOT 128, 13th DISTRICT, CITY OF SOUTH
FULTON COUNTY, GEORGIA



Project No.:	1124-18-133
Surveyed By:	B. COVENEY
Field Date:	10/27/2023
Drafted By:	J. WOODS
Issue Date:	12/06/2023



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0155

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval of an Indemnification, Maintenance, and Land Use Agreement for Private Improvement (Indemnification Agreement) between Fulton County and JBGL Atlanta Development 2014, LLC for the purpose of granting conditional approval to allow stormwater infrastructure to remain within a portion of the County's existing water line easement area at 132 Brook Street and 51 Thompson Street, Alpharetta, Georgia 30009.

Requirement for Board Action

Fulton County is authorized to grant an encroachment on its water line easement pursuant to Fulton County Code, Subpart B-Code of Resolutions - Appendix A - Subdivision Regulations, Article IX (Required Improvements), Section 9.5.5(c), which states the following in part: "No retaining wall, building, pole, sign or other vertical structure shall be constructed in sanitary and storm sewer easements, including vehicular access easements around structures, without approval from the [Director of Public Works]."

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☐
- District 1 ☐
- District 2 ☒
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background

Scope of Work: JBGL Atlanta Development 2014, LLC, the owner of the real property located at 132 Brook Street and 51 Thompson Street, Alpharetta, Georgia 30009, has requested the conditional approval of the Fulton County Board of Commissioners via an Indemnification, Maintenance, and Land Use Agreement for Private Improvement to install stormwater infrastructure within the County's existing water line easement area.

In accordance with County Policy and the Statue of Frauds, all amendments and edits to contractual agreements involving Fulton County are required to be in writing and approved by the Fulton County Board of Commissioners.

The purpose of the Indemnification Agreement is to formally affirm the terms of Fulton County's conditional approval of an encroachment(s) of private improvements to remain within the County's water line easement area.

The Fulton County Department of Real Estate and Asset Management, DREAM, and the Fulton County Department of Public Works are requesting approval to amend the terms of the County's water line easement as referenced and recorded in Deed Book 68146, Page 689.

At the request of JBGL Atlanta Development 2014, LLC, the Department of Public Works completed an on-site assessment of the area, which is approximately 23.3 square feet, and confirmed that the County's water system will not be adversely impacted and can continue to be properly maintained if this encroachment is permitted.

Community Impact: As per the terms of the agreement, Fulton County retains its full access to maintain its water service line while granting the property owner the conditional approval to install stormwater infrastructure within the County's water line easement area.

Department Recommendation: The Department of Real Estate and Asset Management, DREAM, accepts the conclusion of the Department of Public Works to accept the terms in the Indemnification Agreement and recommends its approval.

Project Implications: Approval of this Agreement will not impact water services or Fulton County's access to the onsite water service line for necessary maintenance.

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Approval of the Agenda Item does not involve the receipt or payment of funding.

After recording return to:
Michael Graham, Land Administrator
Fulton County Land Division
141 Pryor Street, SW, Suite 8021
Atlanta, GA 30303

Cross Reference

Deed/Plat Book 67325, Page 228
Deed Book 68146 Page 689

INDEMNIFICATION, MAINTENANCE AND LAND USE AGREEMENT FOR PRIVATE IMPROVEMENT

THIS AGREEMENT made this _____ day of _____, 2024, between JBGL Atlanta Development 2014, LLC a property owner within Fulton County, Georgia, his successors, affiliates and assigns, as Indemnitor (“Owner”), and FULTON COUNTY, GEORGIA, a political subdivision of the State of Georgia (“County”).

For good and valuable consideration, receipt of which is hereby acknowledged, it is hereby agreed as follows:

1.
Owner warrants that he is the full and true owner and has clear title to that certain property known as 31 & 51 Thompson Street – Park Walke (address), and as more fully described in that certain conveyance recorded in Deed Book 67325, Page 228 of Fulton County, Georgia records, on which Owner desires to install certain private improvements (the “Private Improvements”) as more fully described in Exhibit “A”, attached hereto and incorporated herein by reference.
2.
Previously, Fulton County was granted a water meter easement, as referenced in and recorded at Deed Book 68146, Page 689 of Fulton County, Georgia records, and hereby grants Owner a License to enter within portions of its water meter easement, to construct, repair and replace, from time to time as may be needed, certain private improvements at his sole cost and responsibility, said private improvements as the same are more fully described in Exhibit “A” (the “Private Improvements”).
3.
With respect to this License, Owner shall install and construct the Private Improvements in a good and workmanlike manner and in compliance with all state, local, and Fulton County laws and regulations, including but not limited to, all current state, local and Fulton County laws and regulations governing soil erosion and sedimentation control. Owner will at all times adhere to best management
Standard Form Water Line Indemnification Agreement 10.2023

practice procedures to protect the environment in connection with the construction, repair and/or maintenance of the Private Improvements.

4.

This License shall commence on the date of execution hereof and shall continue in full force and effect unless and until it is terminated at the will of the County.

5.

Owner may terminate this License and Agreement by written notice to the County and shall remove the Private Improvement at his sole costs and return the area to its natural vegetative state. If during the term of this License, the area containing the Private Improvements is condemned by the County or its assign, Owner shall make no claim in the condemnation proceedings for compensation for the Private Improvements.

6.

Fulton County personnel and/or agents shall have free access to and across the Private Improvements to perform routine maintenance and any emergency repairs to the existing public improvements.

7.

Owner shall be solely responsible for the maintenance, repair and replacement of the Private Improvements and the County grants Owner a right of access in order to carry out these obligations.

8.

Notwithstanding any other provisions, in the case of an emergency, Fulton County may immediately suspend or revoke the License without notice in order to protect the health, safety, and welfare of the public. In non-emergency situations, after providing at least 10 days' notice to Owner, Fulton County may suspend or revoke the License in order to carry out any necessary governmental function. In the event of the suspension or revocation of the License, Owner must cure all defects specified by the County in its notice and within the time reasonably specified by the County. Failure on the part of Owner to cure any defects within the allotted time will be grounds for the County to terminate the License. Alternately, the County may, but shall not be required to, cure any such defect at the sole cost and expense of Owner. The County may elect to terminate the License at will and remove the Private Improvements without liability for loss or damage for such removal. Fulton County shall remove the Private Improvements so as not to damage other portions of Owner's property and is granted a right of entry by Owner on the other portions of Owner's property to effectuate the repair, if necessary.

9.

Owner hereby agrees to indemnify Fulton County and hold Fulton County harmless from any and all damages which Fulton County may suffer and from any and all liability, claims, penalties, forfeitures, suits, and costs and expenses incident to the granting of the License and this Agreement (including cost of defense, settlement, and reasonable attorney's fees), which it may hereafter incur, become responsible for, or pay out as a result of the death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violations of governmental laws, regulations, or orders caused, in whole or in part, by the negligent act, negligent omission or willful misconduct of Owner, his employees, subcontractors, or assigns in the performance of this License or Agreement.

10.

Owner agrees to repair or replace in a manner acceptable to the County and/or the owner thereof any public utilities damaged by its employees or subcontractors during performance of this License and Agreement or resulting from the failure of the Private Improvements. At its election the County may repair or replace the damaged utility and assess all costs against Owner.

11.

The License conveyed to Owner by this Agreement shall be binding upon Owner, his assigns, affiliates, and successors. This Agreement shall be governed by and construed in accordance with the laws of the State of Georgia. If any provisions of this Agreement is held to be unenforceable for any reason, the unenforceability thereof shall not affect the remainder of the Agreement, which shall remain in full force and effect, and enforceable in accordance with its terms.

12.

The License conveyed to Owner by this Agreement shall constitute a covenant running with the land and shall be recorded in the real property records of Fulton County, Georgia and shall be binding upon all subsequent transferees of said property.

13.

All notices, consents, request, demands or other communications to or upon the respective party shall be in writing and shall be effective for all purposes upon receipt, including, but not limited to, in the case of (i) personal delivery; (ii) delivery by messenger, express or air courier or similar courier; or (iii) delivery by United States first class certified or registered mail, postage prepaid and addressed as follows:

COUNTY: Fulton County
Director of Public Works
141 Pryor Street, SW, 6th. Floor
Atlanta, GA. 30303

with a copy to: County Attorney
Office of the County Attorney
141 Pryor Street, SW, Suite 4038
Atlanta, GA. 30303

OWNER: JBGL Atlanta Development 2014, LLC
11340 Lakefield Drive, Ste 140
Johns Creek, GA 30093

Re: 1st District 2nd Section, Land Lot(s) 247

Parcel Number: 12-270307480685 & 12-270307480693

IN WITNESS WHEREOF, the parties have executed this Agreement at Atlanta, Georgia,
as of the day and year first above written.

Signatures:

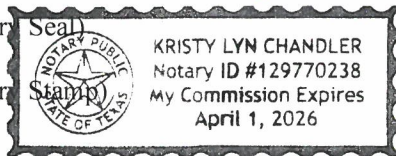
Signed sealed and delivered in the presence of
OWNER JBGL Atlanta Development 2014, LLC

[Signature]
Unofficial Witness

[Signature]
Notary Public

My Commission Expires: April 1, 2026

(Notary Seal)



(Notary Stamp)

[Signature]
Signature (Authorized Party to Bind Owner Entity)

Veronica Edwards, Auth. Representative
Signatory's Name and Title (printed)

Owner's Address: _____

5501 Headquarters Dr, Ste 300W, Plano, TX 75024

Attest:

FULTON COUNTY, GEORGIA

Clerk of Commission

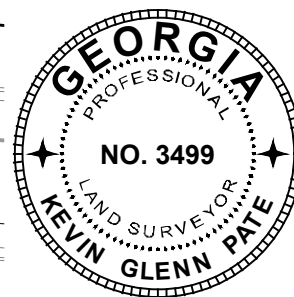
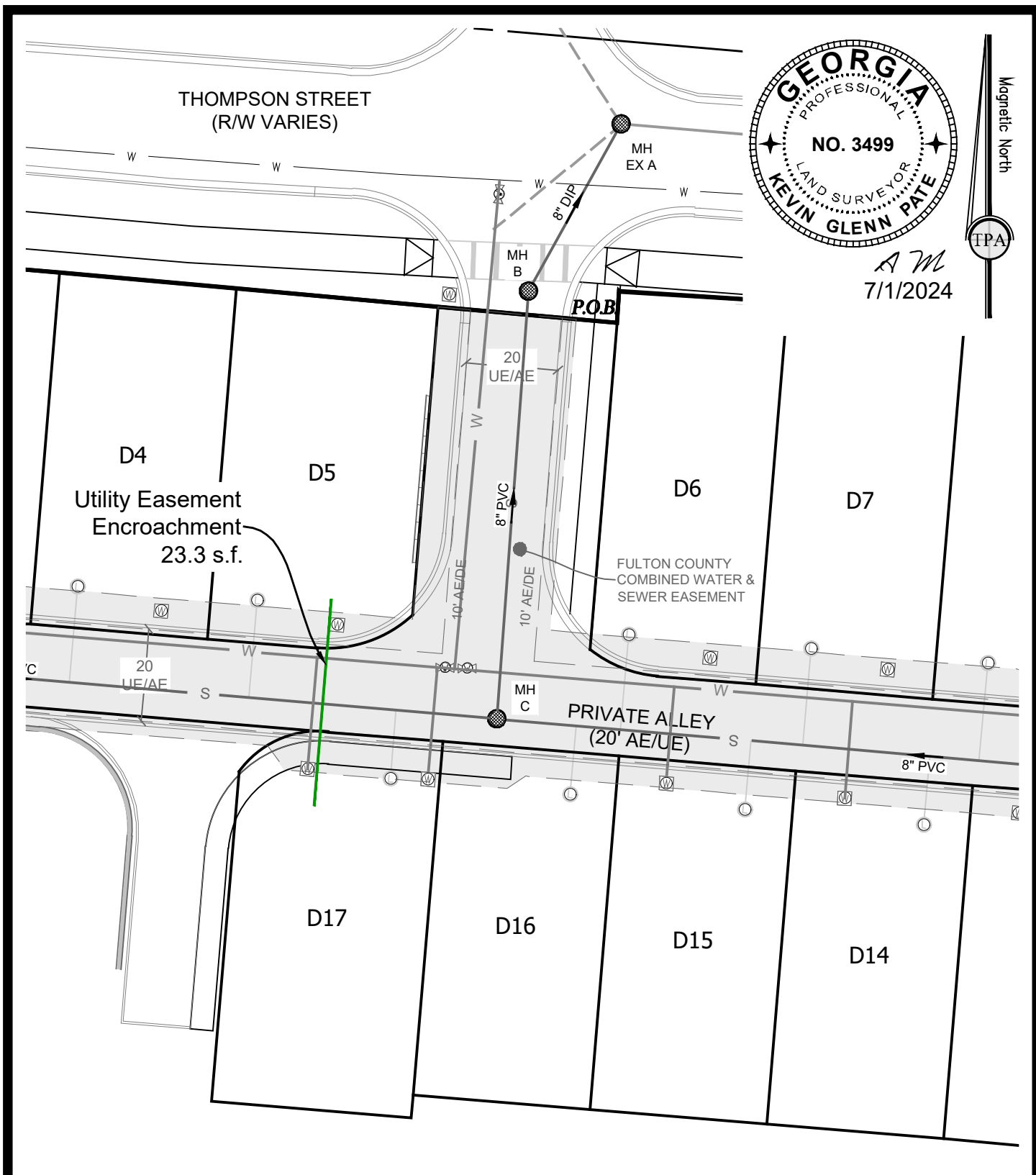
By: _____
Chairman, Board of Commissioners

APPROVED AS TO CONTENT:

APPROVED AS TO FORM:

David E. Clark, Director
Department of Public Works

Y. Soo Jo, County Attorney




A M
7/1/2024





4317 Park Drive, Suite 400
Norcross, Georgia 30093
Phone: (770) 416-7511
Fax: (770) 416-6759
www.travispruitt.com

Certificate of
Authorization Number 613

UTILITY EASEMENT ENCROACHMENT EXHIBIT
PARKE WALKER
AUTHORIZED BY: JBGL Alanta Group Development 2014, LLC
LAND LOT 247 • 1st DISTRICT • 2nd SECTION CITY OF ALPHARETTA • FULTON COUNTY • GEORGIA
GRAPHIC SCALE - IN FEET


PLAT DATE: 06/13/2024
FIELD DATE:
SCALE: 1" = 30'
JN: 1-23-0368
FN: 101-A-2526
DRAWN BY: SH
SHEET NO: 1 of 1



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0156

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action

Request approval to rescind an award - Department of Real Estate and Asset Management, Sourcewell Contract RFP #032824-CER, Equipment, Product, or Services with Certified Stainless Service, Inc. dba West-Mark through Sourcewell's Authorized Representative Vacutek, LLC (Austell, GA), for the purchase and delivery of one (1) Hydro Sewer Jetting Truck, Aquatech SJR-1500 (steel water tank), with a 1,500 gallon capacity for the Fulton County Public Works Department. Effective upon BOC approval.

Requirement for Board Action

In accordance with Purchasing Code Section 102-421, when a contract requires termination or rescission of the award, it shall be forwarded to the Board of Commissioners for approval.

Strategic Priority Area related to this item

Open and Responsible Government

Commission Districts Affected

- All Districts ☒
- District 1 ☐
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

Yes

Summary & Background: On August 21, 2024, the BOC approved the utilization of cooperative purchasing contract, Sourcewell Contract RFP #032824-CER, Equipment, Product, or Services, as BOC Item #24-0539 with with Certified Stainless Service, Inc. dba West-Mark through Sourcewell's Authorized Representative Vacutek, LLC (Austell, GA), in an amount not to exceed \$313,111.81, to purchase and deliver one (1) Hydro Sewer Jetting Truck, Aquatech SJR-1500 (steel water tank), with a 1,500 gallon capacity for the Fulton County Public Works Department.

Now, DREAM is requesting approval to rescind that award and to terminate the Purchase Order on behalf of the Public Works Department because the awarded vendor can no longer provide the needed equipment. In response, the Public Works Department searched and located an equivalent sewer cleaner, 1,500-gallon capacity single-mounted truck that is readily available at an authorized representative dealer at a comparable cost in the amount not to exceed \$313,255.00, which will be presented as a separate agenda item for approval to the Board of Commissioners.

Scope of Work: Non-Applicable

Community Impact: None the Department is aware.

Department Recommendation: The Department of Real Estate and Asset Management recommends approval to rescind the award and terminate the Purchase Order on behalf of the Public Works Department.

Project Implications: This rescission of the award allows the County to move forward to obtain another contractor to provide the replacement equipment for the Public Works Department.

Community Issues/Concerns: None of which the Department is aware.

Department Issues/Concerns: If this request to rescind the award is not approved, the Department cannot move forward with obtaining another Contractor to provide a replacement for this specialize equipment for the Public Works Department.

Contract & Compliance Information

Not Applicable

Exhibits Attached

Exhibit 1: Request to rescind award Memo

Contact Information

Joseph N. Davis, Director, Department of Real Estate and Asset Management, (404) 612-3772

Contract Attached

Yes

Previous Contracts

Yes

Total Contract Value

Original Approved Amount: \$313,111.81

Agenda Item No.: 25-0156

Meeting Date: 3/5/2025

Previous Adjustments: \$0.00
This Request: -\$313,111.81
TOTAL: \$0.00

Grant Information Summary

Amount Requested: ☐ Cash
Match Required: ☐ In-Kind
Start Date: ☐ Approval to Award
End Date: ☐ Apply & Accept
Match Account \$:

Fiscal Impact / Funding Source

Funding Line 1:

201-540-5469-1410: Water & Sewer Revenue, Public Works, Equipment- \$313,111.81

Key Contract Terms	
Start Date: Upon BOC Approval	End Date: 12/31/2025
Cost Adjustment:	Renewal/Extension Terms: N/A

Overall Contractor Performance Rating: No CPR

Would you select/recommend this vendor again?
Yes

Report Period Start: N/A **Report Period End:** N/A
[Click here to enter a date.](#) [Click here to enter a date.](#)



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0157

Meeting Date: 3/5/2025

Department

Senior Services

Requested Action

Request approval to amend a contract - Services for Seniors Services, 23RFQ138337A-CJC, Cosmetology and Aesthetic Services at no cost with Katylady Building Maintenance Services to adjust the scope of work menu costs to provide on-site cosmetology and aesthetic services for seniors aged 55 and older in the four senior multipurpose facilities. Effective upon BOC approval.

Requirement for Board Action

In accordance with Purchasing Code Section 102-420, contract modifications within the scope of the contract and necessary for contract completion of the contract, in the specifications, services, time of performance or terms and conditions of the contract shall be forwarded to the Board of Commissioners for approval.

Strategic Priority Area related to this item

Health and Human Services

Commission Districts Affected

- All Districts ☒
- District 1 ☐
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

Yes

Summary & Background: To amend the existing contract to adjust the scope of work menu costs. Per the contract, services available in the hair salon are independently procured between the caregiver/participant and stylist. The cost for other services is listed in the Menu Cost. Established in FY2024, this contract aims to support Fulton County seniors in maintaining their grooming needs by providing on-site cosmetology and aesthetic services at the four senior multipurpose facilities. Following one year of service delivery, Senior Services seeks a revenue-neutral price adjustment to align costs with the lower range of the market rates for similar services within Fulton County.

Scope of Work: This is a Revenue Neutral Contract. There is no cost to the County and there is no revenue to the Stylist. Compensation for work performed by the Stylist shall be in accordance with the Menu Cost. The services will provide for both male and female senior participants professional salon and barber services, including haircuts, hair styling, coloring, conditioning, skincare, manicures, pedicures, and geriatric massages.

Community Impact: No negative community impact. By providing this service, the department is providing access to personal grooming and aesthetic services, which are essential for enhancing self-esteem and well-being.

Department Recommendation: Recommendation is approval

Project Implications: The service enhances seniors' well-being by providing accessible grooming options, improving physical appearance, and encouraging social interaction. Professional stylists deliver high-quality salon services, while the availability of no-cost or subsidized options ensures affordability. This initiative promotes emotional health and addresses the unique personal care needs of the aging senior population.

Community Issues/Concerns: No known community issues/concerns.

Department Issues/Concerns: No known community issues/concerns.

Contract Modification

Current Contract History	BOC Item	Date	Dollar Amount
Original Award Amount	102-369	1/9/2024	Revenue Neutral
1st Renewal	24-0884	11/4/2024	Revenue Neutral
Amendment - Price Adjustment			Revenue Neutral
2 nd Renewal			\$.00
Extension #1			\$.00
Total Revised Amount			\$.00

Contract & Compliance Information

Contract Value: \$No Cost

Prime Vendor: Katylady Building Maintenance Services
Prime Status: African American Female Business Enterprise
Location: Decatur, GA
County: DeKalb County
Prime Value: \$No Cost

Total Contract Value: \$No Cost
Total Certified Value: \$No Cost

Exhibits Attached

Exhibit 1: Original Salon FY2024 Prices

Exhibit 2: Requested Salon FY2024 Prices with Market Analysis ranges

Exhibit 3: Performance Evaluation

Contact Information

Ladisa Onyiliogwu, Director, Department of Senior Services, 404-281-4042

Contract Attached

Yes

Previous Contracts

Yes

Total Contract Value

Original Approved Amount: No Cost

Previous Adjustments: No Cost

This Request: No Cost

TOTAL: No Cost

Key Contract Terms	
Start Date: 1/1/2025	End Date: 12/31/2025
Cost Adjustment:	Renewal/Extension Terms:

Overall Contractor Performance Rating: 100**Would you select/recommend this vendor again?**

Yes

Report Period Start: **Report Period End:**

5. Menu Cost

(Original FY2024 Services & Prices)

Service	Rates
Shampoo with conditioner	\$22.00
Shampoo only	\$10.00
Press and curl	\$25.00
Rinse	\$10.00
Cut	\$11.00
Treatment	\$12.50
Hair color	\$16.25 (patrons provide their own color)
Hair straightening (Flat Iron)	\$25.00
Relaxer	\$40.00
Hair cuts	\$11.25
Manicures	\$16.00
Pedicures	\$20.00
Gel	30.00
Fill In Gel	25.00
Acrylic	25.00
Fill In Acrylic	20.00
Threading	10.00
Geriatric massage	\$50 – 30 minutes \$60 – 45 Minutes
Skincare including facials and make-up application	\$35.00

FY2025 Senior Facilities Salon Services and Price Adjustments		Market Analysis Price Ranges per Service
Service	Salon Prices	Minimum to Maximum
Shampoo/Conditioner	\$ 22.00	\$35 – \$60
Shampoo only	\$ 10.00	\$20 – \$40
Press/Curl	\$ 30.00	\$50 – \$100
Cut	\$ 15.00	\$35 – \$60
Hair Color	\$ 20.00	\$75 – \$200
Blow Dry	\$ 10.00	\$35 – \$55
Chin Wax	\$ 10.00	\$15 – \$30
Roller Set	\$ 12.00	\$50 – \$100
Spa Manicure	\$ 35.00	\$50 – \$80
Spa Pedicure	\$ 45.00	\$60 – \$100
Hair Straightening/Flat iron	\$ 25.00	\$60 – \$100
Rinse	\$ 16.00	\$20 – \$40
Relaxer	\$ 45.00	\$40 – \$150
Gel Manicure	\$ 35.00	\$35 – \$60
Brow Wax	\$ 15.00	\$15 – \$30
Gel Pedicure	\$ 55.00	\$50 – \$80
Lip Wax	\$ 10.00	\$10 – \$20

Performance Evaluation Details

ID	E1
Project	COSMETOLOGY AND AESTHETIC SERVICES FOR SENIORS
Project Number	23RFQ138337A-CJC
Supplier	Katylady Building Maintenance Services
Supplier Project Contact	Glenda Anderson (preferred language: English)
Performance Program	Goods and Commodity Services
Evaluation Period	10/01/2024 to 12/31/2024
Evaluation Type	Formal
Interview Date	Not Specified
Expectations Meeting Date	Not Specified
Status	Draft
Evaluation Score	100

Related Documents

There are no documents associated with this Performance Evaluation

OVERALL RATING GUIDE - GOODS AND COMMODITY SERVICES

Evaluation Score Range

Outstanding = 90-100%

Excellent = 80-89%

Satisfactory = 70-79%

Needs Improvement = 50-69%

Unsatisfactory = -50%

QUALITY OF PRODUCT OR SERVICE

20/20

Rating

Outstanding: The contractor has demonstrated an outstanding performance level, no quality problems, all performance/specification requirements met, minor problems, highly effective corrective actions.

Comments

Katylady Building Maintenance Services consistently provided outstanding quality in delivering cosmetology and aesthetic services for seniors under the contract. Their attention to detail and adherence to specifications ensured that all services met high standards, contributing positively to the well-being and satisfaction of program participants. Their ability to maintain a seamless and professional operation across multiple locations demonstrates a commendable commitment to excellence.

TIMELINESS OF PERFORMANCE

20/20

Rating

Outstanding: The contractor has demonstrated an outstanding performance level, significantly exceeded delivery requirements, all on-time deliveries to the Government's benefit.

Comments

Katylady Building Maintenance Services consistently demonstrated exceptional timeliness in meeting all performance requirements under the Cosmetology Contract. Their ability to deliver services on schedule and without delays ensured seamless operations and maximized benefits to the program participants. Their commitment to punctuality and reliability has been a significant asset to the success of this initiative.

BUSINESS RELATIONS

20/20

Rating

Outstanding: The contractor has demonstrated an outstanding performance level that justifies adding a point to the score. It is expected that this rating will be used in those rare circumstances where contractor performance clearly exceeds the performance levels described as "Excellent".

Comments

Katylady Building Maintenance Services has demonstrated exemplary business relations under the Cosmetology Contract. Their responsiveness to inquiries, proactive communication, and professionalism in addressing administrative and service-related matters have been outstanding. This level of engagement and collaboration has greatly supported the success of the program.

CUSTOMER SATISFACTION

20/20

Rating

Outstanding: Contractor representative proactively communicates performance/specification issues to the User Department, highly professional and responsive.

Comments

Katylady Building Maintenance Services consistently provided exceptional service under the Cosmetology Contract, demonstrating a proactive approach to addressing performance issues and maintaining open, professional communication with the Senior Services Team and senior adult customers. Their responsiveness and commitment to customer satisfaction have greatly enhanced the experience for all program participants.

COST CONTROL

20/20

Rating

Outstanding: Compliance with contract pricing, all cost discrepancies are clearly identified with explanation; compliance with invoice submission requirements/price substantiation.

Comments

Outstanding because this is a no cost contract.

GENERAL COMMENTS

Comments

Not Specified



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0158

Meeting Date: 3/5/2025

Department

Department for HIV Elimination

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Request approval to extend two existing "Ryan White Part A" service contracts for a three-month period from March 1, 2025, through May 31, 2025, and, subject to federal funding, amend these two existing contracts to increase the spending authority of "Ryan White Part A" subrecipients in the amount of \$610,886.00 pursuant to the Health Resources and Services Administration "Ryan White Part A" award H89HA00007. Contracts are 100% grant funded with no Fulton County match. Request authorization for the Chairman to execute contracts with subrecipients. To protect the interest of the County, the County Attorney is authorized to approve the contracts as to form and make any necessary modifications thereto prior to execution by the Chairman.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

O.C.G.A. § 36-10-1 requires all official contracts entered by the County governing authority with other persons on behalf of the County be in writing and entered on its minutes.

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Health and Human Services

Commission Districts Affected

- All Districts ☒
- District 1 ☐
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background *(First sentence includes Agency recommendation. Provide an executive summary of the action that gives an overview of the relevant details for the item.)*

Scope of Work: The Department for HIV Elimination recommends approval of a three-month

contract extension and increased spending authority in the amount of \$610,886.00 for two “Ryan White Part A” subrecipients to provide HIV care and support services using 100% “Ryan White Part A” grant funds with no required County match. “Ryan White Part A” has a project period from 3/1/2025 through 2/28/2028. The Board of Commissioners previously approved “Ryan White Part A” grant funding through #21-0800 for project period ending 02/28/2025. Subrecipients were recommended by a Review Committee pursuant to 21RWRFP1112B-PS. By extending these two contracts and increasing the spending authority of these two “Ryan White Part A” agencies, the Department for HIV Elimination will be able to ensure the uninterrupted provision of services while completing the vendor selection process for the remainder of FY2025 through February 28, 2028, pursuant to RFP 24RFP1343702B-PS. These agencies provide core medical services and essential support services for medically indigent Persons Living with HIV in the 20-county Eligible Metropolitan Area. Funds are recommended to increase spending authority for the following subrecipients in the following amounts: Open Hand Atlanta, Inc. \$283,096. Positive Impact Health Centers \$327,790.

Community Impact: “Ryan White Part A” funding will support essential core and support services for Persons Living with HIV (PLWH) in the eligible metropolitan area (EMA) to decrease the number of new HIV cases. Funds will support the provision of medical services, case management, mental health services, housing services, and initiative projects. All services have as their main goal increased viral suppression rates.

Department Recommendation: The Department for HIV Elimination recommends approval of three-month contract extensions for the period March 1, 2025 - May 31, 2025, and increased spending authority for two “Ryan White Part A” grant subrecipients in the amount of \$610,886.00 in FY25 funding.

Project Implications: No change in County budget. These contracts are 100% grant-funded with no County match.

Community Issues/Concerns: Were contracts not to be extended, and funding levels increased, there would be a period of time during which “Ryan White Part A” core medical and support services would cease.

Department Issues/Concerns: Were funds not to be increased, and the contract period not extended, there would be an interruption of core medical and support services for Persons Living with HIV in the 20-County area.

Fiscal Impact / Funding Source

Funding Line 1:

461-227-R254

Funding Line 2:

461-227-R255



**THE RYAN WHITE
HIV/AIDS TREATMENT EXTENSION ACT
PART A GRANT**

**Atlanta Eligible Metropolitan Area FY22 Agreement
FY 2025 Partial Award and
Three-Month Contract Extension**

THIS AGREEMENT, entered this 1st day of March 2025 through the 31st day of May 2025 by and between FULTON COUNTY (hereinafter referred to as "County") a political subdivision of the State of Georgia, acting by and through its duly elected Board of Commissioners ("**BOC**"), and **Positive Impact Health Centers, Inc.** (hereinafter referred to as "Subrecipient").

WHEREAS, the County, has recommended additional funding to Subrecipient to facilitate the approved program for a three-month extension into FY2025 in an amount not to exceed **\$327,790.00**. Award is subject to federal funding availability and disbursement.

WHEREAS, the County desires to avoid an interruption of client services through the provision of partial FY2025 funding for services provided in FY2025 through extension of the existing Department for HIV Elimination Agreement.

WHEREAS, the County and subrecipient entered in an agreement dated the 1st day of March 2022 pursuant to Item #22-0306 (5/4/2022).

WHEREAS, the County desires to amend aid agreement pursuant to Item #25-0020 (1/8/2025).

NOW, THEREFORE, in consideration of the mutual covenants contained herein and for other good and valuable consideration, the parties hereunto agree as follows:

ARTICLE 1. CONTRACT DOCUMENTS

Revise Paragraph 1.0 by adding:

- EXHIBIT A-25 Work Plan Goals and Objectives tied to Approved Budget
- EXHIBIT B-25 Approved Three-Month Budget

ARTICLE 7. COMPENSATION FOR SERVICES

Revise Paragraph 7.0 by adding:

Paragraph 7.0 Subject to the availability and disbursement of federal funds, the legislatively approved services described in EXHIBIT A-25 Workplan and EXHIBIT B-25 Budget herein shall be performed by Subrecipient for a FY2025 partial allocation of RWHAP, Part A funds, in an additional amount not to exceed **\$327,790.00**.

Revise Paragraph 7.2 by adding:

Paragraph 7.2a. The budget attached to Contract in EXHIBIT B-25 Approved three-month Budget is a complete, approved partial FY2025 budget for expenditures of all RWHAP Part A funds awarded pursuant to this Agreement and may hereafter be amended or extended in writing by mutual agreement of parties prior to expenditure of funds.

Paragraph 7.2.b. For FY2025 three-month budget, subrecipient must submit a draft partial FY2025 Work Plan and partial FY2025 budget to the designated DHE Project Officer no later than **February 14, 2025**. After the subrecipient and the designated DHE Project Officer agree on a negotiated budget and work plan and the negotiated budget and work plan are approved by the DHE Director, these items will become a part of this agreement as EXHIBIT A-25 partial FY2025 Work Plan Goals and Objectives tied to Approved Budget and EXHIBIT B-25 partial Approved Annual Budget respectively.

EXHIBIT B-25 partial Budget shall then be a complete, approved partial FY2025 budget for expenditures of all RWHAP Part A funds awarded pursuant to this Agreement and may hereafter be amended or extended in writing by mutual agreement of parties prior to expenditure of funds.

ARTICLE 8. GENERAL SUBRECIPIENT REQUIREMENTS

Revise Paragraph 8.4:

Paragraph 8.4. In order to reduce the administrative burden to clients and Subrecipients of collecting and maintaining client Ryan White eligibility documents, Subrecipient agrees to participate in the uploading, updating, and sharing of client eligibility documents via e2Fulton.

In order to obtain client consent for the sharing of such documentation Subrecipient will obtain client consent using the form developed by the Department for HIV Elimination and available at www.endhivatl.org ~~www.ryanwhiteatl.org~~. The consent must be uploaded into e2Fulton before a client's service data can be entered.

ARTICLE 9. INVOICING AND PAYMENT

Paragraph 9.9. Closeout and Final Reimbursement Submission. The final submission must include a certification signed by the official authorized to legally bind Subrecipient as follows: *"By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of this contract. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812, 45 CFR 75.415(a))."*

ARTICLE 10. FUNDING EXCLUSIONS AND RESTRICTIONS

Revise Paragraph 10.0:

Paragraph 10.0. Subrecipient shall use funds in accordance with federal requirements and shall not use Part A funds for unallowable costs including those listed herein, in the ***“Program Manual of Policies and Procedures”*** incorporated herein by reference and available at www.endhivatl.org ~~www.ryanwhiteatl.org~~ ***PPPN-004: Funding Exclusions and Restrictions*** ” incorporated herein by reference and available at www.endhivatl.org ~~www.ryanwhiteatl.org~~, and in the RFP incorporated herein by reference.

Revise Paragraph 10.1:

Paragraph 10.1. Subrecipient agrees that RWHAP Part A funds will not be used to supplant or replace state and local HIV-related funding or in-kind resources expended by Subrecipient for HIV-related services during the contract period beginning March 1, 2022 and ending May 31, 2025 ~~February 28, 2025~~.

ARTICLE 15. TERMINATION

Revise Paragraph 15.0:

Paragraph 15.0. This contract shall terminate no later than 11:59 p.m. on May 31, 2025 ~~February 28, 2025~~.

IN WITNESS HEREOF, the parties hereto have set their hands and affixed their seals.

FULTON COUNTY, GEORGIA

By: _____
Robert L. Pitts, Chairman
Board of Commissioners

Date

Attest:

Tonya Grier
Fulton County Clerk to the Commission

ITEM#: _____ DATE: _____

APPROVED AS TO FORM:

Office of the County
Attorney For Fulton
County Government

APPROVED AS TO CONTENT:

Jeff Cheek, Director
Department for HIV
Elimination

SUBRECIPIENT:

By: _____
Agency Name

Date

Signature

Typed Name

Title

EXHIBIT A-25

PARTIAL FY2025 WORK PLAN GOALS AND OBJECTIVES TIED TO

APPROVED BUDGET (SEE END OF DOCUMENT)

EXHIBIT B-25

FY2025 APPROVED BUDGET AND BUDGET JUSTIFICATION TIED TO GOALS AND OBJECTIVES



**THE RYAN WHITE
HIV/AIDS TREATMENT EXTENSION ACT
PART A GRANT**

**Atlanta Eligible Metropolitan Area FY22 Agreement
FY 2025 Partial Award and
Three-Month Contract Extension**

THIS AGREEMENT, entered this 1st day of March 2025 through the 31st day of May 2025 by and between FULTON COUNTY (hereinafter referred to as "County") a political subdivision of the State of Georgia, acting by and through its duly elected Board of Commissioners ("BOC"), and **Open Hand Atlanta** (hereinafter referred to as "Subrecipient").

WHEREAS, the County, has recommended additional funding to Subrecipient to facilitate the approved program for a three-month extension into FY2025 in an amount not to exceed **\$283,096.00**. Award is subject to federal funding availability and disbursement.

WHEREAS, the County desires to avoid an interruption of client services through the provision of partial FY2025 funding for services provided in FY2025 through extension of the existing Department for HIV Elimination Agreement.

WHEREAS, the County and subrecipient entered in an agreement dated the 1st day of March 2022 pursuant to Item #22-0306 (5/4/2022).

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Revise Paragraph 7.0 by adding:

Paragraph 7.0 Subject to the availability and disbursement of federal funds, the legislatively approved services described in EXHIBIT A-25 Workplan and EXHIBIT B-25 Budget herein shall be performed by Subrecipient for a FY2025 partial allocation of RWHAP, Part A funds, in an additional amount not to exceed **\$283,096.00**.

Revise Paragraph 7.2 by adding:

Paragraph 7.2a. The budget attached to Contract in EXHIBIT B-25 Approved three-month Budget is a complete, approved partial FY2025 budget for expenditures of all RWHAP Part A funds awarded pursuant to this Agreement and may hereafter be amended or extended in writing by mutual agreement of parties prior to expenditure of funds.

Paragraph 7.2.b. For FY2025 three-month budget, subrecipient must submit a draft partial FY2025 Work Plan and partial FY2025 budget to the designated DHE Project Officer no later than **February 14, 2025**. After the subrecipient and the designated DHE Project Officer agree on a negotiated budget and work plan and the negotiated budget and work plan are approved by the DHE Director, these items will become a part of this agreement as EXHIBIT A-25 partial FY2025 Work Plan Goals and Objectives tied to Approved Budget and EXHIBIT B-25 partial Approved Annual Budget respectively.

EXHIBIT B-25 partial Budget shall then be a complete, approved partial FY2025 budget for expenditures of all RWHAP Part A funds awarded pursuant to this Agreement and may hereafter be amended or extended in writing by mutual agreement of parties prior to expenditure of funds.

ARTICLE 8. GENERAL SUBRECIPIENT REQUIREMENTS

Revise Paragraph 8.4:

Paragraph 8.4. In order to reduce the administrative burden to clients and Subrecipients of collecting and maintaining client Ryan White eligibility documents, Subrecipient agrees to participate in the uploading, updating, and sharing of client eligibility documents via e2Fulton.

In order to obtain client consent for the sharing of such documentation Subrecipient will obtain client consent using the form developed by the Department for HIV Elimination and available at www.endhivatl.org ~~www.ryanwhiteatl.org~~. The consent must be uploaded into e2Fulton before a client's service data can be entered.

ARTICLE 9. INVOICING AND PAYMENT

Paragraph 9.9. Closeout and Final Reimbursement Submission. The final submission must include a certification **signed by the official authorized to legally bind Subrecipient** as follows: *"By signing this report, I certify to the best of my knowledge and belief that the report is true, complete, and accurate, and the expenditures, disbursements and cash receipts are for the purposes and objectives set forth in the terms and conditions of this contract. I am aware that any false, fictitious, or fraudulent information, or the omission of any material fact, may subject me to criminal, civil or administrative penalties for fraud, false statements, false claims or otherwise. (U.S. Code Title 18, Section 1001 and Title 31, Sections 3729-3730 and 3801-3812, 45 CFR 75.415(a))."*

ARTICLE 10. FUNDING EXCLUSIONS AND RESTRICTIONS

Revise Paragraph 10.0:

Paragraph 10.0. Subrecipient shall use funds in accordance with federal requirements and shall not use Part A funds for unallowable costs including those listed herein, in the ***“Program Manual of Policies and Procedures”*** incorporated herein by reference and available at www.endhivatl.org ~~www.ryanwhiteatl.org~~ ***PPPN-004: Funding Exclusions and Restrictions*** ” incorporated herein by reference and available at www.endhivatl.org ~~www.ryanwhiteatl.org~~, and in the RFP incorporated herein by reference.

Revise Paragraph 10.1:

Paragraph 10.1. Subrecipient agrees that RWHAP Part A funds will not be used to supplant or replace state and local HIV-related funding or in-kind resources expended by Subrecipient for HIV-related services during the contract period beginning March 1, 2022 and ending May 31, 2025 ~~February 28, 2025~~.

ARTICLE 15. TERMINATION

Revise Paragraph 15.0:

Paragraph 15.0. This contract shall terminate no later than 11:59 p.m. on May 31, 2025 ~~February 28, 2025~~.

IN WITNESS HEREOF, the parties hereto have set their hands and affixed their seals.

FULTON COUNTY, GEORGIA

By: _____
Robert L. Pitts, Chairman
Board of Commissioners

Date

Attest:

Tonya Grier
Fulton County Clerk to the Commission

ITEM#: _____ DATE: _____

APPROVED AS TO FORM:

Office of the County
Attorney For Fulton
County Government

APPROVED AS TO CONTENT:

Jeff Cheek, Director
Department for HIV
Elimination

SUBRECIPIENT:

By: _____
Agency Name

Date

Signature

Typed Name

Title

EXHIBIT A-25

PARTIAL FY2025 WORK PLAN GOALS AND OBJECTIVES TIED TO

APPROVED BUDGET (SEE END OF DOCUMENT)

EXHIBIT B-25

FY2025 APPROVED BUDGET AND BUDGET JUSTIFICATION TIED TO GOALS AND OBJECTIVES



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0159

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Adoption of the First Regular Meeting Agenda.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0160

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Ratification of Minutes.

First Regular Meeting Minutes, February 5, 2025

Second Regular Meeting Post Agenda Minutes, February 19, 2025



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0161

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Presentation of Proclamations and Certificates.

Proclamation recognizing “Developmental Disabilities Awareness Month.” **(Ellis/BOC)**

Proclamation recognizing “Atlanta Women’s Foundation Appreciation Day.” **(Barrett/BOC)**

Proclamation recognizing “Harold D. Lamar Appreciation Day.” **(Abdur-Rahman/Pitts)**



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0162

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Public Comment - Citizens are allowed to voice County related opinions, concerns, requests, etc. during the Public Comment portion of the Commission meeting. **Priority for public comment will be given to Fulton County citizens and those individuals representing businesses or organizations located within Fulton County, including their employees, whether such persons are commenting in-person, via emails or via Zoom or other electronic media (i.e., phone call). Non-Fulton County citizens will only be heard after all in-person Fulton County citizens, representatives of business and organizations located within Fulton County, including their employees, have been heard and the time allotted for public comment has not expired, except as otherwise provided in this code section. County staff shall verify the residency of each public speaker prior to such person being heard by the board. Speakers will be granted up to two minutes each. Members of the public will not be allowed to yield or donate time to other speakers. The Public Comment portion of the meeting will not exceed sixty (60) minutes at the First Regular Meeting, nor will this portion exceed sixty (60) minutes at the Second Regular Meeting.** In the event the 60-minute time limit is reached prior to public comments being completed, public comment will be suspended and the business portion of the BOC meeting will commence. Public comment will resume at the end of the meeting. For more information or to arrange a speaking date, contact the Clerk's Office.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0163

Meeting Date: 3/5/2025

Department

Finance

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Request approval of a Resolution of the Board of Commissioners of Fulton County, Georgia Authorizing the Issuance and Sale of Fulton County, Georgia General Fund Tax Anticipation Notes; Authorizing the Distribution and Use of a (a) Request for Bids and/or (b) Preliminary Official Statement and Notice of Sale, in each case relating to such Tax Anticipation Notes and the Solicitation of Offers for the purchase of the Notes and related matters.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

Approval of a Resolution to authorize issuance of the 2025 Tax Anticipation Notes and/or other alternative financing arrangement in an amount up to \$275,000,000 and acceptance as allowed under The Temporary Loans provisions of the Georgia Constitution (Article IX, Section V, Paragraph V of the Georgia Constitution of 1983 and O.C.G.A. § 36-80-2)

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Open and Responsible Government

Commission Districts Affected

- All Districts ☒
- District 1 ☐
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background *(First sentence includes Agency recommendation. Provide an executive summary of the action that gives an overview of the relevant details for the item.)*

Scope of Work: Fulton County plans to obtain a temporary loan through a Tax Anticipation Note (TAN) to support operations in anticipation of the receipt of taxes levied for the General Fund. The

amount of the (TAN) will not exceed \$275,000,000. The attached resolution authorizes the distribution of a preliminary official statement, the distribution of a notice of sale, and the solicitation of offers for the purchase through the Official Bid Form. Electronic bids are expected to be received in the Finance Department at 10:00 am local time, Wednesday, May 7, 2025. The selected financing option or bid will be presented to the Board of Commissioners at their May 7, 2025 meeting for approval. This request authorizes the County Manager, County Attorney, CFO and staff to complete work to distribute relevant documents to effect sale of the short-term Tax Anticipation Note for temporary cash funding of County operations. To that end, the Department of Finance seeks approval by the BOC for authorization for a publicly placed offering with a Preliminary Official Statement, Notice of Sale and Official Bid form for a TAN and/or release a Request for Proposal for a privately placed financing for an amount not to exceed \$275,000,000.

Community Impact: Will provide funding of County operations throughout 2025 until property tax collections are due.

Department Recommendation: Recommend approval

Project Implications: None

Community Issues/Concerns: None

Department Issues/Concerns: None

Fiscal Impact / Funding Source

Funding Line 1:

100-999-D100-1601 Debt Service-TANS \$5,200,000.00	100-999-D100-1601 Tax Anticipation Note
Expense - \$200,000.00	

1 A RESOLUTION OF THE BOARD OF COMMISSIONERS OF FULTON COUNTY,
2 GEORGIA AUTHORIZING, AMONG OTHER THINGS, THE ISSUANCE AND SALE
3 OF FULTON COUNTY, GEORGIA GENERAL FUND TAX ANTICIPATION NOTES;
4 AUTHORIZING THE DISTRIBUTION AND USE OF (A) A REQUEST FOR BIDS
5 AND/OR (B) A PRELIMINARY OFFICIAL STATEMENT AND NOTICE OF SALE, IN
6 EACH CASE RELATING TO SUCH TAX ANTICIPATION NOTES, AND THE
7 SOLICITATION OF OFFERS FOR THE PURCHASE OF THE SAME; AND
8 RELATED MATTERS.

9 WHEREAS, the Board of Commissioners of Fulton County (the "**Board of**
10 **Commissioners**") is charged with the duties of contracting debts and managing the affairs of
11 Fulton County, Georgia (the "**County**"); and

12 WHEREAS, the Board of Commissioners has determined that it is in the best interest
13 of the County to obtain a temporary loan in anticipation of the receipt of taxes levied or to be
14 levied for the General Fund of the County for calendar year 2025; and

15 WHEREAS, the County is authorized by Article IX, Section V, Paragraph V of the
16 Georgia Constitution of 1983, and Section 36-80-2 of the Official Code of Georgia Annotated,
17 as amended and supplemented, to obtain a temporary loan to pay current expenses during any
18 calendar year and to evidence such loan by issuing tax anticipation notes in anticipation of the
19 receipt of revenues from taxes levied or to be levied for the General Fund for expenses payable
20 in such calendar year; and

21 WHEREAS, the County is considering issuing such notes in an aggregate principal
22 amount not to exceed \$275,000,000 (the "**Notes**"); and

23 WHEREAS, in connection with the offering of the Notes, the County will request bids
24 from financial institutions for a temporary loan (including, but not limited to, a line of credit)
25 relating to such Notes (the "Request for Bids") and/or prepare or cause the preparation of a
26 preliminary official statement relating to such Notes (the "**Preliminary Official Statement**")
27 and a notice of sale relating thereto (the "**Notice of Sale**"), and the County proposes to authorize
28 the use of either or both approaches in connection with the offering of the Notes.

29 NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF
30 COMMISSIONERS OF FULTON COUNTY, GEORGIA, as follows:

31 Section 1. Authorization of Notes. There is hereby authorized to be issued tax
32 anticipation notes of the County in the aggregate principal amount not to exceed \$275,000,000
33 which shall be designated "Fulton County, Georgia General Fund Tax Anticipation Notes,
34 Series 2025" (the "**Notes**"). The Notes shall be dated as of the date of delivery thereof to the
35 Purchaser (as herein defined) and shall bear interest at the rate per annum, calculated on the
36 basis of a 360-day year comprised of twelve 30-day months, all as provided in, and in
37 accordance with, the Purchaser's winning bid; shall be payable as to principal and interest by
38 wire transfer upon surrender of the Notes to the persons who are registered owners on
39 December 30, 2025 and shall be payable as to principal and interest in lawful money of the
40 United States of America; shall be issued in \$100,000 denominations or any integral multiple
41 of \$5,000 in excess thereof; shall be numbered R-1 upward; and shall mature and interest shall
42 be payable on December 30, 2025. The Notes shall be issued in the form of fully registered
43 notes. The Notes shall be executed by the manual or facsimile signature of the Chairman of the

1 Board of Commissioners and by the manual or facsimile signature of the Clerk thereof, and the
2 corporate seal of the County shall be impressed or imprinted thereon. In case any officer whose
3 signature shall be affixed to the Notes or who shall have sealed any of the Notes shall cease to
4 be such officer before the Notes so signed and sealed shall have been actually delivered, the
5 Notes, nevertheless, shall be valid Notes of the County and may be delivered as such
6 notwithstanding the fact that such officer or officers may have ceased to be such officer or
7 officers of the County when the Notes shall be actually delivered.

8 **Section 2. Findings.** The Board of Commissioners hereby finds and determines as
9 follows: (a) the aggregate principal amount of the Notes herein authorized (\$275,000,000) does
10 not exceed \$589,997,341, being 75% of the total gross income from taxes collected by the
11 County in calendar year 2024 for the General Fund (\$786,663,121); (b) the aggregate principal
12 amount of the Notes, together with other contracts, notes, warrants or obligations of the County
13 for current expenses in calendar year 2025 for the General Fund, do not exceed the total
14 anticipated tax revenues of the County for the General Fund for calendar year 2025; (c) no
15 temporary loan or other contract, note, warrant or other obligation for current expenses incurred
16 in calendar year 2024 or any prior calendar year remains unpaid as of the date hereof; and (d)
17 a need exists for the County to borrow an amount not to exceed \$275,000,000 to pay current
18 expenses of the County in calendar year 2025 prior to the receipt of sufficient revenues from
19 taxes levied or to be levied for the General Fund for 2025.

20 **Section 3. Authorization of Distribution of the Request for Bids and/or**
21 **Preliminary Official Statement and Notice of Sale.** The distribution of the Request for Bids
22 and/or Preliminary Official Statement and the Notice of Sale relating to the Notes, and the
23 solicitation of offers for purchase of the Notes from prospective purchasers by or on behalf of
24 the County are hereby authorized. The Request for Bids and/or Preliminary Official Statement
25 and the Notice of Sale shall be in form and substance as shall be approved by the Chief
26 Financial Officer of the County, in consultation with the County Attorney, the financial advisor
27 and outside legal counsel to the County, and the distribution or publication of the Request for
28 Bids and/or Preliminary Official Statement and the Notice of Sale shall be conclusive evidence
29 of any such approval.

30 **Section 4. Approval and Ratification of Certain Documents and Actions.** The
31 actions of the Chief Financial Officer of the County and of the financial advisors to the County,
32 and any other officials, officers, employees, agents or attorneys representing the County, in
33 consultation with the County Attorney, in causing information with respect to the County and
34 the Notes to be prepared and distributed to potential purchasers of the Notes, and in advertising
35 the Notes for sale, including the preparation, use and circulation of the Request for Bids and/or
36 Notice of Sale and the Preliminary Official Statement, are hereby approved, ratified and
37 confirmed.

38 **Section 5. Rule 15c2-12 Certificate.** The Chief Financial Officer is hereby
39 authorized to execute and deliver a certificate "deeming final" the Preliminary Official
40 Statement, as applicable, on behalf of the County in accordance with Rule 15c2-12
41 promulgated by the Securities and Exchange Commission under the Securities and Exchange
42 Act of 1934, as amended.

43 **Section 6. Acceptance of Winning Bid.** The Chief Financial Officer of the County
44 is hereby authorized to accept the bid of and award the sale of the Notes to the responsible

bidder whose bid (a) results in the lowest true interest cost to the County and (b) best meets the needs of the County, determined as set forth in the Request for Bids and/or Notice of Sale, as applicable; provided, however, that the Chief Financial Officer of the County is not authorized to accept any bid for less than 100% of the par value of the Notes. Following the acceptance of the winning bid, the Chief Financial Officer shall provide information concerning such bid, including the name of the winning Purchaser, the interest rate of the Notes and the true interest cost of the Notes, to the Board of Commissioners for ratification and approval.

Section 7. Approval of Form of Notes. The Notes as initially issued shall be issued in substantially the form attached hereto as **Exhibit A** subject to such minor changes, insertions or omissions as may be approved by the Chairman of the Board of Commissioners, and the execution and delivery of the Notes shall be conclusive evidence of such approval.

Section 8. Designation of Paving Agent. The Chief Financial Officer of the County is hereby designated as Paying Agent, Note Registrar and Authenticating Agent with respect to the Notes. The Chief Financial Officer, upon consultation with the County Attorney, is hereby authorized to designate U.S. Bank Trust Company, National Association as Deputy Paying Agent, Deputy Note Registrar and Deputy Authenticating Agent, as necessary or convenient. Any actions or responsibilities which may be undertaken by the Paying Agent, Note Registrar and/or Authenticating Agent, as the case may be, may also be taken by the Deputy Paying Agent, Deputy Note Registrar and/or Deputy Authenticating Agent, as the case may be.

Section 9. Tax Revenues Used to Repay Notes. The County agrees to use for payment of the Notes and the interest thereon a sufficient portion of the revenues received by the County from taxes levied or to be levied for calendar year 2025 for the General Fund and other funds available for such purpose.

Section 10. Authentication of Notes. Only such Notes as shall have endorsed thereon a certificate of authentication substantially in the form hereinabove set forth duly executed by the Note Registrar shall be deemed to be validly issued hereunder. No Notes shall be valid or obligatory for any purpose unless and until such certificate of authentication shall have been executed by the Note Registrar, and such executed certificate of the Note Registrar upon any such Note shall be conclusive evidence that such Note has been authenticated and delivered hereunder. Said certificate of authentication on any Note shall be deemed to have been executed by the Note Registrar, but it shall not be necessary that the same authorized signatory sign the certificate of authentication on all of the Notes.

Section 11. Transfer and Exchange of Notes. The Note Registrar shall cause to be kept books for the registration of transfer of the Notes. Notes may be registered and transferred on the books of registration by the registered owner thereof in person or by his duly authorized attorney, upon surrender thereof, together with a written instrument of transfer executed by the owner or his duly authorized attorney. Upon surrender for registration of transfer of any Note at the principal corporate office of the Note Registrar, the Chairman of the Board of Commissioners shall execute, and the Note Registrar shall authenticate and deliver in the name of the transferee or transferees, a new Note or Notes of the same aggregate principal amount and tenor and of any authorized denomination or denominations, numbered consecutively in order of issuance according to the records of the Note Registrar.

1 The Notes may be exchanged at the principal corporate office of the Note Registrar for
2 an equal aggregate principal amount of Notes of the same aggregate principal amount and tenor
3 and of any authorized denomination or denominations. The Chairman of the Board of
4 Commissioners shall execute, and the Note Registrar shall authenticate and deliver, Notes,
5 which the owner of Notes making such exchange is entitled to receive, bearing numbers not
6 contemporaneously then outstanding.

7 Such transfers of registration or exchanges of Notes shall be without charge to the
8 owner of such Notes, but any tax or other governmental charge, required to be paid with respect
9 to the same shall be paid by the owner of the Note requesting such transfer or exchange as a
10 condition precedent to the exercise of such privilege.

11 All Notes surrendered upon any transfer provided for in this Resolution shall be
12 promptly cancelled by the Note Registrar and shall not be reissued. Upon request of the County
13 a certificate evidencing such cancellation shall be furnished by the Note Registrar to the
14 County.

15 **Section 12. Registered Owner.** The person in whose name any Note shall be
16 registered shall be deemed and regarded as the absolute owner thereof for all purposes, and
17 payment of or on account of either principal or interest shall be made only to or upon the order
18 of the registered owner thereof or his duly authorized attorney, but such registration may be
19 changed as hereinabove provided. All such payments shall be valid and effectual to satisfy and
20 discharge the liability upon such Note to the extent of the sum or sums so paid.

21 **Section 13. Mutilated or Destroyed Notes.** In case any Note shall become
22 mutilated or be destroyed or lost, the County may cause to be executed, authenticated and
23 delivered a new Note of like date and tenor in exchange or substitution for any such Note upon,
24 in the case of a mutilated Note, surrender of such Note, or in the case of destroyed or lost Note,
25 the owners filing with the County, the Paying Agent and the Note Registrar evidence
26 satisfactory to them that such Note was destroyed or lost and providing indemnity satisfactory
27 to them. If any such Note shall have matured, instead of issuing a new Note, the County may
28 pay the same.

29 **Section 14. Redemption.** The Notes are not subject to redemption prior to maturity
30 as is more fully provided in the foregoing form thereof.

31 **Section 15. Tax Covenants and Representations.** The Notes are being issued by
32 the County for the governmental purpose of providing funds for the current expenses of the
33 County for the year 2025, in compliance with the conditions necessary for the interest income
34 on the Notes to be excludable from gross income for federal income taxation pursuant to the
35 provisions of Section 103(a) of the Internal Revenue Code of 1986, as amended (the “Code”).
36 It is the intention of the County that the interest on the Notes be and remain excludable from
37 gross income for federal income tax purposes, and, to that end, the County hereby covenants
38 with the holders of the Notes, as follows:

39 (a) It will not take any action, or fail to take any action, if any such action
40 or failure to take action would adversely affect the tax-exempt status of the interest on the Notes
41 under Section 103 of the Code.

1 (b) It will not directly or indirectly use or permit the use of any proceeds of
2 the Notes or any other funds of the County or take or omit to take any action in a way that
3 would cause the Notes to be (i) “private activity bonds” within the meaning of Section 141 of
4 the Code, (ii) obligations which are “federally guaranteed” within the meaning of Section 149
5 of the Code or (iii) “hedge bonds” within the meaning of Section 149 of the Code. Without
6 limiting the foregoing, the County will not allow 10% or more of the proceeds of the Notes to
7 be used in the trade or business of any private business and will not loan 5% or more of the
8 proceeds of the Notes to any nongovernmental units.

9 (c) It will not directly or indirectly use or permit the use of any proceeds of
10 the Notes or any other funds of the County or take or omit to take any action that would cause
11 the Notes to be “arbitrage bonds” within the meaning of Section 148 of the Code. The County
12 anticipates that no rebate of any investment earnings to the Department of Treasury of the
13 United States will be required by Section 148(f) of the Code at any time while the Notes are
14 outstanding. However, in the event that such rebate is required, the County hereby covenants
15 to comply with all requirements of Section 148 of the Code to the extent applicable to the
16 Notes.

17 (d) The County will cause to be completed and filed with the Internal
18 Revenue Service the information required by Section 149(e) of the Code, (Treasury Form 8038-
19 G) prior to or simultaneously with the issuance of the Notes.

20 **Section 16. Approval of Tax Certificate.** The Chairman of the Board of
21 Commissioners and the Chief Financial Officer of the County, or either of them, are hereby
22 authorized to execute on behalf of the County a Non-Arbitrage Certificate and Tax Covenants
23 to assure the owners of the Notes and McGuireWoods LLP, Note Counsel, that the interest on
24 the Notes will remain excludable from gross income for federal income tax purposes and that
25 the proceeds of the Notes will not be used in a manner which would result in the Notes being
26 “arbitrage bonds” within the meaning of Section 148 of the Code.

27 **Section 17. General Authority.** From and after the date of adoption of this
28 Resolution, the Board of Commissioners and the officers and agents of the County are hereby
29 authorized to do all such acts and things, and to execute and deliver all such documents,
30 certificates or agreements as may be necessary or desirable in connection with the offering of
31 the Notes. All actions of the Board of Commissioners, officers or agents of the County taken
32 in connection therewith prior to the date hereof are hereby ratified and confirmed.

33 **Section 18. No Continuing Disclosure Undertaking.** The Notes will be initially
34 offered in authorized denominations of \$100,000 or more, with a maturity of nine months or
35 less and as such, pursuant to paragraph (b)(5)(d)(1)(ii) of Rule 15c2-12, the Notes will be
36 exempt from the requirements of Rule 15c2-12. Notwithstanding the foregoing, the County
37 may agree to provide certain financial information and operating data to the Purchaser, subject
38 to consultation with the County Attorney and Chief Financial Officer of the County.

39 **Section 19. Sale of Notes.** The sale of the Notes to the Purchaser for the price (equal
40 to par, plus a premium (as applicable) and less commitment fees, Purchaser's counsel and/or
41 any Purchaser's discount, as applicable), and at the rate, arbitrage yield, net interest cost (NIC)
42 and total interest, all as set forth in the winning bid as determined pursuant to Section 6 of this

Resolution is hereby authorized, ratified and approved; provided, however that the NIC shall not exceed 5%.

Section 20. Tax Levy for Payment of Note. For the purpose of providing funds for the payment of the principal of and interest on the Notes, there shall be and hereby is assessed and levied and there shall hereafter be collected a direct tax upon all real and personal property now or hereafter subject to taxation within the corporate limits of Fulton County, Georgia, the net proceeds of which will be in a sufficient amount to produce such sums as are required to pay the principal and interest thereon. Said sums are irrevocably pledged and appropriated to the payment of the principal and interest, when due on the Notes, and the provisions to meet the requirements of this Resolution shall hereafter be made in due time and manner so that the Notes, including both principal and interest, shall be fully paid at maturity.

Section 21. Post Issuance Tax Compliance. The County has in place Post-Issuance Tax Compliance Policies and Procedures as required by the Internal Revenue Service in connection with filing Form 8038-G for the Notes and other tax-exempt obligations of the County.

Section 22. Custody and Application of Proceeds of Notes. Upon the issuance and delivery of the Notes, the Chief Financial Officer is hereby authorized and directed to pay the costs of preparing the Notes, including the fees and expenses of the Financial Advisor, Note Counsel, Disclosure Counsel (as applicable) and expenses associated with the limited competitive bidding process utilized by the County relating to the sale of the Notes, and obtaining a CUSIP Number, if required, and all other customary costs of issuance of the Notes in an amount approved by the Chief Financial Officer. The balance of the proceeds of the sale of the Notes (or draws upon any line of credit or similar facility entered into in connection with the sale of the Notes) shall be deposited in the operating account of the County to be applied toward the payment of its current expenses in calendar year 2025.

Section 23. Counterparts; Electronic Execution. The Chairman of the Board of Commissioners, the Chief Financial Officer or such other duly authorized representative of the County are hereby authorized to execute the Preliminary Official Statement, the Official Statement, the Deputy Paying Agent and Note Registrar Agreement and any and all other documents and certificates related thereto, by means of electronic or digital signature, including an emailed PDF of a digitized image of the actual signature page or by other electronic means provided that such other means utilize electronic signature software that has the capability to audit or authenticate the signature, and such electronic pages shall constitute an original signature ad shall be of the same legal effect, validity or enforceability as a manually executed, physically delivered or paper-based signature, as the case may be, and it is further found and determined that such electronic signatures are expressly permitted under the Uniform Electronic Transactions Act (O.C.G.A. § 10-12-1, et seq.)

Section 23. Effective Date. This Resolution will be in full force and effect immediately upon its adoption and any and all resolutions or parts of resolutions in conflict with this Resolution will be and the same are, to the extent of such conflict, hereby repealed.

[REMAINDER OF PAGE INTENTIONALLY BLANK]

1
2 Adopted and approved this 5th day of March, 2025.
3
4

5 Approved:

6
7 [SEAL]

8 By: _____
9 Robert L. Pitts, Chairman
10 Board of Commissioners of
11 Fulton County, Georgia
12

13 ATTEST:
14

15 _____
16 Tonya R. Grier, Clerk
17 Board of Commissioners of Fulton County, Georgia
18

19
20 Approved as to form:
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22 _____
23 Y. Soo Jo, Esq.
24 County Attorney
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1 **CLERK'S CERTIFICATE**

2 I, Tonya R. Grier, Clerk of the Board of Commissioners of Fulton County, Georgia, DO
3 HEREBY CERTIFY that the foregoing pages of typewritten material constitute a true and
4 correct copy of a resolution duly adopted by the Board of Commissioners of Fulton County at
5 a duly called and constituted meeting of said Board held on March 5, 2025, which meeting was
6 open to the public and at which a quorum was present and acting throughout, that all notices
7 of such meeting required by any sunshine law to be given were duly given, and that all the
8 original of said resolution appears of record in the Minute Book of the Board of Commissioners
9 which is in my custody and control.

10 I further certify that said resolution has not been amended, modified or repealed.

11 WITNESS my official signature and the corporate seal of Fulton County, Georgia as of
12 the 5th day of March, 2025.

13
14
15 [SEAL]

16 _____
17 Tonya R. Grier, Clerk
18 Board of Commissioners of Fulton County, Georgia
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EXHIBIT A

FORM OF NOTE

[ATTACHED]

UNITED STATES OF AMERICA
STATE OF GEORGIA
FULTON COUNTY, GEORGIA
GENERAL FUND TAX ANTICIPATION NOTES,
SERIES 2025

Number R-1

Maturity Date

[_____]

Date of Original Issue

[____, __, 2025]

CUSIP

[_____]

Principal Amount: [TWO HUNDRED TWENTY-FIVE MILLION DOLLARS AND NO/100 CENTS (\$275,000,000)]

Registered Owner: CEDE & CO.

KNOW ALL MEN BY THESE PRESENTS: FULTON COUNTY, GEORGIA, a political subdivision of the State of Georgia (the “**County**”), for value received, hereby promises to pay the principal amount set forth above, together with interest thereon at the rate of [____]% per annum (calculated on the basis of a 360-day year comprised of twelve 30-day months), in immediately available funds, on the maturity date set forth above, to the registered owner hereof.

Both principal hereof and interest hereon are payable by wire transfer by the U.S. Bank Trust Company, National Association, as paying agent, note registrar and authenticating agent (the “**Paying Agent**”), to the person who is the registered owner hereof as of [____, __, 2025], upon surrender hereof. Both principal hereof and interest are payable in lawful money of the United States of America. Notwithstanding the foregoing, so long as this Note is registered in the name of the Securities Depository or the Securities Depository Nominee, payment of principal, redemption premium (if any) and interest on this Note shall be made by wire transfer to the Securities Depository as described more fully below. The County also promises to pay any and all amounts owed by the County as arbitrage rebate pursuant to Section 148 of the Internal Revenue Code of 1986, as amended and any amounts expended by any owner of this Note in connection with the collection of amounts owed hereunder, including, but not limited to attorney fees.

This Note is one of a series of tax anticipation notes in the aggregate principal amount of \$275,000,000 authorized by resolutions (the “**Resolution**”) duly adopted by the Board of Commissioners of Fulton County, Georgia (the “**Board of Commissioners**”) on March 5, 2025, in accordance with Article IX, Section V, Paragraph V of the Constitution of the State of Georgia and Section 36-80-2 of the Official Code of Georgia Annotated, for the purpose of making a temporary loan to pay current expenses of the County in calendar year 2025.

This Note is issued in anticipation of the receipt of taxes levied or to be levied for the General Fund in calendar year 2025. The principal amount of this Note together with

all other temporary loans, notes, warrants or similar obligations does not exceed 75% of the total revenues from taxes collected for the General Fund by the County in calendar year 2024 and does not exceed, together with other contracts, notes, warrants and obligations of the County for calendar year 2025 payable from the General Fund, the total anticipated revenues from taxes of the County for the General Fund for calendar year 2025. No temporary loan or other contract, note, warrant or other obligation for current expenses incurred in calendar year 2024 or any prior calendar year remains unpaid.

The Notes are being issued by means of a Book-Entry System, with actual Notes immobilized at The Depository Trust Company, New York, New York, or its successor as Securities Depository, evidencing ownership of the Notes in principal amounts of \$5,000 and any integral multiple thereof, and with transfers of Beneficial Ownership effected on the records of the Securities Depository and its participants pursuant to the rules and procedures established by the Securities Depository. Actual Notes are not available for distribution to the Beneficial Owners, except under the limited circumstances set forth in the Resolution. The principal and interest on the Notes are payable by the Paying Agent to Cede & Co., as nominee of the Securities Depository. Transfer of principal and interest payments to participants of the Securities Depository is the responsibility of the Securities Depository; transfers of principal and interest to Beneficial Owners by participants of the Securities Depository will be the responsibility of such participants and other nominees of Beneficial Owners. The County and the Paying Agent are not responsible or liable for maintaining, supervising or reviewing the records maintained by, the Securities Depository, its participants or persons acting through such participants.

This Note is not subject to prepayment prior to maturity.

If the Notes are no longer registered to a Securities Depository, this Note may be registered as transferred by the registered owner hereof in person or by the owner's attorney duly authorized in writing, but only in the manner, subject to the limitations specified in the Resolution, and upon surrender and cancellation of this Note. Upon such registration of transfer, a new note or notes of the same aggregate principal amount and tenor and of any authorized denomination or denominations will be issued to the transferee in exchange therefor.

If the Notes are no longer registered to a Securities Depository, this Note may be exchanged for an equal aggregate principal amount of Notes of the same aggregate principal amount and tenor of any authorized denomination or denominations, in the manner and subject to the conditions provided in the Resolution. No service charge shall be made for any registration of transfer or exchange hereinbefore referred to, but the Paying Agent may require payment of a sum sufficient to cover any tax or other governmental charge as a condition precedent to the exercise of such privilege.

The person in whose name this Note is registered shall be deemed and regarded as the absolute owner hereof for all purposes, and payment of or on account of either principal or interest made to such registered owner shall be valid and effectual to satisfy and discharge the liability upon this Note to the extent of the sum or sums so paid.

It is hereby certified, recited and declared that all acts, conditions and things required by the Constitution and laws of the State of Georgia to be done precedent to or as a condition to the issuance of this Note have been properly done, have happened and have been performed in the manner required by the Constitution and laws of the State of Georgia; that the tax levies in anticipation of which this Note is issued are or will be valid and legal levies; that the City will use a sufficient amount of the proceeds of such tax levies and other available funds for the payment of this Note and the interest hereon; and that this Note, together with all other indebtedness of the County, is within every debt or other limit provided by the Constitution and laws of the State of Georgia.

All capitalized terms used but not defined herein shall have the meanings assigned to them in the Resolution.

IN WITNESS WHEREOF, the County acting by and through the Board of Commissioners, has caused this Note to be executed in its corporate name by the manual signature of the Chairman of the Board of Commissioners, and attested by the manual signature of the Clerk of the Board of Commissioners and the corporate seal of the County to be impressed or imprinted hereon, all as of the date of original issue as shown above.

FULTON COUNTY, GEORGIA

By: _____
Chairman, Board of Commissioners
Fulton County, Georgia

(SEAL)

ATTEST

Clerk, Board of Commissioners
Fulton County, Georgia

CERTIFICATE OF AUTHENTICATION

This is one of the Notes described in the within mentioned authorizing resolution of Fulton County, Georgia adopted on [____ __, **2025**], and is hereby authenticated.

**U.S. BANK TRUST COMPANY, NATIONAL
ASSOCIATION, as Note Registrar**

By: _____
Authorized Signatory

Date of Authentication: [____ __, **2025**]

* * * * *

ASSIGNMENT FOR TRANSFER

FOR VALUE RECEIVED, the undersigned hereby sells, assigns and transfers unto:

PLEASE INSERT SOCIAL SECURITY
OR OTHER IDENTIFYING NUMBER
OF ASSIGNEE

the within Note of Fulton County, Georgia and does hereby constitute and appoint _____ attorney to transfer the said Note on the books of the Note Registrar, with full power of substitution in the premise.

Date:

In the presence of: _____
Noteholder

NOTICE: The signature to this Assignment must correspond with the name as it appears upon the face of the within Note in every particular, without alteration or enlargement or any change whatever.

* * * * *



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0164

Meeting Date: 3/5/2025

Department

Real Estate and Asset Management

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Request approval to utilize cooperative purchasing - Department of Real Estate and Asset Management, Sourcewell Contract RFP #101221-VTR, Sewer Vacuum, Hydro-Excavation, and Municipal Pumping Equipment with Related Accessories and Supplies in the amount of \$313,255.00 with Vactor Manufacturing through Sourcewell's Authorized Representative Environmental Products Group, Inc. (Atlanta, GA), for the purchase and delivery of one (1) Vactor Ramjet Sewer Cleaner, Single Engine mounted on a Heavy Duty Truck Chassis, 1500 gallon Water Tank for the Public Works Department. Effective upon BOC approval. This is a one-time procurement.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

In accordance with Purchasing Code Section 102-462, requests for approval to utilize cooperative purchasing or GSA purchase contracts of more than \$100,000 shall be forwarded to the Board of Commissioners for approval.

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Open and Responsible Government

Commission Districts Affected

- All Districts ☒
- District 1 ☐
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

Yes

Summary & Background: On August 21, 2024, the BOC approved Item #24-0539, for the purchase and delivery of one (1) Hydro Sewer Jetting Truck, Aquatech SJR-1500 (steel water tank), with a 1,500-gallon capacity however, the awarded company no longer exist, and the circumstances of that Public Works Department was not able to obtain the Hydro Sewer Jetting Truck. A separate agenda item will be presented to the BOC to approve the rescission of this award.

In response, Public Works searched and located a Cooperative Purchasing, Sourcewell Contract that provides an equivalent sewer cleaner 1,500-gallon capacity single mounted truck that is readily available at an authorized representative dealer at a comparable cost in the amount not to exceed \$313,255.00.

The Department of Real Estate and Asset Management on behalf of Public Works, is requesting approval for the purchase and delivery of one (1) Vactor Ramjet Sewer Cleaner, Single Engine mounted on a Heavy-Duty Truck Chassis, 1500-gallon Water Tank.

This equipment will replace older model(s) that have exceeded their useful operational life in accordance with County Policy 400-6. The Fleet Management Division has recommended replacement of these vehicles and equipment based on the age, mileage, and mechanical condition of the vehicles.

Scope of Work: The purchase and delivery of one (1) Vactor Ramjet Sewer Cleaner, Single Engine mounted on a Heavy-Duty Truck Chassis, 1500-gallon Water Tank. This is a one-time procurement for the Public Works Department for 2025.

Standard Features

- Rear Reel
- 80 GPM/2500 PSI Water Pump
- 1500 Gallons of Water
- Rodder Pump Drain Valves
- 2-1/2" x 25' Fill Hose w/ Connections Street Side and Curb Side
- 304 Stainless Steel Tank w/Baffle w/10 Yr Warranty
- Intuitouch Electronic Package
- 1" X 700' Capacity Rotating Hose Reel
- 1" x 10' Leader Hose w/ 1" Nozzle Pipe
- Hydrant Wrench
- Handgun Assembly
- Color Coded Sealed Electrical System
- Aluminum Rear Fenders w/ Mud Flaps and Anti-Sail Brackets
- Hydraulic Oil Sight Gauge
- Electric Back-Up Alarm
- Multi-Flow Water System
- Hydraulic Manifold Hose Reel Controls
- Low Water Alarm with Water Pump Flow Indicator
- Rodder System Accumulator - Jack Hammer on/off Control w/ manual valve
- 1" Water Relief Valve

Community Impact: This specialized equipment is used to accomplish the assigned tasks in during daily operation and maintenance for the Water Sewer Division in the Public Works Department.

Department Recommendation: The Department of Real Estate and Asset Management recommends approval of behalf of the Public Works Department.

The authorized dealer (Environmental Products Group, Inc.) will work in collaboration with the Department Real Estate Asset Management's Fleet Management Division for coordination and delivery of specialized heavy equipment for the Public Works Department.

Project Implications: The replacement of this identified equipment has exceeded their usefulness based on policy #400-6 and the fact that annual cost to repair/maintain these vehicles exceeds the Kelly Bluebook value.

Community Issues/Concerns: It's imperative that the County must have to reliable vehicles and equipment available to response to emergencies or any situation day or night to serve the citizens of Fulton County.

Department Issues/Concerns: If replacement of this specialize equipment is not approved, this will strain the County ability to meet and accomplish the daily operation of the Department.

Contract Modification: This is a new procurement.

Contract & Compliance Information *(Provide Contractor and Subcontractor details.)*

Not Applicable

Exhibits Attached *(Provide copies of originals, number exhibits consecutively, and label all exhibits in the upper right corner.)*

Exhibit 1: Sourcewell Contract RFP #101221-VTR

Exhibit 2: Cost Proposal

Exhibit 3: Cooperative Purchasing Justification and Approval Form

Contact Information *(Type Name, Title, Agency and Phone)*

Joseph N. Davis, Director, Department of Real Estate and Asset Management, (404) 612-3772

Contract Attached

Yes

Previous Contracts

No

Total Contract Value

Original Approved Amount:	\$0.00
Previous Adjustments:	\$0.00
This Request:	\$313,255.00
TOTAL:	\$313,255.00

Grant Information Summary

Amount Requested:

Match Required:

Start Date:

End Date:

Match Account \$:

- ☐ Cash
☐ In-Kind
☐ Approval to Award
☐ Apply & Accept

Fiscal Impact / Funding Source**Funding Line 1:**

201-540-5469-1410: Water & Sewer Revenue, Public Works, Equipment- \$313,255.00

Key Contract Terms	
Start Date: Upon BOC Approval	End Date: 12/31/2025
Cost Adjustment: Click here to enter text.	Renewal/Extension Terms: O time procurement

Overall Contractor Performance Rating: N/A**Would you select/recommend this vendor again?**

Yes

Report Period Start:

N/A

Report Period End:

N/A

**Solicitation Number: RFP #101221****CONTRACT**

This Contract is between Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 (Sourcewell) and Vactor Manufacturing, a division of Federal Signal, 1621 South Illinois St., Streator, IL 61364 (Supplier).

Sourcewell is a State of Minnesota local government unit and service cooperative created under the laws of the State of Minnesota (Minnesota Statutes Section 123A.21) that offers cooperative procurement solutions to government entities. Participation is open to eligible federal, state/province, and municipal governmental entities, higher education, K-12 education, nonprofit, tribal government, and other public entities located in the United States and Canada. Sourcewell issued a public solicitation for Sewer Vacuum, Hydro-Excavation, and Municipal Pumping Equipment with Related Accessories and Supplies from which Supplier was awarded a contract.

Supplier desires to contract with Sourcewell to provide equipment, products, or services to Sourcewell and the entities that access Sourcewell's cooperative purchasing contracts (Participating Entities).

1. TERM OF CONTRACT

- A. **EFFECTIVE DATE.** This Contract is effective upon the date of the final signature below.
- B. **EXPIRATION DATE AND EXTENSION.** This Contract expires November 29, 2025, unless it is cancelled sooner pursuant to Article 22. This Contract may be extended one additional year upon the request of Sourcewell and written agreement by Supplier.
- C. **SURVIVAL OF TERMS.** Notwithstanding any expiration or termination of this Contract, all payment obligations incurred prior to expiration or termination will survive, as will the following: Articles 11 through 14 survive the expiration or cancellation of this Contract. All rights will cease upon expiration or termination of this Contract.

2. EQUIPMENT, PRODUCTS, OR SERVICES

- A. **EQUIPMENT, PRODUCTS, OR SERVICES.** Supplier will provide the Equipment, Products, or Services as stated in its Proposal submitted under the Solicitation Number listed above.

Supplier's Equipment, Products, or Services Proposal (Proposal) is attached and incorporated into this Contract.

All Equipment and Products provided under this Contract must be new and the current model. Supplier may offer close-out or refurbished Equipment or Products if they are clearly indicated in Supplier's product and pricing list. Unless agreed to by the Participating Entities in advance, Equipment or Products must be delivered as operational to the Participating Entity's site.

This Contract offers an indefinite quantity of sales, and while substantial volume is anticipated, sales and sales volume are not guaranteed.

B. **WARRANTY.** Supplier warrants that all Equipment, Products, and Services furnished are free from liens and encumbrances, and are free from defects in design, materials, and workmanship. In addition, Supplier warrants the Equipment, Products, and Services are suitable for and will perform in accordance with the ordinary use for which they are intended. Supplier's dealers and distributors must agree to assist the Participating Entity in reaching a resolution in any dispute over warranty terms with the manufacturer. Any manufacturer's warranty that extends beyond the expiration of the Supplier's warranty will be passed on to the Participating Entity.

C. **DEALERS, DISTRIBUTORS, AND/OR RESELLERS.** Upon Contract execution and throughout the Contract term, Supplier must provide to Sourcewell a current means to validate or authenticate Supplier's authorized dealers, distributors, or resellers relative to the Equipment, Products, and Services offered under this Contract, which will be incorporated into this Contract by reference. It is the Supplier's responsibility to ensure Sourcewell receives the most current information.

3. PRICING

All Equipment, Products, or Services under this Contract will be priced at or below the price stated in Supplier's Proposal.

When providing pricing quotes to Participating Entities, all pricing quoted must reflect a Participating Entity's total cost of acquisition. This means that the quoted cost is for delivered Equipment, Products, and Services that are operational for their intended purpose, and includes all costs to the Participating Entity's requested delivery location.

Regardless of the payment method chosen by the Participating Entity, the total cost associated with any purchase option of the Equipment, Products, or Services must always be disclosed in the pricing quote to the applicable Participating Entity at the time of purchase.

A. **SHIPPING AND SHIPPING COSTS.** All delivered Equipment and Products must be properly packaged. Damaged Equipment and Products may be rejected. If the damage is not readily apparent at the time of delivery, Supplier must permit the Equipment and Products to be

returned within a reasonable time at no cost to Sourcewell or its Participating Entities. Participating Entities reserve the right to inspect the Equipment and Products at a reasonable time after delivery where circumstances or conditions prevent effective inspection of the Equipment and Products at the time of delivery. In the event of the delivery of nonconforming Equipment and Products, the Participating Entity will notify the Supplier as soon as possible and the Supplier will replace nonconforming Equipment and Products with conforming Equipment and Products that are acceptable to the Participating Entity.

Supplier must arrange for and pay for the return shipment on Equipment and Products that arrive in a defective or inoperable condition.

Sourcewell may declare the Supplier in breach of this Contract if the Supplier intentionally delivers substandard or inferior Equipment or Products.

B. SALES TAX. Each Participating Entity is responsible for supplying the Supplier with valid tax-exemption certification(s). When ordering, a Participating Entity must indicate if it is a tax-exempt entity.

C. HOT LIST PRICING. At any time during this Contract, Supplier may offer a specific selection of Equipment, Products, or Services at discounts greater than those listed in the Contract. When Supplier determines it will offer Hot List Pricing, it must be submitted electronically to Sourcewell in a line-item format. Equipment, Products, or Services may be added or removed from the Hot List at any time through a Sourcewell Price and Product Change Form as defined in Article 4 below.

Hot List program and pricing may also be used to discount and liquidate close-out and discontinued Equipment and Products as long as those close-out and discontinued items are clearly identified as such. Current ordering process and administrative fees apply. Hot List Pricing must be published and made available to all Participating Entities.

4. PRODUCT AND PRICING CHANGE REQUESTS

Supplier may request Equipment, Product, or Service changes, additions, or deletions at any time. All requests must be made in writing by submitting a signed Sourcewell Price and Product Change Request Form to the assigned Sourcewell Supplier Development Administrator. This approved form is available from the assigned Sourcewell Supplier Development Administrator. At a minimum, the request must:

- Identify the applicable Sourcewell contract number;
- Clearly specify the requested change;
- Provide sufficient detail to justify the requested change;

- Individually list all Equipment, Products, or Services affected by the requested change, along with the requested change (e.g., addition, deletion, price change); and
- Include a complete restatement of pricing documentation in Microsoft Excel with the effective date of the modified pricing, or product addition or deletion. The new pricing restatement must include all Equipment, Products, and Services offered, even for those items where pricing remains unchanged.

A fully executed Sourcewell Price and Product Change Request Form will become an amendment to this Contract and will be incorporated by reference.

5. PARTICIPATION, CONTRACT ACCESS, AND PARTICIPATING ENTITY REQUIREMENTS

A. PARTICIPATION. Sourcewell's cooperative contracts are available and open to public and nonprofit entities across the United States and Canada; such as federal, state/province, municipal, K-12 and higher education, tribal government, and other public entities.

The benefits of this Contract should be available to all Participating Entities that can legally access the Equipment, Products, or Services under this Contract. A Participating Entity's authority to access this Contract is determined through its cooperative purchasing, interlocal, or joint powers laws. Any entity accessing benefits of this Contract will be considered a Service Member of Sourcewell during such time of access. Supplier understands that a Participating Entity's use of this Contract is at the Participating Entity's sole convenience and Participating Entities reserve the right to obtain like Equipment, Products, or Services from any other source.

Supplier is responsible for familiarizing its sales and service forces with Sourcewell contract use eligibility requirements and documentation and will encourage potential participating entities to join Sourcewell. Sourcewell reserves the right to add and remove Participating Entities to its roster during the term of this Contract.

B. PUBLIC FACILITIES. Supplier's employees may be required to perform work at government-owned facilities, including schools. Supplier's employees and agents must conduct themselves in a professional manner while on the premises, and in accordance with Participating Entity policies and procedures, and all applicable laws.

6. PARTICIPATING ENTITY USE AND PURCHASING

A. ORDERS AND PAYMENT. To access the contracted Equipment, Products, or Services under this Contract, a Participating Entity must clearly indicate to Supplier that it intends to access this Contract; however, order flow and procedure will be developed jointly between Sourcewell and Supplier. Typically, a Participating Entity will issue an order directly to Supplier or its authorized subsidiary, distributor, dealer, or reseller. If a Participating Entity issues a purchase order, it may use its own forms, but the purchase order should clearly note the applicable Sourcewell

contract number. All Participating Entity orders under this Contract must be issued prior to expiration or cancellation of this Contract; however, Supplier performance, Participating Entity payment obligations, and any applicable warranty periods or other Supplier or Participating Entity obligations may extend beyond the term of this Contract.

Supplier's acceptable forms of payment are included in its attached Proposal. Participating Entities will be solely responsible for payment and Sourcewell will have no liability for any unpaid invoice of any Participating Entity.

B. ADDITIONAL TERMS AND CONDITIONS/PARTICIPATING ADDENDUM. Additional terms and conditions to a purchase order, or other required transaction documentation, may be negotiated between a Participating Entity and Supplier, such as job or industry-specific requirements, legal requirements (e.g., affirmative action or immigration status requirements), or specific local policy requirements. Some Participating Entities may require the use of a Participating Addendum; the terms of which will be negotiated directly between the Participating Entity and the Supplier. Any negotiated additional terms and conditions must never be less favorable to the Participating Entity than what is contained in this Contract.

C. SPECIALIZED SERVICE REQUIREMENTS. In the event that the Participating Entity requires service or specialized performance requirements not addressed in this Contract (such as e-commerce specifications, specialized delivery requirements, or other specifications and requirements), the Participating Entity and the Supplier may enter into a separate, standalone agreement, apart from this Contract. Sourcewell, including its agents and employees, will not be made a party to a claim for breach of such agreement.

D. TERMINATION OF ORDERS. Participating Entities may terminate an order, in whole or in part, immediately upon notice to Supplier in the event of any of the following events:

1. The Participating Entity fails to receive funding or appropriation from its governing body at levels sufficient to pay for the equipment, products, or services to be purchased; or
2. Federal, state, or provincial laws or regulations prohibit the purchase or change the Participating Entity's requirements.

E. GOVERNING LAW AND VENUE. The governing law and venue for any action related to a Participating Entity's order will be determined by the Participating Entity making the purchase.

7. CUSTOMER SERVICE

A. PRIMARY ACCOUNT REPRESENTATIVE. Supplier will assign an Account Representative to Sourcewell for this Contract and must provide prompt notice to Sourcewell if that person is changed. The Account Representative will be responsible for:

- Maintenance and management of this Contract;
- Timely response to all Sourcewell and Participating Entity inquiries; and
- Business reviews to Sourcewell and Participating Entities, if applicable.

B. BUSINESS REVIEWS. Supplier must perform a minimum of one business review with Sourcewell per contract year. The business review will cover sales to Participating Entities, pricing and contract terms, administrative fees, sales data reports, supply issues, customer issues, and any other necessary information.

8. REPORT ON CONTRACT SALES ACTIVITY AND ADMINISTRATIVE FEE PAYMENT

A. CONTRACT SALES ACTIVITY REPORT. Each calendar quarter, Supplier must provide a contract sales activity report (Report) to the Sourcewell Supplier Development Administrator assigned to this Contract. Reports are due no later than 45 days after the end of each calendar quarter. A Report must be provided regardless of the number or amount of sales during that quarter (i.e., if there are no sales, Supplier must submit a report indicating no sales were made).

The Report must contain the following fields:

- Participating Entity Name (e.g., City of Staples Highway Department);
- Participating Entity Physical Street Address;
- Participating Entity City;
- Participating Entity State/Province;
- Participating Entity Zip/Postal Code;
- Participating Entity Contact Name;
- Participating Entity Contact Email Address;
- Participating Entity Contact Telephone Number;
- Sourcewell Assigned Entity/Participating Entity Number;
- Item Purchased Description;
- Item Purchased Price;
- Sourcewell Administrative Fee Applied; and
- Date Purchase was invoiced/sale was recognized as revenue by Supplier.

B. ADMINISTRATIVE FEE. In consideration for the support and services provided by Sourcewell, the Supplier will pay an administrative fee to Sourcewell on all Equipment, Products, and Services provided to Participating Entities. The Administrative Fee must be included in, and not added to, the pricing. Supplier may not charge Participating Entities more than the contracted price to offset the Administrative Fee.

The Supplier will submit payment to Sourcewell for the percentage of administrative fee stated in the Proposal multiplied by the total sales of all Equipment, Products, and Services purchased

by Participating Entities under this Contract during each calendar quarter. Payments should note the Supplier's name and Sourcewell-assigned contract number in the memo; and must be mailed to the address above "Attn: Accounts Receivable" or remitted electronically to Sourcewell's banking institution per Sourcewell's Finance department instructions. Payments must be received no later than 45 calendar days after the end of each calendar quarter.

Supplier agrees to cooperate with Sourcewell in auditing transactions under this Contract to ensure that the administrative fee is paid on all items purchased under this Contract.

In the event the Supplier is delinquent in any undisputed administrative fees, Sourcewell reserves the right to cancel this Contract and reject any proposal submitted by the Supplier in any subsequent solicitation. In the event this Contract is cancelled by either party prior to the Contract's expiration date, the administrative fee payment will be due no more than 30 days from the cancellation date.

9. AUTHORIZED REPRESENTATIVE

Sourcewell's Authorized Representative is its Chief Procurement Officer.

Supplier's Authorized Representative is the person named in the Supplier's Proposal. If Supplier's Authorized Representative changes at any time during this Contract, Supplier must promptly notify Sourcewell in writing.

10. AUDIT, ASSIGNMENT, AMENDMENTS, WAIVER, AND CONTRACT COMPLETE

A. **AUDIT.** Pursuant to Minnesota Statutes Section 16C.05, subdivision 5, the books, records, documents, and accounting procedures and practices relevant to this Agreement are subject to examination by Sourcewell or the Minnesota State Auditor for a minimum of six years from the end of this Contract. This clause extends to Participating Entities as it relates to business conducted by that Participating Entity under this Contract.

B. **ASSIGNMENT.** Neither party may assign or otherwise transfer its rights or obligations under this Contract without the prior written consent of the other party and a fully executed assignment agreement. Such consent will not be unreasonably withheld. Any prohibited assignment will be invalid.

C. **AMENDMENTS.** Any amendment to this Contract must be in writing and will not be effective until it has been duly executed by the parties.

D. **WAIVER.** Failure by either party to take action or assert any right under this Contract will not be deemed a waiver of such right in the event of the continuation or repetition of the circumstances giving rise to such right. Any such waiver must be in writing and signed by the parties.

E. **CONTRACT COMPLETE.** This Contract represents the complete agreement between the parties. No other understanding regarding this Contract, whether written or oral, may be used to bind either party. For any conflict between the attached Proposal and the terms set out in Articles 1-22 of this Contract, the terms of Articles 1-22 will govern.

F. **RELATIONSHIP OF THE PARTIES.** The relationship of the parties is one of independent contractors, each free to exercise judgment and discretion with regard to the conduct of their respective businesses. This Contract does not create a partnership, joint venture, or any other relationship such as master-servant, or principal-agent.

11. INDEMNITY AND HOLD HARMLESS

Supplier must indemnify, defend, save, and hold Sourcewell and its Participating Entities, including their agents and employees, harmless from any claims or causes of action, including attorneys' fees incurred by Sourcewell or its Participating Entities, arising out of any act or omission in the performance of this Contract by the Supplier or its agents or employees; this indemnification includes injury or death to person(s) or property alleged to have been caused by some defect in the Equipment, Products, or Services under this Contract to the extent the Equipment, Product, or Service has been used according to its specifications. Sourcewell's responsibility will be governed by the State of Minnesota's Tort Liability Act (Minnesota Statutes Chapter 466) and other applicable law.

12. GOVERNMENT DATA PRACTICES

Supplier and Sourcewell must comply with the Minnesota Government Data Practices Act, Minnesota Statutes Chapter 13, as it applies to all data provided by or provided to Sourcewell under this Contract and as it applies to all data created, collected, received, stored, used, maintained, or disseminated by the Supplier under this Contract.

13. INTELLECTUAL PROPERTY, PUBLICITY, MARKETING, AND ENDORSEMENT

A. INTELLECTUAL PROPERTY

1. *Grant of License.* During the term of this Contract:
 - a. Sourcewell grants to Supplier a royalty-free, worldwide, non-exclusive right and license to use the trademark(s) provided to Supplier by Sourcewell in advertising and promotional materials for the purpose of marketing Sourcewell's relationship with Supplier.
 - b. Supplier grants to Sourcewell a royalty-free, worldwide, non-exclusive right and license to use Supplier's trademarks in advertising and promotional materials for the purpose of marketing Supplier's relationship with Sourcewell.
2. *Limited Right of Sublicense.* The right and license granted herein includes a limited right of each party to grant sublicenses to their respective subsidiaries, distributors, dealers,

resellers, marketing representatives, and agents (collectively “Permitted Sublicensees”) in advertising and promotional materials for the purpose of marketing the Parties’ relationship to Participating Entities. Any sublicense granted will be subject to the terms and conditions of this Article. Each party will be responsible for any breach of this Article by any of their respective sublicensees.

3. *Use; Quality Control.*

- a. Neither party may alter the other party’s trademarks from the form provided and must comply with removal requests as to specific uses of its trademarks or logos.
- b. Each party agrees to use, and to cause its Permitted Sublicensees to use, the other party’s trademarks only in good faith and in a dignified manner consistent with such party’s use of the trademarks. Upon written notice to the breaching party, the breaching party has 30 days of the date of the written notice to cure the breach or the license will be terminated.

4. As applicable, Supplier agrees to indemnify and hold harmless Sourcewell and its Participating Entities against any and all suits, claims, judgments, and costs instituted or recovered against Sourcewell or Participating Entities by any person on account of the use of any Equipment or Products by Sourcewell or its Participating Entities supplied by Supplier in violation of applicable patent or copyright laws.

5. **Termination.** Upon the termination of this Contract for any reason, each party, including Permitted Sublicensees, will have 30 days to remove all Trademarks from signage, websites, and the like bearing the other party’s name or logo (excepting Sourcewell’s pre-printed catalog of suppliers which may be used until the next printing). Supplier must return all marketing and promotional materials, including signage, provided by Sourcewell, or dispose of it according to Sourcewell’s written directions.

B. **PUBLICITY.** Any publicity regarding the subject matter of this Contract must not be released without prior written approval from the Authorized Representatives. Publicity includes notices, informational pamphlets, press releases, research, reports, signs, and similar public notices prepared by or for the Supplier individually or jointly with others, or any subcontractors, with respect to the program, publications, or services provided resulting from this Contract.

C. **MARKETING.** Any direct advertising, marketing, or offers with Participating Entities must be approved by Sourcewell. Send all approval requests to the Sourcewell Supplier Development Administrator assigned to this Contract.

D. **ENDORSEMENT.** The Supplier must not claim that Sourcewell endorses its Equipment, Products, or Services.

14. GOVERNING LAW, JURISDICTION, AND VENUE

The substantive and procedural laws of the State of Minnesota will govern this Contract. Venue for all legal proceedings arising out of this Contract, or its breach, must be in the appropriate state court in Todd County, Minnesota or federal court in Fergus Falls, Minnesota.

15. FORCE MAJEURE

Neither party to this Contract will be held responsible for delay or default caused by acts of God or other conditions that are beyond that party's reasonable control. A party defaulting under this provision must provide the other party prompt written notice of the default.

16. SEVERABILITY

If any provision of this Contract is found by a court of competent jurisdiction to be illegal, unenforceable, or void then both parties will be relieved from all obligations arising from that provision. If the remainder of this Contract is capable of being performed, it will not be affected by such determination or finding and must be fully performed.

17. PERFORMANCE, DEFAULT, AND REMEDIES

A. **PERFORMANCE.** During the term of this Contract, the parties will monitor performance and address unresolved contract issues as follows:

1. *Notification.* The parties must promptly notify each other of any known dispute and work in good faith to resolve such dispute within a reasonable period of time. If necessary, Sourcewell and the Supplier will jointly develop a short briefing document that describes the issue(s), relevant impact, and positions of both parties.
2. *Escalation.* If parties are unable to resolve the issue in a timely manner, as specified above, either Sourcewell or Supplier may escalate the resolution of the issue to a higher level of management. The Supplier will have 30 calendar days to cure an outstanding issue.
3. *Performance while Dispute is Pending.* Notwithstanding the existence of a dispute, the Supplier must continue without delay to carry out all of its responsibilities under the Contract that are not affected by the dispute. If the Supplier fails to continue without delay to perform its responsibilities under the Contract, in the accomplishment of all undisputed work, the Supplier will bear any additional costs incurred by Sourcewell and/or its Participating Entities as a result of such failure to proceed.

B. **DEFAULT AND REMEDIES.** Either of the following constitutes cause to declare this Contract, or any Participating Entity order under this Contract, in default:

1. Nonperformance of contractual requirements, or
2. A material breach of any term or condition of this Contract.

The party claiming default must provide written notice of the default, with 30 calendar days to cure the default. Time allowed for cure will not diminish or eliminate any liability for liquidated or other damages. If the default remains after the opportunity for cure, the non-defaulting party may:

- Exercise any remedy provided by law or equity, or
- Terminate the Contract or any portion thereof, including any orders issued against the Contract.

18. INSURANCE

A. REQUIREMENTS. At its own expense, Supplier must maintain insurance policy(ies) in effect at all times during the performance of this Contract with insurance company(ies) licensed or authorized to do business in the State of Minnesota having an "AM BEST" rating of A- or better, with coverage and limits of insurance not less than the following:

1. *Workers' Compensation and Employer's Liability.*

Workers' Compensation: As required by any applicable law or regulation.

Employer's Liability Insurance: must be provided in amounts not less than listed below:

Minimum limits:

\$500,000 each accident for bodily injury by accident

\$500,000 policy limit for bodily injury by disease

\$500,000 each employee for bodily injury by disease

2. *Commercial General Liability Insurance.* Supplier will maintain insurance covering its operations, with coverage on an occurrence basis, and must be subject to terms no less broad than the Insurance Services Office ("ISO") Commercial General Liability Form CG0001 (2001 or newer edition), or equivalent. At a minimum, coverage must include liability arising from premises, operations, bodily injury and property damage, independent contractors, products-completed operations including construction defect, contractual liability, blanket contractual liability, and personal injury and advertising injury. All required limits, terms and conditions of coverage must be maintained during the term of this Contract.

Minimum Limits:

\$1,000,000 each occurrence Bodily Injury and Property Damage

\$1,000,000 Personal and Advertising Injury

\$2,000,000 aggregate for Products-Completed operations

\$2,000,000 general aggregate

3. *Commercial Automobile Liability Insurance.* During the term of this Contract, Supplier will maintain insurance covering all owned, hired, and non-owned automobiles in limits of liability not less than indicated below. The coverage must be subject to terms

no less broad than ISO Business Auto Coverage Form CA 0001 (2010 edition or newer), or equivalent.

Minimum Limits:

\$1,000,000 each accident, combined single limit

4. *Umbrella Insurance*. During the term of this Contract, Supplier will maintain umbrella coverage over Employer's Liability, Commercial General Liability, and Commercial Automobile.

Minimum Limits:

\$2,000,000

5. *Network Security and Privacy Liability Insurance*. During the term of this Contract, Supplier will maintain coverage for network security and privacy liability. The coverage may be endorsed on another form of liability coverage or written on a standalone policy. The insurance must cover claims which may arise from failure of Supplier's security resulting in, but not limited to, computer attacks, unauthorized access, disclosure of not public data – including but not limited to, confidential or private information, transmission of a computer virus, or denial of service.

Minimum limits:

\$2,000,000 per occurrence

\$2,000,000 annual aggregate

Failure of Supplier to maintain the required insurance will constitute a material breach entitling Sourcewell to immediately terminate this Contract for default.

B. CERTIFICATES OF INSURANCE. Prior to commencing under this Contract, Supplier must furnish to Sourcewell a certificate of insurance, as evidence of the insurance required under this Contract. Prior to expiration of the policy(ies), renewal certificates must be mailed to Sourcewell, 202 12th Street Northeast, P.O. Box 219, Staples, MN 56479 or sent to the Sourcewell Supplier Development Administrator assigned to this Contract. The certificates must be signed by a person authorized by the insurer(s) to bind coverage on their behalf.

Failure to request certificates of insurance by Sourcewell, or failure of Supplier to provide certificates of insurance, in no way limits or relieves Supplier of its duties and responsibilities in this Contract.

C. ADDITIONAL INSURED ENDORSEMENT AND PRIMARY AND NON-CONTRIBUTORY INSURANCE CLAUSE. Supplier agrees to list Sourcewell and its Participating Entities, including their officers, agents, and employees, as an additional insured under the Supplier's commercial general liability insurance policy with respect to liability arising out of activities, "operations," or "work" performed by or on behalf of Supplier, and products and completed operations of Supplier. The policy provision(s) or endorsement(s) must further provide that coverage is

primary and not excess over or contributory with any other valid, applicable, and collectible insurance or self-insurance in force for the additional insureds.

D. **WAIVER OF SUBROGATION.** Supplier waives and must require (by endorsement or otherwise) all its insurers to waive subrogation rights against Sourcewell and other additional insureds for losses paid under the insurance policies required by this Contract or other insurance applicable to the Supplier or its subcontractors. The waiver must apply to all deductibles and/or self-insured retentions applicable to the required or any other insurance maintained by the Supplier or its subcontractors. Where permitted by law, Supplier must require similar written express waivers of subrogation and insurance clauses from each of its subcontractors.

E. **UMBRELLA/EXCESS LIABILITY/SELF-INSURED RETENTION.** The limits required by this Contract can be met by either providing a primary policy or in combination with umbrella/excess liability policy(ies), or self-insured retention.

19. COMPLIANCE

A. **LAWS AND REGULATIONS.** All Equipment, Products, or Services provided under this Contract must comply fully with applicable federal laws and regulations, and with the laws in the states and provinces in which the Equipment, Products, or Services are sold.

B. **LICENSES.** Supplier must maintain a valid and current status on all required federal, state/provincial, and local licenses, bonds, and permits required for the operation of the business that the Supplier conducts with Sourcewell and Participating Entities.

20. BANKRUPTCY, DEBARMENT, OR SUSPENSION CERTIFICATION

Supplier certifies and warrants that it is not in bankruptcy or that it has previously disclosed in writing certain information to Sourcewell related to bankruptcy actions. If at any time during this Contract Supplier declares bankruptcy, Supplier must immediately notify Sourcewell in writing.

Supplier certifies and warrants that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from programs operated by the State of Minnesota; the United States federal government or the Canadian government, as applicable; or any Participating Entity. Supplier certifies and warrants that neither it nor its principals have been convicted of a criminal offense related to the subject matter of this Contract. Supplier further warrants that it will provide immediate written notice to Sourcewell if this certification changes at any time.

21. PROVISIONS FOR NON-UNITED STATES FEDERAL ENTITY PROCUREMENTS UNDER UNITED STATES FEDERAL AWARDS OR OTHER AWARDS

Participating Entities that use United States federal grant or FEMA funds to purchase goods or services from this Contract may be subject to additional requirements including the procurement standards of the Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards, 2 C.F.R. § 200. Participating Entities may have additional requirements based on specific funding source terms or conditions. Within this Article, all references to “federal” should be interpreted to mean the United States federal government. The following list only applies when a Participating Entity accesses Supplier’s Equipment, Products, or Services with United States federal funds.

A. **EQUAL EMPLOYMENT OPPORTUNITY.** Except as otherwise provided under 41 C.F.R. § 60, all contracts that meet the definition of “federally assisted construction contract” in 41 C.F.R. § 60-1.3 must include the equal opportunity clause provided under 41 C.F.R. §60-1.4(b), in accordance with Executive Order 11246, “Equal Employment Opportunity” (30 FR 12319, 12935, 3 C.F.R. §, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, “Amending Executive Order 11246 Relating to Equal Employment Opportunity,” and implementing regulations at 41 C.F.R. § 60, “Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.” The equal opportunity clause is incorporated herein by reference.

B. **DAVIS-BACON ACT, AS AMENDED (40 U.S.C. § 3141-3148).** When required by federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. § 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 C.F.R. § 5, “Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction”). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-federal entity must report all suspected or reported violations to the federal awarding agency. The contracts must also include a provision for compliance with the Copeland “Anti-Kickback” Act (40 U.S.C. § 3145), as supplemented by Department of Labor regulations (29 C.F.R. § 3, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States”). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-federal entity must report all suspected or reported violations to the federal awarding agency. Supplier must be in compliance with all applicable Davis-Bacon Act provisions.

C. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (40 U.S.C. § 3701-3708). Where applicable, all contracts awarded by the non-federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. §§ 3702 and 3704, as supplemented by Department of Labor regulations (29 C.F.R. § 5). Under 40 U.S.C. § 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. § 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence. This provision is hereby incorporated by reference into this Contract. Supplier certifies that during the term of an award for all contracts by Sourcewell resulting from this procurement process, Supplier must comply with applicable requirements as referenced above.

D. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT. If the federal award meets the definition of “funding agreement” under 37 C.F.R. § 401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 C.F.R. § 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency. Supplier certifies that during the term of an award for all contracts by Sourcewell resulting from this procurement process, Supplier must comply with applicable requirements as referenced above.

E. CLEAN AIR ACT (42 U.S.C. § 7401-7671Q.) AND THE FEDERAL WATER POLLUTION CONTROL ACT (33 U.S.C. § 1251-1387). Contracts and subgrants of amounts in excess of \$150,000 require the non-federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. § 7401- 7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251- 1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA). Supplier certifies that during the term of this Contract will comply with applicable requirements as referenced above.

F. DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689). A contract award (see 2 C.F.R. § 180.220) must not be made to parties listed on the government wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 C.F.R. § 180 that implement Executive Orders 12549 (3 C.F.R. § 1986 Comp., p. 189) and 12689 (3 C.F.R. § 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names

of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. Supplier certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency.

G. BYRD ANTI-LOBBYING AMENDMENT, AS AMENDED (31 U.S.C. § 1352). Suppliers must file any required certifications. Suppliers must not have used federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Suppliers must disclose any lobbying with non-federal funds that takes place in connection with obtaining any federal award. Such disclosures are forwarded from tier to tier up to the non-federal award. Suppliers must file all certifications and disclosures required by, and otherwise comply with, the Byrd Anti-Lobbying Amendment (31 U.S.C. § 1352).

H. RECORD RETENTION REQUIREMENTS. To the extent applicable, Supplier must comply with the record retention requirements detailed in 2 C.F.R. § 200.333. The Supplier further certifies that it will retain all records as required by 2 C.F.R. § 200.333 for a period of 3 years after grantees or subgrantees submit final expenditure reports or quarterly or annual financial reports, as applicable, and all other pending matters are closed.

I. ENERGY POLICY AND CONSERVATION ACT COMPLIANCE. To the extent applicable, Supplier must comply with the mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

J. BUY AMERICAN PROVISIONS COMPLIANCE. To the extent applicable, Supplier must comply with all applicable provisions of the Buy American Act. Purchases made in accordance with the Buy American Act must follow the applicable procurement rules calling for free and open competition.

K. ACCESS TO RECORDS (2 C.F.R. § 200.336). Supplier agrees that duly authorized representatives of a federal agency must have access to any books, documents, papers and records of Supplier that are directly pertinent to Supplier's discharge of its obligations under this Contract for the purpose of making audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to Supplier's personnel for the purpose of interview and discussion relating to such documents.

L. PROCUREMENT OF RECOVERED MATERIALS (2 C.F.R. § 200.322). A non-federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation

and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 C.F.R. § 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

M. FEDERAL SEAL(S), LOGOS, AND FLAGS. The Supplier not use the seal(s), logos, crests, or reproductions of flags or likenesses of Federal agency officials without specific pre-approval.

N. NO OBLIGATION BY FEDERAL GOVERNMENT. The U.S. federal government is not a party to this Contract or any purchase by an Participating Entity and is not subject to any obligations or liabilities to the Participating Entity, Supplier, or any other party pertaining to any matter resulting from the Contract or any purchase by an authorized user.

O. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS. The Contractor acknowledges that 31 U.S.C. 38 (Administrative Remedies for False Claims and Statements) applies to the Supplier's actions pertaining to this Contract or any purchase by a Participating Entity.

P. FEDERAL DEBT. The Supplier certifies that it is non-delinquent in its repayment of any federal debt. Examples of relevant debt include delinquent payroll and other taxes, audit disallowance, and benefit overpayments.

Q. CONFLICTS OF INTEREST. The Supplier must notify the U.S. Office of General Services, Sourcewell, and Participating Entity as soon as possible if this Contract or any aspect related to the anticipated work under this Contract raises an actual or potential conflict of interest (as described in 2 C.F.R. Part 200). The Supplier must explain the actual or potential conflict in writing in sufficient detail so that the U.S. Office of General Services, Sourcewell, and Participating Entity are able to assess the actual or potential conflict; and provide any additional information as necessary or requested.

R. U.S. EXECUTIVE ORDER 13224. The Supplier, and its subcontractors, must comply with U.S. Executive Order 13224 and U.S. Laws that prohibit transactions with and provision of resources and support to individuals and organizations associated with terrorism.

S. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT. To the extent applicable, Supplier certifies that during the term of this Contract it will comply with applicable requirements of 2 C.F.R. § 200.216.

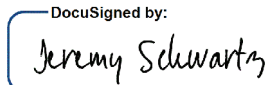
T. DOMESTIC PREFERENCES FOR PROCUREMENTS. To the extent applicable, Supplier certifies that during the term of this Contract will comply with applicable requirements of 2 C.F.R. § 200.322.


22. CANCELLATION

Sourcewell or Supplier may cancel this Contract at any time, with or without cause, upon 60 days' written notice to the other party. However, Sourcewell may cancel this Contract immediately upon discovery of a material defect in any certification made in Supplier's Proposal. Cancellation of this Contract does not relieve either party of financial, product, or service obligations incurred or accrued prior to cancellation.


Sourcewell

Vactor Manufacturing,
a division of Federal Signal

DocuSigned by:

By: C0FD2A139D06489...
Jeremy Schwartz
Title: Chief Procurement Officer
12/20/2021 | 11:51 AM CST
Date: _____

DocuSigned by:

By: 67407721F3A64A7...
David Panizzi
Title: Business Development Manager
12/20/2021 | 11:57 AM PST
Date: _____

Approved:

DocuSigned by:

By: 7E42B8F817A64CC...
Chad Coauette
Title: Executive Director/CEO
12/20/2021 | 2:05 PM CST
Date: _____

RFP 101221 - Sewer Vacuum, Hydro-Excavation, and Municipal Pumping Equipment with Related Accessories and Supplies

Vendor Details

Company Name: Elgin Sweeper Co.

Does your company conduct business under any other name? If yes, please state: Elgin Sweeper Co. Division of Federal Signal and Vector Manufacturing

Address: 1300 W Bartlett Rd
Elgin, IL 60120

Contact: David Panizzi

Email: dpanizzi@elginsweeper.com

Phone: 847-622-7153

HST#: 36-2351764

Submission Details

Created On: Thursday September 16, 2021 12:18:49

Submitted On: Monday October 11, 2021 14:51:07

Submitted By: David Panizzi

Email: dpanizzi@elginsweeper.com

Transaction #: 5f37a299-5bd6-4ac4-aedf-2f1ad40fd7bc

Submitter's IP Address: 4.28.67.162

Specifications

Table 1: Proposer Identity & Authorized Representatives

General Instructions (applies to all Tables) Sourcewell prefers a brief but thorough response to each question. Do not merely attach additional documents to your response without also providing a substantive response. Do not leave answers blank; respond "N/A" if the question does not apply to you (preferably with an explanation).

Line Item	Question	Response *	
1	Proposer Legal Name (one legal entity only): (In the event of award, will execute the resulting contract as "Supplier")	Vactor Manufacturing (a Division of Federal Signal)	*
2	Identify all subsidiary entities of the Proposer whose equipment, products, or services are included in the Proposal.	Vactor Manufacturing; TruVac	*
3	Identify all applicable assumed names or DBA names of the Proposer or Proposer's subsidiaries in Line 1 or Line 2 above.	Vactor Manufacturing; TruVac	*
4	Proposer Physical Address:	1621 South Illinois St. Streator, IL 61364	*
5	Proposer website address (or addresses):	www.Vactor.com	*
6	Proposer's Authorized Representative (name, title, address, email address & phone) (The representative must have authority to sign the "Proposer's Assurance of Compliance" on behalf of the Proposer and, in the event of award, will be expected to execute the resulting contract):	David Panizzi Business Development Manager 1300 West Bartlett Rd dpanizzi@vactor.com 847-622-7153	*
7	Proposer's primary contact for this proposal (name, title, address, email address & phone):	David Panizzi Business Development Manager 1300 West Bartlett Rd dpanizzi@vactor.com 847-622-7153	*
8	Proposer's other contacts for this proposal, if any (name, title, address, email address & phone):	No other contacts	

Table 2: Company Information and Financial Strength

Line Item	Question	Response *
9	Provide a brief history of your company, including your company's core values, business philosophy, and industry longevity related to the requested equipment, products or services.	Aligned with Federal Signal, Vector Manufacturing works to enhance the cleanliness, safety and well being of our communities and work places. We are an American manufacturer with over 55 years of product design and manufacturing experience. Vector Manufacturing is a recognized leader in high quality sewer cleaning and hydro-excavation solutions.
10	What are your company's expectations in the event of an award?	We would expect to continue cooperation with Sourcewell as we work to serve its membership and work to provide effective and simple solutions for environmental cleaning challenges. This would include Sourcewell commitment to expand membership and promotion of their contracts to support their contract holders. We have over a decade of cooperation and growth working together with Sourcewell and their members, and we would work together to continue serve the membership with the latest advances in sewer cleaner and hydro excavator designs and product offerings.
11	Demonstrate your financial strength and stability with meaningful data. This could include such items as financial statements, SEC filings, credit and bond ratings, letters of credit, and detailed reference letters. Upload supporting documents (as applicable) in the document upload section of your response.	Vector is the clear leader of our industry in North America. Our growth over the past 15 years has necessitated two, multi-million dollar factory expansions. The most recent concluding in 2020. Vector is a subsidiary of Federal Signal - a publicly traded company with more than \$1.2 billion in revenue last year. The link shown here can be used to access the latest quarterly reports as well as other financial related topics and will clearly show Federal Signal's financial strength and stability. https://www.federalsignal.com/annual-quarterly-reports
12	What is your US market share for the solutions that you are proposing?	Our industry is a non-reporting industry. Therefore, no independent data of market share exists. Based on our market knowledge and across all sewer cleaning and hydro excavation model/technologies, we believe our aggregate market share to be approximately 40%.
13	What is your Canadian market share for the solutions that you are proposing?	Again, we do not have empirical data supporting market share in Canada but our research shows that we have approximately 32% market share across all types of sewer cleaning and hydro excavation technologies.
14	Has your business ever petitioned for bankruptcy protection? If so, explain in detail.	Vector Manufacturing and Federal Signal Corp. have never been the subject of a bankruptcy action.
15	How is your organization best described: is it a manufacturer, a distributor/dealer/reseller, or a service provider? Answer whichever question (either a) or b) just below) best applies to your organization. a) If your company is best described as a distributor/dealer/reseller (or similar entity), provide your written authorization to act as a distributor/dealer/reseller for the manufacturer of the products proposed in this RFP. If applicable, is your dealer network independent or company owned? b) If your company is best described as a manufacturer or service provider, describe your relationship with your sales and service force and with your dealer network in delivering the products and services proposed in this RFP. Are these individuals your employees, or the employees of a third party?	We are a manufacturer. We have a network of third-party dealerships across North America that are trained to sell and service our products. The dealerships are specifically contracted and trained to represent our products in their local areas. We also have Regional Sales Reps (located throughout N. America) that support the sales process and are available to meet and work with end-users. We also have a Field Service and Support team. They too are located within their regions, and are dedicated to support our dealers and their efforts to ensure customer satisfaction with our products. The Regional Sales Reps and the Regional Service and Support Reps are employees of the company.
16	If applicable, provide a detailed explanation outlining the licenses and certifications that are both required to be held, and actually held, by your organization (including third parties and subcontractors that you use) in pursuit of the business contemplated by this RFP.	All of our contracted dealers are required to have valid state equipment dealer license. All of our dealers must comply with this requirement as part of their contract with us. While not required, Vector is ISO 9001 and 14001 certified. ISO is the International Standards Organization and being certified means that we have policies and procedures commensurate with our business (heavy manufacturing) and that we adhere to those policies, procedures and quality standards. We are audited annually.
17	Provide all "Suspension or Debarment" information that has applied to your organization during the past ten years.	None

Table 3: Industry Recognition & Marketplace Success

Line Item	Question	Response *
18	Describe any relevant industry awards or recognition that your company has received in the past five years	Vector Manufacturing received the Chicago Innovation Award for the Paradigm Hydro Excavation unit in 2016.
19	What percentage of your sales are to the governmental sector in the past three years	Approximately 62%
20	What percentage of your sales are to the education sector in the past three years	Less than 1%
21	List any state, provincial, or cooperative purchasing contracts that you hold. What is the annual sales volume for each of these contracts over the past three years?	We as a manufacturer do not hold any additional state or provincial purchasing contracts - only our current Sourcewell contract. However, a number of our local dealers do hold state or local purchasing contracts which they service. We do not have access to the detailed sales volumes
22	List any GSA contracts or Standing Offers and Supply Arrangements (SOSA) that you hold. What is the annual sales volume for each of these contracts over the past three years?	We service a GSA contract (47QMCA18D000E) that is administered through our dealer in Maryland. Annual sales volumes are unknown.

Table 4: References/Testimonials

Line Item 23. Supply reference information from three customers who are eligible to be Sourcewell participating entities.

Entity Name *	Contact Name *	Phone Number *	
Hampton Roads & Sanitation District (HRSD) member #46762	John "JJ" Jones	(757) 460-7069	*
City of Norfolk, VA member #50228	Steve Patterson	(757) 441-5700	*
City of Wheaton, IL	Sam Webb Fleet Supervisor	630-260-2119	*
Orange County Utilities, member ID 141910	Nathaniel Haney	(407) 883-9574	
City of Chesapeake, member ID 52040	Mike Colgan	(757) 382-3321	

Table 5: Top Five Government or Education Customers

Line Item 24. Provide a list of your top five government, education, or non-profit customers (entity name is optional), including entity type, the state or province the entity is located in, scope of the project(s), size of transaction(s), and dollar volumes from the past three years.

Entity Name	Entity Type *	State / Province *	Scope of Work *	Size of Transactions *	Dollar Volume Past Three Years *	
Confidential	Government	Illinois - IL	Purchase of Sewer Cleaning and/or Hydro Ex. Eq.	We are a public company and this is confidential information	We are a public company and this is confidential information	*
Confidential	Government	Illinois - IL	Purchase of Sewer Cleaning and/or Hydro Ex. Eq.	We are a public company and this is confidential information	We are a public company and this is confidential information	*
Confidential	Government	Illinois - IL	Purchase of Sewer Cleaning and/or Hydro Ex. Eq.	We are a public company and this is confidential information	We are a public company and this is confidential information	*
Confidential	Government	Illinois - IL	Purchase of Sewer Cleaning and/or Hydro Ex. Eq.	We are a public company and this is confidential information	We are a public company and this is confidential information	*
Confidential	Government	Illinois - IL	Purchase of Sewer Cleaning and/or Hydro Ex. Eq.	We are a public company and this is confidential information	We are a public company and this is confidential information	*

Table 6: Ability to Sell and Deliver Service

Describe your company's capability to meet the needs of Sourcewell participating entities across the US and Canada, as applicable. Your response should address in detail at least the following areas: locations of your network of sales and service providers, the number of workers (full-time equivalents) involved in each sector, whether these workers are your direct employees (or employees of a third party), and any overlap between the sales and service functions.

Line Item	Question	Response *	
25	Sales force.	Vactor/TruVac has ten Regional Sales Managers (RSMs) tasked with supporting our dealer's sales efforts. The RSMs set sales targets and are involved in the end-user sales process as needed. The RSMs report to a Director of Municipal/Governmental Sales who reports to a Group level Vice President	*
26	Dealer network or other distribution methods.	Our dealer network consists of 34 dealer entities with over 70 location throughout North America. All dealers are assigned an area of responsibility that cover all of the US, Canada and the US Territories. Total dealer sales reps/territory managers for North American total over 230.	*
27	Service force.	Internally, Vactor/TruVac has an Inside Service organization with eight technical reps that support our dealer's daily need for technical support. We also have four Regional Service and Support Managers (RSSMs) that live and work with specific dealers within their assigned regions to provide warranty support, training, consultation and end-user interaction. All of our internal reps support approximately 225 dealer technicians tasked with providing end-user service.	*
28	Describe the ordering process. If orders will be handled by distributors, dealers or others, explain the respective roles of the Proposer and others.	Sourcewell members will order through their local dealer who will, in-turn, place an order with us. Our dealer will be responsible for assisting the member with equipment configuration recommendations and providing a detailed proposal/quotation to the member. Once the sewer cleaner/hydro excavation unit is manufactured and delivered to our dealer, they will be responsible for preparing, delivering, training and supporting the end-user's needs with the equipment. History is showing that Vactor dealers are knowledgeable, experienced and anxious to use our Sourcewell contract.	*
29	Describe in detail the process and procedure of your customer service program, if applicable. Include your response-time capabilities and commitments, as well as any incentives that help your providers meet your stated service goals or promises.	Customer Service starts from the delivery process with equipment installation/operation training. Shortly after delivery, we request a customer satisfaction survey be filled out so we can understand the level of satisfaction from product quality, to dealer support and overall product satisfaction. Any negative responses are recorded and assigned to a field rep for appropriate follow-up. All Vactor Dealers have trained and certified technicians with the vast majority of dealers providing road (go to customer location) service complete with well-equipped service trucks. This allows for quicker support of possible inoperative vehicles. Also, at Vactor we have a 24-hour toll free helpline that is staffed by factory personnel. The objective is to provide an immediate contact and response for both our dealers and end-user customers. Lastly, we support our products with a comprehensive warranty that is provided through our trained dealer network. Our philosophy is that quality products with high-levels of service support will ensure the best value for our customers - this, in turn, will create their desire to continue their business relationship with Vactor and our dealers.	*
30	Describe your ability and willingness to provide your products and services to Sourcewell participating entities in the United States.	Our dealer network allows us to sell and service our products throughout all of North America. Our dealers are assigned geographic areas (or territories) of responsibility that include all states and provinces. The assigned territories are listed in the dealer contract.	*
31	Describe your ability and willingness to provide your products and services to Sourcewell participating entities in Canada.	We support, service and actively pursue business opportunities with all Canadian entities that use sewer cleaner and/or hydro excavators.	*
32	Identify any geographic areas of the United States or Canada that you will NOT be fully serving through the proposed contract.	We will service all geographic areas of the US and Canada	*
33	Identify any Sourcewell participating entity sectors (i.e., government, education, not-for-profit) that you will NOT be fully serving through the proposed contract. Explain in detail. For example, does your company have only a regional presence, or do other cooperative purchasing contracts limit your ability to promote another contract?	We will service any and all Sourcewell participating entities.	*
34	Define any specific contract requirements or restrictions that would apply to our participating entities in Hawaii and Alaska and in US Territories.	Hawaii, Alaska and the US Territories are serviced the same as other states. We have dealers that are contractually assigned these geographic regions.	*

Table 7: Marketing Plan

Line Item	Question	Response *	
35	Describe your marketing strategy for promoting this contract opportunity. Upload representative samples of your marketing materials (if applicable) in the document upload section of your response.	We advertise our Sourcewell contract at trade shows, on our public website, on our marketing collateral and at our internal dealer events. We invite our Sourcewell Contract Administrator to attend and participate at our trade shows and internal dealer sales training events. We have facilitated contract training with both our Regional Sales Managers and dealerships. We encourage our dealers to attend and network at Sourcewell sponsored events like GTKU and Sourcewell University.	*
36	Describe your use of technology and digital data (e.g., social media, metadata usage) to enhance marketing effectiveness.	Vactor utilizes a number of social media platforms to inform and communicate with the public and our followers. Our Marketing Communications Group does an excellent job of utilizing these technologies to promote our products and keep our users informed of what's happening. We use Facebook, LinkedIn, YouTube and Twitter to keep users and followers up-to-date with the latest product releases including videos; application specific information, new option availability (to enhance the functionality), and the latest press releases. Our website allows users to connect to information including our Sourcewell relationship and contract information.	*
37	In your view, what is Sourcewell's role in promoting contracts arising out of this RFP? How will you integrate a Sourcewell-awarded contract into your sales process?	We would expect Sourcewell to promote our contracts to their membership as a way to simplify the procurement process and that membership understands that contract holders are part of an elite group of product/solution providers that have proven to be reputable and responsive to member's needs. We expect that Sourcewell works to continue to expand membership so that additional entities would be able to experience the benefits for all parties. Our Sourcewell contract is currently well integrated within our sales process. Our RSMs, as well as our dealers, have been trained in using our contract as a preferred method of selling/procuring our products. Our dealers currently have the ability to create Sourcewell compliant proposals/quotes within our on-line configurator and ordering tool. By making a simple selection (check box) within our CPQ tool a dealer sales rep can create a proposal that is compliant with our Sourcewell contract. The tool applies the appropriate pricing, contract information, inserts the approved Sourcewell logo and tracks orders for reporting purposes.	*
38	Are your products or services available through an e-procurement ordering process? If so, describe your e-procurement system and how governmental and educational customers have used it.	We do not have an e-procurement system for end-customer use. However, we do have an on-line product configuration and ordering tool that our dealers use to configure customers specific units and place orders with us. Our dealers use this on-line tool to prepare Sourcewell compliant proposal/quotes for members and then to place that Sourcewell order upon award.	*

Table 8: Value-Added Attributes

Line Item	Question	Response *	
39	Describe any product, equipment, maintenance, or operator training programs that you offer to Sourcewell participating entities. Include details, such as whether training is standard or optional, who provides training, and any costs that apply.	We offer training at several levels. Initial training is basic installation training and is provided by our dealers at or shortly after delivery of a new sewer cleaner/hydro vac as agreed to with customer. This would include basic operation, cleaning and maintenance training. This is generally free of charge unless the member requests multiple sessions or more in-depth training that requires more time. This initial training is considered standard or can be optionally upgraded if a deeper level of training is desired. We also offer product model specific maintenance training at the factory. This covers multiple days and is also free of charge with the only costs being travel and hotel accommodations if needed. Dealers usually assist the member/customer with registration for this training.	*
40	Describe any technological advances that your proposed products or services offer.	Available on our Vactor 2100i combination units we offer a patented Rapid Deployment Boom (RDB). This feature provides for significantly improved productivity in reduced set-up times and also reduces need for operator set-up/breakdown frequency for improved safety and reduced fatigue. Our standard advanced Intui-Touch control system is ergonomically designed that allows for safe and easy interactive control interface. We have also introduced a water-recycler option that again greatly improves productivity while reducing water consumption in the line cleaning process. On our TruVac products we have optional Dig-Right technology (also patented) that allows the operator to set pressure limits to ensure safe digging practices.	*
41	Describe any "green" initiatives that relate to your company or to your products or services, and include a list of the certifying agency for each.	Vactor is ISO 14001 certified (environmental management) which speaks to our environmental management commitment at our factory. Also, the water recycler option mentioned in line item 40 provides for significantly reduced water usage. Lastly, all of our units are now single-engine operation which eliminates the need for an auxiliary engine to drive air-flow for cleaning. This significantly reduces emission and need for secondary engine maintenance.	*
42	Identify any third-party issued eco-labels, ratings or certifications that your company has received for the equipment or products included in your Proposal related to energy efficiency or conservation, life-cycle design (cradle-to-cradle), or other green/sustainability factors.	ISO 14001 would be the only third-party issued certification related to environmental management. However, as mentioned above, we are certainly focused on energy efficiency/conservation. I would go as far as saying that we are a leader in developing and providing environmentally beneficial solutions including using alternative fuels such as CNG.	*
43	Describe any Women or Minority Business Entity (WMBE), Small Business Entity (SBE), or veteran owned business certifications that your company or hub partners have obtained. Upload documentation of certification (as applicable) in the document upload section of your response.	While Vactor does not qualify under any of these business headings, several of our partner/dealers do. This includes WMBE and SBE. This is not a requirement of our dealer/partners and therefore access to documentation is not readily available.	*
44	What unique attributes does your company, your products, or your services offer to Sourcewell participating entities? What makes your proposed solutions unique in your industry as it applies to Sourcewell participating entities?	We offer a variety of combination, jetter only or vacuum only sewer cleaner solutions that can be tailored to specific member requirements. We have a large selection of optional content that allows for customization for specific applications as well as the ability to provide specialized (engineered) solutions that may require unique attention/design. Our excavation products also are available in various sizes with the ability to excavate with water or air. Our products are also supported by a seasoned dealer network that is trained with the capability of supporting users throughout North America.	*

Table 9A: Warranty

Describe in detail your manufacturer warranty program, including conditions and requirements to qualify, claims procedure, and overall structure. You may upload representative samples of your warranty materials (if applicable) in the document upload section of your response in addition to responding to the questions below.

Line Item	Question	Response *	
45	Do your warranties cover all products, parts, and labor?	Yes	*
46	Do your warranties impose usage restrictions or other limitations that adversely affect coverage?	No usage limitation. Standard warranty is for 1 year bumper-to -bumper exclusive of wear items such as nozzles.	*
47	Do your warranties cover the expense of technicians' travel time and mileage to perform warranty repairs?	Yes	*
48	Are there any geographic regions of the United States or Canada (as applicable) for which you cannot provide a certified technician to perform warranty repairs? How will Sourcewell participating entities in these regions be provided service for warranty repair?	Our dealer contracts require that they provide service for all customer within their area of responsibility. This would of course include Sourcewell member customers. In very rare situations and with the agreement of the customer, authorizations for a specific customer to perform their own warranty repair can be given. Vactor and our dealer would support this by providing parts, work instructions and compensation at pre-established rates. Authorization would only be given if the required repair is considered relatively easy to accomplish and did not present any risk for the customer.	*
49	Will you cover warranty service for items made by other manufacturers that are part of your proposal, or are these warranties issues typically passed on to the original equipment manufacturer?	Our warranty covers all items with the exception of engines, truck chassis, tires and other components that carry their own manufacturers warranty. These items are typically supported by local dealer facilities. Any items/components that do not have local service would be cover by Vactor and our dealers. We have been know to assist our end-user by leveraging our contacts with engine and chassis manufacturers and dealers.	*
50	What are your proposed exchange and return programs and policies?	It is extremely rare that we would need to exchange or have a product returned. If one of our sewer cleaners was determined to be wrong for a specific customer need/application, we would work with them to modify or exchange a product for one that would work better. Ultimately, we are all better off if the customer is satisfied with their product - that's what we work toward.	*
51	Describe any service contract options for the items included in your proposal.	We are not specifically offering service contracts with this proposal. However, most of our dealer offer a variety service contract options and service specials. The offerings can be from full-service turnkey parts and service solutions to specific targeted specials. These are dealer specific.	*

Table 9B: Performance Standards or Guarantees

Describe in detail your performance standards or guarantees, including conditions and requirements to qualify, claims procedure, and overall structure. You may upload representative samples of your performance materials (if applicable) in the document upload section of your response in addition to responding to the questions below.

Line Item	Question	Response *	
52	Describe any performance standards or guarantees that apply to your services	To ensure that our products are supported in a timely manner we offer a bumper-to-bumper, 1-year standard warranty (exclusive of wear parts). We have a nation wide/North American service network with all dealer connected via our service network software (providing specific unit service history and service/recall information). We also have a 24-hour hotline to assist both dealers and end-user with diagnosis and troubleshooting information.	*
53	Describe any service standards or guarantees that apply to your services (policies, metrics, KPIs, etc.)	Several months after delivery of each new unit we send out a Customer Satisfaction Survey asking for feedback in the areas of product quality, performance, level of satisfaction with their dealer experience and overall product. Any negative mark or comment is recorded and assigned for follow-up. The scores are tallied in the form of a Customer Satisfaction Index (CSI) score. Several quality and service performance measures are tied to the CSI. This helps us understand the voice of the customer and ensures that we are monitoring quality, performance and overall customer satisfaction at the manufacturer level.	*

Table 10: Payment Terms and Financing Options

Line Item	Question	Response *	
54	Describe your payment terms and accepted payment methods?	Payment terms are established between the Vactor dealer and the Sourcewell member. Generally, this is net 15 or net 30-days. However, our dealers do much of their business municipally and understand that some entities need to apply different payment terms. Most of the time the specific member requirements can be met if within reason. The standard payment terms between our dealer and us is net 30-days.	*
55	Describe any leasing or financing options available for use by educational or governmental entities.	Again, leasing and financing options are determined between the Vactor dealer and the Sourcewell member. All of our dealers offer some type of leasing and/or financing option. This is usually with a third-party that we or they have established relationships with. We often recommend NCL and many of our dealers have an established relationship with NCL and use NCL's Sourcewell contract solution for lease/financing options.	*
56	Describe any standard transaction documents that you propose to use in connection with an awarded contract (order forms, terms and conditions, service level agreements, etc.). Upload a sample of each (as applicable) in the document upload section of your response.	We do not have a standard transaction document that is provided to the end-user/member. Typically, the entity issues a purchase order to our dealer based on a Sourcewell proposal/quote that is generated through our configurator tool. The dealer submits the "quote" to us as an order once the member issues a PO. We, in turn, issue an electronic acknowledgement document to the dealer confirming what was ordered. This is our standard process today, for all orders, and Sourcewell orders fit nicely within our existing process. I am including example document in the upload section.	*
57	Do you accept the P-card procurement and payment process? If so, is there any additional cost to Sourcewell participating entities for using this process?	The payment process for members is a transaction between Sourcewell member and Vactor dealer. I do not believe P-card transactions are used. We (Vactor) do not accept P-card payments from our dealers. We have no hidden or undisclosed costs.	*

Table 11: Pricing and Delivery

Provide detailed pricing information in the questions that follow below. Keep in mind that reasonable price and product adjustments can be made during the term of an awarded Contract as described in the RFP, the template Contract, and the Sourcewell Price and Product Change Request Form.

Line Item	Question	Response *
58	Describe your pricing model (e.g., line-item discounts or product-category discounts). Provide detailed pricing data (including standard or list pricing and the Sourcewell discounted price) on all of the items that you want Sourcewell to consider as part of your RFP response. If applicable, provide a SKU for each item in your proposal. Upload your pricing materials (if applicable) in the document upload section of your response.	We are offering our full-line of sewer cleaners and hydro-excavators. Our pricing model is a 3% discount from list price on all Vactor/TruVac manufactured products (and options) exclusive of chassis and freight (from factory to dealer location) costs. We are also offering the rental of our sewer cleaners and hydro-vacs. Rental rates apply across the US and Canada (in Canadian dollars). The rates provided on the rental rate sheets are the Sourcewell member's price. We will also offer used sewer cleaners and hydro-vacs, primarily from our rental fleet. These are generally late model year and because of various usage and condition of specific units, the pricing will be a negotiated and agreed to price between the member and the Vactor dealer. This allows members a method of obtaining quality equipment at a much lower initial acquisition cost.
59	Quantify the pricing discount represented by the pricing proposal in this response. For example, if the pricing in your response represents a percentage discount from MSRP or list, state the percentage or percentage range.	For new equipment a 3% discount from list price applies. This discount applies to all Vactor/TruVac manufactured content including options. The rental pricing is a pre-established rental rate and is consistent throughout the US and Canada. These rates are at the lower end of the regional rate study that was conducted to determine appropriate and consistent rental rates. Used equipment pricing will be negotiated and agreed to between member and Vactor dealer.
60	Describe any quantity or volume discounts or rebate programs that you offer.	Additional volume discounts may be considered on a case-by-case basis.
61	Propose a method of facilitating "sourced" products or related services, which may be referred to as "open market" items or "nonstandard options". For example, you may supply such items "at cost" or "at cost plus a percentage," or you may supply a quote for each such request.	Sourced products or open market items fall into three categories for us. This could be items that would be provided by our dealer. The items in this category would be quoted by our dealer to the member and could include items such as special radios, decals or exterior wraps, lighting, and other dealer installed accessories. These items would not be subject to the 3% discount. Also included in this category would be unique equipment or options that would be designed, manufactured or procured and installed by Vactor. This is common for us and would be handled through our RFQ/Specials process. This allows us to provide a unique (off price list) solution for our customers and would be priced consistently with the 3% discount from list price. Our "Special" solution would be included in the Sourcewell proposal/quote. The last category would be factory supplied chassis. Because most of our products are mounted and integrated to a commercial chassis, we work with commercial chassis manufacturers and their local dealers to provide chassis specifically engineered for Vactor/TruVac equipment-mounting and use. We typically get favorable pricing from the manufacturer/dealer because of our volume. These chassis are very competitively priced and specifically designed for use with our sewer cleaners/hydro vacs. This is the easiest, least risky, and most often cost-effective turnkey solution. Because chassis availability/inventory is inconsistent and lead times vary significantly, we do not provide chassis pricing. Our dealers will provide chassis quote through at the time a Sourcewell quote/proposal is being developed - the 3% discount does not apply to chassis that we or our dealers provide. Supply of chassis is currently constrained.
62	Identify any element of the total cost of acquisition that is NOT included in the pricing submitted with your response. This includes all additional charges associated with a purchase that are not directly identified as freight or shipping charges. For example, list costs for items like pre-delivery inspection, installation, set up, mandatory training, or initial inspection. Identify any parties that impose such costs and their relationship to the Proposer.	Additional costs not included with our submittal would include dealer charges for items such as pre-delivery inspection and unit preparation, local freight charges, additional training above and beyond initial training at or shortly after delivery. Also, as mentioned above, any dealer installed item would not be identified in our price sheets but would be identified in the member's Sourcewell proposal/quote.
63	If freight, delivery, or shipping is an additional cost to the Sourcewell participating entity, describe in detail the complete freight, shipping, and delivery program.	The freight from our factory to the local dealer facility would be included with the Sourcewell quote but not subject to the 3% discount. Freight is a pass thru cost and not a profit item for us. Local freight and delivery, however, is handled by our local dealers and is not specifically listed in our response. This cost would be additional and should be listed on the member's pricing quote (often listed as part of the PDI process). This price would also vary by dealer and complexity of local shipping requirements.
64	Specifically describe freight, shipping, and delivery terms or programs available for Alaska, Hawaii, Canada, or any offshore delivery.	Alaska, Hawaii, Canada or other "offshore" delivery requirement would include a special quote from us. With offshore shipping requirements we typically containerize the product, deliver to a coastal port via truck and then load the container to a boat for delivery to location. This usually requires additional handling charges including protective coatings and dock charges. These charges can vary and would be disclosed in a member's proposal/quote.
65	Describe any unique distribution and/or delivery methods or options offered in your proposal.	We have a dedicated traffic department which is tasked with arranging any unique delivery requirement. This is their focus and the department is knowledgeable and skilled at finding competitively priced shipping options that best meet requirements.

Table 12: Pricing Offered

Line Item	The Pricing Offered in this Proposal is: *	Comments
66	c. better than the Proposer typically offers to GPOs, cooperative procurement organizations, or state purchasing departments.	The pricing offered for our complete line of sewer cleaners and hydro vacs for this Sourcewell proposal is better than what we typically offer for other purchasing contracts. It is possible that a dealer may offer a lesser price for a specific deal or customer but that is generally without our input.

Table 13: Audit and Administrative Fee

Line Item	Question	Response *
67	Specifically describe any self-audit process or program that you plan to employ to verify compliance with your proposed Contract with Sourcewell. This process includes ensuring that Sourcewell participating entities obtain the proper pricing, that the Vendor reports all sales under the Contract each quarter, and that the Vendor remits the proper administrative fee to Sourcewell. Provide sufficient detail to support your ability to report quarterly sales to Sourcewell as described in the Contract template.	Currently, we require our Regional Sales Managers to report Sourcewell Sales (using the provided Sourcewell template) on a quarterly basis. Late last year we refined and simplified that process by allowing our dealers to select "Sourcewell" within the CPQ/ordering tool and that would automatically apply the appropriate pricing. This also allows us the ability to track Sourcewell deals in our CPQ/on-line ordering tool. Each RSM now has the ability to view all sales, by specific dealer and region and can query for Sourcewell specific sales. By tracking sales within our CPQ ordering tool, we can verify "Sourcewell" sales and obtain the other required reporting details including transaction price. Once RSMs submit their territory Sourcewell sales reports, they are reviewed and reconciled by our Controller. Once approved, I submitted the quarterly report as required and our Controller initiates payment.
68	If you are awarded a contract, provide a few examples of internal metrics that will be tracked to measure whether you are having success with the contract.	Quarterly sales are reviewed and compared to the previous year's quarterly results and are also reviewed as a percentage of overall sales. As Business Development Manager, I am task with ensuring growth targets are achieved specific to several business development objectives that are set. This includes overall Sourcewell Sales increases. I am also charged with ensuring compliance to requirements.
69	Identify a proposed administrative fee that you will pay to Sourcewell for facilitating, managing, and promoting the Sourcewell Contract in the event that you are awarded a Contract. This fee is typically calculated as a percentage of Vendor's sales under the Contract or as a per-unit fee; it is not a line-item addition to the Member's cost of goods. (See the RFP and template Contract for additional details.)	As with past contracts, we propose a 0.5% administrative fee exclusive of chassis pricing and freight. We remove chassis pricing and freight as these items are not profit generating but rather cost items. This fee will be paid by us (Vactor) and is not a line item past on to the member.

Table 14A: Depth and Breadth of Offered Equipment Products and Services

Line Item	Question	Response *
70	Provide a detailed description of the equipment, products, and services that you are offering in your proposal.	We are offering for purchase or rental our full line of combination sewer cleaners, jetters, catch basin (sewer vacuums) and our hydro and air excavation products. This includes multiple sizes/capacities for combination sewer cleaners, truck mounted jetters and catch-basin (vacuum) units. Also, trailer mounted jetters and various sized hydro and air excavation units under our TruVac brand name. Also included is our Liquid Vacuum Tanker (LVT) that is a simple water/sludge pump designed for vacuuming refuse/dirty water, containing and transporting that material.
71	Within this RFP category there may be subcategories of solutions. List subcategory titles that best describe your products and services.	Combination Sewer Cleaners (various capacities) mounted on appropriately sized class 8 truck chassis; Catch Basin (vac only) units; Truck-Mounted Jetter and trailer-mounted Jetters; Various sized Hydro and Air Excavation units mounted on appropriately sized truck chassis; and Liquid Vacuum Tanker (LVT) trucks.

Table 14B: Depth and Breadth of Offered Equipment Products and Services

Indicate below if the listed types or classes of equipment, products, and services are offered within your proposal. Provide additional comments in the text box provided, as necessary.

Line Item	Category or Type	Offered *	Comments	
72	Sewer vacuums or combination sewer cleaners	<input checked="" type="radio"/> Yes <input type="radio"/> No	Full-line of various sized/capacity combination sewer cleaners (2100i-series) also available with alternative fuel. Also straight catch-basin (sewer vacs) units.	*
73	Hydro or air excavation equipment	<input checked="" type="radio"/> Yes <input type="radio"/> No	Full-line of various sized, truck-mounted Hydro and Air excavation units.	*
74	Jetters and rodders	<input checked="" type="radio"/> Yes <input type="radio"/> No	Various sized jetters including both truck and trailer-mounted units.	*
75	Dewatering, mud, trash, and centrifugal pumps	<input checked="" type="radio"/> Yes <input type="radio"/> No	Straight trash pumps are not part of our offering.	*
76	Pumps used in lift stations, sewage treatment, water treatment, or water collection facilities	<input checked="" type="radio"/> Yes <input type="radio"/> No	Our LVT units (TruVac Jackal) can be used in treatment facilities to assist with cleaning.	*
77	Accessories, supplies and replacement or wear parts related to the offerings above.	<input type="radio"/> Yes <input checked="" type="radio"/> No	Service parts and supplies are not included in our proposal.	

Table 15: Industry Specific Questions

Line Item	Question	Response *	
78	Describe any product or equipment features that improve operator safety.	All our products include single button Emergency Stops (E-Stops) at all human-machine interfaces to allow for rapid shutdown of operation. Our Rapid Deployment Boom (RDB) eliminates the need for repeated operator actions for set-up and breakdown throughout the workday. Our Dig-Right technology will automatically control pressure settings to avoid damaging underground utilities that would cause unsafe working conditions. We also have auto Water Shut Off (WSO) on the digging lance on our hydro ex units to provide an extra layer of safety for operators.	*
79	Describe any product or equipment innovations that increase uptime and operator productivity.	Our RDB 10x15 boom, as previously described, significantly improves productivity. Our water recycler option significantly reduces the need to fill-up with fresh water thus providing for greater productive time. The Dig-Right option on our Vacuum Excavators allows greater productivity by automatically adjusting pressures to digging conditions.	

Table 16: Exceptions to Terms, Conditions, or Specifications Form

Line Item 80. NOTICE: To identify any exception, or to request any modification, to the Sourcwell template Contract terms, conditions, or specifications, a Proposer must submit the exception or requested modification on the **Exceptions to Terms, Conditions, or Specifications Form** immediately below. The contract section, the specific text addressed by the exception or requested modification, and the proposed modification must be identified in detail. Proposer's exceptions and proposed modifications are subject to review and approval of Sourcwell and will not automatically be included in the contract.

Contract Section	Term, Condition, or Specification	Exception or Proposed Modification

Documents

Ensure your submission document(s) conforms to the following:

- Documents in PDF format are preferred. Documents in Word, Excel, or compatible formats may also be provided.
- Documents should NOT have a security password, as Sourcwell may not be able to open the file. It is your sole responsibility to ensure that the uploaded document(s) are not either defective, corrupted or blank and that the documents can be opened and viewed by Sourcwell.
- Sourcwell may reject any response where any document(s) cannot be opened and viewed by Sourcwell.
- If you need to upload more than one (1) document for a single item, you should combine the documents into one zipped file. If the zipped file contains more than one (1) document, ensure each document is named, in relation to the submission format item responding to. For example, if responding to the Marketing Plan category save the document as "Marketing Plan."

- [Pricing](#) - Vactor TruVac Pricing files.zip - Monday October 11, 2021 09:49:16
- [Financial Strength and Stability](#) - fss_2020_10k.pdf - Thursday October 07, 2021 11:17:49
- [Marketing Plan/Samples](#) - 2021 Vactor Facebook - Sourcewell.pdf - Thursday October 07, 2021 11:19:56
- WMBE/MBE/SBE or Related Certificates (optional)
- [Warranty Information](#) - Vactor and TruVac Warranty.zip - Thursday October 07, 2021 11:23:13
- [Standard Transaction Document Samples](#) - Vactor Transaction example.zip - Thursday October 07, 2021 11:23:02
- [Upload Additional Document](#) - Fed Sig Elgin Vactor-Sourcewell-COI 2022.pdf - Thursday October 07, 2021 11:18:26

Addenda, Terms and Conditions**PROPOSER AFFIDAVIT AND ASSURANCE OF COMPLIANCE**

I certify that I am the authorized representative of the Proposer submitting the foregoing Proposal with the legal authority to bind the Proposer to this Affidavit and Assurance of Compliance:

1. The Proposer is submitting this Proposal under its full and complete legal name, and the Proposer legally exists in good standing in the jurisdiction of its residence.
2. The Proposer warrants that the information provided in this Proposal is true, correct, and reliable for purposes of evaluation for contract award.
3. The Proposer, including any person assisting with the creation of this Proposal, has arrived at this Proposal independently and the Proposal has been created without colluding with any other person, company, or parties that have or will submit a proposal under this solicitation; and the Proposal has in all respects been created fairly without any fraud or dishonesty. The Proposer has not directly or indirectly entered into any agreement or arrangement with any person or business in an effort to influence any part of this solicitation or operations of a resulting contract; and the Proposer has not taken any action in restraint of free trade or competitiveness in connection with this solicitation. Additionally, if Proposer has worked with a consultant on the Proposal, the consultant (an individual or a company) has not assisted any other entity that has submitted or will submit a proposal for this solicitation.
4. To the best of its knowledge and belief, and except as otherwise disclosed in the Proposal, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest. An organizational conflict of interest exists when a vendor has an unfair competitive advantage or the vendor's objectivity in performing the contract is, or might be, impaired.
5. The contents of the Proposal have not been communicated by the Proposer or its employees or agents to any person not an employee or legally authorized agent of the Proposer and will not be communicated to any such persons prior to Due Date of this solicitation.
6. If awarded a contract, the Proposer will provide to Sourcewell Participating Entities the equipment, products, and services in accordance with the terms, conditions, and scope of a resulting contract.
7. The Proposer possesses, or will possess before delivering any equipment, products, or services, all applicable licenses or certifications necessary to deliver such equipment, products, or services under any resulting contract.
8. The Proposer agrees to deliver equipment, products, and services through valid contracts, purchase orders, or means that are acceptable to Sourcewell Members. Unless otherwise agreed to, the Proposer must provide only new and first-quality products and related services to Sourcewell Members under an awarded Contract.
9. The Proposer will comply with all applicable provisions of federal, state, and local laws, regulations, rules, and orders.
10. The Proposer understands that Sourcewell will reject RFP proposals that are marked "confidential" (or "nonpublic," etc.), either substantially or in their entirety. Under Minnesota Statutes Section 13.591, subdivision 4, all proposals are considered nonpublic data until the evaluation is complete and a Contract is awarded. At that point, proposals become public data. Minnesota Statutes Section 13.37 permits only certain narrowly defined data to be considered a "trade secret," and thus nonpublic data under Minnesota's Data Practices Act.
11. Proposer its employees, agents, and subcontractors are not:
 1. Included on the "Specially Designated Nationals and Blocked Persons" list maintained by the Office of Foreign Assets Control of the United States Department of the Treasury found at: <https://www.treasury.gov/ofac/downloads/sdnlist.pdf>;
 2. Included on the government-wide exclusions lists in the United States System for Award Management found at: <https://sam.gov/SAM/>; or
 3. Presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from programs operated by the State of Minnesota; the United States federal government or the Canadian government, as applicable; or any Participating Entity. Vendor certifies and warrants that neither it nor its principals have been convicted of a criminal offense related to the subject matter of this solicitation.

☒ By checking this box I acknowledge that I am bound by the terms of the Proposer's Affidavit, have the legal authority to submit this Proposal on behalf of the Proposer, and that this electronic acknowledgment has the same legal effect, validity, and enforceability as if I had hand signed the Proposal. This signature will not be denied such legal effect, validity, or enforceability solely because an electronic signature or electronic record was used in its formation. - David Panizzi, Business Development Manager, Vactor Manufacturing

The Proposer declares that there is an actual or potential Conflict of Interest relating to the preparation of its submission, and/or the Proposer foresees an actual or potential Conflict of Interest in performing the contractual obligations contemplated in the bid.

☒ Yes ☐ No

The Bidder acknowledges and agrees that the addendum/addenda below form part of the Bid Document.

Check the box in the column "I have reviewed this addendum" below to acknowledge each of the addenda.

File Name	I have reviewed the below addendum and attachments (if applicable)	Pages
Addendum_3_Sewer_Vac_Hydro-Excavation_Pumps_RFP_101221 Thu September 30 2021 03:29 PM	<input checked="" type="checkbox"/>	2
Addendum_2_Sewer_Vac_Hydro-Excavation_Pumps_RFP_101221 Fri September 10 2021 02:40 PM	<input checked="" type="checkbox"/>	2
Addendum_1_Sewer_Vac_Hydro-Excavation_Pumps_RFP_101221 Thu August 26 2021 05:40 PM	<input checked="" type="checkbox"/>	1

PROPOSAL SUMMARY

Prepared for:

Fulton County, GA

VACTOR®



Vactor Ramjet Sewer Cleaner

Single Engine Sewer Cleaner Mounted on a Heavy Duty Truck Chassis

Fulton County, GA
10/23/24

Vactor Sewer Cleaner

Environmental Products would like to thank you for the opportunity to present the **Vactor Ramjet Sewer Cleaner**.

Environmental Products Group is the sole provider of Vactor Sewer Cleaning Equipment in the State of Georgia, as well as many other leading industry product lines including: Elgin Street Sweepers, Labrie Refuse Equipment, Envirosight Inspection Cameras, PB Asphalt Pothole Patchers, Madvac Sweepers and Vacuums, Petersen Grapple Loaders, TRUVAC Hydroexcavation Equipment and a host of parts, tools and accessories for all your needs.

Environmental Products Group prides itself on our local parts, service, and training capabilities. With multiple full-service locations throughout Florida, Georgia, and Memphis, Tennessee; including Vactor, Elgin, and Envirosight repair centers, extensive parts inventory, factory-trained technicians, mobile parts and service, rentals, turnkey maintenance packages, leasing options, and much more... we are ready to service your every need.

EP Rents is a division of Environmental Products Group, EP Rents specializes in rental trucks when you need them. With a large inventory of Vactor Sewer Cleaners and Trailer Jetters, Elgin Sweeper, Envirosight Pipeline Inspection Cameras, Petersen Grapple Loaders. Call us for any of your rental needs.

Thank you for your consideration.

