

Community Project Funding FY 2025

TOWN OF GORHAM

Water System Improvements



**Town of Gorham – Water System Improvements
FY25 Interior Community Project Funding Questions**

Primary Point of Contact: Dale Stell

Primary Point of Contact Title: Town Supervisor

Primary Point of Contact Phone: (585) 526-6317

Primary Point of Contact Email: supervisor@gorham-ny.org

Address of Requesting Organization: 4736 South Street, Gorham, NY 14461

1. Name of the Organization applying for the funding.
 - a. **Town of Gorham**
2. Name of the Project.
 - a. **Town of Gorham Water System Improvements**
3. What is the total cost of the project? How much federal funding is being requested?
 - a. **The total cost of the project is \$8,598,000.00. Please see the full project budget below.**
 - b. **The Town is requesting \$3,000,000.00 in federal funding for this project. This request has also been made to Senators Schumer and Gillibrand.**
4. The website address of the proposed recipient.
 - a. **<https://www.gorham-ny.com/>**
5. Is this a Clean Water SRF project or a Drinking Water SRF project?
 - a. **This is a Drinking Water SRF project.**
6. Is the project on your State's most recently finalized Clean Water/Drinking Water SRF Intended Use Plan (IUP)?
 - a. **This project is not on New York State's most recently finalized Drinking Water SRF Intended Use Plan (IUP). This project is eligible under SRF guidelines and will be submitted to New York State's FY2025 Drinking Water SRF IUP.**
7. Has the project received Federal funds previously? If so, please describe. Does the project have (or expects to have within 12 months) its 20% cost share requirement?
 - a. **No, this project has not received Federal funds previously.**
 - b. **This project has its 20% cost share requirement.**
8. Given the Federal nexus requirement, does the project help meet or maintain Clean Water Act/Safe Drinking Water Act standards? If so, please describe.
 - a. **Yes, this project helps to meet or maintain Safe Drinking Water Act standards. The project will help the Town of Gorham improve drinking water quality throughout its water system. Currently, the system is facing water quality issues due to an aging, corroded, and undersized pipe, an undersized water storage tank (WST), water main breaks, and low pressure throughout the system. Addressing these issues by replacing undersized and aging water main, adding water main, and replacing the aging WST with two new WSTs will allow the Town to address the drinking water quality issues at hand, reducing public health and sanitary risks to constituents. The plans and specifications for the project will be submitted to the DOH for review and approvals according to current regulations.**

9. Provide a brief overview of the project.

- a. **The Town of Gorham operates and maintains its own effective potable water distribution system and has provided reliable and cost-effective water service to residents for over 50 years. However, the Town has noted several areas of concern over recent years. The Town commissioned a Water Master Plan in 2021 to identify the primary aspects of the system requiring improvements. Several stretches of pipe throughout the system are undersized and nearing or beyond their useful service life. The aging piping has led to watermain breaks throughout the Town, exposing the Town's drinking water to contaminants and posing a threat to users. The undersized piping also provides insufficient fire protection for residents. Additionally, the Town's WST on County Road 1 is undersized; in fact, the Tank recently underwent emergency repairs due to visible leaks along the tank wall. The Town is unable to sandblast the WST for recoating, as the steel is too thin to withstand the process; the tank is thus near the end of its useful life and requires replacement. Many customers must contend with low water pressure, with forty-two customers having a pressure of less than 35 psi, which is lower than the required working pressure in a distribution system. Areas of low pressure within the distribution system may result in backflow from groundwater into the watermain, allowing contaminants to enter the drinking water.**

To address these issues, the Town will replace 19,400 linear feet (LF) of water main throughout the system, add 5,700 LF of new water main, add fire hydrants, add three pressure-reducing valves (PRVs) throughout the system, and replace the County Road 1 Water Storage Tank (WST) with two new storage tanks and auxiliary equipment. The Town will replace the water main along State Route 364, Lake-to-Lake Road, County Road, and Maiden Lane and construct new water main along Middle Road and Lake-to-Lake Road.

The Town provides water to a population of 4,373 through 1,590 water service connections, including services to the hamlets of Crystal Beach and Gorham. The Town also sells water to the Town of Hopewell. Thirty-nine of the system's connections are agricultural, 1,467 are residential, 30 are commercial, 32 are devoted to other services (recreation, community service, manufacturing, etc.), and 22 are vacant. Maintaining an effective and reliable water supply is integral for the Town to retain these residents and businesses, who require reliable potable water and sufficient fire protection, and to allow for potential expansion. Additionally, the Town must address the lack of resiliency within our system, which will only pose more risk to constituents as the Town experiences more severe flooding events due to climate change. Thus, constructing these necessary improvements throughout our water system is essential to ensure a safe and thriving future for the Town and our residents. However, without additional funding, the Town will not be able to carry out these improvements without incurring a severe debt service upon our constituents.

10. Why is this project a good use of federal funding?

- a. **The Town of Gorham provides water services to tax-paying residents throughout the Town, its hamlets, and the Town of Hopewell. Addressing the system's current issues with aging, corroded, and undersized piping, an aging water storage tank, and insufficient fire protection will save local and state taxpayer money. If these issues are not addressed, the taxpayers will be forced to foot the bill as the aging system incurs further repair and recovery costs. The local community supports this project and will benefit from having access to locally supplied, affordable, and reliable water from an updated system. These updates will ensure that the Town can retain residents and businesses and attract new development. These local benefits will, in turn, provide regional and state benefits through protecting public health in the region, providing sustainable and resilient public infrastructure, and providing opportunities for further development in the Finger Lakes region.**

Project Budget:

Mobilization/Demobilization:	\$176,700.00
Maintenance and Protection of Traffic:	\$7,000.00
8" Class 235 PVC Watermain:	\$544,570.00
8" as 12" Class 235 PVC Watermain to Density:	\$1,134,420.00
8" Gate Valve and Box:	\$29,554.00
12" Gate Valve and Box:	\$76,498.00
Hydrant Unit, including Anchor Tee, 6" Anchor Pipe, Valve & Valve Box:	\$239,736.00
Short Side Service Transfer:	\$97,635.00
Long Side Service Transfer:	\$182,310.00
Connect to Existing Watermain:	\$89,516.00
Cut/Plug Ex WM:	\$28,242.00
8" Directional Drill:	\$27,100.00
8" Directional Drill w/ Casting:	\$76,700.00
Asphalt Driveway Replacement:	\$100,560.00
Gravel Driveway Replacement:	\$81,000.00
6" Pipe:	\$9,120.00
1" Sampling & Disinfection Tap:	\$320.00
Restoration:	\$233,620.00
Clearing & Grubbing:	\$21,556.00
Pressure Reducing Valve Vault:	\$191,052.00
Replace Tank #1 w/ Two 0.5 MG Tanks:	\$2,534,742.00
Site Fencing for County Road 1 Tanks:	\$47,450.00
	SUBTOTAL:
Contingency:	\$5,929,401.00
Legal, Administration, Engineering:	\$889,400.00
	PROJECT TOTAL:
	\$1,778,800.00
	\$8,598,000.00

Town of Gorham FY 2025 CPF Requests

Supporting Documents:

Letters of Support

Map of Existing Water System

Map of Proposed Water System

Town of Gorham Water Master Plan

Town of Gorham

FY 2025 CPF Requests

Letters of Support:

- ~ Senator Pamela Helming, NYS Senate 54th District
- ~ Assemblyman Jeffrey Gallahan, NYS Assembly 131st District
- ~ William Wright, Commissioner of Public Works, Ontario
County Public Works
- ~ Kate Ott, MPH, Director, Ontario County Public Health
- ~ Ryan L. Davis, Economic Developer, Ontario County Office of
Economic Development
- ~ Todd D. Campbell, Ontario County Board of Supervisors
- ~ Christopher DeBolt, Ontario County Administrator
- ~ Tracey Dello Stritto, President & CEO, Ontario County Chamber
of Commerce
- ~ Christopher Iversen, President, Iversen Construction
Corporation
- ~ Mark Mayton, President, Flint Creek Resources, Inc.

