

Town of Guilderland Town Hall P.O. Box 339 5209 Western Turnpike Guilderland, NY 12084



Statement of Qualifications Route 146 Pedestrian Safety Project Plan PIN 1757.33

Guilderland Center, New York



Creighton Manning Engineering, LLP

2 Winners Circle Albany, New York 12205

Contact: Don Adams, P.E. Email: dadams@cmellp.com Phone: 518-446-0396 Web: www.cmellp.com Submitted to: Donald Csaposs

April 1, 2013

PARTNERS John M. Tozzi, P.E. Edward V. Woods, P.E. Donald G. Sovey, P.L.S.

April 1, 2013

Mr. Donald Csaposs Town of Guilderland Town Hall, PO Box 339 Guilderland, NY 12084



RE: Route 146 Pedestrian Safety Project Plan, Town of Guilderland, NY, PIN 1757.33

Dear Mr. Csaposs:

The schedule for the Route 146 Pedestrian Safety Project Plan is critical to satisfy the program requirements of the Congestion Mitigation and Air Quality (CMAQ) funds, which require construction to be obligated by September 2014. Creighton Manning provides the Town with a team that will meet the aggressive schedule while successfully completing the project with:

- ✓ Experienced Project Management: Don Adams, PE, PTOE has worked directly with NYSDOT Region One's Local Projects Unit and has a track record for delivering federal-aid transportation projects on time. Don has applicable experience managing federal aid pedestrian improvement projects in Region One and knows how to streamline the process.
- ✓ Experienced Team: The CM team provides the Town with a combination of local knowledge, technical expertise and understanding of the requirements of the Locally Administered Federal Aid (LAFA) process. Bob Hansen's understanding of the project process and funding is unparalleled in the Capital District; he will be a great resource to the Town.
- ✓ Enthusiasm and Dedication: Creighton Manning's involvement in the Neighborhood Master Plan for the Guilderland Center Hamlet is a distinct advantage with regard to project understanding and familiarity. We have a true appreciation for the importance of this sidewalk to the Hamlet residents to address the existing pedestrian safety concerns. CM is enthusiastic about the opportunity to bring this long-awaited improvement to the Guilderland Center Hamlet.
- ✓ Cost Effective: CM provides the Town with a low federally audited overhead rate. This means the Town will get more hours from Creighton Manning than from other firms for the same project budget.

Creighton Manning was recently awarded a smaller CMAQ funded project for Schenectady County. Our highly experienced team will progress the projects simultaneously and take advantage of the economies of scale. We look forward to working with you to confirm the scope of work and fee for this project in a timely manner. Please contact me at 446-0396 or sjohnston@cmellp.com with any questions regarding this Statement of Qualifications.

Respectfully submitted,

Creighton Manning Engineering, LLP

Shelly a Jehnstm Shelly A. Johnston, P.E.

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Partner

Albany, NY 12205

ENGINEERS

PLANNERS

SURVEYORS



TABLE OF CONTENTS

<u>Tab</u>	Section	<u>Page</u>
	Cover Letter	i
1	Project Understanding Introduction Team Interest in Project	1
	Project Staffing	1
	Project Approach and Understanding of Work to be Done	2
	Understanding of Challenges	5
	Schedule	6
	Familiarity with the Project Area	7
	Familiarity with Federal and State Requirements	8
2	Firm Experience	9
3	Management Plan	
	Organizational Chart	10
	Resumes	11
4	References	22
5	Appendix: Draft Scope of Services for Federal Aid Project	

INTRODUCTION

Creighton Manning understands that, through our commitment to strong project management, engineering design and quality control procedures, it is our role to guide the Town through the Federal-aid design and construction process in a timely and cost-effective manner. Creighton Manning has a track record of successfully delivering time-sensitive infrastructure improvement projects

throughout the Capital Region.

Creighton Manning Engineering, LLP is a professional transportation engineering, planning and surveying firm located in Albany. Originally established in 1965, the firm has been providing professional engineering services throughout New York State and has established a solid reputation for high quality design, with specific expertise in:

Creighton Manning has assembled a team and approach to meet the Town's schedule and budget for this project.

Highway and Bridge Design

Sidewalk and Trail Planning and Design

Traffic Engineering

Traffic Signal/ITS Design

Construction Support and Inspection

Environmental Studies

Survey and Mapping

Public Involvement

Civil/Site Design

Public Utility Design

For 48 years, Creighton Manning has been recognized across New York State for its expertise in transportation engineering. The firm has 60 employees including 28 licensed professionals (including PEs, LSs, RLAs and PTOEs) and continues to grow while maintaining our specialization in transportation services.

INTEREST IN PROJECT

During the development of the *Town of Guilderland Neighborhood Master Plan for the Guilderland Center Hamlet*, Creighton Manning recognized the public's continued interest in pedestrian improvements in the Hamlet. Many of the same residents were involved in the development of the *Town of Guilderland Comprehensive Plan 2000* when pedestrian improvements were initially recommended in the Hamlet. Creighton Manning is very interested in working with the Town and the stakeholders to provide a seamless transition from the planning phase to design and implementation. One of the most rewarding aspects of a transportation professional's career is designing infrastructure that directly improves the quality of life in a community. We are enthusiastic about the opportunity to provide sidewalks in Guilderland Center to encourage walking to the high school, businesses, churches, Keenholts Park, and transit.



Over the past 7 years Creighton Manning has made a concerted effort to expand our transportation services to include planning and design of multi-modal transportation improvement projects including separate facilities to accommodate pedestrians and bicyclists, such as sidewalks, multi-use paths and trails. This effort was driven by employees who have the passion to use, design and maintain these facilities. Our engineers have a strong technical base with extensive experience on sidewalk projects and Complete Streets practices. In addition, Creighton Manning's landscape architecture and planning services enhance our professional capabilities. This expertise softens the design and gives more attention to the interests of the users.

PROJECT STAFFING

The Creighton Manning Team is made up of talented, highly qualified and experienced professionals to serve Town officials, residents, businesses and involved agencies during the project. The Creighton Manning Team has reviewed the backlog of their existing projects and the proposed schedule for this project and has determined the key staff proposed are highly available through the duration of this project. Key staff for this project includes Don Adams, Steve Godlewski, Kristie Di Cocco, Don Sovey, Linda Stancliffe, Mark Sargent and



Ed Lawson – all licensed professionals who live and work in the local area. In addition, we have added the services of MJ Engineering and Land Surveying, a certified Disadvantaged Business Enterprise, for the environmental services required for the design report, and RK Hite, Inc. a certified Real Estate acquisition firm with specialty in property acquisition for NYSDOT and Locally Administered Federal Aid projects.

Bob Hansen is Creighton Manning's project advisor, who is available to the Town if necessary through the life of the contract. Don Adams will serve as Project Manager. Don has over 22 years of experience planning and

designing surface transportation including projects several pedestrian improvement projects in the area. In addition to the key staff listed, Rich Miller brings over 40 years of experience to the team and serves the role of QA/QC Manager for Creighton Manning. He will insure that the project satisfies all **NYSDOT** design specifications and policy requirements. Don Sovey, L.S., CM's Chief of Survey, will lead the survey and right-of-way research. Rich Hite will lead the ROW acquisition process for this project, if necessary.

Mark Sargent brings the familiarity and continuity to the project from the Neighborhood Master Plan for the Guilderland Center Hamlet. We work closely with NYSDOT Region

Firm	Experience and Qualifications of Key Staff	Years of Experience	Federal Aid Projects	Sidewalk/ADA Improvement	QA/QC	Public Involvement	Traffic Engineering	Environmental	Data Collection/ ROW	Construction Inspection/ Construction Support	Easements/Right-of-Way
	Bob Hansen, PE	39	X	X	X	X	X				
	Don Adams, PE, PTOE	22	X	X		X	X	X		X	
g.	Mark Sargent, PE	27	X	X	X	X	X		X		
Creighton Manning	Linda Stancliffe, RLA,	20	X	X	X	X		X			
Z Z	Steve Godlewski, PE	10	X	X	X	X					
ighto	Kristie Di Cocco, PE	8	X	X		X		X		X	
Cre	Don Sovey, PLS	27	X	X	X				X	X	X
	Ed Lawson, PE	22	X	X	X					X	
MJ	Lisa Wallin, PE	8	Х	Х				Х			
RKHite	Richard Hite	30	Х	Х							X

One Design, Traffic and Safety, Local Projects Unit and Construction Inspection offices on multiple projects in the Capital Region. This experience and existing working relationships with key stakeholders will facilitate communication and directly benefit the project schedule.

PROJECT APPROACH/ UNDERSTANDING OF WORK TO BE DONE

According to the Federal Highway Administration (FHWA), around 4,500 pedestrians annually are killed in traffic crashes with motor vehicles in the United States. Pedestrians killed while "walking along the roadway" account for almost 8 percent of these deaths. Providing walkways separated from the travel lanes could help to prevent up to 88 percent of these "walking along roadway crashes." Sidewalks provide many benefits including safety, mobility, and healthier communities.

The Neighborhood Master Plan for the Guilderland Center Hamlet Linkage Study provided a great start by seeking public input on a phased approach to transportation improvements in the Hamlet. The first phase was reducing the speed limit to 35 mph in the Hamlet, which was implemented in 2011. The second phase is the pedestrian safety improvement project, a federally funded project under the



Congestion Mitigation and Air Quality (CMAQ) program. Since the project is funded with CMAQ funds, construction must be obligated by September 2014.



The approach below integrates the Scope of Services outlined in the RFP and our first hand experience of completing similar projects. Creighton Manning has developed a complete Draft Scope of Services as required for a locally administered federal aid project and included it as an appendix to this proposal.

The Route 146/Main Street Pedestrian Safety Project will involve the evaluation of several key elements during the concept development including:

- Coordination with utilities to identify locations.
- Obtain NYSDOT right-of-way (ROW) mapping with the intent of constructing the improvements within the existing ROW.
- Meet with the adjacent property owners to understand their access needs.

Below is a summary of Creighton Manning's approach for the tasks outlined in the Request for Proposal:

Task 1: Study Area Boundary – Before proceeding with the development of a concept, we propose to initiate the project with a kickoff meeting with the stakeholders to review the following:

- Critical success factors of the project
- Issues and concerns in the corridor
- Confirm scope of work and approach
- Review the schedule with major milestones and
- Discuss the deliverables.

At this meeting we will use aerial mapping illustrated with information to confirm our understanding of the project, a narrative description of the proposed project area and a concept for a sidewalk along Main Street from Depot Road to the Guilderland Center Nursing Home entrance.

Task 2: Site Inventory and Survey — Creighton Manning recently completed the design and construction inspection of the Johnston Road rehabilitation project for Albany County, which included construction of sidewalks in an area with constrained right-of-way. The Route 146/Main Street corridor has similar constraints with side slopes, utility conflicts and limited right-of-way. Based on our familiarity with the Route 146 corridor, detailed topographic and boundary survey information will be necessary to identify right-of-way, environmental, cultural and utility constraints

that may affect the project. For example, on the west end of the corridor the alignment of the Black Creek is relatively close to Route 146, which will influence the design of the sidewalk.

Task 3: Conceptual Pedestrian Improvement Plan – Using the mapping from the detailed survey and the information gained during site visits, Creighton Manning will develop concept designs that will be used to

confirm the approach with the Town of Guilderland, NYSDOT and key stakeholders. Both plan view and cross-sections will be presented to better understand the pros and cons of the design alternatives. The alternatives should consider an option that meets the desires of the community and also consider an alternative that avoids the need for right-of-way if possible.

Task 4: Draft Design - It is anticipated that this project will be a categorical exclusion under the National Environmental Policy Act (NEPA). Therefore, during the draft design task we will prepare an





Initial Project Proposal/Final Design Report design approval document. This is similar to design approval document we completed on the federal-aid Albany School Zone project. This level of design approval document is straight forward and does not require FHWA approval, only concurrence from NYSDOT on the Design Approval, which expedites this step in the process. We will meet with the Town and NYSDOT to facilitate and expedite design approval. During Draft Design, we will conduct a Public Hearing that would satisfy the requirements of the Eminent Domain Procedures Law. In the event that it is necessary to acquire small piece(s) of right-of-way, the project schedule will not be adversely impacted by the need to have a separate Public Hearing.

Task 5: Final Design – Based on input from the Town, NYSDOT, and the public as well as the detailed environmental review required by NEPA, a preferred design alternative will be identified. The final construction documents will include detailed plans, including work zone traffic control plans, a project manual with construction specifications, and an engineer's construction cost estimate using NYSDOT's standard estimating software.

A design solution will be developed that fits within the context of the natural and built environment as well as the project schedule and budget.

