MRB group

MASC
Municipal Association of South Carolina℠

Qualifications for Engineering Services for Various Projects and On Call Services

October 17, 2022

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Jake Broom, Chief Operting Officer
Municipal Association of South Carolina
PO Box 12109
Columbia, SC 29211

RE: RFQ SUBMITTAL-ENGINEERING SERVICES FOR VARIOUS PROJECTS AND ON CALL SERVICES

Dear Mr. Broom:

MRB Group Consulting, P.C. is pleased to submit our qualifications to provide water and wastewater system planning and design services to various local governments in the Municipal Association of South Carolina (MASC) spurred by the American Rescue Plan Act (ARPA)funding.

MRB Group is a water/wastewater civil engineering consulting firm at its core. Our business and professional model is relationship-based. We are focused on the long-term success of our clients, becoming their partners and trusted resources in order to improve and advance the communities we live in.

Our firm has 95 years of direct experience in water and wasterwater planning, design, construction, commissioning and operating and have assembled a dynamic team for this project that is not only technically qualified but is also highly experienced, knowledgeable, innovative, and ready to support MASC goals and mission. Britton Corbin, P.E., will be the Senior Project Manager and has intimate knowledge of delivering water and wastewater infrastructure projects from conceptual planning to commissioning througout South Carolina and is supported by a talented project team, considered experts in their respective fields.

Thank you for reviewing and considering our qualifications. Should you have any questions regarding this submission, please don't hesitate to contact us.