THE SENATE
STATE OF NEW YORK



SENATOR
PAMELA A. HELMING
54TH DISTRICT

**CHAIR OF THE
MINORITY CONFERENCE**

RANKING MINORITY MEMBER

HOUSING, CONSTRUCTION AND
COMMUNITY DEVELOPMENT

INSURANCE

LEGISLATIVE COMMISSION ON
RURAL RESOURCES

COMMITTEES

AGRICULTURE

COMMERCE, ECONOMIC DEVELOPMENT
AND SMALL BUSINESS

RACING, GAMING AND WAGERING

RULES

MEMBER

LEGISLATIVE WOMEN'S CAUCUS

March 11, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Supervisor Stell,

As the New York State Senator representing the Town of Gorham, I am writing to express my support for the Town's applications for funding through state and federal grant programs. It is my understanding that the Town is seeking funding to make improvements to the water system.

The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. This project will consist of the replacement of the watermain throughout the Town, add resiliency to the system, and replace the County Road 1 Water Storage Tank. More specifically, this project will require: replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364, addition of approximately 1,300 LF of watermain along Middle Road, addition of approximately 4,400 LF of watermain along Lake to Lake Road, replacement of approximately 1,100 LF of watermain along Lake to Lake Road, replacement of approximately 2,900 LF of watermain along County Road, replacement of approximately 2,400 LF of watermain along Maiden Lane, the addition of pressure reducing valves, and the replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

District Office: 25 North St., Canandaigua, NY 14424 • (315) 568-9816 • FAX: (585) 393-0825

Albany Office: Room 711B Legislative Office Building, Albany, NY 12247 • (518) 455-2366 • FAX: (518) 426-6953

www.helming.nysenate.gov • helming@nysenate.gov



Public infrastructure is vital, and Gorham, like many other rural communities across New York State, has limited water and sewer infrastructure to meet the needs of its community members. The project will improve the infrastructure in the area and increase fire protection. Due to the numerous benefits of this project, many constituents have expressed interest in these services.

I would like to reiterate my full support for the Town's application, and I applaud the Town's commitment to improving the lives of those who live and work in Gorham.

Sincerely,



Pamela A. Helming
Senator, 54th District

District Office: 25 North St., Canandaigua, NY 14424 • (315) 568-9816 • FAX: (585) 393-0825
Albany Office: Room 711B Legislative Office Building, Albany, NY 12247 • (518) 455-2366 • FAX: (518) 426-6953
www.helming.nysenate.gov • helming@nysenate.gov





JEFF GALLAHAN
Assemblyman, 131st District

THE ASSEMBLY
STATE OF NEW YORK
ALBANY

RANKING MINORITY MEMBER
Racing and Wagering
Committee

COMMITTEES
Aging
Housing
Local Governments
Tourism, Parks, Arts and
Sports Development

March 8, 2024

Congresswoman Claudia Tenney
7171 Pittsford-Victor Road
Victor, NY 14564

Dear Congresswoman Tenney,

I am writing to express my support for the Town of Gorham's application for funding through the FY2025 Congressionally Directed Spending Program. The Town of Gorham is seeking funds to make improvements to their water system. The project will consist of replacing watermain throughout the Town, replacing the water storage tank on County Road 1, and improving the overall resiliency of the system.

The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. More specifically, the project will require the following: (1) replacement of approximately 13,000 linear feet (LF) of watermain along Middle Road, (2) addition of approximately 4,400 LF of watermain along Lake to Lake Road, (3) replacement of approximately 1,100 LF of watermain along Lake to Lake Road, (4) replacement of approximately 2,900 LF of watermain along County Road, (5) replacement of approximately 2,400 LF of watermain along Maiden Lanc, (6) the addition of pressure reducing valves, (7) the replacement of the single County Road 1 water storage tank with two storage tanks and auxiliary equipment.

Ensuring access to high quality infrastructure in communities throughout the 131st Assembly District is one of my top priorities. Public infrastructure is vital, and Gorham, like many other rural communities across New York, has limited water and sewer infrastructure to meet the needs of residents. This project will substantially improve infrastructure in the area, increase fire protection, and has the support of the local community.

For these reasons, I ask you to give full consideration to this application in accordance with all applicable rules and regulations. If I may provide further information, please do not hesitate to contact my office via email; gallahanj@nyassembly.gov or by phone; 315-781-2030.

Sincerely,

Jeff Gallahan
Member of Assembly
131st District



Ontario County Public Works

William C. Wright, P.E.
Commissioner of
Public Works
Office: (585) 396-4000

2962 County Road 48
Canandaigua, New York 14424-9553
www.ontariocountyny.gov
email: dpw@ontariocountyny.gov

Tim McElligott, P.E.
Deputy Commissioner
of Public Works
Facsimile: (585) 396-4283

HIGHWAYS ~ ENGINEERING ~ WASTEWATER SYSTEMS & SEWERS ~ BUILDINGS & GROUNDS ~ PARKS ~ PUBLIC WORKS FINANCE

March 18, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Supervisor Stell,

I am writing to express my support for the Town of Gorham's applications for funding through state and federal grant programs. It is my understanding that the Town seeks funding to make improvements to the water system.

The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. This project will consist of the replacement of watermain throughout the Town, add resiliency to the system, and the replacement of the County Road 1 Water Storage Tank. More specifically, this project will require:

- Replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364
- Addition of approximately 1,300 LF of watermain along Middle Road
- Addition of approximately 4,400 LF of watermain along Lake-to-Lake Road
- Replacement of approximately 1,100 LF of watermain along Lake-to-Lake Road
- Replacement of approximately 2,900 LF of watermain along County Road
- Replacement of approximately 2,400 LF of watermain along Maiden Lane
- The addition of pressure-reducing valves
- The replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

Public infrastructure is vital, and Gorham, like many other rural communities across New York, has limited water and sewer infrastructure to meet the needs of its community members. The project improve the infrastructure in the area and increase fire protection. Due to the numerous benefits of this project, many constituents have expressed interest in these services.

I would like to reiterate my full support for the Town's application, and I applaud the Town's commitment to improving the lives of those who live and work in Gorham.

Sincerely,

William C. Wright
Commissioner of Public Works



Public Health
Prevent. Promote. Protect.
Ontario County, NY

Ontario County Public Health



March 12, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Supervisor Stell,

I am writing to express my support for the Town of Gorham's application for funding through state and federal grant programs. It is my understanding that the Town is seeking funding to make improvements to the water system. This is great news for our residents and the community at large.

Gorham, like many other rural communities across the state has limited water and sewer options and infrastructure. Planned upgrades will add resiliency to the Town's water system and advance fire protection capacity. Access to safe drinking water and reliable sewer services are two fundamental drivers of population health.

