



RFP# 2023-039



2023 Albany County Hazard Mitigation Plan

April 28, 2023





April 28, 2023

Pamela O'Neill
Albany County Purchasing Agent
112 State Street, Room 1000
Albany, New York 12207

RE: 2023 Albany County Hazard Mitigation Plan
File: 710.2176

Dear Ms. O'Neill:

Barton & Loguidice, D.P.C. (B&L), along with our teaming partner Prudent Engineering (MBE), is pleased to present our proposal for the 2023 Albany County Hazard Mitigation Plan (HMP). Not only have we assisted many communities across New York State with the creation of and updates to their hazard mitigation plan, but B&L developed the Albany County Hazard Mitigation Plan in 2018. We look forward to the opportunity to assist Albany County and its 18 jurisdictions (19 altogether with the County) with this update planning process and aim for 100% participation in 2023 with the Village of Colonie and Town of Rensselaerville, who did not participate in the prior update. Each region that we work with has unique needs and challenges, further complicated by natural hazard events. We have the experience to recognize that within each region, every individual jurisdiction's history and strategy for mitigation varies because of the differences in vulnerabilities, risk potential, and capabilities. As a result, we work closely with our clients to understand their unique strengths, challenges, and needs for an enhanced response to changing conditions.

We understand the challenges communities may face from natural hazards, and the increased threats of climate impacts. We have worked with other communities that have similar needs to Albany County, throughout the Capital District and the Mohawk and Hudson River Watersheds, and have a proven track record of providing Federal Emergency Management Agency (FEMA) and New York State Division of Homeland Security and Emergency Services (DHSES) approved plans.

As a full-service firm, B&L has in-house capabilities to complete the 2023 Albany County HMP with the following:

- Cross-jurisdictional management of the municipal interviews and public outreach components of the project
- A comprehensive range of mitigation actions and ability to address the risks identified in the risk assessment
- Working knowledge of FEMA's Local Mitigation Planning Policy Guide updates (effective April 19, 2023), which includes changes in development such as vulnerability, the needs of underserved communities, and changes in capabilities
- How to leverage the New York State Climate Smart Communities Certification program and earn points for PE7 Action: Climate-resilient Hazard Mitigation Plan
- Established relationship with the DHSES and the University at Albany Visualization and Informatics Lab (AVAIL) teams on the Mitigate NY platform—should the County want to explore an online platform



Our talented team of multidisciplinary professionals will be led by Project Manager, Jayme Breschard and Officer-in-Charge, Don Fletcher. Jayme is a Certified Floodplain Manager, and has served as Chair of the New York State Floodplain and Stormwater Managers Association (NYSFSMA). She currently participates as a Sector Advisor for Water Resources for the New York State Climate Impacts Assessment. **Before her time at B&L, Jayme worked on the Albany County Climate Resiliency Plan (CRP) together with Prudent Engineering. Jayme was also the Project Manager for the Monroe County Coastal Lakeshore Economy and Resiliency (CLEAR) Plan and helped to develop the project profiles for the participating lakeshore communities with Prudent Engineering that focused on offshore and onshore protection recommendations in addition to emergency evacuation routes and feasibility.** She will bring a unique emphasis on floodplain management and vulnerability assessment as part of the 2023 Albany County HMP.

Should you have any questions or wish to speak with us further, please contact Jayme at jbreschard@bartonandloguidice.com or Don at dfletcher@bartonandloguidice.com.

Thank you for the consideration of our qualifications.

Sincerely,

Barton & Loguidice, D.P.C.

A handwritten signature in blue ink, appearing to read 'Donald H. Fletcher'.

Donald H. Fletcher, P.E.
Senior Vice President

A handwritten signature in blue ink, appearing to read 'Jayme Breschard'.

Jayme Breschard, AICP, CFM
Senior Managing Community Planner



Section I:

Title Page and Table of Contents

2023 Albany County Hazard Mitigation Plan

Barton&**Loguidice**

Albany County RFP# 2023-039

2023 Albany County Hazard Mitigation Plan



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B&L Point of Contact/Project Manager:

Jayne Breschard
Senior Managing Community Planner
Phone 585-325-7190
Fax 585-325-4856
jbreschard@bartonandloguidice.com

Officer-in-Charge Responsible for Binding the Company Contractually:

Donald H. Fletcher, P.E.
Senior Vice President
Phone 518-218-1801
Fax 518-218-1805
dfletcher@bartonandloguidice.com



Section II:

Qualifications and Experience

2023 Albany County Hazard Mitigation Plan

Barton&**Loguidice**

Company History



**Sustainable
Planning and Design**



Water Resources



Facilities



Transportation



Environmental



Asset Management



Solid Waste



Land Surveying



Barton & Loguidice, D.P.C. (B&L) has been engaged in the practice of professional engineering since 1961. B&L is a highly diversified planning, engineering, environmental science, and landscape architecture firm with a broad range of experience and expertise. Since our founding in Syracuse, New York, the firm has opened offices in Rochester, Buffalo, Albany, Somers, New Paltz, Binghamton, Plattsburgh, Watertown, and Utica, New York; Camp Hill and Pittsburgh, Pennsylvania; Annapolis and Baltimore, Maryland; Mount Laurel, New Jersey; Hartford, Connecticut; and Portland, Maine.

B&L employs a staff of more than 350, about one quarter of which are licensed professional engineers, and includes landscape architects, planners, geologists, green infrastructure specialists, environmental scientists, and construction support personnel.

Throughout our history, B&L has built its business primarily serving public sector clients ranging from the local municipal level (cities, towns, and villages) to county, state, and federal agencies. The firm operates within 8 core practice areas as shown in the graphic on the left.

Subconsultant Prudent Engineering

Prudent Engineering, LLP, provides engineering services to state and local governments, authorities and agencies, consultant partners, and private-sector clients across New York State. Their project portfolio features experience in bridge, highway, and structural design, condition and safety inspection, civil and site engineering support, construction inspection and administration, land survey and mapping, and hydrographic services.

With 79 full-time employees, Prudent has a staff of experienced licensed engineers and licensed land surveyors, NICET-certified/equivalent construction inspectors, trained designers, and support staff. Prudent is headquartered in East Syracuse, New York, and maintains staffed offices in Albany, Binghamton, Buffalo, Rochester, and Staten Island, New York.

Key Personnel

Organizational Chart

The multidisciplinary team we have assembled for this project is outlined in the organizational chart below and resumes for key personnel are on the following page.



Jayme Breschard, AICP, CFM

Climate Action Specialist and
Senior Managing Community Planner

jbreschard@bartonandloguidice.com



Years of Experience: 22

Education: B.A., Historic Preservation and Geography, Mary Washington College, 2000; M.A., Historic Preservation Planning, Cornell University, 2005

Professional Registrations: American Institute of Certified Planners (AICP), 2013; Association of State Floodplain Managers (ASFPM), Certified Floodplain Manager (CFM), 2011

Summary

Ms. Breschard is a Senior Managing Community Planner serving in the role as Climate Action Specialist at Barton & Loguidice. She has over 20 years of experience in local government assistance, community planning, and project management. Her specializations include land use, water resources, climate resilience, and general municipal planning. She has coordinated various planning projects with an emphasis on stormwater, floodplain, and watershed management with various stakeholders and is able to unite local perspectives into cohesive regional approaches that address economic, social, and environmental concerns that lead to grant funding opportunities and project implementation.

Ms. Breschard seamlessly manages resources, schedules, and budgets while still providing leadership at the executive level through strategic business planning as well as mentoring and coaching direct reports and junior staff on interdisciplinary teams. Ms. Breschard excels working with local governments on providing technical assistance and training. She is a leader in New York State on local government and land use challenges and opportunities. She approaches engagement strategies with a keen focus towards advancing social equity and climate justice. Ms. Breschard has participated on State and National boards and is frequently requested to present at workshops and conferences across New York State.

Relevant Experience

Multi-Jurisdictional Hazard Mitigation Plan, Chautauqua County, New York

As part of the HMP update process, B&L has included FEMA's new policy guide (effective April 19, 2023), recognizing the important role of adopting and enforcing

building codes and land use ordinances and the effects of climate change and other future conditions such as social vulnerability in the risk assessment. As a certified planner, Ms. Breschard provides a unique emphasis to floodplain management as part of hazard mitigation plan updates by coordinating Mitigation Action Roundtables that can be used to discuss and update mitigation actions across departments while also reviewing plan goals and objectives using online engagement tools. She is also the Project Manager and has led the monthly Planning Committee meetings and facilitated dialogue between NYS DHSES and the County. Other key elements of the HMP update include individual municipal meetings with all 42 towns, villages, and cities in Chautauqua County, with increased focus on updates received from elected officials and municipal staff on hazards of concern, capabilities to address these hazards, and the condition of critical infrastructure, and a review of previous mitigation actions with an emphasis on new hazard mitigation actions that include a comprehensive range of solutions, from local plans and regulations, structure and infrastructure projects and natural systems protection to education and awareness programs.

Funding Mechanisms Study for Chautauqua Lake Protection/Rehabilitation, Chautauqua County, New York

This Phase 1 Study District explores and analyzes a wide variety of legal frameworks, district frameworks, and funding methods to inform the potential development of a Chautauqua Lake Protection and Rehabilitation District. Such a district would supply a sustainable pool of funding dedicated specifically to implementing projects that improve the quality and health of Chautauqua Lake and its watershed, which have historically suffered from harmful algal blooms, excessive aquatic weed growth, and other

Jayme Breschard, AICP, CFM continued

challenges. Based on historical spending and anticipated future projects, a dedicated and sustainable funding stream is needed to continue improvement initiatives within the lake and its watershed. While local cost share and available grant programs continue to play a role, these traditional sources of funding are not consistent and do not provide the total amount of funds necessary. Chautauqua County selected B&L to lead this Phase I Study to determine the appropriateness of a district and recommend a sustainable funding source. Ms. Breschard was the Project Manager, leading an interdisciplinary team of planners and watershed scientists in addition to facilitating dialogue with a Steering Committee and an appointed public agency. She led all public presentations and supervised the research and review of findings, along with a preferred funding mechanism which includes the examination of special New York State legislation such as the establishment of boat user fees.

Climate Action Plan, Town of Brighton, New York

B&L is assisting the Town of Brighton with the development of an updated greenhouse gas inventory (GHGI) and climate action plan (CAP) utilizing a robust community engagement process. The project features a publicly-accessible project website with two online public engagement tools: an Ideas Wall and an interactive map called the Brighton Climate App. Ms. Breschard is the Project Manager, serving as the primary point of contact for the Town, subconsultant team, and other partners. She also provides the technical expertise in identifying climate action strategies and projects.

Climate Emergency Energy Plan, Town of Bloomfield, Connecticut

The Town of Bloomfield is in the process of developing a Climate Emergency Energy Plan that outlines a strategy to meet their zero greenhouse gas emissions goal from Town operations by 2030. Ms. Breschard is the Project Manager and responsible for key milestones, various deadlines, and all project deliverables across a multidisciplinary team. She provides her leadership in climate action planning to the team.

CSC and CEC Action Strategy, Rockland County, New York

B&L is providing sustainability consulting services to Rockland County by developing a CSC and CEC Action Strategy. The Action Strategy is a roadmap that outlines how Rockland County can advance certification in the Climate Smart Communities (CSC) Certification program and NYSERDA's Clean Energy Communities (CEC) program

and be eligible for future grants. Ms. Breschard is the Project Manager and has led key interviews with various County Departments and stakeholders. She provides day-to-day management of the project in addition to the coordination and facilitation at all meetings.

Drinking Water Source Protection Program (DWSP2), Various Municipalities

As a technical assistance provider (TA provider) for the state-run Drinking Water Source Protection Program (DWSP2), B&L is working with nine municipalities across New York State to develop and implement a unique drinking water source protection plan for the source(s) of their drinking water. The goal of the program is to proactively protect drinking water sources, which includes working with a local stakeholder group; using the DWSP2 State Framework; and developing a community specific DWSP2 Plan. Ms. Breschard is the Project Manager, serving as the primary point of contact for the New York State Departments of Environmental Conservation (DEC) and Health (DOH), subconsultant teams, municipalities and stakeholder groups, and various other partners.

Albany County Climate Resiliency Plan, Albany County, New York*

Working with County staff and a project advisory committee, this resiliency plan will refine and prioritize strategies, define actions, and recommend projects necessary to reduce the impacts of climate impacts. The plan will include a matrix of prioritized next steps for county resilience, including potential funding sources and a timeline for implementation, as well as relevant maps, tables, and data. All findings from research and community feedback will be compiled into a final deliverable. Ms. Breschard served as the Resiliency Specialist.

Climate Action Plan, Phase 1: County Facilities, Monroe County, New York*

Development of Phase 1 for the County's CAP seeks to reduce GHG emissions and strengthen resiliency; address mitigation and adaptation; and create goals, actions, and policies that are innovative and achievable for government operations. For Phase 1, Ms. Breschard was responsible for day-to-day management of the project and for leading all community engagement and meeting activities. The team will create a plan for transitioning to Phase 2: Countywide Climate Action Plan and a long-term vision. This plan will advance resiliency planning for the County.

*Experience prior to B&L

Johanna E. Duffy, CWB®, PWS

Associate

jduffy@bartonandloguidice.com

Years of Experience: 18

Education: M.P.S., Wetland and Water Resources, SUNY College of Environmental Science and Forestry, 2009; B.T., Wildlife Management, SUNY College of Agriculture and Technology at Cobleskill, 2003; A.A.S., Fisheries and Wildlife Technology, SUNY College of Agriculture and Technology at Cobleskill, 2002

Professional Registrations: Certified Wildlife Biologist (CWB) Certification, The Wildlife Society; Professional Wetland Scientist (PWS) designation, Society of Wetland Scientists



Summary

Ms. Duffy's experience and primary duties are associated with wetland site delineation and permitting, endangered and threatened species assessments and habitat surveys, ecological monitoring, environmental regulations, hazard mitigation, and hazardous waste and environmental site assessments. These services are performed for a wide spectrum of project types, ranging from bridge replacements to recreational trail planning efforts to solid waste facility expansion projects. Ms. Duffy has also performed numerous SEQRA reviews for a variety of projects, including some that required the completion of an Environmental Impact Statement (EIS). Additionally, she is experienced in NEPA processing, the Section 404 and Section 10 federal permit programs, and New York State's Environmental Conservation Law (ECL) regulations and permit requirements. Ms. Duffy has acted as the primary author for several county-wide hazard mitigation plans. She also is proficient in geographic information system (GIS) and global positioning system (GPS) technologies.

Ms. Duffy has the following experience:

- Hazard mitigation planning, organizing, grant funding applications
- State, federal, and local permitting assistance, reviews, and compliance
- Completion of routine and comprehensive wetland delineations and assessments
- Wetland and upland vegetative cover-type mapping and vegetative sampling
- Wetland function and value assessments
- Wetland preservation, enhancement, restoration, and creation
- Plant species identification ranging from upland forested species to obligate wetland herbaceous species

- Invasive species surveys and management planning
- Water quality sampling and monitoring
- State and federal endangered and threatened species surveys
- Ecological assessment and restoration
- Wildlife habitat projects and species management plans

Relevant Experience

Albany County Hazard Mitigation Plan Update, Albany County, New York

B&L worked closely with Albany County to prepare an Update to their existing 2007 Hazard Mitigation Plan. The County's 17 participating partners (towns, cities, and villages) assisted in the development of this document; the B&L team met with each jurisdiction to collect up-to-date information and data. A variety of mitigation actions and natural hazard profiles were included in this plan update, given the inclusion of both very populated cities and very rural and agriculturally-focused towns within the County. A special interest section on crude oil transport by rail was also included to address concerns from multiple communities within the County. FEMA approval of the Albany County HMP Update has been received.

Multi-Jurisdictional Hazard Mitigation Plan, Oswego County, New York

Ms. Duffy was primary author of the NYSDHSES/FEMA-approved Oswego County Multi-Jurisdictional Hazard Mitigation Plan, adopted in 2012. B&L worked with a diverse group of professionals and organizations including, but not limited to, the State University at Oswego, the Oswego County Planning Department, the Oswego County Sheriff's Department, local Soil and Water District representatives, and the State Office of Emergency Management. In 2017, B&L also worked with Oswego County and local jurisdictions on their first 5-year HMP

Johanna E. Duffy, CWB®, PWS continued

Update process. A target of this process was to update the mitigation actions previously included, specifically, to integrate strategies that focused on the Lake Ontario flooding issues that the shoreline communities had been experiencing. The HMP Update successfully navigated NYSDHSES review and received FEMA approval earlier this year (2020).

Multi-Jurisdictional Hazard Mitigation Plan, St. Lawrence County, New York

Ms. Duffy was principal author for a NYSDHSES-approved Multi-Jurisdictional Hazard Mitigation Plan for St. Lawrence County, which involves, in addition to the County, a total of 46 participating municipalities including 32 towns, 13 villages, and one city. As the primary author of the plan, B&L coordinated the development of the countywide Plan with all participating jurisdictions; managed the public outreach component of the project; assessed a wide range of potential natural hazards; and developed prioritized mitigation measures to address the most critical identified hazards. The plan provides the jurisdictions of St. Lawrence County a path toward a future in which the risks associated with natural, technological and human-caused hazards can be collectively reduced. It is designed to be easily updated and implementable. FEMA approval has been received.

Multi-Jurisdictional Hazard Mitigation Plan Update, Orange County, New York

B&L developed an updated Multi-Jurisdictional All-Hazard Mitigation Plan for Orange County, which involves, in addition to the County, a total of 39 participating cities, towns, and villages. As part of the update, B&L developed mitigation strategies that include priority engineered projects that will mitigate flood hazards throughout the County, as well as informing the public of steps that can be taken to minimize future risks of severe outcomes as a result of natural and weather-related hazards. This Plan Update also looked to incorporate the recent changes to state requirements, which included providing an individual Jurisdictional Annex for each municipality within the County.

All-Hazard Multi-Jurisdiction Mitigation Plan Update, Sullivan County, New York

Ms. Duffy was primary author of the NYSDHSES/FEMA-approved Multi-Jurisdictional Hazard Mitigation Plan update for Sullivan County, which involves, in addition to the County, a total of 21 participating municipalities; 15 towns and 6 villages. As part of the update, B&L developed

mitigation strategies that include priority engineered projects that will mitigate flood hazards throughout the County. The Plan also includes strategies to inform the public of steps to minimize future risks of severe outcomes as a result of natural and weather-related hazards. The plan has been approved by FEMA.