Product Description

- Vactor Ramjet Sewer Cleaner, 1500 Gallons of Water, Single Axle

Standard Features

- Rear Reel
- 80 GPM/2500 PSI Water Pump
- 1500 Gallons of Water
- Rodder Pump Drain Valves
- 2-1/2" x 25' Fill Hose w/ Connections Street Side and Curb Side
- 304 Stainless Steel Tank w/Baffle w/10 Yr Warranty
- Intuitouch Electronic Package
- 1" X 700' Capacity Rotating Hose Reel
- 1" x 10' Leader Hose w/ 1" Nozzle Pipe
- Hydrant Wrench
- Handgun Assembly
- Color Coded Sealed Electrical System
- Aluminum Rear Fenders w/ Mud Flaps and Anti-Sail Brackets
- Hydraulic Oil Sight Gauge
- Electric Back-Up Alarm
- Multi-Flow Water System
- Hydraulic Manifold Hose Reel Controls
- Low Water Alarm with Water Pump Flow Indicator
- Rodder System Accumulator - Jack Hammer on/off Control w/ manual valve
- 1" Water Relief Valve
- Side Mounted Jet Rodder Pump W/ 2 Year Warranty
- Road Side Hazard Kit
- Fire Extinguisher 5 Lbs.
- Digital Hose Footage Counter
- Hydraulic Tank Suction Shutoff Valves
- Tachometer / Chassis Engine w/ Hour Meter / Oil Pressure / Coolant Temperature / Hour Meter
- Hydraulic Oil Temp Alarm w/Indicator and Shutdown
- Circuit Breakers
- LED Lights, Clearance, Backup, Stop, Tail, & Turn
- Tow Hooks, Rear and Front
- Over Fender Tool Box- Passenger Side
- Over Fender Tool Tray- Driver Side
- 3" Y-Strainer Filter in Water Tank Fill w/ Cleanable Filter Accessable at Ground Level
- Flexible Hose Guide - Tigertail
- 3" Y-Strainer Filter in Jet Rodder Pump Suction w/ Cleanable Filter Accessable at Ground Level
- Digital Water Pressure Gauge

- Camera System, Rear Only (Back-Up)
- Vactor Manual, Partial Manual and USB Version - 1 + Dealer
- Delivery and Training

Additional Features

- Air Actuated Main Ball Valve
- Digital Water Level Indicator
- 600' x 1" Piranha Sewer Hose 2500 PSI
- Hose Wind Guide (Dual Roller), Auto, Non-Indexing
- Rodder Hose Pinch Roller
- High Pressure Spring Retract Hose Reel w/ Washdown Gun and Hose
- Rear Directional Control, LED Arrowstick
- Worklights (2), Rear, LED
- 6 Light Package, 6 Federal Signal Strobe Lights, LED
- Long Handle Tool Storage
- Safety Cone Storage Rack

Chassis

- Freightliner M2, 106
- Cummins L9 Engine
- Allison Auto Transmission
- 37,000 GVWR

***Sale Price per Sourcewell Contract# 101221-VTR= \$298,339.00**

***If Purchased before 12/31/2024**

****Sale Price per Sourcewell Contract# 101221-VTR= \$313,255.00**

****If Purchased after 12/31/2024**

Please don't hesitate to call with questions, or if you need any additional information. Thank you for your interest and the opportunity to earn your business.

Signature: _____

Date: _____

Sourcewell 
Awarded Contract

LIMITED WARRANTY

Limited Warranty. Each machine manufactured by VACTOR/GUZZLER MANUFACTURING (or, "the Company") is warranted against defects in material and workmanship for a period of 12 months, provided the machine is used in a normal and reasonable manner and in accordance with all operating instructions. In addition, certain machines and components of certain machines have extended warranties as set forth below. If sold to an end user, the applicable warranty period commences from the date of delivery to the end user. If used for rental purposes, the applicable warranty period commences from the date the machine is first made available for rental by the Company or its representative. This limited warranty may be enforced by any subsequent transferee during the warranty period. This limited warranty is the sole and exclusive warranty given by the Company.

STANDARD EXTENDED WARRANTIES (Total Warranty Duration)

<u>2100 Series, HXX, Series and Jetters</u>	10 years against metal water tank leakage due to corrosion. Nonmetallic water tanks are covered for 5 years against any factory defect in material or workmanship.
<u>2100 Series and HXX only</u>	5 years against leakage of debris tank, centrifugal compressor or housing due to rust-through.
<u>2100 Series and Jetters</u>	2 years - Vactor Rodder Pump on all unit serial numbers starting with 13-##V-####

Exclusive Remedy. Should any warranted product fail during the warranty period, the Company will cause to be repaired or replaced, as the Company may elect, any part or parts of such machine that the Company's examination discloses to be defective in material or factory workmanship. Repairs or replacements are to be made at the selling Vactor/Guzzler distributor's location or at other locations approved by the Company. In lieu of repair or replacement, the Company may elect, at its sole discretion, to refund the purchase price of any product deemed defective. The foregoing remedies shall be the sole and exclusive remedies of any party making a valid warranty claim.

This Limited Warranty shall not apply to (and the Company shall not be responsible for):

1. Major components or trade accessories that have a separate warranty from their original manufacturer, such as, but not limited to, trucks, engines, hydraulic pumps and motors, tires and batteries.
2. Normal adjustments and maintenance services.
3. Normal wear parts such as, but not limited to, oils, fluids, vacuum hose, light bulbs, fuses and gaskets.
4. Failures resulting from the machine being operated in a manner or for a purpose not recommended by the Company.
5. Repairs, modifications or alterations without the express written consent of the Company, which in the Company's sole judgment, have adversely affected the machine's stability, operation or reliability as originally designed and manufactured.
6. Items subject to misuse, negligence, accident or improper maintenance.

NOTE The use in the product of any part other than parts approved by the Company may invalidate this warranty. The Company reserves the right to determine, in its sole discretion, if the use of non-approved parts operates to invalidate the warranty. Nothing contained in this warranty shall make the Company liable for loss, injury, or damage of any kind to any person or entity resulting from any defect or failure in the machine.

THIS WARRANTY SHALL BE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE DISCLAIMED.

This warranty is in lieu of all other obligations or liabilities, contractual and otherwise, on the part of the Company. For the avoidance of doubt, the Company shall not be liable for any indirect, special, incidental or consequential damages, including, but not limited to, loss of use or lost profits. The Company makes no representation that the machine has the capacity to perform any functions other than as contained in the Company's written literature, catalogs or specifications accompanying delivery of the machine. No person or affiliated company representative is authorized to alter the terms of this warranty, to give any other warranties or to assume any other liability on behalf of the Company in connection with the sale, servicing or repair of any machine manufactured by the Company. Any legal action based hereon must be commenced within eighteen (18) months of the event or facts giving rise to such action.

The Company reserves the right to make design changes or improvements in its products without imposing any obligation upon itself to change or improve previously manufactured products.



VACTOR/GUZZLER MANUFACTURING
1621 S. Illinois Street
Streator, IL 61364

12-13-2012



COOPERATIVE PURCHASING JUSTIFICATION AND APPROVAL FORM

In accordance with Division 12 of the Fulton County Purchasing Code the Purchasing Agent may enter into an agreement with any public procurement unit for the cooperative use of supplies or services; and, may procure supplies, services or construction items through contracts established by purchasing division of the state where such contract and contractors substantially meet the requirements of the Purchasing Code. Please complete the form below to request that the Purchasing Director review the spending unit's request to engage in cooperative purchasing.

Requesting Department/Agency:

Department/Agency Contact Information:

Cooperative Contract Number and Title:

Estimated Contract Spend:

Contract Source (Identify the source of the cooperative contract by checking the appropriate box):

- | | |
|---|---|
| <input type="checkbox"/> Public Cooperative Entity (Ex: NASPO)
List cooperative entity: _____ | <input type="checkbox"/> State of Georgia Statewide Contracts
(Department of Administrative Services) |
| <input type="checkbox"/> Federal Government (Ex: GSA contract) | <input type="checkbox"/> Other Governmental Entity
(Ex: City of Atlanta)
List Government Entity: _____ |

Verification Requirements

In order to utilize the cooperative purchasing, statewide or GSA contract, the User Department/Agency must provide justification for the use of the cooperative purchase and why the particular cooperative contract is most advantageous to the County as it relates to price and other factors.

1. Provide justification for the use of the cooperative purchase.
2. Provide an explanation regarding the cost analysis conducted and why utilizing this contract is best value and advantageous to the County. This may include but is limited to:
 - a. Leveraging benefits of volume purchasing
 - b. Volume discounts
 - c. Service delivery requirement advantages
 - d. Document market research that was completed to determine use of cooperative purchase request.
3. Provide documentation verifying that the cooperative, statewide or GSA contract is current and awarded through a competitive process.
4. Provide a copy of the cost proposal/quote received.

TO BE COMPLETED BY THE DEPARTMENT OF PURCHASING REPRESENTATIVE:

DOES THE SOLICITATION MEET THE REQUIREMENTS	YES	NO
Reviewed the justification provided by the requesting department/agency and determined that the use of the cooperative purchase/statewide/GSA Contract is justified.	<input type="checkbox"/>	<input type="checkbox"/>
Reviewed the cost analysis provided and determined that the use of the cooperative purchase/statewide/GSA Contract is best value and/or advantageous to the County:	<input type="checkbox"/>	<input type="checkbox"/>
Reviewed the documentation provided and obtained a copy of the contract, solicitation documents, award letters, etc., to verify that the cooperative, statewide or GSA contract is current and was awarded through a competitive process.	<input type="checkbox"/>	<input type="checkbox"/>
The use of the contract meets the needs of the requesting department/agency.	<input type="checkbox"/>	<input type="checkbox"/>
The proposed contracting entity is authorized to conduct business in the State of Georgia.	<input type="checkbox"/>	<input type="checkbox"/>
If applicable, the contracting entity must comply with the Georgia Security and Immigration Act (E-Verify). A copy of the Georgia Immigration and Security Contractor Affidavit is obtained from the contracting entity.	<input type="checkbox"/>	<input type="checkbox"/>
If federal funded, documented that the contracting entity is not on the Excluded Parties List System (EPLS) that identifies those parties debarred, suspended, proposed for debarment, excluded or disqualified under the non-procurement rule, or otherwise declared ineligible from receiving federal contracts, certain subcontracts, and certain federal assistance and benefits.	<input type="checkbox"/>	<input type="checkbox"/>
Obtain Certificate Insurance requirements based on the coverage and limits included in the cooperative purchase/statewide/GSA contract. The County must be the Certificate Holder, Add'l Insured and Subrogation boxes should be marked.	<input type="checkbox"/>	<input type="checkbox"/>

Purchasing Representative Recommendation:

I have reviewed the items on the above checklist for this solicitation and the request

☐ meets the requirements ☐ does not meet the requirements

(Ensure that backup documentation has been scanned/saved into folder for this request)

(CAPA/APA) Purchasing Agent _____ Date_____

Chief Purchasing Agent _____ Date_____



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0165

Meeting Date: 3/5/2025

Department

Public Works

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Request approval and adoption of the North Fulton Water Distribution Masterplan.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

This item is presented for outlining the future Capital Improvement needs of the Public Works Department. Complying with the Georgia Rules for Safe Drinking Water, promulgated under the Clean Water Act.

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Health and Human Services

Commission Districts Affected

- All Districts ☐
- District 1 ☒
- District 2 ☒
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background *(First sentence includes Agency recommendation. Provide an executive summary of the action that gives an overview of the relevant details for the item.)*

In the fall of 2023, Public Works, with the assistance from the consulting firm Jacobs Engineering, undertook a 25-year study to assess the current water distribution infrastructure in the area served by Fulton County Public Works in the North Fulton area. The study included participation of the North Fulton cities served by the water distribution system including Alpharetta, Johns Creek, Milton, and Roswell.

Public Works and Jacobs Engineering staff met with each city to review their current development and comprehensive plans to better understand the types and densities of new and redevelopment each city is anticipating over the next twenty-five years. These development plants, as well as population projections from the Atlanta Regional Commission, were used to develop water distribution needs for 2025, 2025 - 2030, 2030 -

2035, 2035 - 2040, 2040 - 2050 planning years.

Scope of Work:

The Master Plan finds that average day water demands in the North Fulton Distribution are projected to increase by 9.1 MGD from 26.8 MGD in 2024 to 36 MGD in 2050. This results in an increase of maximum day demand from 40.2 MGD to 54 MGD over the same period. The study identified 46 unique projects to be implemented over the 5 planning phases with a planning level estimated cost of \$278.7 million. Major projects include:

- completing the major transmission main to more efficiently carry water to the northwestern portion of the County;
- connecting large pipes and small pipes within close proximity to boost system pressures;
- implementing 6 low pressure zones in current high pressure areas to reduce background water leakage and meter failures;
- adding water tank storage to existing tank sites and adding mixers to existing tank sites; and
- constructing several booster pump stations for both average daily demand and emergency demand needs.

The study showed that the average day demand in 2050 of 36 MGD does not exceed Fulton County's current allowed use of 45 MGD at the Atlanta-Fulton County Tom Lowe Water Treatment Plant so expansion of the water treatment plant is not recommended at this time..

Community Impact: The continued improvement of the water distribution system and associated infrastructure is necessary to ensure that future growth can be accommodated.

Department Recommendation: The Public Works Department recommends approval of this item.

Project Implications: Without an updated and improved water distribution system, growth will be limited in the North Fulton Water Distribution System. Master plans and their regular updates are also now required by the Metro North Georgia Water Planning District every 5 years. This plan outlines the expected investment required to keep pace with the expected development and associated levels of service.

Community Issues/Concerns: The findings of the Master Plan were presented to all of the impacted City's Community Development and relevant Public Works staff during the month of January. All the city's staff provided support for the plan and necessary improvements to support their growth with emphasis on coordination between the cities and the County over new water storage tanks as well as possible traffic impacts of major projects like the transmission main.

Department Issues/Concerns: Public Works staff supports the improvements outlined in this study.

Fiscal Impact / Funding Source**Funding Line 1:**

n/a

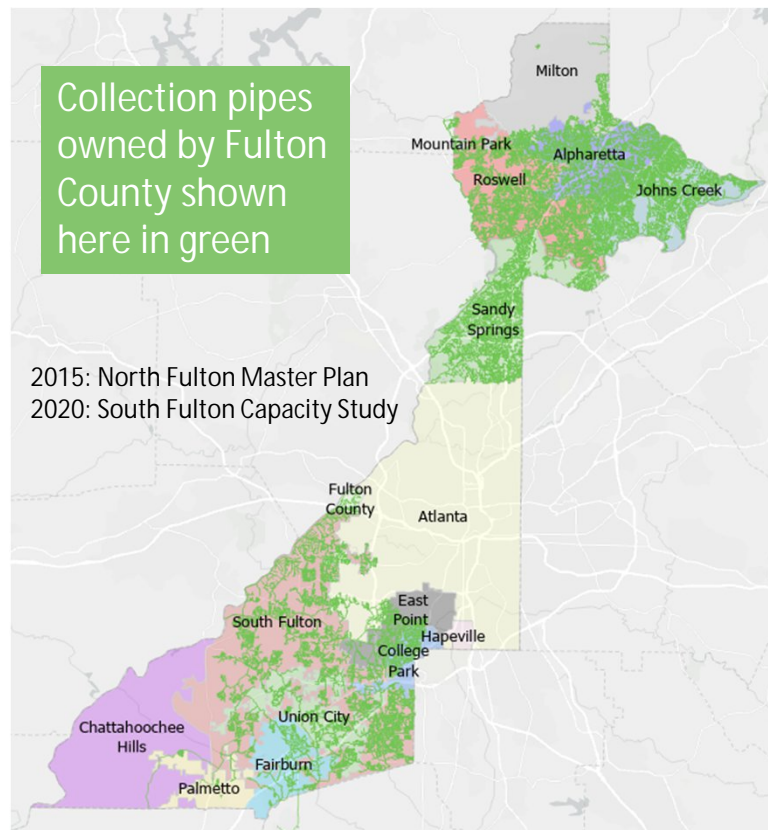


Fulton County Water Distribution System Master Plan

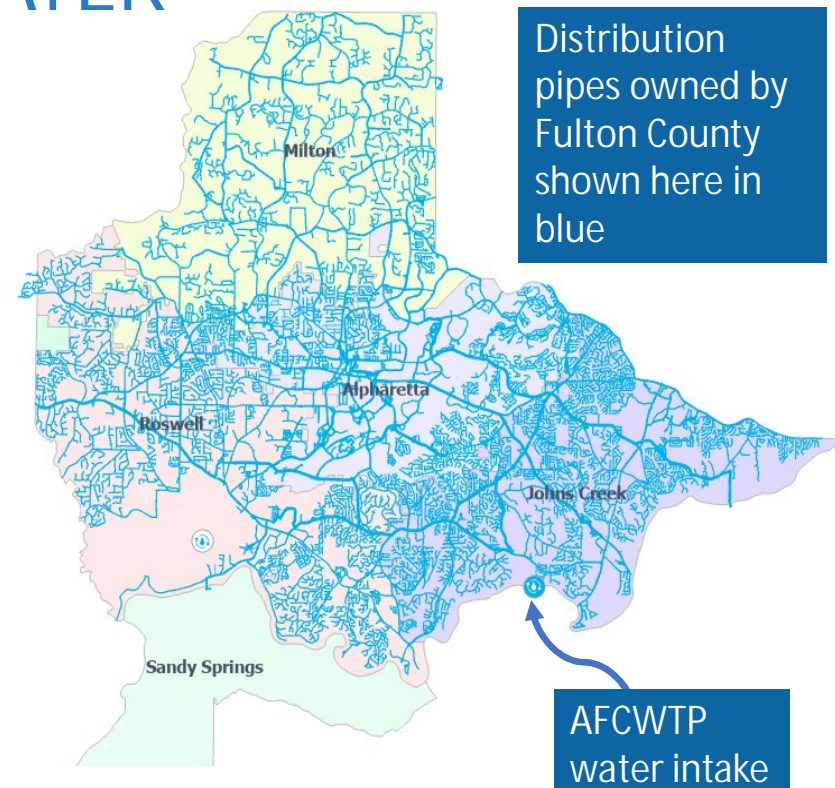
2025 - 2050

Fulton County Public Works Service Areas

SEWER



WATER



North Fulton Water Distribution System



POPULATION
284,862

2020 US Census



CONNECTIONS
79,915

December 2024



2024 WATER DEMAND
average 26.8 MGD
max* 46.9 MGD

* July 3, 2024



PRESSURES (PSI)
98.1 average 185 max
15 min

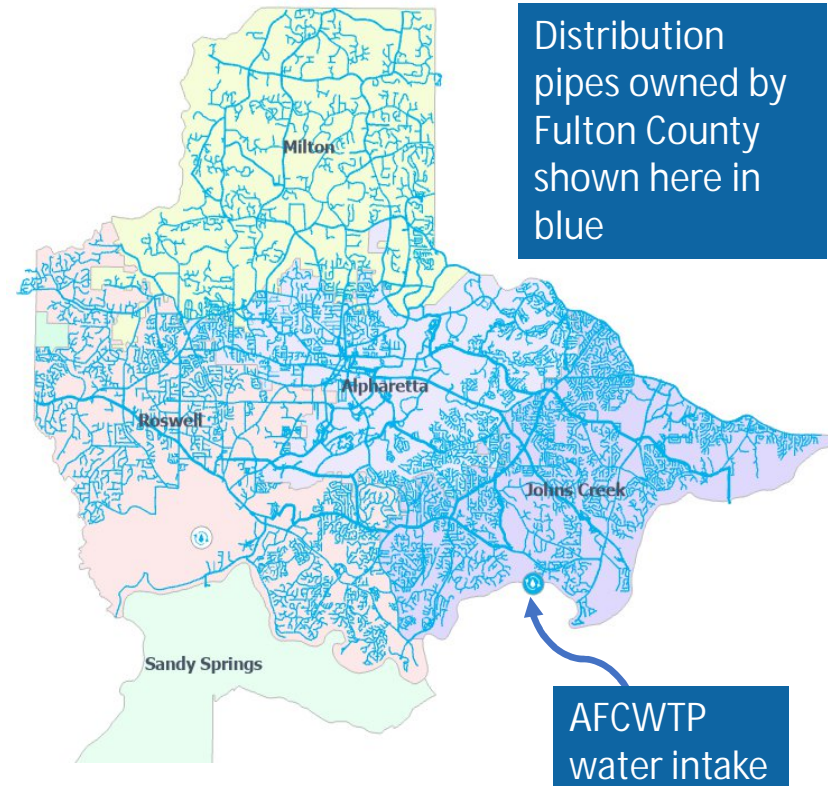


STORAGE
16.7 + 11.8
million gallons

distribution system + plant clearwells



MILES OF PIPE
1,204.6



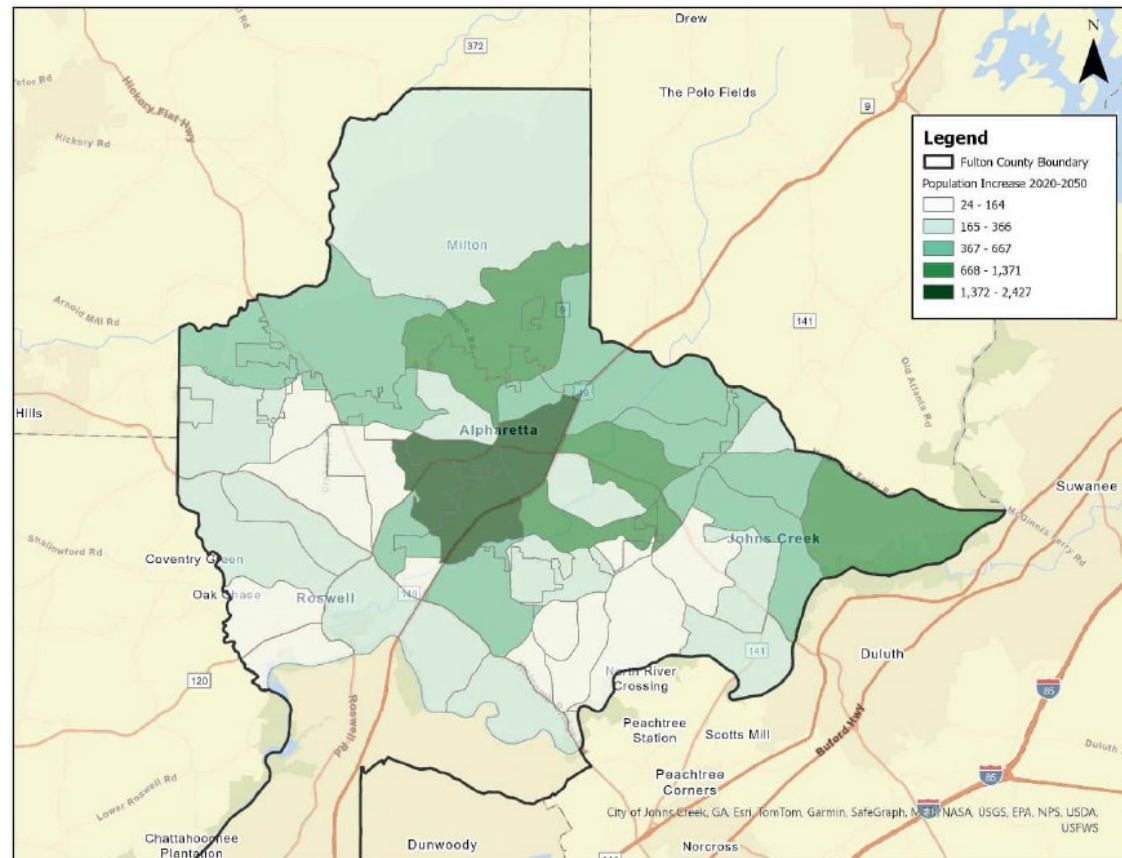
Distribution
pipes owned by
Fulton County
shown here in
blue

AFCWTP
water intake

What is included in the Master Plan?

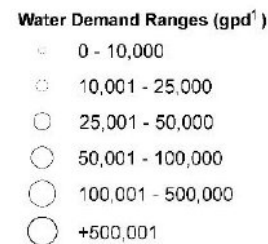
Figure 2-1. ARC Series 17 Projected Population Increase 2020 to 2050

- Population projections and estimated demands in coordination with cities
- Level of service requirements around pressures, fire flows, and water age
- Capacity and pressure maintenance evaluations
- Water loss program evaluation
- Storage requirement evaluation
- Pressure zone evaluation
- Interconnection evaluation
- Capital project lists

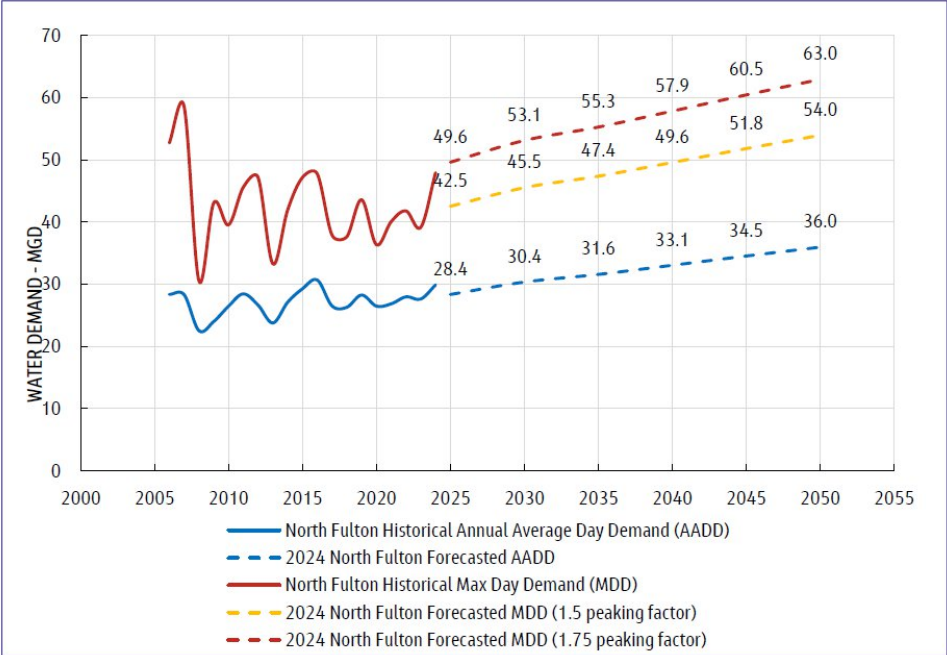
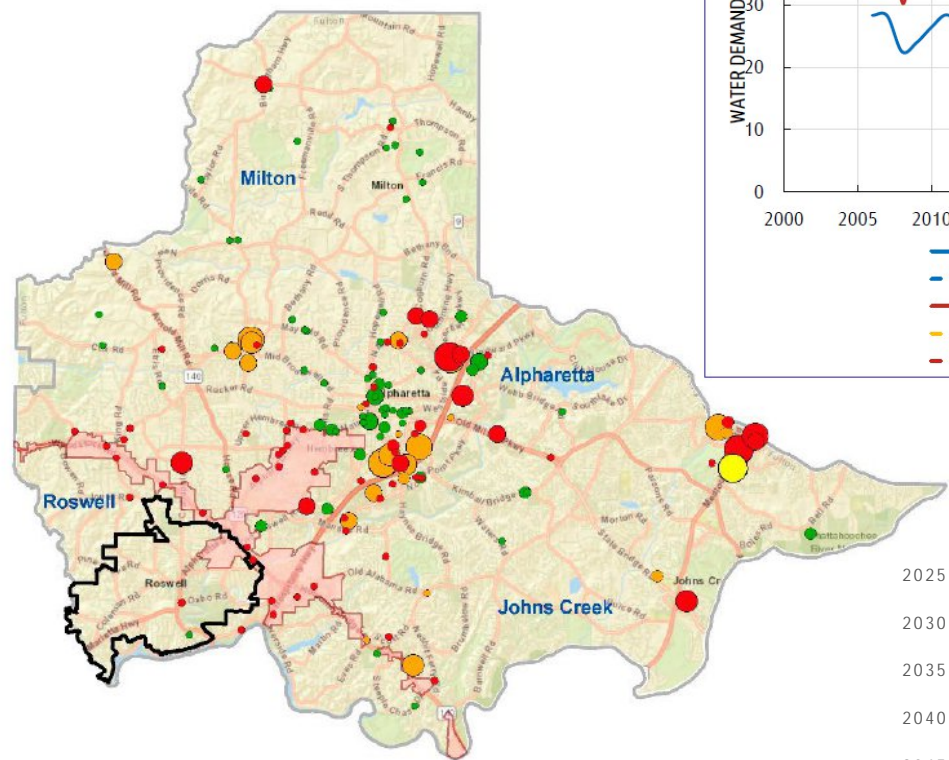


How are we growing?

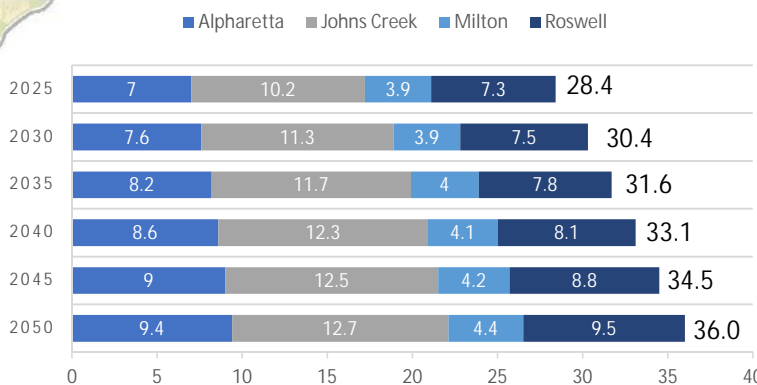
Figure 2-3. Future Growth Areas for North Fulton



NOTE:
1 - gallons per day (gpd)



DEMAND BY CITY



Today's Level of Service

- We are meeting minimum or better level of service requirements for the vast majority of our system
- We have a few areas where during high demand periods (summer, low rainfall) we are not meeting level of service
- Tanks fill/drain as expected and can meet demand

Figure 4-3. Existing System MDD – Tank Levels

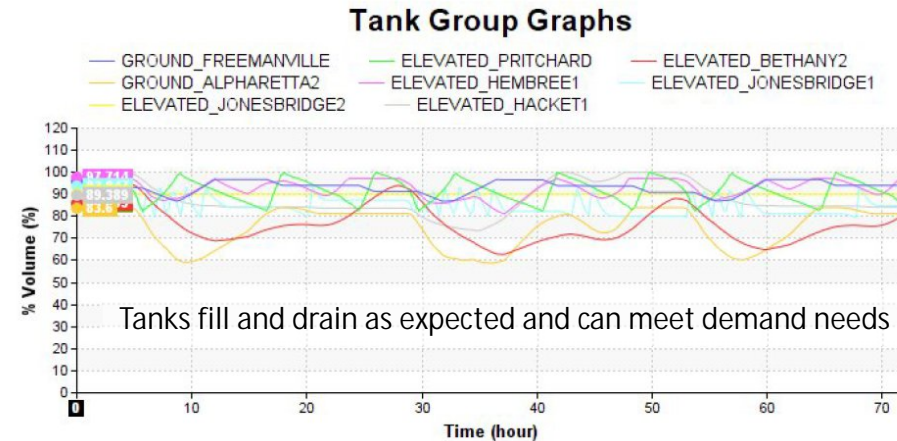
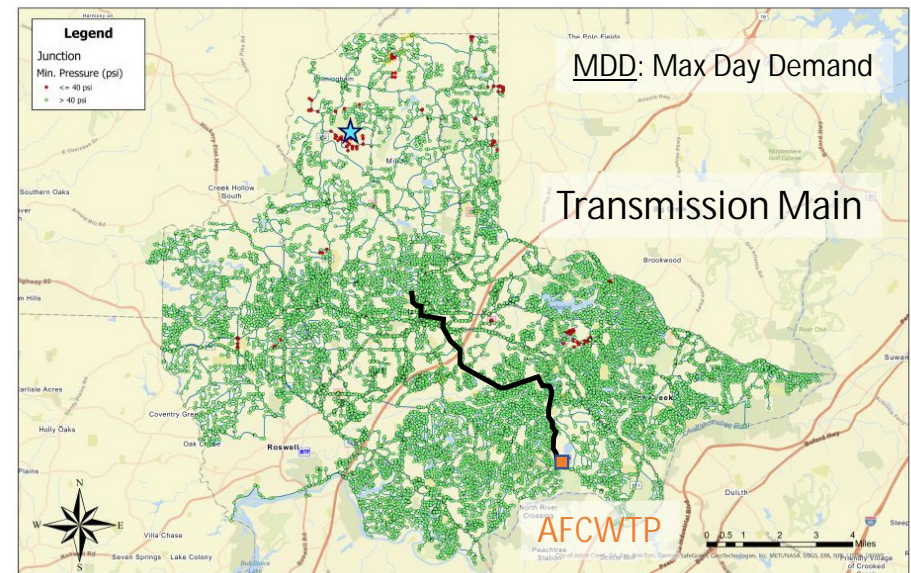


Figure 4-2. Existing System MDD – Minimum Pressure < 40 psi (with unknown user node shown)



Do Nothing Scenario

- We will not meet our minimum service requirements for larger portion of our system
- Our tanks cannot accommodate demand requirements and drain out to zero under max day conditions

Figure 4-12. 2050 MDD – Tank Levels

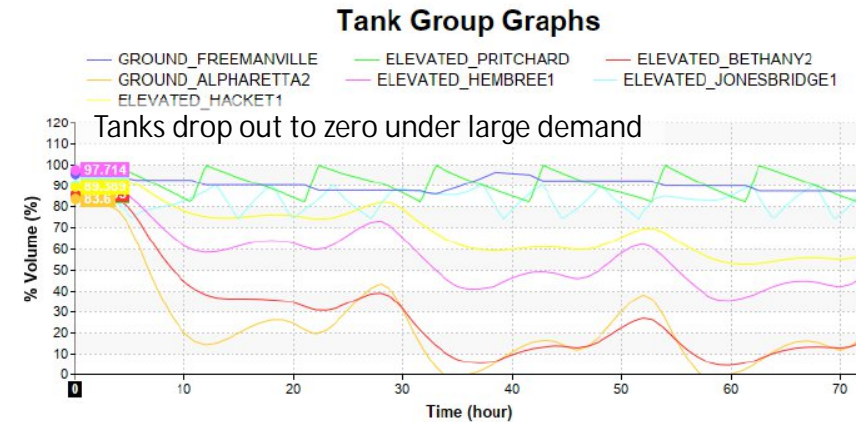
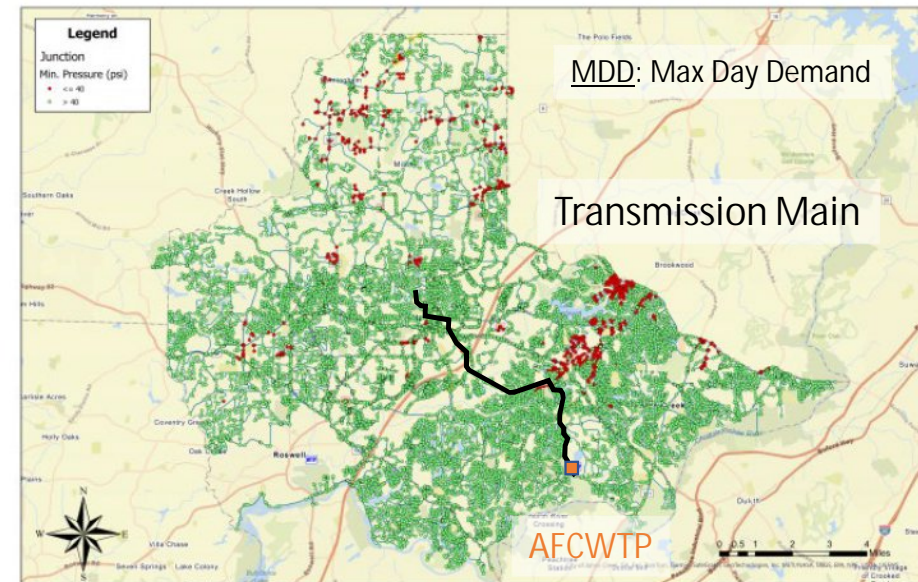
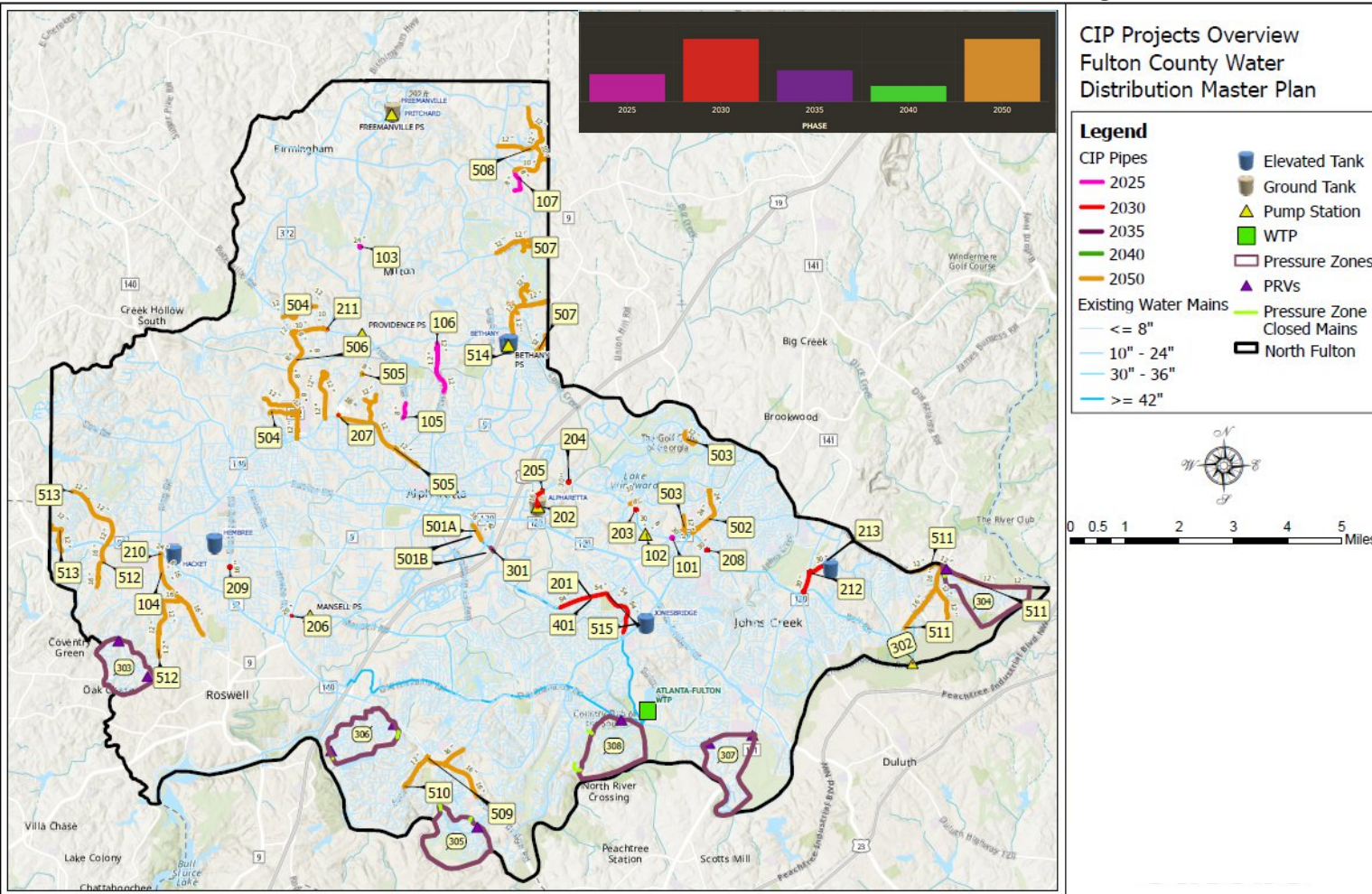


Figure 4-11. 2050 MDD – Minimum Pressure < 40 psi



Capital Improvement Projects 2025 - 2050



46 projects

6 Transmission Main
2.29 miles

34 Distribution Main
32.82 miles

6 Storage/Capacity

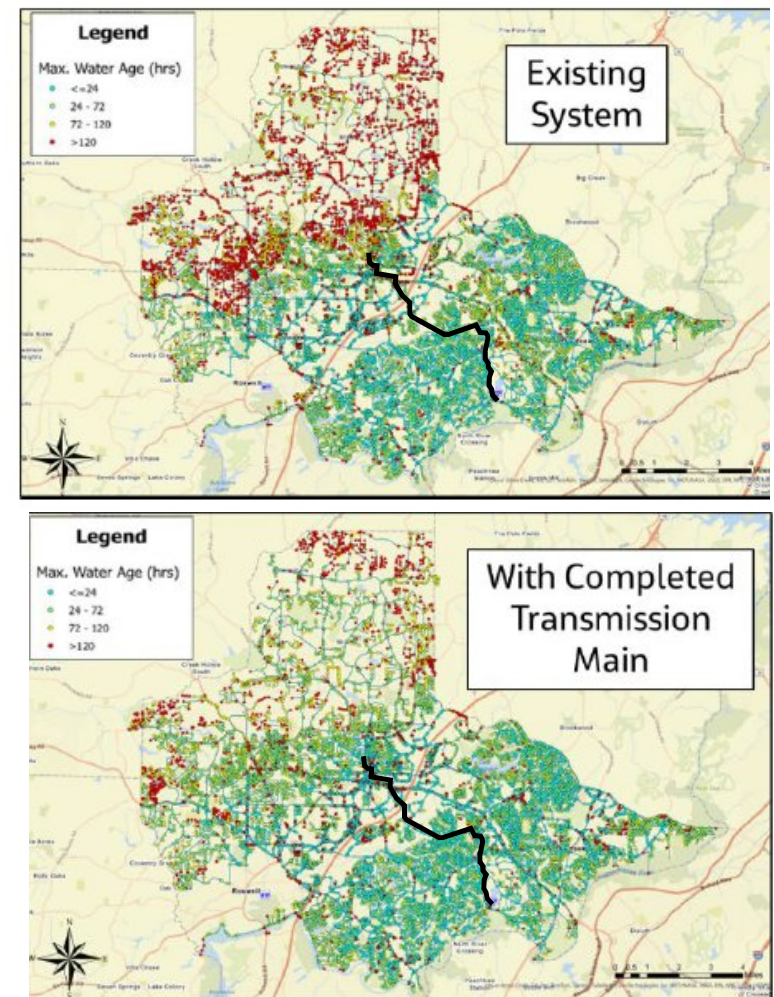
\$278,712,500
estimated cost

5
phases

Major Goal: Completing the Transmission Main

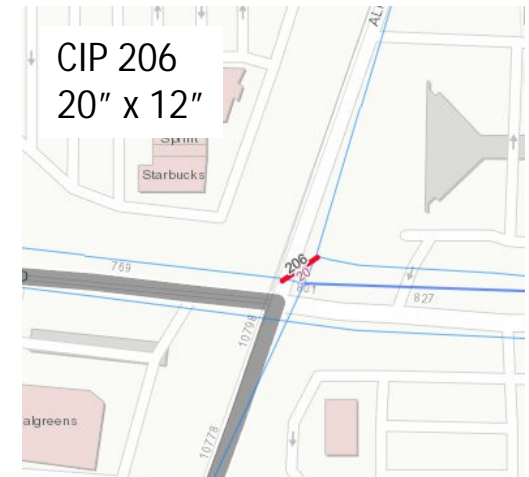
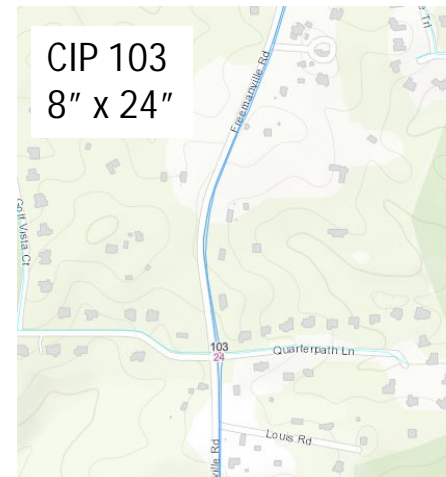
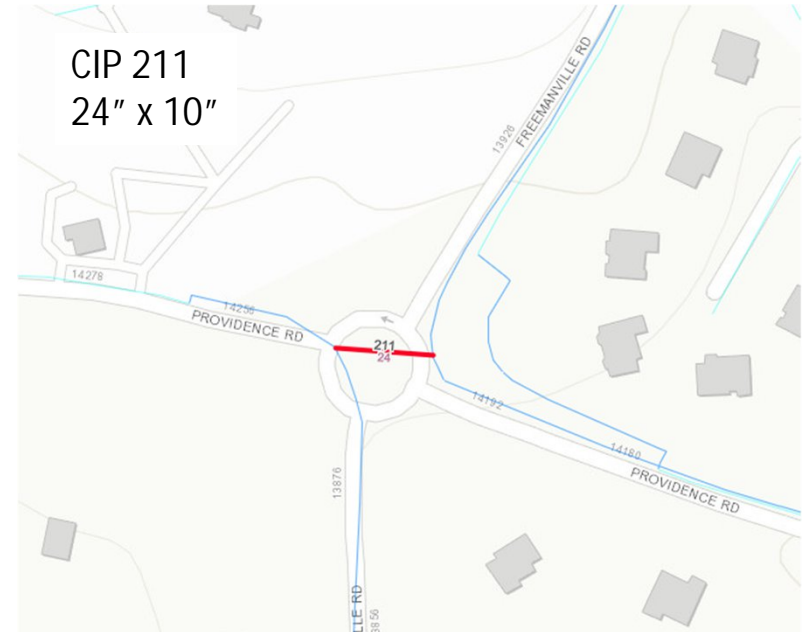
- Previous sections installed piecemeal in coordination with transportation projects
- New projects will be stand-alone as necessary to complete the transmission main according to proposed phases
- **Best solution to reduce deliver water more efficiently to the northwest portion of the distribution system**
- Total of Transmission Main Projects:
 - \$39,425,000
- Projects scheduled for Phase 2030, 2035, and 2050

Figure 6-1. Transmission Main Water Age Improvements



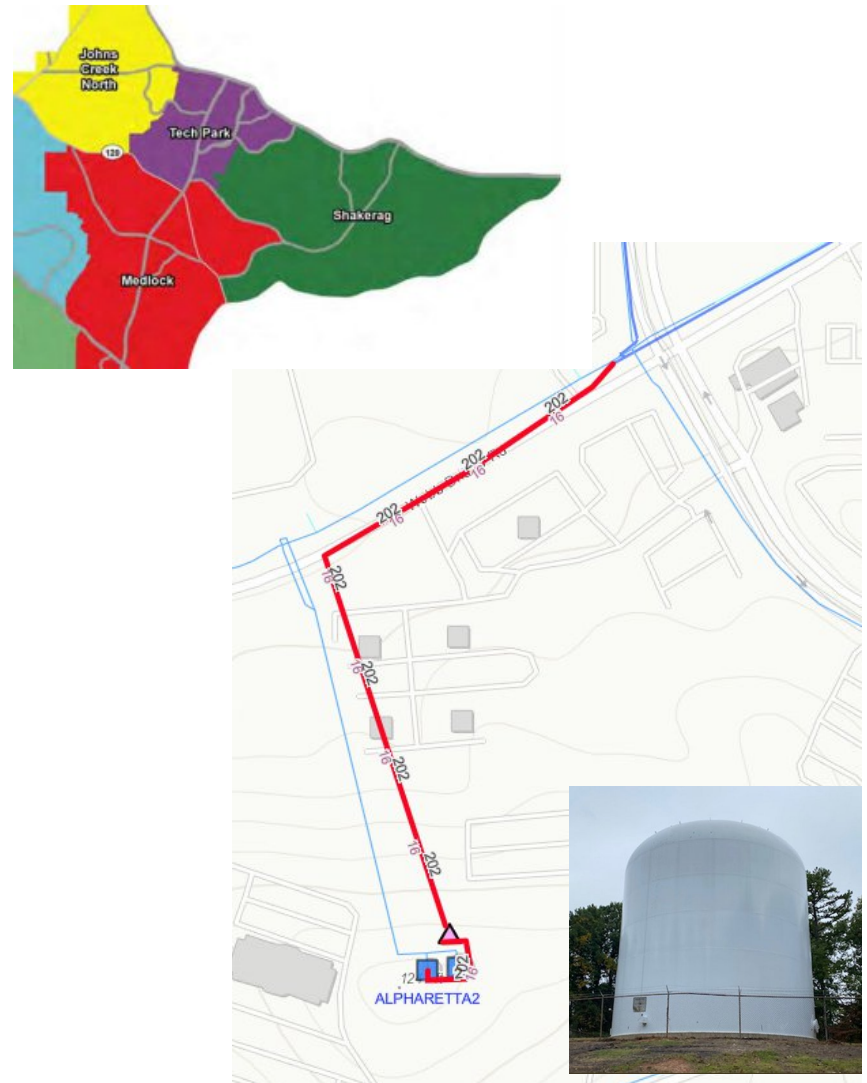
Major Goal: Connecting Distribution Lines

- Considered “low hanging fruit”
- Locations where a larger pipe crosses or is very near a smaller pipe
- Connecting these two pipes can boost pressures on the smaller line
- Total of Crossing Pipe Projects:
 - \$1,615,500 (11 projects)
- Projects scheduled for Phase 2025 and 2030
 - Phase 2025 crossing pipe projects completed in 2024



Major Goal: Storage and Capacity

- Tanks
 - Additional storage to supply Technology Park area of Johns Creek
 - Additional storage at existing Bethany and Jones Bridge tank sites (4 MG total)
- Pump Stations
 - Alpharetta Tank will need a booster pump to drain out due to surrounding pressure improvements
 - Suggested to add in line booster station to local high point near Webb Bridge Park
 - Booster pump station required to make emergency interconnection with Gwinnett County functional to supply Fulton



Requests and Future Actions

TODAY



Requesting Board of Commissioners to adopt and approve the Water Master Plan as presented

NEXT STEPS



Post Water Master Plan to Fulton County public website



Complete and present rate study for Board of Commissioners approval and adoption



Fulton County Valves and Fire Hydrants Assessment and Exercise Program

Valve Inspection and Exercise Program

Benefits

Ensures the reliable and continuous operation of the water distribution system

Enables isolating small sections of the system during emergencies and main breaks

Minimizes service disruptions

Maintains water quality

Two primary components



VALVE LOCATION

Creating an accurate inventory of valves and their locations on water distribution mains



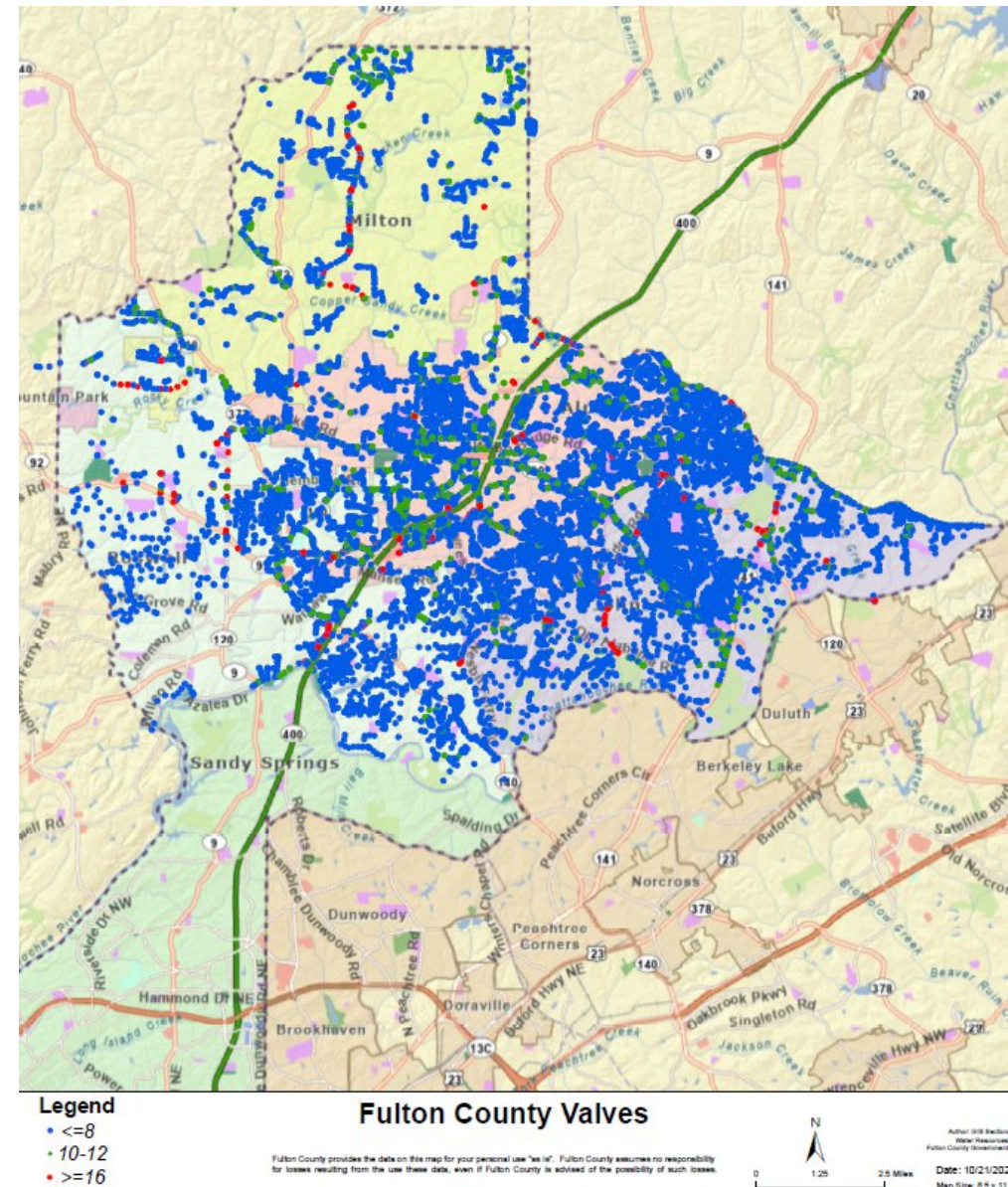
VALVE OPERABILITY

Ensuring located valves are
1) accessible
2) able to open and close



Valves and Fire Hydrant Inventory

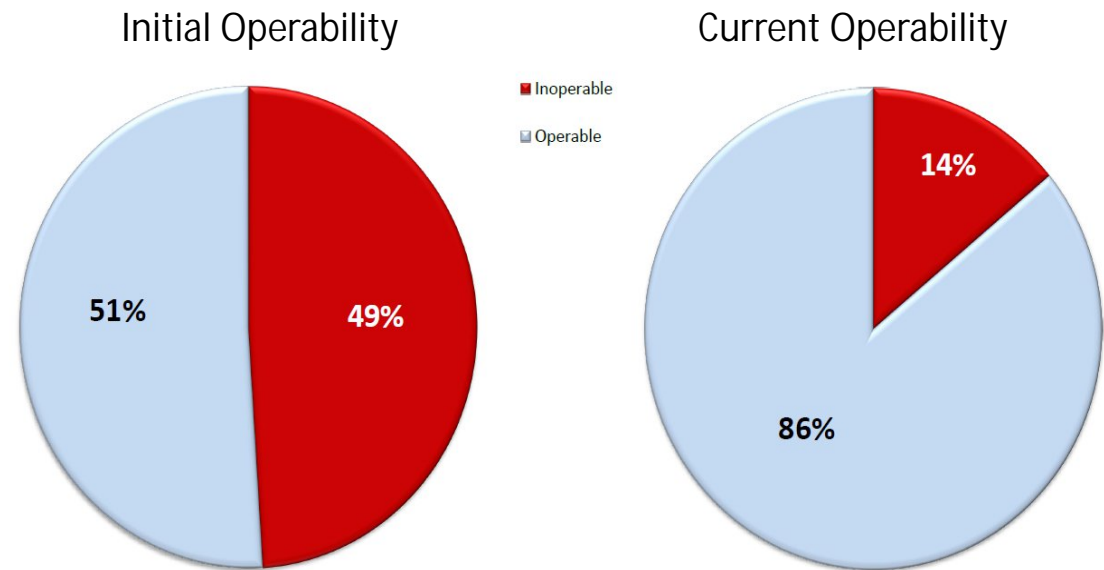
- 25,699 valves of various sizes
 - 442 - 16" or greater (Large)
 - 25,257 - less than 16" (Small)
- 13,927 fire hydrants
- Program Goal:
 - Large valves exercised every year
 - Small valves exercised every 5 years



Valves and FH Exercised as 2024

Valves Operability Progress

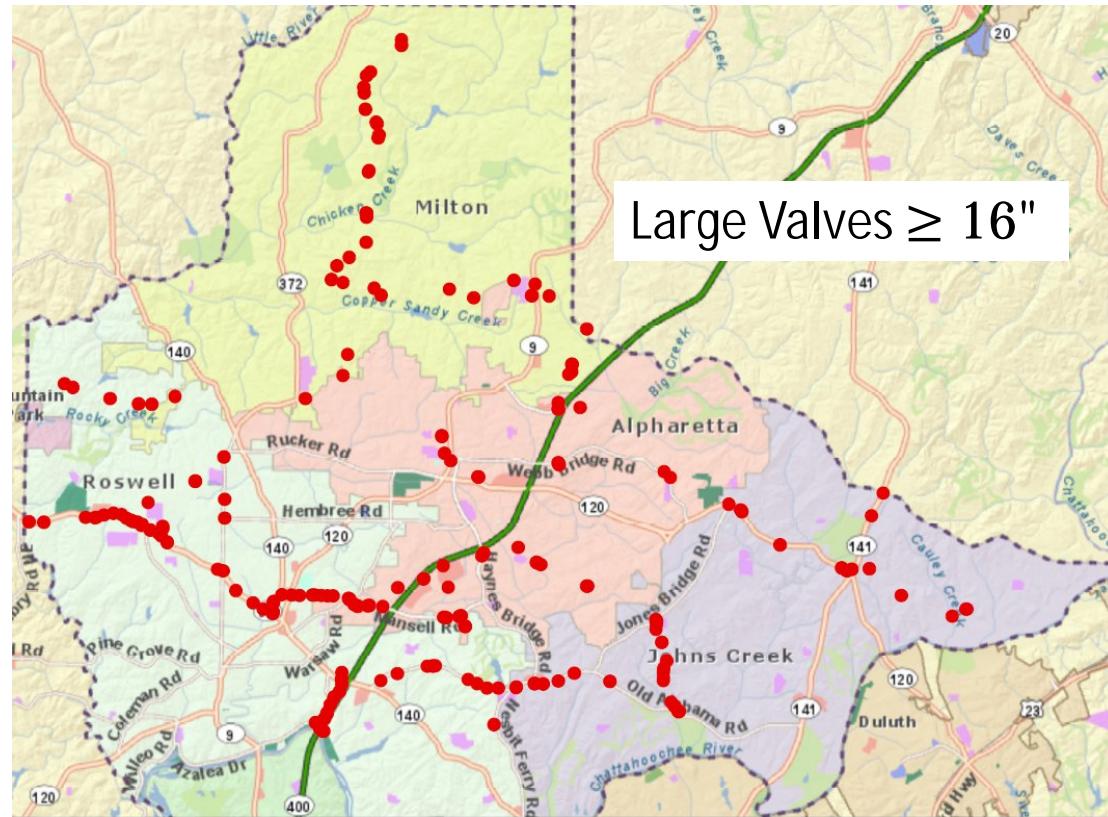
- 17,991 valves exercised (70%)



VALVE OPERABILITY: ensuring valves are accessible as well as able to open and close

Next Steps – Valve Assessment Program

- Complete the remaining 7,708 valves and 5,380 FH assessments
- 3-year period (33% each year)
- Priority given to large valves
- Implement an In-House Exercising Program



Questions?

Fulton County Water Distribution System Master Plan

Document No.: 241012173454_228f57f8
Revision: 02

Fulton County Public Works Department
Georgia



November 2024

Fulton County Water Distribution System Master Plan

Client Name: Fulton County Public Works Department
Georgia

Project Name: Water Distribution System Master Plan

Document No.: 241012173454_228f57f8 **Project No.:** EEXK6102

Revision: 02 **Project Manager:** Brian Skeens

Date: November 2024 **Prepared by:** Jacobs

Document History and Status

Revision	Date	Description	Author	Checked	Reviewed	Approved
01	10/25/24	Draft Master Plan	Brian Skeens		Jennifer Henke	
02	11/25/24	Final Master Plan	Brian Skeens			

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Executive Summary

This Master Plan for the North Fulton County, Georgia, water distribution system outlines capital improvements needed to maintain service levels for Alpharetta, Johns Creek, Milton, and Roswell through 2050. These improvements include water main extensions, pump stations, storage tanks, and new pressure zones and are phased starting with immediate recommendations, 2030, 2035, 2040, and 2050.

To understand the expected growth and developments through 2050, a series of meetings was held with each city served by the North Fulton water distribution system. During these meetings, the community development and planning departments provided information on current and planned projects. Additionally, population projections from the Atlanta Regional Commission were used to provide growth information by census tract for Fulton County through 2050. A water demand forecast was then developed for each city.

The combined water demand projections indicate an expected increase of approximately 9.1 million gallons per day (MGD) by 2050. Table ES-1 presents historical data and the proposed forecast for North Fulton. This report includes both the 1.5 peaking factor (the historical average since 2007) and the 1.75 peaking factor (a recent maximum experienced on July 3, 2024) to illustrate the range of peak demands experienced by the North Fulton system.

Table ES-1. Historical and Proposed Future Annual Average and Maximum Day Water Demand for North Fulton

Year	Historical Water Demand ^a (AADD-MGD)	2024 Water Demand Forecast ^{b,c} (AADD-MGD)	2024 Water Demand Forecast ^d (MDD-MGD)	2024 Water Demand Forecast ^e (MDD-MGD)
2010	26.44	NA	NA	NA
2017	21.8	NA	NA	NA
2018	26.3	NA	NA	NA
2019 ^f	28.2	NA	NA	NA
2020	26.2	NA	NA	NA
2021 ^g	26.8	NA	NA	NA
2025	NA	28.4	42.5	49.6
2030	NA	30.4	45.5	53.1
2035	NA	31.6	47.4	55.3
2040	NA	33.1	49.6	57.9
2045	NA	34.5	51.8	60.5
2050	NA	36.0	54.0	63.0

^a Historical water demand calculated using billing records and water supplied data.

^b Future water demand includes 10 percent non-revenue water.

^c Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 to 2050.

^d Calculated using a peaking factor (peak day factor) of 1.5 based on the historical average.

^e Calculated using a peaking factor (peak day factor) of 1.75 based on highest demand of 47.9 MGD registered on July 3, 2024.

Fulton County Water Distribution System Master Plan

^f Water demand data for the year 2019 reflect an anomalous higher rate of water consumption that may be attributable to the lower precipitation levels experienced during that year.

^g Billing- and water-supplied data for 2021 were used as the baseline for the 2024 demand forecast.

AADD-MGD = annual average daily demand in million gallons per day

MDD-MGD = maximum day demand in million gallons per day

NA = Not Available

The hydraulic model used in this Master Plan was rebuilt and calibrated for Fulton County by Stantec in 2022 and 2023. Jacobs was asked to evaluate and validate the calibrated water distribution model for use in future system capacity planning as part of this Master Plan project. Jacobs reviewed the calibrated model, and the calibration reports provided with the hydraulic model. The evaluation found discrepancies between the pump station flow rates and suction/discharge pressures in the model results compared to SCADA data. These discrepancies are suspected to be due to pump curve issues in the model. To address these concerns, Jacobs made several adjustments, including modifying the pump curves, updating the model controls, accounting for an unknown large water user and a known closed valve, and other adjustments. These changes appear to have significantly reduced or eliminated the previous concerns with the model. The pump station suction/discharge pressures, pump flow rates, and tank levels in the revised model more closely align with SCADA data than the observations in the previous calibration report. These changes significantly improve the confidence level in the model performance for use in this Master Plan.

To evaluate improvements in the water distribution system, a standard for customer service levels and hydraulic performance must be established. Primarily, this consists of minimum pressures and available fire flow, but it also includes industry best practice for potable water service. The County's operational Level of Service for minimum pressure is 35 psi; however, for the modeling in this Master Plan, a minimum pressure of 40 psi was used. This provides a buffer to account for potential uncertainties and adds a "factor of safety" to the recommendations related to minimum pressure. The minimum pressure criteria is 40 pounds per square inch (psi) under maximum day demand conditions. The minimum fire flow is 1,500 gallons per minute (gpm) for residential and 3,000 gpm for commercial on the average hour under maximum day conditions, while maintaining 20 psi pressure. Using these Level of Service criteria, the hydraulic model is run to identify areas where the system does not meet these standards. Both under existing water demands and future demands. Once these system deficiencies are identified, projects are identified for the Fulton County Capital Improvement Plan (CIP).

Jacobs conducted additional analyses that were included in the final CIP. These included a system storage analysis, a pressure zone analysis, water loss control review, interconnections analysis, and a valve criticality analysis, summarized as follows:

Storage Analysis – Based on a robust evaluation of system storage considering requirements for equalization, fire protection, and emergency storage, Fulton County has a 2050 storage deficit of 6.7 million gallons (MG), excluding the clearwells at the Tom Lowe Water Treatment Plant.

Pressure Zone Analysis – The objective was to identify areas where zones could be created to lower the pressure in areas with lower ground elevation, providing multiple benefits to the system: stabilizing pressure through pressure-reducing valves, reducing background leakage, and lowering pipe stress and risk of failure in these areas. Six pressure zones were recommended to be implemented.

Water Loss Control Review – Involved a review of water loss trends and analysis of real loss components. The analysis showed a large portion of the existing real loss is background leakage, so only a small annual investment in leak detection is recommended. For apparent losses, a customer meter testing program is recommended, to meet the Metro North Georgia Water Planning District requirement, and to address the high annual cost of apparent losses, which is trending up.

Interconnections Analysis – Findings showed Fulton County could only get water from Forsyth County in an emergency without investing in additional infrastructure to raise the pressure. However, there are potential for significant amounts of emergency water supply from Gwinnett, Cobb, and Cherokee Counties and the City of Atlanta with the use of a booster pump station at the interconnection points.

The hydraulic model was used to develop projects to address the deficiencies such as low pressure, fire flow availability, customer demands, and operational efficiency. Based on the timing of the growth in demand, the projects are phased by current year recommendations, 2030, 2035, 2040, and 2050.

- Current phase: 8,708 feet of water main, \$6,813,000
- 2030 phase: 16,906 feet of water main, 2 pump stations, and 1 storage tank, \$72,261,000
- 2035 phase, 500 feet of water main and the creation of 6 new pressure zones, \$24,288,000
- 2040 phase: 9,838 feet of water main (optional deferral from the 2030 phase), \$30,842,000
- 2050 phase: 163,809 feet of water main (including one project listed twice with different sizes due to peaking factor) and 2 storage tanks, \$181,709,000

Table ES-2 lists the capital improvements by phase for the years 2025 through 2050.

Table ES-2. Capital Improvement Plan Project Descriptions

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (inches)	Planning-Level Cost Estimate (\$) ^b	Length (feet)
101 ^{a†}	2025	Low Pressure	Crossing Pipe Connection at Kimball Bridge Road/Webb Bridge Road	Water Main	Both	-	30"	\$102,000	4
102 [†]	2025	Low Pressure	Crossing Pipe Connection at Webb Bridge Road/Maid Marion Close	Water Main	Both	-	30"	\$195,000	7
103 ^{a†}	2025	Low Pressure	Crossing Pipe Connection at Freemanville Road/Quarterpath Lane	Water Main	Both	-	24"	\$101,000	22
104	2025	Low Pressure	Woodstock Road Extension	Water Main	Both	-	8"	\$128,000	40
105 [†]	2025	Low Pressure/ Fire Flow	Providence Road Extension	Water Main	Both	-	8"	\$741,000	956
106 [†]	2025	Low Pressure/ Fire Flow	Hopewell Road Parallel Line	Water Main	Both	1	12"	\$3,936,000	5,096
107	2025	Low Pressure/ Fire Flow	Hamby Road Extension	Water Main	Both	2	8"	\$1,610,000	2,583
201-A [†]	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Buice Road (Phase A)	Transmission Main	1.75	Yes	54"	\$8,812,000	2,816
201-B [†]	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Buice Road (Phase B)	Transmission Main	1.75	Yes	54"	\$6,111,000	1,960
201-C [†]	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase C)	Transmission Main	1.75	Yes	54"	\$7,269,000	2,309
201-D [†]	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase D)	Transmission Main	1.75	Yes	54"	\$8,650,000	2,753

Fulton County Water Distribution System Master Plan

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (inches)	Planning-Level Cost Estimate (\$) ^b	Length (feet)
202	2030	Alpharetta Tank	Alpharetta Tank Pump Station (75 HP pumps)	Pump Station	Both	1	16"	\$12,380,000	2,014
203	2030	Low Pressure (Maid Marion)	Maid Marion In-line Booster Station and High Pressure Zone (5 HP pumps)	Pump Station	Both	3	8"	\$4,898,000	267
204	2030	Low Pressure	Crossing Pipe Connection at Webb Bridge Road/Strath Drive	Water Main	Both	-	30"	\$143,000	4
205	2030	Low Pressure	Crossing Pipe Connection at Webb Bridge Road/N Point Pkwy	Water Main	Both	-	30"	\$150,000	11
206	2030	Low Pressure	Crossing Pipe Connection at Mansell Road/ Alpharetta Hwy	Water Main	Both	-	20"	\$193,000	52
207	2030	Low Pressure	Crossing Pipe Connection at Bethany Road just north of Mayfield Road	Water Main	Both	-	16"	\$144,000	9
208	2030	Low Pressure	Crossing Pipe Connection at Abbotts Bridge Road/Abbotts Way	Water Main	Both	-	30"	\$159,000	19
209	2030	Low Pressure	Crossing Pipe Connection at Crabapple Road just north of Strickland Road	Water Main	Both	-	16"	\$151,000	24
210	2030	Low Pressure	Crossing Pipe Connection at W Crossville Road/Woodstock Road	Water Main	Both	-	24"	\$203,000	60
211	2030	Low Pressure	Crossing Pipe Connection at Providence Road/Freemanville Road	Water Main	Both	-	24"	\$278,000	127
212	2030	Low Pressure/ALCO N customer	Medlock Bridge Road/Johns Creek Pkwy Parallel Line	Water Main	Both	2	30"	\$7,120,000	4,481

Fulton County Water Distribution System Master Plan

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (inches)	Planning-Level Cost Estimate (\$) ^b	Length (feet)
213	2030	Emergency Storage/ALCON	New 3 MG Elevated Storage Tank at ALCON	Tank	Both	4	N/A	\$15,600,000	N/A
301†	2035	Low Pressure/Water Age	Complete 42" Transmission Main under GA 400 along Kimball Bridge Road	Transmission Main	1.75	Yes	42"	\$3,768,000	500
302	2035	Emergency Interconnection	Rogers Bridge Pump Station - Gwinnett Interconnection (450 HP pumps)	Pump Station	Both	7	N/A	\$11,151,000	N/A
303	2035	High Pressure	Pine Grove Low Pressure Zone	Pressure Reducing Valve	Both	6	N/A	\$2,082,000	N/A
304	2035	High Pressure	Shakerag Low Pressure Zone	Pressure Reducing Valve	Both	2	N/A	\$1,041,000	N/A
305	2035	High Pressure	Horseshoe Bend Low Pressure Zone	Pressure Reducing Valve	Both	3	N/A	\$1,041,000	N/A
306	2035	High Pressure	Martin Landing Low Pressure Zone	Pressure Reducing Valve	Both	1	N/A	\$2,082,000	N/A
307	2035	High Pressure	Atlanta Athletic Club Low Pressure Zone	Pressure Reducing Valve	Both	4	N/A	\$2,082,000	N/A
401-A†	2040	Low Pressure/Water Age	Complete 54" Transmission Main along Buice Road (Phase A)	Transmission Main	1.5	Yes	54"	\$4,815,000	1,769
401-B†	2040	Low Pressure/Water Age	Complete 54" Transmission Main along Buice Road (Phase B)	Transmission Main	1.5	Yes	54"	\$6,111,000	1,960
401-C†	2040	Low Pressure/Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase C)	Transmission Main	1.5	Yes	54"	\$7,269,000	2,309
401-D†	2040	Low Pressure/Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase D)	Transmission Main	1.5	Yes	54"	\$8,650,000	2,753

Fulton County Water Distribution System Master Plan

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (inches)	Planning-Level Cost Estimate (\$) ^b	Length (feet)
501-A†	2050	Low Pressure/Water Age	Complete 36-42" Transmission Main along Kimball Bridge Road	Transmission Main	1.75	Yes	36-42"	\$4,815,000	1,769
501-B†	2050	Low Pressure/Water Age	Complete 36-42" Transmission Main along Kimball Bridge Road	Transmission Main	1.5	Yes	36-42"	\$6,155,000	2,269
502	2050	Low Pressure	Jones Bridge Road Parallel Line	Water Main	Both	1	24"	\$6,949,000	5,196
503	2050	Fire Flow	Fox Road and Greatwood Manor Parallel Line; Extension on Shirley Bridge	Water Main	Both	11	10-12"	\$4,062,000	4,653
504	2050	Fire Flow	Old Cedar Lane/Kensington Farms Drive and Triple Crown Drive/Seabiscuit Parallel Line	Water Main	Both	10	12"	\$9,015,000	11,852
505	2050	Fire Flow	Freemanville Road/Hipworth Road/ Conagree Ct/ Mayfield Road/ Harrington Dr Parallel Line; Bethany Road crossing pipe connection	Water Main	Both	3	12"	\$14,349,000	18,898
506	2050	Fire Flow	Providence Road and Birmingham Hwy Parallel Line	Water Main	Both	2	24"	\$19,594,000	14,773
507	2050	Fire Flow	Hwy 9N/Creek Club Dr, Five Acres Road/Woodlake Dr, Belleterre Dr, Francis Road/Autumn Close Parallel Line and crossing pipe connections on Hwy 9N	Water Main	Both	5	12"	\$16,508,000	21,728
508	2050	Fire Flow	Manor Bridge Road/Manor Club Dr/ Belford Drive, Watsons Bend/Manor Club Drive Parallel Line	Water Main	Both	12	10-12"	\$11,989,000	14,279

Fulton County Water Distribution System Master Plan

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (inches)	Planning-Level Cost Estimate (\$) ^b	Length (feet)
509	2050	Fire Flow	Scott Road/Holcomb Bridge Road Parallel Line	Water Main	Both	4	16"	\$9,201,000	9,237
510	2050	Fire Flow	Eves Road Parallel Line	Water Main	Both	9	12"	\$2,933,000	3,812
511	2050	Fire Flow	Bell Road/McGinnis Ferry Road/Rogers Circle Parallel Line	Water Main	Both	6	12-16"	\$23,680,000	22,874
512	2050	Fire Flow	Woodstock Road/Jones Road/Lake Charles Drive and Bowen Road/Stroup Road Parallel Line	Water Main	Both	8	12-16"	\$23,194,000	21,390
513	2050	Fire Flow	Mountain Park Road and Highland Colony Drive Parallel Line	Water Main	Both	7	12"	\$8,457,000	11,079
514	2050	Emergency Storage	2 MG Storage Tank at existing Jones Bridge tank site	Storage Tank	Both	14	N/A	\$10,404,000	N/A
515	2050	Emergency Storage	2 MG Storage Tank at the existing Bethany tank site	Storage Tank	Both	13	N/A	\$10,404,000	N/A

^a Ongoing project with construction cost estimate per email from Timothy Mullen (August 8, 2024)

^b Cost estimate is total project cost and includes 40% contingency except for ongoing projects.

†This project will improve minimum pressures at subdivisions where low pressure have been reported in the summer by customers.

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Acronyms and Abbreviations

AADD	annual average daily demand
ADD	average day demand
AFCWRC	Atlanta Fulton County Water Resources Commission
ARC	Atlanta Regional Commission
AWWA	American Water Works Association
CIP	Capital Improvement Plan
CMI	Customer Metering Inaccuracy
County	North Fulton County
DEM	digital elevation model
District	Metropolitan North Georgia Water Planning District
EPA	U.S. Environmental Protection Agency
fps	foot (feet) per second
GA EPD	Georgia Environmental Protection Division
GEFA	Georgia Environmental Finance Authority
GIS	geographic information system
GPAD	gallon(s) per account per day
GPCD	gallon(s) per capita per day
gpm	gallon(s) per minute
HGL	hydraulic grade line
HP	horsepower
HSP	high service pump
IRT	Interconnection Reliability Target
MDD	maximum day demand
MG	million gallon(s)
MGD	million gallon(s) per day
MNGWPD	Metro North Georgia Water Planning District
MSL	mean sea level

PF	peaking factor
PHD	peak hour demand
PRV	pressure-reducing valve
psi	pound(s) per square inch
RLCA	real loss component analysis
RPM	revolution(s) per minute
SCADA	Supervisory Control and Data Acquisition
TDH	total dynamic head
VSP	variable speed pump
WTP	water treatment plant

1. Introduction and Background

The North Fulton County (County) water distribution system provides water to the cities of Alpharetta, Johns Creek, Milton, and Roswell, Georgia. It serves approximately 80,000 customers and purchases finished water from the Atlanta Fulton County Water Resources Commission's Tom Lowe Water Treatment Plant (WTP). The County's water distribution system includes 1,100 miles of mostly ductile-iron pipe ranging in size up to 54 inches in diameter. A small portion of Roswell is served by a water treatment plant that it owns and operates.

The County uses a water distribution hydraulic model to aid in understanding water system operations, identifying deficiencies, and developing system improvements through Master Plans. The most current overall Master Plan was developed in 2007 and primarily addressed the major system components (transmission system). Some of the 2007 recommendations have been constructed and some are ongoing as part of the Capital Improvement Plan (CIP).

Continuing its commitment to understanding the water system and strategic future planning, the County selected Jacobs to create an updated Master Plan for the Water Distribution System. One goal of the Master Plan to be developed under this contract is to update the CIP based on current water demand projections as determined from updated population projections and per capita water use values. Additionally, a current Water System Master Plan is a regulatory requirement of the Metropolitan North Georgia Water Planning District (District), and this is intended to meet that requirement.

This report contains the following sections for tasks outlined in the scope of services:

- Section 1: Introduction and Background
- Section 2: Water Demand Projections
- Section 3: Model Review
- Section 4: Water System Analysis
- Section 5: Additional Analyses
- Section 6: Capital Improvement Plan

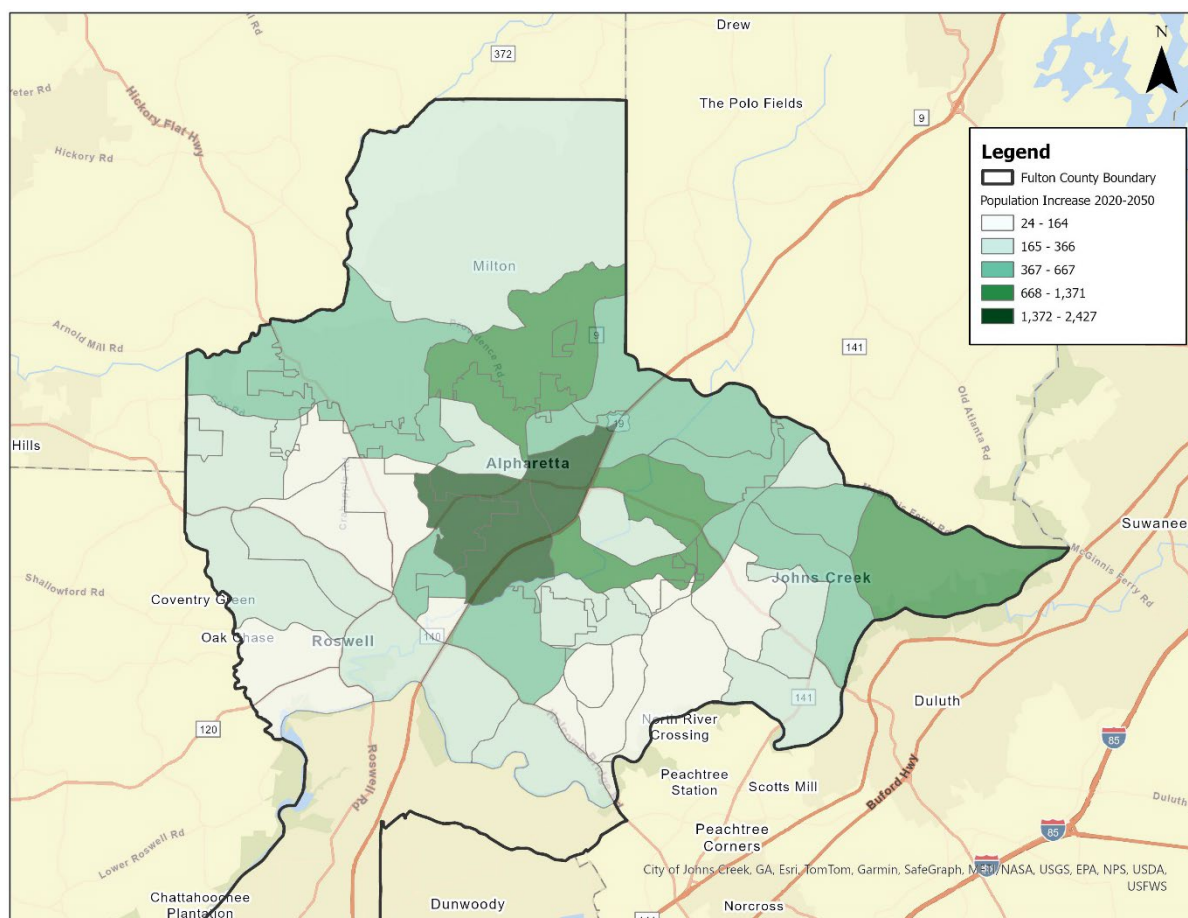
Additional information is provided in the following appendices to this report:

- Appendix A: Overall Water Demand Projections
- Appendix B: Alpharetta Water Demand Projections
- Appendix C: Johns Creek Water Demand Projections
- Appendix D: Milton Water Demand Projections
- Appendix E: Roswell Water Demand Projections
- Appendix F: Model Development Technical Memorandum
- Appendix G: Existing System Deficiencies
- Appendix H: CIP Map Book
- Appendix I: Impact of Transportation Projects on CIPs
- Appendix J: Model Intergovernmental Agreement
- Appendix K: Hydraulic Model Scenario Descriptions

2. Water Demand Projections

Fulton County provides potable water to the cities in North Fulton, including Alpharetta, Johns Creek, Milton, and Roswell. As part of the Fulton County Water Distribution System Master Plan, Fulton County staff and Jacobs met with representatives from each city to discuss future developments and expected growth to develop city-specific water demand projections. Members of the community development and public works departments were extremely helpful in supplying land use information. Historical billing data from Fulton County and population projections broken down by census tract through 2050 from the Atlanta Regional Commission (ARC) were also used to project growth and demand. In February 2024, the ARC adopted the Series 17 population and employment forecast from 2020 to 2050. Figure 2-1 shows the expected population growth for North Fulton per census tract based on the ARC projection.

Figure 2-1. ARC Series 17 Projected Population Increase 2020 to 2050



The water demand projections calculated for Fulton County's *Water and Wastewater Master Plan 2007 Update* (2007 Fulton County Master Plan; JYG 2008) and the newly calculated water demands for North Fulton are shown in Table 2-1. The updated demands are significantly lower based on population projections, data provided by the cities on new development and redevelopment projects, current and future land use planning policies, existing per capita water uses extracted through historical billing data and conservation from more water-efficient fixtures expected in the future. The historical demand and baseline data used for the current demand forecast is approximately 60 percent of the estimated water demand developed for the 2007 Fulton County Master Plan.

Table 2-1. Historical and Projected Annual Average Day Demand for North Fulton

Year	2007 Water Demand Forecast ^a (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005 ^b	33.2	NA
2010 ^b	38.4	NA
2020 ^b	44.0	26.2
2021 ^{b,c}	44.3	26.8
2025	45.5	28.4
2030	47.0	30.4
2035	48.5	31.6
2040	NA	33.1
2045	NA	34.5
2050	NA	36.8

^a Water demand forecast as shown in the 2007 Fulton County Master Plan.

^b Historical water demand shown under the 2024 Water Demand Forecast was calculated using billing records and water supplied data.

^c Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

AADD-MGD = annual average daily demand in million gallons per day.

NA = Not Available.

2.1 Population Projections and Future Development Forecast

Two methods were used to determine future water demand. The first method relies on existing and future development data provided by the cities within the study area being built or permitted as of February 2024. The second method uses the projected population growth for North Fulton to distribute the growth throughout the planning period (2021 to 2050). Both methods produced similar water demand forecasts, but applying a conservative approach, the highest forecast was used in each city to calculate a water demand forecast that is expected to increase approximately 9.1 million gallons per day (MGD) by 2050.

The Jacobs and Fulton County teams met with officials from the cities of Alpharetta, John Creek, Milton, and Roswell to discuss the *Fulton County Water Distribution System Master Plan*. The information presented and shared during and after the meetings was summarized in an overall technical memorandums (TMs) describing the methodology used to calculate future demand projections using information on current and future development (Appendix A). City-specific TMs present the information shared during the team meetings (Appendices B through E). Following the meetings with city officials, the Jacobs team leveraged data from multiple sources, including comprehensive plans, permitting reviews and approvals, land use maps, and geographic information system (GIS) data to compile a list of projects that have been approved or proposed for each jurisdiction. In some cases, the city provided insight on their built-out plans that were also considered for this analysis.

The multifamily residential use per account was similar across all cities and future demands for multifamily residential projects was calculated using 1,100 gallons per account per day (GPAD) for all cities. Similarly, the commercial use per account was similar across all cities, and future demand for commercial projects was calculated using 3,300 GPAD for all cities. The average residential use per account for Alpharetta, Johns Creek, and Roswell is 180 GPAD. Milton's residential use per account is 260 GPAD; hence, a higher per account use needed to be applied for Milton to accurately estimate future water demand. The billing data show that Johns Creek is the only city with significant industrial demand with an average 73,000 GPAD; however, industrial use was extracted completely and projected separately using

the customers' expansion plans and sewer capacity applications. Table 2-2 lists the water use per account for each customer type that was calculated using billing data.

Table 2-2. Per Account Water Use (GPAD) Based on 2021 Billing Records

Jurisdiction	Water Use Customer Type (GPAD)			
	Residential	Multifamily Residential	Commercial	Industrial ^a
Alpharetta	180	1,100	3,300	-
Johns Creek	180	1,100	3,300	73,000
Milton	260	1,100	3,300	-
Roswell	180	1,100	3,300	-

Notes:

^a Significant existing and future industrial water use was only observed in Johns Creek.

The projections considered the type of development and the number of units and/or acres specified in development plans or permit applications. Johns Creek provided information on build-out plans, which were incorporated into the future water demand calculations. Because few plans had specific completion dates, the future demand calculated using this approach lacked temporal distribution but provided important site-specific information. Table 2-3 shows the expected water demand increase for each city based on their development and redevelopment plans as well as future land use plans. The numbers in bold show the highest forecast between the development-based and population-based demands for Alpharetta and Johns Creek. The highest forecast per city was selected to calculate the final water demand forecast summarized in Section 2.2.

Table 2-3. Expected Future Water Demand Increase for North Fulton Using Development-based Forecast

Jurisdiction	Additional Future Water Demand (AADD-MGD) ^a
Alpharetta	2.8
Johns Creek	3.0
Milton	0.5
Roswell ^b	1.4
North Fulton	7.7

Notes:

^a Future water demand includes 10 percent non-revenue water.

^b Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 to 2050.

Population projections are an essential part of the water demand projection calculations because they significantly influence the residential water demand forecast. The 2020 Census calculated Fulton County's population at 1,066,710, with a 15.9 % estimated growth since 2010 (Census 2021). For this analysis, existing population data were gathered from the U.S. Census for each city in North Fulton. The latest Series 17 population projections were developed by the ARC (2024) and are broken down by census tract and city boundary. Figure 2-2 shows North Fulton's historical population and projected increase through 2050 as published by ARC in 2024, as well as the population projections used in the 2007 Fulton County Master Plan. The most recent population data show a higher population at the time the 2020 Census took place, but the projections show a more moderate growth rate from 2020 to 2050.

Figure 2-2. Population Trend for North Fulton

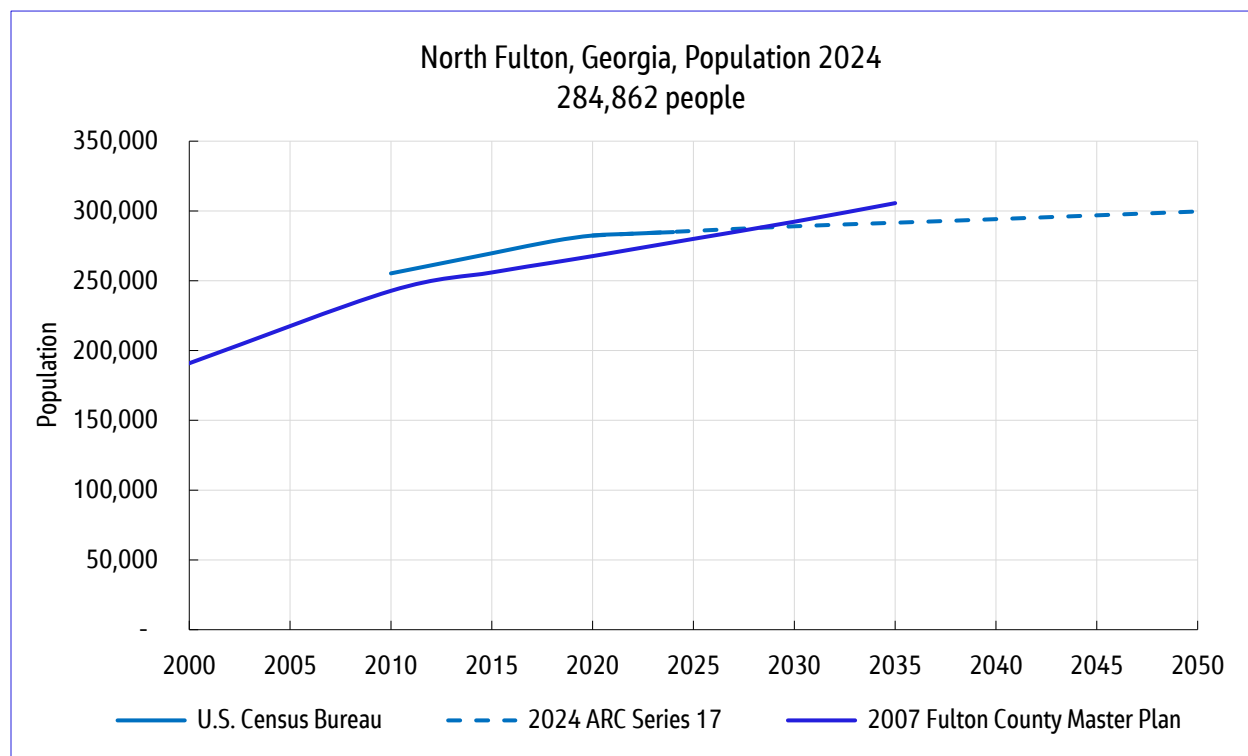


Table 2-4 summarizes the historical population and population projections for each city in North Fulton and the total for the study area. Currently, Roswell is the most populous city, followed by Johns Creek. Alpharetta is expected to have the highest growth in the future with a 12 percent increase in population between 2020 and 2050. The study area is expected to grow 6 percent in the same 30-year period.

Table 2-4. Historical and Projected Population Projections for North Fulton

Jurisdiction	Population					2020 to 2050 Growth Rate
	2010 ^a	2020 ^a	2030	2040	2050	
Alpharetta	57,551	65,818	69,742	72,064	73,721	12%
Johns Creek	76,728	82,453	83,344	84,988	85,674	4%
Milton	32,661	41,290	42,574	43,202	44,220	7%
Roswell ^b	88,346	92,833	93,375	93,881	96,018	3%
North Fulton	255,286	282,394	289,017	294,135	299,633	6%

Notes:

^aPopulation as reported by the U.S. Census Bureau

^bPopulation for City of Roswell includes areas served by Roswell Water Utility and Fulton County.

Population data by census tract and 2021 billing data were used to develop a temporal distribution that would project future water use through 2050. The billing data were used to establish the baseline year and to develop a per capita value for each city. Table 2-5 shows the per capita water use for each city. The per capita water use for Johns Creek was calculated using commercial and residential use only. The industrial use was extracted completely and projected separately using the customers' expansion plans and sewer capacity applications. Alpharetta, Johns Creek, and Roswell have similar per capita uses; hence, those three cities were combined to create an average per capita of 126 gallons per capita per day (GPCD).

Milton showed a higher per capita of 133 GPCD, which was applied in the forecast. In this projection, the per capita usage increases over time due to the expected increase in industrial use, the increase of wholesale water supplied to the City of Roswell, the use of a constant non-revenue water of 10 percent, and exclusion of passive conservation.

Table 2-5. Per Capita Water Use (GPCD) Based on 2021 Billing Records

Jurisdiction	Water Use per Person (GPCD)
Alpharetta	126
Johns Creek	126
Milton	133
Roswell	126
North Fulton ^a	128

Notes:

^a Average per capita for North Fulton

The water demand forecast was calculated by establishing a baseline water use and calculating the future demand for the expected population increase between 2021 and 2050. The baseline water use was set by splitting the 2021 billing data for each census tract and then disaggregated by city. The baseline was calibrated so the addition of the demands for each census tract equaled the total water used in 2021, including losses. The next step was to calculate the increase in number of people for each census tract using the Series 17 ARC population projections. Finally, the future demand was calculated for the new population using the per capita in Table 2-5 and then added to the baseline. Table 2-6 shows the expected water demand increase for each city based on population growth per census tract. The numbers in bold show the highest forecast between the development-based and population-based demands for Milton and Roswell. The highest forecast per city was selected to calculate the final water demand forecast.

Table 2-6. Expected Future Water Demand Increase for North Fulton by 2050 Using Population-based Forecast

Jurisdiction	Additional Future Water Demand (AADD-MGD) ^a
Alpharetta	2.0
Johns Creek	2.6
Milton	0.9
Roswell ^b	2.4
North Fulton	7.9

Notes:

^a Future water demand includes 10 percent non-revenue water.

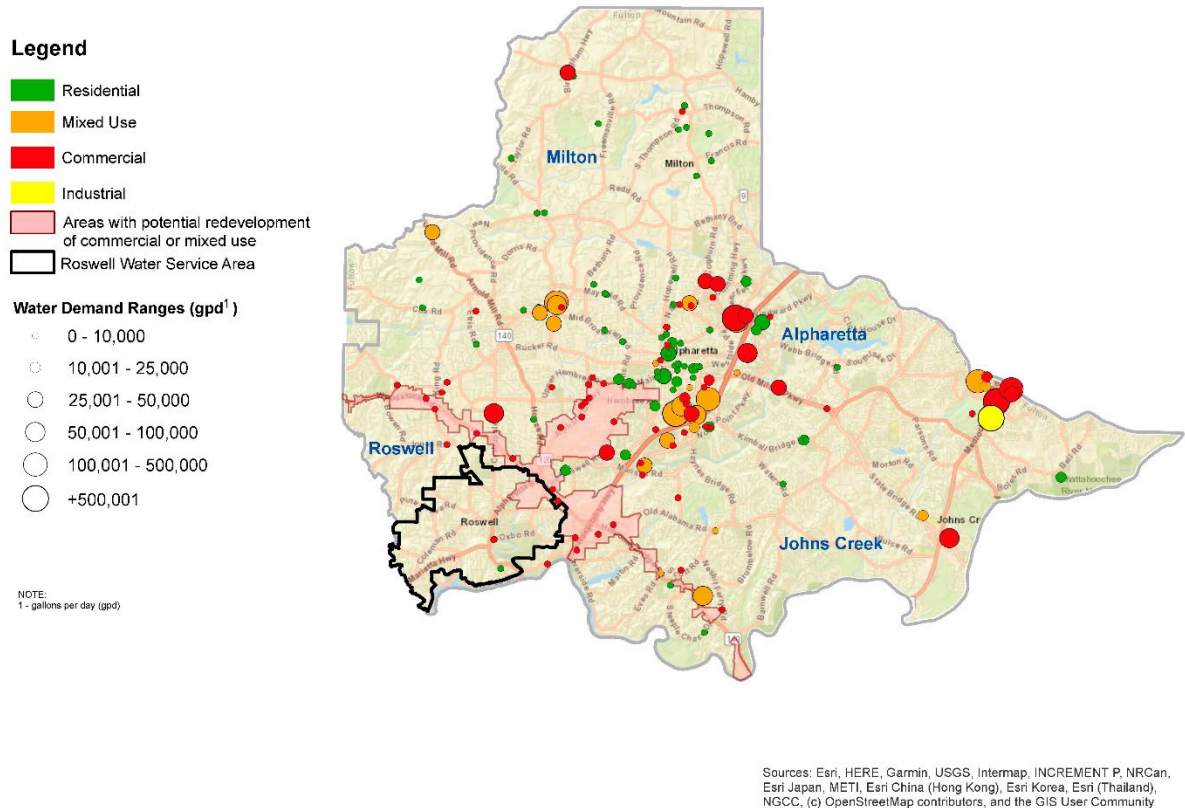
^b Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

2.2 Water Demand Projection Results

The water demand forecast was used to model scenarios for the water distribution system hydraulic model and determine if additional infrastructure is needed to provide adequate water service and fire protection through 2050. The forecast considered factors such as available land for development, current land use and comprehensive land planning policies by the city, existing per capita water uses extracted through

historical billing data, and anticipated conservation efforts through the adoption of more water-efficient fixtures. The major water users are industrial and commercial facilities as well as mixed-use developments that are expected to expand or open as soon as 2025. Figure 2-3 shows the development areas and future growth for North Fulton based on the information provided by the cities and their available planning documents.

Figure 2-3. Future Growth Areas for North Fulton



The methods evaluated during the forecasting exercise resulted in similar water demand projections. Although water demand calculations based on growth beyond developments are not all known and lacked temporal distribution, the demand projections calculated from population projections were comparable in scale and provided a growth rate through 2050. Adopting a conservative approach, the water demand curve was developed using the highest increase in demand between the two methods. Table 2-7 summarizes the future water demand for Alpharetta, Johns Creek, Milton, and Roswell.

Table 2-7. Future Annual Average Water Demand for the Cities Served by North Fulton

Year	2024 Water Demand Forecast ^a (AADD-MGD)			
	Alpharetta ^b	Johns Creek ^b	Milton ^c	Roswell ^{c,d}
2025	7.0	10.2	3.9	7.3
2030	7.6	11.3	3.9	7.5
2035	8.2	11.7	4.0	7.8
2040	8.6	12.3	4.1	8.1

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Year	2024 Water Demand Forecast ^a (AADD-MGD)			
	Alpharetta ^b	Johns Creek ^b	Milton ^c	Roswell ^{c,d}
2045	9.0	12.5	4.2	8.8
2050	9.4	12.7	4.4	9.5

Notes:

^a Future water demand includes 10 percent non-revenue water.

^b Future water demand calculated using development-based approach.

^c Future water demand calculated using population-based approach.

^d Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

The combined water demand projections resulted in an expected increase of approximately 9.1 MGD by 2050. Table 2-8 and Figure 2-4 show the historical data and the proposed forecast for North Fulton. The current demand forecast shows a lower demand projection than the one developed for the 2007 Fulton County Master Plan but follows the most current historical demand and baseline data. The 1.5 peaking factor is the recent historical average (since 2007), and the 1.75 peaking factor is a recent maximum last experienced on July 3, 2024. They are both shown in this report for context and to illustrate the range of peak demands that the North Fulton system experiences.

Table 2-8. Historical and Proposed Future Annual Average and Max Day Water Demand for North Fulton

Year	Historical Water Demand ^a (AADD-MGD)	2007 Water Demand Forecast ^b (AADD-MGD)	2024 Water Demand Forecast ^{c,d} (AADD-MGD)	2024 Water Demand Forecast ^e (MDD-MGD)	2024 Water Demand Forecast ^f (MDD-MGD)
2005	NA	33.2	NA	NA	NA
2010	26.44	38.4	NA	NA	NA
2017	21.8	NA	NA	NA	NA
2018	26.3	NA	NA	NA	NA
2019 ^g	28.2	NA	NA	NA	NA
2020	26.2	44.0	NA	NA	NA
2021 ^h	26.8	44.3	NA	NA	NA
2025	NA	45.5	28.4	42.5	49.6
2030	NA	47.0	30.4	45.5	53.1
2035	NA	48.5	31.6	47.4	55.3
2040	NA	NA	33.1	49.6	57.9
2045	NA	NA	34.5	51.8	60.5
2050	NA	NA	36.0	54.0	63.0

Notes:

^a Historical water demand calculated using billing records and water supplied data.

^b Water demand forecast as show in the 2007 Fulton County Master Plan.

^c Future water demand includes 10 percent non-revenue water.

^d Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand

within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

^e Calculated using a peaking factor (peak day factor) of 1.5 based on the historical average.

^f Calculated using a peaking factor (peak day factor) of 1.75 based on highest demand of 47.9 MGD registered on July 3, 2024.

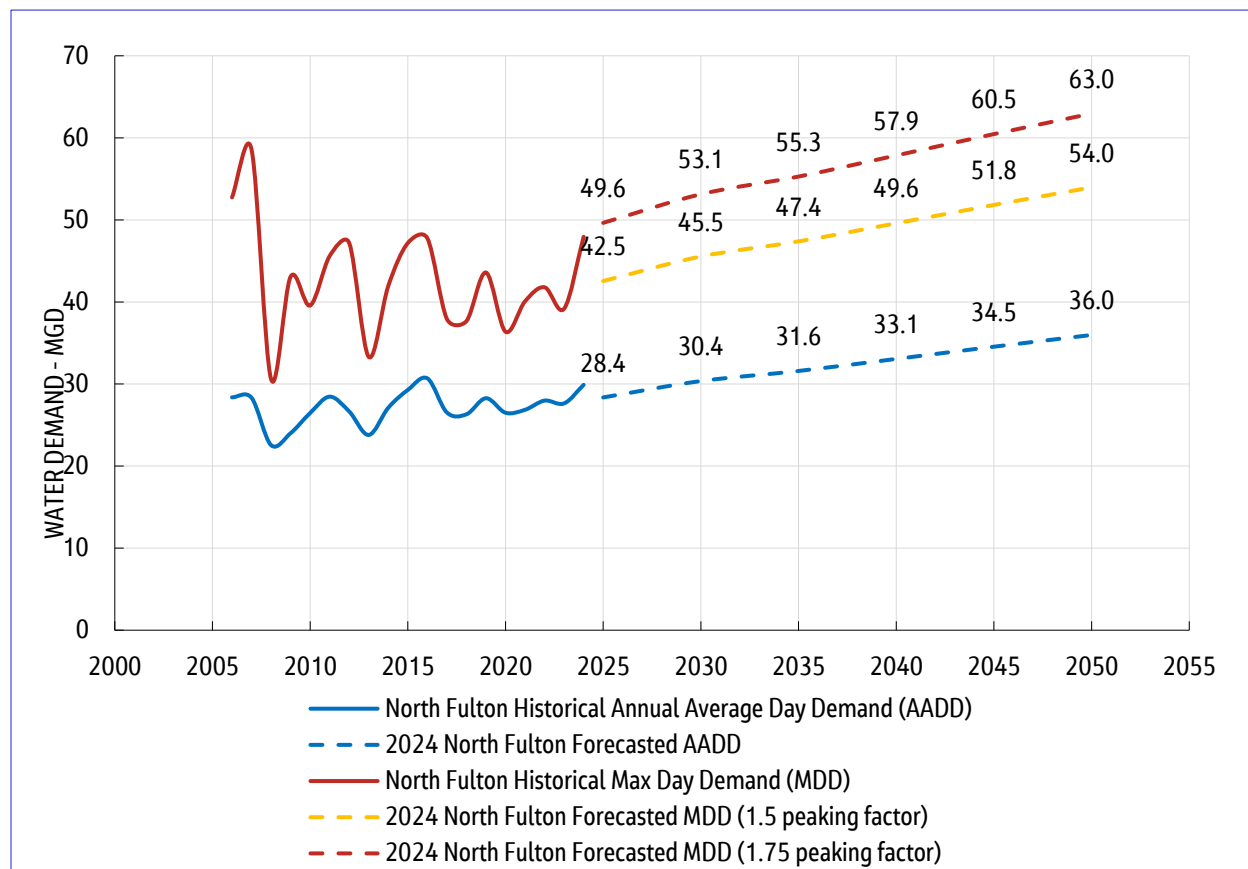
^g Water demand data for the year 2019 reflect an anomalous higher rate of water consumption that may be attributable to the lower precipitation levels experienced during that year.

^h Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

AADD-MGD = annual average daily demand in million gallons per day

NA = Not Available

Figure 2-4. Historical and Proposed Future Annual Average and Max Day Water Demand for North Fulton



2.2.1 Future Demand Allocation to Hydraulic Model

Existing water demands in the calibrated hydraulic model were allocated based on geocoded water billing data.

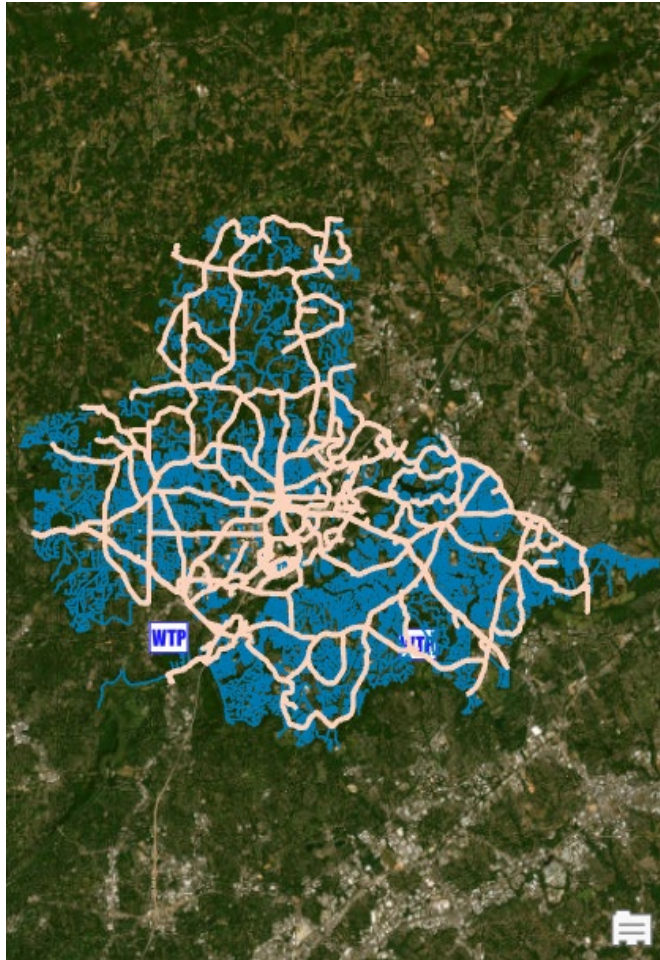
The projected water demands (as shown in Table 2-7) for 2030, 2040, and 2050 were allocated to the corresponding scenarios in the hydraulic model. For the 2035 scenario, an average of the 2030 and 2040 demands was used in the model. The projected water demands were also defined spatially by census tracts for each city service area.

To load future demands for different scenarios, and to avoid allocating future demand growth to areas with existing developments, specific growth area pipes were developed as shown on Figure 2-5. A subdivision with full, 100 percent build-out would not see additional demand due to future growth

estimates, but the main line supplying water to that subdivision would see demand increase from future growth.

Thiessen polygons were generated from the nodes connected to future demand pipes to proportionally allocate by area demand growth from the census tract city service areas. Each Thiessen polygon defines an area of influence around its sample node, so that any location inside the polygon is closer to that node than any of the other sample nodes. This is the industry standard methodology for water distribution demand loading.

Figure 2-5. Future Growth Pipes



3. Model Review

Fulton County engaged Stantec to rebuild and calibrate a hydraulic model of their water distribution system in 2022¹ and 2023.² The model was rebuilt using a combination of GIS and record drawings and subsequently calibrated using field data collected in November 2022.

The County requested that Jacobs evaluate and validate the 2022 calibrated water distribution model for use in future system capacity planning as part of this Master Plan project. Jacobs reviewed the calibrated model and the calibration report of the hydraulic model and noted discrepancies between the pump station flow rates and suction/discharge pressures in the model results compared to SCADA data. The discrepancies were suspected to be due to pump curve issues in the model. Additionally, there were concerns regarding the impact of a large pressure drop in the northwestern part of the system, as captured in the iHydrant data. This was speculated to be related to unknown user and/or closed valves in that area. These issues were investigated further as explained in the following subsection.

3.1 Model Validation and Updates

The original calibrated hydraulic model was reviewed in detail with regard to connectivity, loaded demands, diurnal curves, pump curves, C-factors, fire flow tests, tank levels, pump station suction/discharge pressures, pump station flows, and iHydrant pressures during both average day demand (ADD) and maximum day demand (MDD) scenarios. As part of the main project effort, pipe connectivity review tools in InfoWater Pro were used to assess connectivity issues in the model. Most of these issues were resolved with GIS data; some areas were prioritized and resolved in coordination with County staff.

The model validation results presented in this section are for the MDD scenario (Figure 3-1), where the comparison results are shown between the original calibrated model on the left and the revised model on the right. The comparison was set up for 2 days – June 21 and 22, 2022 (same period as the original calibration). The comparison spreadsheet is included in Appendix F of this report.

3.1.1 Unknown User Demand/Potential Closed Valves Issue

Analysis of the iHydrant pressure monitoring data showed a significant drop in static pressures when compared to the model pressures during summer months. The largest pressure drop was seen in iHydrant 18 (530 Hickory Mill Lane) data, as shown on Figure 3-1. This issue was attributed to a combination of an unknown heavy demand and potential closed valves near iHydrant 18 (530 Hickory Mill Lane). Since heavy usage is seen mostly in summer months, the pressure drop was likely due to outdoor water usage. For iHydrant 18 (530 Hickory Mill Lane), the pressure drop was higher in the summer of 2022 compared to the summer of 2023 when it was more intermittent (Figure 3-2).

The proximity of the valves to iHydrant 18 (530 Hickory Mill Lane). also suggested the valves might be closed at the intersection of Birmingham Road and Freemanville Road between the 12-inch and 24-inch lines. Field investigations confirmed that closed valves existed, as suspected, in this area.

The location of the unknown user is suspected to be somewhere between Birmingham Road and Wood Road as highlighted on Figure 3-2. For the purposes of model validation, a demand of 800 gallons per minute (gpm) was loaded close to a Country Club with a diurnal pattern that matched the pressure drop

¹ Water Model Recalibration Phase 1 Report. Stantec. August 26, 2022.

² Water Model Field Test and Calibration Phase 2 Report. Stantec. May 22, 2023.

that was seen in the iHydrant data. The diurnal pattern was developed where there is a constant demand at around 50 percent and the total demand increases steadily starting from 1:00 a.m., peaking at 6:00 a.m., and dropping back to the constant demand around 11:00 a.m. with a higher peak on the second day as shown on Figure 3-3.

The comparison results of the monitored iHydrant data for the revised model are shown on Figure 3-4 through Figure 3-10. Overall, these results seemed to match well.

Figure 3-1. iHydrant 18 Pressures Comparison

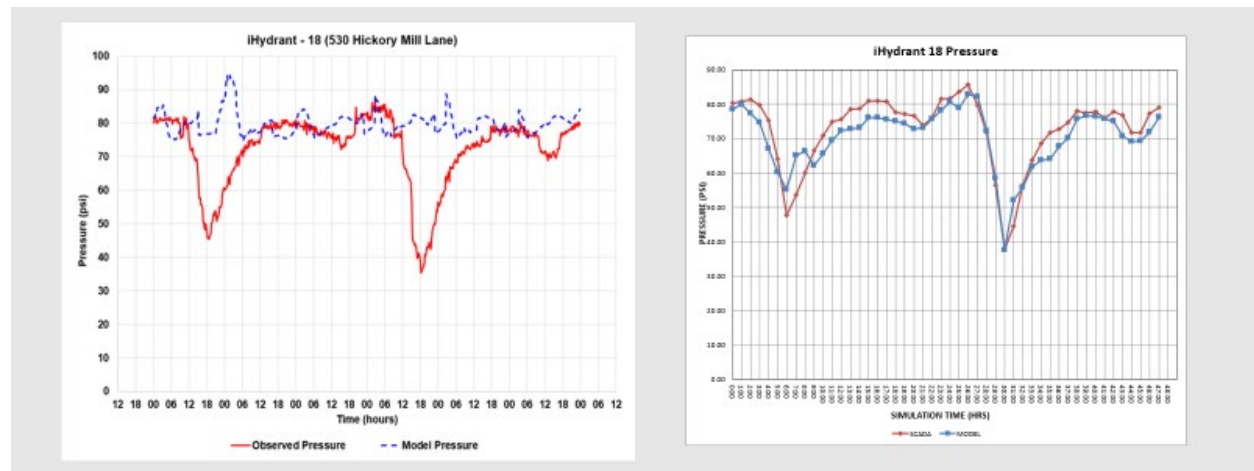


Figure 3-2. iHydrant 18 Pressures in 2022 – 23 and Potential Locations of Unknown Use



Figure 3-3. Unknown User Diurnal Pattern

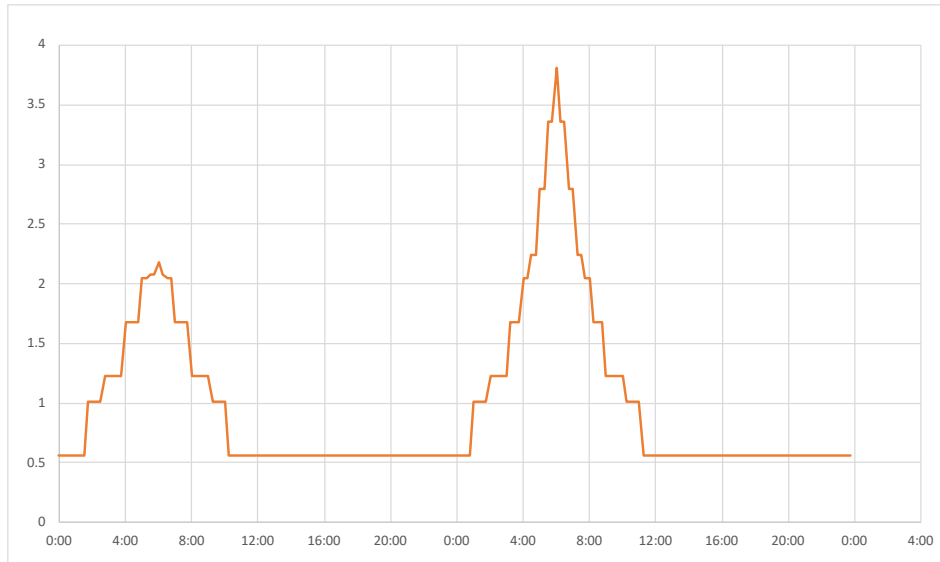


Figure 3-4. iHydrant 25 Pressures Comparison

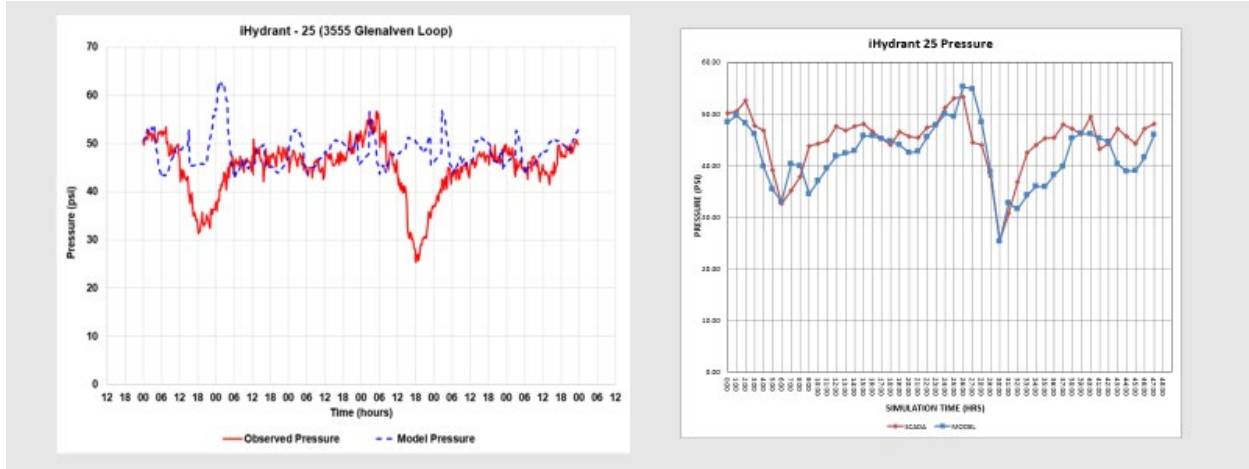


Figure 3-5. iHydrant 17 Pressures Comparison

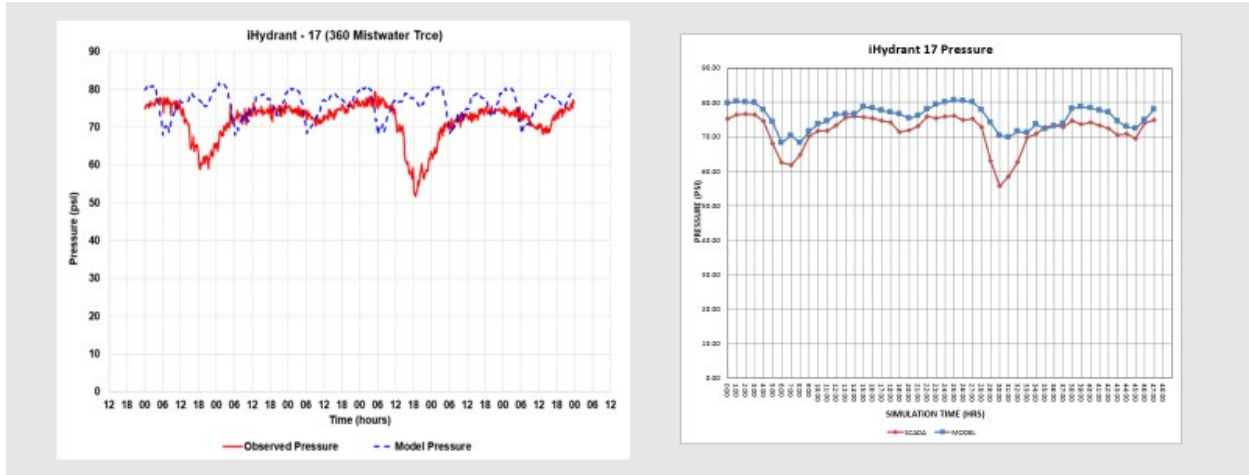


Figure 3-6. iHydrant 16 Pressures Comparison

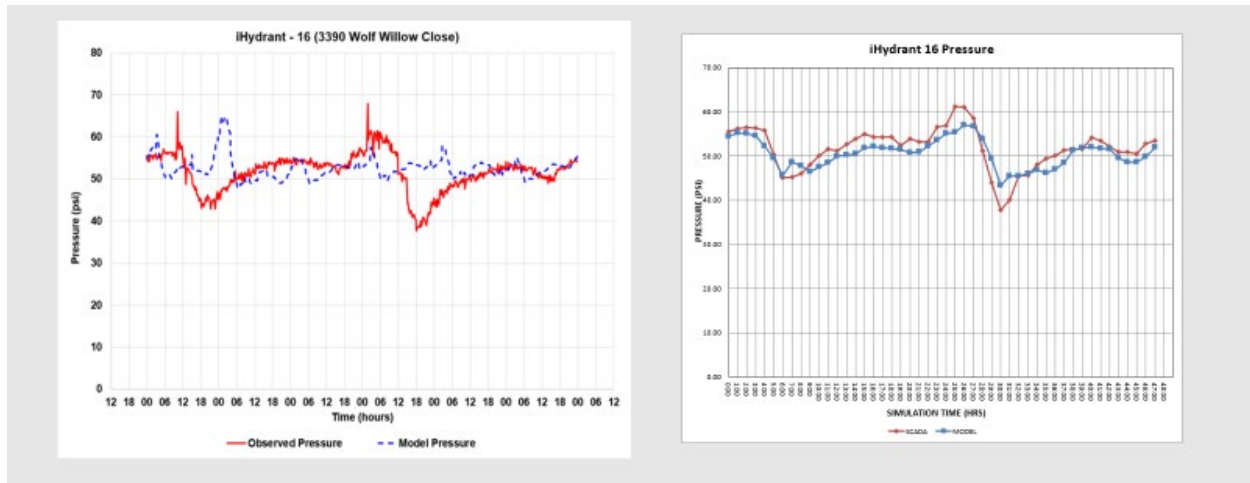


Figure 3-7. iHydrant 11 Pressures Comparison

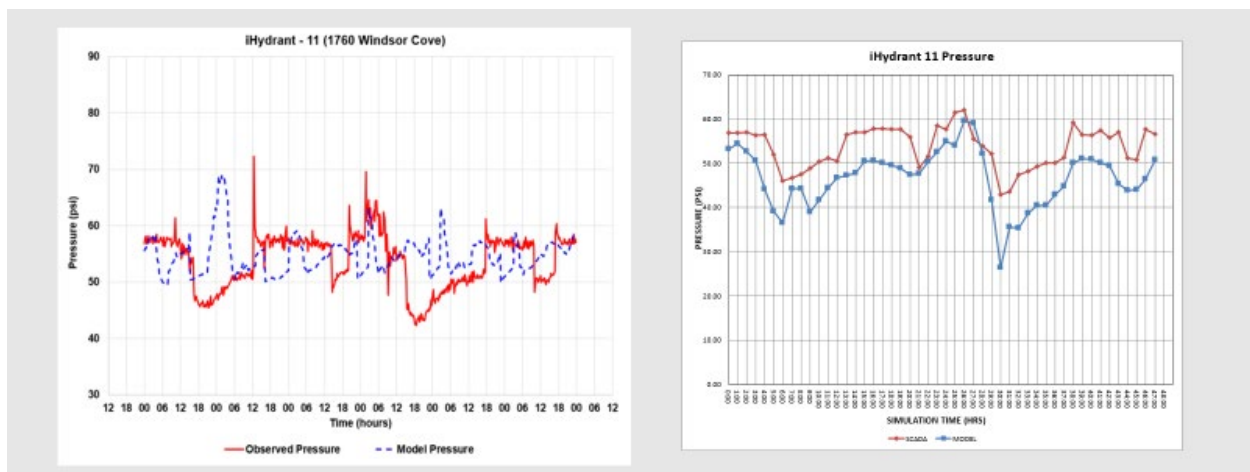


Figure 3-8. iHydrant 13 Pressures Comparison

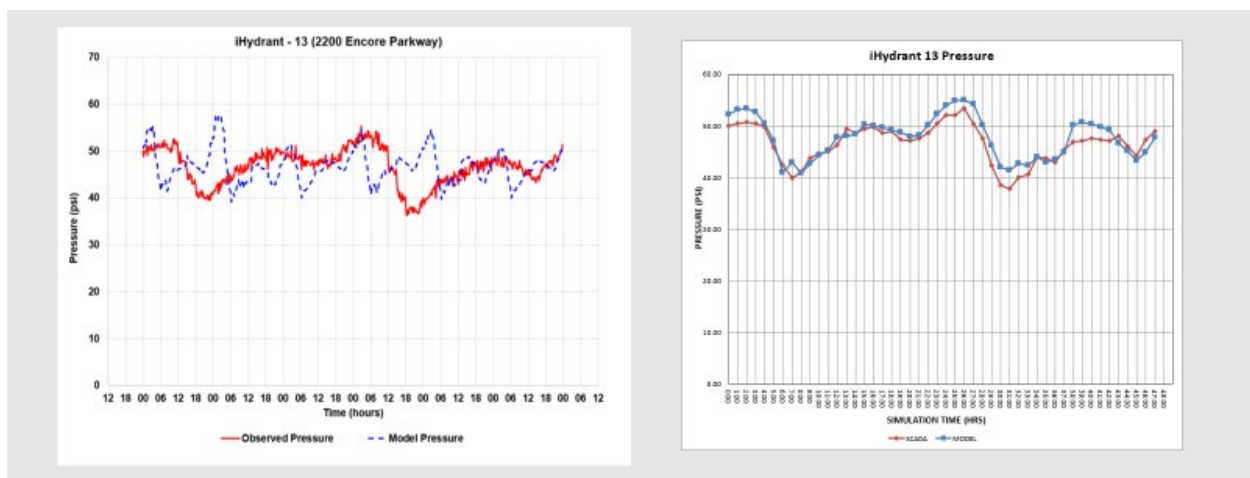


Figure 3-9. iHydrant 7 Pressures Comparison

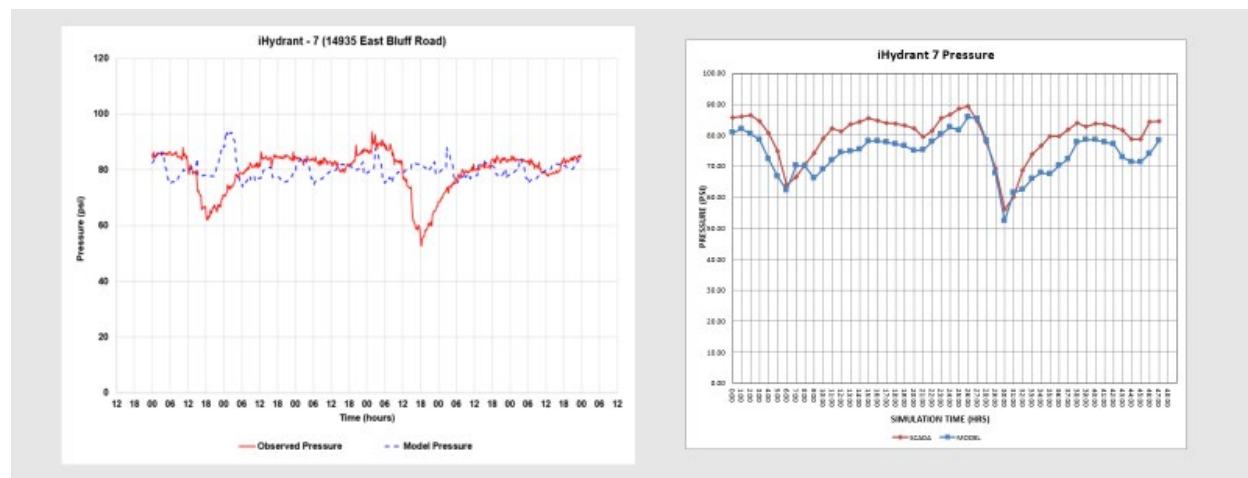
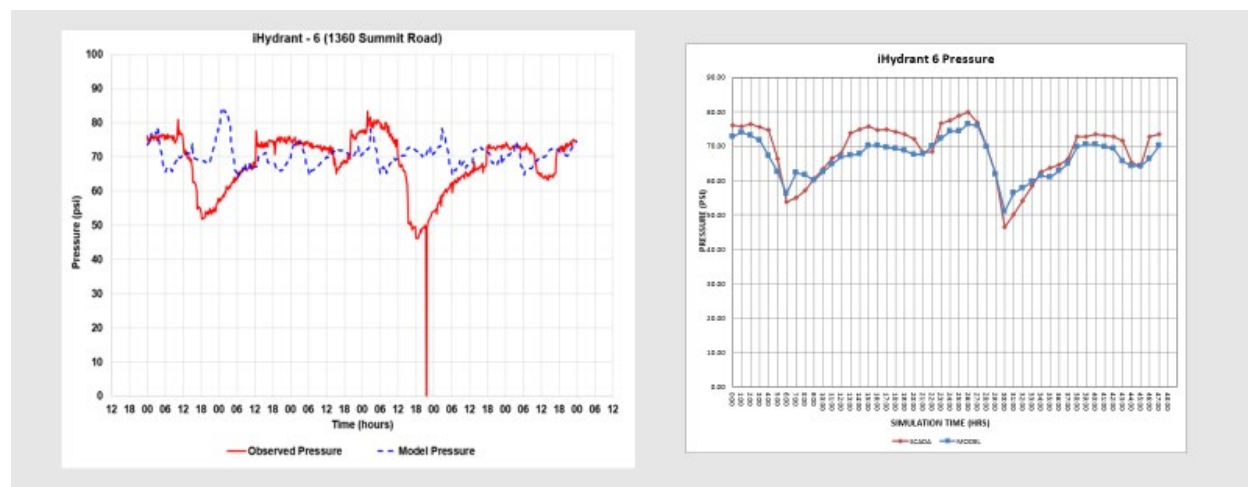


Figure 3-10. iHydrant 6 Pressures Comparison



3.1.2 Pump Station and Tank Updates

The pump curves used in the 2022 calibrated model for the Pritchard Road, Providence Road, and Mansell Road pump stations were based on field testing performed in November 2022. In many cases, the field test results were different from the SCADA data and had a significant impact on model calibration. The manufacturer's pump curves for these pump stations together with the field tests results were compared to find the best fit for the SCADA data. The final pump curves used in the model were digitized from the original manufacturer's pump curves and were adjusted based on the SCADA data, as necessary. The pump digitizer spreadsheet is included in Appendix F of this report. The methodology for the pump curve updates is explained in the sections below for each pump station.

3.1.3 Pritchard Road Pump Station and Pritchard Tank

The primary concern for this station was the large difference observed between the suction and discharge pressures, which was about 30 pounds per square inch (psi) according to the previous calibration report. Additionally, the flow difference between the SCADA and the model was over 3,000 gpm. To address these concerns, the SCADA data and pump curves were reviewed.

For the Pritchard Road pump station, the field test data for both Pumps 1 and 2 showed a flow rate of about 1,040 gpm and a TDH of about 120 feet when running at full speed and with shutoff head near 165 to 170 feet, which was higher than the manufacturer's pump curves' shutoff head. The full speed field test data showed reduced performance from the manufacturer's pump curve; the pump curve was then adjusted to better fit the full speed field data for Pumps 1 and 2, as shown on Figure 3-11 and Figure 3-12.

Uncertainty regarding the quality of the SCADA Pritchard data appears to have resulted in the primary differences in the flow and pressure between the model and SCADA results observed in the prior calibration results. Upon closer inspection, the flow and pressure SCADA results for the Pritchard Road pump station appear to be unreliable and unrealistic.

The suction and discharge pressures from SCADA differed significantly from the model, as shown on Figure 3-13. However, photos taken during field visits and published in the original calibration report clearly show the gauge suction and discharge pressure at the station. The gauges identified the suction pressure as about 18 psi and the discharge pressure as about 67 psi. These values matched well with the model results.

Flow results for this station, however, were more difficult to verify. SCADA pump station flow rate would routinely peak at about 4,000 gpm (with no change in suction/discharge pressures), which was not realistic but would periodically drop for short periods to flows in the more realistic 1,200 to 1,300 gpm range. These flows were comparable to the model results, which were in the 1,250 gpm range. Since the model flows also resulted in a close match of the tank filling and draining, the flow range of 1,200-gpm range had to be correct, and the SCADA flows in the 4,000-gpm range must be incorrect.

The Pritchard Road pump station is primarily used to fill the Pritchard Tank. The trend of the Pritchard Tank levels in the revised model vs. SCADA (Figure 3-14) confirms that the Pritchard Road pump station flow is closer to the model predictions.

It is recommended that the SCADA pressure and flow data for this pump station be checked due to the issues found in suction/discharge pressures and the discharge flow rate. The model results are now considered reasonable for both pressures and flows after the pump curve adjustments. Pressures now fall within the 5-psi tolerance for suction and discharge values, and flows closely align with real flows, as evidenced by the closely matched tank filling and draining at Pritchard Tank. The differences in suction and discharge pressures at the Pritchard pump station are now resolved, but the high flow data being reported by SCADA still need to be investigated.

Figure 3-11. Pritchard Road Pump Station: Original Field-tested Curve vs. Adjusted Pump Curve

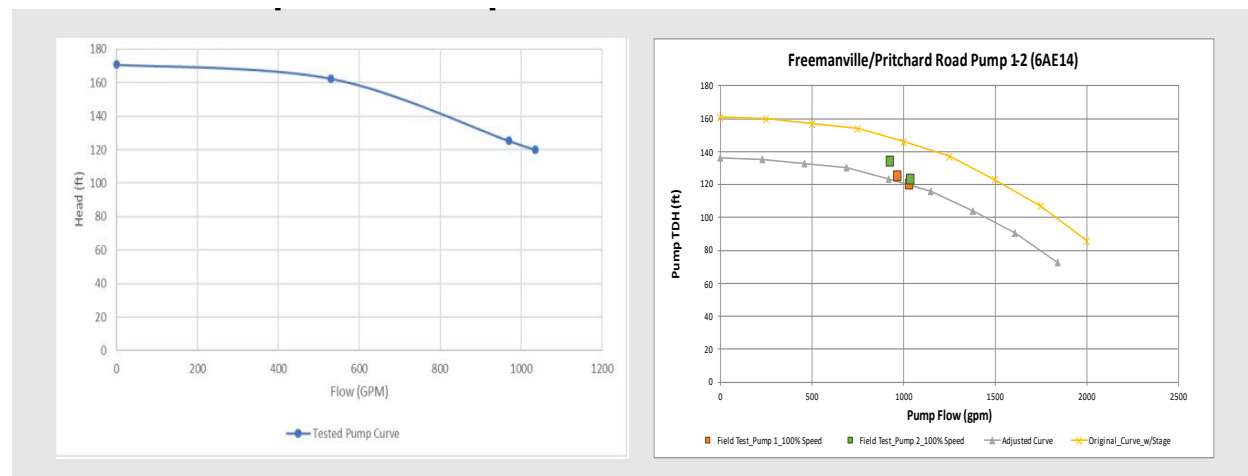


Figure 3-12. Pritchard Road Pump Station: Pump Flow Rate Comparison

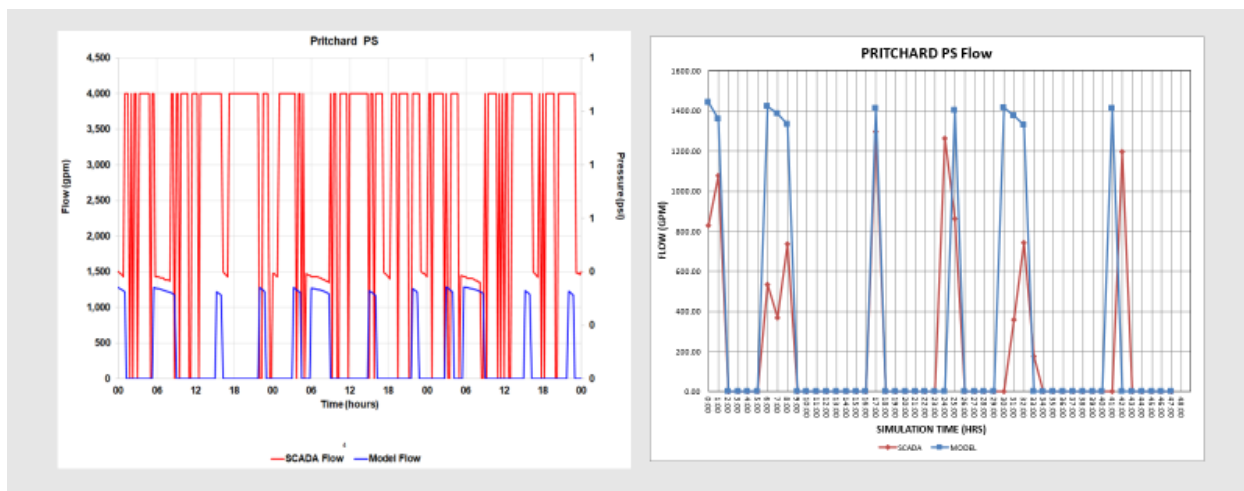


Figure 3-13. Pritchard Road Pump Station: Suction and Discharge Pressure Comparison

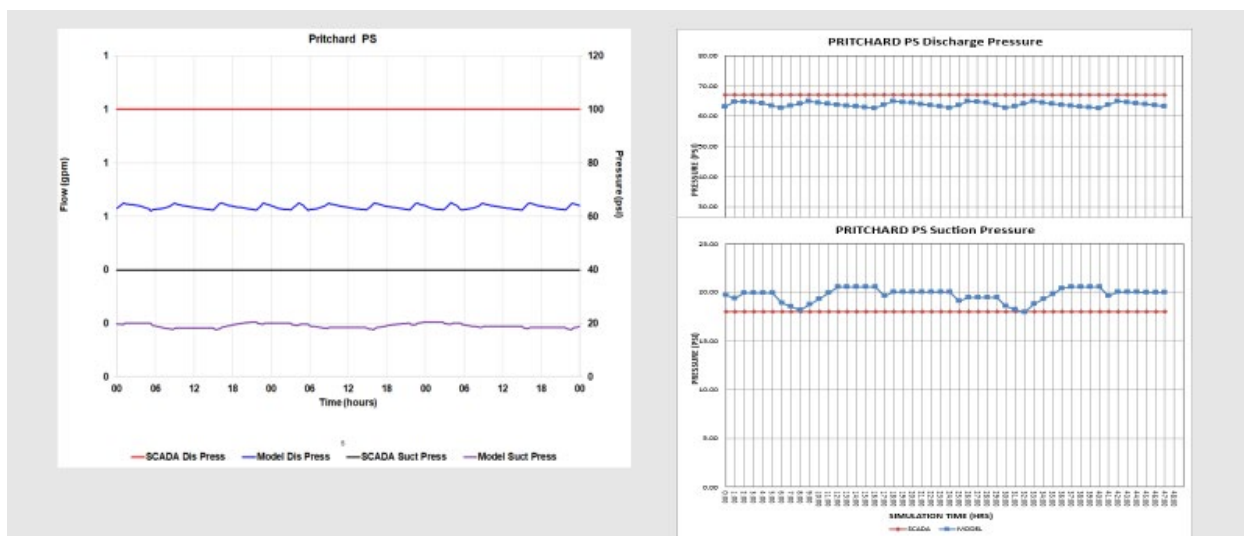
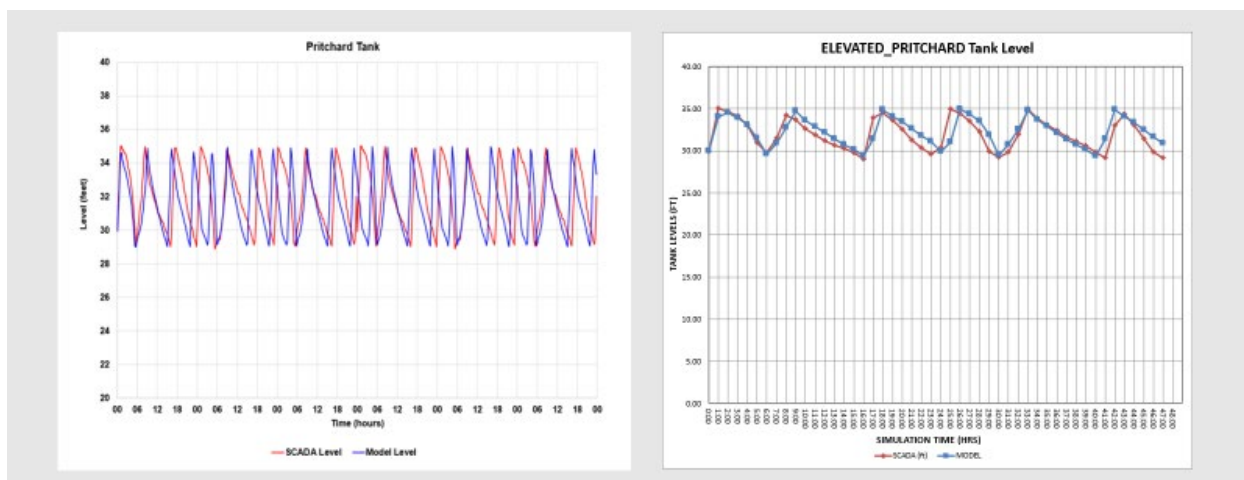


Figure 3-14. Pritchard Tank Level Comparison



3.1.4 Providence Road Pump Station and Freemanville Tank

The primary concern with the Providence Road facility was the 15- to 20- psi difference in the suction pressures and the large 2,000 gpm flow differences between the model and the SCADA data, as observed in the calibration report. These differences are believed to be the result of pump curves that did not incorporate the unidentified large water user in the downstream zone or the identified large close valve previously identified at the corner of Freemanville and Birmingham Roads. The inclusion of updated pump curves and the large water user and closed valve were identified as likely to improve the model's calibration results.

The Providence Road pump station field test data showed a flow rate of 3,000 gpm and TDH of 52 feet with Pump 1 running at full speed, and a flow rate of 2,780 gpm and TDH of 43 feet with Pump 3 running at full speed. The field test data for Pump 1 was very close to the manufacturer's pump curve, but the field test for Pump 3 showed reduced performance. The pump speed that was tested was also higher, at 1,185 revolutions per minute (RPM), than the manufacturer's pump curve test speed of 1,160 RPM. The model results were found to best fit the SCADA data when the Providence Road pump curve was adjusted to be slightly greater than the original pump curve (at roughly 102% speed), which is slightly higher than what was predicted by the field test data shown on Figure 3-15. This curve was needed to get the higher flow rates observed in the SCADA data and is believed to be justified even though it is slightly larger than the original manufacturer's curve as some curves provided may represent trimmed curves while pumps may be delivered without trimmed impellers. Whatever the case, the actual station flows are clearly higher than what is being predicted and a slight adjustment like this is reasonable to assume given the flows observed in SCADA.

The SCADA data show the pump station flow rates were above 4,000 gpm in certain cases. Although the SCADA data did not show how many pumps were running, it was apparent that two pumps were running together. The pump controls at this pump station were revised from a variable speed pump (VSP) to level-based controls based on the Freemanville Tank levels. The predicted flow rate in the revised model is close to 10% of the SCADA flow rate as shown on Figure 3-16.

The calibrated model suction pressures were trending higher compared to the SCADA data while the discharge pressures were fairly close. The revised model suction and discharge pressures trend quite closely to the SCADA data, as shown on Figure 3-17, except for the early hours where the discharge pressures are higher. It is believed this is caused by the model tank control valve failing to open which causes the model pressures to rise when the valve is closed. Similar behavior was also observed in the iHydrant data in the actual system as well and was therefore left closed in the model. Close operational control of the Providence pump station should be matched to ensure that when a second pump is turned on that the Freemanville Tank altitude valve is allowed to fill to avoid higher pressures in the discharge zone. It is unknown if current operations currently are checking for this, but this should be added to the system operation to avoid this potential higher pressurization from occurring in the real system.

The Freemanville Tank altitude valve was adjusted based on SCADA data such that it opens when the tank level drops below 40 feet instead of 42.5 feet. The revised model compares well with the SCADA data for the Freemanville Tank as shown on Figure 3-18.

Conclusions: The tank operations are vastly improved with these changes to the system. The pump curve significantly improved the Providence Road operations for both flow and pressure and getting the model and SCADA values closer than were observed previously. The adjustment of operational controls and adjustment of the operations of the Providence Road pump station to non-variable speed control also greatly improved model operations and model stability. Suction pressures and discharge flows are now much more closely matching what was observed in the SCADA data. Adding the large unknown user demand with its diurnal curve also improved the pressure and flows in this area as well as did the inclusion

of the closed valve at the corner of Freemanville and Birmingham Roads. That the tank level at Freemanville Tank now much more closely matches the actual operation level confirms and appears to validate these changes and increases the confidence in the model significantly.

Figure 3-15. Providence Road Pump Station: Original Field-tested Curve vs Adjusted Pump Curve

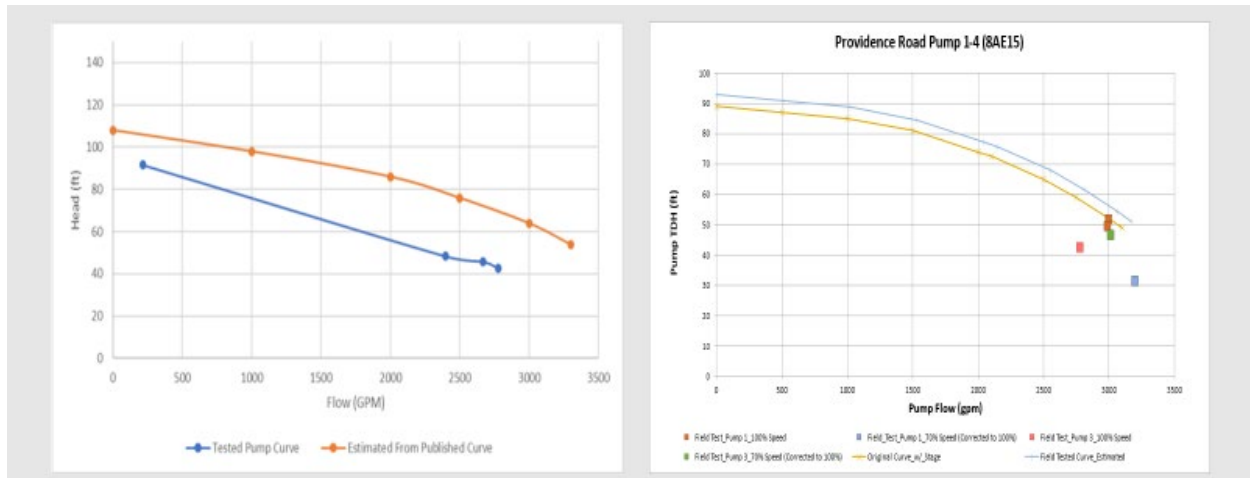


Figure 3-16. Providence Road Pump Station: Pump Flow Rate Comparison

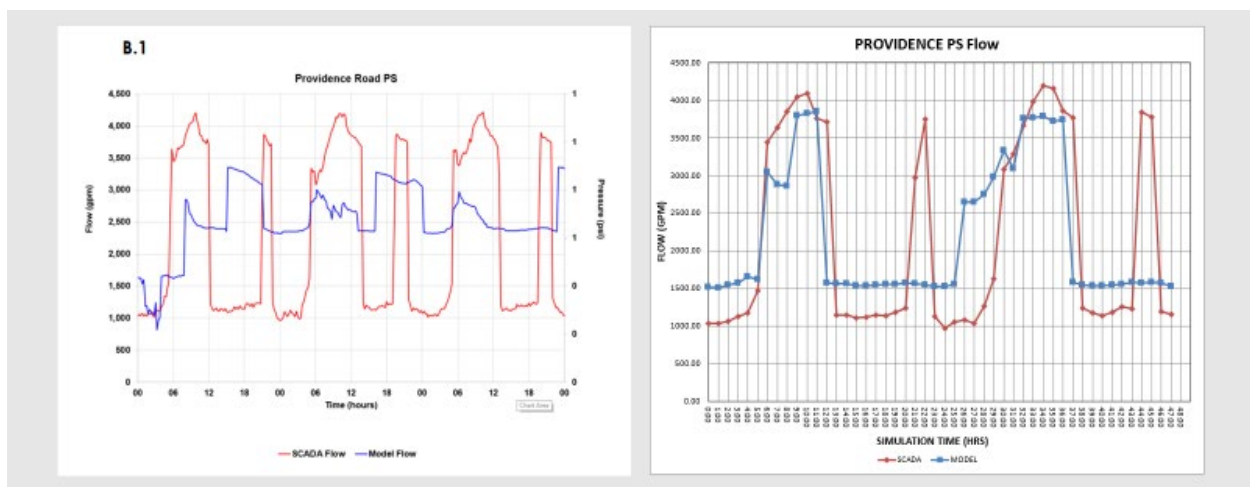
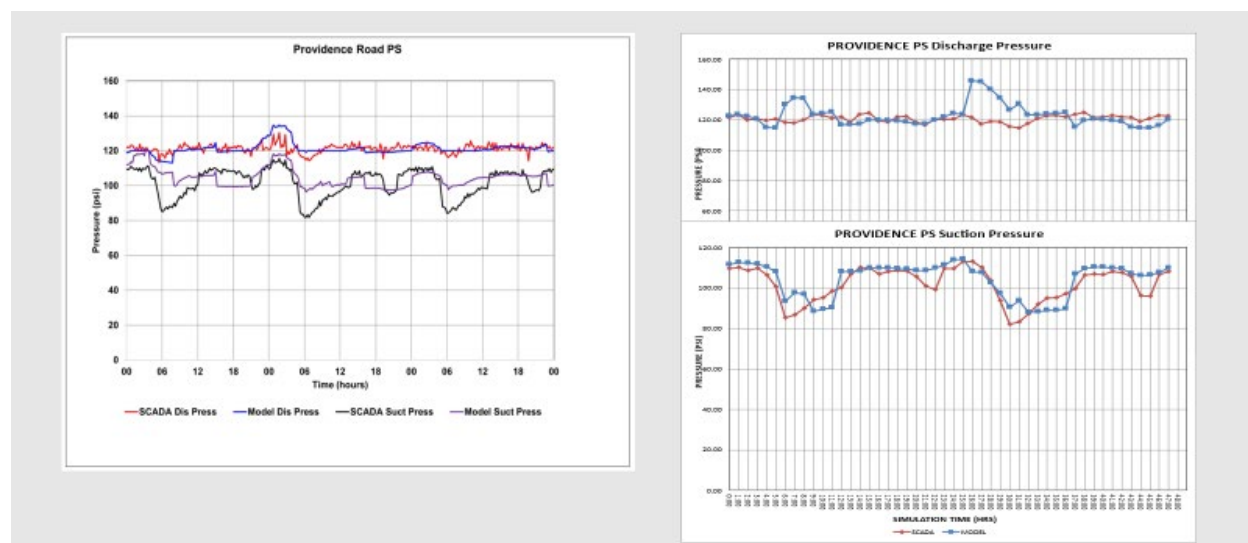
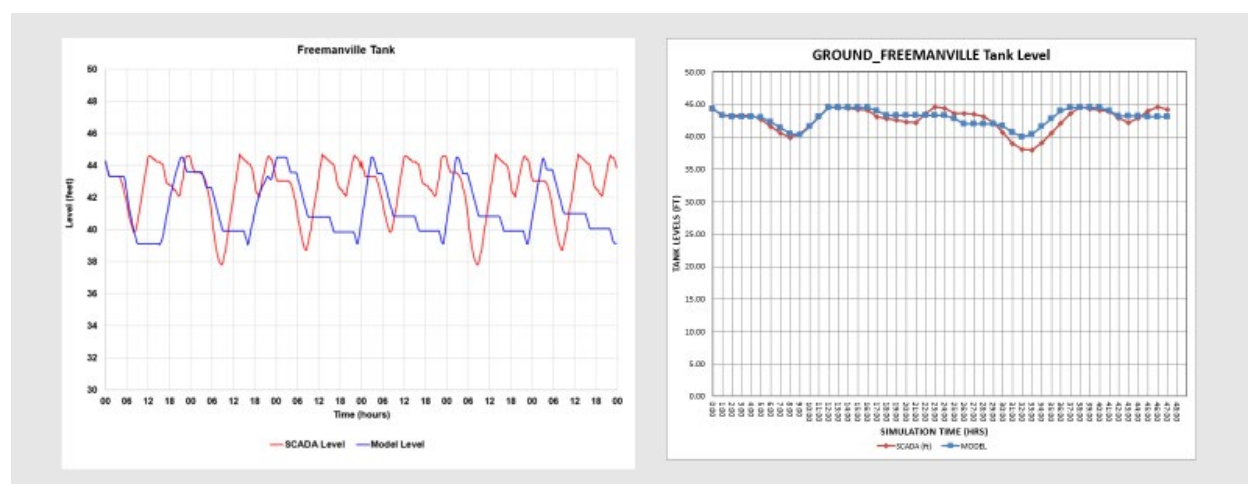


Figure 3-17. Providence Road Pump Station: Suction and Discharge Pressure Comparison

Figure 3-18. Freemanville Tank Level Comparison


3.1.5 Mansell Road Pump Station and Hembree Tank

The primary concerns for the Mansell pump station were the roughly 1,500 gpm difference in pump station flows and the 15 to 20 psi differences in suction pressure that were observed in the original calibration report. It was believed that these differences were due to the pump curves at the Mansell station as well as the low flows seen at the Providence pump station. Improvements to these facilities' pump curves and controls would likely improve these concerns in the model.

The Mansell Road pump station field test data showed a flow rate of 5,150 gpm and a TDH of 15 feet for Pump 1 (at 95% speed), a flow rate of 5,250 gpm and TDH of 15 feet for Pump 2 (at 95% speed), and a flow rate of 4,950 gpm and TDH of 12 feet for Pump 3 (at 94% speed). The pump speed that was tested was also higher (where 100% speed was 1,185 RPM) compared to the manufacturer's pump curve test speed of 1,160 RPM, as shown on Figure 3-19. As with the Providence Road pump curves, to match the flows observed in SCADA, a pump curve similar to the original manufacturer's pump curve was necessary to get model flows close to SCADA flows, even though the field test data indicated that a slight reduction in the curve may have been warranted.

SCADA data indicated that the pump station flow rates were close to 7,000 gpm. Although the SCADA data did not show how many pumps were running, it was apparent that all three pumps were running together. The pump controls at this pump station were revised from a VSP to level-based controls based on the Hembree tank levels. The predicted flow rate in the revised model is close to 10% of the SCADA flow rate (Figure 3-20). Even with this full, 100% speed curve, model flows were still under predicting the flows observed in the SCADA system.

In contrast, the calibrated model suction pressures trended higher compared to the SCADA data while the discharge pressures were fairly close but higher when the pumps were operating. The revised model suction and discharge pressures overall trend does follow quite closely to the SCADA data (Figure 3-21).

However, the differences in flow (lower) and suction pressure (lower), and discharge pressure (higher) when pumping is interesting as it does indicate that there is something still somewhat off here, but the model is still reasonably close overall. This is also a location where the SCADA sensors should also be verified against field gauge data to ensure good accuracy of the data. If there is any inaccuracy in the SCADA data at this location here, that could also explain the differences, but without more information it is difficult to explain the differences further. But even as is, this is still reasonable for the planning purposes of the model but should be revisited should additional information become available.

The Hembree tank altitude valve, which receives water from this pump station, was adjusted based on SCADA data such that it opens when the tank level drops below 33.8 feet instead of 32.0 feet and closes at 34.0 feet instead of 34.2 feet. The revised model aligns with the SCADA data for the Hembree tank (Figure 3-22).

While refining the pump curves and controls for this facility improved flow differences, some uncertainty remains regarding suction pressures. While the changes reduced the differences observed from what was seen in the original calibration report to lesser values, there is still some uncertainties that appear to be occurring that cannot be fully explained. However, results are now much more closely matching to the SCADA data and tank level trending is much more closely matching that the model is more than acceptable for planning purposes of the Master Plan.

