TOWN BOARD MEETING
May 28, 2026

Join Zoom Meeting – Meeting ID: 884 4603 2733 Passcode: 500780
https://us02web.zoom.us/j/88446032733?pwd=L6FJiaDxiTDdg6uIJPWOmKGaekcPgq.1

AGENDA

PLEDGE OF ALLEGIANCE / SILENT REFLECTION

AGENDA APPROVAL

RESIDENTS STATEMENTS

DEPARTMENT HEAD STATEMENTS

APPROVAL OF MINUTES — 5/11/2026 – Not Completed

ABSTRACT OF CLAIMS — Councilman Morreale

OLD/PENDING BUSINESS

NEW BUSINESS

SUPERVISOR BRODERICK
1. Liaison Report
2. Legal
   a. Engagement Letter – Union Attorney
   b. Adoption of Fund Balance Policy
3. Engineering
   a. GHD Submission – Statement of Qualifications
4. Finance
   a. Budget Revisions

COUNCILMAN BURG
1. Liaison Report

COUNCILMAN MORREALE
1. Liaison Report
   a. SEQRA Declaration

COUNCILMAN MYERS
1. Liaison Report

COUNCILWOMAN WAECHTER
1. Liaison Report
   a. Seasonal Recreation Leader Hire

RESIDENTS STATEMENTS

Upcoming Boards/Commission Meetings

Historic Preservation	June 9, 2026	5:45 P.M.
Zoning Board	June 11, 2026	6:30 P.M.
Planning Board	June 18, 2026	6:00 P.M.
Regular Town Board Meeting	June 22, 2026	6:00 P.M.
Town Offices Closed June 19th	Juneteenth	
Town Board Work Session	No Meetings	June – August

One tap mobile
One tap mobile
+16469313860,,88446032733#,,,,*500780# US
+16465588656,,88446032733#,,,,*500780# US (New York)

Join instructions
https://us02web.zoom.us/meetings/88446032733/invitations?signature=LziNQ6cqZC8bM5HaO4czsEq2d8xg6QR2MVEEmyswkkY

Heather Giambra, Esq.
793 Center Street #367
Lewiston, NY 14092

716-572-9307
hgiambra@giambralaw.com
www.giambralaw.com

The Law Office of Heather Giambra

Management-Side Labor & Employment Law
Guiding Employers through Complex Workplace Challenges

May 23, 2026

ATTORNEY-CLIENT PRIVILEGED CONFIDENTIAL

Hon. Steve Broderick, Town Supervisor
Town of Lewiston
1375 Ridge Road
Lewiston, NY 14202
SBroderick@TownOfLewiston.us

Re: Engagement of Legal Services

Dear Steve:

Thank you for selecting The Law Office of Heather Giambra (the "Firm") to represent you. This letter confirms the terms and conditions of our engagement and is intended to comply with New York's requirements for written letters of engagement.

Scope of Representation

You have engaged the Firm to represent you in connection with the following matter(s):

- General Labor and Employment Advice and Counsel and Compliance;
- Collective Bargaining; and
- Grievance and Arbitration Proceedings (the "Matter(s)").

Our representation is limited to the Matter(s) described above. We are not representing you in any other matter unless we agree to do so in writing.

Attorneys and Staffing

All legal services will be provided by Heather Giambra, unless otherwise agreed. The Firm may utilize paralegals and administrative support staff as needed.

Fees and Billing

Our legal services will be billed as follows:

- Hourly Rate for Heather Giambra: $285.00 per hour
- Hourly Rate for Law Clerks: $200.00 per hour
- Hourly Rate for Paralegals: $120.00 per hour
- Billing increments: 1/10th of an hour

Rates are subject to periodic adjustment upon reasonable notice.

The Firm will assign work to other personnel at a lower billing rate consistent with our standards of assuring that capable personnel are performing the services.

The Firm will bill you on a monthly basis. Invoices will describe the services performed, time expended, and expenses incurred. Payment is due within thirty (30) days of the invoice date. The Firm reserves the right to decline to continue providing services to clients who do not pay within those guidelines without making mutually acceptable arrangements for delayed payments. Further, interest of 1% per month (12% annually) will accrue on account balances that remain outstanding forty-five (45) days after billing. If you have questions about your invoice, please call me directly at 716-572-9307.

Expenses/Disbursements

We may incur various expenses/disbursements in providing services. You agree to pay all such expenses and to reimburse us for all disbursements that we pay on your behalf. As is usually the case, disbursement charges may not be current at the time of each monthly billing and will be billed upon the Firm's receipt of the invoice. We reserve the right to forward bills for any expense/disbursement incurred on your behalf in excess of Two Hundred Fifty Dollars ($250.00) directly to you and you agree to make prompt payment directly to the originator of these bills. Expenses that may be incurred include, but are not necessarily limited to, filing fees, service fees, postage/delivery fees, arbitrator fees, transcription fees, travel and similar expenses.

Advance Retainer /Trust Account

The Firm does not require an advance retainer for this engagement. Legal fees will be billed after services are performed. Accordingly, no funds will be held in a trust or escrow account unless otherwise agreed in writing.

Client Responsibilities

You agree to:

- Provide complete and accurate information in a timely manner;
- Cooperate in the Firm's representation;
- Timely review and respond to communications; and
- Provide the firm with updated contact information (name, address, telephone, email) when such information changes.

Communication

The Firm will keep you reasonably informed about the status of your Matter(s) and will respond to your inquiries in a timely manner. You are encouraged to contact the Firm with any questions or concerns.

Confidentiality

The Firm will maintain the confidentiality of your information and will not disclose your information to anyone except as may be required by law, consistent with the Firm's professional responsibilities.

Use of Technology and Artificial Intelligence

In the course of providing legal services, the Firm may utilize technology-assisted tools, including secure artificial intelligence ("AI") applications, to assist with tasks such as legal research, document organization, drafting, data analysis, and administrative functions. Any such tools will be used under attorney supervision and in a manner consistent with the Firm's professional obligations, including the duty to maintain client confidentiality and exercise independent professional judgment. The Firm will take reasonable steps to protect confidential and privileged information when utilizing such technology.

Conflicts of Interest

This engagement is subject to the Firm's ongoing obligation to avoid conflicts of interest. If a conflict arises, the Firm may be required to withdraw, subject to applicable ethical rules.

Termination of Representation

You may terminate the Firm's representation at any time. The Firm may withdraw from representation at any time as permitted or required by its professional responsibilities and, where applicable, the court.

Upon termination for any reason, you remain responsible for payment of fees and expenses incurred through the date of termination.

File Retention

At the conclusion of the Matter(s) we will close our file and return to you any original documentation and property you provided. Upon receipt of a written request from you, we will also return to you other documents and materials prepared as part of the representation. We exclude from this our internal memoranda and records, attorney notes, drafts not intended for external distribution, and similar lawyer working materials. We may also elect to retain a copy of other portions of the file at our expense. The Firm will retain in accordance with our records retention program any files relating to your representation, that you do not ask to have returned, for approximately three (3) years. The Firm will destroy the file after that period of time unless you instruct me in writing now, to return the file to you rather than destroy it.

No Guarantee of Outcome

While the Firm will endeavor to represent you diligently and competently, no particular outcome has been promised or guaranteed.

Entire Agreement

This letter constitutes the entire agreement regarding this engagement and may be modified only in writing.

We greatly appreciate your confidence and are looking forward to having you among our clients. We know that our reputation has been built upon and continues to depend upon the timeliness, efficiency and effectiveness of the work we have done for others and now will be doing for you.

Please acknowledge your understanding and agreement regarding the terms of our engagement as described in this letter by signing this letter in the space provided below and returning it to me.

We appreciate the opportunity to represent you.

Sincerely,

s/*Heather Giambra*
Heather Giambra, Esq.

AGREED AND ACCEPTED:

Client Name: _____

Signature: _____

Print Name: _____

Date: _____

TOWN OF LEWISTON FUND BALANCE POLICY

Purpose

The Town of Lewiston has enacted the following policy in an effort to ensure financial security through the maintenance of a healthy reserve fund that guides the creation, maintenance, and use of resources for financial stabilization purposes.

The Town of Lewiston's reserve funds must be properly established and maintained to promote the goal of creating an open, transparent and accountable use of public funds. The Town of Lewiston's primary objective is to maintain a prudent level of financial resources to protect against reducing service levels or raising taxes and fees due to temporary revenue shortfalls or unpredicted one-time expenditures. The Town of Lewiston also seeks to maintain the highest possible credit ratings which are dependent, in part, on the Town of Lewiston's maintenance of a healthy fund balance.

Background

The Governmental Accounting Standards Board (GASB) issued Statement No. 54, Fund Balance Reporting and Governmental Fund Type Definitions, which is intended to enhance the usefulness of fund balance information by providing clearer fund balance classifications that can be more consistently applied. These are included at the end of this policy for clarification.

The Government Finance Officers Association (GFOA) recommends that governments establish a formal policy on the level of unrestricted fund balance that should be maintained in the general fund.

Minimum Fund Balance Policy

- This policy shall apply to all of the funds held by the Town of Lewiston.
- The Town Board of the Town of Lewiston is the only decision-making authority that can commit fund balances.
- The Town of Lewiston shall strive to maintain unexpended surplus funds in accordance with the Town of Lewiston's adopted "Five-Year Capital Plan" as approved, from time to time, by the Town of Lewiston Town Board.
- Funding of fund balances will generally come from excess revenues over expenditures or one-time revenues.
- The Town of Lewiston will measure its compliance with this policy as of March 31st of each year, or as soon as practical after final year-end account information becomes available. During the course of the year the Town of Lewiston Finance Department shall closely monitor the Town of Lewiston's revenues and expenditures to ensure fund balances are not used beyond what was expected.
- It is the intent of the Town of Lewiston to limit the use of fund balances to address unanticipated, non-recurring needs, or unanticipated future obligations. Fund balances shall not normally be applied to recurring annual operating expenditures.
- In the event that unassigned fund balances deviate significantly from those outlined in the "Five-Year Capital Plan", the Town of Lewiston Finance Department shall make a recommendation to the Town Board to restore the fund balances to appropriate levels for the next budget year or appropriate period of time.

The Town of Lewiston will spend the most restricted dollars before less restricted where such spending is appropriate and the legal restriction does not limit the use of such restricted amount for the particular purpose in question in the following order:

- Nonspendable (if funds become spendable)
- Restricted
- Committed
- Assigned
- Unassigned

Definitions

GASB Statement No. 54 replaces the previous fund balance classifications with the following:

Nonspendable fund balance
This consists of assets that are inherently nonspendable in the current period either because of their form or because they must be maintained intact, including prepaid items, inventories, long-term portions of loans receivable, financial assets held for resale, and principal of endowments.

Restricted fund balance
This consists of amounts that are subject to externally enforceable legal purpose restrictions imposed by creditors, grantors, contributors, or laws and regulations of other governments, or through constitutional provisions or enabling legislation.

Committed fund balance
This consists of amounts that are subject to a purpose constraint imposed by a formal action of the government's highest level of decision-making authority before the end of the fiscal year, and that require the same level of formal action to remove the constraint. The New York State Office of the State Comptroller believes that in most cases, local governments in New York will not have committed fund balance to report.

Assigned fund balance
This consists of amounts that are subject to a purpose constraint that represents an intended use established by the government's highest level of decision-making authority, or by their designated body or official. The purpose of the assignment must be narrower than the purpose of the General Fund, and in funds other than the General Fund, assigned fund balance represents the residual amount of fund balance.

Unassigned fund balance
This represents the residual classification for the government's General Fund, and could report a surplus or deficit. In funds other than the General Fund, the unassigned classification should be used only to report a deficit balance resulting from overspending for specific purposes for which amounts had been restricted, committed, or unassigned.

Statement of Qualifications

Qualified A/E Firms for Various Infrastructure Projects

Town of Lewiston

April 29, 2026

→ **The Power of Commitment**

285 Delaware Avenue, Suite 500
Buffalo, New York 14202
United States
ghd.com

Our ref: 12696029

Original Submitted Via Email to:
tburns@townoflewistonny.gov

April 29, 2026

Tamara Burns, Town Clerk
Town of Lewiston
1375 Ridge Road
Post Office Box 330
Lewiston, New York 14092

Statement of Qualifications | Qualified A/E Firms for Various Infrastructure Projects

Dear Ms. Burns:

Creating lasting community benefit is at the heart of GHD's culture. This commitment to our communities, as well as our clients' communities guides us. We understand that the Town of Lewiston (Town) is seeking qualified architectural and engineering firms capable of delivering a variety of services for infrastructure projects. GHD staff, notably Robert (Bob) Lannon and Camie Jarrell, have been working on Town projects for 25 years. We understand your water, sewer and storm infrastructure, including the Water Pollution Control Center and appreciate the opportunity to submit our Statement of Qualifications for the above-referenced services.

- **Experience with Comparable Projects.** GHD has provided municipal engineering and water and wastewater engineering services to New York communities for more than 70 years including our current retained engineering agreement with the Town. In a similar capacity locally, GHD has also served as the retained engineer for the Towns of Niagara and Hamburg, the Village of Youngstown, and Niagara County Sewer District No. 1. We also hold term agreements for similar work with the Erie County Division of Sewerage Management and the Town of Amherst, which is a testament to our ability to provide services of the same quality and scale. Projects completed under these arrangements have involved wastewater treatment facilities, sanitary and storm sewer lines and force mains, pump stations, system planning and hydraulic analysis, regulatory assistance, and services during construction.
- **Team Organization and Expertise.** GHD knows the importance of having a local team with a diverse skill set and a variety of partner firms available to assist the Town with any project regardless of scope or scale. The variety of services outlined in the Request for Qualifications require agility and flexibility, and the GHD team is available to give the Town access to all our combined resources for project execution.

On behalf of the entire GHD team, we thank you for your time and consideration. We look forward to continuing our ongoing partnership.

Regards,

Robert P Lannon Jr.

Robert Lannon
Project Director

+1 716 362-8806
robert.lannon@ghd.com

Copy to: Camie Jarrell, PE

Project name		Engineering Services				
Document title		Statement of Qualifications | Qualified A/E Firms for Various Infrastructure Projects				
Project number		12696029				
File name		12696029-PRO-SOQ Various Infrastructure Projects.docx				
Revision	Author	Reviewer		Approved for issue		
		Name	Signature	Name	Signature	Date
A	C. Hynes, L. Smith	Robert Lannon				
B	L. Smith	Camie Jarrell				
0	L. Smith	Camie Jarrell		Robert Lannon		4/29/2026

GHD 337
Contact: Robert Lannon, Project Director | GHD
285 Delaware Avenue, Suite 500
Buffalo, New York 14202, United States
T +1 716 856 2142 | **F** +1 716 856 2160 | **E** info-northamerica@ghd.com | **ghd.com**

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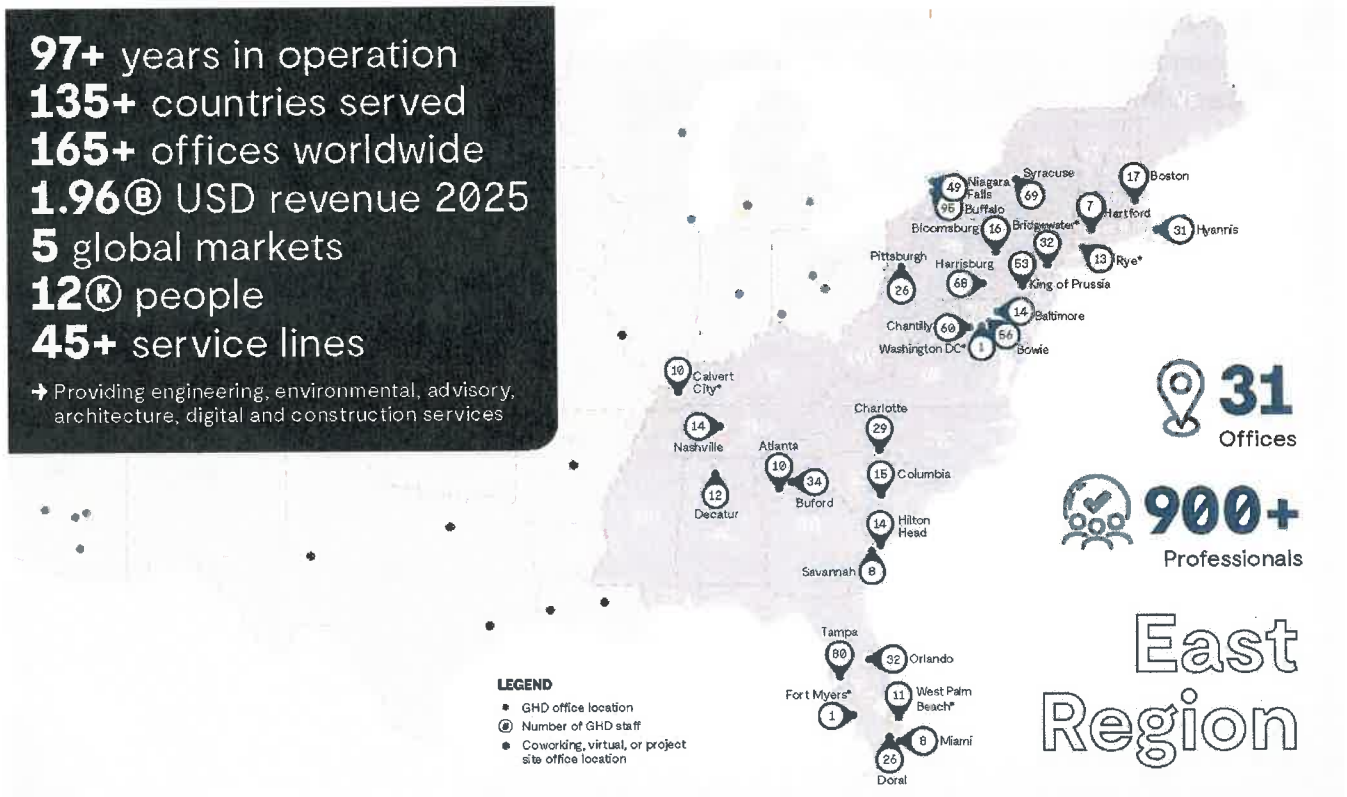
1. Qualifications and Experience

1.1 About GHD

Established in 1928 and privately owned by our people, GHD is one of the world's leading professional services companies operating in the global markets of water, energy and resources, environment, property and buildings, and transportation. Committed to creating lasting community benefit, our connected global network of 12,000 diverse people delivers engineering, environmental and construction services to public and private sector clients across five continents—North and South America, Asia, Australia and Europe—and the Pacific region.

Operating globally and delivering services locally, we offer the Town of Lewiston the ability to continue working with our local staff who are familiar with the Town and its needs while having access to our global experience base. Our people offer decades of knowledge, as well as a deep understanding of the challenges facing businesses and communities today. We deliver projects with high standards of safety, quality, and ethics across our entire range of services. Driven by a client service-led culture, we connect the knowledge, skill, and experience of our people with innovative practices, technical capabilities, and robust systems to benefit your project.

GHD Consulting Services Inc. is a corporation licensed to practice professional engineering in New York State (License Certificate No. 021536). As shown below, our Buffalo location offers nearly 100 staff, including engineers and professionals of varying disciplines, including civil, process, structural, mechanical, electrical, and instrumentation, along with environmental specialists, CAD designers and support staff. GHD has another 130+ staff in our neighboring New York offices (Niagara Falls, Syracuse and Rye). With a management team based in Buffalo, our project is supported by additional staff in New York with access to more than 900+ talented staff in GHD's East Region. Based in our downtown Buffalo office, Robert P. Lannon Jr., PE, Project Director, will serve as the Engineer-of-Record for the Town's identified projects.



1.2 Knowledge and Familiarity with the Town of Lewiston Systems

GHD's Robert (Bob) Lannon has provided services to the Town since 2001. He has served as retained engineer to the Town since 2014 with its contract renewed annually. *(Bob previously served as Town Engineer from 2001 – 2003 (with a previous company) and 2004 – 2010 (with CRA now GHD).* Our current agreement runs through December 31, 2026. As Town Engineering Consultant, GHD's proposed Management Team of Bob Lannon and Camie Jarrell, PE, attend monthly Town Board and Planning Board meetings and bring in GHD staff as necessary to assist the Building and Water Departments.

Separate from our retained engineering services, GHD provides services at the Water Pollution Control Center (WPCC). The WPCC receives sanitary flow from the Towns of Lewiston and Porter and the Villages of Lewiston and Youngstown, serving approximately 24,000 residents. The WPCC SPDES permit allows for the treatment of 2.75 million gallons per day (mgd) of sanitary flow, on a rolling 30-day average. Plant operations began in 1976 and much of the equipment in operation today is the original. GHD assists WPCC staff with the evaluation and design of plant systems upgrades, SCADA, regulatory compliance regarding the plant's New York State Pollutant Discharge Elimination System (SPDES) Permit and addressing projects related to infiltration and inflow (I/I) in the collection system.

Services provided to the Town in recent years have included but are not limited to:

Site Plan Reviews and SEQR Support Services

GHD provides engineering reviews of site plans submitted to the Town to determine how a proposed project will affect existing Town infrastructure and how it may impact the community. GHD reviews the plan for compliance with local zoning, Town, state and federal codes. As part of the review process, GHD also assesses site layout, parking and ADA requirements, utility needs, stormwater management (SWPPP review), grading and drainage, and comprehensive assessment for compliance with SEQR and applicable engineering standards. Recent project examples include President's Park, Wolf Run, The Patios at Essex and Sanborn Square.

WPCC Digester and Grit System Evaluation

Aging infrastructure, particularly the digester and grit systems, has increasingly challenged operators and maintenance staff at the WPCC. Many components of these systems are nearing the end of their useful life and raising concerns about reliability and the risk of failure. GHD prepared a study for the Town in 2020, which concluded that much of the equipment was approaching the end of its service life. In response, the Town requested GHD to further investigate potential equipment replacement options for the digester and grit systems.

GHD performed a comprehensive analysis of the WPCC to identify potential solutions to the primary and secondary digesters and grit system problems. GHD developed an engineer's report that 1) reviewed the condition of the existing grit chambers; 2) reviewed the condition of the digesters including covers, primary digester mixing/heating, gas safety equipment, and boiler; 3) identified alternative equipment options for the grit and digester systems, with corrosivity of the incoming influent taken into account; 4) developed cost estimates for each of the alternatives identified; and 5) recommended a solution for each of the design alternatives.

Stormwater Modeling

In response to recent wet weather events, the Town retained GHD to perform stormwater modeling of the Morgan Farms area and the Woodland/Forest area of the Town. Existing conditions were modeled to reflect storm sewer system performance under various storm events. The model was then run to simulate various improvement options and design storms to generate storm sewer pipe sizes for storms of various return frequencies up to and including a 100-year storm event. Based on model results, GHD was able to present the Town with plans to address long-term flooding in these communities.

Riverfront Park Project

GHD prepared a concept plan to expand an underutilized 6.4-acre open space along the Niagara River. The concept plan recommended various improvements to expand the park and increase public access by providing additional water-oriented recreational experiences and passive recreational opportunities. GHD assisted the Town in completing much of the initial park layout using Town forces, such as a new and expanded entrance road, walking trails, parking and drainage improvements, then prepared bid documents for granite curbing to be completed by a contractor. Next, GHD prepared a design and bid package for a large park pavilion constructed at the site. As use of the park expands, GHD has designed a second pavilion, a fishing pier and seasonal kayak launch to add to the enjoyment of the Niagara River. These aspects are currently under construction. GHD also coordinated the environmental review with potentially involved and interested agencies and completed permitting applications, regulatory revisions, and attended several meetings with regulators in regard to this project.

Water Storage Tank Building Improvements

GHD provided design for a replacement roofing system and masonry repairs at the water tank storage building on Upper Mountain Road. The project included the removal and replacement of the roofing system with an EPDM roofing system over an existing concrete deck, as well as repointing and repairs. GHD also coordinated a hazardous materials assessment for asbestos, lead-based paint and PCBs, which was used as the basis for design when developing the contract documents. GHD assisted the Town in the receipt of bids and provided a recommendation for award of a construction contract.

Morgan Drive Relief Sewer Design and SSES Field Investigations

The Town is about to commence construction of a new relief sanitary sewer to serve the Morgan Drive area of the Town. Following a significant rainfall event, the Morgan Drive area experienced street flooding, overtaxing of storm and sanitary sewer systems, and inundating of residential properties. GHD coordinated a geotechnical investigation, topographic survey and designed the relief sewer.

GHD also conducted a sanitary sewer evaluation survey (SSES) in the Morgan Farms area of the Town. A draft of the engineering report has been submitted to the Town and is currently under review.

