

Work Plan / Task 4 – WAC Meetings

SUMMARY NOTES

NOVEMBER 9, 16, and 30 2022 7:00PM-7:45PM

VIRTUAL

MEETING CALLED BY	Sally Baker – PBI Project Management
ATTENDEES	See attached lists for three meetings held on 11/9, 11/16, and 11/30

Agenda topics

DISCUSSION	Review of Consultant Proposals	
	Three meetings were held to review and discuss the proposal received from LaBella Associates DPC. This was the single proposal received in response to the RFP. The attached rubric was used to evaluate the proposal.	
CONCLUSIONS	WAC meeting 11/9	
	<p>There were four topics of discussion in the 11/9 meeting that need addressing with the consultant as a part of the proposal review process.</p> <ul style="list-style-type: none"> <p>Budget and MWBE allocations - addressing the MWBE %.</p> <p>To meet the contract requirement – the consultant firm must include both MBE and WBE for a 15% allocation of \$24,957 for each allocation for a total amount of \$49,914 of the \$129,380 budget.</p> <p>Task 7 & 8 in La Bella proposal in relation to Task 12 - Characterization, and Task 14 - Refinement.</p> <p>The WAC would prefer to arrive at a Vision Statement over the course of the watershed management planning process instead of trying to accomplish this with a visioning meeting & exercise at the outset of the project. This point came up in one of our early WAC meetings which resulted in a more favored process by WAC members of allowing the vision to form as the project proceeded.</p> <p>Community Participation Plan (CCP) – This scope of work Task 6 is allocated to PBI to write the plan & conduct the community outreach.</p> <p>Team organization (page 42 / proposal. Will need to reflect all sub-consultant team members.</p> 	
ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE
Chair and PBI to place a call with the consultant to review.	PBI	11/10/22

DISCUSSION	Conference held with the consultant on 11/14 attended by LaBella Associates core management team identified in the proposal, WAC Chair, and PBI.	
CONCLUSIONS	All four topics of concern expressed by WAC members in the 11/9 meeting were addressed and discussed.	
ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE
LaBella Associates will re-present revised proposal, budget, and organizational chart by 11/17/22.		11/17/22

DISCUSSION	WAC meeting 11/16	
	General discussion regarding the LaBella 11/14 conference call.	
CONCLUSIONS	Revised proposal and budget are due from consultant by 11/29/ in time for WAC meeting scheduled for 11/30.	
ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE

DISCUSSION	WAC meeting 11/30	
	Review discussion of revised proposal, budget, and organizational team received from LaBella.	
CONCLUSIONS	The revised budget provided does not indicate the specific allocations and time per subcontractor allocations. One topic was raised in reference to the revised budget. WAC members asked for LaBella to provide a detailed budget, breaking down each staff members hours and fee.	
	Depending on the detailed budget being satisfactory to meet WAC expectations that the local law and zoning analyses for Task 11 will be conducted by the LaBella core team, WAC members were in agreement the revised proposal should be recommended to the Village of Philmont LWRP Grant oversight Committee to recommend to the Village of Philmont Board to proceed with the procurement of services.	
ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE
PBI to request a detailed budget showing time & cost allocations per sub-contract on LaBella team.		12/2/22

DISCUSSION	Follow up to WAC members by email communications:	
	Series of emails from 11/29 to 12/12 with consultant re revised budget, detailed budget received showing time/cost allocations, and allocations of time re MWBE as sub-contractors as a part of the LaBella team.	
CONCLUSIONS	All emails were reviewed by the Chair and WAC members. No other concerns or topics were presented by WAC members.	
ACTION ITEMS	PERSON RESPONSIBLE	DEADLINE
PBI to submit revised consultant proposal and revised budget to Village of Philmont LWPR oversight committee with WAC recommendation to proceed to procurement and contract discussions.		12/15/22



This report was prepared with funding provided by the New York State Department of State under Title 11 of the Environmental Protection Fund.

Agawamuck Creek Watershed Management – Proposals

SCORING CHART – to be used as an initial basis of assessment of proposals. Selection review will not be aggregating scores.

RFP QUESTIONS (pages 13-15)	SCORE 1-10	YOUR COMMENTS
<p>1. A full description of how the chosen firm will complete each item in the Scope of Work, as well as a schedule that lists all milestones for developing and executing project deliverables.</p>		
<p>2. A narrative explaining the firm’s qualifications for the project, and a summary of the firm’s recent experience in similar projects.</p>		
<p>3. Include reference links to access as examples of prior watershed management plan(s) the firm or consultant has completed or equivalent water quality and land use plans. LWRP watershed management plans are strongly preferred as examples.</p>		
<p>4. A description of each staff member or sub-consultant who will be involved with this project and a description of his or her role in the project. The proposer must provide a list of all person(s) who will be assigned work pursuant to this RFP (including subcontractors), as well as their resumes showing qualifications, educational background, training and experience.</p>		
<p>5. References: names and contact information of previous clients with a detailed description of the type of project completed. The proposer must submit three references from projects of similar scope and nature. Each reference should include a contact person, email address and phone number along with a statement describing the project.</p>		

RFP QUESTIONS (pages 13-15)	SCORE 1-10	YOUR COMMENTS
<p>6. A budget, including a cost for each task and a lump sum cost for the entire project. In addition, a timeline for the completion of the project by task should be included. A Cost proposal outline must accompany the submission. It should break down each task in the Scope of Work and show the ability to complete all project tasks within the allotted budget.</p>		
<p>7. A statement of the respondent's effort to comply with the State's Minority and Women Owned Business Enterprise (M/WBE) goals of 15% Minority-owned Business Enterprise ("MBE") participation and 15% Women-owned Business ("WBE") participation (based on the current availability of MBEs and WBEs).</p>		
<p>8. Prior experience drafting local laws, GEIS's and ordinances guiding land use and resource management.</p>		
<p>9. Familiarity with the Village of Philmont and participating towns of Claverack, Ghent, Hillsdale, and Austerlitz.</p>		
<p>10. Quality and completeness of the response: Quality, clarity, and demonstrated understanding of the project objectives.</p>		
<p>11. Qualifications and relevant experience with respect to the tasks to be performed.</p>		
<p>12. Cost-effectiveness of the proposal.</p>		

NYS Department of State - Office of Planning, Development and Community Infrastructure

Attachment F - Other (Volunteer Services by Group)

**This timelog showing daily time distribution, signed by the oversight individual MUST be submitted with Payment Request Forms.
For use when a group of volunteers are completing similar tasks at project meetings and events.**

Contract #:	C1001662 - LWRP					
Description of services performed (including specific project tasks):	WAC Meeting - Watershed Advisory Committee - Agawamuck Creek Watershed Management Plan					
Date (individual date only):	11/9/2022					
Explanation of how hourly rate was determined:	Volunteer services of the Watershed Advisory Committee including project oversight, public outreach, reviewing the watershed plan and project-related deliverables and participating in meetings - \$15 per hour					
Name and Title of Oversight Individual:	Sally Baker, Project Management, Philmont Beautification, Inc.					
Signature of Oversight Individual:	Sally Baker			Date: 11/9/22		
By signature, I certify that this time log represents an accurate representation of hours worked towards completion of tasks related to the contract listed above.						
TOTAL HOURS:				6	TOTAL:	\$ 90.00
Time In	Time Out	Name of Each Volunteer (including Organization, if applicable)	# of Hours	Volunteer Rate	Amount (includes local match)	
7pm	8.00pm	Greg Vogler, Deputy Supervisor Town of Austerlitz	1	\$ 15.00	\$ 15.00	
7pm	8.00pm	David Lewis, Chair of Conservation Council Town of Hillsdale	1	\$ 15.00	\$ 15.00	
7pm	8.00pm	Gretchen Stevens, member of Conservation Council Town of Hillsdale	1	\$ 15.00	\$ 15.00	
7pm	8.00pm	Cathy Zises, farmowner and resident - representing Town of Ghent	1	\$ 15.00	\$ 15.00	
7pm	8.00pm	Barbara Sagal, Chair, WAC	1	\$ 15.00	\$ 15.00	
7pm	8.00pm	Emily Vail, Hudson Watershed Alliance	1	\$ 15.00	\$ 15.00	
7pm	8.00pm	Irene Holak, DOS				
7pm	8.00pm	Sally Baker, PBI Project Management				

**All records must be maintained at the Recipient's official place of business for a period of 6 years following the last contract transaction, which is generally the final payment.

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Description of services performed (including specific project tasks):	WAC Meeting - Watershed Advisory Committee - Agawamuck Creek Watershed Management Plan					
Date (individual date only):	11/16/2022					
Explanation of how hourly rate was determined:	Volunteer services of the Watershed Advisory Committee including project oversight, public outreach, reviewing the watershed plan and project-related deliverables and participating in meetings - \$15 per hour					
Name and Title of Oversight Individual:	Sally Baker, Project Management, Philmont Beautification, Inc.					
Signature of Oversight Individual:	Sally Baker			Date: 11/16/22		
By signature, I certify that this time log represents an accurate representation of hours worked towards completion of tasks related to the contract listed above.						
TOTAL HOURS:				3.75	TOTAL:	\$ 56.25
Time In	Time Out	Name of Each Volunteer (including Organization, if applicable)	# of Hours	Volunteer Rate	Amount (includes local match)	
7pm	7.45pm	Greg Vogler, Deputy Supervisor Town of Austerlitz	0.75	\$ 15.00	\$ 11.25	
7pm	7.45pm	David Lewis, Chair of Conservation Council Town of Hillsdale	0.75	\$ 15.00	\$ 11.25	
7pm	7.45pm	Gretchen Stevens, member of Conservation Council Town of Hillsdale	0.75	\$ 15.00	\$ 11.25	
7pm	7.45pm	Cathy Zises, farmowner and resident - representing Town of Ghent	0.75	\$ 15.00	\$ 11.25	
7pm	7.45pm	Barbara Sagal, Chair, WAC	0.75	\$ 15.00	\$ 11.25	
7pm	7.45pm	Sally Baker, PBI Project Management				

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For use when a group of volunteers are completing similar tasks at project meetings and events.**

Contract #:	C1001662 - LWRP					
Description of services performed (including specific project tasks):	WAC Meeting - Watershed Advisory Committee - Agawamuck Creek Watershed Management Plan					
Date (individual date only):	11/30/2022					
Explanation of how hourly rate was determined:	Volunteer services of the Watershed Advisory Committee including project oversight, public outreach, reviewing the watershed plan and project-related deliverables and participating in meetings - \$15 per hour					
Name and Title of Oversight Individual:	Sally Baker, Project Management, Philmont Beautification, Inc.					
Signature of Oversight Individual:	Sally Baker			Date: 11/30/22		
By signature, I certify that this time log represents an accurate representation of hours worked towards completion of tasks related to the contract listed above.						
TOTAL HOURS:				3.75	TOTAL:	\$ 56.25
Time In	Time Out	Name of Each Volunteer (including Organization, if applicable)	# of Hours	Volunteer Rate	Amount (includes local match)	
7pm	7.45pm	Greg Vogler, Deputy Supervisor Town of Austerlitz	0.75	\$ 15.00	\$ 11.25	
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7pm	7.45pm	Barbara Sagal, Chair, WAC	0.75	\$ 15.00	\$ 11.25	
7pm	7.45pm	Sally Baker, PBI Project Management				

**All records must be maintained at the Recipient's official place of business for a period of 6 years following the last contract transaction, which is generally the final payment.

Prepared for:

Sally Baker

Project Management
Philmont Beautification, Inc.
c/o Jessica Thomas
Clerk/Treasurer
Village of Philmont
124 Main Street
Philmont, NY 12565

Submitted by:

Russell Urban-Mead, PG

Vice President
Senior Hydrogeologist
LaBella Associates
21 Fox Street
Poughkeepsie, NY 12601
(845) 486-1551



Proposal for Local Waterfront Revitalization Program
Watershed Management Planning
for the Agawamuck Creek Watershed

NOVEMBER 1, 2022

PROPOSAL NO. P2205286

Original Proposal.

November 1, 2022

RECEIVED 11/04/22 BY PBI ON THE DATE DUE, with 2x paper copies mailed to Village Office 11/4/22

Ms. Sally Baker
Project Management
Philmont Beautification, Inc.
c/o Jessica Thomas
Clerk/Treasurer
Village of Philmont
124 Main Street
Philmont, NY 12565

**RE: Proposal for Local Waterfront Revitalization Program
Watershed Management Planning for the Agawamuck Creek Watershed
Village of Philmont, Towns of Claverack, Ghent, Hillsdale and Austerlitz
Columbia County, New York
Proposal P2205286**

Dear Ms. Baker:

LaBella Associates is pleased to provide the attached Proposal in response to the Village of Philmont's Request for Proposals (RFP) to prepare the Agawamuck Creek Watershed Management Plan.

We have assembled a diverse team of engineers, hydrogeologists, ecologists, environmental scientists, and community planners to successfully complete the complex set of tasks outlined in the RFP. In addition to LaBella Associates, our team includes Behan Planning and Design and Amala Consulting, both New York State Certified Woman-Owned Business Enterprises (WBEs). This Team has successfully completed several watershed planning and engineering projects and are currently engaged in several Drinking Water Source Protection Program Plans throughout New York State.

Given the depth and breadth of this assignment, we remain flexible in our approach and can modify the budget and/or schedule to best meet the needs of Philmont and participating communities.

Thank you for considering us for this important project. We look forward to answering questions and discussing our qualifications. Please feel free to contact me at the email address and phone number listed below.

Respectfully submitted,

LaBella Associates



Russell Urban-Mead, PG

Vice President

Senior Hydrogeologist

LaBella Associates, DPC

Email: urban-mead@labellapc.com

Phone: (845) 486-1551

November 29, 2022

WAC REQUESTED CHANGES:

Ms. Sally Baker
Project Management
Philmont Beautification, Inc.
Village of Philmont
124 Main Street
Philmont, NY 12565

Increase of MBE to required 15%
Updated Organization Chart
Amended Budget showing MBE team consultant
No need for Kick Off meeting with DOS - this has already taken place by Village in 2022

**RE: Revised Budget and Consulting Team
Watershed Management Planning for the Agawamuck Creek Watershed
Village of Philmont, Towns of Claverack, Ghent, Hillsdale and Austerlitz
Columbia County, New York
Proposal P2205286**

Dear Ms. Baker:

LaBella Associates has added Foit-Albert (Certified Minority Business Enterprise) to our team and revised the project budget accordingly. Foit-Albert's qualifications along with the revised project budget are attached.

Please let us know if you require any additional information to assist in your final selection.

Respectfully submitted,

LaBella Associates



Russell Urban-Mead, PG

Vice President
Senior Hydrogeologist
LaBella Associates, DPC
Email: rurban-mead@labellapc.com
Phone: (845) 486-1551

TABLE OF CONTENTS

Cover
Cover Letter
Table of Contents

SECTION 1

Scope of Work*

SECTION 2

Schedule*

SECTION 3

Qualifications*

SECTION 4

Staff*

SECTION 5

References*

SECTION 6

Budget*

SECTION 7

MWBE Partners*

Back Cover

*Indicates a Proposal Compliance Document. All other pages are considered additional and count towards the 20-page limit.



SECTION 1
SCOPE OF WORK

SCOPE OF WORK

Approach & Scope of Work

The LaBella Team has reviewed the RFP and will complete all tasks requested in the Scope of Work for the LWRP Agawamuck Creek Watershed Management Plan. Three additions recommended by LaBella are summarized here:

Additional Task: We recommend one additional task not included in the RFP, Task 7 Kick-Off Meeting. Based on our past experience with NYS DOS-administered projects, an initial kick-off meeting between the consultant, the Watershed Advisory Committee, and Department is usually held at project initiation.

Public Outreach Approach: While the final format for each public meeting will be confirmed with the Watershed Advisory Committee and the Department, the LaBella Team proposes that in-person workshops be complemented by additional online outreach campaigns, under Tasks 13, 17, and 22.

All three in-person outreach meetings will be supplemented by two-week online campaigns providing additional opportunities for the public and stakeholders to review draft material and recommendations and provide input.

For these outreach events, the LaBella Team will prepare flyers, press releases, online content, and use additional outreach techniques to inform the public and stakeholders about the availability of draft materials and upcoming public meetings. Key stakeholders will be directly contacted and invited to the



outreach meetings and online campaigns. All workshops will be held at a convenient location within the watershed.

All findings and recommendations for public meetings will be captured in a visually accessible format using **ArcGIS Online Story Maps** to supplement the narrative and static maps, further enhancing the public outreach process and the ability to accept comments outside of the in-person meetings.

Committee Meetings: The LaBella Team has identified that up to 19 Waterfront Advisory Committee meetings are warranted to complete the Scope of Work. The meetings are included in our budget and will be a combination of in-person and virtual. Where we can combine tasks and introduce other strategies to increase overall efficiencies, the total number of meetings may be reduced. Strategies to increase efficiencies would be discussed at the kick-off meeting and throughout the course of the project. Each meeting is identified here within the sequence of the full Scope of Services.

Scope of Work (Contract No. C1001662)

The following is the full Scope of Work incorporating recommended Task 7 (see previous note), and estimated timelines for each task, set of deliverables, and Waterfront Advisory Committee Meetings:

Project Schedule: Completing Tasks 7 through 23 is estimated to require 20 months, beginning December 2022, and ending July 2024. **Task 24: Watershed Monitoring Pilot** will run from August 2024 to August 2025. The estimated timeline for each Task is indicated in the Scope of Services that follows and in Section 2 of this proposal (*Schedule*)

Task 7: Kick-Off Meeting and Public Outreach Plan (Dec. 2022)

The LaBella Team proposes conducting an initial kick-off meeting with the Philmont Beautifications Inc. (PBI) Project Management, the Watershed Advisory Committee, and representatives of the Department to review

SCOPE OF WORK

and confirm the project scope, schedule, roles and responsibilities, identify new information needs, next steps, and documentation needs. This meeting will also involve preliminary discussions towards the initial vision, goals, and objectives.

In addition, if PBI Project Management and the Watershed Advisory Committee have not already prepared a Public Outreach Plan, the LaBella Team can provide assistance.

Task 7 Deliverables/Products

- Attend Kick-Off Meeting (Meeting #1) and prepare draft and revised summary meeting notes, including preliminary vision, goals, and objectives recommendations submitted to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval.
- Prepare a draft and revised Public Outreach Plan submitted to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval.

Task 8: Initial Vision and Watershed Goals (Jan. 2023)

The LaBella Team will attend Meeting #2 and lead a vision, goals, and objectives session with PBI Project Management and the Watershed Advisory Committee. The initial vision statement will express an idea of what the watershed will become and will clearly describe what the participating communities hope to accomplish. The vision will set the tone of the watershed plan

and will be used throughout the planning process. The initial set of watershed goals and objectives will be created to provide a realistic framework for achieving the vision as well as help focus limited resources. The vision and goals session will be guided by the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, Chapter 3.

The initial vision, goals, and objectives will be reviewed and revised as necessary during subsequent meetings as a more thorough understanding of the watershed is developed.

Task 8 Deliverables/Products

- Conduct Meeting #2 – Vision, Goals, and Objectives Session and prepare draft and revised summary meeting notes submitted to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval.
- Draft initial vision statement, goals and objectives submitted to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval.

Task 9: Description and Assessment of the Waterbodies and Watershed Resources (Dec. 2022 – Feb. 2023)

LaBella's Team of engineers, hydrogeologists, environmental scientists, and planners will conduct an inventory of involved waterbodies and watershed data based on existing (e.g., DEC Waterbody Inventory and Priority Waterbody List, DEC Water Quality Classifications,

and state, county, regional or local planning and monitoring programs), and new information collected specifically for this project, as necessary. The scale for which the primary unit of analysis, presentation and recommendations for protection and restoration shall be at the subwatershed level. Based on the inventory, the LaBella Team will prepare a description and assessment that:

- Conducts a non-comprehensive literature review that entails assessing and exploring existing plans, reports, local zoning and applicable land use laws, and other relevant studies on the watershed.
- Delineates the watershed and its constituent subwatersheds determined by an analysis of topography, existing drainage infrastructure, surface hydrology, field observation, and other factors as appropriate.
- Identifies and describes the geographic setting and features of the watershed, including topography, geology, hydrography, floodplains, soils, areas of erosion, and precipitation.
- Identifies, describes, and maps infrastructure (e.g., roads and bridges; stormwater infrastructure including outfalls; dams, and other impoundments or flow constriction structures).
- Identifies and describes well heads and public water supplies.
- Identifies and describes groundwater recharge areas contributing to aquifer replenishment, stream base flow, and wetland hydrology.

SCOPE OF WORK



A sample watershed map, demonstrating residential buildout potential, environmental constraints, and existing impervious surfaces within the Lake George watershed

- Based on available data, describes a projected build-out for involved communities based on available current land use plans and regulations.
- Estimates impervious cover for each subwatershed.
- Estimates runoff and pollutant loadings for each subwatershed under current conditions, and anticipated pollutant loads resulting from new or expanded uses in the watershed, using HEC-RAS Hydrologic Modeling System and the EPA-SWMM (SWMM5) for hydrologic and hydraulic monitoring and pollutant transport.
- Prioritization of subwatersheds based on data analysis.

The LaBella Team will work with PBI Project Management and the Waterfront Advisory Committee to identify potential stakeholders and local and county officials with whom coordination will be necessary to obtain the required information.

Due to the size and complexity of this task and resulting product, the LaBella Team proposes preparing the draft report in manageable sections for easier initial review and editing. Committee Meetings will be held with PBI Project Management and the Waterfront Advisory Committee to review and revise the Waterbody and Watershed Inventory Report.