Figure 3-19. Mansell Road Pump Station: Original Field-tested and Adjusted Pump Curve

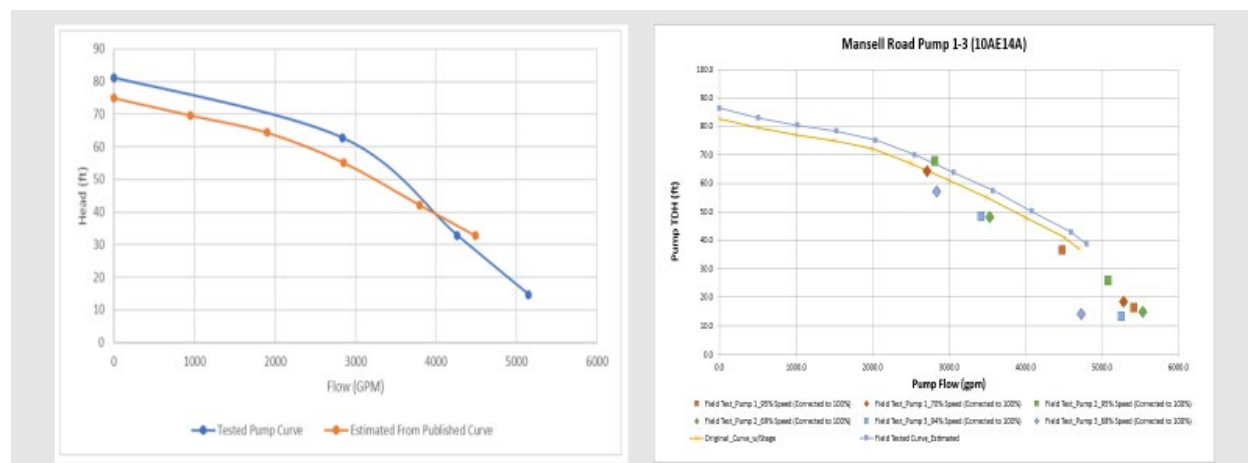


Figure 3-20. Mansell Road Pump Station: Pump Flow Rate Comparison

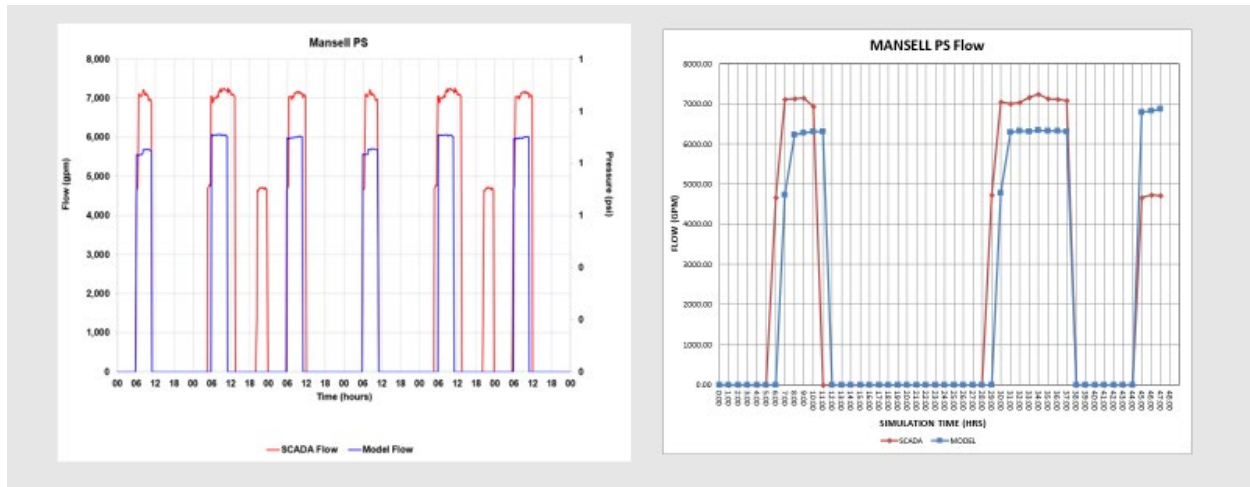


Figure 3-21. Mansell Road Pump Station: Suction and Discharge Pressure Comparison

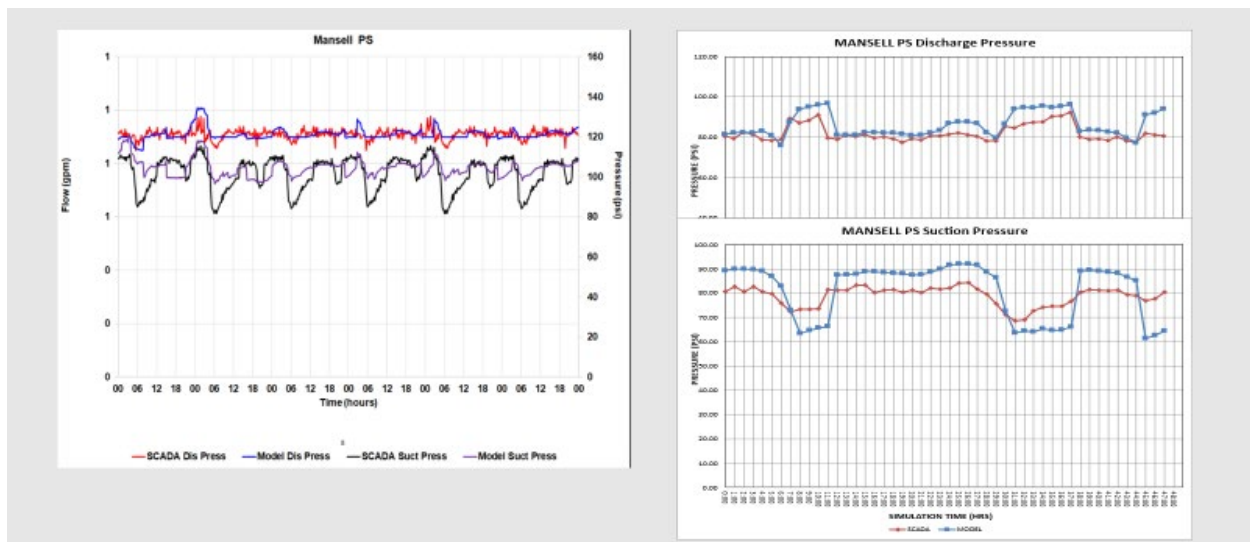
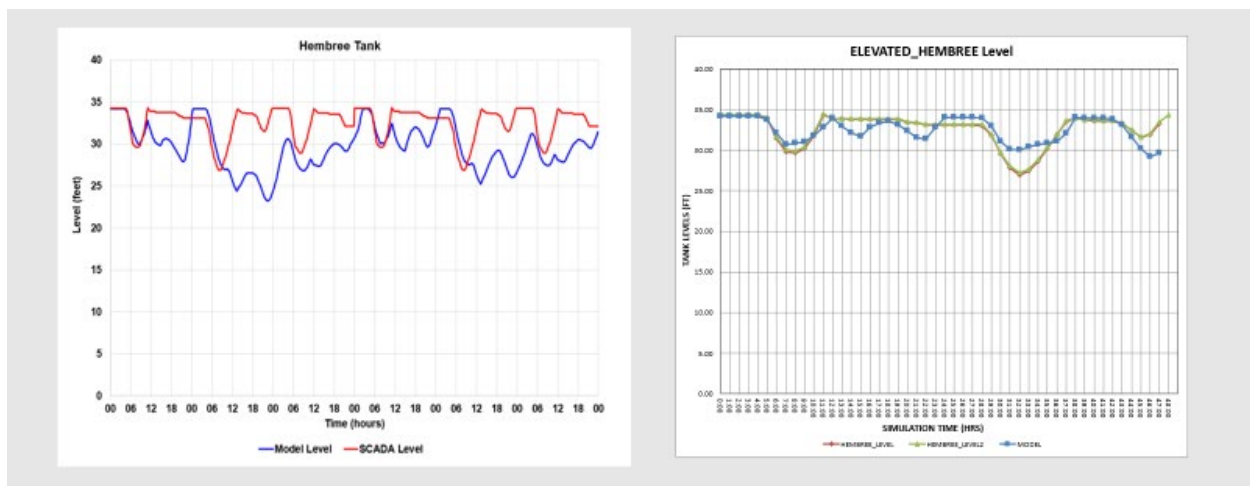


Figure 3-22. Hembree Tank Level Comparison



3.1.6 Other Tank Updates

When reviewing elevated storage tanks in the model, the levels did not match up with SCADA. The current model used tank levels that calculated tank levels from the ground, whereas the SCADA measured tank level from the bottom of the Tank storage level. This difference makes it difficult to compare model and tank “levels” easily from the SCADA to the model. Because of this, the model tank bottom levels were adjusted to match what was used in the SCADA to make the SCADA comparisons easier to read.

Additionally, for the Freemanville and Hackett tanks, the tank volume to depth curves looked to be upside down in the calibrated model. Based on photos of the storage tanks, the volume change had to taper at the bottom and not at the top of the tanks. These curves were corrected as shown on Figure 3-23.

The Hackett and Bethany tanks’ altitude valve controls were also adjusted in the calibrated model to match the operations observed in the SCADA data. They were adjusted based on SCADA data such that the altitude valves open when the tank levels drop below 30.5 feet and 31.0 feet for Hackett and Bethany tanks, respectively, and close at 40.0 feet for both tanks. The revised model tank levels compare well with the SCADA data as shown on Figure 3-24 and Figure 3-25.

Figure 3-23. Pritchard Tank Volume Curve Comparison

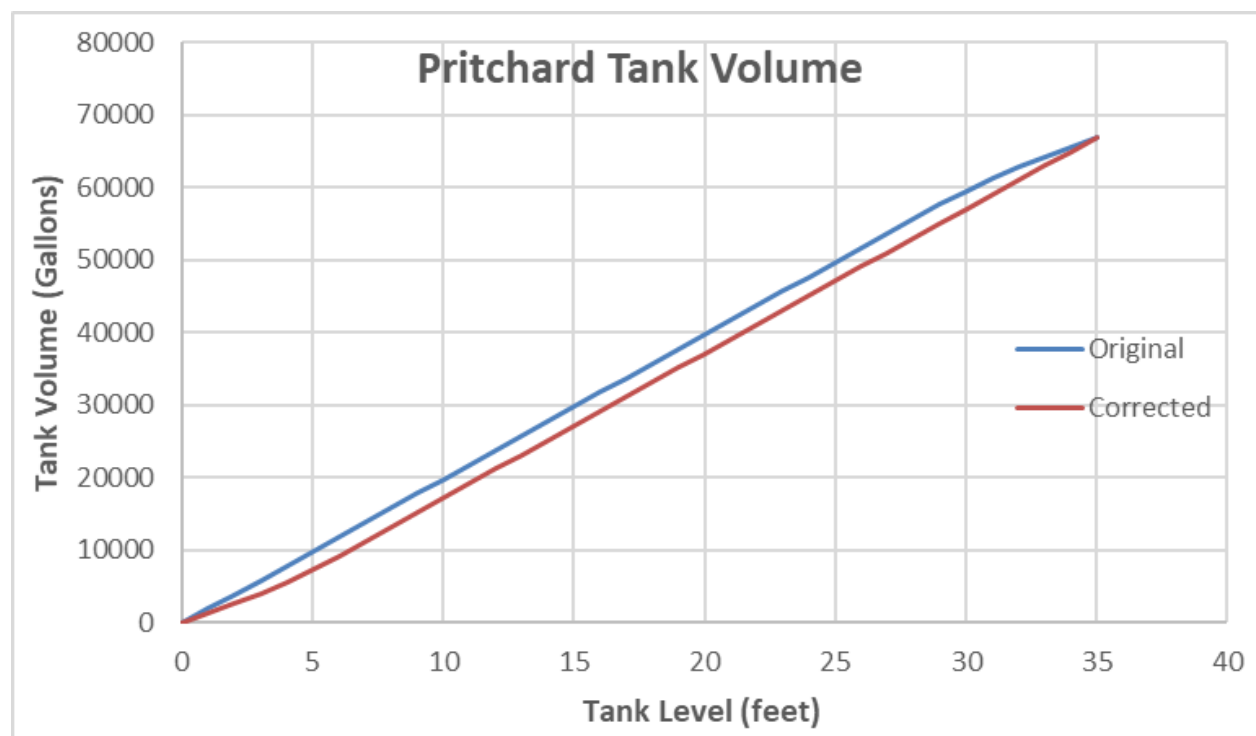


Figure 3-24. Hackett Tank Level Comparison

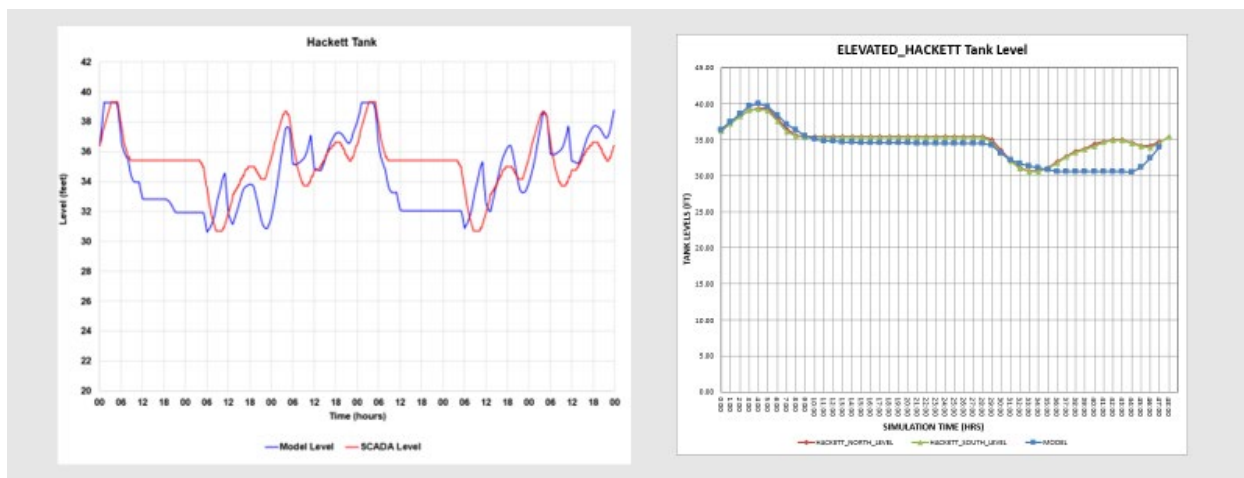
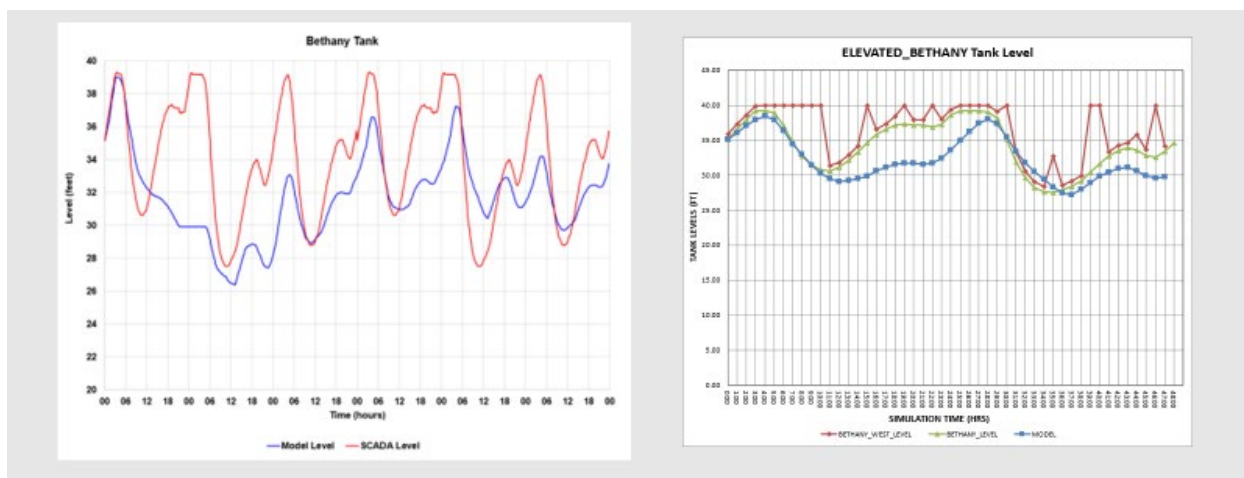


Figure 3-25. Bethany Tank Level Comparison



3.2 Summary

This model validation exercise was conducted as part of the Fulton County Water Distribution Master Plan project to identify areas for improvement and incorporate any changes before future system capacity planning.

With the changes made to the pump curves, the updates to the model controls, the inclusion of the unknown large water user, and known closed valve, the previously identified concerns appear to have been significantly reduced or eliminated from the model. The pump station suction/discharge pressures, pump flow rates, and tank levels in the revised model more closely reflect the SCADA data compared to the previous calibration report. Additional improvements to the model tank curves were identified during this exercise, which allowed for easier comparison of model vs. SCADA tank levels. In addition, two tank volume vs. tank level curves were revised when input errors were found in the previous model. Pump station controls, altitude valve controls, tank levels, and tank volume curves are now more accurately configured in the revised model. These changes appear to now allow the model tank levels significantly better tracking than previously observed. These changes significantly improve the confidence level in the model performance for use in Master Planning purposes.

It is recommended that the SCADA equipment for the Pritchard pump station and the Mansell pump station be checked for issues with suction and discharge pressures and pump flow rates.

The validation exercise also helped identify a significant low-pressure issue near iHydrant 18, which was attributed to a combination of a large unknown user and potential closed valve in the system. Field investigations in this area seemed to corroborate that closed valves might exist as seen at the intersection of Birmingham Road and Freemanville Road between the 12-inch and 24-inch lines. The location of the unknown user is suspected to be somewhere between Birmingham Road and Wood Road. It is recommended that field investigations continue to help identify the location of the unknown user as well as check for other closed valves in the system. For the purposes of future capacity planning, it is recommended that the closed valve that was found at the intersection of Birmingham and Freemanville Roads be opened.

Through this validation exercise one operational recommendation was identified. At the Providence pump station when a second pump is turned on, the Freemanville Tank altitude valve should be allowed to fill to avoid higher pressures in the discharge zone. This will help avoid potentially damaging high pressures from occurring in the system. Overall, this model validation and update exercise helped improve the confidence in the water distribution model for Fulton County. All previously identified concerns appear to have been resolved. Calibration efforts near the Mansell pump station may be warranted in the future to further improve the model, but the current model appears sufficient for master planning purposes without significant flow or pressure concerns previously identified.

4. Water System Analysis

The water system analysis identifies the following under existing and future conditions:

- Areas of constant concern, such as chronically low pressure, high pressure, or high velocity
- System capacity and capability to deliver peak flows
- Available fire flows
- Areas of high average water age

Water system operating standards help ensure an adequate level of water service to all customers. The recommendations applied to the Fulton County water distribution system are from design guidelines published by the American Water Works Association (AWWA) Manuals of Water Supply Practice and input from County personnel. These standards are customized to the County's needs in a tailored Level of Service.

When the system does not meet this Level of Service under the specified conditions, deficiencies are identified. This aids in the identification of improvements to the system, both operational and capital, to overcome these deficiencies and meet the County Level of Service.

Jacobs performed analysis using an extended period simulation of 3 to 168 days using diurnal demand patterns to fluctuate demands hourly. This method allows for a more robust approach in that it evaluates various simulation periods under a defined demand set based on the analysis being performed. Simulations for maximum system response were under maximum day demands, and simulations for minimum or average system response were under average day demands.

4.1 Level of Service

The performance criteria of a water system is defined as the Level of Service a water system delivers water to the customer, as well as other defined criteria in the water distribution system. The following Levels of Service were developed in consultation with the County to evaluate the performance of the water system using the hydraulic model (Table 4-1). The County's operational Level of Service for minimum pressure at the customer connection is 35 psi; however, for the modeling in this Master Plan, a minimum pressure of 40 psi was used at the customer connection or node in the model. This provides a buffer to account for any potential uncertainties or minor losses and adds a "factor of safety" to the recommendations related to minimum pressure.

Table 4-1. Level of Service Criteria

Evaluation Criteria	Value	Units	Evaluation Demand Conditions
System Pressure			
Minimum Pressure	40	psi	PHD
Minimum Pressure, Fire Flow Conditions	20	psi	MDD
Pipeline Velocity			
Maximum Pipeline Velocity for Pipes < 12 inches	5	fps	PHD
Maximum Pipeline Velocity for Pipes > 12 inches	4	fps	PHD
Maximum Pipeline Velocity during a Fire Flow Event	10 to 15	fps	MDD
Pipeline Head Loss			

Evaluation Criteria	Value	Units	Evaluation Demand Conditions
Maximum Pipeline Head Loss for pipes < 16 inches	10	ft/1,000 ft	PHD
Maximum Pipeline Head Loss for pipes > 16 inches	4	ft/1,000 ft	PHD
Water Quality			
Water Age	72 to 96	hours	ADD
Fire Flow Availability			
Residential	1,500	gpm	MDD
Commercial	3,000	gpm	MDD
For New Pressure Zone Evaluations			
Maximum Pressure	100	psi	ADD
Minimum Pressure	40	psi	PHD
Target Pressure Range (static)	50 to 100	psi	-

fps = foot (feet) per second

PHD = peak hour demand

4.2 Current System Deficiencies

The model was run under current demand conditions and compared to the Level of Service to identify deficiencies in the current system. Pressures vary due to changes in ground elevation, water demands, and location relative to water supply sources. Ground elevations within the Fulton County water system vary from 857 feet mean sea level (MSL) to 1,264 feet MSL. This difference is about 407 feet MSL and therefore it is not feasible to limit pressures everywhere within the desired range of 35 psi to 100 psi with the elevation variation of this magnitude. The average pressure across all junctions in the model is about 98 psi with a range of 15 to 198 psi. Most of the high pressure areas are close to the Chattahoochee River toward the south of the county where the elevations are lower. The overall system average pressures are shown on Figure 4-1.

Figure 4-2 illustrates the existing system under MDD, highlighting areas with a minimum pressure below 40 psi. As previously discussed, this is partly attributed to the large unknown demand in the vicinity of iHydrant 18 (530 Hickory Mill Lane), where 2022 data show that the static pressures dropped significantly during the summer months. Figure 4-3 shows the tank level turnover during the MDD scenario. Most of the tanks turn over at least 20%, while Bethany and Alpharetta tanks turn over almost 40%.

Figure 4-4 shows the maximum head losses in the system in feet per thousand feet of main during MDD. Figure 4-5 shows the maximum velocities in feet per second (fps) in the mains during MDD.

According to the Level of Service criteria established in Section 4.1, there are only a few areas where the criteria are exceeded for both high head losses and maximum velocities; some of these exceedances are attributed to the assumption of the unknown user demand mentioned herein. The current system deficiencies are also presented in Appendix G.

Figure 4-1. Existing System ADD – Average Pressures

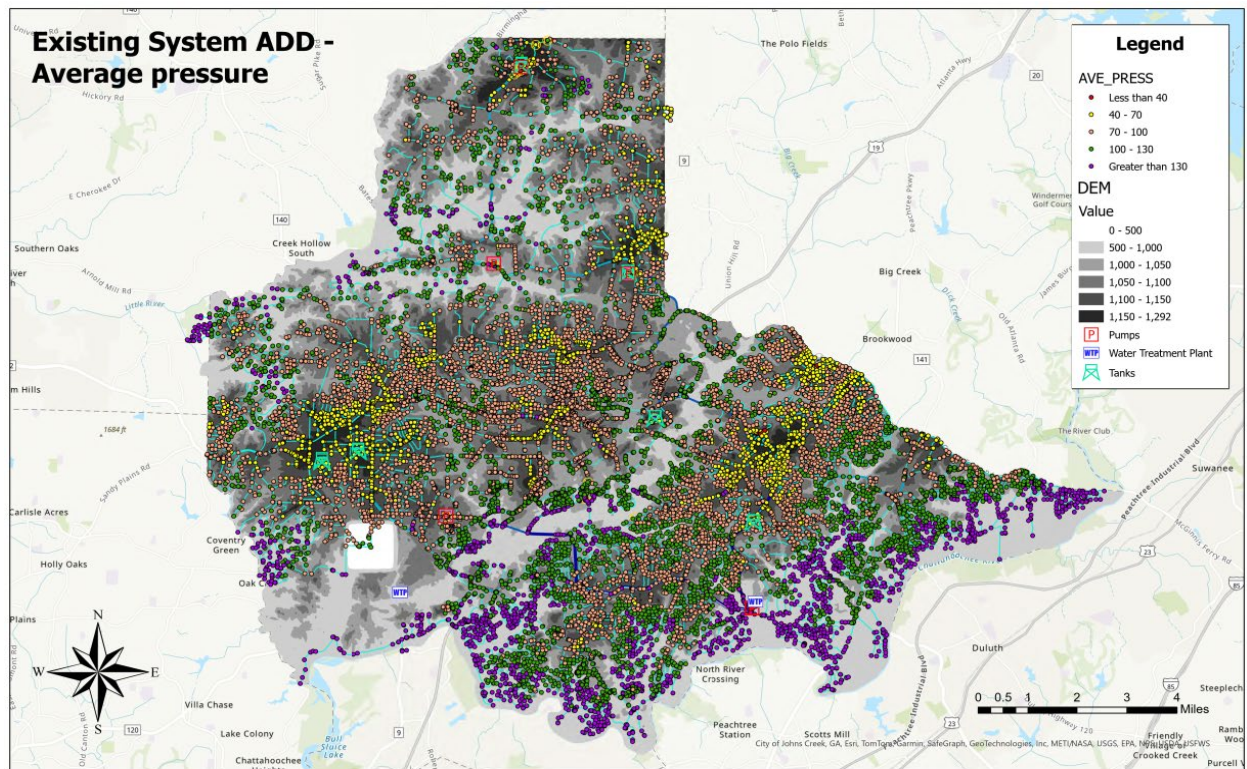


Figure 4-2. Existing System MDD – Minimum Pressure < 40 psi (with unknown user node shown)

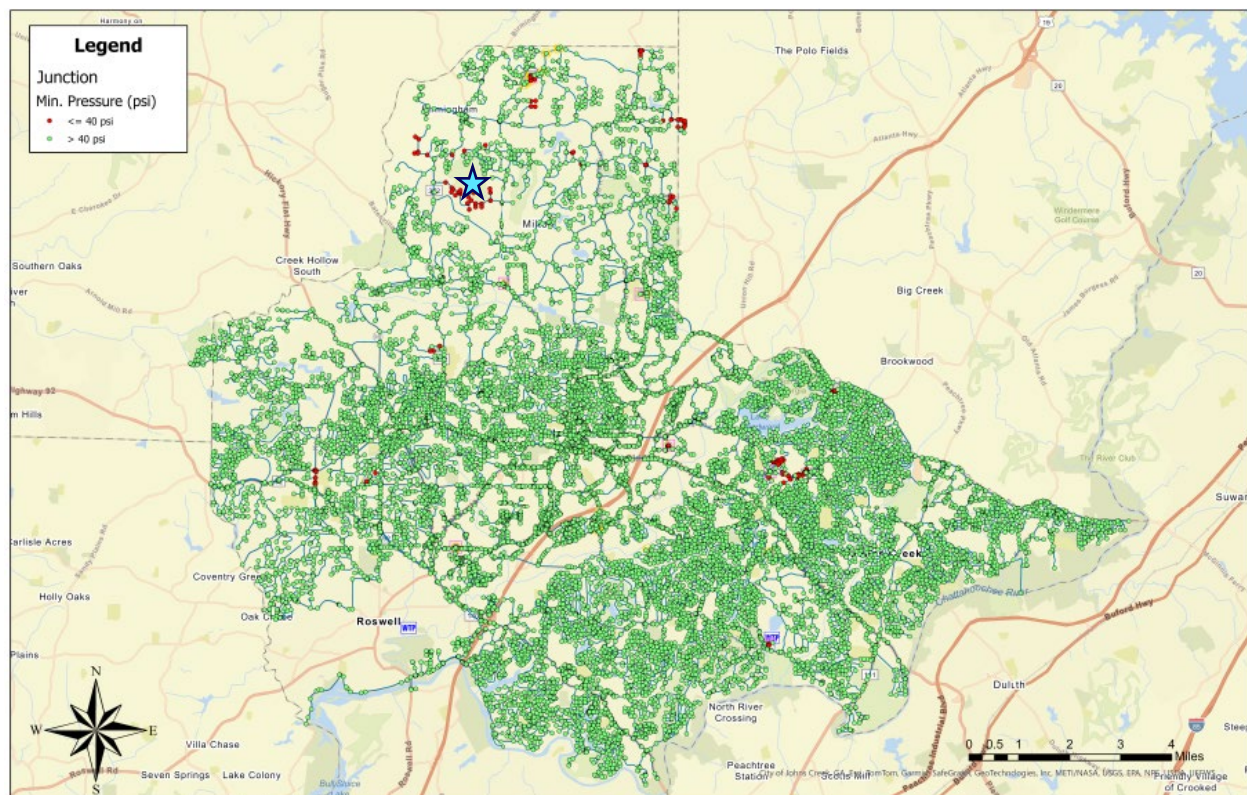


Figure 4-3. Existing System MDD – Tank Levels

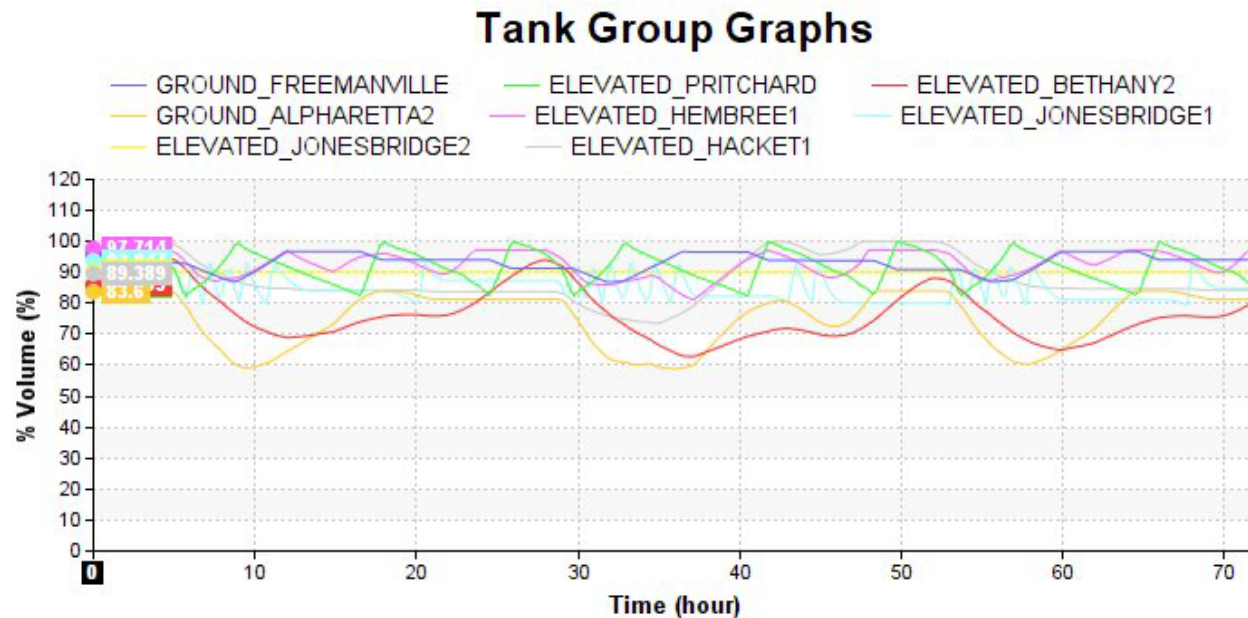


Figure 4-4. Existing System MDD – Maximum Head Losses

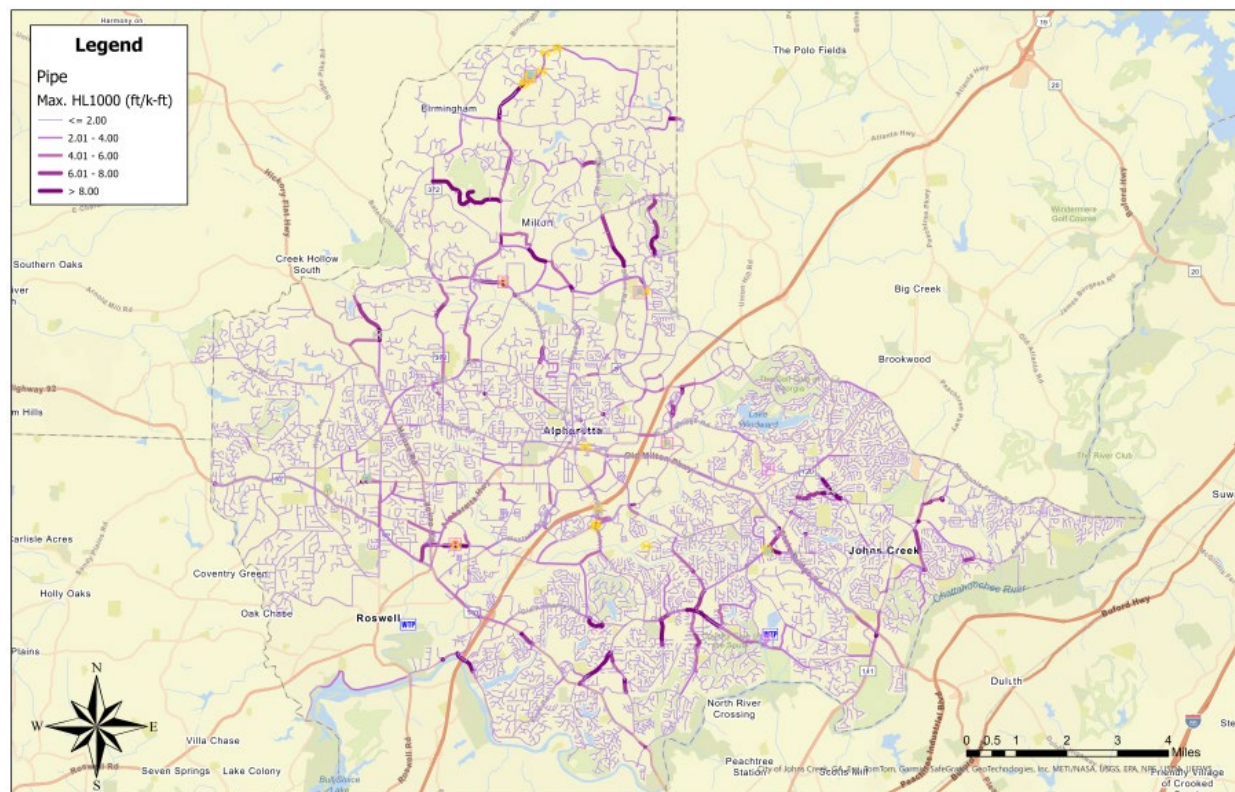
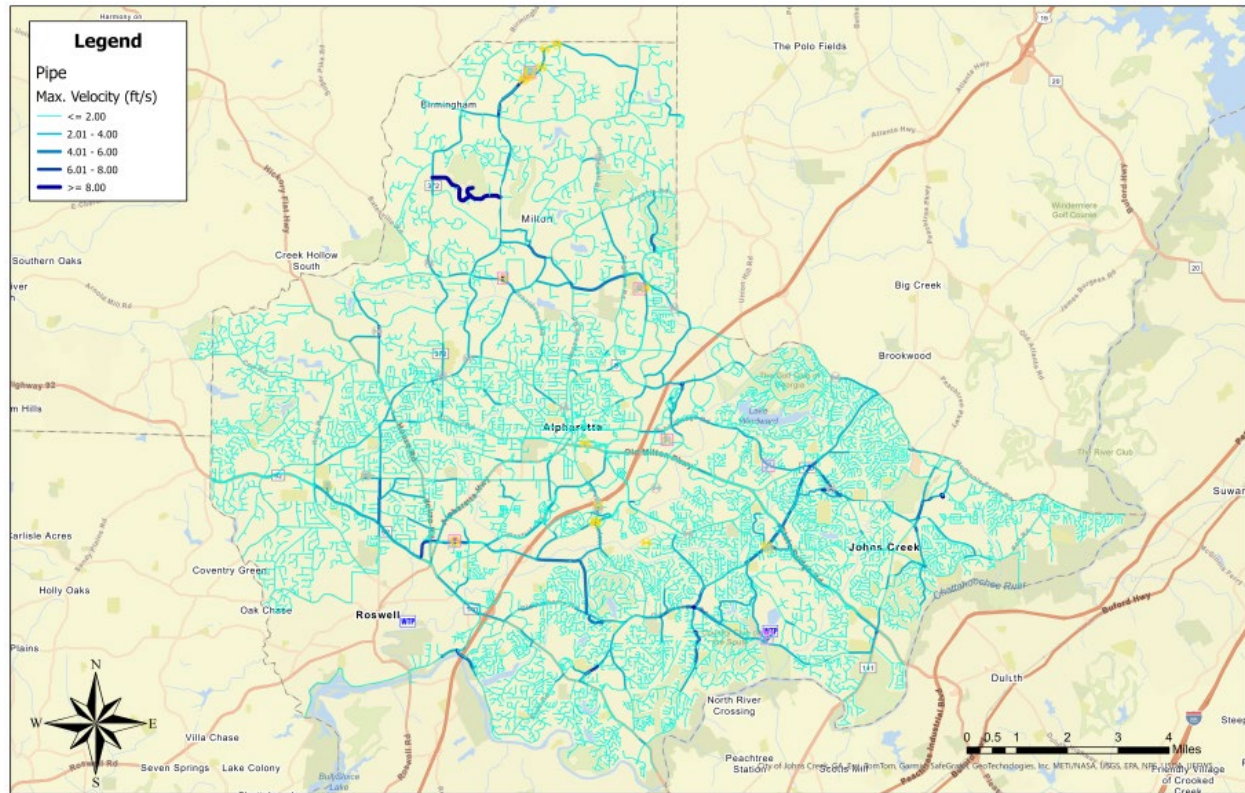
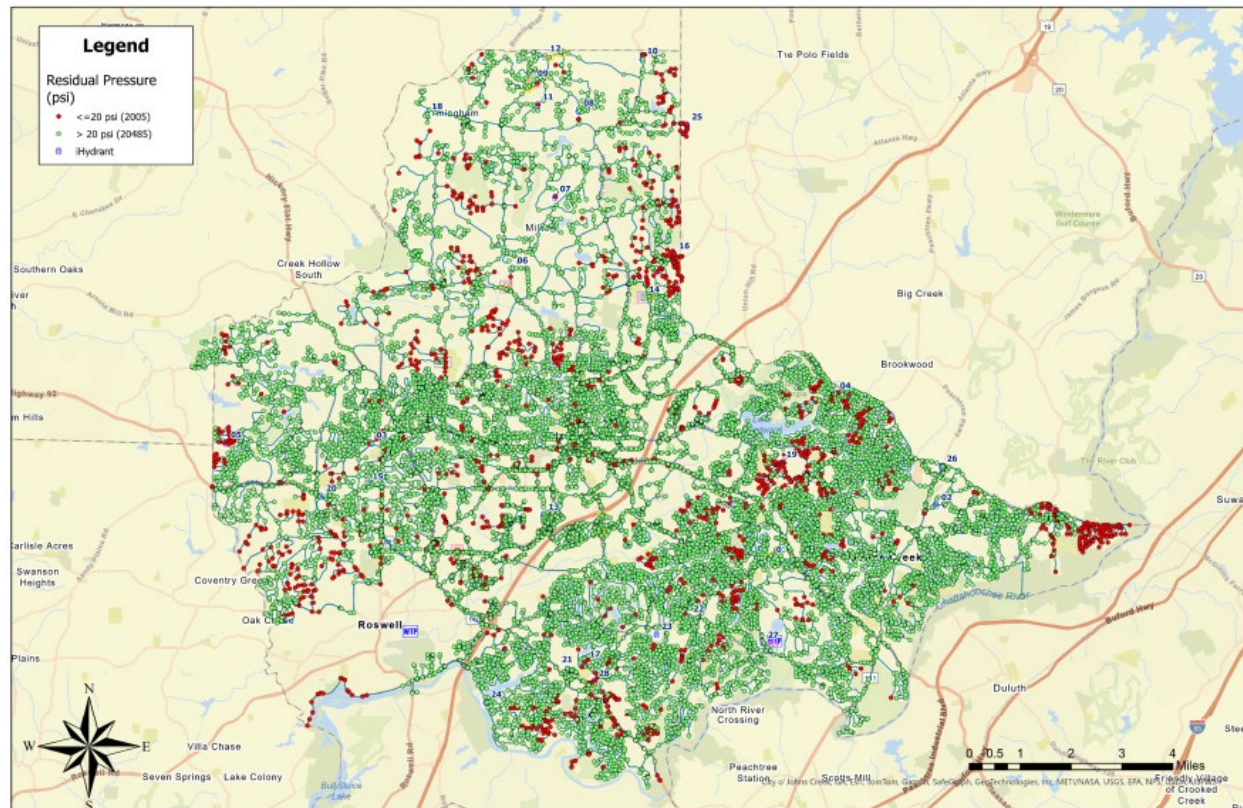


Figure 4-5. Existing System MDD – Maximum Velocities



A fire flow analysis was performed using the MDD scenario where AWWA recommends that fire flow be evaluated at the average hour of the MDD rather than the peak hour. The likelihood of a large fire occurring at the peak hour of the maximum day is small, and planning for this condition could result in the overdesign of system components. Fire flow demand was loaded into the model based on the land use codes associated with the tax parcel data in GIS. Any model junctions that were within commercially zoned parcels were loaded with a fire flow demand of 3,000 gpm. Junctions within residentially zoned parcels were loaded with a fire flow demand of 1,500 gpm. The system's capacity for delivering fire flow to an area via the water mains rather than through an individual hydrant is the metric commonly used by ISO for evaluating system performance. This method more accurately represents the available fire flow in the system up to the hydrant's location. Individual hydrant components were not modeled. The results of the fire flow analysis under MDD are shown on Figure 4-6, where junctions with residual pressures below 20 psi during a fire flow condition are highlighted in red.

Figure 4-6. Existing System MDD – Fire Flow



4.2.1 Water Quality Analysis

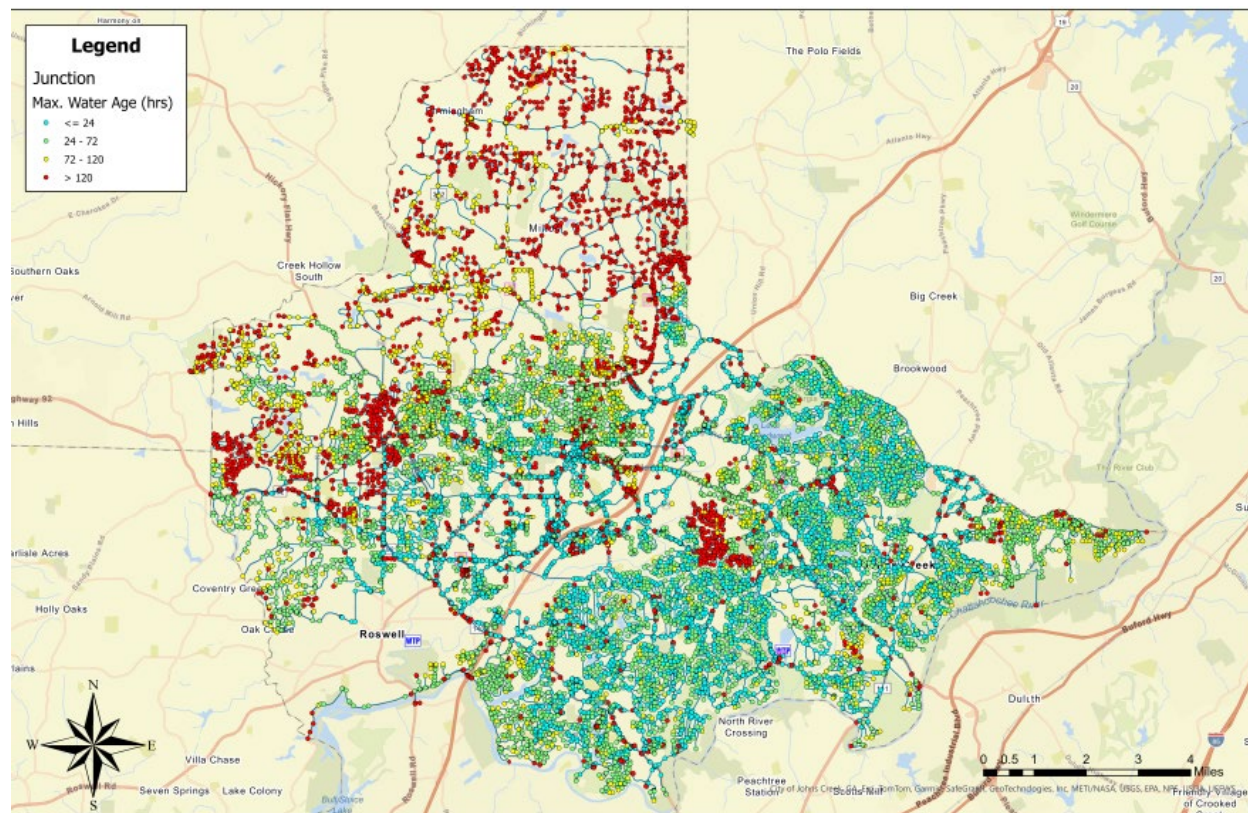
As water travels through the distribution system, it undergoes various chemical, physical, and aesthetic changes, which affect water quality. These changes depend on the finished water quality, water age, water flow rate, pipe materials, and deposited materials (such as sand, iron, and manganese). The water quality analysis evaluated water age and pipe velocities to identify areas that could be more susceptible to deterioration of finished water quality. The water quality analysis consisted of an extended analysis period of 30 days. The extended analysis is required because water models initialize water age at 0 hours and increases until a repeated pattern of water age is stabilized based on a daily diurnal of water patterns and system operations. The results of the water age analysis were based on average water age and average pipe velocity for the final 3 days of the 30-day simulation. The water age evaluation was performed under ADD.

4.2.1.1 Water Age

Water age is defined by measuring the time the water spends in the distribution system—the number of days it takes to travel from the WTP to the customer. As water demand increases, the amount of time any given volume of water resides in the system decreases. Analyzing water age provides information on the operation of the distribution system, the movement of water within the piping network, and the adequacy of the fill and drain process in storage tank operations. Water age provides a better understanding of water quality issues and helps to identify improvements. Several indicators may suggest high water age, including aesthetic considerations that consumers may identify and the results of distribution system monitoring efforts. Other than water age, indicators of poor water quality include insufficient source water treatment and pipe materials, and the condition or age of the distribution system.

The water age analysis indicates that there are certain areas, mostly in the City of Milton, where the maximum water age is more than 5 days, as shown on Figure 4-7. This is largely attributed to the WTP's location in the southeastern portion of the county and the increased travel times to get to the northwestern portion of the county. The higher water age area near Kimball Bridge Road is due to the area being isolated from the system. The water age here is improved with the completion of the transmission main.

Figure 4-7. Existing System Water Age (ADD)



4.2.1.2 Chlorine Residual Sampling

For chlorine analysis, Fulton County provided chlorine results from 679 addresses sampled multiple times between January 2022 and December 2023. In the original dataset, location codes were provided alongside addresses, and some addresses were assigned multiple location codes. For the purpose of this analysis, such data were consolidated and regarded as one location.

Drinking water chlorine sample locations and Tax Parcel shapefiles provided by Fulton County were used as initial reference points for geolocating the 679 addresses. The addresses used for the chlorine sampling were spatially joined to matching addresses in the drinking water chlorine sample locations shapefile. Next, the remaining addresses were manually compared to, matched with, and spatially joined to addresses in the Tax Parcel shapefile. Finally, the remaining addresses were geolocated based on their physical address. If an address could not be located using these methods, it was manually compared to the remaining 678 addresses. If there was a matching address with a different suite or building number, the two were consolidated. However, five addresses from the chlorine residuals file could not be geolocated.

The minimum, average, and maximum chlorine residuals were calculated for the sampling locations and are illustrated on Figures 4-8 to 4-10. There is no apparent relationship between high water age and low

chlorine residual on the Figures. It is also noted that if there were more chlorine sampling locations in the northwest portion of the County, it may be helpful to correlate with the higher water age areas shown by the hydraulic model.

Figure 4-8. Minimum Chlorine at Sampling Locations

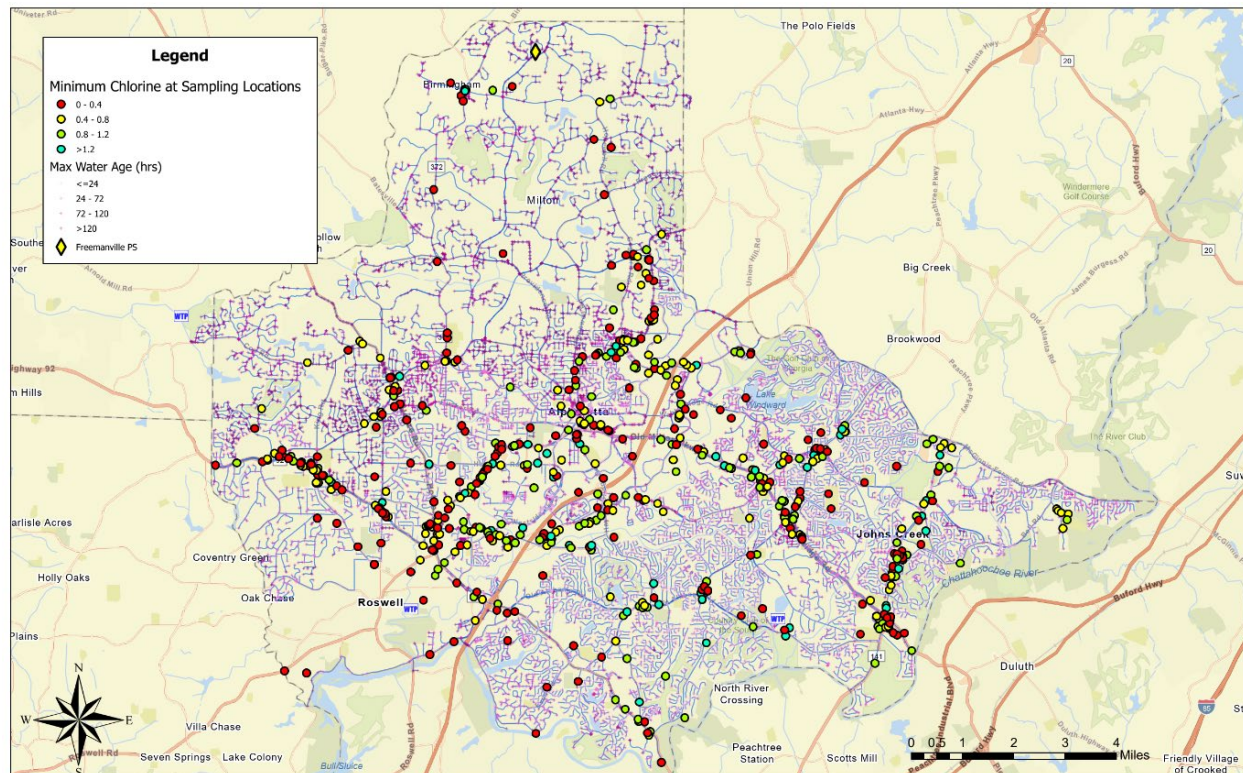


Figure 4-9. Average Chlorine at Sampling Locations

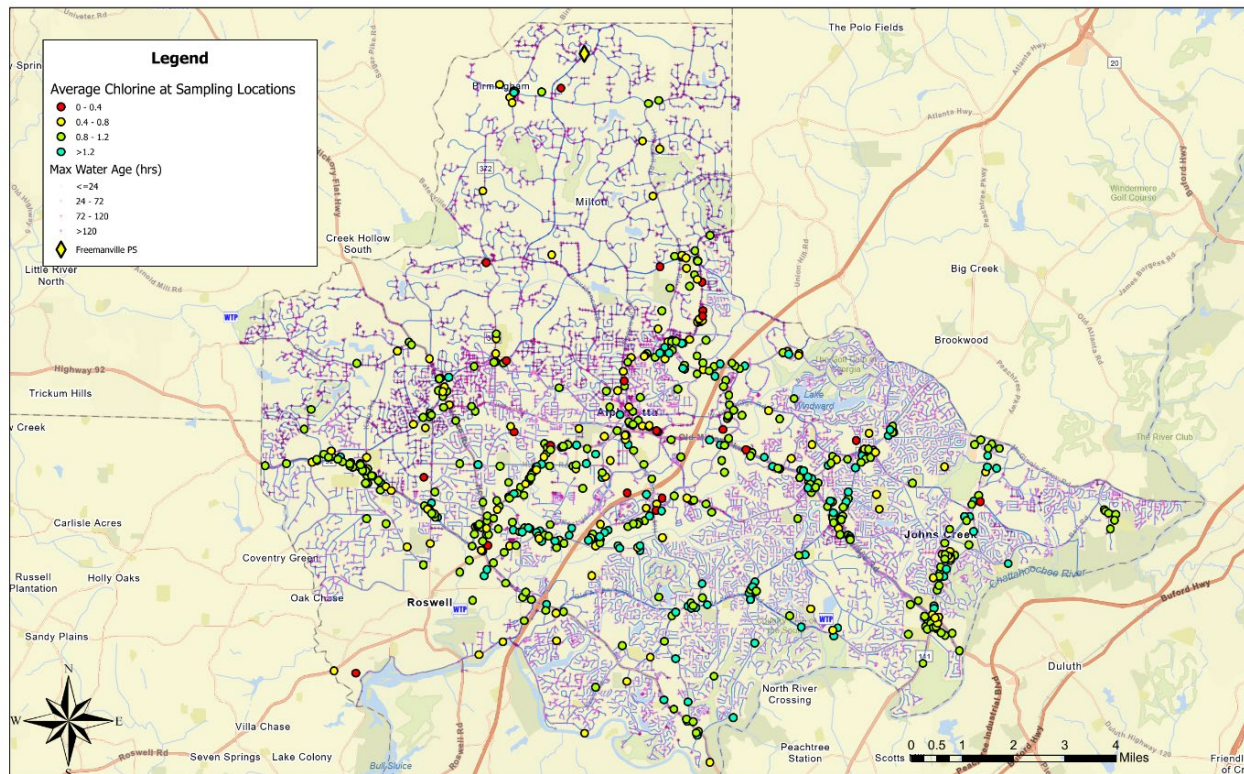
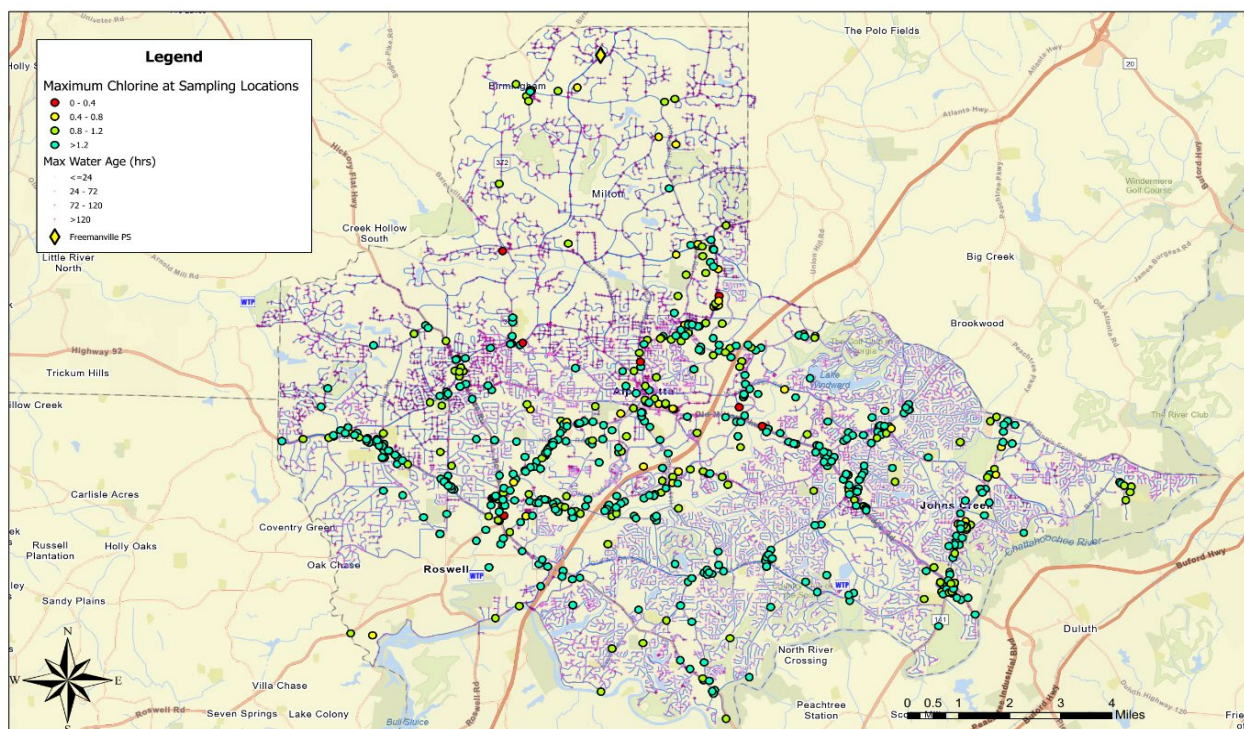


Figure 4-10. Maximum Chlorine at Sampling Locations



4.3 2050 System Deficiencies

The areas with minimum pressures less than 40 psi are shown on Figure 4-11, and the tank levels are shown on Figure 4-12. The Alpharetta and Bethany tanks drain almost completely, while the Hembree and Hackett tanks also have trouble filling. A fire flow analysis similar to the existing system's was repeated under 2050 demand conditions, but the results indicated that the impact was insignificant. This is logical because fire flow demands are usually much higher than domestic demands in the system. The junctions with areas of less than 20 psi residual pressures to meet the total demand are shown on Figure 4-13.

Figure 4-11. 2050 MDD – Minimum Pressure < 40 psi

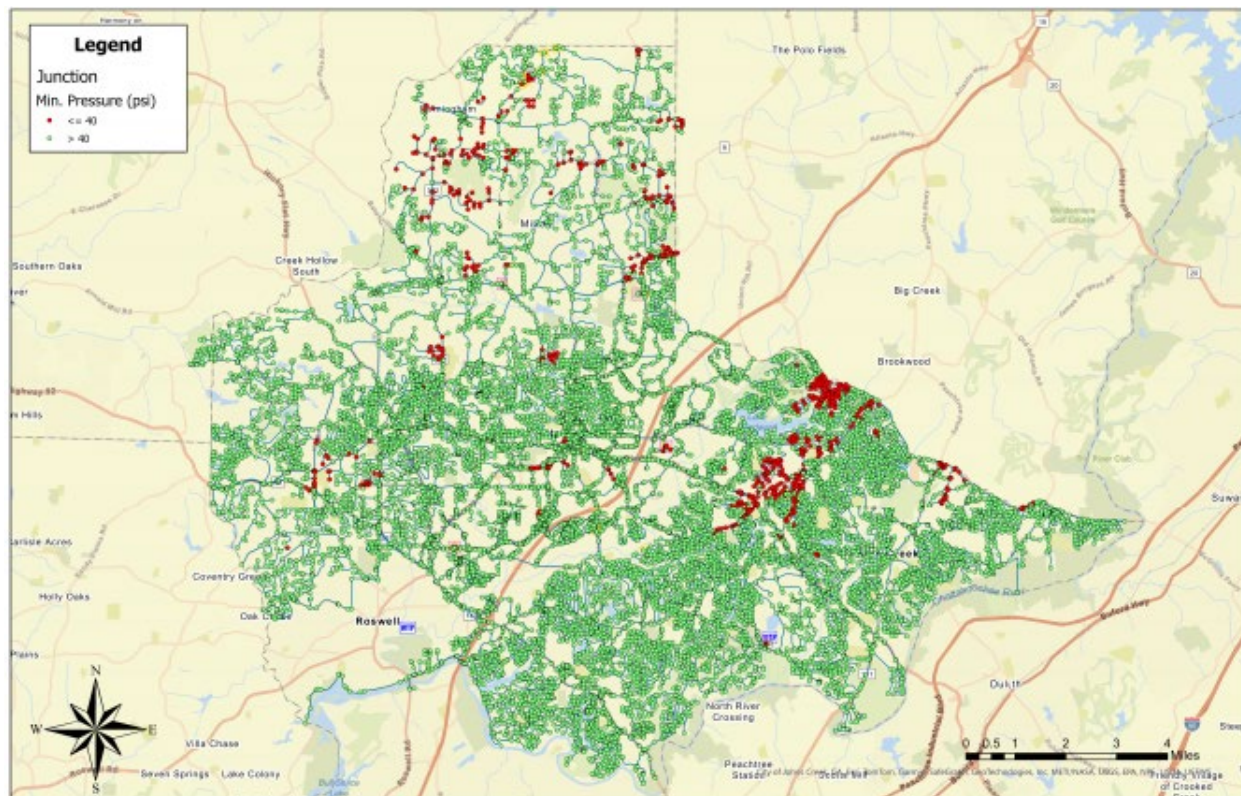


Figure 4-12. 2050 MDD – Tank Levels

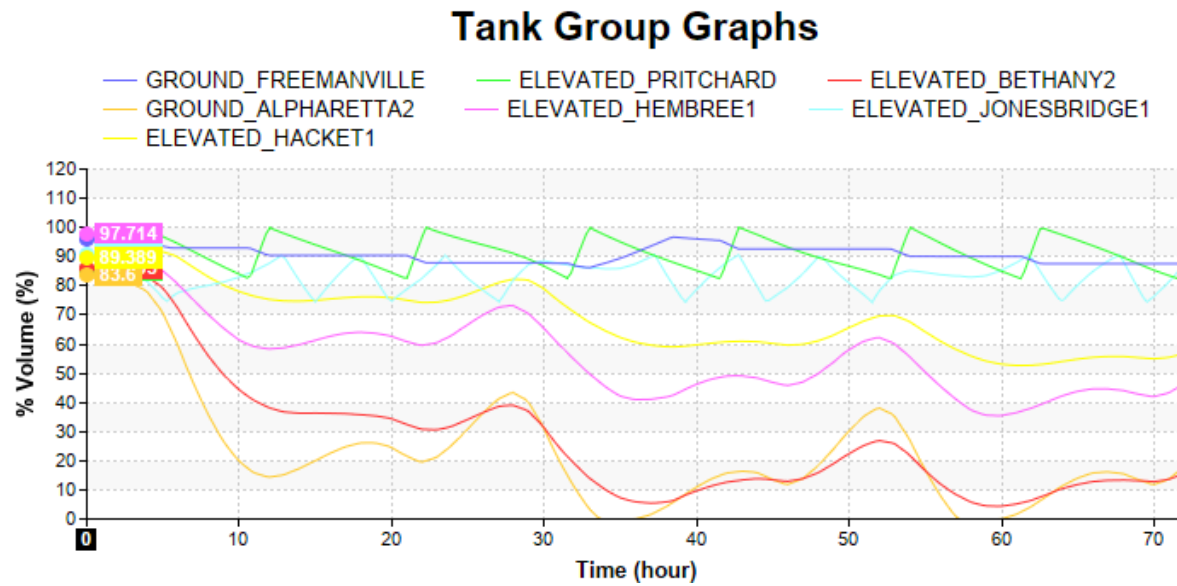
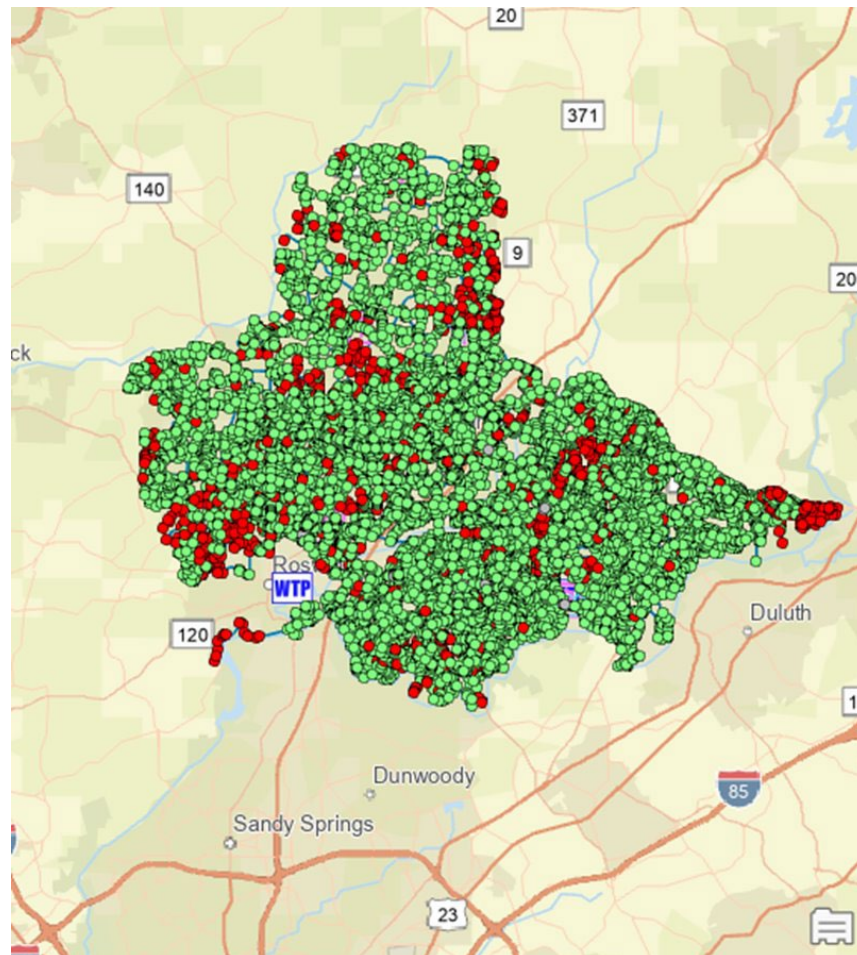


Figure 4-13. 2050 MDD – Fire Flow



5. Additional Analyses

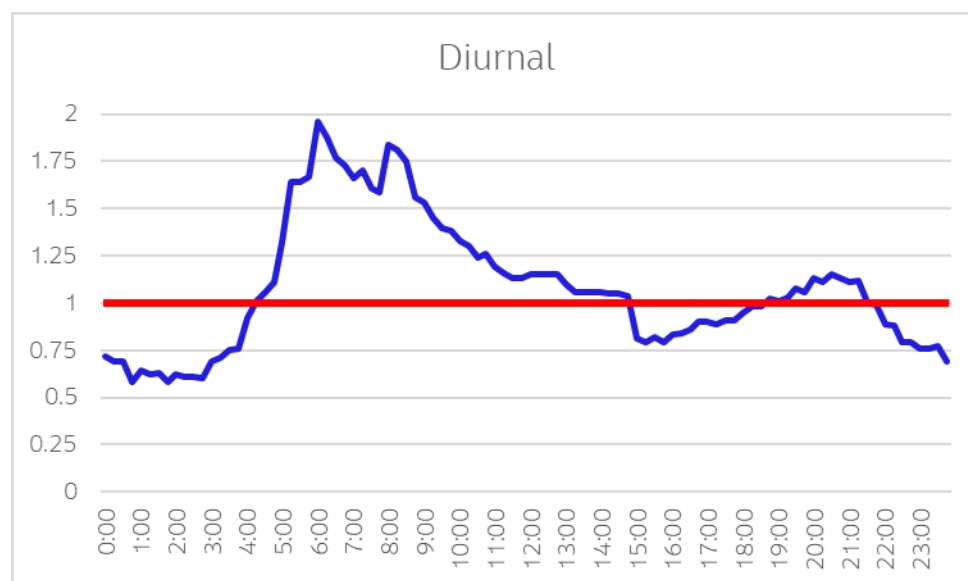
In addition to analysis of system deficiencies, additional analyses were performed that inform the capital improvements plan. These include analysis of required storage in the system, new pressure zones, water loss, interconnections, and valve criticality analysis.

5.1 Storage Analysis

Water system storage is needed to provide equalization, fire protection, and emergency supply to the distribution system. Each of these types of supply requirements should be calculated separately, and there are guidelines for each. Equalization storage provides supply to meet the fluctuating customer demands throughout the day. Fire protection storage should be adequate to supply water for fighting one large fire. Emergency storage should be calculated using a vulnerability analysis in accordance with AWWA Manual M19 or other state guidance.

To determine the amount of required equalization storage in the Fulton County system, the diurnal curve was evaluated (Figure 5-1). The area under the curve above the number 1 is totaled, and that percentage of the day is multiplied by the MDD to determine the volume of equalization storage required. For Fulton County, that number is 17.54% multiplied by the MDD. For this analysis, the MDD used was 47.9 MGD (from 2024) for existing analysis and 63 MGD (using a 1.75 peaking factor for 2050 analysis) from the projected demands.

Figure 5-1. Diurnal Curve



To calculate the fire protection storage, the amount of water needed to fight a large fire is used. In this case, a design fire of 3,000 gpm for 4 hours was used for conservative purposes. This equals 0.72 million gallons (MG) of water.

For emergency storage in Georgia, the Georgia Environmental Protection Division (GA EPD) recommends storage equal to an average day of demand. However, for most large systems, this is generally more than is necessary and can cause water quality issues due to excessive water age, and a more detailed study like this one is recommended. The 2011 Georgia Environmental Finance Authority (GEFA) Water System Interconnection, Redundancy and Reliability Act Emergency Supply Plan identified two Interconnection

Reliability Targets (IRTs), which were 35% and 65% of ADD. In other states, the general guidance for emergency storage is 50% of ADD. For this analysis, the ADD used was the average of the previous 5 years, 27.44 MGD, for existing analysis, and the projected ADD of 36.00 MGD for the 2050 analysis. For the purpose of this study, the GEFA IRT of 65% was used for emergency supply requirements.

Storage needs are determined by comparing the required emergency volume with the available storage separately from the sum of the required equalizing and fire volumes with the available storage. This is because it is not reasonable to assume storage is required for emergency and fire and equalization at the same time, but equalization and fire at the same time is required.

$$\text{Storage Deficit} = \text{Existing Storage} - \text{Emergency Storage}$$

$$\text{Storage Deficit} = \text{Existing Storage} - (\text{Equalizing Storage} + \text{Fire Storage})$$

The amount of available storage in the Fulton County main distribution system is 16.2 MG. The Pritchard Mountain zone contains 0.5 MG and can be counted in the analysis because in an emergency it could be drained into the main zone (Table 5-1). The clearwells at the Tom Lowe WTP are pumped into the distribution system and normally would not be included in distribution storage, but because backup generators are capable of supplying full power to the high service pump station, it is appropriate to include the clearwells in the calculation. The clearwells at the Tom Lowe WTP total 23.6 MG, of which one-half is allocated to Fulton County, which results in 11.8 MG of clearwell storage available at the Tom Lowe WTP. However, Fulton County has requested that the storage analysis be calculated both with and without the Tom Lowe WTP clearwells.

Table 5-1. Distribution Storage Tanks

Tank Name	Capacity
Alpharetta 1	1.00
Alpharetta 2	0.50
Bethany 1	2.00
Bethany 2	2.00
Freemanville	4.00
Hackett 1	2.00
Hackett 2	2.00
Hembree 1	0.20
Hembree 2	1.00
Jones Bridge 1	0.50
Jones Bridge 2	1.00
Pritchard Mountain	0.50
Total	16.70

The storage analysis is performed for current (existing) and future (2050) conditions to determine if additional storage is required. Of course, hydraulic modeling may also determine if there are localized needs for storage outside of this overall analysis. Because the main zone for Fulton County is very large and spread out, there may be high demand users that cause a need for storage in a localized area that is different from this overall system analysis. If this analysis reveals a storage deficit, hydraulic modeling will be used to identify potential storage sites that could maximize equalization and prevent excessive water age.

In Table 5-2, the Existing Storage Analysis results are shown with and without the Tom Lowe WTP clearwells. The analysis indicates that when the Tom Lowe WTP clearwells are included, there is no storage deficit. When the Tom Lowe WTP clearwells are not included, there is a 1.13 MG deficit. Not shown, if 50% of the ADD is used as the emergency storage criteria rather than 65%, the storage deficit drops to zero.

Table 5-2. Existing Storage Analysis

Existing Storage Requirements			
Equalizing Storage			
% from Diurnal Curve	17.54%		
Maximum Day - MGD	47.9	From 2024	
Storage Needed - MG	8.40		
Fire Storage			
Design Fire Flow - gpm	3,000		
AWWA Duration - hours	4		
Storage Needed - MG	0.72		
Emergency Storage			
% to meet State Regulations	65%	GEFA IRT	
5-year Average Day - MGD	27.44		
Storage Needed - MG	17.83		
Existing System Storage - MG			
Total Floating Storage - MG	16.70		
Existing Repumped Storage - MG			
Tom Lowe AFCWRC Clearwells	11.80	Fulton portion only	
Total Repumped Storage - MG	11.80	Including WTP clearwells	
Total Repumped Storage - MG	0.00	Not including WTP clearwells	
Total Storage - MG	28.50	Including WTP clearwells	
Total Storage - MG	16.70	Not including WTP clearwells	
Total Needed for Emergency - MG	17.83		
Total Existing Storage - MG	16.70	Not including WTP Clearwells	
Total Storage Deficit - MG	1.13		
Total Existing Storage - MG	28.50	Including WTP clearwell	
Total Storage Deficit - MG	--		
Needed for Equalizing and Fire - MG	9.12		
Total Existing Dist. Storage - MG	16.70	Not including WTP clearwells	
Distribution Storage Deficit - MG	--		
Total Existing Dist. Storage - MG	28.50	Including WTP clearwells	
Distribution Storage Deficit - MG	--		

AFCWRC = Atlanta Fulton County Water Resources Commission

Table 5-3 shows the 2050 Storage Analysis results with and without the Tom Lowe WTP clearwells. When the Tom Lowe WTP clearwells are included, there is no storage deficit. When the Tom Lowe WTP clearwells are not included, there is a 6.7 MG deficit. Not shown, if 50% of the ADD is used as the emergency storage criteria rather than 65%, the storage deficit drops to 1.3 MG.

Table 5-3. 2050 Storage Analysis

2050 Storage Requirements			
Equalizing Storage			
	% from Diurnal Curve	17.54%	
	Maximum Day - MGD	63	Using 1.75 PF (most conservative)
	Storage Needed - MG	11.05	
Fire Storage			
	Design Fire Flow - gpm	3,000	
	AWWA Duration - hours	4	
	Storage Needed - MG	0.72	
Emergency Storage			
	% to Meet State Regulations	65%	GEFA IRT
	2050 Average Day - MGD	36.00	
	Storage Needed - MG	23.40	
Existing System Storage - MG			
	Total Floating Storage - MG	16.70	
Existing Repumped Storage - MG			
	Tom Lowe AFCWRC Clearwells	11.80	Fulton portion only
Total Repumped Storage - MG		11.80	Including WTP clearwells
Total Repumped Storage - MG		0.00	Not including WTP clearwells
Total Storage - MG		28.50	Including WTP clearwells
Total Storage - MG		16.70	Not including WTP clearwells
Total Needed for Emergency - MG		23.40	
Total Existing Storage - MG		16.70	Not including WTP clearwells
Total Storage Deficit - MG		6.70	
Total Existing Storage - MG		28.50	Including WTP clearwell
Total Storage Deficit - MG		--	
Needed for Equalizing and Fire - MG		11.77	
Total Existing Dist. Storage - MG		16.70	Not including WTP clearwells
Distribution Storage Deficit - MG		--	
Total Existing Dist. Storage - MG		28.50	Including WTP clearwells
Distribution Storage Deficit - MG		--	

Hydraulic modeling will be performed to identify one or more locations in the distribution system for approximately 1.13 MG of storage under existing demands. This will depend on the ability to utilize the tank appropriately for equalization, so water quality is not compromised. For the 2030 and 2050 scenarios, additional storage will be evaluated up to 6.7 MG and will be included in the capital projects listing. These locations will be evaluated in a similar manner to ensure that the tank storage fluctuates throughout the day for optimal water quality.

5.2 Pressure Zone Review

The North Fulton County water distribution system currently operates with two zones – the Main Zone and the Pritchard Mountain zone. A pressure zone evaluation was conducted for the water distribution system to understand if the system would benefit from creating new pressure zones. This was evaluated based on the junction pressures during ADD and the minimum pressures during MDD while overlaying the ground elevations in the form of a digital elevation model (DEM) as shown on Figure 5-2 and Figure 5-3. The areas experiencing over 130 psi are circled in blue on Figure 5-2; these areas were further evaluated to determine if they could be isolated to create low pressure zones. The evaluations are described further in Section 6.4.1 Pressure Zone Recommendations. Similarly, the area experiencing less than 40 psi during MDD is circled in red on Figure 5-3. This area was evaluated during the future CIP scenarios to determine if it would benefit from the creation of a higher-pressure zone.

Figure 5-2. Existing System Average Pressures

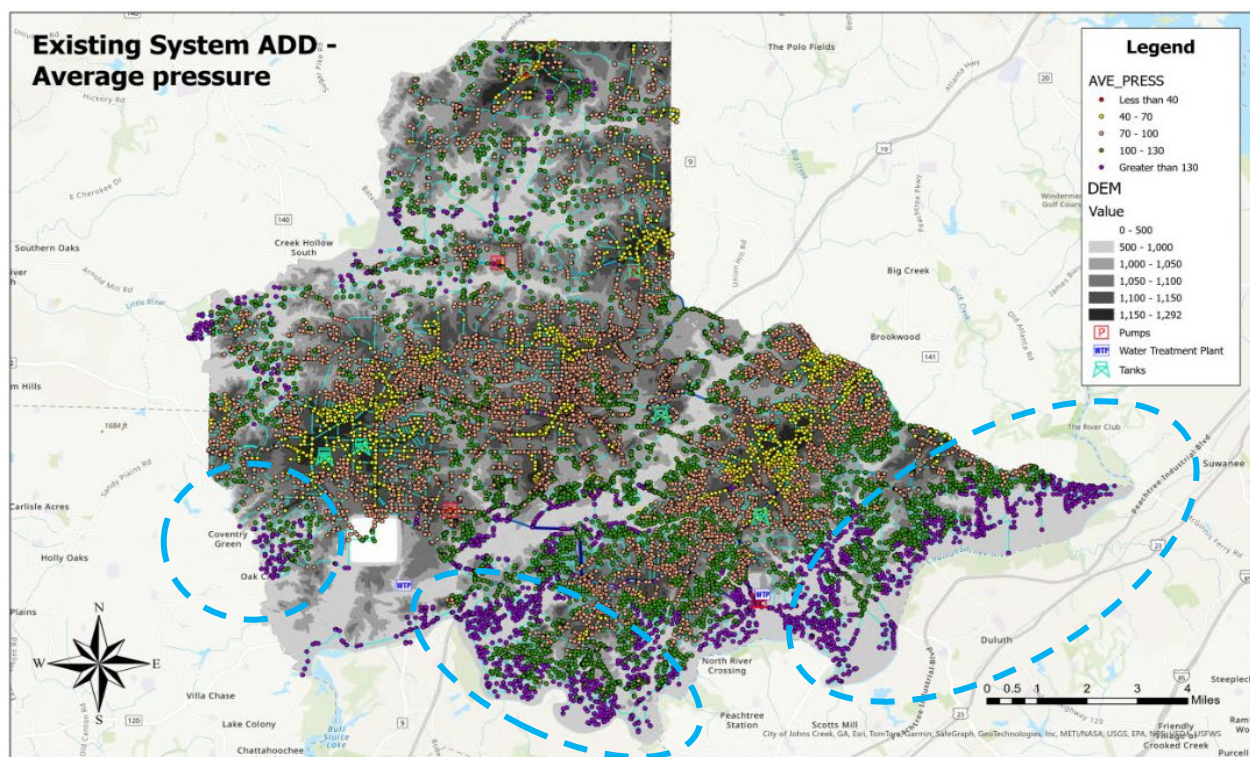
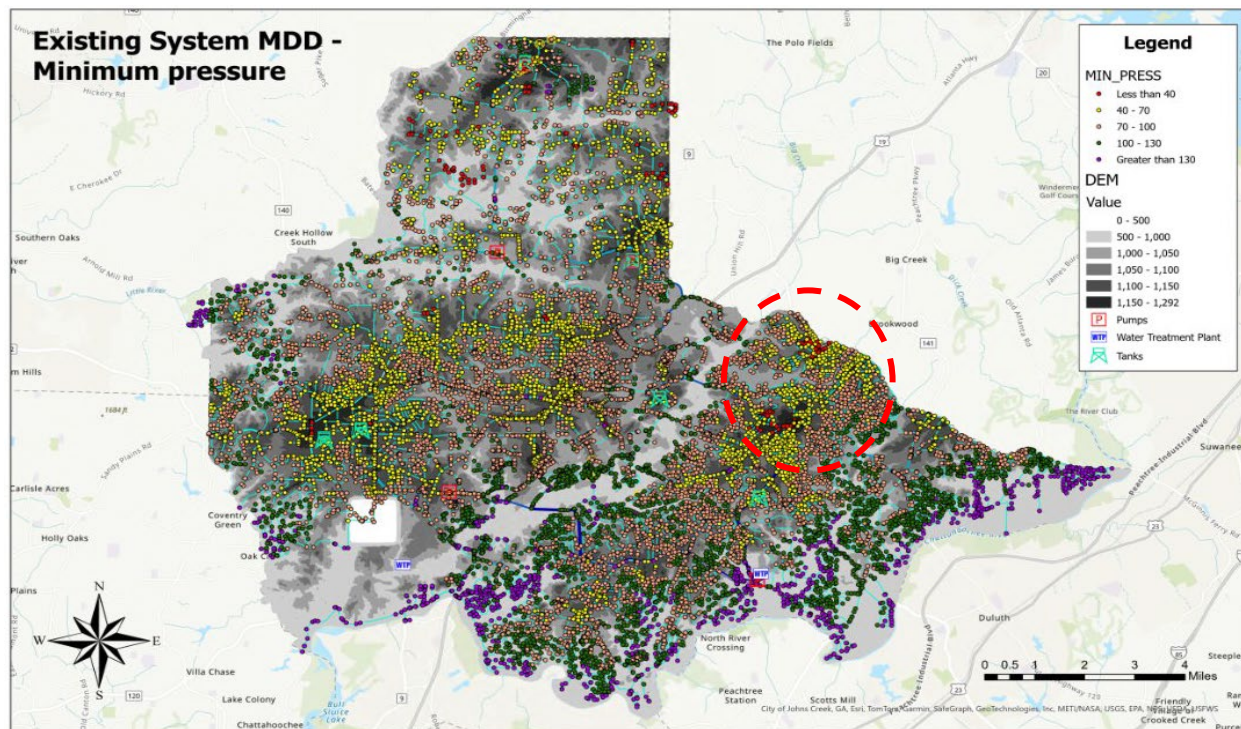


Figure 5-3. Existing System Minimum Pressures (MDD)



5.3 Water Loss Control Review

This task assessed the benefits of increasing water loss reduction efforts. It involved a review of previous water loss audits and the assessment of the cost effectiveness of water loss reduction activities. A real loss component analysis was also included to determine the amount of background leakage that is occurring and how much is potentially recoverable.

County water loss audits from 2016 through 2023 that were provided to GA EPD were compiled using the AWWA Compiler Tool. It should be noted that starting in 2021, Fulton County advanced from using Version 5 to Version 6 of the AWWA Free Water Audit Software. With this change, some defaults in the software changed, which caused some of the outputs to change. Therefore, trending between different versions of the software should be done with this in mind. Figure 5-4 shows an increasing trend in real losses between 2019 and 2022, with a slight dip in 2023. Figure 5-5 shows an increasing trend in the cost of apparent losses from 2017 through 2023. The cost of apparent losses in 2023 was more than \$900,000.

Figure 5-4. Real Water Losses (MG)

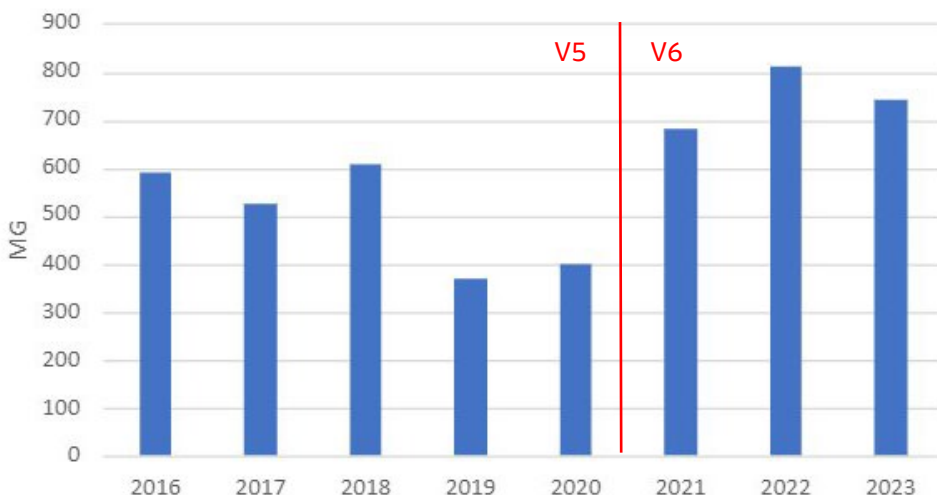
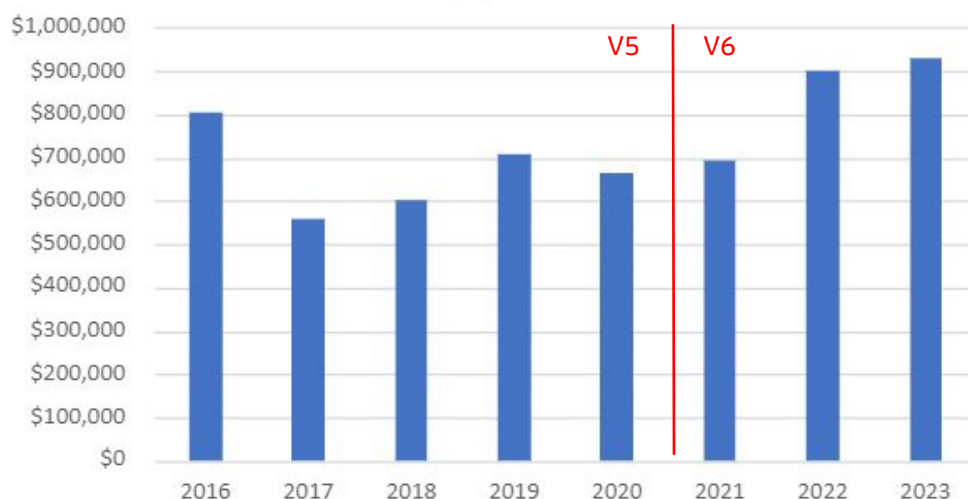


Figure 5-5. Cost of Apparent Water Losses



5.3.1 Compliance with MNGWPD Requirements

The Metro North Georgia Water Planning District (MNGWPD) has an Action Item (WSWC-15) related to Water Loss with several requirements. One of the requirements is to reduce real losses below 35 gallons/connection/day by 2028. As shown on Figure 5-6, these real losses reached a peak of 30 gallons/connection/day in 2022. The County must remain below 35 gallons/connection/day until 2028 and beyond to remain in compliance. The Action Item also requires systems to have a data grade of 7 on Water Imported in the water audit software. The County met this requirement in 2023. In addition, systems must have a data grade of 6 on Customer Metering Inaccuracies (CMI); however, the County only had a data grade of 3 in 2023 in the water audit software on CMI. The County should take action to increase this data grade by conducting a proactive, small customer meter testing program.

Figure 5-6. Real Water Losses (gallons/connection/day)



5.3.2 Real Loss Component Analysis

The water loss audit does not break down real losses into its component parts, and the types of real loss reduction activities are based on the types of real losses that are occurring. The Water Research Foundation created a Real Loss Component Analysis (RLCA) Model in 2015 (Project 4372a) that can be used as a companion to the AWWA Free Water Audit Software to break down existing real losses into the component parts and evaluate some real loss reduction practices.

The three types of real losses are background leakage, unreported leakage and reported leakage. Background leakage is unreported and undetectable using traditional acoustic equipment. It is reduced through pressure reduction and pipe replacement and rehabilitation. Unreported leakage often does not surface but is detectable using traditional acoustic and other leak detection equipment. Reported leakage surfaces and is identified by the public or county workers to be repaired.

The primary inputs to the RLCA are water loss audits and history of water main failures in the distribution system. According to the 2022 Work Orders that were collected from the County, 45 main breaks were reported, 18 service line breaks occurred, and there were 330 appurtenance failures that year. When input into the RLCA model, it compares to literature and other systems. Figure 5-7 shows that Fulton County has a much lower mains failure frequency than the two references cited. Figure 5-8 shows that Fulton County has a much lower service line failure frequency than the two references cited. Figure 5-9 shows the work order failures that were provided for 2022.

Figure 5-7. 2022 Mains Failure Frequency Comparison

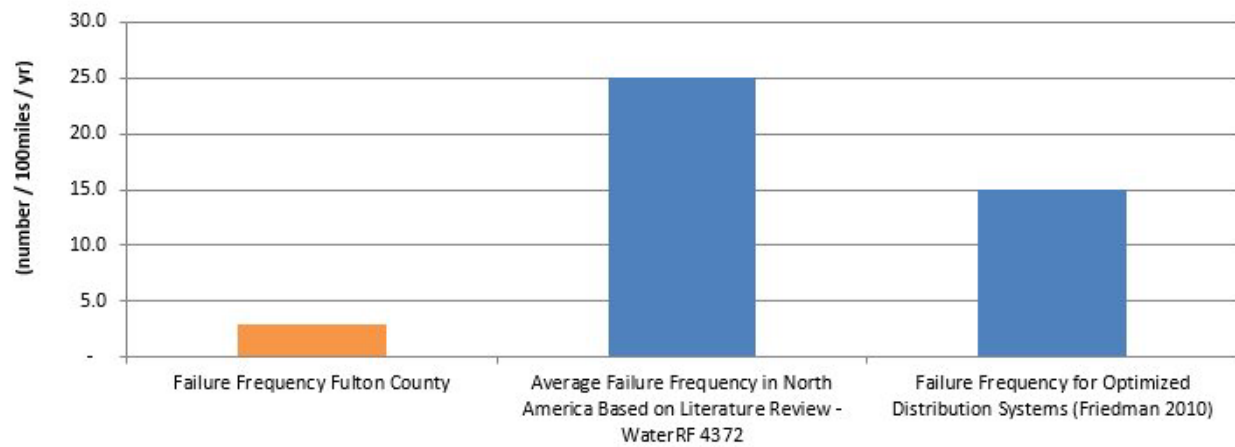


Figure 5-8. 2022 Service Connection Failure Frequency Comparison

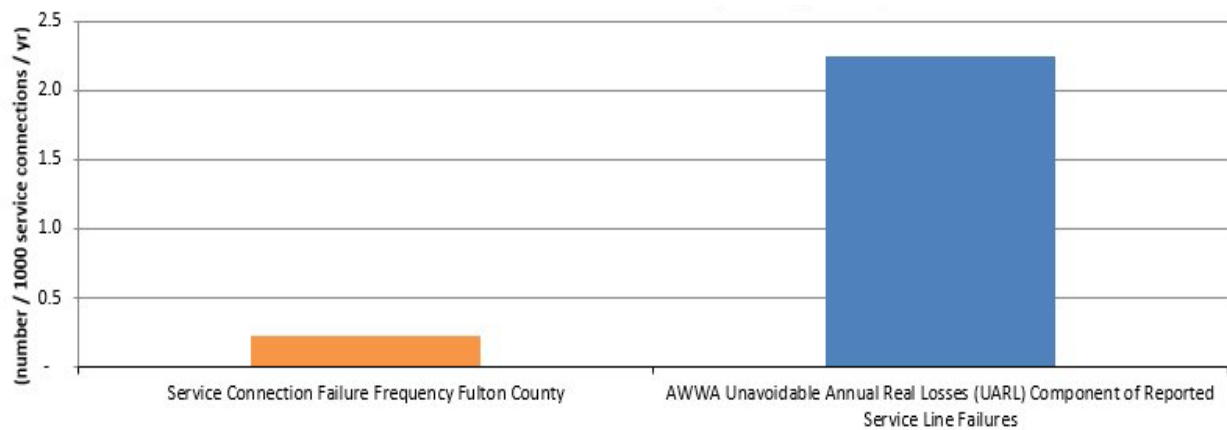
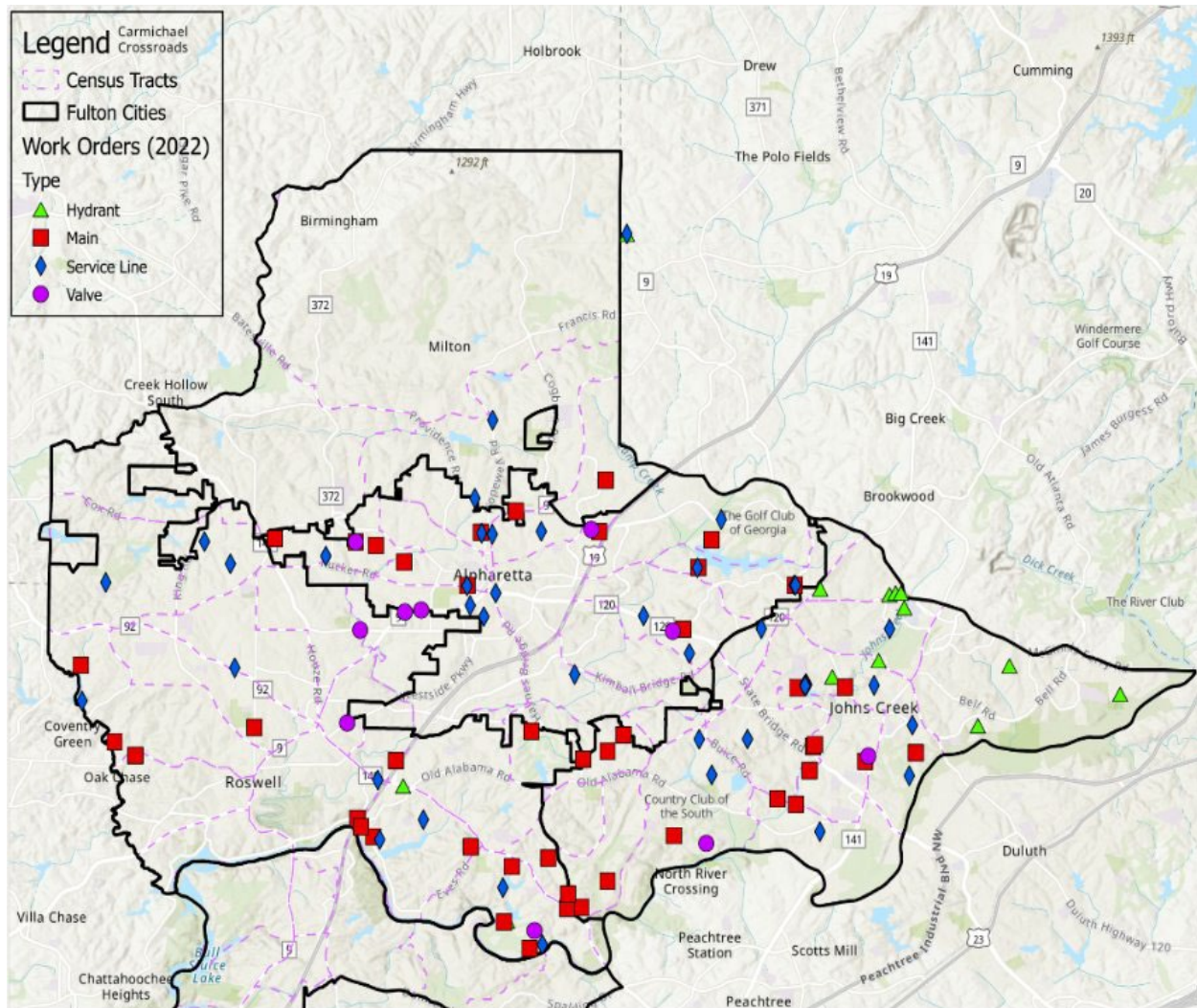


Figure 5-9. 2022 Breaks and Failures



The analysis in the RLCA breaks down the reported real loss from the water loss audit using information about the system age, and characteristics such as density of system connections. Figure 5-10 shows that the real loss is 61% background leakage and 32% hidden losses. According to this analysis, of the real losses, nearly two-thirds of the existing leakage cannot be found using traditional leak detection technologies. Figure 5-11 shows that of the 2022 Real Loss volume, only 16% (132.44/811.13) is potentially recoverable through proactive leak detection. The remaining leakage which is estimated by the analysis to be background leakage, can only be reduced through pressure reduction or pipeline replacement or rehabilitation.

Figure 5-10. RLCA Results for 2022 – Real Loss Components

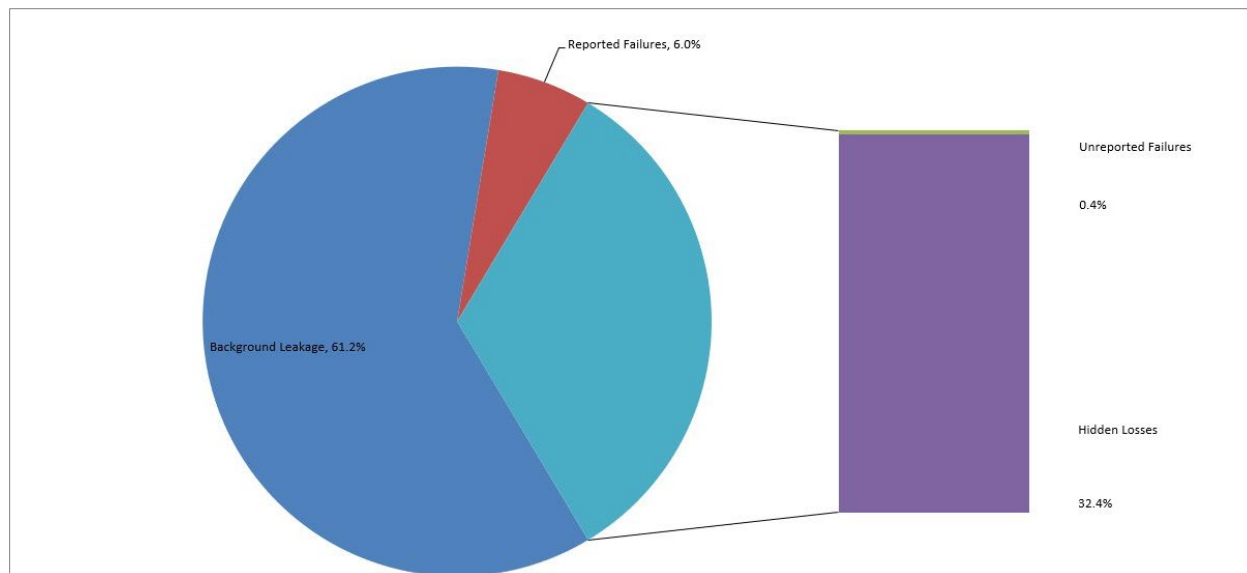
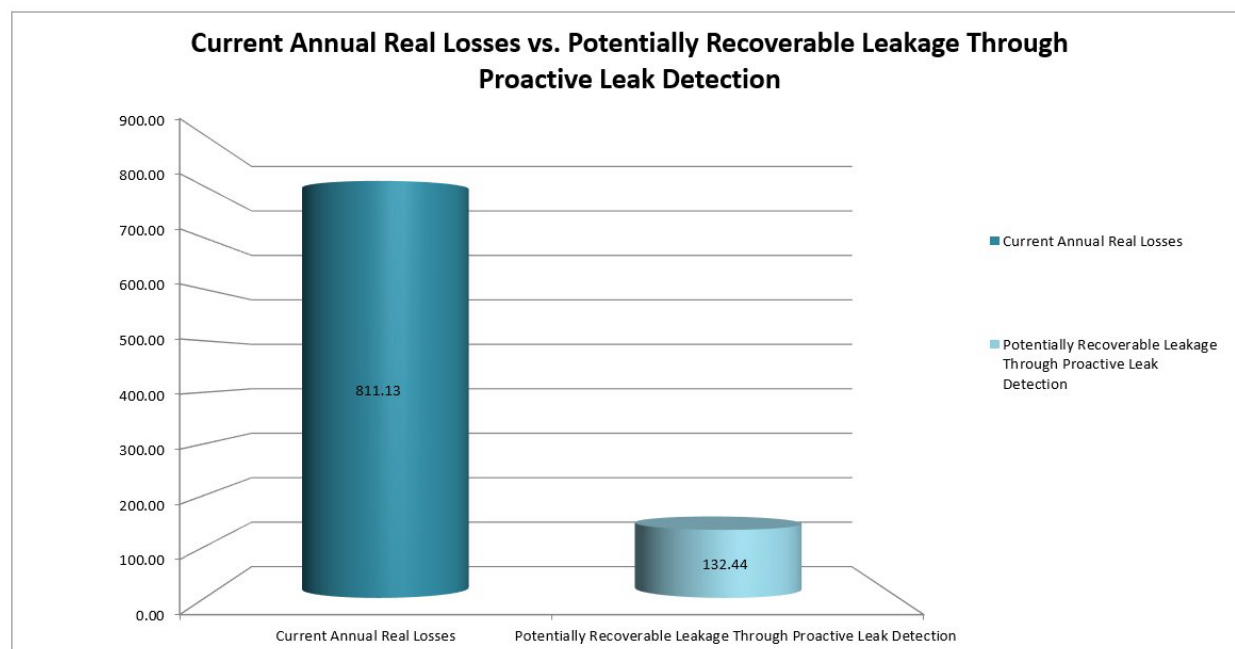


Figure 5-11. RLCA: Recoverable Leakage through Proactive Leak Detection



The RLCA model has a simple tool to evaluate the cost-effective budget for leak detection based on the cost of leak detection and the cost to produce water. Figure 5-12 indicates that the economic amount of performing leak detection on the County's system is 13% of the distribution system per year. That equates to an approximate annual leak detection budget of \$70,000, assuming a leak detection survey cost of \$350 per mile.

Figure 5-12. RLCA: Analysis of Recoverable Leakage through Proactive Leak Detection

Variable Cost of Real Losses		
CV	Variable Production cost (applied to Real Losses):	0.54 \$/per kgal
		536.86 \$/MG
CI	Cost of comprehensive leak detection survey (excluding leak repair cost)	350.00 \$/per mile
		540,715 \$/for entire system
RR	Average Rate of Rise of Unreported Leakage	0.06 kgal/mile of mains/day in a year
		0.09 MG/day in a year
	CI/CV	651.9 kgal/mile
EIF	Economic Intervention Frequency $[0.789 * (CI/CV)/RR]^{0.5}$	92.6 months
		2,816.3 days
	Economic Intervention Frequency - Average Leak Run Time	1,408.1 days
	Economic Percentage of System to be Surveyed per Year	13 %
ABI	Average Annual Budget for Intervention (Proactive Leak Detection)	70,078 \$/year
EUL	Economic Unreported Real Losses	130,534 kgal/year
		130.5 MG/year
	Economic Infrastructure Leakage Index (ILI)	0.9
PRL	Potentially Recoverable Leakage (CARL-CRL-EUL-TBL-UL)	132.4 MG/year

Another leak detection activity that the RLCA evaluates is pressure management for the entire system. Based on an average operating pressure of 98.1 psi, if the pressure is lowered by 5 psi, and it costs \$250,000 to implement this pressure reduction, there would be a reduction in leakage of 45.5 MG per year. This would equate to approximately a 10-year payback, as shown on Figure 5-13.

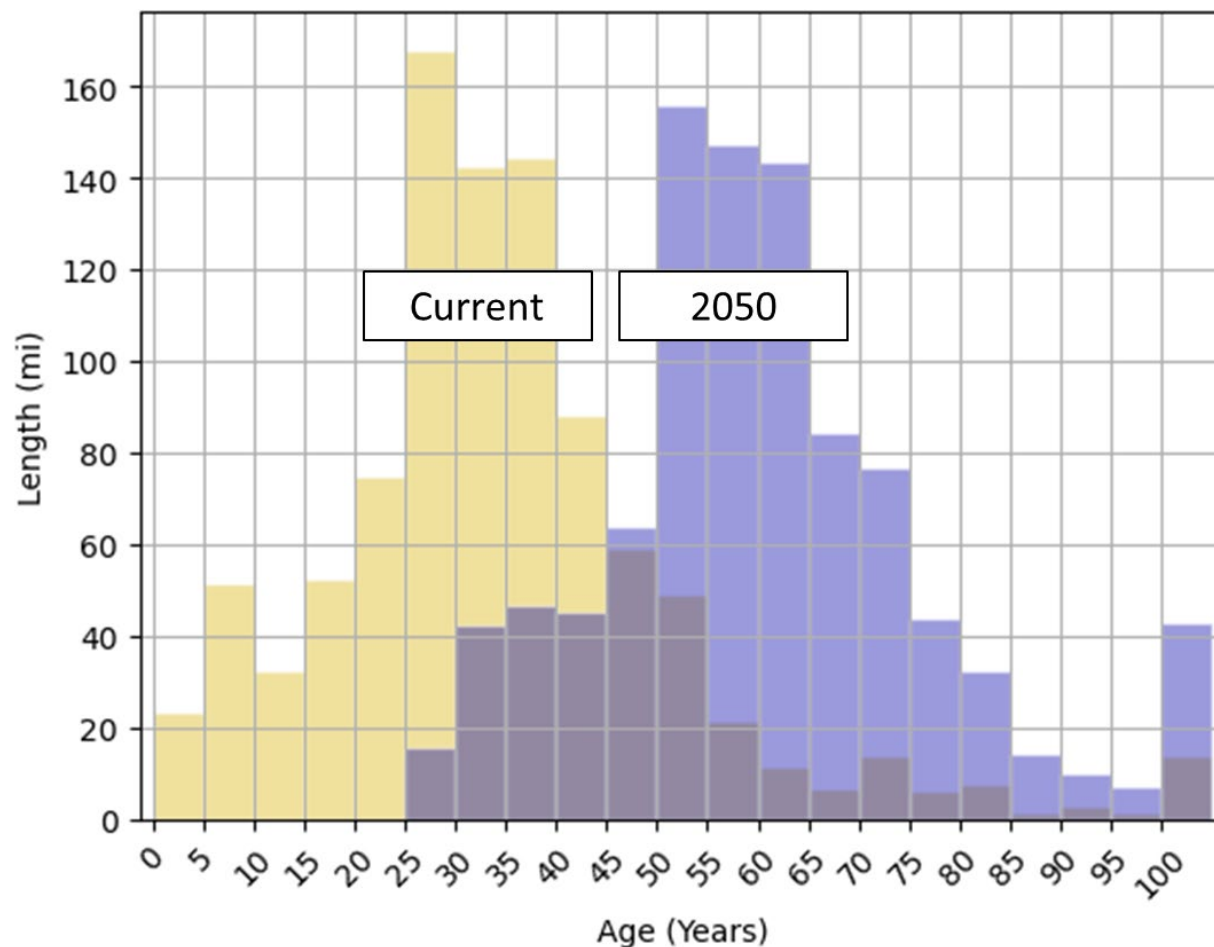
Figure 5-13. RLCA: Analysis of Recoverable Leakage through Pressure Management

Pressure Management Opportunities		
Existing Pressure Management Policy		
Current Average System Pressure	98.1	PSI
Total Annual Real Losses	811.1	MG/Yr
Value of Real Losses	435,463	\$/year
FAVAD N1 Value Used for Calculation of Real Loss Reduction Due to Reduction of Average System Pressure		
	<input type="radio"/> Use Default N1	1.0
	<input checked="" type="radio"/> Use System Specific N1	1.1
Enter % of rigid pipes and service connections in system	95%	
ILI	1.1	
Alternative Pressure Management Policy		
Assumed Reduction in Average System Pressure	5.0	PSI
Assumed % Reduction in Average System Pressure	5%	
Real Loss Volume Saved Through Alternative Pressure Management Policy	45.5	MG/Yr
Value of Real Loss Volume Saved Through Alternative Pressure Management Policy	24,420	\$/Year
Enter Estimated Cost of Implementing Alternative Pressure Management Policy	250,000	\$
Simple Payback Period for Implementing Alternative Pressure Management Policy	10.2	Years

These RLCA results are based on the fact that the County's pipe system is mostly ductile-iron and relatively young (less than 50 years old). Figure 5-14 indicates that most pipe lengths are in the 25- to 35-year age range. However, by 2050, the majority of pipes will be in the 50 to 65 age group, with many

older. To maintain low water losses and low failure frequency, the County will need to establish a robust asset management program for the water distribution assets. The mains in Figure 5-14 that are older than 100 years are actually unknown or based on the ages of structures, not actually older than 100 years.

Figure 5-14. Water Main Ages



5.3.3 Water Loss Recommendations

Based on the review of the water loss analysis, the annual cost and volume of water losses are high – and trending higher in recent years. However, a deeper analysis of the real losses demonstrates that a large portion are not recoverable using traditional leak detection technology. Therefore, it is recommended that only a small budget be allocated to real loss reduction activities at this time, as demonstrated above. In the longer term, an asset management program should be implemented to replace and rehabilitate the inventory of water mains in the future as they get older. This RLCA should be repeated in approximately 5 years as the infrastructure ages. For the apparent losses, a customer meter testing program should be implemented to raise the data grade in the audit and meet the MNGWPD requirement, as well as address the increasing apparent losses through meter replacement, and consider an Advanced Metering Infrastructure (AMI) program.

5.4 Interconnections Analysis

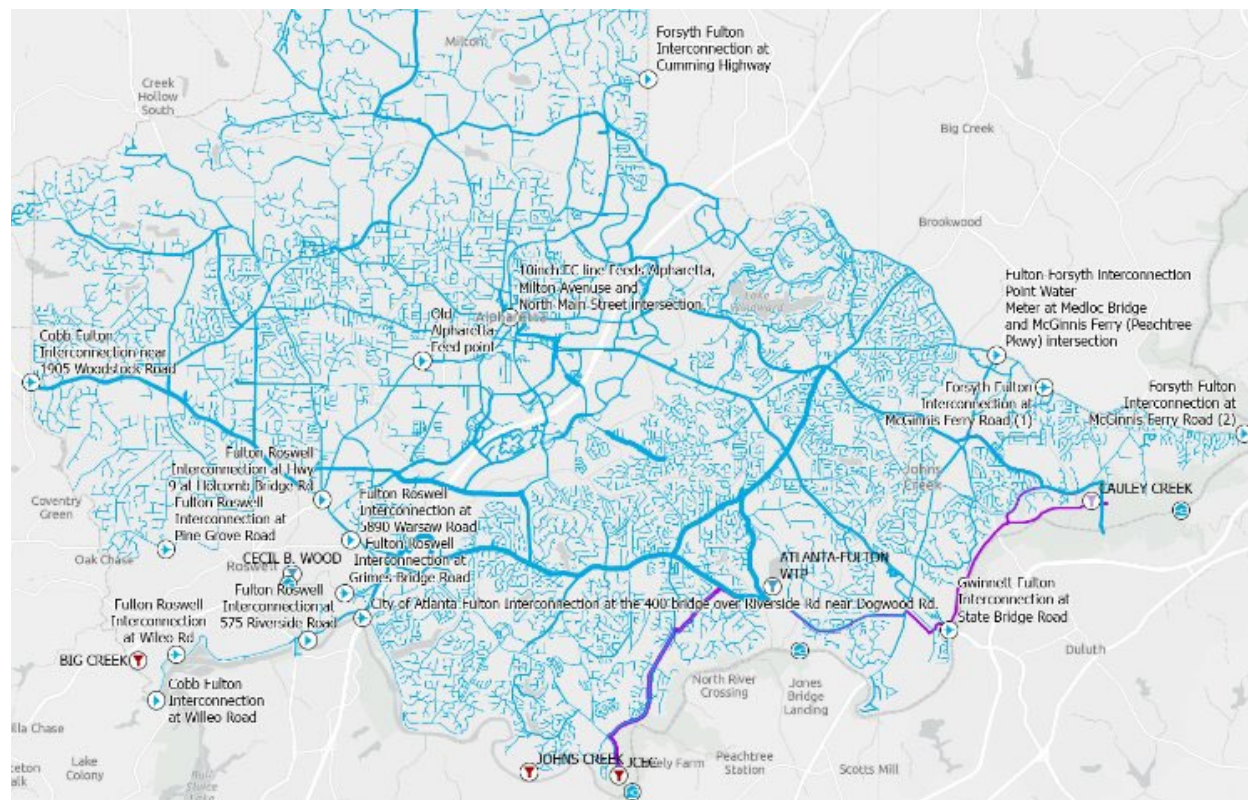
This task is to inventory the existing interconnections and use the hydraulic model to understand the flow capacity available to Fulton County during an emergency. There are potential additional interconnections that have either been disconnected or could be established as new. They are listed in Table 5-4. The County has existing interconnections with Forsyth County, the City of Atlanta, and the City of Roswell. The connections with Forsyth County are to multiple pressure zones in their system, so emergency supply must be drawn from a specific connection. The connections with Roswell are mostly to provide them water; they do not produce enough water to adequately supply the County in an emergency. The County previously studied an interconnection with Gwinnett County and has a plan to install a pump station for an emergency supply location. This will be summarized below and was not evaluated again as part of this plan.

Fulton County may consider two new interconnections for emergency supplies. One is with Cobb County, which is a previous interconnection that has been disconnected because of water quality incompatibility. However, Cobb County-Marietta Water Authority is changing its corrosion control to conform to the rest of the region, so Fulton could potentially re-establish a connection with them in the future. The second connection is with Cherokee County to the north of Fulton County. A connection with Cherokee County could be an advantage in an emergency since it is the farthest away from the Tom Lowe WTP and provides redundancy in the event of a WTP failure. A map of the County's interconnections is provided on Figure 5-15.

Table 5-4. Interconnections Inventory

Name	Address	Fulton Pipe	Other System Pipe	Gravity or Pumped	Status N.O. – Normally Open N.C. – Normally Closed
Atlanta	Riverside Road @ GA 400 bridge overpass	24	42/48	Gravity	N.C.
Forsyth #1	Cumming Highway	8	10	Gravity	N.C.
Forsyth #2	Medlock/Peachtree Parkway	12	24?	Gravity	N.C.
Forsyth #3	6985 McGinnis Ferry	12	10	Gravity	N.C.
Forsyth #4	McGinnis Ferry Road at River Walk Landing	8	8	Gravity	N.C.
Roswell #1	10489 Alpharetta Hwy (at Holcomb Bridge)	8	8	Gravity	N.O.
Roswell #2	9120 Willeo	8	8	Gravity	N.C.
Roswell #3	575 Riverside and Atlanta Street	12" to 6" meter	8	Gravity	N.C.
Roswell #4	890 Warsaw	8	8	Gravity	N.C.
Roswell #5	Grimes Bridge	8	8	Gravity	N.C.
Roswell #6	800 Pine Grove Road	8	6	Gravity	N.O.
Roswell #7	Wavetree Address - 155 Spring Hollow Court	8	8	Gravity	N.C.
Gwinnett	Rogers Bridge Road	30	24	Pumped	New
Cobb	County line on Highway 92	16	Unknown	Gravity	N/A
Cherokee	Hickory Flat Road			Gravity	N/A

Figure 5-15. Interconnections Locations



Each of the existing interconnections and potential new interconnections was evaluated using the hydraulic model to determine the capacity available during an emergency. A fixed-head reservoir was placed at the pressure of the neighboring system and then the amount of water that can be supplied or procured via that connection was evaluated. This was done for the City of Atlanta, Forsyth County, Cobb County, Cherokee County, and the City of Roswell systems. The results are presented below.

The hydraulic grade line (HGL) at the Atlanta side of the interconnection is 1,225 feet while the HGL at the Fulton side of the interconnection is approximately 1,324 feet during ADD; therefore, Fulton County cannot receive any flow from the City of Atlanta without any proposed improvements but can supply flow to the City of Atlanta, if needed. The location of the interconnection as well as the impact of supplying 21 MGD to the City of Atlanta are shown on Figure 5-16. Modeling scenarios were run to determine the pumping capacity (head) required to get 2 MGD, 5 MGD, and 10 MGD using the interconnection. These are presented in Table 5-5. The County has an existing Dogwood pump station that is out of service that was used previously to pump water from Atlanta to Fulton County. The County may decide to refurbish/replace the pumps at the Dogwood pump station to meet these required pumping capacities, if desired.

Figure 5-16. City of Atlanta Interconnection Location and Fulton Impact with 21 MGD Supply to Atlanta

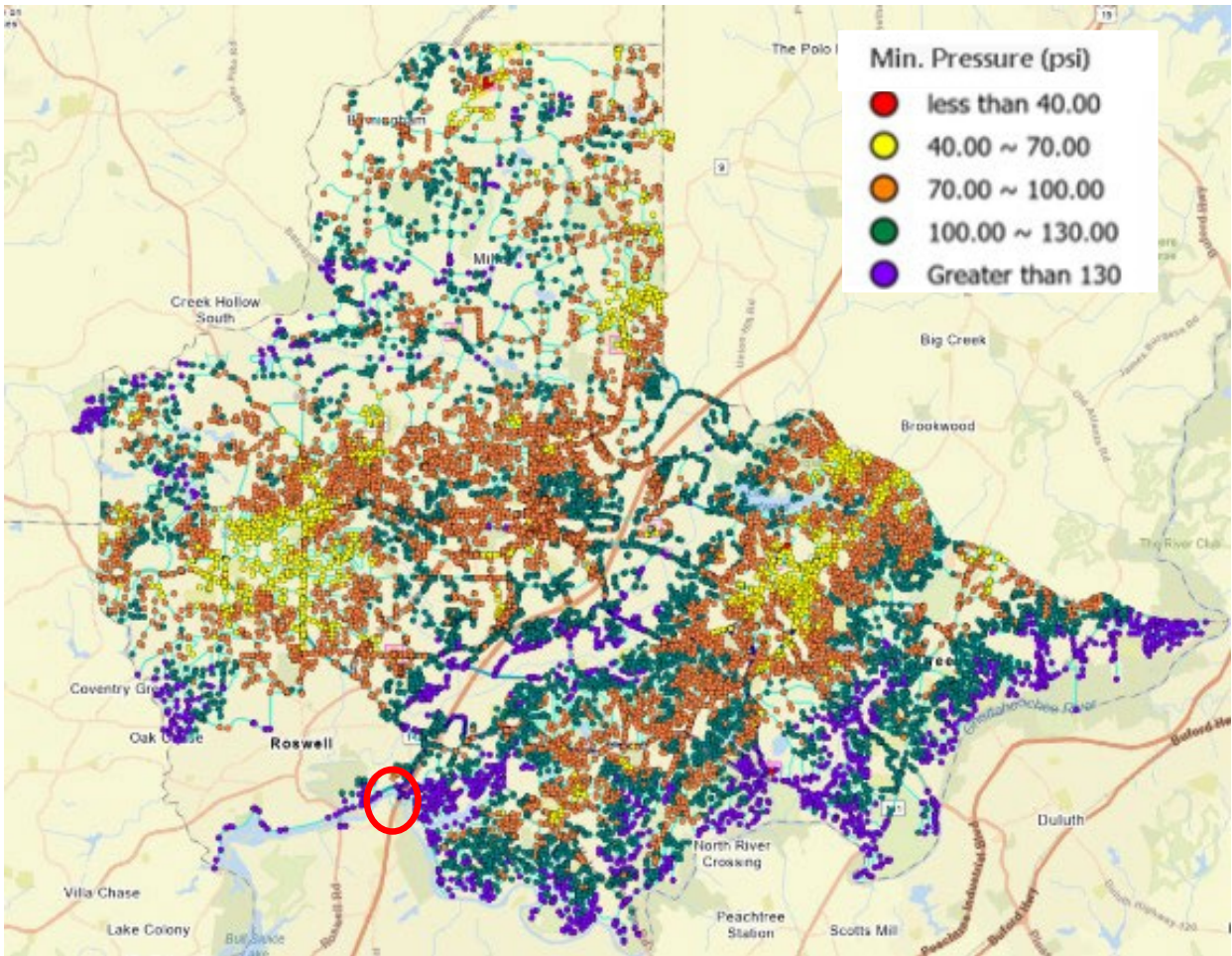


Table 5-5. City of Atlanta Interconnection Pumping Requirements

HGL Needed (ft)	Required Flow (gpm)	Required Flow (MGD)	Modeled Flow (gpm)	Modeled Flow (MGD)
1,375	1,389	2	1,338	2
1,410	3,472	5	3,448	5
1,465	6,945	10	7,075	10

The HGL at the Forsyth County side of the interconnection is 1,421 feet while the HGL at the Fulton side of the interconnection is approximately 1,310 feet during ADD; therefore, Fulton County can receive flow from Forsyth County without any proposed improvements during an emergency. The location of the interconnection as well as the supply of approximately 15 MGD from Forsyth County are shown on Figure 5-17. The Forsyth interconnection could supply a flow of 16 MGD if only high service pump (HSP) 5 was running at a maximum speed of 80%. This was run as another emergency scenario with only one pump running and the impact on the distribution system is shown on Figure 5-18. If the WTP were completely offline (that is, all the HSPs were off), the interconnection could supply up to 19.5 MGD. The impact on the distribution system pressures is shown on Figure 5-19. Note that this evaluation does not consider if Forsyth County's distribution system could feasibly supply these flows but only evaluates the capacity on Fulton County's side during an emergency.

Figure 5-17. Forsyth County Interconnection – 15 MGD Supply to Fulton County (Normal Operation)

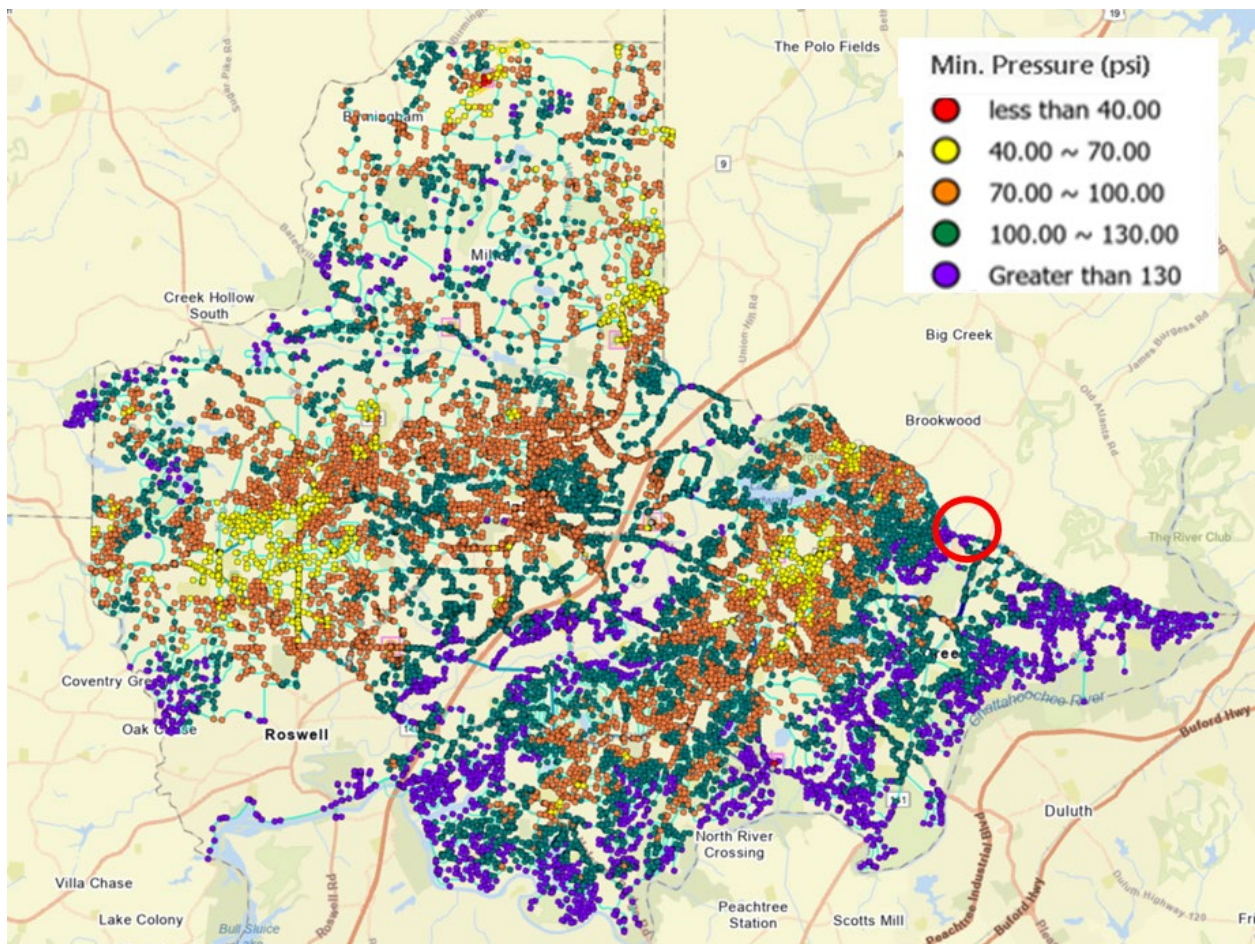


Figure 5-18. Forsyth County Interconnection – 16 MGD Supply to Fulton County (with Only HSP 5 Running at Reduced Speed)

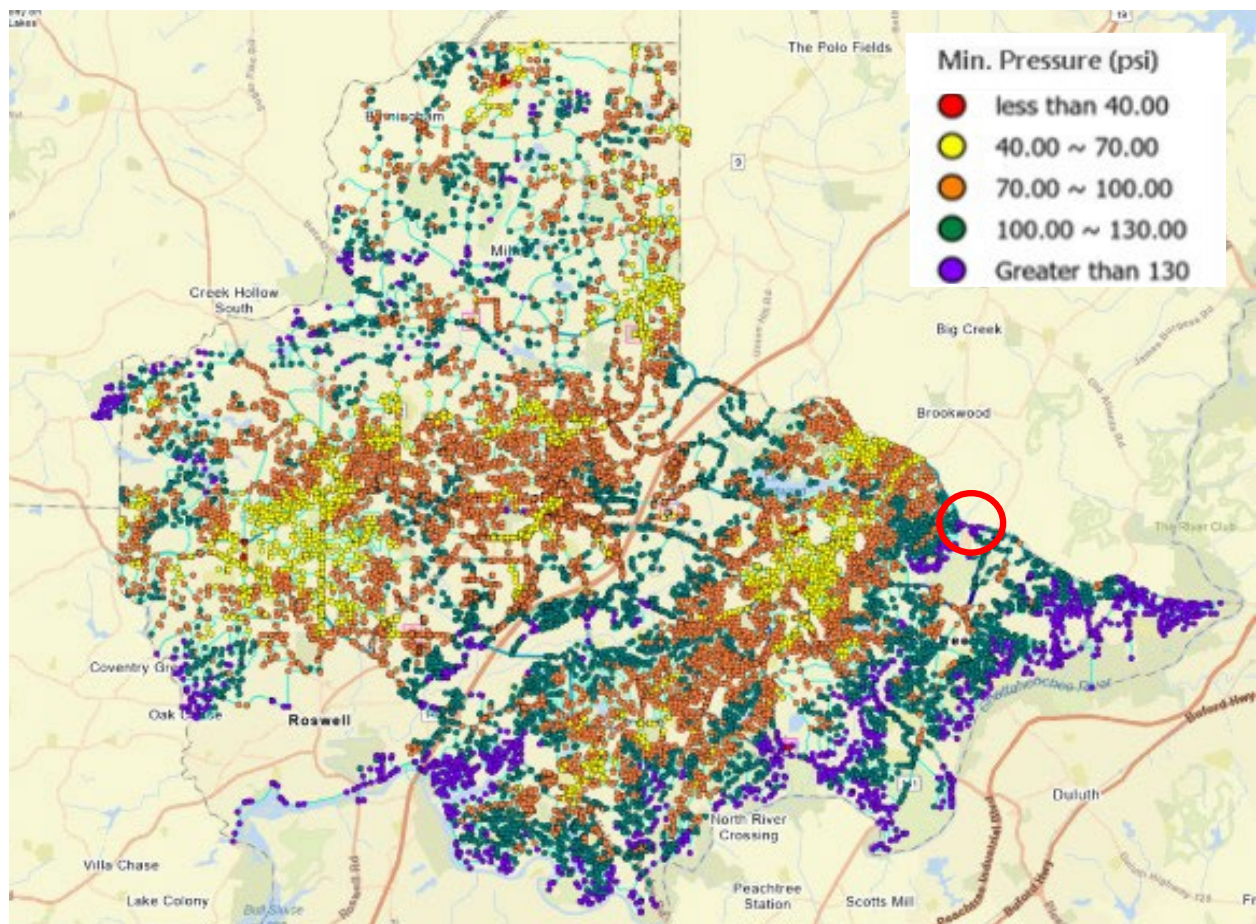
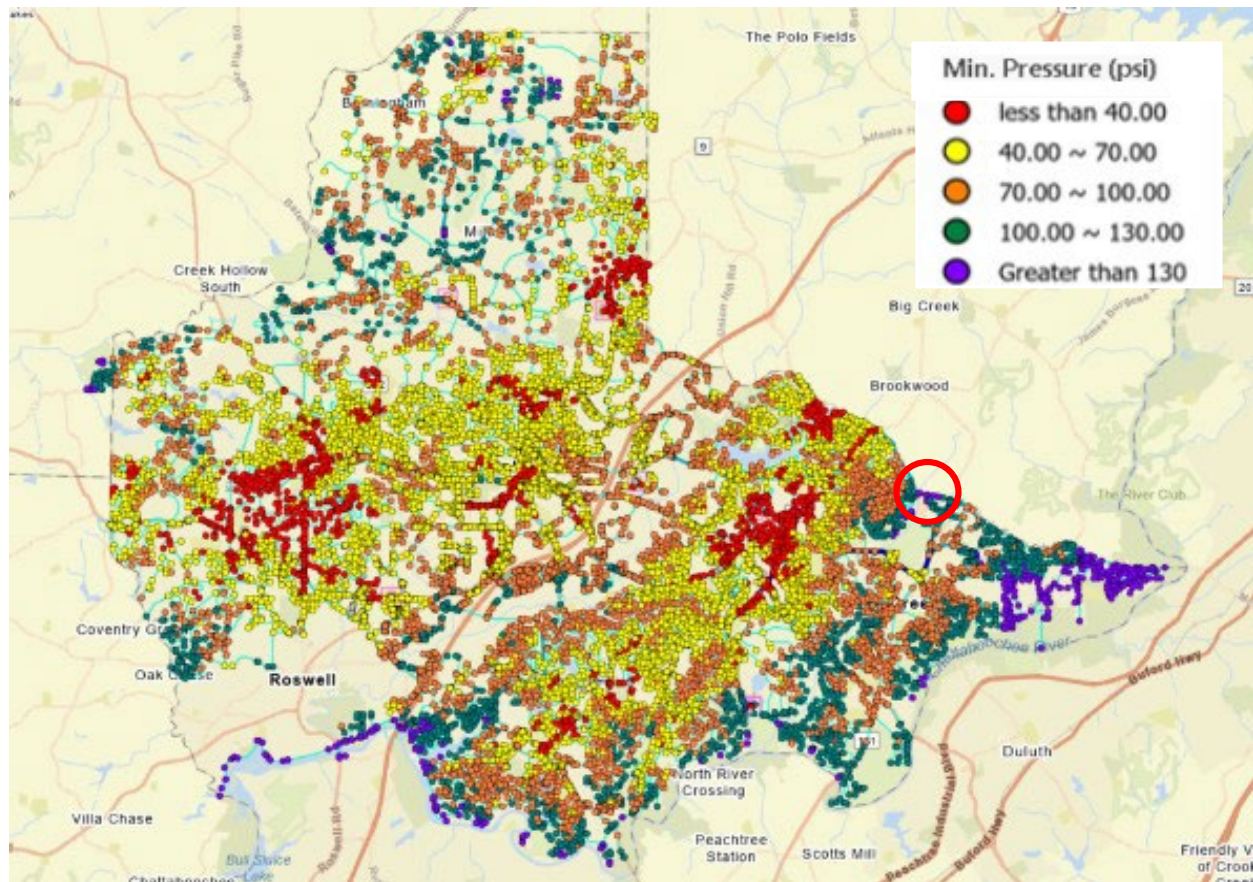


Figure 5-19. Forsyth County Interconnection – 19 MGD Supply to Fulton (with Tom Lowe WTP Offline)



The HGL at the Cobb County side of the interconnection is 1,270 feet while the HGL at the Fulton side of the interconnection is approximately 1,300 feet during ADD; therefore, Fulton County cannot receive any flow from Cobb County without any proposed improvements but can supply flow to Cobb County, if needed. The location of the interconnection as well as the impact of supplying 4.2 MGD to Cobb County are shown on Figure 5-20. A few different modeling scenarios were run to determine the pumping capacity (head) required to get 2 MGD, 5 MGD, and 10 MGD using the interconnection. These are presented in Table 5-6. The County has an existing Woodstock pump station that is out of service that was used previously to pump water from Cobb County to Fulton County. Fulton County may decide to refurbish/replace these pumps at the Woodstock pump station to meet these required pumping capacities, if desired.

Figure 5-20. Cobb County Interconnection Location and Fulton Impact with 4.2 MGD Supply to Cobb

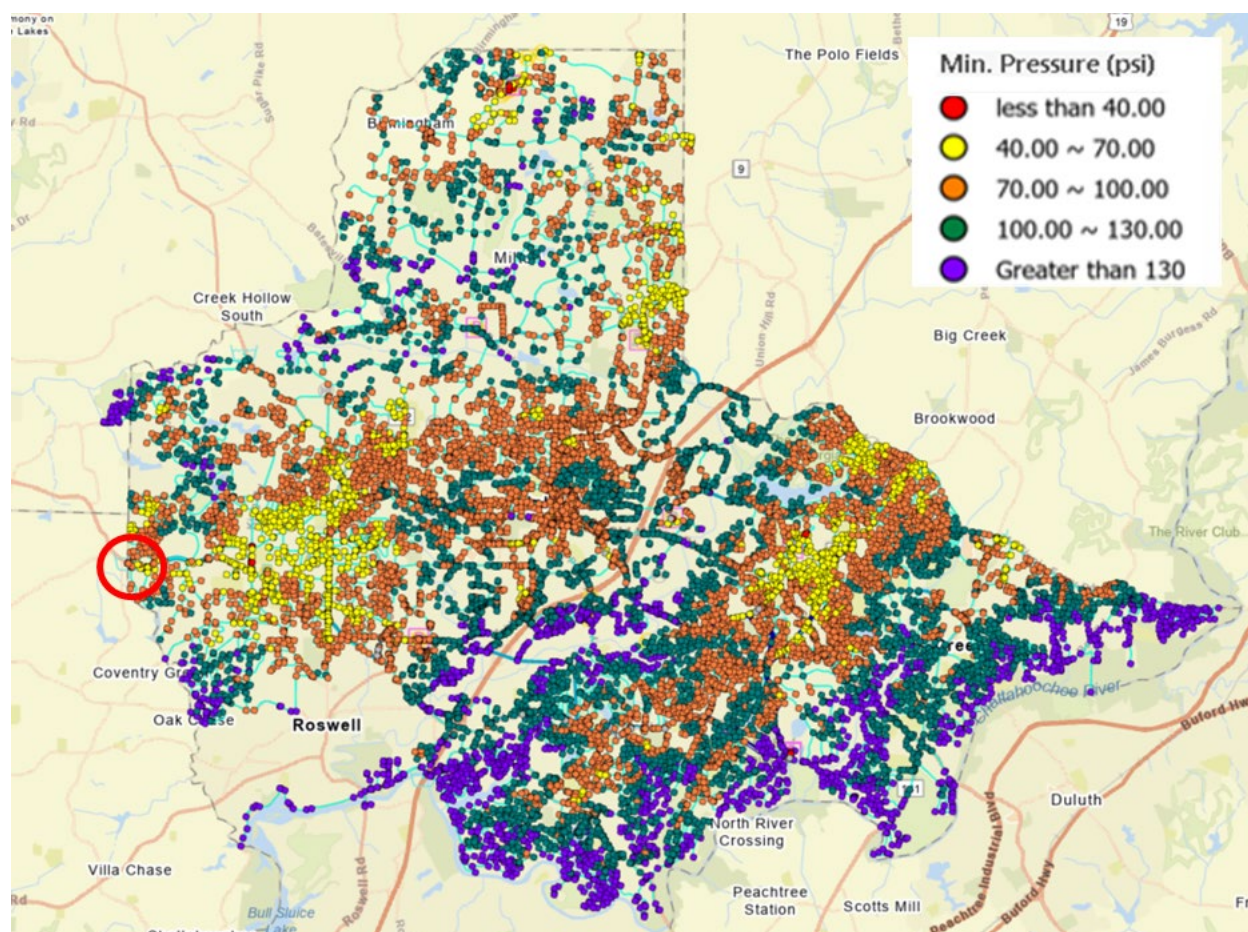


Table 5-6. Cobb County Interconnection Pumping Requirements

HGL Needed (ft)	Required Flow (gpm)	Required Flow (MGD)	Modeled Flow (gpm)	Modeled Flow (MGD)
1,375	1,389	2	1,310	2
1,430	3,472	5	3,475	5
1,535	6,945	10	6,926	10

The HGL at the Cherokee County side of the interconnection is 1,270 feet while the HGL at the Fulton side of the interconnection is approximately 1,301 feet during ADD; therefore, Fulton County cannot receive any flow from Cherokee County without any proposed improvements but can supply flow to Cherokee County, if needed. The location of the interconnection as well as the impact of supplying 1.6 MGD to the Cherokee County are shown on Figure 5-21. A few different modeling scenarios were run to determine the pumping capacity (head) required to get 2 MGD, 5 MGD, and 10 MGD using the interconnection. These are presented in Table 5-7.

Figure 5-21. Cherokee County Interconnection Location and Fulton Impact with 1.6 MGD Supply

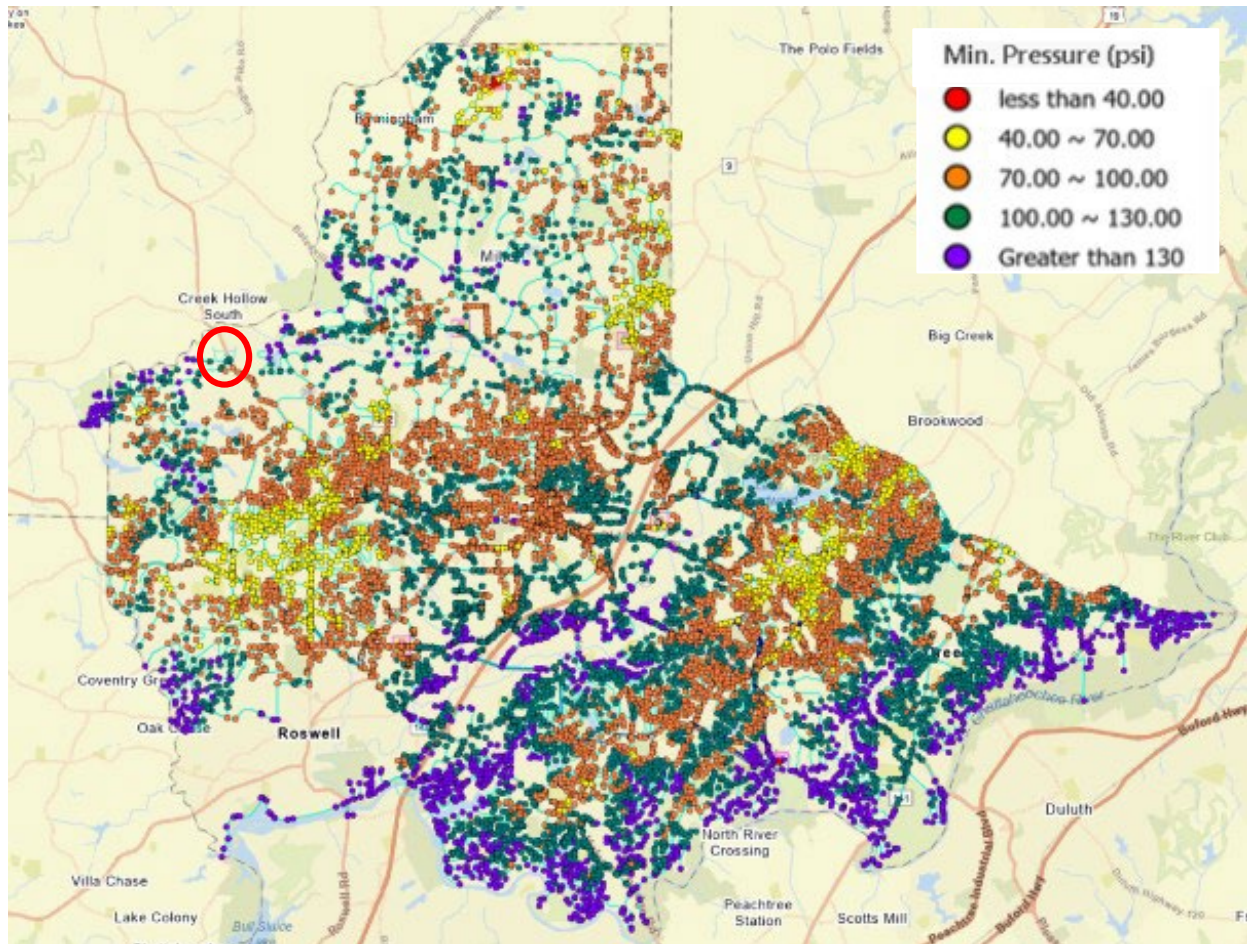
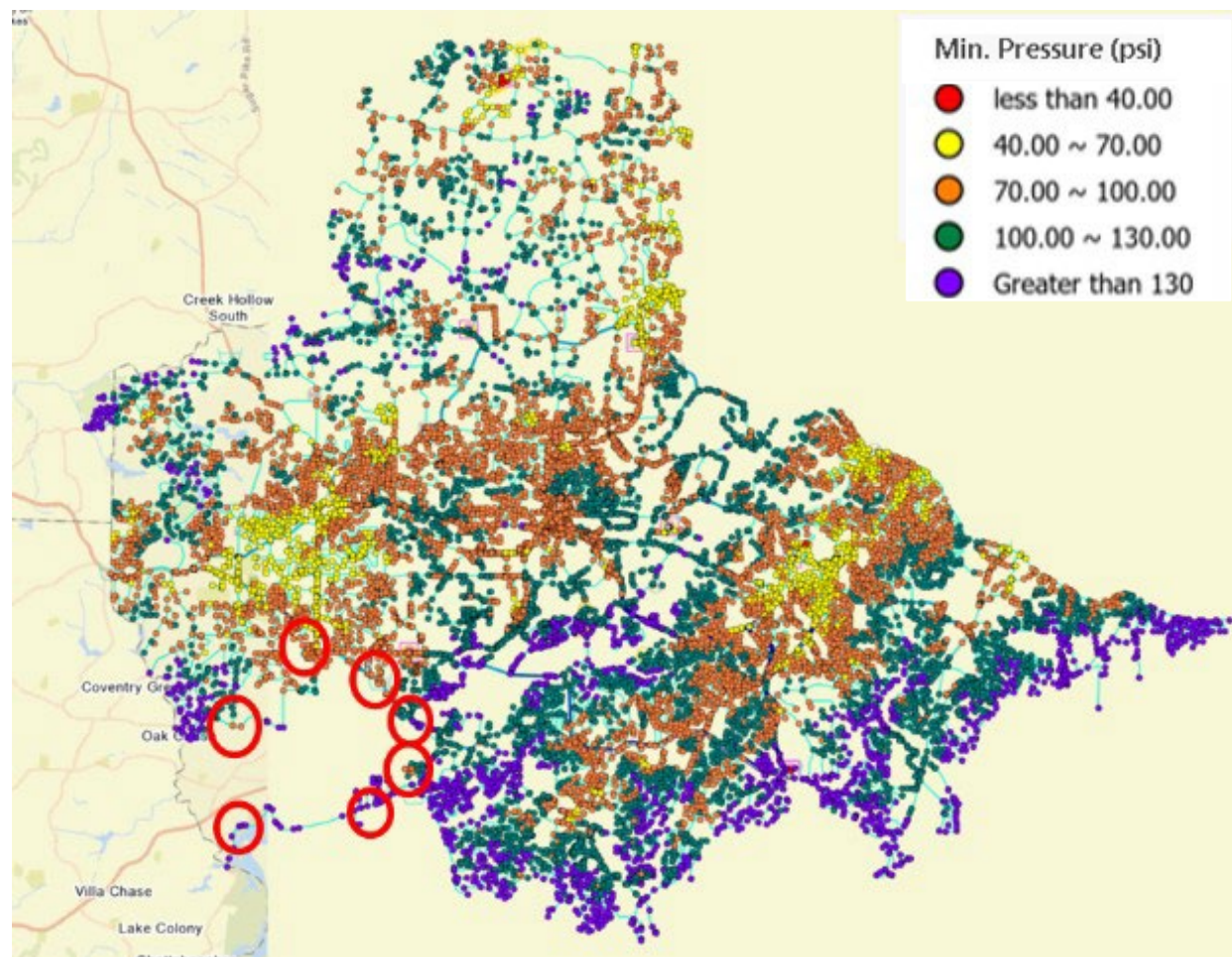


Table 5-7. Cherokee County Interconnection Pumping Requirements

HGL Needed (ft)	Required Flow (gpm)	Required Flow (MGD)	Modeled Flow (gpm)	Modeled Flow (MGD)
1,440	1,389	2	1,441	2
1,630	3,472	5	3,204	5
2,465	6,945	10	7,084	10

The City of Roswell has seven interconnections with Fulton County, as shown on Figure 5-22. The HGL at the Roswell side of the interconnections is 1,290 feet while the HGL at the Fulton County side of the interconnection varies from 1,318 to 1,360 feet during ADD. Only the Pine Grove location could be used to get a supply of about 1 MGD from the City of Roswell while at the other locations, Fulton County could supply 0.3 to 2.5 MGD if needed depending on the location.

Figure 5-22. City of Roswell Interconnection Locations and Fulton Impact with 2.2 MGD Supply to Roswell



5.4.1 Gwinnett County Interconnection

Fulton County is planning for a modified interconnection with Gwinnett County at Rogers Bridge Road. In 2019, Stantec produced a report³ that described an evaluation of 14 scenarios in the hydraulic model of Gwinnett County Emergency Supply. The report concluded that a pump station would be needed to provide up to 20 MGD if the Tom Lowe WTP were out of service, and that three 18-inch-diameter pipes would be sufficient for crossing the river.

Emails provided by Fulton County indicate that Gwinnett County has a 30-inch McCrometer V-Cone meter that could be used to measure the flow through the interconnection.

³ Stantec Consulting Services. 2019. *Technical Memorandum: North Fulton County Hydraulic Model Evaluation of Gwinnett County Emergency Supply*. July 1.

Fulton County has already begun implementing this interconnection, including the installation of the three 18-inch pipes across the river, and has purchased property for the installation of the booster pump station.

5.4.2 Intergovernmental Agreements

It is important for both parties in a water sharing arrangement to have an intergovernmental agreement in place. The 2011 GEFA Water System Interconnection, Redundancy and Reliability Act Emergency Supply Plan⁴ contains a section describing the topics that should be addressed during the drafting of the intergovernmental agreement and also includes a model agreement. That section and the model agreement from that plan are included as Appendix H.

5.5 Valve Criticality Analysis

Valve criticality analysis was performed for all valves along the transmission mains that are greater than 30 inches in the system using InfoWater Pro's Criticality Assessment Manager. The original model was built using GIS where the in-line valves were imported into the model as junctions. These were used in this analysis to assess each main valve and the impact to facilities caused upstream and downstream of the main valve when the valve is closed. Failure criteria include reverse flow, pressure below 20 psi, and flow velocity greater than 5 feet per second. Example results for valve criticality analysis on two primary transmission corridors are provided as follows: Figure 5-23 shows the flow reversals affected by the valves on the 42-inch transmission main on Old Alabama Road and how the affected area increases as the valve locations get closer to the Tom Lowe WTP; provides examples of flow reversal pipes affected by a valve on the 36-inch transmission main on Jones Bridge Road, velocity violations caused by the same valve, and upstream pressure violations caused by a valve next to Mansell Road.

A vulnerability analysis was also conducted to assess critical pipes and valves within the distribution system. These indicate that if main breaks or valve closures were to occur on these mains, then there could be consequences such as pressure violations in the system. Many of these critical mains are the transmission mains from the WTP or other mains from facilities like tanks and booster pump stations. The critical pipes in the system are shown on Figure 5-24.

⁴ CH2M HILL. 2011. *GEFA Water System Interconnection, Redundancy and Reliability Act Emergency Supply Plan*. September.

Figure 5-23. Pipes with Flow Reversal*

As 42" main valves on Old Alabama Road are closed (top); pipes with flow reversal and pipes with velocity violations when 36" main valves on Jones Bridge Road are closed (bottom two from the left) and locations with pressure violations when a valve on Mansell Road is closed (bottom right)

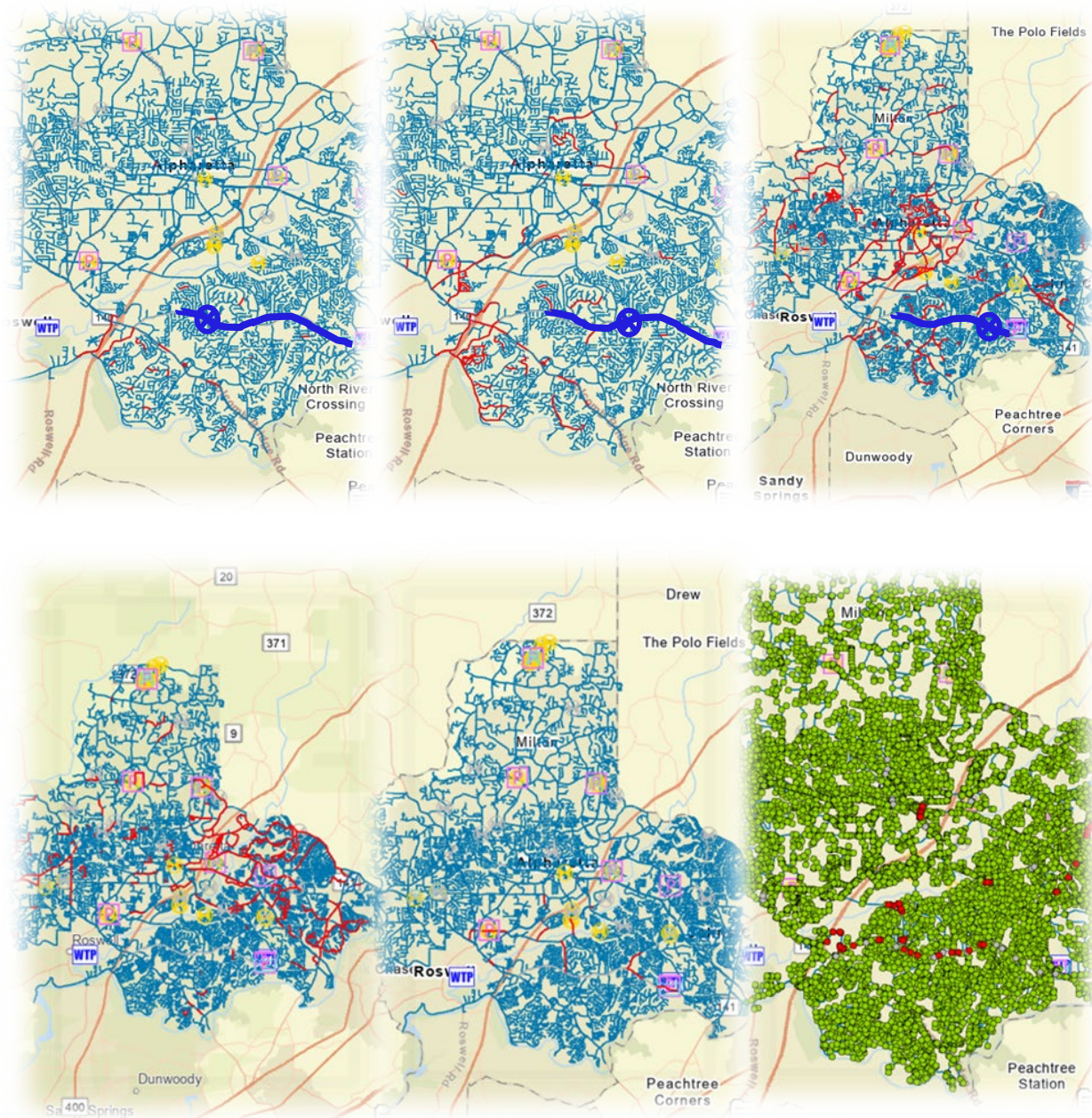
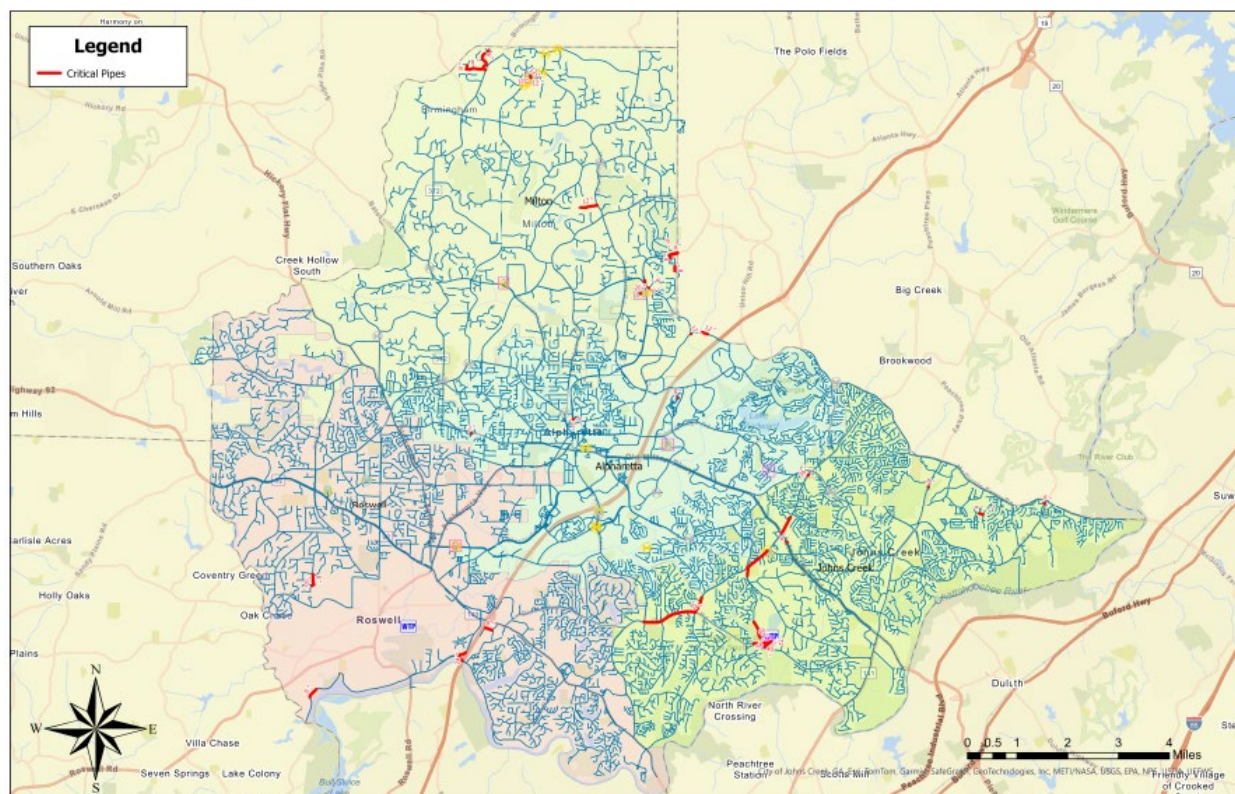


Figure 5-24. Pipe Criticality Analysis



5.6 Climate Resiliency

Planning and preparation by water providers is vital because of the uncertain nature of future climate conditions. The MNGWPD conducted a Utility Climate Resiliency Study in 2015 to address this uncertainty and provide possible future scenarios. The study focused on impacts to water demand, water supply, water quality, and watersheds. Fulton County must continue to address any vulnerabilities in their system due to potential changes in climate and adapt, as necessary.

Water demand was found to be sensitive to climate during the study, with a 1 to 4% increase expected by 2050 due to the influence of climate. Fulton County is preparing for increases in demand by monitoring increasing demands and planning for potential upgrades at the Tom Lowe WTP. The CIP projects developed as a part of this Master Plan also consider future increases in demand.