Town-wide Water System Improvements

Due to deficiencies within the Town's water system, including a history of frequent water main breaks, reduced flow capacity due to aging pipelines and areas with insufficient fire flows, GHD along with Water Department staff completed a series of field investigations to review existing conditions, establish conceptual waterline alignments, and to gain a better understanding of potential construction constraints. The development of the capital improvement list was based upon operation and maintenance data provided by the Water Department coupled with the results of a Town-wide hydraulic water model developed by GHD in 2006.

GHD was authorized in 2017 to provide survey, design, bidding, and construction phase services for the replacement of approximately 8 miles of 8-, 12, and 16-inch PVC waterline along 12 roads in the Town. The project also included 43 interconnections, 100 new hydrants, 100 new valves, and 380 new residential and business water services. This project was very challenging due to construction constraints, location of existing utilities and the requirements of the reviewing agencies (New York State Department of Transportation, Niagara County Highway, State Parks, etc.). In addition, the project included four horizontal directional drill installations (Robert Moses and three creeks), nine bored and cased road crossings, and one bored and cased railroad crossing. Construction of the project was completed in 2022.

1.3 Municipal Wastewater Services

GHD's roots in the wastewater industry go back almost 100 years and the company has been providing engineering services in New York State since 1950, and we have acquired experience in a wide variety of municipal planning, design, and construction projects. GHD's diversified team of engineers, scientists, construction inspectors/managers, and technical support staff offers a wealth of experience in developing both traditional and innovative solutions to engineering projects.

Our local staff have managed a full range of engineering projects from simple, single-discipline projects to complex multi-disciplinary, multi-million-dollar projects. We offer responsive and cost-effective engineering services with a low ecological footprint to fit a wide range of situations, ranging from the study/planning phase through conceptual design to the development of plans and specifications. For each project, GHD applies its client relationship focus and in-depth technical expertise to work closely with client representatives to address key concerns, constraints, and issues. Once identified and analyzed, sound engineering alternatives are developed to provide tailored solutions to suit the project at hand. Our experienced team members also regularly assist utilities with permitting and regulatory compliance items, as well as assistance with project funding.

Our wastewater services include evaluation, planning, condition assessments, preliminary and detailed project design, and construction services for treatment facilities, interceptors, collection systems, and pump stations. Table 1.1 highlights the wastewater services that GHD can offer to the Town.

Table 1.1 Wastewater Services Summary

System Analysis and Planning	Wastewater Treatment	Collection and Pumping Systems
– SSO and CSO Mitigation – Long term control plan development – Map, plan and report development and sewer district formation – Facilities planning studies and process audits – Sewer system extensions – Infiltration/inflow analysis and sewer system evaluation studies – System flow monitoring – Capacity analysis and wastewater collection reports – Sewer system hydraulic modeling and analysis – Inter-municipal utility systems planning – Regional shared services and/or consolidation assistance – State environmental quality review (SEQR) assistance and environmental impact assessments – Demand forecasting and management – Pipeline condition assessments of sewer CCTV data using cloud-based software through companies such as Sewer AI – Capital planning for pipeline repair or replacement using condition assessment data and software with owner defined decision trees, such as Info360 Asset	– Treatment plant design, including rehabilitation, capacity enhancement and new systems – Process analysis, troubleshooting, optimization, and design recommendations – Instrumentation and control design – Operations and permitting assistance – Incinerator stack testing – High-rate treatment systems – Hydraulic modeling – Process modeling – Odor control evaluations and recommendations – Stream assimilative capacity studies – Pretreatment assistance – Wet weather operating plans – Disinfection, including chlorination, dichlorination, ultraviolet disinfection and ozonation – BOD treatability levels and oxygenation efficiency studies – Biosolids management – Risk and lifecycle assessments – SPDES Permit negotiations and modification assistance – Consent Order compliance	– Analysis and design of force mains, interceptors, and lateral sewers – Complex hydraulic modeling (XP-SWMM, PCSWMM, Infoworks, among others) – Testing, field analytical services, including force main and pumping system hydraulic evaluation, dry and wet weather flow – Evaluations, modifications, and new design for pumping stations – Overflow retention facilities – Gravity sewer and force main piping – Trenchless sewer replacement/relining design, including microtunneling – SSO/CSO abatement facilities design and construction – Long Term Control Plan implementation support – Low and medium voltage systems, standby power facilities and SCADA control systems for pump stations

1.3.1 Wastewater Treatment Expertise

GHD is a global leader in wastewater treatment. Using the experience gained from the design of more than 300 wastewater treatment facilities, our diverse staff can deliver project-specific wastewater treatment solutions from facilities planning through start-up and commissioning. All wastewaters are different. It is necessary to work with a team that can combine comprehensive knowledge with practical experience in the fields of chemistry, biology, hydraulics, mechanical processes/equipment, instrumentation and control, materials handling and plant layout.

1.3.1.1 Technical Expertise from Influent to Effluent

The GHD team has extensive experience in both solid and liquid process systems. We are industry specialists in the rehabilitation and upgrade of wastewater process, civil, and mechanical facilities, as well as the wholesale replacement of wastewater processes with innovative and/or alternative technologies. In addition to providing preliminary and detailed engineering design, our firm is recognized as a leader in providing wastewater facilities operation and management reviews to assist public facility owners and their operations and maintenance staff in improving the efficiency of their systems. Our experience includes all treatment processes from headworks through primary/secondary/tertiary treatment, high-rate treatment disinfection, and sludge processing.

1.3.1.2 Comprehensive Planning, Design and Construction Services

We harness extensive capability from project initiation to start up and optimization. Our team can help with preparation of feasibility studies and pilot tests, facility plans, concept and detailed designs, digital automation and controls, and construction phase engineering, construction management and commissioning support. Through our Business Advisory group, we can also assist with asset management planning. Our clients recognize that the ability to preserve our precious resources is paramount—we have developed leading edge solutions that allow wastewater to be treated to a standard that minimizes its environmental impact. We also understand the pressures surrounding capacity expansion and the impacts of population growth and regulatory limits from government and councils.

1.3.2 Collection and Pumping Systems

We have acquired experience in a wide variety of projects including the planning, evaluation, design, permitting and rehabilitation/construction of interceptors, gravity sewers, forcemains, and pumping stations. Much of this experience has been developed working on projects for municipal clients locally, in North America and around the globe. As technologies have developed, so has our expertise in planning for future growth and improving system performance for ratepayers. Plans for growth are tailored to each client and determined holistically to ensure that flow can optimally make it to its intended downstream point.

GHD's civil and environmental engineers have prepared designs that range from small collector sewers in neighborhoods to tunnels that extend for miles. Our team includes members of the Water Environment Federation (WEF), the North American Society for Trenchless Technology (NASTT), and the National Association of Sewer Service Companies (NASSCO) PACP/MACP/LACP certified staff, who are at the forefront of new regulations and technologies. In addition, our team thoroughly understands system dynamics associated with pumping, condition assessments, air/water interaction in pressurized sewer systems, and applicability of flowmetering to a sewer system. Outcomes of similar evaluations have been successfully implemented throughout the United States.

1.3.2.1 Infiltration/Inflow Analyses and Sewer System Evaluation Surveys

Specializing in engineering for wastewater collection and treatment systems, GHD has conducted numerous I/I analyses and sewer system evaluation surveys (SSES) for clients across the United States, including many in New York. GHD has developed an innovative approach to I/I evaluations that achieves verifiable and measurable removal results. Since results are measurable, the cost effectiveness of I/I removal can be determined in order to develop successful long-term sewer rehabilitation programs that provide demonstrative results. With the development of this program, GHD has emerged as a leader in I/I remediation.

GHD has been pushing the boundaries of data analytics and automation. We have created tools that allow for advanced statistical/predictive analysis of large datasets with approximately 75 percent less effort than what would be done manually. Combining the expertise of GHD's digital statisticians and data scientists with our engineers allows for projects to be delivered more efficiently and more accurately than in the past. We use technologies such as Machine Learning/Artificial Intelligence guided by domain experts to develop highly sophisticated algorithms that can assist utilities with their daily and strategic operations while solving several business problems. GHD can tailor a program to best suit the clients' desired outcomes and budget. We have partnered with companies like Sewer AI and used software such as Info360 Asset to customize solutions for each client.

1.4 Municipal Water Services

GHD offers competitive services in water transmission and distribution covering the full life cycle of projects. With more than 90 years' experience, GHD works for public and private clients covering a wide range of services including planning, evaluations and design to bidding, construction administration, and field services during construction. We have developed a suite of tools and procedures to allow us to deliver projects expeditiously and cost effectively. They include automated pipe grading for different pipe materials and joint systems; 3-D pipe routing software that helps to identify the optimum alignment that minimizes excavation and conflicts with existing services and other site constraints; proven bedding designs for different soil conditions and pipe materials.

For the purposes of this submission, we are highlighting our experience with hydraulic modeling and the assessment, design and construction of waterlines.

1.4.1 Hydraulic Modeling

GHD performs hydraulic modeling of water systems from intake to distribution in order to determine flow rates, pressure requirements, fire flow, system demands and limitations, and to evaluate potential connections or emergency connections to surrounding communities. GHD utilizes the latest version of many modeling programs depending on client need including EPANET, Bentley WaterCAD, Bentley WaterGEMS, and InfoWater to perform static and dynamic computerized hydraulic network modeling, including fire flow, SCADA interface, water age analyses to determine pipe and storage size requirements. GHD also uses Bentley HAMMER to analyze transient conditions in pipelines to mitigate damage to pipelines caused by water hammer.

1.4.2 Transmission and Distribution

GHD is an industry leader in developing solutions for the transmission and distribution of potable water. Our staff has extensive experience designing pipe networks ranging from small diameter service laterals to large diameter transmission mains using a wide variety of pipe materials including ductile iron, steel, PVC, and HDPE installed via conventional excavation or trenchless methods. GHD's pipeline engineers select the appropriate coating systems and pipeline materials for different soil conditions and service applications. They also provide appropriate solutions for cathodic protection.

The condition assessment and rehabilitation of water supply lines requires specific experience with condition assessment technologies, risk assessment, public and permitting coordination, field safety, data management and analysis, construction technology and project management.

GHD has realized efficiencies in both construction time and capital costs through the use of trenchless technologies for projects such as pipe bursting and replacement, directional drilling, and others. Trenchless technologies have also been applied by GHD to reduce environmental impacts and minimize traffic disruptions on watermain projects. As stated previously, GHD is member of the NASTT and stands at the forefront of modern technology on all aspects of locally available trenchless rehabilitation services.

1.5 Stormwater Services

GHD provides a full range of services encompassing all aspects of surface water resources. Our specialized surface water modeling team offers services in the fields of deterministic and hydrologic modeling, hydraulic and water quality modeling. GHD has successfully provided these services to a diverse client base on both large and small-scale projects. Typical applications include stormwater best management and post-construction practices design, watershed studies, river channel design and restoration studies, Federal Emergency Management Agency (FEMA) floodplain delineations, flood studies, hydraulic design support modeling, green infrastructure improvements, and compliance permitting. Some of the local projects the GHD team has worked on include:

- Town of Lewiston Cliff Road Storm Sewer Improvements
- Amherst Stormwater Inspections Term Agreement
- Town of Orchard Park Drainage District Consolidation Study
- Town of Niagara, Belden Center Drainage Improvement Project
- Batavia Stormwater Master Plan
- Lemke Culvert Replacement Project
- Various Storm Sewer System Improvement Projects as the Retained Engineer Towns of Lewiston, Niagara, and Hamburg

In addition, GHD aids in the management of the municipal stormwater program in compliance with MS4 (Municipal Separate Storm Sewer System) SPDES Permit. Under the current 2024 permit, municipalities must expand their procedures, operation and housekeeping across multiple departments with the intent to protect local waterways from impacts. The permit outlines specific annual measures and reporting and covers a variety of topics, such as mapping, outfalls, illicit discharges, construction sites, and municipal facilities. Compliance with the permit is an ongoing and constantly changing process that requires diligence and oversight. GHD provides these services at varying levels depending on individual need for four local municipalities.

1.5.1 Hydrologic Analysis

Hydrologic analyses encompass the study of precipitation patterns and calculation of surface runoff during storm events. Hydrologic analyses typically comprise the first step in preparation of the engineering design for stormwater management studies, floodplain delineation and water balance studies. These analyses are used to calculate surface runoff from a contributing drainage area under various precipitation events. The hydrologic models developed as part of the hydrologic analysis consider the physical characteristics of the contributing drainage area and are used to calculate surface runoff flow peaks, volumes, and durations from the drainage area.

The results from the hydrologic analyses are used to prepare engineering designs for stormwater management treatment systems and features. These features will include hydraulic conveyance structures such as culverts, natural creeks, treatment facilities including oil grit interceptors, detention ponds, retention ponds, green infrastructure, and constructed wetlands.

1.5.2 Hydraulic Analysis

GHD prepares hydraulic analyses to design conveyance structures such as channels or culverts and to delineate floodplains in accordance with FEMA's map revision program. Hydraulic analyses are regularly applied by GHD to assess the erosive potential of a flow within a channel to design bank stabilization measures to prevent erosion. Alternatively, the same studies are used to assess the sediment transport potential of a creek or river to track contaminant spills or areas of influence in a river.

Hydraulic models applied by GHD include:

- Autodesk – Infoworks ICM
- CulvertMaster
- USACE Hydrologic Engineering Center's River Analysis System (HEC-RAS) and GeoHec-Ras
- HECGeoRas
- CivilGEO Engineering Software – (GeoHECRAS)
- HydroCAD Software Solutions (HydroCAD)
- United States Environmental Protection Agency's Storm Water Management Model (EPASWMM)
- Computational Hydraulics International – (PCSWMM)
- Hydraflow Hydrographs Extension for AutoCAD Civil 3D
- Hydraflow Express Extension for AutoCAD Civil 3D

1.5.3 Permitting

GHD has assisted numerous clients in obtaining stormwater permit coverage under the State Pollutant Discharge Elimination System (SPDES) Permit and the Construction General Stormwater Permit, including writing Stormwater Pollution Prevention Plans (SWPPPs). GHD has also audited many facilities for compliance with individual stormwater permits. In addition, GHD has been an active member of the Western New York Stormwater Coalition since its inception. We have actively been involved in the development of the program to bring Coalition members into compliance with the Phase II Stormwater Regulations for Municipal Separate Storm Sewer Systems (MS4). GHD staff members are frequently involved in Coalition meetings and attend as retained engineer or engineer of record on behalf of member communities.

GHD also has extensive experience assisting our clients through the SEQR process. We are able to determine a project's significance, complete Environmental Assessment Forms, and provide supporting documentation for negative or positive declarations. In the case of a positive declaration, we are able to compile the Environmental Impact Statement. Additionally, our team can draft lead agency declaration letters for the Town and issue them to interested parties.

1.6 Design Services

GHD's in-house resources can provide most services required to complete the potential list of projects referenced in the RFQ. This provides a significant advantage to the Town in having a group of engineers with extensive knowledge of municipal wastewater treatment and sewer facilities, stormwater, and water systems, as well as Town and firm expectations for quality, schedule, and budget. Our firm has qualified engineering design managers and support staff available to assist in the areas listed below:

- Civil Engineering
- Structural Engineering
- Process Engineering
- Mechanical / HVAC Engineering
- Electrical Engineering
- Instrumentation, Automation and Control Engineering
- Computer-Aided Design Services
- Geographic Information Systems (GIS)

GHD's design teams make use of the latest technology to maximize collaboration between team members and resolve conflicts that are inherent in construction projects that can lead to unwanted change orders. Many resources are available to improve project outcomes including the ability to create 3D design models that can be shared among designers using Autodesk Forma. Local staff have the ability to call on subject matter experts to consult on complex issues, including design concerns, cost estimates, and safety in design concerns.

1.6.1 Building Information Modeling (BIM)

BIM is the digital representation of physical and functional characteristics of projects, assets, and environments, but it is more than a design tool—it is an avenue to create value. Data-rich BIM models are constructed using data captured from existing assets during the planning, design, and delivery process. On large and complex projects, BIM provides a clear picture of the project before it is realized to reduce costs, increase efficiencies, improve safety, and streamline processes. With this, the Town can expect greater project control, better connection with the design, reduced uncertainties, and cost overruns.

1.6.2 Safety in Design

In broad terms, there are three stages in the design process that consider safety in design, including:

- **Concept Design:** Conduct preliminary hazard identification, for hazards that are within the control of the designer.
- **Preliminary Design:** Identify reasonably foreseeable, significant construction/manufacture, installation, commission/use, maintenance/repair, demolition and disposal hazards associated with a design project and controls to mitigate.
- **Detailed Design:** Focusing on ways in which a design can be modified to eliminate or reduce issues that may affect the ongoing safety of people involved in constructing, using, maintaining, or demolishing the design product.

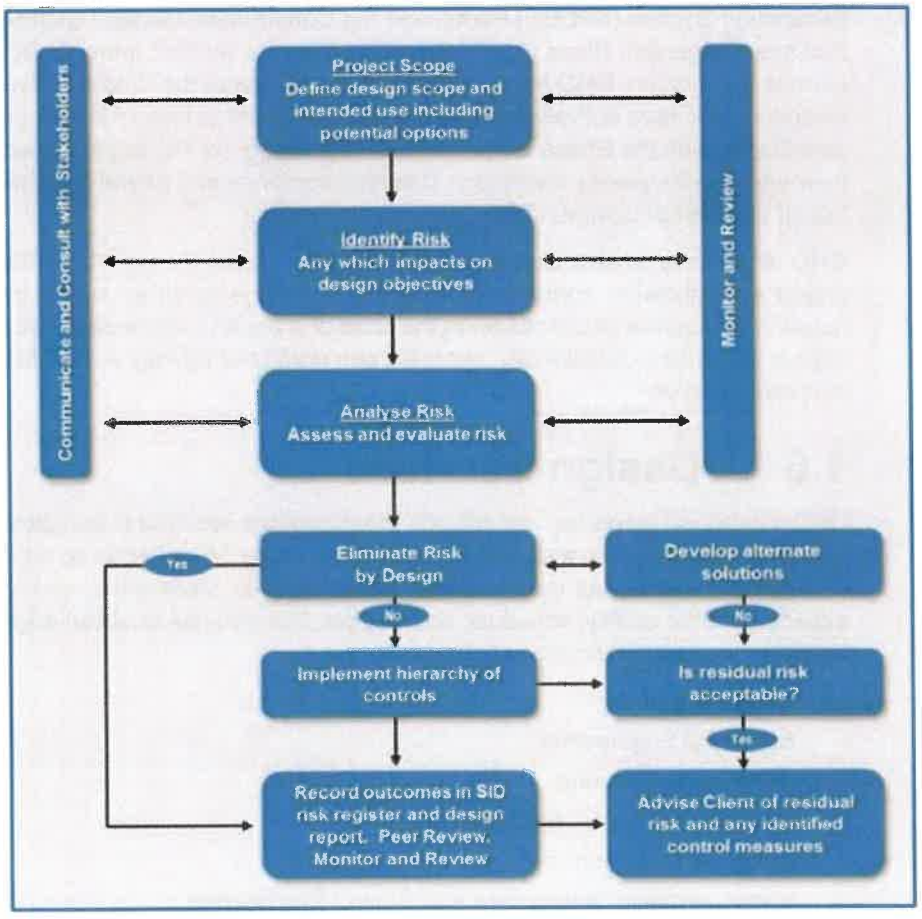


Figure 1.1 Flowchart to Identify and Eliminate/Control Hazards During Design

Figure 1.1 depicts a flow chart for identifying and eliminating/controlling hazards during design. Designers need to:

- Identify relevant stakeholders
- Be familiar with the assets being designed
- Make clients aware of their duties to disclose information about hazards

- Provide adequate and appropriate information about the residual risk of the design to those who need it
- Designers must ensure, within the extent of their control, that any designs they prepare minimize the risks to:
  - Anybody occupying, using, or operating the asset
  - Anybody carrying out construction, maintenance, or cleaning work at any time
  - Anyone else who may be affected by these activities

1.6.3 Constructability

Preparing a constructable and biddable set of contract documents are the ultimate goals for the design of every project. Identifying unknowns, solid design judgment, clearly communicating the design intent, and a well-coordinated design package are essential to meeting these goals. During the design phase, the GHD team will address key elements for construction sequencing during rehabilitation, repair, or replacement. As part of the design project, GHD's approach to integrating the essential project disciplines will be a key component in providing a constructable, biddable, and high value design.

1.6.4 Construction Cost Estimating

Our history of developing accurate costs is a function of our extensive experience on similar projects. GHD's focus areas include:

- Updated cost estimates at each design milestone to identify areas where scope may need to be adjusted to meet established project budget limits
- GHD maintains a region-wide construction cost database of unit costs that is updated to account for current market and changing bidding climate. We frequently coordinate with contractors and vendors on changing market conditions and updated material costs throughout the design development process.
- Tracking of recent bid tabulations to check against actual bid prices prior to advertisement and provide a chance to adjust as needed.
- Our ability to draw upon in-house Certified Cost Estimators and multiple internal supporting disciplines such as electrical, instrumentation, controls, HVAC, structural, and fire protection has proven to provide a more accurate depiction of anticipated costs.

The use of industry standardized practices and tools for back-checking and cost adjustment.

1.6.5 Regulatory Compliance and Permitting

GHD continually monitors the ever-changing regulations issued by the United States Environmental Protection Agency (EPA), NYSDEC, and the New York State Department of Health (DOH), and their implementation by local enforcement agencies. We work closely with these agencies to gain a solid understanding of new regulations so that we may help our clients obtain compliance in a timely and cost-effective manner. GHD's extensive experience in municipal wastewater treatment and sanitary sewers, stormwater and water system infrastructure projects has gained our firm credibility with regulatory authorities. Our firm and personnel have been successful in achieving regulatory approvals from agencies across all levels of government. GHD has developed a strong knowledge of compliance policies and procedures through close working relationships with these agencies. Our firm has built a solid reputation based on hard work, discipline, and high-quality project delivery with local municipalities, public authorities, and regulatory agencies.

As required for design and construction projects, GHD develops a comprehensive list of required permits and identifies agencies of jurisdiction. GHD also holds initial stakeholder meetings to present proposed project(s), identify permitting and design criteria, and determine any other agency's projects or plans, which could affect a proposed project or cause potential schedule delays.

1.7 Construction Phase Services

We believe that construction services share an equal pedestal in importance to preliminary and detailed design services. While excellence in design is critical, the greatest risks to project success are often experienced during the construction phase.

GHD's staff have experience in administering municipal construction projects for capital improvement and maintenance projects for treatment plants, pumping stations, water storage tanks, water distribution and wastewater collection, including large diameter pipelines, and other challenging projects. These services are led by Mr. Daniel Kolkmann, who alone has more than 45 years of construction contract administration experience. We will support the Town during any construction project by providing contract administration and resident inspection services, as requested. Our design teams work closely with the assigned construction contract administrators and resident inspectors to verify that the design intent and quality of equipment and materials are maintained.

GHD's goal is to assume a leadership role during the construction phase by encouraging communication and understanding among the project participants, contributing to solutions, completing submittal reviews, inspections, delivery of owner-furnished equipment, processing payments, coordination of contractor, owner, and operations staff, and resolving disputes in a fair and expeditious manner. GHD maintains a full complement of staff experienced in procurement phases, pre-construction phase requirements, construction contract administration and site observation, facility start-up/performance phases, and project completion and closeout phases.

2. Proposed Team

GHD's local presence and long history with the Town, and our proposed team's experience working on the types of projects referenced in the RFQ make us uniquely qualified to deliver the requested services. To provide the greatest level of responsiveness to the Town, GHD offers a team of experienced and diverse professionals to meet the needs of any potential project, while providing the necessary comprehensive services identified in the framework of services in the RFQ. This team approach, which GHD has successfully employed on similar arrangements with many municipal clients, provides several advantages including:

- A sole point of consultant contact and responsibility
- Comprehensive and complementary service capabilities brought by the team to assure that any project assignment can be handled by appropriately skilled professionals
- A vast resource network and redundancy to assure that any and all assignments are completed on schedule

As shown on Figure 2.1, our proposed project team has been organized to offer the Town the most qualified group of individuals to respond to your needs in a timely and cost-efficient manner, with the depth and redundancy to assure the Town that qualified personnel will be available as needed. Abbreviated resumes for key staff *(identified with an asterisk)* are provided in **Appendix A.**

As a project progresses or projects are assigned, a task or element may be identified that best suits the qualifications or experience of a specific person in another GHD office. When this situation occurs, this technical specialist will be added to the team to enhance project success. GHD's policies and structure have been established to promote collaboration and take full advantage of expertise throughout the firm. This approach provides a direct benefit to the Town, as the best team possible will be assigned to your projects.