Upon completion of initial section reviews, the LaBella Team will submit a complete draft Waterbody and Watershed Inventory Report to PBI Project Management, the Watershed Advisory Committee and Department for review and

approval and shall incorporate all comments in the final watershed characterization.

Task 9 Deliverables/Products

- Preparation of the draft Waterbody and Watershed Inventory Report with maps, tables, and graphics. Initial drafts will be provided in sections for easier review.
- Conduct Committee Meetings #3 and #4 to review draft sections of the report. Prepare draft and revised summary meeting notes.
- Spatial data will be submitted in ArcGIS format, or similar product acceptable to the Department.
- The draft report will include a new, updated map of the Agawamuck Creek Watershed.

Task 10: Conduct Site-Specific Biological Survey Study and Literature Review (Completed)

This task has been completed by the Hawthorne Valley Farmscape Ecology Program. The Report will be integrated into the final Watershed Management Plan as an appendix with relevant findings integrated into the characterization chapter of the Plan.

Task 11: Description and Assessment of the Ability of Local Laws and Programs to Implement Best Management Practices to Protect Water Quality (Feb. – March 2023)

For each involved community, the LaBella Team will identify and assess the ability and effectiveness of their local

- Describes demographics, and historic, current, and projected population density.
- Describes historic, current, and projected land uses and land cover.
- Describes zoning and current land use practices.
- Identifies water quality classifications for all segments of the waterbody.
- Identifies and describes impairments to water quality and living resources
- Identifies point sources and hot spots (i.e., NPDES Phase I & II permittees, septic and underground storage tanks, landfills and superfund sites).
- Describes living resources (e.g., fish, macroinvertebrates), and overall watershed habitat, drawing heavily from the Task 10 Biological Survey Study.
- Describes key water and habitat resources warranting special protection or restoration.

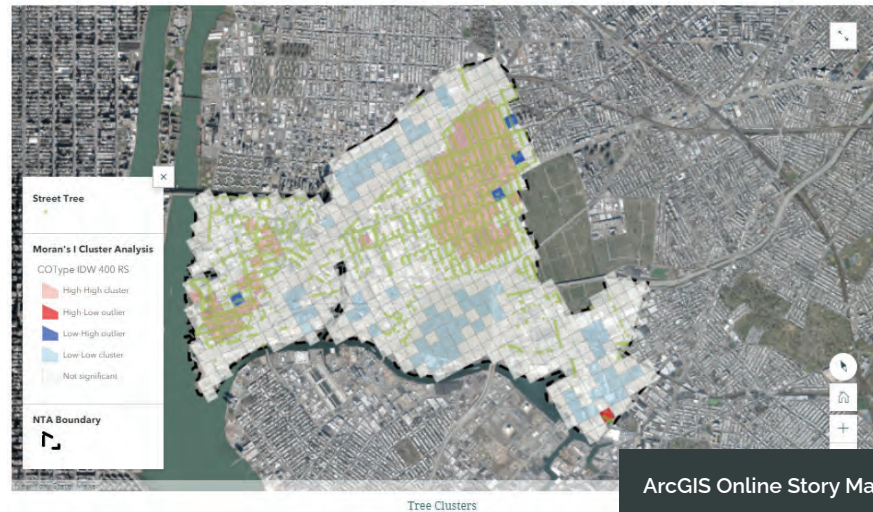
SCOPE OF WORK

laws, programs, and policies collected in Task 9, to implement best management practices to protect surface and groundwater quality and habitat from point and nonpoint source pollution, including those related to new and existing development, road and bridges, onsite wastewater treatment systems, marinas, forestry and agriculture, habitat and hydrologic modification (such as channelization of streams), and riparian area management. Additional background information will be obtained as necessary during this task to supplement previous data collection efforts.

The LaBella Team will work with PBI Project Management and the Watershed Advisory Committee to identify all county and local municipality contacts, and other relevant stakeholders that will be engaged during this assessment.

Per the RFP, this assessment will be primarily based on the nonpoint assessment tool developed by the Department to identify gaps in local programs and practices, and follow the methodology explained in Section 2, *Nonpoint Assessment and Gap Analysis of Protecting Water Resources through Local Controls and Practices: An Assessment Manual for New York State Municipalities*. As necessary, the LaBella Team may supplement the assessments with one or more equivalent tools in coordination with the DOS Department.

The assessment will identify and document any gaps in data or information. Specifically, this assessment will identify the strengths and gaps in the ability of each community to effectively manage pollution,



as related to local regulations, polices, programs, routine operation and maintenance practices, training, and outreach programs. This assessment will be supplemented with **ArcGIS Online** to provide one or more interactive maps visually depicting the results of this analysis.

The local laws and programs assessment, at a minimum, will include the following:

- A description of county, and local agencies as they affect nonpoint source pollution, including stormwater management, habitat protection, and restoration in the watershed. A narrative of federal and state roles will be provided by the Department for incorporation into this task. The LaBella Team will identify and describe the roles of county and local agencies.
- A description and comprehensive assessment of the ability of local land use plans, regulations, (including zoning, site plan review, subdivision regulations, stormwater management, and wetlands, watercourse

and flooding regulations), programs and practices, (including road de-icing practices, basin maintenance schedules, salt storage placement and volumes, ditch maintenance, etc.) to implement best management practices to control point and nonpoint source pollution and protect habitat, including an analysis of their strengths and weaknesses as they relate to the implementation of management practices.

- Completed municipal assessment forms (using Appendix F, of *Protecting Water Resources through Local Controls and Practices: An Assessment Manual for New York State Municipalities*).
- A listing of municipal representatives who were actively engaged by the LaBella Team in completing the assessment forms.

Similar to Task 9, this assessment report is a complex undertaking involving several communities and data sets. To facilitate a coordinated development and review process, the LaBella Team will prepare the report in

SCOPE OF WORK

sections for review by PBI Project Management and the Watershed Advisory Committee. Committee meetings will be conducted to review and revise the draft sections prior to assembling the full draft report.

Upon completion of the draft section reviews, the LaBella Team will submit the complete draft Assessment of the Ability of Local Laws, Programs and Practices to Implement Best Management Practices to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval and shall incorporate all comments in the final assessment report.

Task 11 Deliverables/Products

- Preparation of the Description and Assessment of the Ability of Local Laws and Programs to Implement Best Management Practices to Protect Water Quality, complete with maps and ArcGIS Online data. Initial drafts will be provided in sections for easier review.
- Conduct Committee Meetings #5 and #6 to review draft sections of the report. Prepare draft and revised summary meeting notes.

Task 12: Draft Watershed Characterization Report (March – April 2023)

The LaBella Team will prepare and submit to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval a single Watershed Characterization Report including the written description and assessment of the waterbody and watershed as well as assessment

of local laws programs and practices to control nonpoint source pollution and habitat degradation. The report will include current management strategies in the subwatersheds, as deemed appropriate.

The characterization will be supported by maps and other data as appropriate, including, but not limited to **ArcGIS Online** interactive maps, describing the physical, biological, and ecological condition of lakes, rivers, streams, wetlands, riparian areas, and upland portions of the watershed. Chapter 4 of the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, will be referenced during this Task.

An initial draft and revised draft will be prepared and reviewed with PBI Project Management and the Watershed Advisory Committee over the course of two Committee Meetings.

Task 12 Deliverables/Products

- Draft and Revised Draft Watershed Characterization Report.
- Committee Meeting #7 to review the draft and revised drafts. Prepare draft and revised summary meeting notes.

Task 13: First Public Participation/Outreach Meeting (May 2023)

In consultation with PBI Project Management, the Watershed Advisory Committee and the Department, the LaBella Team will conduct the first public information meeting during the watershed and waterbody characterization phase of the project. The exact timing of the workshop will be determined in consultation with PBI Project Management and the Watershed Advisory Committee. The purpose of the workshop will be to solicit public input related to defining



SCOPE OF WORK

and characterizing the nonpoint source pollution issues in waterbodies, refine the watershed vision, goals and objectives, and review and discuss water quality and watershed protection and restoration issues.

While the workshop format will be confirmed with PBI Project Management and the Watershed Advisory Committee, the LaBella Team proposes an interactive format to educated participants on the existing conditions of the watershed gathered in Task 9, contribute to the collective understanding of the watershed and potential threats, and refinement of the Initial Vision and Goals. The in-person workshop will be supplemented by an online campaign that will provide opportunities for interested members of the public to learn about the watershed and contribute to the vision and goal setting exercise.

To generate interest in the overall project, the first and future workshops, the LaBella Team will prepare flyers, press releases, online content, and other outreach techniques. The workshop will be held at a convenient location within the watershed.

Task 13 Deliverables/Products

- Conduct Workshop #1.
- Prepare and distribute workshop outreach information.
- Prepare online interactive material supplementing the in-person workshop.
- Prepare a written summary of public input obtained during the workshop for PBI Project Management, Watershed Advisory Committee, and Department review and comment.

- Conduct Committee Meeting #8. Prepare draft and revised summary meeting notes.

Task 14: Refinement of Vision and Watershed Goals (May – June 2023)

Based on information gathered from the Waterfront Characterization phase and public/stakeholder comments obtained from the public workshop and associated outreach, the LaBella Team will work with PBI Project Management and the Waterfront Advisory Committee to refine the initial Vision Statement and Watershed Goals and Objectives, as needed. Any changes shall be submitted to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval.

Task 14 Deliverables/Products

- Revised Vision and Watershed Goals and Objectives.
- Conduct Committee Meeting #9. Prepare draft and revised summary meeting notes.

Task 15: Final Watershed Characterization (June – July 2023)

The LaBella Team will revise the Draft Watershed Characterization Report, incorporating the Description and Assessment of the Waterbody and Watershed Resources, the Description and Assessment of Local Laws, Programs and Practices, and the statement of Vision and Watershed Goals into one cohesive document that discusses the relationships among these components. The Report will include all associated

maps, tables, and graphics. Two drafts will be prepared and submitted to PBI Project Management, the Watershed Advisory Committee, and the Department for review and approval. The Final Report will incorporate PBI Project Management, Waterfront Advisory, and Department comments.

Task 15 Deliverables/Products

- Final Watershed Characterization Report, draft, and revised draft.
- Conduct Committee Meeting #10. Prepare draft and revised summary meeting notes.

Task 16: Watershed Management Recommendations to Achieve Goals and Objectives (July – Sept. 2023)

A. Identify and Describe Management Strategies and Recommendations

Based on the characterization of the waterbody and its watershed tasks, the LaBella Team, in close coordination with PBI Project Management and the Watershed Advisory Committee, will identify management strategies and recommendations to protect and restore the resources of the waterbody and its watershed. Chapters 5 & 6 of the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning* will be used as a reference during this Task. The recommendations will be organized by resource and geography.

SCOPE OF WORK

Based on results of the preceding tasks, potential recommended **Regulatory and Programmatic Actions** may include, but would not be limited to the following:

- Land use management, such as: comprehensive plans/updates, zoning, site plan review, erosion, and sediment control regulations.
- Improved stormwater management practices, including Low Impact Development and Green Infrastructure, and recommendations for each of the subwatersheds, as appropriate.
- Onsite wastewater treatment system management.
- Wetlands and watercourse protection (including buffer area establishment).
- Groundwater and aquifer protection, floodplain management.
- Open space protection and land conservation and protection and forest management.
- Training, education, and stewardship programs.
- Identification of related monitoring and research, gaps, and appropriate programs (i.e., water quality monitoring program) needs to advance watershed management goals and management strategies.

Restoration and Protection Projects may include, but would not be limited to the following:

- Watershed-wide and site-specific actions to restore and protect water quality and living resources/habitat.

- Stormwater remediation measures to reduce pollutant loadings in each subwatershed (e.g., wetland creation, vegetative treatment systems, retrofitting, reduction of impervious surfaces).
- Identifying potential sites for fish and wildlife habitat restoration including areas within streams, stream corridors, freshwater and tidal wetlands, and ponds for potential improvement to ecological integrity (e.g., habitat structure, dynamics, connectivity, and quality).
- Structural activities such as stream restoration or stormwater treatment system retrofits.
- Establishing education programs to build awareness and stewardship. This could involve activities such as storm drain stenciling that are implemented on-the-ground and are identified during field assessments.

The LaBella Team will submit the draft management strategies and recommendations to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval and shall incorporate all comments in the final management strategies. This draft management strategies and recommendations will be supplemented with **ArcGIS Online** to provide one or more interactive maps visually depicting the results of this task.

Task 16A Deliverables/Products

- Draft and revised draft Report identifying and describing specific management strategies and

recommendations for water quality and habitat protection and restoration.

- Committee Meeting #11. Prepare draft and revised summary meeting notes.

B. Prioritize Recommended Projects and Actions and Key to Map(s)

The LaBella Team will develop and submit to PBI Project Management, the Watershed Advisory Committee and the Department, for review, a prioritized list of recommendations, with supporting justification, linked to maps and associated photographs showing project locations and conditions. Chapter 5 of the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, will be referenced. The prioritization process will include, but will not be limited to the following:

- Evaluating subwatersheds according to impairments and/or threats to water quality and habitat.
- Identifying priorities within subwatersheds for focused nonpoint source pollution management action.
- Ranking projects and actions within each subwatershed according to anticipated reduction in nonpoint source pollution or protection of unimpaired resources. Potential ranking factors may include:
 - Watershed goals, subwatershed priority, and vulnerability.
 - Pollutant reduction/protection afforded, water resources and/or habitat value.

SCOPE OF WORK

- Cost, permitting, and maintenance.
- Landowner cooperation, public access, and visibility.
- Partner involvement and innovation.

The prioritized recommendations will be visually depicted using **ArcGIS Online** to supplement the written report.

Task 16B Deliverables/Products

- Draft and revised draft Report of prioritized recommendations, keyed to maps and photographs.
- Committee Meeting #12. Prepare draft and revised summary meeting notes.
- Full Draft Watershed Management Recommendations and Prioritization Report.

Task 17: Second Public Participation/Outreach Meeting (Oct. 2023)

In consultation with PBI Project Management, the Watershed Advisory Committee and Department, the LaBella Team will conduct the second public outreach/participation meeting to allow for public review and comment on the Watershed Management Recommendations and Prioritization.

The in-person workshop will be supplemented by an online campaign providing opportunities for interested members of the public to review the Watershed Management Recommendations and Prioritization and provide input.

The LaBella Team will prepare flyers, press releases, online content, and other outreach techniques. The workshop will be held at a convenient location within the watershed.

The LaBella Team will prepare a written summary of public and stakeholder input obtained at this meeting for PBI Project Management, Waterfront Advisory Committee, and Department review and comment. Public input will be incorporated into the Final Watershed Management Plan to the satisfaction of PBI Project Management, Waterfront Advisory Committee, and Department prior to finalization and/or publication of the plan.

Task 17 Deliverables/Products

- Conduct Public Workshop #2 and provide all handouts and presentations.
- Prepare and distribute workshop outreach information.
- Prepare online interactive material supplementing the in-person workshop.
- Prepare a written summary of public input obtained during the workshop for PBI Project Management, Watershed Advisory Committee, Department review and comment.

Task 18: Watershed Management Recommendations Report (Nov. – Dec. 2023)

The LaBella Team will prepare and submit the draft and final Watershed Management Recommendations Report to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval. The draft will incorporate management recommendations, the prioritization, and potential recommendations into one cohesive chapter. The final report will incorporate all comments received.

Task 18 Deliverables/Products

- Draft and Final Watershed Management Recommendations Report.
- Conduct Committee Meeting #12. Prepare draft and revised summary meeting notes.

Task 19: Implementation Strategy and Schedule (Jan. – Feb. 2024)

The LaBella Team will prepare a strategy and schedule to implement the identified watershed management practices and approaches, including the specific projects and other actions that were identified through analysis and public participation. Chapter 5 of the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, will be referenced.

The Implementation Strategy will:

- Clearly articulate priorities, measurable objectives, and steps to implement the identified protection and restoration strategies.
- Include cost estimates as feasible and applicable based on the project, potential funding sources, and a phasing schedule noting lead/involved organizations for each action.
- Include a schedule for periodically updating the plan.
- Articulate the ongoing role of the Watershed Advisory Committee.

The Implementation Strategy will include a matrix of prioritized projects and other actions for advancing the implementation of the goals and objectives of

SCOPE OF WORK

the watershed plan, including steps needed to implement the specific projects (e.g., feasibility, design, permitting, construction), timeframe for implementation; short term (e.g., immediate to 1 year), medium term (e.g., greater than 1 year, up to 5 years), or long-term (e.g., greater than 5 years), cost estimates (as feasible and applicable based on the project), potential funding sources, regulatory approvals needed, and likely project sponsors (agency or organization lead) and project partners. The LaBella Team will submit the draft Implementation Strategy to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval and shall incorporate all comments in the final Implementation Strategy.

The projects and recommendations will be visually depicted using **ArcGIS Online** to supplement the written report.

Task 19 Deliverables/Products

- Draft and Final Implementation Strategy and Schedule Report.
- Committee Meetings #13 and #14. Prepare draft and revised summary meeting notes.

Task 20: Tracking and Monitoring (March – April 2023)

The LaBella Team will prepare a Plan identifying strategies for tracking implementation of projects and other actions, and monitoring water and related resources to measure success in achieving project goals and objectives. The tracking and monitoring plan will identify methods to track implementation of projects and other actions

and gather baseline data on watershed conditions toward assessing the effectiveness of implementation over time. Chapter 6 of the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, will be referenced.

The Plan will also include a method for tracking the implementation of projects and actions, and periodic monitoring of water and related resources. In addition, and based on coordination, the plan may include identification of potential parties to conduct monitoring activities, potential funding sources, and methods of data management. The LaBella Team will submit the draft tracking and monitoring plan to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval, and shall incorporate all comments in the final monitoring and tracking plan.

Task 20 Deliverables/Products

- Draft and Final Monitoring and Tracking Plan.
- Committee Meeting #15. Prepare draft and revised summary meeting notes

Task 21: Draft Watershed Management Plan (April – May 2024)

In collaboration with PBI Project Management, the Watershed Advisory Committee and the Department, the LaBella Team will prepare the complete Draft Watershed Management Plan. The Draft Plan will incorporate the results from all preceding tasks, referencing all sources of information and identifying any information gaps and issues

requiring further study. The watershed management plan will contain six main sections: Executive Summary, Introduction, Characterization, Watershed Management Recommendations, Implementation Strategy, Monitoring and Tracking.

Executive Summary - The executive summary will provide a concise reference for the entire document. It will present key points of the watershed plan, provide a brief overview of the purpose of the watershed plan, who was involved in the planning process, and highlight the vision, main findings, and list watershed goals, and recommendations.

Introduction - The introduction will describe the watershed plan (including where the watershed is located, general facts about the watershed and the communities within its boundaries, and general demographics) and provide a basic understanding of the planning process (including partners involved and how they contributed, methodologies used to prepare the plan) to give the reader an understanding of the watershed and why watershed planning is important. The introduction will also contain the watershed vision - what it means to the participating communities and how it will shape the future of the watershed.

Characterization - The characterization will provide an inventory and analysis describing the current state of the watershed and assessment of programs and practices in place for controlling pollution. This section will delineate the watershed and subwatershed boundaries and describe its waterbodies, describe physical and biological characteristics,

SCOPE OF WORK

including how the watershed functions, explain existing land use and land cover patterns, and identify trends within the watershed. The characterization will include an identification of sensitive resource areas, water quality issues, pollutants, and corresponding activities impacting water resources. This section will also assess the programs and practices in place for controlling pollution, describe the assessment process used and discuss the gaps found during the assessment. The characterization is the basis for the development of watershed management recommendations.

Watershed Management Recommendations - This section will explain how water quality will be protected and restored within the watershed through a series of projects and actions developed to correct existing impairments and prevent future impacts to water quality. The LaBella Team will explain how these specific recommendations were identified and provide a discussion of the assessments conducted in support of the recommendations. All recommendations will be supported by data, and where appropriate, extensive technical information will be placed into an appendix or supplemental report.

Implementation Strategy - This section will set the stage for implementation by identifying the actions needed to address the problems and opportunities in the watershed. It will set out an implementation schedule, lay out priorities, establish realistic expectations for partner involvement, and outline budget needs.

Monitoring and Tracking

- This section will outline a proposed long-term monitoring and tracking plan, describe indicators and performance criteria for monitoring restoration projects, establish milestones and tracking mechanisms to evaluate progress over time, and propose mechanisms for reporting progress and updating the watershed plan. Creating a plan for observing changes in water quality will help involved communities understand how well certain practices work and how to adapt the plan to continue to provide water quality improvement. Chapter 5 of the Department's guidebook: *Watershed Plans; Protecting and Restoring Water Quality on Watershed Planning*, will be referenced.

The LaBella Team will submit the Draft Watershed Management Plan to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval.

Applicable results will be visually depicted using ArcGIS Online to supplement the written report.

Task 21 Deliverables/Products

- Draft Watershed Management Plan.
- Committee Meetings #16 and #17. Prepare draft and revised summary meeting notes

Task 22: Third Public Participation/Outreach Meeting (June 2024)

In consultation with PBI Project Management, the Watershed Advisory Committee and the Department, the LaBella Team will conduct the third public workshop prior to preparation of the final Watershed Management

Plan to allow for public review and comment on the draft document. The LaBella Team will prepare and provide a written summary of public input to PBI Project Management, the Watershed Advisory Committee and the Department for review and comment. Applicable public input shall be incorporated into the Final Watershed Management Plan to the satisfaction of PBI Project Management, the Watershed Advisory Committee, and Department prior to finalization and/or publication of the plan.

The in-person workshop will be supplemented by an online campaign providing opportunities for interested members of the public to review the Draft Watershed Management Plan and provide input.

The LaBella Team will prepare flyers, press releases, online content, and other outreach techniques. The workshop will be held at a convenient location within the watershed.