The plan includes:

- The replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.
- Replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364
- Addition of approximately 1,300 LF of watermain along Middle Road
- Addition of approximately 4,400 LF of watermain along Lake-to-Lake Road
- Replacement of approximately 1,100 LF of watermain along Lake-to-Lake Road
- Replacement of approximately 2,900 LF of watermain along County Road
- Replacement of approximately 2,400 LF of watermain along Maiden Lane
- The addition of pressure-reducing valves

I am in full support of the Town's application and applaud them for choosing a project that will improve the lives of those who live in, work in, or visit the Town of Gorham.

Sincerely,

Kate Ott, MPH
Director, Ontario County Public Health

Director
Kate Ott, RN, MPH
Email: Kate.Ott@ontariocountyny.gov

Address
3019 County Complex Drive
Canandaigua, NY 14424-9505

Telephone
585-396-4343
Fax: 585-396-4551

Web Site
ontariocountypublichealth.com

March 8, 2024

Supervisor Dale Stell
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Supervisor Stell:

I am writing to express Ontario County Office of Economic Development's support for the Town of Gorham's applications for funding through state and federal grant programs. It is our understanding that the Town seeks funding to make improvements to the water system.


The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. This project will consist of the replacement of watermain throughout the Town to add resiliency to the system. It will also the replace the County Road 1 Water Storage Tank. Specifically, this project will require:

- Replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364.
- Addition of approximately 1,300 LF of watermain along Middle Road.
- Addition of approximately 4,400 LF of watermain along Lake to Lake Road.
- Replacement of approximately 1,100 LF of watermain along Lake to Lake Road.
- Replacement of approximately 2,900 LF of watermain along County Road
- Replacement of approximately 2,400 LF of watermain along Maiden Lane.
- Addition of pressure reducing valves.
- Replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

Public infrastructure is vital, and Gorham, like many other rural communities across New York, has limited water and sewer infrastructure to meet the needs of its community members. The project improves the infrastructure in the area and increases fire protection. Due to the numerous benefits of this project, many constituents have expressed interest in these services.

For these reasons, the Ontario County Office of Economic Development fully supports the Town of Gorham's application, and we applaud the Town's commitment to improving the lives of those who live and work in Gorham.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ryan L. Davis', with a stylized flourish extending to the right.

Ryan L. Davis
Economic Developer

Cc: Chris DeBolt, County Administrator



Ontario County Board of Supervisors

Todd D. Campbell

Chairman, Board of Supervisors
Ontario County Municipal Building
20 Ontario Street
Canandaigua, New York 14424

Kristin A. Voss, Clerk
Diane R. Foster, Deputy Clerk

Phone: 585-396-4447
E-Mail: todd.campbell@ontariocountyny.gov

April 26, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water System Improvements

Dear Supervisor Stell,

I am writing to express my support for the Town of Gorham's applications for funding through state and federal grant programs. It is my understanding that the Town seeks funding to make improvements to the water system.

The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. This project will consist of the replacement of watermain throughout the Town, add resiliency to the system, and the replace the County Road 1 Water Storage Tank. More specifically, this project will require: replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364, addition of approximately 1,300 LF of watermain along Middle Road, addition of approximately 4,400 LF of watermain along Lake to Lake Road, replacement of approximately 1,100 LF of watermain along Lake to Lake Road, replacement of approximately 2,900 LF of watermain along County Road, replacement of approximately 2,400 LF of watermain along Maiden Lane, the addition of pressure reducing valves, and the replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

Public infrastructure is vital, and Gorham, like many other rural communities across New York, has limited water and sewer infrastructure to meet the needs of its community members. The project improve the infrastructure in the area and increase fire protection. Due to the numerous benefits of this project, many constituents have expressed interest in these services.

I would like to reiterate my full support for the Town's application, and I applaud the Town's commitment to improving the lives of those who live and work in Gorham.

Sincerely,

A handwritten signature in blue ink, appearing to read "Todd D. Campbell", written over a blue horizontal line.

Todd D. Campbell



Ontario County
Office of County Administrator

Chris DeBolt
County Administrator

County.Administrator@ontariocountyny.gov
www.ontariocountyny.gov

Municipal Building
20 Ontario Street
Canandaigua, New York 14424
(585) 396-4400

Alissa Bub
Deputy County Administrator

March 11, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Supervisor Stell,

I am writing to express my support for the Town of Gorham's applications for funding through state and federal grant programs. It is my understanding that the Town seeks funding to make improvements to the water system.

The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. This project will consist of the replacement of watermains throughout the Town, add resiliency to the system, and the replace the County Road 1 Water Storage Tank. More specifically, this project will require: replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364, addition of approximately 1,300 LF of watermain along Middle Road, addition of approximately 4,400 LF of watermain along Lake to Lake Road, replacement of approximately 1,100 LF of watermain along Lake to Lake Road, replacement of approximately 2,900 LF of watermain along County Road 1, replacement of approximately 2,400 LF of watermain along Maiden Lane, the addition of pressure reducing valves, and the replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

Public infrastructure is vital, and Gorham, like many other rural communities across New York, has limited water and sewer infrastructure to meet the needs of its community members. The project will improve the infrastructure in the area and increase fire protection. Due to the numerous benefits of this project, many constituents have expressed interest in these services.

I would like to reiterate my full support for the Town's application, and I applaud the Town's commitment to improving the lives of those who live and work in Gorham.

Sincerely,

Christopher P. DeBolt
County Administrator



March 29, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Supervisor Stell,

As a leader of the Ontario County Chamber of Commerce, I am writing to express my support for the Town of Gorham's applications for funding through state and federal grant programs. It is my understanding that the Town seeks funding to make improvements to the water system.

The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. More specifically, this project will require:

- Replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364
- Addition of approximately 1,300 LF of watermain along Middle Road
- Addition of approximately 4,400 LF of watermain along Lake-to-Lake Road
- Replacement of approximately 1,100 LF of watermain along Lake-to-Lake Road
- Replacement of approximately 2,900 LF of watermain along County Road
- Replacement of approximately 2,400 LF of watermain along Maiden Lane
- The addition of pressure-reducing valves
- The replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

As a stakeholder in the community who supports the health of our business community, it is increasingly clear that a thriving business community must coexist with a healthy municipality to support and attract livable and vibrant communities. Public infrastructure is vital, and Gorham, like many other rural communities across New York, has limited water and sewer infrastructure to meet the needs of its community members.

I strongly support the Town's application, and I applaud the Town's commitment to improving the lives of those who live and work in Gorham, NY.

Sincerely,

A handwritten signature in black ink that reads "Tracey Dello Stritto".

Tracey Dello Stritto
President & CEO
Ontario County Chamber of Commerce

Iversen Construction Corporation

PO Box 214, 10 Dewey Avenue
Gorham, NY 14461

Phone 585-526-6331
Fax 585-526-6305

Christopher N. Iversen
chris@iversenconstr.com

March 7, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Supervisor Stell:

I fully support the Town of Gorham's applications for funding through state and federal grant programs. I understand that the Town seeks funding for water system improvements consisting of various improvements throughout the system. This project will replace watermains throughout the Town, add resiliency to the system, and replace the County Road 1 Water Storage Tank.