Sincerely,

Ryan T. Colvin, P.E.
President / CEO

Britton Corbin, P.E.
Senior Project Manager

1. TECHNICAL APPROACH/ UNDERSTANDING

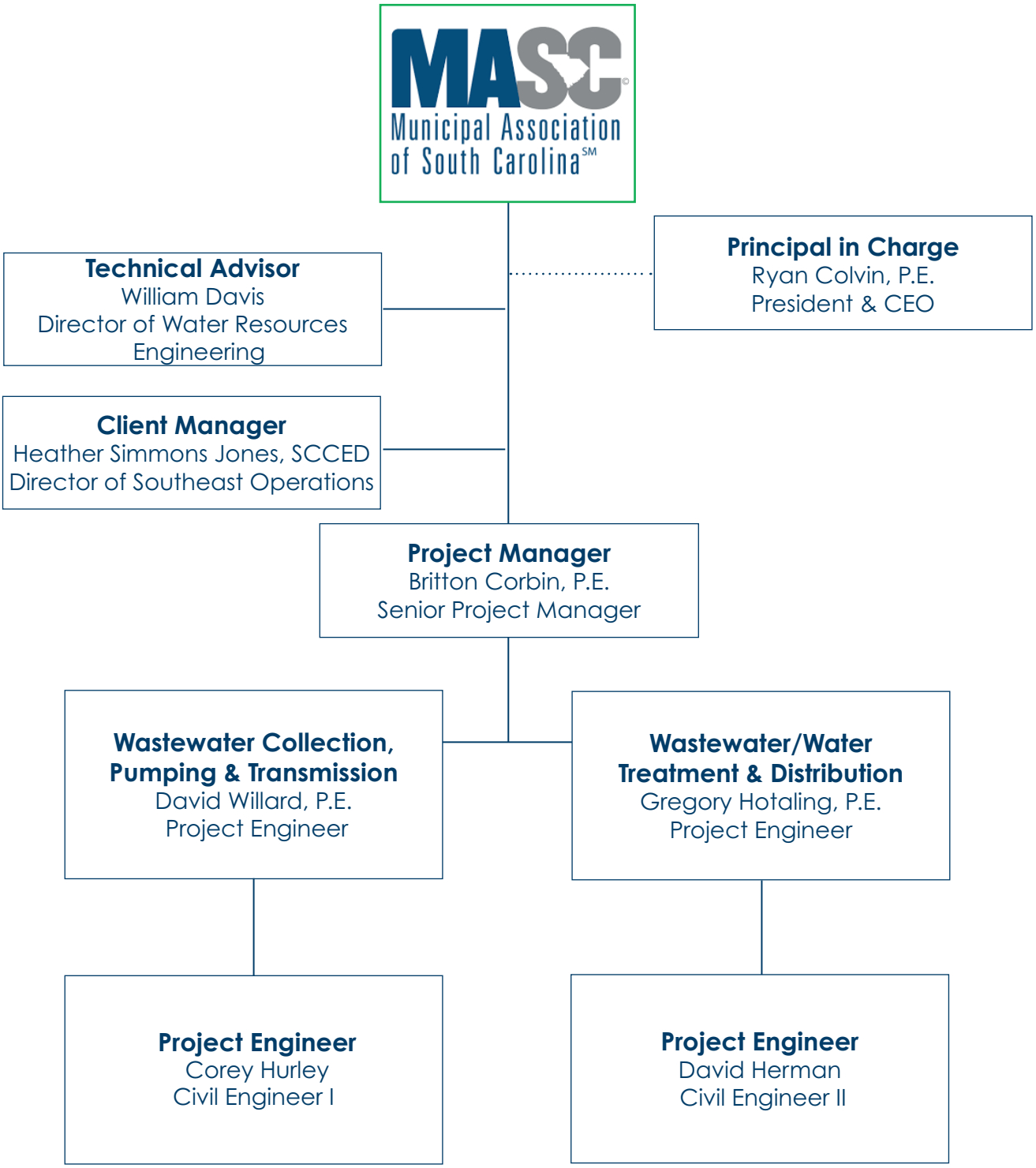
MRB group

MRB Group recognizes the need for proper public project execution within limited funds. The key to maintaining cost-efficient design delivery and administrative services with our clients is to understand the necessary steps to complete a project on time and within budget, as delineated below:

1. It is critical to understand the available ARPA funds at the beginning of the project to delineate tasks successfully. MRB Group will communicate with each client within the MASC to review potential projects.
2. Upon receipt of the Notice to Proceed, MRB Group will coordinate a project kick off meeting with the project stakeholders to define the project scope, the project objectives, roles and responsibilities, communication protocols, and project schedule. A site visit will be conducted or a "windshield" survey for linear projects after the project meeting. Meeting minutes will be created and distributed to the meeting attendees.
3. MRB Group will gather and review the client's Water and Sewer Master Plan (if available), Comprehensive Plan, GIS data, water and sewer record drawings and any other pertinent information that would assist in the preliminary design phase.
4. MRB Group will initiate surveying services depending on the project type. For water or sewer projects confined to a single parcel, a traditional, ground based survey will be conducted to establish the existing conditions of the site. For longer linear projects, LIDAR will be used to establish grades and surface features.
5. For linear projects, MRB Group will coordinate with the client on potential easement acquisitions for projects not located within the highway rights-of-way and assist in property acquisition if necessary. Projects located within highway-rights-of-way will be coordinated with the South Carolina Department of Transportation or other controlling entity.
6. For large and complex projects, MRB Group will prepare a Basis of Design Report memorializing the previous findings and conduct a design charette as necessary to ensure that the proposed project scope and design parameters meets the client's expectations and objectives.
7. MRB Group will prepare progress plans, specifications, and cost estimates at the 30%,60%, 90%, and 100% completion levels. After review by the client, a design review meeting will be conducted at these interim levels.
8. Linear projects crossing multiple parcels may require public involvement. If necessary, MRB Group will conduct a public meeting to discuss the project with local residents and gather feedback.
9. Wetland Permitting, if necessary, will be initiated after the 30% design has been completed. SDHEC Bureau of Water permitting will be initiated after the 60% design has been completed.
10. MRB Group will prepare final sealed design documents to include plans, specifications, permits, and cost estimates and assist the client in obtaining all required permits.
11. MRB Group will assist the client during the bidding phase, conducting the prebid meeting, answering contractor questions during bidding, and conduct the public bid opening if required. MRB Group will provide a bid summary to the owner so they can make an award.
12. Once the construction contract is awarded, MRB Group will provide construction administration services including administering the project kickoff meeting, shop submittal review, and construction observation and administrative services (as necessary) for the duration of the project.
13. Once construction is completed, MRB Group will assist the MASC with commissioning activities and obtaining the required permit to operate.

2. WORK MANAGEMENT PLAN/ EXPERIENCE OF PROPOSED TEAM

The projects will be managed from MRB Group's Charleston office, with support from our headquarters in Rochester, New York, and additional offices in Texas. Our management plan incorporates Britton Corbin, P.E. and Heather Simmons Jones' local knowledge and professional experience. However, MRB Group's resources are not limited to our local staff. Team members collaborate on projects daily which ensures seamless services without interruption.



BRITTON CORBIN, P.E.
Senior Project Manager

MRB group

Senior Civil Engineer with 20 years of experience designing and managing large civil infrastructure projects and associated project teams. Areas of expertise includes all aspects of planning, designing, construction oversight, and commissioning of projects up to $200 million. Planning and programming experience includes establishing project requirements, gathering stakeholder input, alternative analysis, and contract execution strategies. Design experience includes water distribution and wastewater conveyance, hydraulic modeling, civil site design associated with land development, aviation terminal layout and design, airfield pavements, building layout and design, and MEP coordination.

Expertise

Civil Engineering
Consulting Engineer of Record for commercial, industrial, and municipal projects. Areas of expertise include water and wastewater design and hydraulic modeling as well as civil site design associated with land development. Additional duties include, permitting, project management, client management, billing and oversight of staff engineers.

Project Programming
Extensive knowledge of planning and programming of infrastructure projects, including facilitating design charrettes, preliminary planning, gathering stakeholder input, alternative analysis, cost estimating, and evaluating contract executing strategies.