Task 6: Permit Approval and Environmental Quality Review — The Creighton Manning Team will prepare all documents and applications necessary to obtain all required permits and approvals as appropriate under NEPA and SEQRA. The final design will require a NYSDOT Non-Utility Highway Work Permit. Creighton Manning has prepared and secured dozens of Highway Work Permits in coordination with NYSDOT Region One's Permit Engineer Kevin Novak. Other potential permitting and approval agencies include NYS Office of Parks, Recreation and Historic Preservation, and NYS Department of Environmental Conversation. In a good faith effort to meet the DBE goal for the project, the team includes MJ Engineering and Land Surveying who will assist with environmental tasks and permitting.

Task 7: Construction Support – Creighton Manning understands the key to a project's success is making sure the obligations made during design are fulfilled during construction and this is achieved during the construction support task. We will prepare final bid documents, advertise and coordinate the bidding process and make a recommendation to the Town for contract award. Following award of the contract by the Town Board, Creighton Manning will hold a preconstruction meeting with the contractor, Town and NYSDOT to discuss schedule, review plans and establish communication channels.

Over the recent years the Federal and State requirements and oversight on transportation projects during the construction phase has increased immensely. Therefore, having experienced staff to assure that all the proper procedures and specifications are followed so that the project can be fully reimbursed is extremely critical. Creighton Manning has this Construction Inspection and Administration experience. All of the inspection projects are staffed by a Resident Engineer and various inspectors, and project record keeping is in accordance with NYSDOT's Manual for Uniform Record Keeping (MURK). Ed Lawson, with 22 years of inspection experience, will be responsible for managing the construction



Johnston Road sidewalk construction inspector

inspection on this project. All inspection staff will be NICET-certified with a professional engineer available as needed. Creighton Manning staff includes qualified, local Resident Engineers, Office Engineers, and Inspectors acceptable to the project sponsor and NYSDOT. Creighton Manning realizes that when a municipality is using Federal and State monies, special requirements must be met otherwise the municipality is in jeopardy of not getting reimbursed..." We will not allow this to happen." Creighton Manning's Construction Inspection

personnel, currently consisting of nearly 20 field inspectors, will assure that only certified materials are used, the proper field testing is obtained and that all the required documentation is provided by both the inspectors and the contractors.

Task 8: Project Completion – Creighton Manning will prepare punch list items, submit certification that all construction work has been completed and will provide the Town and NYSDOT with as-built drawings. Creighton Manning will assist the Town through the CMAQ federal-aid close out process with NYSDOT.

UNDERSTANDING OF CHALLENGES

Creighton Manning believes there are five (5) key project objectives that need to be considered and addressed in determining the proposed design alternative for this project. These project objectives include:

- 1. Enhance pedestrian safety by constructing an ADA-compliant sidewalk in Guilderland Center.
- 2. Obligate construction phase by September 2014.
- 3. Construction cost of the preferred design alternative is consistent with the CMAQ funding available.
- 4. Maintain access to homes and businesses during construction of the sidewalk.
- 5. Minimize the need for additional public right-of-way to accommodate the construction of the new sidewalk and avoid potential environmental impacts to keep the project on schedule.

Challenge	Approach
ADA-compliant	Construct five-foot wide concrete sidewalk where feasible
Sidewalk	Minimize abrupt changes in cross-slope
	Improve accessibility to transit stops
	■ Enhance crosswalk and ramp at the traffic signal at School Road
	Develop logical termini
Schedule	■ Draft Scope of Work is included in the Appendix of this proposal
	Begin contract negotiations immediately
	 Prepare draft Local Agreement for NYSDOT
	 Develop concept plans on available aerials while survey data is collected.
	 Hold Public Hearing as per Eminent Domain Procedures Law
Available Funding	Iteratively update cost estimates for design alternatives
	Eliminate or minimize utility impacts
	• Provide adequate open storm drainage (e.g., swales, ditches, etc.) to reduce
	costly underground work
	Avoid right-of-way acquisition
	Grade backslope to avoid use of retaining walls
Maintain Access	 Engage in open dialogue with property owners during design and construction
	Use steel plates over open construction to maintain vehicular access
	Coordinate with CDTA for access to transit stops
	Coordinate with Guilderland School District for temporary impact to bus stops
Right-of-way and	• Identify sensitive environmental constraints (e.g., wetlands, bats, historic
environmental impacts	properties, etc.)
	Avoid cutting or removing large trees
	• Work with property owners to secure temporary grading easements
	 Detailed design of horizontal and vertical alignment to minimize impacts

We understand the challenges associated with this project and developed an approach that satisfies all of the project objectives identified above within the existing project funding that is programmed on the NYSDOT Transportation Improvement Program (TIP).



SCHEDULE

Creighton Manning has developed a plan to expedite the process and complete the project in advance of the CMAQ construction funding obligation deadline of September 2014. We understand the Town anticipates starting this project in April 2013. In accordance with the Procedures for Locally Administered Federal Aid Projects, the Town's consultant may not begin work on the project until a State-Local Agreement is in place and it typically takes 60 to 90 days to obtain a fully-executed State-Local agreement. Creighton Manning has assisted numerous project sponsors through these steps and will assist the Town of Guilderland through this process. To expedite the schedule, we have included a draft Scope of Work as an appendix to the proposal. The scope of work is a critical path item along with the associated fees in the first 60 days before a State-Local agreement can be initiated. The consultant fees will be proposed once a scope of work is agreed upon.

From our experience with similar projects we know that the first 60 days is critical to meet the overall project schedule. To guide this project in the right direction we have prepared the following **First 60 Days Action Plan**:

- Evaluate and select a consultant. This includes
 - Form a committee of at least 3 municipal representatives to establish the ratings protocol and rank the proposals based on the established criteria. This can be done together at a meeting or individually and then combined.
 - Send a Consultant Recommendation letter along with the ratings to the Regional Local Project Liaison (Karen Hulihan) for concurrence with the selection.
 - Once confirmation is received, send an Award Letter to the selected consultant and begin scope and fee negotiations.
- Prepare a resolution to the Town Board to execute a contract with the selected engineering firm, this resolution is required to initiate the State Local Agreement between the Town and NYSDOT for scope and fees negotiated with the selected consultant.
- Prepare a Town Board resolution authorizing and appropriating first instance funding for the contract and designating an official to sign agreements.
- Send resolution, proposed scope and fees to NYSDOT for review and concurrence and request a State-Local agreement.
- Prepare letter requesting federal authorization. Once federal authorization is granted work can proceed with the reassurance it is reimbursable upon full execution of the State Local agreement.
- Project Kickoff with Town, NYSDOT Local Projects Representative and Consultant

The following task schedule is based on Creighton Manning's familiarity with the project and recent experience on similar projects:

Task	Completion
Task 1: Study Area Boundary	June 2013
Task 2: Site Inventory/Survey/ROW Research	June 2013
Task 3: Conceptual Pedestrian Improvement Plan	July 2013
Task 4: Draft Design	December 2013
Task 5: Final Design	April 2014
Task 6: Permit Approval and Environmental Quality Review	July 2014
Task 7: Construction Support, Administration and Inspection	
Task 7a: Request Authorization to Proceed with Construction	July 2014
Task 7b: Construction Phase Obligated	September 2014*
Task 7c: Advertise for bids and Award contract	October 2014
Task 8: Project Completion	August 2015



If necessary, ROW incidentals and acquisition effort will occur concurrently with Tasks 4-7a *Federal funds are obligated for the construction phase when the FHWA issues an Authorization to Proceed with that phase. A request for construction authorization must include contract bid documents, i.e., plans, specifications, engineer's estimate (PS&E) and all federal contract requirements. Construction must be authorized by FHWA before the Town may advertise for bids on the contract.

FAMILIARITY WITH THE PROJECT AREA

Creighton Manning Engineering is very familiar with the project area based on our role as the transportation consultant on the *Town of Guilderland Neighborhood Master Plan for the Guilderland Center Hamlet*. The firm analyzed traffic operations in the corridor, developed transportation alternatives and participated in public information meetings for the project. We know first-hand that property owners, neighbors and the Guilderland Center Hamlet Association are all proponents of the project and are anxious to see the improvements in place. In addition, key staff at Creighton Manning live in the Town of Guilderland, have children who attend Guilderland High School and travel the Route 146/Main Street corridor on a daily basis. We have a vested interest in the quality of life of the Guilderland Center Hamlet. The firm has worked with the Town of Guilderland on four linkage studies and many economic development projects. Creighton Manning is a local firm, so all staff resources are located 10 miles from Town Hall and 11 miles from the project site. This will facilitate communication and coordination with the Town throughout the duration of the project.



FAMILIARITY WITH FEDERAL AND STATE REQUIREMENTS

Creighton Manning has completed or is currently progressing 40 locally-administered Federal-aid (LAFA) projects in NYSDOT Region One that vary in size and scope including:

- Pedestrian and Bicycle Improvements
- Highway Reconstruction
- Roundabout Design/Intersection Safety
- Construction Inspection & Administration
- Bridge Replacement
- Highway Realignment
- Trail Design
- Traffic Signalization

In addition to these LAFA projects, Creighton Manning has been responsible for hundreds of highway, bridge and transportation design related projects throughout New York State over the past 20 years. Many of these projects were NYSDOT projects with State and Federal funding, and all of which required strict conformance to the NYSDOT Design Manuals. The experience gained on these and other projects has kept our staff up-to-date with the latest analysis tools and procedures for processing Federal Aid projects particularly Locally Administered Federal Aid projects. We have worked successfully under the guidance of NYSDOT Region One's Local Projects Group to deliver projects that satisfy the needs of the sponsoring municipalities and comply with the Federal and State regulations, policies and procedures. The table below is a representative summary of some of Creighton Manning's applicable LAFA project experience.

	CREIGHTON MANNING'S REGION ONE LOCALLY ADMINISTERED FEDERAL AID (LAFA) PROJECT EXPERIENCE												
	Project Name	Client	PIN	ARRA Project*	Highway Design	Pedestrian Improve.	Design Approval Document	Public Involvement	Traffic Modeling/ Signal Design	Corridor Studies	SPDES	ROW Takings	Construction Inspect.
1	Mannix Rd/Route 4 Intersection	Town EGreenbush	1757.99		✓	✓	✓	✓	✓	✓	✓	✓	
2	Bay Street Phase II Rehabilitation	City of Glens Falls	1758.61	✓	✓	✓	✓	✓	✓				✓
3	Church Street Reconstruction	Saratoga Springs	1757.14	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Cold Springs Road Reconstruction	Town of Stillwater	1757.53		✓			✓				✓	✓
5	Congress / Ferry St. Reconstruction	City of Troy	1756.62	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	County Route 28 Rehabilitation	Greene County	1758.74	✓	✓	✓	✓						✓
7	CR 42 /Mahaffey Rd Reconstruction	Washington Co	1755.60		✓		✓	✓			✓	✓	✓
8	Downtown Troy Signalization	City of Troy	1756.70		✓	✓	✓	✓	✓				✓
9	Broad Street	City of Glens Falls	1759.36		✓	✓	✓	✓	✓		✓		✓
10	Fuller Rd/Washington Ave Intersection	Albany County	1757.31		✓	✓	✓	✓	✓		✓	✓	✓
11	Glen & Bay Street Reconstruction	City of Glens Falls	1755.59		✓	✓	✓	✓	✓	✓	✓		✓
12	Aviation Road/Dixon Road Intersection	T/o Queensbury	1759.06		✓	✓	✓	✓	✓	✓	✓	✓	✓
13	ITS Signals – Washington/Western Avenues	City of Albany	1756.63				✓	✓	✓				✓
14	New Scotland Avenue Signals	City of Albany	1758.04				✓	1	✓	✓			
15	Providence Avenue/Hillside Avenue	Schenectady Co	1758.06		✓	✓	✓	✓	✓			✓	✓
16	South Troy Industrial Park Road	City of Troy	1754.59		✓	✓	✓	✓	✓		✓		✓
17	North Elba Trail	Town of N. Elba	1756.24		✓	✓	✓	1			1	✓	✓
18	Warren Street Rehabilitation	City of Glens Falls	1754.59		✓	✓	✓	1	1	✓	1	✓	1

^{*} ARRA Project – Federal Aid transportation improvement project funded through the American Recovery and Reinvestment Act of 2009, which required accelerated project schedules to satisfy funding requirements.



PROJECT EXPERIENCE



Johnston Road Sidewalk



Main Street Voorheesville Sidewalk



Sidewalk at Couse Corners



Sidewalk along Church Street



New Scotland Avenue Sidewalks

Creighton Manning brings both an extensive resume of completing locally administered Federal-aid projects and experience with several sidewalk projects in the Capital Region.

CR 306/203 Normanskill/Johnston Road Rehabilitation Project, Towns of Guilderland and New Scotland, NY (2008): This \$6.5 million Albany County project involved a four-mile rehabilitation of Normanskill and Johnston Roads. The project included a new concrete sidewalk, sections of full-depth pavement replacement, intersection realignment, pavement rehabilitation, and widened shoulders for bicycle accommodations. Scope of work included survey, design, permitting and construction inspection.