Specifically, this project will replace approximately 13,000 Linear Feet (LF) of watermain along State Route 364, 1,300 LF of watermain along Middle Road, 4,400 LF of watermain along Lake to Lake Road, 1,100 LF of watermain along Lake to Lake Road, 2,900 LF of watermain along County Road, 2,400 LF of watermain along Maiden Lane, add pressure reducing valves, and replace the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

Public infrastructure is vital, and Gorham, like many other rural communities across New York, has limited water and sewer infrastructure to meet the needs of its residents. The project will improve the infrastructure in the area, and will improve fire protection.

I would like to reiterate my earnest support for the Town's application, and I applaud the Town's commitment to improving the lives of those who live and work in Gorham.

Sincerely,



Christopher N. Iversen, pres.



*Flint Creek Resources, Inc.
4682 State Route 245
Gorham, New York 14461-0207
Tel: 315-694-1936
www.flintcr.com*

March 7, 2024

Dale Stell, Town Supervisor
Town of Gorham
4736 South St.
Gorham, NY 14461

Re: Town of Gorham Water District No. 8

Dear Dale,

I am writing to express my support for the Town of Gorham's applications for funding through state and federal grant programs. It is my understanding that the Town is seeking funding to make improvements to the water system.

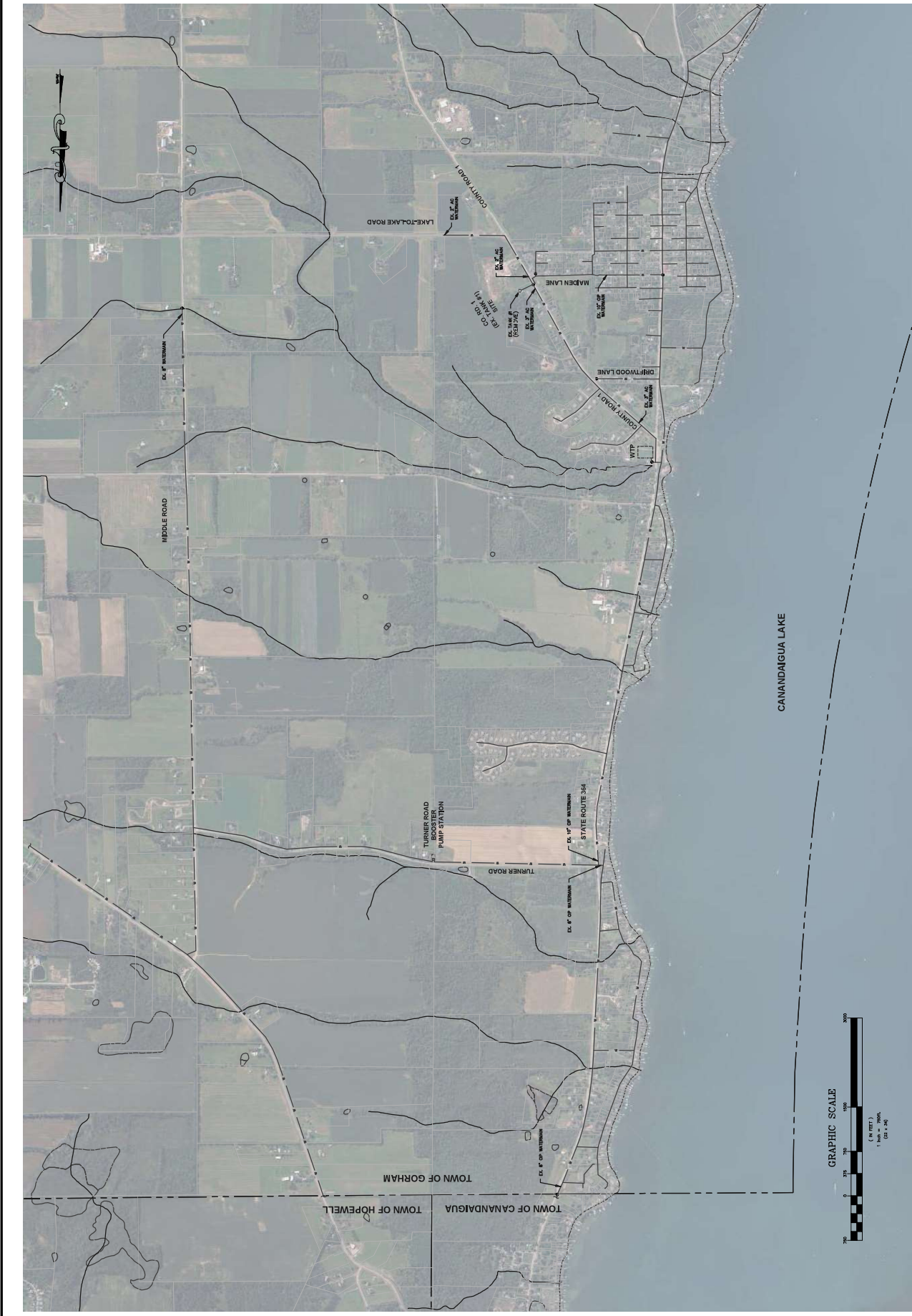
The Town of Gorham Water Improvement Project will consist of various improvements throughout the system. This project will consist of the replacement of watermains throughout the Town, add resiliency to the system, and the replacement of the County Road 1 Water Storage Tank. More specifically, this project will require: replacement of approximately 13,000 Linear Feet (LF) of watermain along State Route 364, addition of approximately 1,300 LF of watermain along Middle Road, addition of approximately 4,400 LF of watermain along Lake to Lake Road, replacement of approximately 1,100 LF of watermain along Lake to Lake Road, replacement of approximately 2,900 LF of watermain along County Road, replacement of approximately 2,400 LF of watermain along Maiden Lane, the addition of pressure reducing valves, and the replacement of the single County Road 1 Water Storage Tank with two (2) Storage Tanks and auxiliary equipment.

Flint Creek Resources provides upcycling services to photonics companies in the US and in particular, companies in New York and New England. Our processes require a constant supply of quality water. These upgrades are important to allow us to provide these services to our customers.