Key Projects
- Berkeley County, SC – Camp Hall Master Sewer Extension*
- Berkeley County, SC – CIF Bond Water Project*
- Berkeley County, SC – Sewer Master Plan*
- Monks Corner, SC – Stormwater Review*
- Summerton, SC-new Pump Stations and Force Main*
- Jacksonville, NC – Camp Lejune Water Hydraulic Model*
- Jacksonville, NC – Camp Lejune Water System Testing*
- Aiken, SC – Montmorceni-Couchton Water Project*
- Sumter, SC – Water System Evaluation*
- Edisto Beach, SC – Water Master Plan*
- Edisto Beach, SC – Well No.1 Pump Replacement*
- Charleston, SC – Regional Pump Station and Wastewater Interceptor*
- Charleston, SC – Daniel Island Wastewater Treatment Facility Expansion*
- Charleston, SC – Daniel Island Pump Station No. 84 *
- Bamberg County, SC – Regional Water System Development*

Education
M.S., Civil Engineering, Clemson University, 2002

B.S., Civil Engineering, The Citadel, 2001

Professional License:
Professional Engineer, South Carolina, #25068

Primary Location:
Charleston, South Carolina

* **Britton's experience prior to joining MRB Group**

William G. Davis
Director of Water Resources Engineering

MRB group

Years of expertise in civil and environmental engineering, including the analysis, evaluation, design, construction, and operation of water and wastewater treatment facilities and system components. Direct experience in operations, holding a Grade 2-A Water Treatment Operator License, a Grade D Water Distribution License, a Grade 2 Wastewater Treatment Operator License, and earning a Code Enforcement Compliance Certificate from the State of New York.

Well-versed in regulatory compliance, having an excellent, long-standing working relationship with agency officials.

Expertise

Water/Wastewater Design – Extensive background in the design of new water and wastewater treatment facilities, and in the re-design of upgrades and/or other improvements to inefficient or antiquated existing water/wastewater infrastructure. In-depth knowledge of Sequencing Batch Reactor process (SBR), Membrane Bio-Reactor (MBR) treatment, Biological Nutrient Removal (BNR), aerobic and anaerobic digesters, influent processes, effluent water re-use, treatment disinfection systems, fixed film technology, and green technology and sustainability. Manages team of highly qualified professionals involved in numerous capital projects, providing on-going oversight and support to engineers and facility operators, municipal officials, and constant communication with federal, state, and local regulatory agencies.

Municipal Engineering Services – Previous hands-on experience as a municipal wastewater operator, with direct training and ability to operate water/wastewater treatment facilities, and distribution and collection systems. Direct experience and invaluable insight in district operations, budget preparation, repair and maintenance procedures and schedules, and strategic long-range municipal planning.

Studies, Plans, and Reports – Vast experience conducting comprehensive wastewater treatment headworks analyses, Inflow & Infiltration (I & I) evaluations, sanitary sewer system studies, and town-wide reviews, providing municipalities a better understanding of existing conditions and inefficiencies, and recommendations to enhance overall water/wastewater quality and operations.

Education

B.S., Environmental Studies, SUNY College of Environmental Science and Forestry, 1995

A.A.S., Individual Studies, SUNY College of Technology at Delhi, 1992

Professional Affiliations

New York Water Environment Association – Member Education Committee Chair

Former President Genesee Valley Chapter of NYWEA

Water Environment Federation

Finger Lakes Water Works Association

New York Rural Waters Association (NYRWA)

Primary Location:
Rochester, New York

Key Projects

Report Analysis and Evaluations

- Western Wayne County Regional Wastewater Treatment Plant
- City of Ithaca Wastewater Treatment Plant, Headworks Analysis
- Village of Seneca Falls, Wastewater Treatment Plant Headworks Analysis
- Village of Belmont Wastewater Treatment Plant Headworks Analysis
- Village of Seneca Falls, Facility Plan
- Villages of Waterloo, Genesee, and Dansville, Flow Management Plans
- Town of Savannah, Sewer District No. 1 Treatment System Evaluation
- Villages of Geneseo, Waterloo, and Farmington, Spill Prevention Reports
- Wayne County, Regional Wastewater Treatment Facility Plan
- Village of Union Springs, Hydrogen Sulfide Investigation
- Village of Geneseo, Sanitary Sewer System Infiltration/Inflow Investigation
- City of Canandaigua, Water Treatment Plant Evaluation
- Town of Farmington, Building Code Review
- Village of Avon, Wastewater Treatment Plant Evaluation and 5 Year Plan
- Village of Bergen, Wastewater Treatment Plant Regional Study
- Village of Trumansburg Water Treatment Plant Study
- Village of Trumansburg Wastewater Treatment Plant Plan
- Village of Hamilton Wastewater Treatment Plant Facility Plan
- Village of Dryden Water Treatment Plant Study
- Village of Geneseo Water Plant and Wastewater Plant Evaluations

Sewer Use Laws and SIU Permits

- Wayne County Water and Sewer Authority
- Town of Farmington
- Village of Hamilton
- Village of Avon
- Village of Dansville
- Village of Waterloo

Mr. Davis is currently the Project Manager / Primary Client Contact for the following municipalities:

- Town of Avon
- Village of Avon
- Village of Dansville
- Village of Dryden
- Town of Farmington
- Village of Geneseo
- Village of Hamilton
- Village of Hoosick Falls
- City of Hornell
- Village of Newark
- Town of Palmyra
- Village of Perry
- Village of Rushville
- Village of Trumansburg
- Town of Ulysses
- Village of Wayland
- Village of Wellsville

HEATHER SIMMONS JONES, SCCED

Director of Southeast Operations

MRB group

Strategic advisor, public administrator, non-profit leader, and economic development practitioner. Heather is a known entity in economic development in the Southeast, having worked primarily in South Carolina over the past two decades.