Water availability and supply is also expected to be impacted by climate uncertainty. Changes to the local climate can affect precipitation, and therefore affect supply. The change could be either an increase or decrease in the amount of precipitation. Drought conditions could cause water supply availability to change. Conservation efforts taken by the County could also help mitigate the impacts of decreased water supplies. Fulton County is an EPA WaterSense Partner, participates in the MNGWPD My Drop Counts program, and provides water conservation kits to its customers.

During times of drought, Fulton County could rely on the raw water reservoirs at the Tom Lowe WTP, clearwell storage, and distribution system storage tanks. In addition, the County could use the existing interconnections with Forsyth County and the City of Atlanta to purchase water, if available. The County is also planning a future interconnection with Gwinnett County for additional capacity. Finally, Fulton County

has prepared a Hazard Mitigation Plan, which identifies drought as a recurring concern and identifies basic mitigation measures.

A potential increase in future temperatures could impact source water quality, as higher temperatures would lead to reduced dissolved oxygen and therefore impact the ability to handle pollutants. Temperature increases could also lead to more algal blooms in the lake upstream of the river intake. These issues would need to be handled with changes to the treatment processes used at the water treatment plant. While a potential increase in rainfall could help water supplies, it could also increase the amount of nonpoint source pollutants. Best management practices are adopted by many counties in their Watershed Protection Plans to protect water supplies from potential pollution sources. This will be vital if the ability for water supplies to handle contaminants is impaired.

6. Capital Improvement Plan

CIP solutions were developed as necessary based on several drivers. The main drivers were maintaining minimum pressures above 40 psi, improving operational efficiency, meeting customer demand, improving water age, and maintaining tank levels. Each phase below represents the demand conditions in that year, so if demands increase as predicted, the projects listed for each year should be implemented by that year, as they are needed to meet the water demands in that year.

CIP solution development for this Master Plan began with the existing system scenario based on the deficiencies discussed in Section 4 and were expanded upon for each phase through 2050. The solutions included new piping, pressure zones, pump stations, and operations adjustments. Minimum pipe sizes and extents of upsizing needed to maintain the required level of service are provided in the CIP solutions. When project design starts, pipe sizes and length of new piping can be increased where reasonable and verified in the model.

In the development of capital improvement projects, Jacobs noticed that there were many instances of pipes in the County water system that were close or crossing, but not connected. Some of these are small pipes, which may not have much impact if connected, but others are larger pipes that may have a significant impact when connected. Many of these crossing pipes were evaluated to determine the benefit of making these connections. They were prioritized by diameter of pipe, and proximity to hydraulic deficiency. In many cases, they were very helpful in increasing pressure, and providing additional fire flow. These crossing pipe connections have the potential to make the County water distribution system much more robust, when implemented. They were recommended in the CIP as shown below. Their cost is relatively inexpensive compared to water main extensions, and their benefit is measurable and therefore are priority recommendations.

In the development of the 2050 CIP projects, the MDD peaking factor was discussed and debated with the County. As shown in the water demand projections, a peaking factor of 1.5 reflects the recent historical average since 2007, and the 1.75 peaking factor is a recent maximum last experienced on July 3, 2024. For the transmission main CIP recommendation (Section 6.2), both peaking factors were used to show the County options for the phasing of this project.

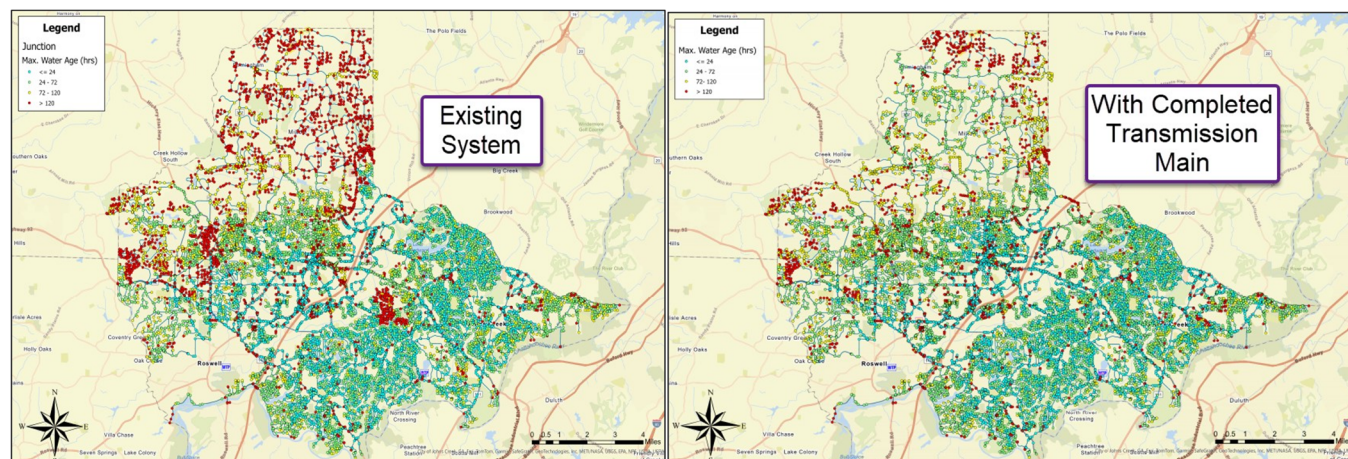
The completion of the transmission main is one of the most beneficial capital improvement projects in this Master Plan. This is based on the hydraulic modeling showing that through the completion of the transmission main with CIP projects 201/401 and 501, deficiencies are significantly reduced toward meeting the levels of service the County has identified. The transmission main helps with reducing low pressure deficiencies in the central and northern portions of the county. The completion of the transmission main also significantly reduces the water age in the northeastern portion of the county, as shown on Figure 6-1. As a result, the county should prioritize the implementation of these transmission main segments in the future.

There are some capital improvement projects that help improve pressure at neighborhoods that have historically experienced low pressure. These neighborhoods and CIP projects include the following list:

- Providence Oaks: 103, 105
- Vickery Crest: 103, 106
- Hayfield: 103, 211, 506
- Maid Marion: 101, 102, 203

To further prioritize the projects within each phase, the projects with costs greater than \$1 million were evaluated to determine which ones should be implemented first. This prioritization is based on engineering judgment and the impact each project will have on the system in terms of improving the Level of Service that Fulton County has identified. The transmission main is excluded from this prioritization due to the priority nature of this project. It is a priority project due to the significant benefits of the implementation of this project. The pressure zones were prioritized according to the number of customers in each zone.

Figure 6-1. Transmission Main Water Age Improvements



6.1 CIP Costs

CIP costs were developed using a Jacobs proprietary tool called Replica Parametric Design. This software generates conceptual-level designs and cost estimates for municipal and industrial water and wastewater projects that facilitate sustainable and economical decision-making early in the project. Replica Parametric Design integrates the three main conceptual components of early project planning (facility design criteria and footprints, construction cost estimates, and life cycle cost estimates) to provide a clearer picture of project scope and cost than traditional conceptual estimating techniques. Life cycle costs were not included as part of the CIP costs presented herein but they do include overall project capital costs including adders for additional project costs (like site work or yard piping, if any), contractor markups (which includes a 40% contingency) as well as non-construction costs like permitting, engineering, and services during construction. Costs should be reassessed at the time of project execution.

6.2 Current Recommendations

This section provides the CIP solutions that are recommended to be implemented as soon as they can be funded. They provide immediate improvement to pressure and fire flow and are shown on Figure 6-1. Table 6-1 lists each of the projects in the 2025 phase, along with the driver, description, size, length, and planning level cost estimate. Appendix G includes a map book of the individual CIP projects.

The current recommendations include several crossing pipe connections, and a few line extensions to help with low pressures. Note that crossing pipe connection lengths and costs presented herein are approximate and will need to be reassessed before detailed design and construction.

Figure 6-2. 2025 CIP Projects Overview

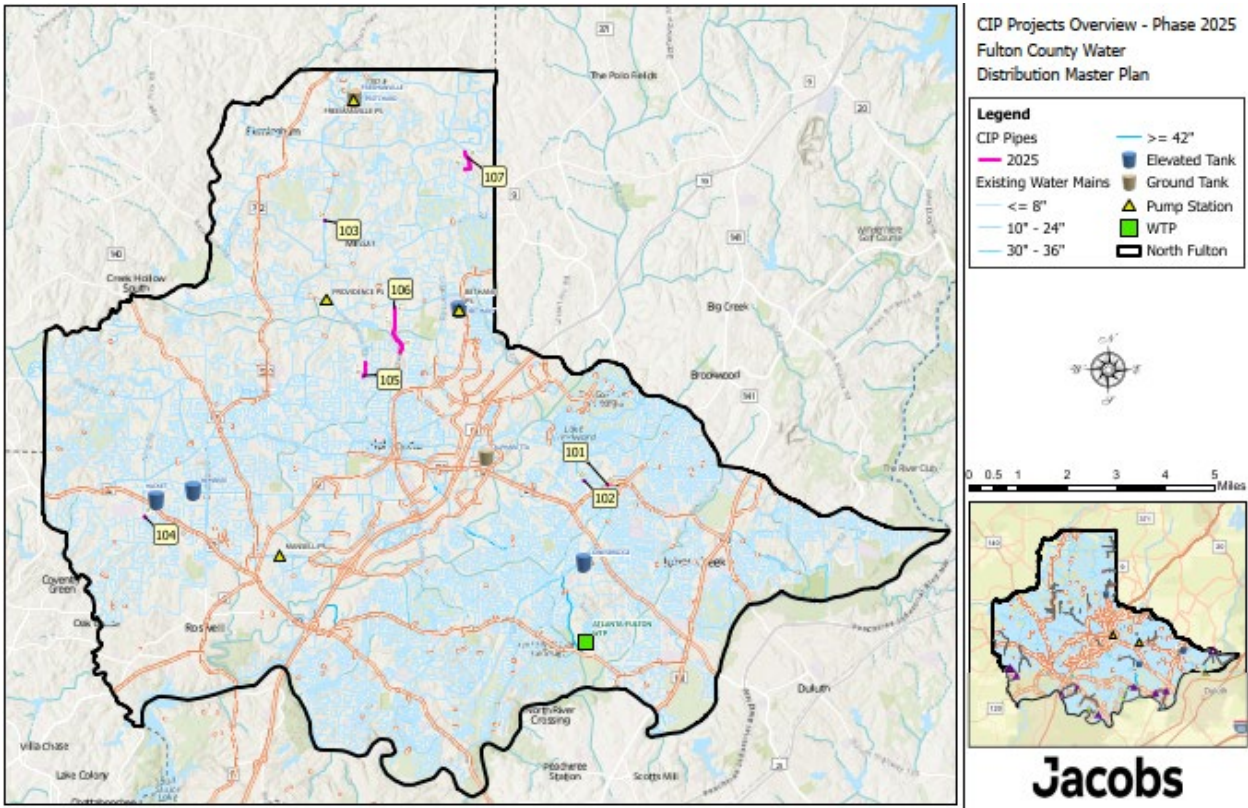


Table 6-1. 2025 CIP Project Descriptions

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^b	Length (ft)
101 [†]	2025	Low Pressure	Crossing Pipe Connection at Kimball Bridge Road/Webb Bridge Road	Water Main	Both	-	30"	\$102,000	4
102 [†]	2025	Low Pressure	Crossing Pipe Connection at Webb Bridge Road/Maid Marion Close	Water Main	Both	-	30"	\$195,000	7
103 [†]	2025	Low Pressure	Crossing Pipe Connection at Freemanville Road/Quarterpath Lane	Water Main	Both	-	24"	\$101,000	22
104	2025	Low Pressure	Woodstock Road Extension	Water Main	Both	-	8"	\$128,000	40
105 [†]	2025	Low Pressure/Fire Flow	Providence Road Extension	Water Main	Both	-	8"	\$741,000	956
106 [†]	2025	Low Pressure/Fire Flow	Hopewell Road Parallel Line	Water Main	Both	1	12"	\$3,936,000	5,096
107	2025	Low Pressure/Fire Flow	Hamby Road Extension	Water Main	Both	2	8"	\$1,610,000	2,583

^a Ongoing project with construction cost estimate per email from Fulton County's Timothy Mullen (August 8, 2024)

^b Cost estimate is total project cost and includes 40% contingency except for ongoing projects.

[†]This project will improve minimum pressures at subdivisions where low pressure have been reported in the summer by customers.

6.2.1 Operational Recommendations

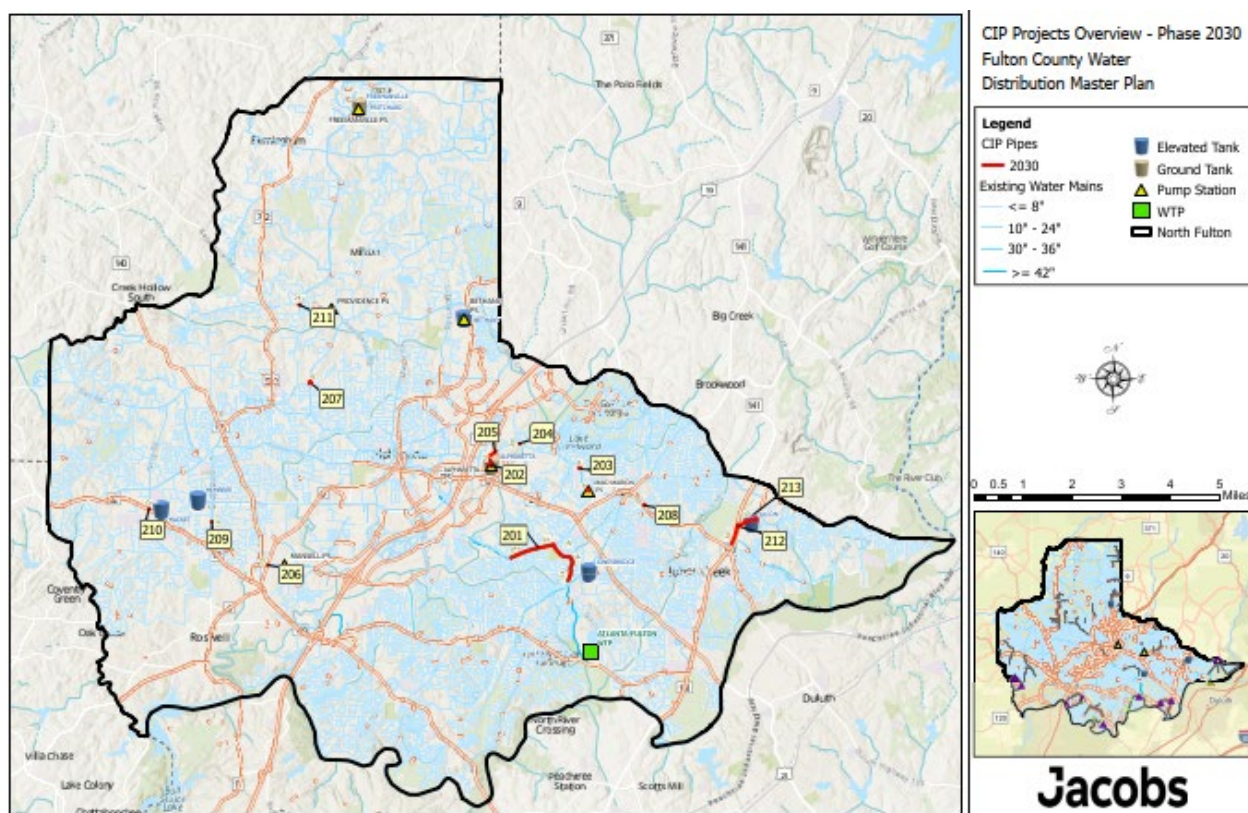
The water distribution system operates based on two main pressure zones – the Main Zone and the Pritchard Mountain Zone. The Main Zone covers most of the county and is supplied by the high service pumps at the Tom Lowe WTP. This zone has an HGL of approximately 1,280 feet. Flow to the Freemanville ground service tank is supplied from the Providence pump station. The Pritchard Mountain pump station then pumps water from the ground Freemanville Tank to the elevated Pritchard Mountain tank. This operates at the Pritchard Mountain Zone at an HGL of around 1,380 feet.

Through the validation exercise, an operational recommendation was identified. At the Providence pump station when a second pump is turned on, the Freemanville Tank altitude valve should be allowed to fill to avoid higher pressures in the discharge zone. This would help avoid potentially damaging high pressures from occurring in the system.

6.3 2030 Recommendations

The 2030 recommendations include some water main and a storage tank for a large customer, eight crossing pipe connections, a segment of the transmission main at the 1.75 peaking factor and two pump stations needed for different reasons. Figure 6-3 shows the locations of these projects and Table 6-2 lists each of the projects in the 2030 phase, along with the driver, description, size, length, and planning level cost estimate.

Figure 6-3. 2030 CIP Projects Overview



The Existing Storage Analysis (Section 5.1) identified a storage deficit of 1.13 MG in the Fulton County system, and the need for additional storage in the near term was discussed with the County. Based on the

projected future demand of a large industrial customer (ALCON), the County evaluated the option of an elevated storage tank to serve them. From the 2050 demand, the average water usage was projected to be about 2.5 MG per day. An elevated, 3 MG tank would be able to meet future demands, but the tank could still be used in the short term, as needed.

Table 6-2. 2030 CIP Project Descriptions

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^a	Length (ft)
201-A†	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Buice Road (Phase A)	Transmission Main	1.75	Yes	54"	\$8,812,000	2,816
201-B†	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Buice Road (Phase B)	Transmission Main	1.75	Yes	54"	\$6,111,000	1,960
201-C†	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase C)	Transmission Main	1.75	Yes	54"	\$7,269,000	2,309
201-D†	2030	Low Pressure/Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase D)	Transmission Main	1.75	Yes	54"	\$8,650,000	2,753
202	2030	Alpharetta Tank	Alpharetta Tank Pump Station (75 HP pumps)	Pump Station	Both	1	16"	\$12,380,000	2,014
203†	2030	Low Pressure (Maid Marion)	Maid Marion In-line Booster Station and High Pressure Zone (5 HP pumps)	Pump Station	Both	3	8"	\$4,898,000	267
204	2030	Low Pressure	Crossing Pipe Connection at Webb Bridge Road/Strath Drive	Water Main	Both	-	30"	\$143,000	4
205	2030	Low Pressure	Crossing Pipe Connection at Webb Bridge Road/North Point Parkway	Water Main	Both	-	30"	\$150,000	11
206	2030	Low Pressure	Crossing Pipe Connection at Mansell Road/ Alpharetta Highway	Water Main	Both	-	20"	\$193,000	52
207	2030	Low Pressure	Crossing Pipe Connection at Bethany Road just north of Mayfield Road	Water Main	Both	-	16"	\$144,000	9

Fulton County Water Distribution System Master Plan

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^a	Length (ft)
208	2030	Low Pressure	Crossing Pipe Connection at Abbotts Bridge Road/Abbotts Way	Water Main	Both	-	30"	\$159,000	19
209	2030	Low Pressure	Crossing Pipe Connection at Crabapple Road just north of Strickland Road	Water Main	Both	-	16"	\$151,000	24
210	2030	Low Pressure	Crossing Pipe Connection at W Crossville Road/Woodstock Road	Water Main	Both	-	24"	\$203,000	60
211†	2030	Low Pressure	Crossing Pipe Connection at Providence Road/Freemanville Road	Water Main	Both	-	24"	\$278,000	127
212	2030	Low Pressure/ALCON customer	Medlock Bridge Road/Johns Creek Pkwy Parallel Line	Water Main	Both	2	30"	\$7,120,000	4,481
213	2030	Emergency Storage/ALCON	New 3 MG Elevated Storage Tank at ALCON	Tank	Both	4	N/A	\$15,600,000	N/A

^a Cost estimate is total project cost and includes 40% contingency.

†This project will improve minimum pressures at subdivisions where low pressure have been reported in the summer by customers.

Figure 6-4 below shows the tank levels under the 2030 MDD scenario with all the 2025 CIP projects completed with peaking factors of 1.75 and 1.5. Figure 6-5 shows the improvement to the tank levels when all the 2030 CIP projects are completed with peaking factors of 1.75 and 1.5.)

Figure 6-4. Tank levels at 2030 MDD with 2025 CIP projects completed at a PF of 1.75 (left) and a PF of 1.5 (right)

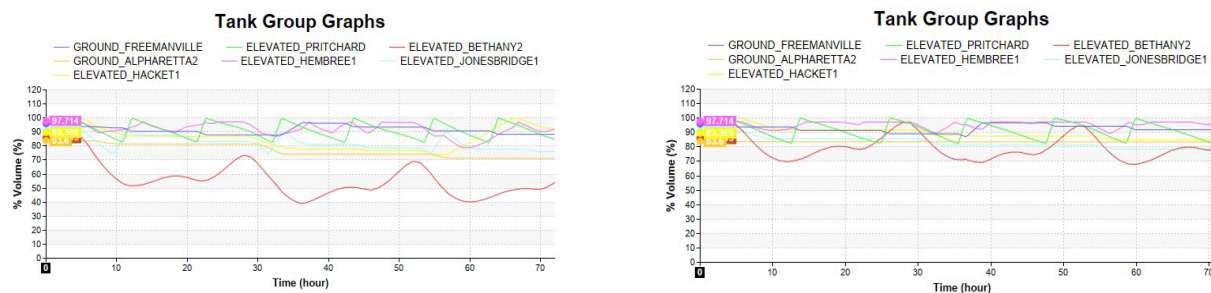
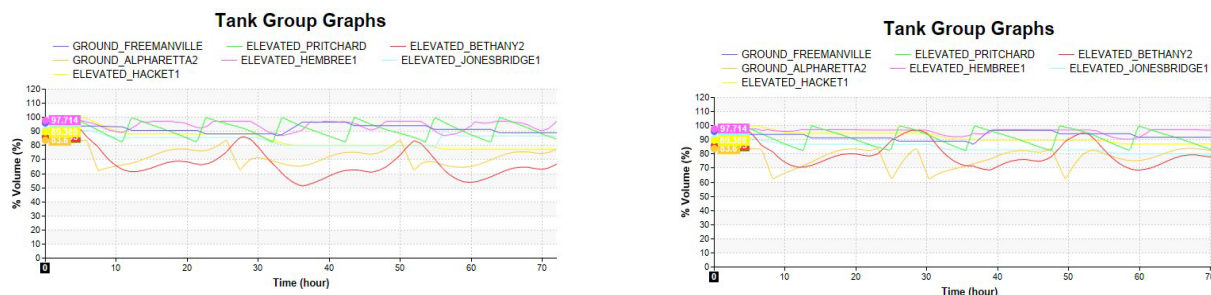


Figure 6-5. Tank levels at 2030 MDD with 2030 CIP projects completed at a PF of 1.75 (left) and a PF of 1.50 (right)



In this phase, due to the benefits of the various crossing pipe connection projects reducing head losses in the system, the Alpharetta tanks do not drain as shown on Figure 6-6. The difference in the HGL between the drain lines between the existing and 2050 scenarios is shown on Figure 6-7. Therefore, to drain the Alpharetta tanks effectively, a pump station is proposed.

This phase also includes the Maid Marion in-line booster station and the creation of a new high-pressure zone. The zone is isolated by closing two valves on the 8-inch main on Webb Bridge Road. This zone helps in alleviating the significant low-pressure issues experienced by the customers in the Maid Marion and Park Glenn subdivisions, which are due to their grade elevations.

Figure 6-6. Alpharetta Tank Levels – Existing System vs. 2050 CIP with No Pump Station

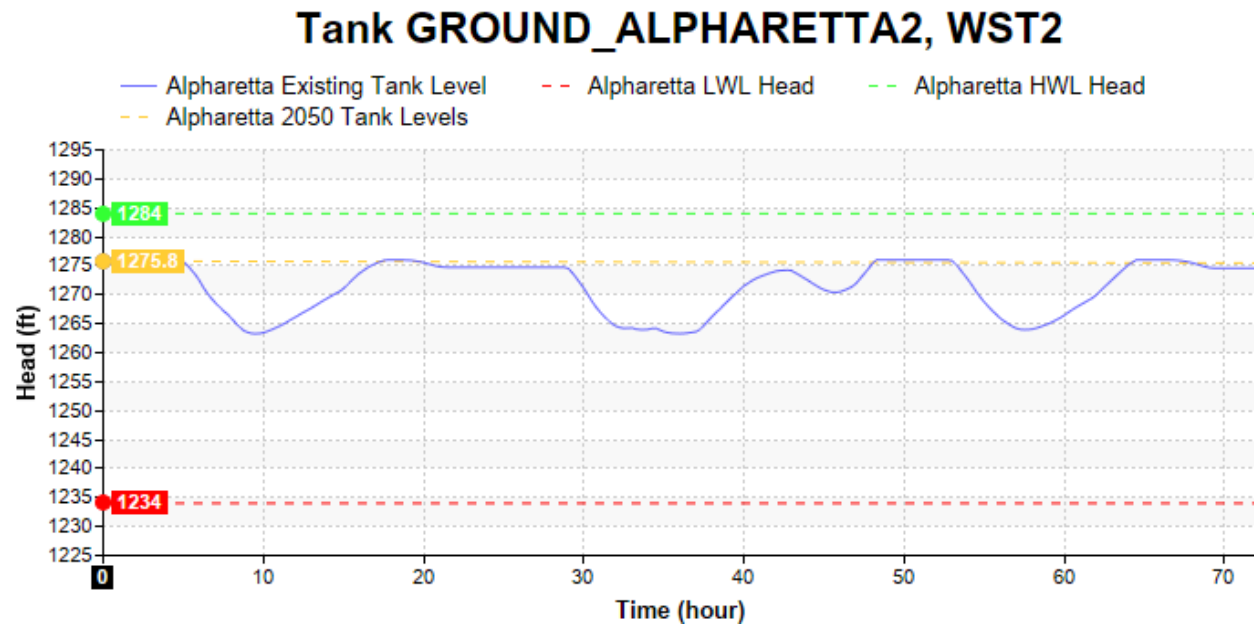
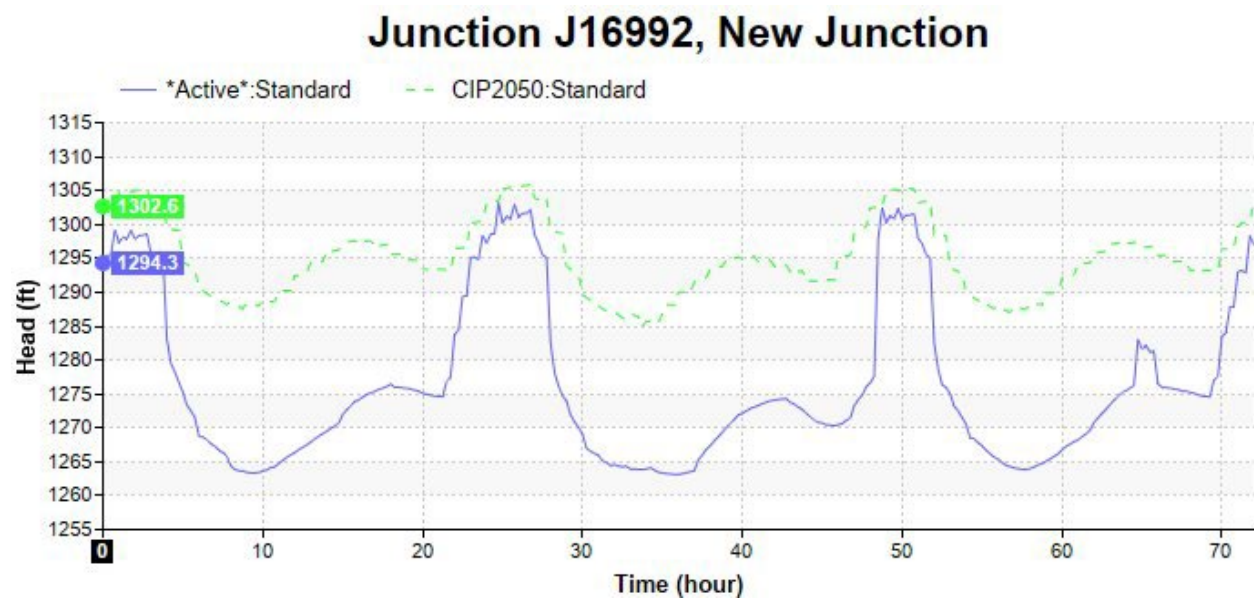


Figure 6-7. HGL Difference between Existing and 2050 Scenario for the Alpharetta Drain Line



6.4 2035 Recommendations

The 2035 recommendation includes a segment of the transmission main at the 1.75 peaking factor. Figure 6-8 shows the locations of this project, and Table 6-3 lists the project in the 2035 phase, along with the driver, description, size, length, and planning level cost estimate.

Figure 6-8. 2035 CIP Projects Overview

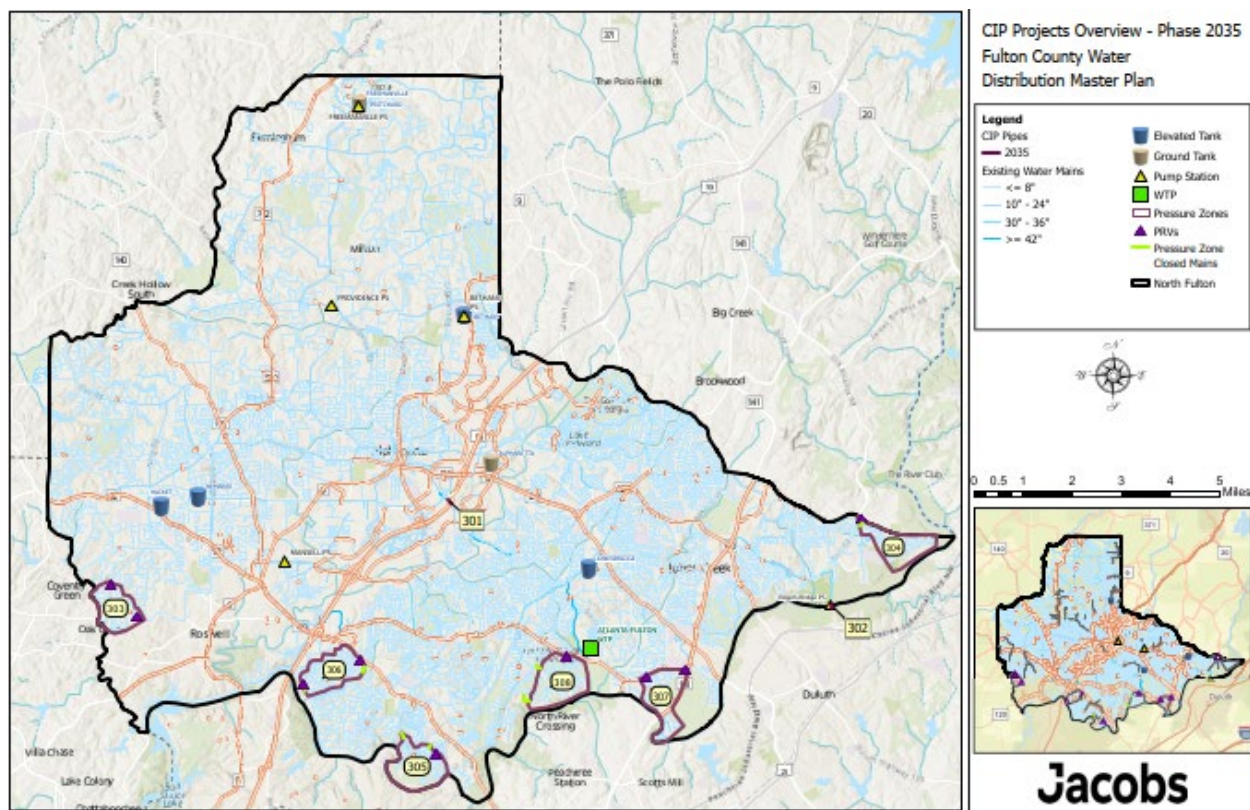


Table 6-3. 2035 CIP Project Descriptions

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^a	Length (ft)
301†	2035	Low Pressure/Water Age	Complete 42" Transmission Main under GA 400 along Kimball Bridge Road	Transmission Main	1.75	Yes	42"	\$3,768,000	500
302	2035	Emergency Interconnection	Rogers Bridge Pump Station - Gwinnett Interconnection (450 HP pumps)	Pump Station	Both	7	N/A	\$11,151,000	N/A
303	2035	High Pressure	Pine Grove Low Pressure Zone	Pressure Reducing Valve	Both	6	N/A	\$2,082,000	N/A

Fulton County Water Distribution System Master Plan

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^a	Length (ft)
304	2035	High Pressure	Shakerag Low Pressure Zone	Pressure Reducing Valve	Both	2	N/A	\$1,041,000	N/A
305	2035	High Pressure	Horseshoe Bend Low Pressure Zone	Pressure Reducing Valve	Both	3	N/A	\$1,041,000	N/A
306	2035	High Pressure	Martin Landing Low Pressure Zone	Pressure Reducing Valve	Both	1	N/A	\$2,082,000	N/A
306	2035	High Pressure	Atlanta Athletic Club Low Pressure Zone	Pressure Reducing Valve	Both	4	N/A	\$2,082,000	N/A
307	2035	High Pressure	County Club of the South Low Pressure Zone	Pressure Reducing Valve	Both	5	N/A	\$1,041,000	N/A

^a Cost estimate is total project cost and includes 40% contingency.

†This project will improve minimum pressures at subdivisions where low pressure have been reported in the summer by customers.

Figure 6-9 below shows the tank levels under the 2035 MDD scenario with all the 2030 CIP projects completed with peaking factors of 1.75 and 1.5. Figure 6-10 shows the improvement to the tank levels when all the 2035 CIP projects are completed with peaking factors of 1.75 and 1.5.

Figure 6-9. Tank levels at 2035 MDD with 2030 CIP projects completed at a PF of 1.75 (left) and a PF of 1.5 (right)

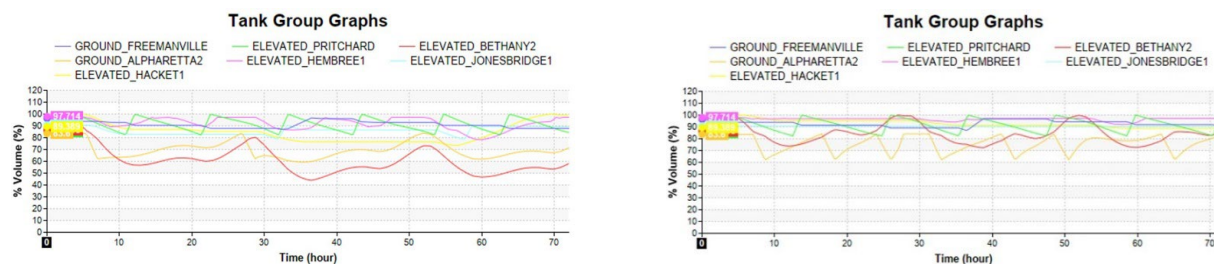
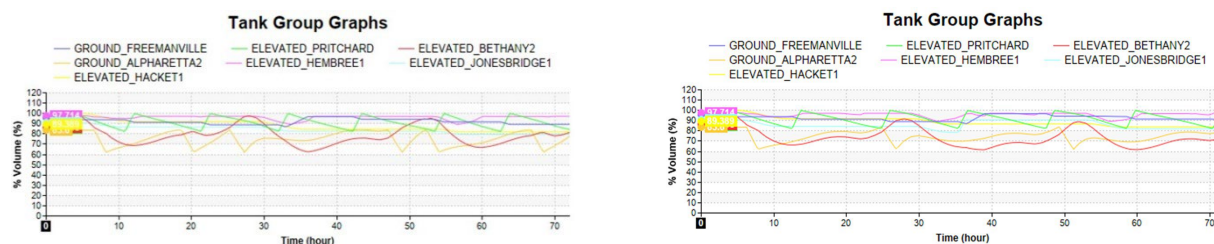


Figure 6-10. Tank levels at 2035 MDD with 2035 CIP projects completed at a PF of 1.75 (left) and a PF of 1.50 (right)



6.4.1 Pressure Zone Recommendations

There are six new proposed pressure zones shown below, and they are recommended to be implemented as soon as they can be funded in the 2030 Phase. They will lower the pressure and will be created by closing valves and installing pressure-reducing valves (PRVs). All pressure zone analysis were conducted using the existing model for ADD and to assess fire flows under MDD. The six new low-pressure zones are as follows:

- Pine Grove Zone
- Shakerag Zone
- Horseshoe Bend Zone
- Martin Landing Zone
- Atlanta Athletic Club Zone
- Country Club of the South Zone

The pressure zone analysis statistics for each zone is tabulated in Table 6-4. This table shows the average pressure before and after, number of PRVs needed, number of customers affected, pressure settings, length of pipe in each zone, maximum pressures before and after, junction residual pressures less than 20 psi during fire flows before and after, and the flow requirement on the low-pressure side. This information is typically used to size and cost PRV stations. The rough order of magnitude costs for a PRV station is around \$250,000 to \$300,000 but could vary based on several factors.

Table 6-4. Pressure Zone Analysis Statistics

Pressure Zone Analysis Statistics	Pine Grove Zone	Shakerag Zone	Horseshoe Zone	Martin Landing Zone	Atlanta Athletic Club Zone	Country Club of the South Zone
Average pressure (before), psi	137	149	150	162	155	146
Average pressure (after), psi	100	91	101	84	100	88
Number of PRVs	2	1	1	2	2	1
Number of customers (based on tax parcel layer)	443	806	632	1,207	489	485
PRV 1 setting, psi	67	70	80	90	80	90
PRV 2 setting, psi	67	-	-	90	80	-
Length of pipes, feet	34,696	46,891	35,201	56,725	42,196	42,766
Length of pipes, miles	7	9	7	11	8	8
Maximum pressure (Before), psi	155	170	184	184	173	176
Maximum pressure (After), psi	117	113	136	106	119	118
Residual pressure junctions < 20 psi (before)	13	122	17	1	0	62
Residual pressure junctions < 20 psi (after)	12	154	21	21	13	62
Valve size (pipe size) for both pipes	8-inch	8-inch	10-inch	8-inch	12-inch	8-inch
Low pressure side flow requirement (ADD - gpm)	63	95	78	198	90	81

Pine Grove Zone: The location and average pressure in the Pine Grove Pressure Zone with a pressure setting of 67 psi under ADD is shown on Figure 6-11. Fire flow impacts were assessed before and after by examining areas with residual pressures less than 20 psi during MDD as shown on Figure 6-12. The pressure zone statistics are tabulated in the Table 6-4.

Figure 6-11. Pine Grove Low Pressure Zone – Average Pressures (ADD)

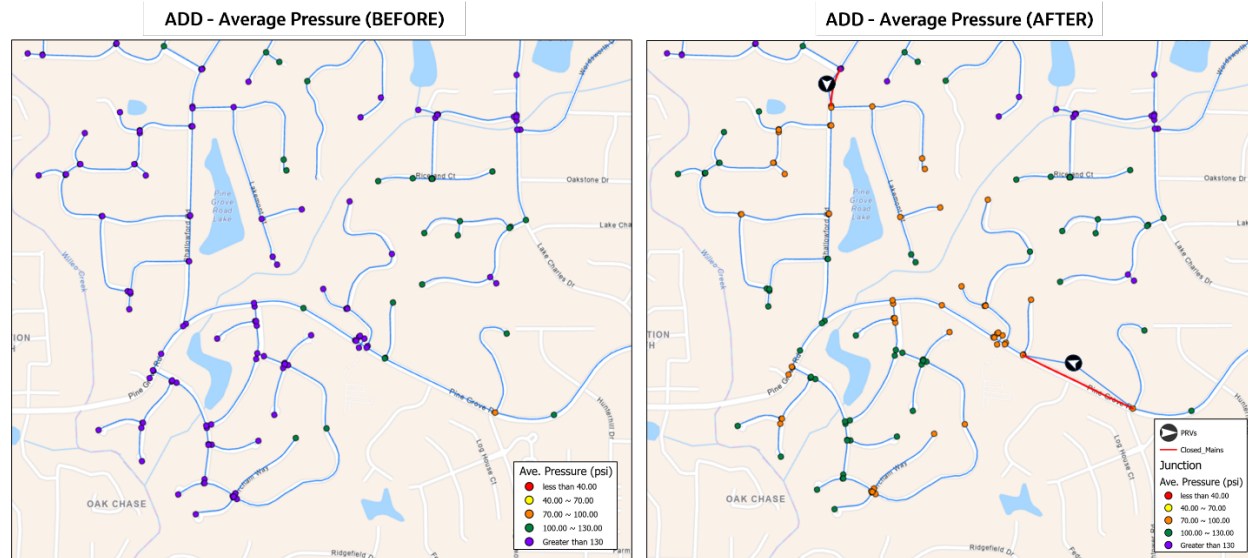
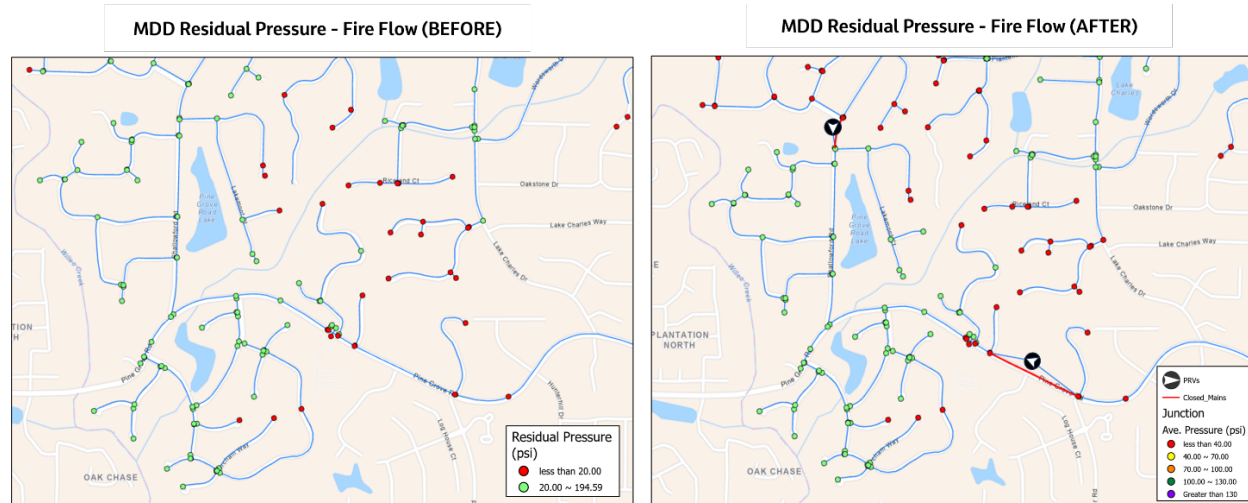


Figure 6-12. Pine Grove Low Pressure Zone – Fire Flow Residual Pressure (MDD)



Shakerag Zone: The location of the Shakerag Pressure Zone and the average before and after pressures with a pressure setting of 70 psi under ADD are shown on Figure 6-13 and Figure 6-14. The PRV is proposed in the main along McGinnis Ferry Road. Fire flow impacts were assessed before and after by examining areas with residual pressures less than 20 psi during MDD, as shown on Figure 6-15. The pressure zone statistics are tabulated in Table 6-4.



Figure 6-14. Shakerag Low Pressure Zone – Average Pressures (ADD)

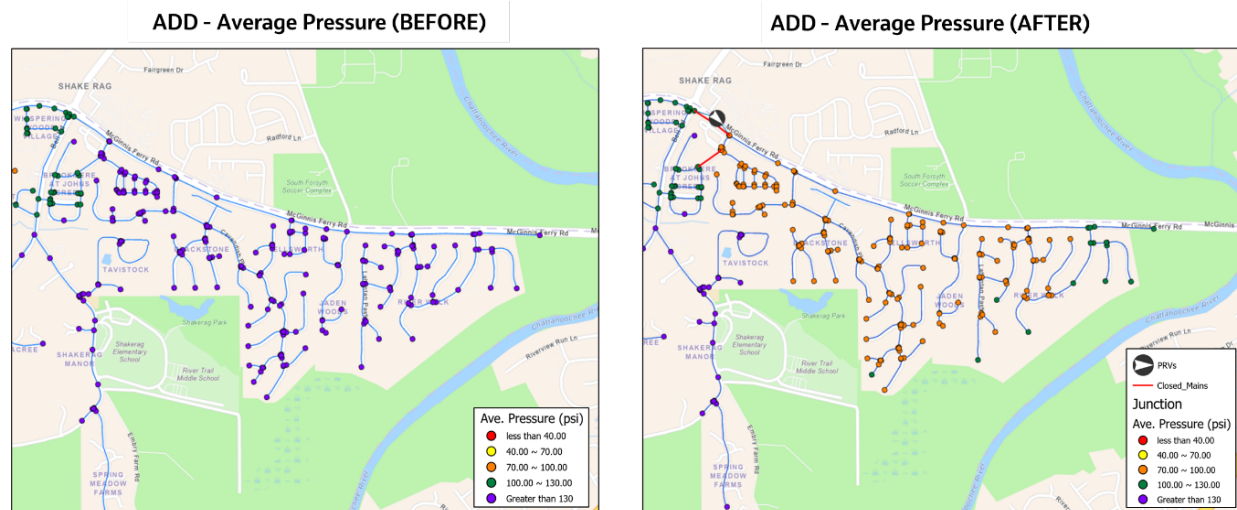
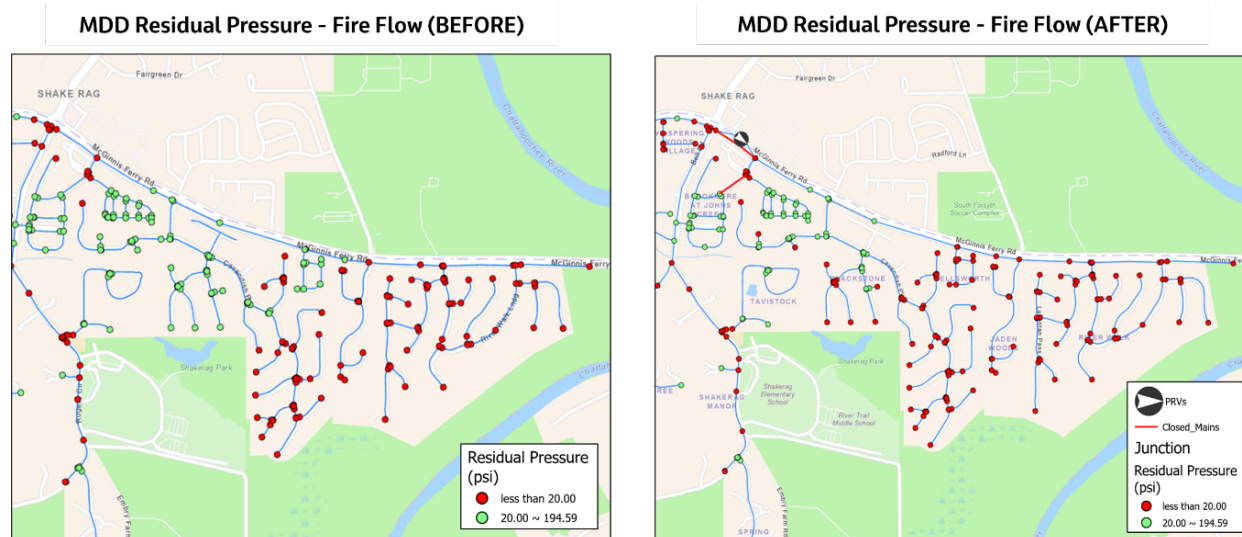


Figure 6-15. Shakerag Low Pressure Zone – Fire Flow Residual Pressure (MDD)



Horseshoe Bend Zone: The location of the Horseshoe Bend Pressure Zone and the average before and after pressures with a pressure setting of 80 psi under ADD are shown on Figure 6-16 and Figure 6-17. The PRV is proposed in the main in the Haven Wood area. Fire flow impacts were assessed before and after by examining areas with residual pressures less than 20 psi during MDD, as shown on Figure 6-18. The impact on available fire flow was not significantly affected by the new zone. The pressure zone statistics are tabulated in Table 6-4.

Figure 6-16. Horseshoe Bend Low Pressure Zone Location

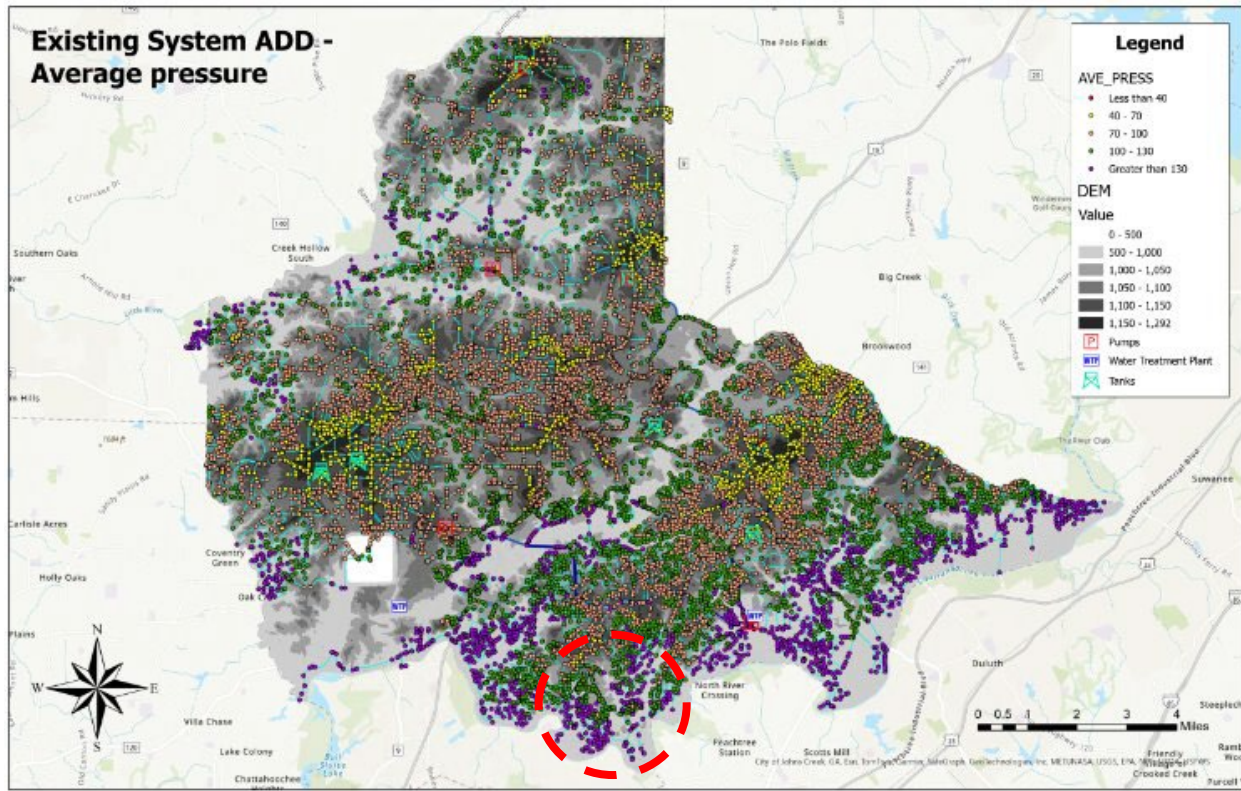


Figure 6-17. Horseshoe Bend Low Pressure Zone – Average Pressures (ADD)

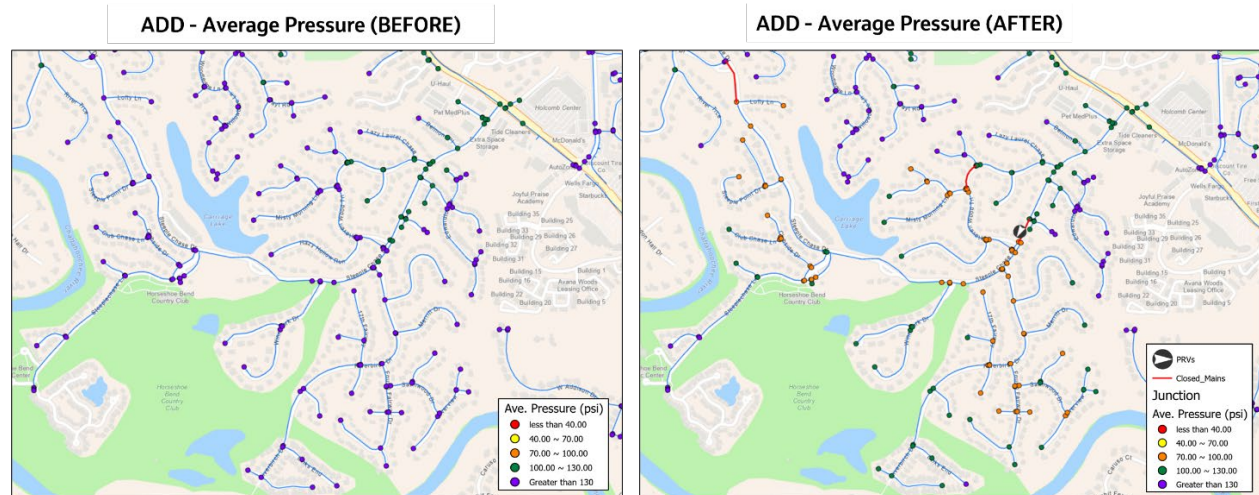
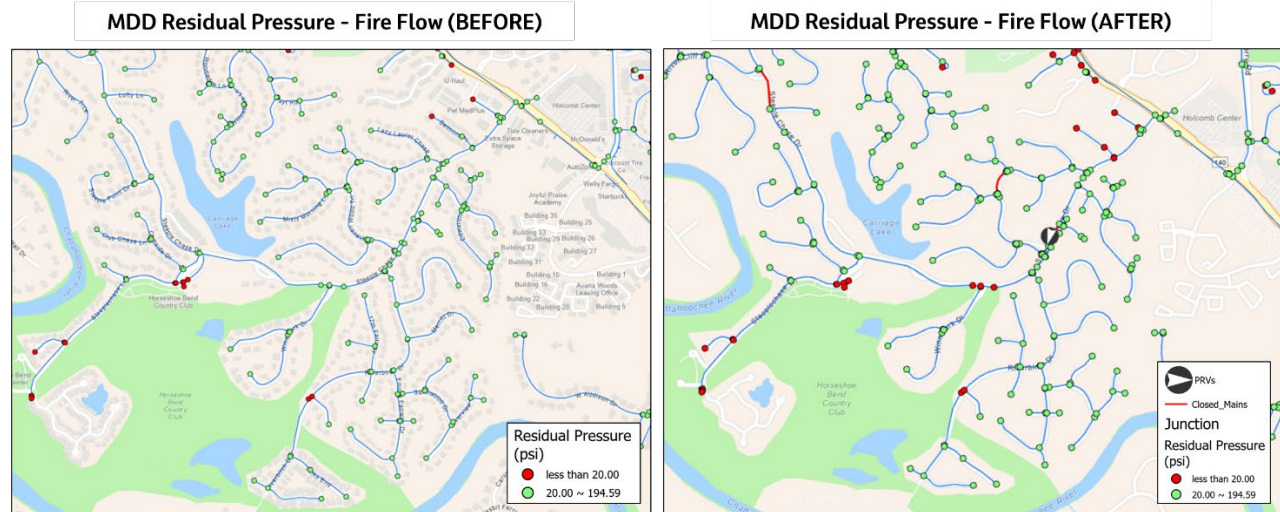


Figure 6-18. Horseshoe Bend Low Pressure Zone – Fire Flow Residual Pressure (MDD)



Martin Landing Zone: The location of the Martin Landing Pressure Zone and the average before and after pressures with a pressure setting of 90 psi under ADD are shown on Figure 6-19 and Figure 6-20. There are two PRVs proposed in the main along Martin Road and along Martin Landing Drive. Fire flow impacts were assessed before and after by examining areas with residual pressures less than 20 psi during MDD, as shown on Figure 6-21. The impact on available fire flow was significantly affected by adding a PRV on Martin Landing Drive. To mitigate this, another PRV on Martin Road was added which had a lesser impact on the available fire flow. The pressure zone statistics are tabulated in Table 6-4.

Figure 6-19. Martin Landing Low Pressure Zone Location

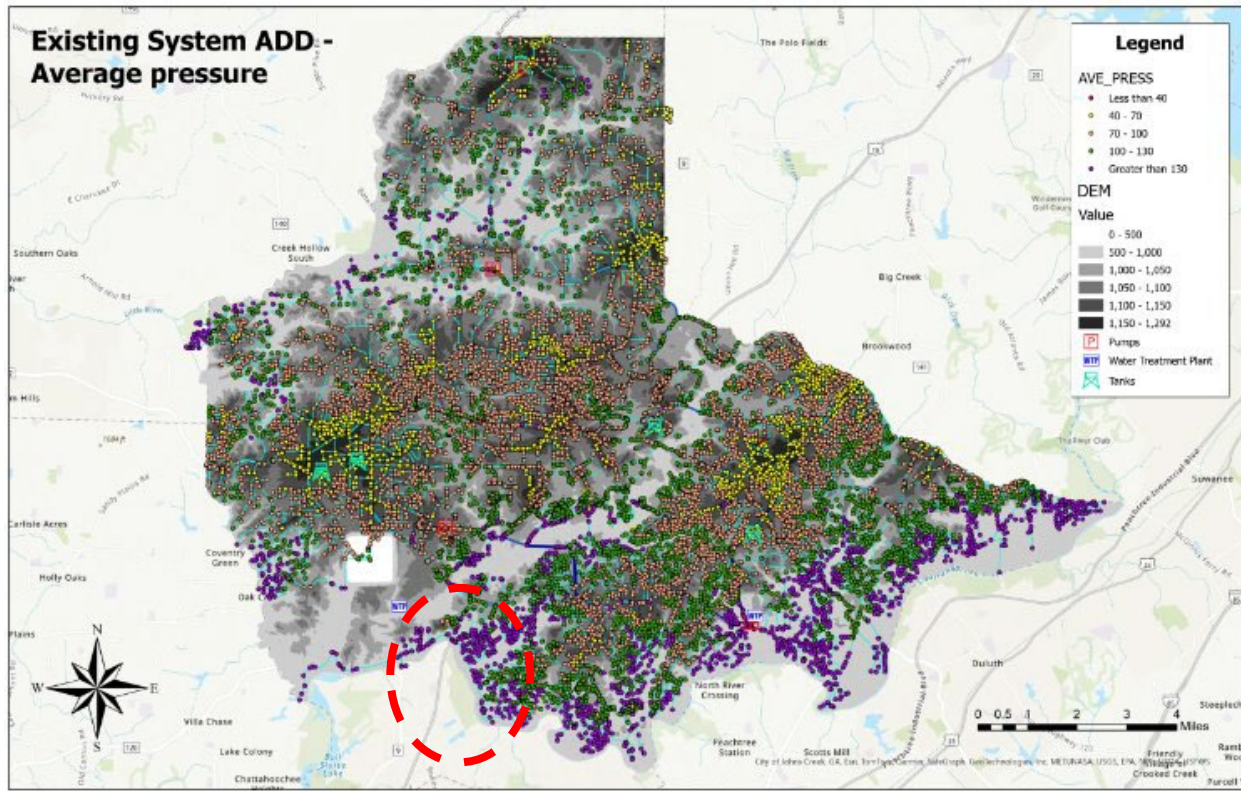


Figure 6-20. Martin Landing Low Pressure Zone – Average Pressures (ADD)

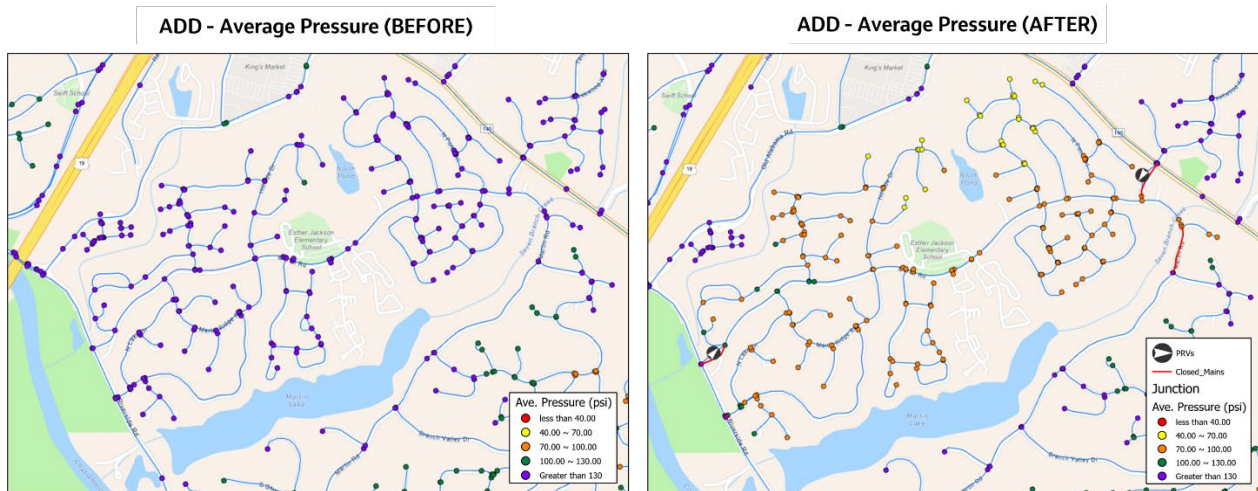
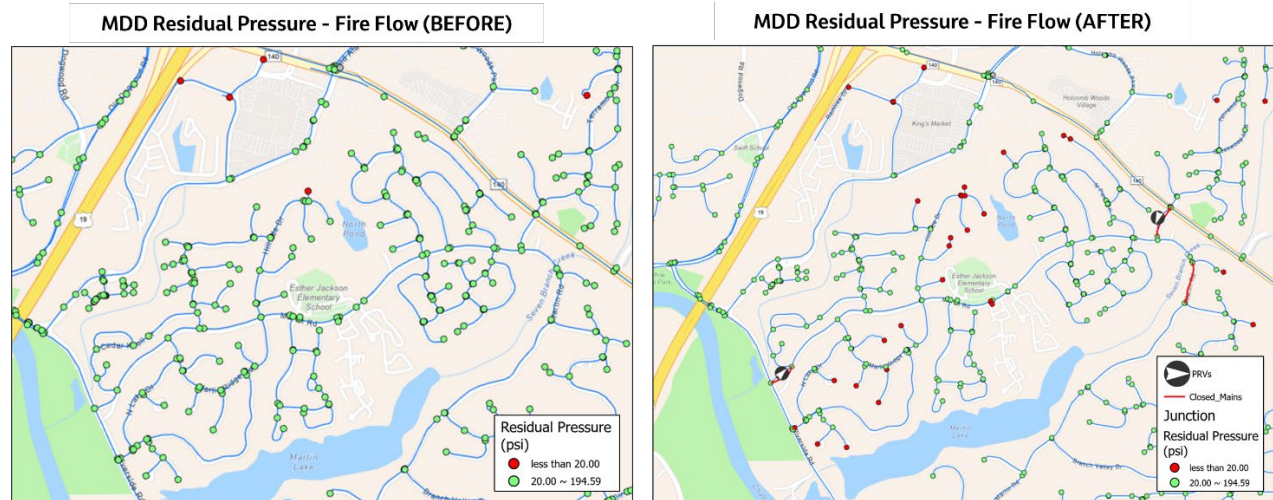


Figure 6-21. Martin Landing Low Pressure Zone – Fire Flow Residual Pressure (MDD)



Atlantic Athletic Zone The location of the Atlantic Athletic Pressure Zone and the average before and after pressures with a pressure setting of 80 psi under ADD are shown on Figures 6-22 and 6-23. Two PRVs are proposed in the main along Old Alabama Road and along Waits Ferry Crossing Road. Fire flow impacts were assessed before and after by examining areas with residual pressures less than 20 psi during MDD as shown on Figure 6-24. The impact on available fire flow was significantly affected by adding a PRV on Old Alabama Road. To mitigate this, another PRV on Waits Ferry Crossing Road was added, which had a smaller impact on the available fire flow. The pressure zone statistics are tabulated in Table 6-4.

Figure 6-22. Atlanta Athletic Club Low Pressure Zone Location

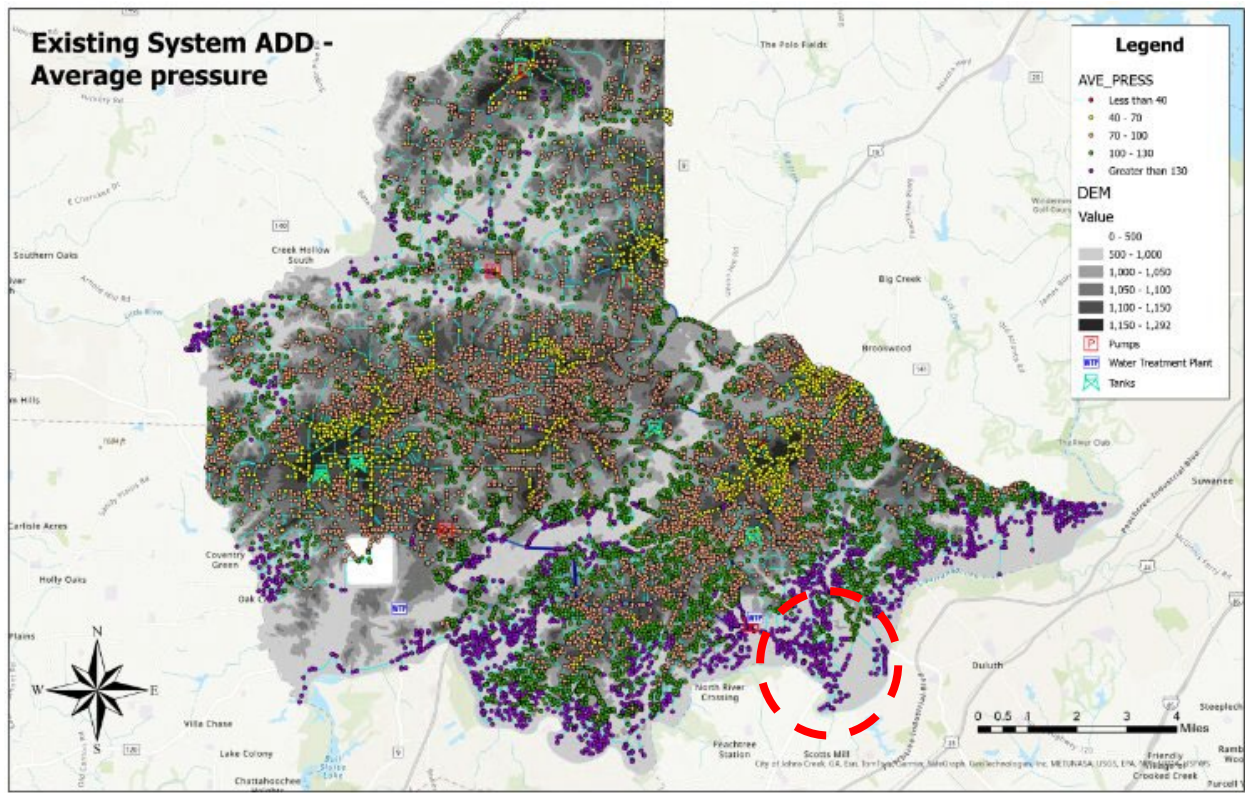


Figure 6-23. Atlanta Athletic Club Low Pressure Zone – Average Pressures (ADD)

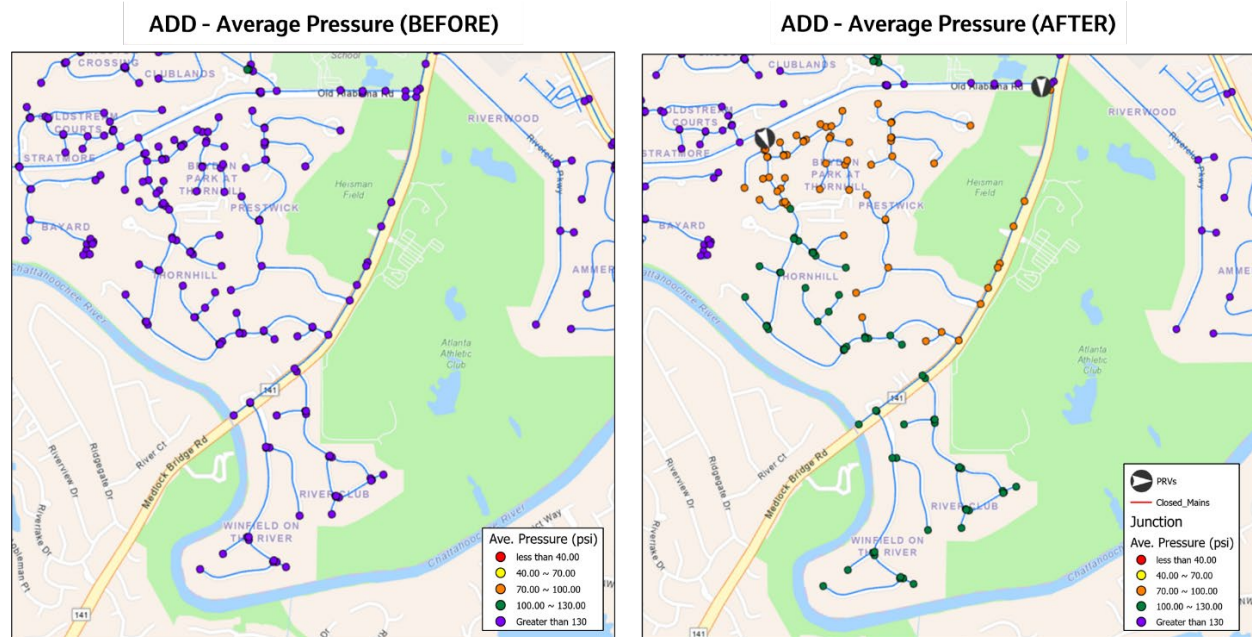
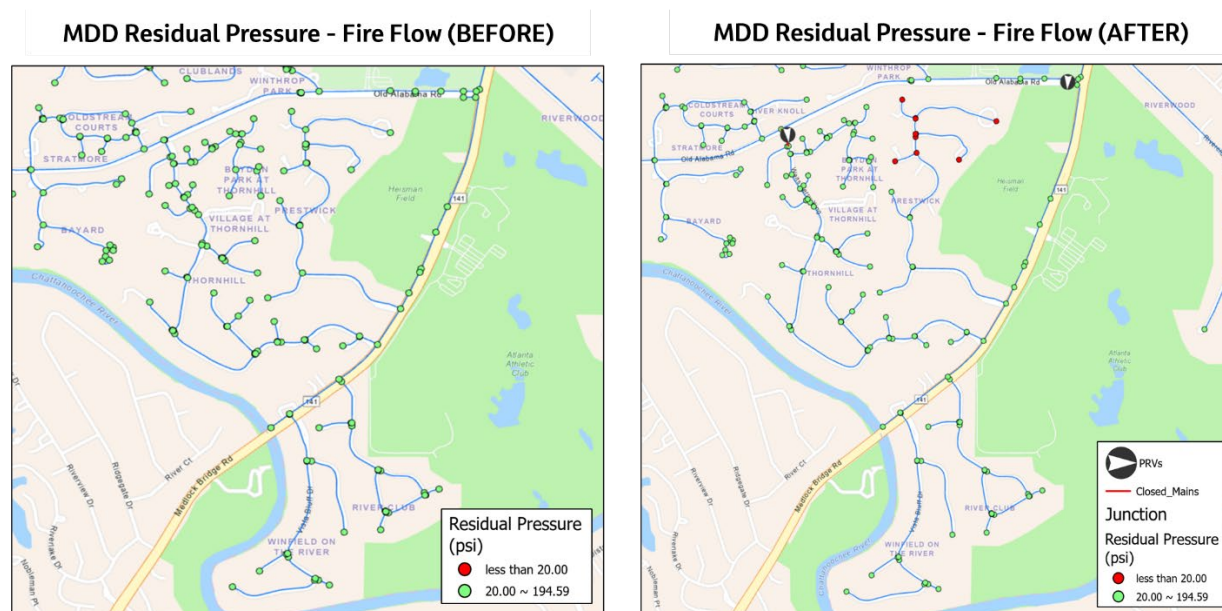


Figure 6-24. Atlanta Athletic Club Low Pressure Zone – Fire Flow Residual Pressure (MDD)



Country Club of the South Zone: The location of the Country Club of the South Pressure Zone and the average before and after pressures with a pressure setting of 90 psi under ADD are shown on Figure 6-25 and Figure 6-26. There are two PRVs proposed in the main along Old Southwick Pass Road. Fire flow impacts were assessed before and after by examining areas with residual pressures less than 20 psi during MDD, as shown on Figure 6-27. The impact on available fire flow was not significantly affected by the new zone. The pressure zone statistics are tabulated in Table 6-4.

Figure 6-25. Country Club of the South Low Pressure Zone Location

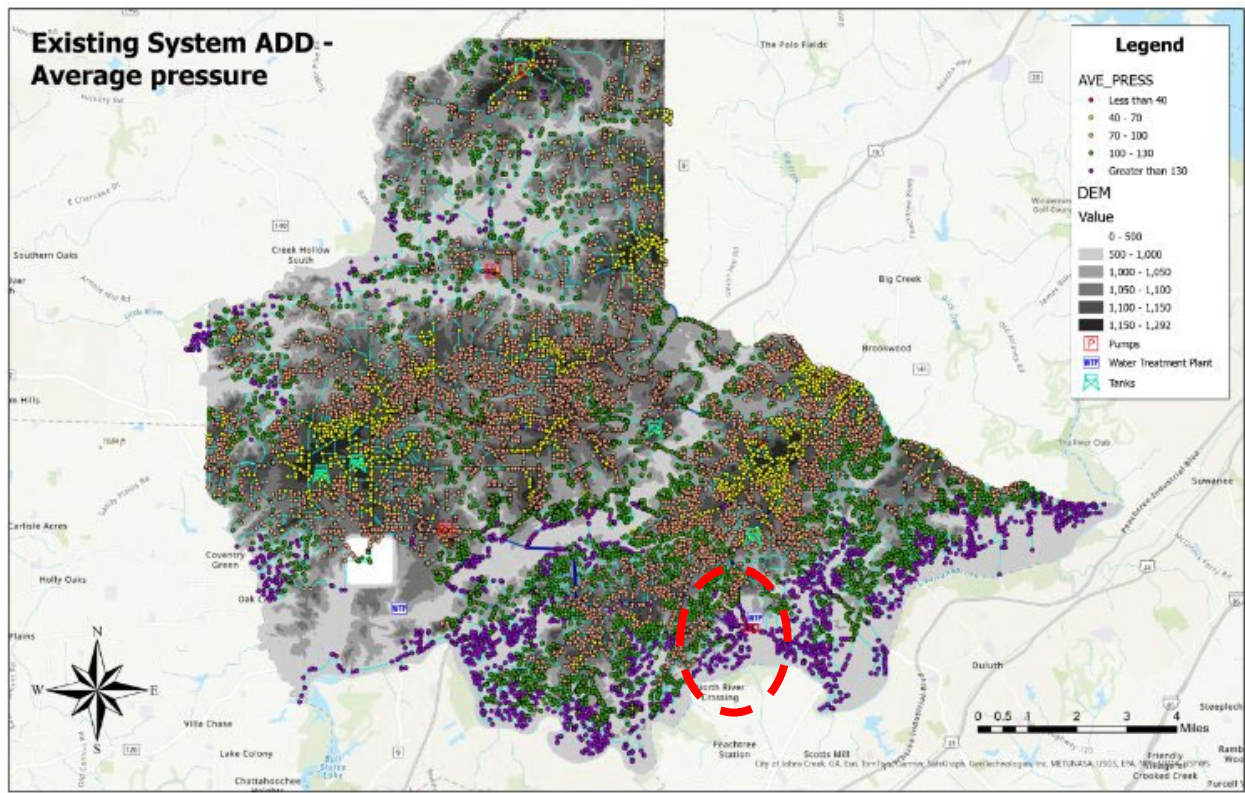


Figure 6-26. Country Club of the South Pressure Zone – Average Pressures (ADD)

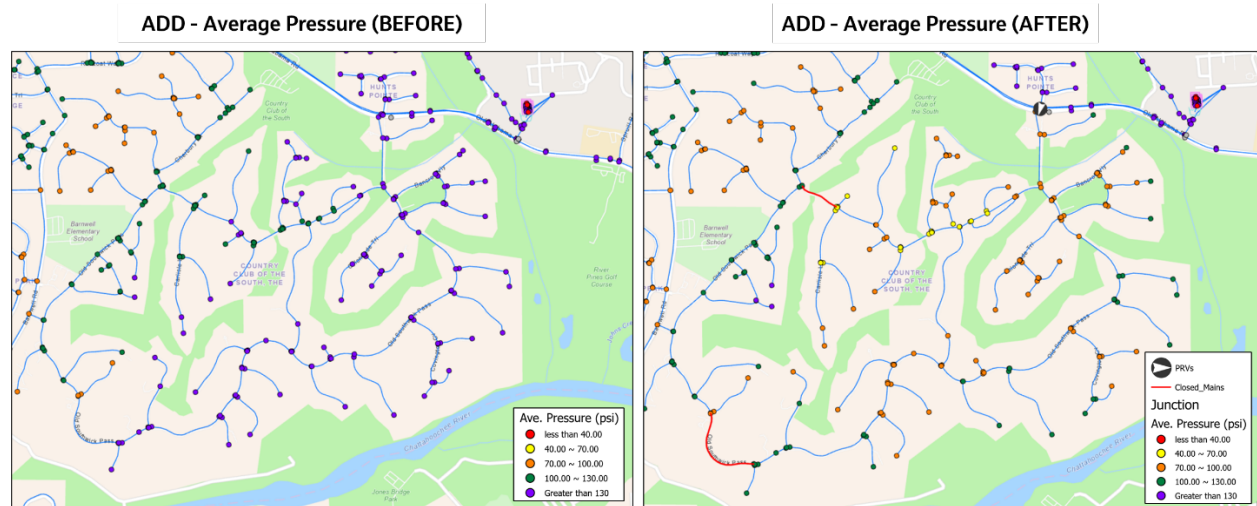
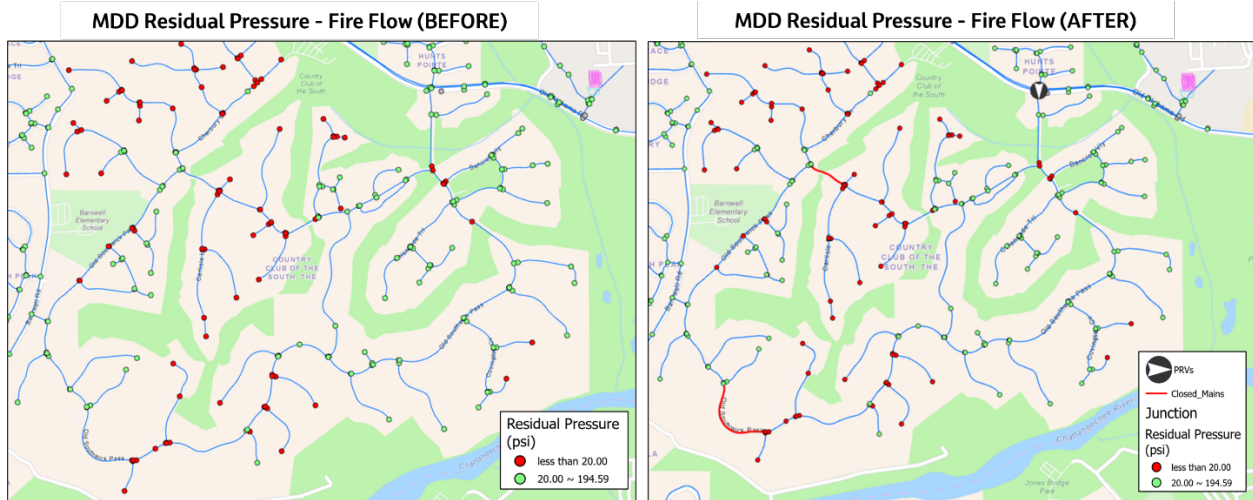


Figure 6-27. Country Club of the South Low Pressure Zone – Fire Flow Residual Pressure (MDD)



6.5 2040 Recommendations

The 2040 recommendation includes a segment of the transmission main at the 1.5 peaking factor. Figure 6-28 shows the locations of this project and Table 6-5 lists the project in the 2040 phase, along with the driver, description, size, length, and planning level cost estimate.

Figure 6-28. 2040 CIP Projects Overview

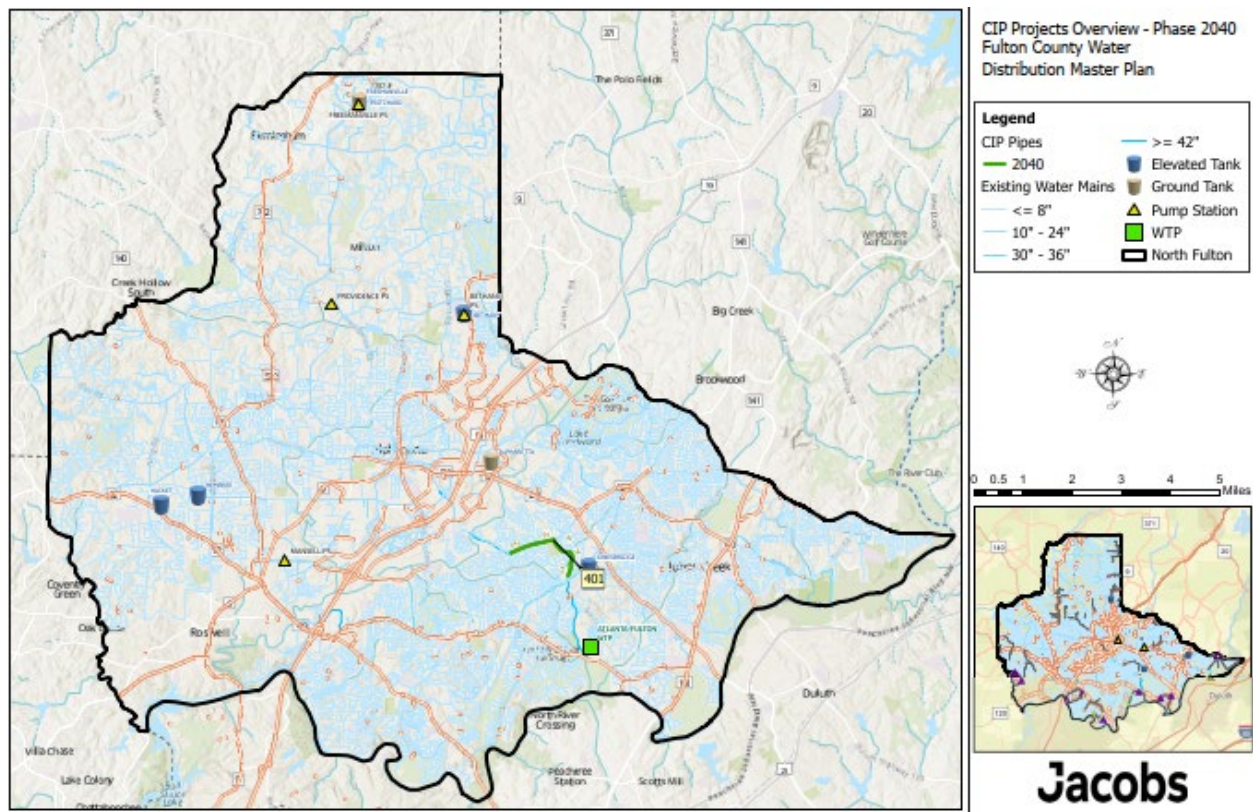


Table 6-5. 2040 CIP Project Descriptions

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^a	Length (ft)
401-A†	2040	Low Pressure/ Water Age	Complete 54" Transmission Main along Buice Road(Phase A)	Transmission Main	1.5	Yes	54"	\$8,812,000	2,816
401-B†	2040	Low Pressure/ Water Age	Complete 54" Transmission Main along Buice Road (Phase B)	Transmission Main	1.5	Yes	54"	\$6,111,000	1,960
401-C†	2040	Low Pressure/ Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase C)	Transmission Main	1.5	Yes	54"	\$7,269,000	2,309
401-D†	2040	Low Pressure/ Water Age	Complete 54" Transmission Main along Kimball Bridge Road (Phase D)	Transmission Main	1.5	Yes	54"	\$8,650,000	2,753

^a Cost estimate is total project cost and includes 40% contingency.

†This project will improve minimum pressures at subdivisions where low pressure have been reported in the summer by customers.

Figure 6-29 shows the tank levels under the 2040 MDD scenario with all the 2035 CIP projects completed with peaking factors of 1.75 and 1.5. Figure 6-30 shows the improvement to the tank levels when all the 2040 CIP projects are completed with peaking factors of 1.75 and 1.5.

Figure 6-29. Tank levels at 2040 MDD with 2035 CIP projects completed at a PF of 1.75 (left) and a PF of 1.5 (right)

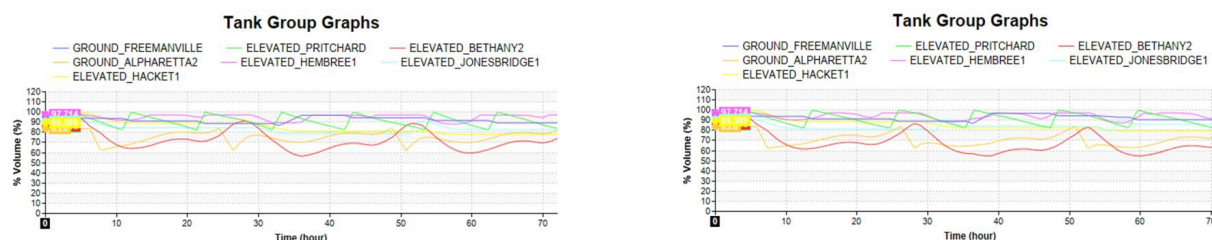
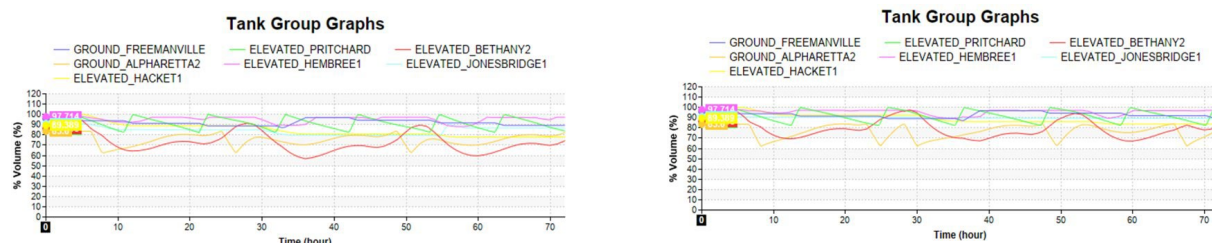


Figure 6-30. Tank levels at 2040 MDD with 2040 CIP projects completed at a PF of 1.75 (left) and a PF of 1.50 (right)



6.6 2050 Recommendations

The 2050 recommendations include water main improvements and two segments of the transmission main at the 1.75 and 1.5 peaking factors.

Figure 6-31 shows the locations of these projects and Table 6-6 lists each of the projects in the 2050 phase, along with the driver, description, size, length, and planning level cost estimate.

From the storage analysis described in Section 5.1, a storage deficit of 6.7 MG was determined for 2050. Since 2030 had a project to serve ALCON with an elevated tank of 3 MG capacity, the remaining storage of 2 MG each is sized at the Jones Bridge and Bethany tanks where Fulton County indicated that there was available space.

Figure 6-31. 2050 CIP Projects Overview

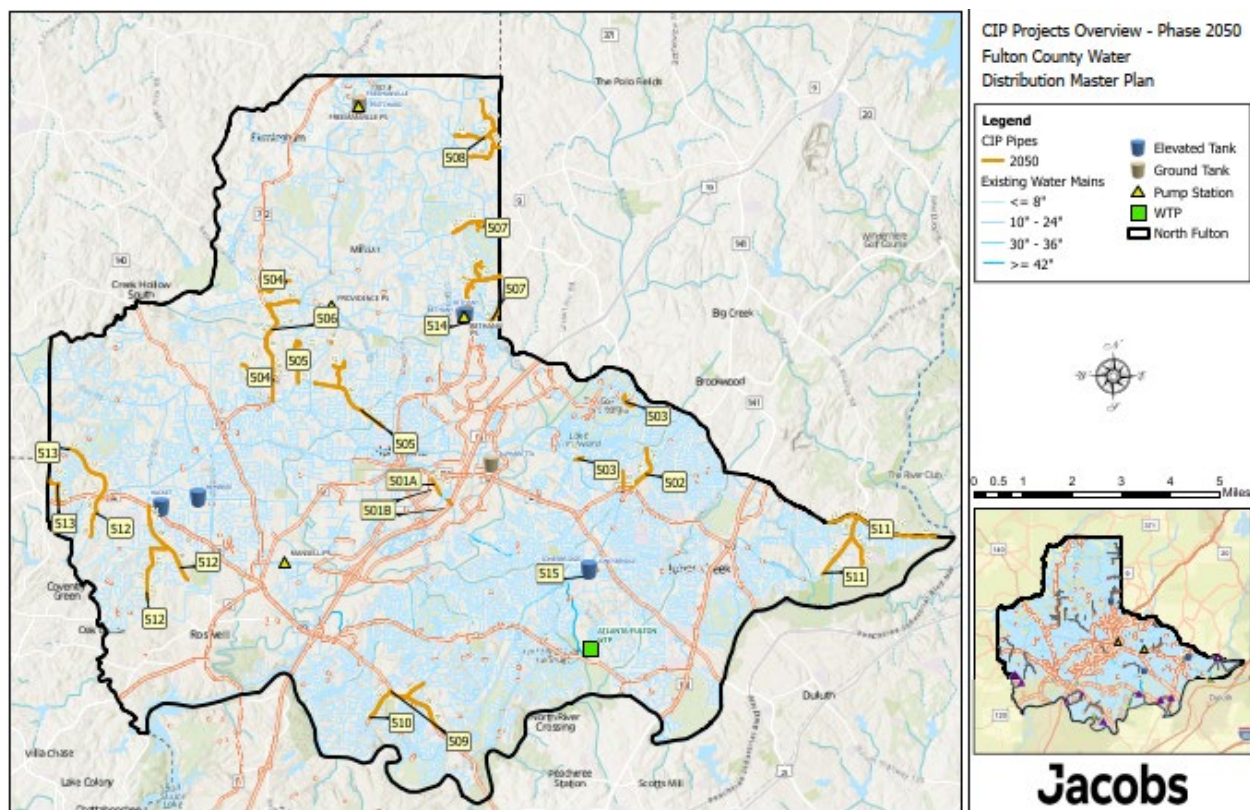


Table 6-6. 2050 CIP Project Descriptions

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^a	Length (ft)
501-A†	2050	Low Pressure/Water Age	Complete 36-42" Transmission Main along Kimball Bridge Road	Transmission Main	1.75	yes	36-42"	\$4,815,000	1,769
501-B†	2050	Low Pressure/Water Age	Complete 36-42" Transmission Main along Kimball Bridge Road	Transmission Main	1.5	yes	36-42"	\$6,155,000	2,269
502	2050	Low Pressure	Jones Bridge Road Parallel Line	Water Main	Both	1	24"	\$6,949,000	5,196
503	2050	Fire Flow	Fox Road and Greatwood Manor Parallel Line; Extension on Shirley Bridge	Water Main	Both	11	10-12"	\$4,062,000	4,653
504	2050	Fire Flow	Old Cedar Lane/Kensington Farms Drive and Triple Crown Drive/Seabiscuit Parallel Line	Water Main	Both	10	12"	\$9,015,000	11,852
505	2050	Fire Flow	Freemanville Road/Hipworth Road/Conagree Court/ Mayfield Road/Harrington Drive Parallel Line; Bethany Road crossing pipe connection	Water Main	Both	3	12"	\$14,349,000	18,898
506	2050	Fire Flow	Providence Road and Birmingham Highway Parallel Line	Water Main	Both	2	24"	\$19,594,000	14,773
507	2050	Fire Flow	Hwy 9N/Creek Club Drive, Five Acres Road/Woodlake Drive, Belleterre Drive, Francis Road/ Autumn Close Parallel Line and crossing pipe connections on Hwy 9N	Water Main	Both	5	12"	\$16,508,000	21,728
508	2050	Fire Flow	Manor Bridge Road/Manor Club Drive/Belford Drive, Watsons Bend/Manor Club Drive Parallel Line	Water Main	Both	12	10-12"	\$11,989,000	14,279
509	2050	Fire Flow	Scott Road/Holcomb Bridge Road Parallel Line	Water Main	Both	4	16"	\$9,201,000	9,237

Fulton County Water Distribution System Master Plan

CIP Project #	Phase	Driver	Description	Type	Peaking Factor	Priority	Size (in)	Planning-Level Cost Estimate (\$) ^a	Length (ft)
510	2050	Fire Flow	Eves Road Parallel Line	Water Main	Both	9	12"	\$2,933,000	3,812
511	2050	Fire Flow	Bell Road/McGinnis Ferry Road/ Rogers Circle Parallel Line	Water Main	Both	6	12-16"	\$23,680,000	22,874
512	2050	Fire Flow	Woodstock Road/Jones Road/Lake Charles Drive and Bowen Road/Stroup Road Parallel Line	Water Main	Both	8	12-16"	\$23,194,000	21,390
513	2050	Fire Flow	Mountain Park Road and Highland Colony Drive Parallel Line	Water Main	Both	7	12"	\$8,457,000	11,079
514	2050	Emergency Storage	2 MG Storage Tank at the existing Jones Bridge tank site	Storage Tank	Both	14	N/A	\$10,404,000	N/A
515	2050	Emergency Storage	2 MG Storage Tank at the existing Bethany tank site	Storage Tank	Both	13	N/A	\$10,404,000	N/A

^a Cost estimate is total project cost and includes 40% contingency.

†This project will improve minimum pressures at subdivisions where low pressure have been reported in the summer by customers.

Figure 6-32 shows the tank levels under the 2050 MDD scenario with all the 2040 CIP projects completed with peaking factors of 1.75 and 1.5. Figure 6-33 shows the improvement to the tank levels when all the 2050 CIP projects are completed with peaking factors of 1.75 and 1.5.

Figure 6-32. Tank levels at 2050 MDD with 2040 CIP projects completed at a PF of 1.75 (left) and a PF of 1.5 (right)

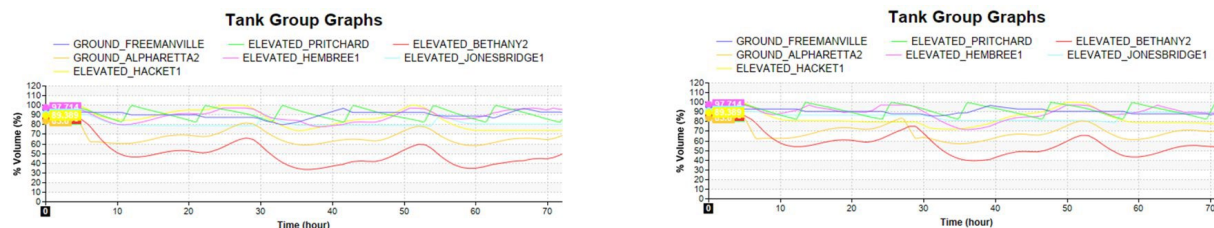
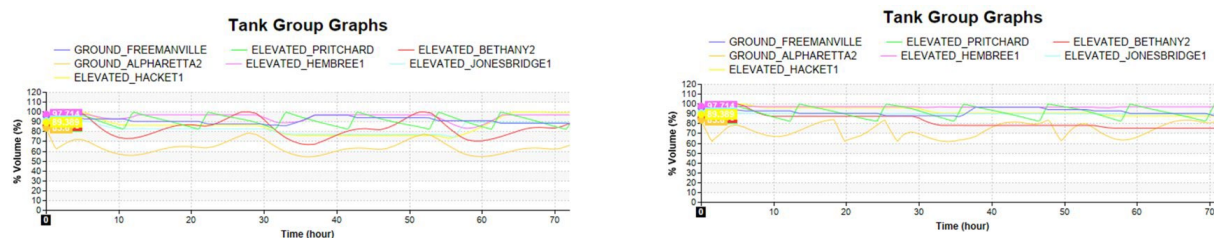
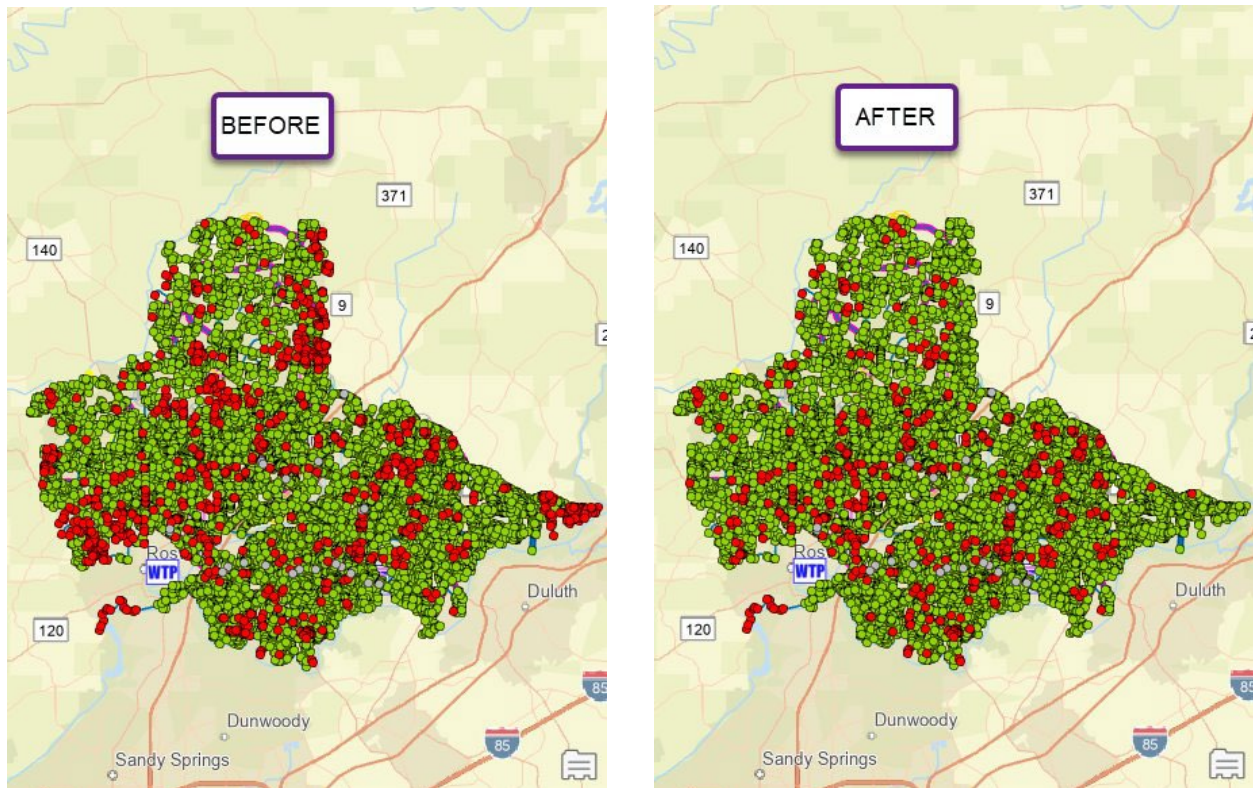


Figure 6-33. Tank levels at 2050 MDD with 2050 CIP projects completed at a PF of 1.75 (left) and a PF of 1.5 (right)



The impact of the many improvements in this 2050 phase targeted to improve fire flows can be seen on Figure 6-34.

Figure 6-34. Fire Flow Based on Junctions with Residual Pressures < 20 psi



7. References

- Atlanta Regional Commission. 2024. Population and Employment Forecast. <https://atlantaregional.org/atlanta-region/population-employment-forecasts/>
- CH2M HILL. 2011. *GEFA Water System Interconnection, Redundancy and Reliability Act Emergency Supply Plan*. September.
- City of Roswell. 2022. *Roswell Water Utility Master Plan*. January.
- Jacobs. 2024a. *Technical Memorandum: Water Demand Projections for North Fulton County – City of Alpharetta*. August 28.
- Jacobs. 2024b. *Technical Memorandum: Water Demand Projections for North Fulton County – City of Johns Creek*. August 28.
- Jacobs. 2024c. *Technical Memorandum: Water Demand Projections for North Fulton County – City of Milton*. August 28.
- Jacobs. 2024d. *Technical Memorandum: Water Demand Projections for North Fulton County – City of Roswell*. August 28.
- Jordan, Jones & Goulding (JJG). 2008. *Fulton County Water and Wastewater Master Plan 2007 Update*.
- Stantec Consulting Services (Stantec). 2019. *Technical Memorandum: North Fulton County Hydraulic Model Evaluation of Gwinnett County Emergency Supply*. July 1.
- Stantec Consulting Services (Stantec). 2022. *Water Model Recalibration Phase 1 Report*. August 26.
- Stantec Consulting Services (Stantec). 2023. *Water Model Field Test and Calibration Phase 2 Report*. May 22.
- U.S. Census Bureau. 2020. "Total Population." Decennial Census, DEC Demographic and Housing Characteristics, Table P1. <https://data.census.gov/table/DECENNIALDHC2020.P1?q=alpharetta>. Accessed on March 7, 2024.
- U.S. Census Bureau. 2024. Census.gov. <https://www.census.gov/>.

Appendix A

Overall Water Demand Projections

Water Demand Projections for North Fulton County

Date:	August 26, 2024	Ten 10th Street, NW
Project name:	Fulton County Water Distribution System Master Plan	Suite 1400
Project no:	EEXK6102	Atlanta, GA 30309
Client:	Fulton County Government	United States
Prepared by:	Jacobs	T +1.404.978.7600
Revision no:	4	F +1.404.978.7660
		www.jacobs.com

Executive Summary

Fulton County serves potable water to the cities in North Fulton, including Alpharetta, Johns Creek, Milton, and Roswell. As part of the Fulton County Water Distribution System Master Plan, water demand projections for each of these cities were developed to appropriately plan for reliable water service to them in the future.

Fulton County staff and Jacobs met with members from the cities to discuss future developments that could be used to develop water demand projections. The community development and public works departments were extremely helpful in supplying information. In addition, historical billing data from Fulton County and population projections broken down by census tract through 2050 from the Atlanta Regional Commission (ARC) were used to project growth and demand. In February 2024, the ARC adopted the most recent Series 17 population and employment forecast from 2020-2050.

The water demand projections calculated for Fulton County's *Water and Wastewater Master Plan 2007 Update* (2007 Fulton County Master Plan, JJG; 2008) and the newly calculated water demands for North Fulton are shown below in Table ES-1. The new demands show a significantly lower demand trend based on population projections, data provided by the cities on new development and redevelopment projects, current and future land use planning policies, existing per capita water uses extracted through historical billing data and conservation from more water-efficient fixtures expected in the future. The historical demand and baseline data used for the current demand forecast is approximately 60 percent of the estimated water demand developed for the 2007 Fulton County Master Plan.

Table ES-1. Historical and Projected Annual Average Day Water Demand for North Fulton

Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005 ²	33.2	NA
2010 ²	38.4	NA
2020 ²	44.0	26.2
2021 ^{2,3}	44.3	26.8
2025	45.5	28.2
2030	47.0	30.0
2035	48.5	31.2

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Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2040	NA	32.5
2045	NA	33.9
2050	NA	35.3

Notes:

AADD-MGD = annual average daily demand in million gallons per day.

NA = Not Available.

¹ Water demand forecast as shown in the 2007 Fulton County Master Plan.

² Historical water demand shown under the 2024 Water Demand Forecast was calculated using billing records and water supplied data.

³ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Additional information about the development of the water demand projection is included in the Technical Memorandum herein.

1. Introduction

Fulton County is located in the north-central portion of the State of Georgia and includes the City of Atlanta. North Fulton is comprised of Johns Creek, Milton, Sandy Springs, Alpharetta, Roswell, and Mountain Park. South Fulton includes College Park, East Point, Fairburn, Hapeville, Palmetto, South Fulton, Chattahoochee Hills, and Union City. Fulton County is not only the largest county in the region with an area of 528.7 square miles but also the most populous county in Georgia. Per the 2020 Census data, Fulton County is the only county in Georgia that has surpassed 1 million people. The main water source for Fulton County is the Chattahoochee River. The County straddles four major river basins- the Chattahoochee, Etowah, Flint, and Ocmulgee River Basins. The Atlanta-Fulton County Water Resources Commission (AFCWRC) and the City of Atlanta fulfill the majority of the water demand. The AFCWRC, a joint venture between the city and county, operates the Tom Lowe Water Treatment Plant (WTP) located in the City of Johns Creek and serve North Fulton County. The City of Atlanta operates two treatment plants located within its City limits and smaller treatment facilities are operated by the cities of East Point, Palmetto, and Roswell. This plan will focus on North Fulton service area that includes the cities of Alpharetta, Johns Creek, Milton, and Roswell.

In an effort to proactively address infrastructure needs, protect the health of the Chattahoochee River, and fulfill regulatory requirements, the county periodically updates their water master plan to evaluate the most current water demand data and prepare for future growth and expanding demands. As part of the *Fulton County Water Distribution System Master Plan*, it is essential to forecast water demand for the municipalities within North Fulton, including Alpharetta, Johns Creek, Milton, and Roswell. This effort not only highlights the availability of the resource but also dives into the operation of the current distribution network and ways to improve water distribution in the future. North Fulton's distribution system is comprised of 12 booster pump stations, 9 elevated storage tanks, 3 ground storage tanks, and approximately 1,100 miles of pipe of multiple materials such as cast iron, copper, ductile iron, galvanized, steel, RCP, and PVC.

Population projections and current use data constitute the basis for this analysis. In addition, city-specific data from their comprehensive master plans and meetings with the community development departments of each city were used to calculate future water demands. This memorandum summarizes methodology used to calculate current and future water needs using the information provided during the city-specific meetings and gathered during the review of the comprehensive master plans and other development plans and maps.

2. Population Projections

Population projections are an essential part of the demand projection calculation because they have a significant impact on the water demand forecast for North Fulton. The 2020 Census calculated Fulton County's population at 1,066,710 people with a 15.9% estimated growth since 2010 (Census, 2021). For this analysis, existing population data was gathered from the U.S. Census for each city within North Fulton. The latest Series 17 population projections were developed by the Atlanta Regional Commission (ARC, 2024) and are broken down by census tract. They were further broken down by city boundary for use in this study. Census tracts that crossed city boundaries were split and the population allocated proportionally based on area.

Figure 1 shows North Fulton's historical population and its projected increase through 2050 as published by the ARC in 2024 as well as the population projections used in the 2007 Fulton County Master Plan. The most recent population data show higher population at the time the 2020 Census took place but the projections show a more moderate growth rate between 2020 and 2050.

Figure 1. Population Trend for North Fulton

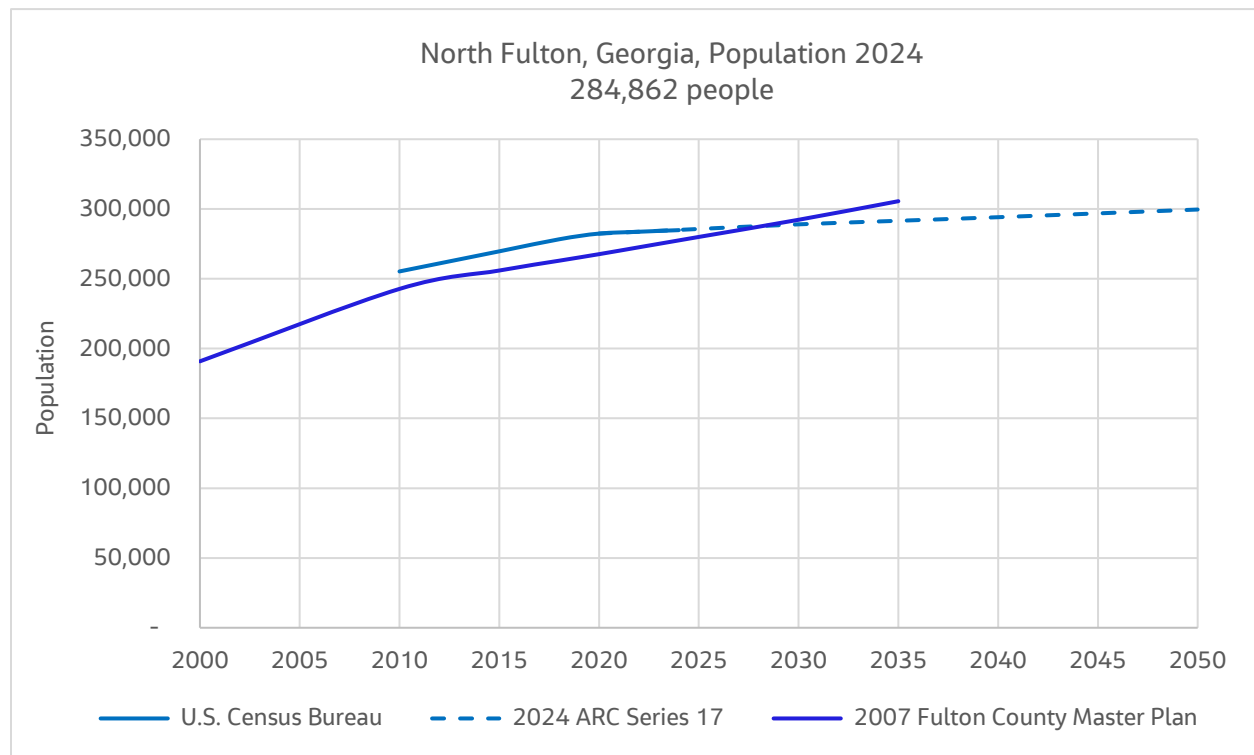


Table 1 summarizes the historical population and population projections for each city within North Fulton and the total for the study area. Currently, the City of Roswell is the most populous city, followed by Johns Creek. The City of Alpharetta is expected to have the highest growth in the future with a 12 percent increase in population between 2020 and 2050. The study area is expected to experience a 6 percent population growth in the same 30-year period.

Table 1. Historical and Projected Population Projections for North Fulton

Jurisdiction	Population					2020-2050 Growth Rate
	2010 ¹	2020 ¹	2030	2040	2050	
Alpharetta	57,551	65,818	69,742	72,064	73,721	12%
Johns Creek	76,728	82,453	83,344	84,988	85,674	4%
Milton	32,661	41,290	42,574	43,202	44,220	7%
Roswell ²	88,346	92,833	93,375	93,881	96,018	3%
North Fulton	255,286	282,394	289,017	294,135	299,633	6%

Notes:

¹ Population as reported by the U.S. Census Bureau

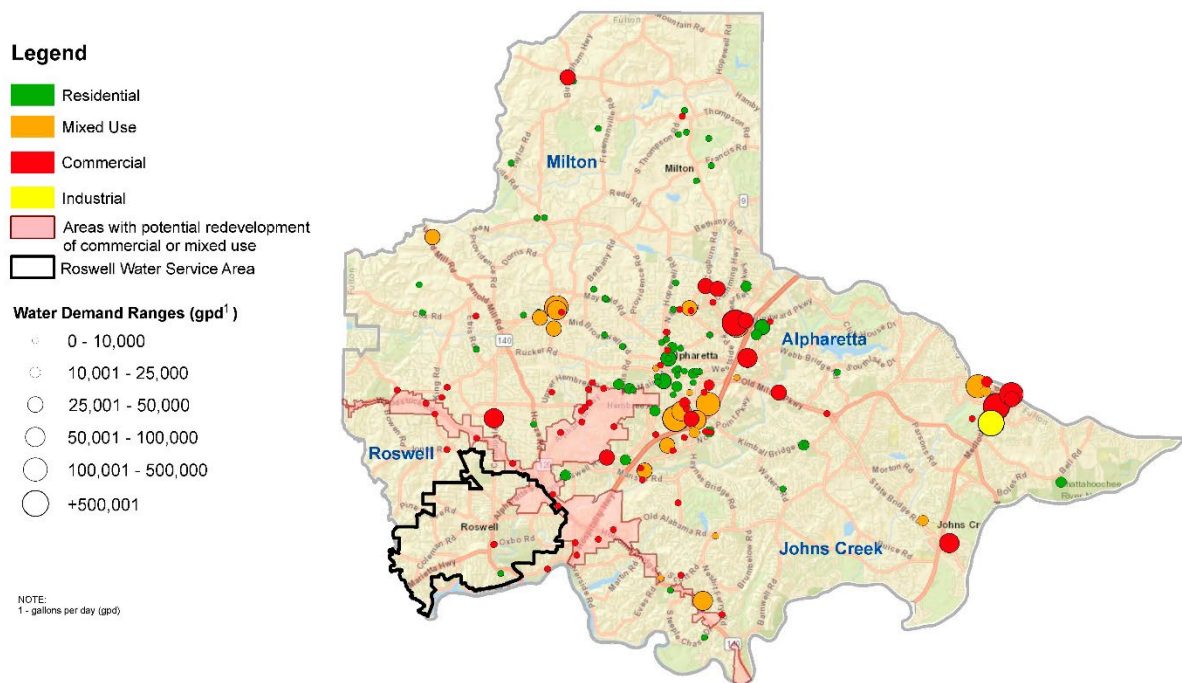
² Population for City of Roswell includes areas served by Roswell Water Utility and Fulton County.

3. Water Demand Forecast

The water demand forecast will be used to in future demand scenarios of Fulton County's water distribution system hydraulic model to determine if additional infrastructure is needed to provide adequate water service and fire protection for future needs through 2050. The water demand forecast used two methods to determine future water demand. The first method relies on existing and future development data provided by the cities within the study area being built or permitted as of February 2024. The second method uses the projected population growth for North Fulton to distribute the growth throughout the planning period (2021-2050). Both methods produced similar water demand forecast but applying a conservative approach, the highest forecast was selected to calculate a water demand forecast that is expected to increase approximately 9.1 million gallons per day (MGD) by 2050. The forecast considered factors such as available land for development, current land use and comprehensive land planning policies by the city, existing per capita water uses extracted through historical billing data, as well as anticipated conservation efforts through the adoption of more water-efficient fixtures. The major water users are industrial and commercial facilities as well as mixed-use developments that are expected to expand or open as soon as 2025. Figure 2 shows the development areas and future growth for North Fulton based on the information provided by the cities and their available planning documents.

Figure 2. Future Growth Areas for North Fulton

Growth Concept Map for North Fulton County, GA



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

3.1 Development-Based Water Demand Forecast

At the end of 2023, representatives from the Jacobs team and Fulton County convened with officials from the City of Alpharetta, John Creek, Milton, and Roswell to discuss the *Fulton County Water Distribution System Master Plan*. The information presented and shared during and after the meetings was summarized in separate documents and is included in Appendix A. This document describes the methodology used to calculate future demand projections using information on current and future development. Following the meetings with city officials, the Jacobs team leveraged data from multiple sources including their comprehensive plans, permitting review and approval, land use maps, and geographic information system data to compile a list of projects that have been approved or proposed for each jurisdiction. In some cases, the city provided insight on their built out plans that were also considered for this analysis.

In order to calculate future water demands in addition to the current demand, the 2021 billing records were summarized per city and separated by customer type. The four customer types used were Residential, Multifamily Residential, Commercial, and Industrial. The purpose of this exercise was to establish a per account water use that can be applied to the various existing and future development projects within each City and calculate the expected increase in water demand based on the type of development.

Table 2 shows the water use per account for each customer type. The multifamily residential use per account was similar across all cities and future demands for multifamily residential projects was calculated using 1,100 gallons per account per day (GPAD) for all cities. Similarly, the commercial use per account was similar across all cities and future demands for commercial projects was calculated using 3,300 GPAD for all cities. The average residential use per account for Alpharetta, Johns Creek, and Roswell is 180 GPAD. City of Milton's residential use per account is 260 GPAD; hence, it was determined that a higher per account use needed to be applied for Milton to correctly estimate their future water demand. The billing data shows that Johns Creek is the only city with significant industrial demand with an average 73,000 GPAD; however, industrial use was extracted completely and projected separately using the customers' expansion plans and sewer capacity applications.

Table 2. Per Account Water Use (GPAD) based on 2021 Billing Records

Jurisdiction	Water Use Customer Type (GPAD)			
	Residential	Multifamily Residential	Commercial	Industrial ¹
Alpharetta	180	1,100	3,300	-
Johns Creek	180	1,100	3,300	73,000
Milton	260	1,100	3,300	-
Roswell	180	1,100	3,300	-

Notes:

¹ Significant existing and future industrial water use was only observed in Johns Creek.

The water demand forecast used the type of development and the number of units and/or acres specified in the plans or permit applications. Johns Creek had information describing build-out plans that was included in their future water demands calculations. Because not many plans had specific completion dates, the future demands calculated using this approach lacked temporal distribution but provided important site-specific information. Table 3 shows the expected water demand increase for each city based on their development and redevelopment plans as well as future land use plans. The numbers in bold show the highest forecast between the development-based and population-based demands for

Alpharetta and Johns Creek. The highest forecast per city was selected to calculate the final water demand forecast summarized in Section 3.3

Table 3. Expected Future Water Demand Increase for North Fulton using Development-Based Forecast

Jurisdiction	Additional Future Water Demand (AADD-MGD) ¹
Alpharetta	2.8
Johns Creek	3.0
Milton	0.5
Roswell ²	1.4
North Fulton	7.7

Notes:

¹ Future water demand includes 10% Non-Revenue Water (NRW).

² Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

3.2 Population-Based Water Demand Forecast

After calculating the future water demands based on city-specific development and redevelopment information, additional work was put into developing a temporal distribution that would project future water use through 2050. For that purpose, the Series 17 ARC population projections by census tract was used as described in Section 2 and the 2021 billing data. The billing data was used to establish the baseline year and to develop a per capita value for each city. The per capita was developed using the billing records for all customer types combined and dividing it by the number customers in each city. The number of customers was calculated using the total number of accounts for each city and multiplying it by the average number of people per household. The average number of people per household for North Fulton is 2.50 as stated in the U.S. Census database.

Table 4 shows the per capita water use for each city. The per capita water use for Johns Creek was calculated using commercial and residential use only. As described in Section 3.1, the industrial use was extracted completely and projected separately using the customers' expansion plans and sewer capacity applications. Alpharetta, Johns Creek, and Roswell have similar per capita uses; hence, those 3 cities were combined to create an average per capita of 126 gallons per capita per day (GPCD). City of Milton presented a higher per capita of 133 GPCD which was applied in the forecast. In this projection, the per capita usage increases over time due to the expected increase in industrial use, the increase of wholesale water supplied to the City of Roswell, the use of a constant non-revenue water of 10%, and exclusion of passive conservation.

Table 4. Per Capita Water Use (GPCD) based on 2021 Billing Records

Jurisdiction	Water Use per Person (GPCD)
Alpharetta	126
Johns Creek	126
Milton	133
Roswell	126

North Fulton ¹	128
---------------------------	-----

Notes:

¹ Average per capita for North Fulton

The water demand forecast was calculated by establishing a baseline water use and calculating the future demand for the expected population increase between 2021 and 2050. The baseline water use was set by splitting the 2021 billing data for each census tract and then disaggregated by city. The baseline was calibrated so the addition of the demands for each census tract equaled the total water used in 2021, including losses. The next step was to calculate the increase in number of people for each census tract using the Series 17 ARC population projections. Finally, the future demand was calculated for the new population using the per capita in Table 4 and then added to the baseline. Table 5 shows the expected water demand increase for each city based on population growth per census tract. The numbers in bold show the highest forecast between the development-based and population-based demands for Milton and Roswell. The highest forecast per city was selected to calculate the final water demand forecast summarized in Section 3.3.

Table 5. Expected Future Water Demand Increase for North Fulton by 2050 using Population-Based Forecast

Jurisdiction	Additional Future Water Demand (AADD-MGD) ¹
Alpharetta	2.0
Johns Creek	2.6
Milton	0.9
Roswell ²	2.4
North Fulton	7.9

Notes:

¹ Future water demand includes 10% Non-Revenue Water (NRW).

² Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

3.3 Water Demand Forecast Results

The methods presented above resulted in similar water demand forecasts. While water demand calculations based on growth beyond developments are not all known by the cities and lacked temporal distribution, the demands projections calculated using population projections were similar in scale and provided a growth rate through 2050. Adopting a conservative approach, the water demand curve was developed using the highest increase in demand between the two methods. Table 6 summarized the future water demand for Alpharetta Johns Creek, Milton, and Roswell.

Table 6. Future Annual Average Water Demand for the Cities served by North Fulton

Year	2024 Water Demand Forecast ¹ (AADD-MGD)			
	Alpharetta ²	Johns Creek ²	Milton ³	Roswell ^{3,4}
2025	7.0	10.2	3.9	7.3
2030	7.6	11.3	3.9	7.5
2035	8.2	11.7	4.0	7.8
2040	8.6	12.3	4.1	8.1
2045	9.0	12.5	4.2	8.8
2050	9.4	12.7	4.4	9.5

Notes:

¹ Future water demand includes 10% Non-Revenue Water (NRW).

² Future water demand calculated using development-based approach.

³ Future water demand calculated using population-based approach.

⁴ Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

The combined water demand projections resulted in an expected increase of approximately 9.1 MGD by 2050. Table 7 and Figure 3 show the historical data and the proposed forecast for North Fulton. The current demand forecast shows a lower demand projection than the one developed for the 2007 Fulton County Master Plan but follows the most current historical demand and baseline data. The 1.5 peaking factor is the recent historical average (since 2007), and the 1.75 peaking factor is a recent maximum last experienced on July 3rd, 2024. They are both shown in this TM for context and to illustrate the range of peak demands that the North Fulton system experiences.

Table 7. Historical and Proposed Future Annual Average and Max Day Water Demand for North Fulton

Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Water Demand Forecast ^{3,4} (AADD-MGD)	2024 Water Demand Forecast ⁵ (MDD-MGD)	2024 Water Demand Forecast ⁶ (MDD-MGD)
2005	NA	33.2	NA	NA	NA
2010	26.44	38.4	NA	NA	NA
2017	21.8	NA	NA	NA	NA
2018	26.3	NA	NA	NA	NA
2019 ⁷	28.2	NA	NA	NA	NA
2020	26.2	44.0	NA	NA	NA
2021 ⁸	26.8	44.3	NA	NA	NA
2025	NA	45.5	28.4	42.5	49.6
2030	NA	47.0	30.4	45.5	53.1

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Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Water Demand Forecast ^{3,4} (AADD-MGD)	2024 Water Demand Forecast ⁵ (MDD-MGD)	2024 Water Demand Forecast ⁶ (MDD-MGD)
2035	NA	48.5	31.6	47.4	55.3
2040	NA	NA	33.1	49.6	57.9
2045	NA	NA	34.5	51.8	60.5
2050	NA	NA	36.0	54.0	63.0

Notes:

AADD-MGD = annual average daily demand in million gallons per day

NA = Not Available

¹ Historical water demand calculated using billing records and water supplied data.

² Water demand forecast as show in the 2007 Fulton County Master Plan.

³ Future water demand includes 10% Non-Revenue Water (NRW).

⁴ Future water demand includes water needs as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

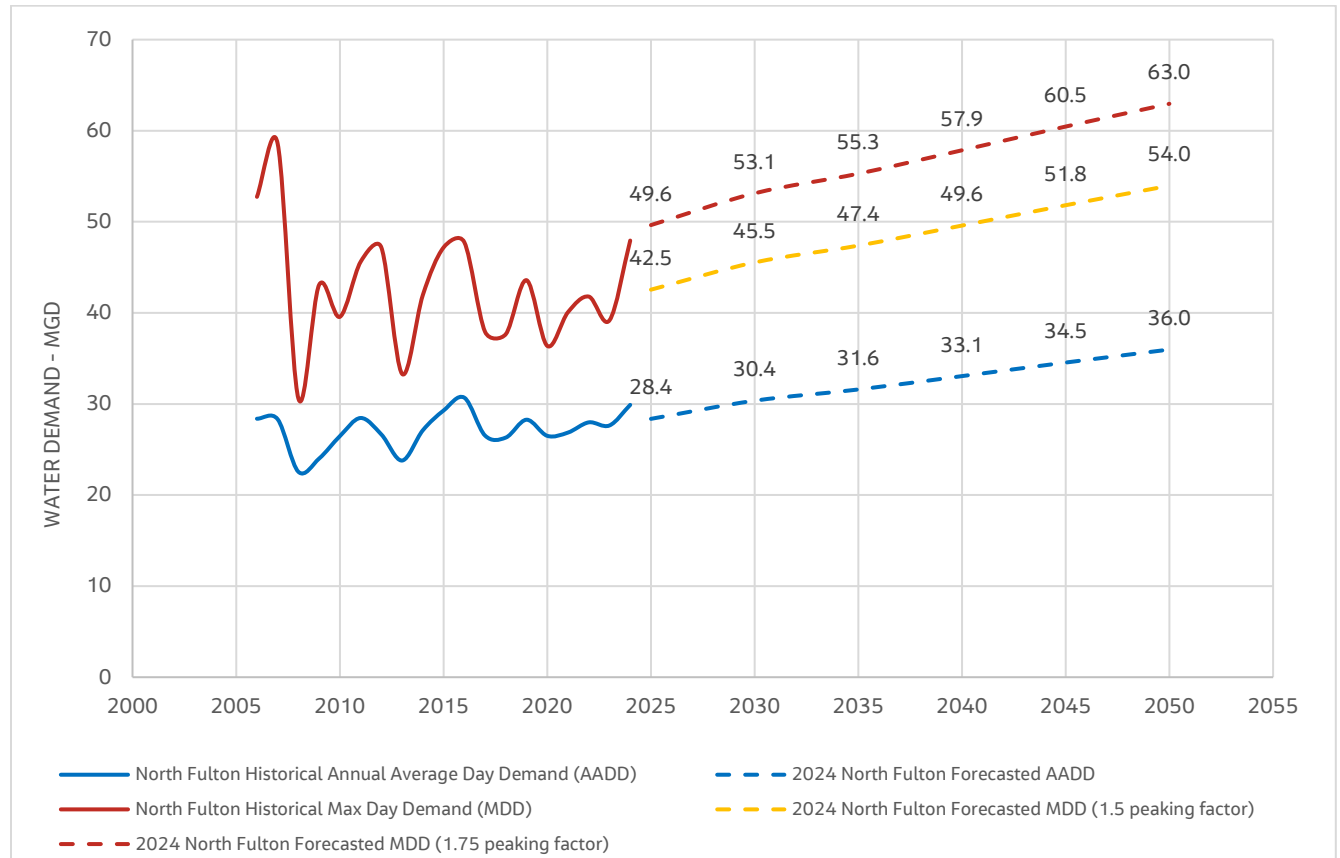
⁵ Calculated using a peaking factor (peak day factor) of 1.5 based on the historical average.

⁶ Calculated using a peaking factor (peak day factor) of 1.75 based on highest demand of 47.9 MGD registered on July 3rd, 2024.

⁷ Water demand data for the year 2019 reflect an anomalous higher rate of water consumption that may be attributable to the lower precipitation levels experienced during that year.

⁸ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Figure 3. Historical and Proposed Future Annual Average and Max Day Water Demand for North Fulton



4. References

JJG. 2008. *Water and Wastewater Master Plan 2007 Update*

U.S. Census Bureau. 2020. "TOTAL POPULATION." Decennial Census, DEC Demographic and Housing Characteristics, Table P1. <https://data.census.gov/table/DECENNIALDHC2020.P1?q=alpharetta>. Accessed on March 7, 2024.

U.S. Census. 2021. Census 2020 Data Confirms that Fulton Remains Georgia's Most Populous County. <https://www.fultoncountyga.gov/news/2021/08/13/census-2020-data-confirms-that-fulton-remains-georgias-most-populous-county#:~:text=42.5%25%20of%20Fulton%20County's%20population,County's%20population%20is%20Hispanic%2FLatino>.

U.S. Census Bureau. 2024. Census.gov. https://data.census.gov/profile/Fulton_County,_Georgia?g=050XX00US13121.

Atlanta Regional Commission. 2024. Population and Employment Forecast. <https://atlantaregional.org/atlanta-region/population-employment-forecasts/>.

Appendix B

Alpharetta Water Demand Projections

Water Demand Projections for North Fulton County – City of Alpharetta

Date:	August 28, 2024	Ten 10th Street, NW
Project name:	Fulton County Water Distribution System Master Plan	Suite 1400
Project no:	EEXK6102	Atlanta, GA 30309
Client:	Fulton County Government	United States
Revision no:	3	T +1.404.978.7600
Document no:	240308111745_9a8f45bf	F +1.404.978.7660
		www.jacobs.com

Executive Summary

Fulton County serves water to the cities in North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. As part of the Fulton County Water Distribution System Master Plan, water demand projections for each of the cities were developed to appropriately plan for reliable water service to them in the future.

Fulton County staff and Jacobs met with members from the cities to discuss future developments that could be used to develop water demand projections. The community development and public works departments were very helpful in supplying information. In addition, historical billing data from Fulton County and population projections broken down by census tract through 2050 from the Atlanta Regional Commission (ARC) were used to project growth and demand. In February 2024, the ARC adopted the most recent Series 17 population and employment forecast from 2020-2050.

The water demand projections calculated Fulton County's *Water and Wastewater Master Plan 2007 Update* (2007 Fulton County Master Plan, JJG; 2008) and the newly calculated water demands for the City of Alpharetta are shown below in Table ES-1. The new demands shows a significantly lower demand trend based on population projections, data provided by the city on new development and redevelopment projects, current and future land use planning policies, existing per capita water uses extracted through historical billing data and conservation from more water-efficient fixtures expected in the future. The historical demand and baseline data used for the current demand forecast is half of the estimated water demand developed for the 2007 Fulton County Master Plan.

Table ES-1. Historical and Projected Annual Average Day Water Demand for the City of Alpharetta

Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005 ²	7.6	NA
2010 ²	11.4	NA
2020 ²	14.5	6.5
2021 ^{2,3}	14.7	6.6
2025	15.5	6.9
2030	16.5	7.5
2035	17.4	8.02
2040	NA	8.44

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Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2045	NA	8.81
2050	NA	9.15

Notes:

AADD-MGD = annual average daily demand in million gallons per day.

NA = Not Available.

¹ Water demand forecast as shown in the 2007 Fulton County Master Plan.

² Historical water demand shown under the 2024 Water Demand Forecast was calculated using billing records and water supplied data.

³ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Additional information about the development of the Alpharetta water demand projection is included in the Technical Memorandum herein.

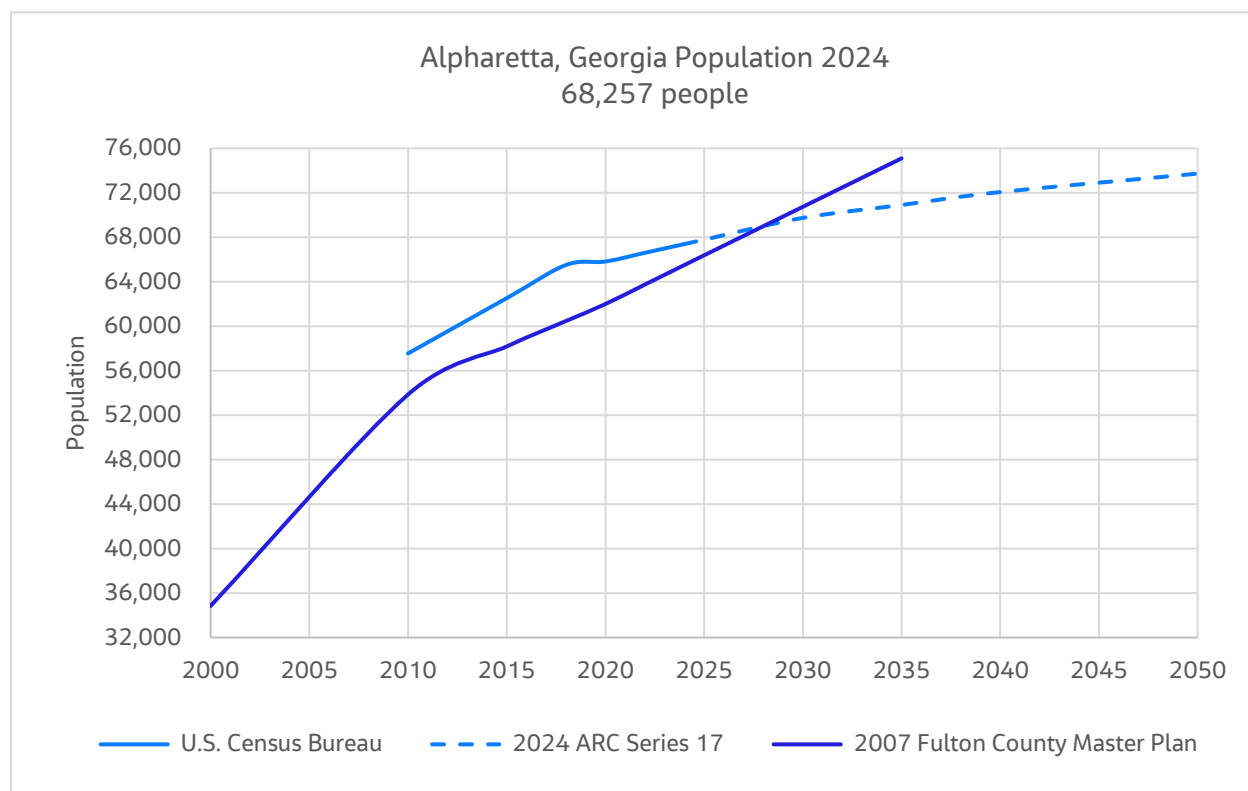
1. Introduction

As part of the *Fulton County Water Distribution System Master Plan*, it is essential to forecast water demand for the municipalities within North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. To determine the future water demands for the cities, meetings were held with the community development departments of each city. This memorandum summarizes the outcomes of the meeting with the City of Alpharetta, integrating research and insights from the city planning departments and various other sources to formulate water demand projections.

Founded in the 1830s and occupying a land area of approximately 27 square miles, Alpharetta, Georgia, is one of the 14 incorporated municipalities within Fulton County and one of the fastest growing communities in the South (City of Alpharetta 2021). It is in northern Fulton County, Georgia, approximately 25 miles north of the City of Atlanta. Alpharetta contains many single-family neighborhoods and continues to be a leading destination for corporate locations, high-tech services, and retail trade.

Alpharetta is mostly developed and still has substantial potential for growth in terms of redevelopment. A majority of Alpharetta's commercial land is professional office space, with most of its residential land consisting of single-family detached residential dwellings. One of the most significant changes in the last 10 years has been the emergence of mixed-use centers in locations such as Avalon, Northwinds Summit, and TPA/Lakeview.

According to the 2020 U.S. Census Bureau data, Alpharetta was home to approximately 65,818 individuals residing in 26,089 housing units. By 2024, the population is expected to increase to 67,388, reflecting a growth rate of 2.4 percent since the latest census (ARC, 2024). Forecasts from the City of Alpharetta's *Horizon 2040 Comprehensive Plan* suggest continued expansion, with the population projected to reach 83,034 by 2040. These projections were compared to those outlined in the 2007 Fulton County Master Plan, which estimated Alpharetta's population at 66,379 in 2025 and 75,094 in 2035. Notably, the U.S. Census data revealed a higher and more realistic population figure compared to the projections in the 2007 Fulton County Master Plan. Figure 1 shows Alpharetta's historical population growth and its projected population increase as published by the ARC in 2024.

Figure 1. Population Trend for the of City of Alpharetta


Source: U.S. Census Bureau, Series 17 Population Forecast from 2020-2050 (ARC, 2024) and 2007 Fulton County Master Plan

Alpharetta residents rely on the Tom Lowe Atlanta-Fulton County Water Treatment Plant for their water supply. Alpharetta's distribution system is comprised of 283 miles of pipe of multiple materials such as cast iron, copper, ductile iron, and PVC. There are two ground tanks within city limits located off Preston Ridge Road. As per projections outlined in the 2007 Fulton County Master Plan, water demand for Alpharetta was expected to reach 14.5 million gallons per day (MGD) by 2020 and 17.4 MGD by 2035, as shown in Table 1. These estimates were based on population projections, with per capita water usage rates set at 81.3 gallons per capita per day (GPCD) for residential purposes and 53.6 GPCD for non-residential purposes, as stipulated in the 2007 Fulton County Master Plan.

Table 1. Previous Water Demand Projections of Cities within Fulton County (MGD)

Jurisdiction	Water Demand (MGD)				
	2005	2010	2020	2030	2035
Alpharetta	7.6	11.4	14.5	16.4	17.4
Johns Creek	9.2	9.5	10.3	10.6	10.7
Milton	3.8	4.6	5.7	6.2	6.5
Roswell	12.6	12.9	13.5	13.7	13.9

Source: 2007 Fulton County Master Plan

Despite the population growth in Alpharetta, billing records show that water demand for the city did not reach the expected water demand levels stated in the 2007 Fulton County Master Plan. Moreover, demand remained below 7 MGD throughout the period of record (2017-2021) with the highest water

demand recorded in 2019. The high demand of 6.94 MGD for 2019 was attributed to lower precipitation levels experienced during that year. Billing records show a combined per capita water usage rates of 100 GPCD. This reduction may be attributed to a lower population growth, advancements in water-saving technologies, the adoption of efficient water use practices, the implementation of water conservation programs, and shifts in climate and weather patterns.

2. Meeting Summary

On November 14, 2023, representatives from the Jacobs team and Fulton County convened with officials from the City of Alpharetta to discuss the *Fulton County Water Distribution System Master Plan*. Attachment 1 shows the meeting presentation and sign-in sheet. This plan emphasizes the municipalities in North Fulton County, outside of Atlanta's service area, including Alpharetta, Johns Creek, Milton, and Roswell. The primary objective of these discussions was to evaluate the future requirements of Alpharetta for the *Fulton County Water Distribution System Master Plan*.

Currently, Alpharetta has established a daily water demand of 6.56 MGD and a peak reaching 10.36 MGD. The majority of Alpharetta's residential areas comprise single-family detached homes, while commercial areas are predominantly occupied by professional offices. Potable water for Alpharetta residents is sourced from the Tom Lowe Atlanta-Fulton County Water Treatment Plant.

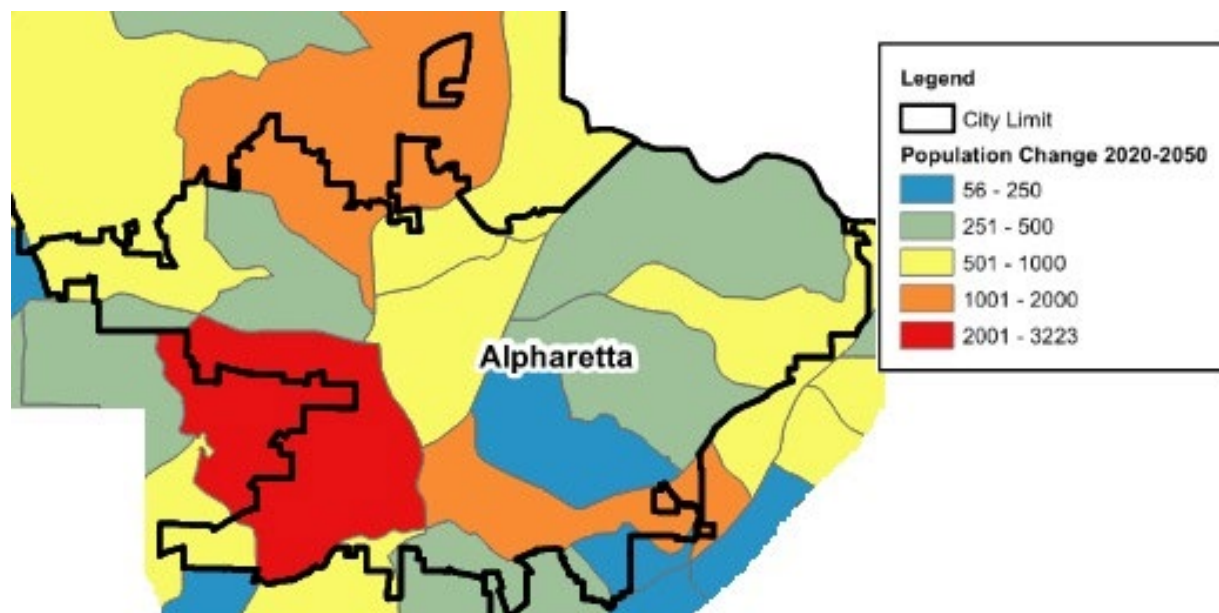
Alpharetta's development landscape primarily centers around redevelopment, with downtown Alpharetta spearheading initiatives to incorporate more housing and dining options into its urban fabric. Much of the remaining undeveloped land within the city poses challenges for construction or is in areas prone to significant flood risk.

Anticipating a surge in development proposals, City of Alpharetta officials foresee a proliferation of mixed-use complexes featuring amenities such as sports and entertainment venues, restaurants, office spaces, green areas, and residential units. Prominent locations earmarked for mixed-use growth include North Point Parkway, Windward Parkway, Westside Parkway, and Brookside Parkway. Ongoing mixed-use construction projects include Alpha Loop, Lakeview Park, 116 and 126 North Main Street, and Northwinds Summit.

Several residential developments are either under way or anticipated, including The Gathering comprising 179 rental units and townhomes, Continuum with 250 homes, Firefly with 48 townhomes, and The Foundry with 113 single-family homes. Moreover, forthcoming developments in manufacturing, special event centers, and data centers are expected to drive significant demand for water resources.

Alpharetta officials anticipate a growth trajectory surpassing that depicted on the U.S. Census Tract maps, with the 2022 Census reporting a total population of 67,267 residents. Growth metrics for the city are readily accessible through the City of Alpharetta's website, with permit statuses tracked via the city's GIS system for proposed, approved, and under construction projects. Figure 2 depicts the population projections per census tract for North Fulton County with a focus on Alpharetta.

Figure 2. Population Projections per Census Tract for North Fulton County



Source: Fulton County Water Distribution System Master Plan

3. Future Developments

Future developments for the City of Alpharetta have been determined through a comprehensive analysis leveraging data from multiple sources, including the City of Alpharetta *Horizon 2040 Comprehensive Plan*, geographic information system data, land use maps, and input from the city's Community Development Department.

Alpharetta maintains its position as a premier destination for corporate headquarters, high-tech services, and retail trade, boasting nearly 700 technology companies operating within the city limits. One of the most notable shifts in the past decade has been the rise of mixed-use centers. Alpharetta is committed to furthering growth and development in both residential and commercial sectors, aiming to attract fresh investments and businesses to the area.

Enhancements in transportation infrastructure also are under way, with the Georgia Department of Transportation expanding express lanes on Georgia State Route 400 (GA 400) and plans from the Metropolitan Atlanta Rapid Transit Authority (MARTA) to establish a Bus Rapid Transit (BRT) line along GA 400, featuring designated stops for both Windward and North Point Districts in Alpharetta. These initiatives are expected to improve transportation accessibility and mobility in the region.

Table 2 presents an overview of current and projected developments, detailing their respective locations, descriptions, water demand, and anticipated completion years. The table organizes projected developments alphabetically based on their approximate geographical locations, facilitating easy reference.

Table 2. Ongoing and Future Development Plans as Proposed to the City of Alpharetta

Location	Name (Address)	Description	Water Demand (gallons/day)	Timing
Alpharetta Highway	Village Park – Phase 2 (11940 Alpharetta Highway)	Building enhancement; Construction of 91 assisted living units	17,480	Under construction
Amber Park Drive	Parkway 400 (11740/11760 Amber Park Drive)	Construction of 120,000 square feet (SF) of office space	19,800	Approved
Anglin Walk	Manning on the Square (215 Anglin Walk)	58 single-family homes on 11.7 acres	11,540	Under construction
Ashbury Drive	700 Hudson Way	New gated townhome community with 128 units	24,140	Under construction
Cotton Creek	Foamworks (11725 Cotton Creek Entry)	Construction of a car wash	50,000	Under construction
Cumming Street	133 Cumming Street	3 single-family homes on 1.76 acres	540	Under construction
Cumming Street	The 1858	11 single-family homes on 1.7 acres	1,980	Under construction
Davis Drive	Iveybrooke Townhomes (10800 Davis Drive)	Construction of 85 townhomes on 8.6 acres	16,400	Approved
Devore Road	Sedgwick Residential (130 Devore Road)	Construction of a single-family detached dwelling unit	180	Approved
Fanfare Way	Fulton Science Academy Sports Field (3035 Fanfare Way)	Construction of athletic fields (4 tennis courts and 1 soccer field)	3,300	Approved
Gardner Drive	Alpha Loop (6000 Gardner Drive)	Construction of multi-use trail and park system	1,100	Under construction
Haynes Bridge Road	Alcovy Estates (11681 Haynes Bridge Road)	Construction of 10 single-family detached homes, 4 semi-detached homes, and 5 townhomes on 2.84 acres	3,420	Approved
Haynes Bridge Road	Eddie V's (11405 Haynes Bridge Road)	Construction seafood restaurant	3,300	Proposed
Haynes Bridge Road	The Atley (Haynes Bridge Road)	122-unit townhomes and stacked condominiums	23,060	Under construction

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Location	Name (Address)	Description	Water Demand (gallons/day)	Timing
Haynes Bridge Road	The Gathering (11470 Haynes Bridge Road)	Construction of a mixed-use development with 144 townhomes, 37 single-family detached homes, and 41,900 SF of retail and restaurant space on 24.8 acres	52,150	Under construction
Hembree Road	Firefly (3000 Hembree Road)	Construction of 58 (1,862–2,025 SF) townhomes	11,540	Under construction
Kimball Bridge Road	Garren	Construction of gymnasium	3,300	Under construction
Kimball Bridge Road	Kimball Bridge Condos	Construction of 8 condominium units	1,440	Approved
Kimball Bridge Road	Ocee Place	Construction of 2 single-family detached homes on 2.5 acres	360	Approved
Kimball Bridge Road	Toll Brothers (Kimball Bridge Crossing)	Construction of 43 single-family detached homes on 22.7 acres	8,840	Under construction
Lakeview Parkway	Lakeview Park TPA	Construction of a 62-acre mixed-use development with 630,000 SF of office space, 32,000 SF of retail and restaurant space, 60 townhomes, and 255 apartments.	547,250	Under construction
Mansell Road	Verzachi Bar and Restaurant (2375 Mansell Road)	A restaurant and bar	3,300	Approved
Marietta Street	Chapman Medical and Office	Construction of a 4,000 SF medical building	3,300	Approved
Mayfield Road	Hudson Park	Construction of 17 single-family detached homes on 2.41 acres	3,060	Approved
Mayfield Road	KJ Luxury Homes	Construction of 7 single-family detached homes on 5.6 acres	1,260	Approved
Mayfield Road	Marigold at Mayfield Road	Construction of a subdivision with 10 single-family homes	1,800	Under construction
Mid Broadwell Road	Mid Broadwell Parc (1460 Mid Broadwell Road)	Construction of 5 single-family detached homes	900	Approved
Mid Broadwell Road	Mid Broadwell Residential	Construction of 23 single-family detached homes, 20 townhomes	7,740	Approved
North Main Street	100 N Main Street	Construction of a 30,000 SF office building	3,300	Under construction

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Location	Name (Address)	Description	Water Demand (gallons/day)	Timing
North Main Street	116 and 126 N Main Street	Two 4-story mixed-used building on 1.43 acres (32,000 SF of office, 4,000 SF of retail, 8,000 SF of restaurant space, and 4 condominiums)	5,120	Approved
North Main Street	Alpha at Main (236 and 244 N Main Street)	11 single-family detached homes	1,980	Approved
North Main Street	Custom Pools ATL (711 North Main Street)	Construction of a 3,000 SF office building	3,300	Under construction
North Main Street	Mamita's Cantina and Tacos (312 N Main Street)	Construction of a 2-story, 4,000 SF building for a restaurant and office on 0.59 acre	3,300	Proposed
North Main Street	North Main Street Townhomes (0 State Highway)	Construction of 16 townhomes on 2.28 acres	2,880	Approved
North Main Street	Pavlova	Conditional use of an existing building for a restaurant, bakery, and coffee shop	3,300	Approved
North Point	Adora Childcare (5750 North Point Parkway)	Addition to an existing building for a childcare establishment	3,300	Under construction
North Point	Brixmor - Mansell Crossing (North Point Parkway)	Construction of 3 buildings (16,600 SF) for restaurant and retail	29,700	Approved
North Point	Cooper's Hawk (7665 North Point Parkway)	A winery and restaurant	3,300	Approved
North Point	Ecco Park (Olmstead Way)	Construction of 159 condominium units on 9.2 acres	29,720	Under construction
North Point	Encore Commons (North Point Parkway)	Construction of 5 retail spaces and 2 restaurants	50,000	Approved
North Point	Maru Japanese Restaurant (North Point Drive)	Construction of a restaurant	3,300	Under construction
North Point	Pickle and Social (North Point Drive)	Construction of an indoor and outdoor pickleball facility, 14,000 SF restaurant with rooftop, 24,000 SF medical	13,200	Approved

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Location	Name (Address)	Description	Water Demand (gallons/day)	Timing
		office, and 5,000 SF professional office on 6.25 acres		
North Point	Pinecone (5760 North Point Parkway)	Construction of 90 single-family detached homes	17,300	Under construction
North Point	Terra Nova Spa (5755 North Point Parkway)	Conditional use of an existing building for a spa business	3,300	Approved
North Point	The Golf Sanctuary (380 North Point Circle)	Conditional use of an existing building for a restaurant and indoor recreational facility	3,300	Proposed
North Point	Windward Point Townhomes (315 and 425 North Point Parkway)	Construction of 100 townhomes	18,000	Under construction
Northwinds Parkway	The Bailey/ Northwinds	Construction of a 156,400 SF wellness center, 53,000 SF of office space, 100-room boutique hotel, 24,700 SF of retail and restaurant space on 4.7 acres	200,000	Approved
Old Milton Parkway	2325 Old Milton Parkway Tract	Construction of 24 townhomes on 4.9 acres	4,320	Approved
Old Milton Parkway	Bridge Road Holdings (3190 Old Milton Parkway)	Construction of 21,500 SF of professional, medical, and dental offices	3,300	Approved
Old Roswell Road	Julio Jones Kia (Old Roswell Road)	Kia car dealership	3,300	Under construction
Rainwater Drive	Roberts Properties (11556 Rainwater Drive)	Construction of a 39,000 SF office building	13,200	Approved
Roswell Street	Roswell St. Corridor (75 and 91 Roswell Street)	Construction of a 3-story building to include a restaurant and office space.	9,900	Approved
South Main Street	Maxwell	Construction of 138 detached and attached townhomes and condominiums	25,940	Under construction
South Main Street	Mayfair on Main (217 S Main Street)	Construction of a 24-unit townhome development	4,320	Under construction
South Main Street	South of Wills Park	Construction of 55 townhomes on 5.5 acres	11,000	Approved
South Main Street	Wills Overlook	Construction of 16 townhomes on 2.24 acres	2,880	Approved

Technical Memorandum

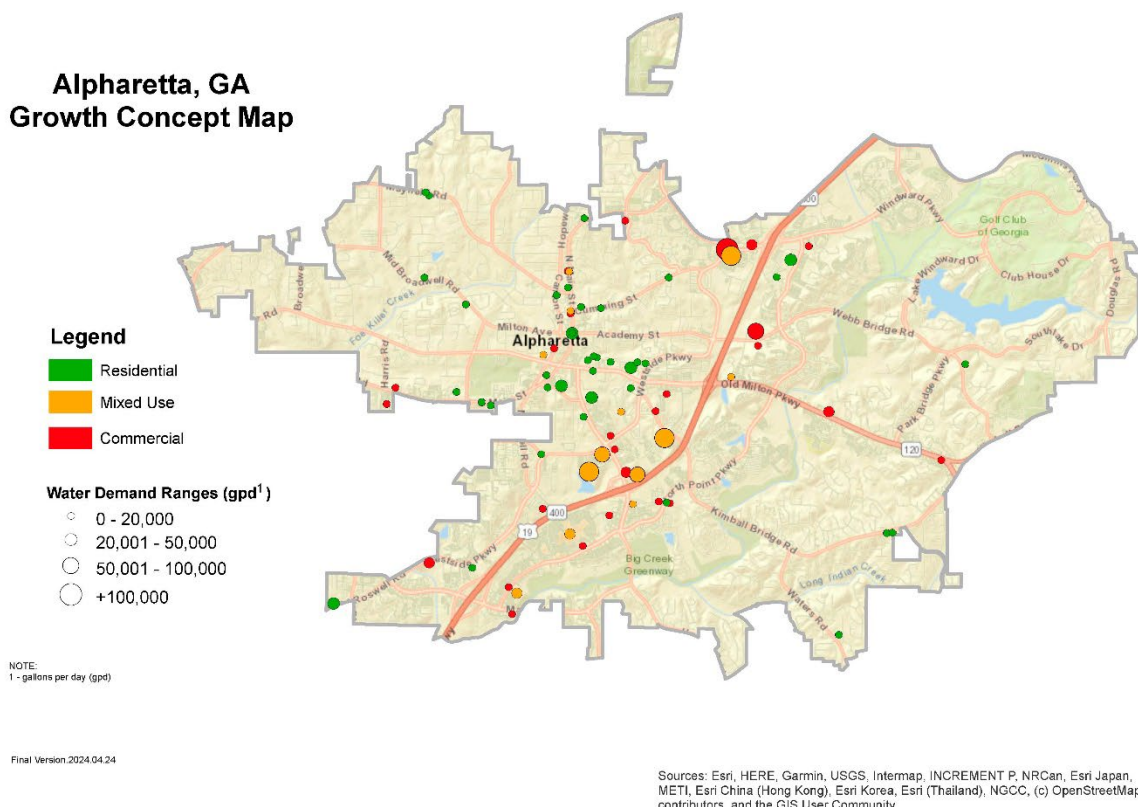
Location	Name (Address)	Description	Water Demand (gallons/day)	Timing
State Bridge Road	Fifth Third Bank (4303 State Bridge Road)	Construction of a banking center	3,300	Proposed
Summit Place	AC Hotel at Northwinds (2000 Summit Place)	Construction of 140-room hotel facility	28,500	Approved
Summit Place	Northwinds Summit	Construction of 5 office buildings totaling 1.2 million SF (30,000 to 50,000 SF of retail and restaurant space, 140-room hotel, 130 apartment units, 32 stacked flat condominium units)	54,360	Under construction
Thompson Street	296 and 304 Thompson Street	Construction of a 17-unit subdivision (11 single-family detached homes and 6 townhomes)	3,060	Approved
Thompson Street	31 and 51 Thompson Street	Construction of 17 single-family detached homes and 5 townhomes on 2.23 acres	3,960	Approved
Thompson Street	82 and 92 Thompson Street	Construction of a 5-unit condominium building on 1.13 acres	900	Under construction
Thompson Street	Alcovy	10 single-family homes	1,800	Under construction
Thompson Street	Chiswick Park (332 Thompson Street)	Construction of 44 new townhomes on 5.8 acres	9,020	Under construction
Thompson Street	The Foundry	113 homes (25 single-family homes and 88 townhomes)	21,440	Under construction
Thompson Street	Towns of Thompson (165 Thompson Street)	48 townhome units on 3.27 acres	9,740	Under construction
Upper Hembree Road	Spirit of God Church	Construction of a church on 2.9 acres	3,300	Approved
Upper Hembree Road	Upper Hembree Healthcare (1180 Upper Hembree Road)	Construction of 5,200 SF of medical office building	3,300	Approved
Waters Road	Waters Road Tract	Construction of 3 single-family detached homes on 1.5 acres	540	Approved
Webb Bridge Road	Fairfield Inn (3225 Webb Bridge Road)	Construction of a 5-story, 78,000 SF hotel with 166 guest rooms	36,480	Under construction

Location	Name (Address)	Description	Water Demand (gallons/day)	Timing
Webb Bridge Road	Stack Data Center (3200 Webb Bridge Road)	Construction of a 2-story 131,720-SF data center on 6.5 acres	100,000	Approved
Webb Bridge Road	The Bridges (4430 Webb Bridge Road)	Construction of 6 single-family detached homes on 8.1 acres	1,080	Under construction
Weyhill Court	Weyhill	9 single-family homes on 3.1 acres	1,620	Under construction
Windward Parkway	5555 Windward Parkway	Enhancement of an existing structure	668,200	Under construction
Windward Parkway	Calibar Car Wash (5570 Windward Parkway)	Construction of a car wash	50,000	Under construction
Windward Parkway	Continuum (5555 Windward Parkway)	Mixed-use development with 1,545,899 SF office space, 77,600 SF of retail and restaurant space, 82 townhome units, 488 rental units, 218 hotel rooms, parks, and greenspace on 51.9 acres	207,840	Approved
Windward Parkway	Windward Park Pod 66 Master Plan (Zephyr Way)	Construction of 100 townhomes and 130 condominium units	42,500	Approved

4. City-Specific Water Demand Forecast

The water demand forecast for the City of Alpharetta will be used to update the Fulton County's water distribution system hydraulic model and will determine if additional infrastructure is needed to provide adequate water service and fire protection to meet future needs out to 2050. Based on the data provided by the city and the new development and redevelopment projects being built or permitted as of February 2024, water demand is expected to increase approximately 2.8 MGD in the future. The projection considers factors such as available land for development, current land use and comprehensive land planning policies by the city, existing per capita water uses extracted through historical billing data, as well as anticipated conservation efforts through the adoption of more water-efficient fixtures. The major water users are athletic facilities and mixed-use developments that are expected to expand or open new facilities as soon as 2025. Figure 3 shows the development areas and future growth for the City of Alpharetta based on the information provided by the city and available planning documents.