Route 22 Pedestrian Improvements, Town of New Lebanon, NY; PIN 8131.15 (2013): A \$1.2 million Locally Administered Federal Aid project to provide improved pedestrian and bicycle accommodations, considering sidewalks and bike lanes. Scope of work includes design, preparation of the design approval document and public participation.

Osborne Road (CR 154), Town of Colonie, NY (2010-2013): A \$3.6 million Albany County project to rehabilitate 1.9 miles of Osborne Road from Central Avenue (NY 5) to Albany-Shaker Road (CR 151). The project includes new sidewalk, curb, improvements to existing drainage structures, guiderail, signs and pavement markings.

Main Street, Village of Voorheesville, NY (2004): This Albany County project involved the reconstruction of approximately one mile of CR 306 and CR 201. A five-foot wide sidewalk was constructed along the entire project length without requiring right-of-way or reduction of on-street parking. One-on-one meetings were held with property owners to discuss specific issues and concerns. .

Couse Corners, Town of East Greenbush, NY (2009-2011): A \$2.2 million multi-modal funded project to reconstruct the Route 4/Route 151 intersection as a two-lane roundabout including concrete sidewalks, lighting, drainage, and landscaping. Scope of work included survey, design, permitting, Eminent Domain Procedures Law public hearing, and construction inspection.

Church Street, City of Saratoga Springs, NY; PIN 1755.59 (2010): This \$2.5 million Locally Administered Federal Aid project involved design and construction inspection to reconstruct approximately 1 mile of urban roadway. Major improvements included sidewalks, new pavement, curb, closed storm sewer system, water main replacement, traffic signal and period street lighting. Scope of work included survey, design, permitting and construction inspection.

Slingerlands Bypass, Town of Bethlehem, NY; PIN 1125.19 (2004-2008): The design of an ADA-compliant concrete sidewalk along New Scotland Avenue was part of this \$15 million NYSDOT Federal-aid project.

PROJECT ORGANIZATIONAL CHART



Project Advisor

Robert Hansen, P.E.

Project Manager

Don Adams, P.E.

Design and Costs

Steve Godlewski, P.E. Kristie Di Cocco, P.E. Linda Stancliffe, RLA

Safety Assessment

Mark Sargent, P.E. Mark Nadolny

Survey

Don Sovey, PLS Matt Perrault

Construction Inspection

Edwin Lawson, P.E. Brian Jones

Environmental

Lisa Wallin, P.E. MJ Engineering (DBE)

Right-of-Way

Richard Hite R.K. Hite, Inc.



Don D. Adams, P.E., PTOE



Project Role:

Project Manager

Professional Registration:

Professional Engineer New York Utah

Certified Professional Traffic Operations Engineer

Years of Experience: 23 Years

Education:

B.S., Civil Engineering, 1990 Clarkson University

Professional Affiliation:

Institute of Transportation Engineer (ITE)

American Society of Civil Engineers(ASCE)

NYS Association of Transportation Engineers (NYSATE)

Experience Summary

Mr. Adams has 23 years experience in a variety of multi-modal surface transportation engineering projects. He has completed highway and trail design projects, corridor studies, rail and transit projects as well as traffic impacts studies. He is a certified Professional Traffic Operations Engineer (PTOE) with diverse public participation experience working with steering committees, making public presentations and managing stakeholders. Selected project experience includes:

Route 22 Pedestrian Improvements, Town of New Lebanon, Columbia County, NY; PIN 8131.15 (2013) Project Manager for a \$5.3 million Locally Administered Federal Aid project to design improved pedestrian accommodations, including sidewalks and bike lanes. Responsible for preliminary and final design, preparation of the design approval document and public participation.

Osborne Road (CR 154), Town of Colonie, Albany County, NY (2010-2012): Project Manager for design of the rehabilitation of Osborne Road. This \$3.6 million County-funded project includes sidewalk, improvements to existing drainage structures, new curb, guiderail, signs and pavement markings, milling and replacing the asphalt wearing course for approximately 1.9 miles of two lane road from Central Avenue (NY 5) to Albany-Shaker Road (CR 151).

Lower Congress/Upper Ferry Street Reconstruction, City of Troy, Rensselaer County, NY; PIN 1756.62 \$6.0 million (2006-2010): Project Manager responsible for preliminary and final design for this Locally Administered Federal Aid project to reconstruct 6 blocks of Congress and Ferry streets including significant pedestrian accommodations in an urban setting.

Lake Placid to Saranac Lake Multi-Use Trail, Town of North Elba, Essex County, NY; PIN 1756.24 (2012-2013): Senior Project Manager for this \$2.5 million Federal-aid project responsible for preliminary through final design of a multi-use trail connection between Lake Placid and Saranac Lake. The project includes creative, economically feasible design, public participation, and coordination with several regulatory agencies.

Zim Smith Trail Connection, Town of Malta, Saratoga County, NY; PIN 1MB013.00B; \$1.1 million (2010-2012): Project Manager responsible for preliminary through final design and bidding for a multi-purpose trail connection between the Zim Smith Trail and Route 9. The project includes public participation, survey, design, regulatory permitting, right-of-way acquisition, and construction administration and inspection services.

<u>Luther Forest Technology Campus Roads and Trails, Town of Malta, Saratoga County, NY (2004–2010):</u> Project Manager for the design of approximately six miles of trails and new town roads. The project included wetland mitigation, storm water system, Phase 1b archaeological investigation, permits and coordination with utility companies.

Stephan W. Godlewski, P.E.



Project Role:

Project Engineer

Professional Registration:

Professional Engineer New York State, 2009

Years of Experience: 10 Years

Education:

B.S., Civil Engineering, 2003, Clarkson University

Professional Affiliation:

American Society Of Civil Engineers, Member

Leadership Saratoga – Class of 2010

Saratoga Mountain Bike Association, President

Saratoga Complete Streets Committee

Experience Summary

Mr. Godlewski is a transportation design engineer with ten years of experience. He is a licensed professional engineer who has experience designing multi-modal transportation facilities in accordance with NYSDOT and AASHTO design standards. His project experience includes:

Fuller/Washington Ave Intersection Project, City of Albany, Albany County, NY; PIN 1757.31, D261876, \$14.5 Million (2007-2012): Project Engineer for this Locally Administered Federal aid intersection reconstruction project. The project involved significant scoping and stakeholder outreach, and includes design of a state highway on new alignment with a bridge over a roundabout with sidewalks. Mr. Godlewski was responsible for development of the Design Approval Document, community involvement, contract plans, cost estimates and construction support.

Church Street Reconstruction, City of Saratoga Springs, Saratoga County, NY; PIN 1757.14, D032058, \$2.7 Million (2007-2009): Project Engineer responsible for preliminary and final design for this Locally Administered Federal Aid project. The project reconstructs approximately 1 mile of urban roadway including sidewalks, new pavement, curb, closed storm sewer system, water main replacement and traffic signal. Coordinated focus meetings with all project stakeholders and directed the public outreach effort including two public presentations.

Glen and Bay Street Reconstruction/Rehabilitation, City of Glens Falls, Warren County, NY; PIN 1755.59.121,D022008,\$8.5 Million (2004-2007): Project Engineer responsible for preliminary and final design of this Locally Administered Federal Aid project to reconstruct 1.3 miles of roadway through the center of downtown. Major improvements included sidewalks, new pavement, curb, closed storm sewer system, three traffic signals, water main replacement, street lighting, vault enclosures, and separation of the combined storm and sanitary sewer.

Bay Street Rehabilitation – Phase II, City of Glens Falls, Warren County, NY; PIN 1758.61.12, (2008-2010): Project Engineer responsible for this \$2.4 Million Locally Administered Federal aid project to rehabilitate 1 mile of urban roadway. Major improvements included pavement resurfacing, curbing, sidewalks, rehabilitation of storm sewer basins, sanitary force main replacement, two (2) traffic signal replacements, water main replacement, and separation of the combined storm and sanitary sewer. The project received funding through ARRA.

<u>Luther Forest Technology Campus Roads and Trails, Town of Malta, Saratoga County, NY; \$30 Million (2004-2011):</u> Project Engineer responsible for developing construction plans for six miles of new road and multi-use trails. The project included several three-sided box culverts, wetland mitigation, a complex storm water system and Phase 1b archaeological investigation and coordination with several utility agencies. Tasks included design of roadway alignment, roundabout, drainage, wetland permit plans and complete construction plans and documents.



Project Engineer

Professional Registration:

Professional Engineer, New York

Years of Experience:

8 Years

Education:

B.S., Civil Engineering 2005 University of New York at Buffalo

Professional Affiliation:

Professional Member, SWE

Experience Summary

Ms. Di Cocco has eight years of diverse transportation engineering experience including highway design, trail design, and traffic engineering. She has also gained experience as a construction inspector. She is a licensed professional engineer. Her project experience includes:

<u>CR306/203 Normanskill/Johnston Road Highway Rehabilitation Project, Guilderland, NY; (2007)</u>: Project Engineer for approximately 4 miles of rehabilitated County roadway that included all treatments of pavement restoration including full-depth reconstruction. This project included sidewalk, pedestrian crossings, closed and open drainage systems, several utility relocations, right-of-way acquisition, and public outreach.

Route 22 Pedestrian Improvements, Town of New Lebanon, Columbia County, NY; PIN 8131.15 \$1.1 million (2013): As the Project Engineer, Ms. Di Cocco is responsible for providing a sidewalk design that would allow pedestrian access through the center of New Lebanon. Due to limited funding, it was necessary to minimize property acquisitions, utility impacts, and environmental impacts. Two alternatives were developed. Conceptual cost estimates were provided to the Town to assist them in determining the exact limits of construction.

Zim Smith Trail Connection, Town of Malta, Saratoga County, NY; PIN 1MB013.00B; \$1.1 million (2010-2012): Project Engineer responsible for preliminary through final design and public participation for a multipurpose trail between the Zim Smith Trail and Route 9. The project includes design, regulatory permitting and right-of-way acquisition.

Lake Placid to Saranac Lake Multi-Use Trail, Town of North Elba, Essex County, NY; PIN 1756.24; \$2.5 million (2012-present): Project Engineer for this Federal-aid project responsible for preliminary through final design of a multi-use trail connection between Lake Placid and Saranac Lake. The project includes creative, economically feasible design, public participation, and coordination with several regulatory agencies, including the APA. The first stage of the proposed trail is expected to be constructed during the 2013 construction season.

<u>Luther Forest Technology Campus Roads and Trails, Town of Malta, Saratoga County, NY; \$32 Million (2007):</u> Project Engineer responsible for developing construction plans for six miles of new road and multi-purpose trail. Tasks included horizontal and vertical alignment design, roundabout design, drainage design, wetland permit plans and complete construction plans and documents.

<u>County, NY; PIN 1757.53</u> Project Engineer for this \$15 million Locally Administered Federal Aid project that involved full depth reconstruction of 6.7 miles of road including shoulders to accommodate pedestrians and bicycles. Responsible for horizontal and vertical alignment, coordination with utility companies and permitting.

Linda Stancliffe RLA, LEED® AP



Project Role:

Landscape Architect

Professional Registration:

Registered Landscape Architect New York, 1998 Maine, Pennsylvania

LEED Accredited Professional

Years of Experience: 20

Education:

1992, Bachelor of
Landscape Architecture,
College of Environmental
Science and Forestry,
Syracuse

Professional Affiliation:

American Society of Landscape Architects

CLARB Certified Landscape Architect

Board Member, New York State Council of Landscape Architects (2012-2014)

Experience Summary

Linda is a Registered Landscape Architect with 20 years of experience in trail design, site design, storm water management systems, streetscapes, environmental impact statements and SEQR documentation. She has been responsible for managing a wide variety of civil projects. Linda is also a LEED accredited professional. Her project experience includes:

Couse Corners Intersection Reconstruction, Town of East Greenbush, Rensselaer County, NY; PIN 1MB014; \$2.2 million (2009-2012): Project Landscape Architect responsible for the Preliminary and Final Design for the underground stormwater management system and streetscape associated with a two-lane roundabout with sidewalks.

Fuller/Washington Ave Intersection Project, City of Albany, Albany County, NY; PIN 1757.31 (2010-2012): Landscape Architect for this \$14.5 million Locally Administered Federal Aid intersection reconstruction project that included highway on new alignment with a bridge over a roundabout. Ms. Stancliffe developed the stormwater management design in accordance with the 2010 NYS DEC Stormwater Manual.