Heather has benefitted the communities she has served by providing the leadership, vision, and energy needed to bring stakeholders together for consensus building and engagement.

Heather has over twenty years of experience in grant sourcing, applications, and administration.

Expertise

Community Development – Supported community development efforts and collaborated on strategic plans to address community infrastructure, business recruitment and retention strategies, resiliency planning, adaptive reuse projects, and small business support.

Additionally, Heather has led cultural programming development, streetscape projects, façade improvements, and transportation infrastructure development and enhancement. As a trained, skilled facilitator and consensus builder, Heather has pulled together communities around polarizing topics to yield positive outcomes.

Economic Development Programming – Served as lead local developer for four counties in addition to driving strategy and program development for multiple municipalities throughout South Carolina.

From agency leadership to project management, Heather's experience ranges from securing South Carolina's largest manufacturing project for 2016, to driving investment in downtowns and smaller communities. She has the vision to see what is appropriate and possible while applying the energy to rally stakeholders around the plan.

A champion for industrial growth and high-tech sectors, she has served on the executive committee of SCBIO, helping to drive the conversation around life sciences growth and prosperity in the Southeast; and served as a trustee of the SC Research Authority under appointment by Governor Henry McMaster, guiding the state's investments in the innovation economy.

Education

M.A. Human Resources Development, Clemson University

B.A., Clemson University

Professional Affiliations & Training

South Carolina Certified Economic Developer

South Carolina Economic Developers Association

SC Executive Institute, Harvard Business School

Diversity Leaders Initiative, Furman University

Local Government Leadership Institute (SC) - Advanced Programming

Primary Location:
Charleston, South Carolina

Gregory J. Hotaling, P.E.

Wastewater/Water Treatment &
Distribution Engineer

MRB group

Extensive civil and environmental engineering experience includes conducting water/wastewater studies and evaluations, and planning and designing water/wastewater treatment plant upgrades, water and sewer main installations, and road and drainage improvements.

In-depth background and direct experience as municipal engineer, assisting local officials and community boards in infrastructure analysis, long-range strategic planning, and environmental review. Strong familiarity with federal, state and local regulatory and permitting processes.

Expertise

Water/Wastewater Improvement Projects – Experienced in preparing thorough engineering reports, facility master plans, and hydraulic analyses. A proven track record for system design and upgrades that increase capacity, maximize operational efficiency, and enhance treatment quality. Expertise in the design and layout of water treatment and storage facilities, force mains, sanitary sewers, pump stations and appurtenances. Strong familiarity with the evaluation, extension, and formation of consolidated water districts.

Wastewater/Water Projects

- Town of Canandaigua, Nott Road Water System Extension
- Town of Farmington, Route 96/Hook Road Pump Station Replacement
- Town of Farmington, Wastewater Treatment Facility Improvements
- Town of Penfield, Ext. 19 (Forcemain Rehabilitation)
- Town of Penfield, Thomas Cove Sewer and Water District
- Town of Penfield, Sewer and Water District Extensions Extensions
- Town of Savannah, Sewer District Extension
- Town of Savannah, Comprehensive Water Project
- Village of Dansville, Wastewater Treatment Plant Improvements
- Village of Geneseo, Wastewater Treatment Plant Improvements
- Village of Hilton, Old Hojack Lane Water Main Improvements
- Village of Lima, Improvements to Wastewater Facility
- Village of Newark, Wastewater Treatment Plant Improvements
- Village of Rushville, Wastewater Treatment Plant Improvements
- Village of Seneca Falls, Improvements to existing facility
- Village of Seneca Falls, Sewer Rehabilitation Project
- Village of Sodus Point, Water Improvement Project
- Village of Waterloo, Wastewater Treatment Plant Improvements

Education

B.S. Environmental Resource Engineering (EAC/ ABET), SUNY College of Environmental Science and Forestry

Professional License

Professional Engineer, New York

Professional Affiliations

New York Water Environment Association (NYWEA)
Finger Lakes Water Works Conference (FLWWC)

Primary Location:
Rochester, New York

David R. Willard, P.E.

Wastewater Collection, Piping,
& Transmission Engineer

MRB group

Highly respected civil engineer, with a strong focus on analyzing, evaluating, designing, and rehabilitating and/or replacing wastewater treatment and collection infrastructure and sanitary sewer systems. Expertise in conducting infiltration and inflow (I&I) studies and surveys, and assisting municipalities in identifying specific repairs or alternative solutions to reduce I&I.