Task 22 Deliverables/Products

- Conduct Public Workshop #3 and provide all handouts and presentations.
- Prepare and distribute workshop outreach information.
- Prepare online interactive material supplementing the in-person workshop.
- Prepare a written summary of public input obtained during the workshop for PBI Project Management, Watershed Advisory Committee, and Department review and comment.

SCOPE OF WORK

Task 23: Final Watershed Management Plan

(June – July 2024)

The LaBella Team will prepare the Final Watershed Management Plan incorporating and reflecting comments received from the Department, the Watershed Advisory Committee, and the public. Comments and revisions suggested by Department shall be incorporated into the plan to the satisfaction of the Department prior to finalization and/or publication of the document.

Task 23 Deliverables/Products

- Final Watershed Management Plan.
- Electronic data for all Geographic Information System- based mapping products and associated spatial data submitted in either ArcGIS format, or similar product acceptable to the Department, in compliance with the requirements for Contract GIS Products.
- Committee Meeting #18. Prepare draft and revised summary meeting notes

Task 24: Watershed Monitoring Protocol and Pilot

(Aug. 2024 – Aug. 2025)

The LaBella Team will prepare a Watershed Monitoring Protocol to capture water quality data and sampling methodology using guidance from the New York State Department of Environmental Conservation and the U.S. Environmental Protection Agency, where appropriate. The monitoring protocol will be implemented for up to one year as a pilot in order to incorporate testing in the field for practicality, identify needed improvement to the protocol, and identify missing components.

Revisions will be made based on the field testing and a final Watershed Monitoring Protocol will be drafted. The LaBella Team will submit the draft Watershed Monitoring Protocol to PBI Project Management, the Watershed Advisory Committee and the Department for review and approval, and shall incorporate the Department's comments and field pilot findings into the final

Watershed Monitoring Protocol. This protocol can be used as a standalone document and will be incorporated into the Agawamuck Creek Watershed Plan.

Task 24 Deliverables/Products:

- Draft Watershed Monitoring Protocol.
- Final Watershed Monitoring Protocol incorporating the Department's comments and field pilot findings.
- Committee Meeting #19.




SECTION 2
SCHEDULE

SCHEDULE

LWRP Watershed Management Planning for the Agawamuck Creek Watershed

	2022	2023												2024					2025				
TASKS AS OUTLINED IN RFP	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug '24—Aug '25		
7 Kickoff Meeting																							
8 Initial Vision and Waterfront Goals																							
9 Description and Assessment of the Waterbodies and Watershed Resources																							
10 Conduct Site-Specific Biological Study and Literature Review (Completed)																							
11 Description and Assessment of the Ability of Local Laws and Programs to Implement Best Management Practices to Protect Water Quality																							
12 Draft Watershed Characterization Report																							
13 First Public Participation/ Outreach Meeting																							
14 Refinement of Vision and Watershed Goals																							
15 Final Watershed Characterization																							
16 Watershed Management Recommendations to Achieve Goals and Objectives																							
17 Second Public Participation/ Outreach Meeting																							
18 Watershed Management Recommendation Report																							
19 Implementation Strategy and Schedule																							
20 Tracking and Monitoring																							
21 Draft Watershed Management Plan																							
22 Third Public Participation/ Outreach Meeting																							
23 Final Watershed Management Plan																							
24 Watershed Monitoring Protocol and Pilot																							

KEY

Public Meeting 



SECTION 3

QUALIFICATIONS

ABOUT LABELLA

At LaBella Associates, our job is to create – structures, plans, ideas, results. As a nationally recognized Design Professional Corporation, that's a given, right?

But here's what really drives us: creating partnership between our team and our clients. So much so that we become one team, unified in the unrelenting pursuit of exceptional performance on each and every project. Reliability. Accountability. Collaboration. Respect. Not skills we went to school for, but innate in LaBella team members.

The pursuit of partnership is embedded in our culture—has been since our inception in 1978. And it affects client outcomes in profound ways. It means we're built to expertly execute projects from start to finish. That we have the talent and resources to take on any challenge. That projects are completed on time, on budget, and beyond expectations. And that we win awards – not just for our talent, but also for our ethics, employee culture, and growth.

Today, our wheelhouse is broad, with four key service offerings: Buildings, Energy, Infrastructure, and Environmental. Our reach is widespread with over 1,300 staff located throughout the country and Madrid, Spain. We're headquartered in Rochester, NY—but our impact is seen, felt, and experienced around the world.



INFRASTRUCTURE



WASTE, RECYCLING AND ENVIRONMENTAL



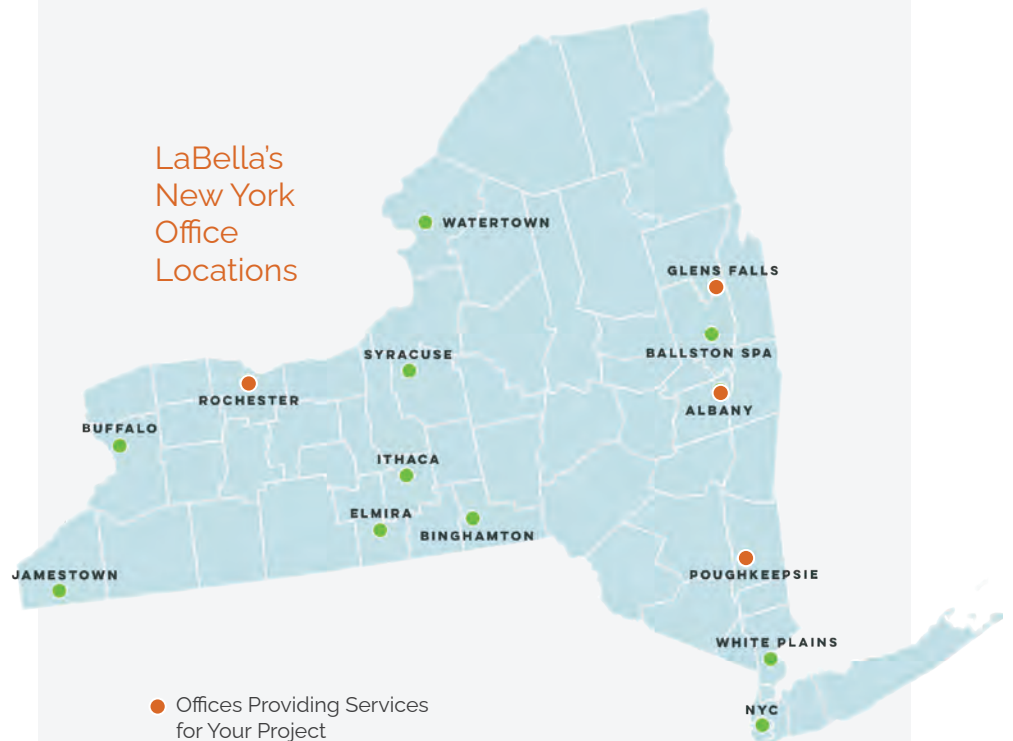
BUILDINGS & FACILITIES



ENERGY



LaBella's New York Office Locations



TECHNICAL CAPABILITIES

Areas of Firm Expertise

Architecture

- Architectural Design
- Project Management
- Development Scheduling
- Code Reviews & ADA Compliance
- Site Selection & Analysis
- Feasibility Studies
- Land Use Master Planning
- Space Planning
- Site/Sports Planning
- Computer-Aided Design & Drafting
- Facilities Evaluation & Planning
- Project Programming
- Cost Analysis
- Resident Project Representation

Building Code & Life Safety Services

- Municipal Plan Review, Inspection, & Code Analysis
- Building & Fire Code Evaluation
- Design Document Review
- Healthcare Risk Assessments & Code Training
- Electrical Safety & Arc Flash Compliance
- Health & Safety Training & Consulting

Civil Engineering

- Water Supply, Treatment, & Distribution
- Wastewater Collection & Treatment
- Gas Design, Including Leak-Prone Main, Gate, & Regulator Stations & Service Connections
- Stormwater Management
- Site Design



- State & Local Permitting
- Athletic Facility Design
- Pedestrian & Vehicular Traffic Circulation

Commissioning Services

- Evaluation of Facility Requirements
- Compliance & Performance Reviews
- Field Verification
- Identify & Correct System Installation Deficiencies
- Review of Operations & Maintenance Manuals for Compliance
- Post Construction Assessments
- NYSERDA & LEED Commissioning
- Retro-Commissioning

Construction Engineering & Inspection

- Construction Inspection & Administration
- Scheduling
- Review of Drawings & Materials Submissions
- Maintenance & Protection of Traffic
- Constructability Reviews

The pursuit of partnership is embedded in our culture – has been since our inception in 1978. And it affects client outcomes in profound ways.

Drilling

- Direct Push, Hollow Stem Auger, & Sonic Drilling of Unconsolidated Materials
- Wash Rotary, Air Hammer, & Coring Methods for Bedrock
- Depth Discrete Soil & Groundwater Sampling Via Direct Push
- Monitoring Well Installation & Development
- Remedial Well Installation
- Overwater Barge Drilling & Sampling
- Membrane Interface Probe (MIP) & Laser-Induced Fluorescence (LIF)
- Geotechnical (Standard Split Spoon & Shelby Tube Sampling)
- Well Decommissioning

TECHNICAL CAPABILITIES

Electrical Engineering

- Power Distribution Systems & Emergency Power
- Lighting & Life Safety Design
- Fire Alarm Engineering
- Security & Access Control Systems
- Telephone & Data Communications
- Electric Utility Engineering
- Process Control & Instrumentation

Energy Engineering

- Auditing & Lighting Surveys
- Energy Master Planning
- Energy Metering & Monitoring
- Performance Contracting Assistance
- Energy Conservation Measures: Evaluation, Design
- Alternative Fuels: Biomass & Biogas
- Distributed Energy Resources: CHP, PV, & Wind
- Economic Analysis & Life Cycle Cost Analysis
- Rebate Assistance & 3rd Party Reviews
- Facility Benchmarking
- LEED Assistance
- NYSERDA Program Services

Environmental Consulting & Ecological Services

- Phase I & II ESAs
- Remediation
- Brownfields
- Asbestos, Lead, & Mold Abatement Design
- Water Supply & Resources
- Water Resource Management
- Air Modeling
- Air Quality Services
- Industrial Hygiene & Safety
- Site Analysis & Site Selection

- Wetland & Stream Delineation & Permitting
- Ecological & Wildlife Studies
- SEQR/NEPA
- Air Permitting

Geotechnical Engineering

- Subsurface Investigations
- Foundation Design
- Slope Stabilization
- Retaining Walls
- Dams
- Stream Restoration & Culverts

Interior Design

- Interior Design
- Space Utilization
- Furniture, Fixtures, Equipment, & Technology Integration

Landscape Architecture

- Master Planning
- Open Space Planning
- Feasibility Studies
- Land Use Analysis
- Site Design/Schematic Design
- Visual Assessments & Simulations
- Parks & Recreation Design
- Planting & Site Lighting Plans

- Landscape Restoration & Climate Adaptive Design
- Athletic Facilities
- Trail Planning & Design
- Streetscapes

Land Surveying

- Topographic Surveys
- ALTA/ASCM Land Title Surveys
- Property Line Surveys
- Construction Layout
- Right-of-Way Mapping
- 3D High-Definition Laser Scanning
- GPS Surveying: Static & RTK
- Digital Terrain Modeling
- Photogrammetric Control Surveys
- Land Records Research

Mechanical Engineering

- HVAC/Precision Cooling System Design
- Plumbing & Fire Protection
- Distribution Systems
- Building Systems & Controls
- Facilities Evaluation & Design
- Industrial Process Piping & Systems
- Geothermal
- Solar Thermal



TECHNICAL CAPABILITIES

Planning

- Downtown Revitalization & Development
- Economic & Market Analysis
- Comprehensive Planning
- Grants & Financing
- Community Engagement
- Environmental Review
- Active Transportation
- Public & Private Development Services
- Geographic Information Systems (GIS)

Power Systems

Transmission & Distribution

- Routing Analysis/Conceptual Design
- Survey-Topographical Survey/LiDAR
- Subsurface Utility Engineering
- Geotechnical Investigations
- Plan & Profile Drawings: OH & UG
- Trenchless Technologies
 - Horizontal Directional Drill
 - Jack & Bore
 - Micro Tunnel
- Civil Construction & Traffic Control Plans
- Permitting Support
- Engineering Construction Support

Substations

- Project Requirements & Equipment Specifications
- Geotechnical Studies
- Soil Resistivity Studies
- Ground Impedance Studies
- Topographical Survey
- Conceptual Design
- In-Ground Detailed Design
- Above-Ground Detailed Design

- System Protection & Controls Detailed Design
- Permitting Assistance
- Stormwater Pollution Prevention Plan
- Spill Prevention, Control & Countermeasure (SPCC) Plan

Program Management

- Portfolio & Program Management
- Project Management
- Procurement Coordination & Expediting
- Project Scheduling & Controlling
- Cost Analysis
- Risk Management

Renewable Energy

- Interconnection Design
- Site Plan Design & Approval
- Stormwater Design & Inspection
- ALTA & Topographic Survey
- Wetland & Stream Delineation Services & Mitigation
- Agricultural Monitoring
- Geotechnical Investigation & Report
- Pile Pull/Load Testing & Report
- Critical Issue Analysis/Site Due Diligence
- Interconnection Application (Third-Party) Review & Management
- State or Local Environmental Impact Statement & Review
- Local, State, & Federal Permitting
- Noise & Visual Impact Analysis
- Protected Species Surveys
- Brownfield/Landfill Redevelopment
- Local Law Development Assistance

- Solar Construction & Installation
- Construction Phase Owner's Representation
- Wind Energy Project Review
- Decommissioning
- Program Management Support

Structural Engineering

- Structural Design & Inspection
- Load Ratings
- Site Engineering
- Substation Structural Design
- Foundation Design

Transportation Engineering

- Highway & Street Design
- Bridge Design
- Traffic Impact & Safety Studies
- Bicycle, Pedestrian, & Trail Planning & Design
- Parking Studies & Design
- Traffic Signal Design
- ADA Compliance

Waste & Recycling

- Construction Phase Services
- Environmental Compliance & Remediation
- Facility Operations Consulting
- Operator Training & Certification
- Landfill Gas System Design & O&M
- Title V Permitting & Compliance
- Leachate Management & Treatment
- Organic Waste Management
- Closure & Post-Closure Design, Reuse, & Maintenance

QUALIFICATIONS & EXPERIENCE

Our Watershed Management Plan Experience—Preserving our natural resources

The importance of protecting our environment cannot be overstated. With the right team, preservation and progress can often be equally accommodated. LaBella has led a wide variety of watershed planning, water quality protection, and stream corridor and shoreline preservation/restoration efforts, including the Lake George Basin, Glen Lake (Town of Queensbury), the Poesten Kill Watershed (Rensselaer Plateau Alliance), Byram Reservoir (Village of Mount Kisco), Saratoga Lake, and Lake Erie, among others. In addition, LaBella is currently completing Drinking Water Source Protection Program (DWSP2) Plans under a term contract with the New York State Office of General Services in ten communities.

Our work on Lake George includes early efforts focused on stream corridor protection and development of stormwater management rules for the Lake George Park Commission, septic system inventory and mapping for the Town/Village of Lake George, and volunteer work to identify the source of E. coli detections impacting Million Dollar Beach.

The Poesten Kill Watershed Plan was a multi-jurisdictional project, including the Towns of Poestenkill, Grafton, and Brunswick, and smaller portions of the City of Troy and the Towns of Sand Lake and Berlin. The project aimed to develop a better understanding of flood hazards in the watershed and to look creatively at existing open



LaBella staff carefully canoe Glen Lake in the Town of Queensbury for work related to the watershed management plan.

spaces in the upper watershed and opportunity areas in the urban centers to identify where implementing green or natural flood mitigation solutions, restoring streams and floodplains, and/or utilizing traditional engineering strategies could help build resiliency to future flooding.

LaBella has conducted routine water quality sampling for the Byram Reservoir from 2007 to 2022. Our services have also included evaluating tributary flow, monitoring salt loading, and providing Mount Kisco with annual reports summarizing critical observations. LaBella has also provided management and monitoring recommendations, managed a fish population summary and a safe yield evaluation for the reservoir.

LaBella's watershed management teams consist of professionals with experience in water quality analysis, wetlands science, shoreline protection, invasive

species evaluation, and public outreach. We have developed successful relationships with communities across the state through our watershed management projects. The team assembled for this project includes Behan Planning and Design and Amala Consulting, both current team members for the DWSP2 Plans and past watershed projects.

Recent & Ongoing Efforts

In the following pages, we highlight several representative projects, and encourage the Village and Towns to contact the references provided.

RENSSELAER PLATEAU ALLIANCE

Poesten Kill Watershed Management Plan

CLIENT PARTNER

Jim Bonesteel
Executive Director
Rensselaer Plateau Alliance
jim@rensselaerplateau.org
(518) 712-9211



This flood mitigation study contained policy and management considerations and recommended flood mitigation measures at key locations through the Poesten Kill watershed.

The Poesten Kill watershed covers approximately 96 square miles, including portions of the Towns of Poestenkill, Grafton and Brunswick, and smaller portions of the City of Troy and the Towns of Sand Lake and Berlin. Tropical Storm Irene caused significant flood damage in the Poesten Kill watershed, with the largest impacts occurring in the upstream sections of the Poesten Kill and its major tributary the Quacken Kill, accompanied by downstream flooding extending into the City of Troy. Flooding took out bridges and roads and damaged private property. The flooding and subsequent emergency response efforts also eliminated significant trout habitat in headwater streams.

With funding from the New York State Department of Environmental Conservation

(NYSDEC) Hudson River Estuary Grant Program/New England Interstate Water Pollution Control Commission (NEIWPCC), the Rensselaer Plateau Alliance (RPA) led this project with support from LaBella, Sarah Parks of Amala Consulting, the Towns of Poestenkill, Brunswick, Grafton, and the City of Troy, Trout Unlimited, the Dyken Pond Center, and the Rensselaer Land Trust. The project aimed to develop a better understanding of the flood hazards in the watershed and to look creatively at existing open spaces in the upper watershed and opportunity areas in the urban centers to identify where implementing green or natural flood mitigation solutions, restoring streams and floodplains, and/or utilizing traditional engineering strategies could help build resiliency to future flooding.

A range of opportunities to mitigate flood hazards and improve community resilience to flooding while protecting water quality and ecological health were described and evaluated. Consideration was given to natural flood management approaches, green infrastructure, and built infrastructure improvements for a comprehensive approach. A flood mitigation study was produced, containing policy and management considerations as well as recommended flood mitigation measures at key locations throughout the watershed.

LaBella assisted RPA with a 2022 Hudson River Estuary Grant Program application which was subsequently awarded and will fund a pilot wetland detention project.

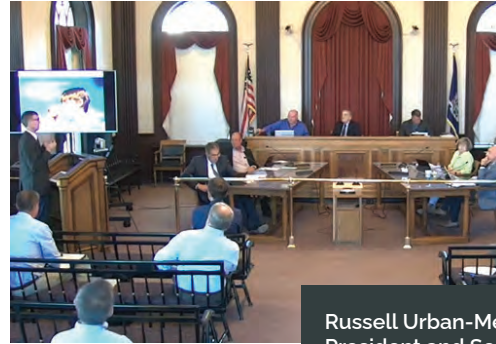
Project was initiated by The Chazen Companies. Chazen is now LaBella Associates.

NEW YORK STATE OFFICE OF GENERAL SERVICES

Drinking Water Source Protection Program Plans

CLIENT PARTNER

Nicole L. Cheplowitz, PE
Project Manager, D&C
NYSOGS
nicole.cheplowitz@ogs.
ny.gov
(518) 473-4999



Russell Urban-Mead, PG, CPG, QEP, Vice President and Senior Hydrogeologist at LaBella, presents the Drinking Water Source Protection Plan to the Auburn City Council in July 2022.

LaBella is currently completing Drinking Water Source Protection Program (DWSP2) Plans under a term contract with the New York State Office of General Services (NYSOGS) in ten communities. These include public water systems for the Villages of Otisville, Silver Springs and Allegany, the Cities of Auburn, Glens Falls and Beacon, and the Towns of Wappinger, Brookhaven, St. Armand and Manlius. The Cities of Glens Falls and Auburn draw water from surface water reservoirs while the City of Beacon relies on a combination of wells and reservoirs. The other project sources all depend on groundwater wells.

For each community, LaBella has helped assemble local working committees, established goals and visions, developed an overview of the water system, prepared wellhead protection or surface water source

watershed maps, created a potential contaminant source inventory, identified protection and management methods, developed an implementation timeline, and designated a plan management team.

Water quality threats are collected using GIS based mapping tools, local knowledge, and consultation with local health units and water system operators. Quality threats assessed for each source have included chlorinated solvent exposure from remediation sites, hydrocarbon management from underground storage tanks and petroleum bulk storage facilities, and emerging contaminant vulnerability from remediation sites and septic systems. The planning process has also reviewed drinking water source vulnerability to Harmful Algal Blooms (HABs), nitrate accumulations from septic systems, increasing salt profiles

associated with road de-icing and water softener use, and general pathogen presence. Climate change influences on water temperatures and availability have also been considered in select DWSP2 plans.

In addition to completing the DWSP2 Plans, the LaBella team meets monthly with project leadership within NYSDEC and New York State Department of Health to confer on work progress and provide feedback on the project framework.

The first eight DWSP2 plans are in their final months of assembly and presentation at this time, and new assignments to the LaBella team are forthcoming.