<u>State Street Rehabilitation, Preliminary and Final Design, PIN1MA121.30A</u> <u>& IME019.30A, Albany NY (2010-2011) \$4.2 million:</u> Project designer for an urban roadway rehabilitation project involving sections of full depth reconstruction, new sidewalk, lighting, street trees, concrete bus pads, gateway features, decorative streetscape elements, a new traffic signal, and pedestrian crossing upgrades at other signals. The project extended from Eagle Street to Broadway in the City of Albany. Ms. Stancliffe was responsible for landscape plans, contract documents, and contract plans.

Abeel Street Reconstruction, City of Kingston, Ulster County, NY PIN 8757.10 (2010) Project Designer for storm water management system associated with northern portion of the \$9.7 million Locally Administered Fed Aid project. Prepared stormwater pollution prevention plan and Notice of Intent for construction, coordinated with other designers on potential green infrastructure techniques and landscape design elements within the corridor.

Troy Riverfront Bike Trail, City of Troy, Rensselaer County, NY; PIN 1754.52; \$2 Million (2004-2005): Landscape Architect for a three-mile long trail along the Hudson River that connects existing trails in North Troy to the Menands Bridge and ultimately the Corning Preserve in Albany along the Hudson Mohawk trail system. This Locally Administered Federal Aid project involved coordination between land holders, local, state and national entities to establish a route through an urban industrial area.

Albany NanoTech Complex Expansion, City of Albany, NY (2010-2011): Landscape Architect responsible for landscape plans, review of site lighting and layout and incorporating green infrastructure practices within the design. Involved with the coordination with site utilities related to the campus expansion at the College of Nanoscale Science and Engineering (CNSE) of the University at Albany (UAlbany).



Traffic Engineering

Professional Registration:

2002, Professional Engineer New York

Years of Experience:

27 Years

Education:

M.S., Transportation Engineering, 1998, Rensselaer Polytechnic Institute

B.A. Geography, 1984, University of New Hampshire

Professional Affiliations: *Member, Institute of Transportation Engineers*

Officer, Institute of Transportation Engineers

Experience Summary

Mr. Sargent's transportation work experience spans more than 27 years in both the public and private sectors. He has managed a range of multimodal surface transportation projects from planning and engineering studies through Preliminary and Final Design. The following are selected projects from Mr. Sargent's career.

Neighborhood Master Plan for the Guilderland Center Hamlet, Town of Guilderland, Albany County, NY; (2009-2010): Sub-consultant Project Manager for the transportation elements of the Neighborhood Master Plan. The scope of work included a traffic simulation for two intersections. Recommendations, drawings, and cost estimates were made for pedestrian and vehicular improvements. Constructability issues including right-of-way, utility poles, and oversized vehicle routing were considered in the plan development and cost estimates.

School Zone Driver Feedback Signs, City of Albany, NY; PIN 1758.01 (2012): Project Manager responsible for this \$0.6M locally administered Federal aid project involving the design of 17 driver feedback signs to reduce driver speeds near Albany schools. Plans and estimates were developed for several alternatives. The existing conditions, proposed alternatives, and environmental impacts were documented in the Final Design Report. Design Approval was obtained and bid documents and final plans, specifications & estimates were prepared.

Madison Avenue Road Diet Feasibility Study, City of Albany, Albany County, NY (2012) Project Manager responsible for a study to determine the most effective multi-modal lane configuration for the Madison Avenue corridor between Lark Street and S. Allen Street. The study identifies and analyzes three alternatives for safe and efficient mobility for passenger vehicles, transit, pedestrians and bicycles. The project includes transportation safety assessments; level of service; simulation modeling; speed and delay; conceptual improvement plans, public participation and cost estimating.

Term Agreement of Regional Sign Design, Preliminary and Final Design, PIN S086.31, D030554: Project Manager for a term agreement with the New York State Department of Transportation to perform Appurtenance Design services. The scope of work includes Preliminary and Final Design of highway signs including text, legend, location and foundation design, survey and mapping, and overhead sign structure design. Responsible for designing 2,800 new signs on the Taconic State Parkway.

Hamilton College Pedestrian Crossing Study, Town of Kirkland, Oneida County, NY (2005): Project Manager for a pedestrian evaluation of County Road 13 which extends through the Hamilton College Campus in an eastwest orientation. Pedestrians are concentrated at one major crossing on College Hill Road that connects the two areas of the campus. The purpose of the study was to evaluate the feasibility of various traffic calming improvements along this section of County Road 13 to better integrate the north and south portions of the College.



Project Engineer

Professional Registration:

Years of Experience: 11 Years

Education:

B.A., Geography, 2000, State University of New York at Geneseo

Professional Affiliation: Institute of Transportation Engineers (ITE), Associate Member

Experience Summary

Mr. Nadolny is a Project Engineer who specializes in traffic engineering and transportation planning. His expertise is in the area of travel demand modeling, traffic operations analysis, GIS applications, and traffic simulations. His specific project experience includes:

Neighborhood Master Plan for the Guilderland Center Hamlet, Town of Guilderland, Albany County, NY; (2009-2010): Sub-consultant Project Engineer for the transportation elements of the Neighborhood Master Plan. CME developed a traffic simulation of 2 study area intersections located within the Hamlet and provided vehicular and pedestrian recommendations, drawings, and cost estimates. Traditional vehicular transportation improvements were explored including engineering analysis and concept plans for sidewalks, turn lanes and roundabouts.

Guilderland Hamlet Master Plan, Town of Guilderland, Albany County, NY; (2009): Sub-consultant Project Engineer for the transportation elements of the Master Plan. CME developed detailed pedestrian recommendation, drawings and cost estimates. A variety of typical sections were developed to best fit the pedestrian improvements into their surroundings including on-street sidewalks and off-street paths. Constructability issues including embankments, wetlands, drainage, right-of-way, and utility poles were considered in the plan development and cost estimating. Traditional vehicular transportation improvements were also explored.

Marlboro Hamlet Area Transportation Plan, Town of Marlborough, Ulster County, NY (2008) Project Engineer focused on pedestrian/bicycle accommodations, traffic operations, economic vitality, and preserving the historic character of the community. SYNCHRO models were developed to analyze traffic operations at the signalized intersections in the corridor. Recommendations included roadway and intersection improvements, access management, parking recommendations, pedestrian/bicycle accommodations, aesthetic enhancements and land use policies.

Fuller/Washington Ave Intersection Project, City of Albany, Albany County, NY; \$14.5 Million PIN 1757.31 (2007-2011): Project Engineer for this Locally Administered Federal Aid intersection reconstruction project. Mr. Nadolny was responsible for traffic engineering, alternatives analysis and computer simulation.

Couse Corners Intersection Reconstruction, Town of East Greenbush, Rensselaer County, NY; PIN 1MB014; \$2.2 million (2009-2011): Project Engineer responsible for the traffic analysis for the reconstruction of an intersection to a two-lane roundabout with sidewalks. Project tasks included a review of existing conditions and turning movement counts, coordination with CDTC and NYSDOT for traffic volume forecasts, and an analysis of existing and proposed conditions using the Synchro, Vissim, and Sidra software packages. The results were documented and presented in the Final Design Report.



Chief of Survey

Professional Registration:

Professional Land Surveyor New York, 1994 Vermont, 1996

Years of Experience:

27 Years

Education:

B.A., Environmental Science 1985, Plattsburgh State University

Professional Affiliation:

NYS Association of Professional Land Surveyors

Eastern New York Society of Land Surveyors

Experience Summary

Mr. Sovey is a licensed Professional Land Surveyor with 27 years of applicable and practical experience. Mr. Sovey's surveying and project management experience includes boundary survey, topographic survey, and construction stakeout projects. He is in charge of all aspects of survey including scheduling, research, computations, fieldwork, quality control and project budget control. Representative projects include:

Johnston Road and Normanskill Road, Towns of Guilderland and New Scotland, Albany County, NY; (2007): Existing Conditions and Right of Way Survey with Aerial Photogrammetry for approximately four (4) miles of highway. Survey prepared for alignment and pedestrian improvements.

Fuller Road (CR 156) /Washington Ave Intersection, City of Albany, Albany County, NY; PIN 1757.31, (2007-2009): Chief of Survey for this \$15 million Locally Administered Federal Aid Project for the intersection improvement of Fuller Road and Washington Avenue. Mr. Sovey was responsible for all topographic and boundary survey and preparation of all mapping.

NYISO, Towns of Guilderland and East Greenbush, Albany and Rensselaer <u>Counties, NY (2009-2010)</u>: Chief of Survey responsible for topographic and boundary survey for the facility expansion of two New York Independent System Operator projects. The projects also involved a subsurface utility survey and wetland mapping.

Broad Street Reconstruction, City of Glens Falls, Warren County, NY PIN 1759.36 (2012) Chief of Survey for this \$3 million locally administered Federal aid project to reconstruct Broad Street. The project includes sidewalk, rehabilitation of the pavement and storm sewer system, intersection reconstruction, and public participation. He was responsible for the design survey including quality control and project budget control.

<u>South Troy Industrial Park Road, City of Troy, Rensselaer County, NY; PIN 1754.59; \$5.0 million (2009-2010):</u> Chief of Survey for this Locally Administered Federal Aid Project involving the design of a local road to access development parcels and remove truck traffic from urban residential neighborhoods. Specific responsibilities included design survey and ROW.

<u>Lower Congress and Upper Ferry Streets Realignment, City of Troy, Rensselaer County, NY PIN 1756.62; \$6.0 million (2006 - present):</u> Mr. Sovey was responsible for the design survey and mapping for the realignment of Lower Congress and Upper Ferry Streets for this Locally Administered Federal Aid project.

Church Street Reconstruction, City of Saratoga Springs, Saratoga County, NY; \$2.2 Million (2007-2008) (PIN 1757.14): Chief of Survey responsible the existing conditions and Right of Way survey for this Locally Administered Federal Aid Project to reconstruct approximately 1 mile of urban street. Survey scope included topographic and boundary survey, preparation of ROW maps and assistance with ROW acquisition.



Construction Manager

Professional Registration:

Professional Engineer New York, 2007

Certified Erosion Sediment and Storm Water Inspector, 2008

Certified NorthEast Transportation Technician Certification Program (NETTCP) - Soils and Aggregate Inspector, 2010

Years of Experience: 22 Years

Education:

A.A.S., Civil Engineering Technology, 1990, Hudson Valley Community College

Experience Summary

Mr. Lawson has 22 years of experience, 10 years of which were with NYSDOT. He manages Creighton Manning's construction inspection projects. Ed is a professional engineer and a Certified Erosion Sediment and Storm Water Inspector. His project experience includes the following:

CR 306/203 Normanskill & Johnston Roads Highway Rehabilitation, Towns of New Scotland & Guilderland, Albany County, NY \$ 7.5 Million (2008-2009) Project Manager responsible for the construction inspection and administration of Johnston and Normanskill Roads. The project included the installation of concrete sidewalk, granite curb, closed drainage, full depth reconstruction, shoulder widening, guiderail, retaining walls, water line, asphalt concrete overlay, and maintenance and protection of traffic. Responsible for utility coordination and maintenance and protection of traffic. Prepared engineer's estimates and orders-on-contract using the NYSDOT estimating system CEES.

Schoolhouse, Krumkill & Russell Road Reconstruction, Towns of Guilderland and Bethlehem, Albany County, NY \$ 5.9 Million (2007-2008): Project Manager responsible for the construction inspection and administration of CR 204. The project included concrete sidewalk, curb, closed drainage, full depth reconstruction, bridge rehabilitation, retaining walls, water line and asphalt overlay. Responsible for maintenance and protection of traffic and preparing engineer's estimates and orders-on-contract.

Congress & Ferry Streets Reconstruction, City of Troy, Rensselaer County, NY \$6.0 Million (2009-2010); PIN 1756.62: Construction Project Manager responsible for the inspection and contract administration for this ARRA project. The work included ADA compliant sidewalk and ramps, full depth reconstruction, construction of 6th Street extension, granite curb, closed drainage, asphalt paving, utility coordination, and water main installation.

Church Street Reconstruction, City of Saratoga Springs, Saratoga County, NY \$2.6 Million; PIN 1757.14 (2009-2010): Construction Project Manager responsible for the Inspection and Contract Administration for this ARRA funded project. The project included ADA compliant concrete sidewalk, full depth reconstruction, water main installation, granite curb, closed drainage, traffic signal, and ornamental lighting. Responsibilities included supervision of field staff which included Resident Engineer and 1 inspector.

NYSDOT Construction Inspection Term Agreement, D031005, (2012-2015): Project Manager for a NYSDOT term agreement for construction inspection services for various projects in Region 1. Responsible for ensuring the work of the contractor conforms to the provisions of the contract documents. All records are kept in accordance with MURK.