Figure 3. Future Growth Areas for the City of Alpharetta



Water demand calculations based on growth beyond developments are not all known by the city; therefore, additional demands projections were also calculated using ARC population projections and the most current billing data. These water demand projections resulted in an expected increase of approximately 2.0 MGD by 2050. Adopting a conservative approach, the demand curve was developed using higher increase in demand as calculated using future development plans. Table 3 and Figure 4 show the historical data and the proposed forecast for the City of Alpharetta. The current demand forecast shows a lower demand projection that follows the most current historical demand and baseline data used for the current demand forecast is half of the estimated water demand developed for the 2007 Fulton County Master Plan.

Table 3. Historical and Proposed Future Annual Average Water Demand for the City of Alpharetta

Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005	NA	7.6	NA
2010	NA	11.4	NA
2017	5.37	NA	NA
2018	6.47	NA	NA

Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2019 ³	6.94	NA	NA
2020	6.46	14.5	NA
2021 ⁴	6.60	14.7	NA
2025	NA	15.5	7.0
2030	NA	16.5	7.6
2035	NA	17.4	8.2
2040	NA	NA	8.6
2045	NA	NA	9.0
2050	NA	NA	9.4

Notes:

AADD-MGD = annual average daily demand in million gallons per day

NA = Not Available

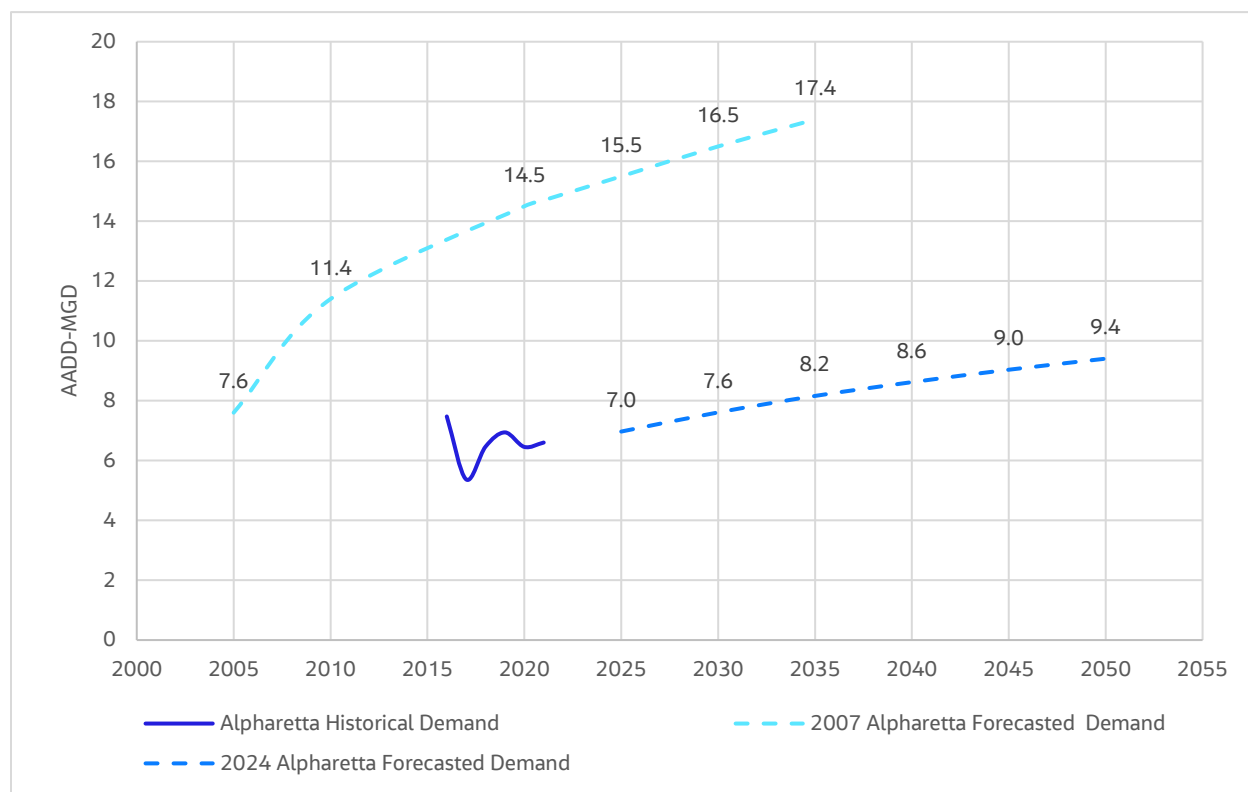
¹ Historical water demand calculated using billing records and water supplied data.

² Water demand forecast as show in the 2007 Fulton County Master Plan.

³ Water demand data for the year 2019 reflect an anomalous higher rate of water consumption that may be attributable to the lower precipitation levels experienced during that year.

⁴ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Figure 4. Historical and Proposed Future Annual Average Water Demand for the City of Alpharetta



5. References

City of Alpharetta. 2021. *Horizon 2040 Comprehensive Plan*. October.

JJG. 2008. *Water and Wastewater Master Plan 2007 Update*

U.S. Census Bureau. 2020. "TOTAL POPULATION." Decennial Census, DEC Demographic and Housing Characteristics, Table P1. <https://data.census.gov/table/DECENNIALDHC2020.P1?q=alpharetta>. Accessed on March 7, 2024.

U.S. Census Bureau. 2024. Census.gov. <https://www.census.gov/>.

Atlanta Regional Commission. 2024. Population and Employment Forecast. <https://atlantaregional.org/atlanta-region/population-employment-forecasts/>.

Attachment 1

Meeting Presentation and Meeting Sign-in Sheet



Appendix C

Johns Creek Water Demand Projections

Water Demand Projections for North Fulton County – City of Johns Creek

Date:	August 28, 2024	Ten 10th Street, NW
Project name:	Fulton County Water Distribution System Master Plan	Suite 1400
Project no:	EEXK6102	Atlanta, GA 30309
Client:	Fulton County Government	United States
Revision no:	1	T +1.404.978.7600
Document no:	240308112636_4d3a2796	F +1.404.978.7660
		www.jacobs.com

Executive Summary

Fulton County serves water to the cities in North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. As part of the Fulton County Water Distribution System Master Plan, water demand projections for each of the cities were developed to appropriately plan for reliable water service to them in the future.

Fulton County staff and Jacobs met with members from the cities to discuss future developments that could be used to develop water demand projections. The community development and public works departments were very helpful in supplying information. In addition, historical billing data from Fulton County and population projections broken down by census tract through 2050 from the Atlanta Regional Commission (ARC) were used to project growth and demand. In February 2024, the ARC adopted the most recent Series 17 population and employment forecast from 2020-2050.

The water demand projections, as outlined in the Fulton County's *Water and Wastewater Master Plan 2007 Update* (2007 Fulton County Master Plan JJG; 2008), and the newly calculated water demands for the City of Johns Creek, are presented in Table ES-1. The 2024 Water Demand Forecast is relatively aligned with the 2007 Water Demand Forecast in the 2007 Fulton County Master Plan. Throughout the comparable years spanning from 2020 to 2035, the water demands show a consistent trend remaining within a 10 percent margin of each other. The 2024 water demand forecast is estimated based on population projections, data provided by the city on new development and redevelopment projects, current and future land use planning policies, existing per capita water uses extracted through historical billing data and conservation from more water-efficient fixtures expected in the future.

Table ES-1. Projected Future Annual Average Water Demand for the City of Johns Creek

Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005 ²	9.2	NA
2010 ²	9.5	NA
2020 ²	10.3	9.5
2021 ^{2,3}	10.3	9.7
2025	10.5	10.2
2030	10.6	11.3
2035	10.7	11.7
2040	NA	12.3

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Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2045	NA	12.5
2050	NA	12.7

Notes:

AADD-MGD = annual average daily demand in million gallons per day.

NA = Not Available.

¹ Water demand forecast as shown in the 2007 Fulton County Master Plan

² Historical water demand shown under the 2024 Water Demand Forecast was calculated using billing records and water supplied data.

³ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

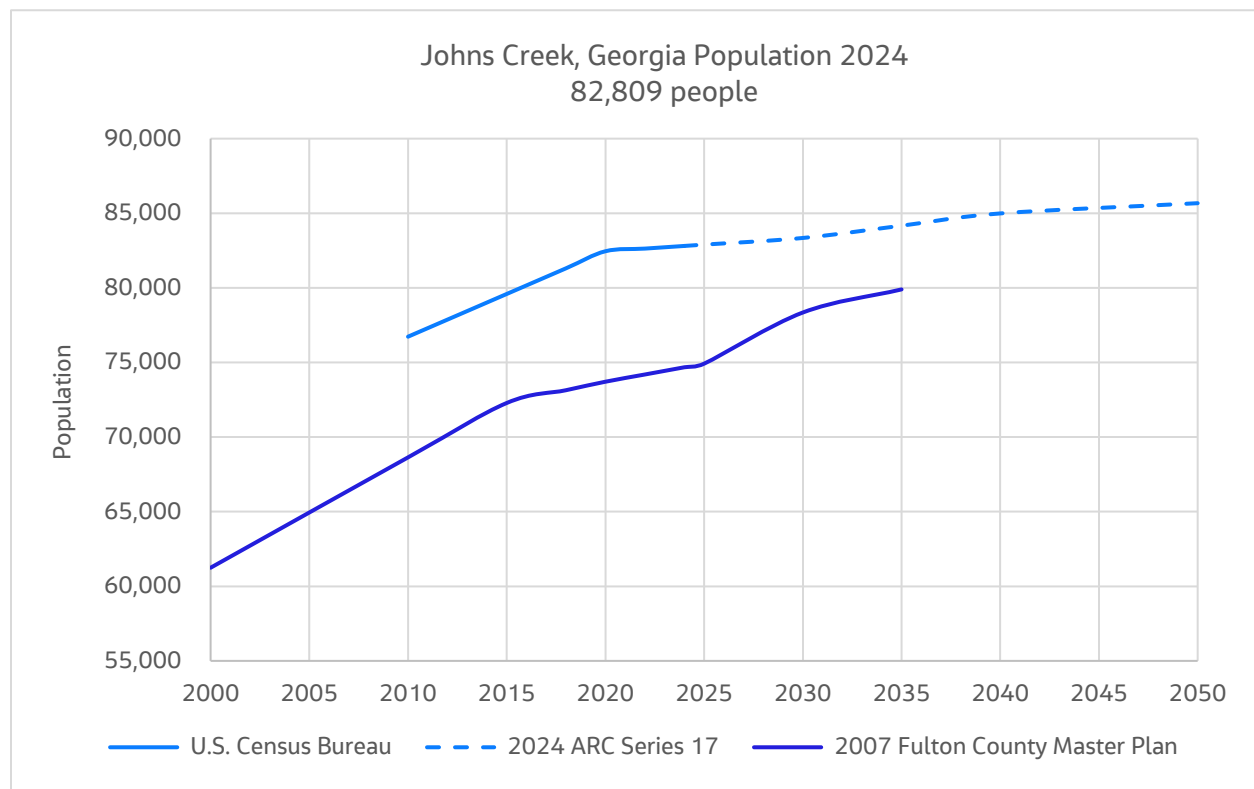
Additional information about the development of the Johns Creek water demand projection is included in the Technical Memorandum herein.

1. Introduction

As part of the *Fulton County Water Distribution System Master Plan*, it is essential to forecast water demand for the municipalities within North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. To determine the future water demands for the cities, meetings were held with the community development departments of each city. This memorandum summarizes the outcomes of the meeting with the City of Johns Creek, integrating research and insights from the city planning departments and various other sources to formulate water demand projections.

The City of Johns Creek, established in December 2006, is segmented into eight distinct community areas: Autrey Mill, Johns Creek North, Medlock, Newtown, Ocee, River Estates, Shakerag, and Technology Park. Spanning an area of 31.3 square miles. According to the 2020 U.S. Census Bureau data, Johns Creek was home to approximately 82,453 individuals residing in 28,177 households. By 2024, the population is expected to increase to 82,809 reflecting a slight decline in growth rate of 0.7 percent since the latest census (ARC, 2024). Notably, new residential developments have declined significantly, with emphasis shifting predominantly toward single-family homes and the revitalization of specific commercial areas. The ARC population projections were compared to those outlined in the 2007 Fulton County Master Plan, which estimated Johns Creek population at 74,920 in 2025 and 79,896 in 2035, which are noticeably lower than both the U.S. Census and ARC data, as shown on Figure 1. Both the U.S. Census Bureau and the ARC data present a more realistic population data compared to the projections in the 2007 Fulton County Master Plan. Figure 1 shows Johns Creek's historical population growth and its projected population increase as published by the ARC in 2024.

Figure 1. Population Trend for the City of Johns Creek



Source: U.S. Census Bureau, Series 17 Population Forecast from 2020-2050 (ARC, 2024) and 2007 Fulton County Master Plan

The residents of the City of Johns Creek receive water from the Atlanta-Fulton County Water Treatment Plant (nine high service pumps), located within city limits. Johns Creek's distribution system is comprised of 326 miles of pipe of multiple materials such as cast iron, copper, ductile iron, galvanized, steel and PVC. There are two elevated tanks located off Jones Bridge Road. Per the population projections outlined in 2007 Fulton County Master Plan, the water demand for Johns Creek was forecasted to reach 10.3 million gallons per day (MGD) by the year 2020, with a slight increase to 10.7 MGD by 2035 as shown in Table 1. These projections were formulated based on population estimates. The per capita water usage rates were delineated as 81.3 gallons per capita per day (GPCD) for residential purposes and 53.6 GPCD for non-residential purposes, per the 2007 Fulton County Master Plan.

Table 1. Previous Water Demand Projections of Cities within Fulton County (MGD).

Jurisdiction	2005	2010	2020	2030	2035
Alpharetta	7.6	11.4	14.5	16.4	17.4
Johns Creek	9.2	9.5	10.3	10.6	10.7
Milton	3.8	4.6	5.7	6.2	6.5
Roswell	12.6	12.9	13.5	13.7	13.9

Source: 2007 Fulton County Master Plan

Billing records show that water demand for the city was close to reaching the expected water demand levels stated in the 2007 Fulton County Master Plan. Demand shows an average 9.3 MGD throughout the period of record (2017-2021) with the highest water demand recorded in 2019. The high demand of 10.2 MGD for 2019 was attributed to lower precipitation levels experienced during that year. Billing records show a combined per capita water usage rates of 109 GPCD. Demand is expected to continue its steady growth trend with periodic increases in industrial demands from research and development companies as well as data centers.

2. Meeting Summary

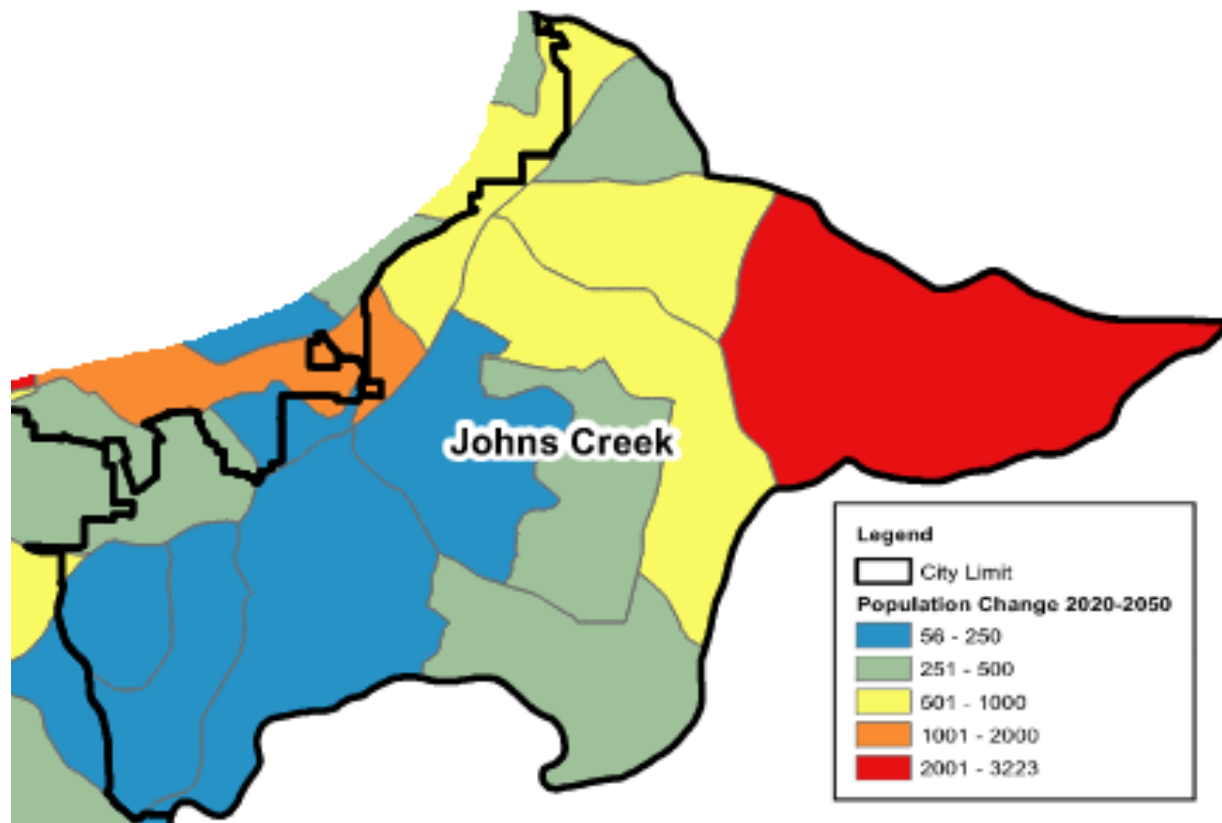
On November 13, 2023, representatives from the Jacobs team and Fulton County convened with officials from the City of Johns Creek to discuss the *Fulton County Water Distribution System Master Plan*. Attachment 1 shows the meeting presentation and sign-in sheet. This plan emphasizes the municipalities in North Fulton County outside of the City of Atlanta's service area, including Johns Creek, Alpharetta, Milton, and Roswell. The primary objective of these discussions was to evaluate the future requirements of the City of Johns Creek for the *Fulton County Water Distribution System Master Plan*.

Currently, Johns Creek has established a daily water demand of 10.58 MGD, peaking at 14.06 MGD, the highest usage among all North Fulton County cities. Potable water needs for Johns Creek residents are met through the Tom Lowe Atlanta-Fulton County Water Treatment Plant. Most residential developments in Johns Creek adhere to a 1-unit-per-acre zoning requirement. There are ongoing initiatives to decrease residential density and designate specific areas for commercial redevelopment. Anticipated growth peaks are expected in the northwestern quadrant of the city, with vertical expansion yet to be zoned. The Town Center area, serving as the commercial hub, is zoned for 30 units per acre, with plans spanning the next three decades. Notable concentrations of commercial development are situated in the Medlock Bridge Road and State Bridge Road areas.

City officials highlighted that future redevelopment focuses on major intersection areas. Details of the redevelopments and action plans are documented comprehensively in the Community Work Program section of the *Johns Creek 2018 Comprehensive Plan* (City of Johns Creek 2018). This section delineates priority capital projects for land use, economic development, transportation, parks and recreation, and community facilities over the forthcoming 5 to 10-year period, as outlined in Section 3.

During the meeting, it was stated that Alcon, a prominent eye care manufacturing company with a facility in Johns Creek, is expanding its manufacturing operations. Alcon has requested permits for additional sewer capacity, initially from 1 MGD to 1.7 MGD, with eventual plans to reach 2 MGD. Regarding the potential necessity of water tanks as an upgrade to the existing water distribution system to accommodate future demand, Johns Creek authorities emphasized that if such tanks are deemed necessary, careful consideration of their location and aesthetics will be crucial to community satisfaction. Figure 2 depicts the population projections per census tract for North Fulton County with a focus on Johns Creek.

Figure 2. Population Projections per Census Tract for North Fulton County

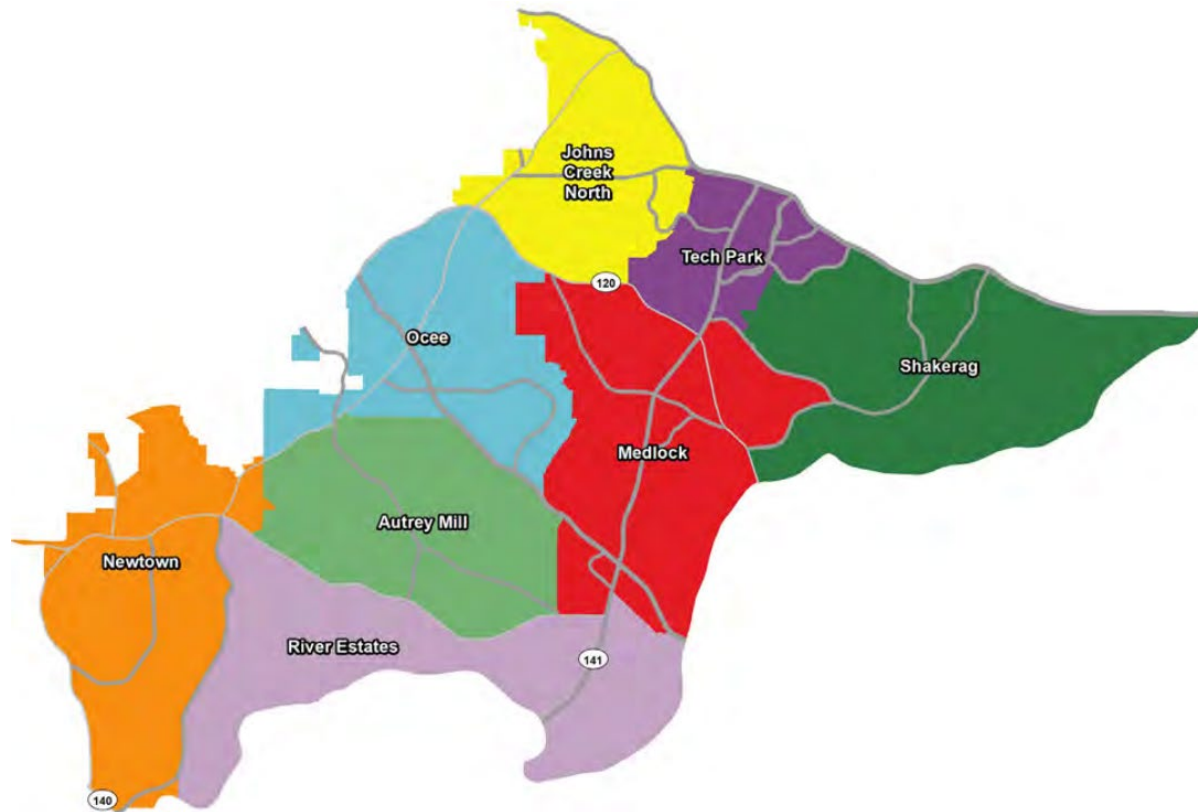


Source: Fulton County Water Distribution System Master Plan

3. Future Developments

The future development plans for Johns Creek have been determined through a thorough analysis incorporating data from various sources such as the *Johns Creek 2018 Comprehensive Plan*, geographic information system data, land use maps, and the Johns Creek Community Development Department. Each of the city's eight distinct community areas presents unique characteristics, influencing their respective development goals in terms of land use, density, and zoning. Figure 3 illustrates the geographical locations of each of Johns Creek community areas.

Figure 3. Johns Creek Community Areas



Source: Johns Creek 2018 Comprehensive Plan

Six of these community areas—Autrey Mill, Johns Creek North, Ocee, River Estates, Newtown, and Shakerag—are primarily focused on fostering low-density, single-family housing. Conversely, Medlock and Technology Park prioritize commercial and mixed-use developments, with Technology Park particularly emphasizing high-density office and institutional spaces, including corporate offices, and supporting amenities like food and retail establishments. The specifics of development vary by community area and are described in the following sections.

3.1 Autrey Mill

This community area is characterized by large-scale single-family residential properties, comprising 78.3 percent of the total land. Commercial and multi-family residential developments are limited, with only 0.2 percent and 1 percent of the land allocated, respectively. With 63.4 acres of undeveloped land, future plans focus on single-family residential units with a density of 1 unit per acre, allowing for an additional 34 residential units based on zoning requirements and available land.

3.2 Johns Creek North

The Johns Creek North community area is dominated by single-family residential land use covering 87.4 percent of the area. Commercial and multi-family residential developments occupy smaller percentages. With 3.2 acres of undeveloped land, future residential infill projects are restricted to single-family detached homes at a density of 3 units per acre, enabling the addition of 155 residential units based on zoning and land availability.

3.3 Medlock

Medlock is primarily characterized by large-scale residential subdivisions alongside commercial retail spaces, housing approximately 20 percent of the city's population. Single-family residential land use accounts for 62.1 percent, with commercial office and retail spaces comprising 4.6 percent. New residential infill developments are capped at a maximum of 2 units per acre for single-family detached homes, with no mixed-use projects based on existing traffic congestion. The buildout analysis suggests a capacity for 156 additional residential units.

3.4 Ocee

Ocee is predominantly single-family residential covering 78.6 percent of the area, with commercial and retail spaces occupying smaller proportions. New low-intensity mixed-use developments are planned at a rate of 8 residential units per acre, alongside single-family detached units limited to 3 units per acre for infill housing projects. The buildout analysis indicates a potential for 362 additional residential units.

3.5 River Estates

River Estates mainly consists of single-family residential and recreational spaces, with golfing facilities being a prominent feature. New infill housing developments are restricted to single-family detached homes at a density of 1 unit per acre, with a capacity for 92 additional residential units based on the analysis of available land.

3.6 Shakerag

Shakerag is predominantly single-family residential at approximately 58 percent of total land, with significant portions dedicated to recreational (18.9 percent) and agricultural (6.5 percent) uses. New developments, including commercial and mixed-use projects, are limited, with infill housing projects focused on single-family detached homes at a density of 1 unit per acre. There are approximately 342 acres of undeveloped land (11.3 percent) left in this area. The buildout analysis suggests a capacity for 606 additional residential units, although substantial development is not anticipated in the next decade.

3.7 Newtown

Characterized by single-family residential properties as the primary land use, Newtown also has smaller allocations for commercial office, retail, and multi-family residential spaces. Plans include transforming existing shopping centers into low-intensity mixed-use areas that incorporate local retail, office spaces, residential units, and entertainment venues. New infill housing developments are limited to 3 units per acre for single-family detached homes, with mixed-use projects capped at 8 residential units per acre. The buildout analysis shows a capacity for 615 additional residential units.

3.8 Technology Park

Focused on office and industrial spaces, Technology Park has commercial offices as the primary land use covering 26 percent of the area. Residential spaces, both single-family and multi-family, comprise a smaller percentage. New residential infill developments are limited to single-family detached units at a density of 3 units per acre, with a capacity for 75 additional residential units based on available land.

Table 2 below provides details of known developments, including location, description of housing or commercial units, water demand, and projected timing. The table organizes the projected developments by Community Areas in alphabetical order.

Table 2. Ongoing and Future Development Plans for the City of Johns Creek

Name	Location	Description	Water Demand (gallons/day)	Timing
Autrey Mill	Autrey Mill	Large-scale single-family housing developments, 1 dwelling per acre. Buildout capacity is 34 dwelling units. No pending developments currently.	9,420	Buildout, not permitted or planned
Johns Creek North	Johns Creek North	Single-family housing developments, 3 dwellings per acre. Buildout capacity is 155 dwelling units. No pending developments currently.	34,500	Buildout, not permitted or planned
Medlock	Medlock	Large-scale housing developments with commercial office and retail spaces. Buildout capacity is 156 dwelling units. No pending developments currently.	64,380	Buildout, not permitted or planned
Newtown	Newtown	Single-family housing developments with low commercial office, retail, and multi-family dwellings. Buildout capacity for 615 dwelling units. No pending developments currently.	127,200	Buildout, not permitted or planned
Mt. Pisgah Christian School	Newtown	Potential 123,362 SF expansion of the school (academic buildings, performing arts theater, indoor pool).	7,700	NA
Ocee	Ocee	Single-family housing developments with low commercial and retail spaces. Buildout capacity is 362 dwelling units. No pending developments currently.	76,160	Buildout, not permitted or planned
Medlock Crossing Shopping Center	Ocee	A 21-acre shopping center revitalization project that proposes a mixed-use retail center anchored by Regal Cinema. Potential for mixed-use development up to 12 to 14 dwelling units/acre.	57,320	Assuming completion within 5 to 10 years (by 2035)
River Estates	River Estates	Single-family housing developments with recreational spaces. Buildout capacity is 92 dwelling units. No pending developments currently.	22,060	Buildout, not permitted or planned
Shakerag	Shakerag	Low-density, single family housing development with 1 dwelling unit/acre requirement. Buildout capacity is 606 dwelling units. No pending dwelling developments currently.	110,180	Buildout, not permitted or planned
Cauley Creek Park	Shakerag	A 203-acre multipurpose park consisting of lighted grass and synthetic turf playing fields, playgrounds, parking, park office, sports courts (pickle ball, volleyball, basketball), a 5-kilometer rubberized trail, pedestrian bridges, and river overlooks. The park opened to the public in July 2023. City is in the process of determining a project to introduce commercial space (for	16,500	Completed July 2023

Technical Memorandum

Name	Location	Description	Water Demand (gallons/day)	Timing
		example, restaurants) to the southern portion of the park.		
Technology Park	Technology Park	High-density, multi housing, 30 dwelling units/acre. Approximately 11.2 acres of undeveloped land. Buildout is 75 dwelling units.	14,600	Buildout, not permitted or planned
Alcon	Technology Park	Requested additional sewer capacity for permitting reasons going from 1 MGD to 1.7 MGD, and eventually will request 2 MGD.	1,200,000	NA
Boston Scientific	Technology Park	A \$62.5 million medical device manufacturing and distribution facility to be located at 11350 Johns Creek Pkwy. It is expected to employ approximately 340 people. Sewer capacity request states 30.07 gpm water demand.	43,301	Fall 2024
Emory Johns Creek Hospital	Technology Park	Hospital and medical offices, proposed expansion adds 1 million SF to existing facility. Proposed expansion of hospital and medical office buildings adds 337,922 SF in 0 to 10 years, and 742,380 SF in 10 to 20 years.	165,000	337,922 SF by 2034 742,380 SF by 2044
Hospital Pkwy	Technology Park	75+ condominiums. Pending rezoning. Council will review rezoning request in April/May 2024.	14,600	NA
Johns Creek Town Center	Technology Park	A 192-acre business park area surrounding City Hall with a phased redevelopment to include a new 40-acre mixed-use retail district, Creekside Park (a park that features pedestrian pathway systems, lakefront amphitheater, a boardwalk, fountains, and a community playground).	1,320,000	Ongoing through approximately 2034
Medley	Technology Park	A \$350 million development plan of unique residential (141 townhomes and 750 multi-family units), retail space (200,000 SF), office space (110,000 SF), and entertainment offerings.	214,280	2026
Standard Club Golf Course	Technology Park	Building a 3,600 SF Mizuno Golf Fitting and Training Facility.	3,300	Assuming completion within 5 years (by 2030)
The Terraces at Johns Creek	Technology Park	Development of a shopping center that will be approximately 69,200 SF spread across 4 buildings.	13,200	Fall 2025
Wards Crossing Townhomes	Medlock	Development of 128 residential units (104 townhomes and 24 single-family detached homes).	24,140	2025

Notes:

NA = not available

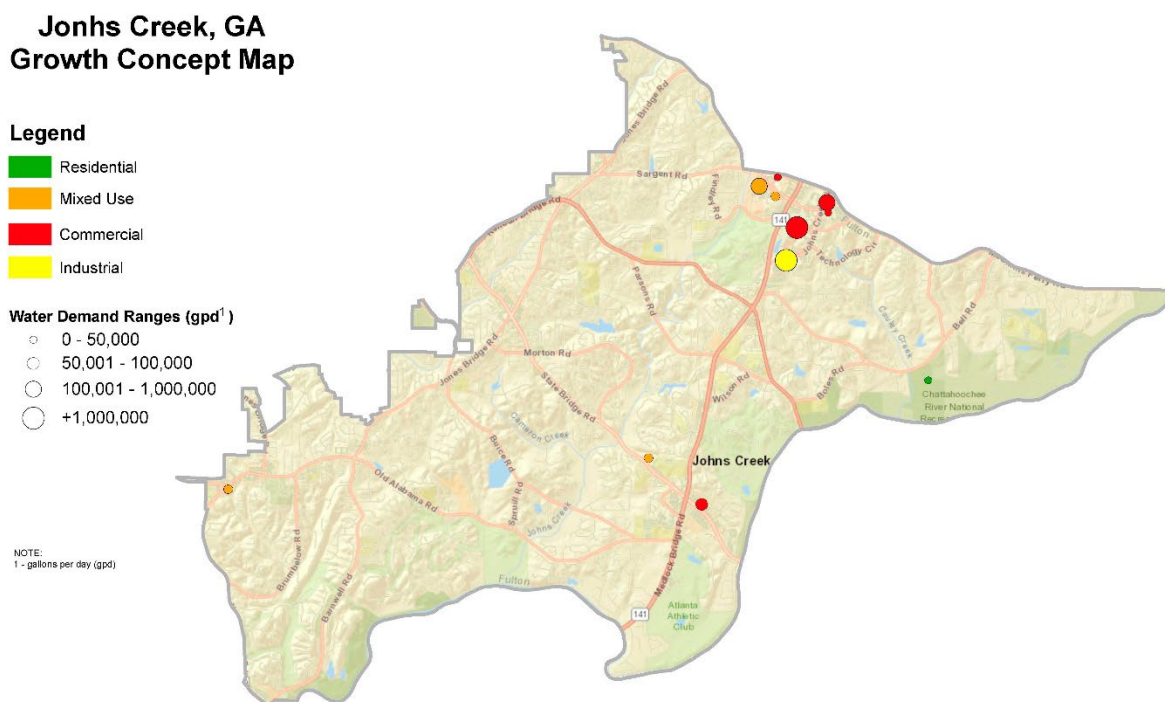
SF = square foot (feet)

4. City-Specific Water Demand Forecast

The water demand forecast for the City of Johns Creek will be used to update the Fulton County's water distribution system hydraulic model and assessing the need for additional infrastructure to ensure sufficient water service and fire protection to meet future needs out to 2050. Based on the data provided by the city alongside ongoing new development and redevelopment projects being built or permitted as of February 2024, it is projected that water demand will rise by approximately 3.0 MGD in the near future. The projection considers factors such as available land for development, current land use and comprehensive land planning policies by the city, existing per capita water uses extracted through historical billing data, as well as anticipated conservation efforts through the adoption of more water-efficient fixtures.

Furthermore, the forecast accounts for significant water consumers like Alcon, a pharmaceutical and medical device manufacturing facility, and the anticipated growth of mixed-use developments concentrated in the Technology Park area that are expected to expand or open new facilities. To accommodate uncertainties surrounding future growth beyond current developments, additional projections were calculated using ARC population estimates and the most current billing data. These supplementary projections indicate a potential increase of approximately 2.6 MGD by 2050. Figure 4 shows the development areas and future growth for the City of Johns Creek based on the information provided by the city and available planning documents.

Figure 4. Future Growth Areas for the City of Johns Creek



Final/Version 2024.04.24

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

Adopting a conservative approach, the demand curve was developed using the higher demand as calculated using future development plans. Notably, the current demand forecast reflects a more conservative estimate, aligning closely with recent historical data, and within 10 percent of the 2007 water demand forecast. Detailed historical data and the proposed forecast for the City of Johns Creek are presented in Table 3 and Figure 5, showing a comprehensive view of past trends and future projections to inform strategic planning and infrastructure development decisions.

Table 3. Historical and Proposed Future Annual Average Water Demand for the City of Johns Creek

Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005	NA	9.2	NA
2010	NA	9.5	NA
2017	7.88	NA	NA
2018	9.49	NA	NA
2019 ³	10.19	NA	NA
2020	9.48	10.3	9.5
2021 ⁴	9.69	10.3	9.7
2025	NA	10.5	10.2
2030	NA	10.6	11.3
2035	NA	10.7	11.7
2040	NA	NA	12.3
2045	NA	NA	12.5
2050	NA	NA	12.7

Notes:

AADD-MGD = annual average daily demand in million gallons per day

NA = Not Available

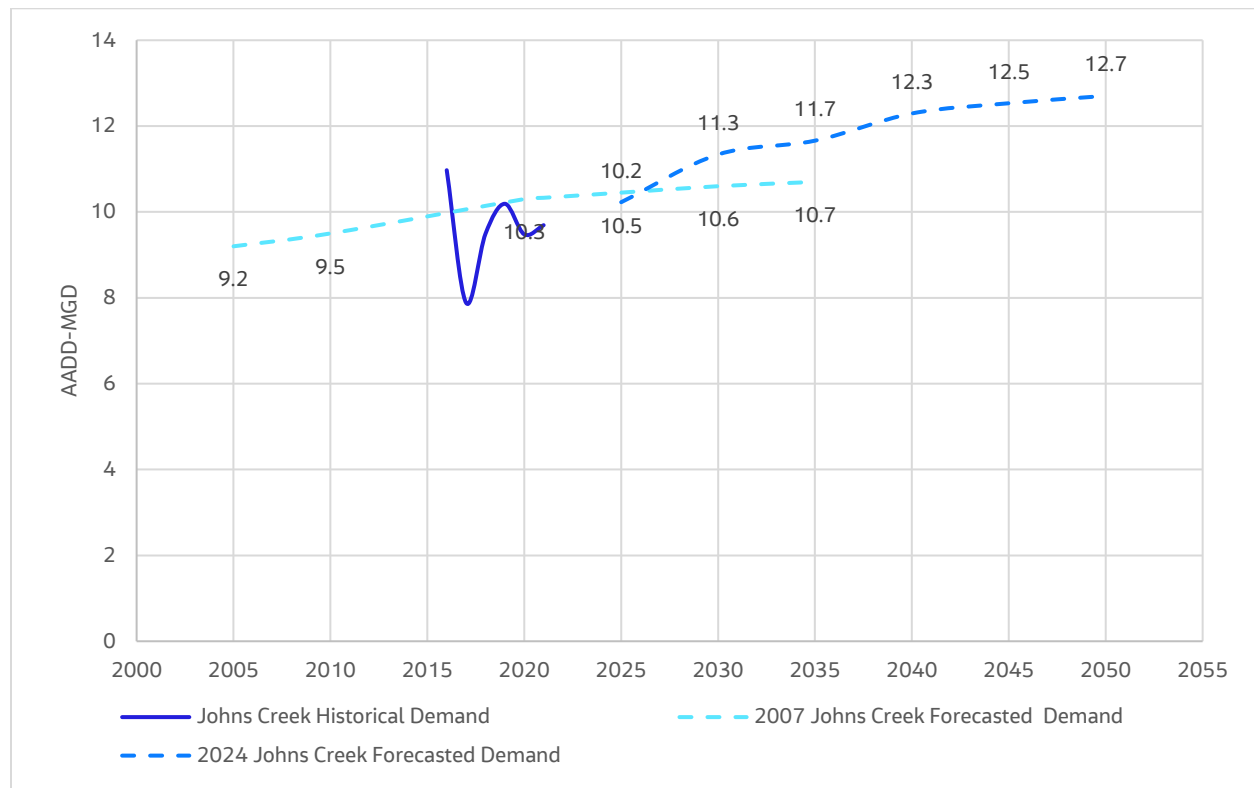
¹ Historical water demand calculated using billing records and water supplied data.

² Water demand forecast as show in the Water and Wastewater Master Plan 2007 Update (JJG, 2008)

³ Water demand data for the year 2019 reflect an anomalous higher rate of water consumption that may be attributable to the lower precipitation levels experienced during that year.

⁴ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Figure 5. Historical and Proposed Future Annual Average Water Demand for the City of Johns Creek



5. References

City of Johns Creek. 2018. *Johns Creek 2018 Comprehensive Plan*. October.

JJG. 2008. *Water and Wastewater Master Plan 2007 Update*.

U.S. Census Bureau. 2020. "TOTAL POPULATION." Decennial Census, DEC Demographic and Housing Characteristics, Table P1. <https://data.census.gov/table/DECENNIALDHC2020.P1?q=alpharetta>. Accessed on March 7, 2024.

Atlanta Regional Commission. 2024. Population and Employment Forecast. <https://atlantaregional.org/atlanta-region/population-employment-forecasts/>

Attachment 1

Meeting Presentation and Meeting Sign-in Sheet



Appendix D

Milton Water Demand Projections

Water Demand Projections for North Fulton County – City of Milton

Date:	September 10, 2024	Ten 10th Street, NW
Project name:	Fulton County Water Distribution System Master Plan	Suite 1400
Project no:	EEXK6102	Atlanta, GA 30309
Client:	Fulton County Government	United States
Revision no:	3	T +1.404.978.7600
Document no:	240311085349_1ac289e1	F +1.404.978.7660
		www.jacobs.com

Executive Summary

Fulton County serves water to the cities in North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. As part of the Fulton County Water Distribution System Master Plan, water demand projections for each of the cities were developed to appropriately plan for reliable water service to them in the future.

Fulton County staff and Jacobs met with members from the cities to discuss future developments that could be used to develop water demand projections. The community development and public works departments were very helpful in supplying information. In addition, historical billing data from Fulton County and population projections broken down by census tract through 2050 from the Atlanta Regional Commission (ARC) were used to project growth and demand. In February 2024, the ARC adopted the most recent Series 17 population and employment forecast from 2020-2050.

The water demand projections calculated Fulton County's Water and Wastewater Master Plan 2007 Updated (2007 Fulton County Master Plan, JJG; 2008) and the newly calculated water demands for the City of Milton are shown below in Table ES-1. The new demands show a lower demand trend based on population projections, data provided by the city on new development and redevelopment projects, current and future land use planning policies, existing per capita water uses extracted through historical billing data and conservation from more water-efficient fixtures expected in the future. The historical demand and baseline data used for the current demand forecast is also lower than estimated water demand developed for the 2007 Fulton County Master Plan.

Table ES-1. Historical and Projected Annual Average Day Water Demand for the City of Milton

Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005 ²	3.8	NA
2010 ²	4.6	NA
2020 ²	5.7	3.4
2021 ^{2,3}	5.8	3.5
2025	6.0	3.9
2030	6.2	3.9
2035	6.5	4.0
2040	NA	4.1
2045	NA	4.2

Technical Memorandum

Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2050	NA	4.4

Notes:

AADD-MGD = annual average daily demand in million gallon(s) per day.

NA = Not Available

¹ Water demand forecast as shown in the 2007 Fulton County Master Plan.

² Historical water demand shown under the 2024 Water Demand Forecast was calculated using billing records and water supplied data.

³ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

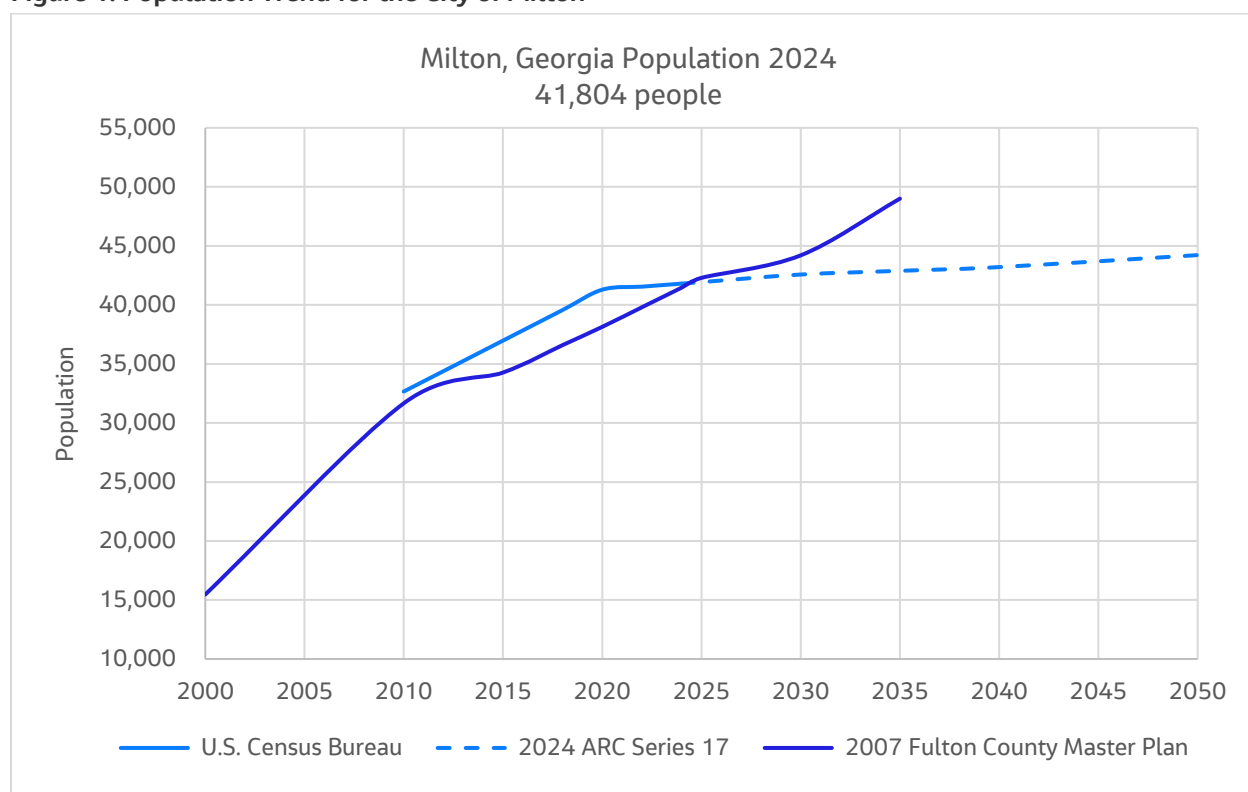
Additional information about the development of the Milton water demand projection is included in the Technical Memorandum herein.

1. Introduction

As part of the *Fulton County Water Distribution System Master Plan* (Fulton County 2008), it is essential to forecast water demand for the municipalities within North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. To determine the future water demands for the cities, meetings were held with the community development departments of each city. This memo summarizes the findings of those meetings, research, and information from planning departments and various sources to develop water demand projections.

The present-day City of Milton, Georgia, was formerly a part of the Cherokee Nation. With fewer than 4,000 residents, Milton County was formed in 1857 from portions of northeastern Cobb, southwestern Forsyth, and southeastern Cherokee counties. Fulton County annexed Milton County on January 1, 1932. This region has continued to expand and prosper. The City of Milton was incorporated in 2006. Its traditional mix of small-town living and easy access to nearby cities has made it a desirable location, so it has grown since its establishment. In 2024, the population is 41,804 with the anticipation of strong population growth in the future. Figure 1 shows Milton's historical population growth and its projected population increase as published by the ARC in 2024.

Figure 1. Population Trend for the City of Milton



Source: U.S. Census Bureau, Series 17 Population Forecast from 2020-2050 (ARC, 2024) and 2007 Fulton County Master Plan.

Milton residents rely on the Tom Lowe Atlanta-Fulton County Water Treatment Plant for their water supply. Milton's distribution system is comprised of 228 miles of pipe of multiple materials such as cast iron, copper, and ductile iron. There are booster pump stations off Bethany Road (2 pumps), Freemanville Road (4 pumps), Providence Road (2 pumps), an elevated tank and a ground tank off Freemanville Road, and two elevated tanks off Bethany Road. Crabapple, Milton Lakes, Deerfield, and Bethany are some of the

Milton character areas served by the Fulton County wastewater treatment plant. Septic systems are used for all other sewer services in Milton.

As shown on Figure 1 and in Table 1, the City of Milton has consistent growth overall with its projected population and water demand. In the 2007 Fulton County Master Plan, the water demand for Milton was forecasted to reach 5.7 million gallons per day (MGD) by 2020, with a slight increase to 6.5 MGD by 2035 as shown in Table 1. These estimates were based on population projections, with per capita water usage rates set at 81.3 gallons per capita per day (GPCD) for residential purposes and 53.6 GPCD for non-residential purposes, as stipulated in the 2007 Fulton County Master Plan.

Table 1. Previous Water Demand Projections of Cities within Fulton County (MGD)

Jurisdiction	Water Demand (MGD)				
	2005	2010	2020	2030	2035
Milton	3.8	4.6	5.7	6.2	6.5
Alpharetta	7.6	11.4	14.5	16.4	17.4
Johns Creek	9.2	9.5	10.3	10.6	10.7
Roswell	12.6	12.9	13.5	13.7	13.9

Source: 2007 Fulton County Master Plan

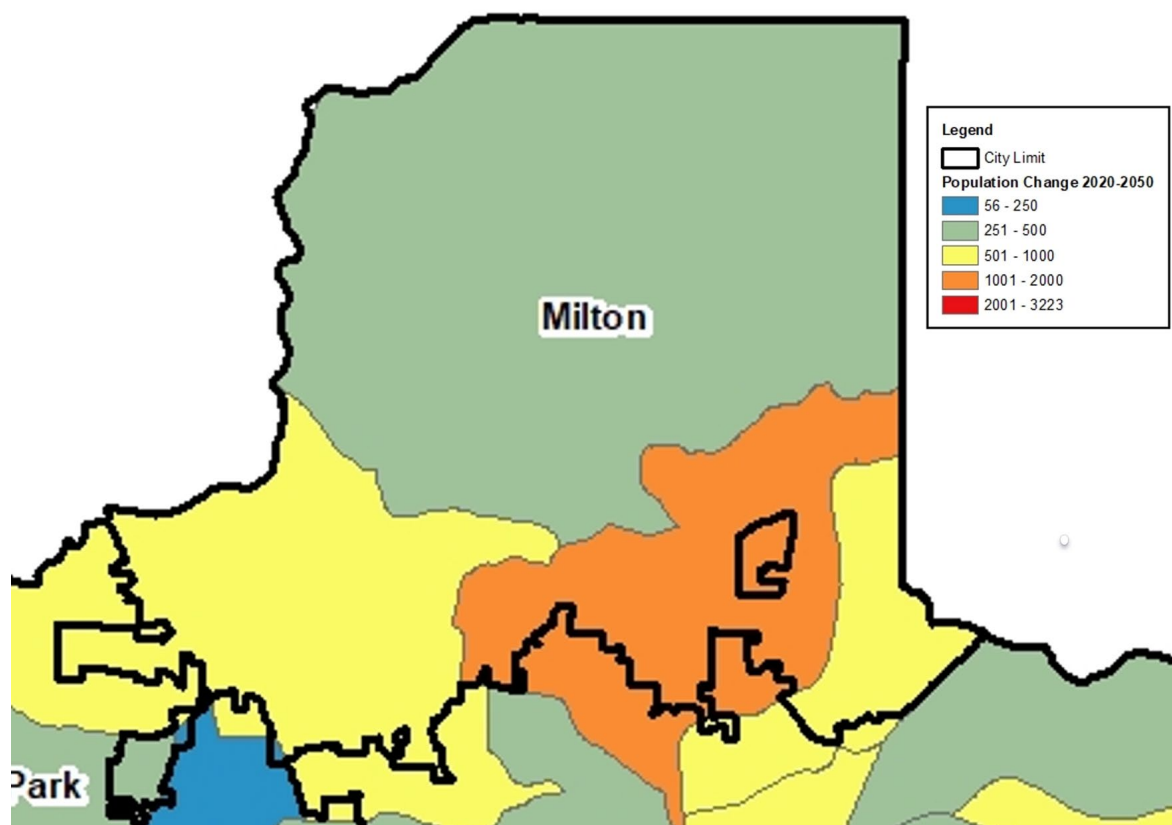
Despite the population growth in Milton, billing records show that water demand for the city did not reach the expected water demand levels stated in the 2007 Fulton County Master Plan. Moreover, demand remained below 4 MGD throughout the period of record (2017-2021). The high demand of 3.6 MGD for 2019 was attributed to lower precipitation levels experienced during that year. Billing records show a combined per capita water usage rate of 91 GPCD. This reduction may be attributed to lower population growth, advancements in water-saving technologies, the adoption of efficient water use practices, the implementation of water conservation programs, and shifts in climate and weather patterns.

2. Meeting Summary

On December 12, 2023, representatives from the Jacobs team and Fulton County convened with officials from the City of Milton to discuss the *Fulton County Water Distribution System Master Plan*. Attachment 1 shows the meeting presentation and sign-in sheet. This plan emphasizes the municipalities in North Fulton County, outside of Atlanta's service area, including Milton, Alpharetta, Johns Creek, and Roswell. The primary objective of these discussions was to evaluate the future requirements of Milton for the *Fulton County Water Distribution System Master Plan*.

Currently, Milton has established a daily water demand of 2.79 MGD and a peak reaching 6.29 MGD. Milton anticipates higher growth than what the census tract maps reflect. The green area on Figure 2 shows the Central Milton census tract area, which is expected to remain a low-density development region with large lots. In this area of low-density development, septic tanks supply most of the sewer services. Milton describes the orange area on Figure 2 as Sweetapple/Arnold Mill, which is experiencing growth, and the yellow Deerfield character area as mostly built out. According to Milton staff, the primary expansion growth corridor in the yellow Deerfield character area is near Georgia State Highway 9 (GA 9).

Figure 2. Population Projections per Census Tract for North Fulton County



Source: Fulton County Water Distribution System Master Plan

An urban growth boundary (UGB) has been established around the sewage area. Within specific geographic areas, the UGB is used for limiting dense urbanization. Overall, the City of Milton is expected to reach its maximum building capacity by 2040. Milton aims to maintain its rural characteristics while offering access to urban conveniences.

Milton staff stressed the importance of the existing elevated water storage tanks, which need maintenance. Staff would like to know the maintenance schedule for these tanks. Fulton County staff members indicated they would contact the tank maintenance group for more information. For water distribution system planning, Fulton County has mentioned that there may be a need for additional water storage tanks to maintain the necessary water pressure. Milton staff expressed concern about the possibility of the additional tanks and their locations. If additional tanks are required to meet the water demands, Milton staff would request more public outreach assistance from the county.

Milton would prefer that the *Fulton County Water Distribution System Master Plan* take into consideration the long-term objectives of the city, which include the following:

- For new developments, it is recommended to have a looped water distribution system. The looped water system will minimize water quality issues normally associated with dead-end mains.
- For new developments, master meters will not be used.
- For general usage, water conservation is encouraged.

3. Future Developments

Since 2006, the City of Milton has created citywide initiatives to preserve its small town quality and to focus its future development on supporting this quality of life. The Fulton County/Jacobs team reviewed various relevant information, including the *2040 Milton Comprehensive Plan* (City of Milton 2021b) and the city's vast interactive GIS data.

Milton delineated eight character areas, each of which has distinctive characteristics and aspirations for the future. Figure 3 illustrates Milton's character areas and the availability of the Fulton County sewer area within Milton. These character areas are described in the following sections.

3.1 Arnold Mill

This area is the southwest gateway to Milton from the City of Roswell and Cherokee County. The primary land use in Arnold Mill is rural and low-density residential. Arnold Mill plans to develop its public recreation space. Fulton County provides sewage to the part of Arnold Mill adjacent to Crabapple.

3.2 Bethany

Bethany has the eastern boundary with Forsyth County, while the remaining boundaries are encircled by the character areas of Deerfield and Central Milton. This character area contains approximately 10 subdivisions built between 1978 and 2016. Bethany plans to continue its dominant land use of residential properties of similar types and styles. All of Bethany uses sewer services from Fulton County.

3.3 Birmingham

This region lies in the northwestern part of Milton, bordering Cherokee County to the west. It is the most northern part of Fulton County and mostly comprises rural areas with forests and horse farms. Septic systems are in use throughout Birmingham.

3.4 Central Milton

The largest of all the character areas is Central Milton. Numerous upscale home communities provide expansive lots exceeding 1 acre, some of which feature exclusive recreational amenities such as tennis courts, golf courses, and swimming pools. Large woodlands and other nature preserves controlled by the city are among the many green spaces in Central Milton. When new development areas are integrated, Central Milton intends to preserve the rural, low-density residential land uses throughout the city. Septic systems are in use throughout Central Milton.

3.5 Crabapple

Crabapple boasts a unique rural village core with the highest concentration of historical preservation. Crabapple Road is home to several residential complexes, new commercial buildings, and transportation upgrades. Crabapple plans to continue to promote a pedestrian-oriented community. Fulton County provides sewage to the lower portion of Crabapple.

3.6 Deerfield

The mix of residential, commercial, and office uses at higher densities sets this character area apart. Deerfield intends to keep redeveloping and building in its available space in a mix of higher-density

combinations that complement neighboring projects in Forsyth County and Alpharetta. All of Deerfield receives sewer services from Fulton County.

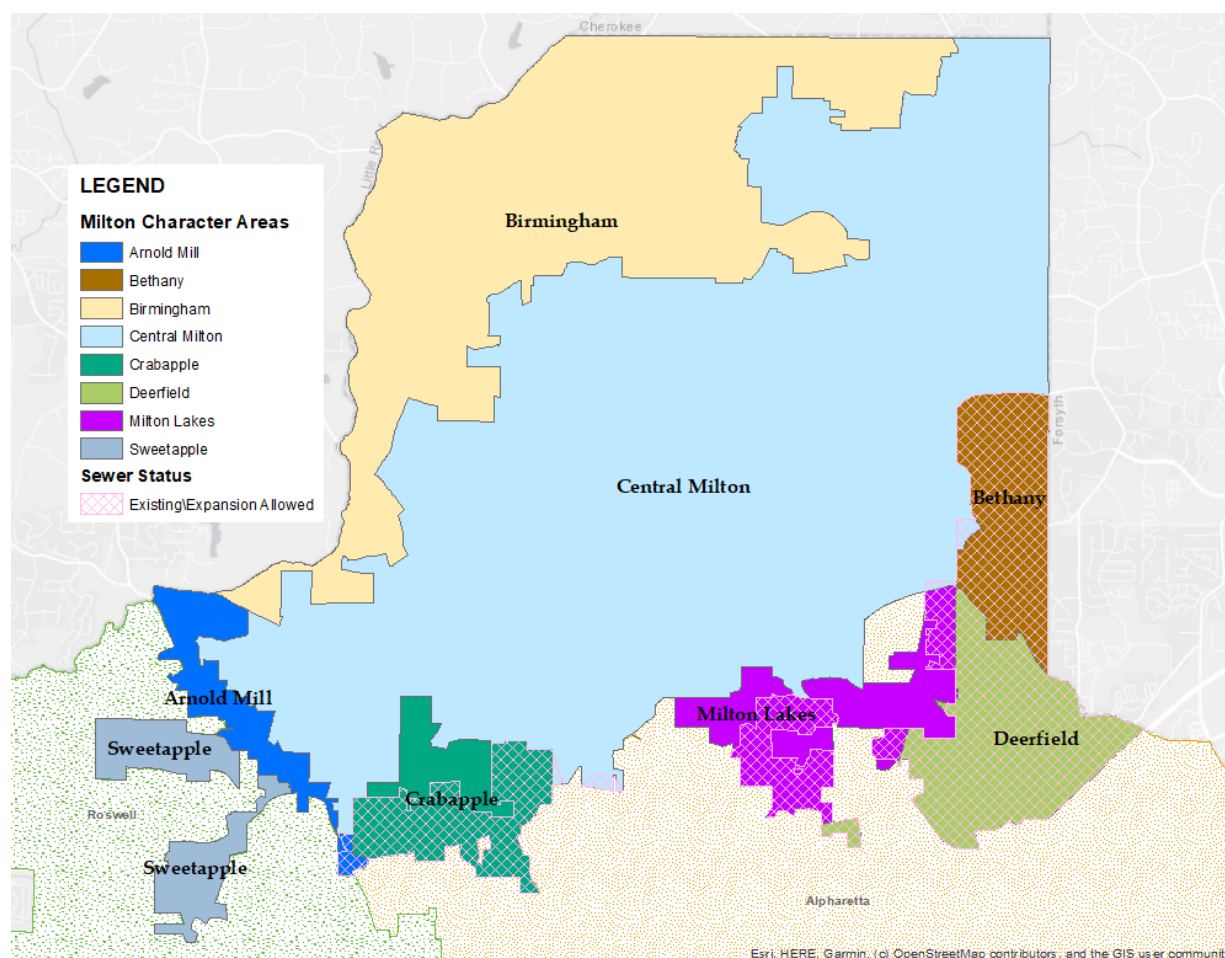
3.7 Milton Lakes

This area is bordered by the City of Alpharetta, the Deerfield character area, and the Central Milton character area. It has a blend of low-density residential and medium-density residential neighborhoods. The 2040 *Comprehensive Plan* (City of Milton 2021b) recommends that Milton Lakes minimize redevelopment of this area into a higher-density multi-family residential area. Milton Lakes' sewage is serviced by septic systems or the Fulton County Wastewater Plant.

3.8 Sweetapple

This region is divided into two sections and bound on three sides by Roswell. It is in the southwest corner of Milton. It features woodlands, pastures, and horse farms. It is considered the most rural of Milton's character areas. Sweetapple plans to continue its typical agricultural and rural-residential pattern of development. Septic systems are in use throughout Sweetapple.

Figure 3. City of Milton Character Areas and Sewer Status with Fulton County



Source: Milton On-Demand GIS Data

In Table 2, each of the developments are listed, along with the location of the development (address), description (number of housing units, commercial description), water demand, and timing (expected

completion year). The table lists active and potential development projects in Milton, arranged alphabetically by location (Character Area) and development name, respectively.

Table 2. Ongoing and Future Development Plans for the City of Milton

Name	Location (Character Area/Description)	Description	Water Demand (gallons/day)	Timing
Chadwick Village	Arnold Mill - Arnold Mill Rd	Mixed-use gas station with convenience store and other retail space	28,000	Current Project
Birmingham Crossroads Office Building	Birmingham -Birmingham Hwy/ Birmingham Rd	Medical office building	28,000	Current Project
Crossroads at Birmingham	Birmingham	New neighborhood, 35 single-family lots	10,200	Current Project
Little River Estates	Birmingham -11040 Taylor Rd (near Little River Farms)	15 single-family lots, 27.49 acres	3,900	Current Project
Claxton Subdivision	Central Milton – Hopewell Rd	12 single-family lots, 17.27 acres	3,120	Current Project
Deerhaven Preserve Subdivision	Central Milton -Freemanville Rd	Gated neighborhood, 9 single-family lots, 25 acres, with 2.84 acres for conservation	3,440	Current Project
Heatherton Subdivision	Central Milton - Mayfield Rd	New neighborhood, 21 single-family lots, 33.99 acres	6,560	Current Project
The Homestead at Milton	Central Milton - Hopewell Rd	32 single-family lots, each lot is 3.04 to 10.33 acres, 172.8 acres	9,420	Current Project
Lyndon Creek	Central Milton - Cogburn Rd	11 single-family lots, 14 acres	2,860	Current Project
Oaks at Francis	Central Milton - Francis Rd (Old Field)	7 single-family lots, minimum lot size > 1 acre, 10.2 acres	1,820	Current Project
Providence Point	Central Milton - New Providence Rd and Birmingham Hwy	5 single-family lots, 6.56 acres	1,300	Current Project
Whisper Woods	Central Milton - New Providence Rd and Birmingham Hwy	5 single-family lots, 11 acres	1,300	Current Project
Thompson Estates	Central Milton	7 single-family lots, 23.119 acres	1,820	Current Project
Thompson Oaks	Central Milton - Thompson Rd (adjacent to Fire Station #42)	16 single-family lots, 20.52 acres	4,160	Current Project

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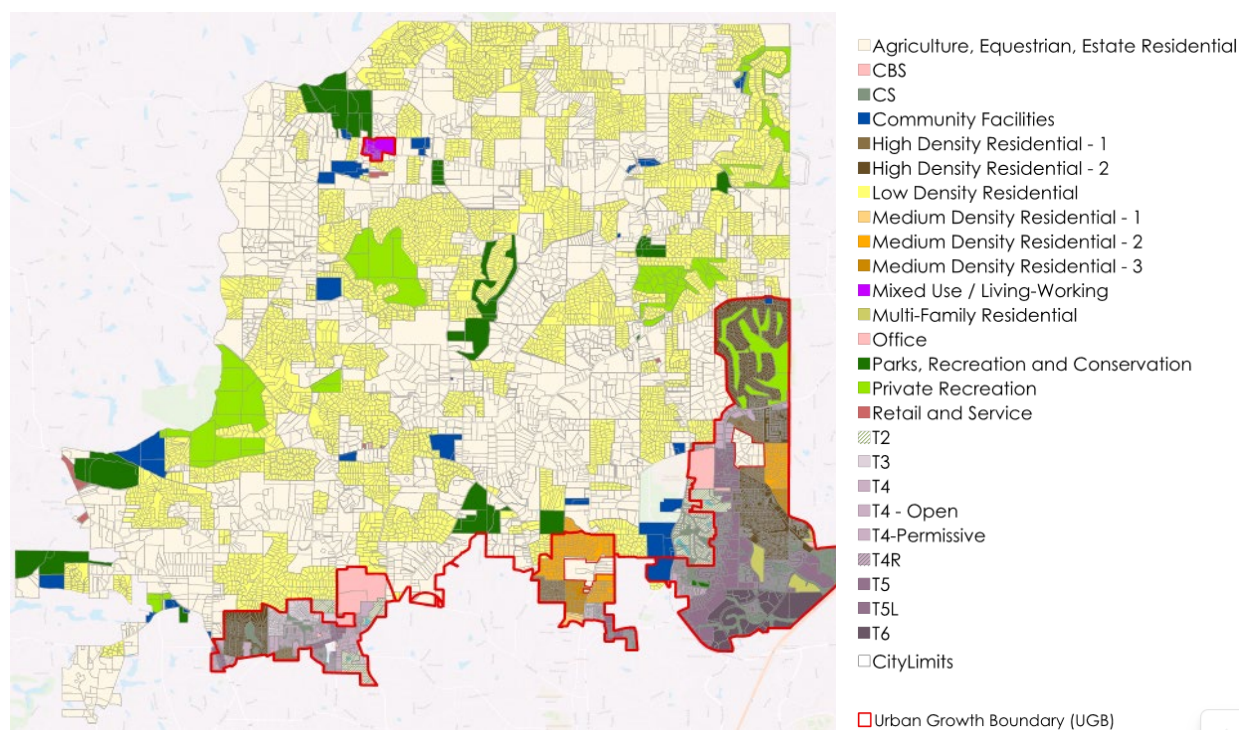
Name	Location (Character Area/Description)	Description	Water Demand (gallons/day)	Timing
Braeburn Townhomes	Crabapple - Heritage Walk	9 single-family lots, summer 2023 – remaining 3 units under construction	2,340	Current Project
Echo at Crabapple	Crabapple	23 single-family lots, 4.88 acres	5,980	Current Project
Market District Crabapple	Crabapple	Mixed use – restaurant, office, retail, and residential spaces, 2 buildings completed in 2022, 2 buildings under construction	112,000	Current Project
Milton Pointe at Broadwell	Crabapple - Southern part of Crabapple	New mixed use with condominiums, restaurants, and retail	28,000	Current Project
Milton Towns	Crabapple - Branyan Trl	14 single-family lots, townhomes	3,640	Current Project
Stone House Tap	Crabapple	Reuse of Crabapple Stone House to a new restaurant	28,000	Current Project
Town Center East	Crabapple - Mayfield Rd	Mixed use: retail, office, and commercial business uses, 4-story building with a proposed second building	56,000	Current Project
Daycare Facility	Deerfield - Webb Rd	Childcare facility, 6,342 square feet	28,000	Current Project
Deerfield Dentistry	Deerfield	2-story dental office, 8,147 square feet, with tenant space	28,000	Current Project
Henderson Mixed-Use Development	Deerfield	Retail/commercial tenants on the first floor, office space on the second floor	28,000	Current Project
Millstone Parc	Deerfield - Webb Rd and Deerfield Pkwy	9 stacked flats/ duplexes, 1.401 acres	18,000	Current Project
Crescent Ridge	Milton Lakes - Hopewell Rd	11 single-family lots, 9.045 acres	2,860	Current Project
The Ridge at Sweetapple	Sweetapple - Ebenezer Rd	19 single-family lots, 25.3 acres	4,940	Current Project

The planned and ongoing developments illustrated in Table 2 should be considered short-term projects because they are active developments. From the Community Development Online GIS data, the interactive map illustrates approximately 29 development projects.

3.9 Current and Future Land Use

In addition to the character area map, Milton also uses a UGB as a growth management strategy to recognize denser urbanization within designated areas of the city, such as Crabapple and Deerfield/GA 9. Milton and Fulton County agreed in the early 2000s to limit the number of sewer connections in Milton's rural areas. With this agreement and its usage of the UGB, Milton created a future land use map that designates more than 90 percent of Milton as low-density residential areas. Figure 4 illustrates the location of the UGB, which corresponds with the area where an existing sewer or the expansion of a sewer is allowed.

Figure 4. City of Milton's Urban Growth Boundary



Source: Milton website Community Development

Milton has an on-demand GIS data view for its land use for the periods of 2023, 2035, and 2040. Along with the UGB, the intended future development pattern and density in these character areas are reflected in the future land use. These data were also referenced in the 2040 *Comprehensive Plan* (City of Milton 2021b). From these data, tabular attributes were created to illustrate the land use composition for each period. Currently, the top three land use categories are agriculture/ equestrian, low-density residential, and forest/undeveloped areas. Milton intends to keep the city's rural character while promoting growth, and this is reflected in the composition of land uses.

Table 3 illustrates the estimated number of acres and percentage of each future land use for 2040. In order of highest to lowest percentage of land used, the top three land use categories are agriculture/ equestrian/estate residential, low-density residential, and private recreation areas. The percentages shown below represent the city's intention to continue maintaining low residential density to enhance the natural

resources and rural character, to support the "live-work-play" model, and to maintain recreation space to improve the previously mentioned items within the designated character area.

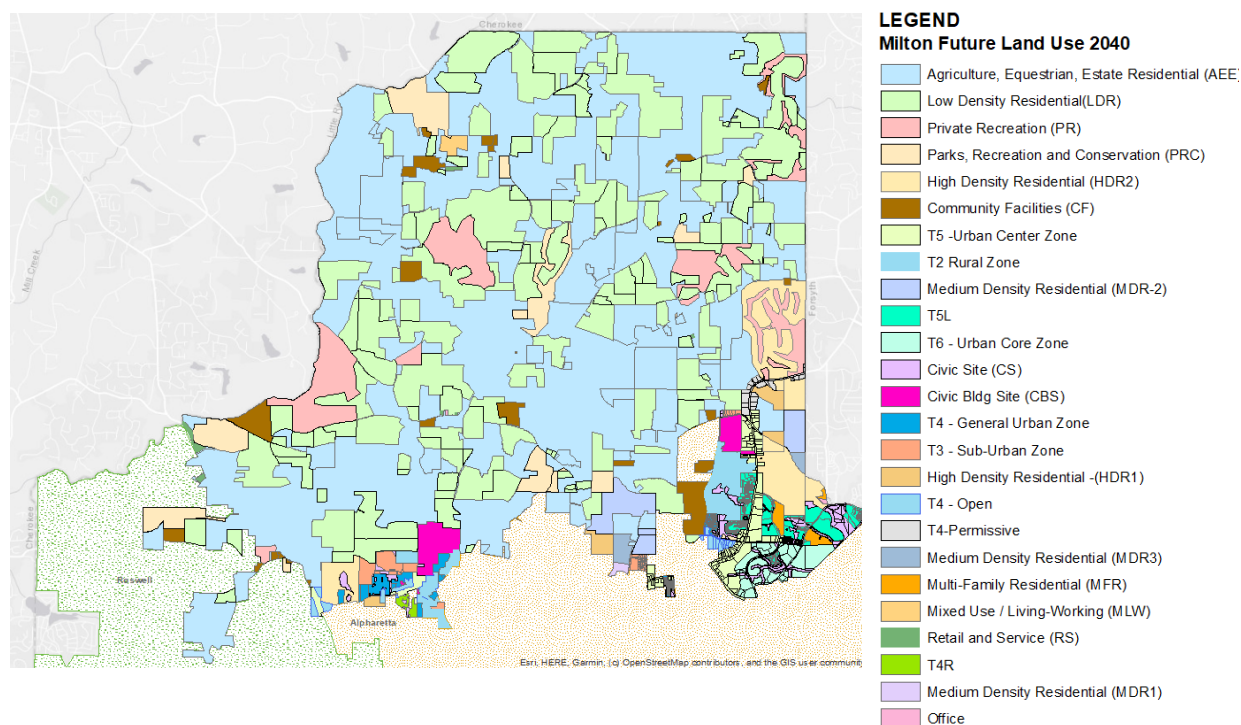
Table 3. City of Milton Land Use 2040

Land Use Categories	Area in Acres	Percent by Acre
Agriculture, Equestrian, Estate Residential (AEE)	11,877	47.03%
Low-Density Residential (LDR)	7,492	29.67%
Private Recreation (PR)	1,185	4.69%
Parks, Recreation and Conservation (PRC)	834	3.30%
High-Density Residential (HDR-2)	768	3.04%
Community Facilities (CF)	458	1.81%
T5 - Urban Center Zone	353	1.40%
T2 - Rural Zone	284	1.13%
Medium-Density Residential (MDR-2)	281	1.11%
T5L	276	1.09%
T6 - Urban Core Zone	234	0.93%
Civic Site (CS)	220	0.87%
Civic Building Site (CBS)	217	0.86%
T4 General Urban Zone	130	0.52%
T3 Sub-Urban Zone	126	0.50%
High-Density Residential (HDR-1)	120	0.48%
T4 Open	104	0.41%
T4 Permissive	66	0.26%
Medium-Density Residential (MDR-3)	65	0.26%
Multi-Family Residential (MFR)	54	0.21%
Mixed Use / Living-Working (MLW)	40	0.16%
Retail and Service (RS)	29	0.11%
T4R	21	0.08%
Medium-Density Residential (MDR-1)	15	0.06%
Office (O)	4	0.02%
TOTAL	25,254	100.00%

Source: Calculated using Milton Land Use GIS Data

Figure 5 illustrates Milton's land use for 2040. The allocation of agricultural and equestrian land use was broadened to include residential estates. The Estate Residential category is a large residential estate with at least 3-acre lots on gravel roads. To further reflect the area's development pattern, several land categories for residential density on different lot sizes were introduced. Milton preserves its city's rural character while promoting growth in designated areas within the specified character area.

Figure 5. City of Milton Land Use 2040

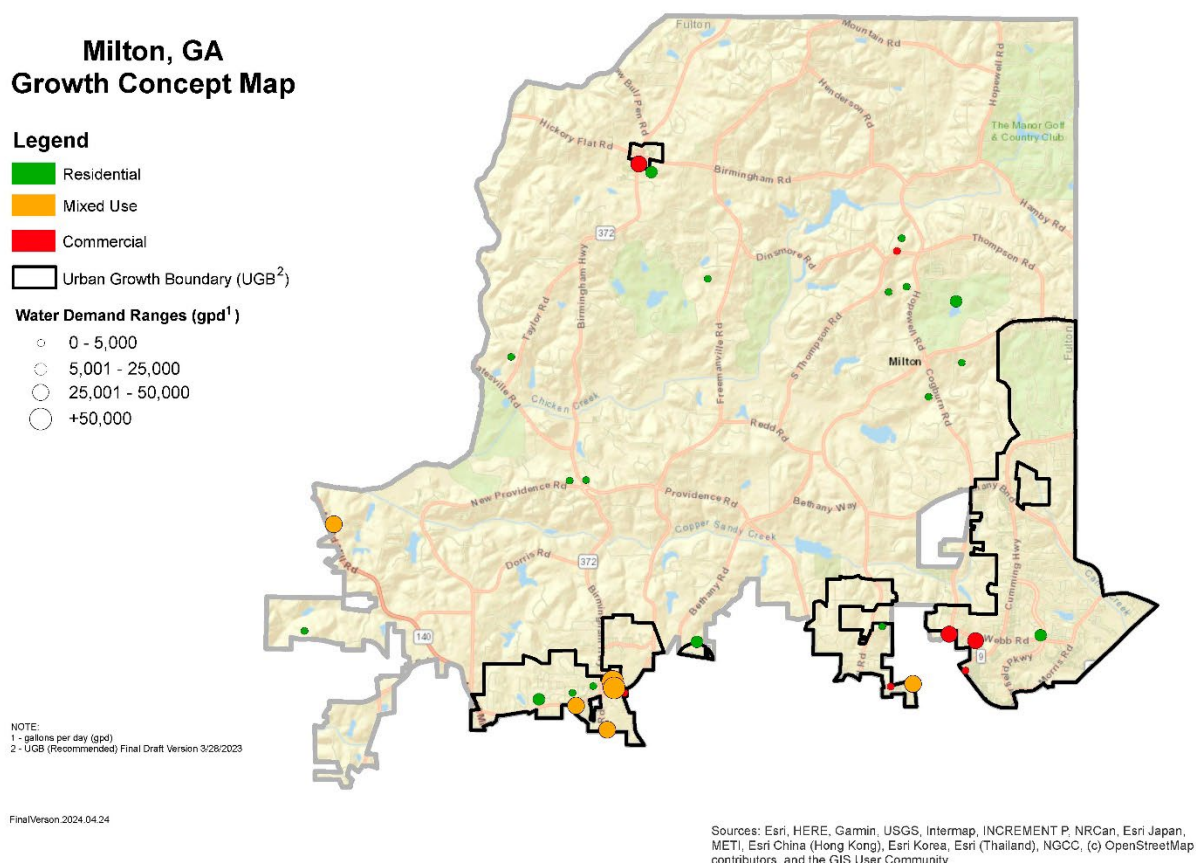


Source: Milton On-Demand GIS Data

4. City-Specific Water Demand Forecast

The water demand forecast for the City of Milton will be used to update the Fulton County's water distribution system hydraulic model and determine if additional infrastructure is needed to provide adequate water service and fire protection to meet future needs out to 2050. Based on the data provided by the city and the new development and redevelopment projects being built or permitted as of February 2024, water demand is expected to increase approximately 0.5 MGD in the future. The projection considers factors such as available land for development, current land use and comprehensive land planning policies by the city, existing per capita water uses extracted through historical billing data, as well as anticipated conservation efforts through the adoption of more water-efficient fixtures. While single-family residential areas may expect the most development, new commercial businesses are the biggest users of water. Figure 6 shows the development areas and future growth for the City of Milton based on the information provided by the city and available planning documents.

Figure 6. Future Growth Areas for the City of Milton



Water demand calculations based on growth beyond developments are not all known by the city; therefore, additional demands were also calculated using ARC population projections and the most current billing data. These water demand results in an expected increase of approximately 0.9 MGD by 2050. Adopting a conservative approach, the demand curve was developed using higher increase in demand as calculated using future development plans. Table 4 and Figure 7 show the historical data and the proposed forecast for the City of Milton. The current demand forecast shows a lower demand projection that follows the most current historical demand and baseline data used for the current demand forecast is less than half of the estimated water demand developed for the 2007 Fulton County Master Plan.

Table 4. Historical and Proposed Future Annual Average Water Demand for the City of Milton

Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2005	NA	3.8	NA
2010	NA	4.6	NA
2017	2.82	NA	NA
2018	3.39	NA	NA

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Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Water Demand Forecast (AADD-MGD)
2019 ³	3.64	NA	NA
2020	3.38	5.7	NA
2021 ⁴	3.46	5.8	NA
2025	NA	6.0	3.9
2030	NA	6.2	3.9
2035	NA	6.5	4.0
2040	NA	NA	4.1
2045	NA	NA	4.2
2050	NA	NA	4.4

Notes:

AADD-MGD = annual average daily demand in million gallon(s) per day.

NA = Not Available

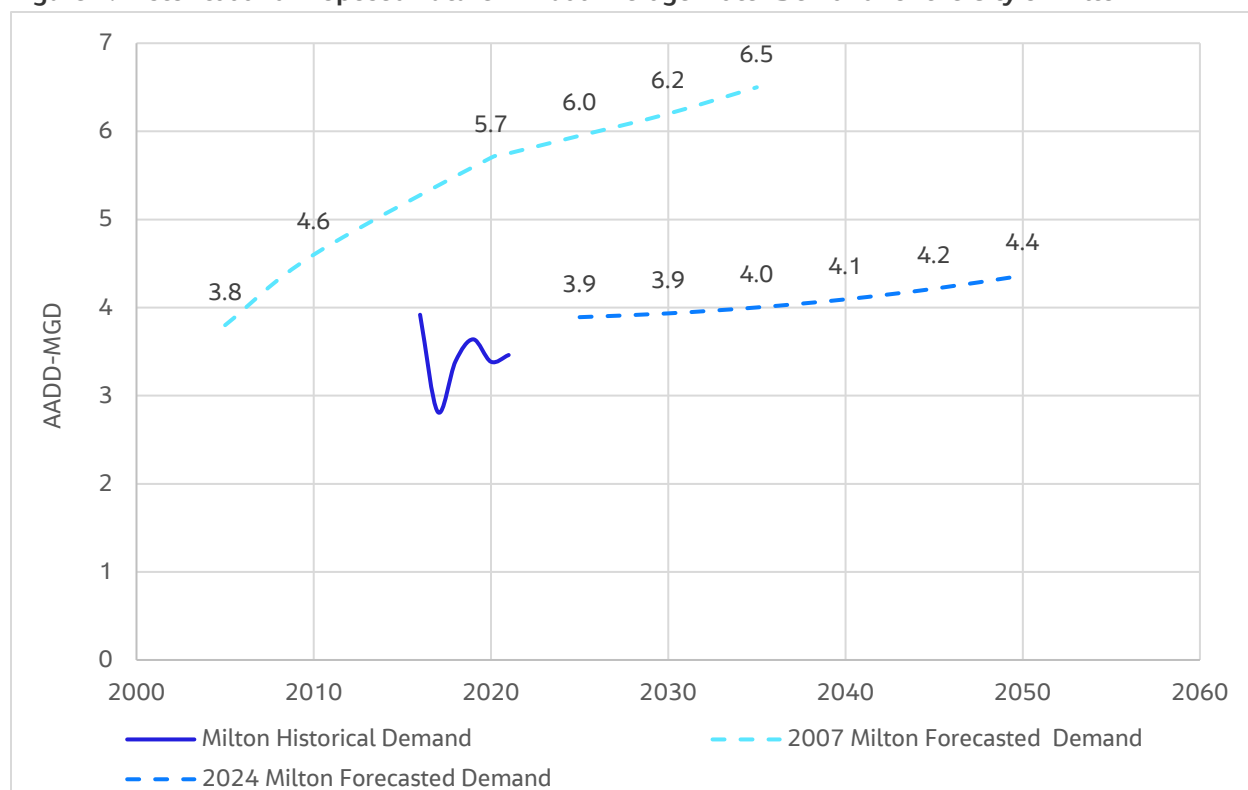
¹ Historical water demand calculated using billing records and water supplied data.

² Water demand forecast as show in the 2007 Fulton County Master Plan.

³ Water demand data for the year 2019 reflects an anomalous higher rate of water consumption that may be attributable to the lower precipitation levels experienced during that year.

⁴ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Figure 7. Historical and Proposed Future Annual Average Water Demand for the City of Milton



5. References

- City of Milton. N.d. Milton, GA | Home. <https://www.miltonga.gov/>.
- City of Milton. N.d. Milton on demand. <https://ondemand-miltonga.hub.arcgis.com/>.
- City of Milton. 2019. *City of Milton Comprehensive Parks & Recreation Master Plan*. March.
- City of Milton. 2021a. *Milton Strategic Plan, 2021-2025*. March.
- City of Milton. 2021b. *Milton Comprehensive Plan 2040*. October.
- City of Milton. 2022. *City of Milton Crabapple Area Personal Transportation Vehicle (PTV) Plan*.
- City of Milton. 2023a. *Milton Final Draft Urban Growth Boundary (UGB) Map*. May.
- City of Milton. 2023b. *Comprehensive Transportation Plan*. December.
- City of Milton. 2024. Milton, GA, Private Development. ArcGIS StoryMaps. <https://storymaps.arcgis.com/stories/90c2a451e1e4495ab3e7c20e43d6c2ea>.
- City of Milton Community Development. N.d. Community Development | Milton, GA. <https://www.miltonga.gov/government/community-development>.
- City of Milton Community Development. N.d. Urban Growth Boundaries | Milton, GA. <https://www.miltonga.gov/government/community-development/zoning/urban-growth-boundaries>.
- JJG. 2008. *Water and Wastewater Master Plan 2007 Update*
- Milton Historical Society. N.d. *History of Milton*. <https://www.miltonhistoricalsociety-georgia.org/history-of-milton.html>.
- U.S. Census Bureau. 2024. Census.gov. <https://www.census.gov/>.
- <https://worldpopulationreview.com/h>Atlanta Regional Commission. 2024. Population and Employment Forecast. <https://atlantaregional.org/atlanta-region/population-employment-forecasts/>

Attachment 1

Meeting Presentation and Meeting Sign-in Sheet



Appendix E

Roswell Water Demand Projections

Water Demand Projections for North Fulton County – City of Roswell

Date:	September 10, 2024	Ten 10th Street, NW
Project name:	Fulton County Water Distribution System Master Plan	Suite 1400
Project no:	EEXK6102	Atlanta, GA 30309
Client:	Fulton County Government	United States
Revision no:	3	T +1.404.978.7600
Document no:	240311082933_48bc3f14	F +1.404.978.7660
		www.jacobs.com

Executive Summary

Fulton County serves water to the cities in North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. As part of the Fulton County Water Distribution System Master Plan, water demand projections for each of the cities were developed to appropriately plan for reliable water service to them in the future.

Fulton County staff and Jacobs met with members from the cities to discuss future developments that could be used to develop water demand projections. The community development and public works departments were very helpful in supplying information. In addition, historical billing data from Fulton County and population projections broken down by census tract through 2050 from the Atlanta Regional Commission (ARC) were used to project growth and demand. In February 2024, the ARC adopted the most recent Series 17 population and employment forecast from 2020-2050.

The water demand projections calculated Fulton County's *Water and Wastewater Master Plan 2007 Update* (2007 Fulton County Master Plan, JJG; 2008) and the newly calculated water demands City of Roswell are shown below in Table ES-1. The new demands show a significantly lower demand trend based on population projections, data provided by the city on new development and redevelopment projects, current and future land use planning policies, existing per capita water uses extracted through historical billing data and conservation from more water-efficient fixtures expected in the future. The historical demand and baseline data used for the current demand forecast is approximately half of the estimated water demand developed for the 2007 Fulton County Master Plan.

Table ES-1. Historical and Projected Annual Average Day Water Demand for the City of Roswell

Year	2007 Water Demand Forecast ¹ (AADD-MGD)	2024 Fulton County Water Demand Forecast (AADD-MGD) ²
2005 ³	12.6	NA
2010 ³	12.9	NA
2020 ³	13.5	6.9
2021 ^{3,4}	13.5	7.1
2025	13.6	7.3
2030	13.7	7.5
2035	13.9	7.8
2040	NA	8.1

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2045	NA	8.8
2050	NA	9.5

Notes:

AADD-MGD = annual average daily demand in million gallons per day.

NA = Not Available

¹ Water demand forecast as show in the 2007 Fulton County Master Plan.

² Includes the water demands as indicated in the Roswell Water Utility Master Plan, 2022, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

³ Historical water demand shown under the 2024 Water Demand Forecast was calculated using billing records and water supplied data.

⁴ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Additional information about the development of the Roswell water demand projection is included in the Technical Memorandum herein.

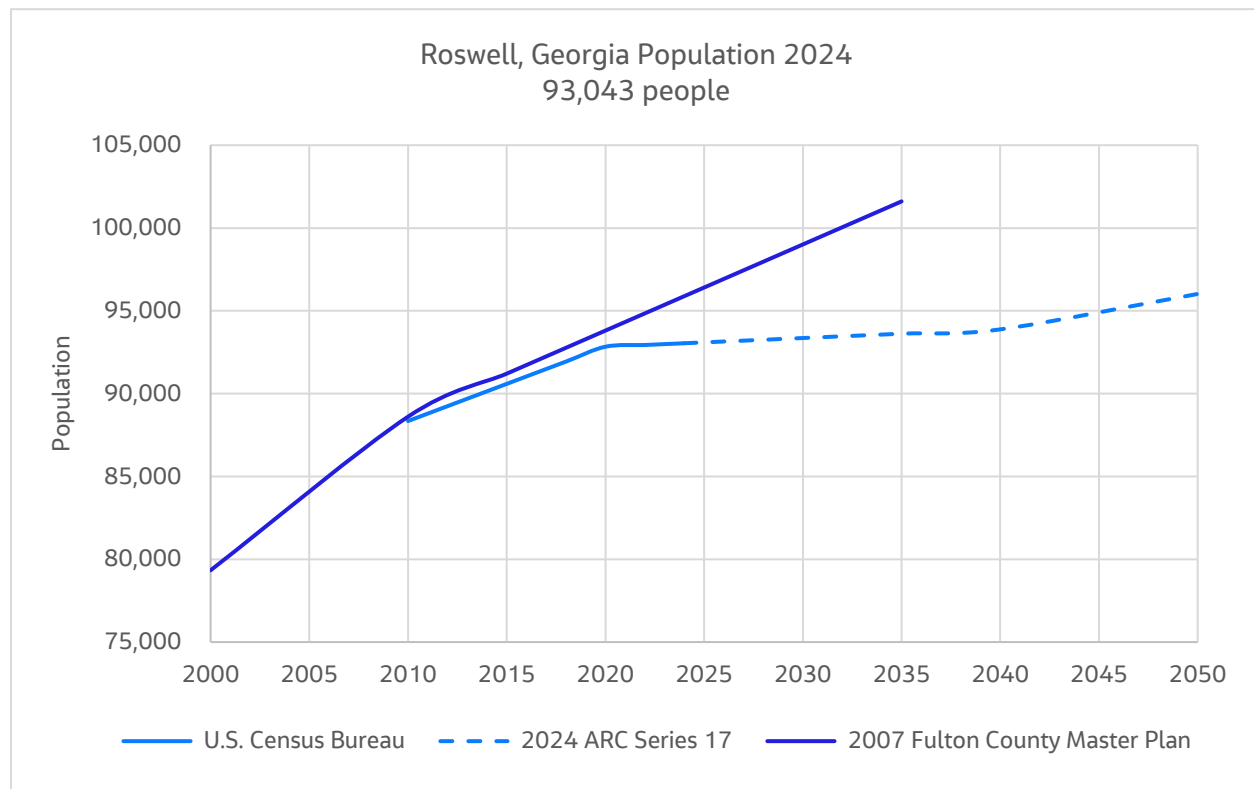
1. Introduction

As part of the *Fulton County Water Distribution System Master Plan*, it is essential to forecast water demand for the municipalities within North Fulton County, including Alpharetta, Johns Creek, Milton, and Roswell. To determine the future water demands for the cities, meetings were held with the community development departments of each city. This memorandum summarizes the outcomes of the meeting with the City of Roswell, integrating research and insights from the city planning departments and various sources to develop water demand projections.

In 1828, Roswell King traveled to the Cherokee Nation's "gold country" to investigate business opportunities. In his travels, he came upon the confluence of the Chattahoochee River and Big Creek, and he saw the business potential of harnessing the waterpower of these sources. Roswell King moved to the area in 1836 and established the Roswell Manufacturing Company, a mill to make textiles, using the power of the local rivers. Roswell officially became a city on February 16, 1854 (Roswell Historical Society Library and Archives).

According to the 2020 U.S. Census Bureau data, City of Roswell was home to approximately 92,833 individuals. Today, Roswell extends north from the Chattahoochee River, encompassing historic homes, a downtown, and green spaces laid over the rolling hills of north-central Georgia. Roswell is the eighth largest city in Georgia and has a population in 2024 of 93,043. Figure 1 illustrates the historical population growth and its projected population increase as published by the ARC in 2024.

Figure 1. Population Trend for the City of Roswell



Source: U.S. Census Bureau, Series 17 Population Forecast from 2020-2050 (ARC, 2024) and 2007 Fulton County Master Plan

Roswell Water Utility operates the Roswell Water Treatment Plant (WTP) and maintains its distribution mains within the south-central portion of the city. Fulton County provides water from the Tom Lowe Atlanta-Fulton County Water Treatment Plant for the remainder of the city. The portion of Fulton's

distribution system within the city limits of Roswell is comprised of 336 miles of pipe of multiple materials such as cast iron, copper, ductile iron, galvanized iron, PVC, RCP, and steel. There is one booster pump station (three pumps) on Mansell Road, two elevated tanks on Hembree Road and two elevated tanks on Hackett Road.

Per the population projections outlined in 2007 Fulton County Master Plan, the water demand for Roswell was forecasted to reach 13.5 million gallons per day (MGD) by the year 2020, with a slight increase to 13.9 MGD by 2035 as shown in Table 1. These estimates were based on population projections, with per capita water usage rates set at 81.3 gallons per capita per day (GPCD) for residential purposes and 53.6 GPCD for non-residential purposes, as stipulated in the 2007 Fulton County Master Plan.

Table 1. Previous Water Demand Projections of Cities within Fulton County (MGD)

Jurisdiction	Water Demand (MGD)				
	2005	2010	2020	2030	2035
Roswell	12.6	12.9	13.5	13.7	13.9
Alpharetta	7.6	11.4	14.5	16.4	17.4
Johns Creek	9.2	9.5	10.3	10.6	10.7
Milton	3.8	4.6	5.7	6.2	6.5

Source: 2007 Fulton County Master Plan

2. Meeting Summary

On December 4, 2023, representatives from the Jacobs team and Fulton County team convened with officials from the City of Roswell to discuss the *Fulton County Water Distribution System Master Plan*. Attachment 1 shows the meeting presentation and sign-in sheet. This plan emphasizes the municipalities in North Fulton County outside of Atlanta's service area, including Roswell, Alpharetta, Johns Creek, and Milton. The primary objective of these discussions was to evaluate the future requirements of Roswell for the *Fulton County Water Distribution System Master Plan*.

Unlike other North Fulton County municipalities, Roswell operates and maintains the Roswell WTP to service a portion of its water demand needs. In addition to the plant, Roswell Water Utility operates and maintains 89 miles of distribution waterline mains and three elevated storage tanks within the Roswell water distribution system. Roswell Water Utility maintains six interconnections with the Fulton County water distribution system. Of the six interconnections, Roswell Water Utility primarily uses two interconnections, GA 9 Interconnect and Pine Grove Road Interconnect. The other four interconnections located at Warsaw Road (removed and replaced with new Wavetree interconnection), Riverside Road, Willeo Road, and Grimes Bridge Road are valved off and serve as emergency backup water supplies for the Roswell Water Utility service area. Fulton County is responsible for maintaining and testing the interconnect meters and Roswell is responsible for maintaining and testing the backflow prevention valves. Fulton County provides water service to those customers not served by the Roswell Water Utility.

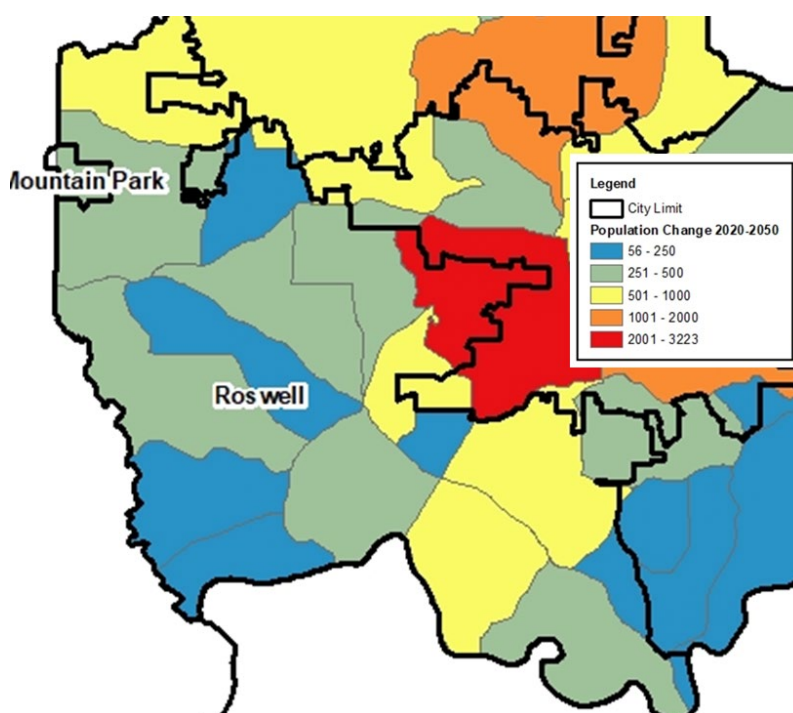
According to Fulton's historical water usage data, Roswell has a current water demand of 7.2 MGD and a peak of 10.7 MGD. Roswell staff believes that the peak demand may have occurred in June and July with outdoor water usage. This demand excludes what the City of Roswell provides from its treatment plant and distribution system.

The Atlanta Regional Commission (ARC) has developed a series of population and employment forecasts within 21 counties up to the year 2050. Population projections per census tract for Roswell are presented in Figure 2. ARC population projections indicated an average of 2 percent to 3 percent population growth

per year in Roswell. City of Roswell staff believes that its population growth projection will be closer to 3 percent. While reviewing the ARC population projection map, there is a red-highlighted census tract that indicates a large population change of 2,001 to 3,223. The red census tract on the map seems unexpected to Roswell staff since it represents a more industrial area. In January 2022, Roswell completed the *Roswell Water Utility Master Plan*, which anticipated a 3 percent population growth.

Fulton County and Jacobs team asked if the Roswell staff used the traffic analysis zone (TAZ) U.S. Census Bureau projections. Roswell staff could not confirm the use of TAZ projections; however, they noted that the city does have the *City of Roswell Transportation Master Plan 2023 Update*. The next update to this document is anticipated to occur in 2028. Roswell staff mentioned that in the northwest area of the city, the Grand Reserve subdivision (near the intersection of Grand Litchfield Drive and Arnold Miller Road) anticipated more growth.

Figure 2. Population Projections per Census Tract for North Fulton County



Source: Fulton County Water Distribution System Master Plan

Roswell expects high-density growth to occur in the economic development pod areas only. There are four economic development areas or pods that were identified and discussed. The four pods were described as follows:

- **Roswell Downtown:** This is an older area with more redevelopment and there is a mixed use of residential and commercial.
- **The Mountain Park area:** This is in the northwest part of the city and is described as having single-family units with septic tanks only.
- **The southwest area of the city:** This part of the city is considered built out.
- **The Alpharetta Highway and Holcomb Bridge Road intersection:** These areas are expected to redevelop into new use, adaptive mixed-use and commercial infill.

The Fulton County and Jacobs team later found out the economic development pods had been merged into one development region.

Roswell has considered several redevelopment areas for mixed-use development of residential and commercial uses. The industrial area will have a townhouse development, but there will be a height restriction in these redevelopment areas that typically is three stories. Multi-family units with commercial mixes also have height restrictions that typically are four to five stories. The historic district has a height restriction of three stories, with some exceptions for four-story buildings. The Old Roswell Road area near Harlow has an eight-story limit. Hotels near the intersection of State Road 400 (GA 400) and Holcomb Bridge are restricted to heights of nine to ten stories with permitting. They indicated that the southwest area of the city is mostly built out. Kimberly Clark is one of the major employers in Roswell and the corporation is headquartered in a seven-story building. Adjacent buildings in the area have a maximum height of three stories.

The Fulton County and Jacobs team inquired if Roswell had a fire flow requirement for its emergency demand such as a pressure of 150 pounds per square inch. The fire flow requirement is a standard set to maintain a minimum sufficient water flow and pressure to fire hydrants. Roswell indicated that the Roswell Fire Department input will be recommended. The team will contact the Roswell Fire Department to better understand the fire flow requirement.

Roswell inquired if an additional water storage tank would be considered for future planning. Fulton County staff did respond that the option of an additional water storage tank to ensure water demands are met is a possibility.

3. Future Developments

The City of Roswell has several resources provided on its website, from various city plans such as the *Roswell Water Utility Master Plan* and the *2040 Comprehensive Plan*, as well as the interactive GIS viewer that shows both intended future land use and currently planned developments. Roswell delineated thirteen character areas with distinctive characteristics and aspirations for the future. Figure 3 illustrates Roswell's character areas. These character areas are described in the following sections:

3.1 Estate Residential

This area will continue to share an estate lot pattern; the low-density character of this area also preserves large acres of open space. Much of this area is not currently served by sewer and therefore has limited future development potential at any density greater than that currently existing. Specific land uses in this area are comprised of primarily single-family residential.

3.2 Suburban Residential

This character area continues to foster stable, established suburban neighborhoods. Existing single-family neighborhoods are preserved and protected in their current state, as are pockets of existing other housing types that occur on scattered sites, some within master planned neighborhoods. Suburban Residential areas often reflect a large lot and/or natural environment. Infill and redevelopment opportunities are limited and should be sensitive to scale and character when implemented.

3.3 Neighborhood Residential

Neighborhood Residential areas are established, traditional suburban-oriented neighborhoods often in a subdivision setting, some within large master planned neighborhoods. Neighborhood Residential areas often reflect medium to large lots. Opportunities for infill and redevelopment are limited but should be realized with a commitment to preserving the existing scale and character. All new development is limited to single-family housing with a density and character matching the character area's overall existing patterns.

3.4 Active Neighborhood

Active Neighborhoods areas accommodate small-lot single family and multi-family areas near commercial areas and major roadways. Opportunities for infill and redevelopment are often limited and should be realized while respecting the existing scale and character.

3.5 Neighborhood Serving Area

Neighborhood Serving Area continues to provide commercial uses for nearby existing neighborhoods in a manner that is compatible with their scale and character. It provides for an assortment of retail, restaurant, and services uses within compact, walkable locations centered on key intersections. Within these areas, Roswell will carefully manage transitions of use between them and the adjacent neighborhoods through the controls required by the Unified Development Code (UDC).

3.6 Commercial Mixed-Use

Holcomb Bridge Road west of GA-400 and areas surrounding the GA-400 node will become a mixed-use village paired with open space. New development in the western portion of the character area will create a mixed-use, pedestrian friendly corridor and activity center that builds a better sense of community.

3.7 Major Activity Area

Roswell will capitalize on this major regional access point to provide maximum economic benefit to the city. The perception of this area will change as Roswell invests in streetscape and new road improvements, and investors redevelop underutilized sites with a mix of uses characterized by high quality building materials. The Big Creek Parkway with a bridge connection across GA 400 north of Holcomb Bridge Road is anticipated to begin construction within a few years. Likewise, various conversations involving heavy rail transit or BRT from MARTA have identified this area as a likely location. Therefore, future development should be sensitive to and compatible to the possibility of the area eventually emerging as a Transit Oriented Development.

3.8 Historic Area/Downtown

The Historic District includes Canton Street, Oak Street, Mimosa Boulevard, Atlanta Street, and other areas. This area will continue to serve as a destination point. As change occurs around the Historic District, the area will need to continue to be protected and additional threatened historic sites should be protected and added to the district. The Groveway Community will implement design initiatives to create a community that includes pocket parks; mixed residential and retail uses; and a strong connection visually and aesthetically to Canton Street. The Historic District Master Plan will be a guiding document for this area.

3.9 Industrial / Flex

This cluster of industrial and heavy commercial development will continue to function as an office and business distribution district. The uses in the area will be flexible however, allowing transitions to new uses as economic demand changes. These new uses may include mixed residential and office development. This area is not located along a major gateway to the city and is also not located adjacent to Roswell's cultural or recreational assets. Therefore, it is ideally situated to continue functioning as an employment center within the city limits with an additional mix of uses.

3.10 Highway 9

A gateway will be established at the City boundary along the Alpharetta Highway/SR 9 corridor to announce arrival into Roswell. Existing big-box developments will have evolved either into a new use or enhanced with additional amenities to keep viable beyond the typical 20-year life cycle. A regulatory framework that encourages flexibility of uses for these existing structures will generate economic value for Roswell. The vacant or underutilized strip centers will achieve adaptive mixed-use and commercial infill.

3.11 Parkway Village

This corridor has a historic character. Any transportation project that is implemented along this corridor will preserve the existing character of the corridor. Vehicular and pedestrian interparcel access between adjacent parcels has been achieved. The single-family residences located along the corridor will be incrementally converted to office/professional use.

3.12 Holcomb Bridge Road

This area will be regulated by an overlay district which will protect the established single-family neighborhoods to the north and south of the corridor. The overlay will include signage or a similar element that is also found in the Parkway Village Character Area portion of the corridor. This corridor will be traversed by multi-use trails which connect the Big Creek Park, the Chattahoochee River, and the adjacent single-family neighborhoods. The development along the corridor will be a mix of uses to allow for residential to integrate with retail and commercial. A gateway will be established at the eastern end of the character area to create a sense of arrival.

3.13 Conservation / Greenspace

This character area includes a portion of the Chattahoochee River National Recreation Area. This undeveloped and protected parkland is bounded on the west by Big Creek, which flows from the character area south to the Chattahoochee River. This area will continue to serve as a major recreational area for Roswell and the region. Further opportunities to provide access to the park via walking or cycling should be explored. This park serves as a major piece of the interconnected trail system envisioned for Roswell.

In Table 2, each of the planned and ongoing developments are listed, along with the character area of the city in which they are located, the location of the development (address), description (number of housing units, commercial description), water demand, and timing (expected completion year). Table 2 identifies developments from the Roswell Community Development online viewer. The viewer illustrates developments in four categories: Pending, Approved, Under Construction, and Denied. The expected completion year (Timing column) is not stated on the viewer. The table lists active and potential development projects in Roswell, arranged alphabetically by location (Character Area) and development name, respectively.

Table 2. Ongoing and Future Development Plans for the City of Roswell

Name	Location (Character Area, Address)	Description	Water Demand (gallons/day)	Timing	Notes
Alstead Shops	Commercial Mixed Use. – 2000 Holcomb Bridge Rd	Holcomb Bridge Rd west of GA 400 and surrounding area	2,200	Under Construction	NA

Name	Location (Character Area, Address)	Description	Water Demand (gallons/day)	Timing	Notes
		Retail shopping – 11,200 SF, 60 parking spaces. Mixed-use pedestrian. Redeveloped.			
East Village Redevelopment	Commercial Mixed Use. - 2600 Holcomb Bridge Rd	350 apartments, 76 townhomes, 6,000 SF commercial. Mixed-use pedestrian. Redeveloped.	90,000	Under Construction	NA
Etris Grove	Suburban Residential Central and southwest cluster – 12155 Etris Rd	27-lot single-family neighborhood. Infill and redevelopment should be limited with sensitivity to scale.	5,960	Under Construction	There are five zones in this area matching the height of the neighborhood.
Ferncroft	Estate Residential Northwest area – 845 Cox Rd	24 Estate Lots. The pattern is low density, with 1 dwelling unit/ acre requirement. Preserves large acres of open space.	5,420	Under Construction	Currently, it is not served by sewer.
Maison Subdivision	Active Neighborhood. 11310 Houze Rd	7-lot single-family and multi-family residential near commercial areas and major roadways.	2,360	Under Construction	NA
Parkside Estates	Neighborhood Residential. Various designated larger areas – 9050 Fouts Rd	45-lot single-family homes and townhomes. Infill and redevelopment should be limited. Typically, it is medium to large lots.	9,200	Under Construction	NA
Roswell Community Mosque	Neighborhood Serving – 13170 Crabapple Rd	Commercial use (Place of Worship) for nearby neighborhoods. 3 buildings 48,000 SF, 174 parking spaces	59,400	Pending	NA
Roswell Water Utility	6 interconnections with Fulton County Water	Roswell Water Utility to purchase water from Fulton County Water to supplement demands.	20,000–1,240,000	2024–2050	Refer to Section 3.15 for more details.

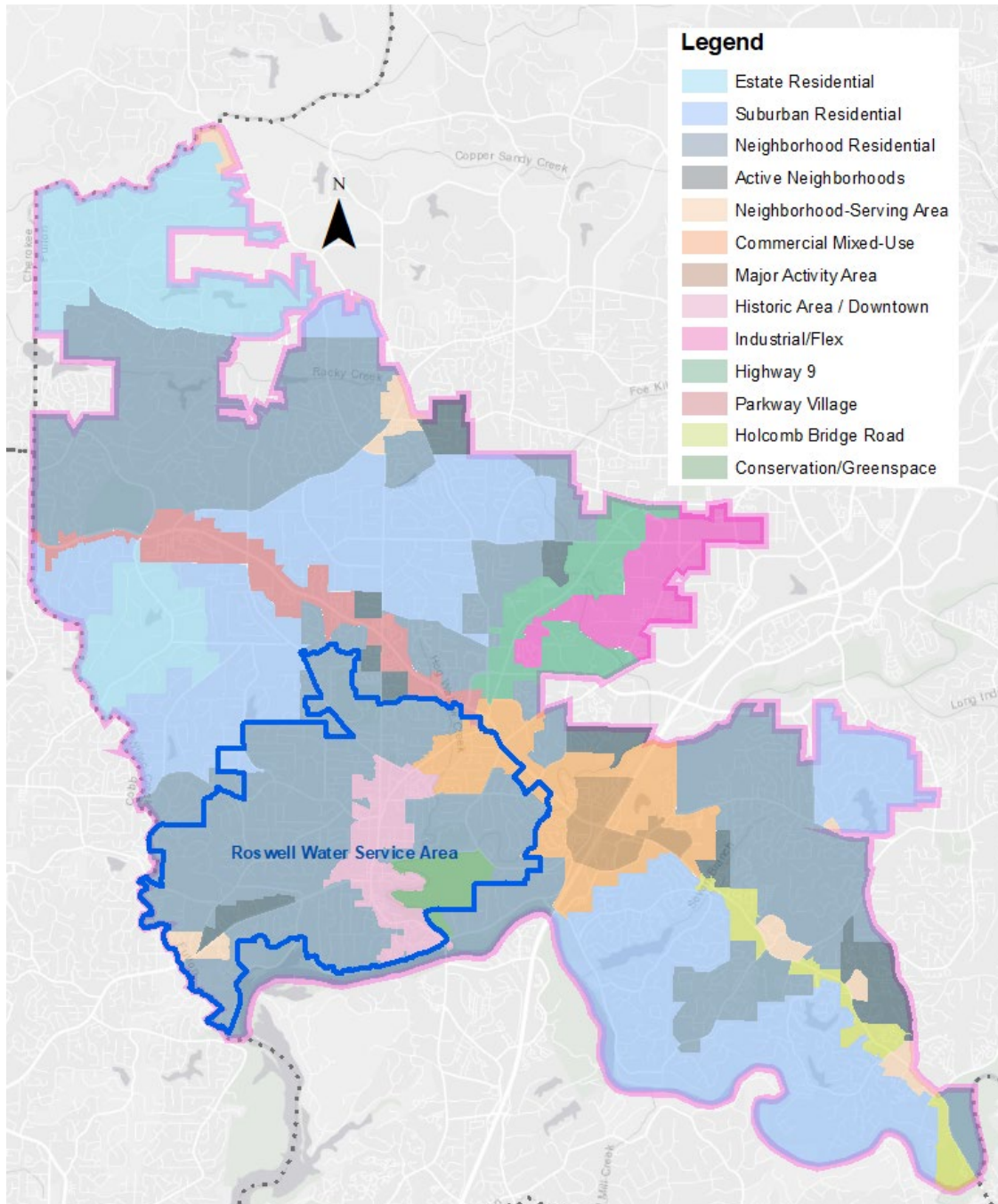
Source: Roswell GIS Development Projects Map Viewer

The Community Development Online GIS data illustrates 65 development projects on March 6, 2024. Of these, 30 percent of the development projects were within the Roswell Water Utility service area, and the rest will be served by Fulton County water distribution.

Figure 3 illustrates the Roswell Water Utility service area with its various character areas, which are identified in the 2040 *Comprehensive Plan*. The Roswell Water Utility serves the area that is outlined in blue. The Fulton County water service area provides water to the remainder of the city that is not served by the Roswell Water Utility. Roswell has adopted UDC regulations and guidelines. Roswell will use the

design-based provisions of the UDC in the character areas identified in the *2040 Comprehensive Plan*. Roswell manages transitions of use between character areas and the adjacent neighborhoods through the controls required by the UDC.

Figure 2. Roswell Character Areas with the Roswell Water Service Area Boundary

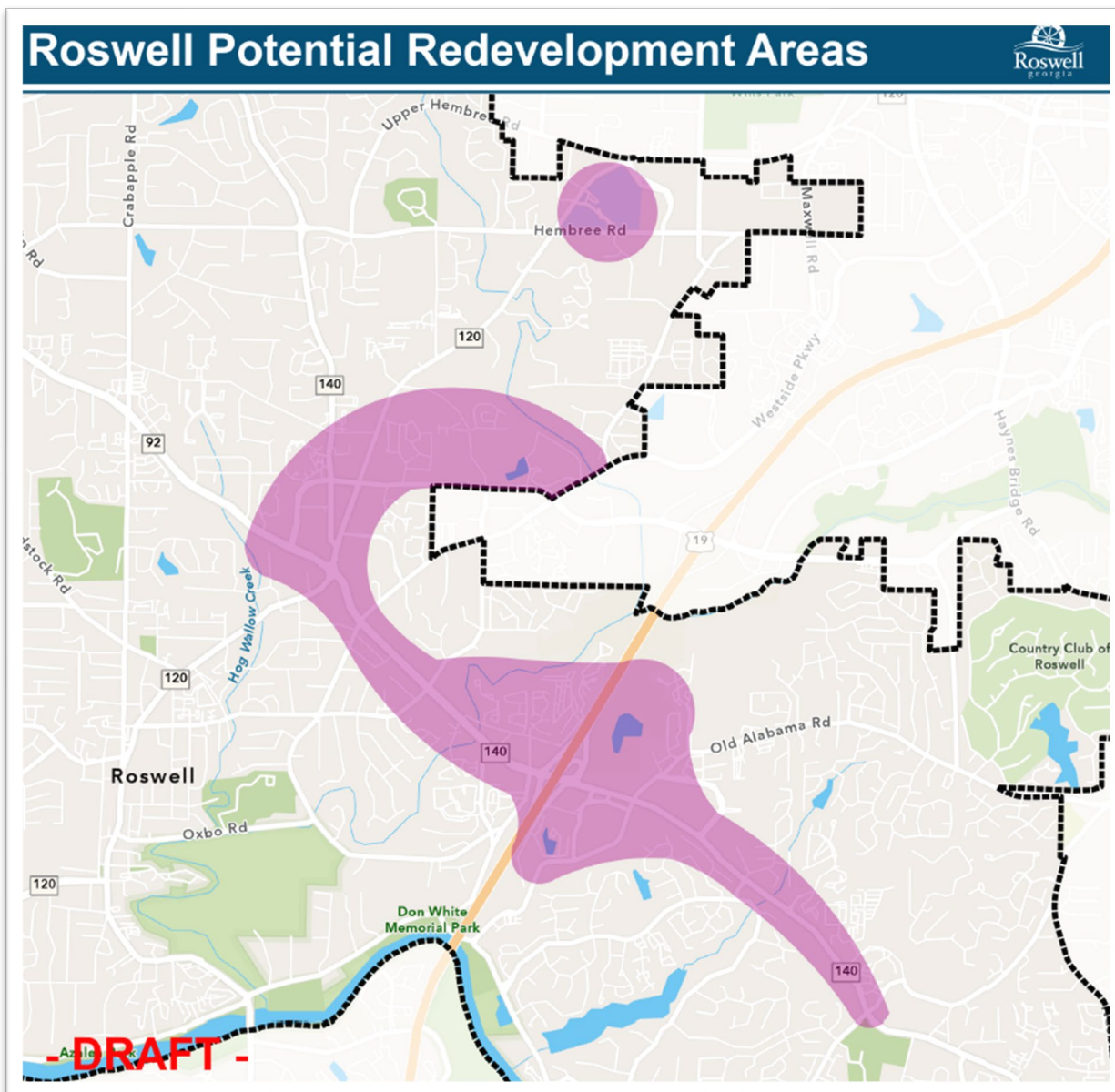


Source: 2040 Comprehensive Plan

3.14 Redevelopment Areas

Using the *Strategic Economic Development Plan*, the City of Roswell pursued preserving and advancing the local economy. The city will encourage redevelopment in several concentrated areas. Roswell also has used the *Urban Redevelopment Plan* to commit public investment within these redevelopment areas. From the Livable Centers Initiative studies, the city will undertake projects based on the study results of an action plan consisting of transportation, regulations, and housing projects. The draft map of potential redevelopment areas (Figure 4) shows these locations.

Figure 3. Draft Map of Roswell Potential Redevelopment Areas



Source: Roswell GIS Department

These potential redevelopment areas are along Holcomb Bridge Road (GA 140) and near North Fulton Medical Center. Since most of the redeveloped area is outside the Roswell Water Utility service area and will be served by Fulton County water distribution lines, it is recommended the water service to these areas

be evaluated. Table 3 illustrates the estimated land use areas to be redeveloped based on the preceding map and GIS data. The proposed redevelopment's total area is approximately 1,373 acres.

Table 3. Redevelopment Land Use Composition

Land Use	Redevelopment Percent Area by Land Use	Redevelopment Area (Acres)	Percent Area by Land Use
Neighborhood-serving Area	18%	77	6%
Holcomb Bridge Road	30%	115	8%
Major Activity Area	100%	349	25%
Commercial Mixed-Use	18%	346	25%
Highway 9	61%	485	35%
TOTALS		1,373	100%

Source: Calculated by Roswell Future Land Use GIS Data

3.15 Roswell Water Utility Master Plan and North Fulton County Water Distribution

Water demands in the system are dependent on the population and number of customers served and their associated water use. Roswell Water Utility developed the *Roswell Water Utility Master Plan* in 2022. Roswell Water Utility operates the Roswell WTP (3.3 MGD) and maintains distribution mains within the south-central portion of Roswell. The capacity of the treatment plant is limited by the Georgia Environmental Protection Division water withdrawal permit (Permit Number 060-1209-01; effective date October 28, 2021; expiration date October 28, 2031) and limits withdrawal from Big Creek to a monthly average of 2.8 MGD.

Roswell Water Utility also operates a groundwater well system that is permitted to withdraw a monthly average rate of 0.167 MGD from a well located at 9400 Willeo Road (Permit Number #060-0007). The groundwater is pumped from the well to the Michael J. Leonard Groundwater Treatment Plant (Permit Number #1210009) located at 485 Willeo Road. The treated groundwater then is blended into the distribution system via a connection at Willeo Road and GA 120. The groundwater is currently used as needed.

Roswell Water Utility implemented a successful and aggressive water conservation rate structure in 2015 and continues other incentives to encourage customers to conserve water. Average annual indoor residential per capita water consumption declined from 75 GPCD in 2015 to 55 GPCD in 2020.

In the *2040 Comprehensive Plan*, all of the historic district and 42 percent of the neighborhood residential character areas are indicated as being served by Roswell Water Utility (along with a small percentage from adjacent character areas near the Roswell Water Service Area). However, the *Roswell Water Utility Master Plan* developed historical and projected water demands for the Roswell water system. Table 4 illustrates the projected growth of water demand for Roswell and the projected demand to be purchased from Fulton County.

Table 4. Roswell Utility Water System Demand Projections

Year	Monthly Average Daily Demand (MGD)	Monthly System Peak Demand (MGD)	Demand Reduction from Water Conservation	Monthly Average Daily Finished Water Production from WTP (MGD)	Monthly Average Daily Withdrawal from Big Creek (MGD)	Monthly Average Daily Well Production (MGD)	Monthly Average Daily Purchase from Fulton County (MGD)
2017	1.47	1.63	--	1.46	1.48	0.00	0.01
2018	1.53	1.70	--	1.52	1.54	0.00	0.01
2019	1.73	2.18	--	1.69	1.74	0.00	0.04
2020	1.79	2.07	0.1%	1.76	1.79	0.00	0.03
2021	1.84	2.21	0.1%	1.82	1.86	As Needed	0.02
2022	1.90	2.27	0.1%	1.88	1.91	As Needed	0.02
2023	1.95	2.34	0.1%	1.93	1.97	As Needed	0.02
2024	2.01	2.41	0.1%	1.99	2.02	As Needed	0.02
2025	2.07	2.48	0.1%	2.05	2.08	As Needed	0.02
2026	2.12	2.55	0.1%	2.10	2.14	As Needed	0.02
2027	2.19	2.62	0.1%	2.17	2.21	As Needed	0.02
2028	2.25	2.70	0.1%	2.23	2.27	As Needed	0.02
2029	2.32	2.78	0.1%	2.30	2.34	As Needed	0.02
2030	2.37	2.85	0.5%	2.35	2.40	As Needed	0.02
2040	3.14	3.77	0.5%	2.75	2.80	0.17	0.22
2050	4.16	4.99	0.5%	2.75	2.80	0.17	1.24
2060	5.51	6.61	0.5%	2.75	2.80	0.17	2.59
2070	7.29	8.75		2.75	2.80	0.17	4.37

Source: Roswell Water Utility Master Plan, 2022. Appendix F – Water Conservation Plan. Table 8-Roswell Water System Demand Projections.

Roswell is projecting limited use of the Fulton County Water Distribution System through 2030; emergency use only from the six interconnections. After 2030, Roswell is projecting the need to use Fulton County to balance water demands in its service area, 0.22 MGD in 2040 to 1.24 MGD in 2050.

In Section 2.6 of the *Roswell Water Utility Master Plan*, Roswell identified several customers within the city's water system boundary that are currently being served by Fulton County because of low pressures in the city's system, which leads to lost revenue by the city. Roswell is evaluating the cost of upgrades to tie these customers to the city's water system:

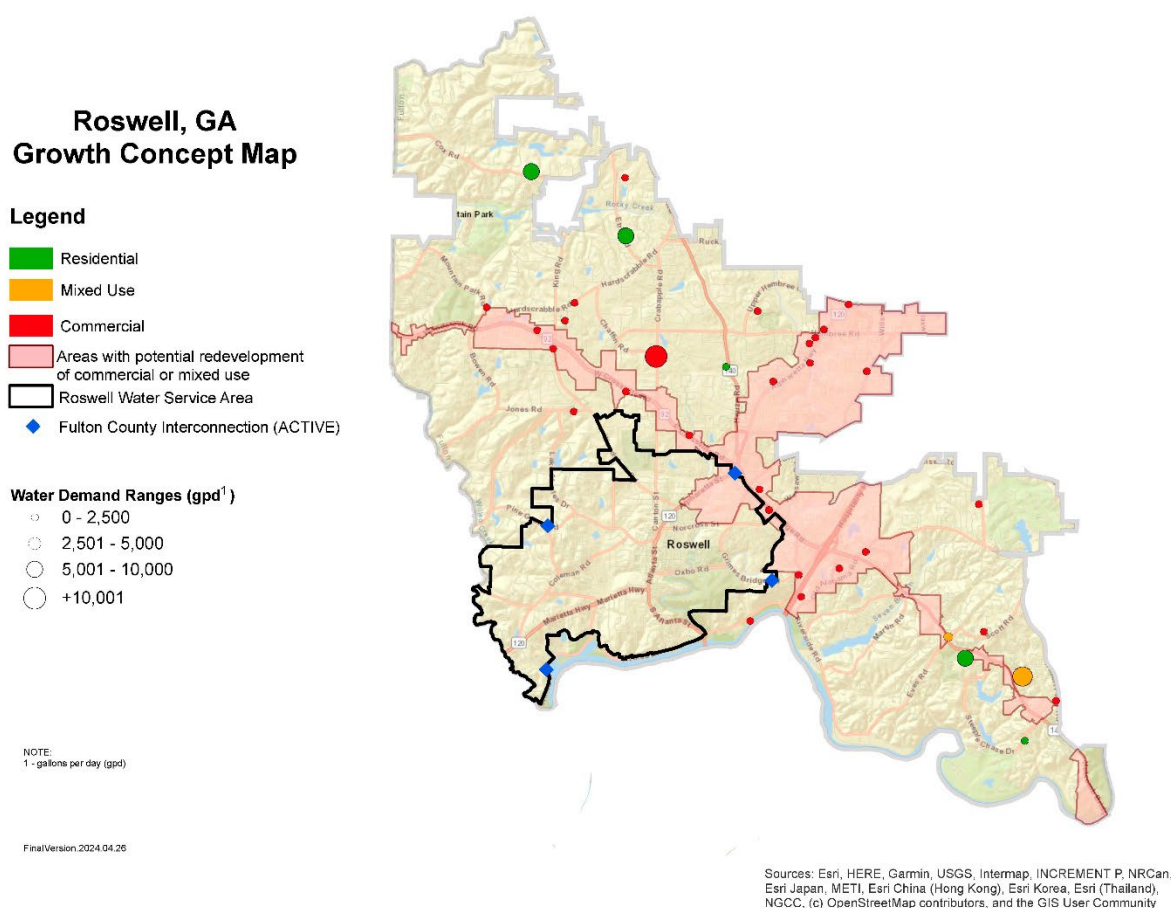
- Swaybranch Drive between Marketplace Road and Warsaw Road
- Wavetree Drive

- Woodstock Road, including Amber Place, Legacy Oaks, Oak Lane, new Fulton County School, Park Bridge Lane, Broadmeadow Cove, and Kiveton Park area
- Park East

4 City-Specific Water Demand Forecast

The water demand forecast for the City of Roswell will be used to update the Fulton County's water distribution system hydraulic model and will determine if additional infrastructure is needed to provide adequate water service and fire protection to meet future needs out to 2050. Based on the data provided by the city and the projects being built or permitted as of February 2024, water demand is expected to increase approximately 1.4 MGD. The projection considers factors such as available land for development, current land use and comprehensive land planning policies by the city, existing per capita water uses extracted through historical billing data, as well as anticipated conservation efforts through the adoption of more water-efficient fixtures. The major water users for the city seem to be commercial and mixed-use development or redevelopment. Figure 5 shows the development areas and future growth for the City of Roswell based on the information provided by the city and available planning documents.

Figure 5. Future Growth Areas for the City of Roswell



Water demand calculations based on growth beyond developments are not all known by the city; therefore, additional demands projections were also calculated using the ARC population projections and the most current billing data. These water demand projections resulted in an expected increase of approximately 2.4 MGD by 2050. The demands includes additional water sales to the City of Roswell

through their interconnection points for sales inside their service area. Adopting a conservative approach, the demand curve was developed using the highest increase in demand as calculated using future development plans. Table 5 and Figure 6 show the historical data and the proposed forecast for the City of Roswell served by Fulton County considering steady growth and redevelopment. The current demand forecast shows a lower demand projection that follows the most current historical demand. The baseline data used for the current demand forecast is half of the estimated water demand developed for the 2007 Fulton County Master Plan.

Table 5. Historical and Proposed Future Annual Average Water Demand for the City of Roswell

Year	Historical Water Demand ¹ (AADD-MGD)	2007 Water Demand Forecast ² (AADD-MGD)	2024 Fulton County Service Area Water Demand Forecast (AADD-MGD)	Roswell Water Utility Interconnections Water Demand (AADD-MGD) ³	2024 Total Fulton County Water Demand Forecast (AADD-MGD)
2005	NA	12.6	NA	NA	NA
2010	NA	12.9	NA	NA	NA
2017	5.8	NA	NA	NA	NA
2018	6.9	NA	NA	NA	NA
2019 ⁴	7.4	NA	NA	NA	NA
2020	6.9	13.5	NA	NA	NA
2021 ⁵	7.1	13.5	NA	NA	NA
2025	NA	13.6	7.3	0.02	7.3
2030	NA	13.7	7.5	0.02	7.5
2035	NA	13.9	7.6	0.12	7.8
2040	NA	NA	7.8	0.22	8.1
2045	NA	NA	8.0	0.73	8.8
2050	NA	NA	8.3	1.24	9.5

Notes:

AADD-MGD = annual average daily demand in million gallon(s) per day

NA = Not Available

¹ Historical water demand calculated using billing records and water supplied data.

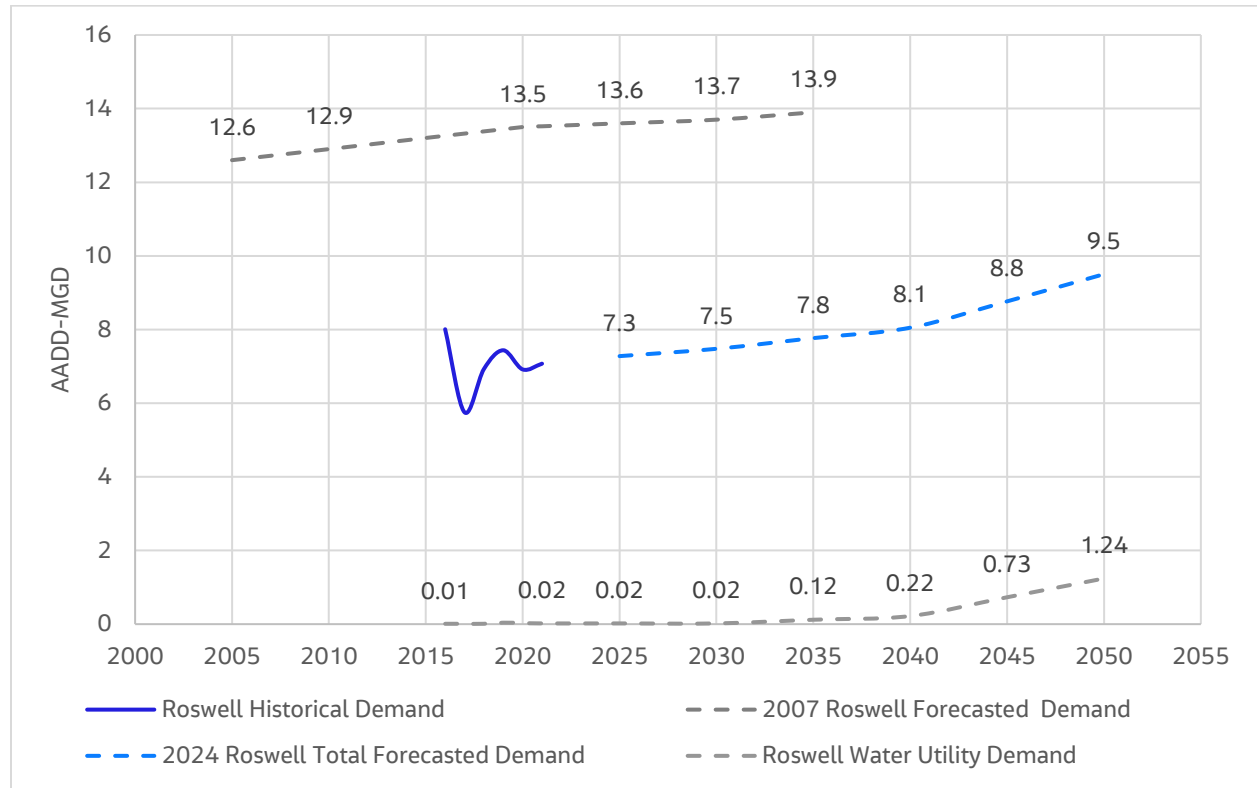
² Water demand forecast as show in the 2007 Fulton County Master Plan.

³ As indicated in the *Roswell Water Utility Master Plan, 2022*, Table 8—Roswell Water System Demand Projections (Appendix F—Water Conservation Plan), there is an increase in the water purchase from Fulton County to serve the Roswell Water service area to fulfill its demand within its water service areas. As a result, the water demand that Fulton County has directly served and the water demand that Roswell Water Utility has acquired for its water service area combine to provide the county's projected future annual average water demand for 2017 - 2050.

⁴ Water demand data for the year 2019 reflects an anomalous higher rate of water consumption that may be attributable to the lower precipitation levels experienced during that period.

⁵ Billing and water supplied data for 2021 were used as the baseline for the 2024 demand forecast.

Figure 6. Historical and Proposed Future Annual Average Water Demand for the City of Roswell



5. References

- Atlanta Regional Commission (ARC). 2024. *Series 17 Forecast Data, covering 2020-2050*. Adopted in February 2024. <https://atlantaregional.org/atlanta-region/population-employment-forecasts/>
- City of Roswell. N.d. Home page. <https://www.roswellgov.com/>.
- City of Roswell. N.d. ARCGIS data. <https://data-roswellga.opendata.arcgis.com/>.
- City of Roswell. 2012. *Strategic Economic Development Plan*. April.
- City of Roswell. 2012. *Historic Gateway Master Plan*. June.
- City of Roswell. 2013. *Roswell Urban Redevelopment Plan*. November.
- City of Roswell. 2021. *2040 Comprehensive Plan*. October.
- City of Roswell. 2021. *Strategic Plan 2021 to 2025*.
- City of Roswell. 2022. *Roswell Water Utility Master Plan*. January.
- City of Roswell. 2023. *Transportation Master Plan*. December.
- City of Roswell Community Development Department. N.d. Community Development website. <https://experience.arcgis.com/experience/599169ff48124fe7becb643a5b8d3d41/page/Home/>.
- Fulton County. 2008. *Water and Wastewater Master Plan 2007 Update*.
- JJG. 2008. *Water and Wastewater Master Plan 2007 Update* Roswell Historical Society Library and Archives. N.d. Roswell Historical. <https://www.roswellhistoricalsociety.org/>.
- Roswell Potential Redevelopment Map (DRAFT) provided by Roswell GIS Department
- U.S. Census Bureau. 2024. Census.gov. <https://www.census.gov/>.
- Atlanta Regional Commission. 2024. Population and Employment Forecast. <https://atlantaregional.org/atlanta-region/population-employment-forecasts/>

Attachment 1

Meeting Presentation and Meeting Sign-in Sheet



Appendix F

Model Development Technical Memorandum

Water Distribution Model Validation

Date:	May 9, 2024	Ten 10th Street, NW
Project name:	Fulton County Master Plan	Suite 1400
Project no:	EEXK6102	Atlanta, GA 30309
Attention:	Anna Skipper	United States
Client:	Fulton County Department of Public Works	T +1.404.978.7600
Prepared by:	Padmanabhan Narayanan, Pat Moore	F +1.404.978.7660
Reviewed by:	Brian Skeens	www.jacobs.com
Document no:	1	
Revision no:	0	

Introduction

Fulton County Department of Public Works (County) requested that Jacobs Engineering (Jacobs) evaluate and validate the 2022 calibrated water distribution model for use in future system capacity planning as part of the Fulton County Water Distribution Master Plan project. Jacobs reviewed the calibrated model and the calibration report of the hydraulic model. The main concerns were regarding the discrepancies found between the pump station flowrates and suction/discharge pressures between model results and SCADA. It was suspected that these were due to pump curve issues in the model. There were also concerns regarding the impact of a large pressure drop in the northwest part of the system which was seen in the iHydrant data. This was speculated to be an issue about an unknown user and/or closed valves in that area. These were investigated further as explained in the model validation and updates section below..

Model Validation and Updates

The original calibrated hydraulic model was reviewed in detail with regard to connectivity, loaded demands, diurnal curves, pump curves, C-factors, fire flow tests, tank levels, pump station suction/discharge pressures, pump station flows, and iHydrant pressures during both average day demand (ADD) and maximum day demand (MDD) scenarios. As part of the main project effort, pipe connectivity review tools in InfoWater Pro were used to assess connectivity issues in the model. Most of these were resolved with GIS data and some areas were prioritized and were resolved in coordination with County staff.

The model validation results presented in this section are for the MDD scenario, where the comparison results are shown between the original calibrated model on the left and the revised model on the right. The comparison was set up for two days -June 21st and 22nd, 2022 (same period as the original calibration). The comparison spreadsheet is included as an appendix to this report.

1. Unknown User Demand/Potential Closed Valves Issue

Upon analysis of the iHydrant pressure monitoring data, most of them showed a significant drop in static pressures when compared to the model pressures during summer months. The largest pressure drop was

seen in iHydrant 18 data as shown in Figure 1. This issue was attributed to a combination of an unknown large demand and potential closed valves close to iHydrant 18. Since the large usage was seen mostly in summer months it is likely due to outdoor water usage. For iHydrant 18, the pressure drop was higher in the summer of 2022 compared to the summer of 2023 where it was more intermittent as shown in Figure 2.

The proximity to iHydrant 18 also suggested that valves might be closed on the intersection of Birmingham Road and Freemanville Road between the 12" and 24" lines. Field investigations seem to corroborate that closed valves existed as suspected in this area.

The location of the unknown user is suspected to be somewhere between Birmingham Road and Wood Road as highlighted in Figure 2. For the purposes of model validation, a demand of 800 gpm was loaded close to the White Column Country Club with a diurnal pattern that matched the pressure drop that was seen in the iHydrant data. The diurnal pattern was developed where there is a constant demand at around 50% and the total demand increases steadily starting from 1:00 AM, peaking at 6:00 AM, and dropping back to the constant demand around 11:00 AM with a higher peak on the 2nd day as shown in Figure 3.

The comparison results of the monitored iHydrant data for the revised model are shown in Figures 4-10. Overall, these results seemed to match quite well.

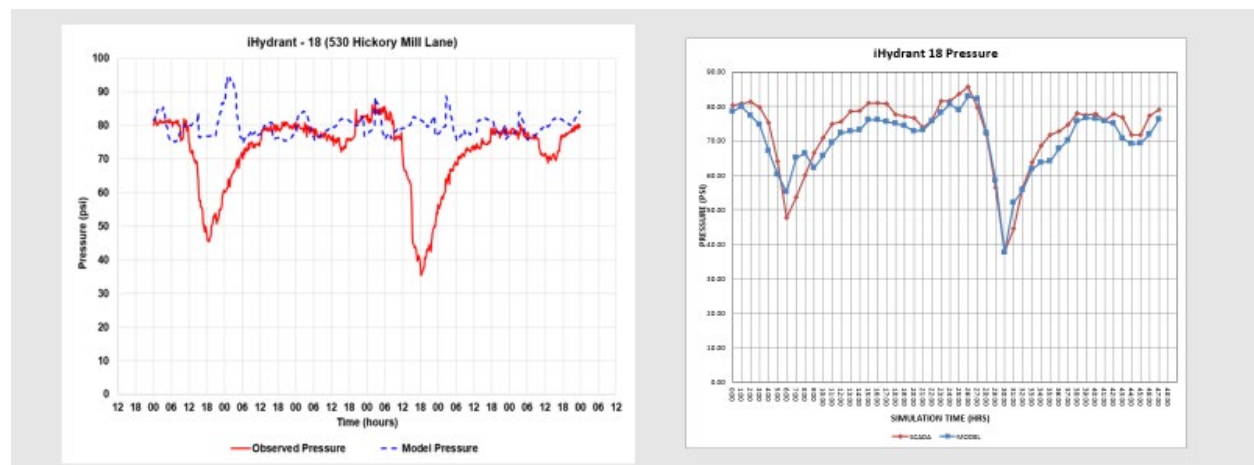
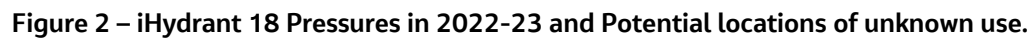


Figure 1 – iHydrant 18 Pressures Comparison



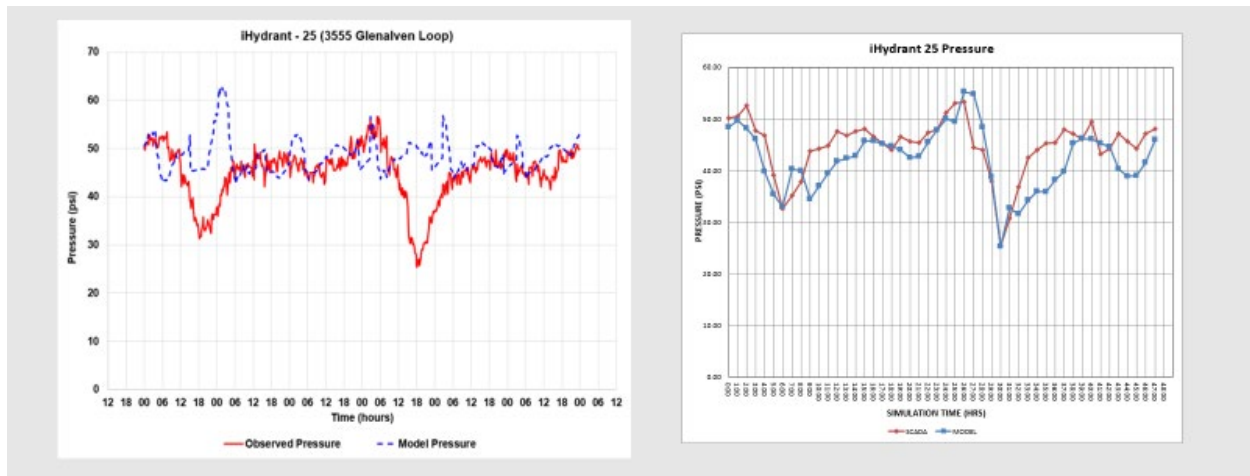


Figure 4 – iHydrant 25 Pressures Comparison

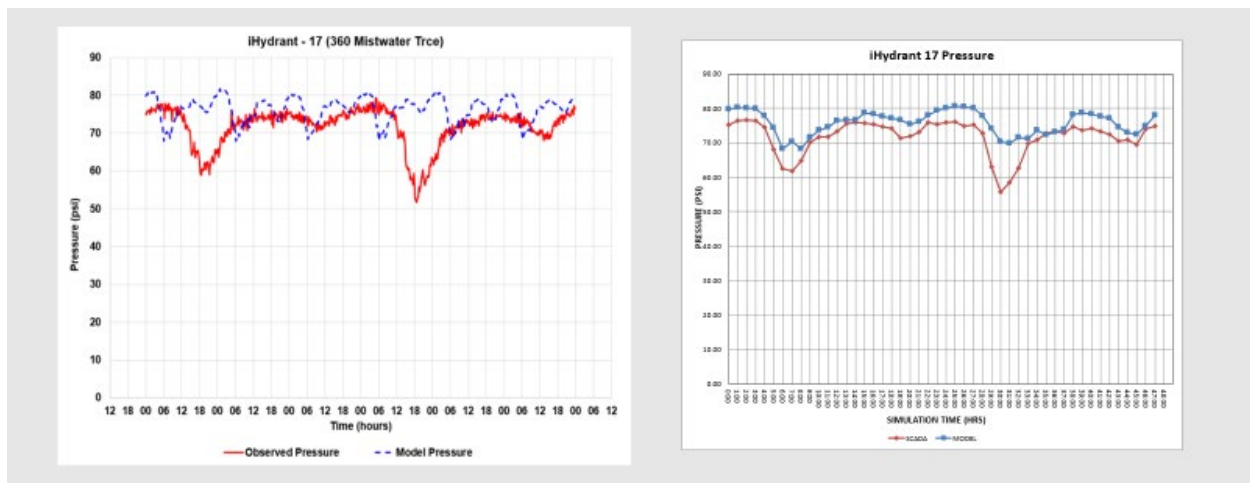


Figure 5 – iHydrant 17 Pressures Comparison

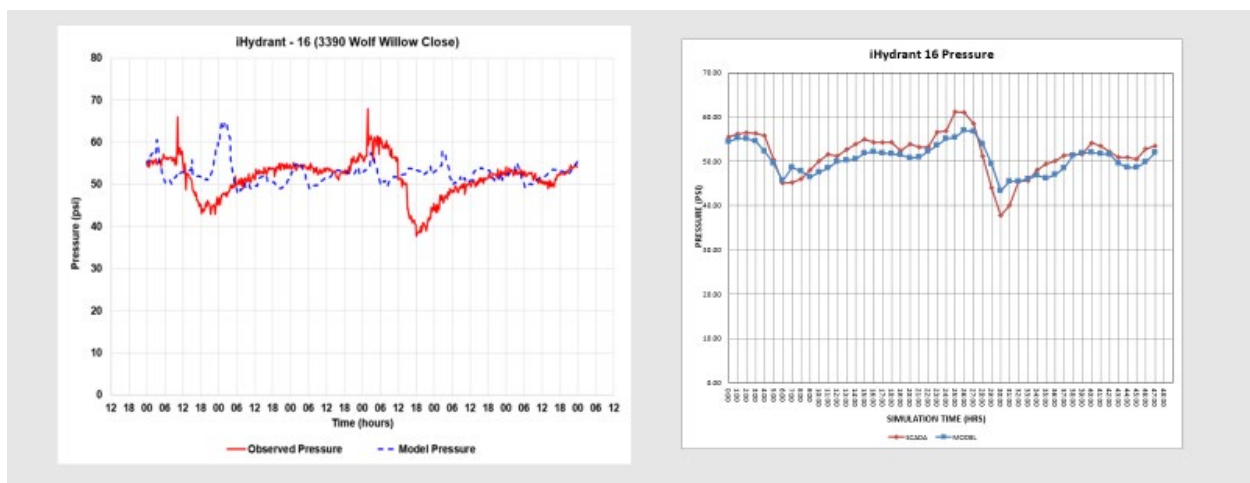


Figure 6 – iHydrant 16 Pressures Comparison

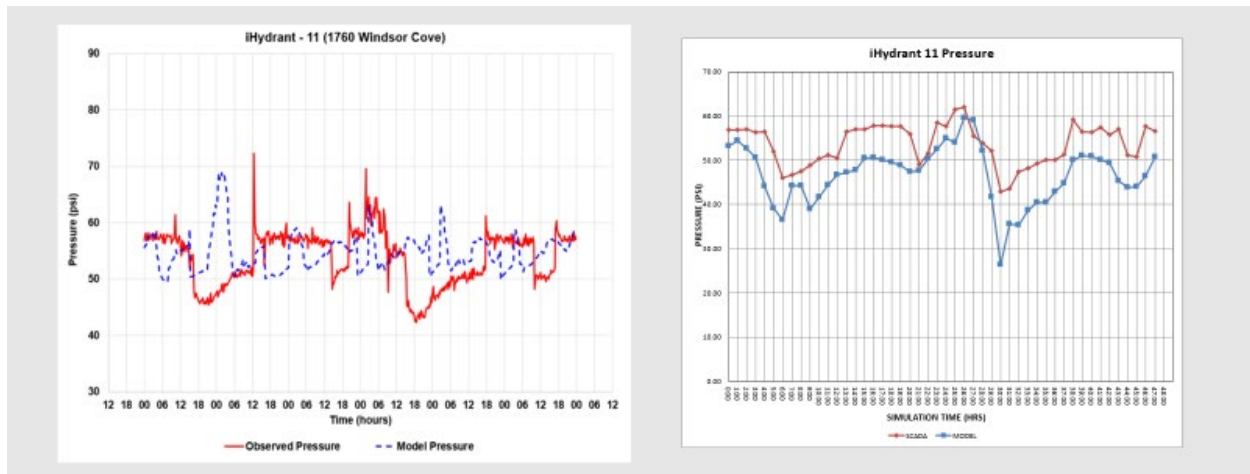


Figure 7 – iHydrant 11 Pressures Comparison

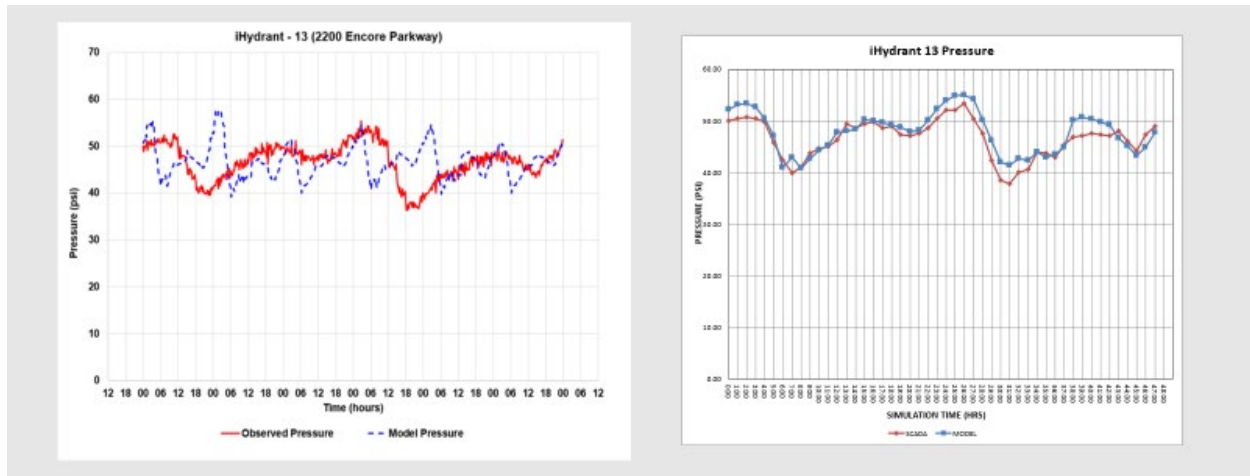


Figure 8 – iHydrant 13 Pressures Comparison

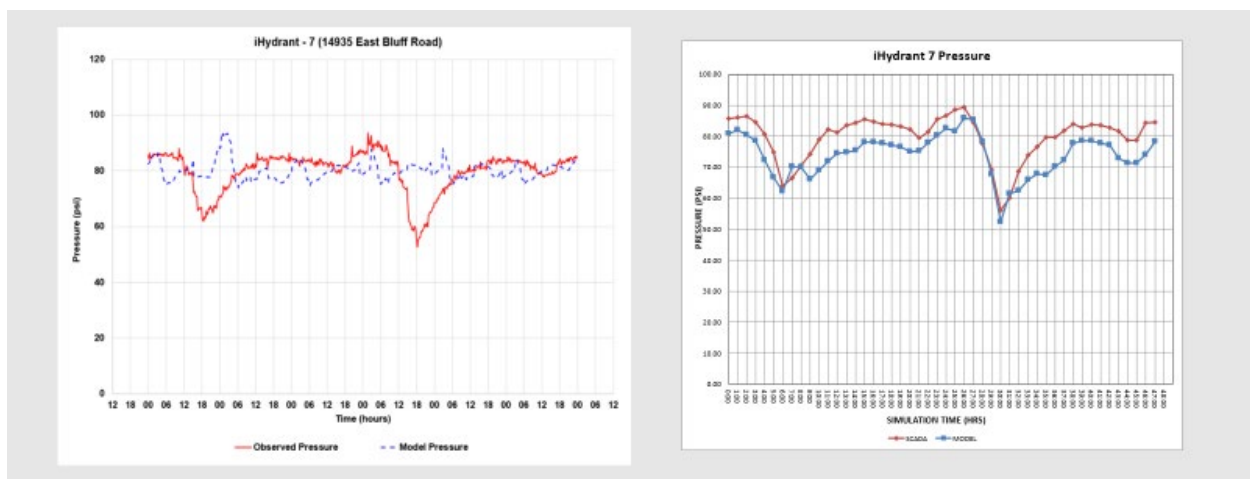


Figure 9 – iHydrant 7 Pressures Comparison

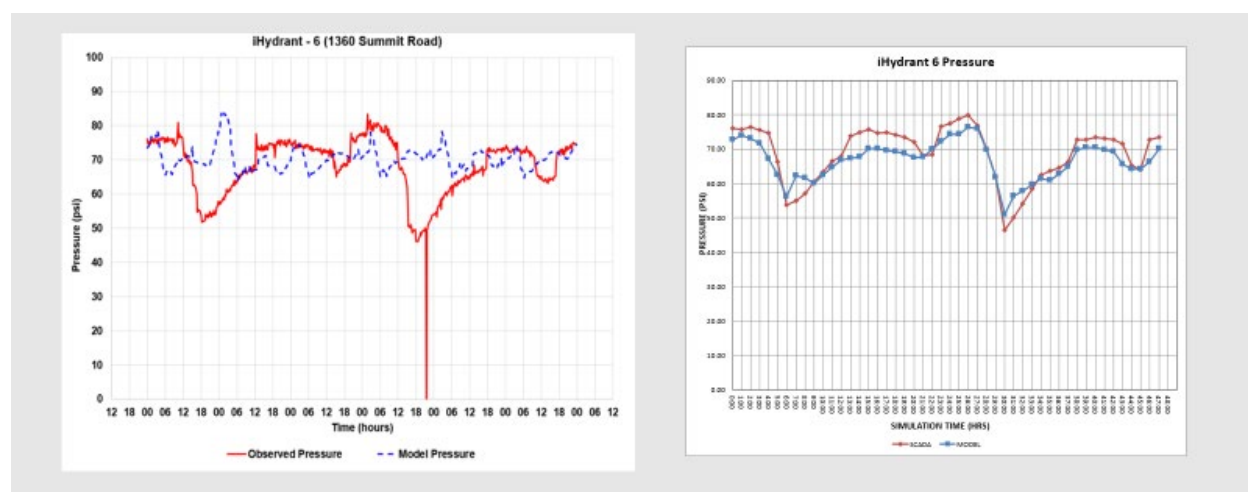


Figure 10 – iHydrant 6 Pressures Comparison

2. Pump Station and Tank Updates

The pump curves used in the 2022 calibrated model for the Pritchard Road, Providence Road, and Mansell Road pump stations were based on field testing performed in November 2022. In many cases, the field tests results were different from the SCADA data and had a significant impact on model calibration. The manufacturer's pump curves for these pump stations together with the field tests results were compared and used to find the best fit for the SCADA data. The final pump curves used in the model were digitized from the original manufacturer's pump curves and were adjusted based on the SCADA data as necessary. This pump digitizer spreadsheet is included in an appendix to this report. The methodology behind the pump curve updates is explained in the sections below for each pump station.

2.1 Pritchard Road Pump Station and Pritchard Tank

The primary concern for this station was the large differences observed between the suction and discharge pressures of roughly 30 psi seen in the previous calibration report as well as flow differences between the SCADA and the model of over 3000 gpm. To resolve these concerns a review of the SCADA data and the pump curves was completed.

For the Pritchard Road pump station, the field test data for both pumps 1 and 2 showed a flowrate of about 1040 gpm and a TDH of about 120 feet when running at full speed while the shut-off head being close to 165-170 feet which was higher than the manufacturer's pump curves' shutoff head. The full speed field test data showed reduced performance from the manufacturer's pump curve; the pump curve was then adjusted to better fit the full speed field data for pumps 1 and 2 as shown in Figure 11.