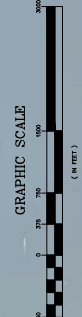
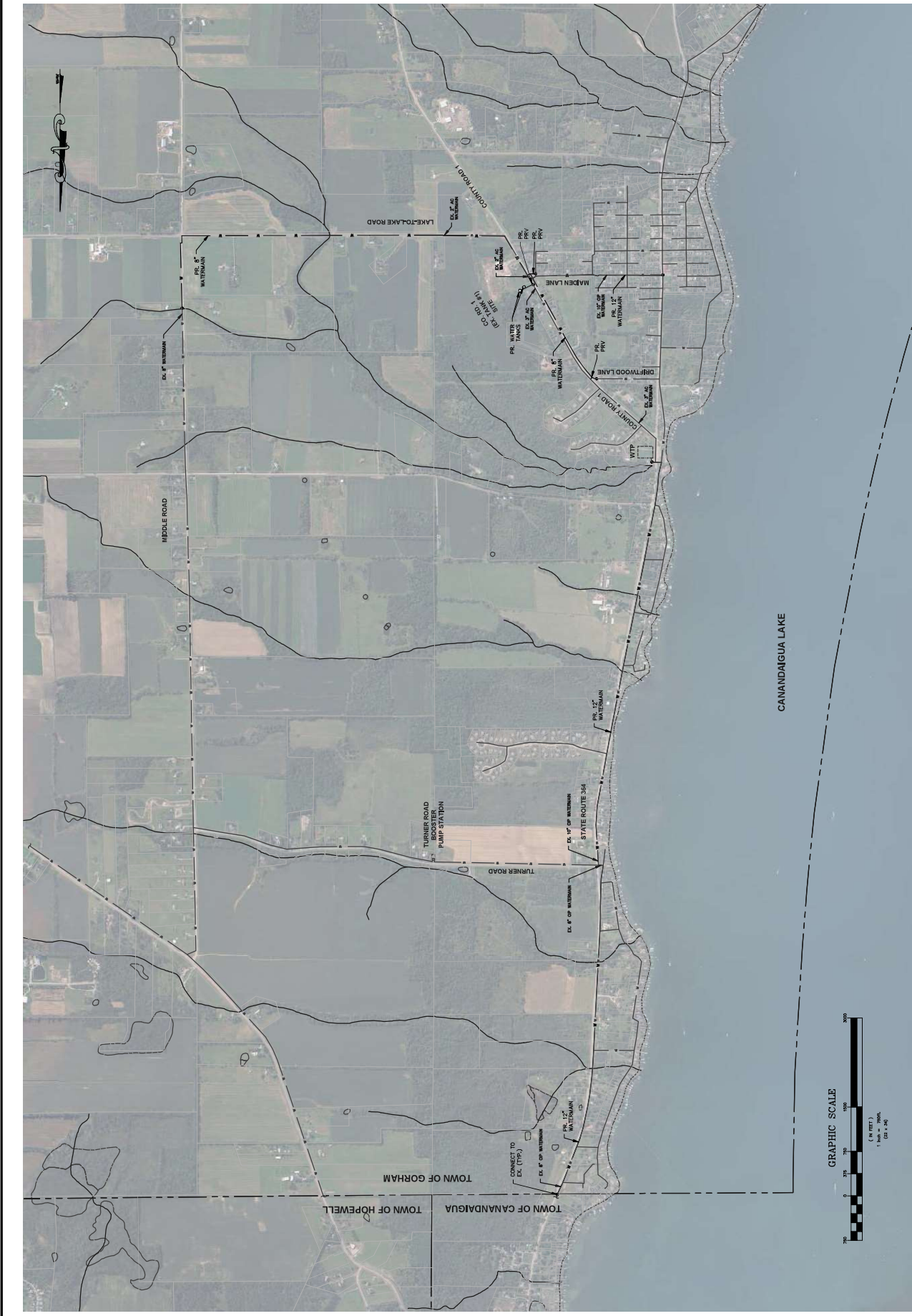
I offer my full support for the Town's application, and I appreciate the Town's commitment to improving the lives of those who live and work in Gorham.

Sincerely,

President, Flint Creek Resources. Inc.



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Town of Gorham

4736 South Street
Gorham, NY 14461

WATER MASTER PLAN

for the

TOWN OF GORHAM

February 2021

MRB Group Project No. 0735.18001.000

Prepared by:

MRB *group*

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The following is an excerpt from the New York Education Law Article 145 Section 7209 and applies to this document.

"It is a violation of this law for any person unless he is acting under the direction of a Licensed Professional Engineer or Land Surveyor to alter an item in any way. If an item bearing the Seal of an Engineer or Land Surveyor is altered, the Altering Engineer or Land Surveyor shall affix to the item his Seal and the Notation 'Altered By' followed by his signature and the date of such alteration and a specific description of the alteration".

I. INTRODUCTION

Town of Gorham operates and maintains a water system that includes: a Water Treatment Plant (WTP) on New York State Route 364 (SR364) at Crystal Beach, a water booster station on Turner Road, a water storage tank on County Road 1 (CR 1), a water storage tank on Lake to Lake Road (with a booster station), and a distribution system of various pipe sizes and types. The water distribution system generally serves the hamlets of Crystal Beach and Gorham, and several roads within Town of Gorham. Town of Gorham also sells water to the Town of Hopewell.

Town of Gorham recognizes that its water system needs improvements to address aging infrastructure, community fire protection, and current New York State Department of Health (DOH) regulations. This *Water Master Plan* provides:

- technical guidance for making decisions regarding improvements,
- considers the needs of the water system including its integrity and water quality,
- considers reasonable growth,
- identifies system deficiencies, and
- evaluates and prioritizes system improvements.

II. BACKGROUND

Town of Gorham is in central Ontario County surrounded by Canandaigua Lake, Town of Canandaigua, Town of Hopewell, Town of Seneca, Town of Potter, and Town of Middlesex. The Village of Rushville is located in south-central Gorham. Areas with significant populations include the hamlets of Crystal Beach and Gorham.

The Village of Rushville has its own water system that includes a water treatment plant, transmission and distribution mains, and storage tank. The Village sells water to the Town of Middlesex and the Marcus-Whitman Central School District. Marcus-Whitman has a dedicated transmission main and elevated water storage tank. While this water

H. WATER METERS

The Town of Gorham water districts include 1,597 water accounts, of which 113 are seasonal. When requested, the water Department installs the seasonal water meters typically in the spring, and removes them in the fall. The seasonal meters are not dedicated to a specific account. When the water Department installs the meter it documents the address, the meter's serial number, and reading. The meters are then read on a quarterly basis with a final reading taken when removed.

Typically water meters have a probable useful life of 20 years. The later service years of a meter have decreased accuracy, and thus require replacement to capture water consumption (i.e. revenue) for the district.

Based on the age of the current inventory of water meters, a water meter replacement plan should be developed to replace all of the meters more than 10 years old in the short term. This can be accomplished by replacing roughly 400 meters per year over a four (4) year period.

With advancements in meter communication technology, the next meter replacement for should consider utilizing an Advanced Metering Analytics (AMA) or Automatic Meter Reading (AMR) technology that includes a cellular end point connection. These types of meters can increase the amount of information available to the operators and potentially minimize water loss liability.

VI. WATER QUALITY

The Town of Gorham produces its own water and is solely responsible for source and distribution water quality. Those water quality parameters include, lead/copper, free chlorine, bacteriological, disinfection byproducts. Town of Gorham is under mandate by the DOH to develop a plan to address cyanotoxins in its water supply.

A. LEAD/COPPER

A review of the available water quality results do not indicated that lead/copper concentrations in the distribution system have reached any actionable level and therefore not a concern for this system.

B. FREE CHLORINE

Table VI.1 summarizes sample results published in the *2019 Town of Gorham Annual Water Quality Report*, which represents samples taken in 2013, 2017 and 2019 at designated locations within the distribution system.

C. DISINFECTION BYPRODUCTS

The Stage 1 and Stage 2 Disinfectants and Disinfection Byproducts Rules (DBPRs) are part of the suite of Microbial and Disinfection Byproducts Rules (MDBPs). MDBPs are a series of interrelated regulations that address risks from microbial pathogens and disinfectants/disinfection byproducts. Disinfection byproducts are formed in drinking water by the interaction of the disinfectant (chlorine) and organics over time.

The DBPRs specifically regulate exposure to Total Trihalomethanes (TTHM) and Five Haloacetic Acids (HAA5). These two parameters are monitored at points in the distribution system expected to have the oldest water. TTHM and HAA5 have established Maximum Contaminate Levels (MCLs) set at 65 ug/L and 36 ug/L respectively based the highest locational running average calculated from data collected. These results are below the maximum contaminant level (MCL) for each contaminant.