Dave's experience includes wastewater collection and sanitary sewer system projects, and on numerous water and sewer main projects, experience includes planning, design, bidding, and construction observation services.

Expertise

Water and Wastewater Collection Systems/Sanitary Sewers
Specialized expertise in planning, design, and construction observation of water and sewer main design and improvement projects. Thorough understanding of design techniques and infrastructure related to gravity sewer mains, force mains, trunk interceptors, sewer relocation and realignment, sewer relining, and trenchless sewer repair methods and other sewer rehabilitation methods.

Water and Sewer Main Projects

- Blind Sodus Bay, Sanitary Sewer Project
- City of Hornell, Sanitary Sewer Rehabilitation Project
- Monroe County Department of Environmental Services, Village of Scottsville, and Town of Wheatland, Regional Pump Station and Force Main
- Monroe County Department of Environmental Services/Village of Spencerport, Sanitary Sewer, Pump Station, and Force Main Project
- Port Bay, Sanitary Sewer Project
- Town of Farmington, Loomis Road Sanitary Sewer
- Town of Penfield, Creek Street Sanitary Sewers
- Town of Penfield, Extension No. 19 Force Main Rehabilitation
- Town of Perinton, Sanitary Sewer Project
- Town of Pittsford, Tobey Road Sanitary Sewer
- Village of Marcellus, Sanitary Sewer Improvements
- Village of Newark, East Newark Pump Station
- Village of Red Creek, Sanitary Sewer Project
- Village of Scottsville, Scott Crescent Sewer and Water Main Replacement
- Village of Spencerport, Inflow and Infiltration (I&I) Study
- Village of Spencerport, I&I Reduction Project
- Village of Spencerport, Sanitary Sewer System Rehabilitation

Education

B.S., Civil Engineering Technology, Rochester Institute of Technology

Professional License

Professional Engineer, New York

Primary Location:
Rochester, New York

David Herman
Civil Engineer II

David's experience includes water, wastewater, structural, site design, and sewer projects. He performs SWPPP inspections for municipal clients and general CADD and 3D CADD modeling. His extensive onsite construction observation work experience is paired with his knowledge of engineering theories, principles, specifications, and standards.

Expertise

Water/Wastewater Collection and Treatment
Assists in the design of new and upgrades to existing water distribution, collection, and storage systems as well as water and wastewater treatment facilities. David has several years of CADD experience on projects of various sizes and capacities.

Complete and thorough understanding of the analysis necessary to forecast future needs, assisting clients in planning for growth. Proficient in the design of pump stations and force mains with extensive knowledge in differing treatment processes.

Water and Sewer Main Projects
- Town of Canandaigua – County Road 32 Water Extension
- Town of Canandaigua – Woolhouse & Rossier Water Extension
- Town of Canandaigua – County Road 10 Watermain Improvement Project
- Canandaigua / Farmington Water – Purdy Road Watermain
- Canandaigua / Farmington Water – County Road 28 and North Road Watermain
- Canandaigua / Hopewell Water District
- Village of Dryden – Water Treatment Plant Improvement Project
- Town of Farmington – Brickyard Road Water Tank
- Town of Farmington – Fox Road Water Meter Vaults
- Town of Farmington – Monarch Manor Water District Extension
- Town of Farmington – North East Water District Map, Plan, and Report
- Town of Geneva – District No. 6 Water Main Design
- Town of Geneva – Water Main District No. 13
- Town of Hopewell – Water Feasibility Study
- Town of Arcadia – Water District #12
- Village of Hamilton – Water System Engineering Study
- Village of Newark – Water Treatment Plant Improvements
- Village of Union Springs – Water System Upgrades
- Village of Wayland – Watermain Replacement Project
- Village of Wayland – Clearwater & Mack Street Watermain

Education
B.S., Civil Engineering
Clarkson University

Professional Certifications
Engineer in Training Certification

Erosion and Sediment Control Training, New York State Department of Environmental Conservation (DEC)

Professional Affiliations
New York Water Environmental Association (NYWEA)

Primary Location:
Rochester, New York

Corey Hurley
Civil Engineer I

MRB group

Corey has assisted on water, wastewater, site design, and sewer projects. He is experienced in using GPS and Survey equipment, AutoCAD and, Autodesk Civil 3-D.

His extensive onsite construction observation work experience is paired with his knowledge of engineering theories, principles, specifications, and standards.