Uncertainty regarding the quality of the SCADA Pritchard data was identified which appears to have resulted in the primary differences in the flow and pressure differences between the model and SCADA results observed in the prior Calibration results. Upon closer inspection the flow and pressure SCADA results for the Pritchard station appears to be unreliable and unrealistic

The suction and discharge pressures from SCADA differed significantly from the model as shown in Figure 13. However, from photos taken during field visits that were published in the original calibration report

show clearly what the gauge suction and discharge pressure was at the station. These gauges identify the suction pressure as about 18 psi, and the discharge pressure as about 67 psi, and these values matched well with the model results.

Flow results for this station though were a bit more difficult to verify. SCADA pump station flowrate would routinely peak at about 4000 gpm (with no change in suction/discharge pressures) which was not realistic but would periodically drop for short periods to flows in the 1200 to 1300 gpm range. These flows were more realistic and were comparable to the model results which were in the 1250 gpm range. Since the model flows also resulted in a close match of the Tank filling and draining the flow range of 1200 gpm range had to be correct, and the SCADA flows in the 4000-gpm range must be incorrect.

The Pritchard Road Pump station is primarily used to fill the Pritchard Tank. The trend of the Pritchard Tank levels in the revised model versus SCADA as shown in Figure 14 further validates that the Pritchard Road Pump Station flow is closer to the model predictions.

It is recommended that the SCADA pressure and flow data for this pump station be checked due to the issues found in suction/discharge pressures as well as the discharge flowrate. In conclusion, we are confident that the model results are now reasonable for both pressures and flows after the pump curve adjustments. Pressures are now falling within the 5-psi tolerance for the suction and discharge pressures and the flows are much closer to the likely real flows because the Tank filling and draining at Pritchard Tank is so closely matching. While there is still some uncertainty of the actual Pritchard pump station flows to compare to, the previous concerns regarding the differences in suction and discharge pressures and station flows are no longer a concern.

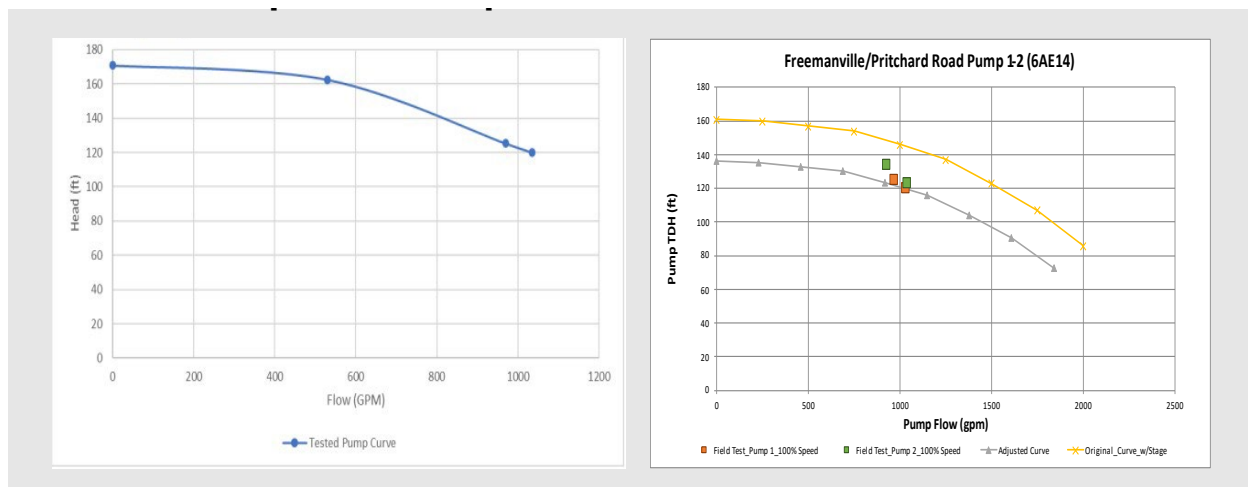


Figure 11 – Pritchard Road Pump Station: Original Field-Tested Curve vs Adjusted Pump Curve

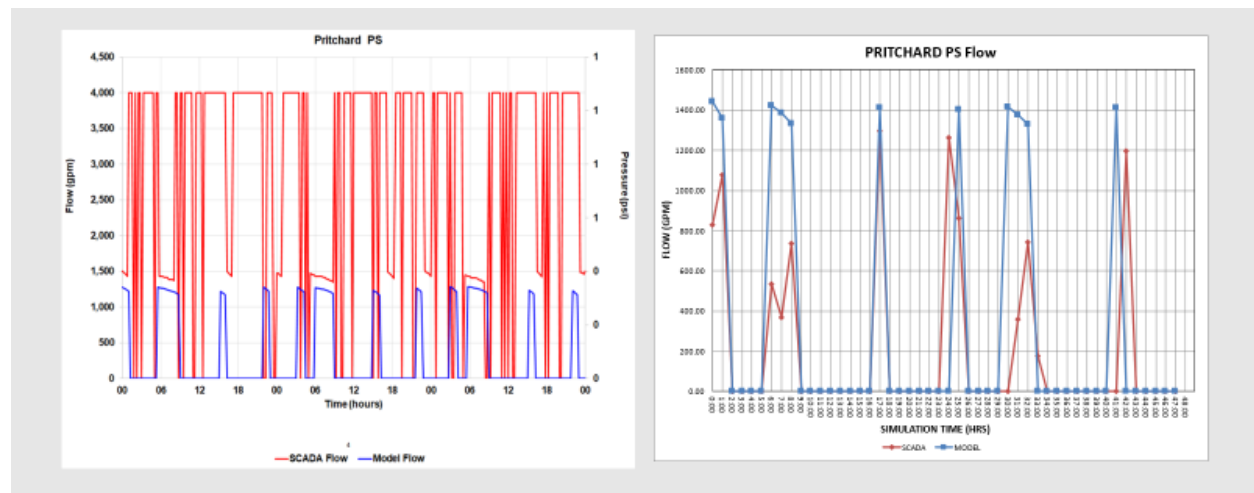


Figure 12 – Pritchard Road Pump Station: Pump Flowrate Comparison

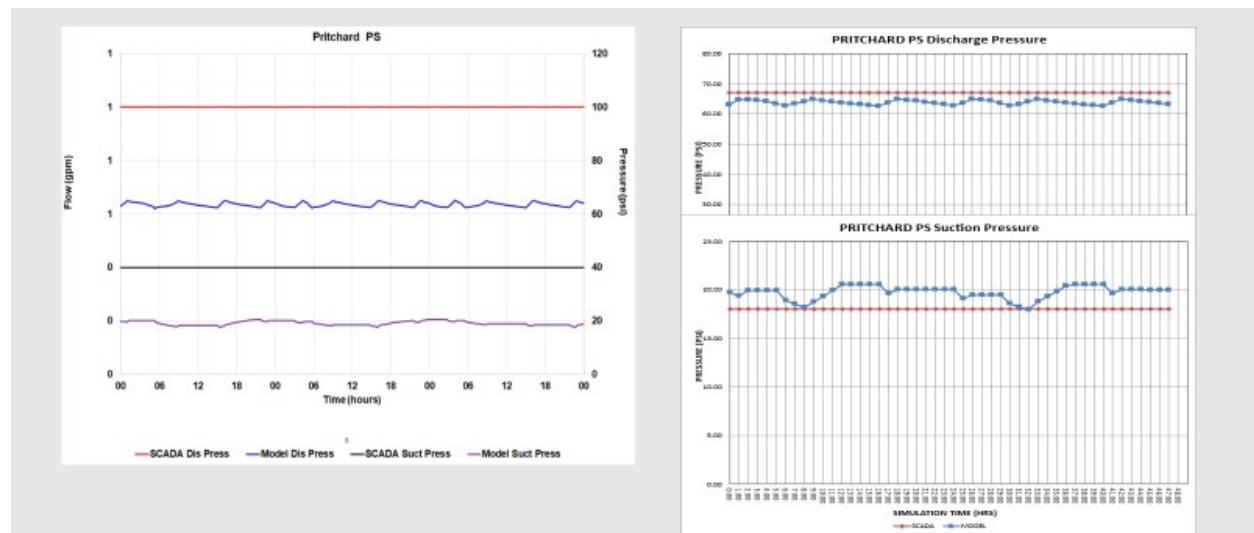


Figure 13 – Pritchard Road Pump Station: Suction and Discharge Pressure Comparison

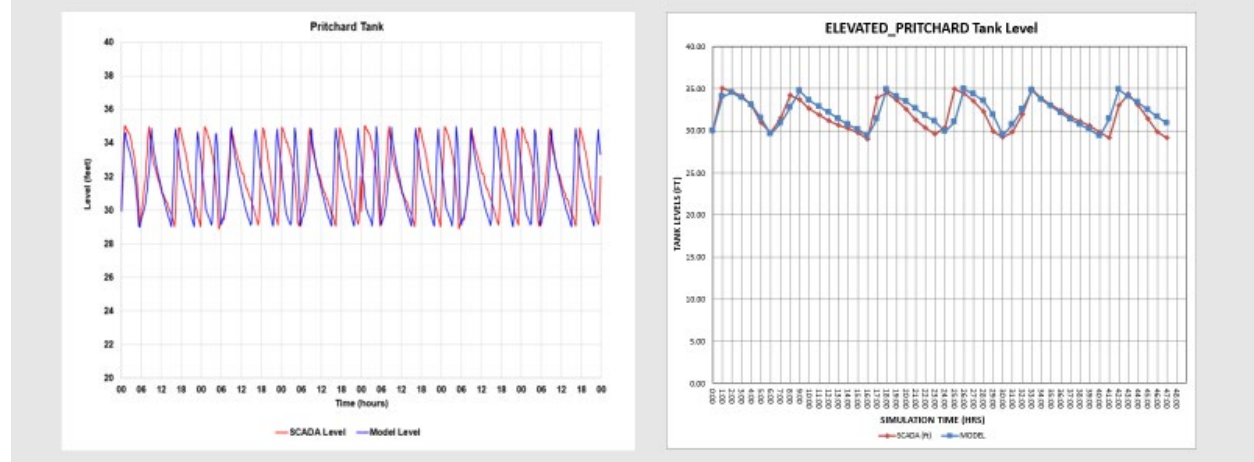


Figure 14 – Pritchard Tank Level Comparison

2.2 Providence Road Pump Station and Freemanville Tank

The primary concern for the Providence facility was the 15-20 psi differences in the suction pressure and the large 2000 gpm flow differences observed in the calibration report between the model and the SCADA data. It is believed that these differences were due to the pump curves used at the Providence Road Pump station and the lack of the use of the unidentified large unknown water user in the downstream zone as well as the identified large close valve previously identified at the corner of Freemanville and Birmingham Roads. The inclusion of updated pump curves and the larger water user and closed valve were identified as likely to improve the calibration results in the model.

For the Providence Road pump station, the field test data showed a flowrate of 3000 gpm and TDH of 52 feet when the Pump 1 was running at full speed and a flowrate of 2780 gpm and TDH of 43 feet when the Pump 3 was running at full speed. The field test data for Pump 1 was very close to the manufacturer's pump curve but the field test for Pump 3 showed reduced performance. The pump speed that was tested was also higher at 1185 RPM compared to the manufacturer's pump curve test speed of 1160 RPM. The model results were found to best fit the SCADA data when the Providence Road pump curve was adjusted to be slightly greater than the original pump curve (at roughly 102% speed) which is slightly higher than what was predicted by the field test data shown in Figure 15. This curve though was needed to get the higher flow rates observed in the SCADA data and is believed to be justified even though it is slightly larger than the original manufactures curve as some curves provided may represent trimmed curves while pumps may be delivered without trimmed impellers. Whatever the case, the actual station flows are clearly higher than what is being predicted and a slight adjustment like this is reasonable to assume given the flows observed in SCADA.

From the SCADA data, the pump station flowrates were above 4000 gpm in certain cases. Although the SCADA data did not show how many pumps were running, it was apparent that two pumps were running together. The pump controls at this pump station were revised from a variable speed pump (VSP) to level-based controls based on the Freemanville Tank levels. The predicted flowrate in the revised model is close to 10% of the SCADA flowrate as shown in Figure 16.

The calibrated model suction pressures were trending higher compared to the SCADA data while the discharge pressures were fairly close. The revised model suction and discharge pressures trend quite closely to the SCADA data as shown in Figure 17 except for the early hours where the discharge pressures are higher. It is believed this is caused by the model Tank control valve failing to open which causes the model pressures to rise when the valve is closed. Similar behavior was also observed in the iHydrant data in the actual system as well and was therefore left in the model. Close operational control of the Providence Pump station should be matched to ensure that when a second pump is turned on that the Freemanville Tank Altitude valve is allowed to fill to avoid higher pressures in the discharge zone. It is unknown if current operations currently are checking for this at this time, but this should be added to the system operation to avoid this potential higher pressurization from occurring in the real system.

The Freemanville Tank altitude valve was adjusted based on SCADA data such that it opens when the tank level drops below 40 feet instead of 42.5 feet. The revised model compares well with the SCADA data for the Freemanville Tank as shown in Figure 18.

Conclusions: The Tank operations are vastly improved with these changes to the system. The pump curve significantly improved the Providence Road operations for both flow and pressure and getting the model and SCADA values closer than were observed previously. The adjustment of operational controls and adjustment of the operations of the Providence Road Pump Station to non-Variable Speed Control also

greatly improved model operations and model stability. Suction Pressures and discharge flows are now much more closely matching what was observed in the SCADA data. Adding the large unknown user demand with its diurnal curve also improved the pressure and flows in this area as well as did the inclusion of the closed valve at the corner of Freemanville and Birmingham Roads. That the Tank Level at Freemanville Tank now much more closely matches the actual operation level confirms and appears to validate these changes and increases the confidence in the model significantly.

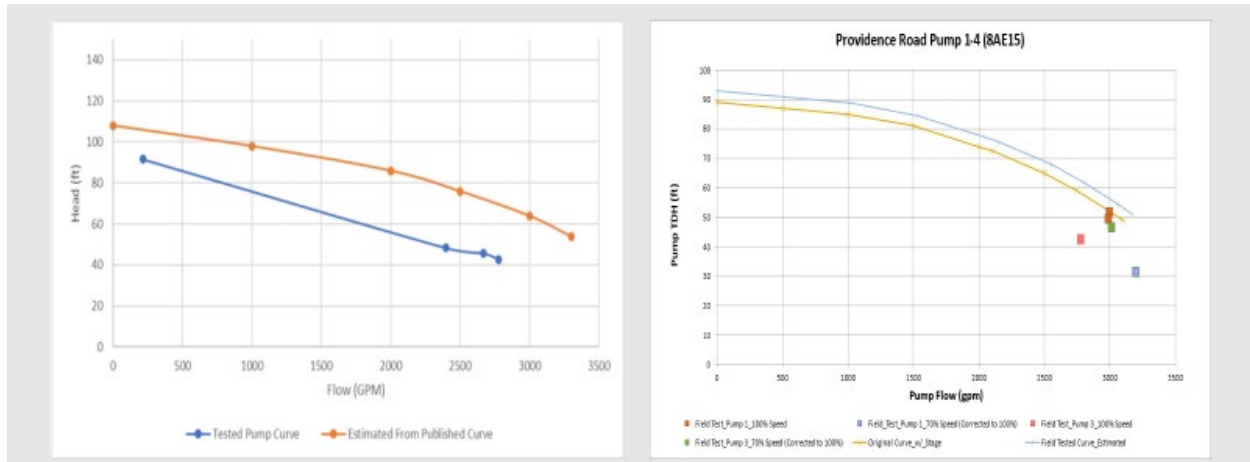


Figure 15 – Providence Road Pump Station: Original Field-Tested Curve vs Adjusted Pump Curve

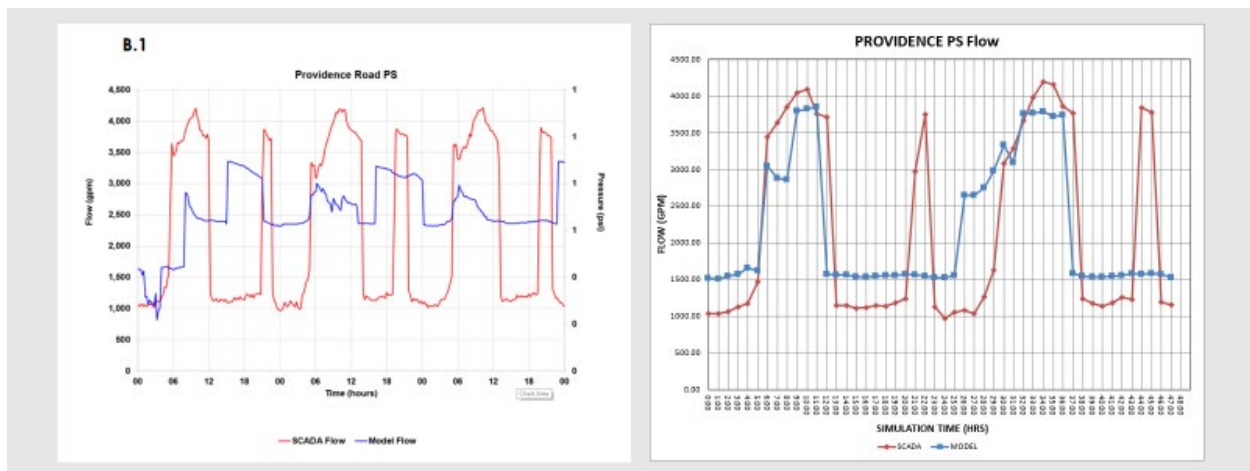


Figure 16 – Providence Road Pump Station: Pump Flowrate Comparison

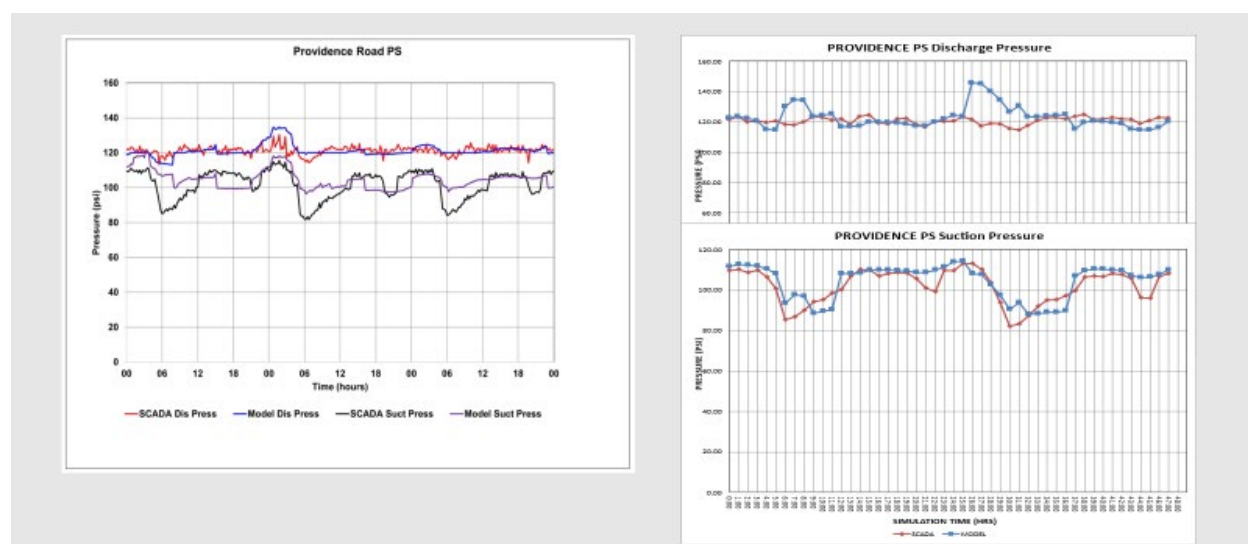


Figure 17 – Providence Road Pump Station: Suction and Discharge Pressure Comparison

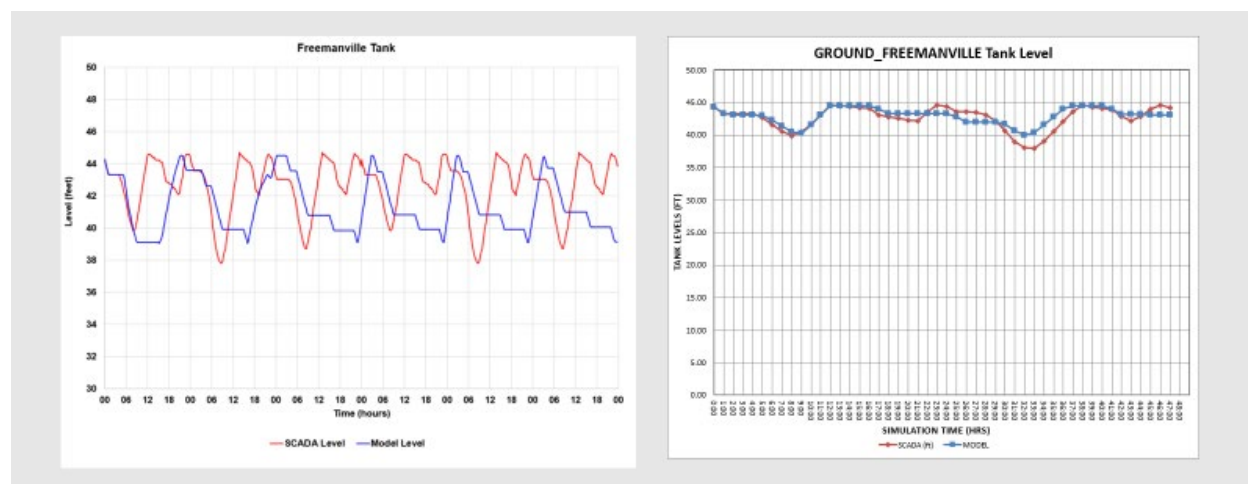


Figure 18 – Freemanville Tank Level Comparison

2.3 Mansell Road Pump Station and Hembree Tank

The primary concerns for the Mansell Pump station were the roughly 1500 gpm difference in pump station flows and the 15-20 psi differences in suction pressure that were observed in the original calibration report. It was believed that these differences were due to the pump curves at the Mansell station as well as the low flows seen at the Providence Pump station. Improvements to these facilities pump curves and controls were thought would likely improve these concerns in the model.

For the Mansell Road pump station, the field test data showed a flowrate of 5150 gpm and a TDH of 15 feet for Pump 1 (at 95% speed), a flowrate of 5250 gpm and TDH of 15 feet for Pump 2 (at 95% speed), and flowrate of 4950 gpm and TDH of 12 feet for Pump 3 (at 94% speed). The pump speed that was

tested was also higher (where 100% speed was 1185 RPM) compared to the manufacturer's pump curve test speed of 1160 RPM as shown in Figure 19. Similar to the Providence Road Pump Curves it, was found that to match the flows observed in SCADA, a pump curve close to the original manufacturer's pump curve, was necessary to get model flows close to what was observed in SCADA even though the field test data potentially identified a possibly slight reduction in the curve may have been warranted.

From the SCADA data, the pump station flowrates were close to 7000 gpm. Although the SCADA data did not show how many pumps were running, it was apparent that all three pumps were running together. The pump controls at this pump station were revised from a variable speed pump (VSP) to level-based controls based on the Hembree Tank levels. The predicted flowrate in the revised model is close to 10% of the SCADA flowrate as shown in Figure 20. So even using this full, 100% speed curve, model flows were still under predicting the flows observed in the SCADA system.

In contrast, the calibrated model suction pressures were trending higher compared to the SCADA data while the discharge pressures were fairly close, but higher when the pumps were operating. The revised model suction and discharge pressures overall trend does follow quite closely to the SCADA data as shown in Figure 21.

However, the differences in flow (lower) and suction pressure (lower), and discharge pressure (higher) when pumping is interesting as it does indicate that there is something still somewhat off here, but the model is still reasonably close overall. This is also a location where the SCADA sensors should also be verified against field gauge data to ensure good accuracy of the data. If there is any inaccuracy in the SCADA data at this location here, that could also explain the differences, but without more information it is difficult to explain the differences further. But even as is, this is still reasonable for the planning purposes of the model but should be revisited should additional information become available.

The Hembree Tank altitude valve which receives water from this pump station was adjusted based on SCADA data such that it opens when the tank level drops below 33.8 feet instead of 32.0 feet and closes at 34.0 feet instead of 34.2 feet. The revised model compares well with the SCADA data for the Hembree Tank as shown in Figure 22.

Conclusions: While improving the pump curves for this facility and controls did improve the flow differences at this facility, there is still some uncertainty at the suction pressures at this facility. While the changes did reduce the differences observed from what was seen in the original calibration report to lesser values, there is still some uncertainties that appear to be occurring that cannot be fully explained. However, results are now much more closely matching to the SCADA data and Tank level trending is much more closely matching that the model is more than acceptable for planning purposes of the Master Plan.

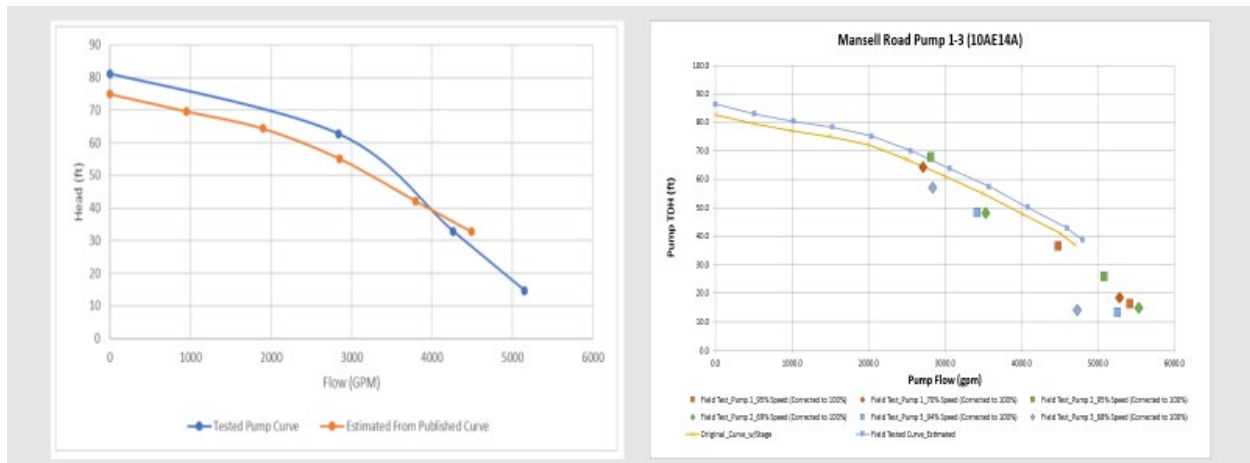


Figure 19 – Mansell Road Pump Station: Original Field-Tested and Adjusted Pump Curve

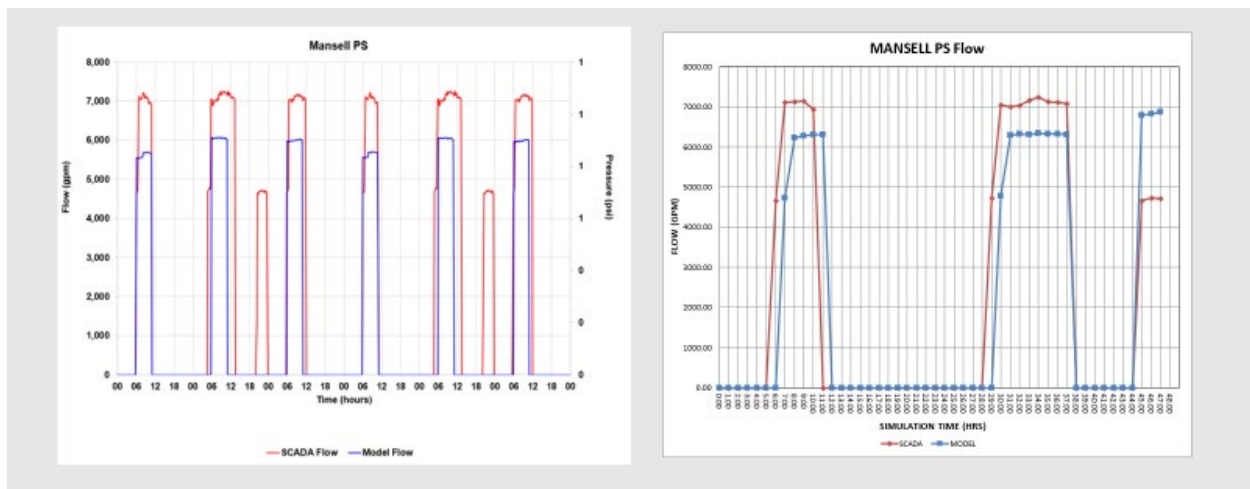


Figure 20 – Mansell Road Pump Station: Pump Flowrate Comparison

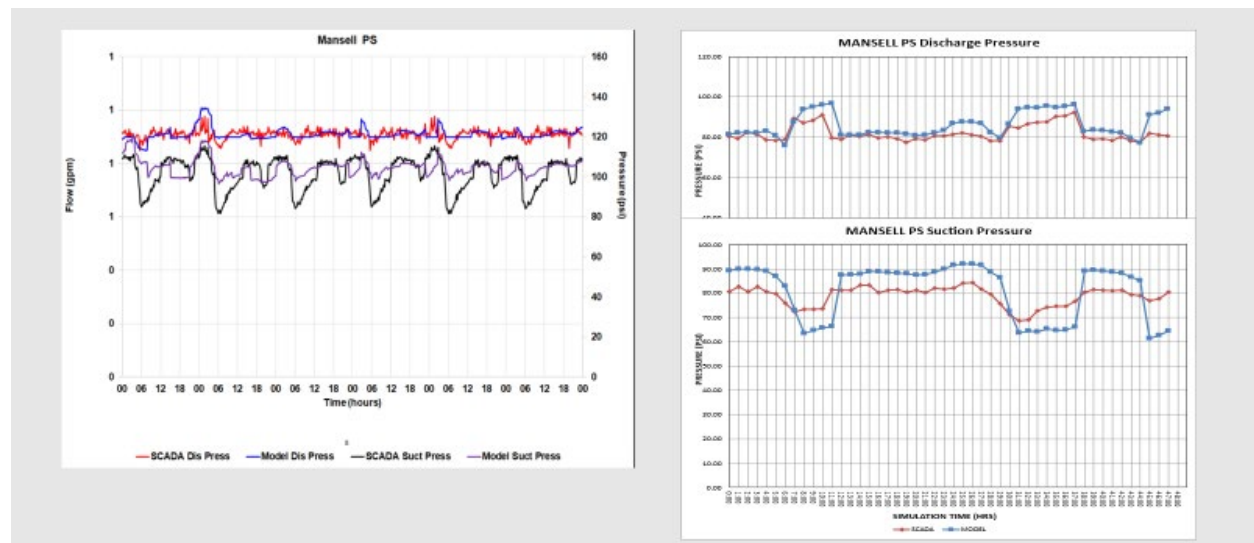


Figure 21 – Mansell Road Pump Station: Suction and Discharge Pressure Comparison

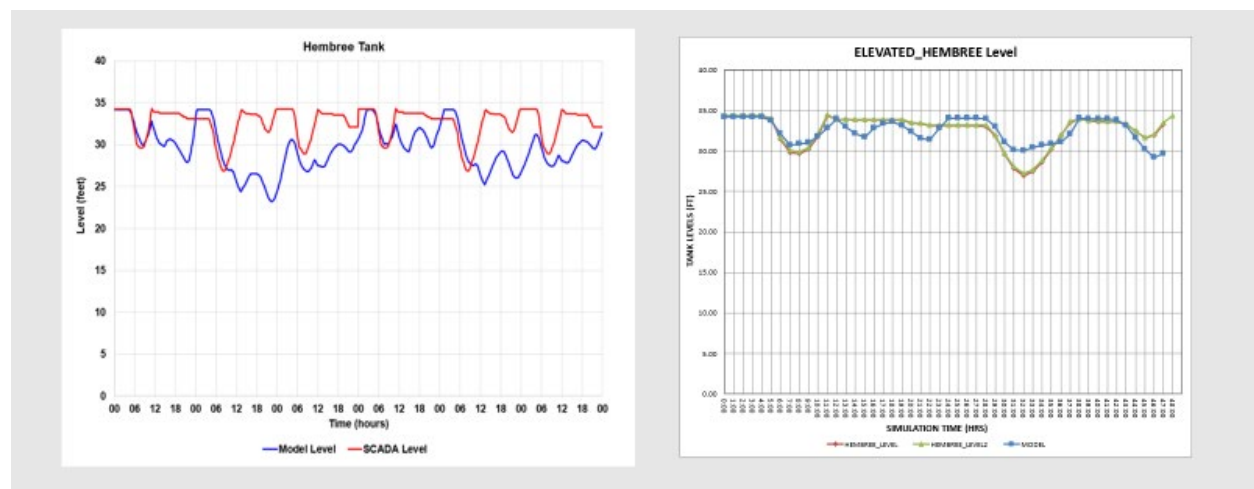


Figure 22 – Hembree Tank Level Comparison

3. Other Tank Updates

When reviewing elevated storage tanks (EST) in the model, the levels did not match up with SCADA. The currently model used Tank levels that calculated Tank levels from the ground whereas the SCADA measured tank level from the bottom the Tank storage level. This difference makes it very difficult to compare model and tank “levels” easily from the SCADA to the model and so the model Tank bottom levels were adjusted to match what was used in the SCADA to make the SCADA comparisons easier to read.

Additionally, for the Freemanville and Hackett tanks, the tank volume to depth curves looked to be upside down in the calibrated model. Based on photos of the storage tanks, the volume change had to taper at the bottom and not at the top of the tanks. These curves were corrected as shown in Figure 23.

The Hackett and Bethany tanks' altitude valve controls were also adjusted in the calibrated model to match the operations observed in the SCADA data. They were adjusted based on SCADA data such that the altitude valves open when the tank levels drop below 30.5 feet and 31.0 feet for Hackett and Bethany tanks respectively, and close at 40.0 feet for both tanks. The revised model tank levels mostly compare well with the SCADA data as shown in figures 14 and 15.

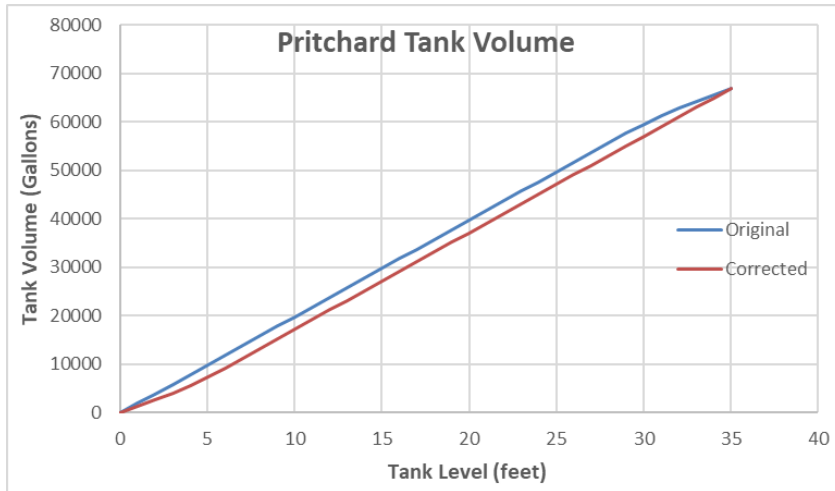


Figure 23 – Pritchard Tank Volume Curve Comparison

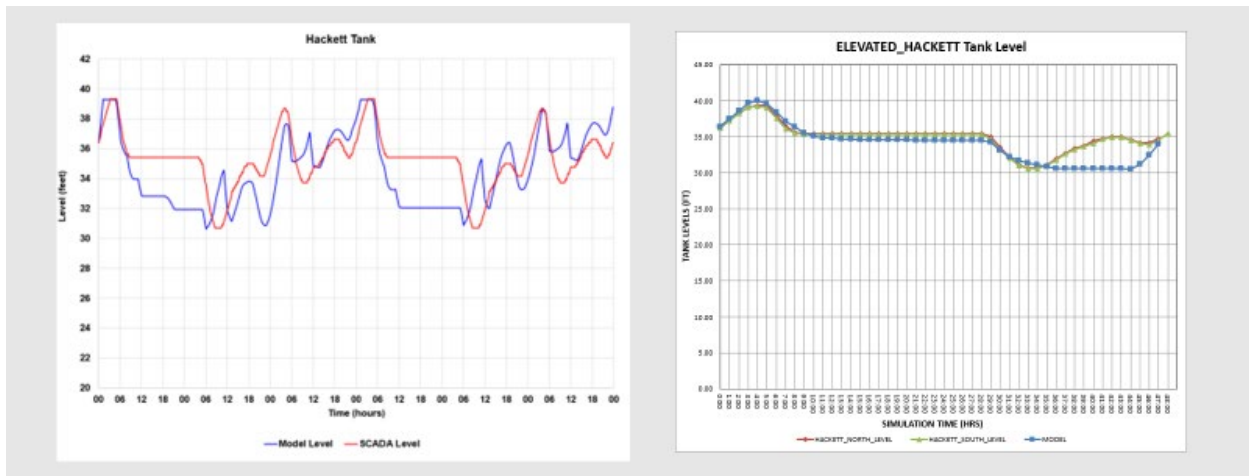


Figure 24 – Hackett Tank Level Comparison

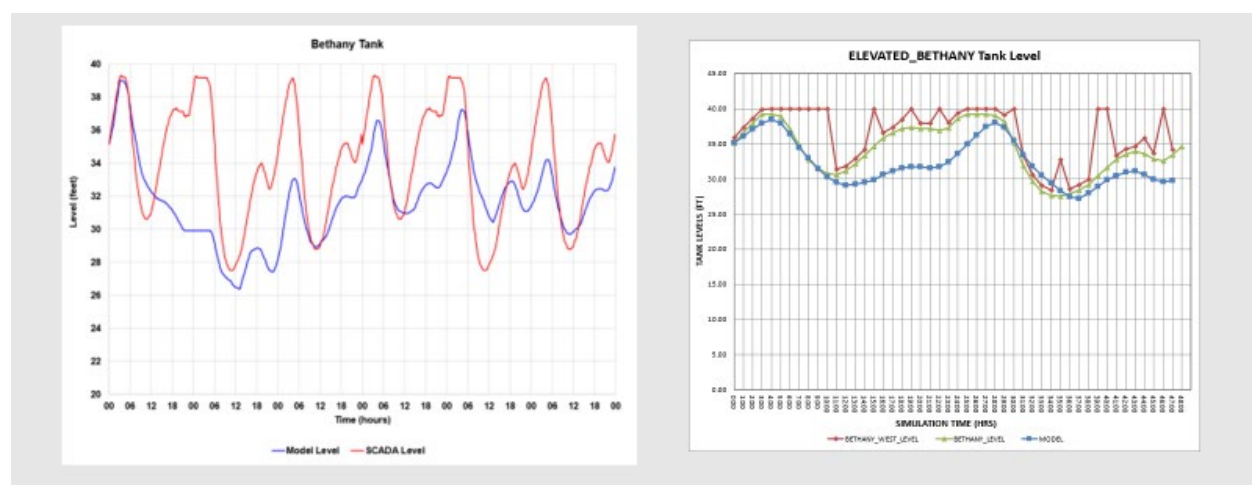


Figure 25 – Bethany Tank Level Comparison

Summary

This model validation exercise was conducted as part of the Fulton County Water Distribution Master Plan project to identify areas of improvement and incorporate any changes before future system capacity planning.

With the changes made to the pump curves, the updates to the model controls, the inclusion of the unknown large water user, and known closed valve the previously identified concerns appear to have been significantly reduced and or eliminated from the model. The pump station suction/discharge pressures, pump flowrates, and tank levels in the revised model seem to match significantly closer with SCADA data than what was observed in the previous calibration report. Additional improvements to the Model Tank curves were also identified during this exercise which allowed for easier comparison of Model vs. SCADA tank levels as well as two Tank Volume vs Tank Level Curves were fixed when curves were found to have been inputted incorrectly in the previous model. Pump station controls, altitude valve controls, tank levels, and tank volume curves are also now set up better in the revised model. These changes appear to have now allowed the model tank levels to now have a significantly better tank level tracking that was previously observed in the previous calibration reports. These changes significantly improve the confidence level in the model performance for use in the Master Planning purposes.

It is recommended that the SCADA equipment for the Pritchard pump station and the Mansell Pump station be checked for issues with regard to suction/discharge pressures as well as pump flowrates.

The validation exercise also helped identify a significant low-pressure issue close to iHydrant 18 which was attributed to a combination of a large unknown user and potential closed valves in the system. Field investigations in this area seemed to corroborate that closed valves might exist as seen on the intersection of Birmingham Road and Freemanville Road between the 12" and 24" lines. The location of the unknown user is suspected to be somewhere between Birmingham Road and Wood Road. It is recommended that field investigations continue to help identify the location of the unknown user as well as check for other closed valves in the system. For the purposes of future capacity planning, it is also recommended that the closed valve that was found in the intersection of Birmingham Road and Freemanville Road be opened.

Overall, this model validation and update exercise helped improve the confidence in the water distribution model for Fulton County. All previously identified concerns appear to have been addressed and have now been resolved. Further calibration efforts near the Mansell Pump station may be warranted in the future

Technical Memorandum

to further improve the model but the current model appears sufficient for the Master Planning purposes without significant flow or pressure concerns previously identified.

Appendices: Pump Curve Digitizer and SCADA Comparison Spreadsheets

Appendix G

Existing System Deficiencies

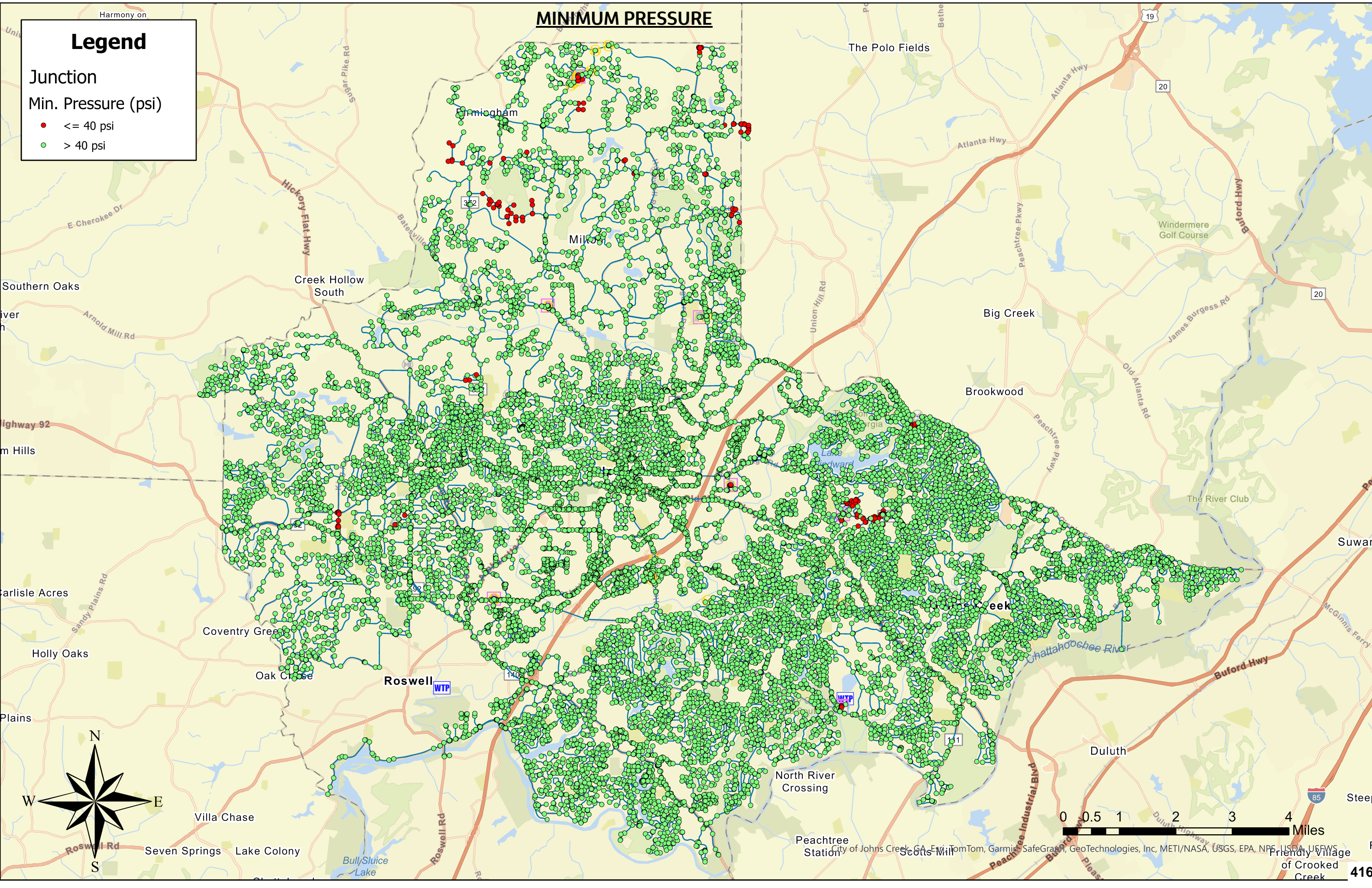
MINIMUM PRESSURE

Legend

Junction

Min. Pressure (psi)

- ≤ 40 psi
- > 40 psi



0 0.5 1 2 3 4 Miles

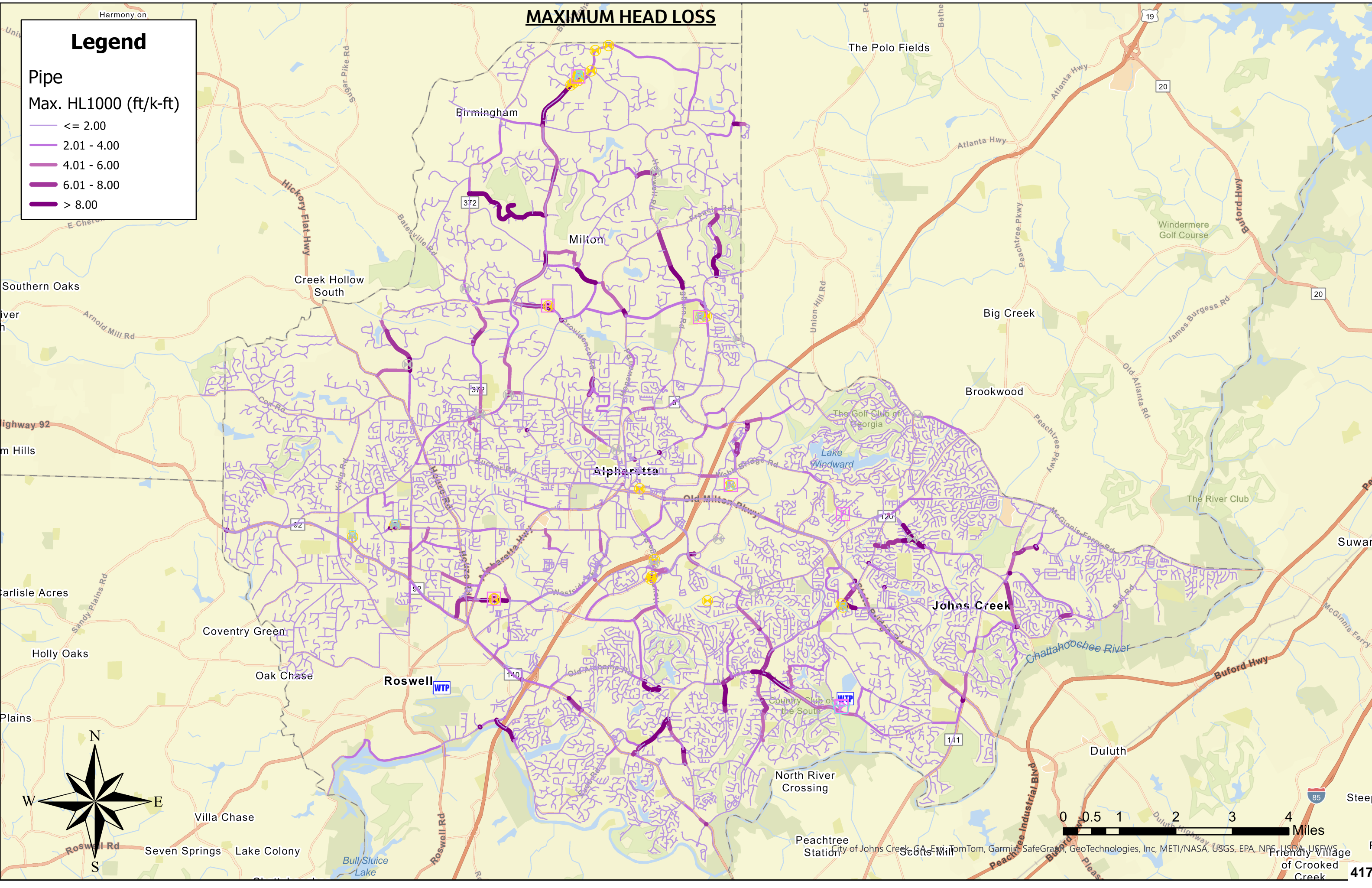
City of Johns Creek, GA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

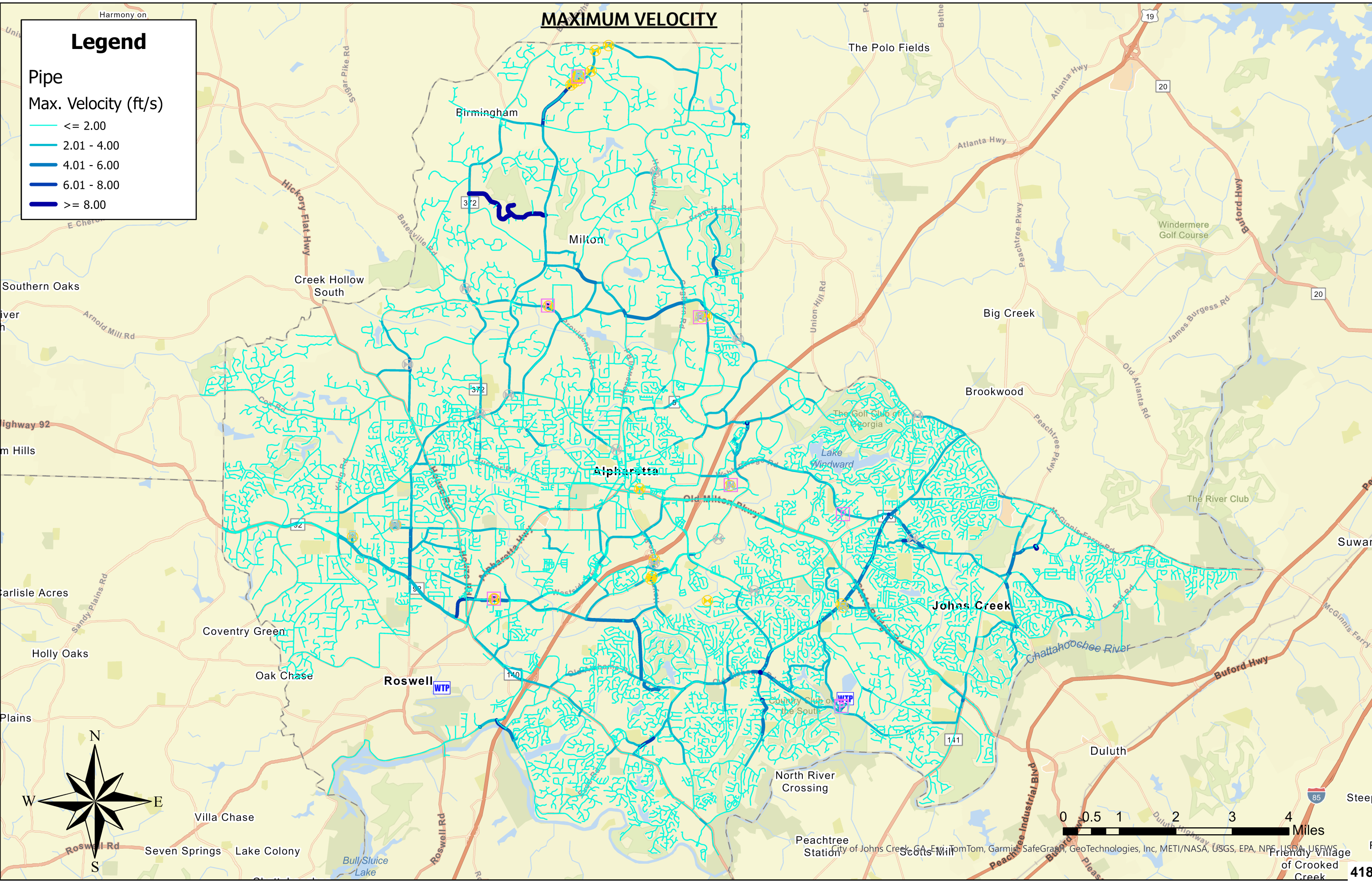
MAXIMUM HEAD LOSS

Legend

Pipe
Max. HL1000 (ft/k-ft)

- <= 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 8.00
- > 8.00





MAXIMUM VELOCITY

Legend

Pipe
Max. Velocity (ft/s)

- <= 2.00
- 2.01 - 4.00
- 4.01 - 6.00
- 6.01 - 8.00
- >= 8.00

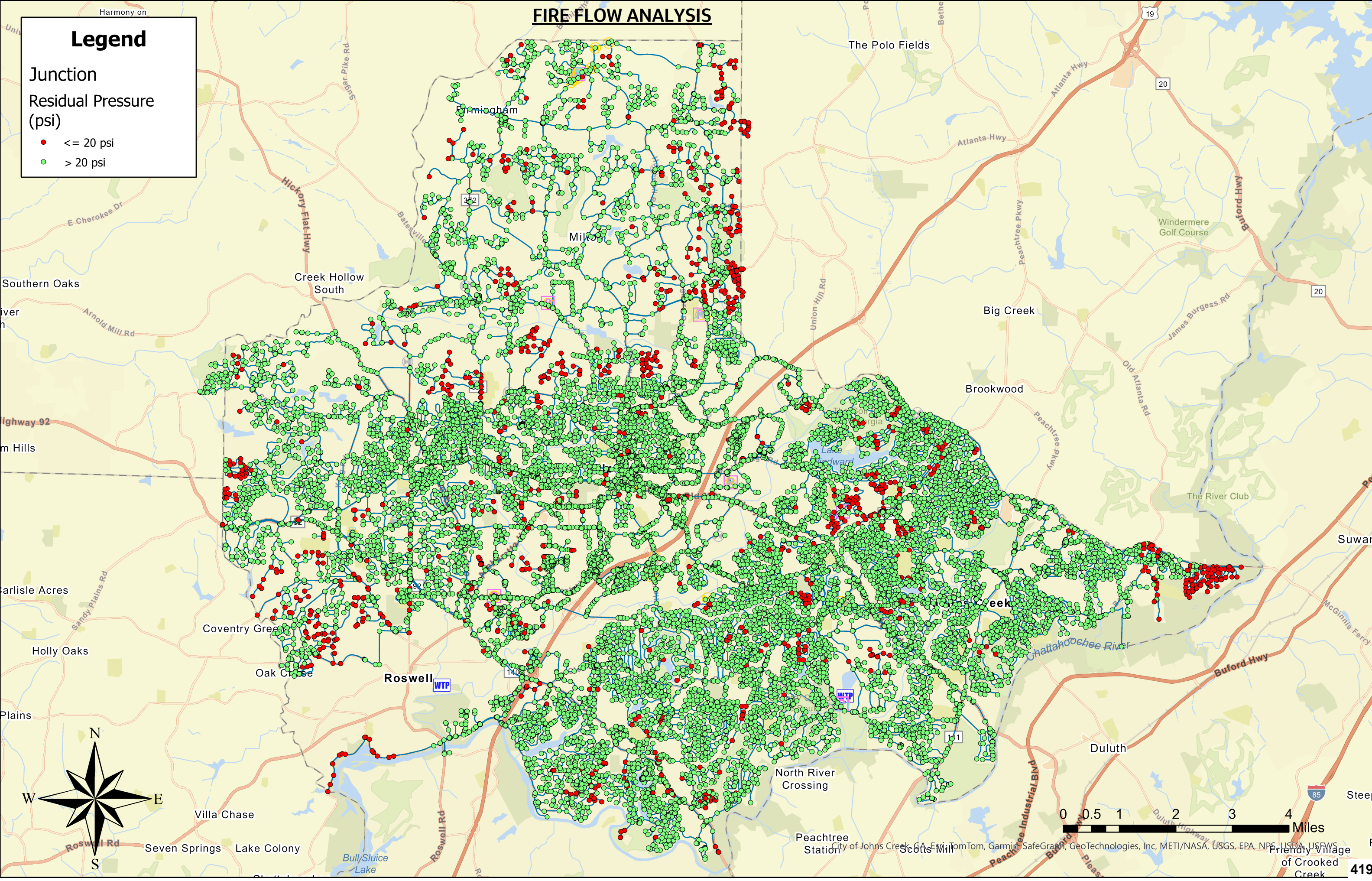
0 0.5 1 2 3 4 Miles

City of Johns Creek, GA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

FIRE FLOW ANALYSIS

Legend

- Junction
Residual Pressure
(psi)
- ≤ 20 psi
 - > 20 psi



0 0.5 1 2 3 4 Miles

City of Johns Creek, GA, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

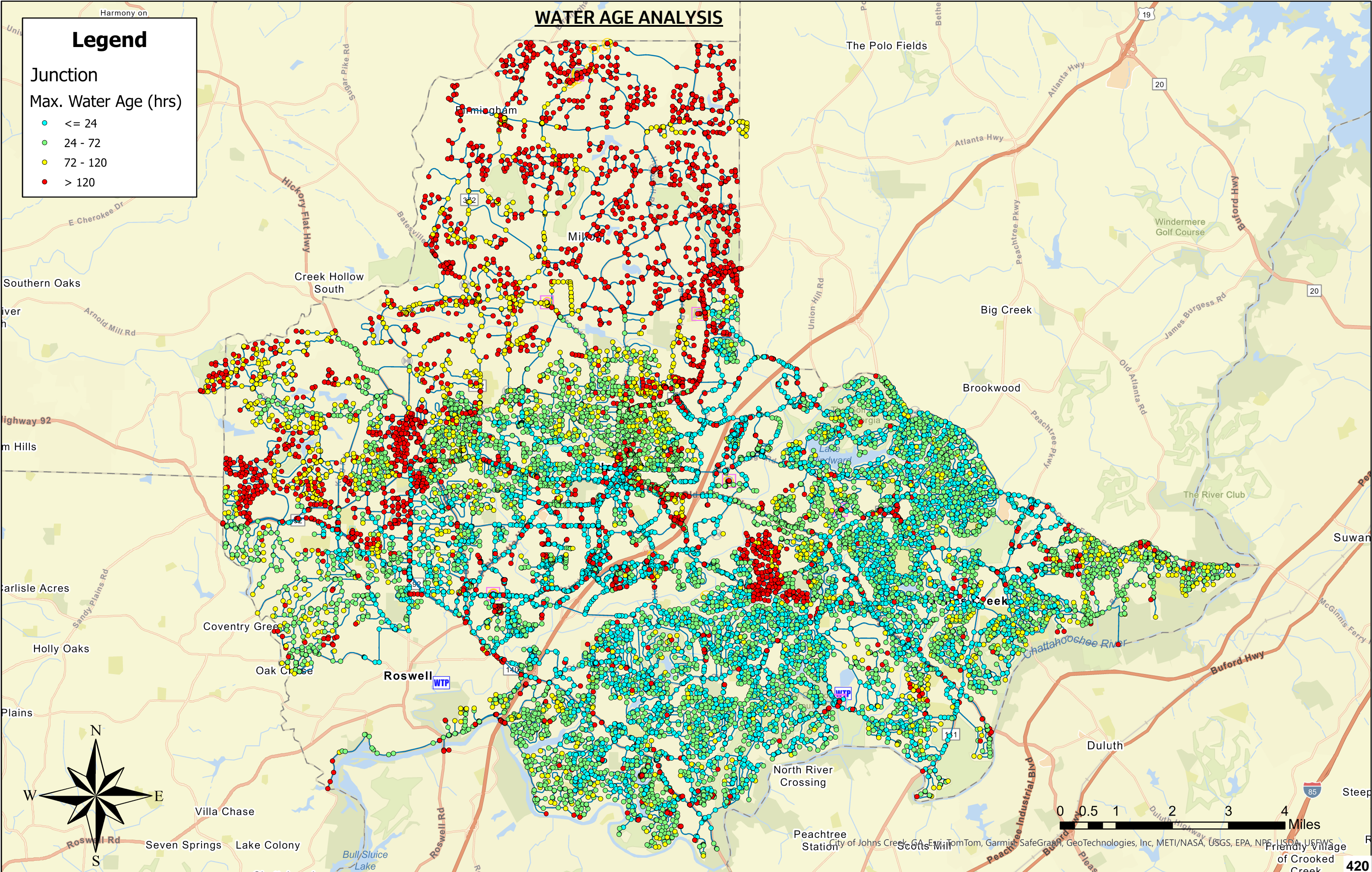
WATER AGE ANALYSIS

Legend

Junction

Max. Water Age (hrs)

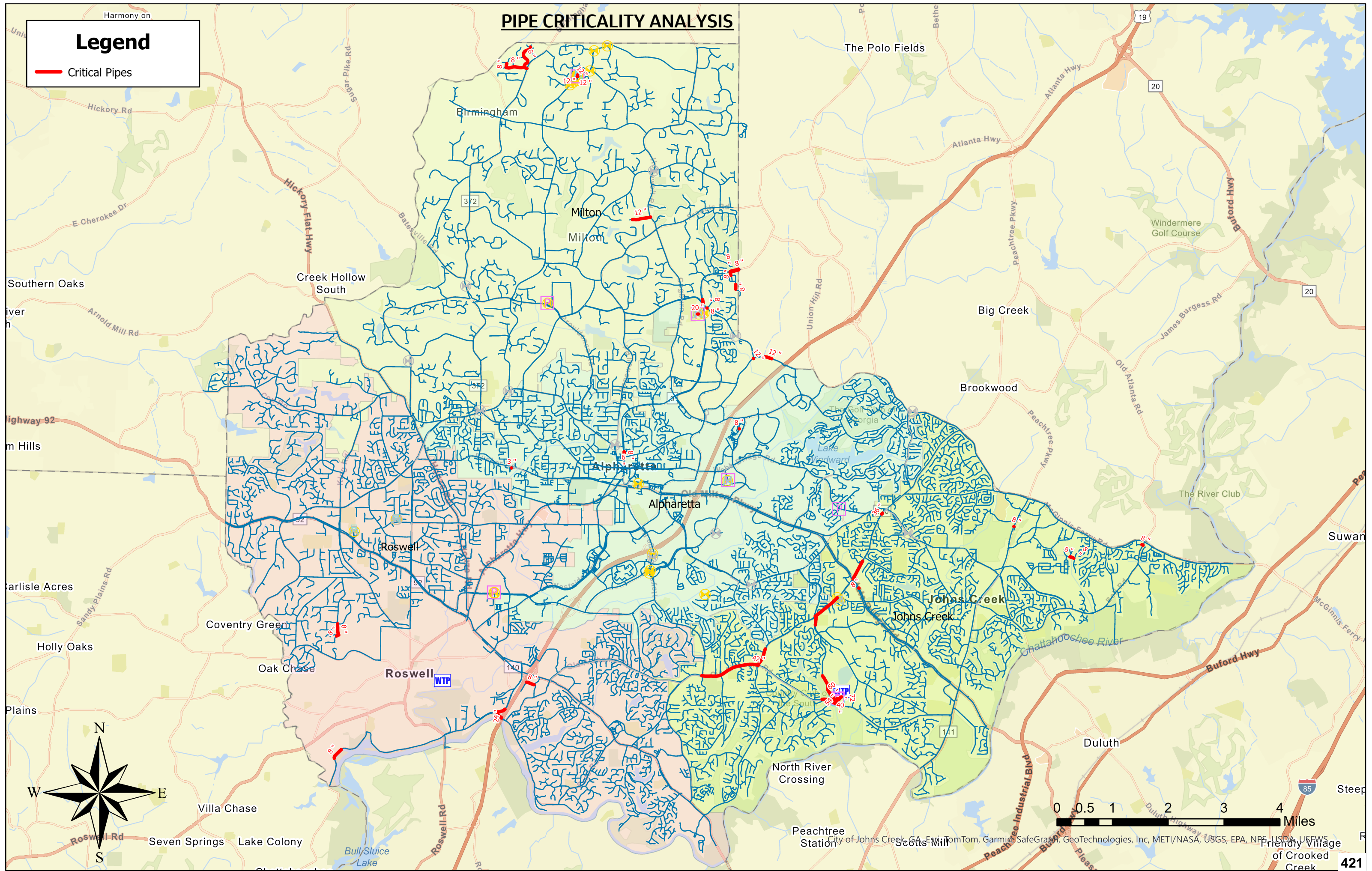
- ≤ 24
- $24 - 72$
- $72 - 120$
- > 120



PIPE CRITICALITY ANALYSIS

Legend

Critical Pipes



Appendix H

CIP Map Book

CIP Projects Overview Fulton County Water Distribution Master Plan

Legend

CIP Pipes

2025

2030

2035

2040

2050

Existing Water Mains

<= 8"

10" - 24"

30" - 36"

>= 42"

Elevated Tank

Ground Tank

Pump Station

WTP

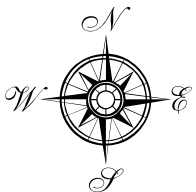
Pressure Zones

PRVs

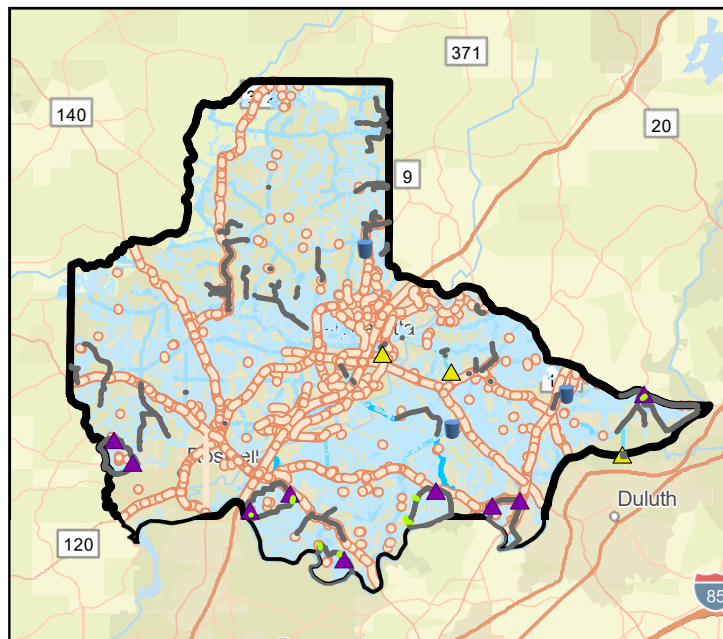
Pressure Zone

Closed Mains

North Fulton



0 0.5 1 2 3 4 5 Miles



Jacobs

CIP Projects Overview - Phase 2025

Fulton County Water Distribution Master Plan

Legend

CIP Pipes

2025

Existing Water Mains

<= 8"

10" - 24"

30" - 36"

>= 42"

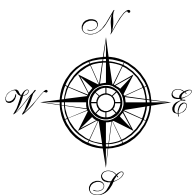
Elevated Tank

Ground Tank

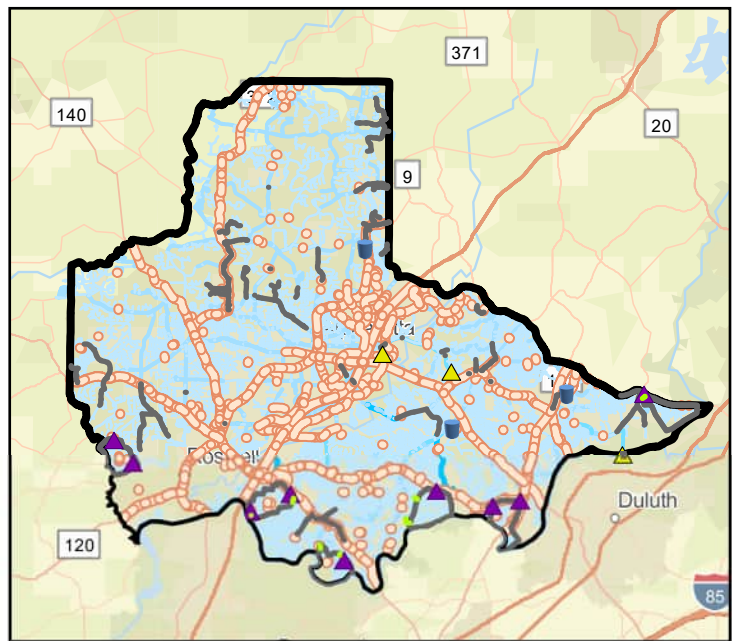
Pump Station

WTP

North Fulton



0 0.5 1 2 3 4 5 Miles



Jacobs

CIP Projects Overview - Phase 2030

Fulton County Water Distribution Master Plan

Legend

CIP Pipes

2030

Existing Water Mains

<= 8"

10" - 24"

30" - 36"

>= 42"

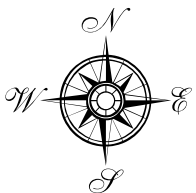
Elevated Tank

Ground Tank

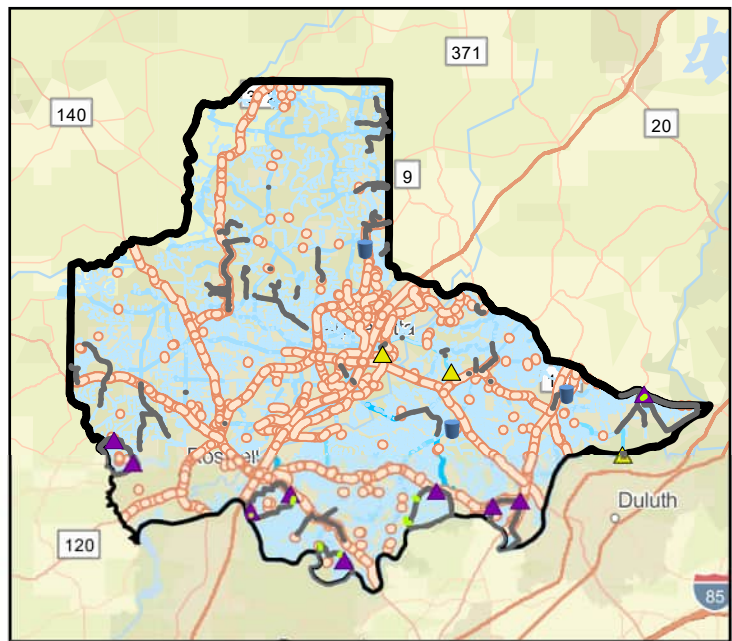
Pump Station

WTP

North Fulton



0 0.5 1 2 3 4 5 Miles



Jacobs

CIP Projects Overview - Phase 2035

Fulton County Water Distribution Master Plan

Legend

CIP Pipes

2035

Existing Water Mains

<= 8"

10" - 24"

30" - 36"

>= 42"

Elevated Tank

Ground Tank

Pump Station

WTP

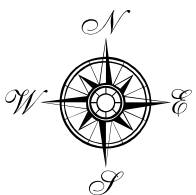
Pressure Zones

PRVs

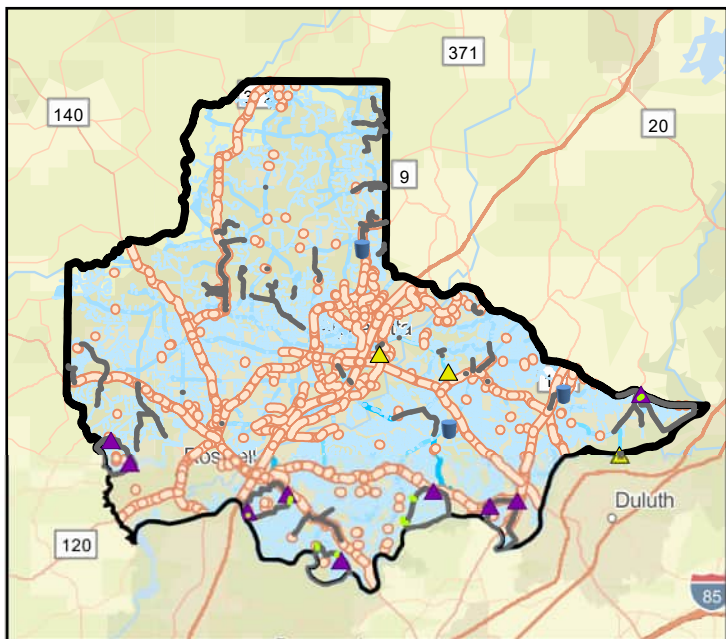
Pressure Zone

Closed Mains

North Fulton



0 0.5 1 2 3 4 5 Miles



Jacobs

CIP Projects Overview - Phase 2040 Fulton County Water Distribution Master Plan

Legend

CIP Pipes

2040

Existing Water Mains

<= 8"

10" - 24"

30" - 36"

>= 42"

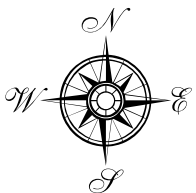
Elevated Tank

Ground Tank

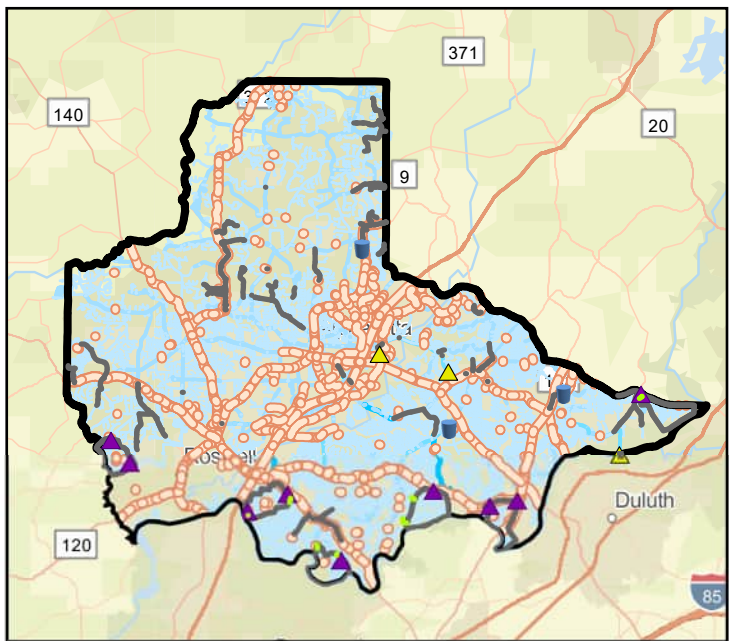
Pump Station

WTP

North Fulton



0 0.5 1 2 3 4 5 Miles



Jacobs

CIP Projects Overview - Phase 2050

Fulton County Water Distribution Master Plan

Legend

CIP Pipes

2050

Existing Water Mains

<= 8"

10" - 24"

30" - 36"

>= 42"

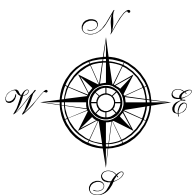
Elevated Tank

Ground Tank

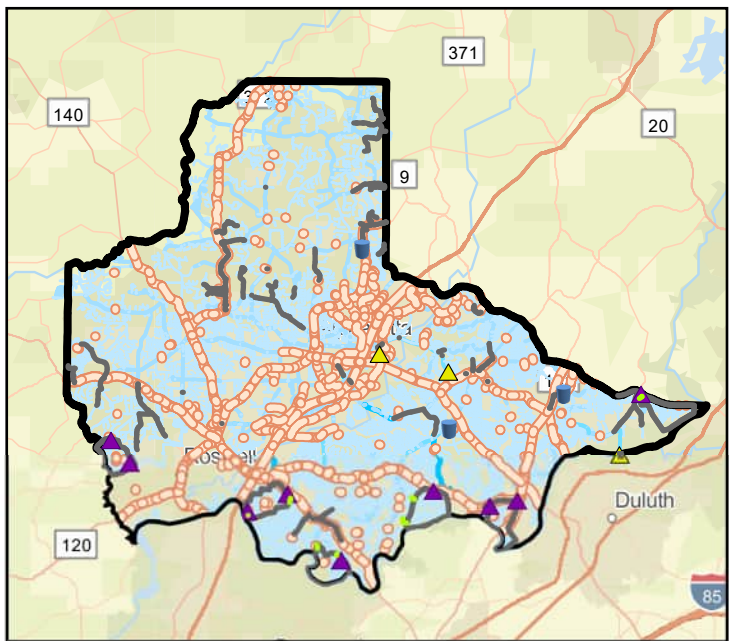
Pump Station

WTP

North Fulton



0 0.5 1 2 3 4 5 Miles



Jacobs

★ This project will help improve minimum pressures at the Maid Marion subdivision where low pressures in the summer have been reported by customers.

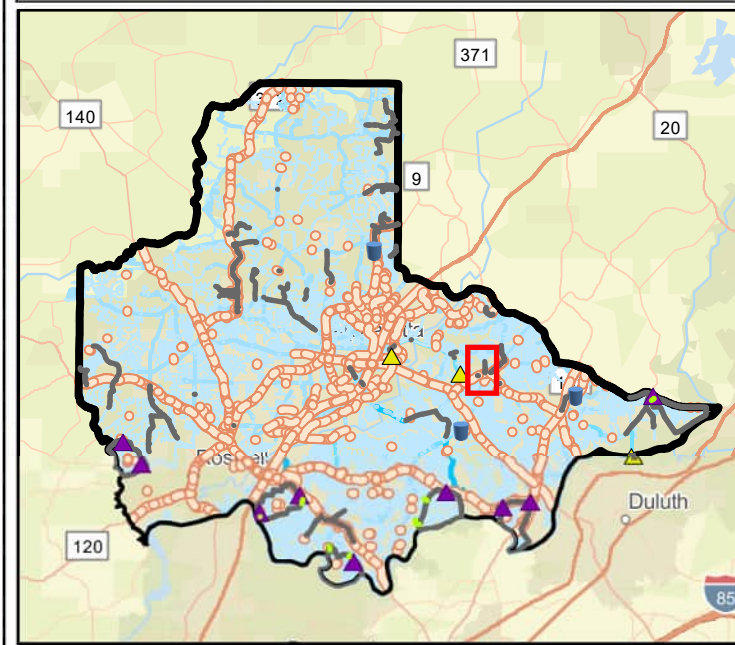
CIP Project #101
Kimball Bridge Rd and Webb Bridge Rd Crossing Pipe Connection
Phase: 2025
Fulton County Water Distribution Master Plan

Project Description:

Perform crossing pipe connection of 30" water main to 8" water main at Kimball Bridge Rd and Webb Bridge Rd. Helps in improving minimum pressures in the area.

Legend

- | | |
|---------------------|----------------------|
| Highlighted Project | Existing Water Mains |
| CIP Pipes | <= 8" |
| 2025 | 10" - 24" |
| 2030 | 30" - 36" |
| 2035 | >= 42" |
| 2040 | ▲ Pump Station |
| 2050 | ■ WTP |
| | ■ North Fulton |
| | — GDOT Road Segments |

















★ This project will help improve minimum pressures at the Maid Marion subdivision where low pressures in the summer have been reported by customers.

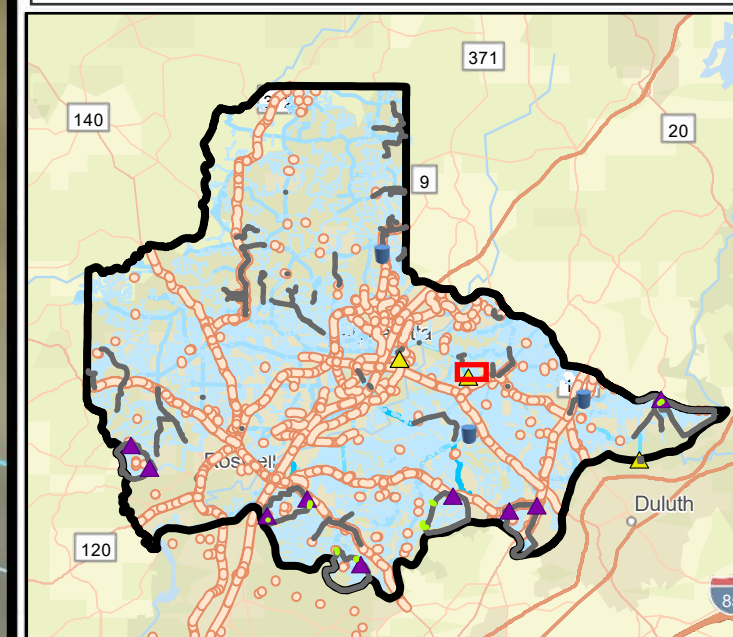
CIP Project #102
Webb Bridge Rd and Maid Marion
Close Crossing Pipe Connection
Phase: 2025
Fulton County Water Distribution
Master Plan

Project Description:

Perform crossing pipe connection of 30" water main to 8" water main at Webb Bridge Rd and Maid Marion Close. Helps in improving minimum pressures in the area.

Legend

 Highlighted Project	Existing Water Mains
 2025	 <= 8"
 2030	 10" - 24"
 2035	 30" - 36"
 2040	 >= 42"
 2050	 Pump Station
	 WTP
	 North Fulton
	 GDOT Road Segments



★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, and Hayfield subdivisions where low pressures in the summer have been reported by customers.

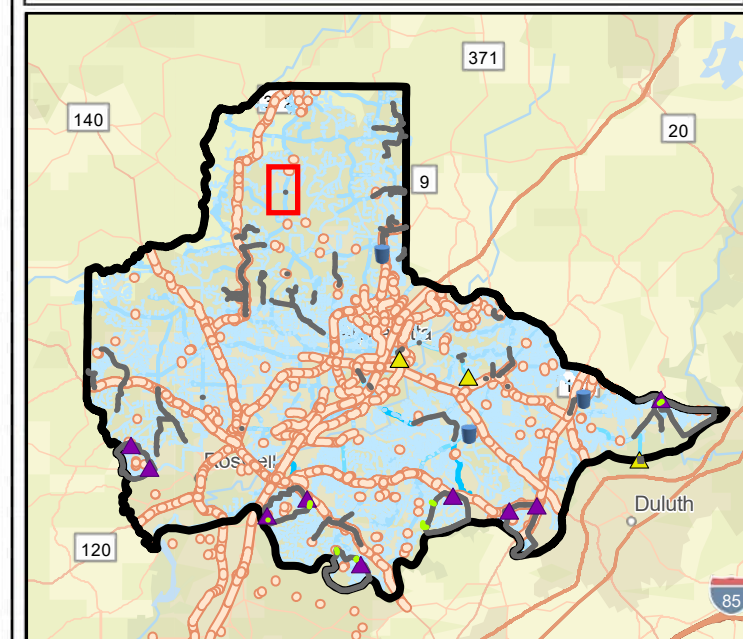
CIP Project #103
Freemanville Rd and Quarterpath Ln
Close Crossing Pipe Connection
Phase: 2025
Fulton County Water Distribution
Master Plan

Project Description:

Perform crossing pipe connection of 24" water main to 8" water main at Freemanville Rd and Quarterpath Ln. Helps in improving minimum pressures around the county.

Legend

- | | |
|---------------------|----------------------|
| Highlighted Project | Existing Water Mains |
| CIP Pipes | <= 8" |
| 2025 | 10" - 24" |
| 2030 | 30" - 36" |
| 2035 | >= 42" |
| 2040 | ▲ Pump Station |
| 2050 | ■ WTP |
| | ■ North Fulton |
| | — GDOT Road Segments |



0 5 10 20 30 40 Feet

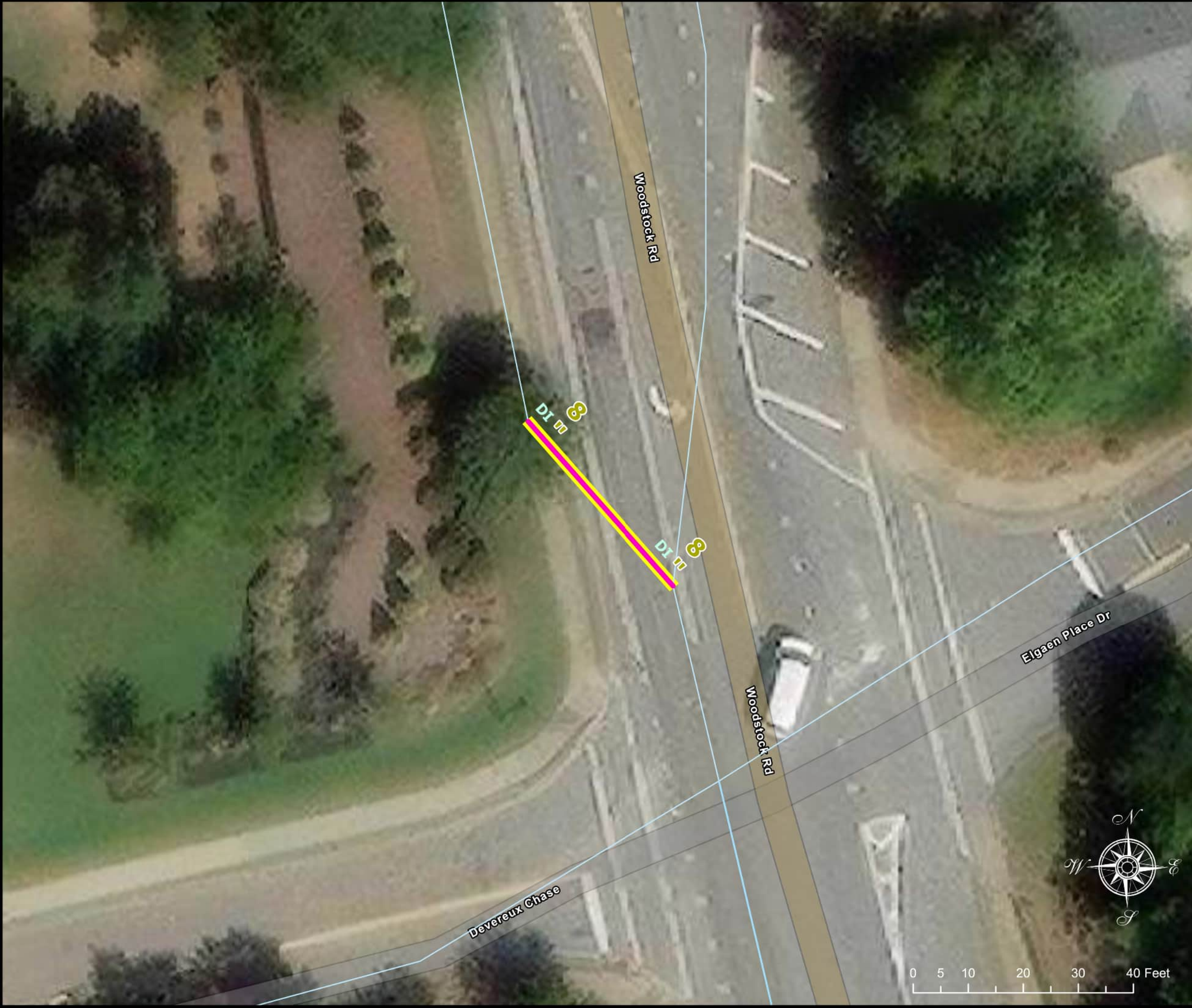
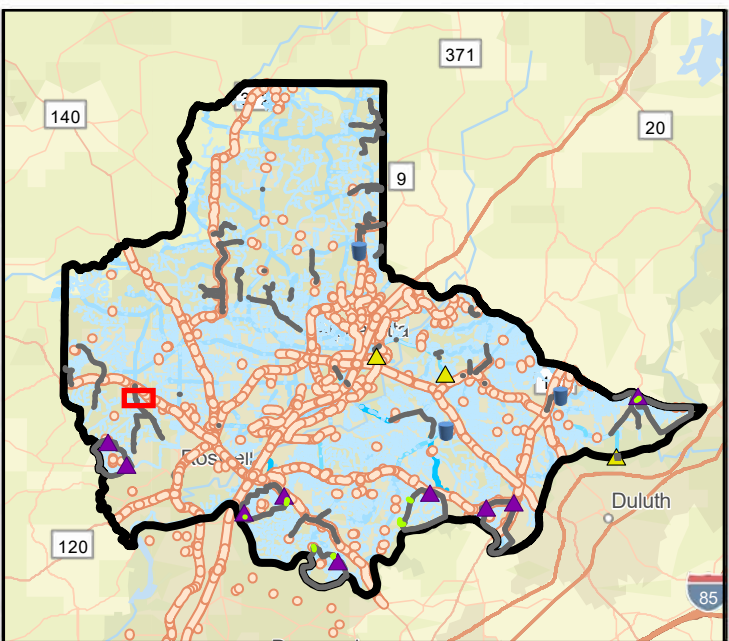


CIP Project #104
Woodstock Rd Extension
Phase: 2025
Fulton County Water Distribution
Master Plan

Project Description:
Extend 40 LF of 8" water main along Woodstock Rd. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



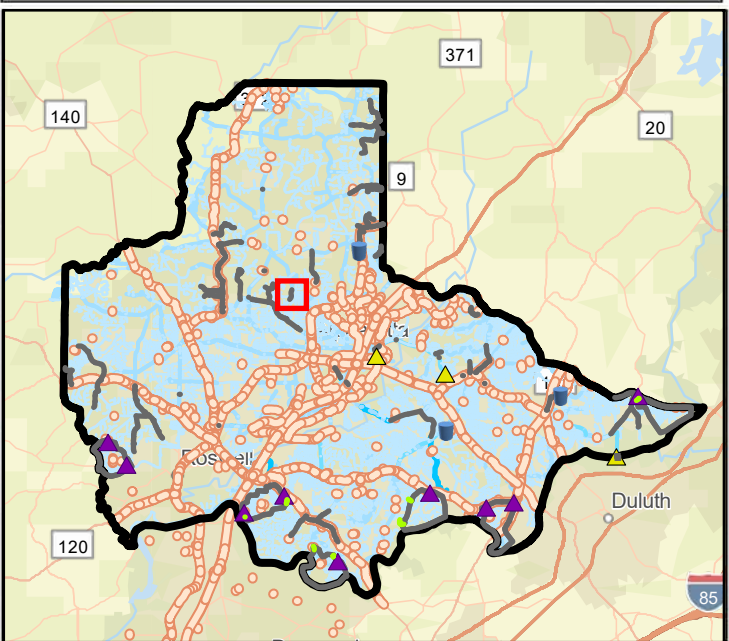
★ This project will help improve minimum pressures at the Providence Oaks subdivision where low pressures in the summer have been reported by customers.

CIP Project #105
Providence Rd Extension
Phase: 2025
Fulton County Water Distribution
Master Plan

Project Description:
Extend 1,600 LF of 8" water main along Providence Rd. Helps in improving low pressures and fire flows in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	▲ Pump Station
2050	■ WTP
	■ North Fulton
	— GDOT Road Segments



0 45 90 180 270 360 Feet

★ This project will help improve minimum pressures at the Vickery Crest subdivision where low pressures in the summer have been reported by customers.

CIP Project #106

Hopewell Rd Parallel Line
















Phase: 2025

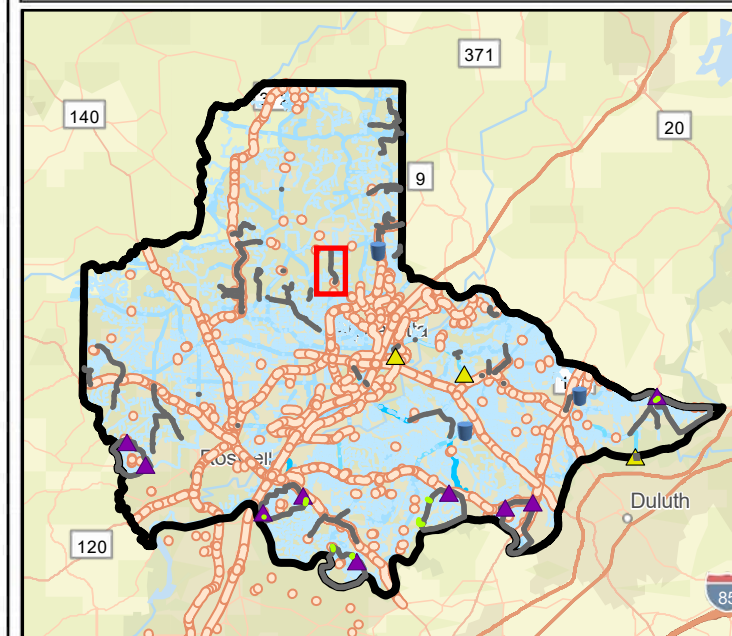
Fulton County Water Distribution Master Plan

Project Description:

Parallel 5,100 LF of 12" water main along Hopewell Rd. Helps in improving minimum pressures and fire flows in the area.

Legend

 Highlighted Project	 Existing Water Mains
 2025	 <= 8"
 2030	 10" - 24"
 2035	 30" - 36"
 2040	 >= 42"
 2050	 Pump Station
	 WTP
	 North Fulton
	 GDOT Road Segments



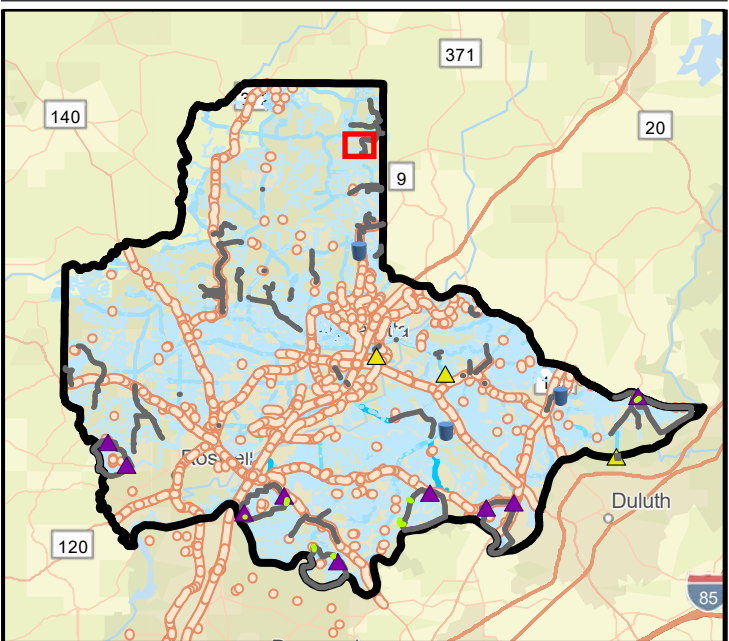


CIP Project #107
Hamby Rd Extension
Phase: 2025
Fulton County Water Distribution
Master Plan

Project Description:
Extend 2,600 LF of 8" water main
along Hamby Rd. Helps in
improving minimum pressures in
the area.

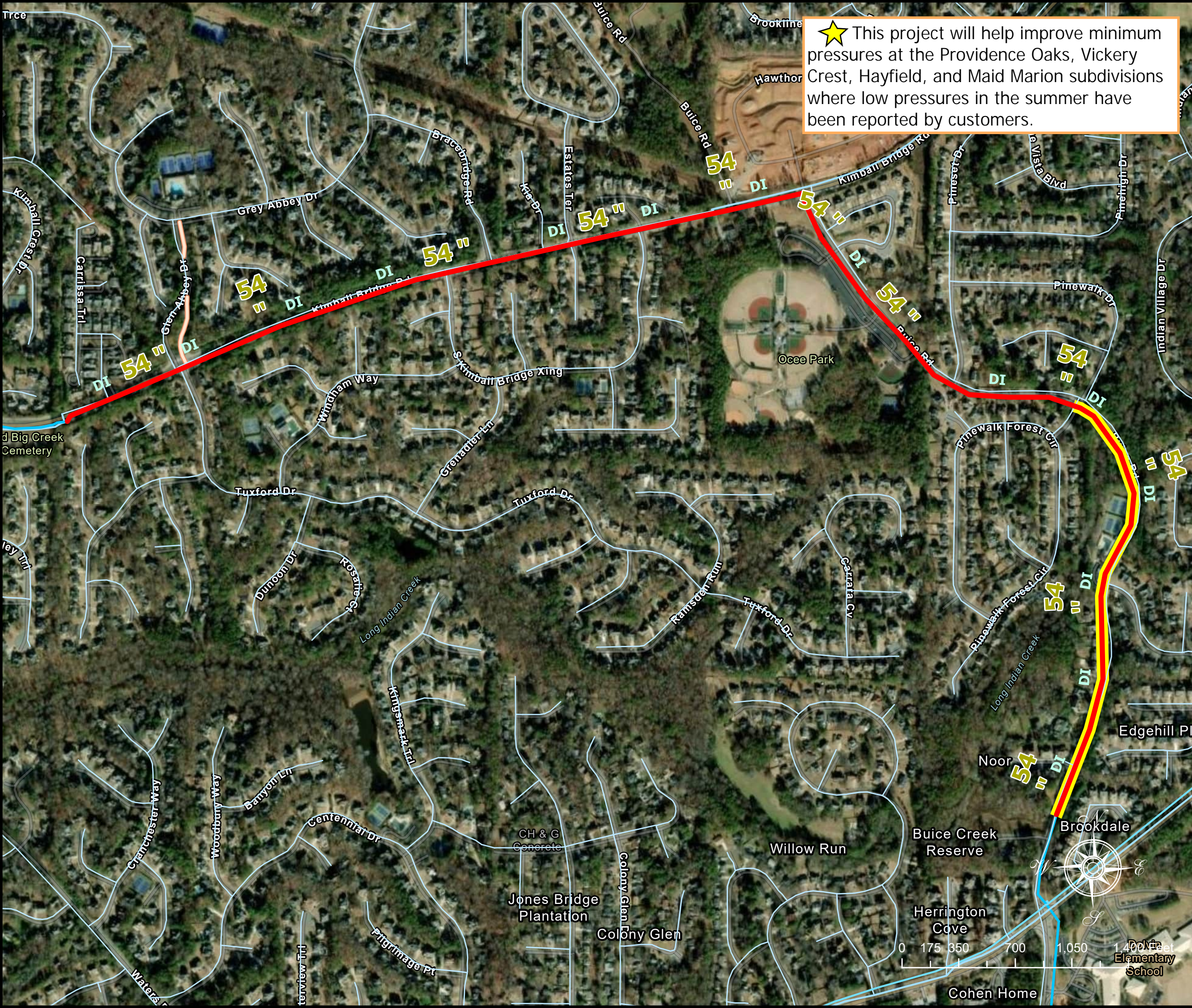
Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



0 65 130 260 390 520 Feet





★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

CIP Project #201A

Buice Rd Transmission Main

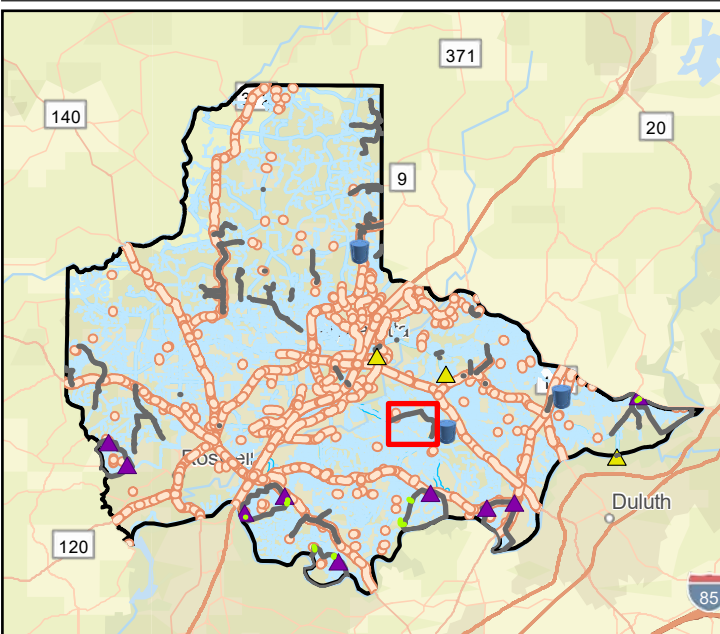
Phase: 2030

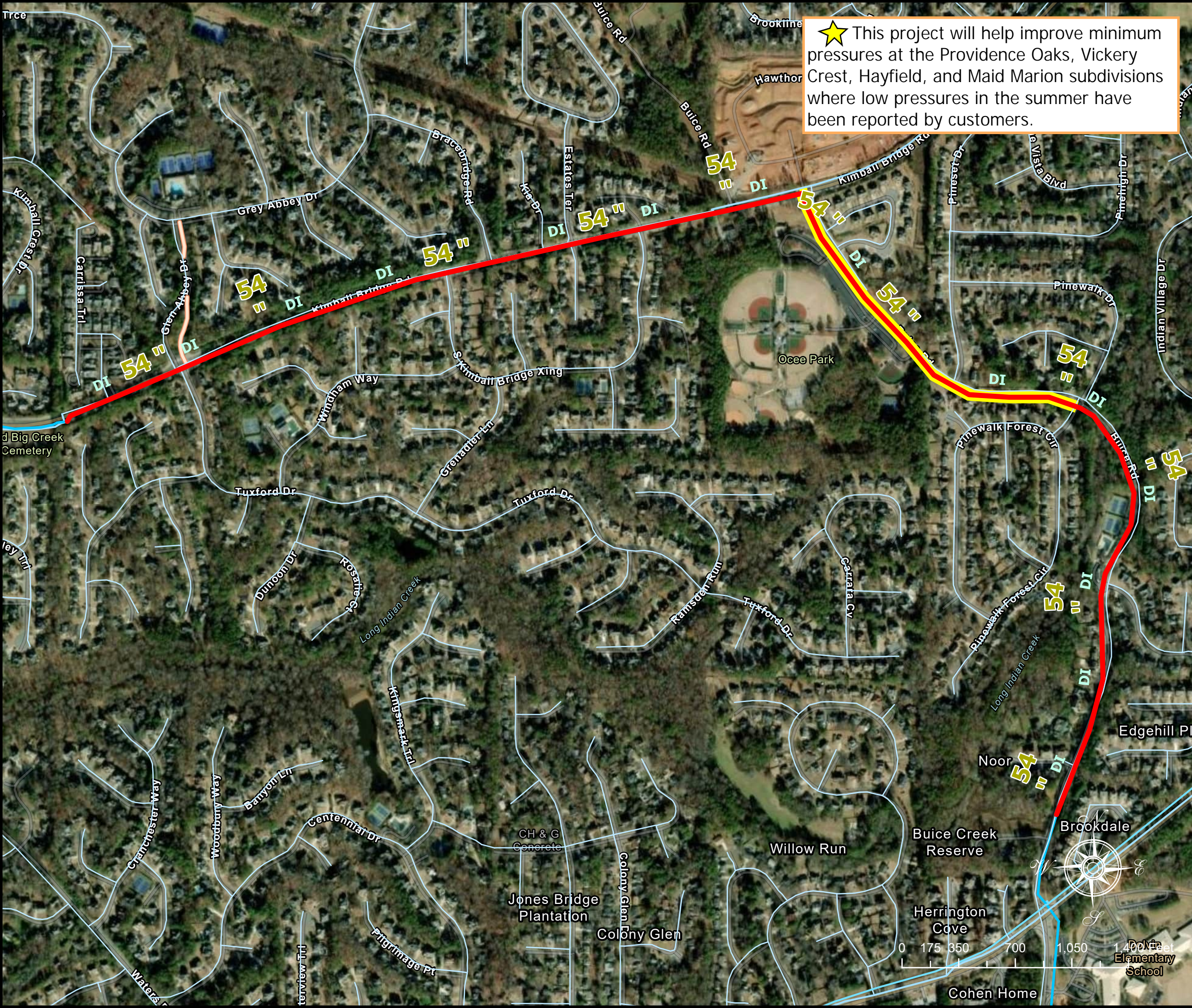
Fulton County Water Distribution Master Plan

Project Description:
Complete 2,800 LF of 54" transmission main along Buice Rd, starting at Pinewalk Forest Cir. Helps in improving minimum pressures and water age in the county.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
CIP Pipes 2030	10" - 24"
CIP Pipes 2035	30" - 36"
CIP Pipes 2040	>= 42"
CIP Pipes 2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments





★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

CIP Project #201B

Buice Rd Transmission Main

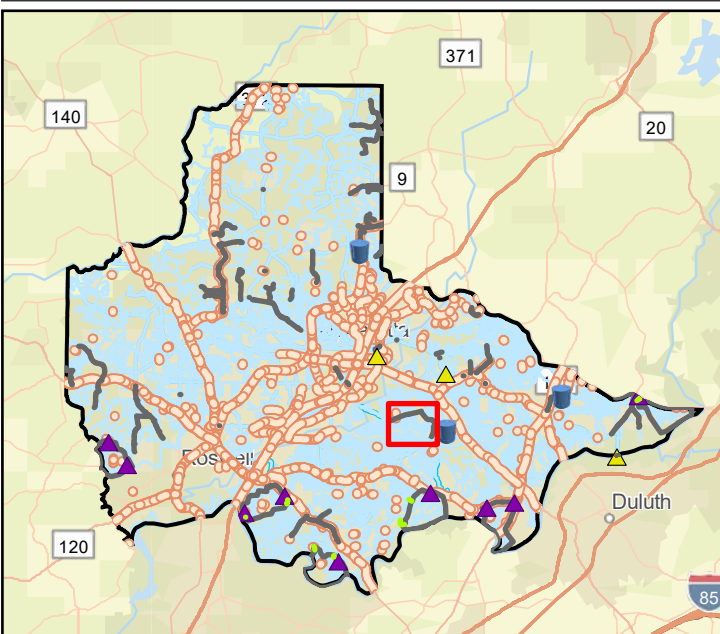
Phase: 2030

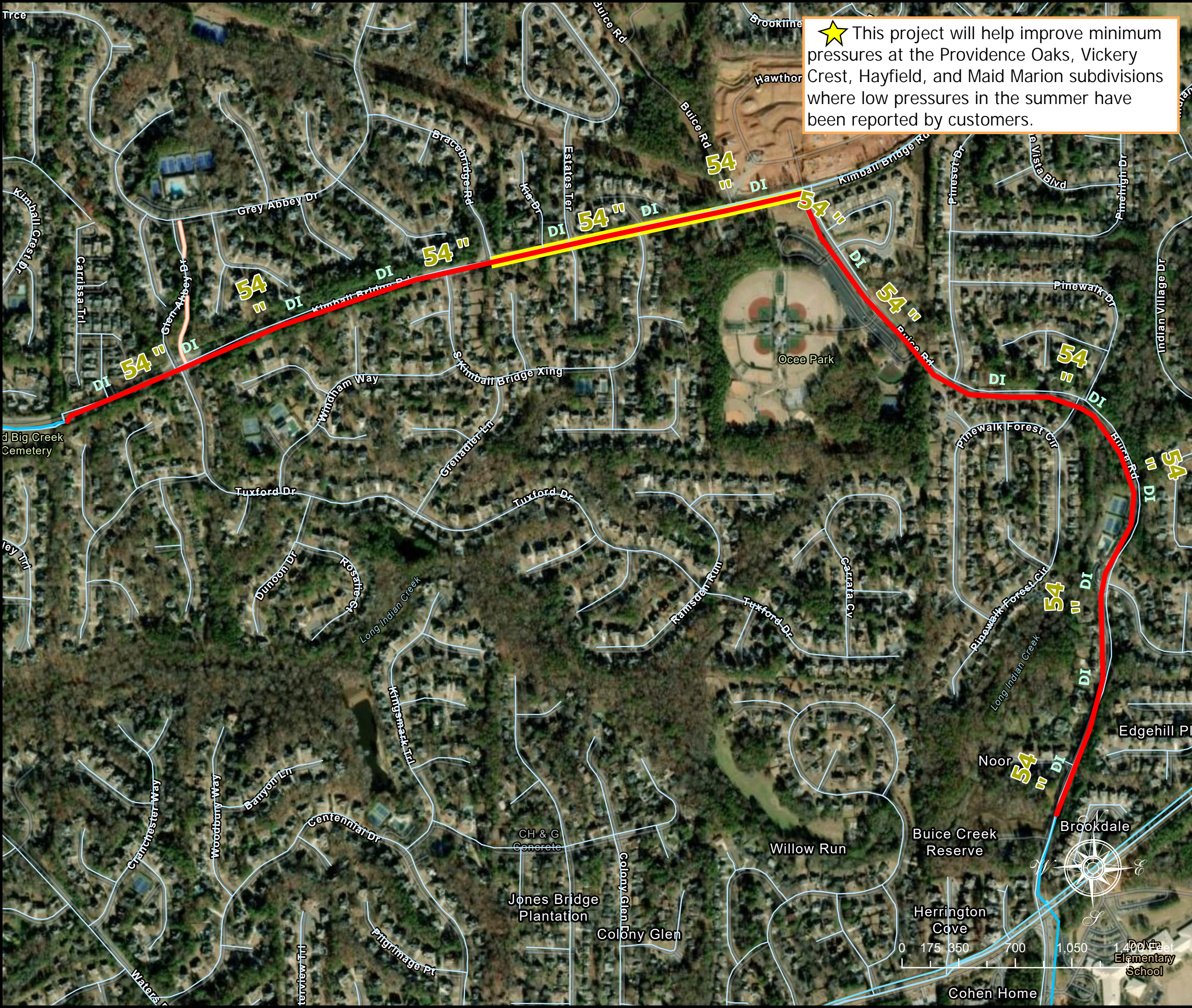
Fulton County Water Distribution Master Plan

Project Description:
Complete 2,400 LF of 54" transmission main along Buice Rd, ending at Pinewalk Forest Cir. Helps in improving minimum pressures and water age in the county.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments





★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

CIP Project #201C

Bruice Rd Transmission Main

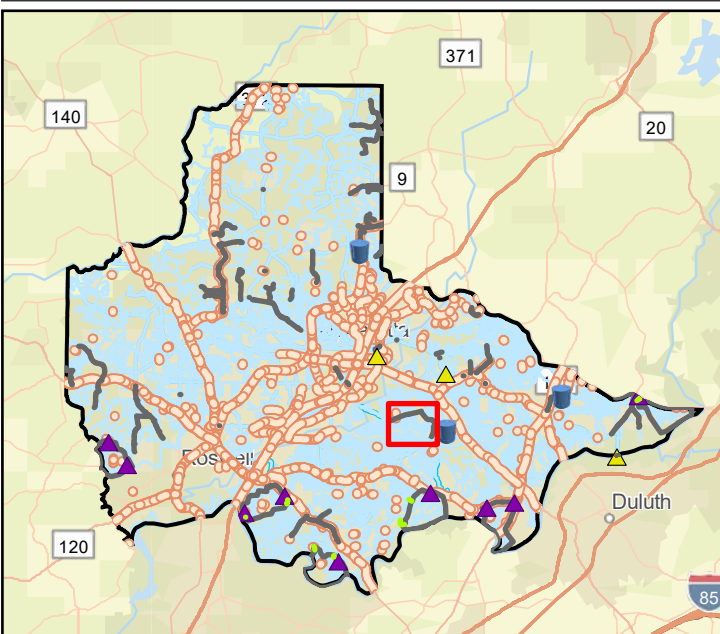
Phase: 2030

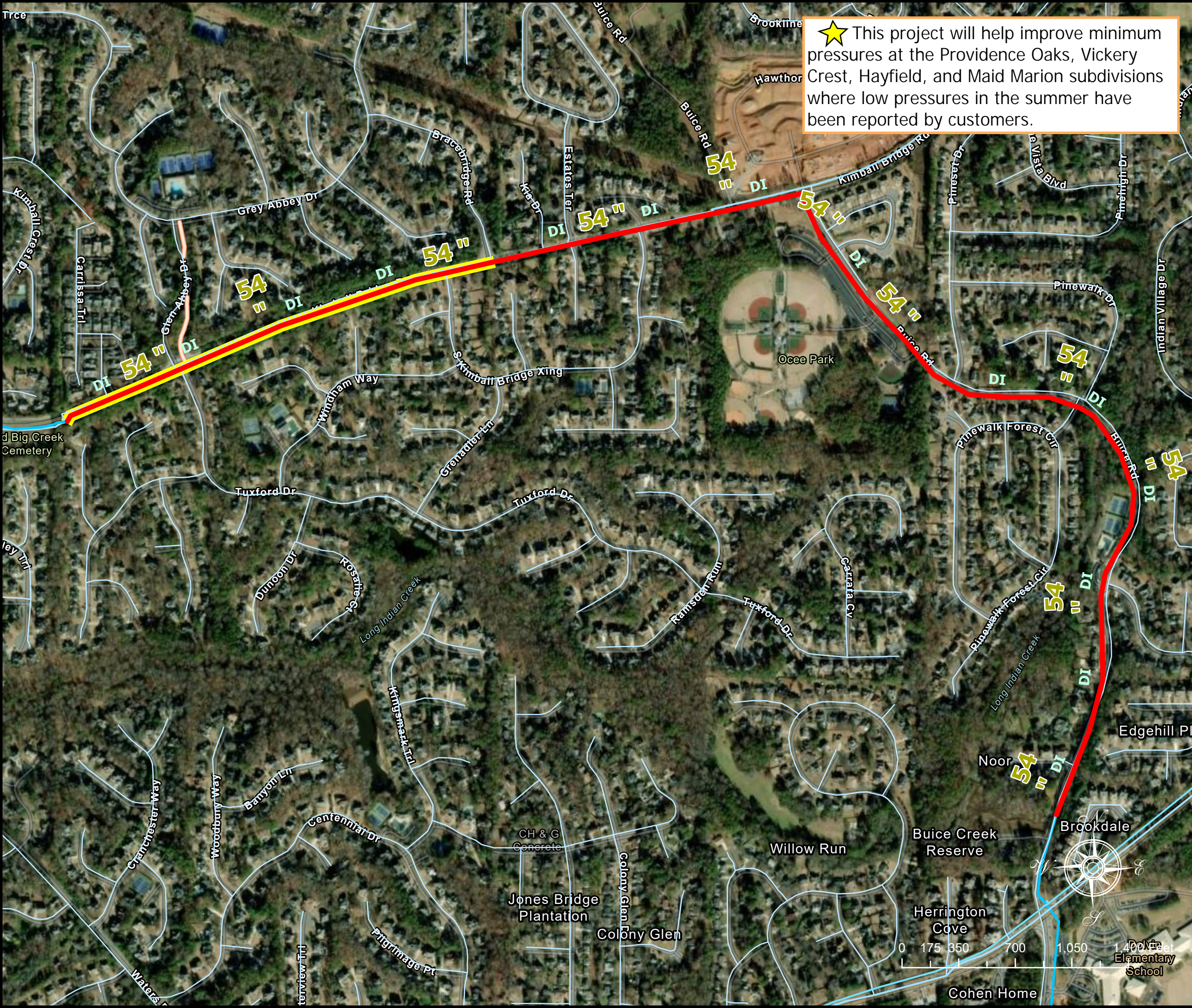
Fulton County Water Distribution Master Plan

Project Description:
Complete 2,000 LF of 54" transmission main along Kimball Bridge Rd, starting at Bracebridge Rd. Helps in improving minimum pressures and water age in the county.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments





★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

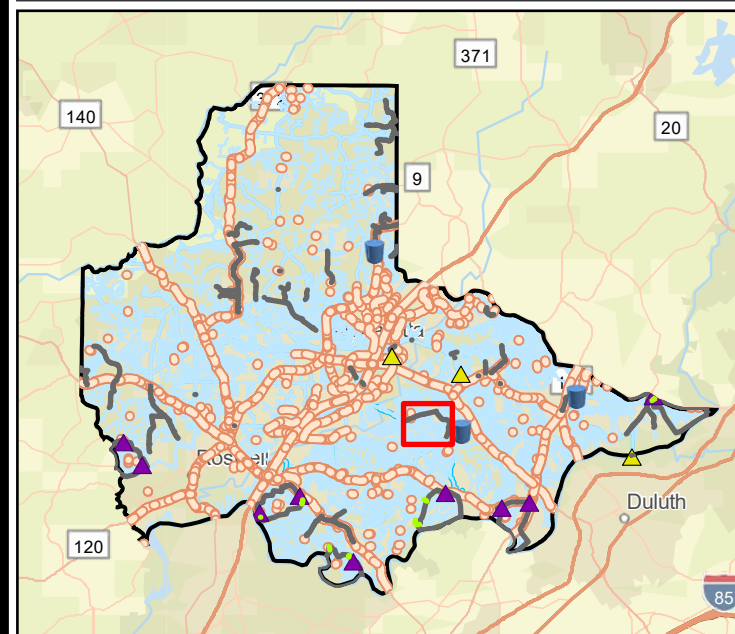
CIP Project #201D
Bruce Rd Transmission Main
Phase: 2030
Fulton County Water Distribution
Master Plan

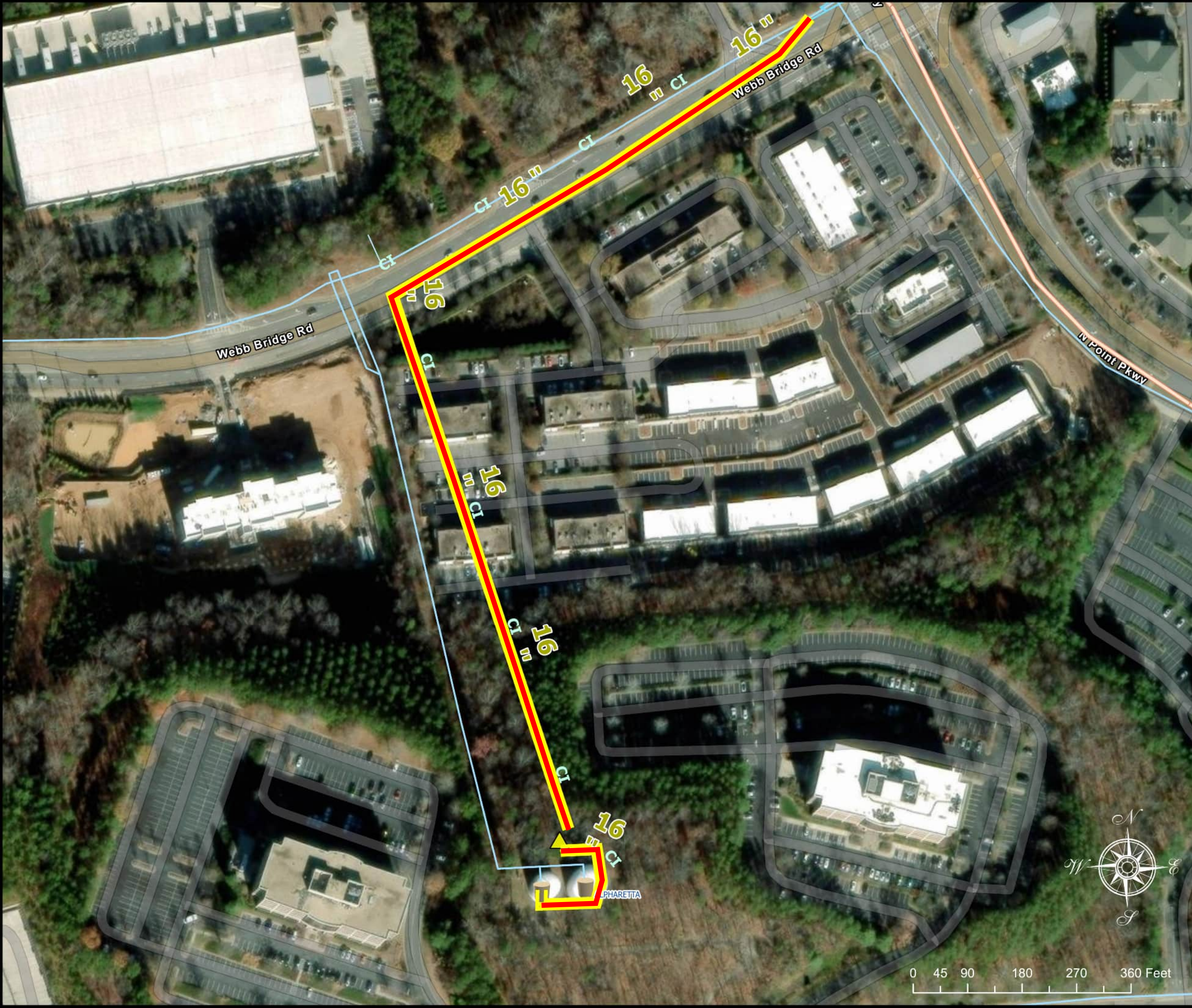
Project Description:

Complete 2,900 LF of 54" transmission main along Kimball Bridge Rd, ending at Bracebridge Rd. Helps in improving minimum pressures and water age in the county.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments



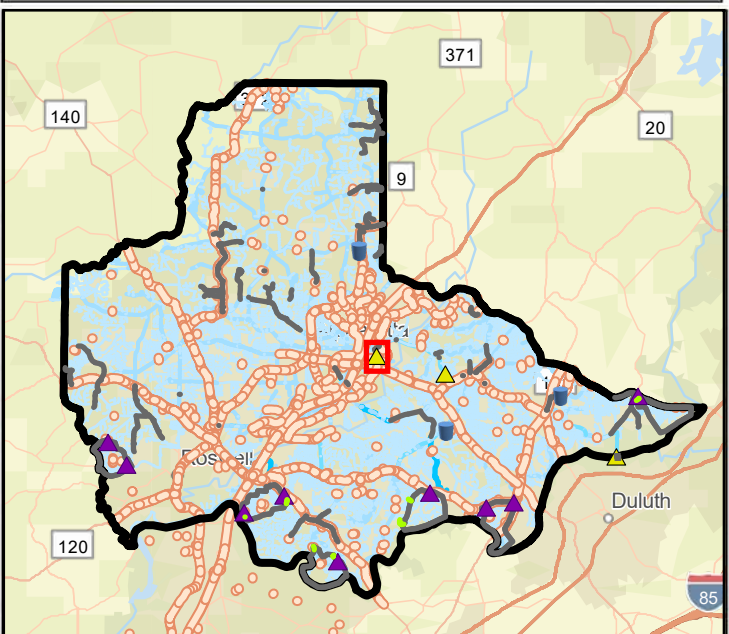


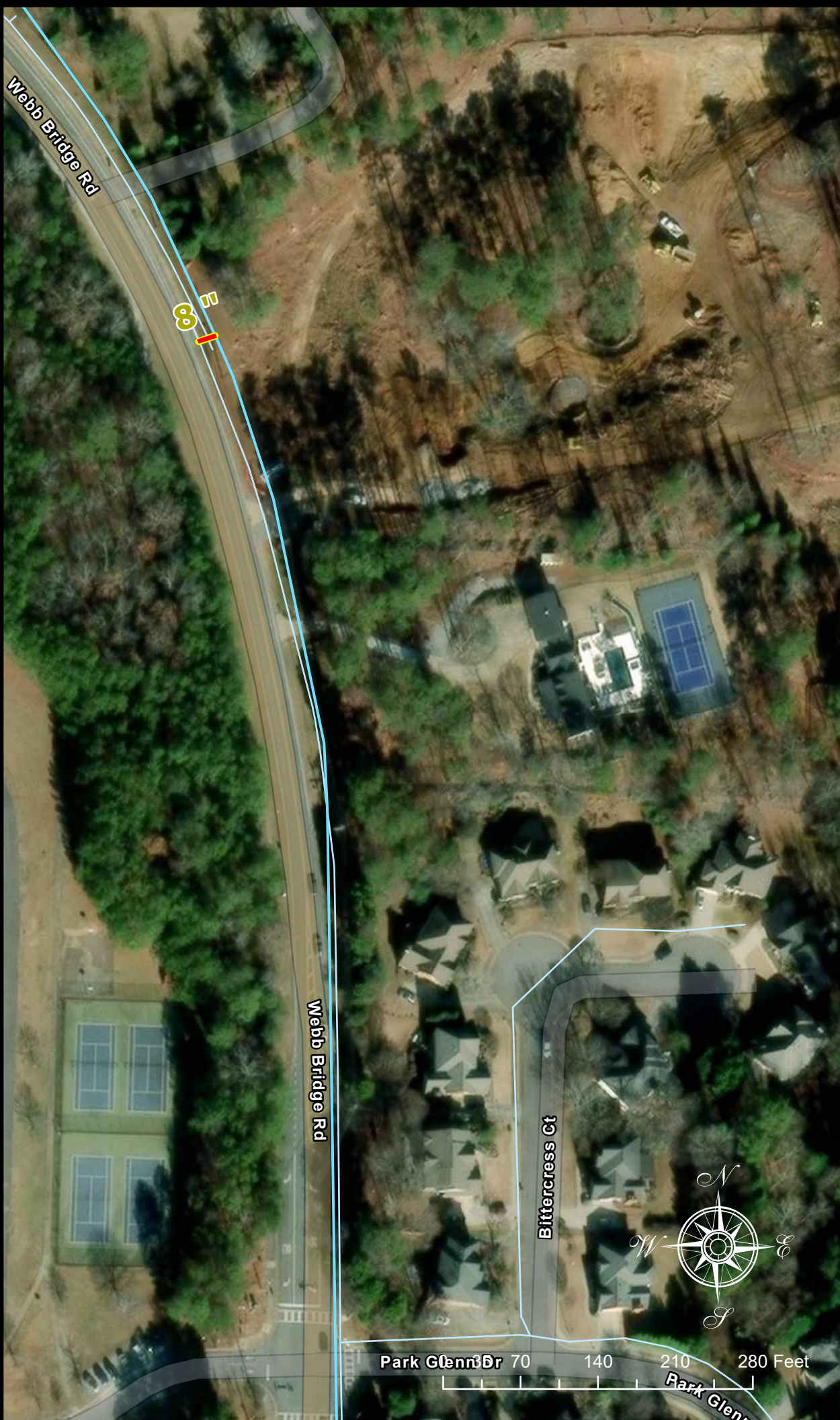
CIP Project #202
Alpharetta Tank Pump Station
Phase: 2030
Fulton County Water Distribution
Master Plan

Project Description:
New Alpharetta Tank Pump Station, with three pumps of 75 HP each, with 2,100 LF of 16" main along Webb Bridge Road. Helps with draining the Alpharetta Tank.

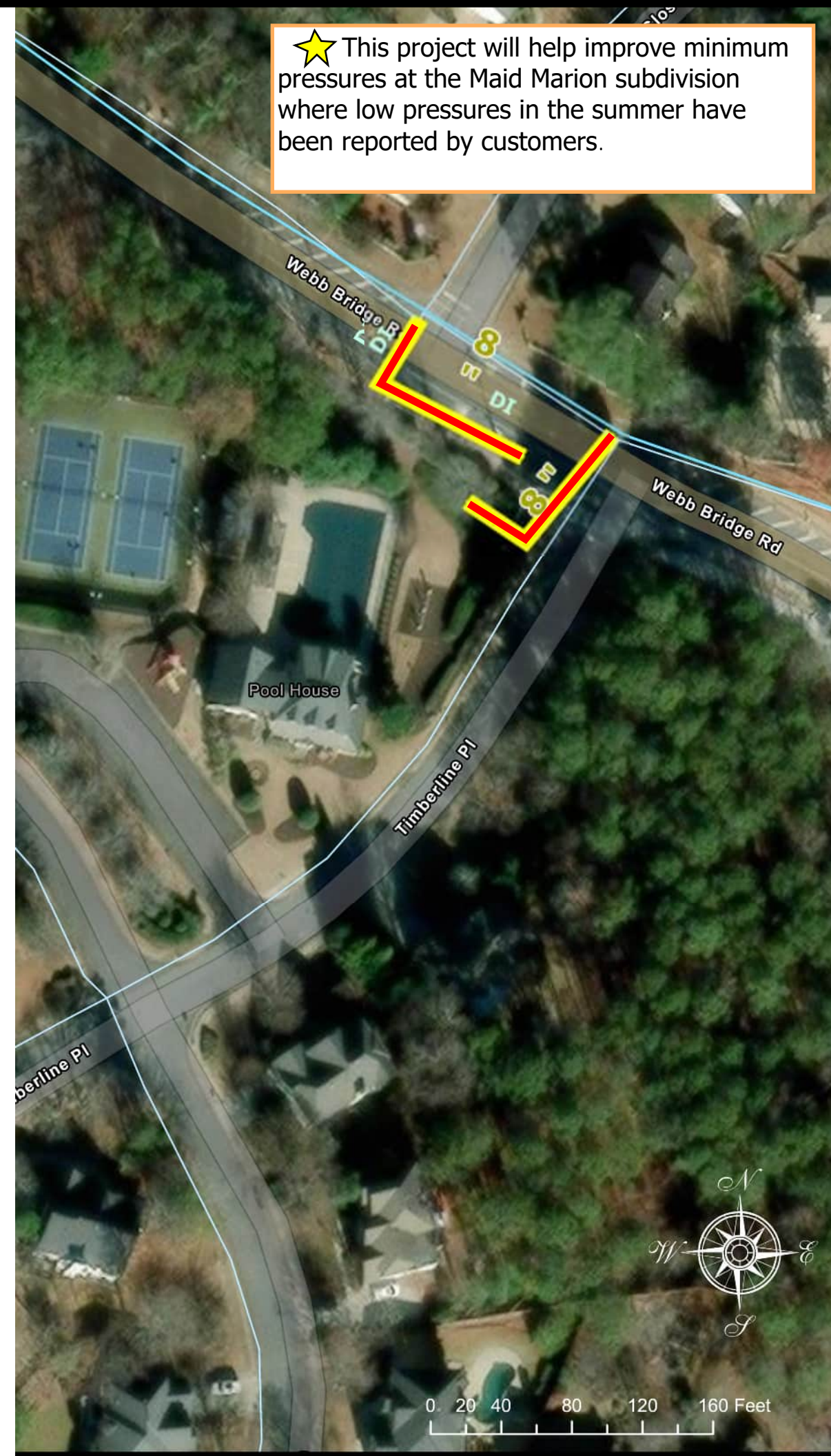
Legend

Highlighted Project	10" - 24"
CIP Pipes	30" - 36"
2025	>= 42"
2030	Ground Tank
2035	Pump Station
2040	WTP
2050	North Fulton
Existing Water Mains	GDOT Road Segments
<= 8"	





★ This project will help improve minimum pressures at the Maid Marion subdivision where low pressures in the summer have been reported by customers.



CIP Project #203

Maid Marion In-line Booster Station

Phase: 2030

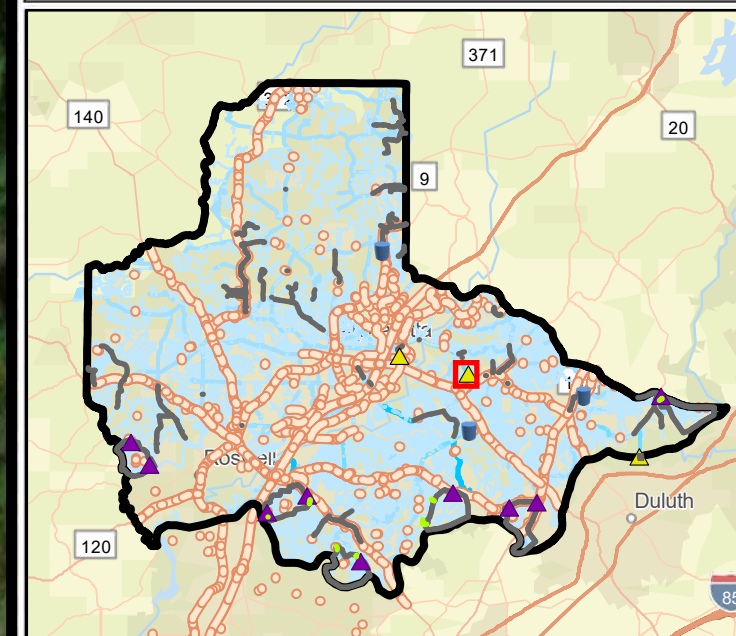
Fulton County Water Distribution Master Plan

Project Description:

New Maid Marion In-line Booster Station with three pumps of 5 HP each. Perform crossing pipe connection of 300 LF of 8" water main to 30" water main at Webb Bridge Road. Helps with improving minimum pressures in the area by creating a new Maid Marion high pressure zone. Project includes closed valves.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments

















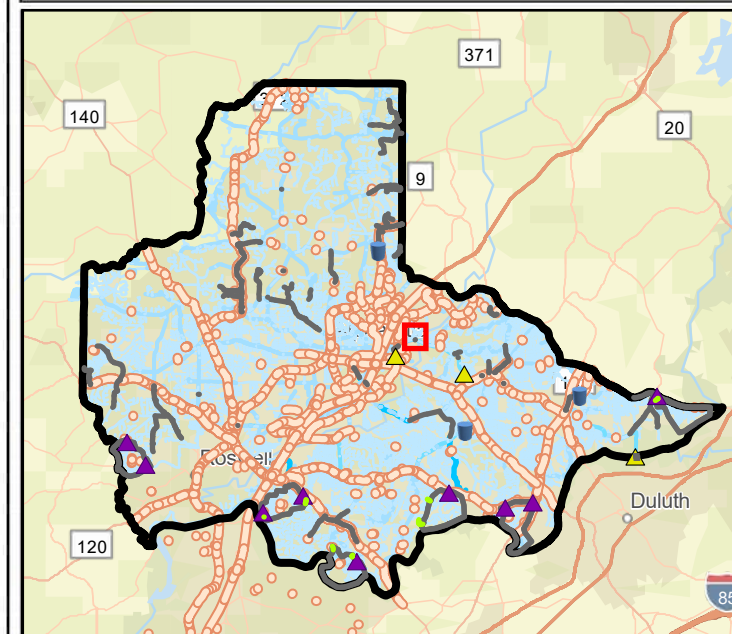
CIP Project #204
Webb Bridge Rd and Strath Dr
Crossing Pipe Connection
Phase: 2030
Fulton County Water Distribution
Master Plan

Project Description:

Perform crossing pipe connection of 30" water main to 8" water main at Webb Bridge Rd and Strath Dr. Helps in improving minimum pressures in the area.

Legend

-  Highlighted Project
- CIP Pipes
-  2025
-  2030
-  2035
-  2040
-  2050
- Existing Water Mains
-  ≤ 8"
-  10" - 24"
-  30" - 36"
-  ≥ 42"
-  Pump Station
-  WTP
-  North Fulton
-  GDOT Road Segments



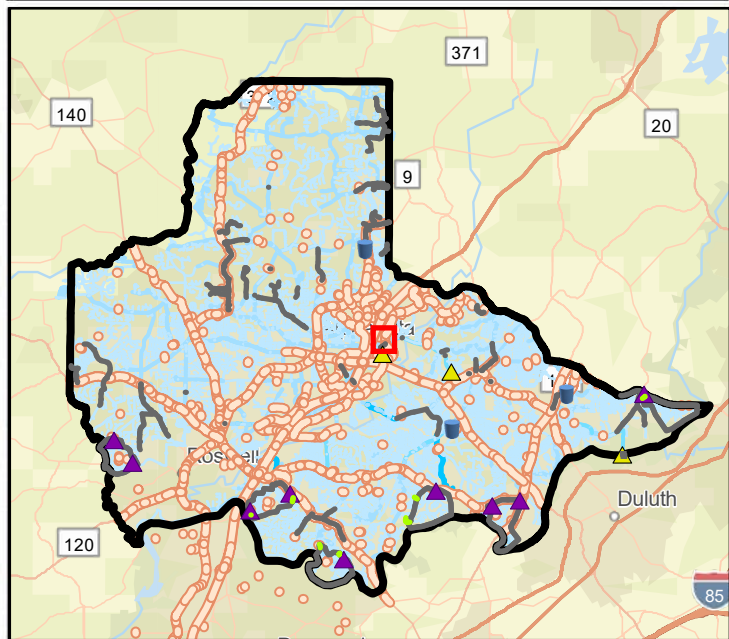
CIP Project #205
 Webb Bridge Rd and N Point
 Pkwy Crossing Pipe Connection
 Phase: 2030
 Fulton County Water Distribution
 Master Plan

Project Description:

Perform crossing pipe connection of 30" water main to 12" water main at Webb Bridge Rd and N Point Pkwy. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



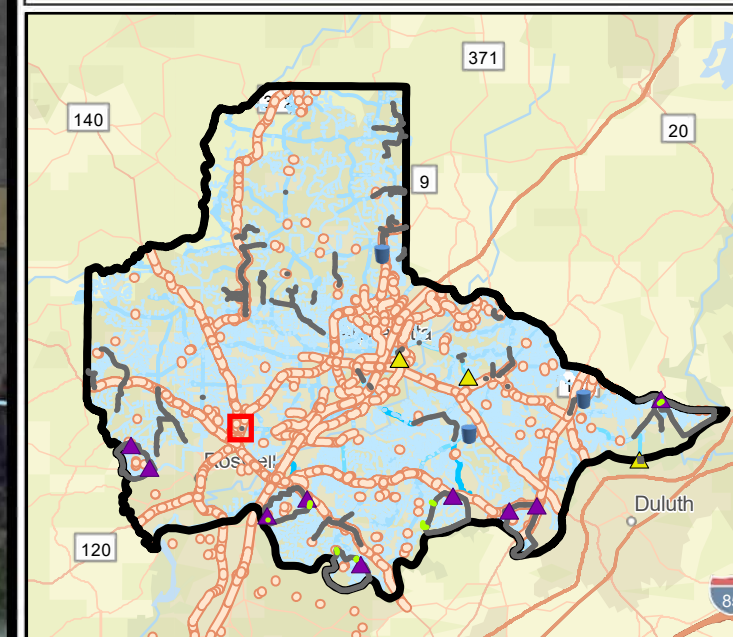
CIP Project #206
Mansell Rd and Alpharetta Hwy
Crossing Pipe Connection
Phase: 2030
Fulton County Water Distribution
Master Plan

Project Description:

Perform crossing pipe connection of 60 LF of 20" water main to 10" water main at Mansell Rd and Alpharetta Hwy. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



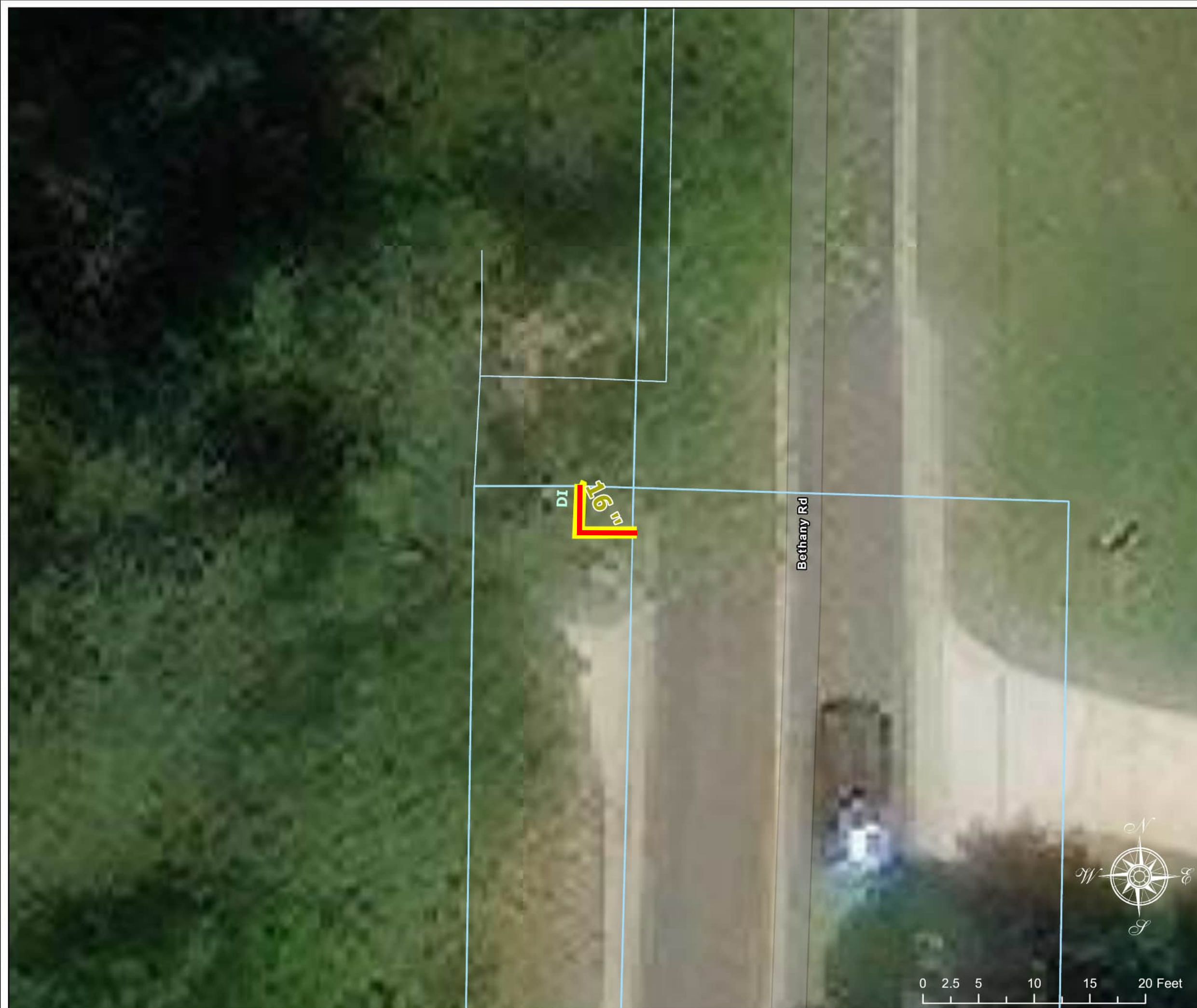
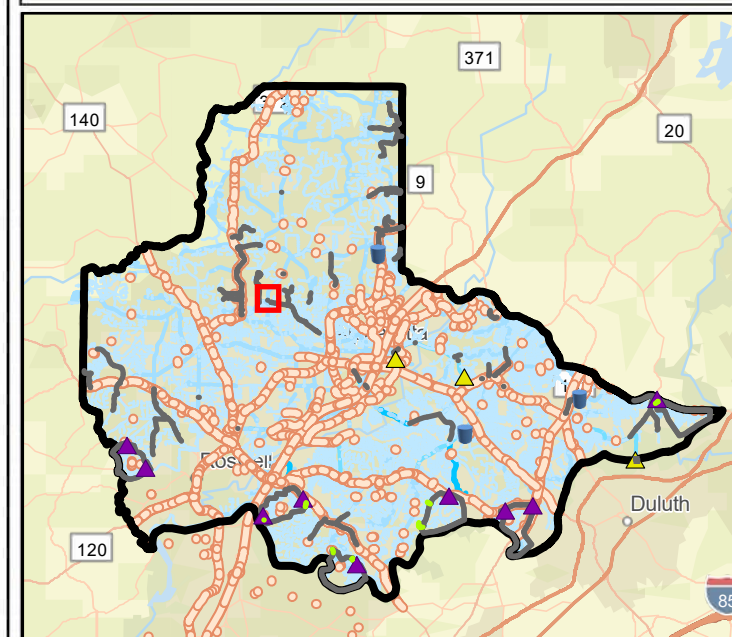
CIP Project #207
 Bethany Rd Crossing Pipe
 Connection
 Phase: 2030
 Fulton County Water Distribution
 Master Plan

Project Description:

Perform crossing pipe connection of 16" water main to 10" water main at Bethany Rd, just north of Mayfield Rd. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



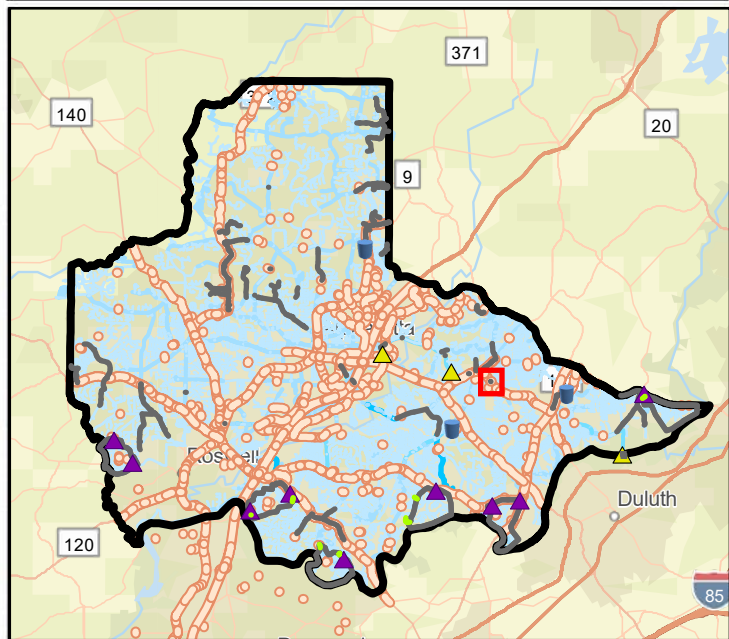
CIP Project #208
 Abbotts Bridge Rd and Abbotts Way Crossing Pipe Connection
 Phase: 2030
 Fulton County Water Distribution Master Plan

Project Description:

Perform crossing pipe connection of 30" water main to 8" water main at Abbotts Bridge Rd and Abbotts Way. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



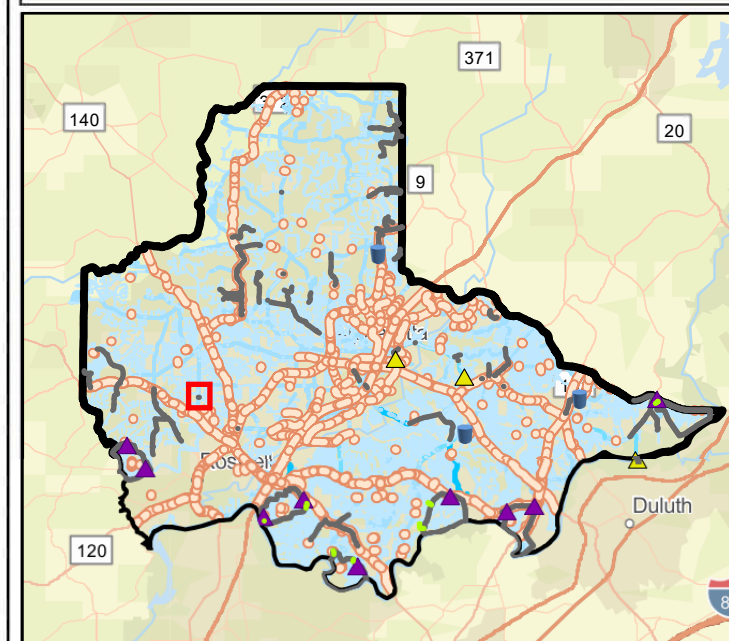
CIP Project #209
 Crabapple Rd Crossing Pipe
 Connection
 Phase: 2030
 Fulton County Water Distribution
 Master Plan

Project Description:

Perform crossing pipe connection of 16" water main to 10" water main at Crabapple Rd, just north of Strickland Rd. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



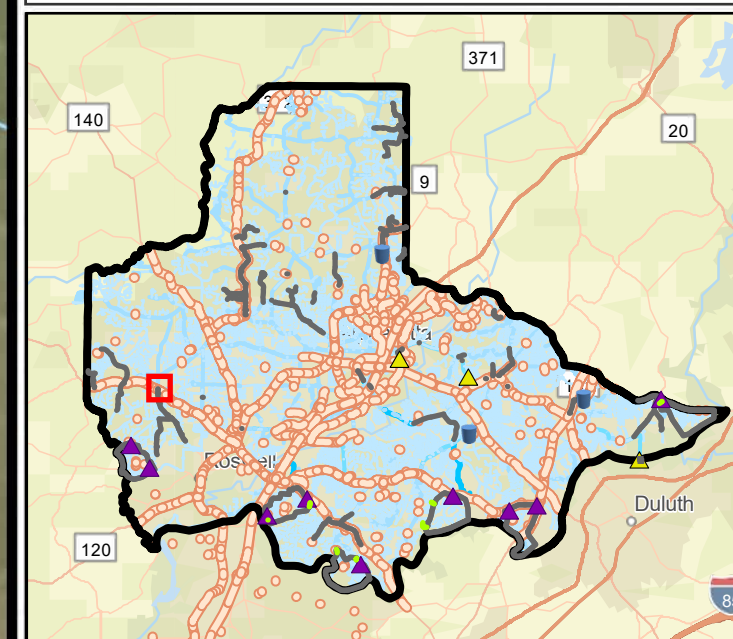
CIP Project #210
W Crossville Rd and Woodstock Rd Crossing Pipe Connection
Phase: 2030
Fulton County Water Distribution Master Plan

Project Description:

Perform crossing pipe connection of 60 LF of 24" water main to 10" water main at W Crossville Rd and Woodstock Rd. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	Pump Station
2050	WTP
	North Fulton
	GDOT Road Segments



★ This project will help improve minimum pressures at the Hayfield subdivision where low pressures in the summer have been reported by customers.

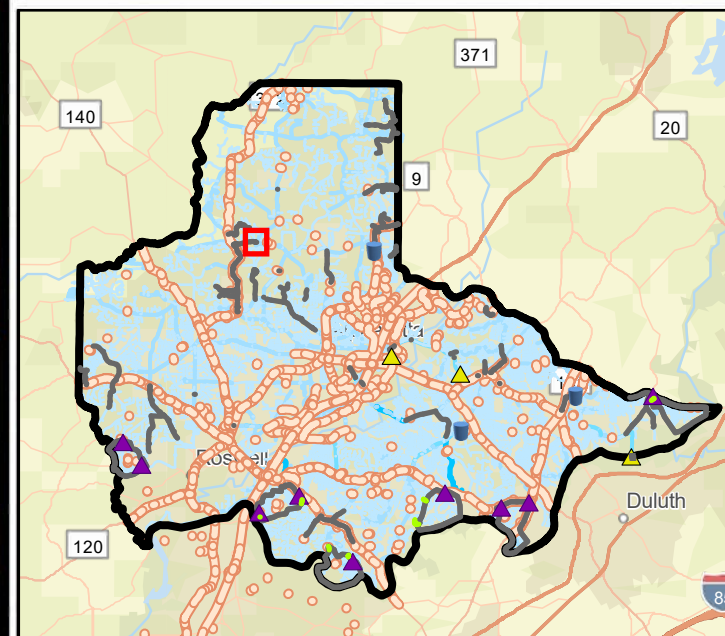
CIP Project #211
Providence Rd and Freemanville Rd Pipe Connection
Phase: 2030
Fulton County Water Distribution Master Plan

Project Description:

Perform crossing pipe connection of 120 LF of 24" water main to 10" water main at Providence Rd and Freemanville Rd. Helps in improving minimum pressures in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	▲ Pump Station
2050	■ WTP
	■ North Fulton
	— GDOT Road Segments


















0 5 10 20 30 40 Feet

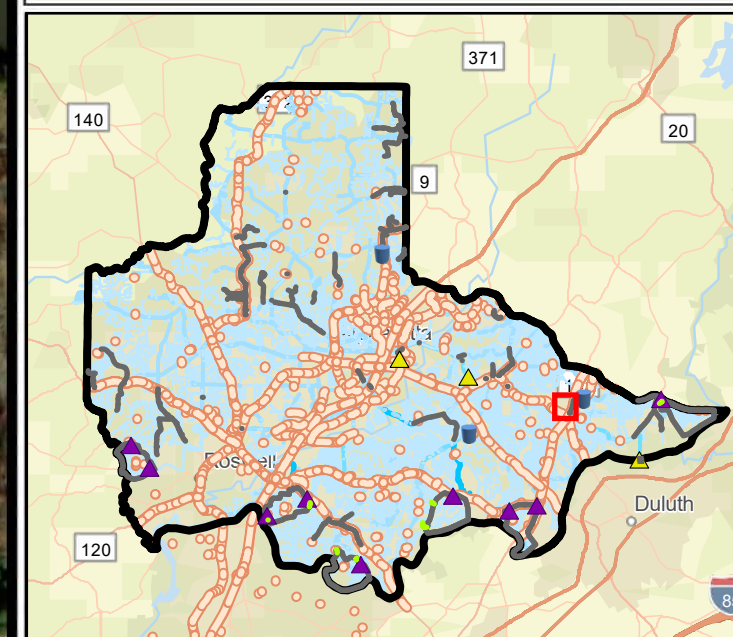
CIP Project #212
Medlock Bridge Rd Parallel Line
Phase: 2030
Fulton County Water Distribution
Master Plan

Project Description:

Parallel 4,500 LF of 30" water main along Medlock Bridge Rd and Johns Creek Pkwy. Helps in improving minimum pressures in the area. ALCON customer

Legend

 Highlighted Project	 Existing Water Mains
 CIP Pipes 2025	 <= 8"
 2030	 10" - 24"
 2035	 30" - 36"
 2040	 >= 42"
 2050	 Pump Station
	 WTP
	 North Fulton
	 GDOT Road Segments





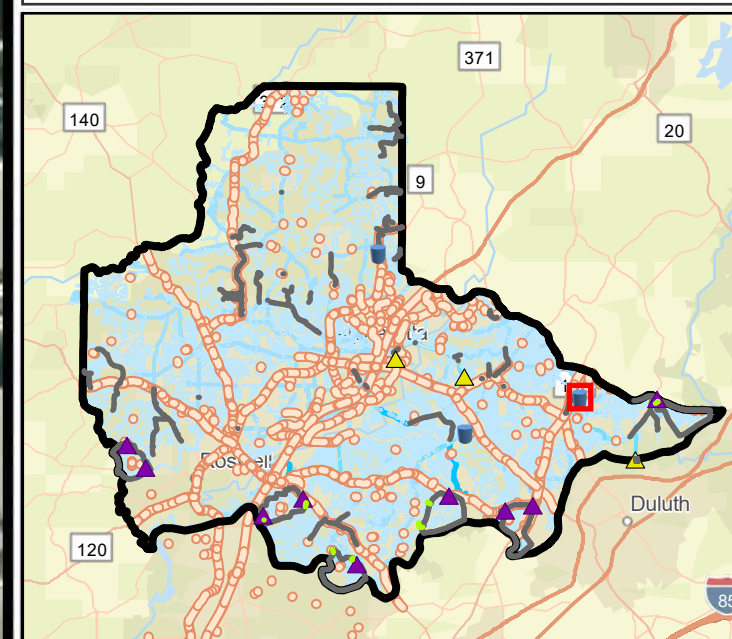
CIP Project #213
New 3 MG Elevated Tank at
ALCON
Phase: 2030
Fulton County Water Distribution
Master Plan

Project Description:

New 3 MG elevated storage tank at
ALCON. Helps with providing
emergency storage.