**Contract was initiated by The Chazen Companies. Chazen is now LaBella Associates.*

TOWN OF QUEENSBURY

Glen Lake Watershed Management Plan

CLIENT PARTNER

John Strough
Town Supervisor
Town of Queensbury
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Existing water quality data, lake user surveys, a septic system inventory, and a wetland ecology evaluation will help facilitate a plan for the Lake's future.

LaBella is currently working with the Town of Queensbury and the Glen Lake Protective Association (GLPA) in preparing an update to the 1998 Glen Lake Watershed Management Plan.

The GLPA has been monitoring water quality for nearly 40 years and taking proactive measures to address water quality and manage invasive species. The Town established the "Glen Lake Aquatic Plant Control District" in 2011, a special taxing district to fund application of aquatic herbicides and harvesting of aquatic invasives (primarily Eurasian milfoil). The Town and the GLPA wanted to examine the historic efforts and develop a more comprehensive approach to address water quality.

LaBella's role in preparing the plan includes summarizing existing water quality data (CSLAP

and near shore monitoring), developing and executing a lake user survey, completing a septic system inventory, and an evaluation of the Lake's wetland ecology. A key focus is preparation of upland mapping (using GIS) and development of a hydrologic model of the watershed. The mapping and model will facilitate the development of a pollutant loading and transport analysis. A water quality sampling program will be completed to allow calibration of the model and the identification of key nutrient and pollutant sources.

The Plan will include short term and long term goals as well as identification of funding sources to implement key measures.

**Project was initiated by The Chazen Companies. Chazen is now LaBella Associates.*



LAKE GEORGE ASSOCIATION

Additional Water Quality Protection Efforts



CLIENT PARTNER

Randy Rath
Project Manager
Lake George Association
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lakegeorgeassociation.org
(518) 668-9700 ext. 307

Through efforts such as a demographic data atlas, stormwater management, and septic system inventories, we help communities protect their cherished water resources.

LaBella Associates is pleased to have been engaged in a wide variety of water quality protection/planning projects on and around Lake George. We have provided support to the Lake George Association (LGA) on a number of important projects.

Lake George Deltas Sediment Management/Shoreline Restoration

LaBella completed preparation of a Draft/Final Supplemental Generic Environmental Impact Statement (Supplemental GEIS or SGEIS) for the Lake George Deltas Sediment Management/Shoreline Restoration Project ("Restoration Project"). The purpose of the Restoration Project was to remediate the deltas that have formed along the shoreline areas of Lake George due to excessive sedimentation caused by human activities in upland drainage areas while minimizing environmental impacts from the dredging. The LGA was established as the Project Sponsor on behalf of the various Towns and Village surrounding Lake George and engaged LaBella to prepare the Supplemental GEIS.

The SGEIS explored alternative delta dredging/sediment removal techniques for seven deltas that have formed at the principal tributaries to Lake George. Specifically, the SGEIS explored methods of mechanical dredging from access pads, in-water mechanical dredging and suction-dredging. The SGEIS describes potential water quality impacts specific to the three currently proposed distinct methods for sediment removal and sets forth an analysis of potential significant impacts that may accrue from the proposed (and similar) methods of sediment access, in-situ removal, conveyance, and work area custody, via operational methods not assessed within the original GEIS. The analyses included a description and plans to manage invasive species and impacts to fish, benthic invertebrates and aquatic macrophytes. The alternatives analysis evaluated water quality and benthic impacts and explored the potential of creating unnatural and fertile lakebed from dredging actions.

Work was reported in a Draft/Final Supplemental GEIS reviewed by NYSDEC Region 5, the LGA, Warren County Soil and Water Conservation District and others, with positive SEQR findings.

East Shore/Michelli Drive Area Stream Assessment and Stormwater Resiliency

LaBella was retained by the LGA to perform a field investigation and stream calming assessment of a stream and stormwater system tributary to Lake George. The existing drainage system results in water quality impairments of Lake George. LaBella was asked to develop stream calming and storm resiliency features to improve water quality and mitigate stormwater rates. LaBella first assessed the existing conditions of the sub-watershed, then performed dye testing to determine the existing surface flow paths and subterranean paths of the stream. The existing surface drainage conditions and features were inventoried and combined with GIS land cover data and watershed boundaries to develop an existing conditions

LAKE GEORGE ASSOCIATION

Additional Water Quality Protection Efforts (...cont'd)

hydrologic model of the entire sub-watershed using HydroCAD. LaBella developed and modeled conceptual improvements to mitigate stormwater runoff rates and improve water quality. Conceptual level maps were prepared by LaBella with recommended drainage improvements along with order of magnitude cost estimates.

Greater Circle Drive Area Stormwater Improvements Feasibility Study and Implementation

The LGA retained LaBella to perform a field investigation and stream calming assessment of an unnamed brook tributary to Lake George. The existing brook drains an area of over 300 acres that consists of developed and undeveloped parcels. As the brook's watershed becomes more developed, the brook's erosive conditions increase. The sedimentation due to erosion has resulted in water quality impairments of Lake George as well as potential navigability issues at the brook's outlet near the Tahoe Resort. LaBella was tasked with developing stream calming and storm resiliency features to improve water quality and mitigate erosion of stream sedimentation into the lake. The existing conditions of the watershed were assessed, and LaBella walked the entire brook in the immediate vicinity of the improvements. The existing surface drainage conditions and features were inventoried. LaBella documented existing areas that could be improved but were not identified in the initial proposal. The existing features were combined with GIS land cover data and watershed boundaries to develop an existing

conditions hydrologic model of the entire watershed using HydroCAD. LaBella developed and modeled conceptual improvements to mitigate erosive forces/sedimentation and improve water quality. Conceptual level maps were prepared with recommended drainage improvements along with order of magnitude cost estimates. Where possible, LaBella proposed natural erosion protection features with the intent to return the brook back to its original condition.

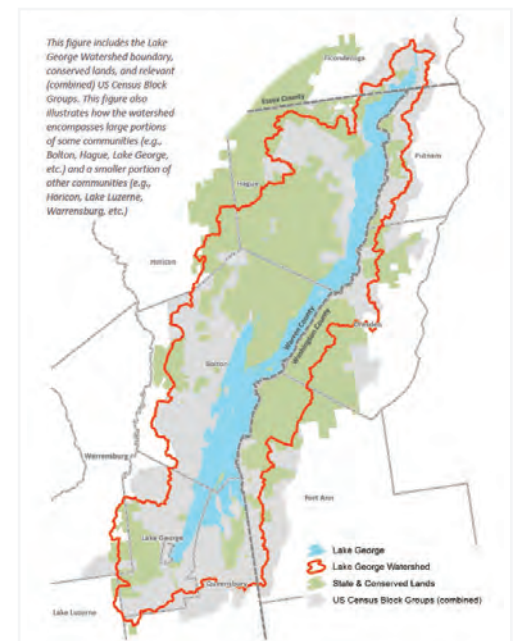
Following the completion of the Feasibility Study, LaBella assisted the Town in applying for a grant from the NYSDEC for implementation of the project. We continue to work with the Town to provide stream calming and resiliency techniques, sedimentation reduction techniques and practical stormwater management improvements throughout the watershed. The Town Highway Department to date has completed all work with design assistance from our office.

Lake George Data Atlas

LaBella completed preparation of the Lake George Data Atlas, a project funded by the LGA and the Lake Champlain/Lake George Regional Planning Board. The Data Atlas is the first ever compilation of watershed specific population, housing, land use and infrastructure data for the 12 communities located in the Lake George Park. The Data Atlas explores development potential (buildout) of the entire watershed and presents this information in a highly readable graphic format. The project involved an intensive data collection effort, a robust

GIS evaluation, interviews with stakeholders and a variety of public presentations across three counties. Community profiles were developed for the 11 towns and the village that call Lake George home. The Data Atlas now serves as a resource to planners and environmental scientists supporting Lake protection efforts.

**Projects were completed by The Chazen Companies. Chazen is now LaBella Associates.*



LAKE GEORGE PARK COMMISSION

Water Quality Protection Efforts

LaBella has been working with the Lake George Park Commission (LGPC) since 2011 on a range of water quality protection/planning projects related to Lake George.

Stream Corridor Protection Evaluation

The LGPC requested assistance in gaining a better understanding of local perceptions surrounding the issues of regulating tree clearing and enhanced stream corridor protection measures within the Lake George Watershed. LaBella conducted interviews with three primary advocacy groups within the watershed, developed and completed a survey of municipal officials and performed a literature search for similar watershed programs. The findings and recommendations were shared with stakeholders through a series of presentations. The evaluation was successful in establishing an understanding that local communities lack technical capacity to address the issue and that watershed-based approach was desired.

Septic System Inventory and Evaluation

The increasing presence of algae blooms off the shores of Lake George was a cause of concern for the Town of Lake George and water quality advocates. In response, the Town established a partnership with the Fund for Lake George and engaged LaBella to assist with the Lake George Septic System Initiative.

Town staff conducted an inspection and inventory of on-site wastewater treatment systems (OWTS) within the



hamlet of Diamond Point located in the Town. This initial work focused on locating systems within 500 feet of the shoreline and 100 feet of streams and lake tributaries. All OWTS were located using a GPS enabled GIS collector and general conditions were catalogued. Concurrently, water quality and algae sampling of the lake was conducted proximate to the shoreline.

Utilizing ESRI ArcGIS, a series of maps were prepared examining the variety of physical, environmental, and land use characteristics of the upland, exploring the relationship between the OWTS conditions, water quality results and site conditions. Using this information, risk assessment criteria were established identifying high priority OWTS targets for corrective measures. Criteria included depth to groundwater, slopes/soils, proximity to waterbody/wetlands, hydraulic conductivity, and the water quality sampling results. GIS was utilized to develop a series of thematic maps exploring the relationships between the various criteria.

CLIENT PARTNER

David Wick
Executive Director
LGPC
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(518) 668-9347



LGPC engaged LaBella to assist in identifying the impacts of on site septic systems on the Lake's water quality and public health. There is recent momentum in requiring septic inspections at the time of property transfer; several of the 13 communities that front on the Lake have done so. The LGPC has been asked to broaden this effort and asked LaBella to conduct a literature review providing evidence of septic failure on nutrient inputs and public health, prepare an initial inventory of systems, and explore what other areas/communities are doing.

**Projects were initiated/completed by The Chazen Companies. Chazen is now LaBella Associates.*

TOWN OF EVANS

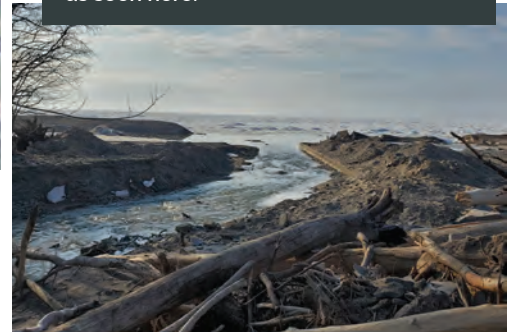
Lake Erie Beach Shoreline Management

CLIENT PARTNER

William Smith
Director of Planning &
Community Development
Town of Evans
wsmith@townofevans.org
(716) 549-0945



Debris buildup and sediment at the outlet of Muddy Creek have caused coastal erosion at Lake Erie Beach Park, as seen here.



Lake Erie Beach Park is a 5.5-acre park that includes approximately 900 feet of beachfront, multiple recreational facilities, and amenities. Muddy Creek runs along the southern edge of the park where it empties into Lake Erie. The beach area at the park is preserved by a concrete retaining wall that redirects the outlet of Muddy Creek to the west, diverting its natural path. Historically, Lake Erie Beach Park and Muddy Creek have experienced issues with water quality, debris buildup, streambank and coastal erosion, and beach closures. In March 2019, a large storm event deposited debris and sediment at the outlet of Muddy Creek, resulting in significant upstream flooding and damage to the park. This event highlighted the need for different management measures to be implemented to create a more resilient shoreline.

LaBella conducted a study that focused on Muddy Creek as it traverses the Lake Erie Beach neighborhood, the interface of

Muddy Creek and Lake Erie, and Lake Erie Beach Park.

LaBella reviewed historical data and an existing conditions survey was prepared. LaBella also reviewed various requirements related to the Great Lakes shoreline management strategies and erosion control methods to develop a compliance blueprint for potential future management programs and projects. LaBella reviewed previously constructed projects within the Great Lakes region and identified best management practices to reduce streambank and shoreline erosion, with a focus on management strategies and capital projects that would be applicable to Lake Erie Beach Park.

After evaluating potential effects and costs of implementing various management programs and capital projects, LaBella selected remedies that align with best management practices, aim to reduce flooding and erosion, and improve water quality within

the study area. This action plan took into account input from the Town and the stakeholder committee.

Throughout the project, LaBella presented each of these reports to a stakeholder committee consisting of Town of Evans officials, New York State Department of Environmental Conservation, United States Army Corps of Engineers, Erie County, and local residents, and incorporated comments and feedback into each report.

VILLAGE OF MOUNT KISCO

Byram Reservoir Water Quality & Fisheries Monitoring

CLIENT PARTNER

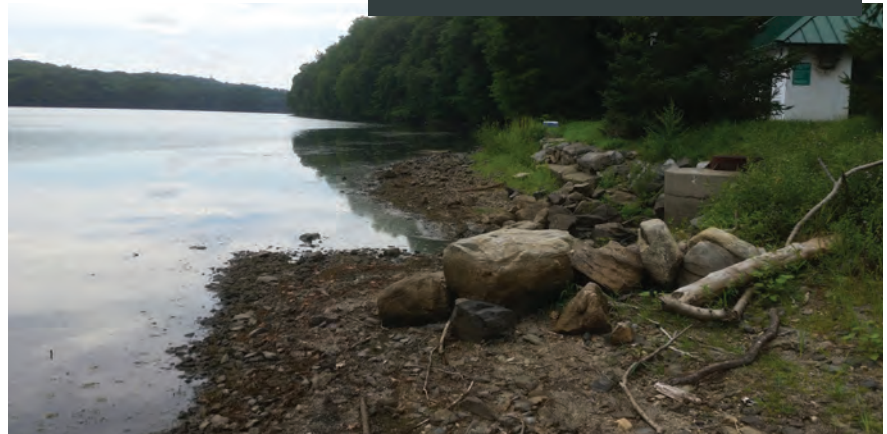
Edward W. Brancati
Village Manager
Village of Mount Kisco
ebrancati@mountkisco.ny.gov
(914) 864-0001



LaBella has conducted routine water quality sampling for the reservoir from 2007 (pictured below) to date (2022 pictured above).

The Byram Reservoir is enjoyed for catch-and-release game fishing and used as a primary water supply for Mount Kisco. Preserving the quality of water and analyzing the significance of any changing conditions are priorities for this community.

Since 2007, LaBella has conducted routine water quality sampling, gauging tributary flow, monitoring salt loading and providing the municipality with annual reports summarizing critical observations. LaBella has providing management and monitoring recommendations as well. This program has evolved over time to focus on evolving critical performance priorities. LaBella has also managed a fish population study and a safe yield evaluation for Byram Reservoir.



**Project was initiated by The Chazen Companies. Chazen is now LaBella Associates.*

NYSOGS/NYSDEC

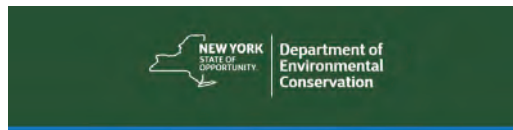
New York State Stormwater Management Design Manual

As part of LaBella's Environmental Term Contract with New York State Office of General Services, LaBella is working with the New York State Department of Environmental Conservation (NYSDEC) to perform a comprehensive revision to the New York State Stormwater Management Design Manual (SWDM).

The SWDM defines technical requirements for the design of stormwater management practices (SMPs) on projects that require coverage under the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity. Design engineers are required to refer to and conform to this statewide reference.

The comprehensive revisions include:

- Updated technical requirements for SMPs based on new technologies, studies of installed SMP functionality, and construction/maintenance experience;
- Enhanced guidance for removal of pollutants of concern, redevelopment activities, stormwater hotspots, and infiltration practices;
- Addition of new SMPs;
- New chapters for design examples, application of SMPs in urban areas, and planting guidance for SMPs;
- Incorporation of the DEC Maintenance Guidance as a new Chapter;
- Updated Appendix D for soil test requirements;



STORMWATER MANAGEMENT DESIGN MANUAL

DRAFT – May 2022



The revisions include design modifications to promote more effective water quality and quantity control.

- General clarifications and reformatting to improve user experience and ensure consistent application of the technical requirements;
- Creation of CAD details for each SMP;
- Updated inspection checklists;
- Updated SMP calculation worksheets.

A draft of the revised SWDM was issued in October 2022 for public comment, then will be further updated for final release.

**Project was initiated by The Chazen Companies. Chazen is now LaBella Associates.*

CLIENT PARTNER

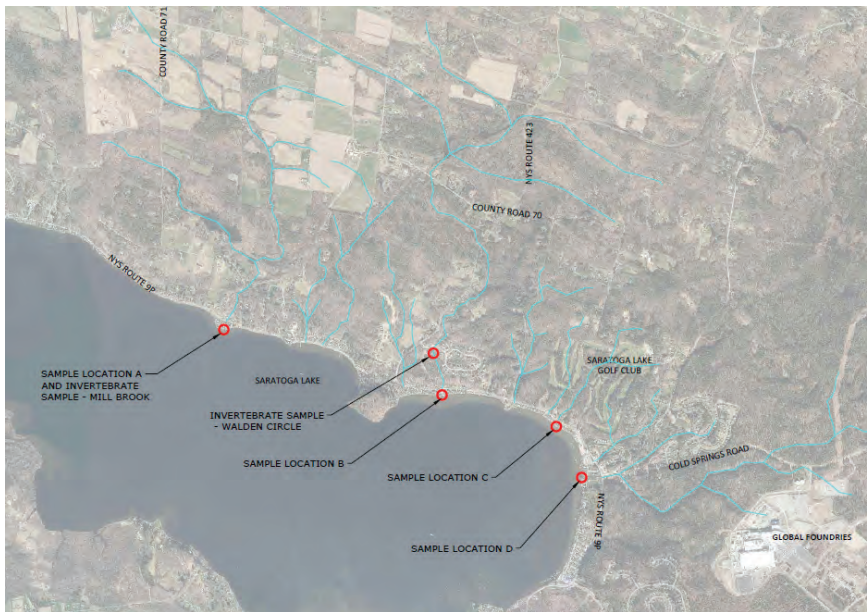
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TOWN OF STILLWATER

Saratoga Lake Watershed Analysis & Water Quality Studies

CLIENT PARTNER

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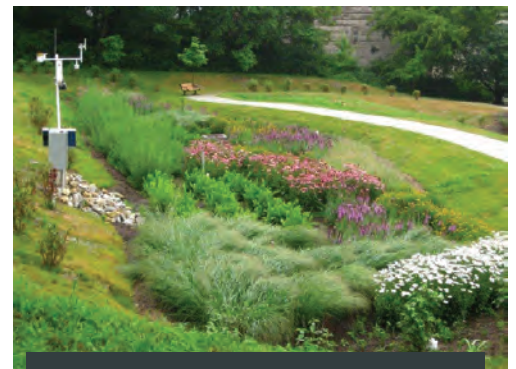


LaBella has assisted the Town of Stillwater in securing funds and executing a wide variety of planning and implementation activities. Initial planning activities include the development of a Comprehensive Plan and a Hudson River Local Waterfront Revitalization Plan. These plans have led to the design and construction of new water/wastewater facilities, sharing of services with Mechanicville and Saratoga County, a new trail network along the waterfront, establishment of Brown's Beach on Saratoga Lake, improved access to the Hudson River, and a watershed analysis of Saratoga Lake.

The Saratoga Lake shoreline is largely developed with residences. The upland areas located within the Town of Stillwater are a mix of residential and agricultural uses. In 2018, LaBella prepared an initial analysis of the Saratoga Lake watershed. The focus was to understand stormwater

emanating from the Town, to predict potential pollutant loads to the lake, and to look for opportunities to employ green infrastructure practices to reduce pollutant loads. The Town was awarded funding from NYSDEC and NYSDOS.

The Watershed Study and Water Quality Analysis performed in the Town included a hydrologic and hydraulic model using EPA-SMMM software. The model identified flow rates and observed pollutant loading for 11 sub-watersheds, focusing on Total Phosphorous, Total Nitrogen, and Total Suspended Solids. This work was supplemented with a series of water quality sampling events and invertebrate population counts. The model was calibrated using the water quality results. Pollutant loading estimates were used to identify target mitigation sites. Green infrastructure practices were evaluated at target sites and ultimately a series of raingardens were proposed to reduce pollutant loads.



Following a watershed study and water quality analysis, raingardens were proposed as a simple, cost-effective solution to reduce pollutant loading.

**Project was completed by The Chazen Companies. Chazen is now LaBella Associates.*

Summit Lake and its Watershed: An Element of the Brownfield Opportunity Area in Philmont

VILLAGE OF PHILMONT, NY



PROJECT SPECS

◆ CLIENT

Village of Philmont, NY
c/o Philmont Beautification, Inc.

◆ STATUS

Report completed 2017

◆ PRIME CONSULTANT

Elan Planning and Design

◆ SERVICES PROVIDED

Site Analysis
Technical Writing
Environmental Planning
Public Presentation

◆ BEHAN FEE

\$5,000

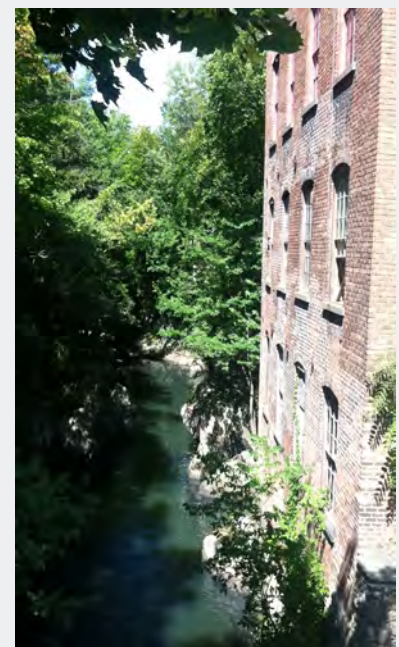
◆ CLIENT REPRESENTATIVE

Sally Baker
Executive Director
Philmont Beautification, Inc.