Expertise

Water, Sewer, and GIS Projects

- MCDES Bay Road Sewer Odor Study
- Town of Canandaigua Outhouse Park (West) Design
- Town of Canandaigua Cramer Road Water Extension
- Town of Farmington – GIS Mapping Assistance
- Town of Geneseo Lima Road Water District No.6
- Town of Ontario Watershed Services
- Town of Penfield Highway Garage Facility
- Town of Rose Water System Improvements
- University of Rochester – GIS Support Services
- Village of Avon Reservoir Road Water Tank
- Village of Avon WWTP Disinfection Improvements
- Village of Fairport Sanitary Sewer Study – Asset Inventory / GIS Mapping
- Village of Lima Water Improvement
- Village of Perry WWTP Improvement (Phase 2)
- Village of Victor Moore, Webster & Dryer Avenue Improvements
- Village of Victor WWTP Improvements
- Village of Victor – MS4 and GIS Services
- Village of Waterloo Water Improvement (South Streets)
- WCSWCE Blind Sodus Bay Western Bluff
- WCWSA-Western Wayne county Regional WWTP

Education
BS in Civil Engineering Technology – Rochester Institute of Technology (RIT)

Professional Memberships
American Public Works Association (APWA)

Primary Location:
Rochester, New York

Our Water/Wastewater Expertise

Water:

- Water Distribution Systems
- Water Transmission Pipelines
- Water Treatment Plants
  - —Conventional Surface Water
  - —Lime Softening
  - —Filtration Retrofits
  - —Iron and Magnesium Removal
  - —Membrane Filtration
  - —Disinfection and Disinfection Byproduct Reduction
- Water Pumping Systems
- Elevated Storage Tanks
- Hydropneumatic Water Systems
- Groundwater Permitting
- Groundwater Well Development
- Ground Storage Tanks
- Hydraulic Modeling

Wastewater:

- Wastewater Treatment Plants
- Lift Stations
- Nutrient Removal Systems
- Force Mains
- Pipeline Rehabilitation
- Trenchless Technologies
- Land Application Systems

Stormwater:

- FEMA Mapping and CLOMR's
- Stormwater Infrastructure Design

Funding Services:

- Funding Research
- Grant Writing
- Grant Administration

Construction Phase Services:

- Bid Solicitation Preparation
- Construction Administration and Observation
- Operations Support

3. EXPERIENCE OF THE FIRM

MRB Group has completed an extensive number of water improvement projects. Some involve upgrading/improving existing systems while others require designing a new system from scratch including new storage tanks, pump stations, distribution and transmission systems, filtration treatment systems, groundwater well installations, master meter vaults, and pressure reducing stations. Our projects have included award-winning designs for system improvements and water treatment plant upgrades.

New Pump Stations and Force main to Manning, Summerton, SC*
- Design and bidding of 65,000 lf of forcemain and two duplex pump stations
- Rehabilitation of three existing pump stations and installation of Mission RTU's
- Project addressed sanitary sewer overflows at the existing influent pump station
- The work was USDA grant funded

Berkeley County CIF Bond Water Project, Berkeley County, SC*
- Developed plans and specifications for 90,800 lf of 6-inch, 8-inch and 12-inch water mains
- Project included 125 fire hydrants and associated appurtenances
- Modeled system improvements to determine the interaction between differing pressure systems
- Hydraulic modeling and permitting for water system improvements for isolated areas

Water and Wastewater Sustainability Study, Denmark, SC*
- Evaluated water and sewer systems for capacity, condition, ability to accommodate future growth
- Determined the feasibility of creating of a regional water and sewer authority
- This project was funded by Rural Infrastructure Authority

Wayne County Water and Sewer Authority (WCWSA) Regional WWTP Project
- One large WWTP will treat flows from the five municipalities and decommission the smaller WWTPs
- The new WWTP offers a modern treatment process and reduces the operational staffing requirements
- This $50M project resulted from three years of collaboration with many partners in Wayne County

Cayuga County Water and Sewer Authority (CCWSA)
- Convert spiderweb of water distribution piping in each municipality to a county-wide regional network
- Share water resources and reduce overall expenditures for capital projects and O&M
- Improve water service to the larger region sharing the costs among a more significant customer base
- We have developed a plan for 12 phases of this project, totaling approximately $60M in project costs

Canandaigua NY, Watermain
- 10,300 lf of 8" PVC DR-14
- Watermain, valves, hydrants, services, and appurtenances were replaced
- Design, Bidding, Administration and Inspection Phases

Dryden NY, Watermain and Tank
- New 500,000-gallon tank
- Replace 4" lines with 8" lines on 4 different streets and many hydrants
- $8.2M project, completed in 2021

CITY OF MART WATER SYSTEM IMPROVEMENTS

MRB group

The City of Mart is conducting an $18.1 million renovation of their entire water supply and distribution system. The project was funded by a $5 million grant and a $13 million loan from the US Department of Agriculture (USDA) Rural Development, and a $100,000 grant from the Texas Water Development Board (TWDB).

MRB Group prepared and submitted the applications on the City's behalf to both Texas Water Development Board and USDA.