Legend

Highlighted Project	10" - 24"
CIP Pipes	30" - 36"
2025	>= 42"
2030	Elevated Tank
2035	Pump Station
2040	WTP
2050	North Fulton
Existing Water Mains	GDOT Road Segments
<= 8"	



★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

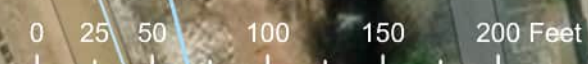
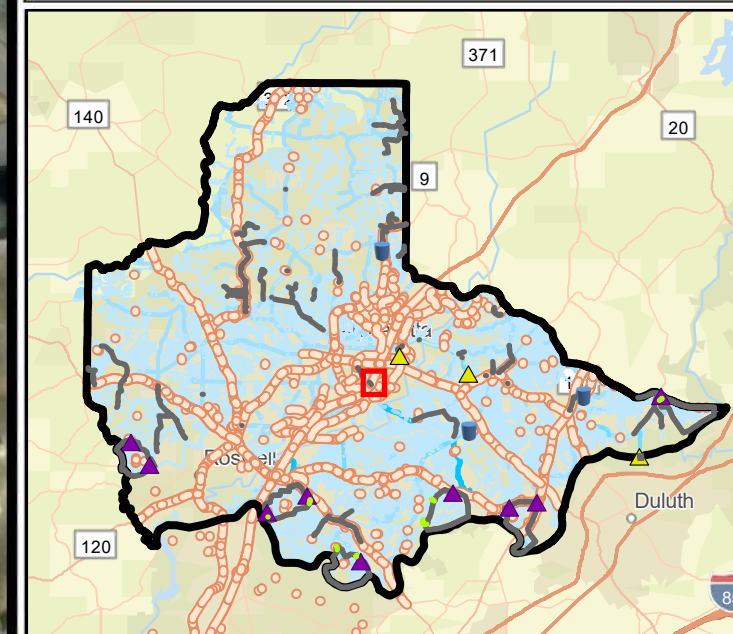
CIP Project #301
Kimball Bridge Rd Transmission Main
Phase: 2035
Fulton County Water Distribution Master Plan

Project Description:

Complete 500 LF of 42" Transmission Main under GA 400 along Kimball Bridge Rd. Helps in improving minimum pressure and water age in the area.

Legend

- | | |
|---------------------|----------------------|
| Highlighted Project | Existing Water Mains |
| CIP Pipes 2025 | <= 8" |
| 2030 | 10" - 24" |
| 2035 | 30" - 36" |
| 2040 | >= 42" |
| 2050 | Pump Station |
| | WTP |
| | North Fulton |
| | GDOT Road Segments |

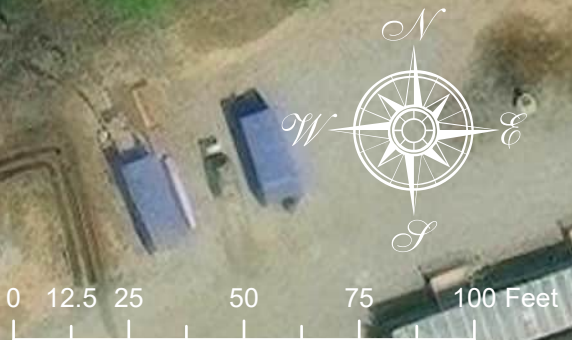
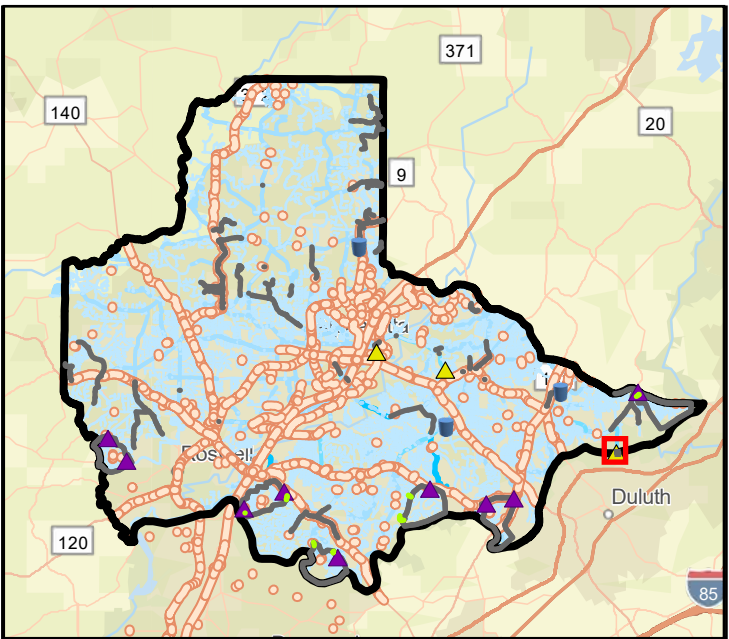




CIP Project #302
Rogers Bridge Pump Station
Phase: 2035
Fulton County Water Distribution
Master Plan

Project Description:
New 20 MGD Pump Station at Rogers Bridge Rd with three 18-inch parallel mains. Includes replacing 18-inch cross connects with 24-inch cross connects. Helps serve as an emergency interconnection with Gwinnett County.

Legend	
Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	North Fulton
	GDOT Road Segments



CIP Project #303

Pine Grove Low Pressure Zone

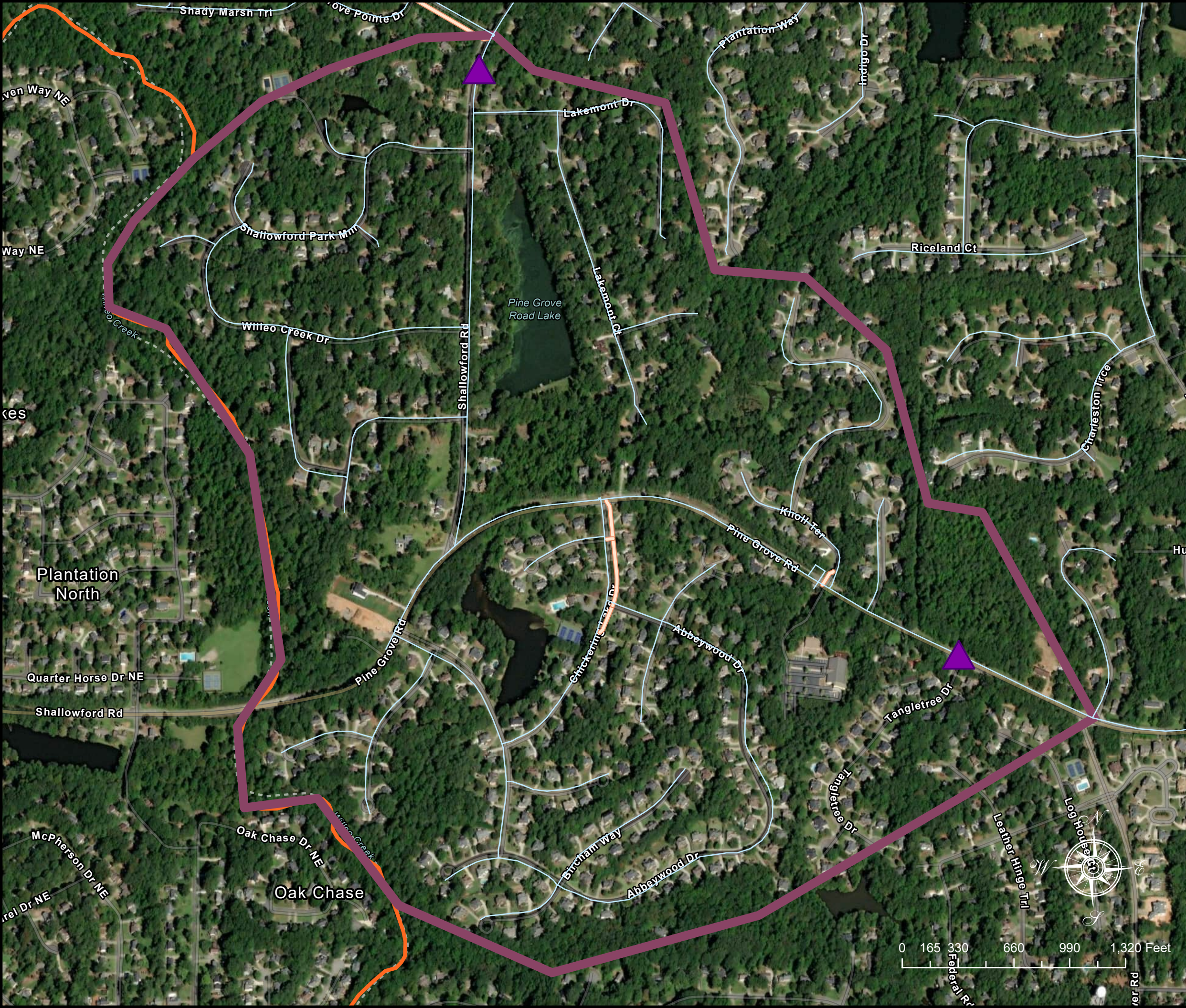
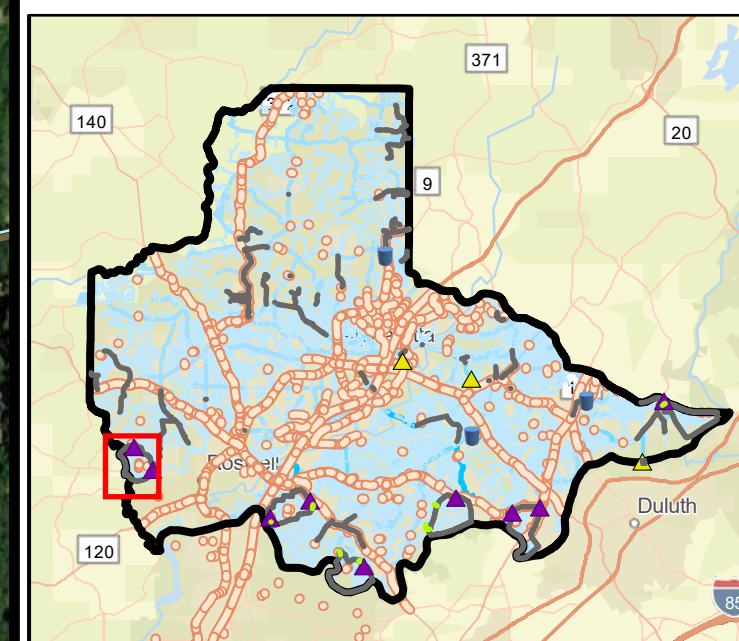
Phase: 2035

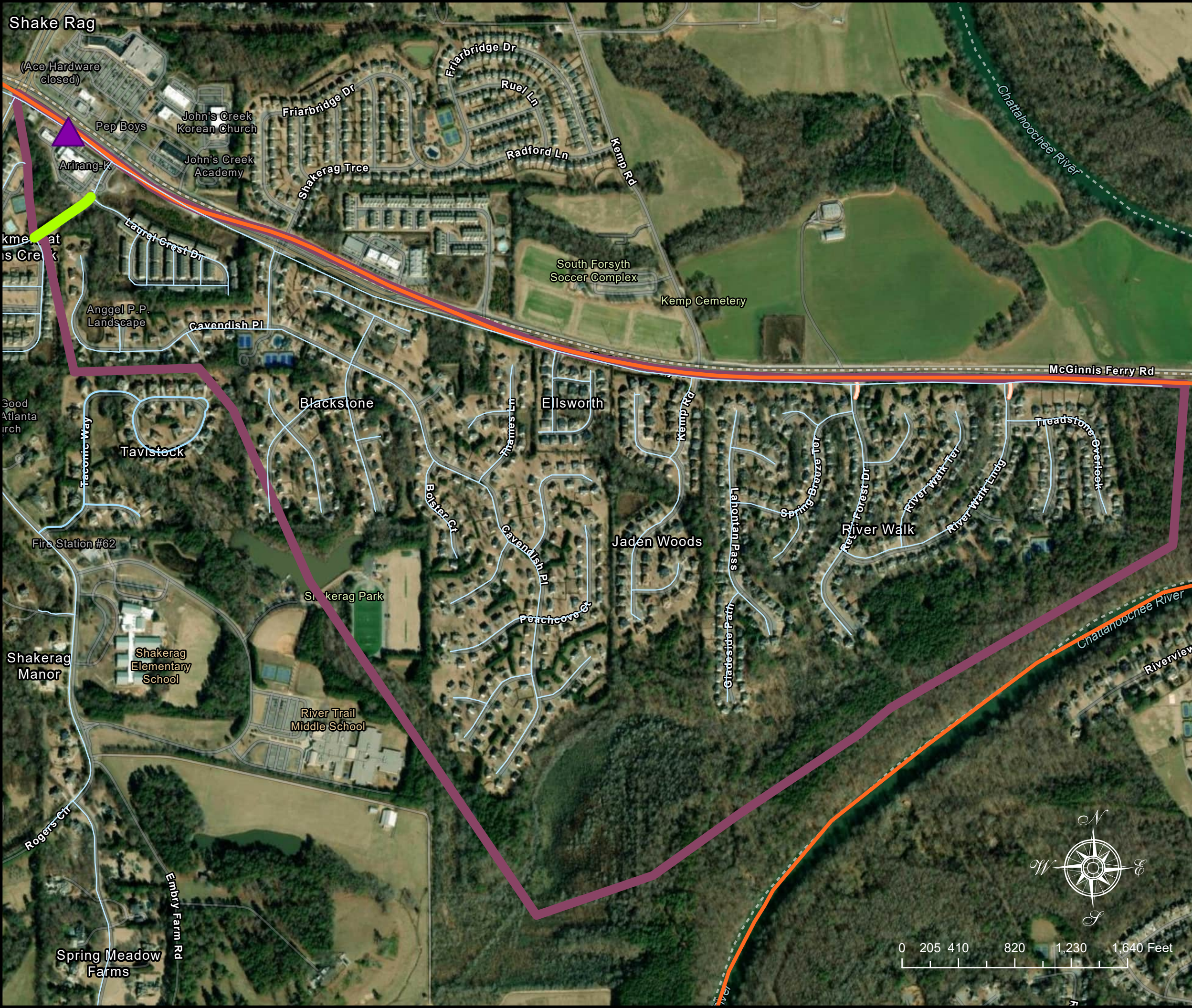
Fulton County Water Distribution Master Plan

Project Description:

New Pine Grove low pressure zone with two PRVs which reduces the average pressure from 137 psi to 100 psi. This zone covers around 7 miles of water main and impacts about 500 customers.

- Legend**
- | | |
|----------------------|----------------------------|
| Existing Water Mains | North Fulton |
| <= 8" | GDOT Road Segments |
| 10" - 24" | Pressure Zones |
| 30" - 36" | PRVs |
| 38" - 42" | Pressure Zone Closed Mains |
| >= 42" | |





CIP Project #304

Shakerag Low Pressure Zone

Phase: 2035

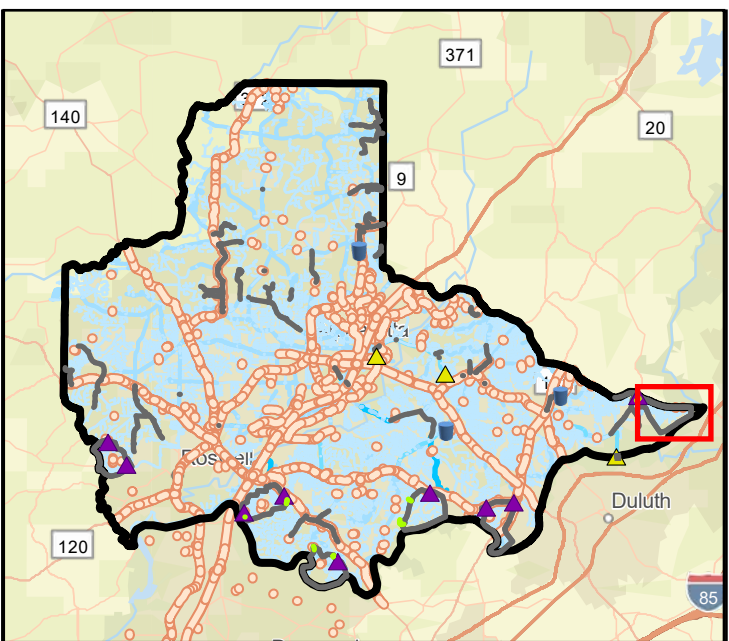
Fulton County Water Distribution Master Plan

Project Description:

New Shakerag low pressure zone with one PRV and one closed valve which reduces the average pressure from 149 psi to 91 psi. This zone covers around 9 miles of water main and impacts about 850 customers.

Legend

Existing Water Mains	North Fulton
<= 8"	GDOT Road Segments
10" - 24"	Pressure Zones
30" - 36"	PRVs
>= 42"	Pressure Zone Closed Mains



CIP Project #305
Horseshoe Bend Low Pressure Zone
Phase: 2035
Fulton County Water Distribution
Master Plan

Project Description:

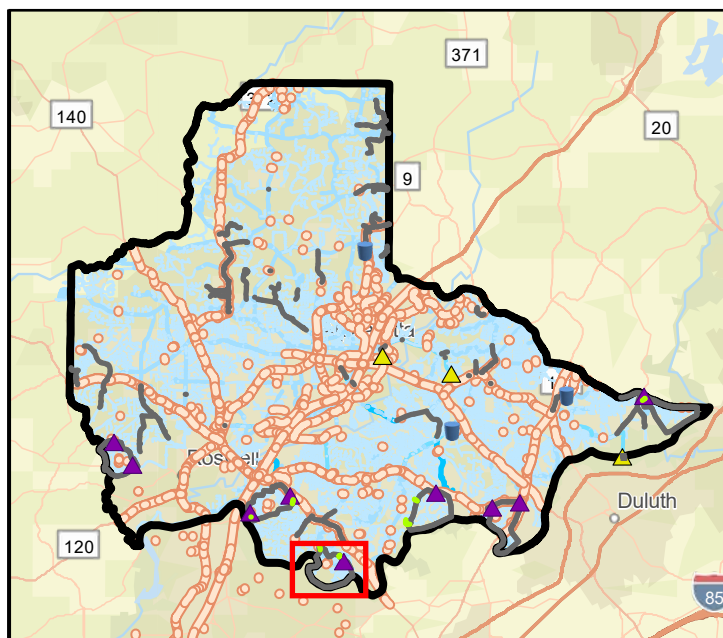
New Horseshoe Bend low pressure zone with one PRV and two closed valves which reduces the average pressure from 150 psi to 101 psi. This zone covers around 7 miles of water main and impacts about 700 customers.

Legend

Existing Water Mains

- <= 8"
- 10" - 24"
- 30" - 36"
- >= 42"

- North Fulton
- GDOT Road Segments
- Pressure Zones
- PRVs
- Pressure Zone Closed Mains



CIP Project #306
Martin Lake Low Pressure Zone
Phase: 2035
Fulton County Water Distribution
Master Plan

Project Description:

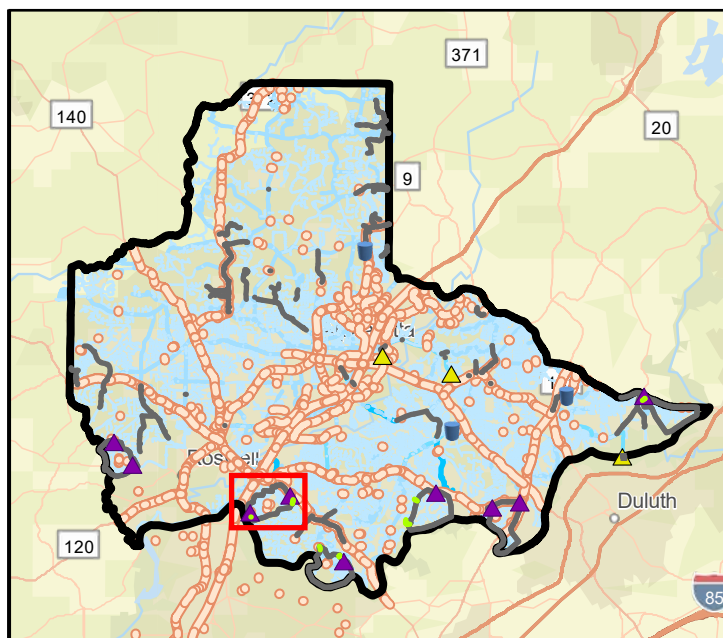
New Martin Lake low pressure zone with two PRVs and two closed mains which reduces the average pressure from 162 psi to 84 psi. This zone covers around 11 miles of water main and impacts about 1,300 customers.

Legend

Existing Water Mains

<= 8"
10" - 24"
30" - 36"
>= 42"

North Fulton
GDOT Road Segments
Pressure Zones
PRVs
Pressure Zone Closed Mains



CIP Project #307
Atlanta Athletic Club Low
Pressure Zone
Phase: 2035
Fulton County Water Distribution
Master Plan

Project Description:

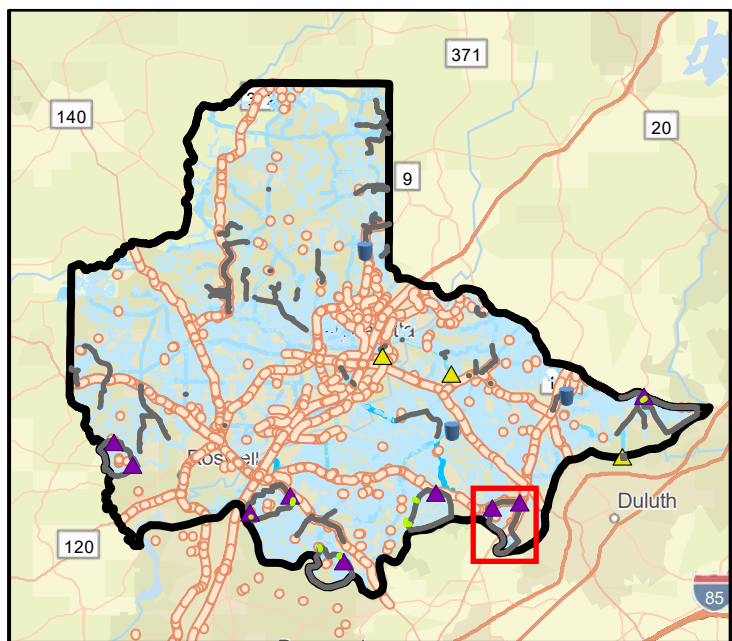
New Atlanta Athletic Club low pressure zone with two PRVs which reduces the average pressure from 155 psi to 100 psi. This zone covers around 8 miles of water main and impacts about 500 customers.

Legend

Existing Water Mains

<= 8"
10" - 24"
30" - 36"
>= 42"

North Fulton
GDOT Road Segments
Pressure Zones
PRVs
Pressure Zone Closed
Mains



CIP Project #308
Country Club of the South Low
Pressure Zone
Phase: 2035
Fulton County Water Distribution
Master Plan

Project Description:

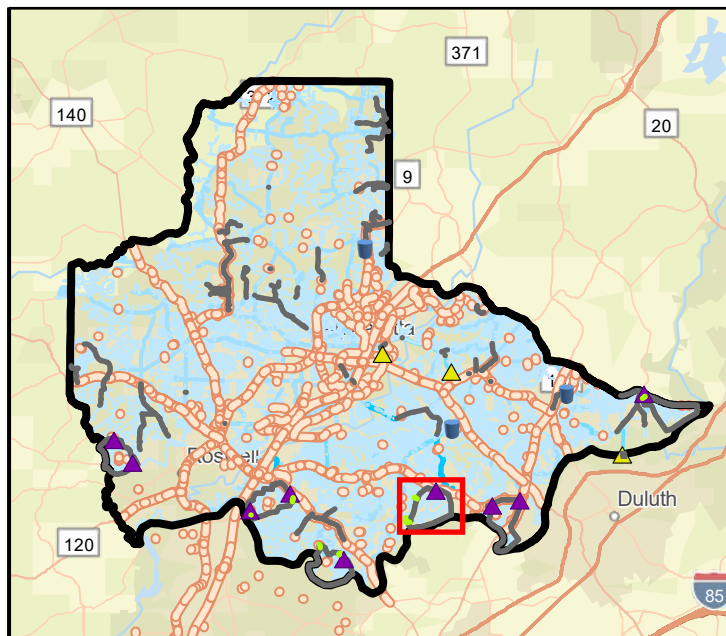
New Country Club of the South low pressure zone with one PRV and two closed valves which reduces the average pressure from 146 psi to 88 psi. This zone covers around 8 miles of water main and impacts about 500 customers.

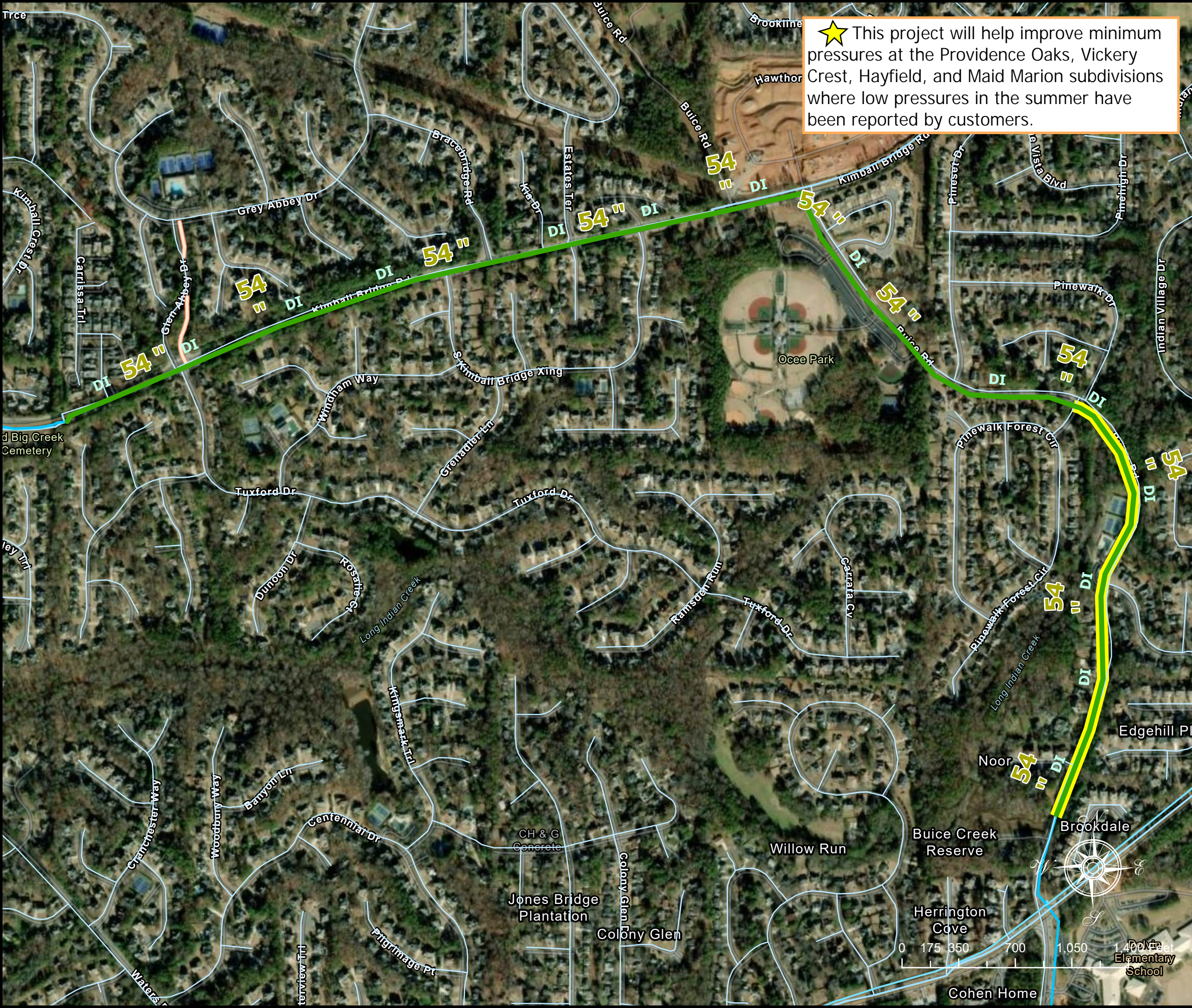
Legend

Existing Water Mains

<= 8"
10" - 24"
30" - 36"
≥ 42"

North Fulton
GDOT Road Segments
Pressure Zones
PRVs
Pressure Zone Closed
Mains





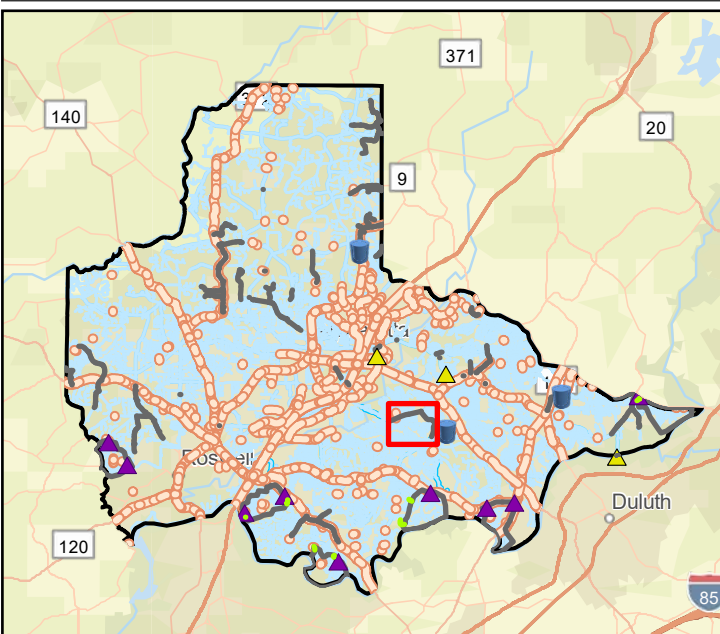
★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

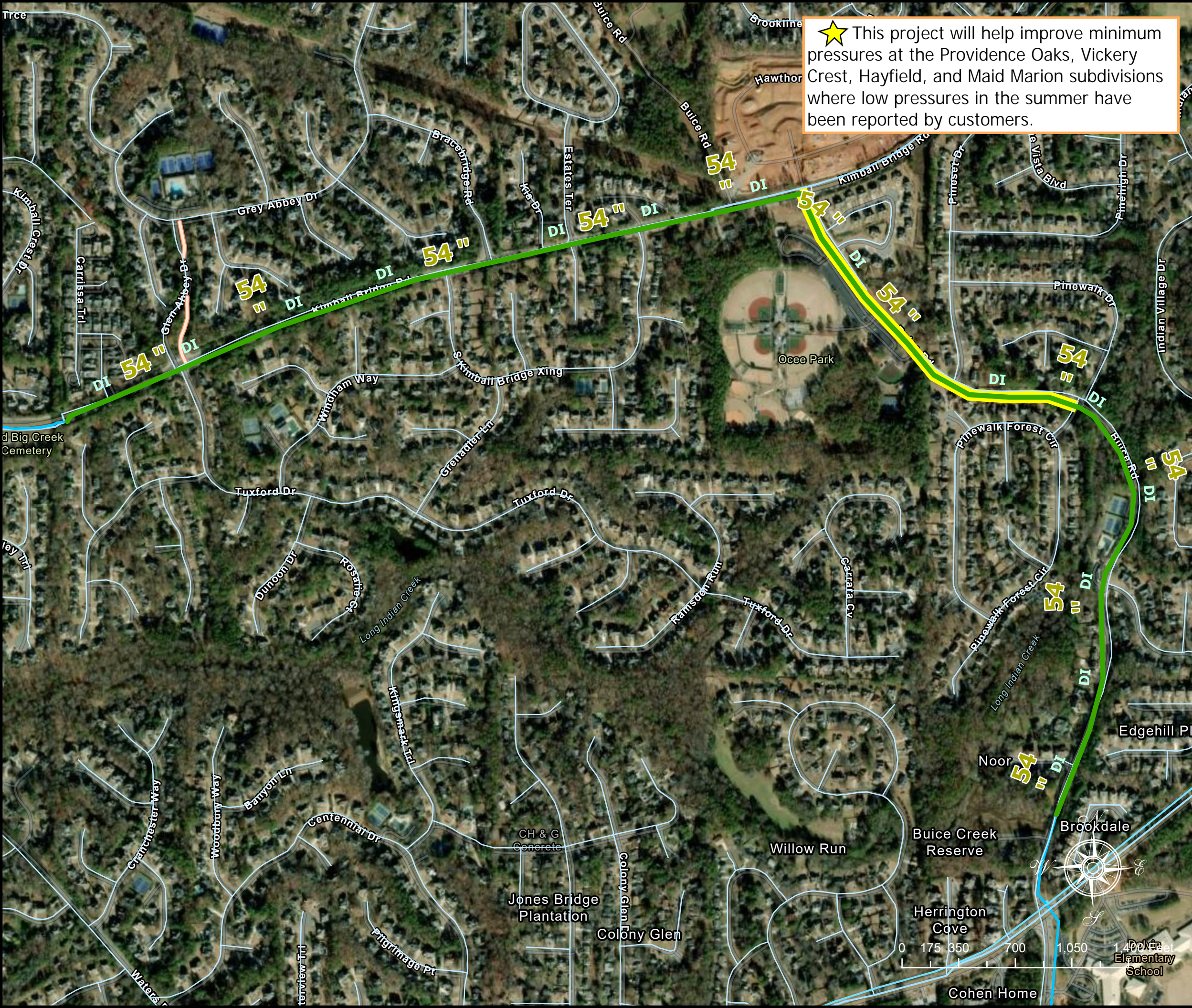
CIP Project #401A
Buice Rd Transmission Main
Phase: 2040
Fulton County Water Distribution
Master Plan

Project Description:
Complete 2,800 LF of 54" transmission main along Buice Rd, starting at Pinewalk Forest Cir. Helps in improving minimum pressures and water age in the county. The project is optional for a peaking factor of 1.5.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments





★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

CIP Project #401B

Buice Rd Transmission Main

Phase: 2040

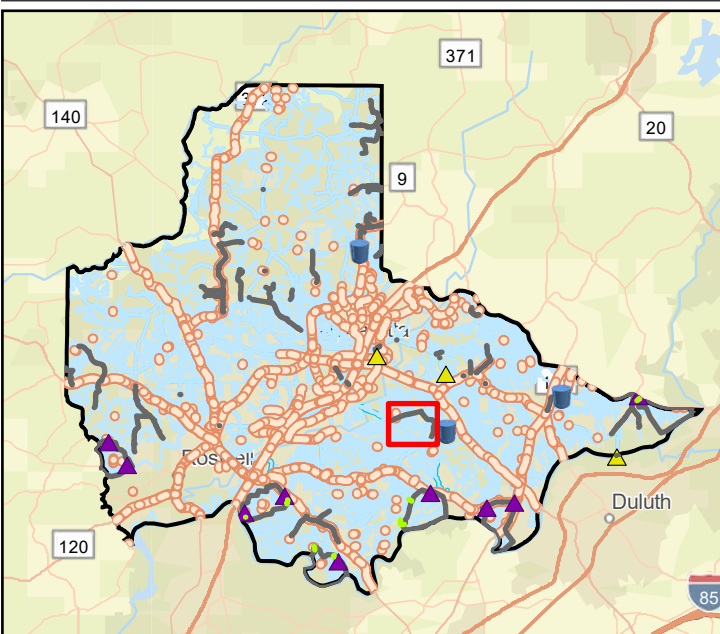
Fulton County Water Distribution Master Plan

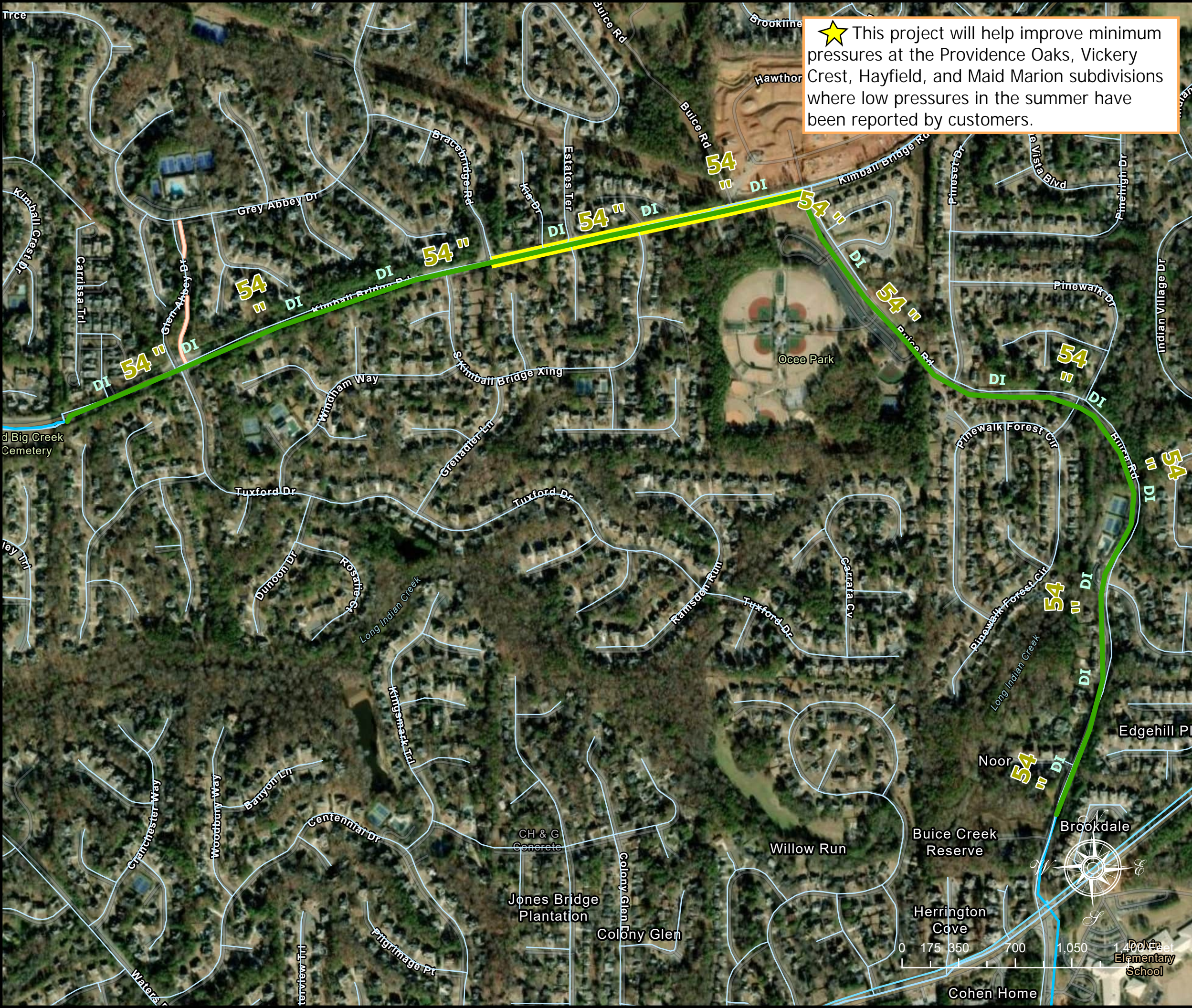
Project Description:

Complete 2,400 LF of 54" transmission main along Buice Rd, ending at Pinewalk Forest Cir. Helps in improving minimum pressures and water age in the county. The project is optional for a peaking factor of 1.5.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
CIP Pipes 2030	10" - 24"
CIP Pipes 2035	30" - 36"
CIP Pipes 2040	>= 42"
CIP Pipes 2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments





★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

CIP Project #401C

Bruice Rd Transmission Main

Phase: 2040

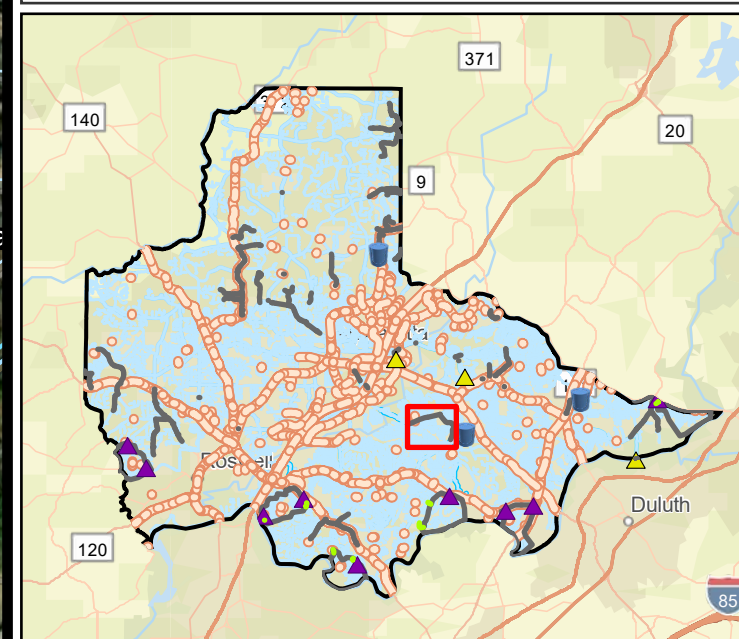
Fulton County Water Distribution Master Plan

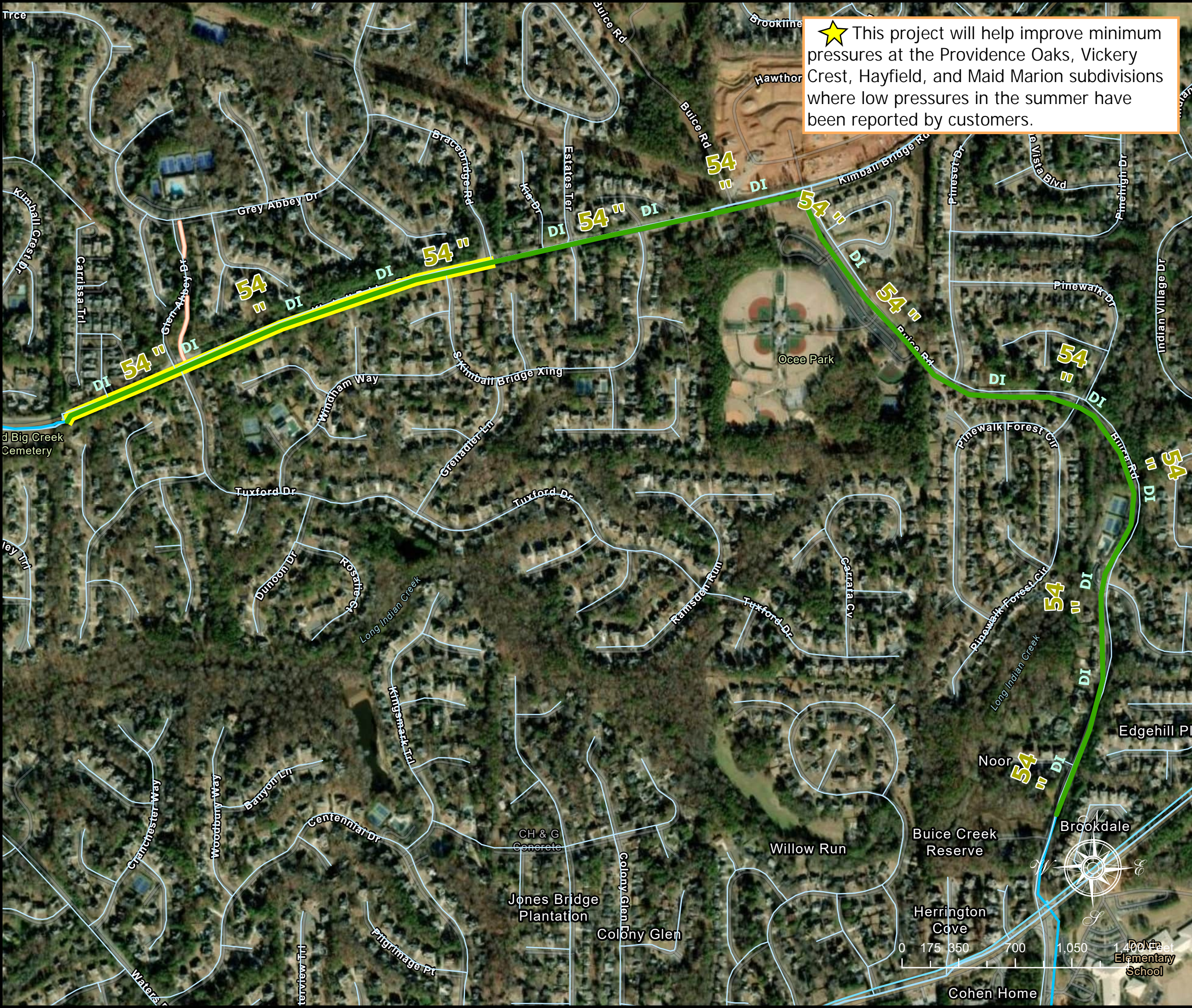
Project Description:

Complete 2,000 LF of 54" transmission main along Kimball Bridge Rd, starting at Bracebridge Rd. Helps in improving minimum pressures and water age in the county. The project is optional for a peaking factor of 1.5.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments





★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

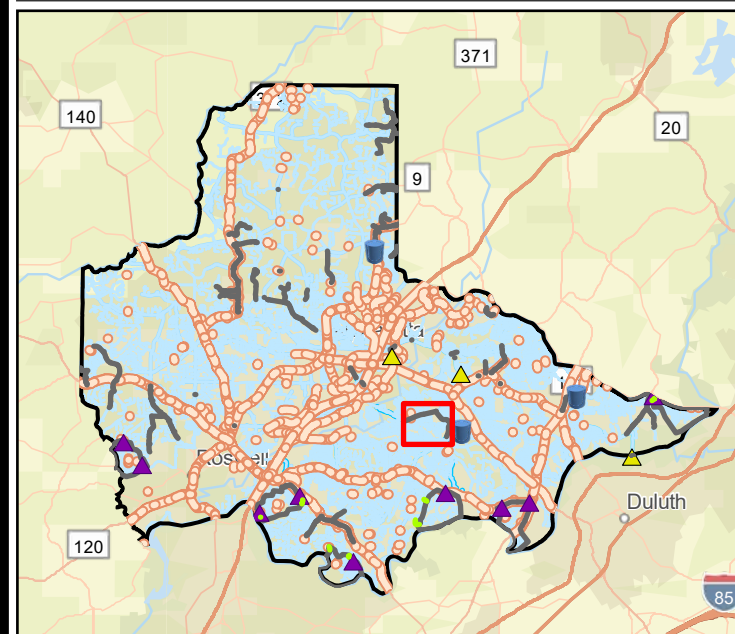
CIP Project #401D
Bruce Rd Transmission Main
Phase: 2040
Fulton County Water Distribution
Master Plan

Project Description:

Complete 2,900 LF of 54" transmission main along Kimball Bridge Rd, ending at Bracebridge Rd. Helps in improving minimum pressures and water age in the county. The project is optional for a peaking factor of 1.5.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
CIP Pipes 2030	10" - 24"
CIP Pipes 2035	30" - 36"
CIP Pipes 2040	>= 42"
CIP Pipes 2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments



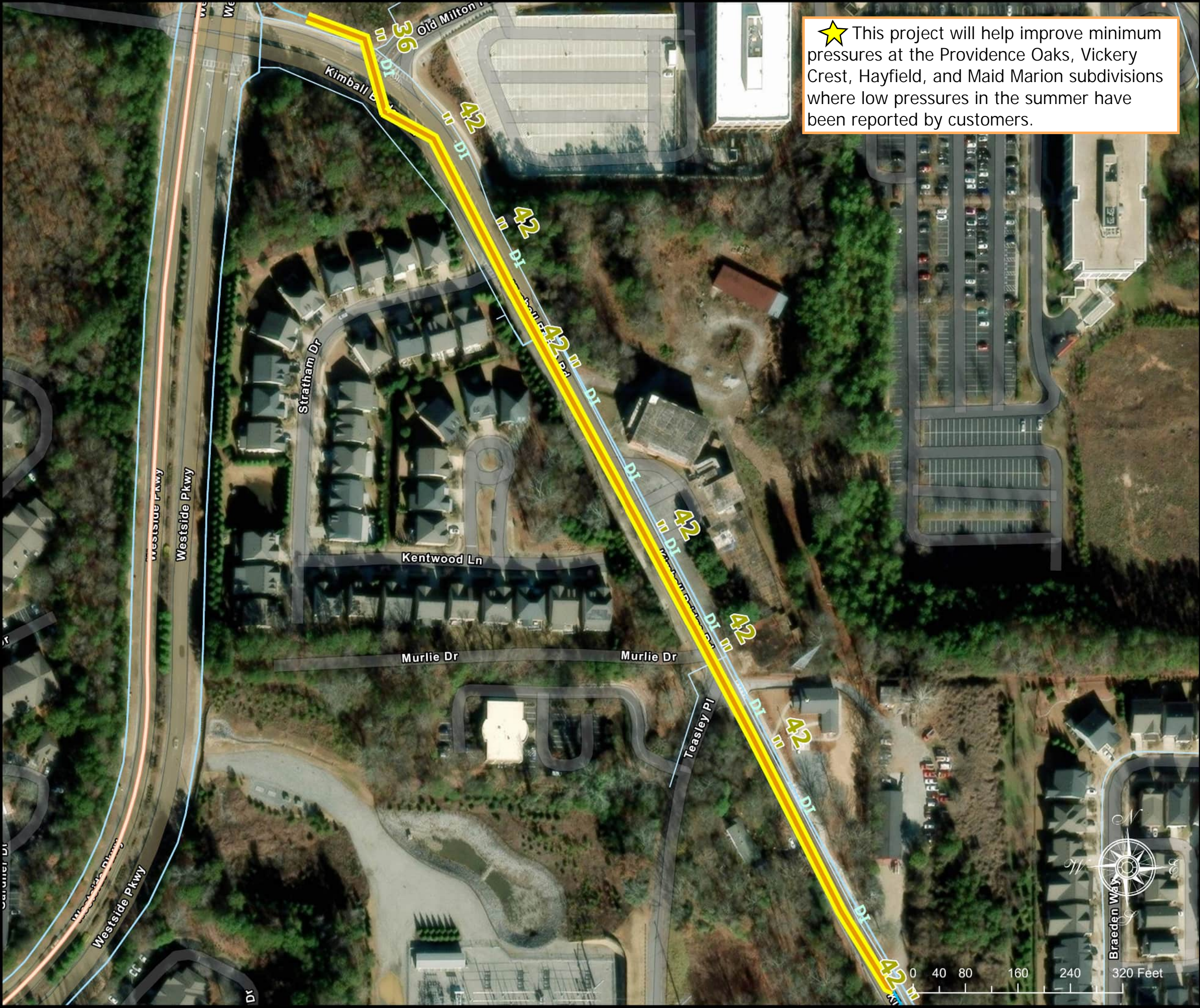
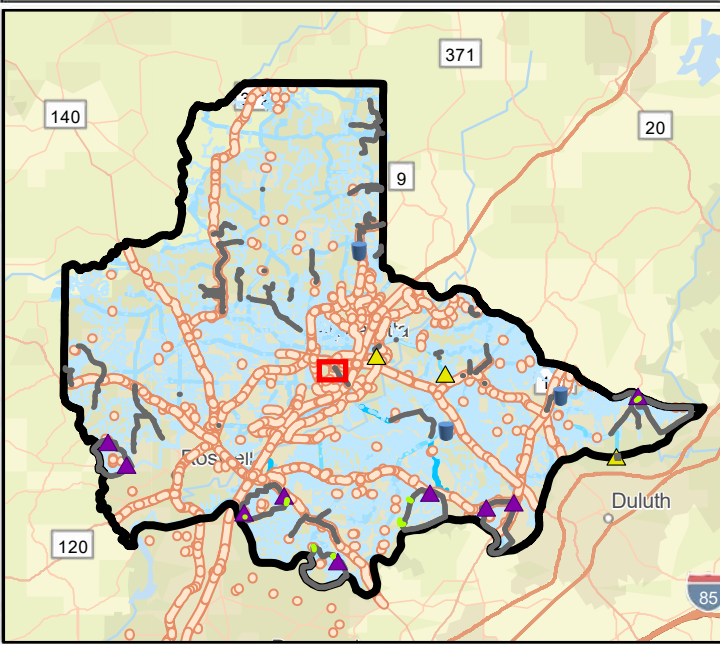
★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

CIP Project #501A
Kimball Bridge Rd Transmission Main
Phase: 2050
Fulton County Water Distribution Master Plan

Project Description:
Complete 1,800 LF of 36"-42" Transmission Main under GA 400 along Kimball Bridge Rd. Helps in improving minimum pressure and water age in the county.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	▲ Pump Station
2050	■ WTP
	■ North Fulton
	— GDOT Road Segments





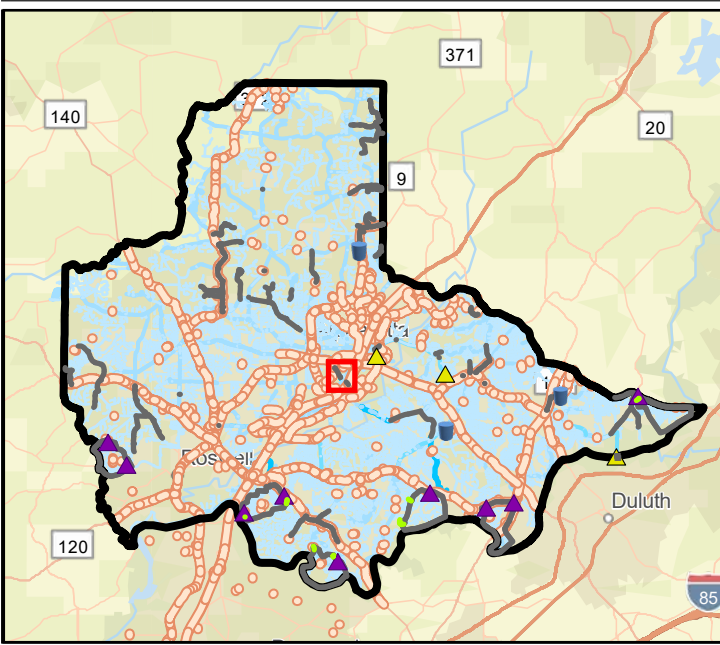
★ This project will help improve minimum pressures at the Providence Oaks, Vickery Crest, Hayfield, and Maid Marion subdivisions where low pressures in the summer have been reported by customers.

CIP Project #501B
Kimball Bridge Transmission Main
Phase: 2035
Fulton County Water Distribution Master Plan

Project Description:
Complete 2,300 LF of 36-42" Transmission Main under GA 400 along Kimball Bridge Rd. Helps in improving minimum pressure and water age in the county. The project is optional for a peaking factor of 1.5.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments


















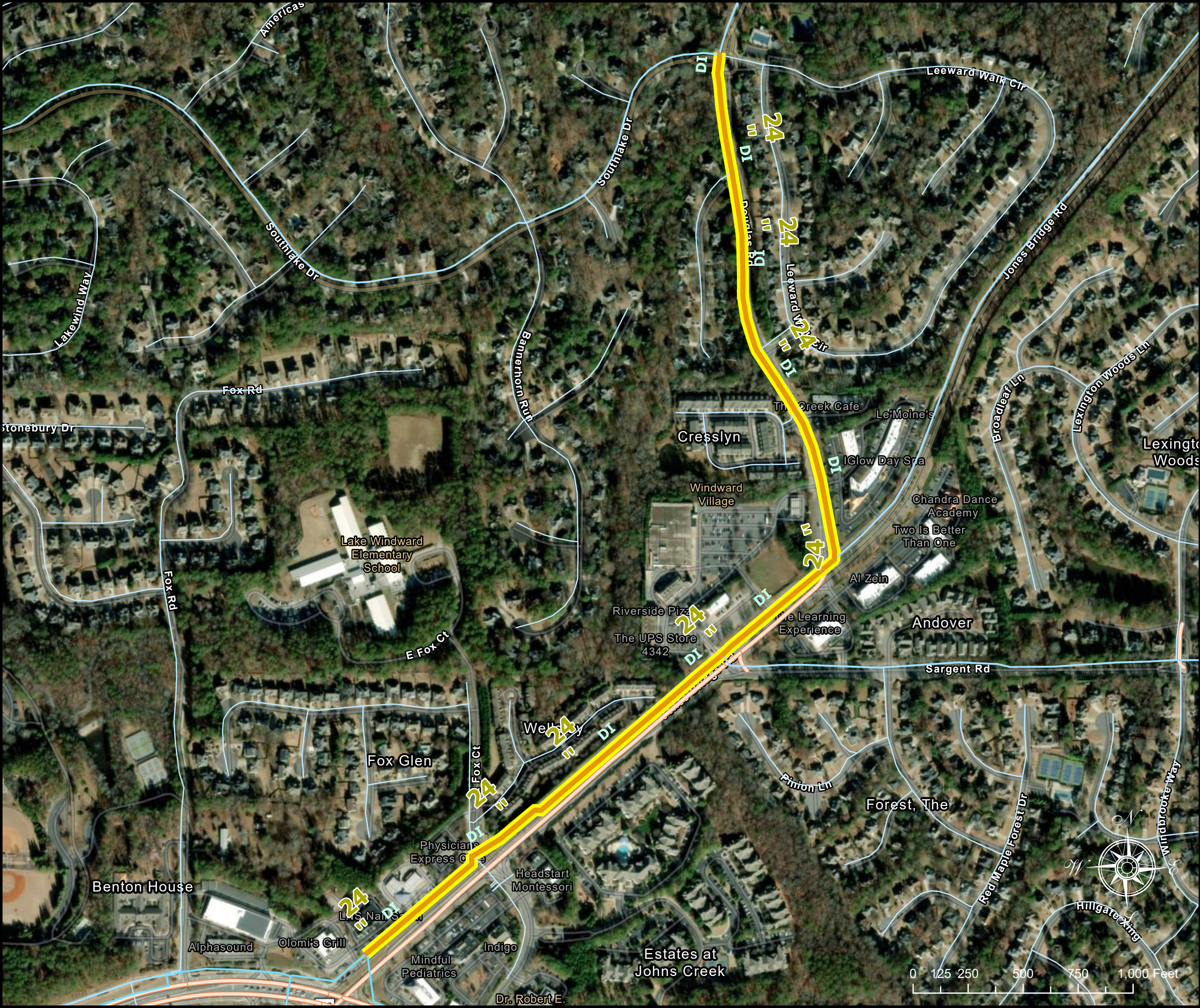
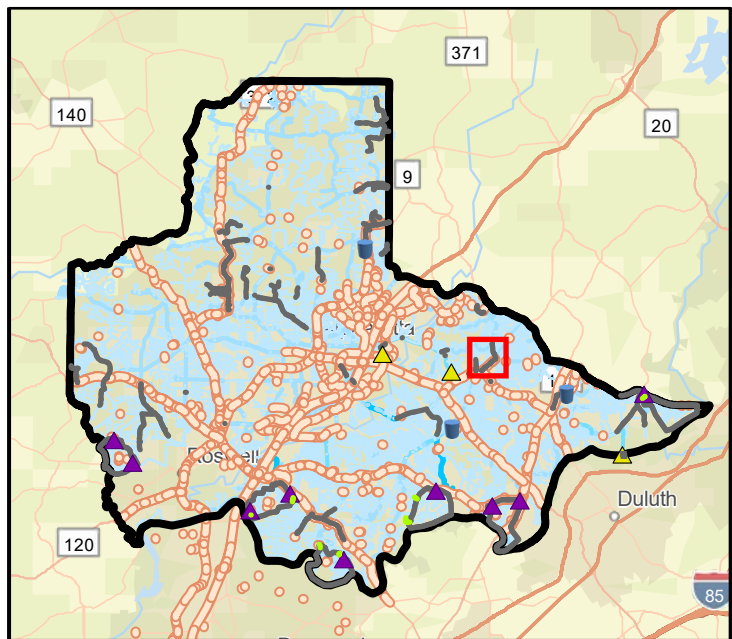
CIP Project #502
Jones Bridge Rd Parallel Line
Phase: 2050
Fulton County Water Distribution
Master Plan

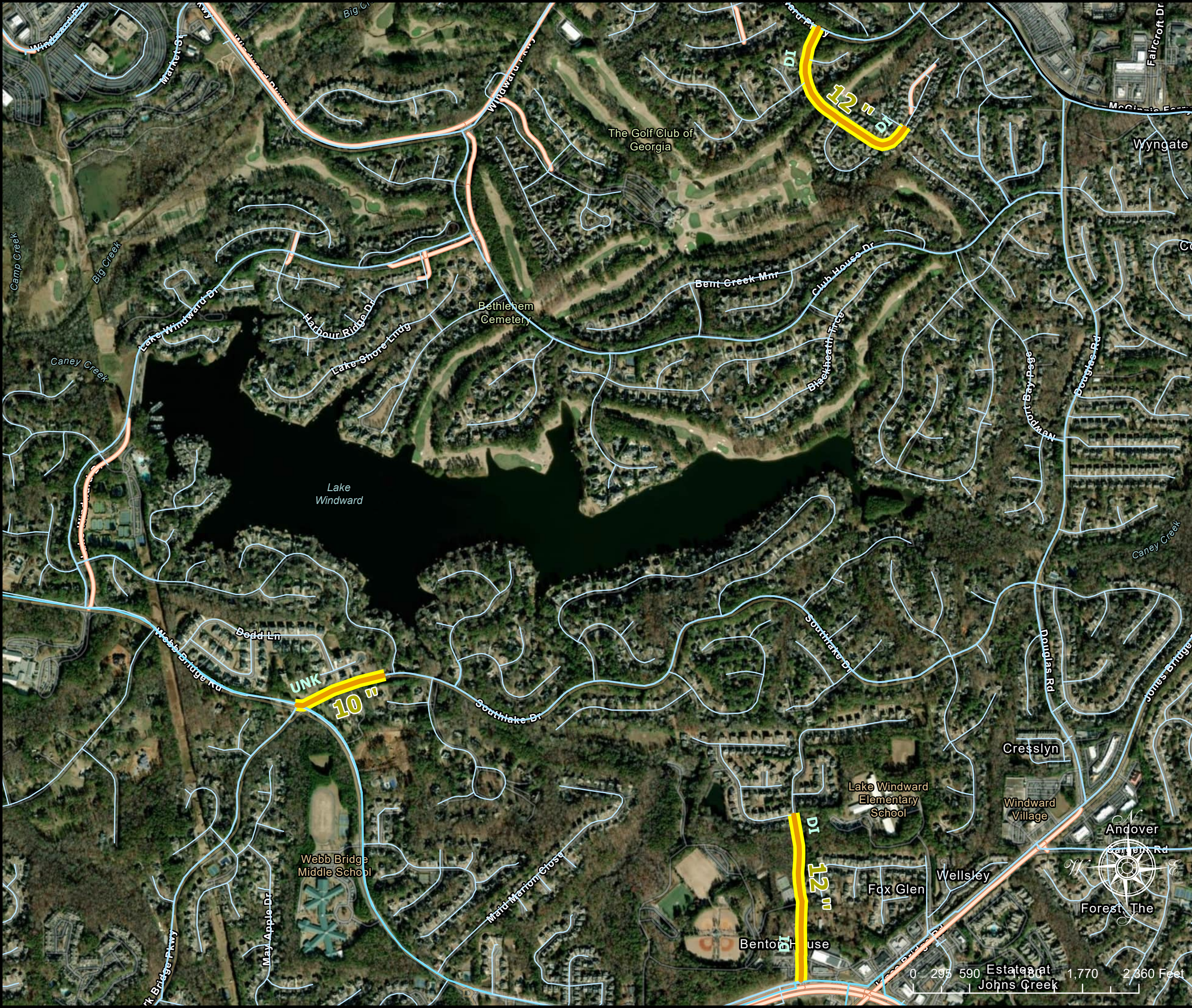
Project Description:

Parallel 5,200 LF of 24" water main along Jones Bridge Rd and Douglas Rd. Helps in improving fire flows in the area.

Legend

 Highlighted Project	 Existing Water Mains
 CIP Pipes 2025	 <= 8"
 2030	 10" - 24"
 2035	 30" - 36"
 2040	 >= 42"
 2050	 Pump Station
	 WTP
	 North Fulton
	 GDOT Road Segments

















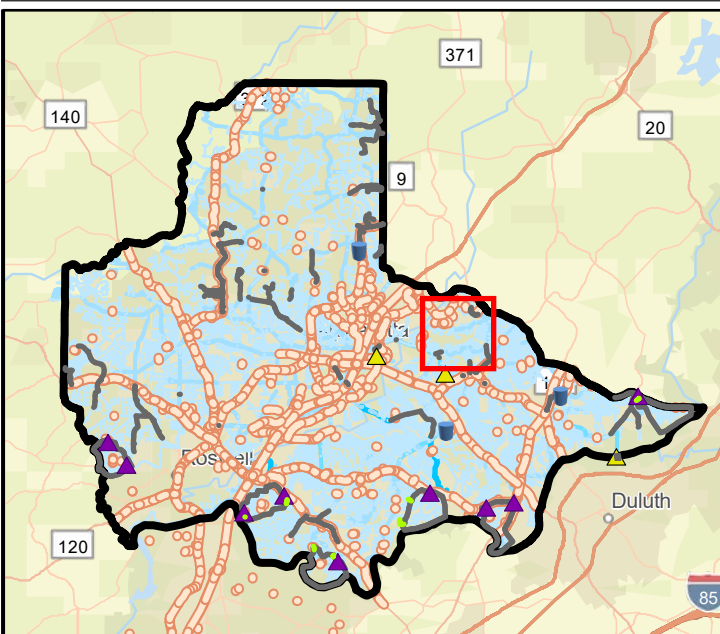


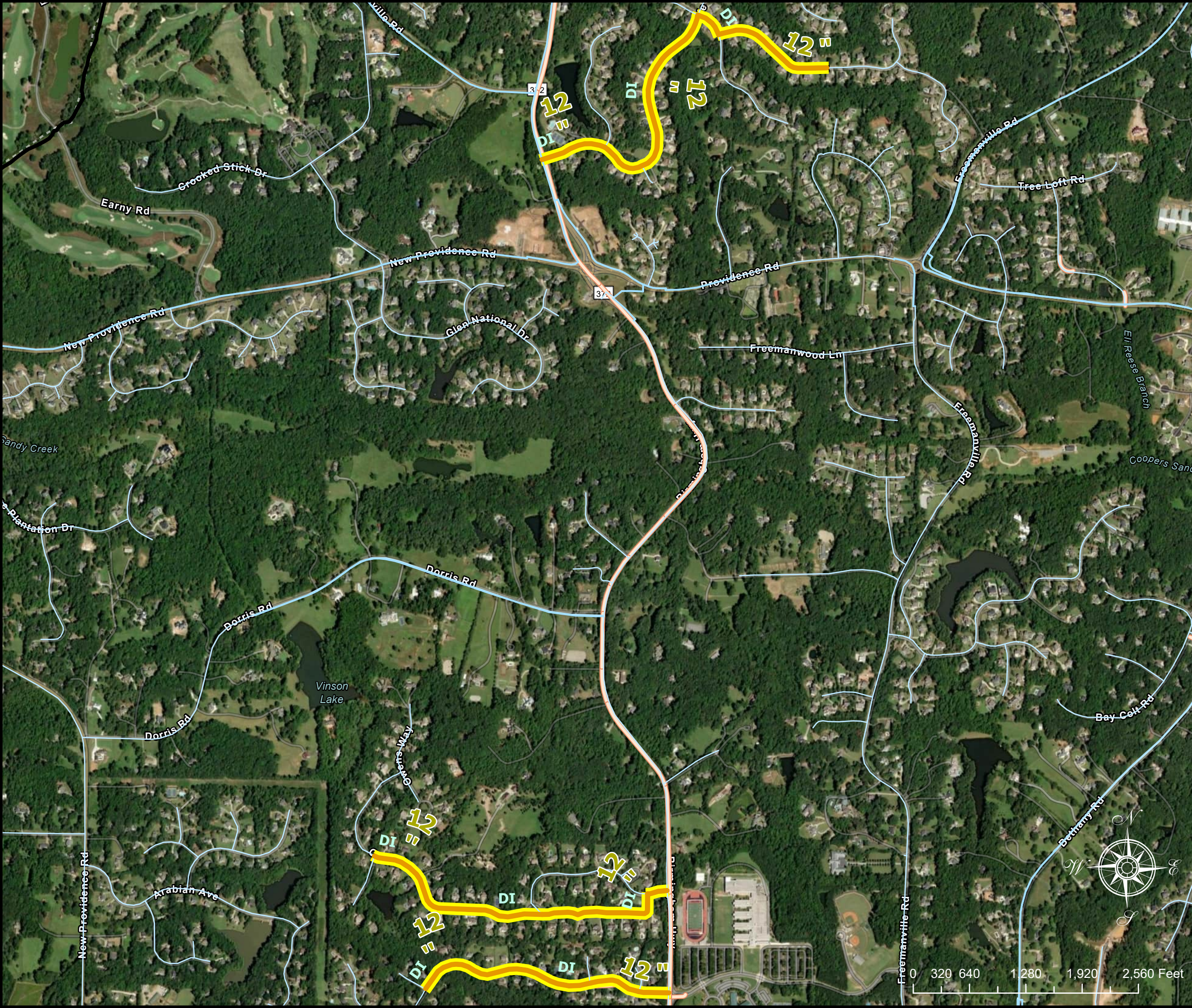
CIP Project #503
Fox Rd and Greatwood Manor
Parallel Lines. Shirley Bridge
Extension.
Phase: 2050
Fulton County Water Distribution
Master Plan

Project Description:
Parallel 1,800 LF of 12" water main
along Fox Road. Parallel 2,000 LF of
12" water main along Greatwood
Manor. Extend 1,000 LF of 10" water
main along Shirley Bridge. Helps in
improving fire flows in the area.

Legend

 Highlighted Project	Existing Water Mains
 2025	 <= 8"
 2030	 10" - 24"
 2035	 30" - 36"
 2040	 >= 42"
 2050	 Pump Station
	 WTP
	 North Fulton
	 GDOT Road Segments





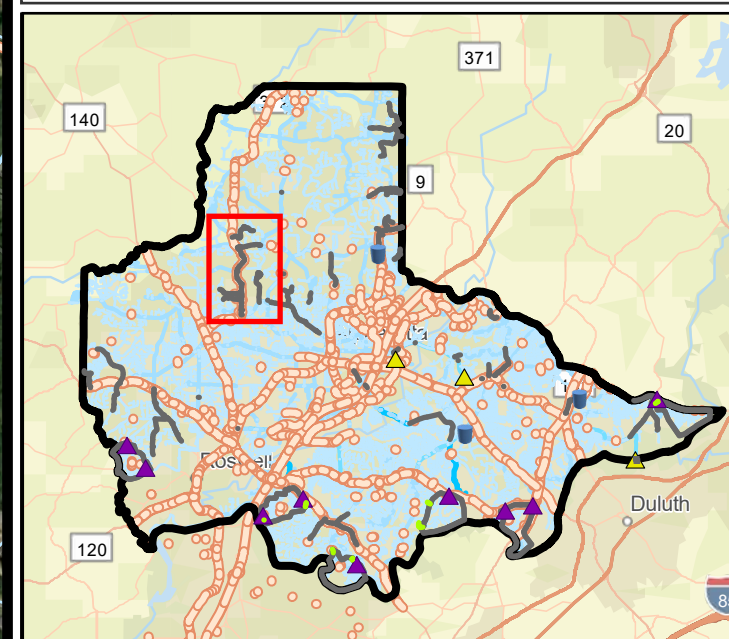
CIP Project #504
Tripe Crown Dr, Old Cedar Ln, and
Kensington Farms Dr Parallel Lines
Phase: 2050
Fulton County Water Distribution
Master Plan

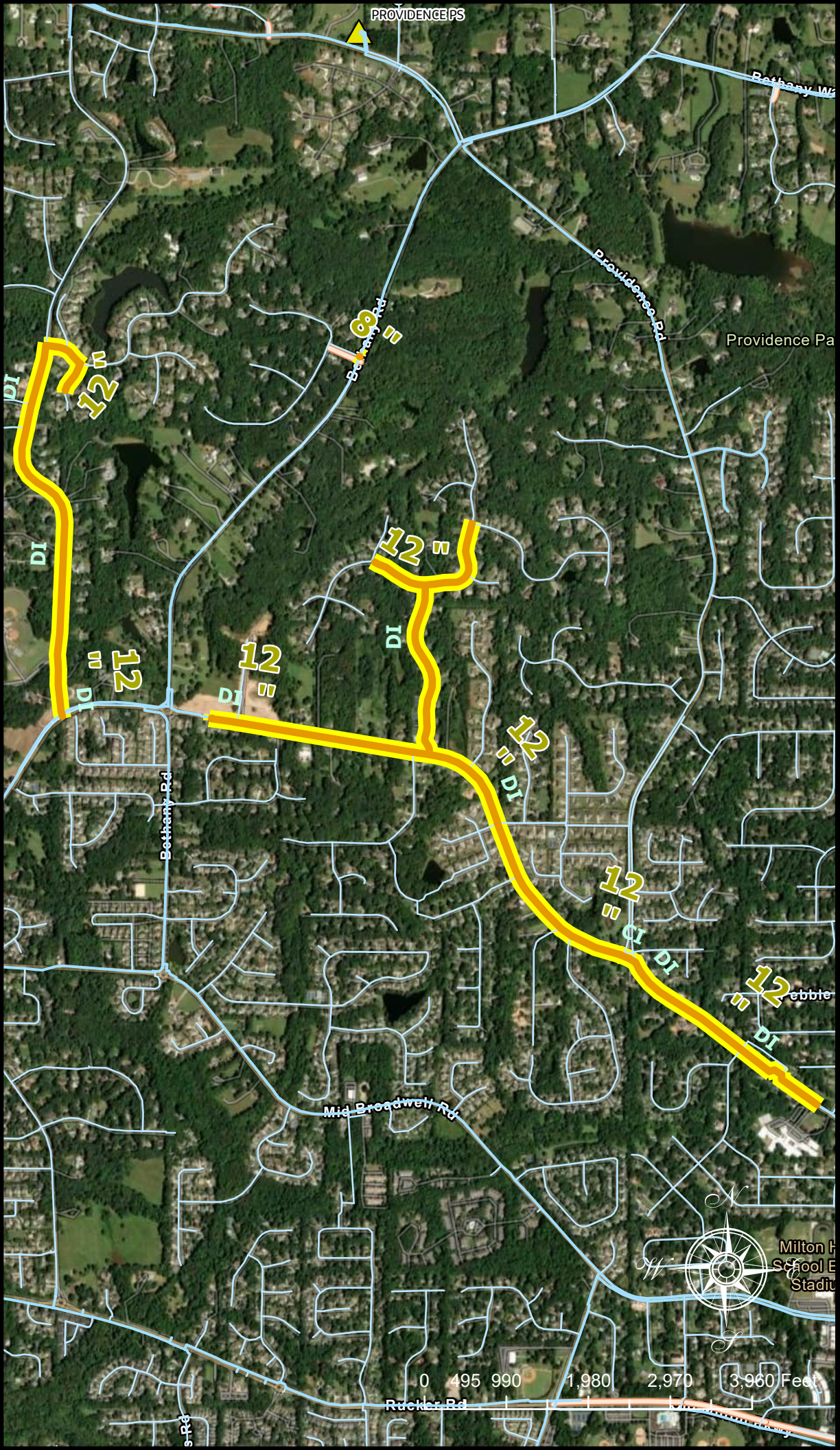
Project Description:

Parallel 5,100 LF of 12" water main
along Triple Crown Dr and Seabiscuit.
Parallel 3,900 LF of 12" water main
along Old Cedar Ln. Parallel 3,000 LF of
12" water main along Kensington Farms
Dr. Helps in improving fire flows in the
area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes 2025	<= 8"
2030	10" - 24"
2035	30" - 36"
2040	>= 42"
2050	Pump Station
	WTP
	North Fulton
	GDOT Road Segments





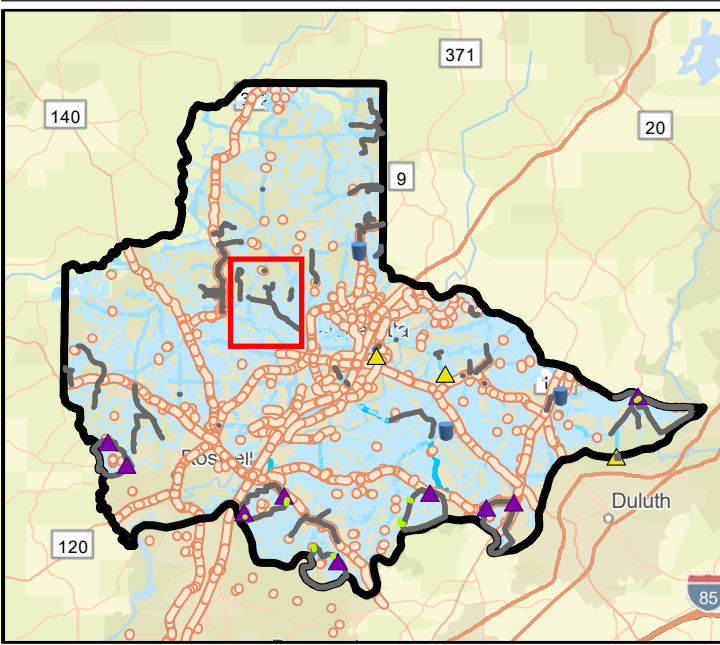
CIP Project #505
 Freemanville Rd and Mayfield Dr
 Parallel Lines. Bethany Rd Cross
 Connection
 Phase: 2050
 Fulton County Water Distribution
 Master Plan

Project Description:

Parallel 5,600 LF of 12" water main along Freemanville Rd, Hipworth Rd, and Conagree Ct. Parallel 13,300 LF of 12" water main along Mayfield Rd and Harrington Dr. Perform crossing pipe connection of 8" water main on Bethany Rd. Helps in improving fire flows in the area.

Legend

- | | |
|---------------------|----------------------|
| Highlighted Project | Existing Water Mains |
| CIP Pipes 2025 | 10" - 24" |
| 2030 | 30" - 36" |
| 2035 | >= 42" |
| 2040 | Pump Station |
| 2050 | WTP |
| | North Fulton |
| | GDOT Road Segments |



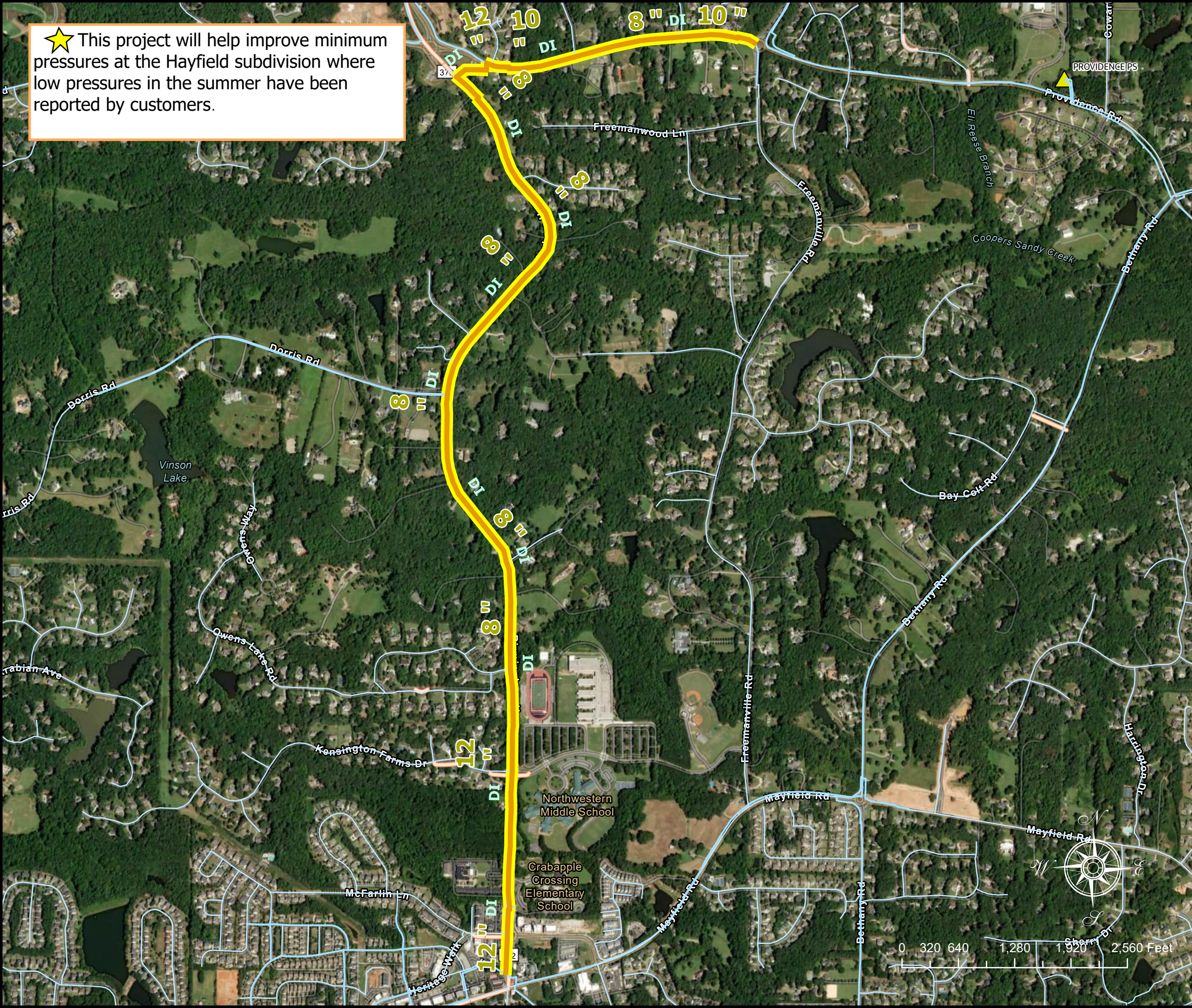
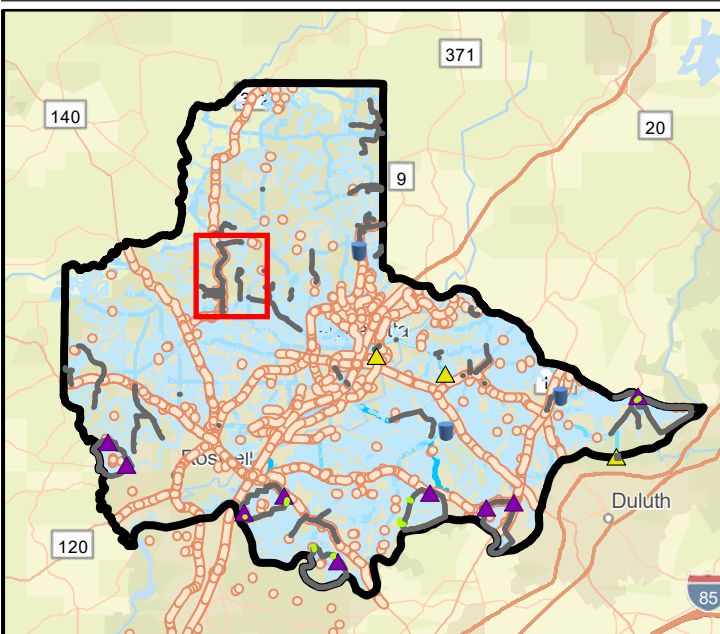
★ This project will help improve minimum pressures at the Hayfield subdivision where low pressures in the summer have been reported by customers.

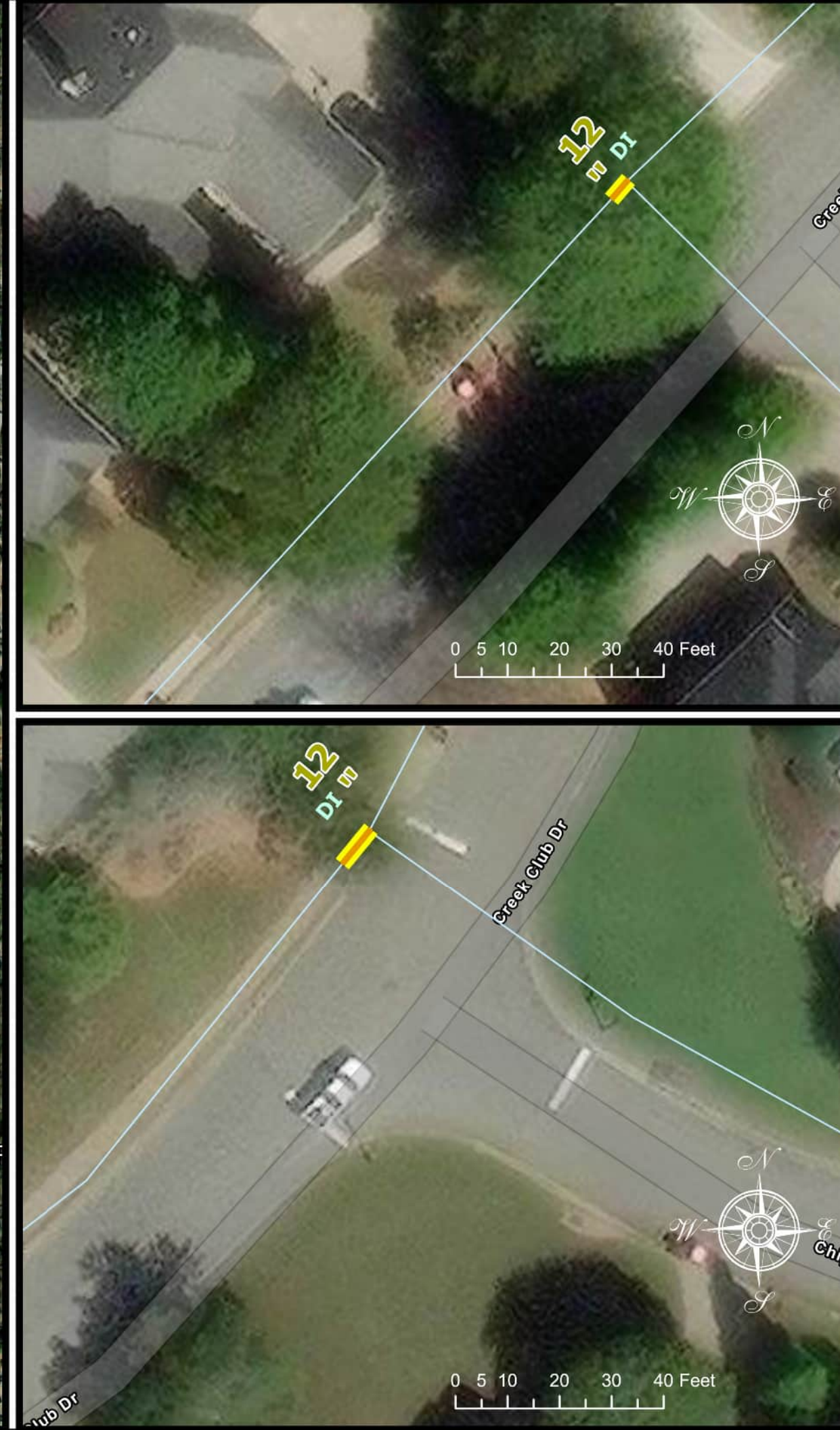
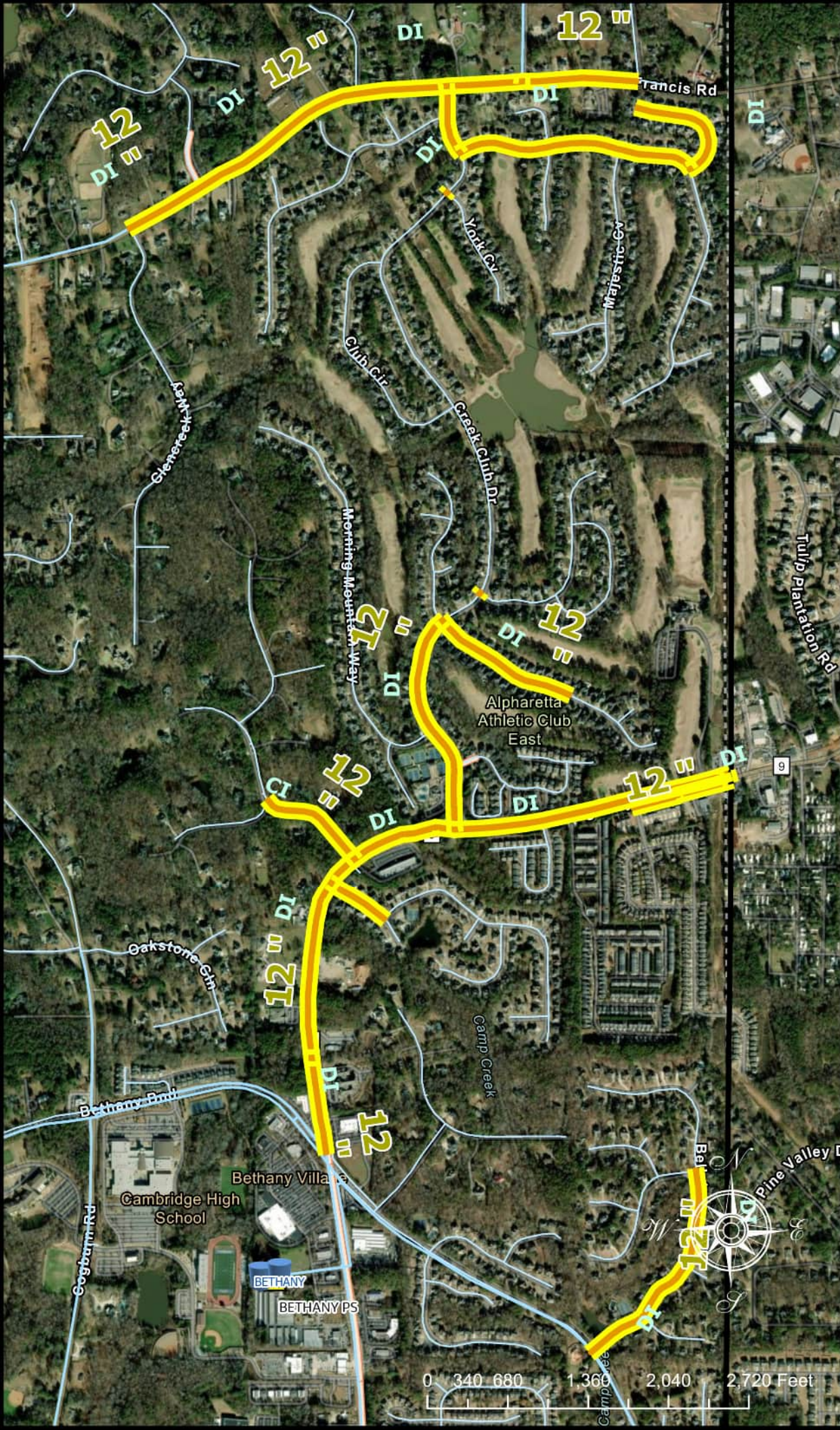
CIP Project #506
Birmingham Hwy Parallel Line
Phase: 2050
Fulton County Water Distribution
Master Plan

Project Description:
Parallel 14,800 LF of 24" water main along Birmingham Hwy and Providence Rd. Helps in improving fire flows in the area.

Legend

Highlighted Project	Existing Water Mains
CIP Pipes	<= 8"
2025	10" - 24"
2030	30" - 36"
2035	>= 42"
2040	▲ Pump Station
2050	■ WTP
	■ North Fulton
	— GDOT Road Segments



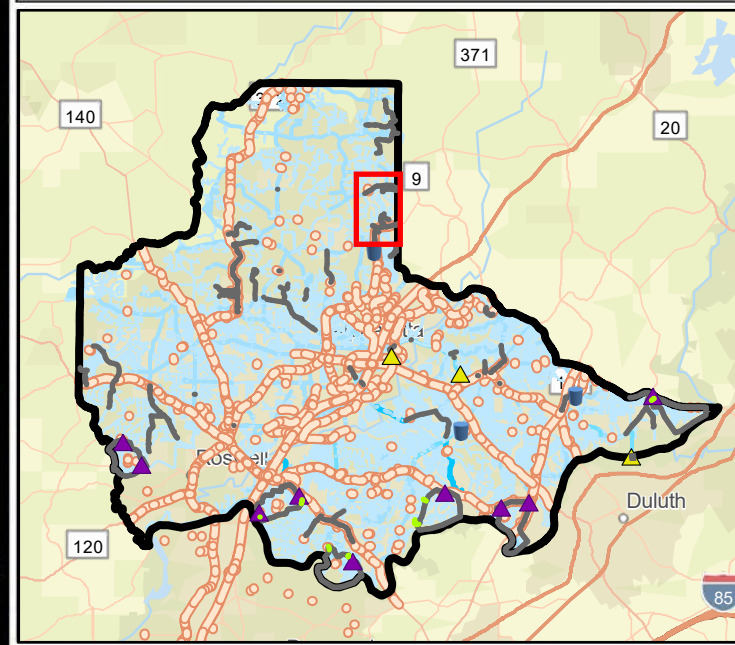


CIP Project #507
 Francis Rd, Hwy 9N, and Belleterre Dr Parallel Lines. Creek Club Dr Cross Connections
 Phase: 2050
 Fulton County Water Distribution Master Plan

Project Description:
 Parallel 8,300 LF of 12" water main along Francis Rd and Autumn Close. Parallel 11,600 LF of 12" water main along Hwy 9N, Creek Club Dr, and Five Acres. Parallel 2,000 LF of 12" water main along Belleterre Dr. Perform crossing pipe connection of 12" water mains on Creek Club Dr. Helps in improving fire flows in the area.

Legend

Highlighted Project	10" - 24"
CIP Pipes	30" - 36"
2025	>= 42"
2030	Elevated Tank
2035	Pump Station
2040	WTP
2050	North Fulton
Existing Water Mains	GDOT Road Segments
<= 8"	


















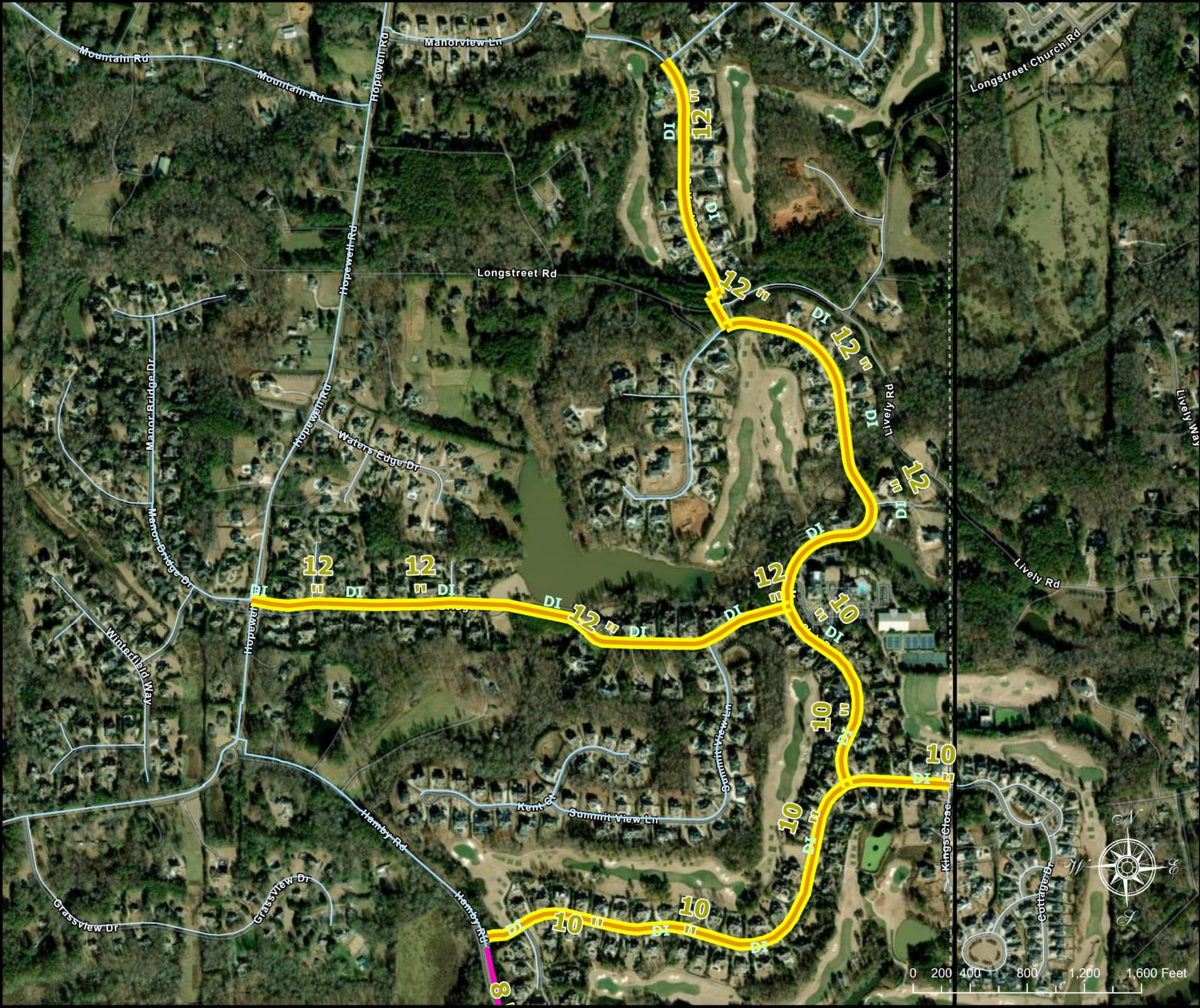
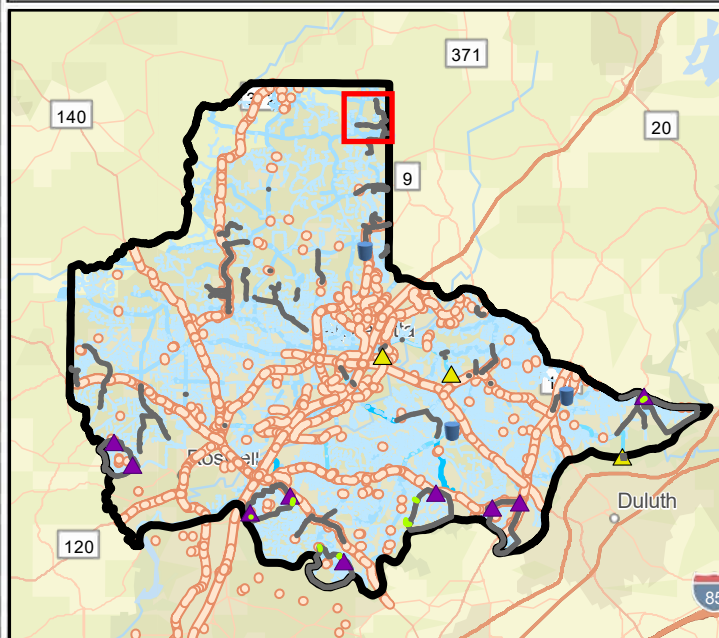
CIP Project #508
Manor Bridge Dr and Watsons
Bend Parallel Lines
Phase: 2050
Fulton County Water Distribution
Master Plan

Project Description:

Parallel 8,800 LF of 12" water main along Manor Bridge Dr, Belford Dr, and Manor Club Dr. Parallel 5,500 LF of 10" water main along Watsons Bend and Manor Club Dr. Helps in improving fire flows in the area.

Legend

 Highlighted Project	 Existing Water Mains
 2025	 <= 8"
 2030	 10" - 24"
 2035	 30" - 36"
 2040	 >= 42"
 2050	 Pump Station
	 WTP
	 North Fulton
	 GDOT Road Segments


















0 200 400 800 1,200 1,600 Feet

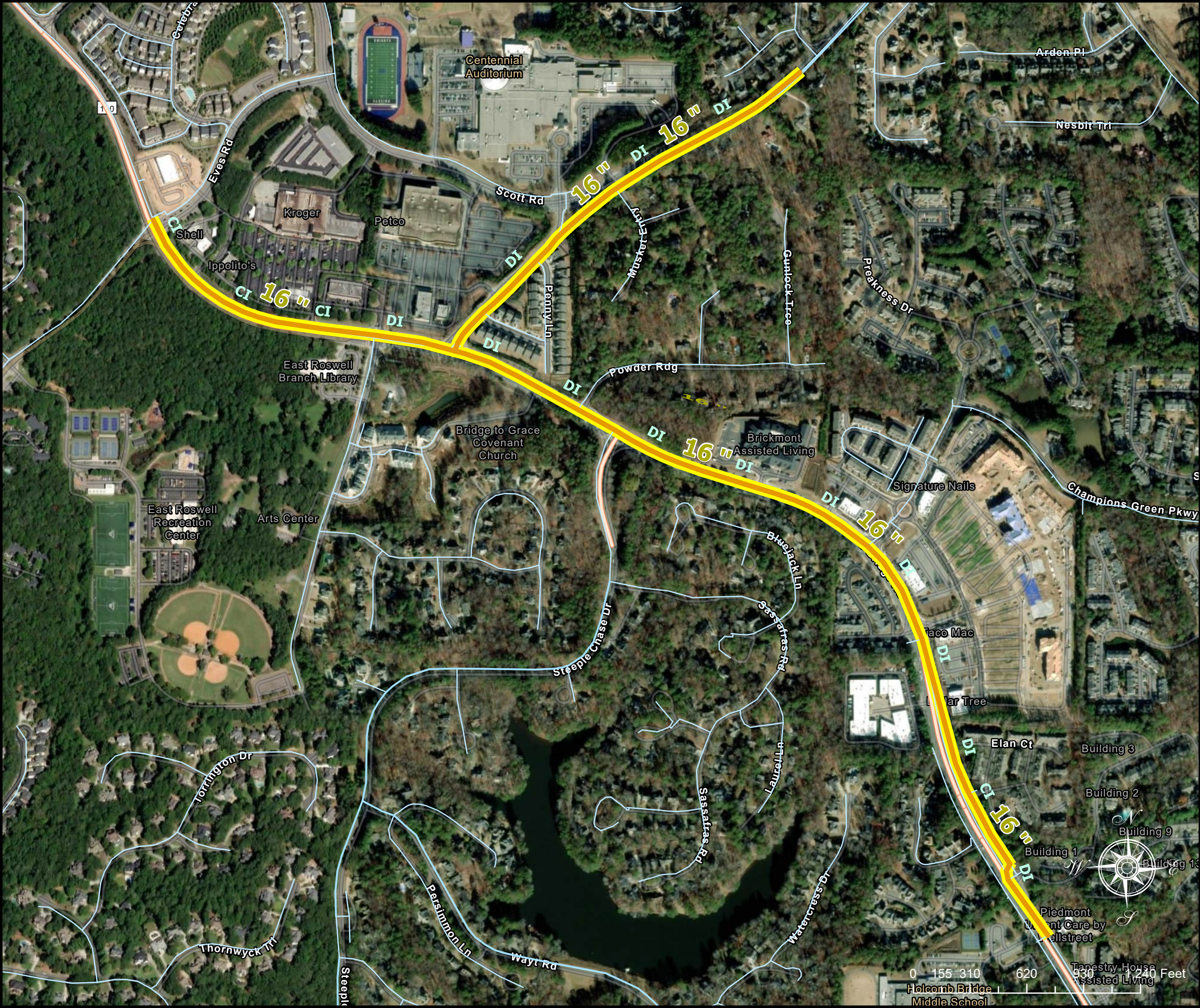
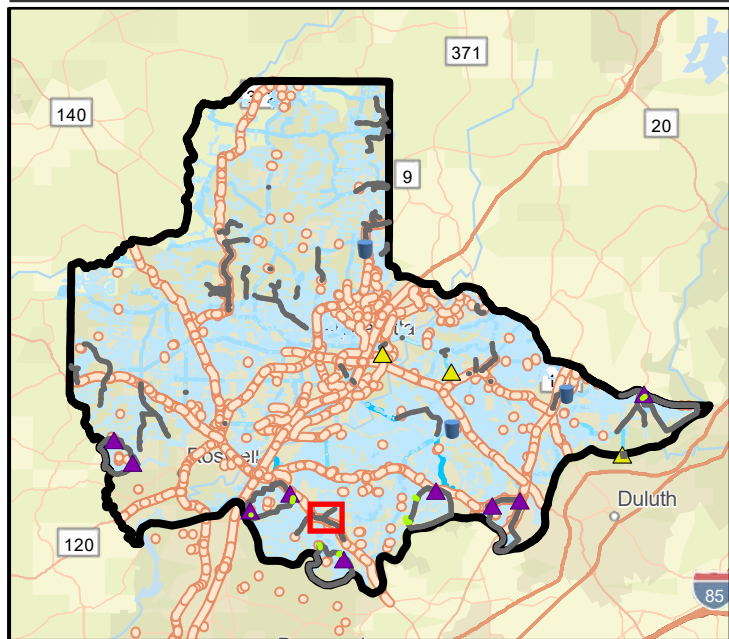
CIP Project #509
Holcomb Bridge Rd Parallel Line
Phase: 2050
Fulton County Water Distribution
Master Plan

Project Description:

Parallel 9,300 LF of 16" water main along Holcomb Bridge Rd and Scott Rd. Helps in improving fire flows in the area.

Legend















 Highlighted Project	 Existing Water Mains
 CIP Pipes 2025	 <= 8"
 2030	 10" - 24"
 2035	 30" - 36"
 2040	 >= 42"
 2050	 Pump Station
	 WTP
	 North Fulton
	 GDOT Road Segments

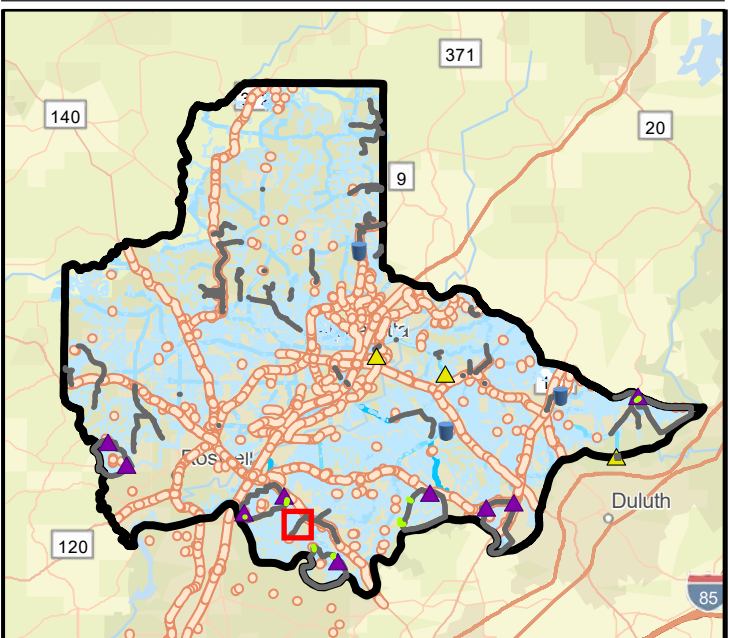


CIP Project #510
Eves Rd Parallel Line
Phase: 2050
Fulton County Water Distribution
Master Plan

Project Description:
Parallel 3,900 LF of 12" water main
along Eves Rd. Helps in improving
fire flows in the area.

Legend

 Highlighted Project	Existing Water Mains
CIP Pipes	 <= 8"
 2025	 10" - 24"
 2030	 30" - 36"
 2035	 >= 42"
 2040	 Pump Station
 2050	 WTP
	 North Fulton
	 GDOT Road Segments




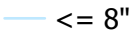

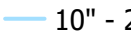



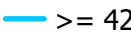







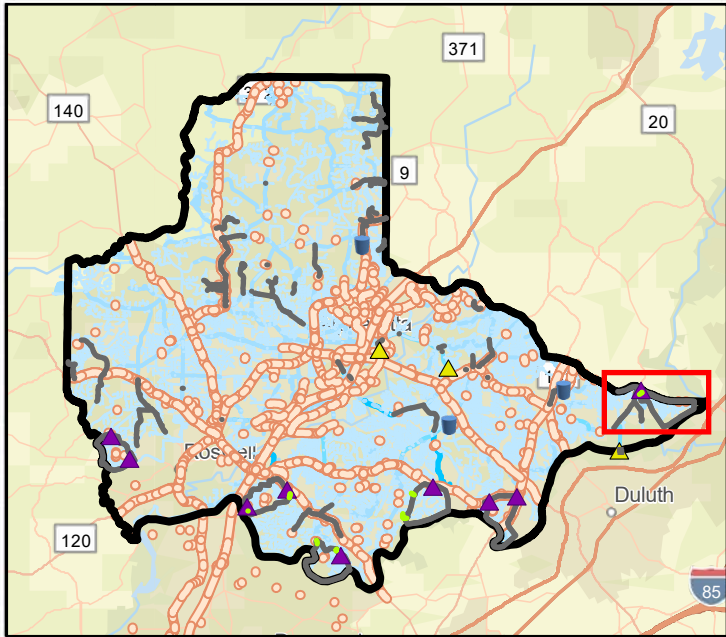
CIP Project #511
 Bell Rd, McGinnis Ferry Rd, and
 Rogers Circle Parallel Lines
 Phase: 2050
 Fulton County Water Distribution
 Master Plan

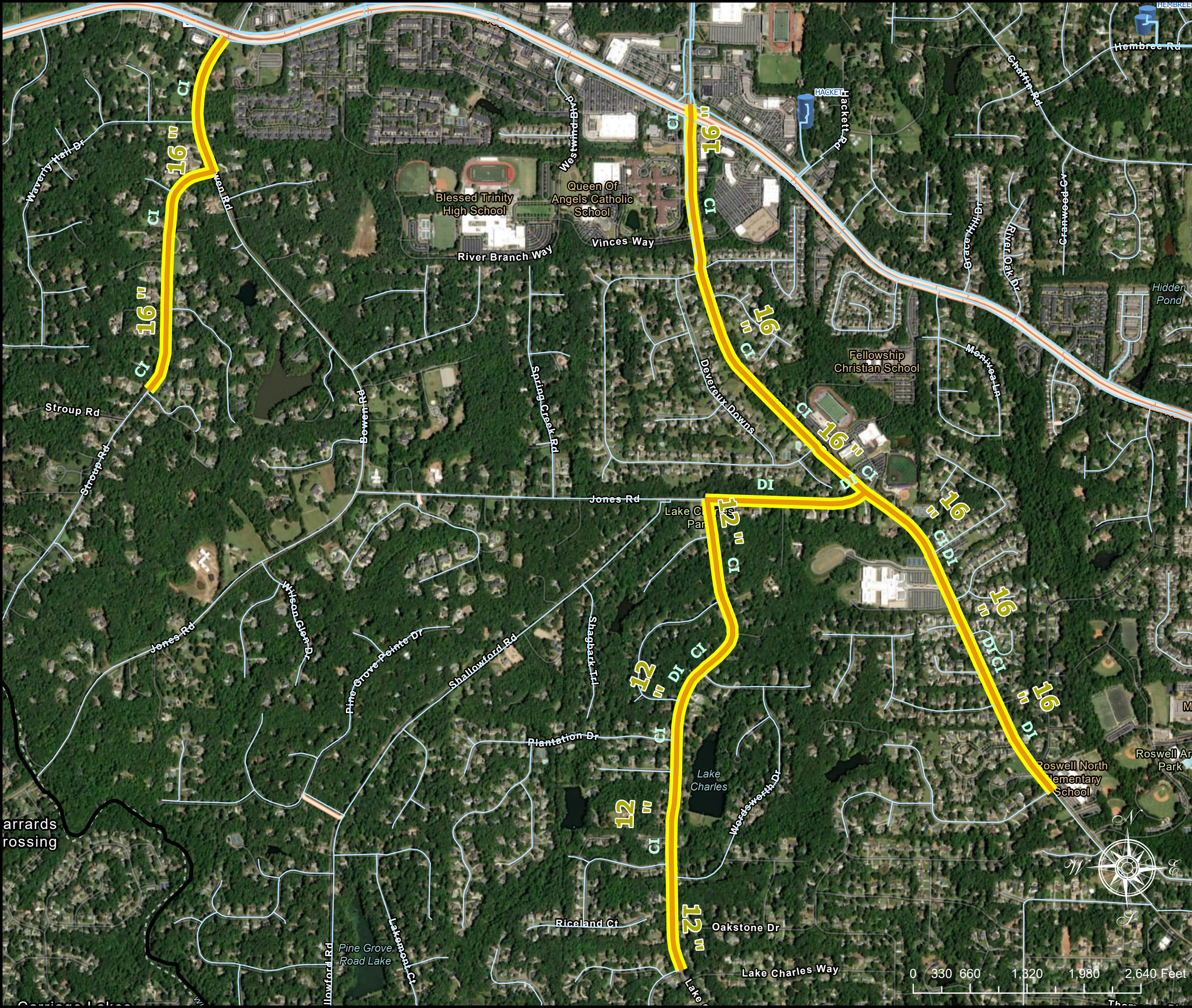
Project Description:

Parallel 7,400 LF of 16" water main along Bell Rd. Parallel 12,200 LF of 12" water main along McGinnis Ferry Rd. Parallel 3,500 LF of 12" water main along Rogers Circle. Helps in improving fire flows in the area.

Legend

- | | |
|---|--|
|  Highlighted Project |  Existing Water Mains |
|  CIP Pipes 2025 |  <= 8" |
|  2030 |  10" - 24" |
|  2035 |  30" - 36" |
|  2040 |  >= 42" |
|  2050 |  Pump Station |
| |  WTP |
| |  North Fulton |
| |  GDOT Road Segments |





CIP Project #512

Stroup Rd, Woodstock Rd, and Lake Charles Dr Parallel Lines

Phase: 2050

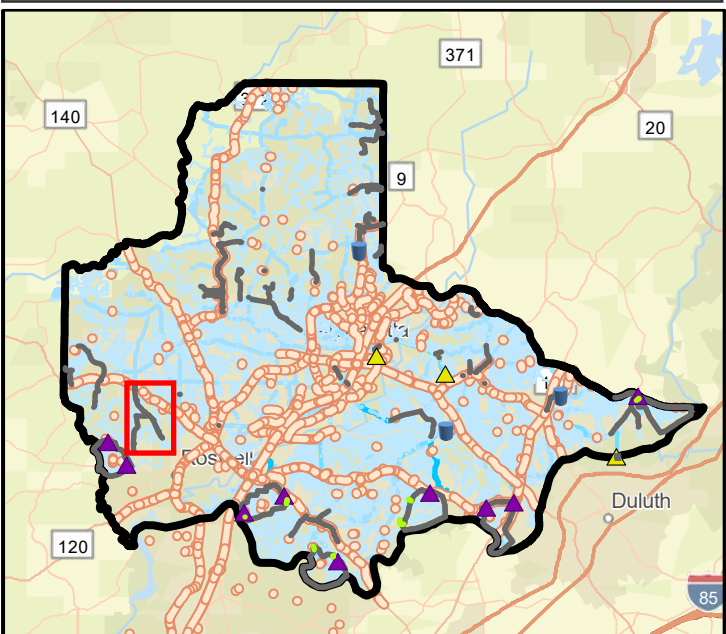
Fulton County Water Distribution Master Plan

Project Description:

Parallel 4,500 LF of 16" water main along Stroup Rd and Bowen Rd. Parallel 11,300 LF of 16" water main along Woodstock Rd and Jones Rd. Parallel 5,700 LF of 12" water main along Lake Charles Dr. Helps in improving fire flows in the area.

Legend

Highlighted Project	10" - 24"
CIP Pipes	30" - 36"
2025	>= 42"
2030	Elevated Tank
2035	Pump Station
2040	WTP
2050	North Fulton
Existing Water Mains	GDOT Road Segments
<= 8"	



CIP Project #513
Mountain Park Rd and Highland
Colony Dr Parallel Lines
Phase: 2050
Fulton County Water Distribution
Master Plan

Project Description:

Parallel 7,600 LF of 12" water main along Mountain Park Rd. Parallel 3,600 LF of 12" water main along Highland Colony Dr and Bridle Ridge Trce. Helps in improving fire flows in the area.

Legend

- Highlighted Project**

CIP Pipes

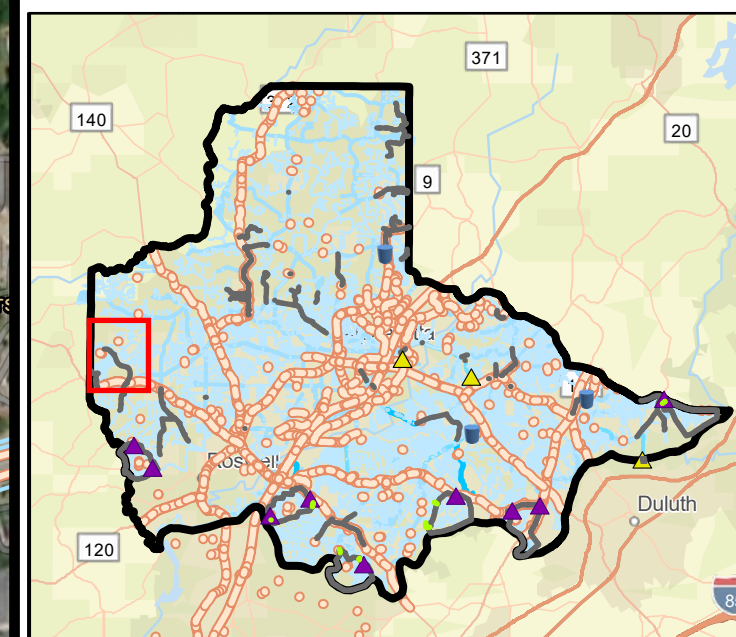
 - 2025
 - 2030
 - 2035
 - 2040
 - 2050

Existing Water Mains

 - <= 8"
 - 10" - 24"
 - 30" - 36"
 - >= 42"

Legend:

 - Pump Station
 - WTP
 - North Fulton
 - GDOT Road Segments



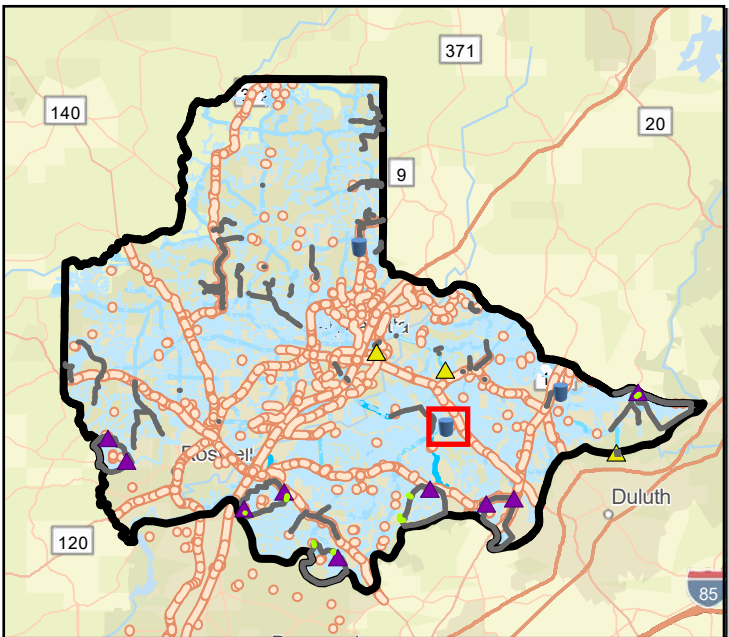
CIP Project #514
 New 2 MG Elevated Storage
 Tank at Jones Bridge
 Phase: 2050
 Fulton County Water Distribution
 Master Plan

Project Description:

New 2 MG elevated storage tank at existing Jones Bridge Tank site. Helps with providing emergency storage.

Legend

Highlighted Project	10" - 24"
CIP Pipes	30" - 36"
2025	>= 42"
2030	Elevated Tank
2035	Pump Station
2040	WTP
2050	North Fulton
Existing Water Mains	GDOT Road Segments
<= 8"	

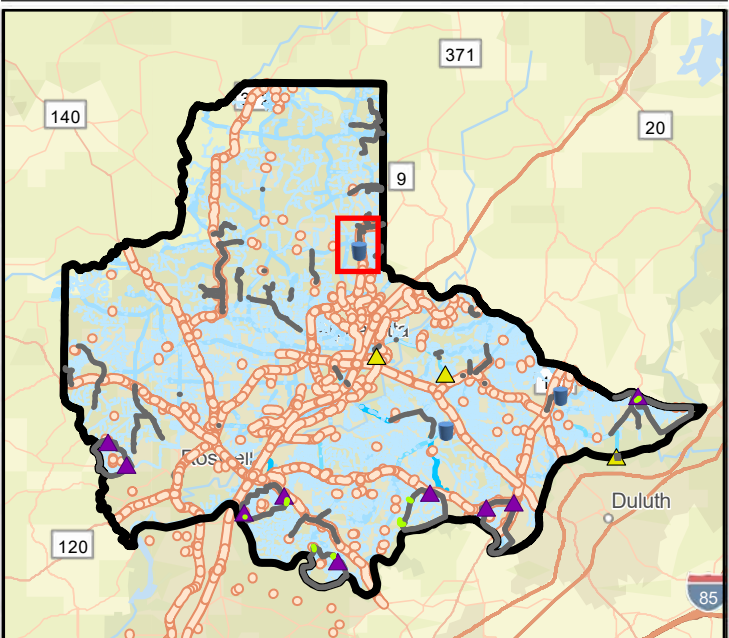




CIP Project #515
New 2 MG Elevated Storage
Tank at Bethany
Phase: 2050
Fulton County Water Distribution
Master Plan

Project Description:
New 2 MG elevated tank at
existing Bethany Tank site.
Helps with providing emergency
storage.

Legend	
Highlighted Project	10" - 24"
CIP Pipes	30" - 36"
2025	>= 42"
2030	Elevated Tank
2035	Pump Station
2040	WTP
2050	North Fulton
Existing Water Mains	GDOT Road Segments
<= 8"	



Appendix I

Impact of Transportation Projects on CIPs

Impact of Planned City and County Transportation Projects on the Master Plan's Capital Improvements Projects

The North Fulton individual city comprehensive plans, the North Fulton's 2010 Transportation Resource Implementation Plan (TRIP), the North Fulton's 2018 Comprehensive Transportation Plan (CTP), and the Atlanta Regional Commission's (ARC) Metropolitan Transportation Plans were compared to the capital improvement projects in the Fulton County Water Distribution Master Plan to assess any interaction of water main improvement projects with planned transportation projects in the area. A determination of impact was assigned based on whether projects were along the same road or if they overlapped at any intersection. Table 1 presents a summary of the impact of planned transportation projects on the capital improvement projects (CIP) recommended as part of this Master Plan. Table 2 presents a summary of the North Fulton's 2010 TRIP recommendations which impact the CIP projects of this Master Plan.

City of Milton

As the City of Milton continues to grow, the community aims to focus on land use that supports rural lifestyles; expanding greenspaces and trails using existing natural features; supporting local businesses by designating areas for commercial development; organizing agritourism; and promoting economic development. Table 3 presents the projects from the Milton's 2023 Comprehensive Transportation Plan and their level of impact with the Master Plan's CIP projects.

An Operations project, R11, aiming for operational and safety improvements along Hopewell Road, is expected to coincide with CIP 106. The city hopes that future projects will result in additional crossing treatments along Hopewell Road, but it is not a current priority.

A Multimodal project, R59, is expected to make improvements along Birmingham Highway which has a minor impact to CIP 506. The improvement aims to extend the two turning lanes along SR 372 and includes multi-use trails on both sides of the road. A sidewalk project, B29, aims to install Rectangular Rapid Flashing Beacon (RFFB) at the roundabouts along SR 372 and Heritage Walk. This project also has a minor impact to CIP 506.

Another Multimodal project, R3, is proposing streetscape enhancements along SR 9 which would impact CIP 507. An Intersection improvement project, I50, is proposed at Thompson Road and Francis Road which also intersects with CIP 507. The city hopes for a future sidewalk to side path conversion along this route but has not designated it as a current priority.

The following CIP projects exist along Milton's designated priority bike networks: CIP 103, CIP 106, CIP 207, CIP 506, and CIP 507. CIP 506 is along the designated sidewalk priority area.

The North Fulton's TRIP project, VH102, which proposes widening SR 9 from 2 to 4 lanes from Academy Street to Hamby Road in Forsyth County and the ARC's Metropolitan Transportation Plan, which highlights a project aiming to widen lanes along SR 9 from Windward Parkway to the Forsyth County line, are both expected to impact CIP 507.

The following projects from North Fulton's 2018 CTP are within the City of Milton:

- Roadway capacity improvements that widen existing roads are expected to overlap with CIP 106 and CIP 507.
- New intersection projects are proposed to intersect with CIP 506.
- Operational projects that work to optimize roadway performance are expected to overlap with CIP 506 and CIP 507. CIP 507 also overlaps with a bicycle and pedestrian improvement project.

City of Johns Creek

Johns Creek's vision for growth includes protecting and preserving the city's residential community; providing recreational and cultural activities; protecting the natural and historical properties; expanding the economic base; strengthening the city's identity; and creating a multi-modal transportation network.

Road widening and capacity improvement projects in the City's Comprehensive Plan are expected to impact some of the CIPs in the City of Johns Creek. The road widening project on Abbotts Bridge Road is expected to impact CIP 101 and CIP 208. The roadway capacity improvement project on Medlock Bridge Road and Jones Bridge Road are expected to impact CIP 212 and CIP 502, respectively. Potential new roundabouts at Bell Road and Rogers Bridge Road and Rogers Circle are expected to impact CIP 511.

An increase in residential units is expected near many of the CIP projects proposed within the City of Johns Creek. These are sometimes in proximity to multiple buildings and are either eligible for the National Register of Historic Places or identified as historically significant by the city.

The following CIP projects exist alongside roads designated as future sidewalk/trailway paths: CIP 101, CIP 208, CIP 212, and CIP 511.

North Fulton's TRIP project, VH112, which proposes capacity improvements to Jones Bridge Road and road widening to 4 lanes from Taylor Road to Douglas Road is alongside CIP 502.

The ARC's Metropolitan Transportation Plan also proposes improvements such as widening along Abbotts Bridge Road (SR 120) and Medlock Bridge Road (SR 141), and operational improvements on Jones Bridge Road.

The following projects from North Fulton's 2018 CTP are within the City of Johns Creek:

- Roadway capacity improvements that widen existing roads are expected to overlap with CIP 101, CIP 208, CIP 212, and CIP 502.
- Roadway widening improvements are expected to overlap with CIP 208, CIP 502, and CIP 503.
- Operational projects that work to optimize roadway performance are expected to overlap with CIP 212, CIP 503, and CIP 511.

City of Roswell

For its future, Roswell aims to promote a well-designed community; sustain, and protect its resources; be responsive to its citizen's concerns; and maintain a safe environment for its inhabitants. Table 4 presents the projects from the Roswell's 2023 Transportation Master Plan and their level of impact with the Master Plan's CIP projects.

Bicycle and pedestrian improvement projects, intersection improvement projects, and traffic calming element projects in the City of Roswell's Transportation Plan are expected to impact some of the CIPs in this Master Plan.

BPD-35 is a proposed multi-use trail along King Road from Woodstock Road to Hardscrabble Road and is expected to be alongside CIP 104, CIP 210, and CIP 512. BPD-08 and BPD-10 are proposed multi-use trails on Crabapple Road from Hembree Road to Houze Way and are expected to be alongside CIP 209. BPD-34 is a proposed sidewalk project on Jones Road from the existing sidewalk to Shallowford Road; this is expected to be alongside CIP 512. BPD-38 is a proposed multi-use trail on Mountain Park Road from Woodstock Road to Mountain Park Elementary School; this is expected to be alongside CIP 513.

INT-05, an intersection improvement project on SR 9 and Mansell Road, is proposed at the location of CIP 206. TCE-11 is a project that will place speed feedback signs along Holcomb Bridge Road. This will have a minor impact to CIP 509. TCE-08 is a proposed project to review the feasibility of traffic calming features on Eves Road and is expected to be alongside CIP 510. TCE-18 is a proposed project to review the feasibility of traffic calming features on Mountain Park Road and is expected to be alongside CIP 513.

The following projects from North Fulton's 2018 CTP are within the City of Roswell:

- Roadway capacity improvements that widen existing roads are expected to overlap with CIP 509.
- Operational projects that work to optimize roadway performance are expected to overlap with CIP 206.

City of Alpharetta

The City of Alpharetta plans to promote and encourage residential housing, improve transportation accessibility and mobility; support economic development; revitalize downtown areas; protect and preserve cultural and historic resources; provide high-quality public services and facilities; coordinate more with adjacent local governments; and promote broadband services.

The GA 400 Westside Greenway multi-use trail from Webb Bridge Road east of GA 400 to the Deerfield Area west of GA 400 is expected to be alongside CIP 202, CIP 204, and CIP 205.

The Kimball Bridge Road multimodal improvements propose to extend the greenway along Kimball Bridge Road from Northwinds Parkway to Big Creek Greenway/Rock Mill Road. This is expected to impact CIP 301, CIP-501A, and CIP 501-B.

North Fulton's TRIP project, BP105, is expected to occur along the same segments as CIP 101, CIP 102, CIP 203, and CIP 204. The project entails connections from Big Creek Greenway at Webb Bridge Road to Webb Bridge Park and from the future Big Creek Greenway east of Marconi Drive down the powerline easement to the existing trail at Park Bridge Parkway. The connections include grade separation at Webb Bridge Road and grade crossings elsewhere.

The ARC's Metropolitan Transportation Plan highlights a project to provide MARTA's High-Capacity Premium Transit Service from the North Springs MARTA station to Windward Parkway. The Plan also highlights a project to provide new Express Lanes along GA 400 from North Springs MARTA station to McFarland Road. These projects are expected to have minor impact to CIP 301 and CIP 501B.

The following projects from North Fulton's 2018 CTP are within the City of Alpharetta.

- Roadway capacity improvements that widen extending roads are expected to overlap with CIP 101 and CIP 502.
- Operational projects that work to optimize roadway performance are expected to overlap with CIP 102, CIP 202, CIP 203, CIP 204, and CIP 205.
- A street completion project is expected to overlap with CIP 201/401.

Table 1. Impact of Planned Transportation Projects with Master Plan’s Proposed Capital Improvement Projects (CIPs)

CIP Project Number	Project Description	2010 North Fulton TRIP Projects (Table 2) ^a	2018 North Fulton CTP Projects ^b	ARC Projects ^c	Projects in Individual City Comprehensive Plans ^d	Impacted City
103	Crossing Pipe Connection at Freemanville Rd/Quarterpath Ln	No	No	No	No but along a priority bike network.	Milton ^d (Table 3 provides in-depth description of projects)
106	Hopewell Rd Parallel Line	No	Yes – Capacity; Maybe – New Intersection	No	Yes – R11; priority bike network; aspirational crossing treatments along Hopewell Road	
207	Crossing Pipe Connection at Bethany Rd just north of Mayfield Rd	No	Maybe – New Intersection, Realignment	No	No but along a priority bike network.	
504	Old Cedar Ln/Kensington Farms Dr and Triple Crown Dr/Seabiscuit Parallel Line	No	Maybe – Operational, New Intersection	No	Maybe – Personal Transportation Vehicle (PTV) permitted on Kensington Farms Dr and Owens Lake Rd (Crabapple PTV Plan)	
505	Freemanville Rd/Hipworth Rd/ Conagree Ct/ Mayfield Rd/ Harrington Dr Parallel Line; Bethany Rd crossing pipe connection	No	Maybe – New Intersection	No	Maybe – Mayfield Road sidewalk project .	
506	Providence Rd and Birmingham Hwy Parallel Line	No	Yes – Operational, New Intersection; Maybe – New location	No	Yes – R59, BP29; priority bike network, sidewalk priority area.	
507	Hwy 9N/Creek Club Dr, Five Acres Rd/Woodlake Dr, Belleteree Dr, Francis Rd/ Autumn Close Parallel Line and crossing pipe connections on Hwy 9N	Yes – VH102	Yes – Capacity, New Lanes, Operational, Bicycle and Ped	SR 9 (Cumming Highway) Widening from Windward Pkwy to Forsyth County Line	Yes – R3, I50; Aspirational conversion of sidewalk to sidepath, priority bike network	
101	Crossing Pipe Connection at Kimball Bridge Rd/Webb Bridge Rd	No	Yes – Road Capacity, Operational (at a point)	No	Yes – Roadway widening on Abbotts Bridge Rd Maybe – Future sidewalk/trailway, Increase in residential units	Johns Creek ^e
208	Crossing Pipe Connection at Abbotts Bridge Rd/Abbotts Way	No	Yes – Road Capacity, Widening	SR 120 (Abbotts Bridge Rd Widening) from Jones Bridge Rd to Sr 141 (Medlock Bridge) – Programmed	Yes – Roadway widening on Abbotts Bridge Rd Maybe – Future sidewalk/trailway	
212	Medlock Bridge Rd/Johns Creek Pkwy Parallel Line	No	Yes – Road Capacity; Lane addition; Operational; New Location; Bike, Pedestrian, and Trail	SR 141 (Medlock Bridge Rd) Widening from Grove Point to McGinnis Ferry RD (Phase 3)	Yes, Roadway Capacity Improvement at Medlock Maybe – Traffic signal improvements, Future sidewalk/trailway, increase in residential units, from commercial office to mixed-use high intensity, Improvements to Creekside Park are near but not on the road segment	
502	Jones Bridge Rd Parallel Line	Yes - VH112	Yes – Road Capacity, Widening	Jones Bridge Rd Operational Improvements from Sargent Rd to Douglas Rd	Yes – Roadway Capacity Improvement on Jones Bridge Rd, Maybe – Increase in residential units	
503	Fox Rd and Greatwood Manor Parallel Line; Extension on Shirley Bridge	No	Maybe – Road Capacity, Widening , Operational	No	Maybe – Increase in residential units	

CIP Project Number	Project Description	2010 North Fulton TRIP Projects (Table 2) ^a	2018 North Fulton CTP Projects ^b	ARC Projects ^c	Projects in Individual City Comprehensive Plans ^d	Impacted City
511	Bell Rd/McGinnis Ferry Rd/ Rogers Circle Parallel Line	No	Yes – Operational, proposed trail Maybe – Road Capacity (at a node) – Forsyth	No	Yes – Potential new roundabouts - Bell Road at Rogers Bridge and Rogers Circle Maybe – Multiple buildings either eligible for National Register of Historical Places or identified as historically significant by the city, large increase in residential units, new bridge or bridge repair, New 2 lane local street off of the intersection of Rogers Bridge Rd and Kemper Dr); Future Sidewalk/Trailway.	
104	Woodstock Rd Extension	No	Maybe – New Location	No	Yes – BPD-35	Roswell ^d (Table 4 provides in-depth description of projects)
206	Crossing Pipe Connection at Mansell Rd/ Alpharetta Hwy	No	Yes – Operational Maybe – New Intersection	No	Yes – INT-05	
209	Crossing Pipe Connection at Crabapple Rd just north of Strickland Rd	No	Maybe – Operational, New Trail, Bike and Ped	No	Yes – BPD-08, BPD-10	
210	Crossing Pipe Connection at W Crossville Rd/Woodstock Rd	No	Maybe – New Location, New intersection, New Trail	No	Yes – BPD-35	
509	Scott Rd/Holcomb Bridge Rd Parallel Line	No	Yes – Capacity Maybe – Operational, New Intersection, New Trail, Bike and Ped	No	Yes – TCE11	
510	Eves Rd Parallel Line	No	Maybe – Operational	No	Yes – TCE-08	
512	Woodstock Rd/Jones Rd/Lake Charles Dr and Bowen Rd/Stroup Rd Parallel Line	No	Maybe – New Location, New Intersection, Bike and Ped	No	Yes – BPD-35, BPD-34	
513	Mountain Park Rd and Highland Colony Dr Parallel Line	No	Maybe – New Location, New Intersection, Bike and Ped	No	Yes – TCE 18, BPD-38	
101	Crossing Pipe Connection at Kimball Bridge Rd/Webb Bridge Rd	Yes – BP105	Yes – Road Capacity, Maybe – Operational (at a point)	No	Maybe – Webb Bridge Road Improvement, Kimball Bridge Road Improvement	Alpharetta ^f
102	Crossing Pipe Connection at Webb Bridge Rd/Maid Marion Close	Yes – BP105	Yes – Operational	No	Maybe – Webb Bridge Road Improvement	
105	Providence Rd Extension	No	No	No	Maybe – Sidewalk Improvements	
201/401	Complete 54" Transmission Main along Buice Rd and Kimball Bridge Rd	No	Yes – Complete Street	No	Maybe – Kimball Bridge Road Improvement	
202	Alpharetta Tank Pump Station (75 HP)	No	Yes – Operational	No	Yes – GA 400 Westside Greenway	
203	Maid Marion In-line Booster Station (5 HP pumps)	Yes – BP105	Yes – Operational	No	No	
204	Crossing Pipe Connection at Webb Bridge Rd/Strath Dr	Yes – BP105	Yes – Operational	No	Yes – GA 400 Westside Greenway Maybe – Webb Bridge Road Improvement	

CIP Project Number	Project Description	2010 North Fulton TRIP Projects (Table 2) ^a	2018 North Fulton CTP Projects ^b	ARC Projects ^c	Projects in Individual City Comprehensive Plans ^d	Impacted City
205	Crossing Pipe Connection at Webb Bridge Rd/N Point Pkwy	No	Yes – Operational	No	Yes – GA 400 Westside Greenway. Maybe – Webb Bridge Road Improvement, North Point Parkway Streetscape Design/Improvements	
301/501B	Complete 42" Transmission Main under GA 400 along Kimball Bridge Rd	No	Yes – SR 400 Express Lanes Maybe – New Bridge, New Trail	Yes MARTA GA 400 High Capacity Premium Transit Service – Phase 1 (From North Springs MARTA station to Windward Pkwy) SR 400 Express Lanes from (From North Springs MARTA station to McFarland Rd)	Yes – Kimball Bridge Multimodal Improvements and Kimball Bridge at North Point Parkway Intersection Maybe – Kimball Bridge Road Improvement	
501A/501B	Complete 36-42" Transmission Main along Kimball Bridge Rd	No	No	No	Yes – Kimball Bridge Multimodal Improvements and Kimball Bridge at North Point Parkway Intersection Maybe – Kimball Bridge Road Improvement	
502	Jones Bridge Rd Parallel Line	No	Yes – Road Capacity, Widening	No	No	
503	Fox Rd and Greatwood Manor Parallel Line; Extension on Shirley Bridge	Maybe - BP105	Maybe – Road Capacity	No	No	
505	Freemanville Rd/Hipworth Rd/ Conagree Ct/Mayfield Rd/ Harrington Dr Parallel Line; Bethany Rd crossing pipe connection	No	Maybe – Intersection	No	No	

^a North Fulton County Comprehensive Transportation Plan, Transportation Resource Implementation Program, October 2010

^b North Fulton Comprehensive Transportation Plan, Executive Summary, 2018

^c [ARC Metropolitan Transportation Plan | Fulton County, Georgia - Open Data](#)

^d Plans used are cited under each city's separate project table.

^e Johns Creek information: Johns Creek Recreation and Parks Master Plan, 2023; Johns Creek Comprehensive Plan, 2018-2028; Johns Creek Transportation Master Plan, Appendix B, 2008

^f North Fulton CID Master Plan Update, Blueprint North Fulton 2.0, 2014 ; Alpharetta Comprehensive Plan, Horizon 2040, 2021

Appendix I - Fulton County Water Distribution Master Plan

Table 2. North Fulton's 2010 TRIP Recommendations^a

North Fulton's 2005 TRIP Project Number	Project Name	Project Description	Tier ^b
BP105	Johns Creek Connection to Big Creek Greenway	Connections made from Big Creek Greenway at Webb Bridge Road along Webb Bridge Road to Webb Bridge Park and from future Big Creek Greenway east of Marconi Drive down powerline easement to existing trail at Park Bridge Parkway. Grade separation only at Webb Bridge Road. At grade crossings elsewhere.	Tier 1
VH102	Capacity Improvements to SR 9 (Hamby Road to Academy Street)	Widen to 4 lanes from Hamby Road in Forsyth County to Academy Street.	Tier 1
VH112	Capacity Improvements to Jones Bridge Road	Widen to 4 lanes from Taylor Road to Douglas Road.	Tier 1

^a North Fulton County Comprehensive Transportation Plan, Transportation Resource Implementation Program, October 2010

^b Tiers: Tier 1: \$500 Million, the approximate cost of projects currently in the Envision6 RTP, High Priority

Table 3. Milton's 2023 Comprehensive Transportation Plan Recommendations^a

Milton Transportation Plan Project ID	Project Name	Project Description	Level ^b
Sidewalk - BP29	SR 372 Ped Crossing RRFBS	Rectangular Rapid Flashing Beacon (RRFB) at roundabouts along SR 372 and Heritage Walk	Level 1, Tier 1
Multimodal - R3	SR 9 Streetscape	Streetscape enhancements along SR 9 (North Main Street/Cumming Highway)	Level 1, Tier 1
Operations - R11	Hopewell Road Corridor Improvements	Concept and preliminary design of operational and/or safety improvements with traffic calming measures along Hopewell Road from Mayfield Road to Redd Road	Level 1, Tier 1
		Right of way acquisition for operational and/or safety improvements with traffic calming measures along Hopewell Road from Mayfield Road to Redd Road	Level 1, Tier 2
Multimodal - R59	SR 372 School Stacking Lane	Northbound right turn lane extension approaching School Drive and southbound left turn lane extension to remove queuing from SR 372 mainline; includes multiuse trails on both sides of the road	Level 1, Tier 1
Intersection - I50	Thompson Road at Francis Road	Intersection improvements at Thompson Road and Francis Road	Level 2, Remaining Projects

^a City of Milton Comprehensive Transportation Plan, Recommendations Report, 2023; Milton 2040 Comprehensive Plan, 2021

^b Levels and Tiers:

Level 1: TSPLOST II funding, highest priority projects; Tier 1 funding is the highest priority, which is 85% of the expected TSPLOST revenue; Tier 2 equals 100% of the funding.

Level 2: Projects that could be completed if another TSPLOST was passed on the next ballot. These projects would be initiated in the next 6 to 10 years.

Level 3: This funding is an estimate of TSPLOST funding in the next 11 to 20 years if the tax continues to be passed.

Table 4. Roswell Comprehensive Plan Recommendations^a

Roswell Comprehensive Plan Project ID	Project Name	Project Description	Tier ^b
BPD-08	Multi-use Trail; Crabapple Road; Hembree Road to Strickland Road	This project will fill gaps in sidewalk network and construct multi use path on corridor where feasible.	Tier 2
BPD-10	Multi-use Trail; Crabapple Road; Strickland Road to Houze Way	This project will construct multi use path where feasible	Tier 3
BPD-34	Sidewalks; Jones Road; Existing Sidewalk to Shallowford Road	This project will fill the sidewalk gap along the south side of Jones Road.	Tier 2
BPD-35	Multi-use Trail; King Road; SR 92/Woodstock Rd to Hardscrabble Road	This project will install multi use path on corridor where feasible.	Tier 1
BPD-38	Multi-use Trail; Mountain Park Road; SR-92/Woodstock Rd to Mountain Park Elementary	This project will construct multiuse path where feasible.	Tier 3
INT-05	Alpharetta Hwy (SR 9); Mansell Road	Examine signal timing improvements and add new pedestrian island in NE quadrant where dual right turn lanes exist.	Tier 1
TCE-08	Eves Road; Riverside Road to Holcomb Bridge Road (SR 140)	Review future feasibility for traffic calming features that may include speed feedback signs, median treatments, horizontal deflection, or other improvements.	Tier 2
TCE-11	Holcomb Bridge Road (SR 140); Holcomb Woods Parkway to City Limits	This project will increase the placement of speed feedback signs along Holcomb Bridge Road (SR 140) as part of the Speed Management Program.	Tier 2
TCE-18	Mountain Park Road; Woodstock Road (SR 92) to Old Mountain Park Road	Review future feasibility for traffic calming features that may include speed feedback signs, median treatments, horizontal deflection, or other improvements.	Tier 3

^a City of Roswell Transportation Master Plan, 2023; City of Roswell Comprehensive Plan, 2040

^b Tiers:

Tier 1: Capital Improvement Program and Short-Range Projects for Fiscal Years 2024-2028

Tier 2: Mid-Range Projects, Fiscal Year 2029-2039

Tier 3: Long Range Projects, Fiscal Year 2040-2050

Table 4. North Fulton CID Master Plan – Alpharetta Recommendations

North Fulton CID Master Plan Project ID	Project Name	Project Description	Prioritization**
8 - Multimodal Trail	GA 400 West Side Greenway; Windward Pkwy	Complete greenway from Webb Bridge Road East of GA 400 to Webb Road/Deerfield Area West of GA 400	Work Plan
9 - Roadway	Lakeside Parkway/Haynes Bridge Road Accel/Decel Lane; North Point	Reopen slip lane from Lakeview Parkway to Haynes Bridge Road and extend decel lane from GA 400 southbound on-ramp to Lakeview Parkway	Work Plan
11- Multimodal Trail	Kimball Bridge Multimodal Improvements and Kimball Bridge at North Point Parkway Intersection; Old Milton	Extend greenway along Kimball Bridge Road from Northwinds Parkway to Big Creek Greenway/Rock Mill Road	Work Plan
16 - Multimodal Trail	Webb Bridge Multimodal; Greenway Old Milton	Extend greenway along Webb Bridge Road from Westside Parkway to Big Creek Greenway	Out of district

*North Fulton CID Master Plan Update, Blueprint North Fulton 2.0, 2014

**Prioritization

Work Plan: Top Tier appropriate size and scale. CID can undertake these efforts within 7 years

Out of District: CID's ability to pursue these projects is limited by different restraints. Initiatives can be revisited.

Appendix J

Model Intergovernmental Agreement

8.4 Model Intergovernmental Agreement

Intergovernmental agreements for sharing and pricing of water during emergency situations are unique and will vary depending on the type of project and the systems or entities involved. Crafting a successful intergovernmental agreement will involve a number of policy decisions, which also will vary according to the governmental entities involved. However, there are key issues common to all intergovernmental agreements that are integral to the success of these agreements. Addressing these issues of governance and financial and technical issues in the agreement will minimize the potential for legal disagreements between the participating governmental parties.

A Model Intergovernmental Agreement for Emergency Water Interconnection System is provided at the end of this section as Exhibit 8-5. It assumes that the parties will share water in emergency situations via a physical interconnection between their distribution systems. While the type of project may vary, parties can use this Model Intergovernmental Agreement as a tool to facilitate discussion on drafting the specific intergovernmental agreement that best meets their needs.

This section sets out a list of topics that should be addressed by the parties during the drafting of the intergovernmental agreement and addresses the general issues surrounding each topic.

8.4.1 Governance

Generally, the recitals of the agreement between various parties set forth the legal authority permitting the parties to enter into the agreement. Since the intergovernmental agreements at issue deal specifically with the sharing and pricing of water during emergency situations for QWSs in the District, the WSIRRA (O.C.G.A. § 12-5-200, et seq.) should be addressed. As defined by the WSIRRA, “Qualified Water Systems” considered in this study are limited to public water systems that are operated by a city, county or water authority. Therefore, the examples discussed in this section involve only intergovernmental agreements.

Example:

“WHEREAS, the General Assembly finds that it is in the best interests of the state of Georgia for public water systems in the Metropolitan North Georgia Water Planning District to evaluate their withdrawal, treatment, and distribution systems and to take proactive measures to reduce the risk of catastrophic interruptions of water service during emergencies as set forth in O.C.G.A. §12-5-200(2); and,”

City and county governmental entities need statutory authority to enter into contracts. This is because of the general rule that local governments may not enter into a contract that lasts longer than the government’s term of office. One council may not bind itself or its successors (O.C.G.A. § 36-30-3(a)). However, the Intergovernmental Contracts Clause found in Article IX, Section III, Paragraph I(a) of the 1983 Georgia Constitution provides an exception to that rule and allows political subdivisions of the state to contract with one another or with other public agencies provided that the contract does not exceed 50 years. This exception does not give authority for these governmental entities to enter into any kind of agreement that they want to. The agreement must be for the provision of services or for the use of facilities or equipment that the parties are authorized by law to undertake. See, City of Decatur vs. DeKalb County, Ga. (2011) (Georgia Supreme Court Case No. S11A0354, decided July 5, 2011). City and county governments are authorized by law to provide services for “[d]evelopment, storage, treatment, purification, and distribution of water”, 1983 Georgia Constitution Article IX, Section II, Paragraph III(7). Thus, city and county governments are permitted by law to contract for the provisions of services or for the use of facilities or equipment for the sharing of water.

Examples:

“WHEREAS, Article IX, Section III, Paragraph I(a) of the Georgia Constitution authorizes, among other things, any county, municipality or other political subdivision of the state to contract, for a period not exceeding 50 years, with another county, municipality or political subdivision or with any other public agency, public

corporation or public authority for joint services, for the provision of services, or for the provision or separate use of facilities or equipment, provided that such contract deals with activities, services or facilities which the contracting parties are authorized by law to undertake or to provide; and,”

“WHEREAS, Article IX, Section II, Paragraph III(7) of the Georgia Constitution authorizes, among other things, any county or municipality to provide for the development, storage, treatment, purification, and distribution of water; and”

If the “qualified system” contracting party is a local water authority, the recitals of the agreement should set forth the legal authority permitting the local authority to contract. “[T]he term “local authority” means an instrumentality of one or more local governments created to fulfill a specialized public purpose or any other legally created organization that has authority to issue debt for a public purpose independent of a county or municipality, regardless of name; provided, however, that the term “local authority” does not include a state authority. A local authority may have been created by local constitutional amendment, general statute or local law.” (O.C.G.A. § 36-80-17(a)).

Example:

“WHEREAS, the Local Water Authority is organized and established under the provisions of [local constitutional amendment, general statute, or local law], for the purpose of constructing and operating a water supply distribution system serving water users within the area described in the plans now on file in the office of the Local Water Authority; and, “

8.4.2 Purpose

The agreement should address why the parties are entering into the agreement, including the spirit and intent of the agreement, which can be set forth in the recitals or as a provision in the agreement.

Examples:

“WHEREAS, the City and County agree that the establishment of a potable water interconnection between the two parties is in the best interest of their respective communities and that to promote the establishment of such a system, all points of connection constructed between the City system and the County system shall be treated as emergency interconnections and constructed so as to allow the flow of water from either system to the other; and”

“WHEREAS, the City and the County desire to enter into an agreement for an emergency water interconnection system, whereby both parties agree to coordinate and cooperate with each other and agree to establish the terms and conditions under which the systems can be physically connected and water made available to each other during times of emergency, as more specifically set forth below. “

“1. Purpose. This is an Agreement for the reciprocal sale and purchase of available potable water by and between the City and County during emergency water conditions for the mutual convenience of the parties. All of the foregoing recitals are true and correct and are made a part of this Agreement as if fully set forth herein.”

8.4.3 Definitions

Terms and corresponding definitions should clearly be set out in the agreement. Of particular interest is the definition of “emergency,” which should be defined to include those parameters set forth in O.C.G.A. § 12-5-201. Other terms and corresponding definitions may be dictated by the type of project and its financial and technical issues.

Examples:

“2. Definitions. For purpose of this Agreement, the following definitions shall apply:

- (a) *"Available Potable Water" shall mean a surplus of potable water not immediately needed by the Selling Party.*
- (b) *"Emergency Water Condition" shall mean a shortage of potable water to meet the essential water needs of the Requesting Party's customers that threatens their health, safety and welfare.*
- (c) *"Essential Water Needs" shall mean the minimum amount of water needed for residential and commercial means for food processing, drinking, toilet flushing, fire fighting, hospital use, and critical asset use and a portion of the system's unaccounted for water as defined in O.C.G.A. §12-5-201(4).*
- (d) *"Requesting Party" shall mean that party which desires to purchase potable water from the other.*
- (e) *"Selling Party" shall mean that party which has Available Potable Water to sell to the Requesting Party."*

8.4.4 Procedures

The agreement should address the processes and procedures for parties to follow in a water emergency.

Examples:

- "3. Disruption of Potable Water Supply. Whenever either City or County experiences an Emergency Water Condition and desires to purchase Available Potable Water from the other, the Requesting Party shall notify the Selling Party of the Emergency Water Condition and request Available Potable Water be transferred to the Requesting Party for a limited period, as determined by mutual agreement. The Selling Party shall respond as soon as possible to the request by advising the Requesting Party of the quantity of Available Potable Water.
- 4. Notification of Emergency Water Conditions. The City water system director, by whatever name called, or his on-call designee, and the County water system director, by whatever name called, or his on-call designee, shall immediately notify the other when Emergency Water Conditions develop and request temporary water service from the other. Such notice shall include a description of the emergency and expected duration.
- 5. Utility Staff Responsibilities. In the event that water is needed by City or County, each parties' Utility Department will be responsible for operating all of the valves necessary to permit water to be sold from one to the other; and each utility will be responsible for returning their valves to the original closed position once the temporary water service event is completed."

8.4.5 Amount to Supply

The agreement should address how much water the parties agree will be supplied in the event of an emergency.

Example:

- "6. Rate of Supply. The Selling Party shall not be required to draw water in excess of any Water Use permits, nor shall the Selling Party be required to provide more than its Available Potable Water; and the Selling Party shall not be liable to the Requesting Party or its customers for any interruptions or water service provided hereunder. The parties shall be obligated to supply water pursuant to this Agreement only to the extent that doing so does not prejudice the ability of the Selling Party to fulfill its obligations to its customers and other entities with contracts with the Selling Party."

8.4.6 Pricing

The cost allocation concepts discussed in the prior sections give various examples of how allocation of costs associated with interconnections can be addressed by the parties in the agreement. The Model Intergovernmental Agreement presented here uses a volume of use approach to pricing and contemplates a change in rates; however, other approaches to pricing, as described previously, could be instituted with the concurrence of both parties. Setting the cost allocation in the agreement will require a mixture of accounting, business and political skills to arrive at a pricing agreement that meets both business and political criteria.

Example:

- "7. Water Supply Charges. Water supplied by either party per this Agreement and distributed through the point(s) of interconnection shall be charged at the then current lowest retail residential water rate, regardless of the number of gallons used, as set forth in the Selling Party's rate ordinance or resolution. The parties will not be required to pay each other impact or connection fees for the carrying out of this Agreement.

If the contracting party is a local water authority, the enabling legislation, i.e., the local constitutional amendment, general statute or local law that created the water authority, should be reviewed to determine what powers the local water authority has. See, City of Jonesboro v. Clayton County Water Authority, 136 Ga. App. 768 (1975) (Enabling Act of water authority gave it power to set rates; however, it did not give it power to arbitrarily revise rates after it had contracted for specific rates). The agreement also should address the requirements of O.C.G.A. § 36-80-17 as to contracts specifying rates, fees or other charges to be charged and collected for water utility services provided by the local authority. This Code Section allows the governing body of any local authority which is authorized to provide electric, natural gas or water utility services to enter into contracts that specify the rates, fees or other charges which will be charged and collected by the local authority for utility services to be provided by the local authority to one or more of its utility customers. However, such contracts are subject to the following conditions and limitations:

- "(1) No such contract shall be for a term in excess of 10 years;
- (2) Any such contract that is for a term in excess of two years shall include commercially reasonable provisions under which the rates, fees or other charges shall be adjusted with respect to inflationary or deflationary factors affecting the provision of the utility service in question; and,
- (3) Any such contract shall include commercially reasonable provisions relieving the local authority from its obligations under the contract in the event that the local authority's ability to comply with the contract is impaired by war, natural disaster, catastrophe or any other emergency creating conditions under which the local authority's compliance with the contract would become impossible or create a substantial financial burden upon the local authority or its taxpayers." (O.C.G.A. § 36-80-17 (b) (1) – (3)).

There is a similar provision authorizing municipalities to execute contracts establishing water rates, which recognizes the power of a local authority providing water utility services to establish rates, where the right or power to specify such rates, fees or charges is otherwise vested by local constitutional amendment, general statute or local law in the governing body of such local authority. However, any such contract is subject to the same three conditions and limitations listed above (O.C.G.A. § 36-30-3(d) (1) – (3)).