Hazard Mitigation Plan Update, Tompkins County, New York

Ms. Duffy was principal author of the NYSDHSES/FEMA-approved updated Multi-Jurisdictional Hazard Mitigation Plan Update for Tompkins County, which involves an update to the 2006 plan that was completed for seven towns and the County. The plan update includes hazard assessments and information for all nine towns, six villages, one city, and the County. B&L assessed 22 natural, technological, or human-caused hazards during this process, including nine new hazards that were not profiled as part of the 2006 effort. B&L also integrated potential impacts from climate change and anticipated widespread shale gas drilling into the plan update and hazard profiles.

Steuben County Hazard Mitigation Plan Update, Steuben County, New York

B&L coordinated the development of a multi-jurisdictional hazard mitigation plan for Steuben County. The project included public outreach, assessment of a wide range of potential natural hazards, and assistance in developing prioritized mitigation measures. Ms. Duffy served as an environmental engineer on the project team.

FEMA Assistance, Village of Ellenville, Ulster County, New York

The Village of Ellenville has experienced multiple events of severe flooding, some of which have resulted in FEMA-designated flood disaster declarations. Such declarations have allowed the Village the opportunity to seek reimbursement assistance through FEMA to make repairs and reconstruct damaged infrastructure. Three of the sites affected within the Village are Roslyn Street sanitary sewer pump station, the Village Wastewater Treatment Plant, and Wintish Road. The high flood waters eroded sections of the Sandburg Creek bank at the WWTP and at the pump station, which required stabilization to prevent further erosion. The elevated water levels flooded low-lying areas of the WWTP, damaging outdoor electrical panels, motors and controls, and the rotating biological contactors (RBCs). B&L assisted the Village with necessary project coordination, initial FEMA paper work, project status, and reimbursement procedures with the FEMA and NYSDHSES.

Donald H. Fletcher

Senior Vice President

dfletcher@bartonandloguidice.com



Years of Experience: 32

Education: B.S., Civil and Environmental Engineering, Clarkson University, 1992

Professional Registrations: Professional Engineer - New York; NYSDOT 40 Hour Bridge Inspection Training Course

Summary

Mr. Fletcher has extensive experience as a municipal engineer and has progressed hundreds of projects from planning through construction. His experience includes preparation of feasibility studies, maps, plans and reports for formation of utility districts, facilities plans for water and wastewater systems, grant and funding applications, regulatory agency applications, environmental review documents, permit applications, right-of-way and easement services and contract design drawings and specifications. Further, contract administration and construction observation services were provided on most of these projects.

Relevant Experience

Multi-Jurisdictional Hazard Mitigation Plan, Albany County, New York

B&L coordinated the development of an updated Hazard Mitigation Plan for Albany County. B&L is managing the public outreach component of the project; assessing a wide range of potential natural hazards; and developing prioritized mitigation measures that address the most critical identified hazards. The Plan provides the County and its 18 municipalities with a future in which the risks associated with natural, technological and human-caused hazards can be collectively reduced. It is designed to be easily updated and implementable. Mr. Fletcher was officer-in-charge.

Multi-Jurisdictional Hazard Mitigation Plan Update, Orange County, New York

B&L developed an updated Multi-Jurisdictional All-Hazard Mitigation Plan for Orange County, which involves, in addition to the County, a total of 39 participating cities, towns, and villages. As part of the update, B&L developed mitigation strategies that include priority engineered projects that will mitigate flood hazards throughout the

County, as well as informing the public of steps that can be taken to minimize future risks of severe outcomes as a result of natural and weather-related hazards.

West Trunk Sewer Collapse, City of Newburgh, New York

Mr. Fletcher was Officer-in-Charge for an emergency project for the City of Newburgh that resulted from a major trunk sewer structural failure at the Mill Street Bridge along a portion of the West Trunk Sewer. B&L was retained by the City to provide technical knowledge for an emergency sewer repair and evaluation of an aging 54-inch brick sewer. As a result of the evaluation, B&L has designed, permitted, and oversaw construction for the rehabilitation of approximately 2,550 linear feet of 54-inch brick sewer with CIPP methods, as well as 1,600 linear feet of 60-inch brick overflow and 1,200 linear foot of a 5-foot by 6-foot box culvert with a cementitious lining system. The final stage of this project involves the design, permitting, and construction management for relocation of the Quassaick Creek to prevent future infiltration and potential damage to the sewer.

Ellenville-Wawarsing Stream Banks (GOSR), Ellenville, New York

The Village of Ellenville and Town of Wawarsing were severely impacted by Hurricane Irene and Tropical Storm Lee in the late summer of 2011. The storms damaged community assets and caused the degradation of stream banks. The B&L Team developed a final local flood hazard mitigation plan (LFHMP) with all the required elements of community participation, hydraulic analysis, and conceptual design development. The primary outcome of the study is to provide a focused basis for community implementation of the LFHMP. The approval of the plan has led to design services for improvements to many of the stream corridors identified in the LFHMP. Mr. Fletcher was Officer-in-Charge.

Robert J. Murphy Jr., AICP

Managing Community Planner

rmurphy@bartonandloguidice.com

Years of Experience: 10

Education: M.A., Urban and Regional Planning, University of Florida, 2011 B.S., Management, Rensselaer Polytechnic Institute, 2009

Professional Registrations: American Institute of Certified Planners (AICP)

Synergistic Activities: AMPED Steering Committee Member



Summary

Mr. Murphy is a community planner and lead grant writer with B&L. This has led to his understanding of the importance both roles play in bringing implementable plans into reality. Mr. Murphy has experience in managing large and small planning projects across New York State, ranging from county-wide hazard mitigation plans to main street master plans. He brings a focus on communication that allows project processes and recommendations to be tailored to the specific needs of local clients

Relevant Experience

Multi-Jurisdictional Hazard Mitigation Plan, Albany County, New York

B&L coordinated the development of an updated Hazard Mitigation Plan for Albany County. B&L managed the public outreach component of the project; assessing a wide range of potential natural hazards; and developing prioritized mitigation measures that address the most critical identified hazards. The Plan provides the County and its 18 municipalities with a future in which the risks associated with natural, technological and human-caused hazards can be collectively reduced. It is designed to be easily updated and implementable. Mr. Murphy assisted with public participation, planning, authoring of the plan narratives and construction of its formatting.

Multi-Jurisdictional Hazard Mitigation Plan Update, Orange County, New York

Mr. Murphy was primary author of the updated Multi-Jurisdictional Hazard Mitigation Plan for Orange County, which involves a total of 39 participating cities, towns, and villages. As part of the update, B&L developed mitigation strategies that include priority engineered projects that will mitigate flood hazards throughout the County, as well as informing the public of steps that can be taken to minimize

future risks of severe outcomes as a result of natural and weather-related hazards.

Grant Funding Strategy and Implementation, Sustainable Aquafarm Enterprises (SAFE), Inc., New York

SAFE, Inc. is a private sector firm which established greenhouse and fish hatchery operations at a former rose greenhouse facility in Berlin, New York. SAFE utilizes a campus approach to generate thermal and electrical energy, farm caviar and fish products, and grow produce year-round. Mr. Murphy led B&L's efforts to establish a strategy document geared to obtain grants and affordable financing for the firm during its site development phase. Funding was solicited from Empire State Development, USDA-Rural Development, Rensselaer County IDA, and NYSERDA with over \$3 million in grant funding obtained.

Grant Program, City of Mechanicville, New York

Mr. Murphy assembled and composed a number of grant applications on behalf of the City of Mechanicville including Local Government Records Management Improvement Fund for a records inventory project, Local Government Efficiency Grant program for a water meter replacement project, USDA Rural Business Enterprise Grant Program, and the NYSDOT Strategic Transportation Enhancement Program and NYSDOT Transportation Enhancement Program for pedestrian safety improvements along North Central Avenue. He also investigated and analyzed other grants for probable success include the NYS Department of Homeland Security and Emergency Services Hazard Mitigation Grant Program, Capital District Transportation Committee Transportation and Communities Linkage Study Program, NYSDEC Urban and Community Forestry Program and several program planning grants for the historic train station. B&L has helped the City secure over \$20 million in grant funding since 2008.

Daniel E. Theobald, AICP

Project Community Planner

dtheobald@bartonandloguidice.com



Years of Experience: 4

Education: M.A., Urban and Regional Planning, University at Buffalo, 2018; B.A., History, Le Moyne College, 2011

Professional Registrations: American Institute of Certified Planners (AICP), 2022

Summary

Mr. Theobald is experienced in municipal planning and community development. He has assisted in the preparation and completion of comprehensive plans, master plans, and brownfield opportunity assessments. His knowledge of grant opportunities for different planning and engineering related projects have provided funding for various communities throughout New York. Mr. Theobald's data collection and analysis skills paired with a proficiency in ArcGIS and Adobe Suite has assisted him in generating various site analysis maps, presentations, and reports.

Relevant Experience

Local Waterfront Revitalization Plan, Village of Hoosick Falls, New York

The Village of Hoosick Falls, on the Hoosic River, developed a Local Waterfront Revitalization Plan to guide appropriate future development based on the community's vision. The plan focuses on four key areas: enhancing physical and visual public waterfront access opportunities; revitalizing downtown areas; protecting community character; and improving the ability of the community to take advantage of river-related tourism. Mr. Theobald assisted in grant administration, developed the Local Waterfront Revitalization Plan, and generated maps.

Comprehensive Plan and Zoning Update, City of Port Jervis, New York

B&L provided planning and design services to assist the City with their Comprehensive Plan and Zoning Update. Services included project coordination and committee meetings; community participation; training for local boards and staff; analysis of existing codes, plans, and physical inventory; vision, goals, and recommendations; draft and final comprehension plan update and revised

land use code; and SEQRA compliance and plan adoption. Mr. Theobald assisted in creating the comprehensive plan, revising the zoning code, and updating the zoning districts.

Comprehensive Plan Update, Town of Colonie, New York

B&L was selected to work with the Comprehensive Plan Advisory Committee to update of its 2005 Comprehensive Plan. B&L worked with the committee to make current the information about the Town, and to engage the community. Mr. Theobald was involved in a series of public workshops held around the Town to identify the Town's strengths and the issues of concern that should be addressed. Mr. Theobald assisted in completing the comprehensive plan and updating the Town's maps.

Local Waterfront Revitalization Plan, Villages of Kinderhook and Valatie, New York

Mr. Theobald assisted with a successful grant application for a joint LWRP in the Villages of Kinderhook and Valatie. The LWRP focused on the Kinderhook Creek, a historical waterway which links the two municipalities and has great potential for waterfront recreation opportunity. Mr. Theobald had previously worked with the Villages in developing a Recreational Resource Inventory that spotlighted the Creek as an asset and assisted in the success of the LWRP grant application.

LWRP Update and Comprehensive Plan, Village of Ilion, New York

The Village was awarded funding through the DOS LWRP program in order to update their LWRP and Comprehensive Plan. Mr. Theobald assisted the Village in writing the grant application which centered on enhancing riverfront access, expanding housing options, and downtown revitalization.

Rebecca A. Reohr

Engineer I

rreohr@bartonandloguidice.com

Years of Experience: 1

Education: M.S., Environmental and Water Resources Engineering, University at Buffalo, 2021; B.S., Major in Physics, Minor in Environmental Planning, SUNY College at Oneonta, 2019

Professional Registrations: NYSDEC 4-Hour Erosion and Sediment Control Training



Summary

Ms. Reohr is an engineer on the sustainable planning and design team. Her graduate school academic studies had a strong focus in the areas of air and water pollution, green infrastructure techniques, stormwater management, impacts of climate change on our environment, renewable energy sources, and groundwater contaminant transport. Throughout her academic career she worked on a variety of projects such as using ArcGIS to determine sites that would potentially be ideal for solar farms in three different counties in upstate New York, performing extensive research on drawbacks and benefits of Long Island's future offshore wind farm, and using R to analyze the impact of sea level rise in California, Florida, and New York. While studying at the University at Buffalo, Ms. Reohr served as a member of the carbon offset committee at the University at Buffalo for UB's Climate Action Plan.

Relevant Professional Skills:

- ArcGIS
- AutoCAD
- Stormwater Management Model (SWMM)

Relevant Experience

Hazard Mitigation Plan, Chautauqua County, New York

B&L assisted Chautauqua County with updating their Hazard Mitigation Plan as it was outdated. Ms. Reohr interviewed several of the municipalities in Chautauqua County to become familiar with their local risks and vulnerabilities associated with natural hazards. Mitigation action worksheets were completed for each of the 46 municipalities in Chautauqua County which outline actions they can take to mitigate natural hazards in their area such as severe winter storms, flooding, severe thunderstorms, drought, etc.

FEMA's Hazard Mitigation Grant Program (HMGP), DPW Facility, Peekskill, New York

B&L assisted the City of Peekskill with a FEMA grant application for a new DPW highway garage as the current DPW garage is located in an area that frequently floods, causing damage to equipment and is not reliable or accessible in extreme weather events. Ms. Reohr wrote the grant application.

CSC and CEC Action Strategy, Rockland County, New York

B&L developed a Climate Smart Communities (CSC) and Clean Energy Communities (CEC) Action Strategy for Rockland County to progress them toward their goal of achieving CSC bronze certification and becomes a designated CEC. Ms. Reohr participated in various meetings with departments from Rockland County to gain information regarding actions they have completed to date that could earn them points for either the CSC or CEC programs. Ms. Reohr played a significant role in writing the final report for the County which outlined goals and recommendations for how they can achieve designation and certification for those programs.

Drinking Water Source Protection Program (DWSP2) – Various Municipalities

B&L is a technical assistance provider for the NYS Drinking Water Source Protection Program, which is a program to assist municipalities with protecting their drinking water sources. B&L worked with nine municipalities throughout NYS to help them develop and implement their own unique drinking water source protection plan for their source(s) of drinking water. Ms. Reohr assisted with writing the technical reports and provided general support for the DWSP2 plans.

Wendell R. Buckman, P.E., CFM®

Associate

wbuckman@bartonandloguidice.com



Years of Experience: 22

Education: B.S., Civil Engineering, Clemson University, South Carolina, 2001; A.S., Engineering Science, Alfred State College, New York, 1999

Professional Registrations: Professional Engineer - New York, 2006; ASFPM Certified Floodplain Manager

Summary

Mr. Buckman's experience is in the fields of geotechnical engineering and hydraulic analysis. Mr. Buckman is active in our dam services group where he has completed hydrologic and hydraulic analysis of the spillways and corresponding impoundments. He has created dam discharge curves for various spillways utilizing reservoir routing techniques. His experience includes the delineation of watersheds in excess of 180,000 acres. Mr. Buckman has used the rational method, regional regression equations, Log Pearson Type III, and approximate methods for hydrologic analysis. He has used HEC-RAS to model dam break scenarios in accordance with NYSDEC guidance and develop corresponding inundation maps.

Relevant Experience

Local Flood Hazard Analysis, City of Ithaca, New York

Mr. Buckman was the lead hydraulic engineer for the City of Ithaca's Local Flood Hazard Analysis. He performed the hydraulic modeling aimed at identifying public a property risk and associated mitigation efforts to reduce the flood risk. He assisted with development of hydrologic models for the four watersheds that simulate peak flows utilized by the USGS. He identified existing infrastructure elements of the community at risk for flood damage, evaluated alternatives aimed at reducing flood impacts, prioritized actions by evaluating the effectiveness of each in terms of cost/benefits. Mr. Buckman also presented the findings during community outreach and public presentations for the project.

Binghamton Flood Control Project, City of Binghamton, New York

The Binghamton Flood Control Project was initiated by the City in response to the U.S. Army Corps of Engineers' (ACOE) Inspection Report in relation to the City's flood levee. B&L reviewed the closed-circuit television (CCTV) footage to identify deficiencies and recommend repairs or

further investigation and developed the preliminary design report for the recommended rehabilitation. Development of final design and contract document is currently underway. Mr. Buckman was the geotechnical/structural lead engineer on the project.

Quackenderry Dam, City of Rensselaer, Albany County, New York

B&L was retained to develop an engineering assessment for the City of Rensselaer. The engineering assessment evaluates the stability, spillway capacity, and hazard classification of the structure in accordance with NYSDEC requirements. A safety inspection was completed as part of the assessment. Mr. Buckman was project manager.

Dam Hazard Classification Study, Village of Altamont, New York

The project involves evaluating the hazard classification of their two emergency water supply dams to see if they can be reclassified as low hazard structures, Class A. Mr. Buckman assisted with a complete hydrologic and hydraulic analysis including a dam breach model to accurately determine the limits of impact on properties downstream.

Beaver Brook Dam Emergency Action Plan and Engineering Assessment, Town of Manheim, New York

B&L was retained to develop an Emergency Action Plan (EAP) and Engineering Assessment for the Town of Manheim. The EAP contains procedures for the notification of an emergency; inundation maps; procedures for implementing all aspects of the EAP; procedures for updating the EAP; and other provisions as deemed necessary by NYSDEC. The engineering assessment (EA) evaluates the stability, spillway capacity, and hazard classification of the structure in accordance with NYSDEC requirements. Mr. Buckman was project manager.

Theron D. Bisko, P.E.

Senior Project Engineer

tbisko@bartonandloguidice.com

Years of Experience: 9

Education: B.S., Environmental Engineering, Gannon University, Erie, Pennsylvania, 2013

Professional Registrations: Professional Engineer - Pennsylvania License # PE089621, New York License # 103200, Maryland License # 60554



Summary

Mr. Bisko leads field data collection activities, completes required design calculations, prepares engineering design reports, produces technical documents to support permit applications, evaluates water sources for industrial clients, develops construction drawings and specifications, and provides construction management services for a variety of water resource restoration, stormwater management, energy, transportation, and site development projects. Mr. Bisko's professional experience has focused on the technical aspects of hydrologic and hydraulic analyses, environmentally integrated stormwater management designs, water resource assessments and environmental permits.

Relevant Experience

Ilion Reservoir #3 Rehabilitation Design and Emergency Action Plan Update, Village of Ilion, Herkimer County, New York

The Village of Ilion selected B&L to prepare a rehabilitation design for this deficient high-hazard dam located along a tributary to Steele Creek. As part of the project, B&L was tasked with preparing a detailed hydrologic and hydraulic analysis for the dam, including the development of a dam breach model for risk analysis that follows NYSDEC guidance. Mr. Bisko prepared the hydrologic analysis to assess the Probable Maximum Flood (PMF) for the reservoir, and used the hydrologic results to model a catastrophic dam breach event along Clapsaddle Creek using a 2-dimensional HEC-RAS model and Steele Creek using a version of FEMA's flood model converted to accept unsteady flow conditions. Mr. Bisko utilized the results of the hydraulic modeling effort to develop detailed dam breach inundation maps and update the Village's Emergency Action Plan for Reservoirs #1, #2 and #3.