Our firm was engaged to provide a review of six reports on the Summit Lake and Agawamuck Creek watershed and provide recommendations for a set of “next steps” to help the chart a course to address the concerns regarding the lake so the Philmont community can achieve its goals for an economically vibrant and environmentally sustainable future. These reports included a thorough review of the watershed, water quality, condition of the sediment in the lake bottom, a survey (bathymetric) of the lake bottom and a feasibility study for hydropower.

This work is part of a comprehensive approach toward improving environmental quality and creating a sustainable economic future for Philmont and the larger watershed area as part of program funded with a grant from New York State Department of State.



SKANEATELES LAKE WATERSHED LAND PROTECTION PROGRAM

CITY OF SYRACUSE, NY

2009 PLANNING EXCELLENCE AWARD FOR IMPLEMENTATION - APA NY UPSTATE



CHALLENGE

Skaneateles Lake is a source of drinking water for the City of Syracuse, numerous towns and villages, and individual landowners. The lake's water quality was threatened by development pressure.



SOLUTION

Behan Planning and Design developed the program framework in support of the city's partnership approach to ensure that both the landowners and the communities in the watershed and the city each benefited from the land protection program. The project team secured over one million dollars in grant funding and the city saved \$70 million by avoiding having to build a water filtration plant.



PROJECT SPECS

- ◆ **CLIENT**
City of Syracuse, NY
- ◆ **PARTNER**
American Farmland Trust
Blueberry Ridge Stewardship Services, Inc.
- ◆ **STATUS**
Completed 2009
- ◆ **SERVICES PROVIDED**
Public Outreach and Education
Stakeholder Engagement
Land Conservation Planning
Coordination with
Whole Farm Planning
Site Conservation Plans
Conservation Easement Drafting
Easement Purchase Negotiation
Grant Writing Support and Implementation
- ◆ **PROJECT BUDGET**
\$200,000

The city needed to develop a watershed land conservation plan to protect the city's water

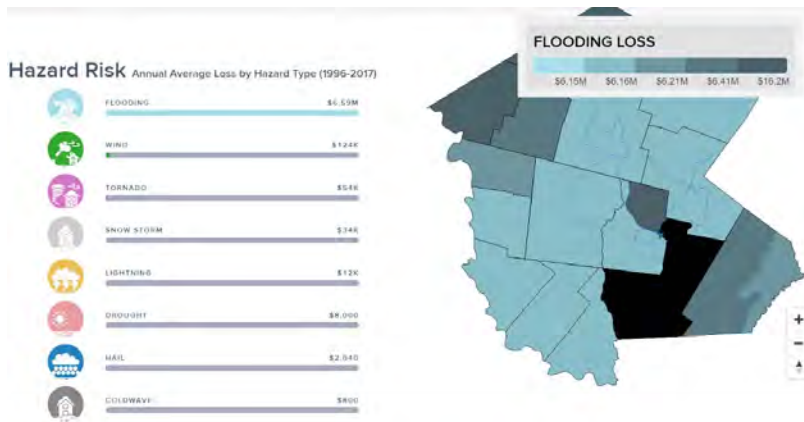




Hazard Mitigation Plan

DELAWARE AND SULLIVAN COUNTIES, NY

CASE STUDY

**CHALLENGE**

Behan Planning and Design provided hazard mitigation planning and community engagement expertise to the State University of New York at Albany's Visualization and Informatics Laboratory (AVAIL) as a consultant for the duration of the Local Hazard Mitigation Planning Pilot Project in Delaware and Sullivan Counties. The project included updating the Multi-Jurisdictional Hazard Mitigation Plan (HMP) and providing resiliency planning support for both Delaware County and Sullivan County, while deploying web-based software planning tools developed by AVAIL that integrate the HMPs with the 2019 Statewide Hazard Mitigation Plan.

As a web-based tool, the data base is both searchable and readily updatable. Its format can be integrated into more focused local/subarea plans and projects and larger regional/state/interstate plans, programs and projects.

In addition to the local jurisdictional actions, the Behan team identified forward-looking and larger scale mitigation actions including:

- Floodplain reclamation
- Floodplain enhancement
- floodplain creation

The hazard mitigation planning process followed the FEMA Local Hazard Mitigation Planning Guidelines and the New York State Hazard Mitigation Planning Standards and Guide. The plan for Sullivan County can be found at sullivan.mitigateny.org and delaware.mitigateny.org

PROJECT SPECS

◆ **PRIME CONSULTANT**

SUNY Research Foundation

◆ **CONTRACT**

\$66,000

◆ **SERVICES PROVIDED**

Public Outreach and Community Participation
 Hazard Review and Analysis
 Resiliency Planning
 Development of Mitigation Actions

REFERENCE

◆ **ERIC KRANS**

Program Manager
 Albany Visualization and Informatics Lab
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ekrans@albany.edu



BEHAN PLANNING
AND DESIGN

DESIGN-BUILD TEAM

Tappan Zee Constructors

OWNER

New York Thruway Authority

PRIME CONSULTANT

Stokes Creative Group

STATUS

Substantially Complete 2018

Behan Budget

\$480,000

SERVICES PROVIDED

Program Design
Public Informational Meetings
Sound Wall Mitigation Voting
Educational Materials
Stakeholder Database



Governor Mario M. Cuomo Bridge Public Education and Involvement Program

Westchester and Rockland Counties, New York



Challenge: A construction project of this magnitude is important to the communities on both sides of the bridge and to the larger region and state. As such, a robust public involvement process was required.

Solution. We designed a multi-year public involvement support plan and assisted in program delivery from pre-construction through bridge opening. Our team produced and managed a 5,000 member stakeholder database to track project input and response and coordinated voting process for determination of noise barrier design and deployment for impacted private properties.

We supported preparation and execution of large public meetings and small stakeholder meetings around the region as well as supported the development of newsletters and other informational materials in support of this effort.

In addition, Behan Planning and Design supported the educational outreach component of the project, developing presentations for students and teachers as well as reference material in the format of a 5-year program.



COMMUNITY PLANNING • LANDSCAPE ARCHITECTURE • ENGINEERING

AMALA CONSULTING

Relevant Projects

Drinking Water Source Protection Program (DWSP2)

Project Summary: The DWSP2 is a state-run program created to assist municipalities with proactively protecting their drinking water sources. The goal is to help municipalities develop and implement their unique drinking water source protection plan for the source of the drinking water.

Project Scope: GIS services for 5 different communities across NYS; Preparation of initial maps for first stakeholder meetings; Development large GIS Database and creation new datasets; Development of maps for watershed, source water protection, wellfield threat maps, land use and other types, as needed; Set up interactive online mapping; Review and address edits from stakeholders.

Monetary Scope: ~\$50,000

Timeframe: July 2021 – present

Poesten Kill Watershed and Flood Mitigation Project

Project Summary: The Poesten Kill Watershed and Flood Mitigation project assisted communities by providing them direction for improving their resilience to flooding and for projecting their natural resources.

Project Scope: Development of maps for watershed overview, flood zones, DEC wetlands, DEC and NWI, land use cover, surficial geology, hydrologic soil groups, culverts, conserved lands and elevation. Development of large GIS database and creation of new datasets.

Monetary Scope ~\$2,000

Timeframe: June 2018 – June 2019

Water Quality Monitoring Efforts on the Marcellus Shale

Project Summary: This study examined the spatial distribution of government and Civil Society Organization (CSO) monitoring efforts in the Marcellus Shale region of Pennsylvania. The project examined the reasons and implications of the gaps in watershed monitoring, drawing conclusions about the promise and limitations of citizen science.

Project Scope: Development of maps for continuous and frequent water quality monitoring by government agencies and by civil society organizations, shale gas wells and watersheds, environmental justice areas. Development of large GIS database of water quality monitoring data across a large region. Spatial analysis including regression and density analysis. Development of maps for public dissemination and for a peer-reviewed journal article.

Monetary Scope: ~\$22,000

Timeframe: September 2012 – November 2013



SECTION 4
STAFF

TEAMING PARTNERS



Role:

Lead Consultant

Planning,
Environmental,
Engineering

LaBella Associates will serve as lead consultant on the project, providing planning, environmental, and engineering services as well as all project management and client coordination. We will be supported by the following firms who we have proudly partnered with on some of the projects described in Section 3 of this proposal.



Role:

Subconsultant

Community Outreach,
Public Participation

Learn more:

www.behanplanning.com

Behan Planning and Design is a New York State Certified Women-Owned Business Enterprise (WBE) providing planning and landscape architecture services. Founded in 1994, their staff collaborates with project partners, clients, and their constituencies to make great communities better.

Behan has been an active collaborator on watershed planning and management for over a quarter of a century, working with communities across New York State to create plans and projects to help enhance long-term management of water resources. They have developed expertise in this area of work, including the intermunicipal aspects of planning and consensus building for workable solutions and projects.

Behan collaborated with Philmont Beautification, Inc. and the Village of Philmont to develop a series of recommendations to address water quality in Summit Lake and the consideration of the upland watershed area. In addition, Behan and LaBella are currently collaborating on the New York State Office of General Services Drinking Water Source Protection Program (DWSP2).

WBE



Amala Consulting

Role:

Subconsultant

GIS

Learn more:

www.amalaconsulting.com

Amala Consulting is a New York State Certified Women-Owned Business Enterprise (WBE) that has been providing expertise and a breadth of services to nonprofit, governmental, and for-profit organizations for over 10 years. They specialize in Geographic Information Systems (GIS), data analysis, research and report writing, project management and grant writing.

Amala Consulting has solid experience related to watershed management planning, having provided GIS services on several projects. Like Behan, Amala Consulting is also working with LaBella on the NYSOGS Drinking Water Source Protection Program (DWSP2), providing GIS services.

Amala Consulting has also partnered with LaBella to provide GIS services for the Poesten Kill Watershed and Flood Mitigation project. Working with LaBella's team of hydrogeologists, environmental scientists, regional planners, and stakeholders throughout the process, the project will ultimately assist communities by providing them direction for improving their resilience to flooding and for protecting their natural resources.

WBE



Appendix A: Organizational Chart

Team organization

VILLAGE OF PHILMONT

Village BOA Grant Committee
Mayor Johnson & Trustee Ostrander

Project Management & Grants Admin & Community Participation
Philmont Beautification, Inc.
Sally Baker

& Towns of
Claverack, Ghent,
Hillsdale &
Austerlitz

Russell Urban-Mead, PG
Technical Lead

Steven Winkley, PG
Technical Lead

Environmental

Russell Urban-Mead, PG
Hydrology

Steven Winkley, PG
Hydrology

Samantha Carey
Environmental Scientist,
Aquatic Ecology and Fisheries

Amala Consulting
(WBE)

Sarah T. Parks
GIS

Planning

Christopher Round,
AICP
Principal-in-Charge

Matthew G. Rogers
Planning Lead/
Public Outreach/Regulatory

Behan Planning
(WBE)

John J. Behan
Public Outreach/Analysis

Cary G. Engle, RLA
Shoreline Stabilization

Amy E. Fitzgerald
Public Outreach/Analysis

Dana Brady
Environmental Analyst

Engineering

Jared Pristach, PE
Shoreline Stabilization and
Stormwater

Seth Erlich, PE
Hydrology

Richard M. Adams, PE
Stormwater

Jessica L. Brown, PE,
CPMSM
Hydrology and Shoreline

Foit-Albert
Associates
(MBE)

Michael Bellack, EIT
Hydrology



RUSSELL URBAN-MEAD

Vice President, Senior Hydrogeologist

As an Environmental Scientist and Senior Hydrogeologist for 23 years, Russell has worked on the restoration and repurposing of contaminated groundwater sites including inactive hazardous waste sites, brownfields sites, gasoline stations and related sites within various New York State Department of Environmental Conservation (NYSDEC) programs using DER 10 protocols. He specializes in water resource and water supply development and planning, establishing aquifer monitoring programs for communities, supporting shoreline and stream corridor restoration programs, and developing high-yield wellfields for municipal and private regulated community water system clients. At LaBella, Russell manages the firm's Hydrogeology Department as a discipline expert and firm Vice President.

**PG, CPG, QEP,
LEED AP**

**Professional Geologist: New York
No. 412, Alaska No. 650**

**Certified Professional Geologist,
AIGP, 10328**

**Qualified Environmental
Professional**

LEED® Associated Professional

EDUCATION

**Rensselaer Polytechnic Institute:
M. S. in Geology (Hydrogeology)**

**Carleton College: B.A. in
Geology**

ORGANIZATIONS

**National Groundwater
Association**

Geologic Society of America

**International Association of
Hydrogeologists**

**New York State Council of
Professional Geologists**

**American Water Resource
Association**

**American Institute of
Professional Geologists**

New York State Office of General Services: Drinking Water Source Protection Program—New York State

Currently leading a NYSOGS term contract for Drinking Water Source Protection Program. Includes developing plans for eight public water system programs in Cayuga, Cattaraugus, Dutchess, Suffolk, Orange, Warren and Wyoming Counties. Recharge areas are identified including discrete travel time and flow paths. Risk-based source water protection plans are developed with community participation.

Rensselaer Plateau Alliance: Poesten Kill Watershed and Flood Mitigation Study— Rensselaer County, NY

Project Manager for this watershed and flood mitigation study funded by a Hudson River Estuary Grant Program/ New England Interstate Water Pollution Control Commission (NEIWPCC) grant. The study resulted in a recommendation for a stormwater detention concept with constructed restrictions at

the existing wetlands' outlets. The project was recently awarded funding by NYSDEC under the 2022 Hudson River Estuary Grant Program, which will help the team establish and instrument a pilot wetland detention project

Byram Reservoir: Water Quality Monitoring—Westchester County, NY

Manages a multi-parameter water quality monitoring at this public water supply reservoir. Recommended and scoped stream gauging stations on critical tributaries and defined gauging requirements leading to rating curves converting depth to volume outputs. Oversaw installation of a tributary weir with data logging instrumentation. All data are converted to report grade presentation materials with annual reporting that supports lake safe yield and water quality trend management recommendations.



Dutchess County Planning and Development Department: Groundwater Supply—Dutchess County, NY

Worked with County, Agency, and Municipal stakeholders to delineate and assess threats to groundwater supplies across six municipalities in Dutchess County's Harlem Valley. Based on hydrogeologic data and review of threats and existing regulations, the working group then identified protective recommendations later converted into a model ordinance. The ordinance has since been adopted by Towns within and beyond Dutchess County. Also calibrated recharge and used nitrate models to recommend sustainable densities for rural septic systems and sustainable groundwater withdrawal budgets and developed a County-wide groundwater and stream monitoring program for the County. Russell continues to provide County-level advisory services to Dutchess County, working with Planning Department personnel and others.

Putnam County Division of Planning: Groundwater Supply—Putnam County, NY

Assembled and analyzed local and county-wide groundwater data, gauged streams, conducted statistical well performance analysis, analyzed threats, to prepare a hydrogeologic summary of County groundwater resources. Met over six months with a stakeholder team to review findings and develop a groundwater protection and management plan for Putnam County.

Nature Conservancy: Groundwater Resource Assessment—Dutchess and Putnam Counties, NY

Completed a groundwater resource assessment for a 97-square-mile watershed, outlining groundwater flows and critical recharge areas worthy of acquisition to protect wetland/groundwater quality and critical habitat baseflow to receiving streams.

Groundwater Resource Assessments—Philipstown, Gardiner, Montgomery, Pleasant Valley, North Salem, Dover, NY

Prepared municipal groundwater resource assessments for these six separate towns, identifying public water supply wells and recharge areas, aquifer safe yields, bedrock fracture traces, with source water protection and wastewater management plans.

Town of Wawarsing: Water Supply Program—Ulster County, NY

Developed a new wellfield adjacent to the Rondout Creek in the Town of Wawarsing. Exploratory wells were advanced on numerous properties to characterize lacustrine and stream bank sediments, leading to identification of deep sand and gravel deposits suitable for installation of test wells. Screened test wells were installed, tested with stream and near-test well piezometer monitoring in place, leading to issuance of water withdrawal permits.

Onondaga Nation: Tully Mudboil Study—Tully Valley, NY

Prepared comprehensive review of mudboil evolution, including analysis of the mechanics and causal factors of saline mudboils, their relationship to

historic halite solution mining, and recommending specific area-wide management strategies to minimize new mudboil development and mitigate existing environmental influences. Presented findings with Onondaga Nation leaders to USEPA project team including USEPA Region 2 Regional Director.

Widow Jane Distillery: Mine Hydrogeology Study—Rosendale, NY

Directed a hydrogeology investigation of the bedrock limestone formations immediately north of the Rondout Creek and approximately one mile west of the Hamlet of Rosendale. Study included analysis of rates of groundwater recharge, directions of groundwater migration, water quality and water level monitoring, and an assessment of the karst-forming tendencies of the bedding horizons quarried historically for Natural Cement. The study led to NYSDOH issuance of a unique source water withdrawal permit from a former Natural Cement mine.

East Sound: Public Water System Supply—Orcas Island, WA*

Conducted field reconnaissance to map the recharge area and evident quality threats to public water system wells supporting this island community.

Groundwater Protection, Risk Analysis, and Planning including Model Ordinances and/or Planning Board Consultant

- Town of Pleasant Valley
- Town of Red Hook
- Town of Dover
- Town of North Salem
- Town of Wawarsing
- Town of Hyde Park
- Village of Millbrook



CHRISTOPHER ROUND

Vice President, Planning Discipline Leader

Chris has 30 years of experience in providing land use planning and environmental services to local government, institutions and private clients. He is responsible for the overall operations of the service line and the management of complex interdisciplinary projects. Chris is experienced in the development of municipal plans and land use regulations, public participation and outreach efforts as well as securing grant funds for public and private entities.

AICP

American Institute of Certified Planners

EDUCATION

College of Environmental Science and Forestry: B.S. in Environmental Studies

ORGANIZATIONS

American Planning Association (APA)

APA Economic Development Division

New York Planning Federation

Habitat for Humanity of Warren, Washington, and Saratoga Counties, Board of Directors

TRAINING

International Economic Development Council

Strategic Planning for Economic Development

Real Estate Development & Reuse

Town of Queensbury: Glen Lake Watershed Management Plan—Queensbury, NY

Project Manager, currently developing a watershed management plan (WMP) for a 320-acre lake located within a highly developed watershed. WMP includes stakeholder outreach, summary of historic water quality data, review of past management practices, watershed model, and septic inventory.

NYSOGS/City of Glens Falls: Source Water Protection Plan—Glens Falls, NY

Project Manager, currently developing a source water protection for the City of Glens Falls surface reservoir system. Project includes evaluation of threats to water quality, stakeholder outreach, and development of strategies and recommendations to protect water quality.

Lake George Association: Lake George Delta-Sediment Management GEIS—Lake George, NY

Developed Generic Environmental Impact Statement (GEIS) for LGA and NYSDEC, evaluating the impacts of in-water

near-shore dredging to remove deltas associated with seven major tributaries. Of particular concerns were a high nutrient benthic environment and use of heavy equipment within the Lake. Served as Project Manager.

LGA: Lake George Data Atlas—Lake George Watershed, NY

Developed a first-ever compilation of watershed specific population, housing, land use and infrastructure data. The Data Atlas also explores development potential (buildout) of the entire watershed to assist decision makers with land use decisions.

LGA: West Brook Conservation Initiative—Lake George, NY

Worked with the LGA in cooperation with the Lake George Land Conservancy and the Fund for Lake George to convert a former 12-acre commercial site into an open area for use as a park, festival space and water quality treatment area, using created wetlands, settling basins and infiltration to provide water quality improvements to Lake George within an interactive park-like setting centered on environmental stewardship and awareness. The site has been constructed and is working successfully.





MATTHEW G. ROGERS

Senior Planner

Matthew has over 24 years of experience in the fields of community, economic, waterfront, and environmental planning. He specializes in providing zoning, land use, comprehensive planning, public outreach, economic development, and regulatory guidance to small and medium-sized towns, villages, and cities, along with private clients. Matthew's prior work with the New York State Adirondack Park Agency has provided him with a unique set of skills that he now uses to assist communities and private clients with the challenges of planning future growth, implementing proper regulatory procedures, and identifying realistic economic development opportunities.