Table VI.1: 2018 Annual Water Quality Report

Contaminant	Units	MCL	MCLC	Water Result Average/Range
Turbidity (Before Treatment)	NTU	TT=5.0	N/A	3.9**
Turbidity (at Filters)	NTU	TT=95% of samples < 1 NTU	N/A	0.16 (0.12-0.17) 100% <1 NTU
Radioactivity				
Gross Alpha	pCi/L	15	0	None Detected
Radium 226	pCi/L	5***	0	None Detected
Radium 228	pCi/L	5***	0	None Detected
Inorganic Chemicals				
Barium	mg/L	2	2	0.023
Chromium	mg/L	0.1	0.1	0.0012
Nickel	mg/L	N/A	N/A	0.00088
Nitrate	mg/L	10	10	0.28
Copper	mg/L	AL=1.3	1.3	*0.99(0.094-1.1)
Lead	ug/L	AL=15	0	*12 (ND-17)
Disinfection By-products				
Total Thialomethanes Stage 2	ug/L	80	N/A	49 (20-100)***
Haloacetic Acids Stage 2	ug/L	60	N/A	36 (23-54)***
Microbiological Contaminants				
Total Coliform Bacteria	N/A	Two positive samples/month	0	No positive samples.

Notes: *21 samples collected for lead and copper in 2017. Level listed is 90% of the 21 sites tested.

** Highest monthly average.

*** Highest locational average of the data collected.

According to USEPA guidelines, the potential for disinfection by product formation can be estimated based on water age as determined by a well-balanced model. Review of model results indicates that the oldest water in the system generally occurs at the south end of CR 11, the south end of Middle Road, the north end of CR 17, and southwest of the hamlet of Gorham. Periodic flushing of the mains is recommended to “freshen” the water and maintain a chlorine residual.

D. CYANOTOXINS

The Town of Gorham water supply has tested positive for the presence of *cyanotoxins* and the WTP has been taken out of service for a few days at a time to protect the public water supply. When out of service, the Town relies on its supplemental supply connection to the Town of Canandaigua.

The Town of Gorham is under mandate by the DOH to develop a plan to address cyanotoxins in its water supply.

VII. AGRICULTURE

As previously discussed, water usage in the Lower service area is predominantly residential and seasonal in nature. In the Upper service area the usage is predominantly residential and agricultural in nature. Currently ~41% of the water usage in the Upper service area is agriculture and of that, ~88% of the usage is dairy. Studies of dairy operations by Michigan State University¹ determined that milking cows have a direct water usage of 35-50 gallons/head/day; and an indirect usages (i.e. cleaning, prepping, milk pre-cooling, etc.) can add 35% to 45% to the usage. The Town of Gorham should monitor dairy practices due to their potential impacts on supply and storage.

Town of Gorham supplies water to other agricultural properties identified by the Town Assessor as either vacant land or croplands. It is likely that water usage by these properties is for irrigation since they are higher than that associated with a single residential property. In other communities in the Finger Lakes region, there has been an increase in the use of drip irrigation particularly for fruit farms. This practice has resulted in significant agricultural usage. The Town of Gorham should monitor irrigation practices due to their potential impacts on supply and storage.

Agricultural demands in Town of Gorham have a significant impact on supply and storage capacity. The Town of Gorham should closely monitor agricultural water usage in its service areas. Growth in agricultural water demands can be greater than population growth, particularly with dairy operations as the size of herds change.

¹ *Estimating Water Usage on Michigan Dairy Farms (1,000 head)*, Dr. Craig V. Thomas, Michigan State University

X. PROPOSED IMPROVEMENTS

Review of the water treatment and distribution system identified several improvements needed to bring the existing water treatment plant into compliance with current DOH standards, address emerging contaminants, bolster overall system performance, and allow reasonable growth. The recommendations are made without regard to providing a prolonged, supplemental water supply to the Town of Seneca due to demands.

A. HIGH LIFT PUMPS

Increasing high lift pump capacity allows the water plant to fill Tank #1 during maximum day demands while the Turner Road pump station takes water, and to provide future maximum day demands with one pump out of service. Since the pumps are relatively new (<10 years) increasing capacity should be considered the next time they need replacement, or as part a long term project designed to address increasing system demands.

Increasing high lift pump capacity also requires increased raw water pump capacity that exceeds the high lift capacity, upgrades to the DE filters, and additional clear well capacity to provide needed CT. These improvements may also require modifying the water supply permit and other regulatory approvals.

B. DE FILTERS

The existing DE filter system relies on all four filters in order to supply 1.5 MGD as allowed under water supply permit. The *RSWW* requires a filter system to be design based on three filters with one out of service. The DOH has indicated that future improvements made to the water treatment plant will need to bring the plant into compliance with current standards.

It is recommended that the filters be cleaned and inspected to determine their viability for long term use, and to identify the source of the DE media observed in the clear well. When the DE filters reach the end of their useful life, or system demands exceed the design capacity of the filters, they should be replaced with units that conform to current design standards.

Based on estimated future demands, the filters will need replacement with larger units so they can provide anticipated maximum day demands. Increasing the capacity of the filters may also require modifying the water supply permit.

Due to a concern that DE filter media may lyse harmful bacteria cells and release cyanotoxins into the water supply, pre-filtration is recommended to help remove intact cells.

C. UV SYSTEM

The current UV system does not comply with the *RSWW*, it is recommended that the UV system be replaced either with a compliant, two unit system. Modification of the UV system should also include provisions to add advanced oxidation in the future should it be needed to remove cyanotoxins.

D. EMERGING CONTAMINANT TREATMENT

Emerging contaminants of concern to the Town of Gorham include cyanotoxins, and PFOS and PFOA. It is recommended that improvements to the treatment plant include treatment for these emerging contaminants.

1. Cyanotoxins

Treatment and removal of *cyanotoxins* is an emerging technology. USEPA and AWWA research identifies, and continues to study, various technologies for treatment and removal of *cyanotoxins*. Effective methods identified to date include filtration, pre-treatment oxidation, UV radiation with advanced oxidation, and removal with granular activated carbon (GAC),

a. Pre-Filtration

Conventional filtration can remove cyanotoxins in their intracellular state (intact cells) but will not remove extracellular toxins (toxins released from the cells). There is a concern that DE filter media, due to its structure, can lyse cells causing the release of toxins. The use of chlorine for zebra mussel control may weaken cells walls making them more susceptible to lysing by DE media. For this reason, pre-filtration with a pressure,

multimedia filter is recommended to help remove cyanotoxins in the intracellular state. Filter media with a structure that is less susceptible to lysing cells should be selected.

b. Oxidation

Town of Gorham utilizes chlorine for zebra mussel control and for disinfecting the water supply.

The effectiveness of pre-treatment oxidation depends on the type of *cyanotoxin*. According to AWWA, “research has demonstrated effective oxidation of microcystins and cylindrospermopsin by free chlorine, but that free chlorine is generally ineffective against anatoxin-a” (*Managing Cyanotoxins in Drinking Water: A Technical Guidance Manual for Drinking Water Professionals*, AWWA September 2016).

“Oxidation often stresses or lyses cyanobacteria cells releasing the cyanotoxin to the water. If oxidation is required to meet other treatment objectives, consider using lower doses of an oxidant less likely to lyse cells. If oxidation at higher doses must be used, sufficiently high doses should be used to not only lyse cells but also destroy total toxins present” (USEPA, *Cyanobacteria and Cyanotoxins: Information for Drinking Water Systems*, June 2019).