Greenwood Lake Dam Engineering Services, Dual Valley Recreation Association, Hometown, Pennsylvania

Mr. Bisko provided services that included field inspections and mapping surveys, emergency action plan (EAP) updates, hydraulic analyses, and the preparation of conceptual plan drawings to bring the dam into compliance with state regulations. Hydraulic analyses included the evaluation of spillway design alternatives utilizing HEC-RAS and other modeling software. He prepared engineer's cost estimates for various alternatives, including a secondary spillway, armored dam crest overflow and labyrinth weir. Mr. Bisko identified and investigated an error in the PADEP provided HEC-1 analysis during a recent update to the dam's EAP, rectified this error and updated the model. The final inundation zone was more accurate and identified 5 additional homes that would be impacted by a catastrophic dam failure event.

BMP Design Services, Tompkins County Soil and Water Conservation District, Ithaca, New York

Since 2020, Mr. Bisko has worked closely with the TCSWCD to provide on-call engineering support services for projects focused on hydrologic and hydraulic analysis, flood mitigation, and stream restoration/stabilization design. Mr. Bisko's efforts having included detailed hydraulic analyses using 1-dimensional and 2-dimensional HEC-RAS models for sites throughout Tompkins County. Mr. Bisko has also provided engineer design services for: a streambank stabilization project along Salmon Creek in the Town of Lansing; a fluvial geomorphic assessment and concept design for sections of eroding streambank along Sixmile Creek in the Town of Caroline; geomorphic data collection for the restoration of nearly 2,500 linear feet of the West Branch Cayuga Inlet; and project scoping services to assist with the prioritization of projects for funding opportunities.

Morgan E. Washburn

Community Planner I

mwashburn@bartonandloguidice.com



Years of Experience: 1

Education: B.A., Urban Studies and Planning - Geography, State University of New York at Albany, New York, 2019

Summary

Ms. Washburn is a community planner with B&L's Sustainable Planning and Design Practice Area. She has experience in assisting large and small planning projects across New York State. Ms. Washburn has assisted in the preparation and completion of grant applications and has assisted in drafting sections of zoning code updates, comprehensive plans, and more. Throughout her academic career, she has worked on a variety of projects including:

- Using GIS to determine sites most appropriate for urban development in a range of different countries,
- And conducted research on architecture in urbanized European countries.

Her undergraduate academic studies have a strong focus in the areas of sustainability, green infrastructure, and climate change.

Relevant Experience

Consolidated Funding Application, City of Mechanicville, New York

Ms. Washburn supported the City of Mechanicville's application for funding by writing grant narratives and assisting with the Smart Growth grant application questionnaire for the project.

Consolidated Funding Application, Route 50 Corridor, Town of Glenville, New York

Ms. Washburn supported the Town of Glenville's application for funding by writing grant narratives, conducting research, and assisting with the Empire State Development (ESD) Strategic Planning and Feasibility Studies grant application questionnaire for the project.

Saratoga County Trails Grant, Town of Halfmoon, New York

Ms. Washburn supported the Town of Halfmoon's application for funding by writing grant narratives, preparing GIS maps, and assisting with the Saratoga County Trails Grant application questionnaire for the project.

Comprehensive Plan Update, Village of Frankfort, New York

The Village of Frankfort enlisted the services of B&L to prepare a Comprehensive Plan. Ms. Washburn assisted in drafting sections of the community profile, conducting research, and preparing documents and PowerPoint presentations for committee meetings and public outreach events.

LWRP and Comprehensive Plan, Village of Ilion, New York

The Village of Ilion is updating their Local Waterfront Revitalization Program (LWRP) and Comprehensive Plan, and has enlisted the services of B&L. Ms. Washburn has assisted with preparing documents and PowerPoint presentations for committee meetings and public outreach events, as well as drafting and finalizing meeting summaries.

Comprehensive Plan and Land Use Code Update, Town of Queensbury, New York

B&L was retained by the Town of Queensbury to update their 2007 Comprehensive Plan and 2009 Land Use Code. Ms. Washburn has assisted in research for drafting sections of the community profile, along with a number of maps using GIS to display categories such as land use, vacant parcels, zoning, and more.

Danielle J. Pottinger

Community Planner I

dpottinger@bartonandloguidice.com



Years of Experience: 1

Education: Bachelor's, Urban Planning and Linguistics, SUNY Binghamton, 2022

Summary

Ms. Pottinger is a community planner and a member of B&L's Sustainable Planning and Design Practice Area. She has experience in community planning data collection and data, strengths, weaknesses, and gaps analyses. Her responsibilities at B&L include geographic information systems (GIS) mapping, local waterfront revitalization planning (LWRP), and grant writing.

Relevant Skills

- ArcGIS Pro
- ArcGIS Online
- Creo CAD
- AutoCAD

Relevant Experience

Chautauqua County Hazard Mitigation Plan Update, Chautauqua County, New York

Chautauqua County enlisted the services of B&L to update its County wide hazard mitigation plan. Interviews were conducted with each of the municipalities within the County to obtain data on infrastructure and development changes and storm events that may have taken place since the 2016 hazard mitigation plan was created. From these interview sheets, Ms. Pottinger created annexes for various Towns and Villages within the County.

Hastings Local Waterfront Revitalization Program, Town of Hastings, New York

The Town of Hastings would like to establish a waterfront area that will receive focused development and protection of its water dependent uses. B&L is preparing the LWRP application proposal for the Town. Ms. Pottinger worked on the community profile for Hastings.

FAST NY Grant, Clinton County, New York

Clinton County sought grant funding from FAST NY to carry out a revitalization project with its former County Airport in Plattsburgh. The project aims to construct office and residential buildings on the unused land. B&L is completing the grant for the County. Ms. Pottinger performed research for the market analysis needed to administer the grant.

Community Impact Intern, United Way of the Greater Capital Region, Albany, New York*

Ms. Pottinger captured qualitative information during midpoint discussions; supported data cleaning, review, analysis, and synthesis from midpoint discussions; assisted the community impact team as they worked with grantees to ensure the collection of relevant and appropriate data needed for UWGCR's reporting purposes; and assisted UWGCR in analyzing strengths, weaknesses, and gaps in existing initiatives. She also coordinated with the resource development division to support research for grant writing and fundraising campaigns, used ArcGIS to display grant and summer meals-related information, and created a standard operating procedure for using ArcGIS Insights for the team.

***Experience prior to B&L**

Terry L. McKiven

Hydrographic Services Manager



Years of Experience: 19

Education: Computer Aided Technology, Onondaga-Cortland-Madison BOCES;
A.A.S, Survey Technology, Mohawk Valley Community College, 2011

Specialized Training: U.S. Coast Guard Master Captain, OSHA 10-Hr. Safety Training,
HazWoper, HYPACK, CPR/First Aid Certified

Summary

Mr. McKiven, a U.S. Army veteran, has over 19 years of experience in the land and hydrographic surveying and mapping profession. As Prudent's full-time hydrographic party chief, Mr. McKiven is responsible for coordinating the hydrography operations. He is a U.S. Coast Guard-certified Master Captain with expertise in a range of hydrographic operations, such as single- and multi-beam bathymetric surveys; sub-bottom surveying and profiling; side-scan surveys; bottom classification mapping; and endangered species studies.

Relevant Experience

NYC Economic Development Corporation On-Call Maritime Engineering Consultant Services, Hammond's Cove 2022 Dredging, The Bronx, New York City, New York

Mr. McKiven was Hydrographic Party Chief supporting a dredging project for the removal of a total of 7,500 cubic yards of dredged material from the area in the vicinity of Hammond's Cove, Bronx, New York. Tasks included one conditional survey to establish existing ground depths to create an estimated total of dredging quantity needed; a pre-dredge survey before the commencement of dredging to establish existing ground depths at that time, to be filed with the US Army Corps of Engineers (USACE) pre-dredge submittal package; and two post-dredge surveys to establish actual ground depths and payable quantities. The surveys were combined into the final post-dredge survey to verify actual conditions and act as the "As-Built" condition. The surveys were conducted using R2Sonic 2024 multi-beam sonar tied to an Applanix Wavemaster motion and position system for data collection, from a 31-foot Catamaran boat and a 6-foot remote control boat. Data was processed in ArcGIS and HYPACK in compliance with USACE and NYSDEC requirements. Deliverables included surveys, the post-dredge survey drawings to act as the "as-built" condition, and assistance with field plans and specifications for the dredging operation provided as hard copy and electronic files.

NYS Office of General Services, REDI – Regional Dredging Initiative, Cayuga, Jefferson, Monroe, and Oswego Counties, New York

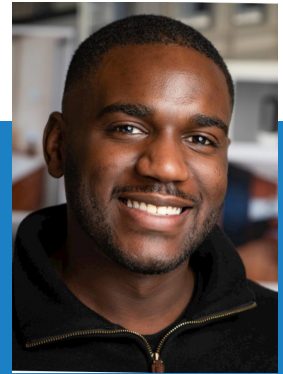
Mr. McKiven was Hydrographic Party Chief for the design / conditional surveys, pre-dredging surveys, and post-dredging surveys for various project locations along the Lake Ontario Shoreline under the Lake Ontario Resiliency and Economic Development Initiative (REDI). Completed 14 design/conditional and pre- and post- dredging surveys. Based on the characteristics of each location, responsible for determining the appropriate vessel and equipment. Thus far surveys have involved Prudent's entire array of their vessels and equipment from the remote control multi-beam Z- boat with an R2 Sonic 2020 multi-beam sonar and a Pos-MV Wavemaster motion sensor to their 31-foot Elco catamaran equipped with R2 sonic 2024 multi-beam sonar. Collected data is processed using HYPACK and PosPAC. Mapping deliverables are generated using AutoCAD, MicroStation, and ARCGIS.

NYS Office of General Services On-Call Environmental Engineering Services, REDI Dredging Projects, Port Bay, Blind Sodus Bay, North Sandy Pond, Olcott Harbor, and Golden Hill, Cayuga, Niagara, Oswego, and Wayne Counties, New York

Mr. McKiven was Hydrographic Party Chief for the design/ conditional surveys, pre-dredging surveys, and post-dredging surveys for five project locations along the Lake Ontario Shoreline. Based on the characteristics of each location, responsible for determining the appropriate vessel and equipment. Surveys involved Prudent's entire array of their vessels and equipment from the remote control multi-beam Z- boat with an R2 Sonic 2020 multi-beam sonar and a Pos-MV Wavemaster motion sensor to their 31-foot Elco catamaran equipped with R2 sonic 2024 multi-beam sonar. Collected data is processed using HYPACK and PosPAC. Mapping deliverables are generated using AutoCAD, MicroStation, and ARCGIS.

Messiah Smart

CADD Technician



Years of Experience: 9

Education: B.S., Computer Science/ Manchester Metropolitan University, Manchester, United Kingdom, 2018; B.T., Architectural Design/ State University of New York at Delhi, 2018

Specialized Training: AutoCAD, HYPAC, POSPac, MicroStation, LiDAR, ArcGIS, Leica Cyclone

Summary

Mr. Smart is graduate of the State University of New York at Delhi with a Bachelor of Technology in Architectural Design and from Manchester Metropolitan University with a Bachelor of Science in Computer Science. He is well versed with a range of drafting and hydrographic software including AutoCAD, HYPAC, PosPAC and Microstation. He has created architectural drawings and documents for projects including renovations, construction and historic preservation.

Relevant Experience

NYC Economic Development Corporation On-Call Maritime Engineering Consultant Services, Hammond's Cove 2022 Dredging, The Bronx, New York City, New York

Mr. Smart was CADD Technician processing data for this dredging project for the removal of a total of 7,500 cubic yards of dredged material from the area in the vicinity of Hammond's Cove, Bronx, New York. Tasks included one conditional survey to establish existing ground depths to create an estimated total of dredging quantity needed; a pre-dredge survey before the commencement of dredging to establish existing ground depths at that time, to be filed with the US Army Corps of Engineers (USACE) pre-dredge submittal package; and two post-dredge surveys to establish actual ground depths and payable quantities. The surveys were combined into the final post-dredge survey to verify actual conditions and act as the "As-Built" condition. The surveys were conducted using R2Sonic 2024 multi-beam sonar tied to an Applanix Wavemaster motion and position system for data collection, from a 31-foot Catamaran boat and a 6-foot remote control boat. Data was processed in ArcGIS and HYPACK in compliance with USACE and NYSDEC requirements. Deliverables included surveys, the post-dredge survey drawings to act as the "as-built" condition, and assistance with field plans and specifications for the dredging operation provided as hard copy and electronic files.

NYS Thruway Authority Agreement for the Biennial Bridge Inspection of the Governor Mario M. Cuomo Bridge (GMMCB), BUE-2113, Tarrytown, New York

Mr. Smart was CADD Technician responsible for processing data for the underwater portion of this biennial bridge inspection of the Northbound and Southbound bridge structures along with the cross-over connecting bridges. Services included a multi-beam sonar hydrographic survey including top of the water shots at the beginning of each day and at tide changes for the limits 100 feet from each bridge fascia and the full shore to shore width of the bridge. The survey was conducted using R2Sonic 2024 multi-beam sonar tied to an Applanix Wavemaster motion and position system for data collection, from a 31-foot Catamaran boat and a 6-foot remote control boat. All data was processed in accordance with the NYSDOT Bridge Inspection Manual, in Applanix POS- Pac. Deliverables included mapping at one foot contour intervals, produced in Bentley Microstation with Inroads, an XYZ file showing underwater elevations on a five-foot grid and an NYSDOT fathometer report.

NYC Department of Transportation, St. George Ferry Terminal – Ferry Maintenance Facility (FMF) Seawall Rehabilitation Project

Mr. Smart was CADD Technician providing CADD drafting support for this bathymetric survey project in support of the rehabilitation of the seawall offshore of the St. George Ferry Terminal's Ferry Maintenance Facility. Services include a single-beam hydrographic survey performed at high tide to maximize coverage, extending 300 feet offshore from the seawall with transects spaced at approximately 10 feet; data reduction; and creation and submission of a contour map and spot elevation deliverable in CAD and PDF format. Surveys are conducted using R2Sonic 2024 multi-beam sonar, Trimble-461 GPS heading bundle, and an IMU-108 motion sensor. The land portions of the surveys are completed using a Trimble S-5 robotic total station and an R-8 RTK GPS.

Daniel J. Gildea, PMP, CEO

Project Manager

**Years of Experience: 31**

Education: Diploma, Advanced Leadership and Management Development, and Basic Leadership and Management Development, U.S. Army

Specialized Training: NYS Code Enforcement Official Course, NYS Department of Transportation; NYS Special Inspections Training; OSHA 30-Hour and 10-Hour Construction Safety Training; Stormwater Pollution Prevention Program, NYS Department of Environmental Conservation; Hazmat Transportation Safety, Security Awareness

Summary

Mr. Gildea is U.S. Army Retired Veteran and an experienced construction project manager with a 30-year track record in establishing efficient, quality-driven environments. He has the ability to effectively lead cross-functional teams while taking leadership roles to guide and foster best practices and drive productivity. Adept at management of varied situations, proactive problem solving, mentoring, program development and management, event and facility organization, strategic planning, and launching innovative processes with emphasis on project management, resource management, and the operational environment.

Relevant Experience

NYS Office of Parks Recreation and Historic Preservation Improvements to Water Quality at Lake Welch in Harriman State Park, Rockland County, New York

Mr. Gildea was Project Manager responsible for oversight of construction inspection, construction administration, surveying, and condition inspection for this project to mitigate and prevent the spreading of Harmful Algal Blume (HAB). Responsibilities include overseeing all field data collection in support of new facilities and existing facilities condition and rehabilitation design and site layout, development of the project schedule, development and maintenance of the site-specific safety plan (SSSP) and health and safety plan (HASP); reviewing monthly invoices, reviewing inspection reports and condition reports before submission, reviewing and finalizing invoices, creating and maintaining project health assessment (PHA), and overseeing project closeout and turnover to client agency.

NYS Office of General Services, NYS Regional Economic Development Initiative (REDI) Dredging Program, Lake Ontario and St. Lawrence River, Hamlet of Morristown, St. Lawrence County, New York

Mr. Gildea was Hydrographic Boat Captain responsible for conducting the pre-dredge hydrographic survey of the Morristown Navigational Harbor as part of the Governor's REDI Dredging Program. In water multi-beam sonar data

and 3-D photographic imagery was collected from a 22-foot survey vessel, with two personnel on the boat. Project deliverables included water data mapping and full bathymetric survey report to NYSOGS.

NYS Office of General Services Cayuga Lake Inlet Dredging, City of Ithaca, Tompkins, County, New York

Mr. Gildea was Marine Projects Consultant called on to assist in the design and permitting of a large-scale dredging project at the head of Cayuga Lake in the City of Ithaca, New York. Responsibilities included identifying areas of concern with shoreline structures, determining best practices for dredging at various phases, site layout for phasing, addressing permitting obstacles, and cost reduction techniques. Using bathymetric survey data, drawings, photos, and in person observation helped to layout the project and reduce overall costs associated with unknown variables. Deliverables included Summary of Findings report, marked up drawings and specifications, and cost analysis summary.

NYS Office of General Services, Regional Economic Development Initiative (REDI) Dredging Program

Mr. Gildea was Engineer-in-charge of Governor's REDI Dredging Program. Responsibilities include designing, permitting, and dredging 21 navigable channels throughout Lake Ontario and the Saint Lawrence River. In order to complete this project various cutter head dredging barges, equipment barges mounted with cranes and / or excavators had to be used to remove sediment and debris and various dozers and graders had to be used to spread material on eroded shorelines. Special care and handling of sediment containing hazmat had to be implemented for project sites that exceeded the acceptable chemical allowances. Water quality measures also needed to be emplaced to protect warm water spawning species as well as nearby wetlands and endangered species. Deliverables included cost breakdown spreadsheets, deliverable tracking log, final permits from numerous agencies, 30/60/90 and final drawings.

Stephen P. Severance, EIT

Project Engineer (A) III

**Years of Experience: 11**

Education: B.S., Civil Engineering Technology / Rochester Institute of Technology, 2012;
A.A.S., Civil Engineering Technology / Broome Community College, 2008

Specialized Training: Amtrak Contractor, CSX Roadway Worker Protection Contractor
Safety, NSC Confined Space Compliance Training, AutoCAD Civil 3D, MicroStation, STADD
ProV8

Summary

Mr. Severance has over 11 years of experience that includes condition inspections, municipal engineering, and civil/site engineering. He has been Prudent's project lead on NYSDOT Gateway and Empire State Trail projects; developed site plans for a substation relocation project; prepared erosion and soil control plans for a NYS Canal Corporation canal lock project; and Assistant Team Leader on NYS Thruway Authority dam safety inspection and NYSDOT Biennial and Interim Bridge inspections. His experience includes preparation of Stormwater Pollution Prevention Plan (SWPPP) and associated SWPPP inspections, hydraulics, conduit remediation design on several structures located along a levee system in Erie County; work zone traffic control plans for railroad crossings; safety inspections on various dam, hydraulic, and lock infrastructures along the Erie Canal and dam structures throughout Herkimer, Madison, Oneida, and Onondaga counties; and bridge inspections on various local and state-maintained bridges and culverts.