State Street Rehabilitation, City of Albany, NY; \$4.1 Million (2011); PIN 1ME019.30A: Construction Manager for this urban project which included night-time inspection for construction of ADA compliant sidewalk ramps, traffic signals, curb, closed drainage, asphalt paving, utility coordination, and water main installation. He performed field measurements, quantity calculations, and ensured contractor compliance with plans and specs.



Construction Inspector

Professional Registration:

NICET Level III ACI – Grade I

Certified NorthEast Transportation Technician Certification Program (NETTCP) - Soils and Aggregate Inspector, 2009

Years of Experience: 8 Years

Education:

B.S., Civil Engineering Technology, 2005, SUNY Institute of Technology

Experience Summary

Mr. Jones has 8 years of experience as an Engineering Technician and Construction Inspector. He is certified as an ACI-Grade 1 Field Technician and also as a Soils and Aggregate Inspector. He is trained in the use of Site Manager. His project experience includes the following:

Albany County Route 204, Schoolhouse, Krumkill and Russell Roads Reconstruction, Towns of Guilderland and Bethlehem, Albany County, NY; \$5.7 Million (2007-2008): Construction Inspector responsible for the inspection of work completed daily by the contractor. The project included full depth pavement reconstruction, granite curbs, concrete sidewalk, water main, street lighting, roundabout construction, closed drainage, open drainage, maintenance and protection of traffic, lag wall and retaining walls. Kept track of quantities in a daily inspectors report. Entered final pay quantities into CEES (Computerized Engineers Estimate System) for estimates to be prepared by the Engineer.

State Street Rehabilitation, City of Albany, Albany County, NY; \$4.1 Million (2011); PIN 1ME019.30A: Night-time Construction Inspector on this multimodal funded project. The project included traffic signals, granite curb, ADA compliant sidewalk ramps, new closed drainage, asphalt paving, utility coordination, and water main installation. He was responsible for ensuring the contractor followed the approved night-time lighting plan, Maintenance and Protection of Traffic, inspection of cold milling, asphalt paving, conduit trenching, and full depth reconstruction. He performed field measurements, quantity calculations, daily report writing and ensured contractor compliance with the plans & specifications.

Route 5 Bus Rapid Transit, City of Schenectady, Village and Town of Colonie, Schenectady & Albany Counties PIN 1709.16 & 1709.17(2010): Chief inspector representing CDTA and NYSDOT on this Federal Aid Project. The project included the reconstruction of sidewalk and maintenance strips, bus shelter demo, conduit and pull-box installation, sub-base placement and concrete pad placement. The work also included widening Route 5/Central Avenue at New Karner Road and at Wolf Road, along with closed drainage improvements. Coordinated the work with CDTA, the contractor, NYSDOT Permits, Village and Town of Colonie and utility companies. He ensured the contractor performed the work in accordance with the plans and specifications, wrote daily reports for payment, made contract payments and ensured Maintenance and Protection of traffic.

Luther Forest Technology Campus Interior Roads, Town of Malta, Saratoga County, NY, PIN 1MS155.30A and 1ME034.30A, \$33 Million (2008-2009): Level II inspector representing the Town of Malta for the construction of approximately 6 miles of new town roads and multi-use path on new alignment. This project included 4 bridges, steel piles, erosion control, wetland mitigation, a complex closed storm water system, 1 million cubic yards of earthwork, two DOT access points, coordination with several utility companies, and the construction of 3 multi-lane roundabouts. He was responsible for inspection of these operations and used Field Manager software to write reports and track project quantities.

Lisa M. Wallin, P.E.

Environmental Engineer



EDUCATION

B.S., Environmental Engineering, State University of New York at Buffalo, 2003

M.S., Civil Engineering -Concentration in Environmental Engineering, State University of New York at Buffalo, 2004

PROFESSIONAL REGISTRATION

Licensed Professional Engineer: New York (2009)

PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers – ASCE

YEARS OF EXPERIENCE

Total: 9 With MJ: 4 Ms. Wallin currently serves as an environmental engineer at MJ. She has nine years of experience in stormwater design, environmental compliance, environmental assessment and remediation. Ms. Wallin is experienced in design plan preparation, wetlands permitting, environmental assessment, NEPA and SEQR processes, remedial investigations, stormwater management design, and design for the protection of wetlands.

Ms. Wallin's project experience includes:

NYS Route 17 / Interstate 86 Upgrade, Towns of Vestal, Union and Dickinson, Broome County, NY. (2011) As project engineer, Ms. Wallin was responsible for design, permitting, and development of the environmental section of the design report for this highway improvement project. There were approximately 53.2 acres of delineated wetlands within or adjacent to the project limits. The project is located within a floodplain and above a sole source aquifer. Ms. Wallin analyzed the impact of different alternatives, and extensive measures were taken to avoid wetland impacts.

Siena College Loop Road, Town of Colonie, NY. (2011) As project engineer, Ms. Wallin was responsible for the preparation of a wetland delineation report, permit applications and attended the jurisdictional determination walkthrough.

Broad Street Reconstruction, City of Glens Falls, NY. (Ongoing) As project engineer, Ms. Wallin was responsible for screening, permitting and conducting preliminary investigations. She will also develop a Stormwater Pollution Prevention Plan (SWPPP).

Tahawus Road over the Hudson River Bridge Rehabilitation, Town of Newcomb, NY. (2012) Ms. Wallin was responsible for environmental investigations for this bridge rehabilitation project. She prepared the Adirondack Park Agency (APA) Jurisdictional Inquiry Form and developed the environmental section of the design report.

Elm Street over Little Hoosic River Bridge Replacement, Town of Berlin, NY. (2012) Ms. Wallin was responsible for overseeing an environmental study which included hazardous waste screening and development of environmental section of the design report.

Routes 5 & 30 Traffic Reconfiguration and Signal Improvement Project, City of Amsterdam, NY. (2010-2011) As project engineer, Ms. Wallin was responsible for environmental studies including an air quality study, surface water identification and evaluation, and identification of endangered species in the project area.

Reconstruction of Kew Gardens Interchange, NYSDOT, Queens, NY. (Ongoing) Ms. Wallin prepared an existing conditions drainage assessment for this highway rehabilitation project, and was responsible for drainage design and analysis of existing available outlets. She is responsible for modeling drainage conditions to assess the effectiveness of the existing system.





Right of Way

Years of Experience:

30 Years

Education:

B.A., Geology

Professional Affiliation:

International Right of Way Association, Ch 18 Treasurer

Experience Summary

Richard K. Hite is the President of R.K. Hite & Co., Inc. and serves as the Principal-in-Charge for transportation related projects. He is primarily responsible for the administration of contracts associated with federally aided pass-thru projects for local public agencies. Mr. Hite has completed or is working on over 100 federally aided, locally administered highway improvement, bridge replacement and traffic enhancement projects. His experience includes the following projects.

<u>County Route 28, Town of Queensbury and City of Glens Falls, Warren County, NY; (2010):</u> Responsible for project management and coordination of right of way acquisition services for this locally administered, federally aided transportation improvement project. Services included all incidental and acquisition phase task outlined in the Locally Administered Federal Aid Projects Manual. The project design required the acquisition of real property interests from 92 properties.

Abeel Street, City of Kingston, Ulster County, NY; PIN 8757.10; (2010): Responsible for the right of way acquisition services for this federally aided bridge replacement project administered by the City of Kingston. Services provided included the incidental and acquisition phase task outlined in the Locally Administered Federal Aid Projects Manual. The project design required the acquisition of real property interests from multiple properties.

Forshay Road (CR 81) Reconstruction, Town of Ramapo, Rockland County, NY: Responsible for project management and coordination of right of way acquisition services for this locally administered, federally aided transportation improvement project. Services included all incidental and acquisition phase task outlined in the Locally Administered Federal Aid Projects Manual. Project design required the acquisition of 18 real property interests.

Page Green Road (CR 122) Phase III Reconstruction, Town of Virgil, NY
This federally aided transportation improvement project was administered by the Cortland County Highway Department. Responsibilities included the management and coordination of the incidental and acquisition phases of the right of way acquisition process. The project design required the acquisition of property rights from 29 properties.

<u>CR 52 Reconstruction project (PIN 1754.42, Town of Bethlehem, Albany County, NY:</u> Responsible for project management and coordination of right of way acquisition services for this locally administered, federally aided transportation improvement project. Services included all incidental and acquisition phase task outlined in the Locally Administered Federal Aid Projects Manual. Project design required the acquisition of numerous real property interests.

REFERENCES

William Anslow Albany County Department of Public Works **Highway Engineering Division** 449 New Salem Road Voorheesville, NY 12186 (518) 655-7920

William.Anslow@albanycounty.com

Russ Reeves, P.E. City of Troy, City Engineer 433 River Street Troy, NY 12180 (518) 270-4604 russ.reeves@troyny.gov

Edward Bartholomew City of Glens Falls 42 Ridge Street Glens Falls, NY 12801 (518) 761-3833 ebartholomew@cityofglensfalls.com

Lorenzo Distefano, P.E. **NYSDOT Region 1** 50 Wolf Road Albany, NY 12232 (518) 485-1715 LDistefano@dot.ny.gov

Kevin King Town of Malta 2540 Route 9 Malta, NY 12020 (518) 899-2502 comptroller@malta-town.org

William E. Trudeau, Jr. City of Albany 10 Enterprise Drive Albany, NY 12204 (518) 434-4318 wtrudeau@albany-ny.org

Scope of Service

Preliminary and Final Highway Design, and Right-of-Way Incidentals for Guilderland Center Pedestrian Safety Project

Town of Guilderland, Albany County



Scope of Services (SOS)

Section 1 - General

1.01 Project Description and Location

Project Name: Guilderland Center Pedestrian Safety Project

PIN: **1757.33**

Project Description: Construction of sidewalk on the south side of Main Street from Depot Road to the Guilderland Center Nursing Home entrance (approximately 4,500 feet) and enhance pedestrian safety at the intersection with School Road.

Project Limits: Route 146 from Depot Road to the Guilderland Center

Nursing Home

Sponsor: Town of Guilderland, Albany County, NY

The date of preliminary design: June 2013

The letting date: September 2014

The construction completed date: August 2015

The anticipated design costs: TBD

The anticipated construction costs: \$400,000-\$500,000

1.02 Project Manager

The **Sponsor's** Project Manager for this project is **Donald Csaposs**, who can be reached at **(518) 356-1980 ext. 1097**.

All correspondence to the **Sponsor** should be addressed to:

Town of Guilderland

Town Hall

P.O. Box 339

Guilderland, NY 12084

The Project Manager should receive copies of all project correspondence directed other than to the **Sponsor**.

1.03 Project Classification

This project is assumed to be a Class II action under USDOT Regulations, 23 CFR 771.

¹ http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=d21c8e6f33a02787d9b788103bac7b9d&rgn=div5&view=text&node=23:1.0.1.8.43&idno=23

Classification under the New York State Environmental Quality Review Act (SEQRA) Part 617, Title 6 of the Official Compilation of Codes, Rules, and Regulations of New York State (6 NYCRR Part 617) is assumed to be *Unlisted*.

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1.04 Categorization of Work

Project work is generally divided into the following sections:

Section 1	General
Section 2	Data Collection & Analysis
Section 3	Preliminary Design
Section 4	Environmental
Section 5	Right-of-Way
Section 6	Detailed Design
Section 7	Advertising, Bid Opening and Award
Section 8	Construction Support
Section 9	Construction Inspection
Section 10	Estimating & Technical Assumptions

When specifically authorized in writing to begin work the **Consultant** will render all services and furnish all materials and equipment necessary to provide the **Sponsor** with reports, plans, estimates, and other data specifically described in Sections 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10.

1.05 Project Familiarization

The **Sponsor and/or NYSDOT** will provide the **Consultant** with the following information:

- Approved project initiation document (Initial Project Proposal or similar documentation) indicating project type, project location, cost estimate, schedule, and fund source(s).
- Transportation needs.
- Plans for future related transportation improvements or development in the area of the project.
- Traffic data.
- Accident records and history.
- Record as-built plans.
- Pavement history.
- Anticipated permits and approvals (initial determination).
- Terrain data requirements for design.
- Available project studies and reports.
- Other relevant documents pertaining to the project.

The **Consultant** will become familiar with the project before starting any work. This includes a thorough review of all supplied project information and a site visit to become familiar with field conditions.

1.06 Meetings

The **Consultant** will prepare for and attend all meetings as directed by the **Sponsor's Project Manager**. Meetings may be held to:

- Present, discuss, and receive direction on the progress and scheduling of work in this contract.
- Present, discuss, and receive direction on project specifics.
- Discuss and resolve comments resulting from review of project documents, advisory agency review, and coordination with other agencies.
- Preview visual aids for public meetings.
- Manage subconsultants and subcontractors.

The **Consultant** will be responsible for the preparation of all meeting minutes; the minutes will be submitted to meeting attendees within one (1) week of the meeting date.