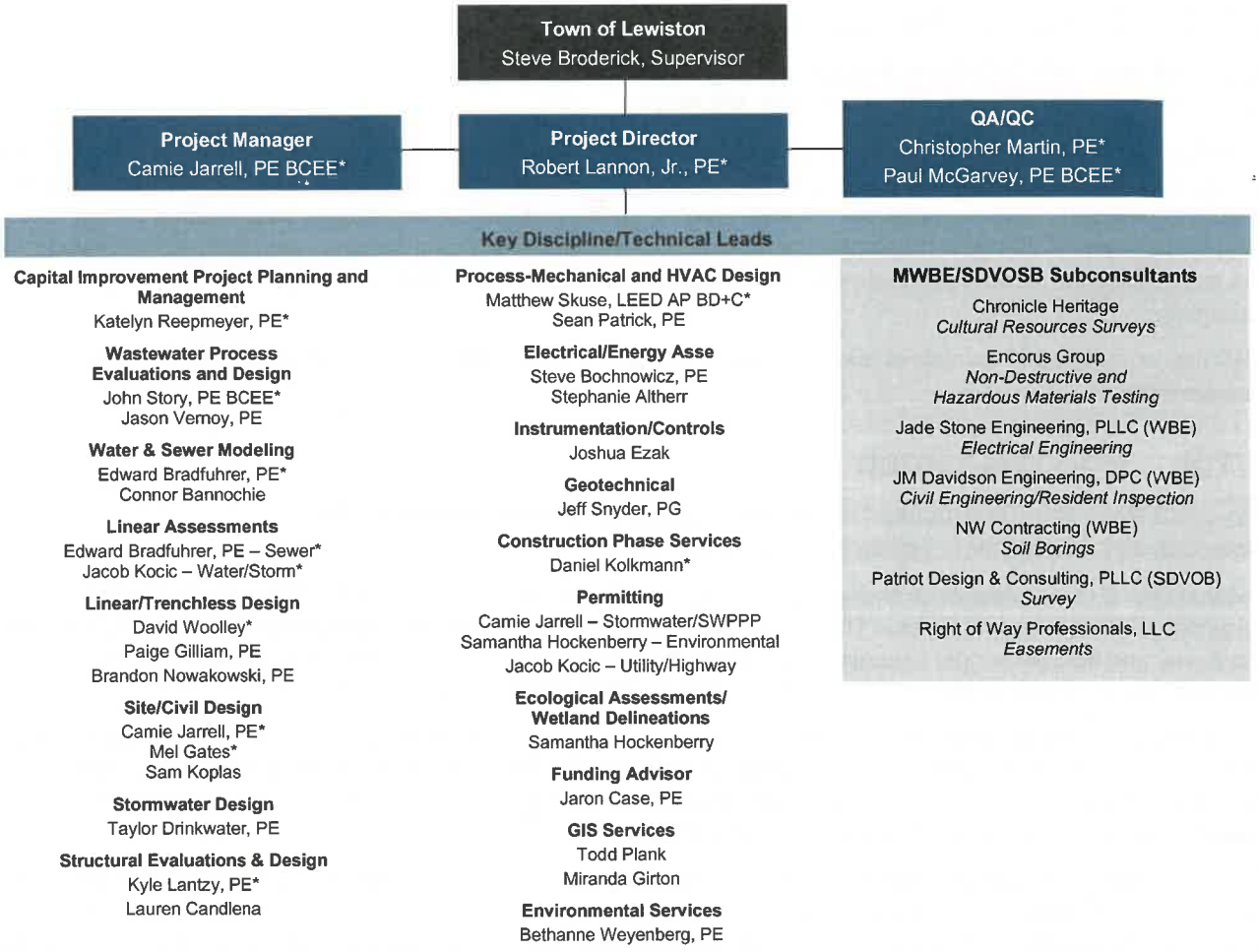


Figure 2.1 *Team Organizational Chart*

2.1 Proposed Subconsultants

GHD is committed to utilizing small and local businesses and maintains a successful Minority and Women-Owned Business Enterprise (MWBE) program. While GHD has the capabilities to complete most aspects of projects in-house, we are committed to fostering valuable relationships with small and local firms. GHD will identify subconsultant tasks that correspond with the projects goal of MWBE participation. This goal is important to us in having a meaningful and positive impact on projects. Below we have listed several MWBE and Service-Disabled Veteran-Owned Businesses (SDVOB) firms that we routinely engage and their probable roles on projects.

Their utilization will vary based on the project assignment and their availability at that time.

2.1.1 Chronicle Heritage

Proposed Role: SHPO/Cultural Resources Assessment (Phase 1 a/b)
Firm Address: 2390 Clinton Street, Buffalo, NY 14227

Chronicle Heritage is a global cultural and heritage resource management consultancy committed to the possibilities in a prosperous balance between the needs of the future and the uses of the past. Throughout their history, they have worked for clients in both the public and private sectors, guiding one successful project after another through the complex regulations that govern the management of prehistoric, historic, architectural, ethnographic, archaeological, and paleontological resources. Chronicle has earned an industry-wide reputation for creativity, innovation, and leadership.

GHD has worked with Chronicle on several water and sewer infrastructure projects requiring SHPO Phase 1A assessments.

2.1.2 Encorus Group

Proposed Role: Non-Destructive Testing and Hazardous Material Assessments
Firm Address: 23 Mechanic Street, Springville, NY 14141

Encorus Group is a professional engineering, testing, and inspection firm. Founded in 1996, Encorus has a staff of more than 100 full-time employees. This includes licensed professional engineers in all major disciplines, registered architects, and field personnel to support our established and accredited civil materials testing laboratory. The firm operates out of multiple offices in Western New York as well as a field office in Butler, PA.

Encorus Group's design team includes multi-state licensed professional engineers, registered architects, associate engineers and architects, drafters, and administrative personnel. These personnel cover all major engineering disciplines including structural, mechanical, electrical, fire protection, process, and automation, and allows us a breadth of experience typically found only in larger firms.

The firm's regulated building materials group can perform a wide range of services associated with environmental, hazardous, and regulated building materials management and abatement in New York, Vermont, Pennsylvania, New Jersey, and Connecticut. These services include inspection, project design, sampling, air monitoring, and laboratory analysis. In addition, the firm oversees renovation and demolition projects for compliance to contract documents and regulations.

2.1.3 Jade Stone Engineering, PLLC | WBE

Proposed Role: Electrical Engineering
Firm Address: 444 Vanduzee Street, Watertown, NY 13601

Jade Stone Engineering, PLLC (JSE) is a woman-owned small business. JSE was founded in January 2012 and offers mechanical, electrical, and plumbing (MEP) engineering design. They also offer Arc flash studies, thermal imaging services, final permit closeout electrical inspections, building condition assessments, mechanical systems assessments, load calculations, and various other mechanical and electrical equipment testing services.

JSE's electrical engineering department is diverse in both small and large projects. Under the leadership of Benjamin Walldroff and Jeffrey Robinson, the electrical team has a vast depth of knowledge and experience. Ben and Jeff have practiced engineering in Delaware, Pennsylvania, Maryland, Washington DC, Vermont, and now live and practice throughout New York State. The electrical team's project experience includes water and wastewater projects ranging from a small pump station up to a 240 mgd facility. They also have experience in substation design, extensive building systems, medium voltage power systems, emergency generator systems, electrical service design, and instrumentation and control system design.

GHD has successfully collaborated with Jade Stone on the Town of Tonawanda WTP Electrical and Pump Station Upgrades, City of Oswego WTP Upgrades, Erie County Division of Sewerage Management Lackawanna WRRF and ORF Disinfection Improvements, and the Village of Bath WWTP Upgrades projects, and many projects in Central New York.

2.1.4 JM Davidson Engineering, DPC (JMD) | WBE

Proposed Role: Civil Engineering/Resident Inspection Services
Firm Address: 935 Sheridan Drive, Suite 120, Tonawanda, NY 14150

JM Davidson Engineering, D.P.C. (JMD) was founded in 2015 by Jaime Davidson, PE to assist in filling the need for women-owned businesses in the civil engineering field. Since then, JMD has grown to include multiple professional engineers, scientists, and construction inspectors, offering a full range of civil engineering services, including water and wastewater, structural, transportation, water resources, and railroad design services. Their firm is headquartered in Western New York, giving us a strong local connection to our clients in the region.. JMD is certified as a Women Business Enterprise (WBE) by New York State. JMD and GHD have successfully worked together on numerous projects with varying roles including resident inspection for Phase 2 of the West Side Sewer Extension along Chautauqua Lake and various projects for the Erie County Division of Sewerage Management.

2.1.5 NW Contracting | WBE

Proposed Role: Geotechnical Soil Borings
Firm Address: 3553 Crittenden Road, Alden, NY 14004

Founded in 1989, as Nature's Way Environmental with a focus on bioremediation. In 1998 the drilling division was formed and in 2009 the fi rm achieved women-owned business status in New York State. The firm was rebranded to NW Contracting in 2019 to better reflect the varying services offered. NW Contracting provides comprehensive environmental consultation, remediation, drilling, fuel systems, and general contracting services. If your site requires subsurface investigation, you need a team with the right tools to help create a thorough plan of action. From soil to pavement to bedrock, proper investigation is critical to understanding any structural concerns, remediation needs, or soil characterization.

2.1.6 Patriot Design and Consulting PLLC | SDVOB

Proposed Role: Topographic Survey
Firm Address: 500 Canal View Boulevard, Suite 300, Rochester, NY 14623

Patriot Design and Consulting is a multidisciplinary architecture, engineering, and land surveying firm with a long history of supporting public agencies across New York State. For more than two decades, they have partnered with organizations such as OGS, the VA, NYPA, SUNY, DASNY, and the NYSDOT to deliver practical, durable, and well-coordinated design solutions. They offer full-service land surveying and construction inspection, supporting DOT and other agencies with accurate field data and dependable oversight that helps keep projects moving smoothly.

2.1.7 Right of Way Professionals, LLC

Proposed Role: Easements
Firm Address: 2440 Sheridan Drive, Suite 100, Tonawanda, NY 14150

Right of Way Professionals, LLC (ROWP) was formed in 1999 with a mission to bring the utmost quality of service to its clients. ROWP has spent the past two decades developing deep and respected relationships within the New York State right of way community. Providing a turnkey solution requires focused knowledge that is heavily dependent on the individual providing the turnkey solution than the firm. It is this belief why ROWP has professional negotiations and experience working with the New York State Department of Transportation.

3. Similar Project Experience and References

The following pages provide an overview of GHD's experience with wastewater collection and water distribution projects. The client references below can attest to GHD's and our proposed team's current and past performance on projects of a similar nature to those proposed for the Town. Detailed project descriptions demonstrating this experience are provided in Appendix B.

Table 3.1 Similar Project References

Project(s)	Client/Contact
Town-wide Water System Improvements	**Town of Lewiston** Steve Broderick, Supervisor 716 754-8213 sbroderick@townoflewistonny.gov
Water Pollution Control Plant Upgrades	**Oneida County Department of Water Quality and Water Pollution Control** Karl E. Schrantz, Commissioner 315 798-5656 kschrantz@oneidacountyny.gov
Metropolitan Syracuse WWTP Digester Phase II Improvements	**Onondaga County Department of Water Environment Protection** James Thayer, PE, Deputy Commissioner of Operations & Maintenance 315 435-2260 jamesthayer@ongov.net
Retained Engineering Services	**Niagara County Sewer District No. 1** Thomas W. Blodgett, PE, Administrative Director 716 693-0001 Thomas.Blodgett@niagaracounty.gov
On-Call Water and Wastewater Services	**Town of Tonawanda** Michael Kessler, Director of Water and Wastewater 716 693-4900 mkessler@tonawanda.ny.us
WWTP Clarifier and Digester Improvements Sanitary Sewer System Rehabilitation	**Town of Grand Island** Robert H. Westfall, PE Town Engineer 716 773-9600 rwestfall@grand-island.ny.us
Royalton Phase 16 Water System Improvements	**Town of Royalton** Jeffrey Brown, Supervisor 716 772-7531 jbrown@townofroyalton.gov

4. Project Management Approach

All GHD projects are effectively managed by qualified and experienced staff. Team members are assigned to projects based on their experience and the specific qualifications they bring to the projects. Our commitment to quality service is reflected in our ISO 9001:2015 Practice Quality Management System, which defines how projects are managed. Direct project responsibility rests with GHD's Project Directors. Project Managers are accountable to the Project Directors and are responsible for defining the scope of work, assigning a work team, ensuring all work is done in a timely and efficient manner, and ensuring that the client is satisfied with the completed project. GHD maintains a commitment to communication with the client and team members throughout the duration of any project. The result is quality service and satisfied clients. Depending on the scope of future projects, GHD will assign the appropriate Task Leads or Design Manager to work directly with Camie.

Project Managers can draw on the expertise of staff from any office to assist with specialty engineering, laboratory services, data management, graphics, computer modeling, drafting and any other technical support services that may be required to complete a project.

4.1 Involvement of O&M Personnel

We believe in completing projects "hand-in-hand" with our client's staff, from the Town Supervisor and Boards to utility departments and operations and maintenance (O&M) staff. This approach provides the greatest opportunity for project success. Ultimately, the consulting engineer is providing the proper tools to allow effective and efficient operation of treatment plants, pump stations, sanitary sewers, storm sewers, and water systems. O&M staff "buy in" to an engineer's proposed solution is mandatory for a project to succeed. We will maintain this contact with the Town's staff through regular communication and listening to their needs.

4.2 Cost Control

GHD has an established system for controlling its own costs throughout a project's life cycle. Therefore, at the assignment onset, GHD will maintain a focus on completing each assignment and developing improvements that are within established budgets. GHD will initiate a kick-off meeting with the Town to review overall project objectives and goals, further define scope, budgets, schedules, and discuss the eligible activities and requirements for any funding pursued. Throughout the project's lifecycle, we consistently monitor both scope and budget, updating cost estimates as design progress further clarifies the necessary work. When indicators of scope creep arise, we inform the Town so that a determination can be made regarding the necessity and value of additional work items. Additionally, we assess project elements that may present risks for cost fluctuations. This proactive approach enables collaboration with Town personnel to gather detailed information on these components, facilitating effective management of the design and construction budgets.

4.2.1 Quality Control Program

GHD firmly believes that quality assurance/quality control is essential to delivering a consistent quality deliverable to our clients. GHD's overall quality management approach for each project is governed by GHD's ISO 9001:2015 accredited North American Quality System. ISO 9001:2015 specifies requirements for GHD's quality management system that allows GHD to demonstrate our ability to provide consistent quality of services to meet the Town's requirements while providing continual improvement. GHD's quality system has been streamlined by using standardized forms and checklists to make compliance clear and allow for consistent internal and external system auditing. Each project's QA/QC procedure is scaled appropriately for the size and complexity of the project.

4.3 Other Services

In addition to the services outlined above, GHD can provide several other services related to planning, design, construction, and operation of water and wastewater infrastructure. Additional services that may be relevant to future Town projects are described below.

4.3.1 Asset Condition Verification

To ensure the full extent of project needs are captured in the scope of the design, GHD team members can visit the project site to verify asset conditions to help prevent scope creep or change orders during construction. Our typical approach to performing condition assessments is as follows:

- GHD will review existing condition assessment information and supplement it with our field observations. We will collect additional field data as required to provide necessary input to develop the concept, final design, and bid documents.
- GHD will undertake a systematic assessment of the asset, conducting both visual inspections and other testing, as necessary.
- GHD will review other projects elements (structural, mechanical, electrical, and instrumentation and controls) as necessary to confirm as-built conditions and capacity, as well as to assess condition and operability.
- GHD will review the latest code requirements as they apply to the asset/facilities and identify any features not compliant.
- GHD will field verify existing as-built drawings vs. field conditions and red-line any field changes made, such as decommissioned or replaced equipment, piping modifications, or field modifications.
- GHD will develop a list of existing assets that cannot be accessed during the design phase for field verification (e.g., buried, encased, or insulated piping, ductbanks and raceways, and tank and channel conditions below the water line). We will incorporate bid items and expected quantities for anticipated potential repairs into the bid documents to cover anticipated or potential, but undefinable, work in these areas.

4.3.2 Studies, Evaluation and Preliminary Design

GHD will evaluate alternatives for achieving the goals of each project and provide a conceptual plan or report consisting of the established footprint of the proposed project and mapping out the relationship between new and existing facilities or site areas. We will conduct field investigations to confirm as-built conditions of facilities; review identified O&M issues and concerns and assess the feasibility of the preliminary layouts. Site topography, accessibility, and site proximity to existing utilities will also be reviewed in the field with respect to available as-builts and GIS data.

Where required for design, we will work with subconsultant partners to perform topographic surveys and research existing easements where required. GHD will also work with our subcontractor partners to conduct soil borings and environmental reviews.

4.3.3 Detailed Design

GHD will prepare designs for the proposed project based on design standards and guidelines for water and sewer facilities. The goal of the detailed design phase is to prepare bid documents for the projects, generally consisting of:

- General conditions
- Supplementary conditions
- Special provisions
- Technical specifications
- Contract drawings (plans)
- We will incorporate any standard details and specifications into our design as applicable

GHD will review designs for conformance with applicable building code requirements, codes, and regulations. In addition, we will review design for conformance with the Recommended Standards such as the Ten State Standards, AWWA, and other applicable industry standards. Following each design submittal, a meeting or workshop (in-person or virtual) will be held with Town staff and other stakeholders (as necessary) to review the draft design documents and solicit comments from all team members. We will track comments obtained in the workshop or in writing for verification that the comments have been addressed.

4.3.4 Bid Phase Services

For projects intended for bidding by contractors, GHD will assist the Town in the advertisement and review of contractor bids. We expect the following tasks within the scope of work for publicly bid projects:

- Attend the pre-bid meeting
- Develop written answers to bidder questions
- Develop written addenda for distribution
- Assist in canvass of bids
- Recommendation of award

4.3.5 Construction Administration and Inspection Services

For projects requiring construction phase services, GHD may provide construction administration and inspection. We expect the following tasks within the scope of work for projects requiring construction phase services:

- Attend a pre-construction meeting and monthly progress meetings
- Review shop drawings and O&M manuals
- Answer requests for information (RFIs)
- Review and respond to work changes
- Review test results and certificates
- Develop as-built drawings
- Conduct part-time or full-time site inspection
- Administer the document management platform
- Assist with startup and testing

5. Project Funding Experience

GHD understands the financial limitations and challenges facing municipalities across New York State. We have a strong history and track record in securing grant funding/financing for capital projects to help communities like the Town of Lewiston deliver critical infrastructure improvement projects. GHD regularly conducts studies, develops engineering reports, performs environmental review tasks, and works within the guidelines of funding sources to guide and assist our clients. GHD will leverage this experience to help identify funding sources to support the planning, design and construction of key infrastructure projects in the Town and will collaborate with the Town's grant writer, Municipal Solutions Inc., to prepare the required engineering reports and design documentation.

5.1 Understanding of Funding Programs

GHD follows all applicable funding opportunities to stay informed for our clients. Table 5.1 presents funding options available to the Town for potential future water, wastewater, and flood control projects. GHD has experience with co-funding using multiple grants and/or financing programs for a single project. Program details are summarized based on currently published funding requirements, which often change from year to year. ***Please note the following upcoming application deadlines for various water and wastewater funding programs:***

NYSEFC Cybersecurity Assessment and Implementation Grant: ***Friday, May 15, 2026***

NYSDOH/NYSEFC DWSRF and CWSRF FFY 2027 Draft Intended Use Plan: ***Friday, May 29, 2026***

NYSDEC/NYSEFC Wastewater Infrastructure Engineering Planning Grant: ***Friday, June 12, 2026***

Table 5.1 NYS Funding Programs

Program	Program Overview	Grant/Loan Figures	Program Requirements
Cybersecurity Assessment and Implementation Grant	Intended to assist in funding compliance with recently issued NYSDOH and NYSDEC cybersecurity requirements for water and wastewater systems	– Assessment Grant - Municipality may apply for up to $50,000 with a 0% match – Implementation Grant - A municipality may apply for up to 20% of net eligible costs, up to $100,000.	– Online Application – No engineering procurement or MWBE/SDVOB requirements for this type of grant
NYSEFC Engineering Planning Grant (EPG)	Helps develop Engineering Reports, which are required to list your project on the Intended Use Plan (IUP) Annual List	– Category 1 – Up to $50,000 for any wastewater infrastructure-related project – Category 2 – Up to $100,000 for I/I projects ***required by an Order on Consent or SPDES Permit Compliance Schedule*** (Proof of Enforcement must be provided). – 20% local match of the requested amount (may include cash and/ or in-kind services). Grants from other sources may not be used to satisfy local match.	– After Grant Award: – Detailed Final Budget and Plan of Finance, including third-party funding agreements and 20% local match – Board resolutions authorizing and obligating local match fund, and designating authorized representative – Fully executed Engineering Agreement – EFC Certification for A/E Services Procurement

Program	Program Overview	Grant/Loan Figures	Program Requirements
NYSDEC Water Quality Improvements Project (WQIP) Grant	Funds projects that directly improve water quality or habitat, promote flood risk reduction, restoration, and enhanced flood and climate resiliency, or protect a drinking water source.	– Match is a percentage of the award amount grant recipients are required to provide as a local share, based on the category.	– Apply through the NYS Consolidated Funding Application (CFA) – MWBE and SDVOB participation requirements – Regulatory driven projects that add effluent disinfection or include phosphorous removal and CSO/SSO improvements are prioritized – Applicants must be registered in the NYS Statewide Financial System to be considered eligible
NYSEFC Water Infrastructure Improvement Act (WIIA) Grant (Clean Water) (Drinking Water)		– Grants of 25% of net eligible project costs up to $25 million , whichever is less. – No more than $5 million allocation per year – Grants of 70% of net eligible project costs with No CAP. For projects addressing an emerging contaminant (EC) above state maximum contaminant level. – Grants of 60% of net eligible project costs up to $5 million, whichever is less, for other eligible water projects.	– MWBE and SDVOB participation requirements – American Iron and Steel (AIS) (CWSRF and WIIA/IMG with CWSRF funding) – Bond/Authorizing resolution – Specific to IMG, must have a current, valid and binding project Intermunicipal Agreement (IMA) between at least two cooperating municipalities related to the financing and implementation of the project.
NYSEFC Intermunicipal Grant (IMG) Program	Available for both clean water and drinking water projects undertaken jointly by multiple municipalities	– Grants of 40% of net eligible project costs up to $30 million , whichever is less – No more than $10 million allocation per year	
Clean Water State Revolving Fund (CWSRF) Financing	Administered by EFC in coordination with NYSDEC	– Market rate, subsidized, hardship financing – Can be combined with WIIA or IMG grants.	– Bond/Authorizing Resolution – Budget Information – Environmental Review Documents – SHPO Approval – District Formation Documents, if applicable – Engineering Agreement, following A/E Procurement – Other Documents, based on project specifics – MWBE participation
NYSEFC BIL Grant / Infrastructure Investment and Jobs Act (IIJA)	NYSEFC Clean Water State Revolving Fund (CWSRF) Bipartisan Infrastructure Law (BIL)	– Grant funding for CWSRF, DWSRF, emerging contaminates, and lead service line replacement/inventory projects	– DBE participation requirements – Build America Buy America (BABA) – Projects serving disadvantaged communities and environmental justice areas are prioritized

Program	Program Overview	Grant/Loan Figures	Program Requirements
Drinking Water State Revolving Fund (DWSRF) Financing	Co-administered by EFC and the NYSDOH	– Market rate, subsidized, and hardship financing – Can be combined with WIIA or IMG grants.	– Bond/Authorizing Resolution – Budget Information – Environmental Review Documents – SHPO Approval – District Formation Documents, if applicable – Engineering Agreement, following A/E Procurement – Other Documents, based on project specifics – MWBE participation

6. Proof of Insurance

As requested in the Towns's RFQ, we are providing sample insurance certificates indicating the required coverages in **Appendix C**.

Appendix A

Project Team Resumes

A GHD Principal

Robert P. Lannon Jr., PE

Project Director/Engineer of Record

Location
Buffalo, New York, USA

Experience
42 years

Qualifications/Accreditations
– B.S. Civil Engineering, 1985
Licensed Professional Engineer, NY

Memberships
– Water Environment Federation
– New York Water Environment Association

Relevant experience summary

Bob has 42 years of experience in the civil engineering field. He has acted as Project Director/Manager for various municipal projects across Western and Central New York, including the design of water and wastewater facilities, water mains, sanitary and storm sewer systems, and pumping stations. Bob currently serves as the retained engineer/engineer of record for the Towns of Lewiston and Niagara, Niagara County Sewer District No. 1, and the Village of Youngstown.