Relevant Experience

Onondaga County Department of Water Environment Protection, Green Projects Design Services: Sanitary and Storm Sewer Projects, City of Syracuse, New York

Mr. Severance was Project Manager for this mini-bid award programmed through the OCDWEP Green Projects Design Services: Sanitary and Storm Sewer Projects 3-year Term Agreement to improve hydraulics of the regulator structure and sewer interconnection to the County's main interceptor. Services included surveying and mapping, submitting quarterly fact sheets for the Onondaga County Save the Rain program outreach, participating in design and construction progress meetings, distributing design meeting minutes, preparing design submissions (technical memorandums, drawings, special specifications, and cost estimates) for agency approvals, finalizing "task order" construction documents for County term contractor

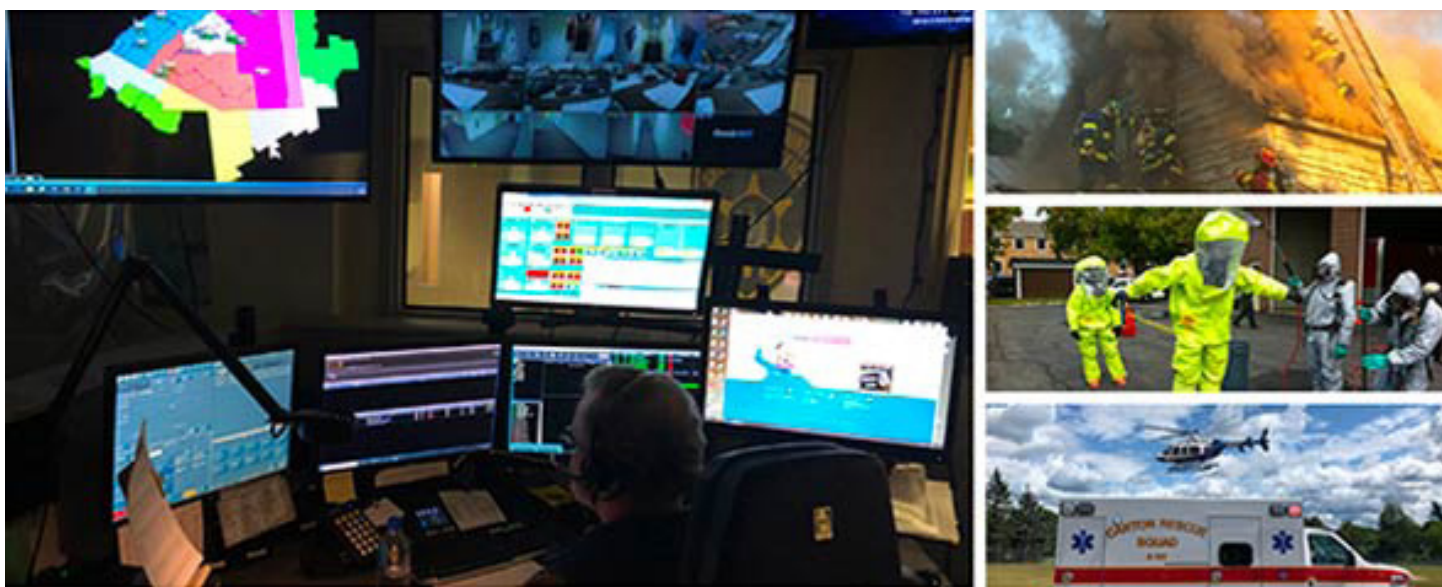
bid, performing general engineering services during construction, and part-time construction inspection.

NYPA/NYS Canal Corporation On Call Engineering Services As-Built Drawings, Oswego County, New York

Mr. Severance was Engineer III for coordination of QA/QC review of as-built drawings for this lock renovation project. Responsible for QC review of plans, field verification inspection, measurements, and revisions to the as-built plans based on field inspection. The CADD drawings were submitted to the Prime for final QA/QC and inclusion in the final as-built drawings.

Monroe County Department of Transportation Schlegel Road Culvert over Four Mile Creek Tributary, Town of Webster, Monroe County, New York

Mr. Severance was Project Engineer III for this culvert replacement project. Responsible for assisting the crew leader in the 2020 culvert inspection to document existing conditions and structural defects and preparing a report with photographs; Identifying FEMA 2008 Flood Insurance Study (FIS) Number 36055CV001A Hydrologic Peak Discharge information and Headwater/Tailwater elevations per Flood Insurance Rate Map (FIRM) Number 36055C0232G for use in the Hydraulic Analysis; Utilized the USDOT Federal Highway Administration HY-8 Culvert Hydraulics Analysis software with FIS / FIRM input values for hydraulic analysis of rehabilitation vs. replacement; rehabilitation via UV CIPP lining was determined to be hydraulically feasible, however, existing conditions (e.g., minimal cover) and multiple spans made it not financially feasible vs. replacement; HY-8 custom tailwater channel was inputted from topographic survey; Hydraulic Analysis Report was prepared to include information above, available record plans, previous inspections report, and HY-8 analysis reports for multiple alternatives evaluated with a recommendation for replacement.



Firm Experience

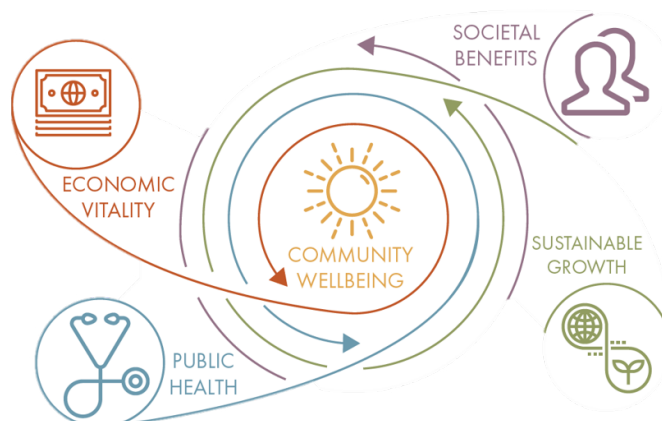
Defining a Hazard and Hazard Mitigation

A hazard is defined as a situation which poses a level of threat to life, health, property, and/or the environment. It can be natural, technological, or human-caused. Hazard mitigation is a method for reducing or alleviating property loss, reducing damage to the environment, and reducing the number and severity of injuries that occur from hazard events through long- and short-term strategies. Responsibility for implementing mitigation measures runs community-wide from individuals to industries, private business, and all levels of government.

Purpose of a Hazard Mitigation Plan

The purpose of a hazard mitigation plan (HMP) is to effectively reduce future disaster damages, public expenditure, private losses, and community hazard vulnerability. An HMP provides an opportunity for a municipality or multiple municipalities to develop a comprehensive risk assessment and to outline proposed mitigation actions, which will minimize the costs and impacts of future disaster events.

The intention of an HMP is to meet the New York State and federal hazard mitigation planning requirements established and managed by the New York State Department of Homeland Security and Emergency Services (DHSES) and FEMA. Jurisdictions that are participating in a plan update will benefit from the planning and implementation of the mitigation actions proposed. The pre-disaster mitigation program (PDM), HMGP, and the



flood mitigation assistance (FMA) program continue to require communities to have an active FEMA-approved multi-hazard mitigation plan in place prior to requesting project implementation funds. Participating jurisdictions that are granted funds are able to implement and complete beneficial mitigation actions to minimize impacts to their communities and constituents from hazard events.

Mitigation Goals

The prime objective of setting hazard mitigation goals is to reduce or eliminate losses and damages from hazard events. It is important to create goals that are tangible. The goals identified below represent what the participants and municipalities are hoping to achieve through the implementation of this hazard mitigation plan. They are based on the findings of the risk assessment, and they will apply to the Albany County government and to each participating jurisdiction.

Hazard Mitigation Goals

- Minimize injury and loss of life from hazards
- Minimize losses to existing and future structures within hazard areas
- Reduce the impact of hazards on water bodies, natural resources, and historic resources
- Protect natural resources, such as open space, drinking water, and recreation areas from hazards
- Protect cultural resources such as historic structures and museums from hazards
- Reduce the economic impacts from hazard events
- Provide for Continuity of Government (COG) and Continuity of Operations Program (COOP) during and in the aftermath of disasters in order to ensure that the government continues to function and to minimize negative impacts from events

Assessing Hazard Risk

Risk assessments consist of three phases of analysis which rate natural, technological, and human-caused disasters based upon probability (likelihood) and severity of impact (consequence):

1. Hazard identification, calls on the community to identify all potential hazards, document their geographic extent, probability of occurrence and anticipated intensity. This phase will also incorporate the best available data on anticipated climate projections and states the intended impacts as they relate to each hazard.

2. Vulnerability assessment, utilizes the information obtained through the first phase and analyzes it with local information of properties and populations exposed to that hazard. As a part of this phase, both current and future development potentials will be analyzed.



3. Risk analysis, estimates the damage, injuries, and costs likely to occur as a result of that hazard in the community. The picture of risk is broken down into both magnitude and probability of harm occurring. For many hazards this phase of risk assessment will not be realized.

The following are a list of hazards which include natural, technological, and human-caused hazards:

- | | |
|------------------------|------------------------------|
| • Air contamination | • Infestation |
| • Civil unrest | • Landslide |
| • Coastal storm | • Mine collapse |
| • Dam failure | • Oil spill |
| • Drought | • Radiological |
| • Earthquake | • Severe storm |
| • Epidemic | • Severe thunderstorm |
| • Explosion | • Structural collapse |
| • Extreme temperatures | • Terrorism |
| • Fire | • Tornado |
| • Flash flood | • Tsunami-wave action |
| • Food shortage | • Transportation accident |
| • Fuel shortage | • Utility failure |
| • HAZMAT | • Water supply contamination |
| • Hurricane | • Wildfire |
| • Ice jam | • Winter storm |
| • Ice storm | |

Mitigation Actions

There are numerous mitigation actions which could reduce the impact of potential hazard events such as the following:

Prevention – Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities to reduce hazard losses. Examples include planning and zoning, building codes, capital government programs, open space preservation, and stormwater management regulations.

Property Protection – Actions that involve the modification of existing buildings or structures to protect them from a hazard, or removal from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

Public Education and Awareness – Actions to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and school-age and adult education programs.

Natural Resource Protection – Actions that, in addition to minimizing hazard losses also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Emergency Services – Actions that protect people and property during and immediately after a disaster or hazard event. Services include warning systems, emergency response services, and protection of critical facilities.

Structural Projects – Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, levees, floodwalls, seawalls, retaining walls, and safe rooms.

B&L's Experience with Hazard Mitigation Plans

B&L has assisted with hazard mitigation planning for various municipalities across New York State. The purpose of hazard mitigation planning is to better respond when disasters occur; reduce vulnerability to natural hazard events; and reduce long-term impacts and damages to human health and structures. Hazard mitigation plans (HMPs) identify short- and long-term mitigation strategies and actions that focus on execution at a pre-disaster level. An updated and approved HMP will enable participating municipalities to remain eligible for future hazard mitigation and resiliency funding from the Federal Emergency Management Agency (FEMA). An updated HMP also provides jurisdictions with an additional tool to reference for disaster planning, land development, and funding initiatives.

Our hazard mitigation planning experience centers on:

- Plan development coordination,
- Public outreach management,
- Potential natural hazards assessments, and
- Prioritized mitigation measures development to address the most critical identified hazards.



Through B&L's experience with several hazard mitigation plans, the project team has developed new insights, such as planning for a changing climate and social vulnerability. Future climate impacts include extreme precipitation, heat stress and water stress, social vulnerability, and public health.

Changing climate conditions are increasing the frequency and magnitude of natural hazards, such as flooding, coastal storms, droughts, wildfires, and extreme temperatures. To prepare, states are encouraging local municipalities to integrate climate projections (e.g., changes in future precipitation, sea-level rise, and extreme weather) into their hazard mitigation plans and identify specific actions to reduce vulnerability. B&L provides solutions for many of the challenges posed by climate change, aging populations, sedentary lifestyles, and increasing urbanization. We also assess future hazard risks and vulnerabilities, including an analysis of climate change predications and future implications, and incorporate them into our plan of action for the municipality.

Environmental Engineering

B&L's environmental services encapsulate a wide variety of practices, including industrial hygiene, hazardous materials and demolition surveys, environmental site assessments and rehabilitations, stormwater and MS4 improvements, stream ecology, erosion and sediment control, wetland delineation and mitigation, and habitat and endangered species surveys. We have designed state-of-the-art, comprehensive solutions for a myriad of environmental projects including hazardous waste sites, petroleum and chemical release sites, and industrial air and water pollution issues.



Emergency Action Planning

B&L updates and creates emergency and disaster planning resources to keep the County safe, prepared, and resilient for years to come. The plans include proactive planning with various municipal personnel, community stakeholders, utilities, and NYS DHSES to identify hazards, risk assessment, and mitigation strategies.

Experience with the Federal Emergency Management Authority (FEMA) and New York State Division of Homeland Security and Emergency Services (NYS DHSES)

As term consultants to a number of counties throughout New York State, B&L has experience with federal and state processes for emergency management services. B&L has relationships with personnel at FEMA Region II and the NYS DHSES. B&L has provided engineering assistance on numerous FEMA/NYS DHSES declared disasters for bridge washouts, retaining wall failures, scour damage, etc. We have completed more than 20 bridge replacements and more than a dozen retaining wall/culvert washout replacements/repairs utilizing the procedures and protocols established by FEMA/NYS DHSES. We have also assisted communities with evaluation and coordination with FEMA/NYS DHSES for storm damage to facilities, parks, trails, and water/sewer systems.



Hazardous Materials and Emergency Spills

Under various state and federal regulatory programs, B&L has helped clients with many petroleum, solvent, PCB, and hazardous substance spills. These remedial projects have included:

- Site characterization;
- Remedial investigation;
- Feasibility analysis;
- Remedial design, including:
 - o In-situ bioremediation,
 - o Groundwater extraction and treatment,
 - o Soil vapor extraction,
 - o Source removal, and
 - o Monitored natural attenuation;
- Construction administration; and
- Remediation investigations at hazardous waste landfills, industrial facilities, abandoned industrial and commercial properties, petroleum bulk storage sites, and retail service stations.



Hydrological and Local Flood Analysis

B&L has extensive experience with watershed-based approaches to addressing drainage issues that have created flooding and erosive velocities in rivers and streams of all sizes. Our team includes Certified Professionals in Storm Water Quality (CPSWQ) and Certified Floodplain Managers (CFM) that are adept at handling a wide variety of stormwater management, flood assessment, hydraulic analysis, and mitigation projects.

When working on these projects, we use Hydrologic Engineering Center River Analysis System (HEC-RAS) modeling to prepare graphic representations of existing river reach flood profiles and to evaluate the predicted degree of flood reduction provided by various proposed mitigation alternatives. By using HEC-RAS as a predictive tool at the alternatives analysis stage of a flood mitigation project, we can identify options that offer the greatest cost/benefit while fulfilling the needs of the project. Streams and rivers are dynamic systems, so understanding their ability to effectively mobilize sediment when in flood without significantly changing the channel form is key to making reliable, long-term flood impact predictions.

Structural and Geotechnical Analysis and Foundation Design

Our engineers have extensive experience with the geotechnical design required for bank stabilizations, slope stability analysis, flood damage repair, stream restoration, scour analysis, and hydraulic/hydrologic waterway analysis. B&L's geotechnical team can investigate the primary cause of a roadway or embankment destabilization, address any drainage situations that may be present, and make recommendations for improvements as appropriate. We have experience designing a wide variety of foundation systems, including driven pile, micropile, caissons, spread footings, geosynthetic reinforced soil, and mat foundations. Conditions and potential solutions will be detailed in a roadway/bank stabilization assessment report. This report will allow us to guide the County through the decision making process regarding next steps on the project.

Stormwater Services

Our environmental group has extensive experience in addressing drainage issues ranging from flooding and infiltration to full scale municipal drainage studies and stormwater management facility design. Stormwater management facility designs and plans are created in accordance with state and federal national pollutant discharge elimination systems (NPDES) permits, including detailed drainage studies, construction erosion and sediment control management, and permanent stormwater management facilities design and installation.



Dam Safety Engineering

B&L's dam safety engineers provide all services required to meet the latest dam safety regulations. These services include engineering inspections and assessments, annual certifications, emergency action plans and associated inspections, and maintenance plan development. We use these services to assist municipalities across New York State with completing and updating all dam safety and associated documents. We also provide cost-effective rehabilitation alternatives to update non-conforming features.

Transportation Planning and Engineering

B&L provides transportation planning and engineering services and solutions that often form the basis for future capital investments on our streets and highways. Our clients include public agencies, metropolitan planning organizations, counties, and municipalities. We offer planning strategies and solutions, research for potential funding sources, and assistance to clients from the project's onset through completion. Our professionals have completed numerous transportation/land use projects with tasks ranging from data collection, capacity analysis, safety and accident analysis, municipal comprehensive planning, transportation and urban planning, multi-modal transportation system planning, corridor revitalization and streetscaping, access management and traffic calming strategies, community visioning and consensus building, and zoning and design guidelines. Working closely with our transportation engineers, land use planners, and landscape architects, we strive to integrate sound transportation and land use planning strategies into our studies and designs to create multi-modal transportation corridors that are safe, attractive, functional, and accessible for all users.

DBE/MBE Subconsultant Prudent Engineering

Prudent Engineering, LLP is a registered DBE/MBE firm in New York and Pennsylvania and a registered MBE in New York City provides quality, cost-effective engineering services to state and local governments, authorities and agencies, consultant partners, and private-sector clients across New York State. Their project portfolio features experience in bridge, highway, and structural design, condition and safety inspection, civil and site engineering support, construction inspection and administration, land survey and mapping, and hydrographic services.



Hydrography Services

Prudent's hydrographic survey and mapping department provides our clients with a wide array of high quality on-water, in-water, and underwater services and mapping products. Equipped with boats from 12 feet to 31 feet, and state-of-the-art underwater surveying technologies, Prudent's hydrography department offers services such as single- and multi-beam survey, side-scan sonar imaging, sub-bottom profiling, sediment sampling, and bottom classification mapping for locations across New York.