The effort for the preparation and summary for each meeting is planned into the specific tasks. We assume there will be 10 meetings through the life of the project through award of the construction contract. It is further assumed that five of these meetings will be steering committee meetings. The steering committee would include key representatives from the Town to guide the project through critical decisions.

1.07 Cost and Progress Reporting

For the duration of this contract, the **Consultant** will prepare and submit to the **Sponsor** on a monthly basis a Progress Report in a format approved by the **Sponsor**. The Progress Report must contain the <u>Cost Control Report</u>.² The beginning and ending dates defining the reporting period must correspond to the beginning and ending dates for billing periods, so that this reporting process can also serve to explain billing charges. (In cases where all work under this contract is officially suspended by the **Sponsor**, this task will not be performed during the suspension period.)

1.08 Policy and Procedures

The design of this project will be progressed in accordance with the current version of the <u>NYSDOT Procedures for Locally Administered Federal Aid Projects (PLAFAP)</u> <u>Manual³</u> including the latest updates.

All work must conform to current versions of the following documents, as applicable. Where necessary, the **Consultant** will obtain either the full document or guidance extracted from it.

- A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO)
- A Policy on Design Standards -- Interstate System, AASHTO
- Highway Capacity Manual, Special Report 209, Transportation Research Board
- NYS Eminent Domain Procedure Law
- ADA Accessibility Guidelines for Buildings and Facilities

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² https://www.dot.ny.gov/plafap/view-document?id=1598

³ https://www.dot.ny.gov/plafap

⁹https://www.dot.ny.gov/portal/pls/portal/MEXIS_APP.EI_EB_DOC_DETAILS.show?p_arg_names=doc_i d&p_arg_values=10618

- AASHTO Model Drainage Manual & NYSDOT Model Drainage Manual
- AASHTO Guide for the Development of Bicycle Facilities
- NYSDOT Scoping Procedure Manual, Appendix D (Design Traffic Forecast Policy)
- NYSDOT Highway Design Manual, Chapter 2 (Design Criteria)
- NYSDOT Highway Design Manual, Chapter 7 (Resurfacing, Restoration and Rehabilitation (3R))
- Federal Manual of Uniform Traffic Control Devices and New York State Supplement
- NYSDOT The Environmental Manual (TEM)
- Locally Administered Federal Aid Projects Manual
- Safe Routes to School Program Project Manual
- Complete Streets Act (law took effect in February of 2012)

1.09 Standards & Specifications

The project will be designed and constructed in accordance with the current edition of the NYSDOT Standard Specifications for Construction and Materials, including all applicable revisions.

1.10 Subconsultants

The **Consultant** will be responsible for:

- Coordinating and scheduling work, including work to be performed by subconsultants.
- Technical compatibility of a subconsultant's work with the prime consultant's and other subconsultants' work.

1.11 Subcontractors

Procurement of subcontractors must be in accordance with the requirements set forth in the NYSDOT PLAFAP Manual.

Section 2 - Data Collection and Analysis

2.01 Design Survey

A. Ground Survey

The **Consultant** will provide terrain data required for design by means of a topographic field survey. Topographic survey required, locating all prominent features within 20 feet of the centerline of the sidewalk, for a distance of approximately 4500 feet.

B. Photogrammetric Survey

The **Consultant** will obtain terrain data required for design by means of a photogrammetric survey. The **Consultant** will:

- Provide aerial photography for the project.
- Determine the horizontal and vertical ground control necessary to orient the aerial photography.
- Provide ground control survey for photogrammetric mapping.

- Perform the aerotriangulation.
- Perform the stereocompilation.
- Provide 1:_____ scale contact prints or enlargements of the aerial photography.
- Perform the field survey and field edit necessary to obtain data required for design which is not obtainable from aerial photography and add the data to the map files.

C. Stream Survey

The **Consultant** may need to perform field surveys necessary to provide stream cross-sections for the hydraulic analysis of the Black Creek

The location and width of the sections will be sufficient to satisfactorily perform a hydraulic analysis of the named stream.

D. Survey of Wetland Boundaries

The **Consultant** will perform the field survey necessary to accurately locate delineated wetland boundaries. This survey should be performed as soon after delineation as possible.

E. Supplemental Survey

The **Consultant** will provide supplemental surveys when needed for design purposes and to keep the survey and mapping current.

F. Standards

Survey will be done in accordance with the standards set forth in the <u>NYSDOT</u> <u>Land Surveying Standards and Procedures Manual</u>⁵ and in accordance with local standards described in Section 10 of the SOS.

2.02 Design Mapping

The **Consultant** will provide the following design mapping:

• 1"=20' scale mapping with 2 foot contour intervals.

The **Consultant** will provide supplemental mapping when needed for design purposes and keep the mapping current for the duration of the project.

2.03 Determination of Existing Conditions

The **Consultant** will determine, obtain or provide all information needed to accurately describe in pertinent project documents the existing conditions within and adjacent to the project limits.

2.04 Accident Data and Analysis

The **Sponsor** will provide accident records for the last three years for roads within the project limits plus one-tenth of a mile immediately outside of the project limits.

The **Consultant** will prepare collision diagrams and associated summary sheets, and note any clusters of accidents or patterns implying inadequate geometrics, or other safety problems, within the project limits.

⁵ <u>https://www.dot.ny.gov/divisions/engineering/design/design-services/land-survey/repository/LSSPM09.pdf</u>

2.05 Traffic Counts

The **Consultant** will provide traffic count data for existing conditions, growth factors for forecasting, and forecast data, in accordance with the requirements noted in the NYSDOT Traffic Monitoring Standards for Contractual Agreements Manual⁶.

The **Consultant** will provide flow diagrams for appropriate peak periods (am, noon, pm) showing existing and design year volumes on the mainline, on each approach of all intersections, and at major traffic generators.

Existing Conditions & Forecast Data: AADT; DHV (2-way); DDHV;

(Seasonal Consideration) % Trucks

AnalysisYears: Present

Estimated Time of Construction

Completion (ETC) ETC + 10 years

Peak Hour: Weekday AM and PM peak hours

Turning Movement Count Locations on Main Street (Route 146) at the

intersection School Road.

24 Hour Counts (speed, volume and classification):

Two locations along Main Street

(Route 146)

2.06 Capacity Analysis

The **Consultant** will perform capacity analyses using the latest version of the Transportation Research Board's *Highway Capacity Manual* at mainline and intersection locations within the project limit to determine:

- Existing level of service.
- Design year level of service (ETC+10 years).
- Estimates of the duration of the poor level of service where it occurs during commuter travel periods.

The **Consultant** will develop project travel speed and delay estimates for the peak hour and average hour for:

- Existing traffic conditions.
- Design year traffic for the null alternative.

2.07 Future Plans for Roadway and Coordination with Other Projects

⁶ https://www.dot.ny.gov/divisions/engineering/technical-services/hds-respository/Traffic%20Monitoring%20Standards%20for%20Contractual%20Agreements.rtf

The **Sponsor** will provide a brief written statement specifying whether or not plans exist to reconstruct or widen the highway segments immediately adjacent to the project within the next twenty years.

The **Sponsor** will determine the influence, if any, of other existing or proposed projects or proposed developments in the vicinity of this project (e.g., whether a nearby highway widening would influence this project's design traffic volumes).

The **Sponsor** will provide all necessary information pertaining to the other projects or developments

2.08 Soil Investigations

The **Consultant** will determine the boring locations, diameters, and sampling intervals; designate soil boring numbers; stake out the locations; take the soil borings; document the resulting subsurface information; and survey and map the actual boring locations.

2.09 Hydraulic Analysis

The **Consultant** will perform a hydraulic analysis in accordance with the principles outlined in the Section 3.4 of the NYSDOT Bridge Manual.

2.10 Bridges to be rehabilitated

A. Inspection

The **Consultant** will perform a field inspection of each bridge to determine its condition, to establish the rehabilitation work necessary, and to prepare a Level I load rating. The intent is to supplement the inspection done as part of NYSDOT's on-going bridge inspection program, not to duplicate it.

The **Consultant** will perform and document the findings of an in-depth inspection of each bridge in accordance with the current AASHTO "Manual for Condition Evaluation of Bridges."

B. Bridge Deck Evaluation

For Bridges in which the deck will be rehabilitated, the Consultant will perform a bridge deck evaluation in accordance with NYSDOT Bridge Inspection Manual.9

C. Load Rating of Existing Bridge

The **Consultant** will perform a Level 1 load rating of each existing bridge in accordance with NYSDOT's *Uniform Code of Bridge Inspection*. Immediately upon completion, the **Consultant** will transmit two copies of the load rating calculations and summary sheets to the **Sponsor** and the Regional Local Projects Liaison for filing.

D. Fatigue Evaluation

⁷ https://www.dot.ny.gov/divisions/engin<u>eering/structures/repository/manuals/brman_4th_edition</u>

⁸https://www.dot.ny.gov/divisions/engineering/structures/repository/manuals/br deck manual/bridge deck eval manual 1992.pdf

https://www.dot.ny.gov/divisions/engineering/structures/manuals/bridge-inspection

The **Consultant** will analyze, in accordance with the current AASHTO *Guide Specification for Fatigue Evaluation of Existing Bridges*, those metal structural elements which will or may be retained in the rehabilitated bridge. Where this guide specification does not apply (e.g., severe corrosion, mechanical damage, repaired fatigue damage, wrought iron instead of steel, etc.), the **Consultant** will develop an appropriate approach for comprehensive fatigue evaluation while maintaining close coordination with the **Sponsor** for guidance and input. The **Consultant** will then conduct the evaluation accordingly.

For situations where the calculated remaining safe life is less than the planned remaining service life, the **Consultant** will develop various conceptual strategies to improve fatigue performance and/or safely manage the risk. The **Consultant** will prepare and submit to the **Sponsor** a technical memorandum documenting the relative advantages, disadvantages, and approximate costs of each strategy along with specific recommendations.

The **Sponsor** will determine the strategy to be adopted.

For situations where the calculated remaining safe life is equal to or greater than the planned remaining service life, the **Consultant** will prepare and submit to the **Sponsor** a technical memorandum documenting the results of the fatigue evaluation.

2.11 Pavement Evaluation

The **Consultant** will perform a pavement evaluation in accordance with the <u>NYSDOT</u> Comprehensive Pavement Design Manual.¹⁰ Analyses will consider thickness design.

The **Consultant** will develop and transmit 3 copies of a draft report along with the cores to the **Sponsor** for review.

The **Sponsor** will determine recommended pavement treatments as part of this review, and will provide the **Consultant** with all comments including the recommended treatments.

The **Consultant** will revise the report to incorporate review comments (assumed minor) and to add the recommended treatment(s) to the "Recommendations" section. The **Consultant** will include a summary in the DAD and retain the report in the project files.

Section 3 - Preliminary Design

3.01 Design Criteria

The **Consultant** will identify the applicable design standards to be used for this project, and will establish project-specific design criteria in accordance with the <u>NYSDOT Project</u> <u>Development Manual¹¹</u>

¹⁰ https://www.dot.ny.gov/divisions/engineering/design/dgab/cpdm

https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm

The **Sponsor** will approve the selected project design criteria and will obtain NYSDOT concurrence (either by a written submission or at a meeting).

Based on the selected design criteria, the **Consultant** will identify all existing non-standard features that are within and immediately adjacent to the project limits. Non-standard features that correlate with a high accident rate will be noted.

3.02 Development of Alternatives

A. Selection of Design Alternative(s)

The **Consultant** will identify and make rudimentary evaluations of potential design alternative concepts that would meet the **Sponsor's** defined project objectives. These evaluations are not to be carried beyond the point of establishing the feasibility of each concept as a design alternative; only those significant environmental and geometric design constraints that bear on the feasibility should be identified.

For each concept the **Consultant** will prepare rudimentary sketches of plan, profile, and typical section views which show:

- On plan: proposed centerlines; pavement edges; curve radii and termini and existing ROW limits.
- **On profile:** theoretical grade lines; critical clearances; vertical curve data; grades; and touchdown points.
- On typical section: lane, median, and shoulder widths; ditches; gutters; curbs; and side slopes.
- Where necessary: important existing features.
- Where pertaining to feasibility: significant environmental and geometric design constraints, labeled as such.

These sketches will include only the minimum information needed to select design alternatives to be studied in further detail.

The **Consultant** will meet with the **Sponsor** to discuss the concepts, using the sketches as discussion aids to describe the relative order-of-magnitude costs, advantages, disadvantages, and problem areas of each. From these concepts the **Sponsor** will select one, or in some cases more, design alternative(s) for further development.