Retained Engineering Services

Town Engineer |
Town of Lewiston | Lewiston, NY, USA |
2001-2003, 2004-2010, 2014-Present

As Town Engineer, Bob is the main client contact. He attends monthly Board Meetings and oversees engineering support services as required by the Town for municipal infrastructure projects including:

– Feasibility studies and preparation of contract documents for numerous infrastructure improvement projects involving water, sewer, and storm sewer systems.
– Capital planning and implementation, including capital cost estimating, concept designs, preparation of Map Plan & Reports, development of contract documents, regulatory agency approvals, contract administration, and assistance with obtaining financing.
– Developing contract documents for a water system capital improvement project to replace approximately 45,000 linear feet of 8-, 12- and 16-inch water main and services throughout the Town.
– Several sanitary sewer infrastructure improvement projects, including installation of more than 4 miles of sanitary sewers to service numerous residential neighborhoods. Services included design and preparation of contract documents and drawings, refinancing assistance, and inspection of construction activities.

Water Pollution Control Center Upgrades

Project Director
Town of Lewiston | Lewiston, NY, USA

Bob oversaw a multi-disciplined team conducting detailed investigations for the preliminary analysis of several processes at the plant including grit removal, sludge processing, and tertiary treatment technologies. Directed the team in the development of a Map Plan and Report and funding opportunities with NYSEFC (CWSRF and Green Grant) and NYSERDA's Existing Facilities Program.

Town-wide Water System Improvements

Project Director
Town of Lewiston | Lewiston, NY, USA

As retained engineer for the Town, Bob directed project efforts for the development, design and construction phase services for this Town-wide water system improvement project. The project included 44,500 linear feet of waterline ranging in size from 8 – 16 inches in diameter and included railroad crossings, stream crossings, NYSDOT and Niagara County Highway roadways, trenchless technologies, and several interconnections.

T 716 362-8806 | M 716 491-1267 | E robert.lannon@ghd.com

Wastewater Treatment Plant Upgrades

Project Director |

Village of Bath/Bath Electric, Gas and Water Systems | Bath, NY, USA

Bob is serving as project director for design and construction administration of $40 million in upgrades at the WWTP. Bob ensured the correct staff were assigned as the project scope changed to implement MBR treatment to meet lower SPDES discharge limits for nitrogen and phosphorous, new disinfection limits and undertake numerous equipment replacements and general renovations throughout the WWTP. Bob was actively involved in discussions regarding financing, design and construction phase services.

Job 3089 – Sanitary Sewer Lining Various Locations

Project Director |

Town of Tonawanda | Tonawanda, NY, USA

Bob is serving as project director for the design of a sanitary sewer rehabilitation project in various locations of the Town. The project consisted of approximately 70,000 linear feet of cured in place pipe (CIPP) and manhole lining.

Retained Engineer

Project Director/Engineer of Record |
Niagara County Sewer District No. 1 |
Niagara County, NY, USA | 2004 – Present

As retained engineer since 2004, Bob attends monthly Board Meetings, responds to client inquiries, and oversees projects completed in connection with the Niagara County Sewer District's (NCSD) 14 million gallon per day (mgd) Water Pollution Control Center (WPCC), seven pump stations, and interceptors within the six member Towns. Bob assisted the NCSD in negotiations with the NYSDEC their recent SPDES Permit renewal and oversaw the development and updating of the current 10-Year Capital Improvement Plan, as well as implementation of their annual Operation and Maintenance (O&M) improvements.

District-wide Condition Assessment and Development of New 10-Year Capital Plan

Project Director
Niagara County Sewer District No. 1 | Niagara County, NY, USA

Bob directed project staff conducting a District-wide condition assessment of the wastewater facilities, systems, and major assets. Data collected was used to develop a new comprehensive 10-Year Capital Improvement Plan (CIP). The project consisted of the following key components:

- Site visits, staff interviews and data collection utilizing iPad technology and customized data collection templates
- Capital needs identification
- Project identification, prioritization and cost estimating; capital projects were prioritized based on criticality and condition
- Capital plan reporting

West Side Sewer Extension Projects

Project Director |
South & Center Chautauqua Lake Sewer Districts | Chautauqua, NY | Ongoing Since 2019

Bob is serving as project director for several projects associated with the extension of public sanitary sewers along the west side of Chautauqua Lake to replace private on-site sewer septic systems. Improvements include a new low-pressure sewer system, grinder pumps, new pump stations, rehabilitation of existing pump stations and all associated appurtenances. Projects to date include:

- Design and construction of Phase 1 extension
- Development of a Map and Plan for Phase 2 extension
- Design and construction of Phase 2 extension
- Development of a Map and Plan for Ashville Bay Service Area
- Development of a Map and Plan for Phase 3 extension.

Capital Plan, Phase 2

Project Officer |
Niagara County Sewer District No. 1 |
Niagara County, NY, USA

Project Officer for the preliminary and detailed design, including a Map, Plan and Report, and preparation of Contract Documents for the following projects:

- Tonawanda Creek Forcemain Replacement/Upgrade
- Tonawanda Creek Road Pump Station Rehabilitation
- Influent Pump Station Bar Screens at the Water Pollution Control Center (WPCC)
- Aeration Basin Grit Removal System at the WPCC
- Secondary Clarifier Valve Actuators

Career history

2003 – present	GHD, Principal/Project Director
1983 – 2003	O'Brien & Gere Inc., Project Manager

Camie Jarrell PE

Project Manager

Location

Buffalo, New York, USA

Experience

23 years

Qualifications/Accreditations

- B.S., Civil Engineering, 2001
- Licensed Professional Engineer – PA

Key technical skills

- MS4 Compliance Reviews
- Stormwater Pollution Prevention Plans

Memberships

- Water Environment Federation
- New York Water Environment Association
- American Public Works Association

Relevant experience summary

Camie has 23 years of general municipal and civil engineering experience. She has been responsible for the execution of a variety of engineering tasks and projects including feasibility studies, infrastructure design, drainage system analysis, site planning, grant and permit applications, stormwater pollution prevention plans for both SPDES construction permits and Multi-sector general permits, MS4 permit compliance and reviews, and preparation of scope of work and contract documents for various municipal and industrial clients. Camie also serves as the Town Engineering consultant for the Town of Hamburg, the engineering representative for the Town of Aurora, and the representative Planning Consultant for the Towns of Lewiston and Niagara. She is a qualified stormwater inspector and resident inspector for public improvement projects.

Retained Engineering Services

Project Manager/Planning Board Consultant | Town of Lewiston | Lewiston, NY, USA | 2001-2010, 2014-Present

Camie currently serves as Project Manager for Town projects under our retainer. She also assists the Planning Board by reviewing submissions from developers and/or property owners for compliance with the associated municipal code, NYS standards and standard engineering practices. Reviews include the design of stormwater, water, and sanitary systems; contour elevations; connection to existing utilities; site access; and parking lot layout. Camie discusses comments with various department heads, attends public meetings, and prepares review letters for the building Inspector.

Town Engineering Services

Town Engineer | Town of Hamburg | Hamburg, NY, USA

Camie oversees the Town's Engineering Department, providing direction to department staff, developing department budgets, addressing resident inquiries and complaints, and providing day to day engineering support. She performs site plan and subdivision reviews; State Environmental Quality Review (SEQR) environmental reviews; drainage reviews; Stormwater Pollution Prevention Plan (SWPPP) reviews; stormwater assistance; and multiple separate storm sewer system (MS4) program coordination. She also provides project management and design services for various Town capital projects and development of and updates to the Town's capital improvement plan (drainage, storm sewer, buildings and grounds and highway). Camie also attends meetings and provides consultation to the Town Board and Planning Board.

Stormwater Inspections

Project Manager/Lead Inspector | Town of Amherst | Amherst, NY, USA

As an approved inspection firm for the Town since 2008, Camie has and continues to conduct inspections of residential and commercial developments for

compliance with the SPDES General Permit for Stormwater Discharges from Construction Activities, including the installation of erosion and sediment control measures, and compliance with the project SWPPP at various stages of construction. Camie coordinates inspections with the contractor(s) and prepares inspection reports outlining the status of construction and any necessary corrective actions. Camie also trains and acts as supervising professional to a team of junior engineers and inspection staff to conduct stormwater inspections.

Phase 2 Stormwater Management Program

Project Engineer |
Multiple Municipal Clients | Erie and Niagara Counties, NY, USA

Camie assists multiple municipal clients with compliance with their MS4 SPDES Permit. This includes answering specific questions from stormwater management officers, reviewing policies and procedures to meet the permit requirements, and assisting with enforcement. Camie attends Western New York Stormwater Coalition meetings representing several municipal clients. This allows her to update clients on activities of the Coalition, public education and outreach, distribution of communication, reports, and instructions required to comply with State regulations, preparation of annual reports, assisting with the preparation of stormwater program plans, and working towards compliance with State permit requirements. She has also assisted the County Attorney, local municipal attorneys, and individual clients with the review of existing local codes and the review and incorporation of State required stormwater erosion and sediment control and illicit discharge elimination laws.

EPA Stormwater Audit Compliance

Engineer |
Town of Clarence | Clarence, NY, USA

Camie conducted a detailed review and update to the Town's Stormwater Program, specifically the Stormwater Program Plan document, in response to an audit and Administrative Order from the EPA. Work included:

- Review of storm and sanitary sewer systems at municipal facilities
- Preparation of concept plans for regulatory approval
- Updating procedures and documents for Illicit discharge detection and elimination program
- Post-construction stormwater practice inventories
- Project involved several meetings with client and attorney and coordination with regulatory agency.

Project experience – Water Resources

Village Drainage Improvements

Project Engineer |
Village of North Collins | North Collins, NY

Camie assisted with the design of drainage upgrades to alleviate flooding concerns and prepared required funding program submittals for the client. Camie prepared plans and specifications for the project, and coordinated with structural design and Village attorney for bidding.

Cayuga Creek Flood Study

Project Engineer |
Town of Niagara | Niagara, NY

Camie conducted a field investigation to determine the condition of the creek, to identify flow obstructions and potential causes of flooding, and coordinated an emergency action to remove impediments and improve flow. She compiled historical development and flow data to determine outside sources of stormwater, prepared a health and safety plan, coordinated the installation of flow monitors along the creek and the collection of data, reviewed and analyzed the information, and assisted in the preparation of project report for presentation to the client.

Watts Drive Flood Study

Engineer |
Town of Lewiston | Lewiston, NY

Camie researched procedures for a Letter of Map Amendment for removal of existing structures in the Watts Drive subdivision from the Flood Hazard Area due to channel improvements. She collected data regarding channel condition, storm water structures and flow information, and sized proposed channel structures according to flow information. Camie prepared a notification letter and instructional letter for residents and assembled an application package for approval by the Town.

Career history

2006 – present	GHD, Sr. Project Engineer
2001 – 2006	O'Brien & Gere, Inc., Engineer

A GHD Principal

Christopher P. Martin PE

QA/QC

Location

Buffalo, New York, USA

Experience

37 years

Qualifications/Accreditations

- B.S., Civil Engineering, 1988
- Licensed Professional Engineer: New York

Memberships

- Member, Water Environment Federation
- Member, New York Water Environment Association

Relevant experience summary

Chris has 37 years of progressively responsible experience in planning, design, and construction of municipal water and wastewater, and industrial wastewater systems. He has managed projects involving treatability studies, disinfection systems, nutrient removal and treatment plant upgrades, as well as numerous pumping stations. He has specific experience in developing creative and cost-effective wastewater treatment facility plans and capital improvement plans in recent years, and also has directed several term services projects for municipalities. Chris has managed or provided quality assurance/quality control for numerous Process Safety Management (PSM) and Risk Management Program (RMP) projects across North America for a variety of industrial and municipal clients.

Oak Orchard WWTP facility plan and feasibility study

Project Director |
Onondaga County Department of Water Environment Protection | Syracuse, New York, USA

Chris served as Project Director for a fast-paced evaluation to expand the Oak Orchard WWTP to handle 20-year growth, which included up to 10 mgd from a semiconductor manufacturer and related conceptual design. After issuing the final evaluation study. Chris directed additional efforts to develop conceptual plans for the plant to treat up to 29.3 mgd of semiconductor wastewater flow. One solution involved a sustainable approach: return high-quality effluent from the WWTP back to the semiconductor manufacturer as reclaimed water to supplement potable water needs.

Backed by these planning efforts, Onondaga County was selected for the home of a $100 billion semiconductor manufacturing facility. Chris led detailed process and hydraulic modeling to quickly determine treatment: capital and O&M costs were also developed. Chris also directed initial discussions with the NYSDEC to determine the process required to revise the SPDES Permit and perform an outfall analysis using Cormix.

Metro WWTP 1978 upgrade infrastructure asset management evaluation

Project Manager |
Onondaga County Department of Water Environment Protection | Syracuse, New York, USA

Project Manager for a comprehensive asset management evaluation of the 84 mgd Metro Syracuse WWTP, which is comprised of over 3,000 assets with a value of approximately $1 billion. The evaluation included conducting inspections of most process tankage, condition and maintenance assessment of the process equipment, as well as inspections of large diameter plant piping. Based on the inspections and assessment, establish risk of failure and consequence of failure scores and input collected asse information into the County's Maximo system. The failure scoring was used to prioritize improvement needs and develop 5-, 10-, and 20-year capital improvement plans.

Three-Year term agreements

Project Director |
Erie County Division of Sewerage Management | Erie County, New York, USA

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Project Director and Project Manager for four 3-Year Term Services Agreements with the Erie County Department of Environment/Division of Sewerage Management. Projects Chris has managed under these term agreements have included:

- Depew Pump Station Rehabilitation Evaluation
- Depew Force Main ARV Analysis
- Vanderbilt Force Main Repairs
- Lackawanna WWTP NFA Analysis (Technical and Financial Evaluations)
- Southtowns AWTF Incinerator Emission Testing Services
- Electrical Distribution Systems Upgrades – ECSD No. 6 Well Street and Wilmuth Pumping Stations
- Rogers Road Pump Station Evaluation and Southwest Interceptor Elimination
- Vanderbilt Pump Station – Force Main and Flow Evaluation
- Rehabilitation of structural steel shells and cathodic protection systems at multiple ECDSM pumping stations (design and construction)
- Evaluating the Southtowns AWTF outfall capacity
- Design of new laboratory and miscellaneous improvements at the Big Sister WWTP
- ECSD No. 1 Mineral Springs Flow Meter Design/Construction
- Southtowns AWTF chlorine contact time analysis

Vanderbilt Pumping Station, Depew Pumping Station and overflow retention facility upgrades

Project Manager |
Erie County Division of Sewerage Management | Depew, New York, USA

Chris managed the design of several improvements in ECSD No. 4. These included new 185 hp pumps, valve chamber, flow meter chamber, VFDs, generator, and SCADA upgrades at the Vanderbilt Pumping Station; new flow meter, flow control valve, and SCADA programming at the Depew Pumping Station; and upgrades to restore hydraulic capacity of the ORF to 75 mgd.

Brewerton WPCP asset renewal project inspection and evaluation

Project Manager |
Onondaga County Department of Water Environment Protection | Cicero, New York, USA

Senior Project Manager for the design and construction of an $11 million improvements project for the 3 mgd Brewerton Water Pollution Control Plant (WPCP). The project involved replacement of the plant aeration system (grit, extended air secondary treatment and digester), plant headworks, sodium hypochlorite storage, and structural rehabilitation. The work included conversion of the existing blower room to an administrative area, installation of a plant-wide fire protection system, entrance gate security and surveillance, and replacement PLC and SCADA systems.

Metropolitan Syracuse WWTP optimization implementation improvements

Project Manager |
Onondaga County Department of Water Environment Protection | Syracuse, New York, USA

Project Manager for design and construction phase services associated with modifications at the Metropolitan Syracuse WWTP (Metro WWTP) to optimize phosphorus removal. Improvements include new HRFS weir gates, tank baffles, and chemical feed systems to optimize the process, HRFS sludge and RAS piping replacement, BAF/HRFS channel isolation wall and waterproofing liner, microsand slurry tank, BAF/HRSF complex effluent water system, HRFS bypass sluice gate replacement, blower room ventilation improvements, UV wall rehabilitation and louver replacement, and SCADA modifications.

Metro WWTP secondary bypass disinfection improvements

Project Manager |
Onondaga County Department of Water Environment Protection | Syracuse, New York, USA

Chris managed the fast-track design of a secondary bypass disinfection facility for the 84 mgd Metro WWTP. The facility is required to meet a fecal coliform limit of 200 cfu/100 mL by April 2017. Key challenges include extremely poor soil conditions requiring piles more than 200 feet deep, relocating a 34.5 kV power line, construction adjacent to a railroad track, and designing the facility for highly variable water quality and flow conditions. The design includes new storage and chemical feed systems for sodium hypochlorite and sodium bisulfite to serve a secondary bypass flow of 114 mgd. Project included a detailed hydraulic analysis to verify the facilities would be capable of discharging peak flow at 25-year flood levels while not submerging the secondary bypass weirs.

Career history

2006 – present	GHD, Principal
1995 – 2005	URS Corporation
1988 – 1995	Malcolm Pirinie

A GHD Principal

Paul McGarvey PE, BCEE

QA/QC

Location

Buffalo, New York, USA

Experience

33 years

Qualifications/Accreditations

- M.Eng, Water Resources and Environmental Engineering, 1992
- B.S., Civil Engineering, 1990
- Registered Professional Engineer: New York
- Board Certified Environmental Engineer

Key technical skills

- WTP/WWTP Evaluation and Treatment
- WTP/WWTP Design
- Water Distribution Systems and Pumping
- Wastewater Collection Systems
- Combined Sewer Overflow – Long Term Control Plans

Memberships

- American Academy of Environmental Engineers (Water Supply and Wastewater, #05-20030)
- Water Environment Federation – Member of NYWEA Hall of Fame
- American Water Works Association

Relevant experience summary

Paul has 33 years' experience in environmental engineering, including wastewater collection and CSO long term control plans, and water and wastewater treatment plant evaluation and treatment plant design.

On-Call Engineering Services (Wastewater)

Project Manager |
Town of Tonawanda | Tonawanda, NY, USA

Paul is managing engineering services provided by GHD to support the Town's efforts to operate and maintain the 30 mgd wastewater treatment plant (WWTP), 300 miles of sanitary sewers, eight pumping stations, 270 miles of storm sewer, and the sanitary sewer overflow (SSO) network. GHD also assists the Town in maintaining compliance with various permits and orders related to its wastewater collection and treatment system.

Town Engineering

Project Manager |
Town of Royalton | Royalton, NY, USA |
April 2018 – Present

Paul provides general municipal engineering services, including attendance at Town Board meetings. Projects to date include multiple waterline design projects, funding assistance, and a wastewater treatment plant disinfection system evaluation.

WWTP Plant Digester Heating and Mixing Improvements

Project Manager |
Town of Grand Island | Grand Island, NY, USA

This project included the construction of digester heating and mixing improvements at the Town's 3.0 million gallons per day pure oxygen activated sludge plant with gravity sludge thickening and anaerobic sludge digestion. The project involved the installation of a new digester gas/natural gas boiler, sludge pumps, spiral heat exchanger, and digester gas compressors for mixing system.

Town Jobs 3089 and 3107 – Sanitary Sewer Lining (Various Locations)

Project Manager |
Town of Tonawanda | Tonawanda, NY, USA

Paul managed the team responsible for design and construction phase services related to two sanitary sewer CIPP lining and manhole lining projects as noted

below. Paul was also the main point of contact with the Town's Water Resources and Engineering staff.

- Job 3089 included approximately 115,500 LF of sanitary sewers and approximately 562 manholes.
- Job 3107 included 115,000 LF of sanitary sewers and approximately 422 manholes.

West Side Sewer Extension Phases 1 & 2

Project Manager |
South & Center Chautauqua Lake Sewer Districts | Chautauqua County, NY, USA

Since 2019, Paul has been assisting the South Chautauqua Lake Sewer District (SCLSD) with extending sewer services along the west side of Chautauqua Lake to reduce phosphorus loading from private septic systems. Initially retained for Phase 1 design and construction, GHD's role expanded to include funding applications, Map and Plan, and subsequent Detailed Design and Construction of Phase 2. The project elements were developed during preliminary studies in 2015 and 2017.

GHD provided surveying, geotechnical, preliminary and detailed design, bidding, and construction phase services. Phase 1, substantially completed in late 2023, included 265 simplex grinder pump stations, 6 duplex booster pump stations, new Hadley Bay and BOCES Pumping Stations, and 79,000 linear feet of HDPE low pressure and forcemain sewers. GHD also managed easement acquisitions for over 300 properties.

In 2022, GHD completed a Map and Plan for Phase 2, which included background studies, conceptual layouts, and cost estimates. Upon approval, GHD moved forward with detailed design, including 225 simplex grinder pumps, three booster pump stations, 13 duplex pump stations, and extensive HDPE piping. Phase 2 construction began in winter 2024 and is expected to be substantially completed by the end of 2026.

WWTP Aeration Improvements and Dechlorination System

Project Manager |
South & Center Chautauqua Lake Sewer Districts | Celoron, NY, USA

Paul managed the development of the Basis of Design Report, for aeration and dechlorination system upgrades in order to comply with the WWTP's revised SPDES permit requirements for total residual chlorine and ammonia limits. Upon acceptance of recommendations, which included replacing the existing surface aerators with membrane fine-bubble diffusers and replacing the sodium hypochlorite system with sodium bisulfite, GHD proceeded with detailed design, bidding and construction phase services.

Southtowns AWTF NFA Analysis

Project Manager |
Erie County Division of Sewerage Management | Hamburg, NY, USA

Managed the development of an NFA analysis for the Southtowns Advanced Wastewater Treatment Facility (AWTF), including the onsite Overflow Retention Facility (ORF). The County was required to complete the NFA analysis as part of the AWTF's State Pollutant Discharge Elimination System (SPDES) permit. Project included desktop engineering evaluations to determine the existing wet weather capacity of the AWTF and ORF, their demonstrated performance, and develop wet weather flow alternatives. A financial capability assessment was also developed for the NFA report.

Southtowns AWTF Capital Improvement Plan and Preventative Maintenance Program

Project Manager |
Erie County Division of Sewerage Management | Erie County, NY, USA

Paul managed an evaluation to determine the condition, serviceability, and longevity of the equipment at the plant. A capital improvement plan was developed to prioritize capital expenditures. Preventive maintenance practices were reviewed to maximize the useful life of the equipment.

Southtowns AWTF Facilities Report

Project Manager |
Erie County Division of Sewerage Management | Hamburg, NY, USA

The Southtowns AWTF was nearing its rated capacity of 16 million gallons per day after nearly 20 years of operation. The Southtowns Sewage Treatment Agency sought to develop a plan to provide for the sewage treatment needs of its member communities for the next 20 years. Existing pure oxygen activated sludge treatment system was evaluated to determine existing capacity. Future wastewater flows and loads were determined for the service area, additional treatment needs were identified, and alternatives for addressing these needs were developed and evaluated. Recommended improvements were estimated to cost $22.8 million and would provide a maximum month treatment capacity of 26 million gallons per day. Process improvements included: Unox upgrades, clarifiers, conversion to sodium hypochlorite, ferric chloride addition, gravity thickener, sludge holding, filter press, and incinerator feed modifications.

Career history

1992 – present	GHD, Principal/Project Director

Katelyn M. Reepmeyer PE

Capital Improvement Project Planning/Management

Location
Buffalo, New York, USA

Experience
15 years

Qualifications/Accreditations
- B.S., Environmental Engineering, 2010
- Licensed Professional Engineer, New York
- OSHA HAZWOPER

Memberships
- Member, American Public Works Association, NY Chapter, Western Branch
- Member, American Society of Civil Engineers, Buffalo Section

Relevant experience summary

Katelyn has 15 years of experience in planning, design, construction, and management of water and wastewater infrastructure. She has completed these services a consulting engineer and as a public works engineer for a utility owner. Her work in water distribution includes transmission mains, water mains and services, storage tanks, hydraulic modeling, pump stations, operational upgrades, and treatment facilities. Her work in wastewater treatment includes the design of gravity sewer systems, treatment facility system improvements, and energy audits. As a municipal engineer, she wrote and executed grants to establish funding sources for infrastructure projects. She wrote internal standards, operation guidelines, and asset management procedures for public utilities and facilities.

Lewiston WPCC Improvements

Project Manager |
Lewiston WPCC | Lewiston, NY, USA

Katelyn is managing the project team to identify alternatives to the replace or restore the existing failing systems at the wastewater plant. She is overseeing the research and selection of replacement alternatives, feasibility and life cycle cost of proposed replacements, and the final engineer's recommended equipment and operation solutions for the digester covers and mixing equipment, grit, and digester gas system. The team will also prepare a map, plan and report to prepare the owner for internal budgeting and funding applications.

NCSD Retainer

Project Manager |
Niagara County Sewer District No. 1 |
Niagara County, NY, USA

Katelyn manages GHD's project team to perform basic retainer services for the sewer district. Other aspects of the agreement include project services under which additional authorizations are developed based on the needs of the client, Supervisory Control and Data Acquisition (SCADA) support, and miscellaneous project assistance that includes downstream capacity evaluations and system model updates.