The project includes the following components:

- Surface Water Intake Structure. A new floating intake structure is proposed to replace the existing temporary facilities.
- Water Treatment Plant. The existing water treatment plant will be replaced with a new facility constructed adjacent to the existing facility. The new 1.3 MGD facility is expandable to 2.0 MGD and is **equipped with backup power**.
- Transmission Main. The existing 6-mile, 10-inch, and 12-inch diameter transmission main will be replaced with a 16-inch diameter HDPE pipe.
- Groundwater Well. The existing well completed at a depth of 3,200 ft was rehabilitated with a new submersible well pump installed following cleaning and flushing of the well.
- Booster Pump Station Upgrade. It was proposed to replace the existing ground storage tank at the BPS, to provide re-chlorination facilities, upgrade station electrical, controls & pumps as necessary. **Backup power was also provided**.
- Distribution System. We evaluated line replacement needs based on water modeling results, and where street improvement to be constructed with the water main installation can be most beneficial to the residents. Approximately 4 miles of new water lines were installed in the City's Distribution System.

Client
City of Mart

Location
Mart, Texas

Project Completed
Estimated Winter, 2022

Contact
Kevin Schaffer
City Manager
P 254-876-2462

PORT BAY SANITARY SEWER IMPROVEMENTS

In 2007, MRB Group completed a comprehensive study of sanitary sewage disposal for the Wayne County Four Bay area (Sodus Bay, East Bay, Port Bay, and Blind Sodus Bay) resulting in a Master Plan outlining the recommended improvements for a phased approach to sewage collection and treatment for the four bays.

Construction of the Port Bay Sanitary Sewer System was completed in 2021.

The Port Bay project was a joint initiative between the Towns of Wolcott and Huron. The project consisted of approximately 18 miles of low-pressure sewer mains with individual grinder pumps generally installed at each home and includes about 620 residences.

The project included:

- Approximately 93,000 linear feet of low-pressure sewer main
- Approximately 73,000 linear feet of pressure sewer laterals
- Approximately 85 air/vacuum release manholes and/or flushing manholes
- Approximately 620 simplex grinder pump stations
- Six pad mounted odor control stations housed in prefabricated enclosures
- Existing regional pump station improvements consisting of a 300,000-gallon cast-in-place concrete equalization tank and miscellaneous pump station improvements.

Client
Town of Wolcott

Location
Huron and Wolcott, New York

Project Completed
2021

Contact
Phillip Eygnor,
Superintendent
315.594.8074

Lynn Chatfield,
Superintendent
315.591.6012

BEAR CREEK PUMP STATION IMPROVEMENTS

Located in the northeast section of the Town of Ontario, the town's main wastewater pump station (WWPS) services the public sanitary sewer needs of 6,000 residents, businesses, and the neighboring Robert Emmett Ginna Nuclear Power Plant.

The WWPS was constructed in the early seventies, around the same time the town constructed their wastewater treatment plant located across the road. The WWPS receives wastewater flow from the entire town collection system and therefore is a vital cog in the Town's municipal sewer system.

This project proposes the replacement of the two existing 100 hp pump motors, low flow 25 hp pump motor, and the existing antiquated flow matcher pump control system.

Three new 60-hp high flow pumps and a fourth 15-hp low flow pump, with the ability to cycle through all four pumps will be installed. The pumps will be provided with variable frequency drives, level control system and new control panel for a more energy efficient pumping operation. This configuration will accommodate a large range of flowrates experienced throughout the year (in excess of 5 MGD).

The upgrades to the WWPS will ensure necessary redundancy to meet the requirements of Ten State Standards.

The project will also replace existing FlowMatcher technology which is outdated and has limited servicing resources available in this region. The FlowMatcher system will be replaced with a new control system that include the incorporation of Variable Frequency Drives (VFDs) with premium efficiency motors to be controlled based on pressure transducers and a backup float system. Electrical/HVAC upgrades will also be provided to bring the pump station into compliance with Ten State Standards for required air changes.

Client
Town of Ontario

Location
Ontario, New York

Project Completed
In progress

Contact

WATERLOO WATER TREATMENT PLANT IMPROVEMENTS

MRB group

MRB Group was retained by the Village of Waterloo, NY, to complete the study, design, municipal bidding, and construction oversight of a drinking water system upgrade to address increasing periodic episodes of high turbidity and occasional episodes of algal toxins from harmful algal blooms (HAB's) in the surface water source of Seneca Lake.

After planning and conducting pilot testing of several turbidity reduction technologies, we selected horizontal pressure filters (HPFs) as the basis of design for a plant upgrade. The HPFs allow for the efficient removal of the sediment and small particulates typically contained in the turbid water and have a rapid backwash cycle that does not involve any physical maintenance by operators. This improvement will drastically extend the intervals between needing to replace the diatomaceous earth (DE) media on the existing filters.

Granular Activated Carbon (GAC) filtration units were also designed to be installed after the HPF units to remove any algal toxins or other emerging contaminants which may be present. This approach will reduce algal toxins effectively and protect against the most known emerging contaminants, such as PFOA/ PFOS and many emerging contaminants currently being studied.

The project has been bid and awarded. Construction began in April 2022, with an anticipated completion date of Fall 2023. MRB Group worked with the client and the reviewing agencies to frame a project which would provide the highest quality drinking water available for the next 30 years at a very reasonable cost. We prepared grant applications that successfully secured $3.0M in grant money for the $12.7M project.