B. Detailed Evaluations of Alternative(s)

The **Consultant** will further evaluate each design alternative and the null alternative with specific engineering analyses and considerations. Analyses will be conceptual and limited to determining the relative suitability of each design alternative, and will include:

 Design geometry, including the identification and comparison of alignment constraints and (where applicable) justification for retaining nonstandard design features, per the <u>NYSDOT Highway Design Manual</u>.¹²

¹² https://www.dot.ny.gov/divisions/engineering/design/dqab/hdm

• Environmental constraints and potential environmental impact mitigation measures (identified under Section 4 tasks).

- Traffic flow and safety considerations, including signs, signals, and level of service analysis for intersections.
- Pavement.
- Structures, including bridges, retaining walls, major culverts, and building alterations (limited to establishing basic concepts, accommodating clearances and stream flow, and estimating costs). Bridge investigative work (inspection, deck coring, etc.) is covered under Section 2.
- Drainage.
- Maintenance responsibility.
- Maintenance and protection of traffic during construction.
- Soil and foundation considerations.
- Utilities.
- Railroads.
- Right-of-way acquisition requirements.
- Conceptual landscaping (performed by a Registered Landscape Architect).
- Accessibility for pedestrians, bicyclists and the disabled.
- Lighting.
- Construction cost factors.

The **Consultant** will prepare the following drawings for each design alternative analyzed:

- 1"=20' plans showing (as a minimum) stationed centerlines; roadway geometrics; major drainage features; construction limits; cut and fill limits; and proposed right-of-way acquisition lines.
- Profiles, at a scale of 1"=20' horizontal and 1"=4' (maximum) vertical, showing (as a minimum) the vertical datum reference; significant elevations; existing ground line; theoretical grade line; grades; vertical curve data including sight distances; critical clearances at structures; centerline stations and equalities; construction limits; and superelevation data.
- Typical sections showing (as a minimum) lane, median, and shoulder widths; ditches; gutters; curbs; and side slopes.

3.03 Cost Estimates

The **Consultant** will develop, provide and maintain a cost estimate for each design alternative.

The **Consultant** will update the estimate periodically and as necessary to incorporate significant design changes.

3.04 Preparation of Draft Design Approval Document

For this project, the Design Approval Document (DAD) will be an Initial Project Proposal/Final Design Report.

The **Sponsor** will make all determinations not specifically assigned to the **Consultant** which are needed to prepare the Draft DAD.

The **Consultant** will prepare a Draft DAD, which will include the results of analyses and/or studies performed in other Sections of this document. The DAD will be formatted as specified in the NYSDOT *Project Development Manual (PDM)*. ¹³

The **Consultant** will submit 6 copies of the Draft DAD to the **Sponsor** for review. The **Sponsor** will review the Draft DAD and provide the **Consultant** with review comments. The **Consultant** will revise the Draft DAD to incorporate the comments.

The **Consultant** will revise the DAD to reflect NYSDOT and/or FHWA comments. The **Sponsor** will sign the cover sheet and submit 3 copies of the revised report to the NYSDOT for signature by the FHWA.

3.05 Advisory Agency Review

The **Consultant** will provide the **Sponsor** with 3 copies of the signed Draft DAD for distribution to advisory agencies.

The **Sponsor** will distribute the Draft DAD to the advisory agencies.

The **Consultant** will assist the **Sponsor** in evaluating and preparing individual responses to the review comments received.

3.06 Public Information Meeting(s) and/or Public Hearing(s)

A Public Information Meeting(s)

The **Consultant** will assist the **Sponsor** at one (1) public information meeting(s) with advisory agencies, local officials, and citizens, at which the **Consultant** will provide visual aids and present a technical discussion of the alternatives.

The **Sponsor** will arrange for the location of public information meeting(s). The **Consultant** will assist the **Sponsor** with appropriate notification.

B. Public Hearing(s)

The **Sponsor** will arrange for the date, time, and location of the public hearing, and the **Consultant** will provide stenographic services.

The **Consultant** will assist the **Sponsor** with appropriate notification, and will produce, modify as necessary, and provide 100 copies of an informational brochure for distribution.

The **Consultant** will provide an outline for the public hearing presentation, and will provide visual aids and displays specifically for use at the public hearing.

¹³ https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm

All products prepared by the Consultant will be provided to the **Sponsor** for review, discussion, and modification as necessary in advance of the public hearing.

The **Consultant** will attend the public hearing, which will be conducted by the **Sponsor**. The **Consultant** will present the technical discussion of the design alternatives. The **Consultant** will assist the **Sponsor** with erecting, managing, and dismantling informational displays and other visual aids.

The **Consultant** will assist the **Sponsor** in analyzing the public hearing transcript and written statements.

3.07 Preparation of Final Design Approval Document (DAD)

The **Sponsor** will obtain all necessary approvals and concurrences and will publish all applicable legal notices.

The **Consultant** will prepare the Design Recommendation, and will modify the DAD to include the Design Recommendation, re-title the DAD in accordance with the *PDM* Manual, and update existing conditions and costs as necessary. The **Consultant** will incorporate changes resulting from the advisory agency review and all public information meetings and public hearings.

The **Consultant** will submit 6 copies of the Final DAD to the **Sponsor** for review. The **Sponsor** will review the Final DAD and provide the **Consultant** with review comments. The **Consultant** will revise the Final DAD to incorporate the comments.

The **Sponsor** will submit 3 copies of the Final DAD to NYSDOT for a Final Environmental Determination. NYSDOT will make the determination. The **Consultant** will again revise the Final DAD to incorporate changes (assumed minor) resulting from the NYSDOT.

The **Sponsor** will grant or obtain, from or through NYSDOT, Design Approval.

Section 4 – Environmental

4.01 NEPA Classification

The **Consultant** will verify the anticipated NEPA Classification.

If the project is assumed to be a Class II action, then the **Consultant** will complete the NEPA Checklist, and forward the completed checklist to the **Sponsor** for forwarding to NYSDOT (with the Final DAD) for a final NEPA determination. The NEPA Checklist need not be completed for projects assumed to be Class I or III actions.

The Lead Agency for NEPA is the Federal Highway Administration (FHWA).

4.02 SEQRA Classification

The **Consultant** will assist the **Sponsor** in complying with SEQRA (6 NYCRR Part 617). The **Sponsor** is the Lead Agency. Consultant tasks include, but are not limited to:

¹⁴ https://www.dot.ny.gov/divisions/engineering/environmental-analysis/manuals-and-guidance/epm

- Drafting letters to involved agencies to determine the lead agency.
- Drafting Environmental Assessment Form(s).
- Drafting a negative declaration.
- Drafting a positive declaration.
- Drafting notices.

The **Consultant** will document the results of SEQRA processing in the body of the Design Approval Document (DAD) and will include documentation of the final SEQRA determination in the Appendix of the DAD.

4.03 Smart Growth

The **Consultant** will complete the Smart Growth Checklist developed by NYSDOT to measure whether and to what extent a project conforms to the principles and objectives of Smart Growth and submit same to the Sponsor for attestation. (New York State's Smart Growth policy was adopted by amendment to the State Highway Law and is intended to minimize the "unnecessary cost of sprawl development." It requires public infrastructure projects to undergo a consistency evaluation and attestation using established Smart Growth Infrastructure Criteria. The consistency evaluation is measured with the Smart Growth checklist which can be found in the Chapter 7 Appendices on the PLAFAP Manual website.)

4.04 Screenings and Preliminary Investigations

The **Consultant** will screen and perform preliminary investigations to determine potential impacts resulting from the design alternative(s) for:

- General Ecology and Endangered Species
- Ground Water
- Surface Water
- State Wetlands
- Federal Jurisdictional Wetlands
- Floodplains
- Coastal Zone Management
- Navigable Waterways
- Historic Resources
- Parks
- Hazardous Waste
- Asbestos
- Noise
- Air Quality
- Energy
- Farmlands
- Invasive Species
- Visual Impacts
- Critical Environmental Areas
- Smart Growth
- Environmental Justice

Work will be performed, as summarized in the PLAFAP Manual and detailed in the PDM and the TEM, to determine whether further detailed analysis or study is required. The results of these screenings and preliminary investigations will be summarized in the appropriate sections of the DAD.

4.05 Detailed Studies and Analyses

Based on the work performed in Section 4.03, the **Consultant** will determine whether detailed analysis or study is required. Prior to commencing such detailed study or analysis, the **Sponsor** must concur with the **Consultant's** determination.

Detailed study or analysis work will be performed and documented as detailed in the PLAFAP Manual, as well as in the PDM and the TEM. Results of the detailed study or analysis will be summarized in the appropriate section of the DAD.

Detailed study or analysis will be done for:

- A. General Ecology and Endangered Species
- B. Ground Water
- C. Surface Water
- D. State Wetlands
- E. Federal Wetlands
- F. Floodplains
- G. Coastal Zone Management
- H. Historic Resources
- I. Parks Section 4(f) and Section 6(f) Evaluations
- J. Hazardous Waste
- K. Asbestos
- L. Noise
- M. Air Quality
- N. Energy
- O. Farmlands
- P. Invasive Species
- Q. Visual Impacts
- R. Critical Environmental Areas
- S. Smart Growth
- T. Environmental Justice

4.06 Permits and Approvals

The **Consultant** will obtain all applicable permit(s) and certification(s), including but not necessarily limited to:

- Article 24 Freshwater Wetlands Permit
- Article 25 Tidal Wetlands Permit
- FHWA Executive Order 11990 Wetlands Finding
- U.S. Coast Guard Section 9 Permit
- U.S. Army Corps of Engineers Section 10 Permit (Individual or Nationwide)
- U.S. Army Corps of Engineers Section 404 Permit (Individual or Nationwide)
- NYSDEC Section 401 Water Quality Certification

- NYSDEC State Pollution Discharge Elimination System (SPDES) Permit
- NYSDEC Article 15 Protection of Waters Permit
- Safe Drinking Water Act Section 1424(e)
- Migratory Bird Treaty Act
- Coastal Zone Consistency
- Scenic, Wild and Recreational Rivers
- NYSDOT Non-Utility Work Permit

(For a complete list of federal and State environmental requirements, see PDM, Appendix 1.)

4.07 Public Hearing

The **Consultant** will provide exhibits to supplement reports for courtroom purposes.

Before the hearing, the **Consultant** will meet with the **Sponsor** to review the permit or certification application.

The **Consultant** will attend the hearing and, as required, provide expert testimony relevant to the particular application. The **Sponsor** will arrange for and provide any necessary legal assistance at the hearing. The **Consultant's** expert witnesses will have personally been in responsible charge of those aspects of the study to which their testimony is directed.

Section 5 - Right-of-Way

5.01 Abstract Request Map and/or Title Search

The **Consultant** will engage a qualified title company to complete title searches (abstracts of title) for properties to be acquired by the **Sponsor**.

5.02 Right-of-Way Survey

The **Consultant** will perform survey needed to accurately determine existing right-of-way limits and establish side property lines.

5.03 Right-of-Way Mapping

The **Consultant** will meet with the **Sponsor** to discuss the types of right-of-way acquisitions required and the limits of acquisition lines.

The **Consultant** will prepare acquisition maps in accordance with the format provided by the **Sponsor**.

All right-of-way mapping will show dimensions in U.S. Customary units of measurement.

The **Consultant** will prepare all map revisions or additions which are determined necessary during the construction of the project.

5.04 Right-of-Way Plan

¹⁵https://www.dot.ny.gov/divisions/policy-and-strategy/planning-bureau/MPO program update guide/repository/Planning%20PIFinal-Manua12%201218.pdf

The **Consultant** will prepare the Right-of-Way Plan(s) in accordance with the PLAFAP Manual.

5.05 Right-of-Way Cost Estimates

The **Consultant** will provide cost estimates for the right-of-way to be acquired by the **Sponsor** on all alternatives being considered and will provide updated estimates, as necessary.

5.06 Public Hearings/Meetings

The **Consultant** will conduct any public hearings and/or informational meetings as may be required by the Eminent Domain Procedure Law. Public hearings will be included under Section 3.06.

5.07 Property Appraisals

The **Consultant** will prepare property appraisals establishing an opinion of value for any damages caused by the acquisition(s). The **Consultant** will also prepare estimates for the rental of occupied property(ies).

5.08 Appraisal Review

The **Sponsor** must have a Certified General Appraiser review the property appraisals. The appraisal reviewer will recommend a value of "just compensation" to the Sponsor. The Sponsor must set the value of just compensation prior to offers being made to the property owners.

5.09 Negotiations and Acquisition of Property

Property offers must not be made until authorization is granted to the **Sponsor** by the NYSDOT.

The **Consultant** will negotiate with property owners for the acquisition of their property, including completion of all documents required by the **Sponsor** in order to obtain the property.

5.10 Relocation Assistance

The **Consultant** will administer relocation assistance to displaced persons and businesses and oversee their relocation and vacating the property, under the close supervision of the NYSDOT Regional Right-of-Way Liaison.