NCSD 2025 State Pollutant Discharge Elimination System Reporting

Project Manager |
Niagara County Sewer District No. 1 |
Niagara County, NY, USA

Katelyn led the project team on an audit of existing programs and procedures in-place within the sewer district and its facilities to confirm compliance with its existing Management, Operation, and Maintenance Plan (MOM Plan) and develop the annual report. She communicated with the client, confirmed the receipt of all documentation of monitoring results and actions, and revised the mercury minimization plan (MMP) annual status report for work completed and changes made in 2025. All reports were submitted to the NYSDEC in accordance with SPDES requirements.

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NCSD 2026 Annual O&M Project

Project Manager |
Niagara County Sewer District No. 1 |
Niagara County, NY, USA

Katelyn is managing the multidisciplinary team to design the replacement of equipment throughout the sewer district's facilities. The scope includes the installation of new check valves, slide gates ,an emergency generator docking station, a transfer switch, structural repairs of existing equipment, and the modification of ferrous chloride dosing at a pump station. Future work includes managing the team during bidding, construction administration, and resident project representative inspections.

Grand Island LS-8 and WWTP Influent Pump Upgrades

Project Manager |
Town of Grand Island | Grand Island, NY, USA

Katelyn is managing the project team to replace existing pumps, reactor sluice gates, piping, valves, flowmeters, variable frequency drives (VFDs), and controls at Lift Station 8 (LS-8) and the influent pump station at the wastewater treatment plant (WWTP). This work also includes implementation of repairs to existing linear infrastructure in conformance with the Town's Sanitary Sewer Evaluation Survey (SSES) Plan. The team is also providing grant coordination and New York State Environmental Facilities Corporation (NYSEFC) documentation for the received NYSDEC Water Quality Improvement Project (WQIP) funding.

Grand Island LS-5 and LS-11 Pump Station Upgrades – Design and Construction Services

Project Manager |
Town of Grand Island | Grand Island, NY, USA

Katelyn managed the project team to design two (2) replacement duplex pumping stations, and approximately LF of new sanitary force main. This work also includes implementation of repairs to existing linear infrastructure in conformance with the Town's SSES Plan. The team is also providing bidding, construction administration, and resident inspection services.

Livingston County Regional Transmission Project

Civil Design Manager |
Livingston County Water & Sewer Authority |
Lakeville, NY, USA

Katelyn leads the civil project team in the design of various contracts of work to provide Livingston County with reliable potable water following the contamination of the groundwater supply. The project design includes miles of water main, installed by open cut and horizontal directional drilling (HDD), interconnections, service transfers, and permitting. Katelyn coordinates with the other disciplines on the project for the completion of the pump station upgrades, water tank design, and water blending and dosing. This project is being funded by numerous grants and DWSRF zero interest loan.

Royalton Phase 16 Waterline

Construction Administration Project Lead |
Town of Royalton | Royalton, NY, USA

Katelyn is the project lead during construction administration of 5 the miles of new waterline in the Town of Royalton. The installation includes services, hydrants, and all appurtenances. The installation occurs on multiple state roads, water crossings, and work adjacent to wetlands. Katelyn is overseeing the review of submittals, coordinating meetings, reviewing progress payments, and managing the resident inspectors.

Wetzel Road WWTP Comprehensive Planning Engineering Study

Project Manager |
Onondaga County Department of Water Environment Protection | Liverpool, NY, USA

Katelyn is leading the GHD project team in executing asset inventory inspections for OCDWEP to guide the development of a series of capital improvement plans for the facility. Inspections include desktop analyses, visual assessments, and coordinated shutdowns for confined space entry access to existing equipment. Existing conditions of equipment will be recorded in the client's asset management database. A risk assessment and structural defect will be performed, followed by capital project forecasting.

NYSEFC Asset Management

Project Engineer |
New York State Environmental Facilities Corporation | Bath, Endicott and Auburn, NY, USA

Katelyn is assisting the project manager in coordination with the utility owners, the NYSDEC, and program consultant to submit required toolbox components for the cataloguing and maintenance of publicly-owned sanitary systems. This work includes reviewing GIS system formatting and content, interim data submittals, and confirming compliance with the program's requirements. Katelyn is performing the sewer rate analysis and development for all three clients.

Career history

1/2025 – present	GHD, Project Manager
6/2018 – 9/2024	Town of Colonie DPW, Civil Engineer
1/2011 – 6/2018	CDM Smith, Environmental Engineer

A GHD Principal

John Story PE BCEE

Wastewater Treatment Evaluations/Design

Location
Buffalo, NY, USA

Experience
22 years

Qualifications/Accreditations
- B.S., Civil Engineering, 2003
- Registered Professional Engineer: New York
- Board Certified Environmental Engineer

Key technical skills
- Management of large multi-disciplined design and construction projects
- Wastewater Treatment Facility Upgrades
- Biosolids Handling

Memberships
- American Academy of Environmental Engineers (Water Supply and Wastewater)
- Member, New York Water Environment Association
- Member, American Public Works Association New York Chapter/Western New York Branch

Relevant experience summary

John is a Principal at GHD and the US Northeast Business Group Leader – Linear Infrastructure. He has spent his entire 22-year career at GHD and has been involved in complex, large-scale wastewater treatment plant and linear infrastructure projects in WNY, Central New York and Pennsylvania. John completed two capital projects with a combined construction cost of $260 million at the Oneida County WPCP effectively doubling the capacity of the plant. The $91 million bypass disinfection project at ALCOSAN involved complicated phased sequencing to construct improvements while the plant remained in service. John has been responsible for ensuring all design disciplines are well coordinated, the teams adhere to a rigorous QA/QC process, the projects are constructable, and ultimately the Owner's critical success factors have been met.

Lewiston WPCC Improvements

Project Director |
Lewiston WPCC | Lewiston, NY, USA

John is Project Director for the identification of alternatives to the replace or restore the existing failing systems at the wastewater plant. He provides support to the team overseeing the research and selection of replacement alternatives, feasibility and life cycle cost of proposed replacements, and the final engineer's recommended equipment and operation solutions for the digester covers and mixing equipment, grit, and the digester gas system. The team will also prepare a map, plan and report to prepare the owner for internal budgeting and funding applications.

WPCP Solids Handling Upgrades

Project Manager |
Oneida County Department of Water Quality and Water Pollution Control | Utica, NY, USA

Project Manager for the $60 million solids handling upgrades at the Oneida County Water Pollution Control Plant. In response to increased flows and loads, and to replace existing equipment which had reached the end of its useful service life, the entire solids handling system at the plant was rehabilitated or replaced. Existing fluidized bed incinerators were rehabilitated for short-term compliance with new emissions regulations, while new anaerobic digesters were installed for long-term operations with the goal of eventually phasing out the incinerators. The new digester facilities include two new 1.2-million-gallon egg shaped primary digesters, along with a gas holding secondary digester. New energy recovery facilities were included in the project consisting of a 600 kW microturbine system and hot water heat exchanger. Other significant project components included a new standby post-lime

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stabilization system, rehabilitations to existing gravity thickeners for primary sludge, new gravity belt thickeners for waste activated sludge, new belt filter presses, and replacement of various sludge pumps at the plant. A new septage receiving facility was included in the project to screen hauled waste and for conveyance directly to the anaerobic digesters. Due to the energy recovery aspect of the project, funding was received from NYSERDA and Empire State Development.

WPCP Expansion

Project Manager |
Oneida County Department of Water Quality and Water Pollution Control | Utica, NY, USA

Project Manager for the $200 million expansion at the Oneida County Water Pollution Control Plant. Due to increased flows from CSO/SSO abatement, as well as new industrial flows in the system, the headworks were expanded from a peak capacity of 55 mgd to a peak capacity of 111 mgd. The project also included new influent screening/pumping facilities, new grit removal systems, new rectangular primary clarifiers to replace circular tanks, a new high-rate disinfection system, improvements to existing final clarifiers and aeration tanks. Significant electrical upgrades included new unit 46kV substations, and two 2.5 MW diesel generators.

WWTP Clarifier and Digester Improvements

Project Engineer |
Town of Grand Island | Grand Island, NY, USA

Evaluation included detailed analysis of various sludge collection equipment; including suction headers, suction withdrawal pipes, and spiral rake arms for the secondary clarifiers. Final design included rehabilitation of the equipment in the two 60-foot diameter secondary clarifiers. Provided spiral sludge rake arms and full radial scum skimmer arms. Project also included the installation of new bubble generator mixing system for the 60-foot diameter anaerobic primary digester. The bubble mixers were fed from re-circulated digester gas. Design included provisions for cleaning the digester, dewatering the sludge, and disposing off site.

Sanitary Sewer Rehabilitation

Project Manager |
Town of Grand Island | Grand Island, NY, USA

Project Manager for various projects to identify and remove wet weather inflow and infiltration (I/I) sources. Prepared a 10-year phased work plan for I/I mitigation which was approved by the New York State Department of Environmental Conservation (NYSDEC). Identified I/I sources through a combination of video inspection of sewers, manhole inspection, smoke testing, and dye testing. Several construction contracts were performed to mitigate the suspect I/I sources. Construction activities included cast in place pipe (CIPP) lining, open-cut sewer and manhole replacement, manhole lining and rehabilitation, and lateral repairs. Provided annual updates to the NYSDEC to ensure compliance with the approved work plan.

Southtowns AWTF Influent Submersible Pumping Station and ORF Improvements

Project Engineer |
Erie County Division of Sewerage Management | Hamburg, NY, USA

Design and construction of a new 58 million gallon per day submersible pumping station, to divert excess influent flows from the Southtowns Advanced Wastewater Treatment Facility (AWTF) to the on-site Overflow Retention Facility (ORF) for flow equalization. Design included two 385-horsepower pumps and two 200-horsepower pumps and variable frequency drive controls to pump the entire range of flows through a new 42-inch diameter, 1,200 lineal foot force main to the ORF. Since the station is to be used intermittently, provisions were included to drain the force main and clean and dewater the wet well. A new at grade controls building was included to house variable frequency drives (VFDs) and controls. A new 800 KW diesel generator was also included to power the pump station in the event of loss of grid power. ORF Improvements included construction of a new chlorine contact chamber sized for a peak for of 80 mgd.

Wastewater Facilities Plan and Sanitary Sewer Overflow (SSO) Abatement Plan

Project Engineer |
Town of Grand Island | Grand Island, NY, USA

Evaluation of the existing collection system and 3.5 mgd wastewater treatment plant in accordance with an order on consent issued by the NYSDEC for the elimination of SSOs. The evaluation included a capacity analysis of the collection system and WWTP based on projected year 2030 flows and loads. Alternatives were developed to eliminate SSOs in the system; including pump station upgrades, new sewers, sewer repairs, and identification and removal of wet weather I/I sources. Temporary flowmeters were utilized to prioritize mini-systems most prone to I/I. A model was developed to estimate the effectiveness of each alternative toward the goal of SSO elimination. A phased sanitary sewer evaluation survey (SSES) work plan was developed to prioritize I/I removal and collection system improvement projects over a 10-year planning horizon.

Career history

2003 – present	GHD, Senior Project Manager

Edward M. Bradfuhrer PE

Linear Assessments and Modeling

Location

Niagara Falls, New York USA

Experience

14 years

Qualifications/Accreditations

- BS, Environmental Engineering, 2009

Memberships

- Registered Professional Engineer, New York
- New York water Environmental Association
- American Society of Civil Engineers

Relevant experience summary

Ed has 14 years of experience in the field of environmental engineering. Ed's background in computer systems, hydraulics, hydrology, and geographic information systems allows designers to better quantify and visualize issues that can impact projects early on, which streamlines design and construction projects. He has been involved in the study, design, and construction of many projects that range from raw water collection to wastewater collection/treatment and stormwater modelling/design. Professional interests include trenchless sanitary sewer rehabilitation, flow control structures, computational fluid dynamics, and hydraulic modelling.

Sanitary Sewer Collection System

Role: Sewer System Modeler
Client: Town of West Seneca
Location: West Seneca, NY

Responsibilities included developing a model of the sanitary sewer collection system in SewerGEMS® to identify and mitigate hydraulic restrictions and high inflow areas in the wastewater collection system. Flowmeter analysis and modelling outcomes discovered hydraulic restrictions in a main interceptor and an inverted siphon. Developed plans for cleaning and rehabilitating the inverted siphon instead of replacement, which was originally planned.

Sewer System Model and Flowmeter Analysis

Role: Project Engineer
Client: City of Tonawanda
Location: Tonawanda, NY

Ed developed a dynamic sewer model in SewerGEMS® that was used to perform a hydraulic evaluation and predict the impact proposed changes would have on the sewer system and identify hydraulic restrictions as part of a Sanitary Sewer Evaluation Study. Ed used flow metering to evaluate how repairs affected infiltration and inflow into the system.

Sanitary Sewer Evaluation Survey

Role: Project Manager
Client: City of Tonawanda
Location: Tonawanda, NY

This project is part of a multi-year program the City is undertaking to reduce the amount of inflow in their sewer system. Managed the project from development of the SSES report, which identified system defects using dye testing, CCTV and manhole inspections, prepared contract documents using the report as a basis of design and served as the Owner's representative during construction.

SWMM Model Development

Modeling Director |
Niagara County Sewer District No. 1 |
Niagara County, NY, USA |

Directed the development of a new sewer system model for Niagara County Sewer District No. 1, which will be used to assist with locating flow restrictions in the system and assist with accommodating future development. Determined the location of flowmeter installation, analyzed flowmeter data, trained junior personnel in calibrating sewer models and geographic information systems, and reviewed model calibration.

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Downstream Capacity Analysis

Role: System Modeler
Client: Grand Island Hotel
Location: Grand Island, NY

Performed a downstream capacity analysis on the impacts of a proposed hotel on behalf of the Town to identify potential negative impacts to the system and recommend options to mitigate the impacts. The hotel was eventually constructed and connected to the sewer system at a location where the additional flows would not surcharge the sewers.

Silver Creek SSES, Phases 2, 3, 4 and 5.

Role: Project Manager
Client: Village of Silver Creek
Location: Silver Creek, NY

Managed a multiyear SSES program as part of complying with an order on consent. Directed CCTV and smoke testing sub consultants as part of their infiltration and inflow reduction program. Analyzed the data to determine a cost-effective sewer and manhole rehabilitation program and produced a design report that was acceptable to local regulators. Produced contract documents for implementation of the design and assisted with construction contract administration.

SWMM Model Development

Role: Technical Advisor
Client: Niagara County Sewer District No. 1
Location: Niagara County, NY

Directed the development of a new sewer system model for Niagara County Sewer District No. 1, which will be used to assist with locating flow restrictions in the system and assist with accommodating future development. Determined the location of flowmeter installation, analyzed flowmeter data, trained junior personnel in calibrating sewer models and geographic information systems, and reviewed model calibration.

Order on Consent Compliance

Role: Project Engineer and System Modeler
Client: Niagara Falls Water Board
Location: Niagara Falls, NY

Performed an evaluation of the Niagara Falls combined sewer system to comply with requirements of an order on consent. The order required evaluating alternatives that would capture 95%-97% of combined sewer overflow generated by the system. Options evaluated included in-line storage, off-line storage, enhanced conveyance, tunnels, real time control, high rate treatment, and sewer separation. Proposed alternatives were sized and evaluated for probable project cost, ecological impacts, impacts to stakeholders. No feasible alternative was found that could meet the required level of capture without significant social, ecological, or financial costs. However, an alternative to redirect overflows away from a popular tourist area was identified and explored as part of a pumping station upgrade.

West Side Interceptor Evaluation

Role: Modeler and Technical Advisor
Client: Town of Amherst
Location: Amherst, NY

Led a team of engineers and modelers who performed a study on the feasibility of installing a relief sewer for the West Side interceptor in Amherst, NY. Options evaluated included gravity conveyance, pumping station and forcemain, and green infrastructure. Probable project costs, preliminary layouts, ecological impacts, and non-monetary factors were evaluated for each alternative. A pumping station and forcemain was determined to be the most feasible option for sewer relief and is anticipated to be implemented by the Town.

Mt. Vernon Sewer Analysis

Role: Modeler
Client: Town of Hamburg
Location: Hamburg, NY

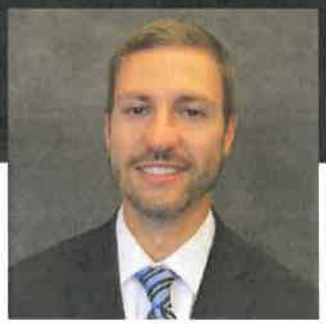
Developed a hydraulic model using XPSWMM and performed an analysis of the Mount Vernon sewer system in Hamburg, NY. Options for reducing surcharge levels in the system were evaluated including, additional conveyance and I/I source reduction. Probable project costs, preliminary layouts, ecological impacts, and non-monetary factors were evaluated for each alternative. Source reduction was determined to be the most feasible option because there are few nearby locations where flow can be sent by pumping, and pumping costs would be prohibitively high.

Career history

2009 - present	GHD, Technical Director
Summer 2008	New York State Office of General Services, Intern
Summer 2007	Lockheed Martin Integrated System and Solutions, Intern
2006 – 2009	University at Buffalo Computing and Information Technology, Systems Administrator
2001 – 2005	United States Marine Corps, Sergeant

Jacob Kocic BS

Linear Assessments/Permitting



Location
Buffalo, New York USA

Experience
8 years

Qualifications/Accreditations
- BS, Environmental Engineering, 2018
- Engineer-in-Training, New York, 2018
- NYS Endorsed Certificate of Erosion and Sediment Control Training (SWT# 16-T-110921-20)

Memberships
- New York Water Environment Association
  Director, Western Chapter
  Chair, Awards Committee
- Western New York Stormwater Coalition

Relevant experience summary

Jake joined GHD in 2017 and has since been involved in design, planning, construction oversight, and engineering studies focusing on municipal water, wastewater, and stormwater. His design responsibilities have included Civil, Environmental, and Process Mechanical disciplines and he has been involved with all aspects of design from plans and specification development to permitting and client reviews. In addition to his technical responsibilities, Jake is a Civil team lead within the Northeast Region's Engineering Design Organization

Waterline Improvement and Riverfront Park SWPPP Inspection

Role: Engineer
Client: Town of Lewiston
Location: Lewiston, NY

Jake provided inspection oversight of the stormwater protection measures for the Waterline Improvements and Riverfront Park projects in the Town of Lewiston. Inspection of the sites throughout the Town were completed in routine (7-day) intervals. Coordinated with the construction inspector onsite to ensure the erosion and sediment control measures outlined in the project specific SWPPP were being implemented and maintained by the contractors.

Village Park Stream Restoration

Role: Engineer
Client: North Middleton Township, PA
Location: Carlisle, PA

Jake was responsible for the coordination of permitting activities for the Village Park Stream Restoration project which included streambank stabilization and streambed grading of a small stream and the affected nearby wetland areas impacted by flooding and erosion. Permitting activities included coordination with the Pennsylvania Department of Environmental Protection for completion of the Environmental Assessment and Joint Permit application both geared toward determining and mitigating environmental impacts due to project construction.

Stormwater Inspection Services

Role: Engineer
Client: Town of Amherst
Location: Amherst, NY

Jake provides inspection oversight of the stormwater protection measures for various construction projects located in the Town of Amherst. Site inspections are completed at designated phases of construction to verify the contractor's compliance with the routine (7-day) inspections required by the NYSDEC and compliance with the Town's MS4 permitting. Inspections include review of the site specific SWPPP and inspection of erosion and sediment control measures in place at the various sites. The activities also include coordination with the respective contractors if any deficiencies are noted or maintenance is required of the control measures in place.

Van de Water Transmission Main

Role: Design Engineer
Client: Erie County Water Authority
Location: Erie County, NY

Jake was an integral part of the design team for the ECWA's Van de Water Transmission Main project, assisting with design and permitting of the site civil and mechanical components of the transmission main. Design included approximately 17,500 LF of 48-inch carbon steel transmission main and associated air-release valves, isolation valves, access ports, and chambers with differential settlement accommodation, located within the Towns of Tonawanda and Amherst. The transmission main alignment included multiple areas of trenchless installation via auger bore and microtunneling methods. Jake also assisted with the project permitting, which included New York's State Environmental Review Process (SERP) consisting of the State Environmental Quality Review (SEQR) coordinated review and State Historic Preservation Office (SHPO) review. Permitting activities also consisted of coordination with the involved municipalities, NYS Department of Transportation, and the U.S. Army Corps of Engineers. The project required evaluation and design around multiple critical utility crossings (e.g., large storm sewer culverts, sanitary sewer piping, high pressure gas lines, etc.) in addition to corrosion protection design coordination.

Water System Improvements

Role: Design Engineer
Client: Town of Royalton
Location: Niagara County, NY

Jake assisted with the permitting of the design for the construction of multiple waterline projects within the Town of Royalton. The permitting activities included New York State's Environmental Review Process consisting of coordination with the State Environmental Quality Review (SEQR) and State Historic Preservation Office (SHPO). Permitting activities also consisted of coordination with the affected municipalities, NYS DOT, and Army Corps of Engineers.

West Side Interceptor Relief Pump Station & Forcemain

Role: Engineer
Client: Town of Amherst
Location: Amherst, NY

The WSI Relief PS & FM consisted of a new wet weather overflow, new 15 MGD sanitary sewage pump station, and over 2 miles of 24-inch forcemain. Jake was responsible for assisting with the detailed design including permitting and agency reviews and approvals, development of design drawings and technical specifications. A critical aspect of the project was an alignment alternative evaluation for over 2 miles of medium diameter pipeline through a highly sub-urbanized area, with numerous utility conflicts, land acquisition implications, and permitting requirements.

Low-pressure Sanitary Sewer Design

Role: Project Engineer
Client: South & Center Chautauqua Lake Sewer Districts
Location: Chautauqua, NY

The West Side Sewer Extension consists of extending an existing sewer district along the west side of Chautauqua Lake. New infrastructure consists of approximately 25,000 linear feet of 1-1/4-inch HDPE, 21,000 linear feet of 2-inch HDPE, 7,500 linear feet of 3-inch HDPE, 1,000 linear feet of 8-inch HDPE, 22,000 linear feet of 10-inch HDPE, 230 grinder pumps, two new pumping stations, rehabilitation of two existing pump stations, and all associated appurtenances. Jake assisted with developing easement acquisition documents and coordinating solicitation and acquirement of over 300 easements for infrastructure installation on private property. Jake also assisted with the development of Civil design drawings and specifications and coordinated permitting and agency review of the project including Joint Application for Permit between NYSDEC and USACE, review and approval from NYS SHPO, NYSDOT, and other local municipality and agency reviews.

Sewer Rehabilitation

Role: Design Engineer
Client: Town of Grand Island
Location: Grand Island, NY

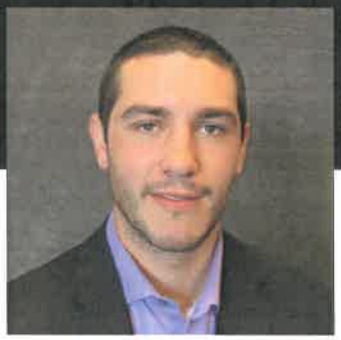
Jake provided design phase services including CCTV review, identifying I/I sources, scheduling open-cut sanitary sewer replacement, open-cut spot and service lateral repairs, manhole replacement and rehabilitation, and sanitary sewer CIPP lining installation. Jake also prepared technical specifications, along with reviewing design drawings and specifications.

Career history

2017 – present	GHD, Engineer

David Woolley BS

Linear/Trenchless Design



Location

Buffalo, New York, United States

Experience

10 years

Qualifications/Accreditations

- Bachelor of Science (BS), Civil Engineering, 2015

Memberships

- Buffalo Section American Society of Civil Engineers (ASCE)
- American Water Works Association (AWWA)
- New York Water Environment Association (NYWEA)
- Member, North American Society for Trenchless Technology (NASTT)

Relevant experience summary

Dave has worked in consulting for 10 years and has been involved in the planning, design, and construction of multi-disciplined projects, with a focus on linear pipeline projects. Recently, he has acted as the design manager on projects entailing over 20 miles of large diameter (24-84") gravity and pressure pipelines with challenging crossings and permitting, over 40 miles of small/medium pipelines, in addition to providing technical advisory/quality assurance to numerous pipeline routing and design projects of varying size and complexity in North America.

2017 Water System CIP Project

Engineer |
Town of Lewiston | Lewiston, NY | 2018

Dave assisted in the detailed design for the replacement of approximately 45,000 feet of various size water mains. Assisted with pipeline alignment, materials of construction, and assembly of all contract documents. Responsible for coordinating all permitting efforts with various entities

Joseph Davis State Park Drainage System

Engineer |
Town of Lewiston | Lewiston, NY | 2015

Assisted in revising a comprehensive drainage plan that included multiple inter-connected retention ponds. Dave designed a new storm sewer system to convey runoff from the retention ponds to an existing storm sewer system. Performed detailed calculations to make sure the new system would meet all design criteria and agency requirements.