MRB Group also helped secure a 0% interest rate hardship loan for the remainder of the funding needed. Funding was provided through NYS EFC and the New York State Clean Water State Revolving Fund.

Client
Village of Waterloo

Location
Waterloo New York

Project Completed
2023 (estimated)

Contact
James Bromka
Dept. Manager
315.585.9811

CITY OF HORNELL SANITARY SEWER REHABILITATION

MRB group

MRB Group provided design, bidding, and construction administration and observation services for the completion of this project in the The City of Hornell. The city was awarded a 2019 NYS CDBG Grant to rehabilitate 9,500 linear feet (lf) sanitary sewer trunk lines on Delaware Avenue (from Elm to East) and East (from Howard to Rockwell). The trunk line was old, deteriorated, and rated in poor condition. In 2020 and 2021, the city lined the sewer main using cured-in-place lining technology.

The sewer main carries approximately 0.6 million gallons per day (MGD) of raw sewage to the Hornell Water Pollution Control Plant. The most cost-effective solution was to line the existing sewer main, which could be done without excavation or disruptions of service connections.

The completed trunk line eliminated existing deficiencies and prolonged its useful life. The rehabilitation project eliminated existing cracks and breaks, and ensured the continued function of the line to provide uninterrupted sewer service. The trunk line lies within residential areas in the southeastern part of the city. The collapse of the sewers in this area would create serious disruptions for the adjacent residences.

Previous sanitary sewer rehabilitation projects revealed that the condition of the existing trunk sewer piping was very poor. Video inspection from these projects revealed numerous areas of cracked and partially crushed piping. Fortunately, these projects, completed in 2017, 2018 and 2019 were successful in rehabilitating the trunk sewer by means of sewer lining.

The selected alternative included the cleaning, lining, lateral reinstatement, and other work associated with the trenchless rehabilitation of the sanitary sewer trunk line by cured-in-place lining technology.

Client
City of Hornell

Location
Hornell, New York

Project Completed
2021

Contact
Mitchell Cornish
Superintendent of Public Works
607.324.7421

PROJECT LOCATION MAP

4. FAMILIARITY WITH FEDERAL FUNDING REQUIREMENTS

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Grant Administration Services

Once projects are underway, specific requirements will be applied to each program and project. Our team will support the client with the full range of project administration and compliance, with the following professional support.

- **ARPA Experience-**ARPA represents a monumental opportunity for cities and towns to think creatively for future financial sustainability and quality of life for its resident. Like most federal funds, allocation and administration can be complex. MRB Group is helping our clients to fully understand the investment opportunities and matching local needs to eligible categories. Additionally, our team assists the municipal staff in developing a file system that supports reporting compliance with the Act. It creates processes and protocols for engagement with the State's compliance representative (Guidehouse). MRB Group's team of local government experts, planners, grant administrators, and infrastructure specialists have extensively evaluated the use of ARPA funds and systems for administration and compliance. We are currently working with the following municipalities providing ARPA support services, including:

  - Town of Ninety-Six, SC
  - Town of Broome, NY
  - Town of Byron, NY
  - Town of Clarkson, NY
  - Town of Esperance, NY
  - Town of Fayette, NY
  - Town of Groveland, NY
  - Town of Huron, NY
  - Village of Marcellus, NY
  - Town of Middlesex, NY
  - Town of Ovid, NY
  - Village of Ovid, NY
  - Town of Richmondville, NY
  - Town of Rose, NY
  - Town of Rush, NY
  - Town of Seneca Falls, NY
  - Village of Waterloo, NY
  - Village of Whitesboro
  - Town of Whitestown, NY

- **Expert Guidance and Support-**Expert Guidance and Support-Grant programs are complex and regularly evolve. Our team has worked with dozens of state and federal funding programs. We will help each client understand all the requirements of the grants and leverage our relationships with state agencies to ensure that the most up-to-date practices, processes, and procedures are applied to the affected projects.

- **Project Monitoring Support**-All state grant awards are subject to routine monitoring by funding agencies. Our team has experience managing monitoring efforts and works closely with state agencies to ensure that their expectations are met and that full compliance is achieved. In addition, we will communicate regularly with agency and municipal staff to ensure that expectations are clear and project activities and records are in such a condition as to facilitate smooth monitoring.

- **Agency Reporting**-Federal programs typically call for regular project reporting and a host of other compliance matters (wage and hour reporting, MWBE compliance, etc.). Our team will review grant agreements and identify all necessary reporting measures. We will develop a compliance calendar and help municipal staff identify and gather needed data utilizing state digital portals and other reporting vehicles. On request, we will prepare regular reports for review, authorization, and submission by municipal staff.

- **Public Engagement and Outreach**-Most funding programs require public hearings or more extensive public engagement efforts. We will review grant agreements to determine the necessary level of engagement and support the client in preparing and publishing required notices. In addition, we will be on hand at public hearings to answer program-specific questions and review minutes and other documentation to ensure compliance with grant guidelines.