Examples:

- "(a) Change of Rates. If either City or County proposes any new or amended rate schedule while this Agreement is in effect, provided that any new or amended rate schedule shall be adjusted with respect to inflationary or deflationary factors affecting the provision of the water utility service, notice shall be furnished to the other party prior to the effective date of the new or

amended rate schedule. Thereafter, the new or amended rate schedule shall take effect for purposes of this Agreement beginning in the next billing cycle after the change in rate takes effect. The purpose of this subsection is only to ensure disclosure of rate changes and shall not grant either party a right to appeal any rate increase. The parties hereby agree that, during the Agreement, both parties shall continue to be billed at the lowest retail residential water rate."

"Term. This Agreement shall continue in effect for five (5) years, unless otherwise terminated, as set forth above. Further, this Agreement shall be automatically renewed for five (5) year increments unless either party notifies the other in writing at least one year prior to the termination date. Upon Termination of the Agreement both parties agree to share equally the interconnection removal costs."

"Force Majeure. City and County agree that the Available Potable Water will be continuous during the Emergency Water Condition, except that temporary disruption of service at any time caused by an act of God, fire, strikes, casualties, war, terrorist act, natural disaster, accidents, necessary maintenance work, breakdowns of or injuries to machinery, pumps or pipelines, civil or military authority, insurrections, riot, acts or declarations of government or regulatory agencies other than City or County, or any other cause beyond the control of City or County, shall not constitute a breach of this Agreement; and no party shall be liable to the other or to its customers for any damage resulting from such unavoidable disruption of service."

8.4.7 Project Subject to Intergovernmental Agreement

The project contemplated by the Model Intergovernmental Agreement is a physical interconnection with the parties equally sharing the capital, operating and maintenance costs of the interconnection. As discussed in the prior sections, the available funding and cost allocation options will vary according to the project.

Example:

- "8. Physical Interconnection for Emergency Conditions. Within six (6) months of the effective date of this Agreement, City and County shall install equipment that will allow water flow in either direction and will allow an automatic supply to occur to equalize pressure (the "Interconnection"). The parties shall mutually determine the scope of and the plan for maintenance of the Interconnection. The cost of installing and maintaining the Interconnection will be shared equally by the parties. The parties shall mutually develop a protocol for maintenance which includes the manner of and procedure for cost sharing. It is agreed that during normal operating conditions, the Interconnection will be closed and water will be prevented from flowing through the Interconnection."

8.4.8 Meter Maintenance and Ownership Responsibilities

The agreement should have basic language about who will read meters, maintain meters and replace meters, especially if the interconnection will be used on a regular basis to provide water from one system to another. The need for meters on emergency interconnections is not as important, and the use of meters is left to the discretion of the utility systems.

Example:

- "9. Metering.
- (a) Each party shall install a meter, and each party shall be charged with maintaining, calibrating and reading its meter at its own expense. Annually, or upon written notice by the other party, each shall inspect and test their meter in the presence of a representative of the other party. Copies of these inspections and tests shall be made available from one to the other. No meter

shall be allowed to remain in service that has an error in excess of published American Water Works Association ("AWWA") Standards (or such succeeding standards) at the time of the testing. If a party requests a meter inspection in addition to the annual inspection, and the meter conforms to AWWA standards upon testing, the party requesting the inspection shall pay all inspection and testing costs. In the event that it is determined that the meter is not properly calibrated, then the requesting party shall not be liable for the inspection and testing cost, and the owner of the meter shall immediately take steps to restore the meter to an accurate condition or install a new meter, and credit the requesting party for any overpayment based on all available information as agreed to by the utility staffs of City and County.

- (b) *The Requesting Party shall read the meter prior to opening the Interconnection. Said meter reading shall be provided to the Selling Party with the notice required in Section 4. When the Interconnection is closed at the end of the Emergency Water Condition, the meter shall be read again by the Requesting Party, which shall immediately notify the Selling Party of the reading."*

8.4.9 Water Quality

The agreement should address water quality standards and should include a basic agreement for each party to notify the other in the event of a change in the water treatment process that would affect the quality of water being furnished under the agreement.

Example:

- "10. Water Quality. Each party shall provide treated water to the other party at the point of connection to the Interconnection. Treated water must meet the water quality requirements of all applicable regulatory agencies, including the U.S. Environmental Protection Agency and the Environmental Protection Division of the Georgia Department of Natural Resources. Further, if City or County proposes any change(s) to their water treatment process that would affect the water quality chemistry of their finished water while this Agreement is in effect, notice shall be furnished to the other party prior to the effective date of the proposed change(s)."

8.4.10 Termination

The agreement should address early termination of the agreement, both for cause and without cause, and the process for handling disputes arising from early termination of the agreement. The model agreement contemplates the option of resolving any disputes through mediation.

Example:

- "11. Early Termination.
- (a) Without Cause. If neither party is in breach, either party may terminate this Agreement prior to the expiration of the term by rendering to the other party ninety (90) days notice of early termination.
- (b) For Cause. If either party fails to perform each and every obligation of this Agreement, each party reserves the right to immediately discontinue performance of services pursuant to this Agreement, after the party seeking termination has provided written notice of the alleged violation to the breaching party, and the breaching party has failed to cure the breach within thirty (30) days of receipt of notice thereof.
- (c) Remedies. Either party to this Agreement, in the event of or act of breach by the other, shall have all remedies available under the laws of the state of Georgia including, but not limited to,

injunction to prevent breach, specific performance to enforce this Agreement, or mediation subject to State law.”

8.4.11 Water Conservation Measures

The agreement should address how water conservation measures and restrictions will be handled. The Model Intergovernmental Agreement contemplates a reciprocal approach to this issue.

Example:

“12. Water Conservation. *This Agreement shall be subject to all state and federal water conservation regulations. Further, any time that the customers of the Selling Party are under water use restriction and water is being supplied to the Requesting Party, the Requesting Party agrees to impose restrictions at least as strict as those imposed by the Selling Party.*”

8.4.12 Other Contract Considerations

The agreement may contain other standard contract provisions regarding the enforcement, interpretation and execution of the agreement, as necessary.

EXHIBIT 8-5**Model Intergovernmental Agreement for Emergency Water Interconnection System****MODEL INTERGOVERNMENTAL AGREEMENT FOR
EMERGENCY WATER INTERCONNECTION SYSTEM**

THIS INTERGOVERNMENTAL AGREEMENT (this "Agreement"), made and entered into as of the ____ day of _____, 20____, by and between CITY OF _____, GEORGIA, a municipal corporation of _____ County, Georgia (the "City"), and _____ COUNTY, GEORGIA, a political subdivision of the state of Georgia (the "County").

WITNESSETH:

WHEREAS, City and County each own and operate public water systems in the Metropolitan North Georgia Water Planning District that provide service to their respective customers; and,

WHEREAS, the General Assembly finds that it is in the best interests of the state of Georgia for public water systems in the Metropolitan North Georgia Water Planning District to evaluate their withdrawal, treatment and distribution systems and to take proactive measures to reduce the risk of catastrophic interruptions of water service during emergencies as set forth in O.C.G.A. § 12-5-200(2); and,

WHEREAS, City and County agree that the establishment of a potable water interconnection between the two parties is in the best interest of their respective communities and that to promote the establishment of such a system, all points of connection constructed between the City system and the County system shall be treated as emergency interconnections and constructed so as to allow the flow of water from either system to the other; and,

WHEREAS, Article IX, Section III, Paragraph I(a) of the Georgia Constitution authorizes, among other things, any county, municipality or other political subdivision of the state to contract, for a period not exceeding 50 years, with another county, municipality or political subdivision or with any other public agency, public corporation or public authority for joint services, for the provision of services, or for the provision or separate use of facilities or equipment, provided that such contract deals with activities, services or facilities that the contracting parties are authorized by law to undertake or to provide; and,

WHEREAS, the City and the County desire to enter into an agreement for an emergency water interconnection system, whereby both parties agree to coordinate and cooperate with each other and agree to establish the terms and conditions under which the systems can be physically connected and water made available to the each other during times of emergency, as more specifically set forth below.

NOW, THEREFORE, for and in consideration of the premises and undertakings as hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the City and the County DO HEREBY AGREE, as follows:

1. Purpose. This is an Agreement for the reciprocal sale and purchase of available potable water by and between the City and County during emergency water conditions for the mutual convenience of the parties. All of the foregoing recitals are true and correct and are made a part of this Agreement as if fully set forth herein.

2. Definitions. For purpose of this Agreement, the following definitions shall apply:

- (a) “Available Potable Water” shall mean a surplus of potable water not immediately needed by the Selling Party.
 - (b) “Emergency Water Condition” shall mean a shortage of potable water to meet the Essential Water Needs of the Requesting Party’s customers that threatens their health, safety and welfare.
 - (c) “Essential Water Needs” shall mean the minimum amount of water needed for residential and commercial means for food processing, drinking, toilet flushing, fire fighting, hospital use, and critical asset use and a portion of the system’s unaccounted for water as defined in O.C.G.A. § 12-5-201(4).
 - (d) “Requesting Party” shall mean that party which desires to purchase potable water from the other.
 - (e) “Selling Party” shall mean that party which has Available Potable Water to sell to the Requesting Party.
3. Disruption of Potable Water Supply. Whenever either City or County experiences an Emergency Water Condition and desires to purchase Available Potable Water from the other, the Requesting Party shall notify the Selling Party of the Emergency Water Condition and request Available Potable Water be transferred to the Requesting Party for a limited period, as determined by mutual agreement. The Selling Party shall respond as soon as possible to the request by advising the Requesting Party of the quantity of Available Potable Water.
4. Notification of Emergency Water Conditions. The City water system director, by whatever name called, or his on-call designee, and the County water system director, by whatever name called, or his on-call designee, shall immediately notify the other when Emergency Water Conditions develop and request temporary water service from the other. Such notice shall include a description of the emergency and expected duration.
5. Utility Staff Responsibilities. In the event that water is needed by City or County, each party’s Utility Department will be responsible for operating all of the valves necessary to permit water to be sold from one to the other; and each utility will be responsible for returning their valves to the original closed position once the temporary water service event is completed.
6. Rate of Supply. The Selling Party shall not be required to draw water in excess of any Water Use permits, nor shall the Selling Party be required to provide more than its Available Potable Water; and the Selling Party shall not be liable to the Requesting Party or its customers for any interruptions or water service provided hereunder. The parties shall be obligated to supply water pursuant to this Agreement only to the extent that doing so does not prejudice the ability of the Selling Party to fulfill its obligations to its customers and other entities with contracts with the Selling Party.
7. Water Supply Charges. Water supplied by either party per this Agreement and distributed through the point(s) of interconnection shall be charged at the then current lowest retail residential water rate, regardless of the number of gallons used, as set forth in the Selling Party’s rate ordinance or resolution. The parties will not be required to pay each other impact or connection fees for the carrying out of this Agreement.
- (a) Change of Rates. If either City or County proposes any new or amended rate schedule while this Agreement is in effect, notice shall be furnished to the other party prior to the effective

date of the new or amended rate schedule. Thereafter, the new or amended rate schedule shall take effect for purposes of this Agreement beginning in the next billing cycle after the change in rate takes effect. The purpose of this subsection is only to ensure disclosure of rate changes and shall not grant either party a right to appeal any rate increase. The parties hereby agree that, during the Agreement, both parties shall continue to be billed at the lowest retail residential water rate.

8. Physical Interconnection. Within six (6) months of the effective date of this Agreement, City and County shall install equipment that will allow water to flow in either direction and will allow an automatic supply to occur to equalize pressure (the "Interconnection"). The parties shall mutually determine the scope of and the plan for maintenance of the Interconnection. The cost of installing and maintaining the Interconnection will be shared equally by the parties. The parties shall mutually develop a protocol for maintenance which includes the manner of and procedure for cost sharing. It is agreed that during the normal operating conditions, water will be prevented from flowing through the Interconnection.
9. Metering.
 - (a) Each party shall install a meter, and each party shall be charged with maintaining, calibrating and reading its meter at its own expense. Annually, or upon written notice by the other party, each shall inspect and test their meter in the presence of a representative of the other party. Copies of these inspections and tests shall be made available from one to the other. No meter shall be allowed to remain in service that has an error in excess of published American Water Works Association ("AWWA") Standards (or such succeeding standards) at the time of the testing. If a party requests a meter inspection in addition to the annual inspection, and the meter conforms to AWWA standards upon testing, the party requesting the inspection shall pay all inspection and testing costs. In the event that it is determined that the meter is not properly calibrated, then the requesting party shall not be liable for the inspection and testing costs, and the owner of the meter shall immediately take steps to restore the meter to an accurate condition or install a new meter, and credit the requesting party for any overpayment based on all available information as agreed to by the utility staffs of City and County.
 - (b) The Requesting Party shall read the meter prior to opening the Interconnection. Said meter reading shall be provided to the Selling Party with the notice required in Section 4. When the Interconnection is closed at the end of the Emergency Water Condition, the meter shall be read again by the Requesting Party, which shall immediately notify the Selling Party of the reading.
10. Water Quality. Each party shall provide treated water to the other party at the point of connection to the Interconnection. Treated water must meet the water quality requirements of all applicable regulatory agencies, including the U.S. Environmental Protection Agency and the Environmental Protection Division of the Georgia Department of Natural Resources. Further, if City or County proposes any change(s) to their water treatment process that would affect the water quality chemistry of their finished water while this Agreement is in effect, notice shall be furnished to the other party prior to the effective date of the proposed change(s).
11. Early Termination.
 - (a) Without Cause. If neither party is in breach, either party may terminate this Agreement prior to the expiration of the term by rendering to the other party ninety (90) days notice of early termination.

- (b) For Cause. If either party fails to perform each and every obligation of this Agreement, each party reserves the right to immediately discontinue performance of services pursuant to this Agreement, after the party seeking termination has provided written notice of the alleged violation to the breaching party, and the breaching party has failed to cure the breach within thirty (30) days of receipt of notice thereof.
- (c) Remedies. Either party to this Agreement, in the event of or act of breach by the other, shall have all remedies available under the laws of the state of Georgia including, but not limited to, injunction to prevent breach, specific performance to enforce this Agreement, or mediation subject to state law.
12. Water Conservation. This Agreement shall be subject to all state and federal water conservation regulations. Further, any time that the customers of the Selling Party are under water use restriction and water is being supplied to the Requesting Party, the Requesting Party agrees to impose restrictions at least as strict as those imposed by the Selling Party.
13. Billing. The Selling Party shall bill on or around the thirtieth (30) day of the month for all metered water sold hereunder during the month. Bills not paid within forty-five (45) days of receipt shall be assessed a one and one-half percent (1-1/2%) per month late charge.
14. Term. This Agreement shall continue in effect for five (5) years, unless otherwise terminated, as set forth above. Further, this Agreement shall be automatically renewed for five (5) year increments unless either party notifies the other in writing at least one (1) year prior to the termination date. Upon termination of the Agreement both parties agree to share equally the Interconnection removal costs.
15. Force Majeure. City and County agree that the Available Potable Water will be continuous during the Emergency Water Condition, except that temporary disruption of service at any time caused by an act of God, fire, strikes, casualties, war, terrorist act, natural disaster, accidents, necessary maintenance work, breakdowns of or injuries to machinery, pumps or pipelines, civil or military authority, insurrections, riot, acts or declarations of government or regulatory agencies other than City or County, or any other cause beyond the control of City or County, shall not constitute a breach of this Agreement; and no party shall be liable to the other or to its customers for any damage resulting from such unavoidable disruption of service.
16. Notices. All notices under this Agreement will be in writing and shall be given only by hand delivery for which a receipt is obtained, or certified mail, return receipt requested. Notices will be deemed given when received by the party for whom intended. Notices will be delivered or mailed to the addresses set forth below or as either party may designate in writing:
- If to the CITY: Mayor
Street
City, Georgia ZIP
- with a copy to: City Attorney
Street
City, Georgia ZIP
- If to the COUNTY: Chairman, Board of Commissioners
Street
City, Georgia ZIP
- with a copy to: County Attorney
Street
City, Georgia ZIP

17. Entire Agreement. This Agreement constitutes the entire Agreement of the parties and may not be changed or modified except by instrument in writing executed by both of the parties hereto. This Agreement shall supersede any other agreement between the parties which may be in conflict.
18. Legal Prohibition. Neither City nor County shall be required to deliver Available Potable Water under the terms of this Agreement if prohibited by any applicable, federal, state, regional or local statute, rule, ordinance, law, administrative order or judicial decree, or in violation of applicable permits.
19. Applicable Law and Venue. The laws of the state of Georgia shall govern the validity, interpretation, construction and performance of this Agreement; and venue for any suit involving this Agreement shall be within County, Georgia.
20. Binding Effect. This Agreement is binding upon and shall inure to the benefit of the successors or assigns of the parties to this Agreement.
21. Indemnity. Each party hereby agrees to save and hold harmless the other from and against any claims made by third parties for damages resulting from the failure of either party to deliver Available Potable Water meeting all state and federal standards. Each party agrees, at its own expense, to maintain general liability insurance coverage or self insure with standard limits for utility operations during the term of this Agreement to cover all such claims by third parties. When receiving water under this Agreement, the Requesting Party acts in the capacity of owner and operator of a public water system and is solely responsible for compliance with all pertinent regulations and the Selling Party will have no responsibility for said water.
22. No Third Party Beneficiaries. The parties' obligations to deliver Available Potable Water shall run only to each other and shall in no event create any obligation to or duty toward any other party or any customer. This Agreement is for the sole and exclusive benefit of the parties, and shall not be construed to confer a benefit or right upon any third party.
23. Assignment. No party may transfer or assign its rights under this Agreement without the written approval from the governing boards of both parties.
24. Further Documents. The parties shall execute such other and further documents as may be deemed necessary by either party to fulfill the intent of the parties to this Agreement.
25. Time of Essence. Time is of the essence of each and every term, provision and covenant of this Agreement.
26. Captions. All captions, headings, Section and subsection numbers and letters and other reference numbers or letters are solely for the purpose of facilitating reference to this Agreement and shall not supplement, limit or otherwise vary in any respect the text of this Agreement.
27. Counterparts. This Agreement may be executed in several counterparts, each of which shall constitute an original and all of which together shall constitute one and the same instrument.
28. Severability. This Agreement is intended to be performed in accordance with, and only to the extent permitted by, all applicable laws, ordinances, rules and regulations. If any provision of the Agreement, or the application thereof to any person or circumstance, shall, for any reason and to any extent be invalid or unenforceable, the remainder of this Agreement and the application of such provision to other

persons or circumstances shall not be affected thereby but rather shall be enforced to the greatest extent permitted by law.

IN WITNESS WHEREOF, the parties hereto, acting by and through their duly authorized officers, have caused this Agreement to be executed under seals as of the day and year first above written.

CITY OF _____, GEORGIA

Mayor

(SEAL)

ATTEST:

City Clerk

COUNTY OF _____, GEORGIA

Chairman

(SEAL)

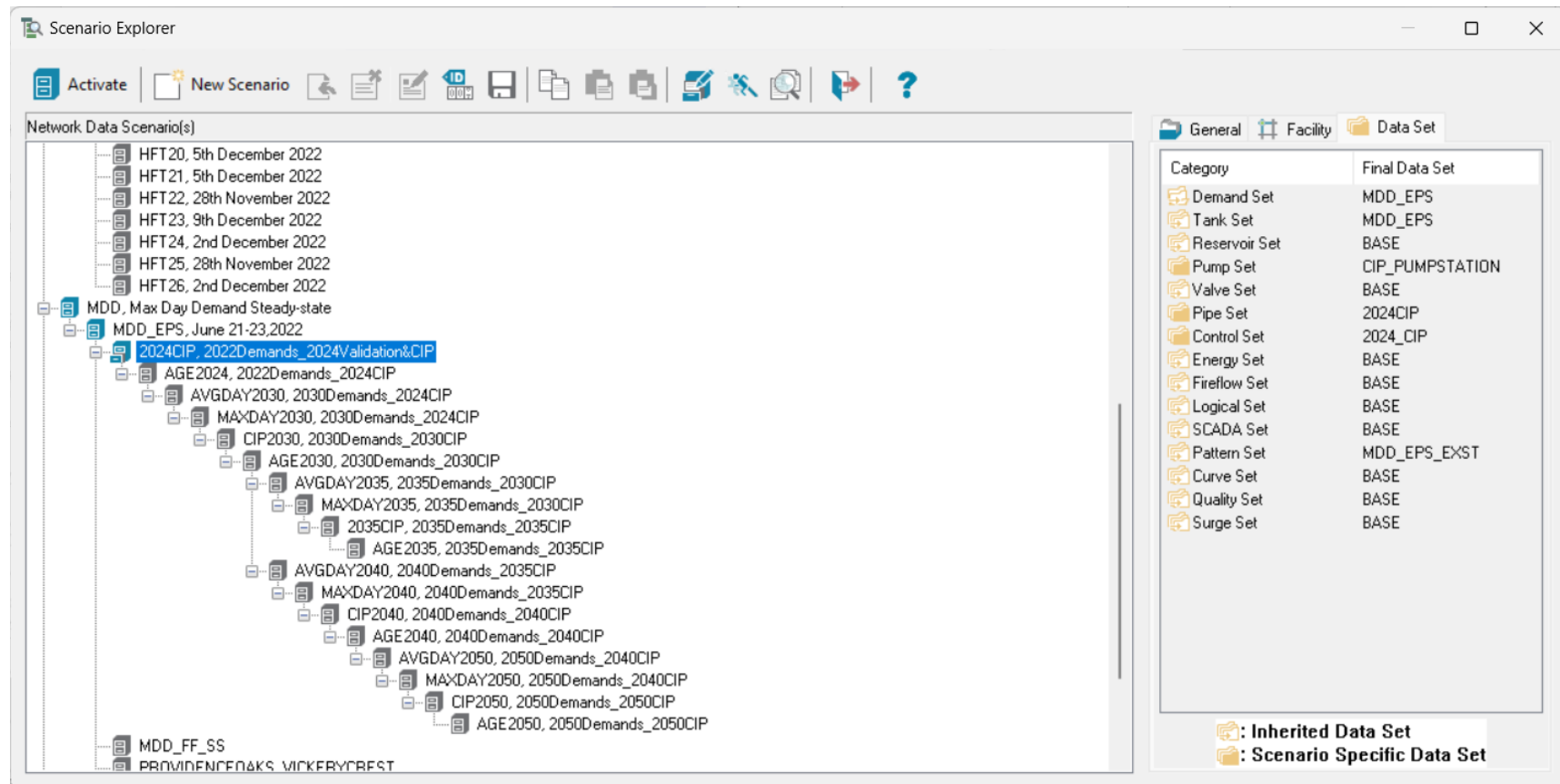
ATTEST:

County Clerk

Appendix K

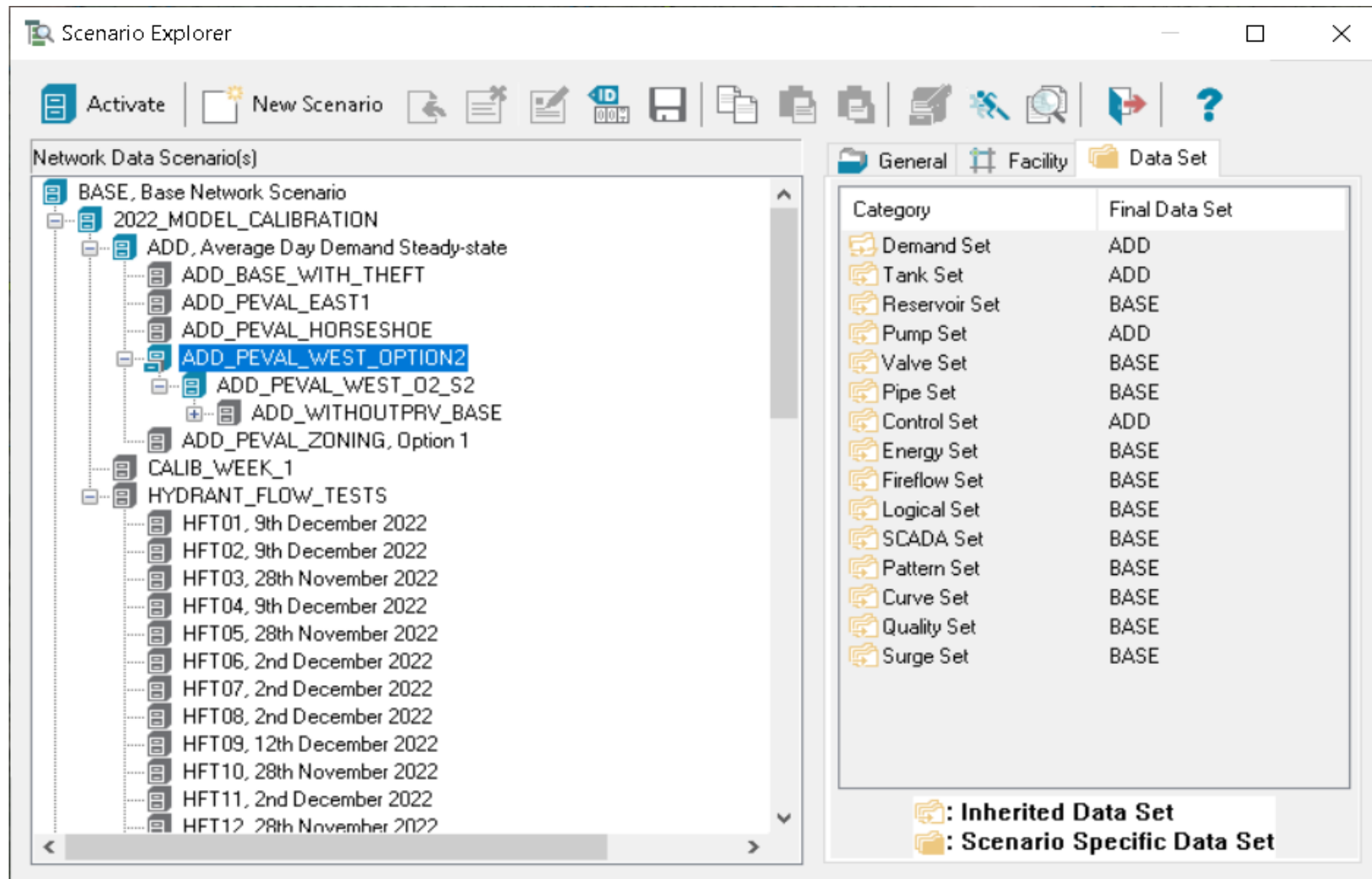
Hydraulic Model Scenario Descriptions

Figure K-1.



Each new model scenario added is shown below the MDD_EPS scenario in the Scenario Explorer in InfoWater Pro. The CIP phasing was done for 2024 (current), 2030, 2035, 2040, and 2050 planning years.

Figure K-2.



Each new pressure zone model was analyzed in the model scenario shown under ADD in InfoWater Pro.



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0166

Meeting Date: 3/5/2025

Department

Public Works

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Request approval of an Intergovernmental Agreement (IGA) between Fulton County and the City of Johns Creek, GA, for the adjustment of the water valve and sanitary sewer manhole and relocation of the fire hydrant associated with the intersection improvement project on Jones Bridge Road, from Sargent Road to Douglas Road, in the City of Johns Creek, GA, in an estimated amount of \$109,000.00.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

GA CONST Art. 9, § 3, ¶ 1 provides that the County may contract for any period not exceeding 50 years with any other public agency, public corporation, or public authority for joint services, for the provision of services, or for the joint or separate use of facilities or equipment; but such contracts must deal with activities, services, or facilities that the contracting parties are authorized by law to undertake or provide. O.C.G.A § 36-10-1 provides that all official contracts entered into by the County governing authority with other persons on behalf of the County shall be in writing and entered on its minutes.

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Health and Human Services

Commission Districts Affected

- All Districts ☐
- District 1 ☒
- District 2 ☐
- District 3 ☐
- District 4 ☐
- District 5 ☐
- District 6 ☐

Is this a purchasing item?

No

Summary & Background *(First sentence includes Agency recommendation. Provide an executive summary of the action that gives an overview of the relevant details for the item.)*

Scope of Work: The City of Johns Creek is currently planning to construct intersection improvements on Jones Bridge Road from Sargent Road to Douglas Road. The project will include road widening with landscaped medians and sidewalk enhancements. As part of this roadway project, water valves, sanitary sewer manholes, and fire hydrants with associated appurtenances will need to be adjusted and relocated within the existing right-of-way. Water service will remain uninterrupted during the construction period. The City of Johns Creek awarded the bid for roadway improvements in July 2024. The project is currently underway and the City of Johns Creek is requesting the execution of an Intergovernmental Agreement (IGA) between Fulton County and the City of Johns Creek to allow for the inclusion of relocation work as part of their project. Fulton County will reimburse the City of Johns Creek after the construction work is completed by their contractor. Fulton County staff will be on-site during the relocation and adjustment work to ensure that it meets Fulton County standards. The cost of relocating and installing the impacted water mains is \$109,000.00, which has been budgeted as part of the water and sewer fund and is included in the 2016-2026 Capital Improvement Program.

Community Impact: Currently, Fulton County has a 16-inch water main serving properties along this section of Jones Bridge Road. The road improvements will affect the existing water lines that serve the developments in this area as well as the distribution system into the City of Johns Creek. There will be isolated water outages during the construction of the project as services are disconnected from the existing water main.

Department Recommendation: The Department of Public Works believes that the most cost-effective way to complete the water main relocations is by allowing the City of Johns Creek to bid out the work as part of their roadway project. Therefore, Public Works recommends that Fulton County enter into an Intergovernmental Agreement (IGA).

Project Implications: The road improvements impact the existing water valve and sanitary sewer manhole due to modifications of the existing grades with road widening along Jones Bridge Road. These modifications require the water valve and sanitary sewer manhole to be adjusted to match the proposed roadway surface. Adjusting the existing water valve and sanitary sewer manholes is necessary to maintain water service in the area.

Community Issues/Concerns: During construction of the relocations, water service is to be maintained and temporary interruptions may occur during tie-ins with the existing water main.

Department Issues/Concerns: The Public Works Department is not aware of any issues or concerns with this proposed Intergovernmental Agreement (IGA). This type of arrangement between the City of Johns Creek and Fulton County has worked well on past projects.

Contract Modification

New Procurement.

Contract & Compliance Information *(Provide Contractor and Subcontractor details.)*
The City of Johns Creek

Exhibits Attached *(Provide copies of originals, number exhibits consecutively, and label all exhibits in the upper right corner.)*

Exhibit-A IGA Jones Bridge Road

Exhibit-B Cost Estimate Jones Bridge Road

Contact Information *(Type Name, Title, Agency and Phone)*

The City of Johns Creek

Contract Attached

Yes

Previous Contracts

No

Total Contract Value

Original Approved Amount:

Previous Adjustments:

This Request: \$109,000.00

TOTAL: \$109,000.00

Fiscal Impact / Funding Source

Funding Line 1:

Water & Sewer / 203-540-5400-H065

**INTERGOVERNMENTAL AGREEMENT BY AND BETWEEN
THE CITY OF JOHNS CREEK, GEORGIA AND FULTON COUNTY, GEORGIA
FOR THE ADJUSTMENT, RELOCATION AND/OR CONSTRUCTION
OF WATER AND SEWER SERVICE LINES ALONG THE JONES BRIDGE ROAD AT
SARGENT ROAD AND DOUGLAS ROAD INTERSECTION IMPROVEMENTS PROJECT**

THIS INTERGOVERNMENTAL AGREEMENT (“IGA”) is executed as of _____ day of _____, 2024, by and between **CITY OF JOHNS CREEK, GEORGIA (“CITY”)**, a municipality of the State of Georgia, and **FULTON COUNTY, GEORGIA (“COUNTY”)**, a political subdivision of the State of Georgia. The term “Party” refers individually to either the CITY or the COUNTY and the term “Parties” refers to both the CITY and the COUNTY.

WHEREAS, the CITY proposes to undertake a transportation project to construct the intersection improvements project at the intersection of Jones Bridge Road with Sargent Road and Douglas Road by contract through its competitive bidding procedures (“TRANSPORTATION PROJECT”); and

WHEREAS, the COUNTY owns and maintains fire hydrants, water mains, water meters, sanitary sewer lines, service lines, valves, and other infrastructure associated with water and sanitary sewer services as shown on construction plans for the TRANSPORTATION PROJECT (“UTILITIES”); and

WHEREAS, the UTILITIES must be adjusted or relocated as a result of the TRANSPORTATION PROJECT (“UTILITIES RELOCATION”); and

WHEREAS, the COUNTY does not have adequate equipment and staff to adjust or relocate its UTILITIES, or for other reasons considers it advantageous to have this work included in the TRANSPORTATION PROJECT contract to be let to bid by the CITY; and

WHEREAS, the Constitution of the State of Georgia provides, in Article IX, Section III, Paragraph I, Subparagraph I, Subparagraph (a), that any county or municipality of the State of Georgia may contract for any period not exceeding fifty (50) years, with each other or with any other public agency, public corporation, or public authority for the provision of services, or for the joint or separate use of facilities or equipment when such contracts deal with activities, services, or facilities which the contracting parties are authorized by law to undertake or provide; and

WHEREAS, the COUNTY and CITY desire to enter into an IGA to facilitate the UTILITIES RELOCATION; and

WHEREAS, as consideration for UTILITIES RELOCATION the COUNTY will reimburse the adjustment or relocation cost incurred by the CITY; and

WHEREAS, the COUNTY and CITY have determined that this IGA serves the best interest of all parties and their citizens by improving transportation and utility infrastructures.

NOW THEREFORE, incorporating the foregoing recitals, and in consideration of the mutual

promises, covenants and undertakings of the parties hereinafter set forth, and for the public purposes herein contained and provided for, the COUNTY and the CITY covenant, agree and bind themselves as follows:

I. PURPOSE.

This IGA is entered into with the understanding by the Parties that the primary purpose of this IGA is for the Parties to meet the public purpose of transportation and utility infrastructure improvements.

II. COMPENSATION AND PAYMENT.

The total estimated cost of UTILITIES RELOCATION work contemplated under this IGA is **One Hundred Nine Thousand Dollars (\$109,000.00)**. Said amount shall be the total COUNTY contribution to the UTILITIES RELOCATION work contemplated under this IGA and is the maximum amount of the COUNTY's obligation under this IGA, unless the IGA is amended by the parties as provided herein. It is agreed that the compensation specified herein includes both direct and indirect costs incurred in the performance of this IGA under generally accepted accounting principles and as allowed in the Federal Acquisition Regulations Subpart 31.6 and not prohibited by the laws of the State of Georgia. Should either Party, pursuant to the provisions of this IGA, terminate the work under this IGA, the performing Party shall be paid for the percentage of work completed as of the date of termination.

III. OVERVIEW.

The UTILITIES RELOCATION project contemplated by this IGA consists of the following:

ADJUSTMENT, RELOCATION AND/OR CONSTRUCTION OF WATERLINE AND ANCILLIARY VALVES AND HYDRANTS ALONG THE JONES BRIDGE ROAD AT SARGENT ROAD AND DOUGLAS ROAD INTERSECTION IMPROVEMENTS PROJECT

IV. FULTON COUNTY'S RESPONSIBILITIES.

1. The COUNTY shall undertake the UTILITIES RELOCATION project design and submit a cost estimate to the CITY for its utility adjustment or relocation based on GDOT specifications and mean item summary.
2. The plans and estimate for the UTILITIES RELOCATION work shall be subject to approval of the COUNTY prior to advertising for bids.
3. The COUNTY shall have the right to visit and to inspect the UTILITIES RELOCATION work at any time and to advise the CITY's engineer of any observed discrepancies or potential problems with the approved UTILITIES RELOCATION plan.
4. The COUNTY shall respond, in a timely manner, to any issue that may arise during the

construction phase of the UTILITIES RELOCATION. Every reasonable effort shall be made with respect to matters within the control of the COUNTY so as not to delay the contractor under any circumstances.

5. The COUNTY is responsible to reimburse all material and labor costs to the CITY related to specified UTILITIES RELOCATION work perform as part of the TRANSPORTATION PROJECT. The reimbursement shall be based on the actual construction costs and shall be paid by the COUNTY within thirty (30) days after delivery of payment request by the CITY.
6. Upon certification by the CITY's engineer that the UTILITIES RELOCATION work has been completed in accordance with the plans and specifications, the COUNTY will accept the adjusted, relocated and/or newly construction UTILITIES and will thereafter operate and maintain said UTILITIES without further cost to the CITY or its contractor.

V. CITY OF JOHNS CREEK'S RESPONSIBILITIES.

1. The CITY shall undertake the UTILITIES RELOCATION contracting and construction and shall assume responsibility for management and completion of the UTILITIES RELOCATION project.
2. The plans and estimate for the UTILITIES RELOCATION work shall be subject to approval of the CITY prior to advertising for TRANSPORTATION PROJECT bids.
3. All UTILITIES RELOCATION work, necessary for the adjustment or relocation of the described UTILITIES in accordance with the final UTILITIES RELOCATION plans when approved, shall be included in the TRANSPORTATION PROJECT contract and let to bid by the CITY.
4. All construction, engineering and contract supervision for the TRANSPORTATION PROJECT shall be the responsibility of the CITY. The CITY shall be responsible to assure that all UTILITIES RELOCATION work is accomplished in accordance with the plans and specifications and to consult with the COUNTY before authorizing any changes or deviations which affect the COUNTY's UTILITIES.
5. The CITY shall respond, in a reasonably timely manner, to any issue that may arise during the construction phase for the UTILITIES RELOCATION. Every reasonable effort shall be made with respect to matters with the control of the CITY so as not to delay the contractor under any circumstances.

VI. ADDITIONAL UNDERSTANDINGS.

The Parties to this IGA have mutually acknowledged and agreed to the following:

1. The Parties shall work together in a cooperative and coordinated effort, and in such a manner and fashion to bring about the achievement and fulfillment of the goals and objectives of this IGA.
2. It is not the intent of this IGA to restrict the Parties to this IGA from their involvement or participation with any other public or private individuals, agencies or organizations.
3. It is not the intent or purpose of this IGA to create any rights, benefits and/or trust responsibilities by or between the Parties.

4. This IGA shall in no way hold or obligate either Party to supply or transfer funds to maintain and/or sustain the IGA or keep in place any contract, except as specifically provided in this IGA.

VII. TERM. This IGA shall be effective upon execution by both Parties and continue until December 31, 2028, unless the IGA is terminated as provided herein by either Party, and in no event shall exceed a fifty (50) year term. The Parties may agree to amend this IGA at any time as provided for herein.

VIII. TERMINATION. Anything contained herein to the contrary notwithstanding, either Party may terminate the IGA:

1. If the other Party commits a material breach of the IGA and fails to cure said breach to the non-breaching Party's satisfaction after receiving thirty (30) days written notice; or
2. Without cause, if the terminating party gives ninety (90) days prior written notice to the other Party.

IX. RESPONSIBILITY FOR CLAIMS AND LIABILITY.

It is hereby stipulated and agreed between the parties that, with respect to any claim or action brought by a third party and arising out of the activities described in this IGA or stems from any matter arising out of any actual or alleged infringement of any patent, trademark, copyright, or service mark, or other actual or alleged unfair competition disparagement of product or service, or other tort or any type whatsoever, or any actual or alleged violation of trade regulations, each party shall only be liable for payment of that portion of any and all liability, costs, expenses, demands, settlements, or judgments resulting from the negligence actions or omissions of its own agents, officers, and employees. Either Party may self-fund its obligations under this IGA. However, nothing herein shall be construed as a waiver of any Party's sovereign immunity or the immunities available to the officials, officers and employees of the Parties. The CITY shall ensure that any contractor retained or selected by the CITY to provide services related to the UTILITIES RELOCATION work contemplated in this IGA shall agree to indemnify and hold harmless the COUNTY as well as its commissioners, officers, officials, employees, and agents, from and against any and all loss and/or expense which it or any of them may suffer or pay as a result of claims or suits due to, because of, or arising out of any and all such injuries, deaths and/or damage, arising out of the UTILITIES RELOCATION work irrespective of the COUNTY's negligence (except that no Party shall be indemnified for their own sole negligence). Any contractor retained by the CITY, if requested, shall assume and defend at the contractor's own expense, any suit, action or other legal proceedings arising therefrom in which the COUNTY, and/or its commissioners, officers, officials, employees, and agents, are named as a party, and the contractor hereby agrees to satisfy, pay, and cause to be discharged of record any judgment which

may be rendered against the COUNTY and/or its commissioners, officers, officials, employees, and agents, arising therefrom. The CITY shall ensure that the provisions of this Article are included in all contracts and subcontracts.

X. INSURANCE. Prior to beginning the UTILITIES RELOCATION work, the CITY shall obtain and where the CITY is utilizing the services of a contractor to carry out the UTILITIES RELOCATION work, shall also cause its contractors to obtain and furnish certificates of insurance in which the COUNTY is named as an “Additional Insured,” for the following minimum amounts of insurance prior to the undertaking of any of the activities contemplated under this IGA, as applicable:

- i. Workmen's Compensation Insurance in accordance with the laws of the State of Georgia.
- ii. Public Liability Insurance in an amount of not less than one hundred thousand dollars (\$100,000) for injuries, including those resulting in death to any one person, and in an amount of not less than three hundred thousand dollars (\$300,000) on an account of any one occurrence.
- iii. Property Damage Insurance in an amount of not less than fifty thousand dollars (\$50,000) from damages on account of any occurrence, with an aggregate limit of one hundred thousand dollars (\$100,000).
- iv. Valuable Papers Insurance in an amount sufficient to assure the restoration of any plans, drawings, field notes, or other similar data relating to the work contemplated under this agreement.

Insurance shall be maintained in full force and effect during the life of this IGA and until final completion of the UTILITIES RELOCATION work contemplated under this IGA. The scope and coverage of the insurance protection shall extend beyond the completion of the UTILITIES RELOCATION project until the expiration of any applicable statutes of limitations. The CITY shall retain the right to satisfy any or all of its insurance obligations under this IGA by means of a Self-Funded Plan or Program. Nothing herein shall be construed as a waiver of either Party’s sovereign immunity as a governmental body, or waiver of any governmental immunities available to its officers, officials, employees or agents.

XI. CONFIDENTIALITY.

The CITY agrees to establish appropriate administrative, technical, and physical safeguards to ensure that it does not provide and make available confidentiality, protected, proprietary or privileged data in the System. The CITY agrees to abide and comply with all applicable laws, rules and regulations relating to privacy and confidentiality of protected information.

XII. REPRESENTATIONS REGARDING DATA.

Each Party has made its best efforts to ensure the accuracy and completeness of the

information and data transferred or made available through the performance of the IGA. Each Party makes no warranties or representations to the public, to the other Party or to third parties regarding data made available through the performance of the IGA. It shall be the responsibility of each Party or any third party to verify the accuracy of data. Each Party to this IGA accepts no liability that may arise from the use of data by any person or any third party. All information is provided "as is" with no warranty of any kind concerning fitness of use. No Party to this IGA shall be liable for the use of data or any inferences, judgments, or decisions resulting from use of data.

XIII. TIME OF PERFORMANCE.

Time is of the essence in all matters pertaining to this IGA. The CITY shall perform its responsibilities under this IGA, commencing on receipt a copy of written "Notice to Proceed" from Fulton County, shall complete the UTILITIES RELOCATION project based on the construction time for the TRANSPORTATION PROJECT.

XIV. REVIEW OF WORK.

Authorized representatives of the COUNTY may at all reasonable times review and inspect the activities and data collected under the terms of this IGA and any amendments thereto, including but not limited to, all reports, drawings, studies, specifications, estimates, maps and computations prepared by or for the CITY related to the UTILITIES RELOCATION. The COUNTY reserves the right for reviews and acceptance on the part of affected public agencies, railroads and utilities insofar as the interest of each is concerned. Acceptance of the UTILITIES RELOCATION work shall not relieve the CITY to exercise reasonable care to correct, at its expense, any of its errors in the UTILITIES RELOCATION work. The COUNTY's review recommendations shall be incorporated into the UTILITIES RELOCATION work activities of the CITY.

XV. RECORDS.

The CITY shall keep accurate records in a reasonable manner approved by the COUNTY with regard to the UTILITIES RELOCATION activities conducted under this IGA and submit to the COUNTY upon request, such information as is required in order to ensure compliance with this IGA.

XVI. MISCELLANEOUS.

- A. **Entire Agreement; Counterparts.** This IGA may be executed by the Parties in counterparts, each of which shall constitute an original. This IGA sets forth the entire understanding between the Parties pending the execution of the Agreement, and supersedes all previous agreements and understandings between them, oral or written, and may be amended only in a document executed by both Parties. No amendment, modification, termination, or waiver of any provision of this IGA, nor consent to any departure by the

Parties, shall in any event be effective unless the same shall be in writing and signed by the COUNTY and CITY, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given.

- B. **Governing Law.** This IGA and the Parties' rights and obligations hereunder, shall be governed by, and construed and enforced in accordance with, the laws of the State of Georgia, without regard to its conflict of laws rules.
- C. **Limitation on liability.** No rights or limitation of rights shall arise or be assumed between the Parties as a result of the terms of this IGA. Nothing herein shall be construed as a waiver of any Party's sovereign immunity or other governmental immunity as allowed by law.
- D. **Representations and Warranties of the Parties.** In furtherance of the public purposes of this IGA, the COUNTY and CITY hereby represent and warrant to each other (which representations and warranties shall be deemed independently material notwithstanding any prior inquiries) the following:
 - 1. **Authority.** Each Party hereto expressly represents and warrants that (i) it has the power to make, deliver and perform this IGA, and has taken all necessary action to authorize the execution, delivery and performance of this IGA; (ii) this IGA when executed will constitute the valid obligations with respect to it legally binding upon the same and enforceable in accordance with the terms hereof; and (iii) no further consent or approval of any other Party not specifically mentioned herein is required in connection with the execution, delivery, performance, validity and enforcement of this IGA. Without limiting the generality of the foregoing, each Party hereby expressly acknowledges and represents that it has officially adopted and otherwise approved this IGA at a meeting of its governing authority in accordance with the Constitution and laws of the State of Georgia, to include, without limitation, the Georgia Open Meetings Act, O.C.G.A. 50-14-1 et seq.
 - 2. **Public Purpose.** This IGA and the services contemplated herein are for the public welfare and benefit and are undertaken in accordance with the laws and Constitution of the State of Georgia. Without limiting the foregoing, the parties specifically and expressly warrant and represent, and do hereby find, that this IGA (i) pertains to the provision of services and activities which the Parties are by law authorized to undertake and provide; (ii) is otherwise authorized under the Intergovernmental Contracts Clause of the Georgia Constitution of 1983, Art. IX, Sec. III, Par. 1(a); (iii) does not authorize the creation of new debt" as contemplated by Ga. Const. of 1983, Art. IX, Sec. V. Par. I (a); and (iv) does not violate O.C.G.A. § 36-30-3(a) or otherwise prevent fee legislation by any Party in matters of government, and shall be binding and

enforceable against the Parties and their successors during the term hereof in accordance with its terms.

3. **No Conflicting Agreements.** The execution, delivery and performance of this IGA will not violate or contravene any contract, undertaking, instrument or other agreement to which the COUNTY and/or CITY are a Party or which purports to be binding upon said Parties. Furthermore, the execution, delivery and performance of this IGA does not violate the provisions of any Party's respective charter or Code of Ordinances, or any statutory or decisional laws of the State of Georgia respecting similarly situated municipal corporations or political subdivisions of said State (as the case may be).

The representations and warranties contained in this Section D shall be true and correct as of the date hereof and such representations and warranties, and the obligation of the COUNTY and CITY to perform their respective obligations under this IGA shall be expressly conditioned upon said representations and warranties being true and correct on the date hereof. Furthermore, each Party hereto specifically acknowledges and agrees that they shall be forever estopped from making any claim, counterclaim, assertion, or other argument of any kind contrary to the representations and warranties set forth hereinabove or otherwise contained in this IGA.

- E. **Assignment; Binding Effect.** The rights and obligations of the Parties under this IGA are personal and may not be assigned without the prior written consent of the COUNTY and the CITY. Subject to the foregoing, this IGA shall be binding upon and enforceable against, and shall inure to the benefit of, the Parties hereto and their respective successors and permitted assigns.
- F. **No Third-Party Beneficiaries.** This IGA is made between and limited to the COUNTY and CITY, and is not intended, and shall in no event be construed to be, for the benefit of any person or entity other than the COUNTY and CITY, and no other person or entity shall be considered a third-party beneficiary by virtue of this IGA or otherwise entitled to enforce the terms of this IGA for any reason whatsoever.
- G. **Relationship of Parties.** Notwithstanding anything in this IGA to the contrary, neither Party shall have the power to bind nor obligate the other Party except as expressly set forth in this IGA.
- H. **Survival of Representations.** All terms, conditions, covenants, warranties contained in any determination of this IGA shall survive the termination of this IGA until amended by the applicable governing authority.

- I. **Notices.** Any notice or communication required or permitted under this IGA shall be sufficiently given if delivered in person or by certified mail, return receipt requested, to the following addresses:

To the COUNTY:

Abul K. Howlader
Engineering Administrator
Department of Public Works
141 Pryor Street, S.W., Suite 6001
Atlanta, Ga 30303

Copy to:

County Attorney
Office of the County Attorney
141 Pryor Street, S.W., Suite 4038
Atlanta, Ga 30303

To the CITY:

Allison Tarpley
City Clerk
11360 Lakefield Drive
Johns Creek, Ga 30097


Copy to:

City Attorney
CAROTHERS & MITCHELL, LLC
1809 Buford Highway
Buford, Ga 30518

- J. **Severability Clause.** In the event that any provision of this IGA shall be deemed to be severable or invalid, and if any term, condition, phrase or portion of this IGA shall be determined to be unlawful or otherwise unenforceable, the remainder of the IGA shall remain in full force and effect, so long as the clause severed does not affect the intent of the parties. If a court should find that any provision of this IGA to be invalid or unenforceable, but that by limiting said provision it would become valid and enforceable, then said provision shall be deemed to be written, construed and enforced as so limited.

IN WITNESS WHEREOF, the Parties, by and through their duly authorized representatives, have executed this IGA to be effective as of the date first set forth above.

CITY OF JOHNS CREEK, GEORGIA

By: 
John Bradberry, Mayor

Attest:

By: 
Allison Tarpley, City Clerk

Approved as to Form:

By: 
City Attorney



FULTON COUNTY, GEORGIA

By: _____
Robert L. Pitts, Chairman
Board of Commissioners

Attest:

By: _____
Tonya R. Grier, Commission Clerk

Approved as to Form:

By: _____
County Attorney

**Anticipated Relcoation Costs for Upcoming Transportation Projects
City of Johns Creek**

	<u>JONES BRIDGE ROAD @ SARGENT/DOUGLAS ROAD</u>	<u>UNIT</u>	<u>QUANTITY</u>	<u>COST</u>	<u>SCHEDULED VALUE</u>
611-8120	ADJUST WATER METER BOX TO GRADE	EA	2	\$1,500	\$3,000
611-8140	ADJUST WATER VALVE BOX TO GRADE	EA	12	\$1,000	\$12,000
611-8050	ADJUST MANHOLE TO GRADE	EA	13	\$3,000	\$39,000
670-9920	REMOVE EXISTING FIRE HYDRANT	EA	2	\$2,500	\$5,000
670-4000	RELOCATE FIRE HYDRANT	EA	2	\$8,500	\$17,000
611-9995	ADJUST WATER VALVE VAULT TO GRADE, STA.	EA	1	\$18,000	\$18,000
	TASK ALLOWANCE		1	\$15,000	\$15,000
					\$109,000

Advertised for Bid (Ant. Ad Begin 5/9/24)

CST NTP Anticipated 7/19/24



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0167

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Request approval of a Resolution approving a Ground Lease Agreement between Fulton County, Georgia (landlord) and the City of College Park, Georgia (tenant) for the purpose of leasing real property at Camp Truitt for the purpose of developing a botanical garden; authorizing the Chairman to execute the Ground Lease Agreement and related documents; authorizing the County Attorney to approve the Ground Lease Agreement and related documents as to form and to make necessary modifications thereto prior to execution; and for other purposes. **(Pitts)**

1 A RESOLUTION APPROVING A GROUND LEASE AGREEMENT BETWEEN FULTON
2 COUNTY, GEORGIA (LANDLORD) AND THE CITY OF COLLEGE PARK, GEORGIA
3 (TENANT) FOR THE PURPOSE OF LEASING REAL PROPERTY AT CAMP TRUITT
4 FOR THE PURPOSE OF DEVELOPING A BOTANICAL GARDEN; AUTHORIZING
5 THE CHAIRMAN TO EXECUTE THE GROUND LEASE AGREEMENT AND RELATED
6 DOCUMENTS; AUTHORIZING THE COUNTY ATTORNEY TO APPROVE THE
7 GROUND LEASE AGREEMENT AND RELATED DOCUMENTS AS TO FORM AND TO
8 MAKE NECESSARY MODIFICATIONS THERETO PRIOR TO EXECUTION; AND FOR
9 OTHER PURPOSES.

10
11 WHEREAS, Fulton County, Georgia is the fee simple owner of the real property
12 located at 4300 Herschel Rd, College Park, GA 30337, consisting of approximately 40.64
13 acres formally known as Camp Truitt by virtue of a deed from John W. Chapman as
14 Grantor dated May 27, 1937 and recorded in Deed Book 1655 and Page 142; and

15 WHEREAS, Fulton County's deed contains a use restriction that requires the
16 subject property to be used "exclusively for park, recreation grounds, and educational
17 purposes..."; and

18 WHEREAS, on June 24, 1958, the Executrix of Mr. Chapman's estate, the grantor
19 of the property to the County, recorded a document in the Real Estate Records for Fulton
20 County in Deed Book Page 3551, Page 97, which purports to modify the use restriction
21 to provide:

22 [T]he use of said property conveyed in said deed, by Fulton County or the
23 State of Georgia for any purpose to serve the 4-H Clubs of Fulton County
24 and Georgia and to promote agricultural, social and economic interest of
25 the rural people of Fulton County and the State of Georgia, are declared to
26 be proper uses of said property...and no violation of said deed or right of
27 reversion of any interest in said property shall ever exist as long as said
28 property is used for such purposes, or any other purpose specifically
29 described and set forth in said [May 27, 1937] deed; and

30
31 WHEREAS, the Executrix's recording further provided:

32
33 The rental or use of any portion of the property conveyed in the deed date
34 May 27, 1937 so as to produce an income derived from any person, shall
35 not constitute a violation of said deed or give rise to any right of reversion,

1 provided the income from such property so received, shall itself be reserved
2 for, and used for the purposes authorized in the original deed dated May
3 27, 1937 and in this Agreement.
4

5 ; and

6 **WHEREAS**, the City of College Park ("City") has proposed to Fulton County that it
7 be allowed to ground lease and develop a portion of the Camp Truitt Site into a municipal
8 botanical garden and nature facility, including supporting buildings, parking and related
9 improvements; and

10 **WHEREAS**, the portion of the property to be developed is identified in the Lease
11 which defines the Premises as "that portion of the real property described and/or depicted
12 on Exhibit "A"; and

13 **WHEREAS**, the proposed development will provide Fulton County residents with
14 amenities and benefits to include additional park space and opportunities for nature
15 education; and

16 **WHEREAS**, the County has negotiated mutually acceptable ground leasing terms
17 with the City to lease the Premises 4300 Herschel Rd, College Park, GA 30337; and

18 **WHEREAS**, said Lease terms include (i) a 50-year term with an optional 50-year
19 extension, (ii) monthly rent of \$2,267.00 based on the results of a ground rent appraisal
20 report, (iii) the obligation of the City to provide sufficient documentation to the County
21 within 90 days of the effective date evidencing that sufficient funding has been obtained
22 to construct and operate the project, and (iv) a requirement that any fees and proceeds
23 generated by the project shall be utilized to support and benefit the permissible uses
24 described in the County's deed and related recorded documents; and

1 **WHEREAS**, the approval of the Fulton County Board of Commissioners is required
2 prior to the Chairman executing a ground lease agreement that will permit the
3 development of the Premises within the site known as Camp Truitt; and

4 **WHEREAS**, it is the desire of Fulton County and the City to enter into a ground
5 lease agreement; and

6 **WHEREAS**, the Constitution of the State of Georgia provides, in Article IX, Section
7 III, Paragraph I, subparagraph I, subparagraph (a), that any counties or municipalities of
8 the State may contract for any period not exceeding 50 years, with each other or with any
9 other public agency, public corporation, or public authority for the provision of services,
10 or for the joint or separate use of facilities or equipment when such contracts deal with
11 activities, services, or facilities which the contracting parties are authorized by law to
12 undertake or provide; and

13 **WHEREAS**, pursuant to Fulton County Code § 1-117, the Fulton County Board of
14 Commissioners has exclusive jurisdiction and control over directing and controlling all
15 property of the County.

16 **NOW, THEREFORE, BE IT RESOLVED**, that the Board of Commissioners hereby
17 approves a Ground Lease Agreement with the City of College Park, Georgia, in
18 substantially the form attached hereto as Attachment "A".

19 **BE IT FURTHER RESOLVED**, that the Chairman of the Board of Commissioners
20 is hereby authorized to execute the Ground Lease Agreement between Fulton County
21 and City of College Park, Georgia and any related documents.

22 **BE IT FURTHER RESOLVED**, that the County Attorney is hereby authorized to
23 approve the Ground Lease Agreement and any related documents as to form, and to

1 make such other or additional modifications as are necessary to protect the County's
2 interests prior to execution by the Chairman.

3 **BE IT FINALLY RESOLVED**, that this Resolution shall become effective upon its
4 adoption, and that all resolutions and parts of resolutions in conflict with this Resolution
5 are hereby repealed to the extent of the conflict.

6 **PASSED AND ADOPTED** by the Board of Commissioners of Fulton County,
7 Georgia, this ____ day of _____, 2025.

8
9
10 **FULTON COUNTY BOARD OF**
11 **COMMISSIONERS**
12
13
14

15
16 _____
17 Robert L. Pitts, Chairman
18
19
20

21 ATTEST:
22
23

24 _____
25 Tonya R. Grier, Clerk to the Commission
26
27
28
29
30

31
32 APPROVED AS TO FORM:
33
34
35

36 _____
Y. Soo Jo, County Attorney

PARTICIPATING GROUND LEASE AGREEMENT

THIS PARTICIPATING GROUND LEASE AGREEMENT (“**Agreement**”) is entered into this ___ day of _____ 2025 (“**Effective Date**”), by and between FULTON COUNTY, GEORGIA, a political subdivision of the State of Georgia (“**Ground Lessor**”) and the CITY OF COLLEGE PARK, GEORGIA, a Georgia municipality (“**Ground Lessee**”).

W I T N E S S E T H:

WHEREAS, Ground Lessor is the owner of certain real property located in the State of Georgia, as defined below in Section 1.1.30 as the “**Premises**”; and

WHEREAS, Ground Lessee is leasing the Premises from Ground Lessor for the purpose of developing, constructing, maintaining, managing and operating a municipal botanical gardens and nature facility and other related improvements (as defined below in Section 1.1.6 as “**Civic Facilities**”); and

WHEREAS, Ground Lessee desires to lease a portion of the land owned by Ground Lessor to develop and utilize the Premises as a municipal botanical gardens and nature facility and other related improvements (the “**Project**”) on the Premises pursuant to the terms and conditions of this Agreement; and

WHEREAS, on, and subject to, the terms and conditions contained in this Agreement, Ground Lessor is willing to lease the Premises to Ground Lessee for such purposes.

NOW, THEREFORE, for and in consideration of the above recitals (which are incorporated into this Agreement by reference), and the agreements, covenants and conditions set forth below, Ground Lessor and Ground Lessee agree as follows:

1.1 DEFINITIONS

1.1.1 The term “**Affiliate**”, whenever used herein, shall mean, with respect to Ground Lessee, its officials, managers, directors, officers, agents, or employees of Ground Lessee. For purposes of this Agreement, Ground Lessor has no Affiliates.

1.1.2 The term “**Assignee**”, whenever used herein, means, as applicable in the context the term is used, (i) any assignee of Lender’s interest in the Loan, or (ii) any assignee of Ground Lessee’s rights and duties under this Agreement pursuant to Section 2.1 below; or (iii) a Permitted Foreclosure Assignee.

1.1.3 The term “**Budget**”, whenever used herein, means the written development and construction budget for the Project to be prepared by Ground Lessee and presented to Ground Lessor. The development and construction budget will be submitted to Ground Lessor within 45 days of the final execution of this Agreement.

1.1.4 The term “**Camp Truitt**”, whenever used herein, means those parcel of real property identified in that certain Deed from John M. Chapman to Fulton County, dated May 27,

1937, filed on June 14, 1937 and recorded in Deed Book 1655, Page 142; and as further described in the Affirmation of certain documents provided by Martha Stevens Chapman Charles, as Executrix of the Estate of John M. Chapman, dated June 24, 1958, filed July 14, 1958 and recorded in Deed Book 3351, Page 97 and as further described in the plat recorded in Deed Book 185, Page 131 on May 24, 1995, comprising of two tracts of 36.1712 acres and 3.7288 acres (aggregate of 39.9000 acres.

1.1.5 The term “**Capital Improvement Expenditures**” whenever used herein, means the expenses and costs of a capital nature incurred by Ground Lessee associated with the development of the portion of the Civic Facilities located on the Premises, such as development and infrastructure expenses and costs, including also certain Maintenance and Operation expenses.

1.1.6 The term “**Casualty**”, whenever used herein, has the meaning set forth in Section 2.9 below.

1.1.6 The term “**Civic Facilities**”, whenever used herein, means the commercial real estate improvements, together with all utilities, parking lots, landscaping, and all other improvements to be constructed on the Premises by Ground Lessee in accordance with the terms and conditions of this Agreement. Lessee’s contemplated use of the Premises is for a municipal botanical garden and nature facility, including supporting buildings, parking and related improvements.

1.1.7 The term “**Commence Construction**”, or similar phrase, whenever used herein, means, (i) commencing construction of the Initial Improvements on the Premises by Ground Lessee causing its construction contractor to obtain occupancy and control of the Premises to begin actual site preparation, development and construction, or (ii) commencing construction of related off-site work and shall be a date no more than thirty (30) days after (i) the date Ground Lessor approves Ground Lessee’s plans for the construction of its Improvements and Ground Lessee receives its Land Disturbance Permit and any other necessary authorizations to commence site development or (ii) a date otherwise agreed to by the Parties.

1.1.8 The term “**Complete Taking**”, whenever used herein, has the meaning set forth in Section 2.15 below.

1.1.9 The term “**Construction Plans**”, wherever used herein, has the meaning given to it in Section 1.11 below.

1.1.10 The terms “**Designated Representative**” or “**DR**”, whenever used herein, means Ground Lessor’s designated representative. As of the Effective Date, the DR is the County Manager or his designee. Promptly following any change to or resignation of the DR, Ground Lessor shall inform Ground Lessee of the new DR. The DR shall communicate any and all consents, approvals, agreements or disapprovals which under this Agreement Ground Lessor is entitled or obligated to make, and Ground Lessee shall be entitled to rely on any such consent, approval, agreement or disapproval communicated by the DR as the consent, approval, agreement or disapproval of Ground Lessor. Notwithstanding the foregoing, the Parties acknowledge and agree that any amendment to or modification of the terms of this Agreement must be in writing and shall be approved by the Fulton County Board of Commissioners.

1.1.11 The term “**Disputed Item**”, whenever used herein, has the meaning set forth in

Section 1.12.2 below.

1.1.12 The term “**Effective Date**”, whenever used herein, means March _____, 2025.

1.1.13 The term “**Environmental Laws**”, whenever used herein, means the following statutes as the same are amended from time to time:

1.1.13.1 COMPREHENSIVE ENVIRONMENTAL RESPONSE,
COMPENSATION AND LIABILITY ACT (42 U.S.C. § 9601 *et seq.*)

1.1.13.2 RESOURCE CONSERVATION AND RECOVERY ACT (42
U.S.C. § 6901 *et seq.*)

1.1.13.3 TOXIC SUBSTANCES CONTROL ACT (15 U.S.C. § 2601 *et*

1.1.13.4 SAFE DRINKING WATER ACT (42 U.S.C. § 300h *et seq.*)

1.1.13.5 CLEAN WATER ACT (33 U.S.C. § 1251 *et seq.*)

1.1.14.6 CLEAN AIR ACT (42 U.S.C. § 7401 *et seq.*)

and the regulations promulgated thereunder, and any other laws, regulations and ordinances (whether enacted by the Federal, State or local government) now in effect or hereinafter enacted that deal with the regulation or protection of the environment (including, but not limited to, the ambient air procedures and records detailing chlorofluorocarbons (“CFC”), ambient air, ground water, surface water and land use, including sub-strata land.

1.1.14 The term “**Force Majeure**”, whenever used herein, shall mean any strike, boycott, labor dispute, embargo, shortage of materials, act of God, act of a public enemy, governmental regulation or delay, act of governmental authority (including any moratorium imposed by such authority or inability to obtain necessary permits, approvals and entitlements from any such authority), unusual weather condition, flood, riot, rebellion, terrorist act or sabotage, declared pandemic, or other condition or circumstance beyond the control of a Party.

1.1.15 The term “**Foreclosing Lender**”, whenever used herein, has the meaning given to it in Section 2.1.3 below.

1.1.16 The term “**Foreclosure Transfer**”, whenever used herein, has the meaning given to it in Section 2.14.6 below.

1.1.17 The term “**Ground Lessee**”, whenever used herein, means City of College Park, Georgia, a municipal corporation, entering into this Agreement as the holder of the ground leasehold estate in the Premises, and as the developer, owner, and operator of the Project.

1.1.18 The term “**Ground Lessor**”, whenever used herein, means Fulton County, Georgia, a political subdivision of the State of Georgia, entering into this Agreement as the fee owner of the Premises, as represented by its Designated Representative or DR (as defined in this Agreement).

1.1.19 The term “**Ground Lessor Delay**”, whenever used herein, means any delay Ground Lessee encounters in the performance of Ground Lessee’s obligations under this Agreement arising from or related to any act or omission of Ground Lessor or its agents, employees or contractors, including the DR. By way of example and not limitation, Ground Lessor Delay includes any delays by Ground Lessor in providing Ground Lessee with information reasonably requested by Ground Lessee, or in providing consents or approvals requested by Ground Lessee, or any delays caused solely by Ground Lessor or its agents, employees, or contractors with Ground Lessee’s construction of the Civic Facilities. If a specific time period is set forth in this Agreement for a response or decision on the part of Ground Lessor, there shall be no Ground Lessor Delay if Ground Lessor provides a response or decision within the specified time period. Further, there shall be no Ground Lessor Delay if the delay is caused by Force Majeure, but the Force Majeure itself shall extend Ground Lessee deadlines in accordance with Section 1.5.6 below. Notwithstanding the foregoing, Ground Lessee will use reasonable efforts to notify Ground Lessor as soon as possible in writing of any circumstances of which Ground Lessee is aware that may or has caused a Ground Lessor Delay, so that Ground Lessor may take whatever action is appropriate to prevent or minimize any such Ground Lessor Delay. The provisions of this Section 1.1.19 only apply to the acts and omissions of Ground Lessor in its capacity as a Party to this Agreement. Nothing in this Agreement shall diminish or eliminate Ground Lessee’s responsibility to comply with applicable law in connection with its development of the Project.

1.1.20 The term “**Hazardous Material**”, whenever used herein, means the definitions of hazardous substance, hazardous waste, hazardous material, toxic substance, regulated substance or solid waste as defined within the following:

1.1.20.1 COMPREHENSIVE ENVIRONMENTAL RESPONSE,
COMPENSATION AND LIABILITY ACT (42 U.S.C. § 9601 *et seq.*)

1.1.20.2 RESOURCE CONSERVATION AND RECOVERY ACT (42
U.S.C. § 6901 *et seq.*)

1.1.20.3 HAZARDOUS MATERIALS TRANSPORTATION ACT (49
U.S.C. § 5101 *et seq.*) and all present or future regulations promulgated thereto

1.1.20.4 DEPARTMENT OF TRANSPORTATION HAZARDOUS
MATERIALS TABLE (49 C.F.R. Part 172) and amendments thereto

1.1.20.5 ENVIRONMENTAL PROTECTION AGENCY (40 C.F.R. Part
300 and amendments the Appendices thereto)

1.1.20.6 and all substances, materials and wastes that are, or that become, regulated under, or that are classified as, listed as, identified as, or otherwise defined as hazardous or toxic under any Environmental Law, whether such laws are Federal, State or local, and petroleum and its breakdown products.

1.1.21 The term “**Improvements**”, whenever used herein, means on-and-off site work, buildings, gardens, walks, parking area and related improvements for one hundred percent (100%)

of the Civic Facilities contemplated by the Construction Plan.

1.1.22 The term “**Interest**”, whenever used herein, means an amount of simple interest calculated by applying an annual rate determined as of January 1 of each calendar year equal to the greater of: (a) 300 basis points over the then current “**prime rate**” as published in The Wall Street Journal or comparable business publication of national circulation, and (b) eight percent (8%). Interest shall adjust each year on the above-mentioned date based on such published prime rate.

1.1.23 The term “**Lender**”, whenever used herein, shall mean the provider of a Loan to Ground Lessee in connection with its development of the Civic Facilities.

1.1.24 The term “**Lender Affiliate**”, whenever used herein, has the meaning set forth in Section 2.1.4 below.

1.1.25 The term “**Loan**”, whenever used herein, shall mean a loan made by a Lender to Ground Lessee for construction, interim or permanent financing (or any refinancing) of the Civic Facilities located on the Premises and satisfying the requirements of this Section 1.1.26. Any Loan may be secured by a mortgage, deed of trust, security deed, or other security instrument encumbering the leasehold estate evidenced by this Agreement. The proceeds of the Loan shall be used solely for development of the Premises, financing the construction of the Civic Facilities, the payment of other Project Costs or refinancing of an existing Loan. The proceeds of any refinancing, to the extent not used to pay off the Loan being refinanced, shall be used for the purpose of: (i) repairing, constructing or reconstructing the Civic Facilities; (ii) held in reserve for such purposes; (iii) the payment of other Project Costs; (iv) used for the repayment of Interest thereon; (v) or used for such other purposes as Ground Lessor and Ground Lessee may, in writing, agree.

1.1.26 The term “**Maintenance and Operations**”, whenever used herein, means the expenses for maintenance, operation, administration, improvement, repair or replacement of the Civic Facilities, including but not limited to, the expenses for maintenance, operation, administration, improvement, repair or replacement of the plumbing, heating, ventilating and air conditioning systems, electrical systems, outdoor developed areas, walking trails, athletic fields, lighting facilities, fire protection systems, utility installations, fixtures, walls, foundations, roofs, ceilings, floors, structural systems, doors, dock doors and leveling systems, glass, skylights, landscaping and irrigating systems, driveways, parking lots, fences, retaining walls, signs, sidewalks, and all janitorial, landscape maintenance, security and fire alarm services, trash disposal and sanitation services, water, gas, electricity, and other utilities together with any taxes thereon.

1.1.27 The term “**Partial Taking**”, whenever used herein, has the meaning set forth in Section 2.15.2 below.

1.1.28 The term “**Parties**”, whenever used herein, means Ground Lessor and Ground Lessee, jointly, and the term “**Party**” means one or the other of Ground Lessor and Ground Lessee.

1.1.29 The term “**Permitted Foreclosure Assignee**”, whenever used herein, has the meaning given to it in Section 2.14.6 below.

1.1.30 The term “**Premises**”, whenever used herein, means that portion of the real property described and/or depicted on Exhibit “A”, which will be identified on an ALTA survey to be prepared by Ground Lessee at its sole expense and approved by Ground Lessor, which will be attached hereto and incorporated herein by reference together with non-exclusive easements for pedestrian, utility and storm water ingress, egress as needed for the Project.

1.1.31 The term “**Project**”, whenever used herein, means a municipal botanical gardens and nature facility, including supporting buildings, parking and related improvements.

1.1.32 The term “**Project Cost**”, whenever used herein, means all costs incurred by Ground Lessee in designing, developing, financing, constructing, owning, operating, maintaining, leasing, and managing the Civic Facilities. Except as otherwise provided in this Agreement, Project Costs shall include, but be not limited to, the following, to the extent associated with the Project:

- (a) all architectural, engineering and surveying expense;
- (b) all plan check fees, building permit fees, school fees, drainage/flood control fees, sewer fees, connection fees, impact or mitigation fees, and all other governmental, quasi-governmental and utility fees, license and permit costs;
- (c) all costs of environmental impact reports, traffic and air quality studies, biological studies and all other reports and studies required by governmental agencies, quasi-governmental entities or utility companies and in compliance with the applicable laws;
- (d) all costs, if required, to subdivide and re-subdivide the Premises, or perform lot line adjustments;
- (e) all costs in constructing the Civic Facilities, whether on or off the Premises, including without limitation all grading, fencing, paving, lighting, roadways, parking lots, landscaping, underground water, sewer, gas, electrical, communication or other utility lines and connections, drainage facilities, water quantity and quality detention and retention facilities, traffic control system, and buildings and structures;
- (f) all Capital Improvement Expenditures;
- (g) all Maintenance and Operations expenses;
- (h) all costs incurred for uninsured losses, earthquake, flood or other casualty, or repairs or replacements to the Civic Facilities and the unreimbursed portion of any insured losses (including any deductible or “**retained risk**” amount);
- (i) all costs of complying with Environmental Laws, including any remediation costs or related costs for which Ground Lessee is responsible under Section 3.1 of this Agreement;
- (j) all insurance premiums for insurance required hereunder, including without limitation, title insurance;
- (k) all legal and accounting fees;

(l) all loan fees, points, appraisal fees, capital market fees and other costs associated with the obtaining of any Loan;

(m) all interest and principal on any Loan;

(n) all property taxes, excises, license fees and permit fees contemplated by Section 2.5 below; and

(p) all other expenses of Ground Lessee related to the development, construction, use, maintenance, financing, management and operation of the Premises and the Civic Facilities.

1.1.33 The term “**Project Development Plans**”, whenever used herein, means the prototypical project development plans for the Project, as approved by Ground Lessor which will later be supplemented and amended by the final approved and stamped project development plans which have been approved by Ground Lessor and required governmental agencies. Once approved by Ground Lessor, a copy of the prototypical Project Development Plans is to be attached hereto as Exhibit C which will later be replaced by the final approved Project Development Plans. The prototypical and the final Project Development Plans shall set forth in detail all proposed improvements as determined by a licensed civil engineer and/or architect retained at Ground Lessee on an ALTA survey prepared by Ground Lessee at Ground Lessee’s expense and approved by Ground Lessor. The Project Development Plan shall depict the location and nature of the portion of Ground Lessee’s proposed Improvements located on the Premises, together with a detailed schedule of completion for the Project development and the portion of the Project development improvements located on the Premises reflecting the steps and milestone dates Ground Lessee will meet to submit plans for construction of its Improvements within six (6) months of the Effective Date and 18 months from the date of Landlord’s approval of the same. In the event Ground Lessee fails to meet the milestone dates for submittal of its plans to the Ground Lessor or to complete construction of the Improvements on the Premises, the Premises shall revert back to the Ground Lessor.

1.1.34 The term “**Records and Accounts**”, whenever used herein, has the meaning set forth in Section 1.9 below.

1.1.35 The terms “**Release**” and “**Released**”, whenever used herein, mean any releasing, spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, disposing or dumping of any Hazardous Material into the environment.

1.1.36 The term “**Rent**”, whenever used herein, means One and No/100 Dollars (\$1.00) per year which shall become payable on the Rent Commencement Date, which date shall be memorialized in a Rent Commencement Letter.

1.1.37 The term “**Rent Commencement Date**” whenever used herein, means the first day of the month immediately after the close of the Due Diligence Period.

1.1.38 The term “**Restoration Work**”, whenever used herein, has the meaning set forth in Section 2.9.2 below.

1.1.39 The term “**Term**”, whenever used herein, means, the duration of the ground leasehold estate created by this Agreement, as specified in Section 1.3 below, including any extension thereof.

1.1.40 The term “**Total Revenue**”, whenever used herein, means, without limitation, but subject to the terms and conditions of this Agreement: (a) the total amount of all rents, charges, fees and/or other income collected by Ground Lessee from any use of the Civic Facilities or the Premises, (b) any unused reserves upon termination or expiration hereof, (c) any net proceeds received by Ground Lessee as a result of a Complete Taking or Partial Taking and (d) any Offset. Total Revenue shall exclude insurance proceeds.

1.2 FUNDING OF PROJECT

This Agreement is subject to the condition precedent of Ground Lessee securing necessary funding to construct and operate the Project. Ground Lessee shall provide sufficient documentation in a pro forma to Ground Lessor within ninety (90) days of the Effective Date of this Agreement evidencing that sufficient funding has been obtained by Ground Lessee to construct and operate the Project. In the event that funding is not obtained within said 90 days, this Agreement shall be automatically terminated without further notice from Ground Lessor and the leased premises revert back to Ground Lessor, unless this deadline is extended in writing by Ground Lessor.

1.3 TERM

1.3.1 The initial term of the Lease shall expire on the fifty (50) year anniversary of the last day of the month following the “Effective Date”, which, upon its expiration, may be extended by mutual agreement between the governing bodies of the parties, for one additional fifty (50) year extension term. Said initial term and any subsequent term, is conditioned on and subject to Ground Lessee’s continued compliance with the restrictions found in Fulton County’s 1937 Vesting Deed and the 1958 Affirmation Document (the “Restrictions”) thereby triggering the right for Ground Lessor to terminate the Agreement.

1.3.2 Ground Lessee shall have a period of one hundred and twenty (120) days after the date of execution of the Agreement in which to undertake, at Ground Lessee’s expense, any and all due diligence for the Ground Lessee to conduct any and all physical inspections and other investigations concerning the Premises as Ground Lessee, in its sole and absolute discretion may deem appropriate, including, without limited, title, ALTA survey, legal access, environmental testing, traffic studies, marketing studies and the like to determine the feasibility of Ground Lessee’s Project and the use and operation of the Premises (the “Due Diligence Period”). During the Due Diligence Period, if Ground Lessee determines the Premises are unsuitable for Ground Lessee’s intended use as determined in Ground Lessee’s sole and absolute discretion, Ground Lessee may terminate this Agreement with no further obligation to continue with this Agreement. On or before the end of the Due Diligence Period, Ground Lessee shall inform Ground Lessor in writing of whether Ground Lessee will proceed with the Project or is terminating this Agreement. In the event that Ground Lessee fails to so notify Ground Lessor of whether it is proceeding with the Project or terminating this Agreement on or before the end of the Due Diligence Period, Ground Lessor shall deem Ground Lessee to be non-compliant and to have elected not to proceed with the Project and to terminate the Agreement, unless Ground Lessor, in its sole and absolute discretion,

agrees to an extension of the Due Diligence Period, and shall notify Ground Lessee of the same and this Agreement shall terminate as of the day of Ground Lessor's notice to Ground Lessee. Regardless of Ground Lessee's election to continue with the Agreement or not, Ground Lessee shall be solely responsible for restoration of the Property to the condition prior to its inspection for any and all damages, including the loss or destruction of any trees or structures on the Property, caused by its testing and inspection of the Camp Truitt parcel irrespective of the amount insurance coverage maintained by Ground Lessee, its agents and contractors.

1.4 PREMISES

1.4.1 Ground Lessor does hereby demise and let unto Ground Lessee and Ground Lessee does hereby take from Ground Lessor the Premises.

1.4.2 Subject to all obligations of the Ground Lessor in this Agreement, including without limitation, Section 3.1.2.1 of this Agreement with respect to pre-existing environmental conditions, Ground Lessee acknowledges that it has inspected the Premises and accepts the Premises "As Is."

1.4.3 The Civic Facilities constructed on the Premises by Ground Lessee at any time and from time to time during the Term of this Agreement will be owned by Ground Lessee during the Term of this Agreement, or any extension thereof.

1.5 USE OF PREMISES

Subject to the agreements, provisions and conditions contained in this Agreement, Ground Lessee will have the use of the Premises solely for the construction and operation of the Civic Facilities ("Project"). Ground Lessee's use of the Premise may also include wireless communications antenna internal to the Civic Facilities.

1.6 NON-INTERFERENCE

Lessee's use of the Premises shall not materially interfere with or impede the other activities at Camp Truitt, including 4-H, Senior Center, and other Permissible Uses authorized by Fulton County 1937 Vesting Deed or the 1958 Affirmation Document on Ground Lessor's remaining portions of Camp Truitt. Any material interference by Ground Lessee with any other activity being conducted on or in operation at Camp Truitt, after prior written notice to cease and desist, shall result in the immediate suspension of all of Ground Lessee's operations on the Premises until such time that the interference is eliminated and any disruption is corrected by the Ground Lessee to the satisfaction of the Ground Lessor.

1.7 DEVELOPMENT, IMPROVEMENTS, AND STANDARDS OF OPERATION

1.7.1 Ground Lessee will develop and cause the Civic Facilities to be constructed substantially in accordance with the Project Development Plan which shall be approved in writing by Ground Lessor's DR identified above in this Agreement. In connection with Ground Lessee's activities at the Premises, Ground Lessee will design, develop, construct, manage, operate, maintain and repair all Civic Facilities, including but not limited to grading, fencing, paving, lighting, driveways, roadways, parking lots, landscaping, drainage, buildings, structures and all

other improvements. Upon completion of construction of the Civic Facilities, Ground Lessee, when and as soon as practicable after such documents become available, shall deliver to Ground Lessor copies of a final permit drawing set, as-builts drawings, a copy of certificate of occupancy, a copy of a full and final release of liens for all contractors, and any other documentation which Ground Lessor may reasonably request related to the construction of the Civic Facilities.

1.7.2 Ground Lessor shall provide Ground Lessee with copies of documents in Ground Lessor's possession, custody and control concerning the Premises within fifteen (15) days after signing of the Lease, including surveys, zoning information, geotechnical reports, title information and existing title policies, civil drawings (including, site, utility, grading, drainage and detention plans), Phase I or Phase II Environmental Site assessments, corrective action plans or any other similar materials related to the Camp Truitt parcel to the extent that such documentation is available. In the case such documentation is not available, this unavailability shall not relieve Ground Lessee from performing the due diligence it believes necessary to satisfy itself regarding proceeding forward with the Project.

1.7.3 Prior to execution of this Agreement, Ground Lessee may obtain a title commitment or preliminary title report. Upon, or as soon as practicable following, the Effective Date, Ground Lessee may obtain at its sole cost and expense an ALTA leasehold policy of title insurance insuring Ground Lessee's ground leasehold estate in the Premises, and containing those endorsements reasonably deemed necessary by Ground Lessee, all issued by a title insurance company selected by Ground Lessee. Ground Lessee may also obtain at its sole cost and expense, a separate title policy insuring the priority of the lien in favor of any Lender, in a form acceptable to such Lender. Ground Lessee's leasehold policy will be subject only to exceptions approved by Ground Lessee. At the time of execution of this Agreement, based on its review of the title commitment or preliminary title report, Ground Lessee will provide Ground Lessor with a list of any objectionable title exceptions. Ground Lessor shall use commercially reasonable efforts to resolve any title exceptions objected to by Ground Lessee. If Ground Lessee is unable to obtain a leasehold title policy in a form acceptable to it within one hundred twenty (120) days following the Effective Date, Ground Lessee may, by written notice to Ground Lessor, terminate this Agreement; provided, however, that to be effective such notice of termination must be received by Ground Lessor within one hundred eighty (180) days following the Effective Date.

1.7.4 Ground Lessee shall Commence Construction on or before the first (1st) day of the twenty-fifth (25th) month following the Effective Date of this Agreement (the "**Entitlement Date**"). Ground Lessee shall submit its plans Ground Lessor for review no later than six (6) months from the Effective Date to include, at minimum, the following: copies of any and all (a) permits, (b) approved permit plans, (c) construction insurance, (d) bond or builders risk insurance, naming Fulton County, Georgia as an additional insured, (e) evidence of a contract with construction company and (f) certificate of insurance from contractor naming Fulton County, Georgia as additional insured, and (g) a detailed timeline of construction. Ground Lessee shall apply for all necessary initial governmental approvals, permits and entitlements within one hundred and eighty (180) days following the Effective Date, and diligently pursue obtaining of both initial and all further necessary approvals, permits and entitlements, unless the Parties mutually agree in writing to delay the same for any reason.

1.7.4.1 If Ground Lessee has not Commenced Construction by the Entitlement Date, it will be a material breach of this Agreement and Ground Lessor will have the right of termination provided in Section 2.10 of this Agreement, subject to the notice and cure provisions of Section 2.10. Ground Lessor agrees not to exercise its rights to terminate until any Lender has been given its rights to cure or foreclose as provided in Section 2.14 of this Agreement.

1.7.5 Subject to the provisions of this Section 1.7 the date of Substantial Completion of the Initial Improvements will be on or before the first (1st) day of the thirty-sixth (36th) month following the Commencement of Construction.

1.7.6 If the Initial Improvements are not Substantially Completed within the time allowed in Section 1.7.5 above, Ground Lessor may declare this failure to perform a material breach of this Agreement and Ground Lessor will have the right of termination provided in Section 2.10 of this Agreement, subject to the notice and cure provisions of Section 2.10.3 and Section 2.10.4 of this Agreement.

1.7.7 The deadlines for the Commencement of Construction and for Substantial Completion of the Initial Improvements, as set forth above in this Section 1.7, shall be extended one (1) day for each day of Ground Lessor Delay provided said delay is solely the result of the Ground Lessor actions. Further, the deadlines for Commencement of Construction and for Substantial Completion set forth above in this Section 1.7 shall be extended one (1) day for each day of delay caused by a Force Majeure event as agreed to by both Parties.

1.7.8 At any time during the Term, as it may be extended, Ground Lessee may make alterations, additions, or improvements to the initial Civic Facilities, without the prior written approval of Ground Lessor; provided, however, that Ground Lessee shall provide Ground Lessor with written notice of any such work which materially deviates from the design and specifications approved by Ground Lessor which Ground Lessor in its sole and absolute discretion may approve. Notwithstanding anything in this Ground Lease to the contrary, Ground Lessee shall deliver the Civic Facilities in accordance with design and specifications as approved by Ground Lessor and Ground Lessee's failure to do so shall be a default under the Ground Lease.

1.7.9 All Civic Facilities constructed at any time and from time to time will be owned by Ground Lessee during the Term of this Agreement and kept in good operation and repair. All such Civic Facilities constructed upon the Premises by Ground Lessee are and shall remain real property and may not be severed from this Agreement or the ground leasehold estate created hereby.

1.7.10 Ground Lessee shall pay for all water, gas, power, communications services, trash disposal and all other utilities and services supplied to the Premises and the Civic Facilities, together with any associated taxes or surcharges.

1.8 PROJECT DEVELOPMENT BUDGET

1.8.1 In accordance with Section 1.3.2 of this Agreement, within 120 days of execution of this Agreement, Ground Lessee shall inform Ground Lessor whether the Premises are suitable or unsuitable for Ground Lessee's intended use as determined in Ground Lessee's sole and absolute discretion and whether it will terminate this Agreement with no further obligation to continue with

this Agreement. If Ground Lessee elects to not terminate this Agreement, on or before the end of the Due Diligence Period, Ground Lessee shall provide Ground Lessor with a pro forma Project development and construction budget. This requirement is in addition to the proof of Funding for the project required by Section 1.2 above. Once the actual Project development and construction budget is prepared, it shall be the “**Construction Budget**” for purposes of this Agreement and shall be substituted as Exhibit B to this Agreement.

1.8.2 Ground Lessee will be entitled to expend funds in accordance with the Construction Budget for the construction of the proposed Civic Facilities. In the event Ground Lessee is over-budget on a particular line item, Ground Lessee may reallocate excess funds from one line item to another line item so long as the Civic Facilities are delivered in accordance with the plans approved by Ground Lessor and any governmental entity having jurisdiction over the Project. Any one or more expenses not covered by the Construction Budget which increase the total Construction Budget by more than twenty percent (20%) are subject to the approval of Ground Lessor.

1.9 RENT

1.9.1 Payment of Rent will begin on the Rent Commencement Date.

1.9.2 Rent: The Annual Rent shall be the amount set forth in Section 1.1.36 of this Lease.

1.9.2.1 The Rent Commencement Date for ground rent will be the date established pursuant to Section 1.1.38 of this Lease.

1.9.2.2 Unless paid in advance upon Lease Execution, Rent shall be paid to Ground Lessor in annual or greater installments in advance for the then upcoming year on or before January 1st of each year during the Term of this Agreement or any extension thereof. Where applicable, such payments shall be accompanied by a statement setting forth the percentage or amount of Offset, defined below, Ground Lessee believes are applicable to said payment. For the initial rental payment, it shall be pro-rated for the remaining portion of the year in which Rent commences.

1.9.2.3 Ground Lessee will make all payments by check made payable to: Fulton County Finance Department, and deliver or mail said payments to:

Attention: Finance Director
141 Pryor Street S.W.
Suite 700
Atlanta, Georgia, 30303

or to such other place as Ground Lessor may direct Ground Lessee in writing. Ground Lessee may also make payments by means of wire transfer or other electronic means. Ground Lessee's payment shall include notations of the lease number and for the month(s) the Rent is intended.

1.9.2.4 In the event any required Rent payment is not made by Ground Lessee to Ground Lessor as required and remains unpaid for a period of Ninety (90) calendar days or more after Ground Lessor has provided written notice of such default to Ground Lessee, Ground Lessor will be entitled to, and Ground Lessee will pay to Ground Lessor, Interest on all amounts unpaid

and which remain unpaid commencing on the day immediately following such grace period. Ground Lessor shall only be obligated to provide such written notice to Ground Lessee one (1) time within any twelve (12) consecutive month period and in the event Ground Lessee fails to timely pay any other amounts due for a second time during any such twelve (12) consecutive month period, then an immediate Event of Default shall occur as a result of such late payment and Ground Lessor shall have no obligation or duty to provide notice of such non-payment to Ground Lessee prior to the occurrence of such Event of Default under this Ground Lease.

1.9.2.5 To the extent Ground Lessee generates rents and other proceeds from operation of the Project, such rents and proceeds shall be restricted for use only for the Permissible Uses set forth in the County's 1947 Vesting Deed and the 1958 Affirmation Document.

1.10 RECORDS AND ACCOUNTS.

1.10.1 Throughout the Term of this Agreement, Ground Lessee shall keep and maintain, in accordance with the cash basis of accounting, accurate and complete books, records and accounts of Total Revenue and all items constituting deductions for purposes of calculating Net Revenue (the "Records and Accounts") for the five (5) immediately prior calendar years, which shall be made available to Ground Lessor following not less than ten (10) business days' prior written notice to Ground Lessee. Ground Lessor's inspection and audit rights, as provided above in this Section 1.8 are also subject to the following conditions: (i) provided that Ground Lessee timely makes the pertinent materials available to Ground Lessor, the inspection or audit must be conducted over a period not to exceed twenty (20) business days (provided that such days need not be consecutive) and be completed no later than thirty (30) days after Ground Lessee provides the pertinent materials; and (ii) Ground Lessee shall not be required to provide new analyses or schedules which are not otherwise required to be kept as part of the Records and Accounts pursuant to Section 1.8.1 of this Agreement.

1.11 IMPROVEMENTS, MAINTENANCE AND REPAIR BY GROUND LESSOR

1.11.1 Ground Lessor has no direct responsibility or obligation for any maintenance, repair or replacement of the Premises or any Civic Facilities constructed thereon, except as otherwise expressly set forth in this Agreement.

1.11.2 In connection with the Civic Facilities, at any time and from time to time during the Term of this Agreement, Ground Lessor shall, upon the written request of Ground Lessee and within the reasonable time frame set forth in such written request and at no cost to Ground Lessor, execute and deliver such instruments as may be reasonably appropriate or necessary for (a) the grant or dedication of any easement, right of way or other property right to any public entity, public utility or service corporation or for the development of the Premises, so long as such grant or dedication does not impair the value of the Ground Lessor's fee interest in the real property underlying the Premises and is necessary and directly tied to the development of the premises, or (b) the application to any governmental authority for, or the obtaining of, approvals, consents, general plan amendments, environmental impact reports, specific plans, zoning changes, conditional uses, variances, in each instance for the purpose of permitting Ground Lessee to develop the Premises, construct the Civic Facilities on the Premises, or make any alteration or addition to the Civic Facilities, or (c) obtaining of one or more Loans, including such Estoppel Certificates, Non-Disturbance and Attornment Agreements, or other agreements, in customary

form, as may be reasonably required by such Lenders.

1.12 CONSTRUCTION STANDARDS

Design and construction plans and specifications, and related documentation, for the Civic Facilities (the “**Construction Plan**”) must (1) be reasonably consistent with the Project Development Plan, (2) provide that the overall Project is in keeping with the plan as proposed and approved, (3) be reviewed and approved by Ground Lessor and the applicable governmental authorities with jurisdiction over the Civic Facilities, and (4) comply with any statute, ordinance, rule or regulation of any applicable governmental agency, department or authority, whether Federal, State or local. In addition to the above, a copy of the Construction Plan shall be delivered to Ground Lessor within ten (10) days of submission to the applicable governmental authorities (if different from Ground Lessor). Ground Lessee shall keep the DR apprised of the progress of construction on a regular basis.

1.13 APPROVALS TO BE REASONABLY GIVEN

1.13.1 Unless otherwise stated herein, it is understood and agreed that all provisions of this Agreement which require approval by or the consent of Ground Lessor will receive timely response and such approvals or consents will not be unreasonably withheld, conditioned or delayed. Except with respect to an approval or consent that must be granted by the Fulton County Board of Commissioners, if Ground Lessor fails to respond in writing to Ground Lessee’s written request for approval or consent (by either approving or disapproving or granting or withholding consent, as applicable) within fifteen (15) business days (or such other period as may be set forth in this Agreement with respect to a particular request), prior to the expiration of the fifteen (15) days, Ground Lessor shall provide in writing to Ground Lessee, the basis for any delay and to provide the reasonable timeframe by which the requested consent shall be considered or acted upon by Ground Lessor. Failure to provide the notice will be construed as a breach of this Agreement and such request shall be deemed approved. Notwithstanding the foregoing, in the case of an approval or consent that must be granted by the Fulton County Board of Commissioners as a matter of law, Ground Lessor will have such time as reasonably required to grant such approval; provided however, Ground Lessor shall use reasonable efforts to have the matter heard by the Fulton County Board of Commissioners as soon as practicable following receipt of Ground Lessee’s request.

1.13.2 Any dispute between Ground Lessor and Ground Lessee arising from Ground Lessor’s refusal to grant any such approval or consent (or unreasonably conditioning or delaying the same) shall be resolved as follows. If disapproved within the applicable time period, Ground Lessor will inform Ground Lessee in writing of its disapproval, describing with specificity the disapproved items, actions, elements or other provisions and stating the reasons for such disapproval or requesting clarification thereof (“**Disputed Items**”). Ground Lessee will respond within fourteen (14) days with either a modification or verification (i.e., confirmation of its original position) of the Disputed Items or clarification of such Disputed Items, as the case may be. If the Parties cannot agree upon the elements requiring such approval or consent or upon the interpretation of the intent thereof, the Parties agree that the Disputed Items shall be submitted to mediation. The Parties will jointly appoint an acceptable mediator and share equally in the cost of such mediation. Either Party may commence mediation by providing to the other Party a written

request for mediation. The Parties shall have fourteen (14) business days from the time of the written request to commence mediation, unless this timeframe is extended by the authorized representative of either Party.

1.13.3 The Parties agree to have the principals participate in the mediation process, including being present throughout the mediation session(s). If mediation fails to resolve the Dispute Items or if the mediation is not timely commenced, the Parties may exercise all available remedies. Nothing in this section shall prevent either Party from seeking emergency legal or equitable relief pending mediation. The Parties agree that each Party will bear its own costs and expenses incurred for its attorney's fees, preparation and presentation costs for the mediation process or in pursuit of any other remedies.

1.13.4 Notwithstanding any provision to the contrary in this Agreement, in the event of an emergency, Ground Lessee may take immediate action to prevent loss, injury or damage to persons or property or to preserve the Premises and the Civic Facilities without the prior approval of Ground Lessor, and such reasonable costs incurred in connection therewith shall be a Project Cost; provided such costs do not reduce the Rent payable to Ground Lessor. Ground Lessee shall inform Ground Lessor of any such emergency, the action taken by the Ground Lessee, and any impact to the Ground Lessor's remaining premises and operation within 24 hours of the emergency.

2.1 ASSIGNMENT

2.1.1 Except as otherwise provided in this Agreement, Ground Lessee will not assign and/or transfer its rights or duties hereunder or any estate created hereunder, in whole or in part, without the prior written consent of Ground Lessor, which consent shall be not unreasonably withheld.

2.1.2 Any assignment by Ground Lessee that is made without first obtaining Ground Lessor's prior written consent or approval shall be void.

2.1.3 The foregoing provisions in this Section 2.1 relating to assignment shall not be applicable to (a) a leasehold mortgage or deed of trust hypothecating or encumbering Ground Lessee's interest in this Agreement and the ground leasehold estate created hereby and the Civic Facilities located on the Premises, (b) any sale by judicial foreclosure or pursuant to a power of sale by any Lender or to any transfer in lieu of such sale, or (c) to any sales or transfers by any Foreclosing Lender subsequent to a sale by judicial foreclosure or pursuant to a power of sale or any transfer in lieu of such sale. The term "**Foreclosing Lender**", whenever used herein, means any Lender or any Lender Affiliate that acquires title to the Ground Lessee's interest in this Agreement and the ground leasehold estate created hereby and the Civic Facilities as a result of a sale by judicial foreclosure, or pursuant to a power of sale, or any transfer in lieu of such sale. The term "**Lender Affiliate**", whenever used herein, means a corporation, limited liability company or other entity which controls, is owned or controlled by, or is under common ownership or control with a Lender and such Lender has a net worth of at least Twenty Million Dollars (\$20,000,000), in Constant Dollars.

2.1.4 Ground Lessor may accept Rent or performance of Ground Lessee's obligations from any person other than Ground Lessee or Ground Lessee's sureties, pending receipt of Ground

Lessor's consent or approval to proposed assignment (to the extent such consent or approval is required under the terms of this Agreement), but only after such other person executes necessary insurance and indemnity agreement in writing with Ground Lessor. If the consent or approval is not granted or obtained, such Rent accepted by the Ground Lessor hereunder shall not be reimbursable to anyone, including to Ground Lessee or any person making the payment.

2.1.5 Ground Lessor's consent to any assignment requiring consent shall not constitute a consent to any subsequent assignment requiring Ground Lessor's consent. In the event of any default by Ground Lessee, Ground Lessor may proceed directly against Ground Lessee, or anyone else responsible for the performance of Ground Lessee's obligations under this Agreement, including any unauthorized transferee of Ground Lessee, without first exhausting Ground Lessor's remedies against any other person or entity responsible therefor to Ground Lessor.

2.2 SUBLEASING

2.2.1 Ground Lessee may enter into Sublessees or Subtenants. Based upon availability, Ground Lessor shall be permitted to sublease improved portions of the Premises for use by Ground Lessor consistent with the Permitted Uses in this Lease. All Subleases and Subtenants must be for those uses permitted in Section 1.4 above or related thereto, including but not limited to related businesses, such as a gift shop, plant nursery, gardening, botanical, landscaping, nature or similar training or teaching classrooms, or other uses related to the Permissible Uses set forth in the County's 1937 vesting Deed and 1958 Affirmation Document, and must incorporate by reference all applicable provisions of this Agreement to ensure every Sublessee's operations and conduct are in compliance with such applicable provisions of this Agreement. Any Sublease shall comply with the following terms and conditions:

2.2.1.1 Any arrangements must be in the form of a written instrument and must be specifically for purposes and uses of the Premises as authorized under this Agreement.

2.2.1.2 All Sublessees will be subject to and subordinate to all terms and conditions of this Agreement.

2.3 ATTORNMEN

2.3.1 If by reason of a default on the part of Ground Lessee as lessee in the performs of the terms and provisions of this Agreement, this Agreement and the ground leasehold estate of Ground Lessee as lessee hereunder are terminated by summary proceedings or otherwise in accordance with the terms of this Agreement Ground Lessor shall have the option to terminate or accept any subleases concurrent with the termination of this Lease. If Ground Lessor by written notice to any Sublessee accept the Sublease, such Sublessees who receive such notice will recognize Ground Lessor as the successor to Ground Lessee, and render performance hereunder to Ground Lessor as if the Sublease were executed directly between Ground Lessor and the Sublessees. Ground Lessor agrees that so long as Sublessees are not in default. It shall provide quiet enjoyment to Sublessees. If required by any Sublessee, Ground Lessor shall execute a separate Recognition, Non-Disturbance and Attornment Agreement in form and substance reasonably acceptable to Ground Lessor and such Sublessee.

2.3.2 All Sublessees of Ground Lessee will contain the following provision:

If by reason of a default on the part of [Ground Lessee] as lessee in the performance of the terms of the provisions of the underlying ground lease [define, as needed, in Sublease] and Ground Lessor affirms the Sublease by written notice to the Sublessee, the underlying ground lease and leasehold estate of [Ground Lessee] as lessee thereunder are terminated by summary proceedings or otherwise in accordance with the terms of the underlying ground lease, the [Sublessee] will attorn to [Ground Lessor] and recognize [Ground Lessor], as lessor; provided, however, [Ground Lessor] agrees that so long as the [Sublessee] is not in default of this Sublease, [Ground Lessor] agrees to provide quiet enjoyment. (but in no event shall [Ground Lessor] be liable for actions taken by [Ground Lessee] prior to [Ground Lessor] coming into possession of the Premises).

2.3.3 Consistent with the terms of Section 2.3.2 above, in the event this Agreement is terminated for any reason, all Sublessees will be liable to Ground Lessor for their payment of rents and fees, and all Subleases will contain provisions to that effect. All rents paid to Ground Lessee by a Sublessee intending such payment to be its rent to continue operating on the Premises beyond the date the Agreement is terminated, shall be remitted by Ground Lessee to Ground Lessor within 15 days of receipt of such rent.

2.3.4 In the event Lender succeeds to title to Ground Lessee's ground leasehold estate through foreclosure or otherwise, all Subleases of the Premises shall run directly to Lender and all such Sublessees shall attorn and be permitted to attorn to Lender as the successor sublessor and perform their obligations to Lender as successor to Ground Lessee under this Agreement as if the Sublease were executed directly between Lender and the Sublessee. Ground Lessor hereby agrees to subordinate Ground Lessor's own attornment rights with respect to any Sublessee contained in this Agreement to the attornment rights of Lender.

2.4 SUCCESSORS AND ASSIGNS

All covenants and conditions of this Agreement will extend to and bind the legal representatives, successors, and permitted assigns, if any, of the respective Parties hereto and all agreements with Assignees will include all provisions contained in this Agreement.

2.5 INTENTION OF PARTIES

This Agreement is intended solely for the benefit of Ground Lessor and Ground Lessee and is not intended to benefit, either directly or indirectly, any third party or member(s) of the public at large, except for those provisions of this Agreement specifically applicable to and for the benefit of a Lender and any benefits Ground Lessee will provide the public. Without limiting the generality of the foregoing, in no event shall this Agreement or the Parties' relationship hereunder be deemed to constitute a partnership or joint venture between Ground Lessee and Ground Lessor.

2.6 LIENS

Provided that such liens attach during the Term of this Agreement, and subject to the rights

to contest set forth below, Ground Lessee will cause to be removed any and all tax liens and liens arising out of or because of any construction or installation performed by or on behalf of Ground Lessee or any of its contractors or subcontractors upon the Premises or arising out of or because of the performance of any work or labor to it or them at the Premises or the furnishing of any materials to it or them for use at the Premises. Should any such lien be made or filed, Ground Lessee will bond against or discharge the same within fifteen (15) days after written request by Ground Lessor. The cost of bonding against or discharging any liens relating to construction or installation of Civic Facilities shall be a Project Cost, unless the liens were the result of Ground Lessee's negligence or willful misconduct.

2.7 TAXES, LICENSES AND PERMITS

Ground Lessee will promptly pay all taxes, excises, license fees and permit fees of whatever nature applicable to its lease of the Premises hereunder and operation of the Civic Facilities, including any personal or real property taxes. All such taxes for the first and last years of the Term hereof shall be equitably prorated between the Parties. Ground Lessee shall not be responsible for any of Ground Lessor's franchise, inheritance, income, succession, transfer or other tax levied on Ground Lessor or Ground Lessor's right in and to the Premises or Ground Lessor's right to receive income from the Premises, if applicable. Ground Lessee may elect, however, in Ground Lessee's or Ground Lessor's name, if needed, to contest (without payment thereof, if permitted by law) any tax, excise, levy or assessment payable by Ground Lessee hereunder in its or Ground Lessor's name. Ground Lessor, if requested in writing by Ground Lessee, shall cooperate with Ground Lessee in any such proceedings. Ground Lessee will keep current municipal, state or local licenses or permits required-for the conduct of its business.

2.8 LIABILITY

Ground Lessee shall be responsible for any damages caused by Ground Lessee to the Property or any damages caused to the Property by someone under Ground Lessee's control or direction. Ground Lessee shall not be responsible for any damages caused by Ground Lessor on the Property or by anyone under Ground Lessor's control or direction. Nothing herein shall be construed as a waiver of Fulton County, as Ground Lessor's or City of College Park, as Ground Lessee's, sovereign immunity or any governmental immunity available to their officials, employees or agents. Should Ground Lessee utilize the services of a private contractor, subcontractor, to perform work or services on the Property, Ground Lessee shall insert language in the contract with the contractor, subcontractor requiring the contractor, subcontractor to hold the College Park and Fulton County harmless, from all claims, actions, damages, liability, and expense, including without limitation reasonable attorneys' fees and costs, in connection with personal injury or property damage arising out of the acts or omissions of the contractor, subcontractor and its employees, agents, contractors or volunteers upon the Property or the surrounding property in conducting the scope of work.

2.9 INSURANCE

2.9.1 Prior to the commencement of any improvement or equipment installation on or about the Premises, Ground Lessee will require that its construction contractor and subcontractors (or its construction contractor on behalf of itself and its subcontractors) procure and maintain insurance for such construction and installation protecting both Ground Lessee and Ground Lessor as well as the construction contractor, and such proof of insurance shall be submitted to Ground

Lessor. Such insurance will provide coverage and limits as are customary in the industry. Such insurance will include, but is not limited to:

2.9.1.1 Commercial General Liability on an "occurrence" basis (or equivalent);

2.9.1.2 Automobile Liability; and

2.9.1.3 Builder's Risk equal to the replacement value of the Civic Facilities and all construction materials and equipment; or Ground Lessee at its option may procure and maintain builders risk insurance for the replacement value of the Civic Facilities.

2.9.2 Ground Lessee's (or its contractor's) insurance will be primary as respects Ground Lessor and Ground Lessee, their officers, employees and volunteers acting as agents of Ground Lessor (hereinafter referred to as "volunteers"). Any other coverage available to Ground Lessor, its officers, employees, and volunteers will be excess over the insurance required by this Agreement and non-contributory.

2.9.3 Ground Lessee will maintain worker's compensation coverage in the amounts and form as required by applicable law.

2.9.4 Ground Lessee will keep insured with responsible insurance carriers any Civic Facilities constructed by it upon and within the Premises to the extent of not less than one hundred percent (100%) of the full replacement cost of such improvements using the "Causes of Loss – Special Form" property insurance coverage (or comparable coverage), but excluding earthquake, terrorism and flood coverage, except to the extent such additional property insurance coverage is required by a Lender. Ground Lessee will also be responsible for maintaining insurance coverage for rental loss due to all covered perils under such form of property insurance (or comparable coverage), with such coverage extending for up to one (1) year.

2.9.5 Ground Lessee will obtain and keep in full force and effect a policy of commercial general liability insurance (or equivalent) on an "**occurrence**" basis. Such a policy must include, but need not be limited to, coverage for bodily injury, property damage, personal injury, Broad Form property damage, and premises and operations. Such policy shall have a limit of no less than Three Million Dollars (\$3,000,000) per occurrence and include the Ground Lessor as an additional insured.

2.9.6 Ground Lessee will maintain Automobile Liability coverage with a limit of no less than One Million Dollars (\$1,000,000) for claims for damage because of bodily injury or death of any person, or property damage arising out of the ownership, maintenance or use of any motor vehicles whether owned, hired or non-owned.

2.9.7 All required insurance coverage as stated in this Section 2.8 will be evidenced by one or more current certificates of insurance. Such certificates will include, but will not be limited to, the following:

2.9.7.1 All certificates for each insurance policy are to be signed by a person authorized by that insurer.

2.9.7.2 Each insurance company providing the coverage required in this Section 2.8 shall have a Financial Strength Rating of “A” or better, and a Financial Size Category of “VIII” or larger, based on the most recent published ratings of the A.M. Best Company (or equivalent).

2.9.7.3 Not Used.

2.9.7.4 Ground Lessee (or its contractor) will furnish renewal certificates for the required insurance during the period of coverage required by this Agreement. Ground Lessee (or its contractor) will furnish renewal certificates for the same insurance coverages as required in this Agreement, and Ground Lessee’s failure to do so will constitute a Default in accordance with the terms herein.

2.9.7.5 Ground Lessor, its officers, employees and volunteers must be covered as additional insureds with respect to liability arising out of the activities by or on behalf of the named insured in connection with this Agreement.

2.9.7.6 All insurance coverage maintained by Ground Lessee (or its contractor) must be endorsed to provide that the amount of coverage afforded to Ground Lessor by the terms of this Agreement will not be suspended, voided, or canceled except after thirty (30) days’ prior written notice to Ground Lessor, and Ground Lessee’s (or its contractor’s) failure to do so will constitute a Default in accordance with the terms herein.

2.9.7.7 Any deductible, as it relates to coverage provided under this Agreement, will be fully disclosed on the certificates of insurance. Any deductible provided will be reasonable and customary for this type of risk, except that the deductibles for commercial general liability and commercial automobile liability insurance shall not exceed \$20,000 per occurrence, unless otherwise agreed to by Ground Lessor.

2.9.7.8 If aggregate limits are imposed on the insurance coverage, then the amounts of such limits must be not less than Three Million Dollars (\$3,000,000) per occurrence or per accident. The minimum aggregates must be fully disclosed and the amount entered on the required certificate of insurance.

2.9.7.9 The insurance company issuing the policy or policies required under this Agreement shall have no recourse against Ground Lessor (including its agents and agencies) for payment of any premiums or for assessments under any form of policy.

2.9.7.10 Any and all deductibles under the above-described insurance policies shall be paid by Ground Lessee

2.9.8 Without affecting any other rights or remedies, Ground Lessee hereby releases and relieves Ground Lessor and waives its entire right to recover damages against Ground Lessor, for loss of or damage to the Civic Facilities arising out of or incident to the perils required to be insured

against herein. The effect of such release and waiver is not limited by the amount of insurance carried or required or by any deductibles applicable thereto. If such waiver of subrogation is not already a feature of Ground Lessee's insurance policies, Ground Lessee agrees to cause their property damage insurance carriers to waive any right to subrogation that such companies may have against Ground Lessor. If Ground Lessee fails to maintain any of the insurance coverages required herein, then Ground Lessor will have the option to declare Ground Lessee in breach, subject to the notice and cure rights contained in Sections 2.10 and 2.14 below, or Ground Lessor may (without obligation) purchase replacement insurance or pay the premiums that are due on existing policies in order that the required coverages may be maintained. In such event, Ground Lessee shall immediately reimburse Ground Lessor for the cost of same plus Interest, commencing from the date the amount is paid by Ground Lessor.

2.9.9 The minimum insurance limits set forth in this Section 2.8 are sufficient as of the Effective Date. It is understood that due to the effect of inflation and/or other factors, it may be necessary for Ground Lessor to raise the minimum insurance limits to protect its interests. Ground Lessee hereby agrees to maintain such insurance limits as may be reasonably required by Ground Lessor; provided, however, that any such increases will not exceed increases in insurance limits for like properties and operations in the market area. All costs in obtaining and maintaining the insurance required in this Section 2.8 are a Project Cost.

2.9.10 Ground Lessee, at its option, may satisfy its obligations hereunder to insure within the coverage of any so-called blanket policy or policies of insurance which it now or hereafter may carry, by appropriate amendment, rider, endorsement or otherwise; provided, however, that the interests of Ground Lessor shall thereupon be as fully protected by such blanket policy or policies as they would be if this option to so insure by blanket policy were not permitted.

2.10 DAMAGE AND DESTRUCTION

2.10.1 In the event of damage or destruction or loss of eighty percent (80%) of the Civic Facilities by any cause ("**Casualty**"), the following provisions shall apply:

2.10.1.1 In the event of an uninsured Casualty and the damage, destruction, or loss is not capable of being repaired or restored within thirty (30) days, Ground Lessee will have the option to terminate this Agreement, which option is exercisable by written notice to Ground Lessor within ninety (90) days after the occurrence of such event. As used in this Section 2.9, "**uninsured**" means either (a) a Casualty that is not a covered peril under the terms of the applicable insurance required to be maintained by Ground Lessee hereunder, or (b) a Casualty that is a covered peril under such insurance but the proceeds of such insurance are, for whatever reason, insufficient to cover the reasonably anticipated cost of the repair or restoration work (as determined without regard to any deductible amount under any such policy).

2.10.1.2 In the event of an insured Casualty and the damage, destruction, or loss is not capable of being repaired or restored within one hundred twenty (120) days, Ground Lessee will have the option to terminate this Agreement, which option is exercisable by written notice to Ground Lessor within ninety (90) days after the occurrence of such event. As used in this Section 2.9, "**insured**" means a Casualty that is a covered peril under the terms of the applicable insurance required to be maintained by Ground Lessee hereunder, and the proceeds of such insurance are or will be available for Ground Lessee's use. Any exercise by Ground Lessee of a termination option set forth above shall require the prior written consent of any Lender. In the

event Ground Lessee does not exercise such termination option or in the event that such damage, destruction, or loss (whether uninsured or insured) is capable of being repaired within the applicable time periods specified above, then Ground Lessee shall repair, restore, replace, rebuild, or alter the same (the “**Restoration Work**”) as nearly as possible to the value, condition, and character existing immediately prior to such damage or destruction. Notwithstanding the foregoing, such requirement to perform the Restoration Work shall be void and of no further force or effect if such Casualty occurs during the last ten (10) years of the Term of this Agreement and if Ground Lessee, in the exercise of its sole discretion, elects to terminate this Agreement by providing written notice to Ground Lessor policy.

2.10.1.3 If Ground Lessee does not exercise any termination option provided above, Ground Lessee shall commence any Restoration Work required by the terms of this Section 2.9 within fifteen (15) days following receipt of all required governmental approvals and permits, the application for which shall be commenced within fifteen (15) days following Ground Lessee’s receipt (or reasonably adequate assurance of the receipt) of sufficient insurance proceeds to perform the Restoration Work, less any deductible amount under the policies, which shall be paid by Ground Lessee (in case of an insured Casualty), and shall diligently and in good faith prosecute such Restoration Work to completion.

2.10.1.4 Notwithstanding any language to the contrary herein, the disposition of the proceeds of any and all available insurance proceeds shall be governed by the terms of the Lender’s Loan documents and not by the terms of this Agreement, to the extent they are inconsistent.

2.11 TERMINATION BY GROUND LESSOR

2.11.1 Default by Ground Lessee.

Ground Lessee will be considered in default (following written notice of default where applicable by Ground Lessor and failure to cure) as lessee under this Agreement in the event of any one or more of the following occurrences:

2.11.1.1 The liquidation under federal bankruptcy statutes which causes the discontinuance of the fulfillment of any required provision of this Agreement by Ground Lessee.

2.11.1.2 Ground Lessee fails to pay the Rent or other charges required by this Agreement when the same are due and the continuation of such failure for a period of ten (10) days after written notice thereof from Ground Lessor to Ground Lessee.

2.11.1.3 Ground Lessee voluntarily abandons any of the Premises for a period of sixty (60) days following written notice from Ground Lessor to Ground Lessee.

2.11.1.4 Ground Lessee fails to fulfill any of the other terms, covenants, or conditions set forth in this Agreement if such failure continues for a period of more than sixty (60) days after written notice thereof from Ground Lessor unless cured as provided below.

2.11.1.5 Ground Lessee violates the covenants and restrictions in Fulton

County's May 27, 1937 Vesting Deed or the 1958 Affirmation Document regarding Permissible Uses.

2.11.1.6 Cure. Subject to the lender protection provisions of Section 2.14 below, Ground Lessee will be considered in default of this Agreement if Ground Lessee fails to fulfill any of the terms, covenants, or conditions set forth in this Agreement following the expiration of the cure period and/or written notice set forth in this Section 2.10.1 above, except that if the nature of such default is such that the same cannot reasonably be cured within the specified cure or notice period, Ground Lessee shall not be deemed to be in default if Ground Lessee shall have commenced in good faith to perform whatever may be required for fulfillment within the specified cure or notice period after receipt of notice and continues such performance to completion and without interruption except as a result of a Force Majeure event.

2.11.1.7 Termination for Default by Ground Lessee. Subject to the Lender protection provisions of Section 2.14 below, if default is made by Ground Lessee as described Section 2.10.1 above, and such default is not cured as provided in such sections, Ground Lessor may elect to terminate this Agreement following sixty (60) days' prior written notice to Ground Lessee.

2.11.1.8 Ground Lessor hereby agrees to give Lender at least thirty (30) days prior notice of any intended revocation, surrender, cancellation or termination of this Agreement.

2.11.1.9 In the event of any termination for default by Ground Lessee, Ground Lessor will have the right to enter upon the Premises and take possession of same. Redelivery and disposal of the Civic Facilities and other property located at the Premises will be governed by Section 2.13 of this Agreement.

2.11.1.10 Notwithstanding the foregoing, upon default of Ground Lessee and subject to the Lender protection provisions of Section 2.14 below, Ground Lessor has the right to pursue any rights or remedies available to Ground Lessor at law or in equity. All such rights and remedies shall be cumulative and not alternative.

2.12 TERMINATION BY GROUND LESSEE

2.12.1 Default by Ground Lessor. Ground Lessor will be considered in default as lessor under this Agreement if Ground Lessor fails to fulfill any of the terms, covenants or conditions set forth in this Agreement if such failure shall continue for a period of more than sixty (60) days after delivery by Ground Lessee of a written notice of such breach or default unless cured as provided below.

2.12.2 Ground Lessor will not, however, be considered in breach of this Agreement if the nature of such default is such that the same cannot reasonably be cured within the sixty (60) day period, and Ground Lessor shall have commenced in good faith to perform whatever may be required for fulfillment within the specified cure period after receipt of notice and continues such performance to completion and without interruption except as a result of a Force Majeure event.

2.12.3 Termination for Default by Ground Lessor. If default is made by Ground Lessor as described in Section 2.11.1 above, Ground Lessee may elect to terminate this Agreement

following sixty (60) days' prior written notice to Ground Lessor, provided, however, that this Agreement may be terminated only following a Ground Lessor default (and the failure to cure within the applicable cure period therefor).

2.12.4 In the event of the termination for default by Ground Lessor, redelivery and disposal of improvements will be as described in Section 2.13 of this Agreement.

2.12.5 Ground Lessee reserves the rights to any remedies it may have at law or in equity arising from Ground Lessor's breach of this Agreement. All such rights and remedies shall be cumulative and not alternative.

2.13 WAIVERS

No waiver of default by either Party hereto of any of the terms, covenants or conditions hereof to be performed, kept or observed will be construed to be or act as a waiver of any subsequent default of any of the terms, covenants, conditions herein contained to be performed, kept and observed. Neither Party hereto may waive any provisions regarding Lender's rights without such Lender's prior written consent.

2.14 REDELIVERY AND DISPOSAL OF IMPROVEMENTS AT TERMINATION

2.14.1 Ground Lessee covenants that at the expiration of the Term or earlier termination of this Agreement, it will quit and surrender the Premises in good repair and condition, excepting reasonable wear and tear, acts of God, the public enemy, the action of the elements, or a Force Majeure event as contemplated in Section 3.2 below.

2.14.2 Title to and ownership of the Civic Facilities shall remain in Ground Lessee until the expiration of the Term or earlier termination of this Agreement. In either event, Ground Lessee will leave in place all of the permanent improvements included within the Civic Facilities in their then existing condition, whereupon title and ownership will pass from Ground Lessee and vest in Ground Lessor without any further consideration required from Ground Lessor. Ground Lessee agrees that it will thereupon immediately execute, acknowledge and deliver to Ground Lessor any documents or instruments pertaining to such transfer of title as may be reasonably requested in writing by Ground Lessor. For purposes of this Section 2.13.2, the term "**permanent improvements**" means all paving, landscaping, buildings, structures and related appurtenances, and building systems.

2.14.3 Upon the expiration of the Term, including any extension term, or earlier or termination of this Agreement, Ground Lessee shall have the right (but not the obligation) to remove or cause to be removed from the Premises, within sixty (60) days following either event, all equipment, trade fixtures, and personal property belonging to Ground Lessee or any Subtenant. For purposes of this Section 2.13.3, the words "**equipment, trade fixtures and personal property**" will include, but not be limited to, (i) signs (electrical or otherwise), (ii) all equipment used in connection with the conduct of Ground Lessee's business whether or not such equipment is attached to the Premises or the Civic Facilities, (iii) any other mechanical device, and (iv) all other miscellaneous equipment, furnishings and fixtures installed on or placed on or about the Premises and used in connection with Ground Lessee's business thereon; provided, however, that such words shall not include elevators, escalators, plumbing systems, electrical systems, life safety systems,

boilers, heating, ventilating and air conditioning systems, floor and wall coverings, ceiling lights, built-in shelving and cabinets, doors, windows, outside walls and fencing, and landscaping. All equipment, trade fixtures and personal property that are not removed within sixty (60) days following the end of the Term shall become the property of Ground Lessor.

2.15 FINANCING

2.15.1 Notwithstanding anything to the contrary contained in this Agreement, Ground Lessee will have the right at any time during the Term hereof to execute and deliver to any or all of its Lenders any documents evidencing a Loan and which will operate as collateral security for any Loan or Loans made, even if such documents result in a form or type of conveyance or assignment of the ground leasehold estate created by this Agreement. It is hereby agreed by Ground Lessor that Ground Lessee or any such Lender(s) will have the right to immediately record such document or document(s), or memorandum or other evidence thereof, with an appropriate public official or officials. Ground Lessee shall provide the DR with copies of all such recorded Loan documents promptly following recording. Ground Lessee is also hereby granted the right to refinance any existing Loan with any Lender at prevailing market terms (including without limitation, loan-to-value and interest rates), provided that such refinanced Loan's amortization period does not exceed the remaining duration of the Term. Any Lender which will succeed to Ground Lessee's interest hereunder will so succeed subject to all the terms and conditions of this Agreement. Ground Lessor agrees to cooperate in executing any documents reasonably requested of Ground Lessor by Ground Lessee or Lender in connection with any Loan and that is not adverse to the Ground Lessor's interests and wellbeing in the Premises; PROVIDED HOWEVER, UNDER NO CIRCUMSTANCES SHALL GROUND LESSOR BE OBLIGATED TO ENCUMBER ITS FEE INTEREST IN THE PREMISES TO SECURE ANY LOAN, AND, NOTWITHSTANDING ANY TERM OR PROVISION OF ANY SUCH LOAN OR THIS AGREEMENT TO THE CONTRARY, UNDER NO CIRCUMSTANCES SHALL ANY SUCH LOAN CONSTITUTE AN INDEBTEDNESS OR OBLIGATION OF GROUND LESSOR NOR SHALL GROUND LESSOR BE LIABLE IN ANYWAY FOR THE PAYMENT OF ANY PORTION OF THE INDEBTEDNESS EVIDENCED BY SUCH LOAN OR FOR THE PAYMENT OR PERFORMANCE OF ANY OBLIGATION THEREUNDER OR SECURED THEREBY. NOTHING IN THIS AGREEMENT SHALL OPERATE AS A PLEDGE OF GROUND LESSOR'S CREDIT WITHIN THE MEANING OF ANY CONSTITUTIONAL DEBT LIMITATION.

2.15.2 The amount of any Loan shall include any fees, including loan points, a capital market fee (equal to twenty (20) basis points on the Loan amount and payable to Ground Lessee or an Affiliate of Ground Lessee), legal fees, loan broker fees, closing costs, and other Loan charges (monthly or otherwise) payable to any Lender or, in the case of loan and capital market fees, to Ground Lessee or an Affiliate of Ground Lessee, provided however that any such fees payable to Ground Lessee or an Affiliate of Ground Lessee, together with any Loan related fees payable to third parties, shall not exceed the costs of obtaining a similar loan in the market. The principal amount of any such Loan shall not be amortized over more than thirty (30) years (or the then remaining period under the Term, if shorter). Any Loan obtained by Ground Lessee shall be at commercially reasonable interest rates, points, fees, closing costs, and other terms and conditions.

2.15.3 Ground Lessor will deliver to any such Lender via nationally recognized

commercial courier or certified mail, return receipt requested, written notice of any default of Ground Lessee under the terms of this Agreement and such notice will specify the nature of the default. Before terminating this Agreement, Ground Lessor will allow such Lender to cure or commence to cure any default of Ground Lessee in accordance with Section 2.10 above and this Section 2.15. The time period to cure any default of Ground Lessee will commence when such notice is received by Lender. Lender and any person designated by Lender shall have and are hereby granted the right to enter upon the Premises upon providing reasonable notice to Ground Lessor for the purpose of taking any cure action permitted under this Agreement.. If such non-monetary breach is of a nature which is incapable of being cured by Lender, Ground Lessor agrees not to exercise its remedies arising from such default if (a) Lender notifies Ground Lessor in writing within the cure period that Lender intends to foreclose its mortgage or deed of trust and Lender commences and diligently pursues such foreclosure within thirty (30) days following Lender's notice to Ground Lessor; and (b) Lender makes all payments due by Ground Lessee under this Agreement through the date of foreclosure..

2.15.4 Any default by Ground Lessee in the payment of money as required under the terms of this Agreement may be cured by Lender in accordance with the terms of Section 2.10 of this Agreement (and subject to the notification and cure provisions of Section 2.10) and this Section 2.14, and Ground Lessor may accept any such payment or cure from such Lender during the term of Lender's Loan to Ground Lessee.

2.15.5 Should Ground Lessee default under the terms of this Agreement and should the default be such that it cannot be cured by the payment of money, Ground Lessor may accept payments of Rent from such Lender (to the extent the amount of such payment can be ascertained by Lender) and this Agreement will not terminate, but will remain in full force and effect, pending Lender's cure of such default within the time periods described herein or resort to foreclosure under its mortgage, deed of trust, security deed, or other security instrument, as provided in Section 2.15.

2.15.5 Notwithstanding the provisions of Section 2.15.4.1 above, should Ground Lessee default under the terms of this Agreement and should the default be such that it cannot be cured by the payment of money and the default (in the reasonable judgment of Ground Lessor) affects the security or safety of the Premises and if Lender does not wish this Agreement to terminate, then upon written notice from Ground Lessor, Lender will have the option to cure immediately or to commence to cure the default during the cure period available to Ground Lessee under Section 2.10.2 of this Agreement and will not need to wait until the expiration of Ground Lessee's cure period.

2.15.6 If any default under this Agreement has been cured by a Lender or an Assignee thereof, Ground Lessor agrees that upon completion of any foreclosure proceedings or sale under the mortgage, deed of trust, security deed, or other security instrument securing the Loan, or upon delivery of a deed in lieu of foreclosure (a "**Foreclosure Transfer**"), (i) the Foreclosing Lender (as defined in Section 2.1.4 above), (ii) a third party who purchases at a Foreclosure Transfer, or (iii) a third party who purchases from the Foreclosing Lender subsequent to a Foreclosure Transfer (the parties described in clause (ii) or (iii) shall be referred to herein as "**Permitted Foreclosure Assignees**"), shall be recognized by Ground Lessor as the ground lessee under the terms of this Agreement for all purposes for the remaining Term hereof. The leasehold interest in the Premises

of the Foreclosing Lender or such Permitted Foreclosure Assignee will not be adversely affected or terminated by reason of any non-monetary default occurring prior to the completion of such proceedings or sale, provided such default has been promptly remedied (unless the non-monetary default is of a nature which is incapable of cure), or if such default requires possession to cure, provided such Foreclosing Lender or Permitted Foreclosure Assignees promptly commences to cure upon taking possession of the Premises.

2.15.7 A Lender shall not become liable under the terms and obligations of this Agreement unless and until it assumes the obligations and is recognized by Ground Lessor as ground lessee under this Agreement (i.e., until it becomes a Foreclosing Lender) and will be liable only so long as such Lender maintains ownership of the ground leasehold estate and recourse to such Lender.

2.15.8 Within fifteen (15) days after a written request by Ground Lessee or any Lender, Ground Lessor, through the DR, will execute, acknowledge and deliver to Ground Lessee or such person or entity as Ground Lessee designates, an estoppel certificate containing the terms generally described below. Without limiting the generality of the foregoing, the estoppel certificate shall state, in part:

2.15.8.1 That this Agreement is the only agreement between Ground Lessor and Ground Lessee concerning the Premises and is unmodified and in full force and effect in accordance with its terms (or if there have been modifications, that this Agreement is in force and effect as modified, and identifying the modification agreements, or if this Agreement is not in full force and effect, that it is not);

2.15.8.2 The commencement and expiration dates of the term of this Agreement and the date to which Rent has been paid to Ground Lessor under this Agreement;

2.15.8.3 Whether or not there is an existing default by Ground Lessee in the payment of Rent or any other sum of money under this Agreement, and whether or not there is any other existing default by either Party under this Agreement with respect to which a notice of default has been served, and if there is such a default specifying its nature and extent;

2.15.8.4 Whether or not there are any setoffs, defenses or counterclaims against enforcement of the obligations to be performed by Ground Lessor under this Agreement;

2.15.8.5 Such other information and terms that a Lender or a Lender's Assignee may reasonably request.

2.15.9 The bankruptcy or insolvency of Ground Lessee will not operate or permit Ground Lessor to terminate this Agreement as long as all Rent or other monetary payments required to be paid by Ground Lessee continue to be made and other required obligations are performed in accordance with the terms of this Agreement.

2.15.9.1 The rejection of this Agreement by a trustee-in-bankruptcy of Ground Lessor shall not affect or impair the lien of any mortgage or deed of trust in favor of Lender or Lender's rights with respect to this Agreement. In addition to the ground leasehold estate created hereunder in favor of Ground Lessee and all other interest specified in any mortgage or deed of

trust in favor of Lender, the lien of such mortgage or deed of trust shall attach to and shall encumber Ground Lessee's right to use and possession of the Premises if a trustee-in-bankruptcy of Ground Lessor rejects this Agreement. This Agreement shall not be treated as terminated by reason of Ground Lessor's rejection of this Agreement pursuant to Section 365(h)(1) of the federal Bankruptcy Code without Lender's prior written consent, and any such purported termination without Lender's prior written consent shall be null and void and of no force and effect.

2.15.10 In the event that Ground Lessor or Ground Lessee terminates this Agreement, whether as a result of the rejection of this Agreement pursuant to the federal Bankruptcy Code or otherwise, then, provided that Lender has cured any monetary defaults under this Agreement (including the payment of Rent due), Lender shall have the right within thirty (30) days after termination of this Agreement to request in writing, and upon such request Ground Lessor shall execute a new lease covering the Premises for the remaining Term and containing the same terms and conditions as set forth herein. Any such new lease agreement shall have the same title priority as this Agreement and shall be subject only to the exceptions to title having priority over this Agreement or such additional exceptions to which such Lender has consented in writing. In the event Ground Lessor and such Lender enter into any such new lease agreement, title to the Civic Facilities shall automatically vest in such Lender.

2.15.11 Following any Foreclosure Transfer, Ground Lessor shall recognize the Foreclosing Lender (as defined in Section 2.1.4 above) or the Permitted Foreclosure Assignee (as defined in Section 2.14.6 above), as applicable, as the ground lessee under this Agreement, which shall be reflected in an amendment to the Agreement.

2.15.11.1 In the event of a default under Lender's mortgage, deed of trust, security deed, or other security instrument, Lender or Lender Affiliate shall have the right, after giving notice to Ground Lessor, to oust Ground Lessee and take possession of the Premises in accordance with the terms of Lender's loan documents. Such ouster shall not constitute a termination of this Agreement but shall be deemed an exercise of the assignment of this Agreement to Lender, which shall be recognized in an amendment to this Agreement.

2.15.11.2 Notwithstanding the above provisions of this Section 2.14 to the contrary, the following shall apply: (a) a Permitted Foreclosure Assignee shall pay the same rental amount that would have been payable by the Foreclosing Lender and shall be subject to the terms and provisions of this Agreement; and (b) Ground Lessor shall not, without Lender's prior written consent, which may be withheld in its sole and absolute discretion, take or permit any action to terminate this Agreement or merge the ground leasehold estate into the fee estate prior to payment of all obligations owing in connection with the Loan. For purposes of this Section 2.14, "**ground leasehold estate**" shall mean the leasehold estate granted to Ground Lessee by Ground Lessor pursuant to this Agreement.

2.15.12 Any mortgage, security deed, lien, encumbrance, deed of trust, or other security instrument placed by Ground Lessor on the fee title to the Premises shall be subordinate to (a) this Agreement (and any replacement to or amendment of this Agreement), and (b) any mortgage, deed of trust, security deed, or other security instrument in favor of Lender encumbering the ground leasehold estate. Ground Lessor shall obligate the holder of any such fee mortgage, security deed, lien, encumbrance, deed of trust, or security instrument to execute and acknowledge

any documentation reasonably requested in writing by Ground Lessee or any Lender to confirm such subordinate status.

2.15.13 In connection with Lender's cure rights in this Section 2, any Lender shall be allowed sufficient time necessary to complete any foreclosure action, including delays due to official restraint (including by law, process or injunction issued by a court), so long as such Lender is making payments required by this Agreement prior to acquiring Ground Lessee's ground leasehold estate. Lender shall have the right to suspend or discontinue foreclosure proceedings at any time if Ground Lessee has cured its defaults under its Loan.

2.15.14 Any Lender shall have the right to participate in any settlement or adjustment of losses under property insurance policies maintained by Ground Lessee under this Agreement. Such Lender shall be named as a loss payee (with respect to property insurance required of Ground Lessee under this Agreement) or additional insured with respect to liability insurance required of Ground Lessee under this Agreement) in accordance with any Loan documents executed by Ground Lessee..

2.15.15 Whenever in this Agreement, Ground Lessee shall have the right to request any information, statements, documents, or anything else whatsoever from Ground Lessor, Lender shall have the right to request the same from Ground Lessor, and such information, statements, documents and other material requested in writing by Lender shall thereafter be given to Lender as if Ground Lessee had requested the same. In addition, Ground Lessor shall furnish Lender with copies of all notices of default and notices of intent served on Ground Lessee under this Agreement concurrently with any delivery to Ground Lessee.

2.15.16 Ground Lessor agrees to notify Ground Lessee of any assignment, transfer, conveyance or sale of Ground Lessor's interest in this Agreement and/or the fee interest in the Premises. Ground Lessor will furnish Ground Lessee with the name and address of such assignee, transferee, grantee or buyer upon finalization of the assignment, transfer, conveyance or sale.. With the closing of any assignment, transfer, conveyance or sale of Ground Lessor's interest in this Agreement and/or the fee interest in the Premises, Ground Lessor shall provide Ground Lessee with an estoppel certificate as contemplated by Section 2.14.8 above.

2.16 EMINENT DOMAIN

2.16.1 If all or substantially all of the Premises are taken under the power of eminent domain or sold under the threat of that power (a "**Complete Taking**"), this Agreement shall terminate and all sums, including damages and interest, awarded for the fee or the leasehold or both shall (i) be delivered to Ground Lessor and Ground Lessee (or to any Lender), respectively, if such award has been apportioned between Ground Lessor and Ground Lessee by such condemning authority, or (ii) be deposited promptly with an escrow agent selected by Ground Lessor if there is only a single award, to be distributed and disbursed as follows (and in the following order of priority):

2.16.1.1 First, to any Lender an amount equal to the balance then due (including principal, interest, and all other charges payable under the Loan documents) on account

of the Loan;

2.16.1.2 Second, the remaining balance of the award shall be divided between Ground Lessor and Ground Lessee as follows:

2.16.1.2.1 Ground Lessor shall be entitled to the portion of damages related to taking of the real property and any improvements made to the Premises by Ground Lessor; and

2.16.1.2.2 Ground Lessee shall be entitled to any damages for the taking of its leasehold estate or the diminution of the value thereof and for any leasehold improvements to the Premises or material alterations, structural changes or repairs thereto at Ground Lessee's expense, regardless of when made, Ground Lessee shall be entitled to claim an award for the unamortized balance of Ground Lessee's cost thereof, and if the condemning authority does not make a separate award therefor Ground Lessor shall assign a portion of its award equal to such damages to Ground Lessee. In addition, Ground Lessee shall be entitled to claim an award for loss of business, damage to merchandise and fixtures, removal and reinstallation costs and moving expenses.

2.16.1.3 In the event of a Complete Taking, Ground Lessee's Lender shall be entitled to receive all sums due to Lender under the Loan documents evidencing and securing the Loan secured by Ground Lessee's ground leasehold estate and the Civic Facilities; provided that the value of the real property and any improvement made by Ground Lessor's shall be paid first to Ground Lessor by the condemning party. Notwithstanding and in replacement of the foregoing, if a Foreclosing Lender or a Permitted Foreclosure Assignee has succeeded to the interest of Ground Lessee as of such Complete Taking, such party shall be entitled to receive the amount which was due to it on the date of the Foreclosure Transfer or purchase from the Foreclosing Lender, as applicable

2.16.1.4 In the event of a taking of less than all or substantially all of the Premises which Ground Lessee reasonably believes to be, in effect, a Complete Taking, Ground Lessee may, by written notice to Ground Lessor approved by all Lenders, elect to treat such taking as a Complete Taking, provided that such notice is given Ground Lessor within one hundred twenty (120) days following Ground Lessee's receipt of written notice of such taking. If Ground Lessee fails to make such timely election, such taking shall be deemed to be a Partial Taking for all intents and purposes.

2.16.2 If less than all or less than substantially all of the Premises are taken under the power of eminent domain or sold under threat of that power (a "**Partial Taking**"), this Agreement shall remain in full force and effect as to the portion of the Premises remaining. In the event of a Partial Taking, all sums, including damages and interest, awarded for the fee simple or the leasehold or both shall (i) be delivered to Ground Lessor and Ground Lessee (or to any Lender), respectively, if such award has been apportioned between Ground Lessor and Ground Lessee by such condemning authority, or (ii) be deposited promptly with an escrow agent selected by Ground Lessor if there is only a single award, the portion awarded for the fee simple shall be fully paid to the Ground Lessor, with the remainder to be distributed and disbursed as follows:

2.16.2.1 First, to taxes constituting a superior lien on the portion of the Premises taken;

2.16.2.2 Second, to restore (to the extent possible) the remaining portion of the Premises to return it to the value, condition and character that existed immediately prior to the Partial Taking, taking into consideration the amount of land remaining after such Partial Taking;

2.16.2.3 Third, to any Lender to the extent that the security for its Loan has been impaired as a result of the Partial Taking or as required by the Loan documents, whichever amount is greater;

2.16.2.4 Fourth, to Ground Lessor an amount equal to the then present value of Ground Lessor's interest in the income stream from rental payments attributable to the portion of the Premises being taken, measured by the diminution in rental payments, plus an amount equal to the then present value of the reversionary interest of Ground Lessor at the expiration of this Agreement in that portion of the real property underlying the Premises that is taken in such Partial Taking; and

2.16.2.5 Fifth, the balance of the award to Ground Lessee. Sums being held by an approved escrow agent pending disbursement (whether pursuant to this Section 2.15.2 or Section 2.15.1 above) shall be deposited in one or more federally insured-interest bearing account(s) and, upon disbursement, each Party having a right to any of the sums being disbursed shall be entitled to receive the interest attributable to its share of such sums.

2.16.3 Ground Lessor, Ground Lessee and any Lender that would be affected by either a Complete or Partial Taking shall each have the right to represent its respective interest in each proceeding or negotiation with respect to any taking or intended taking and to make full proof of its claims. No agreement, settlement, sale or transfer to or with the condemning authority shall be made without the prior written consent of Ground Lessor.. Ground Lessor and Ground Lessee agree to execute and deliver to the other any instruments that may be required to effectuate or facilitate any of the provisions of this Section 2.15.3, provided that such execution or delivery will not adversely affect the right of such Party to receive just compensation for any loss in such negotiation or proceeding.

2.16.4 Unless the respective values are determined by the court in the eminent domain proceeding, the values of the interests for which Ground Lessor and Ground Lessee are entitled to compensation in the event of a Complete or Partial Taking shall be determined by the mutual written agreement of Ground Lessor and Ground Lessee. If Ground Lessor and Ground Lessee are unable to agree on the value of their interests within thirty (30) days after the deposit of the sums awarded with the escrow agent, then within thirty (30) days thereafter, each Party shall submit its good faith estimate of the value of such interests as of the date of the Complete or Partial Taking. If the higher of such estimates is not more than 105% of the lower of such estimates, the values shall be the average of the submitted estimates. If otherwise, then unless the Parties agree to submit the matter to mediation the dispute shall be submitted for resolution to the court with jurisdiction over the eminent domain proceeding.

3.1 ENVIRONMENTAL POLICY

3.1.1 Violation of Environmental Laws

During the Term, Ground Lessee will not cause or permit any Hazardous Material to be released on, under or about the Premises by Ground Lessee, their agents, employees, and contractors in quantities or concentrations that exceed the applicable regulatory cleanup standards under the Environmental Laws.

3.1.1.1 Ground Lessee will provide to Ground Lessor copies of all notices, reports, claims, demands or actions concerning any Release or threatened Release of Hazardous Materials affecting the Premises.

3.1.2 Contamination of the Premises

During the Term, if the Release of any Hazardous Material on, under or about the Premises arising from a breach of Section 3.1.1 above results in the presence of Hazardous Material on the Premises in quantities or concentrations that exceed applicable regulatory cleanup standards under the Environmental Laws, Ground Lessee will promptly take all actions as are necessary to remediate the Premises to the extent required by applicable Environmental Laws.

3.1.2.1 Notwithstanding anything herein to the contrary, Ground Lessor will be solely responsible for the cost and timely performance of remediation of any Hazardous Material which was present (prior to the Effective Date) on, under or about the Premises in quantities or concentrations that exceed applicable regulatory cleanup standards under the Environmental Laws, as well as for the cost and timely performance of remediation of any Release of Hazardous Material caused by Ground Lessor during the Term of this Agreement. Ground Lessor shall not be responsible for the cost or performance of the remediation of any Release of Hazardous Material that is caused by Ground Lessee during the Term of this Agreement.

3.1.3 Right to Inspect

If Ground Lessee remediates any environmental condition under the terms of Section 3.1.2 above, Ground Lessee will submit to the DR a written plan for completing all remediation work. The DR retains the right, following reasonable prior written notice to Ground Lessee, to review and inspect all such work at any time using consultants and/or representatives of his/her choice, at Ground Lessee's cost and expense.

3.2 FORCE MAJEURE

3.2.1 Neither Ground Lessor nor Ground Lessee will be deemed to be in breach of this Agreement by reason of failure to perform any of its obligations hereunder if, while and to the extent that such failure is due to a Force Majeure event. The existence of a Force Majeure event shall not relieve Ground Lessee of its obligation to remit Rent to Ground Lessor, to the extent Net Revenue is available (unless the Force Majeure event affects the mail delivery system, bank wire transfer system and other commercially reasonable methods of delivering the Rent to Ground Lessor, in which case the time for making such payments will be extended, but under no circumstances shall Ground Lessee be released from the obligation to make such payments because of any such Force Majeure event). Notwithstanding the above, the performance by Ground Lessor

of its obligations under this Agreement shall be neither excused nor delayed by reason of any circumstances solely within Ground Lessor's reasonable control or over which it has exclusive jurisdiction.

3.3 QUIET ENJOYMENT

Ground Lessor agrees that, on payment of the Rent and performance of the covenants, conditions and agreements on the part of Ground Lessee to be performed hereunder, Ground Lessee and licensees of Ground Lessee will have the right to peaceably occupy and enjoy the Premises. Ground Lessee acknowledges that prior to entering into this Agreement, Ground Lessee has been provided copies of Ground Lessor's vesting deed and a related document recorded in the real estate records for Fulton County, in Book 1655, Pages 142-43 and Book 3351, Pages 97-99 respectively, which contain certain restrictions on the use of the Premises and a reversionary clause in favor of Ground Lessor's grantor's heirs. Ground Lessee has reviewed these documents and educated itself on the restrictions contained therein. Ground Lessee covenants and agrees that based on its review of these documents it is entering into this Agreement and assuming the risk that its use of the Premises may be negatively affected by these instruments, including, but not limited to, the loss of use of all or part of the Premises. Ground Lessor shall not be liable to Ground Lessee for any damages Ground Lessee may suffer relating to its quiet enjoyment of the Premises relating to any negative effects of these instruments. Ground Lessee is entering into this Agreement not in any way in reliance on representations or statements made by Ground Lessor.

3.4 NOTICES

Any notice or communication to be given under the terms of this Agreement shall be in writing and shall be (i) personally delivered, (ii) delivered by nationally recognized commercial courier/overnight delivery service, or (iii) sent by registered or certified mail, return receipt requested.

Notices shall be addressed as follows:

If to Ground Lessor: Fulton County, Georgia
Office of County Manager 141 Pryor Street
Atlanta, Georgia 30303
Attention: County Manager
Phone: (404) 612-8320

And

Fulton County, Georgia
Office of the County Attorney
141 Pryor Street S.W., Suite 4038
Atlanta, Georgia 30303
Attention: County Attorney
Phone: (404) 612-0246

And

Fulton County, Georgia
Department of Real Estate and Asset Management
141 Pryor Street, S.W., Suite G-119

Atlanta, Georgia 30303
Attention: Director or Deputy Director
Phone: (404) 612-5900

If to Ground Lessee: City of College Park, Georgia
3667 Main St.
College Park, GA 30337
Attention: City Manager
Phone: 404-767-1537

With a copy to: Law Office of Louis E. Bridges, LLC
5784 Lake Forrest Dr., Suite 270
Atlanta, GA 30328
Attention: Louis Bridges
Phone: (404) 845-4001

All such notices shall be deemed to have been given: (i) if personally delivered, upon receipt, (ii) if by registered or certified mail, upon the date indicated on the return receipt, and (iii) if by courier service, upon the date delivered as shown by the records of the courier. The Parties may, from time to time, change their address for delivery of notice by sending notice of its new address to the other Party in accordance with the terms of this Section 3.4.

3.5 HEADINGS, TITLES OR CAPTIONS

Article, section or paragraph headings, titles or captions are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope or extent of any provision of this Agreement.

3.6 INVALID PROVISIONS

It is expressly understood and agreed by and between the Parties hereto that in the event any covenant, condition or provision herein contained is held to be invalid by any court of competent jurisdiction, the invalidity of such covenant, condition or provision will in no way affect any other covenant, condition or provision herein contained; provided, however, that the invalidity of any such covenant, condition or provision does not materially prejudice either Ground Lessor or Ground Lessee in their respective rights and obligations contained in the valid covenants, conditions or provisions of this Agreement.

3.7 GOVERNING LAW

This Agreement will be interpreted under and governed by the laws of the State of Georgia without regard to its principles of choice of law or conflicts of law.

3.8 HOLDOVER

Any unauthorized holding over by Ground Lessee for more than ninety (90) days after the termination of this Agreement or the expiration of its terms without the written consent of Ground

Lessor, except for the period authorized for removal of Ground Lessee's property upon the expiration or termination hereof, shall entitle Ground Lessor to collect from Ground Lessee as liquidated damages for such holding over, one hundred fifty percent (150%) of the then Rent.

3.9 ENTIRE AGREEMENT

3.9.1 This document represents the entire agreement between the Parties hereto and will not be modified or canceled by mutual agreement or in any manner except by instrument in writing, executed by the Parties or their respective successors in interest, and supersedes all prior oral or written agreements and understandings with respect to the subject matter hereof. The Parties further understand and agree that the other Party and its agents have made no representations or promises with respect to this Agreement or the making or entry into this Agreement, except as in this Agreement expressly set forth, and that no claim or liability for cause for termination shall be asserted by either Party against the other, and such Party shall not be liable by reason of, the making of any representations or promises not expressly stated in this Agreement, any other written or oral agreement with the other Party being expressly waived.

3.9.2 The Parties warrant that the individuals executing this Agreement have full authority to execute this Agreement on their behalf and have the requisite authority to do so.

3.9.3 The Parties hereto acknowledge that they have thoroughly read this Agreement, including any exhibits or attachments hereto, which are hereby incorporated into this Agreement by this reference, and have sought and received whatever competent advice and counsel was necessary for them to form a full and complete understanding of all rights and obligations herein.

3.10 SUCCESSORS AND ASSIGNS

This Agreement shall be binding upon and shall inure to the benefit of the Parties hereto and their respective heirs, personal representatives, successors, or permitted assigns, as the case may be.

3.11 COUNTERPARTS

This Agreement may be executed in any number of counterparts each of which when so executed shall constitute in the aggregate but one and the same document.

3.12 INDEPENDENT CONTRACTOR

Ground Lessee is deemed to be an independent contractor for all purposes regarding its operations at the Premises and no agency, partnership or joint venture, express or implied, exists.

3.13 RECORDATION

3.13.1 Under no circumstances shall all or part of this Agreement be recorded with the Clerk of the Superior Court of Fulton County, Georgia.

3.13.2 As soon as practicable following the Effective Date but no later than thirty (30) days thereafter, Ground Lessor and Ground Lessee agree to execute and acknowledge a Memorandum of Participating Ground Lease Agreement which

(i) evidences the existence of this Agreement, the rights of Ground Lessee to develop, own, lease and manage the Civic Facilities, the ground leasehold estate of Ground Lessee in and to the Premises, the Term of this Agreement, and

(ii) containing a legal description of the Premises.

Such Memorandum, substantially in the form of that attached as Exhibit D hereto, shall be recorded with the Clerk of the Superior Court of Fulton County, Georgia. Without limiting the generality of the foregoing, upon expiration of the Term or earlier termination of this Agreement, Ground Lessee, upon Ground Lessor's written request, shall execute, acknowledge and deliver to Ground Lessor such documents as Ground Lessor shall prepare and which are reasonably required to terminate the effect of the recorded Memorandum of Ground Lease on the Premises, which Ground Lessor, at Ground Lessor's sole expense, shall have the right to record with the Clerk of the Superior Court of Fulton County, Georgia.

3.14 FURTHER ASSURANCES

Each Party to this Agreement shall perform any and all acts and execute and deliver any and all documents as may be necessary and proper under the circumstances in order to accomplish the intents and purposes of this Agreement and to carry out its provisions.

3.15 MISCELLANEOUS

3.15.1 Patriot Act

Ground Lessee represents and warrants to Ground Lessor that Ground Lessee is not, and is not acting, directly or indirectly, for or on behalf of, any person or entity named as a "specially designated national and blocked person" (as defined in Presidential Executive Order 13224) on the most current list published by the U.S. Treasury Department Office of Foreign Assets Control, and that Ground Lessee is not engaged in this transaction, directly or indirectly, on behalf of, and is not facilitating this transaction, directly or indirectly, on behalf of, any such person or entity. Ground Lessee also represents and warrants to Ground Lessor that neither Ground Lessee nor its affiliates are in violation of any laws relating to terrorism or money laundering, including the aforesaid Executive Order and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (Public Law 107-56), as amended. To the extent allowed by law, Ground Lessee hereby agrees to defend, indemnify and hold harmless Ground Lessor from and against any and all claims, damages, losses, risks, liabilities and expenses (including reasonable attorney fees and costs) arising from or related to any breach of the foregoing representations and warranties by Ground Lessee.

(Continued on Following Page)

IN WITNESS WHEREOF, Ground Lessor and Ground Lessee have executed this Agreement as of the day and year first written above.

GROUND LESSOR:

FULTON COUNTY, GEORGIA,
a political subdivision of State of Georgia

Name: Robert L. Pitts
Title: Chairman of Fulton County, Georgia

ATTEST

Name: Tonya R. Grier
Title: Clerk to the Commission

APPROVED AS TO FORM:

Name: Y. Soo Jo
Title: County Attorney

(Signatures Continued on Following Page)

GROUND LESSEE:

CITY OF COLLEGE PARK, GEORGIA
a Georgia municipality

By: _____

Name: _____

Its: _____

EXHIBIT A

(Premises)

All that tract or parcel of land lying and being in Land Lot 29 of the 13th District of formerly Campbell, now Fulton County, Georgia, more particularly described as follows:

BEGINNING at an iron pin on the North line of Land Lot 29, said iron pin being on the eastern side of a public road, now or formerly known as Herschel Y. Lee Road;

Running thence North 88 degrees 52 minutes East along said North land lot line of said Land Lot 29 a distance of 1,401.5 feet to a railroad iron, same being the northeast corner of Land Lot 29;

Thence running South 01 degree 56 minutes East along the East line of said Land Lot 29 a distance of 1,233.5 feet to an iron pin (same being 100 feet North of a marked popular tree);

Thence running South 88 degrees 52 minutes West a distance of 1,180.7 feet to the east side of the above mentioned public road;

Thence running in a northerly direction along the eastern side of said public road a distance of 1,338 feet to the POINT OF BEGINNING.

Said parcel containing 40.54 acres \pm as per plat by Earl E. Tantis, Fulton County Highway Engineer, dated May 1937.

LESS AND EXCEPT THE PORTION OF SAID PROPERTY TO BE RETAINED BY GROUND LESSOR FOR OTHER PERMISSIBLE USES.

[THIS LEGAL DESCRIPTION SHALL BE UPDATED AFTER GROUND LESSEE OBTAINS A CURRENT AND ACCURATE ALTA/NSPS AS-BUILT SURVEY OF THE ABOVE-REFERENCED PROPERTY SPECIFICALLY DESIGNATING THE PREMISES AND THE PORTIONS OF THE PROPERTY TO BE RETAINED BY GROUND LESSOR FOR OTHER PERMISSIBLE USES.]

EXHIBIT B

(Construction Budget)

[TO BE PROVIDED BY GROUND LESSEE]

EXHIBIT C

(Project Development Plan)
[TO BE PROVIDED BY GROUND LESSEE]

EXHIBIT D

(Memorandum of Participating Ground Lease)

[TO BE ATTACHED AFTER FINALIZATION OF LEASE]



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0168

Meeting Date: 3/5/2025

Department

External Affairs

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Presentation: 2025 State Legislative Session Update.

Requirement for Board Action *(Cite specific Board policy, statute or code requirement)*

Request approval

Strategic Priority Area related to this item *(If yes, note strategic priority area below)*

Open and Responsible Government

Commission Districts Affected

All Districts ☒

District 1 ☐

District 2 ☐

District 3 ☐

District 4 ☐

District 5 ☐

District 6 ☐

Is this a purchasing item?

No

Summary & Background *(First sentence includes Agency recommendation. Provide an executive summary of the action that gives an overview of the relevant details for the item.)*

Scope of Work: Presentation of 2025 State Legislative Session Update

Community Impact:

Department Recommendation:

Project Implications:

Community Issues/Concerns:

Department Issues/Concerns:

Fiscal Impact / Funding Source

Funding Line 1:

n/a



Fulton County Board of Commissioners

Agenda Item Summary

Agenda Item No.: 25-0169

Meeting Date: 3/5/2025

Requested Action *(Identify appropriate Action or Motion, purpose, cost, timeframe, etc.)*

Executive **(CLOSED)** Sessions regarding litigation **(County Attorney)**, real estate **(County Manager)**, and personnel **(Pitts)**.