Upgrades made to the clear well to allow 1-log disinfection inactivation should also consider contact time necessary to manage *cyanotoxins*. Example CT tables published by the USEPA (*Water Treatment Optimization for Cyanotoxins*, EPA, October 2016), indicate that additional CT than currently available may be necessary to manage microcystins and cylindrospermopsin by free chlorine. Additional treatment may also be required to manage anatoxin-a, if present.

c. UV Radiation

“UV radiation alone is not effective at oxidizing microcystins and cylindrospermopsin at doses typically used in drinking water treatment. When UV radiation is coupled with ozone or hydrogen peroxide (called “advanced oxidation”), the process is effective at oxidizing anatoxin-a, cylindrospermopsin, and with high UV doses, microcystins” (USEPA, *Cyanobacteria and Cyanotoxins: Information for Drinking Water Systems*, June 2019).

Upgrades to the UV system necessary to bring it into compliance with current design standards should also consider increased UV dose, and additional chemical treatment, necessary to add Advanced Oxidation to the treatment process.

d. Granular Activated Carbon

“Effectiveness of GAC adsorption varies based on type of carbon, pore size, type of cyanotoxin, and other water quality parameters such as NOM concentration. GAC is effective for microcystins, and likely effective for cylindrospermopsin, anatoxin-a and saxitoxin. The condition of the carbon is an important factor in determining GAC’s effectiveness for cyanotoxin removal. GAC may need to be regenerated more frequently to ensure adequate adsorption capacity for HAB season” (USEPA, *Cyanobacteria and Cyanotoxins: Information for Drinking Water Systems*, June 2019).

Currently the Town of Gorham water treatment plant does not utilize GAC in its treatment process. Upgrades to the treatment plant should consider GAC for *cyanotoxin* treatment.

2. PFOS / PFOA

PFOS and PFAS are man-made chemicals that persist in the environment and can bioaccumulate in the body. Treatment technologies found to remove PFOS and PFAS include activated carbon, ion exchange resins, and high-pressure membranes. (USEPA, *Reducing PFAS in Drinking Water with Treatment Technologies*, August 23, 2018).

Should PFOS / PFAS be identified in the raw water supply, Town of Gorham should consider adding treatment utilizing GAC as part of a treatment plant upgrade. GAC is also an effective treatment for *cyanotoxins*.

E. CLEAR WELL

It is recommended that the level sensor for the clear well be replaced and calibrated with a unit that measures total depth from the floor of the clear well. Plant operation should then be modified to assure a minimum depth in the clear well of 8.3-feet, and the high lift pump flow limited to 625 gpm.

Additional clear well capacity is needed to allow high lift pump flow rates greater than 625 gpm and potentially to provide cyanotoxin inactivation.

F. PUMP STATIONS

Based on the areas that have expressed an interest in public water, it is apparent that the Upper service area needs to be modified to create a High service area that supplies higher elevations. There are two approaches to fill water storage tanks located at a higher elevation. The first is to upgrade the Turner Road pump station, and the second is to provide a new pump station at Tank #1 with a dedicated transmission main to fill a higher tank. Both approaches include emergency power at each pump station.

1. Turner Road Pump Station

Modifications are needed to the Turner Road pump station to replace aging pumps and to allow the pump station to potentially fill a new higher tank. Upgrades to the pump station need to consider not only system demands but also changes to the distribution system including Tank #2.

Upgrading the Turner Road pump station to fill a higher tank allows Tank #2 and its associated pump station to be taken out of service. A new higher tank will lock Tank #2 out of the system.

Upgrading the Turner Road pump station may also necessitate other system improvements needed to prevent the pump station from starving the lower service area during maximum day and peak hour demands or over-pressurizing the distribution system when filling a higher tank. These improvements may include upgrading the high lift pumps at the water treatment plant (see above), adding additional storage in the lower service area, possible water main upgrades depending on the final capacity of the pump station, and pressure regulating valves that may be needed to manage pressure not only in the Town of Gorham but also the Town of Hopewell since it is supplied by the pump station.

Because of pressure management concerns, upgrading the Turner Road pump station to fill a higher tank may not be technically feasible. However, upgrades may still be needed as the existing pumps reach the end of their useful life.

2. Tank #2 Pump Station

The existing Tank #2 pump station is a pressure demand system sized to provide domestic flow to limited properties on Lake to Lake Road and Yautzy Road. The pump station is not suitable to fill a tank located at a higher elevation. The station would need to be upgraded so it can fill a tank. Because upgrading this pump station relies on the Turner Road pump station for supply by filling Tank #2, there is a risk that if the Turner Road pump station is off line for an extended time, that the Upper Zone may not be able to supply a new High zone. However, upgrading the station cannot be discounted since it can potentially provide an alternate source of supply to the upper zone.

3. Tank #1 Pump Station

Adding a new pump station at Tank #1 that is design to fill a new tank in a new High service area is the preferred approach. Under this approach, the new Tank #1 pump station would utilize a dedicated transmission main to fill a new tank located in a new, higher hydraulic grade zone. Design of the pump station and transmission system would also allow filling Tank #2 in the event the Turner Road pump station is out of service for an extended time.

G. WATERMAINS

Watermain improvements can be broken down into three categories; replacement, transmission, and expansion.

a. Replacement

Over ~31% of the water distribution system includes 3-inch or smaller pipe that limits fire protection capabilities. It was also noted that several of the smaller diameter lines are dead ends, with gaps of 100 feet (+/-) between sections on common streets. It is recommended that Town of Gorham replace the smaller pipes with 6 inch or large pipe in order in bolster performance and reliability while still managing water age.