EDUCATION

SUNY Plattsburgh: B.A. in Environmental Planning and Resource Management

North Country Community College: A.S. in Biology

SPEAKING ENGAGEMENTS

"Site Plan Review Basics", New York Planning Federation (NYPF) Training Session

"ADUs as Affordable Housing", NYPF/Upstate Adirondack Park Agency (APA) Conference

"Characteristics of Successful Downtowns", NYPF Annual Conference

"Preparing the Record for Sound Decisions", Association of Towns – NYPF Zoning Summer School

"Project Plan Review Techniques", Association of Towns – NYS Zoning Summer School

"Getting What You Want Out of Zoning", NYPF Annual Conference

Planning, Zoning and Economic Development

- Town of St. Armand, NY: Drinking Source Water Protection Plan
- Village of Corinth, NY: Reservoir Recreation Master Plan
- Town of Esopus, NY: Riverfront Access and Connections Plan
- Town of Esopus, NY: Local Waterfront Revitalization Program (LWRP) Update Funding
- Town of Esopus, NY: Comprehensive Plan (*Winner of the NYPF Outstanding/ Innovative Comprehensive Plan*)
- City of Amsterdam, NY: LWRP
- Village of Saranac, NY: Lake Designated Planner
- Village of Menands, NY: Hybrid Form-Based Code Zoning Law Update (January 2023 adoption)
- Town of Germantown, NY: Zoning Law
- Town of Esopus, NY: Zoning Ordinance Update
- Town of Prattsville, NY: Site Plan Law Revisions
- Village of Cooperstown, NY: Planned Unit Development Law Update
- Town of Johnstown, NY: Zoning Law Update
- Town of Stillwater, NY: Hybrid Form-Based Code Zoning Law
- Village of Corinth, NY: Zoning Law Update
- City of Fulton, NY: Zoning Update
- Town of Ballston, NY: Zoning Ordinance Update and GEIS
- Town of Lake Pleasant, NY: Comprehensive Plan and Zoning Update
- Town of Erwin, NY: Comprehensive Plan and Zoning Update
- City of Troy, NY: Form-Based Code Development and GEIS
- Town of Hamden, CT: Form-Based Code Evaluation for Quinnipiac University
- Hillsides and Ridges Viewshed Protection Plan, Sevier County, TN

- Town of Westerlo, NY: Planning Board Review Assistance – Telecommunications Tower
- Town of Beekmantown, NY: Planning Board Review Assistance – Windhorse Power Windfarm
- Black River Regulating District Permit System Amendments, NYS Hudson River
- Hamlet and Complete Streets Plan, Central Bridge, NY
- Town of Clermont, NY: Comprehensive Plan and Zoning Law
- Town of Sand Lake, NY: Comprehensive Plan
- City of Dunkirk, NY: Comprehensive Plan
- Village of Chatham, NY: Comprehensive Plan Update
- Town and Village of Catskill, NY: Building Department Consolidation Plan
- Town of Islip, NY: Downtown Strategic Plan and Market Analysis

Grant Writing

- NYSDEC Estuary Grant: Riverfront Access and Connections Plan, Esopus, NY
- NYSDEC Estuary Grant: Park Boundary and Topographic Survey and Bulkhead Structural Analysis, Esopus, NY
- Hudson River Valley Greenway: Zoning Ordinance Update, Esopus, NY
- CDBG Economic Development Grant: All Seasons, Inc.
- Brownfield Opportunity Area Program Grant: Albany, NY

Regulatory Reviews

- Project Manager: Regulatory approvals for private beach dredging—Lake George, NY
- Lead Planner: Visual simulations and Regulatory Project Guidance – Lake George Land Conservancy
- Project Manager: Third Party Review, Telecommunications Tower—Westerlo, NY
- Lead Planner: Regulatory Approvals for Riverlink Park Phase II—Amsterdam, NY
- Lead Planner: Regulatory approvals for the Arts Center—Old Forge, NY
- SEQR Project Manager: Environmental Impact Statement (EIS), Carriage Hill Estates, 250-unit development—Brunswick, NY
- Project Manager: EIS, Vista Technology Campus, Office and R&D—Bethlehem, NY
- NYSEQRA/NEPA Project Manager: EIS, Cornell Agricultural & Food Technology Park—Geneva, NY
- Project Manager: GEIS, Erie Community College—Buffalo, NY
- Project Manager: Third Party Review, SEQRA and Conditional Use Permit, "Windhorse Power Windfarm"—Beekmantown, NY
- Project Manager: Third Party EIS Review, Parking Facility "Bassett Health Care"—Cooperstown, NY
- Project Manager: Viewshed Protection Overlay District Ordinance—Erwin, NY
- Comprehensive Plan—Bolton, NY

- Regulatory Guidance, First Wilderness Economic Development Plan—Warren County, NY

Expert Witness

- Expert Witness, Zoning Ordinance Interpretation, Bonded Concrete, Inc.—Saugerties, NY
- Expert Witness: Osprey Island Property Dispute—Raquette Lake, NY



SAMANTHA CAREY

Environmental Scientist

Samantha is an Environmental Scientist that specializes in Aquatic Ecology and Fisheries Biology with six years of experience. She is responsible for conducting stream monitoring surveys, fisheries management surveys, water quality monitoring, pre/post mitigation monitoring and wetland delineations. She has worked on various projects that include lake management, stream ecology and invasive species monitoring. Samantha has extensive experience in R statistical programming for ecological analyses and writing comprehensive lake management reports.

EDUCATION

SUNY Oneonta: M.S. in Lake Management

SUNY Cobleskill: B.T. in Fisheries and Aquaculture

CERTIFICATIONS/ REGISTRATIONS

American Fisheries Society (AFS), National Member, NYS President Elect

North American Lake Management Society (NALMS), Member

Certificate of Erosion & Sediment Control Training

Lakes Forest and Allure: State of the Lake and Lake Management Plan—Lake Luzerne, NY*

Led and conducted surveys of Lake Forest and Lake Allure in the Adirondack Park. Field work included monthly water quality monitoring and collection, aquatic macrophyte surveys, fisheries stock assessment surveys, aquatic macroinvertebrate abundance and presence surveys, muck depth accumulation studies and freshwater plankton biomass and relative abundance surveys. Coordination occurred between the NYSDEC and Adirondack Park Agency (APA). Deliverables included a state of the lakes report and a comprehensive lake management plan.

Plymouth Reservoir: State of the Lake and Lake Management Plan—Plymouth, NY*

Assisted with field collections of fisheries community assessments, water quality data and watershed/in-lake nutrient cycling of Plymouth Reservoir. Deliverables included bathymetric mapping, a state of the lake report and an interim lake management plan.

Wyndham Condominiums: Invasive Species Collection—Garden City, NY*

Conducted invasive species collection using a boat electro fisher to remove invasive goldfish and Koi. Coordinated with the NYSDEC to complete the survey.

Lake Adirondack Association: Lake Adirondack Fisheries Stock Assessment—Indian Lake, NY*

Responsible for performing boat electrofishing surveys. The survey included water quality monitoring, fisheries community assessments, data management and tabulation.

Oscawana Lake Association: Oscawana Lake Fisheries Stock Assessment—Putnam Valley, NY*

Responsible for a boat electrofishing crew during night surveys that collected water quality samples and community assessment data. Project work included data collection and management.

Mirror Lake Fisheries Stock Assessment—Lake Placid, NY*

Assisted with fish species collection during the field study. The survey included water quality monitoring and data collection via nighttime boat electrofishing.

**Work performed with prior employer.*



JARED PRISTACH

Environmental Engineer

Jared is an Environmental Project Manager and Environmental Engineer responsible for coordination and successful completion of climate resilience projects and solar array development. He currently manages Brownfield Cleanup Programs shoreline resilience, and solar design projects. His project experience includes Phase I and Phase II Environmental Site Assessments (ESAs), New York State Department of Environmental Conservation (NYSDEC) State Superfund projects (including remedial design and construction oversight), remedial systems operation and maintenance, green infrastructure design, civil engineering site design, shoreline and streambank resilience planning, and structural engineering design of recreational facilities.

PE

Professional Engineer: New York

EDUCATION

University at Buffalo: M.S. in Civil/Environmental Engineering

Manhattan College: B.S. in Environmental Engineering

CERTIFICATION

40-hour OSHA HAZWOPER Certified

Town of Evans: Lake Erie Beach Park Shoreline Stabilization Study—Evans, NY

Project Engineer and Manager responsible for conducting a review of historical and existing conditions at the Site and using these findings to provide an in-depth alternatives analysis for how to address streambank erosion, shoreline erosion, and recreational area enhancement at a municipal beach and park. Interacted with a stakeholder committee throughout the study to evaluate and consider public, State, and municipal interests in the future use of the park.

Buffalo Sewer Authority: RainCheck 2.0—Buffalo, NY

Project Engineer responsible for conducting in-field Retrofit Reconnaissance Inventory (RRI) and providing technical insight into each Combined Sewer Overflow (CSO) basin for final reporting. Assessed over 350 individual private properties within six CSO basins in the City of Buffalo to determine whether or not these properties were suitable for green infrastructure

retrofitting. Was also responsible for proposing signature projects in each CSO based on his field findings as well as developing green infrastructure profiles based on the land use of each CSO basin. Additionally, interacted with property owners and communicated proposed designs to these owners.

New York State Office of General Services: Point Gratiot Park—Dunkirk, NY

Served as the primary design engineer for this green infrastructure project conducted for NYSOGS. Project included design of rain gardens and vegetated swales to intercept stormwater runoff at the municipal park to improve water quality. Generated design drawings, design specifications, planting plans, cost estimates, and design presentations given to the municipalities.

New York State Office of General Services: Lake Erie Beach—Evans, NY

Served as the primary design engineer for this green infrastructure project conducted for NYSOGS. The project included the design of rain gardens and vegetated swales to intercept stormwater runoff to improve water quality and reduce beach erosion. Generated design drawings, design specifications, planting plans, cost estimates, and design presentations given to the municipalities.

NYS Office of Parks, Recreation and Historic Preservation: Allegany State Park—Salamanca, NY

Served as the primary design engineer for a recreational boardwalk and interpretive feature designs conducted for NYSOPRHP. The project included the design of walking trails, structural design of elevated boardwalks, observation platforms and recreational boat launches as well as invasive species control. Generated design drawings, design specifications, construction cost estimates, and planting plans as part of the design. Also coordinated the structural design with a subconsultant.

NYS Office of Parks, Recreation and Historic Preservation: Hamlin Beach State Park—Hamlin, NY

Design engineer for a recreational boardwalk and interpretive feature designs. Project included design of walking trails, structural design of elevated boardwalks, observation platforms and recreational boat launches as well as invasive species control. Generated design drawings, design specifications,

construction cost estimates, and planting plans as part of the design. Also coordinated the structural design with a subconsultant.

NYS Office of Parks, Recreation and Historic Preservation: Riddell State Park—Davenport, NY

Primary design engineer for a recreational boardwalk and interpretive feature designs. Project included the design of walking trails, structural design of elevated boardwalks, observation platforms, recreational boat launches, and invasive species control. Generated design drawings, design specifications, construction cost estimates, and planting plans as part of the design, and coordinated the structural design with a subconsultant.

NYS Office of Parks, Recreation and Historic Preservation: Golden Hill State Park—Barker, NY

Served as the primary design engineer for a lakeshore stabilization design conducted for NYSOPRHP. Responsibilities included design of a "green" riprap revetment and recreational walkway. Generated design drawings, design specifications, construction cost estimates, and developed project-specific planting plans to implement the green revetment.



SETH ERLICH

Senior Civil Engineer

Seth has over 16 years of experience in water resources, hydrologic and hydraulic modeling, stormwater management, and construction management. He has worked on hydraulic modeling involving dam assessments and rehabilitations, bridge replacements and scour assessments, floodplain modeling, riverine modeling, and tidal modeling. Seth has also worked on stormwater pollution prevention and management, and erosion and sediment control plans.

PE

Professional Engineer: New York

EDUCATION

SUNY ESF: B.S. in Environmental and Forest Engineering

ORGANIZATIONS

Association of State Floodplain Managers (ASFPM)

TRAINING

NYSDEC Endorsed 4-Hour Erosion and Sediment Control Training

Stream Stability and Scour at Highway Bridges, FHWA-NHI-135046

HEC-RAS Basic Hydraulic Modeling for Steady Flow Analysis

Aquatic Organism Passage and Fishway Design Training

**Work performed with prior employer.*

Scenic Hudson: Hydraulic Assessment for Binnen Kill—Selkirk, NY

Project Manager responsible for assessing flood and wetland conditions for a preserve site along the Binnen Kill. Due to the flat site and tidal impacts of the Hudson River, a 2-dimensional HEC-RAS model was developed. The intent of the project is to assess stability of existing wetland crossings at the preserve. This modeling is intended to assess potential sea level rise along the tidal estuary.

Scenic Hudson: Black Creek Preserve Trail Culvert Assessment—Esopus, NY

Project Engineer responsible for assessing proposed options for a trail crossing over a small stream. The current structure consisted of a 30-inch RCP within a stone box culvert. Flows selected for the crossing were from USGS StreamStats for NY. A HEC-RAS model was completed to assess the proposed crossing. Ultimately, a 20-foot-long wooden bridge was selected primarily for aesthetic reasons. Additional crossings were assessed for the project, but did not require a HEC-RAS model.

Scenic Hudson: Hydrologic Analysis and Floodplain Assessment for Properties along Fall Kill—Poughkeepsie, NY

Project Engineer responsible for preparing a floodplain assessment for several commercial/industrial properties along the Fall Kill with the aim of removing properties from Special Flood Hazard Area Zone A (SFHA). Since there was no existing hydrologic or hydraulic data for the Fall Kill, an 18 square-mile watershed model was computed in HEC-HMS, which contained a large amount of wetland storage areas. Per the client's request, a range of precipitation was assessed to plan for potential flood increases. A steady flow, HEC-RAS model was constructed for a 0.5-mile section of the Fall Kill in an urbanized area of the City. The results indicated the properties may be removed from the SFHA. The project resulted in successful removal of the target building from the SFHA.

Lake Luzerne Dam Safety Inspection, Engineering Assessment and Emergency Action Plan—Lake Luzerne, NY

Lake Luzerne Dam is a Class B - Intermediate Hazard Dam. The dam is approximately 100



feet long and 5.5 feet high; however, it impounds a very large body of water. As Senior Engineer, responsibilities included preparing a hydrologic and hydraulic assessment for the dam, and summarized the findings in an Engineering Assessment Report as well as preparing a draft Emergency Action Plan and inundation mapping.

Thorne Dam Safety Inspection, Engineering Assessment and Emergency Action Plan—Amenia, NY

Thorne Dam is a Class C - High Hazard Dam. The dam is approximately 200 feet long and 40 feet high. The dam was out of code with NYSDEC receiving an unsound condition rating and was not certified with NYSDEC. Responsibilities included conducting a dam safety inspection of the concrete dam and preparing a report summarizing the findings and laying out recommendations to improve the condition of the dam as well as preparing hydrologic and hydraulic assessments in order to assess the capacity of the existing spillway and verify the hazard classification. The breach wave and inundation mapping are expected to end at least four miles downstream of the dam. The project will conclude with preparation of the Engineering Assessment Report and the Emergency Action Plan.

Catskill Watershed Corporation: Property Flood Mitigation Studies—Ulster, Delaware and Greene Counties, NY

Project Engineer responsible for providing assessments for individual properties relating to flood mitigation. For each property, appropriate documentation (Flood Insurance

Studies and Rate Maps, Floor Plans, Site Photos and Survey) are reviewed and appropriate retrofitting measures are recommended with the aim of improving the flood resiliency and reducing flood insurance premiums. Mitigation studies have been completed for more than a dozen properties to date.

Catskill Watershed Corporation: Flood Buyout Program—Ulster, Delaware and Greene Counties, NY

Program Manager for over three years, coordinating building demolition and site restoration for more than 10 properties. For each property, initial materials testing is conducted and a site demolition plan is prepared. The approved site plan is then bid and a contract is selected as well as assisting with project progression. Coordinates with funding agency (CWC), contractor, and regulator (NYC DEP) to ensure that work is conducted safely and cleanly. Manages documentation, including bills of lading, waste manifests, and all closeout documentation.

MaineDOT, NHDOT, MassDOT: Statewide Bridge Scour Assessments—New England Region*

Water Resources Engineer involved with field and office assessment of approximately 1,000 bridges in the States of Maine, New Hampshire and Massachusetts over a period of 10 years. For each bridge, a scour categorization and assessment was conducted. For bridges without H&H data, hydrologic and hydraulic modeling was completed in HEC-RAS to determine flows. As needed scour analyses were completed and countermeasures were recommended.

Dry Floodproofing of Three-Story Commercial Building—Walton, NY

Project Manager for design of dry floodproofing of an existing privately-owned 12,000-square-foot brick building on Delaware Street. The project recommended filling the existing basement with flowable fill and establishing a new slab and concrete curbwall to protect the building up to the Design Flood (base flood plus 2 feet). Prior to flooding, a device would be added at the two reconfigured entrances to protect the interior of the building. The project included coordination of civil, structural, electrical and plumbing design.

Lifting of Commercial and Residential Buildings—Delaware and Greene Counties, NY

Project Manager for proposed design for five buildings lifts of either commercial or residential buildings. Each building is to be lifted such that the lowest structural member is at or above the Design Flood (base flood plus 2 feet). This requires demolition of the existing foundation and design and construction of a new foundation. Often the projects include adding a small mechanical room to contain any utilities located in the basement. These projects include coordination of civil, structural, electrical and plumbing design. The lift and placement of rigging beams is delegated to the lift contractor.



RICHARD M. ADAMS

Senior Civil Engineer

Richard has 12 years of consulting engineering experience. He is experienced in stormwater management, water treatment and transmission, wastewater treatment projects, site development design including site grading, utility design and layout, erosion and sediment control, and transportation planning. His responsibilities consist of engineering design, CAD drafting and project inspections.

PE

Professional Engineer
New York

EDUCATION

Northeastern University: B.S. in
Civil Engineering

CERTIFICATIONS

NYSDEC Erosion and Sediment
Control Training

Town of Lake George: Cedar Lane and Beatty Road Green Infrastructure Feasibility Study—Lake George, NY

Assisted with developing a report investigating the feasibility of implementing green infrastructure practices within a residential area nearby a surface water body that serves as a major drinking water supply to help improve water quality and decrease stormwater runoff, and thereby pollutant loading, in an area previously lacking stormwater infrastructure. Tasks include delineating watershed subcatchments, concept plan layout of GI practices, conducting physical soil testing, and performing preliminary hydrologic, hydraulic, and pollutant reduction analyses.

Lake George Association: Lakeview Area Brook Stormwater Improvements—Lake George, NY

Analyzed stormwater resiliency improvements in a sediment impaired unnamed tributary to Lake George. Performed desktop review of brook's watershed using AutoCAD and GIS. Performed field visit of the brook's watershed to develop an existing conditions model. Assisted with design of stormwater resiliency features to mitigate erosion and sedimentation.

Lake George Association: East Side Stormwater System Improvements—Lake George, NY

Analyzed stormwater resiliency improvements in a sediment impaired stormwater system that is tributary to Lake George. Performed desktop review of storm system watershed utilizing AutoCAD and GIS. Performed field visit of storm system watershed to develop an existing conditions model. Assisted with design of stormwater resiliency features to mitigate erosion and sedimentation.

Town of Lake George: Westbrook Road Site and Stormwater Improvements—Lake George, NY

Prepared the site plan drawings and details. Assisted with the design and layout of the sidewalk, parallel parking lane, site grading and storm sewer system upgrades. Assisted the design team to ensure compliance to ADA and Town standards. Calculated the water quality storm volumes and rates and designed an infiltration system to ensure sufficient stormwater treatment. Compiled the construction cost estimate.

Saratoga County Water Authority: Water Transmission Connection—Stillwater, NY

Modeled the existing and proposed stormwater system using HydroCAD. Sized the stormwater facilities to comply with the New York State Department of Environmental Conservation (NYSDEC) stormwater rate, quantity and water quality regulations. Assisted with the design and layout for the permanent and temporary easements.

Town of Stillwater: Brown's Beach Rehabilitation—Stillwater, NY

Collected water quality samples and measured lake turbidity as required by NYS Department of Health regulations for bathing beaches. Prepared site plan drawings and details for bathing beach and stormwater design. Assisted with design and layout of proposed stormwater system. Performs monthly inspections of stormwater system and prepares status reports in accordance with state's inspection requirements.

Warren County Soil & Water Conservation District: Green Infrastructure Feasibility Study—Queensbury, NY

Analyzed, conceptually designed, and wrote a report for two green infrastructure projects in the Town of Queensbury. Performed the hydrologic and hydraulic analysis. Observed the soil test pits. Calculated the potential Water Quality volume benefits of the green infrastructure practices.

Village of Lake George: Lower Amherst Street Stormwater Improvements—Lake George, NY

Assisted in the development of the site plans, details and HydroCAD model for an

upgraded stormwater system on Lower Amherst Street in the Village of Lake George. The system included rain gardens/ bioretention areas, trench drains, catch basins, and a hydrodynamic treatment unit.

Town of Lake George: Caldwell Sewer District Evaluation—Lake George, NY

Assisted with the evaluation of the Town's Caldwell Sewer District infrastructure (sanitary sewer collection system, manholes, and two pump stations and force mains). Analyzed CCTV results and manhole inspections for roughly 40,000 linear feet of gravity sewer main and 196 sanitary manholes. Created the capital improvement plan, cost estimate, and phasing plan for future rehabilitation of the sewer system.

Village of Fort Edward & Washington Co. Sewer District #2: FE-1A Trunk Sewer (Irving Tissue)—Fort Edward, NY

As Project Engineer/Manager, designed an approximately 5,000-linear-foot sewer separation project to eliminate a portion of a combined sewer system. The project includes the design and layout of a sanitary pump station, approximately 5,000 linear feet of new 16-inch water main, and associated appurtenances.

Town of Lake George: Diamond Point Water District System Evaluation—Lake George, NY

As Project Engineer, prepared an engineer's report that included an evaluation of the complete water system, and development of concept plans for replacement of components beyond their useful life.

Towns of Queensbury, Lake George, Stillwater, Malta and Milton, NY: Planning Board Engineering Support

Assisted in the review of over 500 planning board applications for the Towns mentioned above including the Lake George Park Commission. Services include review of ADA compliance, stormwater management design, overall site design and general compliance with local zoning codes. Projects reviewed include all scales of land development from minor and major residential subdivisions to small and large commercial developments.