Prudent's hydrography team has used these technologies and equipment for projects that include evaluating and mapping dams, canals, and bridges; bridge diving condition inspections; and bathymetry and fathometer surveys. Prudent's hydrography/survey vessels are outfitted with advanced hydrographic software, allowing our field staff to accurately and efficiently collect survey data. With an experienced team and sophisticated equipment, our staff can successfully manage land and hydrographic survey/mapping projects of varying size and complexity.

In addition to field technology, Prudent's office hydrography staff includes skilled GIS specialists and data analysts well-versed in SonarWiz 6, Hypack™, Pos-Pack, Discovery™, ArcGIS, AutoCAD, and MicroStation, which are used to process the collected field data. With these programs, Prudent personnel produce high-resolution data deliverables, including drawings, GeoTIFFs, mosaics, point clouds, XYZ data, sub-bottom profiles, uncertainty values, as well as fathometer and bathymetric survey reports.

Civil/Municipal Engineering Services

Prudent's civil/municipal engineering services staff have expertise in wet infrastructure projects including potable water supply and treatment systems; potable water distribution as well as pumping and storage; industrial



wastewater treatment and permitting; municipal sewage collection system; and sewage treatment and disposal systems. Our engineers prepare and provide Stormwater Pollution Prevention Plans (SWPPP); Erosion and Sediment Control Plans; green designs; solid waste and air permits; and floodplain and floodway evaluations.

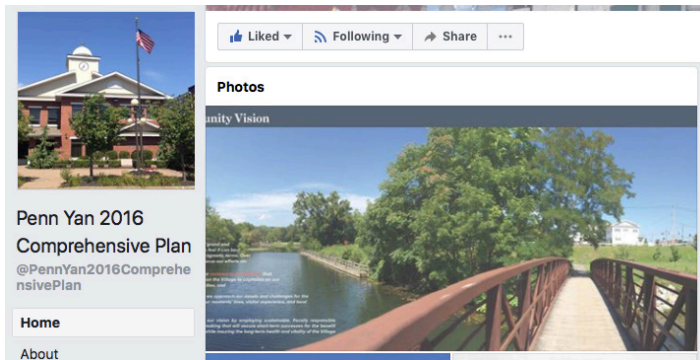
Vertical and Environmental Construction Inspection Services

Prudent has expanded their construction inspection scope of services from mainly horizontal to include vertical and environmental construction inspection to assist partnering consulting firms with their commercial building and environmental and water resource projects. Over the past two years the development of the department has led to the addition of staff who are certified in inspecting buildings, water treatment facilities, airports, and demolition projects. Prudent's vertical construction staff provide code enforcement, shop drawing review, and the development of NYS Department of Environmental Conservation (NYSDEC) Stormwater Pollution Prevention Plans (SWPPP) for site development to supplement existing engineering services.

In conjunction, non-engineering design environmental services have grown to offer inspection for the protection and development of wetlands and rehabilitation and reconstruction of a state historic structure. Prudent engineers have conducted SWPPP inspections for erosion and sediment control (E&SC) measures and permanent SMPs of their own designs for years; now Prudent additionally offers SWPPP inspections as a part of our vertical and environmental construction inspection services regardless of design involvement. These additional services allow us to effectively and efficiently support our clients on a larger variety of projects.

Project Website and Online Engagement Tools

Maintaining an accessible and consistent stream of communication with the public is critical in planning projects. To maintain communication and facilitate educational outreach to interested parties, we can use several online engagement tools.



A project website can be developed in the preliminary stages of the project process and act as a central hub of information regarding this initiative. The project website would be accessible to the general public and could serve several purposes, including but not limited to:

1. Communicating Essential Information

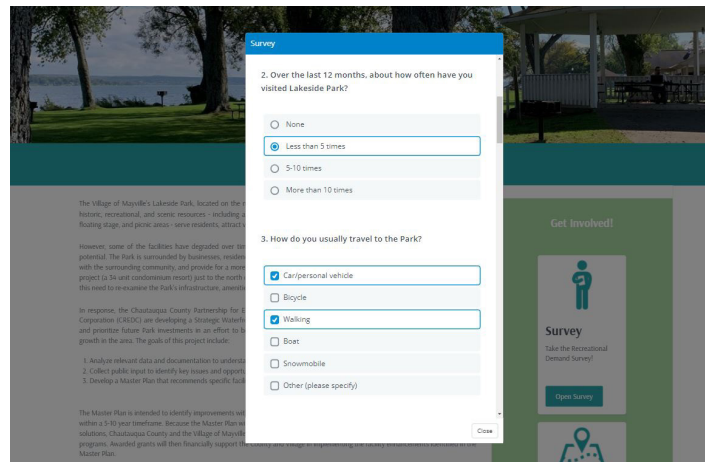
Descriptive text, a dynamic timeline, and an events calendar would inform interested parties of this initiative, the project process and timeline, and upcoming events related to this effort.

2. Advancing Education and Awareness

Relevant document downloads, links, image galleries, and videos would be compiled into a "learning center" on the project website, where community members and leaders can access and engage with educational resources.

3. Soliciting Community Input

Online engagement tools would be embedded into the project website to allow interested parties to actively participate in this initiative. For example, a contact form could allow individuals to sign up for an emailing list and/or submit general questions to the project team. A survey could also be placed on the website to collect information and priorities from locals and other stakeholders. Finally, tools like an interactive map, ideas wall, or virtual forum could provide a space for community members to communicate with each other, build interest in this initiative, and collaborate on ideas and suggestions.



The project website would evolve and be continually updated as this project develops and comes to fruition. The website will be custom designed to maximize interactivity and user accessibility, and will host a multitude of media and graphics to spur interest and active involvement. Our online surveying and mapping tools will be designed not only to collect public input, but also to offer community members an opportunity to learn about and engage in the project through a unique, game-like experience.

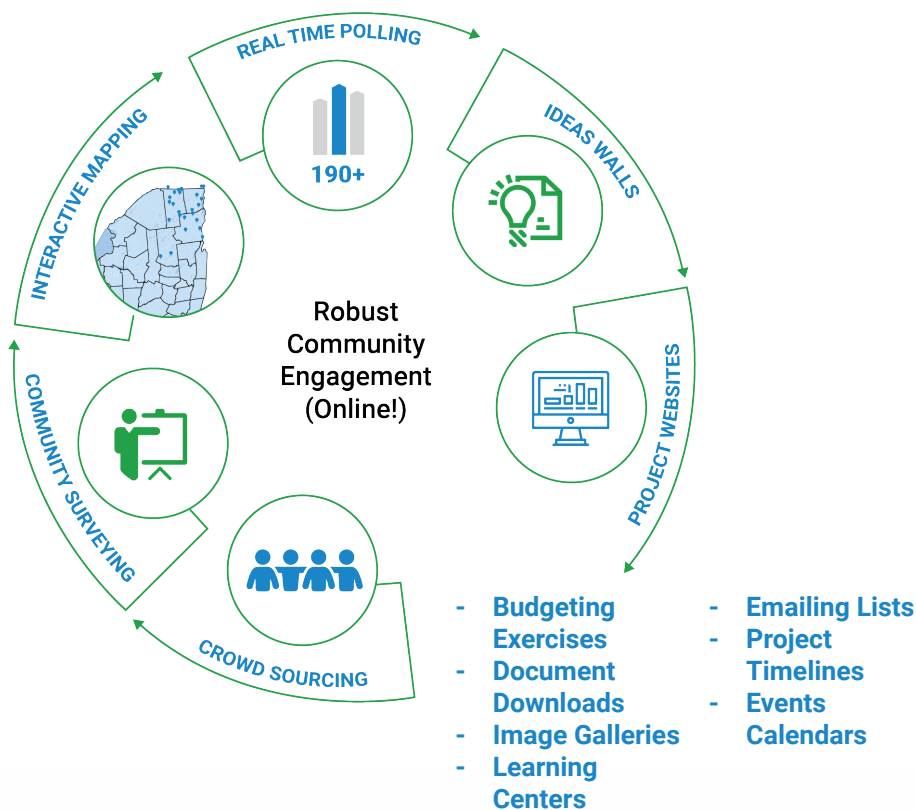
Ultimately, the platform and structure of the project website and online engagement tools will be determined in collaboration with the entire project team to ensure that its functionality serves the dual purpose of informing the public and providing educational and input opportunities on a continual basis. The website will be maintained by B&L for a period of two years following the completion of this project at no cost.



Why Use Online Outreach Methods?

The development of an online engagement platform is beneficial to maximize engagement with diverse populations. Evolving technological enhancements and more recent social distancing guidelines have encouraged communities to explore and embrace online communication methods. While in-person interactions are still immensely valuable, online platforms allow community members to actively participate in projects from the comfort of their home and on their own schedule.

We've learned that virtual engagement and communication tools take outreach beyond a "single event" and are capable of reaching a larger audience. Virtual engagement techniques have become a critical part of our team's strategy to reach community members. We have effectively built and managed a variety of online tools for our clients' planning efforts, including project websites, digital surveys, interactive maps, virtual idea walls, crowdsourcing applications, and real-time virtual polling sessions.



See Examples of our Work

Visit the project websites below to preview some of our online engagement efforts:

1. <https://townofbrighton.org/climate-action-plan> (website through ArcGIS HUB, Ideas Wall, and Brighton Climate App through SPP)
2. <https://cityofplattsburgh-ny.gov/parks-renewal>
3. <https://bartonloguidice.mysocialpinpoint.com/mayville-waterfront>
4. <https://bartonloguidice.mysocialpinpoint.com/shatford-memorial-park-master-plan>
5. <https://lockportny.gov/plan-code-updates>
6. <https://bartonloguidice.mysocialpinpoint.com/chautauqua-co-lake-fund>

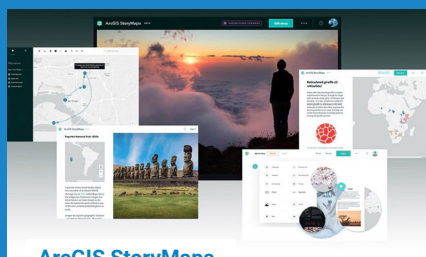
Our Online Platforms

B&L uses several well-known platforms to provide quality online engagement services. These platforms include:

1. Social Pinpoint
2. SurveyMonkey
3. ArcGIS StoryMaps
4. ArcGIS Web AppBuilder
5. ArcGIS Hub Sites
6. ArcGIS Experience Builder
7. Poll Everywhere



Social Pinpoint



ArcGIS StoryMaps

ArcGIS Web AppBuilder



Additional Information

New Considerations

Throughout New York State, changing climate conditions are increasing the frequency and magnitude of natural hazards, such as flooding, coastal storms, droughts, wildfires, and extreme temperatures. To prepare, the NYS Climate Smart Communities (CSC) Certification program encourages local governments to integrate climate projections (e.g., changes in future precipitation, sea-level rise, and extreme weather) into their hazard mitigation plans and identify specific actions to reduce vulnerability.

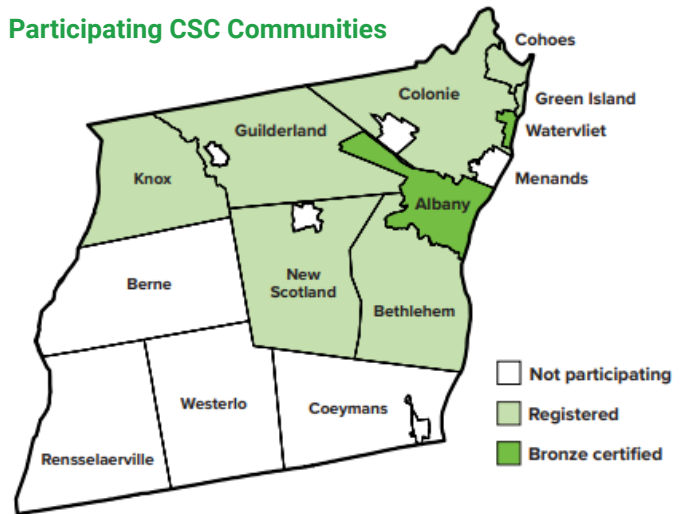
Albany County has 10 municipalities that participate in the CSC Certification program:

- **City of Albany (Bronze)**
- Town of Bethlehem
- City of Cohoes
- **Town of Colonie (Bronze)**
- Village of Green Island
- Town of Guiderland
- Town of Knox
- Village of Menands
- Town of New Scotland
- **City of Watervliet (Bronze)**

Albany County is also a Bronze-certified Climate Smart Community. The CSC Certification program provides local governments with a framework to guide their climate action and recognizes high performing communities for their leadership.

Our team will look to integrate certification actions of the CSC Certification program into the HMP update development as applicable with special focus on PE7 Action: Climate-Resilient Hazard Mitigation Plan. The HMP update can meet the requirements for CSC points under this action if the plan update adequately discusses climate change (Standard 9 - Plan for Climate Change of the New York State Hazard Mitigation Planning Standards Guide). Should the County or any of the participating jurisdictions wish to pursue CSC Certification points, the adoption of the HMP update with this climate focus provides this opportunity.

Participating CSC Communities



Another strategy that our team can tailor specific to Albany County is for the consideration of the National Flood Insurance Program's (NFIP) Community Ratings System (CRS) upfront in the planning process. CRS is a voluntary program that seeks to reduce and avoid flood damages to insurable property, strengthen and support the insurance aspects of the NFIP, and foster comprehensive floodplain management. If there is interest, we can develop a crosswalk tool based on CRS Activity 510 - Floodplain Management Planning credit requirements identified in the 2021 Addendum and the 2017 Coordinator's Manual. This crosswalk will identify compliance with each of 10 CRS planning steps, where in the County HMP update each element is addressed, and possible credit points.

Alternatively, flood vulnerability ideas and experiences can be integrated into the planning process with a Flood Resilience Roundtable composed mostly of local municipal officials but also representatives from the private and non-profit sectors, other community partners, and the general public if warranted.



Section III:

References

2023 Albany County Hazard Mitigation Plan

Barton&**Loguidice**

References

B&L's top references are as follows:

Chautauqua County

Noel M. Guttman
Director of Emergency Services/Fire
Coordinator
201 West Third Street, Suite 115
Jamestown, New York 14701
716-363-3620
guttman@chautcofire.org

St. Lawrence County

Matt Denner
Director/Fire Coordinator,
Emergency Services
44 Park Street
Canton, New York 13617
315-379-1542
mdenner@stlawco.org

Madison County

Daniel S. Degear
Director, Office of Emergency
Management
138 North Court Street
Wampsville, New York 13163
315-366-2789
dan.degear@madisoncounty.ny.gov



Prior Experience on Similar Projects

Following are the counties for which we've prepared a Hazard Mitigation Plan:

- **Tioga County - Plan Update**
→ In Development



- **Tompkins County - Plan Update**
✓ Approved
17 jurisdictions participated (100%)



- **Chautauqua County - Plan Update**
→ In Review
42 jurisdictions participated in municipal interviews



- **Sullivan County - Plan Update**
✓ Approved
22 jurisdictions participated (100%)



- **St. Lawrence County - Plan Update**
✓ Approved
46 jurisdictions participated (100%)



- **Albany County - Plan Update**
✓ Approved
17 of 19 jurisdictions participated



- **Madison County - Plan Update**
✓ Approved
27 jurisdictions participated (100%)



- **Orange County - Plan Update**
✓ Approved
41 of 33 jurisdictions participated



- **Oswego County - Plan Update**
✓ Approved
33 of 34 jurisdictions participated



- **Steuben County - Plan Update**
✓ Approved
33 of 49 jurisdictions participated



Chautauqua County

Multi-Hazard Mitigation Plan

Chautauqua County, New York

Chautauqua County received a Pre-Disaster Hazard Mitigation Grant from the Federal Emergency Management Agency (FEMA) to complete an update to the County's 2016 Multi-Jurisdictional Hazard Mitigation Plan (HMP). The purpose of hazard mitigation planning is to reduce damage to the environment and prevent the loss of life and number and severity of injuries that may result from natural hazard events. The HMP is developed to identify and implement short- and long-term mitigation strategies and actions that focus on execution at a pre-disaster level. Retaining an approved and updated HMP will enable the County and participating municipalities to remain eligible to apply for future hazard mitigation and resiliency funding from FEMA.

Client Contact:

Noel M. Guttman
Director of Emergency Services/
Fire Coordinator
Chautauqua County
201 West Third Street, Suite 115
Jamestown, New York 14701
716-363-3620
guttman@chautcofire.org

Total Project Cost: \$189,000

Completion Date: 2023



Chautauqua County

is updating its
Hazard Mitigation Plan

... and we need your participation!



VIRTUAL PUBLIC INFORMATIONAL MEETING

October 17, 2022 | 6:00 pm

Join via Zoom!
<https://bartonandloguidice.zoom.us/j/81185357865>

What is a Hazard Mitigation Plan?

A hazard mitigation plan identifies and evaluates risks and vulnerabilities associated with natural hazards and disasters. This process aims to reduce the loss of life and property by minimizing the impact of natural hazard events. Hazard mitigation planning leads to the development of short-term and long-term strategies to reduce and manage risk. Mitigation strategies identified in an updated hazard mitigation plan may be eligible for grant funding for implementation.



Chautauqua County Multi-Hazard Mitigation Plan continued

B&L is working with Chautauqua County's Office of Emergency Services (OES) to prepare an updated multi-hazard mitigation plan. The B&L team has met with the forty-two municipalities within the county to update their annexes for the new plan. This process has involved reviewing which hazards are of concern to each municipality and how these hazards might impact critical facilities and infrastructure. In addition, the capabilities of each local government to mitigate hazards have been reviewed, and this assessment has helped to inform the development of new hazard mitigation actions. B&L staff have hosted monthly meetings with the OES team and a representative from the Division of Homeland Security and Emergency Services to discuss the progress of the plan update.

During a majority of these meetings a different county department has been present to provide input on how hazards impact their operations and what can be done at the county-level to mitigate them. To ensure that residents of Chautauqua County are aware of the plan update the B&L team has created public information flyers and press releases for the county departments to post on their website or send in emails.

Input that has been received from county residents via survey responses, emails, and comments during public meetings will inform the development of the updated HMP. The staff at B&L intend to highlight the unequal impact that natural hazards have on disadvantaged communities and vulnerable populations throughout the report, and the team has worked to ensure that the mitigation actions that have been developed seek to address this reality. In

addition, a portion of the updated HMP will focus on the conditions of the county-owned high-hazard dams; B&L is working to develop actions that could be taken to reduce the risk of dam failure to help the county receive future funding through FEMA's Rehabilitation of High Hazard Potential Dams Grant Program. The updated multi-hazard mitigation plan will provide Chautauqua County with a crucially important tool that it can utilize to reduce the risk that climate change poses to its people and critical infrastructure.