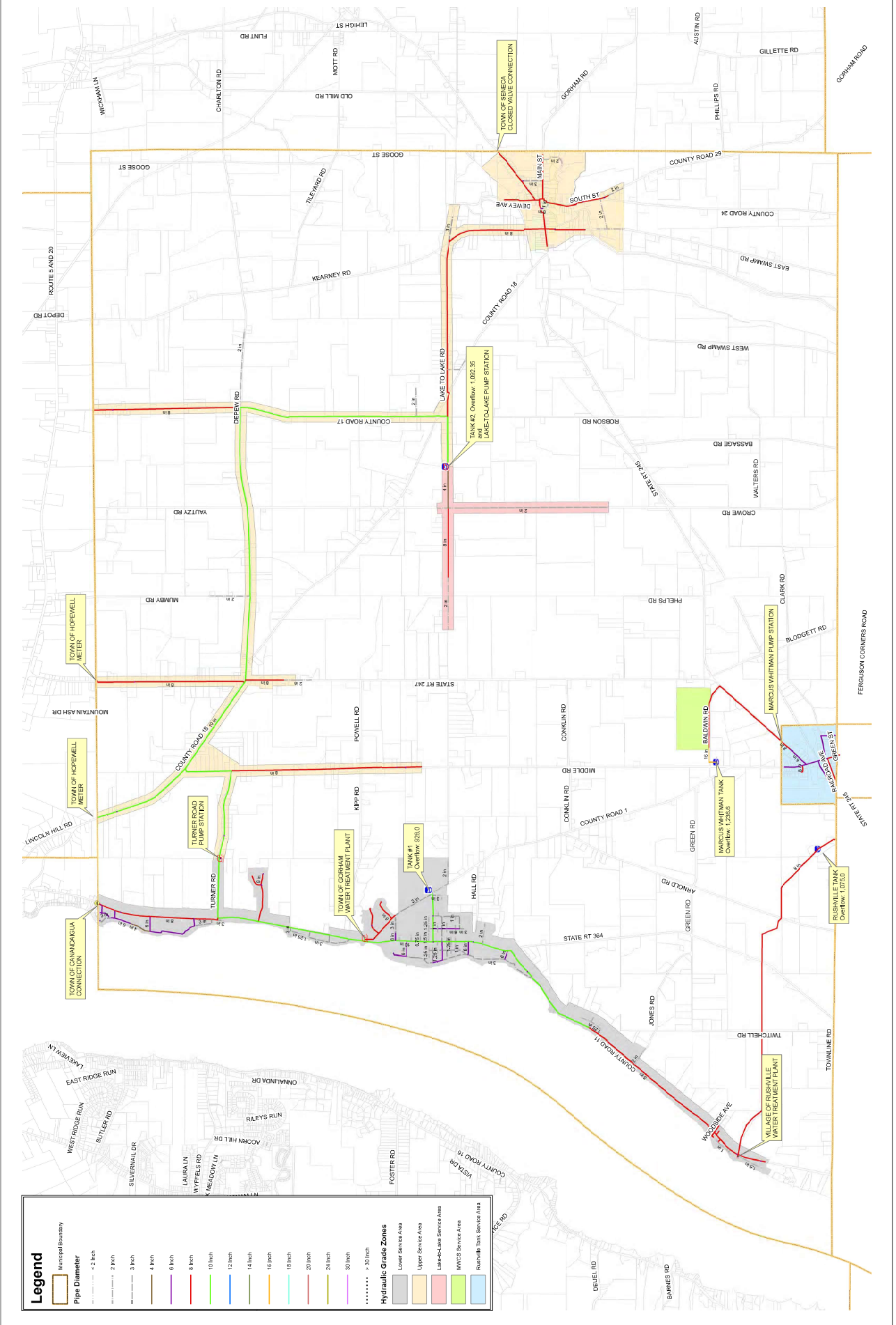
The Town replacement of undersized water mains either as a capital improvement project and/or as an annual budget item that considers 1% to 2% annual replacements.

as the WIIA for submission to the competitive grant, but also includes an executed Intermunicipal Agreement (IMA).

XIII. CONCLUSION

This *Water Master Plan* identified several improvements for overall system durability and performance, as well as addressing the needs of a growing supply area. These improvements generally include treatment, distribution, and storage. The highest priorities being addressing cyanotoxins, consistently providing disinfection CT, and system pressure equalization and fire protection storage.

The immediate need for the water system is to address the potential for cyanotoxines in the water supply, and to address storage issues in the Upper service area.



Legend

Municipal Boundary

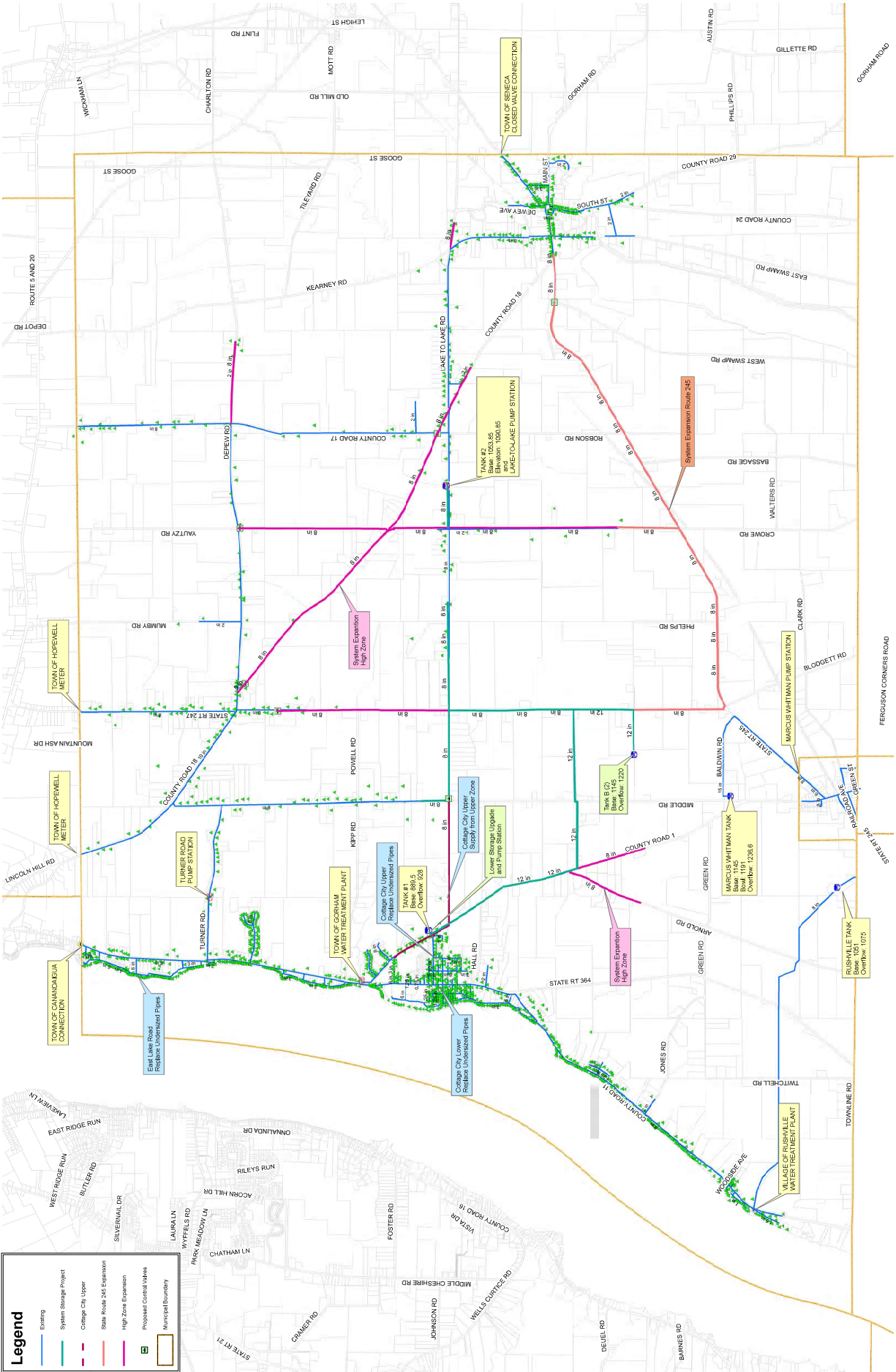
Pipe Diameter

- < 2 inch
- 2 inch
- 3 inch
- 4 inch
- 6 inch
- 8 inch
- 10 inch
- 12 inch
- 14 inch
- 16 inch
- 18 inch
- 20 inch
- 24 inch
- 30 inch
- > 30 inch

Hydraulic Grade Zones

- Lower Service Area
- Upper Service Area
- MWS Service Area
- Lake-Plake Service Area
- Rushville Tank Service Area

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Legend

- Existing
- System Storage Project
- College City Upper
- State Route 245 Expansion
- High Zone Expansion
- Proposed Contour Lines
- Municipal Boundary

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