JESSICA L. BROWN

Senior Civil Engineer

Jessica has over 14 years of consulting engineering experience that includes projects ranging from water supply and treatment, wastewater facilities, site development design including site layout, grading, erosion and sediment control, stormwater management design, and hydrologic and hydraulic analysis. She has also practiced in project detailing and specifications, cost estimating and permitting, and construction administration.

PE, CPMSM

Professional Engineer: New York

Certified Professional in Municipal Stormwater Management

EDUCATION

Clarkson University: B.S. in Civil Engineering

AFFILIATIONS

New York State Floodplain and Stormwater Managers Association

TRAINING

AutoCAD LDT

HydroCAD

HEC-RAS

WaterCAD

Rensselaer Plateau Alliance: Poesten Kill Watershed and Flood Mitigation Study—Rensselaer County, NY

Lead Engineer for this watershed and flood mitigation study funded by a Hudson River Estuary Grant Program/New England Interstate Water Pollution Control Commission (NEIWPCC) grant. Evaluated flood mitigation measures. The study resulted in a recommendation for a stormwater detention concept with constructed restrictions at the existing wetlands' outlets. Assisted client with a successful grant application to NYSDEC for funding under the 2022 Hudson River Estuary Grant Program, which will help the team establish and instrument a pilot wetland detention project.

Town of Denning: Sundown Flood Mitigation—Denning, NY

Project Engineer responsible for working with the Town of Denning to advance improvements for Rondout Creek. Assisted in completing HEC-RAS modeling for several mitigation alternatives.

Otsego Land Trust: Brookwood Point Stream Stabilization—Cooperstown, NY

Hydrologic and Hydraulic Modeling for stream restoration evaluation.

NYSOPRHP: Clove Creek Streambank Restoration—Lagrange, NY

Hydraulic modeling and stream stabilization repair design

Floodplain Assessment for Properties along Richland Creek—Belle Meade, TN

As Project Engineer, assisted in preparation of a floodplain assessment for three residential properties along Richland Creek, with the aim of removing properties from Special Flood Hazard Area (SFHA) Zone AE. The assessment started with existing HEC-RAS modeling requested from FEMA, which was then updated with additional survey data. The results of the modeling confirmed that the properties were appropriately located in the SFHA. Subsequently, a no-rise analysis was completed to aid in landscaping renovations for one of the properties.

Upper and Lower Wiccopee Dams—Peekskill, NY

As Project Engineer, prepared Engineering Assessment Report, hydrologic and hydraulic analyses and permitting associated with the two concrete dams. The upper dam is approximately 325 feet long with a 60-foot long spillway. The lower dam is approximately 350 feet long with a 45-foot long spillway.



JOHN J. BEHAN

Principal - Planning



John J. Behan has been a planner for over 35 years and has earned a reputation for the ability to guide a community from visioning to project construction. Mr. Behan's creative collaborations with his clients and their constituencies has been recognized with several national awards. His experience includes preparation of generic environmental impact statements for large-scale/regional projects and programs and development of natural resources management and protection plans including water supply protection, watershed management, hazard mitigation, farmland protection, open space conservation, waterfront revitalization, trail system and recreation and tourism resource development. Mr. Behan's work helps balance economic and community development needs with long-term conservation and sustainability goals with emphasis on consensus-building to get projects accomplished.

EDUCATION

University of Massachusetts, Amherst, MA, Master of Regional Planning, February, 1983, Emphasis in recreation and natural resource management and economic development planning

State University of New York, Plattsburgh, NY, Bachelor of Arts, Environmental Science, cum laude, 1979

Syracuse University, Syracuse, NY, Liberal Arts studies, 1976

PROFESSIONAL EXPERIENCE

Principal, Behan Planning and Design, Saratoga Springs, New York, 1994-Present

Adjunct Professor, State University of New York, Albany, New York, 1993-2010

Senior Planner, Principal, The Saratoga Associates, Saratoga Springs, New York, 1987-1994

Community Development Planner, Senior Planner, and Deputy Planning Coordinator, City of Fitchburg, Fitchburg, Massachusetts, 1983-1987

Research Assistant and Editor, Water Resources Research Institute, University of Massachusetts, Amherst, Massachusetts, 1980-1983

SELECTED PROJECT EXPERIENCE

ENVIRONMENTAL PLANNING AND ANALYSIS

TOWN OF BLOOMING GROVE – Natural Resources Conservation Plan
TOWN OF CLARKSTOWN, NY – New City Revitalization Project SEQR/NEPA
TOWN AND VILLAGE OF CORNWALL – Natural Resources Conservation Plan
DELAWARE COUNTY, NY – Hazard Mitigation Plan Consulting Team
LEWIS COUNTY, NY – Agricultural Enhancement Plan
TOWN OF MILTON, NY – Generic EIS for Zoning Amendment
TOWN OF BEEKMAN, NY – Comprehensive Plan and Generic EIS
CITY OF BURLINGTON, VT - Comprehensive Development Ordinance and Vermont Act 100 Environmental Review
TOWN OF CLARKSTOWN, NY – West Nyack Zoning Environmental Assessment
TOWN OF CLIFTON PARK, NY - Land Conservation Plan and Generic EIS
TOWN OF EAST GREENBUSH, NY – Zoning Amendment and Generic EIS
TOWN OF GUILDERLAND, NY – Zoning Amendment Environmental Review
CITY OF KINGSTON, NY – Open Space Plan
TOWN OF MARBLETOWN – Natural Heritage Plan
TOWN OF MILTON, NY - Comprehensive Plan and Generic EIS
TOWN AND VILLAGE OF NEW PALTZ – Open Space Plan
NEW YORK STATE – Consulting Team Member for Drinking Water Source Protection Plans for City of Auburn, City of Beacon, Town of Wappinger, Town of Brookhaven
VILLAGE OF PHILMONT, NY – Watershed Planning for Brownfield Area
TOWN OF PITTSFORD, NY – Greenprint Program Generic EIS
TOWN OF PITTSFORD, AND VILLAGE OF PITTSFORD, NY –Local Waterfront Revitalization Program Generic EIS
TOWN OF PITTSFORD, NY – Residential Neighborhood Zoning and Design Guidelines and Environmental Assessment
RENSELAER PLATEAU, NY – Regional Conservation Plan
SARATOGA COUNTY, NY – Green Infrastructure Plan and Generic EIS
SULLIVAN COUNTY, NY – Hazard Mitigation Plan Consulting Team
CITY OF SYRACUSE, NY – Skaneateles Lake Watershed Land Protection
TOWN OF WALLKILL & CITY OF MIDDLETOWN, NY - Natural Hazard Mitigation Plan and SEQR/NEPA Environmental Assessment
TOWN OF WAPPINGER – Wastewater Facilities Plan and Generic EIS
MOREAU INDUSTRIAL PARK—Generic Environmental Impact Statement

JOHN J. BEHAN, Principal

Page 2

NATIONAL AWARDS

National Award for Planning. The American Planning Association, Chicago, IL and Washington, DC For The Pittsford Greenprint Initiative, by John J. Behan, AICP for the Town of Pittsford, NY.

Waterfront Planning. The Waterfront Center, Washington, DC, for Horizons Action Plan for Erie County Waterfront, by The Saratoga Associates, John Behan, Project Manager.

DuPont Greenway Award. The National Geographic Society, The Conservation Fund, Washington DC, and Arlington, VA, for the Upper Hudson Greenway and the Salmon River Greenway, by The Saratoga Associates, John Behan, Project Manager.

SELECTED SPEAKING ENGAGEMENTS

Hudson Valley Regional Council
Integrating stormwater management with community design, and intermunicipal collaboration.

New York State Wetlands Forum, *SEQR and the Generic EIS.*

New York State Association of Towns.,
Revitalizing Town Centers

New York Planning Federation. , *Illustrated Design Guidelines for Development Review.*

Long Island Green Infrastructure Conference, *Municipal Code: Breaking Barriers*

Institute for Transportation Engineers ,
Greening of the Highway.

New York State Association of Towns.
Creative Community Land Use Tools: Incentive Zoning and Transfer of Development Rights (TDR)

New York State Government Finance Officers Association, *Successful Grant Proposals*

New York State Metropolitan Planning Organization (Niagara Falls),
Transportation Drives Land Use

New York State Department of Transportation, *Transportation in the Regional Landscape, Community involvement is a contact sport.*

PROJECT EXPERIENCE

TRANSPORTATION, CORRIDOR PLANNING and PUBLIC WORKS

- EMPIRE STATE TRAIL – Environmental assessment scoping for state-wide trail system and coordination of construction plans and specifications for Tivoli Bays section.
- CAPITAL REGION TRAILS PLAN – Coordination of consulting team and development of four-county shared-use path system master plan.
- HUDSON RIVER VALLEY GREENWAY – Regional Trail Connections Plan (with Alta Planning and Design)
- CITY OF ALBANY, NY - Upper New Scotland Avenue / Krumkill Road Neighborhood Plan
- SYRACUSE I-81 CORRIDOR PLAN,– Public Involvement Program for Phase I Interstate 81 Corridor
- ROCHESTER-PITTSFORD, NY – Monroe Ave-NYS Route 31 Corridor Plan
- TOWN OF CANANDAIGUA, NY – Southern Corridor Study: Development, Transportation and Conservation Strategy
- TOWN OF CLERMONT, NY - Hamlet District and Route 9 Corridor Area Plan
- TOWN OF EAST GREENBUSH, NY - Route 4 Corridor Study (Capital District Transportation Committee)(subconsultant)
- TOWNS OF GUILDERLAND/PRINCETOWN, NY - Route 20 Land Use and Transportation Study (Capital District Transportation Committee)
- CITY OF SARATOGA SPRINGS, NY – Weibel Avenue-Gilbert Road Study (Capital District Transportation Committee)
- CITY OF SARATOGA SPRINGS, NY - Lake Avenue Country Gateway: Vision and Recommendations (Capital District Transportation Committee)
- ULSTER COUNTY, NY – New Paltz Intermodal Feasibility Study
- GLENS FALLS, NY – ADIRONDACK TRANSPORTATION COMMITTEE—Route 9 Corridor Plan, Town of Moreau
- ULSTER COUNTY, NY – Marlboro Hamlet/NYS Route 9 Corridor Plan
- TOWN OF GUILDERLAND, NY,– Guilderland Hamlet Linkage Study (Capital District Transportation Committee)
- TOWN OF GUILDERLAND, NY,– Guilderland Center Linkage Study (Capital District Transportation Committee)
- TOWN OF CLARKSTOWN, NY - New City Vision Plan
- TOWN OF HALFMOON, NY - Town Center Master Plan
- TAPPAN ZEE CONSTRUCTORS AND NYSTA. - Tappan Zee Bridge Replacement Project Public Involvement Program Design and Implementation (with Stokes Creative Group)
- TOWN OF CLARKSTOWN, NY - South Main Street Streetscape Revitalization
- TOWN OF CLARKSTOWN, NY – Central Nyack Hamlet Revitalization
- ROCKLAND COUNTY, TOWN OF CLARKSTOWN, NY – Congers Road Streetscape Reconstruction
- ROCKLAND COUNTY, Dutch Garden Linkage and Parking Improvements
- CITY OF FITCHBURG, MA – Main Street Improvement Program



EDUCATION

◆ **SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY**

Syracuse, New York
Master of Landscape Architecture | 2003

◆ **SUNY COLLEGE OF ENVIRONMENTAL SCIENCE AND FORESTRY**

Syracuse, New York
Bachelor of Science | 1999
Environmental and Forest Biology

PROFESSIONAL EXPERIENCE

◆ **BEHAN PLANNING & DESIGN**

Saratoga Springs, New York
Landscape Architect | 2019-Present

◆ **NEW YORK STATE OFFICE OF PARKS, RECREATION, AND HISTORIC PRESERVATION**

Saratoga Springs, New York
Landscape Architect | 2008-2010

◆ **BARTON PARTNERS**

Philadelphia, Pennsylvania
Land Planner | 2006-2008

◆ **EASTERN STATES ENGINEERING**

Horsham, Pennsylvania
Planning Designer | 2003-2006

CARY G. ENGLE, RLA

LANDSCAPE ARCHITECT

Ms. Engle is a landscape architect licensed to practice in New York State with more than 10 years of professional experience. She has worked in the private sector for engineering and architecture firms, and in the public sector for the New York State Office of Parks, Recreation, and Historic Preservation. Her experience includes streetscape and green infrastructure for stormwater management, park, trail, and recreational facility design and rehabilitation, zoning review and site planning for residential, commercial, and mixed use developments, and the design of wayfinding systems including orientation maps and brochures. Her work is informed by her background in environmental science and her interest in sustainable, ecologically based design.

PROJECT EXPERIENCE

◆ **COMPREHENSIVE PLANNING, ZONING, AND DESIGN GUIDELINES**

Local Waterfront Revitalization Program | TOWN OF CORTLANDT and VILLAGE OF BUCHANAN, NY

Greenway Strategic Development Plan | TOWN OF GLENVILLE, NY

Spring Valley Design Guidelines | VILLAGE OF SPRING VALLEY, NY

Industrial Lands Zoning Study | TOWN OF EAST FISHKILL, NY

Freemans Bridge Road Feasibility Study | GLENVILLE, NY (w/CME)

Route 119 Complete Streets | TARRYTOWN/WHITE PLAINS, NY

Long Lake Comprehensive Plan | TOWN OF LONG LAKE, NY

Inlet Valley Zoning Amendment | TOWN OF ITHACA, NY

Smart Growth Design Guidelines | TOWN OF PLATTSBURGH

◆ **DESIGN**

Brockport Pedestrian Bridge | VILLAGE OF BROCKPORT, NY

Town Center Park Master Plan | TOWN OF CLIFTON PARK, NY

New York Country Club Master Plan | VILLAGE OF NEW HEMPSTEAD, NY

Green Innovative Streetscape Planting Design | WATERTOWN, NY

Complete Streets Planting Design | TOWN OF MALTA, NY (w/ CME)

Landscape Design Services | WMA HEALTH ALLIANCE ST. MARY'S CAMPUS
(sub to F. Cauffman)

Ulster County Design Services | ULSTER COUNTY, NY

Milton Train Station Park | TOWN OF MARLBOROUGH, NY

CARY G. ENGLE, RLA

LANDSCAPE ARCHITECT

◆ PARKS, TRAILS, RECREATION & OPEN SPACE PLANNING

- Schematic Riverfront Park Design*** | TOWN OF HOOSICK FALLS, NY
- South End Connector Trail Construction Documents*** | CITY OF ALBANY, NY
- Saratoga Spa State Park Master Plan*** | CITY OF SARATOGA SPRINGS, NY
- Saratoga Spa State Park Picnic Pavilion and Parking Lot Rehabilitation*** | CITY OF SARATOGA SPRINGS, NY
- Saratoga Spa State Park Trail Improvements*** | CITY OF SARATOGA SPRINGS, NY
- Bennington Battlefield State Historic Site Schematic Trails Plan*** | HOOSICK FALLS, NY
- Johnson Hall State Historic Site Schematic Design for Interpretation of Historic Orchard*** | JOHNSTOWN, NY
- Saratoga Spa State Park Mineral Springs Rehabilitation*** | SARATOGA SPRINGS, NY
- Grant Cottage State Historic Site Circulation Improvements*** | TOWN OF WILTON, NY
- Crown Point State Historic Site Parking and Circulation Improvements*** | TOWN OF CROWN POINT, NY
- Moreau State Park Improvements to Beach Area Amenities*** | TOWN OF GANSEVOORT, NY
- Grafton Lakes State Park Map and Sign Design*** | TOWN OF CROPSYVILLE, NY
- Emma Treadwell Thacher Nature Center Utility Area Planting Design*** | TOWN OF VOORHEESVILLE, NY

AMY E. FITZGERALD

SENIOR PLANNER

Ms. Fitzgerald is a city planner with over 8 years of professional experience in New York and California. Her experience includes municipal and regional planning with projects as diverse as development plan review, managing entitlement cases, revising design guidelines, community outreach, master planning, transportation studies, streetscape design, land use studies and zoning text changes, placemaking, wayfinding and public art opportunities, trail rehabilitation projects, environmental review and drinking water source protection. Her work is informed by her background in design, art, planning and sustainability.

PROJECT EXPERIENCE

◆ PUBLIC OUTREACH

Public Outreach for LWRP | CITY OF WATERTOWN, NY
Public Outreach and Survey for Comprehensive Plan | VILLAGE OF BALLSTON SPA, NY
Stakeholder Group Coordination & Public meetings for Drinking Water Source Protection Plans | TOWN OF MANLIUS, TOWN OF BROOKHAVEN, CITY OF AUBURN, CITY OF BEACON & TOWN OF WAPPINGER, NY
Verdugo Wash Visioning Outreach Materials | CITY OF GLENDALE, CA, w/ City of Glendale
Traveler Information Center User Survey | LASAFE, Los Angeles, CA, w/ LA METRO
Streetscape Survey | HYHK ALLIANCE, New York, NY, w/ HYHK Alliance
Park Naming Survey | HYHK ALLIANCE, New York, NY, w/ HYHK Alliance

◆ COMPREHENSIVE PLANNING, ZONING, AND DESIGN GUIDELINES

Village of Ballston Spa Comprehensive Plan | VILLAGE OF BALLSTON SPA, NY
Clinton County Airport Smart Growth Plan | TOWN OF PLATTSBURGH, NY
Comprehensive Plan & Local Waterfront Revitalization Plan | CITY OF PLATTSBURGH, NY
Master Plan for former golf course site in New Hemstead, NY | NY COUNTRY CLUB
Verdugo Wash Visioning | CITY OF GLENDALE, CA, w/ City of Glendale
Honey Bee Zoning | CITY OF GLENDALE, CA, w/ City of Glendale
Call Box Location Study | LASAFE, Los Angeles, CA, w/ LA METRO
Comprehensive Streetscape Study | HYHK ALLIANCE, w/ HYHK Alliance

◆ ENVIRONMENTAL REVIEW

Freemans Bridge Road Multi-use Path Project | TOWN OF GLENVILLE, NY

◆ ENVIRONMENTAL PROTECTION PLANS

Drinking Water Source Protection Plan | TOWN OF MANLIUS, NY
Drinking Water Source Protection Plan | TOWN OF BROOKHAVEN, NY
Drinking Water Source Protection Plan | CITY OF AUBURN, NY
Drinking Water Source Protection Plan | CITY OF BEACON, NY
Drinking Water Source Protection Plan | TOWN OF WAPPINGER, NY

◆ PUBLIC ART

Installation of "Ascension" sculpture, 9th Ave & W36th St, NY, NY | HYHK ALLIANCE, w/ HYHK Alliance
Mural installation, W37th St, NY, NY | HYHK ALLIANCE, w/ HYHK Alliance

EDUCATION

◆ PRATT INSTITUTE

Brooklyn, New York
Master of Science in City & Regional Planning | 2014

◆ FORDHAM UNIVERSITY

New York, New York
Bachelor of Arts | 2005
Visual Art and Urban Studies

RELEVANT PROFESSIONAL EXPERIENCE

◆ BEHAN PLANNING & DESIGN

Saratoga Springs, New York
Senior Planner | 2021-Present

◆ CITY OF GLENDALE

Glendale, California
Associate Planner | 2020-2021

◆ LA METRO

Los Angeles, California
Transportation Planner | 2017-2020

◆ HYHK ALLIANCE

New York, New York
Director of Planning & Marketing | 2015-2017



DANA BRADY

ENVIRONMENTAL PLANNER

Dana Brady's experience includes assisting in the development of sustainable land use projects for public spaces such as recreational facilities, trail rehabilitation projects, and environmental review and site planning for commercial and mixed-use developments. Her work is supported by her background in environmental science and sustainability.

PROJECT EXPERIENCE

- Community Preservation Plan* | CITY OF KINGSTON, NY
- Freeman's Bridge Road Revitalization* | TOWN OF GLENVILLE, NY
- Mohawk Hudson Bike-Hike Trail Reconstruction* | TOWN OF GLENVILLE, NY
- New York State Drinking Water Source Protection Plan* | CITY OF BEACON, NY
- New York State Drinking Water Source Protection Plan* | CITY OF AUBURN, NY
- New York State Drinking Water Source Protection Plan* | TOWN OF WAPPINGER, NY
- New York State Drinking Water Source Protection Plan* | TOWN OF BROOKHAVEN, NY
- Clinton County Airport Revitalization Plan* | TOWN OF PLATTSBURGH, NY
- Local Waterfront Revitalization Program* | CITY OF PLATTSBURGH, NY

EDUCATION

- ◆ **GREEN MOUNTAIN COLLEGE**
Poultney, Vermont
Master of Environmental Science | 2019
- ◆ **SAGE COLLEGE OF ALBANY**
Albany, New York
Bachelor of Science; Creative Writing | 2012

RELEVANT PROFESSIONAL EXPERIENCE

- ◆ **BEHAN PLANNING & DESIGN**
Saratoga Springs, New York
Environmental Planner | 2021-Present

SUMMARY OF QUALIFICATIONS:

PhD Ecological Economist, GIS Analyst and Grant Writer with excellent research, analysis, and project management skills.