Key Features

- Develop a matrix of local laws regulating land use in each municipality to understand what laws municipalities have or lack that could be used to limit the damage that natural hazards cause when they occur.
- Create updated annexes that contain the most recent data and provide a comprehensive analysis of both current conditions and potential mitigation actions.
- Conduct a HAZUS analysis to locate areas of high risk for natural hazards and estimate physical, social, and economic impacts of hazards.
- Produce a public information postcard, a public meeting flyer, and a press release to ensure that county residents are aware of opportunities to provide input on the multi-hazard mitigation plan update.
- Maintain records of the time and work that municipalities have spent on the HMP update to use this contribution towards the in-kind match requirement for the Pre-Disaster Hazard Mitigation Grant.



Albany County

Multi-Jurisdictional All-Hazard Mitigation Plan Update

Albany County, New York



In order to maintain eligibility for hazard mitigation funding, Albany County needed to develop an updated, comprehensive multi-jurisdictional Hazard Mitigation Plan (HMP). Albany County is comprised of 19 municipalities (which includes the County); however, only 17 municipalities participated in the 2018 plan update. For the purposes of the planning process, these communities were divided into three working groups: Hilltowns, Central, and River Communities. B&L was retained to create the HMP, which details the risks, past hazards events, probability of future incidents, and damages incurred as they relate to the following:

- Community assets such as bridges, dams, roads, land, and facilities;
- Critical facilities such as shelters, police and fire stations, and hospitals;
- Essential facilities that are vital to the health and welfare of the population, such as government offices, banks, schools, grocery stores and gas stations;
- Transportation systems that provide a means into or out of the County such as roadways, airports, bus or train systems;

Client Contact:

Michael Lalli
Director of Civil Service
Albany County
Harold L. Joyce Albany County
Office Building
112 State Street, Room 900
Albany, New York 12207
518-447-7770
michael.lalli@albanycountyny.gov

**Total Project
Cost:** \$112,500

**Completion
Date:** 2018

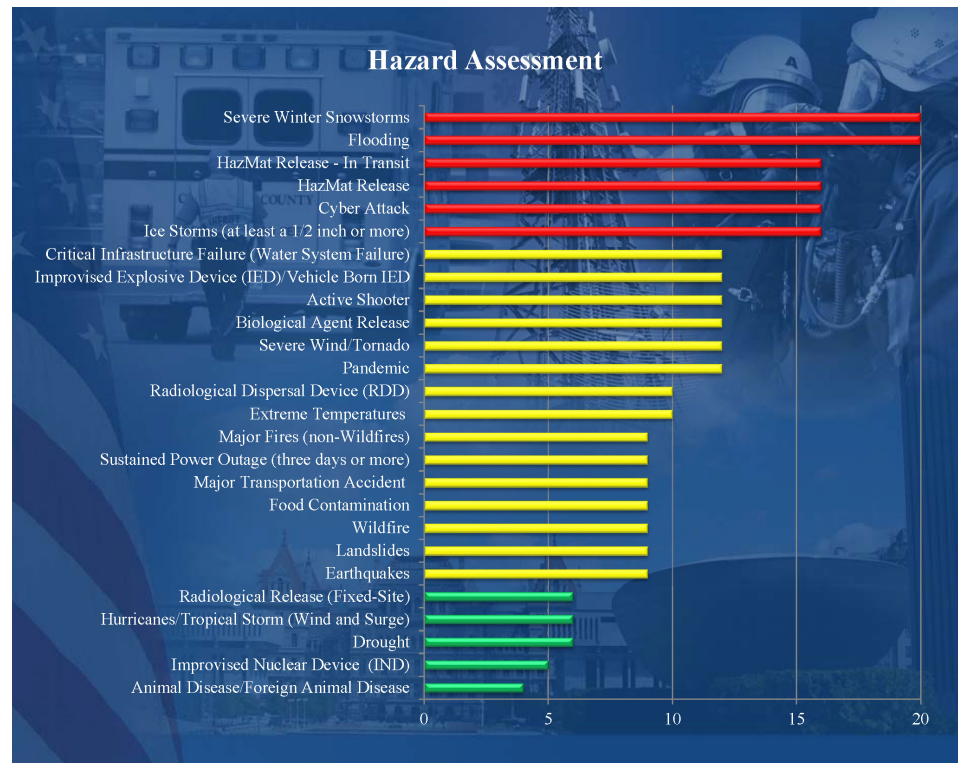
- Utilities such as water and wastewater treatment plants, pumping stations, electrical systems, telephone facilities and cell towers, natural gas and fuel oil storage and transmission facilities;
- Unique threats and high potential loss facilities such as reservoirs, dams, etc.; and
- Population and demographics with emphasis on socially vulnerable populations such as the elderly, students, and people with lower incomes.

Albany County Multi-Jurisdictional All-Hazard Mitigation Plan Update continued

The HMP provided mitigation goals and prioritized actions to reduce vulnerabilities and protect continuity of vital government services, such as emergency housing, food stamp distribution, and mental health clinics. B&L provided the following services:

- Developed the planning process
- Conducted hazard analysis and vulnerability assessment
- Mitigation strategy development
- Evaluation and maintenance of the plan
- Plan review, revision, approval, and adoption process

The end goal of the planning effort is an action plan that will reduce loss of life, property, human suffering, economic disruption, and disaster assistance costs that result from natural and human-induced disasters.



St. Lawrence County

Multi-Jurisdictional Hazard Mitigation Plan

St. Lawrence County, New York



B&L coordinated the development of a multi-jurisdictional hazard mitigation plan for St. Lawrence County, which, in addition to the County, involved a total of 45 participating municipalities including 32 towns, 12 villages, and 1 city.

B&L assisted the County with:

- Plan development coordination,
- Public outreach managements,
- Potential natural hazards assessments, and
- Prioritized mitigation measures development to address the most critical identified hazards.

Natural hazards were identified, profiled, and ranked based on impacts to the County. Jurisdiction-specific vulnerability analyses and risk evaluations were performed as well. Results from the vulnerability assessment aided in developing mitigation and adaption goals and assisted the County and participating jurisdictions in formulating mitigation actions and strategies to include in the HMP. The hazard mitigation and adaption section of the plan also

Client Contact:
Matt Denner
Director/Fire Coordinator
St. Lawrence County
Emergency Services
44 Park Street
Canton, New York 13617
315-379-1542
mdenner@stlawco.org

**Total Project
Cost: \$159,000**

**Completion
Date: 2022**

provides a frame work for prioritizing mitigation actions using a cost-benefit approach. The plan identifies how the hazard mitigation process will be continued and how the document will be maintained. Community involvement, municipal input, annual evaluations, and public meetings will continue to evolve the plan and keep it up to date until its 5-year update target.

Full approval has been received from DHSES and FEMA.

Madison County

Multi-Jurisdictional Hazard Mitigation Plan Update

Madison County, New York



B&L worked closely with the Madison County Office of Emergency Management on their most recent Hazard Mitigation Plan. This Plan looked to update their 2017 document using a Pre-Disaster Hazard Mitigation Grant from FEMA. Aside from Madison County, Plan participants included 15 Towns, 10 Villages, and 1 City, and other community supporters and stakeholders.

The County and each of its jurisdictions identified and ranked the natural hazards to which their communities are most vulnerable, resulting in the profiling of 11 natural hazards. The HMP Update also includes an assessment of risks and vulnerabilities associated with each hazard and details mitigation strategies for each jurisdiction to moderate those vulnerabilities and decrease the potential resulting risks.

FEMA's HAZUS software was used to model and analyze disaster impact scenarios throughout the County for flood, hurricane, and earthquake events. Annexes were drafted for each jurisdiction that included the mitigation actions and strategies developed for their specific community. Individual

Client Contact:

Daniel S. Degear

Director

Madison County Office of
Emergency Management

138 North Court Street

Wampsville, New York 13163

315-366-2789

dan.degear@madisoncounty.ny.gov

Total Project Cost:

\$82,500

Completion Date: 2023

meetings were facilitated with each jurisdiction, which was key to collect the information necessary to make the needed HMP updates. These meetings were led by B&L, but staff from the County OEM was also present at every meeting, which helped make this a collaborative effort.

This approach resulted in 100% participation from local municipalities. The Madison County 2022 Hazard Mitigation Plan received FEMA approval in January 2023.

Monroe County

Coastal Lakeshore Economic and Resilience (CLEAR) Plan

Monroe County, New York



Prudent Engineering, LLP was retained to perform shoreline condition assessment and characterization for nine communities in Monroe County, New York. Prudent was responsible for the inspection and classification of the shorelines of nine communities to identify areas in need of stabilization and/or restoration. Following the inspection and classification Prudent was tasked with generating several reports to brief stakeholders and secure funding for selected CLEAR projects throughout the County.

Client Contact:

Gregory Johnson, P.E.
Bergman Associates, D.P.C.
585.498.7845
gjohnson@bergmannpc.com

**Total Project
Cost:** \$42,000

**Completion
Date:** 2021

Work performed:

- Shoreline inspection and characterization
- Proposed alternatives for stabilize shoreline
- Environmental protection
- Identified required permits
- Classified level of resilience for proposed alternatives
- Identified potential financial resources
- Developed high level report for select CLEAR projects

Deliverables included:

- Offshore and onshore protection recommendations
- Emergency evacuation routes and feasibility
- Structural assessment report on lake shore firehouse

New York Governor's Office of Storm Recovery (NYGOSR)

Living Breakwaters

Staten Island, New York



Living Breakwaters is an innovative coastal green infrastructure project designed to reduce erosion and damage from storm waves, improve the nearshore ecosystems, and protect communities on the south end of Staten Island, New York. This project involved the design and implementation of marine breakwaters in Raritan Bay that were uniquely designed to capture sediment and attract living organisms, such as oysters and clams, while providing protected habitat that will foster development of nearshore marine colonies.

The beach profile survey phase of the Living Breakwaters project included on-land and in-water surveying. Prudent's hydrography team lead the in-water portion and collected bathymetric survey data along 23 transects that extended outward from Staten Island to the federal navigation channel. Working in tandem with the land-side survey crew, bathymetric data was collected at one-second intervals along the transect using a Sonarmite Hydrolite echo sounder. The Hydrolite data was georeferenced in real time to NYSNET and then calibrated to a benchmark set by the land-side survey team. Survey events were completed in December 2015, October 2016, and April 2018.

Additionally, Prudent collected sediment samples for grain size analysis at 39 locations along the 23 survey transects. Sediment samples were collected in April and September of 2016, May and November of 2017, and May of 2018.

In 2016, the Prudent crew was responsible for deploying two Acoustic Doppler Current Profilers (ADCP) which measured

Client Contact:

Pippa Brashear
SCAPE
212.462.2628
pippa@scapestudio.com

Total Project

Cost: \$258,000

Completion Date:

2018

the speed and direction of water currents throughout the water column. The ADCPs collected and stored data on tides, current velocity, wave height, and wave direction.

On a monthly basis in 2016, Prudent's crew retrieved the ADCPs and downloaded collected data for processing. During the data retrieval events, the units were inspected, their batteries replaced, and then redeployed. The ADCPs were placed at GPS positioned locations for one to three months, as deemed necessary, throughout this phase of the project. The data provided information on the effects of current speed and direction on the developing artificial reef ecosystem, as well as verifying existing historical current profiles for Raritan Bay.

Work Performed:

- Bathymetry survey
- Beach monitor survey
- Bottom surface analysis
- ADCP collection and post processing
- Routine ADCP maintenance and service support

NYSTA/NYSCC

Term Agreement for Design and Implementation of Flood Warning System

Mohawk and Upper Hudson River Basins, New York



This project involved the design and implementation of a flood warning system that measures rainfall amounts; monitors water levels and flow rates in reservoirs, lakes, rivers, and streams; and provides notification of projected flood conditions on a near real-time basis for three watersheds in Upstate New York maintained by the NYS Canal System:

- **Upper Hudson River Basin:** 4,620 square miles, upstream of the Troy Dam on the Hudson River;
- **Mohawk River Basin:** 3,460 square miles, upstream of the confluence of the Mohawk River with the Hudson River in Waterford;
- **Oswego River Basin:** 5,100 square miles, upstream of the confluence of the Oswego River with Lake Ontario.

Client Contact: Undisclosed

Total Project Cost: \$163,000

Completion Date: 2015



The scope of this multifaceted project involved the development, calibration, and validation of detailed hydrologic and hydraulic models using available hydrodynamic modeling for each basin; accounting for reservoir and water control structure operations; using existing and new USGS streamflow, stage, and precipitation gages; and integration of National Weather Service precipitation forecasts, system optimization, and flood mitigation analyses. The project also included incorporating a web-based interactive mapping system using orthoimagery to illustrate event-based flood forecasted water levels, timing of peak water levels, and projected flood inundation throughout each of the watersheds.

As a subconsultant to Riverside Technology, Inc., Prudent Engineering's survey team provided hydrographic survey data to complete the hydraulic modeling for the Mohawk and Upper Hudson River Basins. Prudent's team reviewed available survey data and sought permission from data owners to use the existing records, which, in some cases, required the team to convert older data to the current NGVD88 vertical datum. The team was assigned survey tasks encompassing the majority of the basins' non-navigable waters. Using traditional GPS and single-beam sonar, Prudent's survey covered 120 miles of river reaches and approximately 109 locations.

There were three levels of detail for surveying each reach: (1) confirm top-of-structure deck and obstruction elevations; (2) conduct bathymetric survey near bridge elements, abutments, and bridge low chords; and (3) bathymetric survey. In reaches where a hydraulic model already existed and data was only required to confirm the model and update structure elevations, Prudent provided a limited survey of the upstream face of the structure and the width in the direction of flow. At the structures, the survey collected data to define the low chord, high chord, top of abutment, edge of water, pier locations, and bathymetry at the structure face.

Additionally, where existing hydraulic models did not exist, a full survey of the structures, in addition to four bounding bathymetric sections located at 100 and 200 feet upstream and downstream, were performed in accordance with the FEMA-modified Appendix M. Standards. Prudent reviewed and commented on project parameters and inputs.

Work performed:

- Hydrographic survey and mapping
- Single-beam sonar
- Final survey report review



Section IV:

Plan Implementation

2023 Albany County Hazard Mitigation Plan

Barton&**Loguidice**



Plan Implementation

Project Approach

Through our experience with several County hazard mitigation plans and plan updates, our interdisciplinary team of planners, engineers, and environmental scientists and analysts has developed the following scope of services for the advancement of a custom, right-sized HMP update for Albany County.

Task 1: Organize the Planning Effort

Under this task, the planning process will be developed and the initial kickoff meeting will be held with the executive committee. B&L will work closely with this committee to identify the key hazard mitigation regulatory requirements that have changed since the County's Hazard Mitigation Plan (HMP) Update in 2018. The overall planning process and project timeline will be presented at this kickoff meeting, which will include the following items:

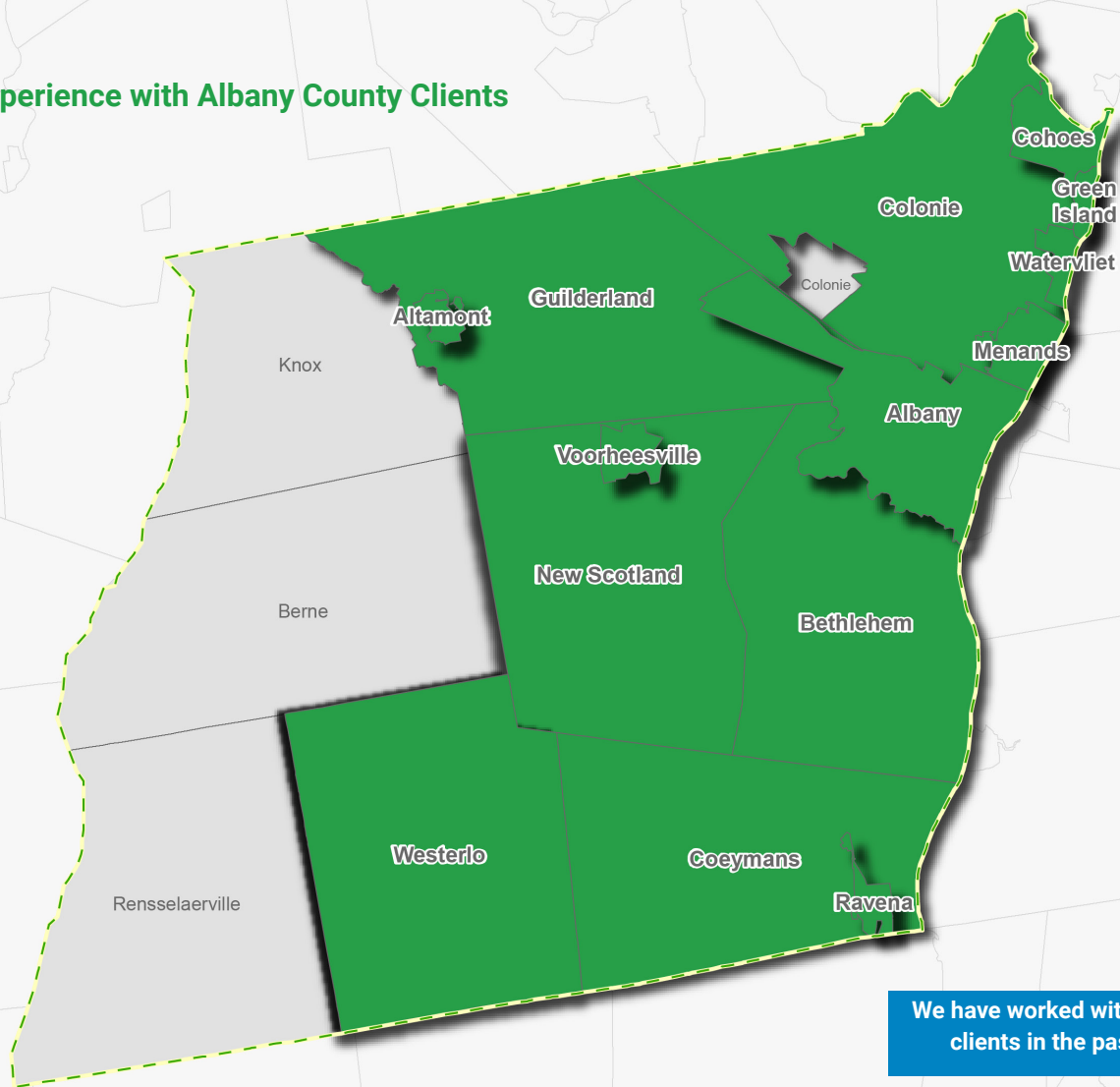
- A review of the HMP update objectives
- Budget and schedule
- Roles and responsibilities of the executive committee, project team, and key stakeholders

- Community engagement strategy
- Identification of other County resources and hazard data information

Plan development will begin once the County approves the scope of work. B&L anticipates the initial meeting with the executive committee will be held within two or three weeks of the contract authorization date. We recommend that the executive committee meet on a monthly basis to keep the project on schedule. To help address stakeholder and community engagement, B&L recommends the development of a community engagement strategy. An engagement strategy or plan outlines a set of specific outreach and public participation strategies with assigned roles and a timeline for new or reoccurring projects that will impact the community. Typical components of an engagement plan include:

- Key stakeholders, such as the three HMP groups and 19 municipalities, which includes the County;
- Communication methods, such as when and how to use online methods,
- Schedule for public events, such as the public workshops, and

B&L's Experience with Albany County Clients



- Roles and responsibilities of team members in preparing and facilitating the outreach efforts. A strategy for identifying and engaging vulnerable populations in the community will be developed to ensure the HMP update represents all segments of the community.