WPCC No Feasible Alternative Analysis

Engineer |
Town of Lewiston | Lewiston, NY | 2015

Dave assisted in conducting a No Feasible Alternative Analysis for the Town's WPCC. This involved performing a detailed review of WPCC operations and procedures, evaluating current operational needs, analizing alternative approaches, and developing a report to satisfy NYSDEC SPDES Permit requirements.

Muck Pump Station

Engineer |
Town of Lewiston | Lewiston, NY | 2015

Dave assembled contract documents, specifications, and plans for the replacement of stormwater pumps. Coordinated with vendors to procure budgetary pricing and to make sure the client would get the most suitable product for the specific application at the most efficient cost.

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Peanut Line Interceptor Project

Design Manager |
Town of Amherst | Amherst, NY

Dave is the design manager responsible for all technical components of this design project. The project consists of approximately 4,000 LF of 24 and 30-inch gravity sewer, flow control structures, and flow metering.

West Side Interceptor Relief Pump Station & Forcemain

Design Manager |
Town of Amherst | Amherst, NY

The WSI Relief PS & FM consisted of a new wet weather overflow, new 15 MGD sanitary sewage pump station, and over 2 miles of 24-inch forcemain. Dave is the design manager for the project and is responsible for all technical components of the project. One critical aspect was an alignment alternative evaluation for over 2 miles of medium diameter pipeline through a highly sub-urbanized area, with numerous utility conflicts, land acquisition implications, and permitting requirements. The project cost is anticipated to be approx. $40 Million.

West Side Sewer Extension

Design Manager/Construction Administrator |
South & Center Chautauqua Lake Sewer Districts |
Chautauqua County, NY | Ongoing Since 2019

The West Side Sewer Extension consists of extending an existing sewer district along the west side of Chautauqua Lake. New infrastructure consists of approximately 150,000 LF of 2-6" HDPE, 75,000 LF of 8/10" HDPE, 750 grinder pumps, 6 new pumping stations, and all associated appurtenances. Dave was responsible for hydraulic calculations during preliminary design to determine pipeline size and pump requirements, development of design report, and development of detailed plans and specifications. Dave assisted with overall project coordination between civil, survey, geotechnical, mechanical, electrical, and instrumentation design. He is also overseeing construction administration and oversight of the subcontracted resident inspector.

Grand Island Lift Station 8 Discharge Forcemain Replacement

Engineer |
Town of Grand Island | Grand Island, NY | 2018 - 2019

Dave was the lead design engineer for replacement of approximately 10,500 feet of 16-inch sanitary sewer forcemain. Dave evaluated the hydraulics of the system and recommended upsizing options, coordination of surveying, geotechnical investigation, and all permitting/coordination with utilities and involved parties. Dave also developed detailed design drawings, front documents and technical specifications.

48-Inch Finished Water Transmission Main

Design Manager |
Erie County Water Authority | Tonawanda, NY | 2022-2023

Dave was the design manager for the preliminary and detailed design of approximately 18,000 feet of 48-inch steel finished water transmission main with numerous trenchless crossings including an 1,800-feet micro tunnel, land acquisition, permitting coordination, with an anticipated project cost of ~$45 Million. The project also included a high level alignment alternatives review, evaluation of piping materials to determine the most advantageous material and a project phasing evaluation.

Royalton Water Distribution System Improvements

Design Manager |
Town of Royalton | Royalton, NY | 2020 - Ongoing

David acted as the design manager for a multi-year multi-phased project to expand the Town's water distribution system. The project(s) included approximately 80,000 LF of new water distribution piping between 8- and 12-inch diameter. Dave was responsible for overseeing all technical calculations and development of design drawings and specifications.

Career history

2015 – present	GHD, Civil Engineer/Civil Engineering Design Manager - Northeast
2014 - 2015	PCS Crane & Rigging Company
2013 - 2014	Clark Patterson Lee Design Professionals

Mel Gates A.S.

Site/Civil Design

Location
Buffalo, New York, USA

Experience
48 years

Qualifications/Accreditations
- A.S., Civil Technology, 1977

Key technical skills
- Linear infrastructure
- Civil and site design
- Cost estimating

Memberships
- American Public Work Association, New York Chapter, Western Branch

Relevant experience summary

Mel has more than 48 years of experience in all phases of design, construction, and management of projects. His linear infrastructure experience includes projects that total more than 395 miles of water mains and 65 miles of sanitary sewers and sanitary sewer forcemain up to and including 96 inches in diameter. He has designed and/or assisted on many types of projects including sanitary sewer evaluations, design and rehabilitation, water tank construction and rehabilitation, reservoir and lagoon cleaning projects, embankment stabilization, road condition assessments and documentation, wind farm document review and issuing associated building permits, reconstruction of roadways and general municipal engineering. Mel has obtained additional training in confined space entry, slip/trip/fall hazards, lockout/tagout procedures, and associated health and safety programs.

Water System Improvements

Project Coordinator/Lead Designer
Town of Lewiston | Lewiston, NY, USA

Mel provided design assistance and project coordination services for the water system improvements for the Town of Lewiston. The project included 38,500 linear feet of 12-inch DIP and PVC watermains, 11,200 linear feet of 8-inch DIP and PVC watermains and 4,300 linear feet of 16-inch DIP watermains and associated appurtenances. Included in the project were four HDD installations totaling 1,700 linear feet along with 13 casing pipe installations totaling 850 linear feet. The project also included 85 hydrant assemblies, 360 new water service installations and 46 interconnections to existing mains.

Water System Improvements Cohocton Line and Walnut Street

Senior Designer/Construction Administrator
City of Batavia | Batavia, NY, USA

Mel completed the design for the replacement of 3,600 linear feet of 12-inch and 10,500 linear feet of 8-inch watermains along the "Cohocton Line" (abandoned railroad Right-of-Way) and Walnut Street in the City of Batavia. Project included various interconnections, valves, hydrants, and coordination with various agencies including NYSDOT, National Grid, USACOE and NYSDEC.

Lockport Street Watermain Replacement

Senior Designer/Construction Administrator
Village of Youngstown | Youngstown, NY, USA

Mel completed the design and provided construction administration for the replacement of approximately 2,300 linear feet of existing watermain with new 8-inch ductile iron pipe. The project included five interconnections to existing watermains and replacement of water services. During design, various options for replacement were investigated including the materials of construction for the watermain and piping alignments. An alignment was selected that required installation of the watermain under the pavement of Lockport Street (Route 93) and under the Robert Moses

Parkway resulting in coordination efforts with NYSDOT and New York State Department of Parks and Recreation. The estimated cost of the project was $600,000.

Lift Station 8 Discharge Forcemain Replacement

Senior Designer |
Town of Grand Island | Grand Island, NY, USA

Mel designed the replacement of approximately 10,500 feet of 16-Inch sanitary sewer forcemain, which included new forcemain sewer alignments, drawings, and associated details for the project. Mel also prepared the specifications for the project along with coordinating the permits and easements necessary to construct the project.

Infiltration/Inflow Demonstration Project

Senior Designer |
Town of Tonawanda | Tonawanda, NY, USA

Mel was the senior designer for a sewer rehabilitation project. The project consisted of lining 32,400 linear feet of sanitary sewers in place using CIPP lining methods. The sewers ranged in size from 8 – 24 inches. The work also included rehabilitation of 80 manholes along point repairs and grouting lateral connections to new CIPP liner. Mel investigated various rehabilitation methods for lining the pipe including a full replacement option. He consulted with the Owner to determine most cost-effective methods for the rehabilitation of the sanitary sewers.

Darwin-Argus Area Sanitary Sewer Re-Lining and Storm Sewer Improvement Project

Project Coordinator/Senior Designer |
Village of Depew | Depew, NY, USA

Mel provided coordination and design for the installation of 17,200 LF of cured-in-place pipe sanitary sewer lining to rehabilitate existing clay tile sewers. The project included point repairs, grouting of lateral connections to the new liners, rehabilitation of 45 manholes in place, and replacement of 950 LF of 12-inch and 15-inch storm sewers within work area.

Mel coordinated the review of videotapes from sewer inspections, developed a system for identifying recommended repairs, and assisted in the development of final contract documents for the project. Mel coordinated the work of the various disciplines to ensure the project was completed within the schedule established for the project.

Oak Orchard WWTP Infrastructure Improvements

Senior Designer |
Onondaga County Department of Water Environment Protection | Clay, NY, USA

Mel was responsible for the preliminary and detailed design for cleaning and rehabilitating the WWTP's two lagoons.

Storm Drainage Improvement Project

Project Manager/Senior Designer |
Village of Gowanda | Gowanda, NY, USA

Mel was Project Manager for the design and installation of 2,200 linear feet of 15- and 36-inch CMP storm sewers within the Village; including construction of a sewer outfall in Cattaraugus Creek. During design, meetings were held with the USACE and NYSDEC to develop requirements for construction of the outfall within the creek area.

Sidewalk Replacement Project

Senior Designer |
City of Batavia | Batavia, NY, USA

Mel completed field investigation to inspect existing sidewalk and curb ramp conditions. From the inspection, it was determined that various areas of the sidewalks and ramps we in good condition and did not require replacement. Only the deteriorated sections were replaced along the streets and the City was able to use the cost savings to replace additional sidewalks on adjacent streets. The project consisted of replacement of 3,300 SY of 4-inch and 6-inch concrete sidewalks, curb ramps, curb cuts, detectable surfaces and final restoration of areas removed during construction. Mel investigated various options available to replace the sidewalks and curb ramps.

Career history

2003 – present	GHD, Senior Technical Specialist
1985 – 2003	R&D Engineering, PC, Project Manager
1980 – 1985	Malcolm Pirnie, Inc., Construction Administration
1978 – 1980	Moretrench American Corp and Freezwall, Inc., Field Construction Engineer and Supervisor
1977 – 1978	Niagara Frontier Transportation Authority, Civil Technician

Kyle Lantzy P.E.

Senior Structural Engineer

Location

Harrisburg, Pennsylvania, USA

Experience

18 years

Qualifications/Accreditations

- BSc – Civil Engineering, 2008
- Registered Professional Engineer: CT, ID, LA, MA, MD, MO, NJ, NY, PA, RI, TN, TX, WV

Memberships

- American Institute of Steel Construction
- American Concrete Institute

Relevant experience summary

Kyle has 18 years' experience as a structural engineer, including structural analysis, design, coordination between disciplines, drafting, and shop drawing review. Kyle is the Northeast Engineering Design Discipline Lead for structural design. Field experience includes Resident Project Representative and field engineering for construction projects. Kyle provides structural design, as well as oversight and review of structural design performed by other personnel. The projects Kyle works on require knowledge of many construction materials, including reinforced concrete, structural steel, masonry, aluminum, and wood. Work is done following current governing design codes and material standards including the American Concrete Institute (ACI), American Institute of Steel Construction (AISC), Concrete Reinforcing Steel Institute (CRSI), American Wood Council (AWC), ASCE 7, and IBC.

Joint Sewage Treatment Plant Restoration and Rehabilitation

Structural Engineer |
Binghamton – Johnson City | Binghamton, New York, USA

Structural Design team to performed structural analysis and design for several structural steel canopies and a 120' monorail design as well as construction document preparation. Key Project features were the design of steel canopies over Methanol Storage tanks and a Methanol Feed station. Construction phase involvement includes shop drawing review and responses to RFI's.

Brush Creek Water Pollution Control Facility Upgrade

Structural Engineer |
Cranberry Township | Cranberry, Pennsylvania, USA

Structural design included reinforced concrete, steel, masonry, and composite slabs. Treatment plant included a 60' deep influent pumping and screening facility with a 30 MGD capacity, new fine screening building, membrane bioreactor tanks and building, supports for a (120' long by 70' wide) bridge crane, ATAD building and tanks, plant water tanks, odor control tanks/systems, effluent pump station, and steel monorails. Design also included many modifications to existing structures for added equipment and processes. Site constraints had to be taken into consideration for constructability and construction schedule of the treatment plant.

Village of Bath WWTP Upgrades

Lead Structural Engineer |
Village of Bath| Bath, New York, USA

Lead structural engineer for the design and document preparation of new MBR process tanks and Membrane Building, new headworks facility and new Aeration tanks.

Town of Falmouth WWTF

Senior Structural Engineer | Town of Falmouth | Falmouth, Massachusetts, USA

Performed structural engineering and design oversight as well as contract document preparation. This project featured the design of new SBR tank, Digester Task and Sludge Holding tanks, along with Biofilters for odor control and distribution boxes, Utility Grarage building

and updates and additons to the existing operations building. There were also several existing structures that needed concrete repair and recoating including the headworks channels.

Muddy Run Enclosure Investigation and Design

Structural Engineer |
Borough of Huntingdon | Huntingdon, Pennsylvania, USA

Performed Structural investigation of a buried culvert over the muddy run creek in the borough of Huntingdon. Provided recommendations for repair and designed new culvert section to be replaced and existing culvert sections to be underpinned due to undercutting of foundations.

Wastewater Treatment Facility Improvements Project

Structural Engineer |
East Pennsboro Township | East Pennsboro Township, Pennsylvania, USA

Assisted in structural engineering design, as well as contract document preparation. This project featured the design of a grit/grease removal system with an attached raw wastewater pumping station and electrical building. Modifications to existing aeration tanks were also made, and a new aeration tank was constructed for added capacity. The three aeration structures were connected with a new channel to be utilized for bypass operations during high flows. A new final clarifier and chlorine contact tank were also added for capacity, and a structural steel-framed canopy was constructed to provide protection for the new sludge dewatering facility conveyor equipment. Construction phase involvement included shop drawing review.

Wastewater Treatment Plant Project

Structural Engineer / Resident Project Representative|
Mt Holly Springs Sewer Authority | Mt Holly Springs, Pennsylvania, USA

Performed structural design and contract document preparation. This upgrade included modifications to existing headworks for grit removal, as well as added sludge dewatering capabilities and an upgrade to existing BNR process tanks. Construction phase involvement included part-time construction observation, oversight of concrete testing and shop drawing review. Observed the improvements to existing aeration basins changed to SBR tanks. Coordinated construction issues between the Engineer, Owner and contractor. Provided on site engineering analysis for construction changes to tanks designs and construction issues. Responsible for approval of monthly applications for payment, initial review of change orders and time extensions and other general construction management issues. Also performed the on-site concrete pre-construction meeting.

Wastewater Treatment Plant Upgrade and Expansion

Structural Engineer / Resident Project Representative |
South Middleton Township Authority | Cumberland County, Pennsylvania, USA

Performed structural analysis and design for structures that were added or changed. Construction phase involvement included construction observation on an as needed basis for filling in for full-time RPR and drawing review. The plant upgrade included new digester tanks and building, new headworks and screening facility, updating existing treatment units, updating several existing maintenance buildings, two new circular clarifiers and a new filter/chemical feed building.

Oswego Eastside WWTP Blower Improvements

Lead Structural Engineer|
City of Oswego | Oswego, New York

Design, for an aeration system improvements project at the Oswego Eastside WWTP. Performed structural design of cast-in-place concrete, pipe supports, equipment supports and other concrete repair details. Signed and sealed structural drawings as the New York Professional engineer.

Mashpee Water Resource Recovery Facility

Senior Structural Engineer | Town of Mashpee | Mashpee, Massachusetts, USA
Structural design included reinforced concrete, steel, masonry, and composite slabs. Treatment plant included a Preliminary Treatment Building, membrane bioreactor tanks and building, Equalization and Metering Tanks, multiple distribution boxes, MLSS holding tanks, Biofilter odor control tanks/systems and odor control covers on all tanks. Site constraints had to be taken into consideration for constructability, future plant expansion and construction schedule of the treatment plant.

Career history

2008 - present	GHD, Camp Hill, PA

A GHD Associate

Matthew Skuse LEED AP BD+C

Process-Mechanical/HVAC Design

Location

Buffalo, New York, USA

Experience

22 years

Qualifications/Accreditations

- B.S., Mechanical Engineering Technology, 2001
  A.A.S., Computing Graphics Technology, 1999

Registrations/Memberships

- LEED AP BD+C
- American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE)

Relevant experience summary

Matt has 22 years of experience in design and construction of municipal, water, and wastewater facility process systems, roofing systems, and HVAC systems. Matt has been involved in several engineering evaluations, studies, and inspections for treatment facilities, pump stations and municipal facility related improvements.

WPCC Sludge Process Improvements

Mechanical Engineer |
Town of Lewiston | Lewiston, NY, USA

Matt was responsible for design and contract document development, including but not limited to sludge drying building supply and exhaust fan systems and fan circulation systems.

Outfall Building Improvements

Project Engineer |
Town of Lewiston | Lewiston, NY, USA

Matt was responsible for design, preparation of contract documents for replacement roofing with metal roofing system, doors, and window repairs.

WPCC Administration Building HVAC Evaluation

Project Engineer |
Town of Lewiston | Lewiston, NY, USA

Matt was responsible for the evaluating the condition of existing building HVAC equipment and recommending improvements to restore building heating and cooling capabilities. He was responsible for design and contract document development, including but not limited to, packaged wall terminal units and split system heating and cooling replacements.

Roof and HVAC Replacement

Project Engineer |
Town of Lewiston | Lewiston, NY, USA

Responsible for design and preparation of contract documents for the replacement of two rooftop HVAC units at the Town Hall, Town Hall EPDM roof replacement, two EPDM roof replacements at the Pollution Control Center, and four EPDM roof replacements at outlaying pump stations.

CSO Bypass and Disinfection

Mechanical Engineer |
Allegheny County Sanitary Authority |
Pittsburgh, PA, USA

Matt developed the HVAC design and assisted in components of the overall design contract documents for the new Bypass Disinfection Chemical Building (Area 865) and the existing Dechlorination Building (Area 842), including but not limited to: air handling units with electric heat coils, electric unit heaters, ductwork systems, air conditioning system, positive pressurization unit system, and exhaust fan ventilation systems.

Wastewater Treatment Plant Phase 1 & 2

Mechanical Engineer |
Village of Alden | Alden, NY, USA

Matt developed the HVAC and roof design contract document components, including but not limited to: building roof replacements with adhered EPDM roofing system, Administration Building replacement make up air unit with hot water coil heating, hot water boiler replacement for building heating systems, and hot water boiler for digester heat exchanger.

Influent Pump Station Screen Room Ventilation Project

Project Coordinator/Engineer |
Niagara County Sewer District No. 1 |
Wheatfield, NY, USA

Matt was responsible for overall project coordination along with design and contract document development, including but not limited to: replacement make-up air unit with electric heat and exhaust fans.

Metropolitan Syracuse WWTP Optimization Implementation Improvements Project

Project Coordinator/Contract Administrator |
Onondaga County Department of Water Environment Protection | Syracuse, NY, USA

Matt coordinated the development of the Engineer's Report and design contract documents. Designed improvements include HRFS weir gates, tank baffles, and chemical feed systems to optimize the process; HRFS sludge and RAS piping replacement; BAF/HRFS channel isolation wall and waterproofing liner; microsand slurry tank; BAF/HRFS complex effluent water system; HRFS bypass sluice gate replacement; blower room ventilation improvements; UV wall rehabilitation and louver replacement; and SCADA modifications.

Brewerton WPCP Comprehensive Facilities Evaluation

Mechanical Engineer |
Onondaga County Department of Water Environment Protection | Cicero, NY, USA

Matt assisted with the Comprehensive Facility Report and was responsible for the evaluation to upgrade the existing electric heating system to a natural gas hot water boiler heating system. He also performed a preliminary odor control evaluation of the raw sewage building and sludge holding tank at the WPCP, and the County-owned South Bay Pump Station, which is one of seven County-owned pump stations in the collection system that feeds to the WPCP.

WPCF Comprehensive Facility Assessment Study (Town Project No. 2012.002Q)

Mechanical Engineer |
Town of Amherst | Amherst, NY, USA

Matt was responsible for inspection and evaluation of the WPCF's various HVAC systems in locations as determined by plant personnel as part of a larger plant-wide assessment.

Wastewater Treatment Plant Rehabilitation, Phase 2A (Contract 59)

Mechanical Engineer |
Niagara Falls Water Board | Niagara Falls, NY, USA

Matt assisted in contract document development, including but not limited to, two new backwash pumps with variable frequency drives, various instrumentation replacement for pump operation, ventilation control modifications, rehabilitation of various valve actuators, and 11 filter air bypass valve and actuator replacements.

Wastewater Treatment Plant Rehabilitation, Phase 1

Mechanical Engineer |
Niagara Falls Water Board | Niagara Falls, NY, USA

Matt assisted in contract document development. He was responsible for new HVAC equipment, which included three heating and ventilation units, one HVAC unit, eight new exhaust fans, six new electric reheat coils, new relief dampers and louvers, two new air purification units, and air purification unit rehabilitation of media and seals.

plant effluent.

Career history

2003 – present	GHD, Mechanical Engineer
2003	R&D Engineering, Inc. (acquired by CRA in 2003), Mechanical CAD Drafter

Daniel Kolkmann AS

Construction Phase Services

Location
Buffalo, New York, USA

Experience
46 years

Qualifications/Accreditations
- AS, Engineering, 1984
- AAS, Construction Technology, 1982

Key technical skills
- Constructability Reviews
- Contract Administration
- Construction Claim and Litigation Assistance

Relevant experience summary

Dan leads our Buffalo construction services group and has more than 45 years of experience in the inspection, contract administration, and construction management of municipal water and wastewater facility and infrastructure projects. Responsibilities have included: review of bid proposals, overseeing receipt/responses to requests for information from prospective bidders, advising/making recommendations to the Client regarding contract award, overseeing the construction of Projects. Dan also manages contractor progress payment recommendations, shop drawing review/processing, and provides consultation relative to substitutions and design modifications.

Mountain View Drive Water System Improvements

Construction Manager
Town of Lewiston | Lewiston, NY

Contract Administrator providing supervision for the installation of 11,260 LF of 8-inch PVC watermain and associated appurtenances. Construction took place in a very affluent area within the Town consisting of multi-million dollar homes with special features that needed to be taken into consideration. Restoration was a key concern, and it was imperative that construction had as little negative impact on the area and its residents as possible.

2018 Water System Improvement Project

Construction Contract Administrator
Town of Lewiston | Lewiston, NY

Dan provided constructability guidance during design, contract administration and oversaw resident inspection for the installation of approximately 44,000 linear feet of 8-inch, 12-inch, and 16-inch watermains, hydrants, valves and appurtenances to replace existing waterlines in various areas of the Town of Lewiston, New York.

Infiltration and Inflow Demonstration Project

Contract Administrator |
Town of Tonawanda | Tonawanda, NY, USA

Dan provided contract administration and oversaw resident inspection staff during the sewer rehabilitation of the test area. The project including cured in place pipe lining of 32,400 linear feet of sanitary sewers. The sewers ranged in size from 8 – 15 inches. The work also included rehabilitation of 80 manholes along point repairs and grouting lateral connections to new CIPP liner.

Parker Fries Interceptor Sewer Project

Contract Administrator |
Town of Tonawanda | Tonawanda, NY, USA

Dan was Construction Manager for this 7 year, multi phased sewer interceptor replacement project, which consisted of:

- Phase 1 Constructability Review, Bid, and Construction Phase Services. Dan was responsible for contract administration and oversight of resident inspection for this major sewer interceptor replacement, which included installation of approximately 48,000 linear feet (LF) of gravity sewer to replace undersized and deteriorated sewers. Pipe sizes ranged from 12 to 84 inches in diameter, with approximately 18,000 feet of pipe larger than 36 inches in diameter. Installed depths of piping ranged up to 55 feet by open cut and tunnel boring machine (TBM) pipe jacking installation methods. The project included new sanitary sewer overflow (SSO) chambers, manholes, overflow structures, and a new flow monitoring system, as well as the replacement of approximately 6,000 LF of 12-inch PVC watermain. This $30 million project was successfully completed on time and below the initial bid amount.
- Phase 2 Bid and Construction Phase Services. Dan's efforts included lead assistance in defense of the construction contract award recommendation / bid protest through legal depositions and testimony, which prevailed through the State Supreme Court, Appellate Division. Dan was responsible for contract administration and oversight of resident inspection for the installation of approximately 4,000 feet of 30-inch diameter sewer pipe replacement, and approximately 2,000 feet each of 24 and 18-inch sewer pipe by open cut method. Project also included cast in place lining of approximately 1,700 feet of existing 30-inch sewer pipe. The $10 million project was successfully completed on time and below the initial bid amount.
- Phase 3 Bid and Construction Phase Services. Constructability Review, Bid, and Construction Phase Services. Dan was responsible for contract administration and oversight of resident inspection. Project involved installation of approximately 5,500 LF of 42-inch diameter sewer pipe replacement, approximately 1,000 LF of 24- to 36-inch and 3,200 LF of 12 through 18-inch sewer pipe by open cut method. Project also includes cast in place lining of approximately 1,500 LF of existing sewer pipe and associated manhole and SSO chambers, including full pavement replacement and resurfacing of all affected areas upon completion of pipe installations.
- Phase 4 Bid and Construction Phase Services. Dan was again instrumental in defense of the construction contract award recommendation / bid protest through legal depositions and testimony, which prevailed through the State Supreme Court. Project includes installation of approximately 12,000 LF of 18 through 36-inch diameter sewer pipe replacing existing interceptor lines, 12 storm sewer overflow chambers, and resurfacing of all affected areas upon completion of pipe installations. The project also includes the addition of an 800 kW diesel emergency generator at the Parker Pump Station.