- PhD in Ecological Economics
- Excellent GIS & spatial analysis skills
- Lead author on “What have economists learned about valuing nature? A review essay.” (*Ecosystem Services* journal) with over 100 citations
- Team lead on the UNDP Thailand’s Millennium Ecosystem Assessment Sub-Global Assessment
- Experience on interdisciplinary teams working toward common goals such as conservation or environmental planning
- Expert ability to research, analyze and synthesize findings
- Extremely detail-oriented
- Passion for meaningful projects

CURRICULUM VITAE:

EDUCATION

Ph.D., Ecological Economics, 2012, Rensselaer Polytechnic Institute (RPI), Troy, NY

Dissertation: Valuing Ecosystem Services: A Pluralistic Approach

M.S., Ecological Economics, Values, and Policy, 2007, Rensselaer Polytechnic Institute (RPI), Troy, NY

B.A., Psychology, Minor in Economics, 2002, Colgate University, Hamilton, NY

Division I Basketball Player, 1998-2002

WORK EXPERIENCE

President and Founder of Amala Consulting (www.amalaconsulting.com) 2012 - present

Specializing in Ecological Economics, Geographic Information Science (GIS), project management, and grant writing. Certified New York State (NYS) Woman-Owned Business Enterprise (WBE)

Geographic Information Systems (GIS) & Ecological Economics

- Watershed-scale spatial analysis and mapping for the New York State Drinking Water Source Protection Program (DWSP2). Work with interdisciplinary team of environmental scientists, hydrogeologists, regional planners, engineers and regional stakeholders.
- Economic valuation of nonmarket ecosystem services on the Rensselaer Plateau (NYS) and development of final public report with maps of the economic values of ecosystem services
- Spatial analysis and mapping for the Poesten Kill Watershed Resiliency Project
- Developed large GIS database for a study of Water Quality Monitoring Efforts on the Marcellus Shale; Completed Spatial Analysis including regression and density analysis; Developed numerous maps for public dissemination and for peer-reviewed journal article
- Spatial analysis to identify ecological and community value hotspots; Aided in conducting participatory mapping workshop to elicit community values
- Digitized, developed and conducted spatial analysis on large ecological data sets; Developed a process to automate the digitization of large datasets; Created numerous maps, such as ecological communities, interior forest areas & biodiversity conservation areas
- Development of countless ecological maps, trail maps, conserved area maps in Capital District Region of NYS. Aided in the development of a Conservation and Trail Vision Plan.

Project Management

- Managed large project for the development of the first Community Forest in New York State
- Organized and facilitated community Woods Forums – aided in educating forest landowners about land conservation and timber harvest management; Presented and facilitated at forums, organized events, conducted outreach and marketing
- Promoted town engagement through outreach and communication with municipal officials
- Organized and managed workshop for Healthy Veterans, Healthy Forest program

Grant Writing

- Raised over \$11.9 million for clients. Experience with Foundation, New York State and Federal Grants, working with both non-profit and for-profit organizations
- Conducted research and synthesized various types of data, such as demographic and other socioeconomic indicators, in order to complete needs assessments
- Identified opportunities, budget development and analysis, developed reporting and accountability indicators, wrote/edited grants
- Ranked #1 nationally for a grant submitted to the USDA Forest Service for the Rensselaer Plateau Alliance Community Forest

Board Member/Executive Committee Member, Rensselaer Plateau Alliance 2014 – 2017

- Served as Secretary of the Board; Reviewed grant reports; Aided in strategic planning, fundraising, and capacity building efforts, supported land conservation efforts with over 1,800 acres conserved during my tenure

Volunteer Mentor, Burmese Refugee Family 2011 – 2014

United States Commission for Refugees and Immigrants (USCRI), Albany, NY, USA

- Aided family of eight to assimilate to American culture, including such help as financial affairs, health, schooling, employment, and day-to-day issues

Consultant for United Nations Development Programme (UNDP) Thailand 2009 – 2010

UNDP Millennium Ecosystem Assessment (MA) for Thailand

- Developed proposal to receive funding from the UNDP and managed the research project
- Completed assessment of and developed survey for ecosystem services, human well-being, and drivers of change for two Thai provinces; Analyzed land use change

GIS/Bio-Science Technician 2008 – 2009

USDA Forest Service, Northern Research Station, Forest Inventory and Analysis, Troy, NY, USA

- Mapped and analyzed forest characteristics using GIS technology
- Aided in developing metrics to understand and analyze the effects of fragmentation and urbanization on forest resources and the ecosystem services and products they provide
- Assessed accuracy of datasets by using statistical analysis to compare field data to data generated through geospatial computer modeling techniques

Co-founder and Co-chair 2007 - 2009

Student Sustainability Task Force, RPI, Troy, NY, USA

- Created university-wide coalition of students, administrators, faculty and staff dedicated to integrating sustainability into all aspects of university life, including education, research, operations, and culture. Organized Sustainability at Rensselaer conference
- Co-authored 50-page “Sustainability at Rensselaer” report - prepared for the Office of the President. Resulted in the integration of sustainability into university performance plans.

FELLOWSHIPS AND INTERNSHIPS

Research and Development Intern	2008
<i>New York State Energy Research and Development Authority (NYSERDA), Albany, NY, USA</i>	
Teaching & Learning Assistant	2007 - 2009
<i>Vasudha, Earth & Environment Living & Learning Community, RPI, Troy, NY, USA</i>	
Environmental and Public Policy Intern	2007
<i>Environmental Advocates of NY, Albany, NY, USA</i>	
Environmental and Community Project Manager	2004 - 2006
<i>Vineyard Conservation Society, Vineyard Haven, MA, USA</i>	

GRANTS AND AWARDS

- Barnabas McHenry Hudson River Valley Award, 2012
- Phalanx Honors Society, Rensselaer Polytechnic Institute, 2012
- Humanities, Arts and Social Science (HASS) Fellowship, 2010-2012
- Teaching and Learning Assistantship, Vasudha: Earth and Environment Living and Learning Community, Rensselaer Polytechnic Institute, 2007 - 2009
- Founders Award of Excellence, 2009
- Dean's List, Colgate University; Patriot League Academic Honor Roll, 1999

GUEST LECTURES

- "GIS in the Social Sciences," for Environmental Justice, Dr. Mascarenhas, Rensselaer Polytechnic Institute, Mar. 5, 2013
- "Sustainability Careers," Dr. Fisk, Rensselaer Polytechnic Institute, Oct. 25, 2012 & Sept. 20, 2013
- "Public Service and Civil Engagement: From Global to Local," for STSH 4900: Public Service Internship, Dr. Kenner, Rensselaer Polytechnic Institute, Sept. 21, 2011
- "Research and Applications: Monitoring Forest Resources for Sustainability," for IHSS-1970: Nature/Society, Dr. Akera and Dr. Gowdy, Rensselaer Polytechnic Institute, Sept. 16, 2011
- "Global & Local Research in Ecological Economics," for GK12: Energy & Environment, Questar III New Visions High School Program, Rensselaer Education Center, Apr. 25, 2012

ATHLETIC HONORS

- Willow Street Athletic Club Team Member, 2021-present
- Semi-Professional Basketball Team Member, MVP, Dublin, Ireland, 2002-2003
- Irish National Basketball Team Member, Ireland, 2002-2003
- Sparks Award, Colgate University, 2002 (*Hustle Award renamed in honor of yours truly*)
- Athlete of the Year, Strength & Conditioning Department, Colgate University, 2002
- First Team All-State in Field Hockey, Basketball and Track, 1998

KEY PUBLICATIONS

- Kinchy, A., Parks, S., & Jalbert, K. (2015). Fractured Knowledge: Mapping the Gaps in Public and Private Water Monitoring Efforts in Areas Affected by Shale Gas Development. *Environment and Planning C: Government and Policy*, 00: 1 -21.
- Gowdy, J., & Parks, S. (2014). The Behavioral Argument for an Expanded Valuation Framework for Biodiversity and Ecosystem Services. In P. Nunes and P Kumar (Eds.), *Handbook on Research on the Economics of Biodiversity and Ecosystem Services*. Cheltenham, UK: Edward Elgar

- Parks, S. & Gowdy, J. (2013). What have economists learned about valuing nature? A review essay. *Ecosystem Services*, 3: e1-e10.
- Parks, S. (2012). Divergent Pathways of Development: Human Wellbeing and Ecosystem Services in Two Thai Provinces. *Environment and Planning C*, 30(5): 891 – 909.
- Riemann, R., Wilson, B.T., Lister, A., & Parks, S. (2010). An effective assessment protocol for continuous geospatial datasets of forest characteristics using USFS Forest Inventory and Analysis (FIA) data. *Remote Sensing of Environment*. 114, 2337-2352.
- Riemann, R., Lister, T., Lister A., Meneguzzo, D., & Parks, S. (2008). Development of issue-relevant state level analyses of fragmentation and urbanization. In W. McWilliams, G. Moisen, R. Czaplewski, comps. *2008 Forest Inventory and Analysis (FIA) Symposium*; October 21-23, 2008; Park City, UT. Proc. RMRS-P-56CD. Fort Collins, CO; U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 1 CD.
- Maps for Citizens' Environmental Coalition. (2007). *Cancer Prevention for Pollution Prevention: State Policies to Reduce the Public's Exposure to Carcinogens*.

OUR FIRM

Firm Background

Foit-Albert Founded – 1977

Names of Principals Gregory R. Carballada, AIA John J. Robson, PE

Gwen A. Howard, AIA Gerard J. Sentz, PE Michael J. Pohl, PLS Andrew S. Taylor, PE, FPE

Certification Disadvantage Business Enterprise (DBE) Minority Business Enterprise (MBE)

Current Staff 120+ employees

Locations

295 Main Street, Suite 200
Buffalo, New York 14203 (716) 856-3933

Hanover Square 435
New Karner Road Albany,
New York 12205
(518) 452-1037

215 West 94th Street Suite 517
Manhattan, NY 10025
(212) 372-4813

89-31 161 St.
Suite 901
Jamaica, NY 11432
(718) 374-3422

Website foit-albert.com

FOIT-ALBERT ASSOCIATES IS AN AWARD-WINNING, NEW YORK STATEBASED, MULTIDISCIPLINARY ARCHITECTURE, ENGINEERING, ENVIRONMENTAL & LAND SURVEYING CONSULTING FIRM.

The architectural group brings extensive experience in the design of new buildings and the rehabilitation and restoration of existing facilities. Clients include public and private sectors, and encompass federal, state, municipal, commercial, institutional and industrial projects. Project types include colleges and universities, K-12 educational institutions, aviation, correctional / judicial facilities, municipal facilities, cultural and heritage facilities, housing projects, zoos and aquariums, healthcare institutions and parks & recreation projects. We also have historic preservation specialists and New York State certified code-enforcement officials.

The engineering group offers design and inspection services for a variety of federal, state, municipal and private clients. Professional services include transportation, site/civil, environmental and structural engineering. Project types include bridges, culverts, highways, roads, intersections, parks, trails, multi-use paths, canals, stormwater management, environmental engineering, water systems, sewer systems, parking lots and planning board review projects.

The Environmental team is versed in hazardous material assessment/testing/design, Phase I Environmental Site Assessments, environmental permitting, preparation of NYSDOT Draft/Final Design Reports (Chapter IV), Wetland Delineation, SEQRA/NEPA compliance and documentation.

The building systems engineering group provides services for new construction and redevelopment projects, central utility and infrastructure systems, fire protection and life safety analysis, HVAC, plumbing, electrical, process piping and high purity water systems, code reviews and analysis, feasibility studies, cost analysis, and construction support.

The surveying group provides a full range of surveying services, including Boundary Surveys of residential and commercial properties, Topographic Surveys, Right-of-Way Surveys, Bathymetric Surveys and High Definition Terrestrial 3D Laser Scanning for architectural and engineering support, hazardous waste, industrial, horizontal and vertical geodetic control and aerial photo control surveys, along with construction layout, among others. Foit-Albert's survey field crews are equipped with current, state-of-the-art equipment supported by CADD graphic workstations. The surveying group has field crews located in Buffalo and Albany, allowing service to the entire State of New York effectively.

Foit-Albert Associates is a certified Minority Business Enterprise (MBE) and a Disadvantaged Business Enterprise (DBE) with offices in Buffalo, Albany and New York City, New York.



MICHAEL BELLACK, EIT

Engineering Group

Years of Experience

Total Years of Experience: 15
Years with Foit-Albert: 1

Education

2003-2007
Worcester Polytechnic Institute,
Worcester, MA
Bachelor of Science, Civil & Environmental
Engineering

Certifications

- E.I.T. Certification
- OSHA HAZWOPER (40 hr)
- First Aid/CPR/AED
- OSHA Confined Space certification
- OSHA Respirator certification
- SWPPP Inspector training

Role: Senior Engineer

• 15 years' experience in civil and environmental engineering.

Mr. Bellack has over 15 years of civil & environmental engineering experience throughout New York State including NYC and Long Island. During this time, he worked on a wide breath of projects as well as developed expertise in various areas of civil engineering, environmental engineering, computer aided design, hydraulic modeling, and GIS implementation.

Mr. Bellack's years of experience in engineering design and computer modeling give him the ability to engineer creative solutions and design constructible, visually appealing, successful projects.

MS4 GIS Storm System Mapping

Washington County, NY

- Role: Senior Engineer
- Responsibilities: Mr. Bellack coordinated with local municipalities to perform in-field GIS data collection of the storm sewer shed, and storm sewer system for the Town of Kingsbury, Village of Hudson Falls, Town of Fort Edward, and Village of Fort Edward. Mr. Bellack produced maps, reports, and an ArcOnline Geodatabase to meet the NYSDEC MS4 mapping requirements of the municipalities.
- Key elements: Provided storm system mapping for the Towns of Kingsbury and Edward.

MS4 GIS Storm System Mapping

Lake George, NY

- Role: Design Engineer
- Responsibilities: Mr. Bellack developed a client specific library and database that would capture the reporting requirements of the NYSDEC MS4 program.
- Key elements: Provided engineering services.

GIS Water System Mapping

Diamond Point, NY

- Role: Design Engineer
- Responsibilities: Mr. Bellack coordinated with the local municipality to perform in-field GIS data collection of the water supply system for the Village of Diamond Point. Mr. Bellack produced maps and an ArcOnline GIS database for the towns records and future maintenance.
- Key elements: Provided water system mapping for the village of Diamond Point.

OGS Harriman Campus GIS Site Mapping

Albany, NY

- Role: Design Engineer
- Responsibilities: Mr. Bellack performed onsite software & hardware training to the OGS staff. Mr. Bellack performed GIS System Troubleshooting field testing to assure a high quality and user-friendly product is delivered to the client.
- Key elements: Provided engineering services for OGS Harriman Campus.



NEW YORK STATE **MINORITY- AND WOMEN-OWNED BUSINESS ENTERPRISE ("MWBE")** **CERTIFICATION**

Empire State Development's Division of Minority and Women's Business Development grants a

Minority Business Enterprise (MBE)

pursuant to New York State Executive Law, Article 15-A to:

Foit -Albert Associates Architecture, Engineering and Surveying, P.C.

Certification Awarded on: September 27, 2018

Expiration Date: September 27, 2023

File ID#: 1928





SECTION 5

REFERENCES

REFERENCES

LaBella has partnered with the following clients for many years. We have provided planning, environmental, and engineering services on relevant projects, some of which are described in Section 3 of this proposal. We encourage the Village to contact these references as well as those listed in the additional relevant projects also provided in Section 3 of the proposal.

Jim Bonesteel **Executive Director**

Rensselaer Plateau Alliance
jim@rensselaerplateau.org
(518) 712-9211
Poesten Kill Watershed
Management Plan (see Section 3
for full description)

Nicole L. Cheplowitz, **PE, LEED AP** **Project Manager,** **Design & Construction**

New York State
Office of General Services
nicole.cheplowitz@ogs.ny.gov
(518) 473-4999
Drinking Water Source Protection
Program Plans (see Section 3 for
full description)

John Strough **Town Supervisor**

Town of Queensbury
johns@queensbury.com
(518) 761-8229
Glen Lake Watershed
Management Plan (see Section 3
for full description)



SECTION 6

BUDGET



**WATERSHED MANAGEMENT PLANNING FOR THE
AGAWAMUCK CREEK WATERSHED**

REVISED PROJECT BUDGET

LaBella	\$ 75,466
Behan/Amala - WBE	\$ 24,957
Foit Albert - MBE	\$ 24,957
Professional Fees	\$125,380
Expenses	\$ 4,000
Project Total	\$129,380
WBE Totals	\$ 24,957
MBE Totals	\$ 24,957

AGAWAMUCK WATERSHED INTERMUNCIPAL PLANNING PROJECT BUDGET - 12.2.22		LaBella Associates						Behan Planning & Design				Amala Consulting	Foit-Albert	Totals		
		Russell Urban Mead	Matthew G. Rogers	Samantha Carey	Jared Pristach	Seth Erlic	Richard Adams	Jessica Brown	John J. Behan	Cary Engle	Amy Fitzgerald	Dana Brady	Sarah Parks	Michael Bellack	Hours	Fee
Tasks																
7	Kickoff Meeting	4	8					4		4				20	\$ 3,172	
8	Initial Vision and Waterfront Goals	4	4							4	4			16	\$ 2,232	
9	Description & Assessment of the Waterbodies & Watershed Resources	6	20	5	12	8	16	12	4		12		16	24	135	\$ 18,724.00
10	Conduct Site-Specific Biological Survey Study & Literature Review (Completed)															
11	Description & Assessment of the Ability of Local Laws & Programs to Implement Best Management Practices to Protect Water Quality	8	35	4	12		4	4	2		16	18	8	8	119	\$ 15,363.00
12	Draft Watershed Characterization Report	4	24	4	4	4	4	4	2		5	6	8	14	83	\$ 11,046.00
13	First Pubic Participation/Outreach Meeting	2	14	4				4					10		34	\$ 4,276.00
14	Refinement of Vision & Watershed Goals	2	8												10	\$ 1,406.00
15	Final Watershed Characterization	6	14	2	2	2	2	2					8	16	54	\$ 7,620.00
16	Watershed Management Recommendations to Achieve Goals & Objectives	6	14	15	8	6	6	12	2	6	8			24	107	\$ 15,414.00
17	Second Public Participation/Outreach Meeting	2	12					8					8		30	\$ 4,066.00
18	Watershed Management Recommendation Report	8	15		2			2	2	6	8		8	14	65	\$ 9,599.00
19	Implementation Strategy & Schedule	4	12	2	2			2						10	32	\$ 4,712.00
20	Tracking and Monitoring	4	8	16	2		2	6						12	50	\$ 7,004.00
21	Draft Watershed Management Plan	4	14	2	2		2	2	2	4			8	10	50	\$ 6,994.00
22	Third Public Participation/Outreach Meeting	2	8	2				2					8		22	\$ 2,766.00
23	Final Watershed Management Plan	4	12	2				2						12	34	\$ 5,092.00
24	Watershed Monitoring Protocol and Pilot	4	6	12				12						12	46	\$ 6,842.00
Total Hours by Staff		74	228	70	46	20	36	74	18	18	57	28	82	156	907	\$ 126,328
Rate		\$ 203.00	\$ 125.00	\$ 110.00	\$ 120.00	\$ 120.00	\$ 126.00	\$ 170.00	\$ 190.00	\$ 150.00	\$ 150.00	\$ 80.00	\$ 100.00	\$ 160.00		
Fee by Staff		\$ 15,022	\$ 28,500	\$ 7,700	\$ 5,520	\$ 2,400	\$ 4,536	\$ 12,580	\$ 3,420	\$ 2,700	\$ 8,550	\$ 2,240	\$ 8,200	\$ 24,960		

	Fee	Hours		
LaBella	\$ 76,258	548	MBE	\$ 24,960
Behan	\$ 16,910	121	WBE	\$ 25,110
Amala	\$ 8,200	82		
Foit-Albert	\$ 24,960	156		
Professional Fees	\$ 126,328			
Expenses	\$ 3,000			
Total	\$ 129,328			



SECTION 7
MWBE PARTNERS

MWBE PARTNERS

Powered by Partnership
is more than a tagline
for us.

LaBella embraces the benefits and added strength created by a diverse project team. We believe that diversity in our staff and subconsultants strengthens our team by providing different perspectives and cultural experiences, which can enhance the design of any project and ultimately create a better final solution for our clients. This is especially the case for projects involving a community's natural resources and water quality.

We have established many successful working relationships with certified minority-owned, women-owned, service disabled veteran owned, and other disadvantaged business enterprises throughout the State of New York. For this project, we have teamed with

Behan Planning & Design and Amala Consulting

Professional services to be provided by Behan and Amala represent approximately 28% of the total estimated project fee. LaBella Associates has partnerships with numerous consultants and we are capable of making adjustment in response to client and Department requests and requirements.





LaBella
Powered by partnership.

www.labellapc.com • (877) 626-6606



November 29, 2022

Ms. Sally Baker
Project Management
Philmont Beautification, Inc.
Village of Philmont
124 Main Street
Philmont, NY 12565

**RE: Revised Budget and Consulting Team
Watershed Management Planning for the Agawamuck Creek Watershed
Village of Philmont, Towns of Claverack, Ghent, Hillsdale and Austerlitz
Columbia County, New York
Proposal P2205286**

Dear Ms. Baker:

LaBella Associates has added Foit-Albert (Certified Minority Business Enterprise) to our team and revised the project budget accordingly. Foit-Albert's qualifications along with the revised project budget are attached.

Please let us know if you require any additional information to assist in your final selection.

Respectfully submitted,

LaBella Associates

Russell Urban-Mead, PG

Vice President
Senior Hydrogeologist
LaBella Associates, DPC
Email: rurban-mead@labellapc.com
Phone: (845) 486-1551

AGAWAMUCK WATERSHED INTERMUNCIPAL PLANNING PROJECT BUDGET - 12.2.22		LaBella Associates						Behan Planning & Design				Amala Consulting	Foit-Albert	Totals		
		Russell Urban Mead	Matthew G. Rogers	Samantha Carey	Jared Pristach	Seth Erlic	Richard Adams	Jessica Brown	John J. Behan	Cary Engle	Amy Fitzgerald	Dana Brady	Sarah Parks	Michael Bellack	Hours	Fee
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