Following the kickoff meeting with the executive committee, B&L recommends that a kickoff meeting for elected officials be organized to introduce the hazard mitigation planning process and the concept of municipal interviews that will assist in updating mitigation action worksheets and jurisdictional annexes. Participation and attendance at all planning steps will be tracked to support fulfillment of state and federal requirements.

B&L can use a hybrid approach to community involvement meetings with each participating municipality, which includes virtual meetings, online surveys, and in-person meetings. A commitment from each jurisdiction to participate in the HMP will be obtained at the early stages of the planning process. It is our goal to have each

municipality in the County formally adopt the plan at the end of the process. Our experience with previous hazard mitigation plans throughout New York State has taught us that the best approach for gaining critical knowledge about each municipality is to provide a variety of engagement opportunities with the appropriate municipal officials.

Public participation and outreach will be discussed with the Executive Committee to formalize the public participation approach utilized throughout the planning process. Our team firmly believes in a “whole community approach” to disaster and hazard planning, and will seek to involve the entire community, including County, participating municipality, and private and non-profit sector representatives; other community partners; and the general public. Two public meetings are anticipated: one at the beginning of the update process and a second after a draft of the HMP update is available for review and consideration. B&L's project team will be available to assist in press release development and appropriate website content facilitation.

Task 2: Hazard Identification

The identification of natural hazards of concern is used to support the development of hazard mitigation actions and strategies by participating jurisdictions. Hazard event documentation will be gathered, with particular focus on the events that have occurred since the prior 2018 HMP update. Results will be compared with local knowledge and weather research to ensure that the significant natural hazards throughout Albany County are identified and understood. The County and each participating jurisdiction will identify their own lists of hazards that have affected their communities.

The focus for Albany County will be on natural hazards, such as inland flooding, coastal flooding, ordinary and extreme temperatures, drought, coastal erosion, wildfire, landslides, tsunamis, invasive species, hurricanes/tropical storms, tornadoes, severe winter storms/nor'easters, other severe weather, and earthquakes. The Albany County Climate Resiliency Plan (CRP) will help to further inform the hazard identification. B&L typically reviews and incorporates the findings from the County Emergency Preparedness Assessment (CEPA) into the HMP update, which the June 2022 CEPA will provide.

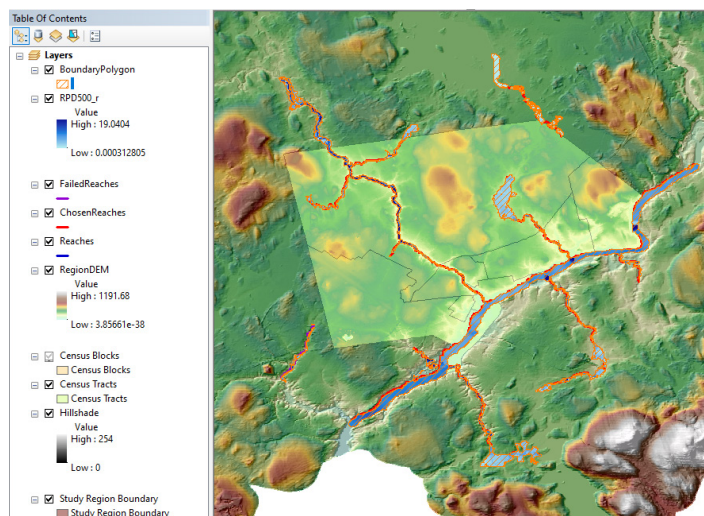
Hazard profiles will be created and included in the HMP update in association with the executive committee to detail the histories of various disaster events within the County. General profiles describing each hazard, including typical frequencies and documentation of actual countywide occurrences, will be included in the HMP update. Additional municipality-specific information will be included in each municipal annex. The annex layout allows geographic location detail and estimated damages specific to each jurisdiction to be included in a more effective way within the document.

Task 3: Vulnerability Assessment

Hazard risks and vulnerabilities will then be assessed and incorporated into the HMP update, including an analysis of climate change predications and future implications. This task looks to further identify specific locations within communities where hazard vulnerabilities are greatest, by focusing on reoccurring hazard events, hazard frequencies, and hazard histories and how resources and programs are applied in disaster mitigation and response.

Hazard Assessment from Albany County's 2018 Hazard Mitigation Plan

Municipality	Drought	Earthquake	Flood	Hurricane	Ice Jam	Ice Storm	Infestation	Landslide	Severe Winter Storm	Severe Thunderstorm/Wind	Tornado	Wildfire	Extreme Temperatures	Air Contamination	Civil Unrest	Dam Failure	Epidemic	Explosion	Fire	Fuel Shortage	HazMat - Fixed Site	HazMat - In Transit	Oil Spill	Radiological - Fixed Site	Radiological - In Transit	Structural Collapse	Terrorism	Transportation Accident	Utility Failure	Water Supply Contamination
Albany (C)		X	X			X		X	X	X				X	X	X	X	X	X		X	X	X			X	X	X	X	X
Altamont (V)	X	X	X	X	X	X			X	X			X			X										X				X
Berne (T)			X			X			X																					
Bethlehem (T)		X	X	X		X		X	X	X	X		X			X		X	X		X	X	X	X	X	X	X	X	X	X
Colonie (T)	X	X	X	X				X	X	X	X	X	X																	
Cohoes (C)	X	X	X	X		X		X	X	X		X	X																	
Coeymans (T)	X		X			X		X	X	X						X		X	X	X	X	X	X		X	X	X	X		
Green Island (T/V)	X	X	X	X	X	X			X	X			X	X		X				X	X	X	X			X	X	X		X
Guilderland (T)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X
Knox (T)	X		X			X	X	X	X	X		X	X	X		X		X	X	X	X	X	X			X		X	X	X
Menands (V)			X	X	X	X	X		X	X			X	X	X	X	X	X	X	X	X	X			X	X		X	X	X
New Scotland (T)	X		X	X		X		X	X	X	X	X	X	X		X		X	X	X		X	X			X		X	X	X
Ravena (V)	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X		X	X	X		X	X		X	X	X
Voorheesville (V)	X		X	X	X	X	X		X	X		X	X	X	X	X	X	X	X			X	X			X		X	X	X
Watervliet (C)			X			X			X							X						X							X	X
Westerlo (T)	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X



B&L has been using FEMA's HAZUS program to estimate risks from floods, hurricanes, and earthquakes. Using models and community-specific GIS data layers, this program projects the extent of damage and geographic area of risk under different storm scenarios. The HAZUS output will be used to identify vulnerable locations within Albany County for the modeled natural hazard events. B&L has successfully updated to the 5.0 HAZUS version and applied the software changes in other HMP updates that our team has worked on.

B&L will summarize and update overall vulnerability for each hazard type in terms of potential physical and economic damage to existing structures and critical infrastructure and facilities. Jurisdictional annexes will include existing and future buildings, infrastructure, critical facilities, and other resources within each community. The asset lists from the 2018 HMP will be used as a baseline, and B&L will work with each jurisdiction and the County to make needed updates and revisions based on existing developments and events that have occurred over the past five years.

Additional data will be gathered and analyzed to help identify physically vulnerable populations and facilities as well as socially vulnerable populations. B&L will assess the potential consequences of the profiled hazards on the County and municipally owned assets.

An important phase of the HMP update will be assessing the natural environment, future development, and impacts on the County's vulnerability. A key resource will be available build-out models; to the extent such are available. In assessing future vulnerability to disasters, consideration will be given to other land use and development trends, such as local laws and ordinances and available building permit data. B&L employs ArcGIS



Community Analyst to utilize Esri Demographics for mapping and analyses of various demographic information for the creation of visually appealing, customizable infographics and reports. Relevant information will be reviewed and extracted from existing reports and studies, land use ordinances, and available existing plans.

Task 4: Capability Assessment and Resource Integration

A review of County and local jurisdiction planning mechanisms and capabilities will be completed, which includes existing building codes, land use development ordinances, and other relevant plans, studies, reports, and technical information. The County Planning Department, Office of Emergency Management, Department for Aging, Departments of Health and Social Services, Public Works, and Soil and Water Conservation District may already have collected information and prepared plans relevant to a vulnerability assessment. Local stakeholders from the 19 municipalities will also identify their planning mechanisms and capabilities through the individual municipal interviews. The B&L project team will review and evaluate the current 2018 HMP with assistance from County and municipal partners.

Our approach includes consideration of FEMA's new policy guide, recognizing the important role of adopting and enforcing building codes and land use ordinances and the impacts of climate change, climate inequality, and disadvantaged communities. Our team will review and discuss changes that have occurred since the 2018 HMP to focus current hazard mitigation needs with municipal representatives, such as building officials, code enforcement officers, zoning enforcement officers, floodplain coordinators, planners, public safety and department of public works personnel, emergency management personnel, public safety staff, and the hazard coordinator. We understand the limited capacity and resources that many municipalities face and that not all of these positions are filled or in existence. Our team will work diligently to guide each jurisdiction through the process steps and collect the necessary information in an efficient manner. This approach gives us the best opportunity to ensure each municipality's concerns and voices are heard and understood.

Opportunities and processes to incorporate the HMP update into existing and future initiatives, documents, and goals at the County and local levels will be identified and included in the plan as appropriate after discussion with



the executive committee and jurisdiction representatives. The CEPA and CRP information will also be helpful in confirming County capabilities and identifying physical and social areas that may need improvement. Information from appropriate municipal and County representatives and personnel will be collected to better understand the County's resources and needs. Our team will review and consider New York State's most recent hazard mitigation plan, the 2019 New York State Hazard Mitigation Plan, for information specifically related to Albany County.

Task 5: Mitigation Strategy and Actions, and Plan Integration

B&L will work with the County and participating jurisdictions to create meaningful and informed hazard mitigation goals and strategies. The most recent FEMA and NYS DHSES worksheets will be used to develop

Location in Plan (Section and page number)	Yes	No	Not Applicable
1. REGULATION CHECKLIST			
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Sample DHSES worksheets

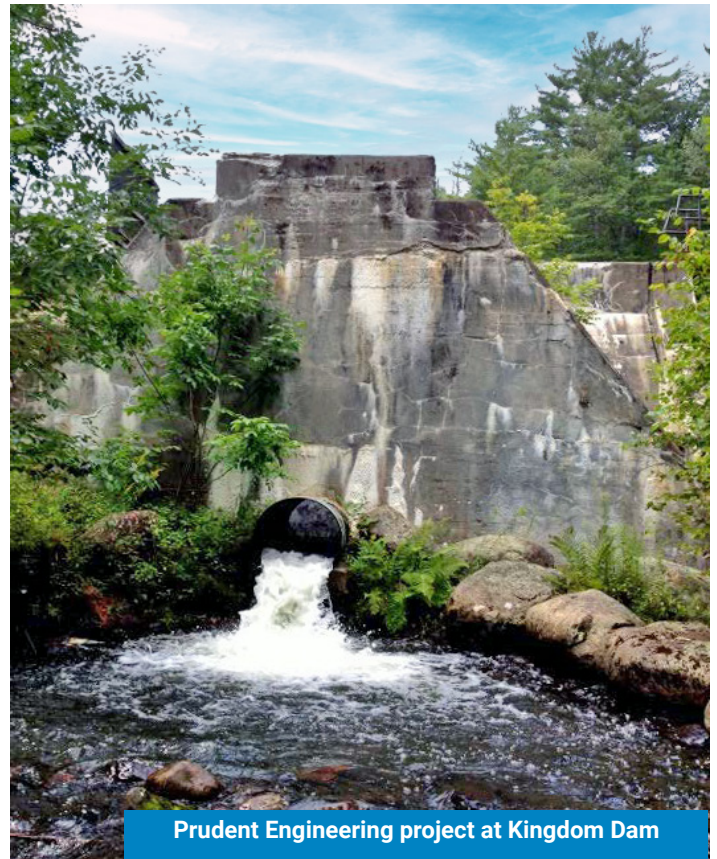
mitigation actions specific to each jurisdiction and its vulnerabilities and highest-ranking natural hazards. FEMA, NYS DHSES, and the state's hazard mitigation plan will be consulted to ensure a comprehensive consideration of goals and strategies is included, along with other relevant local and regional strategies such as CEPA and the CRP. B&L is familiar with the HHPD worksheets and can assist the County in their completion through proper emergency action plan/engineering assessment review in order to qualify for the rehabilitation of High Hazard Potential Dam (HHPD) Grant Program.

Mitigation actions will be included as appropriate by each participating jurisdiction to cover the hazards for which risk and exposure were identified through the vulnerability assessment. These actions will be collectively compiled and displayed in a table within the main body of the HMP update. It is understood that formulating meaningful and customized mitigation actions for each participating jurisdiction is a priority for this HMP update. An approach that our team has found useful is the County Mitigation Action Roundtable. This format can be used to discuss and update mitigation actions across departments while also being facilitated to review plan goals using online engagement tools. Through our proposed hybrid meeting approach, we will be able to collect data specific to each jurisdiction and identify mitigation actions that directly respond to their needs and address risk.



Chautauqua County hazard mitigation plan roundtable

Together with the assistance of Prudent Engineering, mitigation actions proposed by each participating jurisdiction will be analyzed and prioritized to ensure that they are well thought out and ready for implementation should future funding opportunities present themselves. Working in cooperation with the 19 municipalities in the County, B&L and Prudent Engineering will help to develop these actions and advance best practices and logical actions to reduce exposure and risk from hazards.



Prudent Engineering project at Kingdom Dam

Implementation details will be collected and included to identify potential funding sources, primary and secondary agencies involved, and the timeframe and estimated cost anticipated for each action. A simple cost-benefit analysis exercise will be completed with each jurisdiction so that the proposed actions can be appropriately prioritized. This prioritization step will help to focus each municipality's initiatives moving forward through the next five-year hazard mitigation planning cycle. These planning steps and conclusions will be thoroughly documented in the HMP update and specifically in each municipality's annex.

Task 6: Implementation and Plan Maintenance

The executive committee will be charged with ensuring that evaluation measures are consistent with the Disaster Mitigation Act of 2000 (DMA-2000). As noted above, the mitigation plan document should be reviewed, evaluated, and updated every five years to allow participants to remain eligible to apply for and potentially receive funding through programs such as Building Resilient Infrastructure Communities (BRIC), Hazard Mitigation Grant Program (HMGP), and Flood Mitigation Assistance (FMA). B&L will assist the executive committee in creating a method and schedule to allow for effective and efficient monitoring, evaluation, and updating of the HMP

update so that the County has a good start toward its next five-year update. Our team will provide an implementation matrix to track and report on successes of the mitigation measures. Metrics will be developed for project tracking in order to meet specific targets and goals.

Task 7: Update Plan

As B&L receives data and information through the steps above, we will develop an initial draft of the County's HMP update. We anticipate that our draft of the plan update will be presented to the executive committee by January to February 2024. Each participating jurisdiction will have an opportunity to review and comment on their individual municipal annex before finalization. The second public meeting will be held at this time within the process to receive additional feedback and respond to questions.

Once a complete draft is together and has been fully vetted, the final HMP update will be submitted electronically to the NYS DHSES for their review. We will also include a complete copy of the FEMA hazard mitigation plan review tool that includes section and page numbers for easy plan review by NYS DHSES. B&L will present the final report with suggested changes incorporated to members of the Executive Committee, Albany County Legislature, and other invited local officials.

Comments and edits requested by the NYS DHSES will be reviewed and completed to finalize the Albany County HMP update. Any remaining comments from the

executive committee, participating partners, the public, or other stakeholders will be incorporated into the document at this juncture. The review tool will be updated as necessary, and the final versions will be sent back to the NYS DHSES for approval and subsequent submission to FEMA for their review and approval. We understand that the project will not be considered complete until the plan update has been approved by FEMA. Submission of the final plan update to NYS DHSES and FEMA is slated to occur by April to May 2024. Formal plan adoption through an issued resolution by each participating jurisdiction will be required to close out the plan adoption process after state and federal agency approval.

Task 8: Plan Adoption

Our approach with individual jurisdictional meetings creates an environment where municipalities understand the importance of participating and formally adopting the plan. B&L will work closely with the executive committee to coordinate and collect the cumulative expertise and institutional memory from representatives of each jurisdiction during the HMP update phases. Our experience has shown that working across municipal departments – such as with planning and zoning board representatives, highway superintendents, building department and code enforcement officers, police and fire departments, and public health and emergency services personnel – will create more meaningful dialogue and improved awareness about the hazard mitigation planning process and plan adoption.