Emergency Repairs

Contract Administrator | Niagara County Sewer District No. 1 | Lockport, NY, USA

Dan provided contract administration and inspection supervision for the emergency replacement of a failed 500 LF section of 36-inch asbestos concrete pipe (ACP) gravity sewer. The section was replaced at the forcemain interconnection with an 18-inch ductile iron pipe (DIP) forcemain.

Van De Water Delivered Water Transmission Improvements

Constructability Review
Erie County Water Authority | Amherst and Tonawanda, NY

Dan provided constructability guidance during design of the ECWA's two transmission main segments within the Tonawanda Mudflats that is currently designed with construction anticipated in 2024. The second and final segment to be completed is between the Colvin Tank located near Colvin Boulevard and the I-290/I-990 Interchange. The project involves construction of two 48-inch diameter transmission mains from the VDWTP to BPS, providing redundancy for this critical infrastructure, as well as additional capacity for future use, if ever required.

Stormwater Infrastructure

Contract Administrator/Senior Resident Inspector Town of Porter | Porter, NY

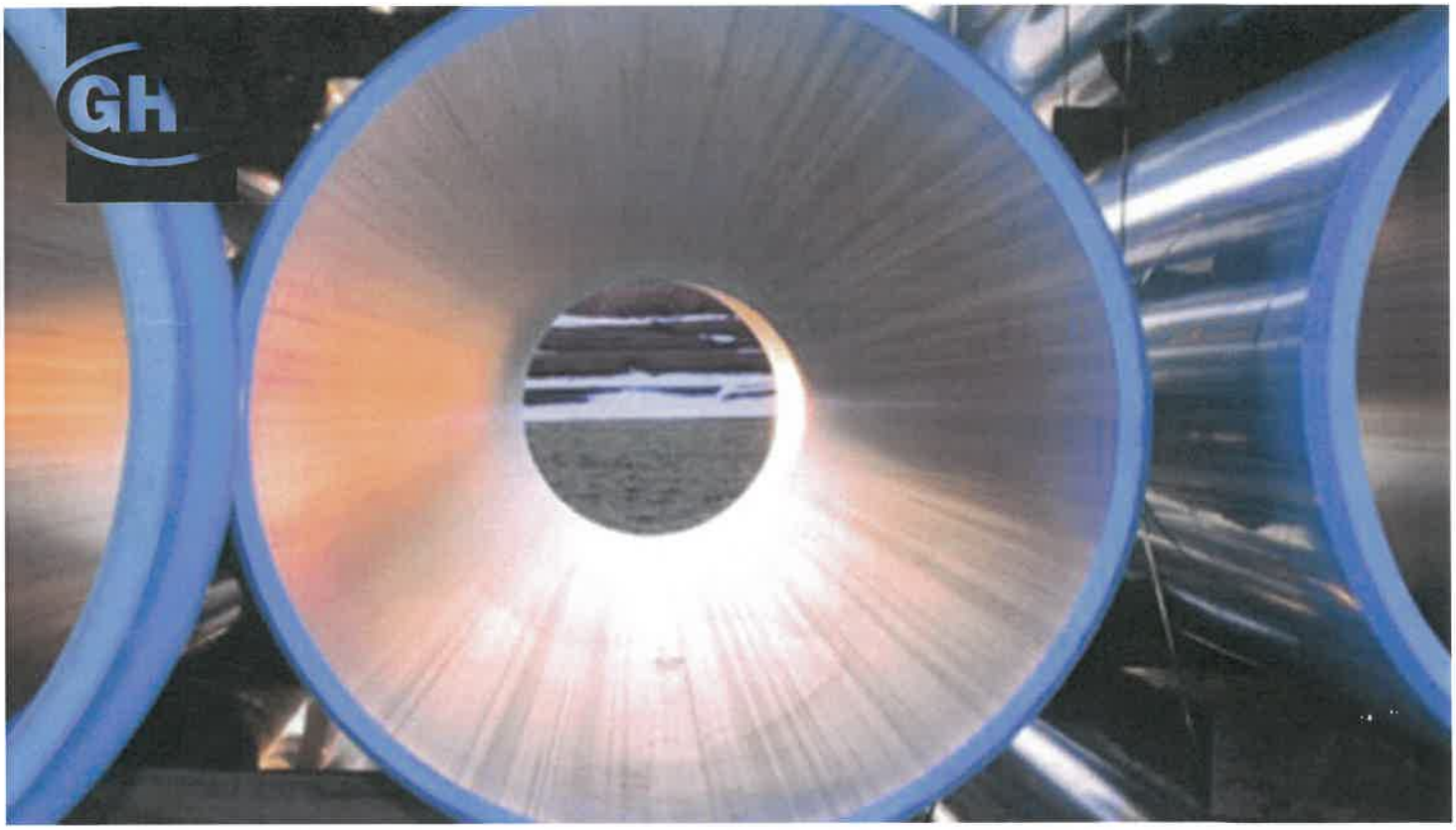
Dan was responsible for predesign consulting and pre-bid review of contracts involving storm collector mains up to 60 inches in diameter. The project also involved special energy dissipation facilities at outfalls, erosion protection systems, and extensive pipe anchoring required on extreme grades.

Career history

2003 – present	GHD, Senior Project Administrator
1986 – 2003	R&D Engineering, PC, Construction Manager
1977 – 1985	Stimm Associates, Inc., General Contractors and Engineers

Appendix B

Detailed Project Profiles



Town-wide Water System Improvements

Mission

To provide preliminary engineering, detailed design, bidding and construction phase services for a Town-wide water system improvements project.

Client

Town of Lewiston, New York

Location

Lewiston, New York

Date

2017 - 2022

Value

Engineering: $1.1 million
Construction: $11.9 million

The challenge

The Town owns, operates and maintains the existing public water system, which provides potable water to Town residents and businesses through 5,162 service connections. This project reflects the efforts of the Town Board and Water Department to address deficiencies within the water system including areas with a history of frequent water main breaks, reduced flow capacity due to aging pipelines, and areas with insufficient fire flows.

In general, the project included the replacement of approximately 8 miles of waterline along 12 roads in the Town. The development of the capital improvement list was based upon operation and maintenance data provided by the Water Department coupled with the results of a Town-wide hydraulic water model developed by GHD in 2006.

Our response

As retained engineer for the Town, GHD along with Water Department staff completed a series of field investigations to review existing conditions, establish conceptual waterline alignments, and to gain a better understanding of potential construction constraints.

The Town authorized GHD in late 2017 to provide survey, design, bidding and construction phase services for the installation of 44,500 linear feet of 8-, 12- and 16-inch diameter PVC pipe including 43 water system interconnections, 100 new hydrants, 100 new valves and 380 new water services of both residential and business services.

This project was very challenging due to construction constraints, location of existing utilities and the requirements of the reviewing agencies (New York State Department of Transportation, Niagara County Highway, State Parks, etc.)

The project included four horizontal directional drill installations (Robert Moses and three creeks), nine bored and cased road crossings, and one bored and cased railroad crossing.

Construction of the project was completed in 2022.

Water Pollution Control Plant Upgrades

Mission

Implementation of a complex, large-magnitude program to meet the compliance requirements of a NYSDEC Order on Consent.

Client

Oneida County Department of Water Quality and Water Pollution Control

Location

Utica, New York, USA

Date

2014-2022

Value

Approximate Construction Value: $300 Million

The challenge

The Oneida County Water Pollution Control Plant (WPCP) receives combined sewer flow from the City of Utica (City), and sanitary flow from 12 municipalities. As a condition of a NYSDEC Order, the WPCP is required to increase peak capacity from 55 mgd to 111 mgd to mitigate combined sewer overflows (CSO) and sanitary sewer overflows (SSO) in the collection system. This multiphase project involves a comprehensive upgrade of the regional WPCP to process and treat the additional wet weather flows. The WPCP upgrades included significant solids handling upgrades, featuring a new anaerobic digestion system to replace fluidized bed incinerators. Additionally, many areas of the plant had not been upgraded since the original construction in the late 1960s. The project also includes refurbishment of aging buildings and equipment to improve the overall physical condition of the WPCP.

Our response

GHD was retained as the primary engineer to lead the County through the various aspects of managing and implementing a complex, large-magnitude program to meet the compliance requirements of a NYSDEC Order on Consent (Order). As prime consultant, GHD's efforts included design and construction administration for several multiple-prime construction projects at the WPCP and within the collection system, as well as overall coordination of a subconsultant team.

GHD's efforts included design and construction administration for the following multiple-prime construction projects at the WPCP and within the collection system:

WPCP Upgrades

GHD developed the over-arching approach to perform WPCP upgrades to mitigate the non-compliant overflows. This regional approach was determined to be more cost-effective than standalone CSO treatment facilities in the City of Utica. The project team developed an innovative "split-flow" approach to double plant flow capacity on a constrained, active site, which was approved by the NYSDEC. Under this approach, sanitary and combined sewer flows will be treated through separate trains during wet weather. Sanitary flows will receive screening, grit removal, primary sedimentation, aeration, final sedimentation, and seasonal disinfection, prior to discharge to the Mohawk River. During wet weather, a portion of combined sewer flows will be diverted to a High-Rate Disinfection (HRD) Facility, following primary sedimentation.

Due to limited available site space, projects were bid on a strategic schedule to allow all contractors adequate working space to successfully complete their work, without delaying the overall program. At the WPCP alone, there were more than 20 separate prime contracts spread over eight individual bid packages. GHD and our subconsultants are responsible for managing contract milestones and providing regular progress updates to the regulatory authorities.

Sustainable Solids Handling Upgrades

The entire solids handling system was refurbished as part of the upgrades. The existing fluidized bed incinerators were evaluated for continued long term service. Due to the cost of fuel oil, frequent maintenance, and more stringent air emissions standards, the incinerators did not have a favorable net present worth as compared to new anaerobic digesters. At the same time, the County-owned recycling center next door to the WPCP was starting a program of receiving and pre-processing source separated organic food waste. The decision was made to install anaerobic digesters, which could receive the food waste, and provide a more sustainable approach to solids handling.

The solids handling upgrades included two new egg-shaped primary digesters, 1.2 million gallons each. A secondary digester with a dual membrane cover for gas storage was installed. Biogas produced by the anaerobic digesters is cleaned on site through a hydrogen sulfide and siloxane removal system. Cleaned gas is utilized to produce up to 600kW of electricity at microturbine generators. The exhaust heat from the micoturbines is recovered in heat exchangers and used to supplement the plant's hot water loop for building heat and digester sludge heating.

The solids handling upgrades included a complete change in operational philosophy at the WPCP. The plant had been utilizing incinerators for 50 years. Additional solids handling upgrades included gravity thickeners for primary sludge, gravity belt thickeners for waste activated sludge, belt filter press dewatering, and a new standby post lime stabilization system to be utilized as backup for the anaerobic digesters.

The impact

The total cost of project upgrades to the WPCP and SCPS is nearly $300 million. GHD and our subconsultants have successfully managed each of the requirements of the programs on time and under budget. The project involved approximately 30 separate contracts between the collection systems and WPCP. This positions the County and City to remain on track to eliminate non-compliant overflows and minimizing the volume of CSO discharges to meet Clean Water Act requirements.

As a result of the solids handling upgrades, greenhouse gas reduction has been approximately 2,900 metric tons CO2e/year by eliminating the use of incinerator fuel oil, producing electricity onsite, and recovering exhaust heat. The project provides a regional disposal site for numerous waste streams including source separated food waste.

Metro WWTP Digester Phase II Improvements

Mission

A comprehensive project to rehabilitate and improve the anaerobic digester complex.

Client

Onondaga County Department of Water Environment Protection

Location

Syracuse, New York, USA

Date

2016-2024

Value

Approximate Construction Value: $25 Million

The challenge

The Onondaga County Department of Water Environment Protection (OCDWEP) owns and operates a digester complex at the Metropolitan Syracuse Wastewater Treatment Plant (Metro WWTP) consisting of four 100-foot diameter anaerobic digesters and one central digester control house. The digester facility produces methane gas that is used to power boilers and cogeneration facilities. The Phase II project was implemented to rehabilitate the existing facilities to improve the performance of the systems and enhance sludge stabilization and biogas production.

Our response

GHD was retained by OCDWEP to evaluate and design recommended improvements to the Metro WWTP digester complex. The project included the following major tasks:

- Preliminary engineering evaluations of the sludge transfer system, biogas supply pressure regulation to the co-gen, digester heating system, Digester No. 4 cover replacement, Digester No. 4 mixing, and biogas storage were performed in an effort to select the most appropriate equipment types for Metro.
- Digester Control House improvements including the replacement of sludge pumps and piping, sludge heat exchangers, sludge heating water and heat recovery network, biogas piping network, waste gas burners and gas safety equipment, gas mixing compressors, and insulation/siding.
- Digester Improvements including digester cleaning, structural repairs, replacement of insulation and siding, gas safety equipment, and the secondary digester cover (converted from floating to fixed cover).
- Addition of two membrane storage spheres for redundant biogas storage.
- Addition of two Combined Heat and Power (CHP) units and rehabilitation of one existing CHP unit.
- Plant PLC/SCADA upgrades including the implementation of an automated digester heating loop to maximize the use of waste heat from the CHP units, with supplemental heat provided by the WWTP's process steam system, addition of automated control and interlocks for the sludge transfer system to allow the facility to dewater a primary digester while maintaining typical sludge withdrawal from the secondary digester, and addition of SCADA screens to improve operator visibility to the biogas network to maximize beneficial use of biogas generated.

The impact

Construction sequencing for the Phase II improvements required significant coordination during design, and active communication with the Owner and contractors to determine workable solutions to minor unexpected circumstances that arose during construction, such as supply chain issues during the COVID-19 pandemic. To maximize safety and efficiency of construction in the digester control house, it was determined during design that the general contractor would provide temporary waste gas burners and gas mixing compressors to eliminate the presence of active biogas piping in the building. This allowed he entire building to be declassified from a Class I, Division 1 rated space.

Retained Engineering Services

Mission

Assist the NCSD Board and staff with engineering services as needed to maintain the system and meeting regulatory requirements.

Client

Niagara County Sewer District No. 1

Location

Niagara County, New York, USA

Date

January 2024-December 2025

Value

$500,000 Engineering

The challenge

Niagara County Sewer District No. 1 (NCSD/District) is a consortium of six towns that own, operate, and maintain a centralized interceptor sewer system, seven remote pumping stations, and a 14 mgd Water Pollution Control Center (WPCC).

Since 2004, GHD has served 11 consecutive biennial terms as the District's retained engineer. This includes attending monthly board meetings, responding to client inquiries and providing engineering consulting services on a wide variety of projects.

Our response

GHD is actively involved in the development and maintenance of the District's capital improvement plan, annual operations and maintenance projects, as well as projects related to the reduction of infiltration and inflow (I/I) into the District's system. GHD also provides environmental/regulatory assistance and compliance as needed.

Highlights of projects completed during the 2024-2025 period are provided on the following pages:

Annual SPDES Compliance Reporting

As part of their current SPDES Permit, the District is required to submit annual reports detailing compliance with their NYSDEC-approved Management, Operations and Maintenance (MOM) Plan and Mercury Minimization Plan (MMP). GHD prepares each annual report in coordination with NCSD staff based on the work performed in the previous year. To maintain permit compliance the MOM Plan Annual Report must be submitted by February 28 and the MMP Annual Report by April 1 of each year. During the contract periods, GHD successfully completed and submitted the annual reports to the NYSDEC each year on behalf of the District.

2024 Operation and Maintenance Project

Because of budget constraints for the 2022 O&M project, several projects were developed as alternate bid items. Those that could not be completed, were further developed in the 2024 O&M project authorization. The 2024 project included plant gate improvements including replacement of seven slide gates for the WPCC's influent pump station, aeration tanks, and the clarifier distribution chamber.

2024 I/I Project – Manhole Inspections

The District's MOM Plan requires implementation of a District-wide Manhole Inspection Program that is to be performed once every 10 years. The initial inspection program was developed and completed in 2014. The goal of this program is to identify asset deficiencies and prioritize repairs based on a condition assessment and the potential for system I/I reduction. For future inspections, the District opted to inspection half of the manholes every 5 years (2019 and 2024). GHD inspected approximately 500 manholes in 2024 and prepared a report ranking deficiencies and recommending prioritized repairs.

2025 Operation and Maintenance Project

GHD developed detailed contract drawings and specifications to address the concerns identified by NCSD staff across the District. Identified projects included the Transit Road Gate Chamber Rehabilitation; Ferrous Chloride Tank Replacements at the Townline Road Pump Station PS) and the East Canal PS; Moyer Road PS Wet Well Rehabilitation; Shawnee Road PS Controls Upgrade; Townline Road PS Isolation Gate Repairs; WPCC Influent Check Valve Repairs (S4 and S5); and Generator Load Bank Connections at the WPCC. Upon completion of the 90% design and development of the construction cost estimate, GHD assisted the District in determining the bidding strategy and selection of Alternate Bid items to make the best use of the allotted budget for the project.

Downstream Capacity Analyses (DSCA)

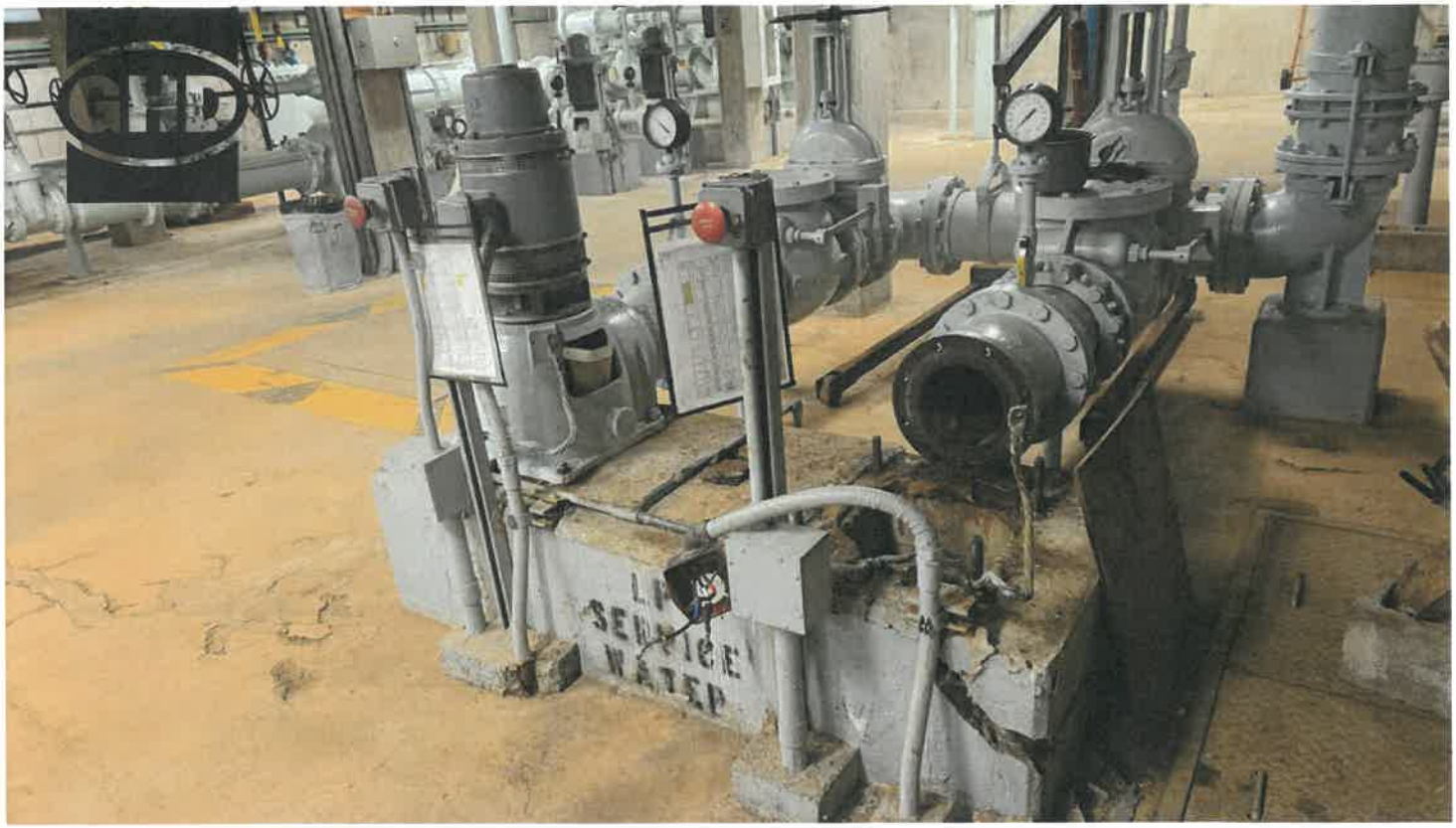
The NCSD utilizes a computer-based, system-wide hydraulic model of district-owned portions of its interceptor system, which is used to assess areas of concern within the system, identify potential areas of limited capacity, and provide a tool for evaluating system flows and impacts associated with new development and ongoing I/I removal efforts by the member Towns.

GHD updated the calibrated hydraulic model to reflect input of future sanitary flows from the various development projects in the member towns based on information provided by the applicant. Utilizing the model, GHD completed several DSCA to look at the dry weather flow effects, wet weather flow effects and pipe capacity results of these developments on the NCSD interceptor system infrastructure from the point of connection to the NCSD to the WPCC.

2025 SWMM Model Update

In 2013, GHD built and calibrated an interceptor model for the District using PCSWMM, which included all NCSD assets within the WPCC's sewershed. This model has been used as a planning tool since it was originally built, most notably for DSCA associated with new developments. The District requested GHD update the model because South Lockport has experienced significant subdivision construction in recent years, with numerous new developments planned. This growth has and will lead to greater demand on the District-owned interceptor system. Concerns These additional flows could lead to sewer and pump capacity issues in South Lockport and the adjacent Town of Pendleton.

Working with our subconsultant, GHD installed 14 flowmeters and four rain gauges in the problem area to and will focus model recalibration in that area. Pump stations in the area will be remodeled based on actual operating parameters. Model results were presented in an engineering report.



Retained Engineer On-Call Services

Mission

Deliver retained engineer on-call services to assist the Town with its wastewater collection and treatment systems.

Client

Town of Tonawanda

Location

Tonawanda, New York, USA

Date

2022-Ongoing

Value

$200,000 (Engineering)

The challenge

The Town of Tonawanda (Town) Water Resources Department has a wide range of responsibilities related to water and sewer maintenance, drinking water treatment and wastewater treatment. The Department identified the need and benefits of placing an engineering firm on retainer to assist and supplement Town forces with a variety of specialized tasks unique to water/wastewater treatment and collection/conveyance systems.

Our response

GHD was retained to provide engineering services as needed to support the Town's efforts to operate and maintain the 30 mgd wastewater treatment plant (WWTP), 300 miles of sanitary sewers, eight pumping stations, 270 miles of storm sewer, and the sanitary sewer overflow (SSO) network. GHD also assists the Town in maintaining compliance with various permits and orders related to its wastewater collection and treatment system.

Tasks to date have included the following:

Consent Order Assistance

In October 2022, the NYSDEC issued a Revised Schedule A to the Town's Order on Consent, which included several new requirements to further address infiltration and inflow (I/I) and SSO abatement in the Town. GHD assisted the Town in developing the following work plans and reports for submission to and approval by the NYSDEC:

- Sewer System I/I Work Plan *
- Sewer System Model Work Plan and Model Calibration*
- Private Property I/I Program Work Plan
- Sanitary Sewer System Evaluation Survey (SSES) and Corrective Action Plan (CAP) Work Plan
- Updated Capacity, Management, Operation and Maintenance (CMOM) Program

Industrial Pretreatment Assistance

GHD provided support with preparing and attending the Town's Pretreatment Compliance Inspection (PCI) with the USEPA for their Industrial Pretreatment Program. Following receipt of USEPA comments, GHD assisted the Town with their response to the USEPA as well as addressing required changes to their pretreatment program related documents (Sewer Use Ordinance, Enforcement Response Plan, Significant Industrial User permits).

SSO Activation Reporting Assistance

The Town is required to submit monthly SSO Activation Reports to the NYSDEC. GHD utilizes the Town's sanitary sewer model to estimate SSO volumes based on daily rain events and summarizes this information for the Town's monthly reports. GHD is also assisting the Town with updating their methodology for SSO reporting in accordance with the New York State Sewage Pollution Right to Know Law (SPRTK).

Risk Management Plan Inspection Assistance

GHD assisted the Town with their Risk Management Plan (RMP) inspection for the WWTP, as required by the USEPA. This included reviewing the WWTP's existing RMP documentation in preparation for the inspection and attending the inspection, as well as assisting with addressing comments from the USEPA post-inspection.

The impact

GHD's assistance has allowed Town resources to focus their time on other projects. Our efforts have also allowed the Town to meet the compliance deadlines under the Consent Order.

* *The Town's I/I Work Plan and Model Calibration were completed by GHD under a separate authorizations*

Clarifier and Digester Improvements

Mission

Improve secondary clarifier performance and provide consistent mixing within the primary digester.

Client

Town of Grand Island

Location

Grand Island, New York, USA

Date

2005

Value

Approximate Construction Value: $1.8 Million

The challenge

The two 60-foot diameter secondary clarifiers at the Grand Island Wastewater Treatment Plant (WWTP) had become increasingly deteriorated due to old age and lack of repair. The existing gas bubble mixing guns in the 60-foot diameter anaerobic primary digester were also deteriorating. The guns had been in place for over 20 years and were beginning to fail. Total solids testing within the digester revealed an inconsistent concentration throughout the tank. Extensive modifications were also required on other digester equipment, including the boiler and gas compressor.

Our response

GHD examined the existing clarifiers and evaluated possible alternatives for upgrading the units. The evaluation included a study of several different clarifier equipment manufacturers and the condition of the effluent channel, scum baffle, V-notch weirs, and leveling grout was reviewed.

The existing clarifiers had "rapid sludge removal" pipes, which frequently clogged during low flows due to low velocities within the pipes. A spiral, rake blade type clarifier was chosen to easily convey sludge to the center withdrawal pipe in the clarifier.

A full-radial skimmer arm was added to improve scum collection and density current baffles were installed to limit the amount of solids entering the effluent launders.

The 12-inch diameter bubble mixing guns in the digester were replaced with 24-inch diameter bubble mixing guns. The increased size provided a greater mixing intensity and improved the solids distribution within the digester. The final design resulted in a digester turnover rate of less than 30 minutes.

As part of the project, both the primary and secondary digesters were cleaned. Sludge from the tanks was dewatered on-site using a portable belt filter press. Dewatered sludge was disposed of at an approved landfill.

A new 75,000 BTU/hr hot water boiler was installed. A new spiral plate heat exchanger, along with heat exchanger feed pumps, were installed to replace ineffective jackets, which were previously on the mixing guns. New liquid ring rotary compressors were constructed in a new housing structure.

The impact

Benefits to the Town of Grand Island included:

- Improved clarifier performance, including more consistent and reliable sludge withdrawal and better scum collection
- Uniform solids concentration within digester
- Replacement of aged heat exchanger, boiler, and compressor

SSES and Sanitary Sewer System Rehabilitation

Mission

Evaluated the Town of Grand Island's existing collection system and analyzed the capacity of their WWTP and prepared a Workplan for an SSES to abate SSOs. Provided phased design and construction phase services to implement improvements.

Client

Town of Grand Island, New York, USA

Date

2012-Ongoing

Value

$21.5 million (Est.)

The challenge

The Town of Grand Island (Town) owns and operates its sanitary sewer system, which includes over 100 miles of collector sewers and interceptors, 22 lift stations, seven SSOs, an overflow retention facility (ORF), and a 3.5 million gallon per day (mgd) wastewater treatment plant (WWTP). Several areas of the collection system are prone to wet weather infiltration and inflow (I/I). The Town was issued an Order on Consent by the New York State Department of Environmental Conservation (NYSDEC) to eliminate sanitary sewer overflows (SSOs).

Our response

GHD was retained to implement a temporary flow metering program to characterize the system and quantify I/I in various mini-systems. Based on the flow metering data, GHD prepared a collection system model.

Several alternatives were developed to estimate the effectiveness of SSO abatement. Alternatives included inflow source identification and removal, sewer rehabilitation including pipe lining, lift station upgrades, in-line storage, and increased capacity of sewer pipes.

Recommendations for collection system improvements were based upon the most cost-effective projects for abating SSOs. The final recommendations included a combination of SSES work, sewer lining, manhole rehabilitation, and lift station capacity upgrades.

GHD also prepared a Capacity Management Operations and Maintenance (CMOM) program for the Town. The CMOM program is a guideline for ongoing collection system maintenance, including sewer cleaning, CCTV inspections, flow monitoring, and system testing. The NYSDEC approved the CMOM program and now enforces CMOM activities through the Town's wastewater discharge permit.

GHD provided the following services:

- Pre-construction flow monitoring
- System modeling
- Alternative analysis for SSO reduction
- Workplan development
- CMOM program development
- Design and construction phase services for system repairs
- Coordination with the NYSDEC and Order on Consent negotiations

The impact

A 10-year Workplan was developed for SSES work within the collection system to identify and remove I/I sources.

The first component of the Workplan included SSES investigations through smoke testing, dye testing, and CCTV inspection. More than 70,000 LF of sewers were inspected with sizes ranging from 8 to 30 inches in diameter. Based on the results of the inspections, recommendations were made for system repairs.

GHD provided design and construction phase services for system repairs, which included:

- Approximately 58,000 linear feet of cured in place lining of sanitary sewers
- Approximately 15,000 linear feet of open cut replacement for sewers with severe structural defects
- Spot repairs at locations with minor defects
- Lateral repairs at locations where the lateral connection to the main sewer is damaged
- Manhole rehabilitation including bench repairs, lining, and chimney seal
- Replacement of the 16-inch diameter, 2-mile-long Lift Station 8 forcemain.
- Replacement of two intermediate lift stations (LS-5 and LS-11) and associated discharge forcemains, currently underway.

At the conclusion of the repairs, post-construction flow monitoring was performed to quantify the effectiveness of I/I reduction and subsequent SSO mitigation. Data suggest the program has been successful in mitigating up to 40 percent of wet weather I/I in several mini systems.

→ ghd.com

Phase 16 Waterline Improvements

Mission

Provide preliminary engineering, design, bidding, and construction phase services to complete the Phase 16 Waterline improvements.

Client

Town of Royalton

Location

Royalton, New York, USA

Date

February 2021 – Present

Approximate Construction Value: $5.4 Million

The challenge

The Town of Royalton (Town) is a rural municipality located in southeastern Niagara County, New York. The existing public water system is owned, operated, and maintained by the Town. Over the years, the Town has expanded the water system to meet the increasing need of public water supply for its residents and established numerous water districts. In 1989, the Town determined it was in the public's interest to extend public water supply to the entire Town and initiated the Wholly Part Town Water Improvement. The Town Board dissolved all pre-existing water districts and began constructing additional waterlines with the debt burden assessed to the entire Town as the benefitted area. Since this time, the Town has completed 15 phases of the Water Plan and has extended public water supply to the majority of properties in the Town.

Our response

As retained engineer to the Town, GHD has provided design services for a number of water system improvements projects. In 2021, GHD was tasked with providing preliminary engineering support and was later authorized for design, bidding, and construction phase services to complete the Phase 16 Waterline improvements. This includes the construction of approximately 25,640 linear feet (LF) of new waterlines along Griswold Road, Ditch Road, and Akron Road to extend public water supply to rural areas served by private well systems.

Under our initial authorization, GHD prepared a Map, Plan and Report for the Phase 16 extension, completed the SEQR and SHPO coordinated reviews, along with surveying and a wetlands delineation which were provided by outside consultants.

GHD is providing detailed design, which includes the following in each area:

- Approximately 15,620 LF (2.95 miles) of 8-inch polyvinyl chloride (PVC) pipe, valves, services, fire hydrants, and associated appurtenances on Ditch Road and Griswold Street between Foote Road and Lewiston Road (NYS Route 77).
- Approximately 4,320 LF (0.82 miles) of 8-inch PVC pipe, valves, services, fire hydrants, and associated appurtenances on Akron Road from Bulmore Road to NYS Route 93.
- Approximately 5,700 LF (1.08 miles) of 8-inch PVC pipe, valves, services, fire hydrants, and associated appurtenances on Akron Road from NYS Route 93 to Grove Road.

GHD coordinated with various local, county and state agencies, and utilities to obtain permits and land use agreements for the project.

The impact

Upon construction completion, the Town of Royalton will have increased public water supply for its residents. Residents along the project area will experience improved capacity, reliability, and pressure.

→ ghd.com

Appendix C

Sample Certificates of Insurance

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 11/21/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Willis Towers Watson Northeast, Inc. c/o 26 Century Blvd P.O. Box 305191 Nashville, TN 372305191 USA	**CONTACT NAME:** WTW Certificate Center **PHONE (A/C, No, Ext):** 1-877-945-7378 **FAX (A/C, No):** 1-888-467-2378 **E-MAIL ADDRESS:** certificates@wtwco.com
INSURED GHD Consulting Services Inc. 5788 Widewaters Pkwy Syracuse, NY 13214	**INSURER(S) AFFORDING COVERAGE** — **NAIC #** INSURER A: Allied World Insurance Company — 22730 INSURER B: Zurich American Insurance Company — 16535 INSURER C: Allied World Assurance Company US Inc — 19489 INSURER D: Beazley Insurance Company Inc — 37540 INSURER E: Beazley Excess and Surplus Insurance Inc — 17520 INSURER F:

COVERAGES **CERTIFICATE NUMBER:** W41875161 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	[X] COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [ ] LOC [ ] OTHER:	Y	Y	6004-2234	12/01/2025	12/01/2026	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 1,000,000 $ 25,000 $ 1,000,000 $ 2,000,000 $ 2,000,000
B	AUTOMOBILE LIABILITY [X] ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY [X] Coll Ded: $50C Comp Ded: $250	Y	Y	BAP 3757423-10	07/01/2025	07/01/2026	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Hired Physical Damag	$ 2,000,000 $ $ $ $ 100,000.00
C	[X] UMBRELLA LIAB [X] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED [X] RETENTION $ 10,000	Y	Y	0310-4498	12/01/2025	12/01/2026	EACH OCCURRENCE AGGREGATE	$ 1,000,000 $ 1,000,000
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: No If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	WC 0380936-10	07/01/2025	07/01/2026	[X] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
D	Professional Liability			V29594250701	12/01/2025	12/01/2026	Each Claim: Aggregate:	$2,000,000 $2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

SEE ATTACHED

CERTIFICATE HOLDER

To Whom It May Concern-GHD Consulting Services Inc-2M

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Patricia A Forry

AGENCY CUSTOMER ID: _____

LOC #: _____

ADDITIONAL REMARKS SCHEDULE

AGENCY Willis Towers Watson Northeast, Inc.	NAMED INSURED GRD Consulting Services Inc. 5788 Widewaters Pkwy Syracuse, NY 13214
POLICY NUMBER See Page 1	
CARRIER See Page 1 / NAIC CODE See Page 1	EFFECTIVE DATE: See Page 1

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 FORM TITLE: Certificate of Liability Insurance

Umbrella/Excess Liability Follows Form over General Liability, Auto Liability and Employer's Liability.

Certificate Holder is included as an Additional Insured as respects to General Liability, Auto Liability and Pollution Liability where required by contract or agreement.

General Liability policy where required by contract or agreement shall be Primary and Non-contributory with any other insurance in force for or which may be purchased by Additional Insured.

Waiver of Subrogation applies in favor of Certificate Holder with respects to General Liability, Auto Liability where required by contract or agreement and Workers Compensation where required by written contract, agreement or permit where permissible by law or statute.

INSURER AFFORDING COVERAGE: Beazley Excess and Surplus Insurance Inc NAIC#: 17520

POLICY NUMBER: D29657250701 EFF DATE: 12/01/2025 EXP DATE: 12/01/2026

ADDITIONAL INSURED: Y

SUBROGATION WAIVED: Y

TYPE OF INSURANCE:	LIMIT DESCRIPTION:	LIMIT AMOUNT:
Pollution Liability	Each Occurrence:	$2,000,000
	Aggregate:	$2,000,000

SR ID: 28911257 BATCH: 4217847 CERT: W41875161

POLICY NUMBER: 6004-2234

COMMERCIAL GENERAL LIABILITY
CG 20 10 10 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization: **Where required by written contract**

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

A. **Section II – Who Is An Insured** is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of your ongoing operations performed for that insured.

B. With respect to the insurance afforded to these additional insureds, the following exclusion is added:

2. Exclusions

This insurance does not apply to "bodily injury" or "property damage" occurring after:

(1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the site of the covered operations has been completed; or

(2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

POLICY NUMBER: 6004-2234

COMMERCIAL GENERAL LIABILITY
CG 20 37 10 01

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name of Person or Organization: **Where required by written contract**
Location And Description of Completed Operations: **Where required by written contract**
Additional Premium: **N/A**

(If no entry appears above, information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.)

Section II – Who Is An Insured is amended to include as an insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" at the location designated and described in the schedule of this endorsement performed for that insured and included in the "products-completed operations hazard".

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NON-CONTRIBUTORY

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS / COMPLETED OPERATIONS COVERAGE PART

Notwithstanding any other provision of this policy to the contrary, the insurance afforded to an additional insured under this policy will be primary to, and non-contributory with, any other insurance available to that person or organization in the event a written contract or written agreement you enter into requires you to furnish insurance to that person or organization of the type provided by this policy.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization:
Where required by written contract
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

Coverage Extension Endorsement

ZURICH

Policy No.	Eff. Date of Pol.	Exp. Date of Pol.	Eff. Date of End.	Producer No.	Add'l. Prem	Return Prem.
BAP 3757423-10	07/01/2025	07/01/2026	07/01/2025		---	---

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the:

Business Auto Coverage Form
Motor Carrier Coverage Form

A. Amended Who Is An Insured

1. The following is added to the **Who Is An Insured** Provision in **Section II – Covered Autos Liability Coverage**:

   The following are also "insureds":

   a. Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow for acts performed within the scope of employment by you. Any "employee" of yours is also an "insured" while operating an "auto" hired or rented under a contract or agreement in an "employee's" name, with your permission, while performing duties related to the conduct of your business.

   b. Anyone volunteering services to you is an "insured" while using a covered "auto" you don't own, hire or borrow to transport your clients or other persons in activities necessary to your business.

   c. Anyone else who furnishes an "auto" referenced in Paragraphs **A.1.a.** and **A.1.b.** in this endorsement.

   d. Where and to the extent permitted by law, any person(s) or organization(s) where required by written contract or written agreement with you executed prior to any "accident", including those person(s) or organization(s) directing your work pursuant to such written contract or written agreement with you, provided the "accident" arises out of operations governed by such contract or agreement and only up to the limits required in the written contract or written agreement, or the Limits of Insurance shown in the Declarations, whichever is less.

2. The following is added to the **Other Insurance** Condition in the Business Auto Coverage Form and the **Other Insurance – Primary and Excess Insurance Provisions Condition** in the Motor Carrier Coverage Form:

   Coverage for any person(s) or organization(s), where required by written contract or written agreement with you executed prior to any "accident", will apply on a primary and non-contributory basis and any insurance maintained by the additional "insured" will apply on an excess basis. However, in no event will this coverage extend beyond the terms and conditions of the Coverage Form.

All other terms, conditions, provisions and exclusions of this policy remain the same.

1. Breakdown;
2. Repair;
3. Servicing;
4. "Loss"; or
5. Destruction.

2. The following is added to the Paragraph **A. Coverage** Provision of the **Physical Damage Coverage** Section:

Temporary Substitute Autos – Physical Damage

We will pay the owner for "loss" to the temporary substitute "auto" unless the "loss" results from fraudulent acts or omissions on your part. If we make any payment to the owner, we will obtain the owner's rights against any other party.

The deductible for the temporary substitute "auto" will be the same as the deductible for the covered "auto" it replaces.

M. Amended Duties In The Event Of Accident, Claim, Suit Or Loss

Paragraph **a.** of the **Duties In The Event Of Accident, Claim, Suit Or Loss** Condition is replaced by the following:

a. In the event of "accident", claim, "suit" or "loss", you must give us or our authorized representative prompt notice of the "accident", claim, "suit" or "loss". However, these duties only apply when the "accident", claim, "suit" or "loss" is known to you (if you are an individual), a partner (if you are a partnership), a member (if you are a limited liability company) or an executive officer or insurance manager (if you are a corporation). The failure of any agent, servant or employee of the "insured" to notify us of any "accident", claim, "suit" or "loss" shall not invalidate the insurance afforded by this policy.

Include, as soon as practicable:

(1) How, when and where the "accident" or "loss" occurred and if a claim is made or "suit" is brought, written notice of the claim or "suit" including, but not limited to, the date and details of such claim or "suit";

(2) The "insured's" name and address; and

(3) To the extent possible, the names and addresses of any injured persons and witnesses.

If you report an "accident", claim, "suit" or "loss" to another insurer when you should have reported to us, your failure to report to us will not be seen as a violation of these amended duties provided you give us notice as soon as practicable after the fact of the delay becomes known to you.

N. Waiver of Transfer Of Rights Of Recovery Against Others To Us

The following is added to the **Transfer Of Rights Of Recovery Against Others To Us** Condition:

This Condition does not apply to the extent required of you by a written contract, executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of operations contemplated by such contract. This waiver only applies to the person or organization designated in the contract.

O. Employee Hired Autos – Physical Damage

Paragraph **b.** of the **Other Insurance** Condition in the Business Auto Coverage Form and Paragraph **f.** of the **Other Insurance – Primary and Excess Insurance Provisions** Condition in the Motor Carrier Coverage Form are replaced by the following:

For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos" you own:

(1) Any covered "auto" you lease, hire, rent or borrow; and

(2) Any covered "auto" hired or rented under a written contract or written agreement entered into by an "employee" or elected or appointed official with your permission while being operated within the course and scope of that "employee's" employment by you or that elected or appointed official's duties as respect their obligations to you.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

WORKERS COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY **WC 00 03 13**

(Ed. 4-84)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

ALL PERSONS AND/OR ORGANIZATIONS THAT ARE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT WITH THE INSURED, EXECUTED PRIOR TO THE ACCIDENT OR LOSS, THAT WAIVER OF SUBROGATION BE PROVIDED UNDER THIS POLICY FOR WORK PERFORMED BY YOU FOR THAT PERSON AND/OR ORGANIZATION.

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (use street address only) GHD Inc. GHD Services Inc. GHD Consulting Services Inc. GHD Consulting Engineers LLC 5788 Widewaters Parkway Syracuse NY 13214 Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)*	1b. Business Telephone Number of Insured 1c. NYS Unemployment Insurance Employer Registration Number of Insured 917814561 1d. Federal Employer Identification Number of Insured or Social Security Number 98-0425935,15-0430700,16-1229774
2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) PER CERTIFICATE HOLDER LISTED ON ACORD CERTIFICATE	3a. Name of Insurance Carrier Zurich American Insurance Company 3b. Policy Number of Entity Listed in Box "1a" WC 0380936-10 3c. Policy effective period 07/01/2025 to 07/01/2026 3d. The Proprietor, Partners or Executive Officers are ☒ included. (Only check box if all partners/officers included) ☐ all excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. **(To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy).** The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) **Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.**

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Kristin Adams
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Kristin J. Adams 07.01.2025
(Signature) (Date)

Title: Associate Director

Telephone Number of authorized representative or licensed agent of insurance carrier: 617-351-7582

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.

2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

NEW YORK STATE | Workers' Compensation Board

CERTIFICATE OF NYS WORKERS' COMPENSATION INSURANCE COVERAGE

1a. Legal Name & Address of Insured (use street address only) GHD Inc. GHD Services Inc. GHD Consulting Services Inc. GHD Consulting Engineers LLC 5788 Widewaters Parkway Syracuse NY 13214 Work Location of Insured *(Only required if coverage is specifically limited to certain locations in New York State, i.e., a Wrap-Up Policy)*	1b. Business Telephone Number of Insured 1c. NYS Unemployment Insurance Employer Registration Number of Insured 917814561 1d. Federal Employer Identification Number of Insured or Social Security Number 98-0425935,15-0430700,16-1229774
2. Name and Address of Entity Requesting Proof of Coverage (Entity Being Listed as the Certificate Holder) PER CERTIFICATE HOLDER LISTED ON ACORD CERTIFICATE	3a. Name of Insurance Carrier Zurich American Insurance Company 3b. Policy Number of Entity Listed in Box "1a" WC 0380936-09 3c. Policy effective period 07/01/2024 to 07/01/2025 3d. The Proprietor, Partners or Executive Officers are ☒ included. (Only check box if all partners/officers included) ☐ all excluded or certain partners/officers excluded.

This certifies that the insurance carrier indicated above in box "3" insures the business referenced above in box "1a" for workers' compensation under the New York State Workers' Compensation Law. **(To use this form, New York (NY) must be listed under Item 3A on the INFORMATION PAGE of the workers' compensation insurance policy).** The Insurance Carrier or its licensed agent will send this Certificate of Insurance to the entity listed above as the certificate holder in box "2".

The insurance carrier must notify the above certificate holder and the Workers' Compensation Board within 10 days IF a policy is canceled due to nonpayment of premiums or within 30 days IF there are reasons other than nonpayment of premiums that cancel the policy or eliminate the insured from the coverage indicated on this Certificate. (These notices may be sent by regular mail.) **Otherwise, this Certificate is valid for one year after this form is approved by the insurance carrier or its licensed agent, or until the policy expiration date listed in box "3c", whichever is earlier.**

This certificate is issued as a matter of information only and confers no rights upon the certificate holder. This certificate does not amend, extend or alter the coverage afforded by the policy listed, nor does it confer any rights or responsibilities beyond those contained in the referenced policy.

This certificate may be used as evidence of a Workers' Compensation contract of insurance only while the underlying policy is in effect.

Please Note: Upon cancellation of the workers' compensation policy indicated on this form, if the business continues to be named on a permit, license or contract issued by a certificate holder, the business must provide that certificate holder with a new Certificate of Workers' Compensation Coverage or other authorized proof that the business is complying with the mandatory coverage requirements of the New York State Workers' Compensation Law.

Under penalty of perjury, I certify that I am an authorized representative or licensed agent of the insurance carrier referenced above and that the named insured has the coverage as depicted on this form.

Approved by: Kristin Adams
(Print name of authorized representative or licensed agent of insurance carrier)

Approved by: Kristin J. Adams 07.01.2024
(Signature) (Date)

Title: Associate Director

Telephone Number of authorized representative or licensed agent of insurance carrier: 617-351-7582

Please Note: Only insurance carriers and their licensed agents are authorized to issue Form C-105.2. Insurance brokers are NOT authorized to issue it.

Workers' Compensation Law

Section 57. Restriction on issue of permits and the entering into contracts unless compensation is secured.

1. The head of a state or municipal department, board, commission or office authorized or required by law to issue any permit for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, and notwithstanding any general or special statute requiring or authorizing the issue of such permits, shall not issue such permit unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter. Nothing herein, however, shall be construed as creating any liability on the part of such state or municipal department, board, commission or office to pay any compensation to any such employee if so employed.

2. The head of a state or municipal department, board, commission or office authorized or required by law to enter into any contract for or in connection with any work involving the employment of employees in a hazardous employment defined by this chapter, notwithstanding any general or special statute requiring or authorizing any such contract, shall not enter into any such contract unless proof duly subscribed by an insurance carrier is produced in a form satisfactory to the chair, that compensation for all employees has been secured as provided by this chapter.

May 22, 2026

Dear Supervisor and Board Members,

At the 5/28/2026 Board meeting I will be asking your approval to process the following **2026** budget revisions:

1. This revision is requesting to move $180.00 to the Assessor Equipment budget (A00-1355-0200-0000) from the Assessor Contractual budget (A00-1355-0400-0000) to cover the purchase of a computer monitor.

2. This revision is requesting to move $1,001.00 to the Highway Insurance budget (DB0-1910-0400-0000) from the General Repairs Contractual budget (DB0-5110-0400-0000) to cover the addition of equipment to the property insurance policy.

Thank you,

Jacquie Agnello
Director of Finance

Town of Lewiston Recreation
Timothy Smith, Director
1375 Ridge Road, Lewiston, NY 14092

May 28, 2026

Honorable Members of the Lewiston Town Board,

Please approve the following Seasonal hire in the Recreation Department for our Spring/Summer Recreation Season. She will be starting her seasonal hours on May 30, 2026.

Madeline Mcguire	Seasonal Recreation Leader	$ 16.00 per hour

Thank You.