Schedule





Section V:

Cost Proposal Section

2023 Albany County Hazard Mitigation Plan

Barton&**Loguidice**

Cost Proposal Section

B&L's cost proposal is included on the following page



Albany County
2023 Hazard Mitigation Plan
2023 Standard Rates (NY Tier 3)



Task	Barton & Loguidice											Prudent Engineering		Cost	Expenses	Total	
	DHF	JED	WRB	JB	TDB	RJM	JMW	DET	RAR2	DJP	MEW						
	P12	P9	P9	P7	P5	P4	P3	P2	P2	P1	P1	P5	Total	Per	Per	Per	SAY /
	\$ 285	\$ 205	\$ 205	\$ 185	\$ 153	\$ 138	\$ 126	\$ 114	\$ 114	\$ 98	\$ 98	\$ 153		Line	Line	Line / Task	CONTRACT
Task 1: Organize the Planning Effort																\$ 14,405	\$ 14,500
Project Initiation: Kickoff Meetings, Community Engagement Strategy	1			30				30		25	25		111	\$ 14,155	\$ 250	\$ 14,405	
Task 2: Hazard Identification																\$ 15,240	\$ 15,500
Hazard event documentation and review				25				30		25	25	15	120	\$ 15,240	\$ -	\$ 15,240	
Task 3: Vulnerability Assessment																\$ 14,297	\$ 14,500
Hazus analysis				25			40	20		12	12		109	\$ 14,297	\$ -	\$ 14,297	
Task 4: Capability Assessment and Resource Integration																\$ 23,690	\$ 24,000
Municipal Interviews, County Roundtable				30		20		40	23	38	38		189	\$ 22,940	\$ 750	\$ 23,690	
Task 5: Mitigation Strategy and Actions, and Plan Integration																\$ 54,196	\$ 54,500
Municipal Interviews, County Roundtable, Jurisdictional Worksheets			10	30	10	15		30	23	23	23	80	244	\$ 33,990	\$ 750	\$ 34,740	
HHPD Worksheets			13	5	12			10					40	\$ 6,566	\$ -	\$ 6,566	
Task 6: Implementation and Plan Maintenance																\$ 6,445	\$ 6,500
Evaluation measures and project tracking				15				15		10	10		50	\$ 6,445	\$ -	\$ 6,445	
Task 7: Update Plan																\$ 44,599	\$ 45,000
Draft and Final Plan Development	2	4		25		15		40		35	35	56	212	\$ 28,073	\$ -	\$ 28,073	
Public Meetings				25		15		30		27	27		124	\$ 15,407	\$ 250	\$ 15,657	
Task 8: Plan Adoption																\$ 14,471	\$ 14,500
DHSES/FEMA review, edit, adoption	2	5		20				30		20	20	12	109	\$ 14,471	\$ -	\$ 14,471	
													0	\$ -	\$ -	\$ -	
													0	\$ -	\$ -	\$ -	
Total	5	9	23	230	22	65	40	275	46	215	215	163	1308	\$ 171,584	\$ 2,000	\$ 166,427	\$ 189,000
	\$ 1,425	\$ 1,845	\$ 4,715	\$ 42,550	\$ 3,366	\$ 8,970	\$ 5,040	\$ 31,350	\$ 5,244	\$ 21,070	\$ 21,070	\$ 24,939	\$ 171,584	✓			

PROJECT TOTAL \$ 189,000



Section VI:

Mandatory Documentation

2023 Albany County Hazard Mitigation Plan

Barton&**Loguidice**

COUNTY OF ALBANY

PROPOSAL FORM

PROPOSAL IDENTIFICATION:

Title: 2023 ALBANY COUNTY HAZARD MITIGATION PLAN
RFP Number: 2023-039

THIS PROPOSAL IS SUBMITTED TO:

Pamela O Neill, Purchasing Agent
Albany County Department of General Services
Purchasing Division
112 State Street, Room 1000
Albany, NY 12207

1. The undersigned Proposer proposes and agrees, if this Proposal is accepted, to enter into a Contract with the owner in the form included in the Contract Documents to complete all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Proposal and in accordance with the Contract Documents.
2. Proposer accepts all of the terms and conditions of the Instructions to Proposers, including without limitation those dealing with the Disposition of Proposal Security. This Proposal may remain open for ninety (90) days after the day of Proposal opening. Proposer will sign the Contract and submit the Contract Security and other documents required by the Contract Documents within fifteen days after the date of County's Notice of Award.
3. In submitting this Proposal, Proposer represents, as more fully set forth in this Contract, that:

- (a) Proposer has examined copies of all the Contract Documents and of the following addenda: (If none, so state)

Date	Number
April 20, 2023	# 1

(receipt of all of which is hereby acknowledges) and also copies of the Notice to Proposers and the Instructions to Proposers;

- (b) Proposer has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as Proposer deems necessary;

(c) This Proposal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Proposer has not directly or indirectly induced or solicited any other Proposer to submit a false or sham Proposal; PROPOSER has not solicited or induced any person, firm or a corporation to refrain from Proposing; and Proposer has not sought by collusion to obtain for himself any advantage over any other Proposer or over the owner.

4. Proposer will complete the Work for the following prices(s): (Attach Proposal)
5. Proposer agrees to commence the Work within the number of calendar days or by the specific date indicated in the Contract. Proposer agrees that the Work will be completed within the number of Calendar days or by the specific date indicated in the contract.
6. The following documents are attached to and made a condition of this Proposal:
 - (a) Non-Collusive Bidding Certificate (Attachment "A")
 - (b) Acknowledgment by Bidder (Attachment "B")
 - (c) Vendor Responsibility Questionnaire (Attachment "C")
 - (d) Iranian Energy Divestment Certification (Attachment "D")
 - (e) Proposer Qualification Questionnaire (Attachment "E")
7. Communication concerning this Proposal shall be addressed to:

Donald H. Fletcher

10 Airline Drive, Suite 200

Albany, New York 12205

Phone: 518-218-1801

8. Terms used in this Proposal have the meanings assigned to them in the Contract and General Provisions.

COUNTY OF ALBANY

COST PROPOSAL FORM

PROPOSAL IDENTIFICATION:

Title: 2023 ALBANY COUNTY HAZARD MITIGATION PLAN
RFP Number: 2023-039

COMPANY: Barton & Loguidice, D.P.C.

ADDRESS: 10 Airline Drive, Suite 200

CITY, STATE, ZIP: Albany, New York 12205

TEL. NO.: 518-218-1801

FAX NO.: 518-218-1805

FEDERAL TAX ID NO.: 16-1020368

REPRESENTATIVE: Donald H. Fletcher

E-MAIL: dfletcher@bartonandloguidice.com

SIGNATURE AND TITLE:  Senior Vice President

DATE: April 18, 2023

ATTACHMENT "A"
NON-COLLUSIVE BIDDING CERTIFICATE PURSUANT TO
SECTION 103-D OF THE NEW YORK STATE GENERAL MUNICIPAL LAW

A. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organizations, under penalty of perjury, that to the best of knowledge and belief:

(1) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.

(2) Unless otherwise required by law, the prices which have been quoted in this bid have not knowingly been disclosed by the bidder and will not knowingly be disclosed by the bidder, directly or indirectly, prior to opening, to any bidder or to any competitor.

(3) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

A bid shall not be considered for award nor shall any award be made where (1), (2), and (3) above have not been complied with; provided, however, that in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons thereof. Where (1), (2), and (3) above have not been complied with, the bid shall not be considered for any award nor shall any award be made unless the head of the Purchasing Unit to the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customer of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of paragraph "A" above.

B. Any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, local law, and where such bid contains the certification referred to in paragraph "A" of this section, shall be deemed to have been authorized by the Board of Directors of the bidder, and such authorization shall be deemed to include the submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation



Signature Donald H. Fletcher

Senior Vice President

Title

Barton & Loguidice, D.P.C.

Company Name

April 18, 2023

Date

ATTACHMENT "B"
ACKNOWLEDGMENT BY PROPOSER

If Individual or Individuals:

STATE OF _____)
COUNTY OF _____) SS.:

On this _____ day of _____, 20____, before me personally appeared _____ to me known and known to me to be the same person(s) described in and who executed the within instrument, and he (or they severally) acknowledged to me that he (or they) executed the same.

Notary Public, State of _____

Qualified in _____

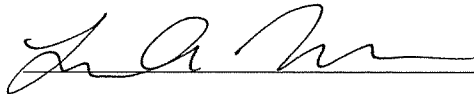
Commission Expires _____

If Corporation:

STATE OF New York)
COUNTY OF Albany) SS.:

On this 18th day of April, 2023, before me personally appeared Donald H. Fletcher to me known, who, being by me sworn, did say that he resides at (give address) 10 Airline Drive, Suite 200, Albany, New York 12205; that he is the (give title) Senior Vice President of the (name of corporation) Barton & Loguidice, D.P.C., the corporation described in and which executed the above instrument; that he knows the seal of the corporation, and that the seal affixed to the instrument is such corporate seal; that it was so affixed by order of the board of directors of the corporation, and that he signed his name thereto by like order.

LEIGH ANN MURPHY
NOTARY PUBLIC-STATE OF NEW YORK
No. 01MU6424730
Qualified in Rensselaer County
My Commission Expires 11-08-2025



Notary Public, State of New York

Qualified in Rensselaer County

Commission Expires 11/8/25

If Partnership:

STATE OF _____)
COUNTY OF _____) SS.:

On the _____ day of _____, 20____, before me personally came _____, to me known to be the individual who executed the foregoing, and who, being duly sworn, did depose and say that he / she is a partner of the firm of _____ and that he / she has the authority to sign the same, and acknowledged that he / she executed the same as the act and deed of said partnership.

Notary Public, State of _____

Qualified in _____

Commission Expires _____

ATTACHMENT "C"
ALBANY COUNTY
VENDOR RESPONSIBILITY QUESTIONNAIRE

1. VENDOR IS: Barton & Loguidice, D.P.C. ☒ PRIME CONTRACTOR		
2. VENDOR'S LEGAL BUSINESS NAME Barton & Loguidice, D.P.C.	3. IDENTIFICATION NUMBERS a) FEIN # 16-1020368 b) DUNS # 05-372-6253	
4. D/B/A – Doing Business As (if applicable) & COUNTY FIELD:	5. WEBSITE ADDRESS (if applicable) https://www.bartonandloguidice.com/	
6. ADDRESS OF PRIMARY PLACE OF BUSINESS/EXECUTIVE OFFICE 443 Electronics Parkway, Liverpool, New York 13088	7. TELEPHONE NUMBER 315-457-5200	8. FAX NUMBER 315-451-0052
9. ADDRESS OF PRIMARY PLACE OF BUSINESS/EXECUTIVE OFFICE <i>IN NEW YORK STATE, if different from above</i>	10. TELEPHONE NUMBER	11. FAX NUMBER
12. AUTHORIZED CONTACT FOR THIS QUESTIONNAIRE Name Donald H. Fletcher Title Senior Vice President Telephone Number 518-218-1801 Fax Number 518-218-1805 e-mail dfletcher@bartonandloguidice.com		
13. LIST ALL OF THE VENDOR'S PRINCIPAL OWNERS.		
a) NAME John F. Brusa, Jr.	TITLE President & CEO	b) NAME Richard A. Straut
c) NAME Matthew J. Schooley	TITLE Executive Vice President	d) NAME TITLE
A DETAILED EXPLANATION IS REQUIRED FOR EACH QUESTION ANSWERED WITH A "YES," AND MUST BE PROVIDED AS AN ATTACHMENT TO THE COMPLETED QUESTIONNAIRE. YOU MUST PROVIDE ADEQUATE DETAILS OR DOCUMENTS TO AID THE COUNTY IN MAKING A DETERMINATION OF VENDOR RESPONSIBILITY. PLEASE NUMBER EACH RESPONSE TO MATCH THE QUESTION NUMBER.		
14. DOES THE VENDOR USE, OR HAS IT USED IN THE PAST FIVE (5) YEARS, ANY OTHER BUSINESS NAME, FEIN, or D/B/A OTHER THAN THOSE LISTED IN ITEMS 2-4 ABOVE? List all other business name(s), Federal Employer Identification Number(s) or any D/B/A names and the dates that these names or numbers were/are in use. Explain the relationship to the vendor. ☐ Yes ☒ No		
15. ARE THERE ANY INDIVIDUALS NOW SERVING IN A MANAGERIAL OR CONSULTING CAPACITY TO THE VENDOR, INCLUDING PRICIPAL OWNERS AND OFFICERS, WHO NOW SERVE OR IN THE PAST ONE (1) YEARS HAVE SERVED AS:		
a) An elected or appointed public official or officer? <i>List each individual's name, business title, the name of the organization and position elected or appointed to, and dates of service</i>		☒ Yes ☐ No
Richard Straut, Mayor, Village of Voorheesville, July 2021 to Present		
b) An officer of any political party organization in Albany County, whether paid or unpaid? <i>List each individuals name, business title or consulting capacity and the official political position held with applicable service dates.</i>		☐ Yes ☒ No

16.	WITHIN THE PAST (5) YEARS, HAS THE VENDOR, ANY INDIVIDUALS SERVING IN MANAGERIAL OR CONSULTING CAPACITY, PRINCIPAL OWNERS, OFFICERS, MAJOR STOCKHOLDER(S) (10% OR MORE OF THE VOTING SHARES FOR PUBLICLY TRADED COMPANIES, 25% OR MORE OF THE SHARES FOR ALL OTHER COMPANIES), AFFILIATE OR ANY PERSON INVOLVED IN THE BIDDING OR CONTRACTING PROCESS:	
a)	1. been suspended, debarred or terminated by a local, state or federal authority in connection with a contract or contracting process; 2. been disqualified for cause as a bidder on any permit, license, concession franchise or lease; 3. entered into an agreement to a voluntary exclusion from bidding/contracting; 4. had a bid rejected on an Albany County contract for failure to comply with the MacBride Fair Employment Principles; 5. had a low bid rejected on a local, state or federal contract for failure to meet statutory affirmative action or M/WBE requirements on a previously held contract; 6. had status as a Women's Business Enterprise, Minority Business Enterprise or Disadvantaged Business Enterprise, de-certified, revoked or forfeited; 7. been subject to an administrative proceeding or civil action seeking specific performance or restitution in connection with any local, state or federal government contract; 8. been denied an award of a local, state or federal government contract, had a contract suspended or had a contract terminated for non-responsibility; or 9. had a local, state or federal government contract suspended or terminated for cause prior to the completion of the term of the contract.	☐ Yes ☒ No
b)	been indicted, convicted, received a judgment against them or a grant of immunity for any business-related conduct constituting a crime under local, state or federal law including but not limited to, fraud extortion, bribery, racketeering, price-fixing, bid collusion or any crime related to truthfulness and/or business conduct?	☐ Yes ☒ No
c)	been issued a citation, notice, violation order, or are pending an administrative hearing or proceeding or determination of violations of: 1. federal, state or local health laws, rules or regulations.	☐ Yes ☒ No
17.	IN THE PAST THREE (3) YEARS, HAS THE VENDOR OR ITS AFFILIATES ¹ HAD ANY CLAIMS, JUDGMENTS, INJUNCTIONS, LIENS, FINES OR PENALTIES SECURED BY ANY GOVERNMENTAL AGENCY? Indicate if this is applicable to the submitting vendor or affiliate. State whether the situation(s) was a claim, judgment, injunction, lien or other with an explanation. Provide the name(s) and address(es) of the agency, the amount of the original obligation and outstanding balance. If any of these items are open, unsatisfied, indicate the status of each item as "open" or "unsatisfied."	☐ Yes ☒ No
18.	DURING THE PAST THREE (3) YEARS, HAS THE VENDOR FAILED TO: a) file returns or pay any applicable federal, state or city taxes? <i>Identify the taxing jurisdiction, type of tax, liability year(s), and tax liability amount the vendor failed to file/pay and the current status of the liability.</i> b) file returns or pay New York State unemployment insurance? <i>Indicate the years the vendor failed to file/pay the insurance and the current status of the liability.</i> c) Property Tax <i>Indicate the years the vendor failed to file.</i>	☐ Yes ☒ No ☐ Yes ☒ No ☐ Yes ☒ No
19.	HAVE ANY BANKRUPTCY PROCEEDINGS BEEN INITIATED BY OR AGAINST THE VENDOR OR ITS AFFILIATES ¹ WITHIN THE PAST SEVEN (7) YEARS (WHETHER OR NOT CLOSED) OR IS ANY BANKRUPTCY PROCEEDING PENDING BY OR AGAINST THE VENDOR OR ITS AFFILIATES REGARDLESS OF THE DATE OF FILING? Indicate if this is applicable to the submitting vendor or affiliate. If it is an affiliate, include the affiliate's name and FEIN. Provide the court name, address and docket number. Indicate if the proceedings have been initiated, remain pending or have been closed. If closed, provide the date closed.	☐ Yes ☒ No
20.	IS THE VENDOR CURRENTLY INSOLVENT, OR DOES VENDOR CURRENTLY HAVE REASON TO BELIEVE THAT AN INVOLUNTARY BANKRUPTCY PROCEEDING MAY BE BROUGHT AGAINST IT? Provide financial information to support the vendor's current position, for example, Current Ratio, Debt Ratio, Age of Accounts Payable, Cash Flow and any documents that will provide the agency with an understanding of the vendor's situation.	☐ Yes ☒ No

21.	IN THE PAST FIVE (5) YEARS, HAS THE VENDOR OR ANY AFFILIATES ¹ :	☐ Yes	☒ No
	a) defaulted or been terminated on, or had its surety called upon to complete, any contract (public or private) awarded;		
Indicate if this is applicable to the submitting vendor or affiliate. Detail the situation(s) that gave rise to the negative action, any corrective action taken by the vendor and the name of the contracting agency.			

¹ "Affiliate" meaning: (a) any entity in which the vendor owns more than 50% of the voting stock; (b) any individual, entity or group of principal owners or officers who own more than 50% of the voting stock of the vendor; or (c) any entity whose voting stock is more than 50% owned by the same individual, entity or group described in clause (b). In addition, if a vendor owns less than 50% of the voting stock of another entity, but directs or has the right to direct such entity's daily operations, that entity will be an "affiliate" for purposes of this questionnaire.

Attachment "D"
Certification Pursuant to Section 103-g
Of the New York State
General Municipal Law

- A. By submission of this bid/proposal, each bidder/proposer and each person signing on behalf of any bidder/proposer certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of Section 165-a of the New York State Finance Law.
- B. A Bid/Proposal shall not be considered for award, nor shall any award be made where the condition set forth in Paragraph A above has not been complied with; provided, however, that in any case the bidder/proposer cannot make the foregoing certification set forth in Paragraph A above, the bidder/proposer shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. Where Paragraph A above cannot be complied with, the Purchasing Unit to the political subdivision, public department, agency or official thereof to which the bid/proposal is made, or his designee, may award a bid/proposal, on a case by case business under the following circumstances:
1. The investment activities in Iran were made before April 12, 2012, the investment activities in Iran have not been expanded or renewed after April 12, 2012, and the Bidder/Proposer has adopted, publicized and is implementing a formal plan to cease the investment activities in Iran and to refrain from engaging in any new investments in Iran; or
 2. The political subdivision makes a determination that the goods or services are necessary for the political subdivision to perform its functions and that, absent such an exemption, the political subdivision would be unable to obtain the goods or services for which the contract is offered. Such determination shall be made in writing and shall be a public document.



Signature Donald H. Fletcher

Senior Vice President

Title

April 18, 2023

Date

Barton & Loguidice, D.P.C.

Company Name



The Experience to **Listen**. The Power to **Solve**.

bartonandloguidice.com