5.11 Property Management

The Consultant will:

- Prepare an inventory of all improvements acquired.
- Prepare and deliver all required rental notices, rental permits and rental information.
- Collect rentals and payments for salvaged items.
- Maintain improvements in safe and secure manner.
- Oversee the removal of improvements by owners or third party purchasers.
- Demolish improvements when available prior to project construction.
- Dispose of excess right-of-way.

Section 6 - Detailed Design

6.01 Preliminary Bridge Plans

A. New and Replacement Bridges

The **Consultant** will prepare and submit to the **Sponsor** a Preliminary Bridge Plan in accordance with the <u>NYSDOT Bridge Manual</u>. For each bridge, the **Consultant** will prepare and submit to the **Sponsor** a Structure Justification Report. The format and content of the Structure Justification Report will be as outlined in the *NYSDOT Bridge Manual*.

B. Bridge Rehabilitations

For each bridge to be rehabilitated, the **Consultant** will prepare and submit to the **Sponsor** for review a Preliminary Bridge Rehabilitation Plan, which will be sufficiently developed to:

- Show basic concepts and major details (including all existing and proposed utilities).
- Acquaint affected parties with the project and project components.
- Serve as an instrument for initial approval.
- Provide a basis for the development of final plans.

The plan should indicate maintenance and protection of traffic provisions and be accompanied by a cost estimate.

C. Selected Structural Treatment

The **Consultant** will modify the Structure Justification Report, Preliminary Bridge Plan and/or Preliminary Bridge Rehabilitation Plan to incorporate **Sponsor** review comments.

The **Sponsor** will approve the selected structural treatment and will obtain NYSDOT concurrence (either by a written submission or at a meeting).

6.02 Advance Detail Plans (ADP)

The **Consultant** will develop the approved design alternative to the ADP stage. At this stage all plans, specifications, estimates and other associated materials will be **90%** complete.

As part of this task the **Consultant** will prepare templated cross sections at 25 ft intervals.

Advance Detail Plans will be in accordance with <u>Chapter 21 of the NYSDOT Highway</u> Design Manual.¹⁷

https://www.dot.ny.gov/divisions/engineering/structures/repository/manuals/brmanusc/2011 nysdot_Br_Man_repl_pgs.pdf

¹⁷ https://www.dot.ny.gov/divisions/engineering/design/dgab/hdm/hdm-repository/Chapt_21.pdf

Advance Detail Plans may include, but are not limited to, the following contract sheet drawings:

- Title Sheet
- Index and legend
- Typical sections
- Traffic Control Plan (including construction sign text data and temporary traffic signal plans and details)
- Maintenance jurisdiction table
- Survey baseline ties
- Miscellaneous tables
- Miscellaneous details
- Erosion and Sediment Control Plan
- General Plans (1"=20")
- General Profiles (1"=20' & 1"=4' vertical scales)
- Signs
- Traffic signal plans
- Lighting plans
- Pavement marking plans
- Utility plans

The **Consultant** will prepare and submit 6 copies of the ADP's to the **Sponsor** for review. The **Consultant** will modify the design to reflect the review of the ADP package.

6.03 Contract Documents

The **Consultant** will prepare a complete package of bid-ready contract documents. The package will include:

- Instructions to bidders.
- Bid documents.
- Contract language, including applicable federal provisions and prevailing wage rates.
- Special notes.
- Specifications.
- Plans
- A list of supplemental information available to bidders (i.e., subsurface exploration logs, record as-built plans, etc.).
- Other pertinent information.

The **Consultant** will submit the contract documents to the **Sponsor** for approval. Upon approval, the **Sponsor** will submit 3 copies of the contract bid documents to NYSDOT as described in the *PLAFAP Manual*.

6.04 Cost Estimate

The **Consultant** will develop, provide, and maintain the construction cost estimate for the project. The **Consultant** will update the estimate periodically and as necessary to

incorporate significant design changes, and will develop and provide the final Engineer's Estimate, including all quantity computations.

6.05 Utilities

The **Consultant** will coordinate with affected utility companies to ensure the timely relocation of utility poles and appurtenances. The **Consultant** will assist the **Sponsor** in preparing any necessary agreements with utility companies. Any agreements containing reimbursable relocations must be approved and signed by the Design Support Section of the NYSDOT Design Quality Assurance Bureau (see PLAFAP Manual Appendix 10-8).

6.06 Railroads

The **Consultant** will coordinate with affected railroads and will assist the **Sponsor** in preparing all necessary Railroad Agreements.

6.07 Bridge Inventory and Load Rating Forms

The **Consultant** will complete and provide the **Sponsor** and NYSDOT with:

- Inventory Update forms, per the current NYSDOT Bridge Inventory Manual for Bridge Inventory and Inspection System, reflecting all proposed physical changes resulting from construction.
- Level 2 Load Rating Data Input forms, per NYSDOT User Manual for Structural Rating Program for Bridges and current NYSDOT guidance on the "Procedure for Inventorying, Inspecting, and Level 2 Load Rating, New, Replacement and Reconstructed or Rehabilitated Bridges".

6.08 Information Transmittal

Upon completion of the contract documents, the **Consultant** will transmit to the **Sponsor** all project information, including electronic files. The electronic information will be in the format requested by the **Sponsor**.

Section 7 - Advertisement, Bid Opening and Award

7.01 Advertisement

The **Consultant** will prepare the advertisement for bids to be placed in the NYS Contract Reporter and any other newspaper or publication identified by the **Sponsor**. The **Consultant** will submit the ad(s) to the **Sponsor** for review and will revise the ad(s) to reflect comments generated by that review. Upon approval by the **Sponsor**, the **Consultant** will place the advertisements.

Advertisements must not be placed until authorization is granted to the **Sponsor** by the NYSDOT.

7.02 Bid Opening (Letting)

The **Sponsor** will hold the public bid opening.

7.03 Award

The **Consultant** will analyze the bid results. The analysis will include:

- Verifying the low bidder.
- Ensuring receipt of all required bid documents (non-collusive bid certification, debarment history certification, etc.).
- Breaking the low bid into fiscal shares, if necessary.
- Determining whether the low bid is unbalanced.
- For pay items bid more than 25% over the Engineer's Estimate:

Checking accuracy of quantity calculations.

Determining appropriateness of price bid for work in the item.

Determining whether the low bidder is qualified to perform the work.

The **Consultant** will assist the **Sponsor** in preparing and compiling the package of information to be transmitted to the NYSDOT.

The **Sponsor** will award the contract and will transmit the award package to the NYSDOT as described in the Procedures for Locally Administered Federal Aid Projects (PLAFAP) Manual.

Section 8 - Construction Support

8.01 Construction Support

The **Consultant** will provide design response to unanticipated or changed field conditions, analyze and participate in proposed design changes, and interpret design plans.

Work under this section will always be in response to a specific assignment from the **Sponsor** under one of the tasks below:

- In response to unanticipated and/or varying field conditions or changes in construction procedures, the **Consultant** will conduct on-site field reconnaissance and, where required, prepare Field Change Sheets modifying pertinent contract plan sheets.
- The **Consultant** will analyze and make recommendations on the implementation of changes proposed by the **Sponsor** or the construction contractor. This includes the Traffic Control Plan.
- The **Consultant** will interpret and clarify design concepts, plans and specifications.
- The **Consultant** will review and approve shop drawings for construction.

Not reimbursable under this Section are:

- Corrections of design errors and omissions
- Straightforward interpretations of plans and designer intentions

Section 9 - Construction Inspection

9.01 Equipment

The **Contractor** will furnish office space and basic office furnishings for the **Consultant**, as part of the contract.

The **Consultant** will furnish all other office, field and field laboratory supplies and equipment required to properly perform the inspection services listed below.

9.02 Inspection

The **Consultant** must provide, to the satisfaction of the **Sponsor**, contract administration and construction inspection services from such time as directed to proceed until the completion of the final agreement and issuance of final payment for the contract. The **Consultant** must assume responsibility, as appropriate, for the administration of the contract including maintaining complete project records, processing payments, performing detailed inspection work and on-site field tests of all materials and items of work incorporated into the contract consistent with federal policies and the specifications and plans applicable to the project.

9.03 Municipal Project Manager

This Project Manager will be the **Municipality's** official representative on the contract and the **Consultant** must report to and be directly responsible to said Project Manager.

9.04 Ethics

Prior to the start of work, the **Consultant** will submit to the **Sponsor** a statement regarding conflicts of interest.

9.05 Health and Safety Requirements

The **Consultant** must provide all necessary health and safety related training, supervision, equipment and programs for their inspection staff assigned to the project.

9.06 Staff Qualifications and Training

The **Consultant** must provide sufficient trained personnel to adequately and competently perform the requirements of this agreement. The **Consultant** will recommend inspectors to the Sponsor for approval prior to their assignment to the project. Resumes, proof of required certification and the proposed initial salary shall be furnished. The Sponsor may want to interview before approval, and reserves the right to disapprove any application. The employment of all consultant personnel is conditional, subject to satisfactory performance, as determined by the Sponsor.

For all construction inspection agreements, it is mandatory that all technician personnel be identified by the National Institute for Certification in Engineering Technologies (NICET) certification levels in the staffing tables. In addition, all Transportation Engineering Technicians-Construction assigned to the project at and above level III, Engineering and Senior Engineering Technicians, must be certified by NICET. Transportation Engineering Technicians-Construction below level III assigned to the project must have successfully completed the General Work Element requirements and at least those Special Work Elements which apply to their specific project assignments at the level of their rating.

In lieu of the NICET certification requirements, the Sponsor may accept evidence that the person proposed for employment (1) has satisfactorily performed similar duties as a

former NYS Department of Transportation (NYSDOT) employee or (2) has a combination of education and appropriate experience commensurate with the scope of the position in question.

Technicians employed by the **consultant** that perform field inspection of Portland cement concrete shall possess a current certification from the American Concrete Institute (ACI) as a Concrete field-testing Technician-Grade 1, or have completed all of the following NICET work elements, which are equivalent to the ACI certification:

NICET	NICET	NICET
LEVEL	CODE	WORK ELEMENT
I	82019	Sample Fresh Concrete
1	82020	Slump Test
II	84068	Air Content, Pressure
II	84069	Air Content, Gravimetric
II	84070	Air Content, Volumetric
II	84076	Field Prepared Test Specimens

Inspectors designated as the responsible person in charge of work zone traffic control must have sufficient classroom training, or a combination of classroom training and experience, to develop needed knowledge and skills. Acceptable training should consist of a formal course presented by a recognized training program which includes at least two full days of classroom training. A minimum of two days classroom training is normally required, although one day of classroom training plus responsible experience may be considered. Recognized training providers include American Traffic Safety Services Association (ATSSA), National Safety Council (NSC), Federal Highway Administration's National Highway Institute (FHWA-NHI), and accredited colleges and universities with advanced degree programs in Civil/Transportation/Traffic Engineering. Former DOT employees may be considered on the basis of at least one day of formal classroom training combined with responsible M&PT experience.

Technicians employed by the **consultant** who perform field inspection of geotechnical construction (earthwork), including, but not limited to embankment construction, subbase placement, structure and culvert backfill placement, and testing of earthwork items for inplace density and/or gradation, shall possess a current certification and/or proof of training from the following organization:

North East Transportation Technician Certification Program (NETTCP) Soils and Aggregate Inspector Certification. An alternative to the certification/training listed above would be proof of previous training (within the past 5 years) of the NYSDOT Earthwork Inspectors School, given by the Department's Geotechnical Engineering Bureau.

9.07 Scope of Services/Performance Requirements

A. Quality

The Consultant will enforce the specifications and identify in a timely manner to the **Sponsor** local conditions, methods of construction, errors on the plans or defects

in the work or materials which would conflict with the quality of work, and conflict with the successful completion of the project.

B. Record Keeping & Payments to the Contractor

- 1) All records must be kept in accordance with the directions of the Sponsor and must be consistent with the requirements of the NYSDOT Manual of Uniform Recordkeeping (MURK). 18 The Consultant must take all measurements and collect all other pertinent information necessary to prepare daily inspection reports, monthly and final estimates, survey notes, record plans showing all changes from contract plans, photographs of various phases of construction, and other pertinent data, records and reports for proper completion of records of the contract.
- 2) Any record plans, engineering data, survey notes or other data provided by the Sponsor should be returned to the Sponsor at the completion of the contract. Original tracings of record plans, maps, engineering data, the final estimate and any other engineering data produced by the Consultant will bear the endorsement of the Consultant. Any documents that require an appropriate review and approval of a Professional Engineer (P.E.) licensed and registered to practice in New York State must be signed by the P.E.
- 3) Unless otherwise modified by this agreement, the **Sponsor** will check, and when **accepta**ble, approve all structural **shop** drawings.
- The **Consultant** must submit the final estimate of the contract to the **Sponsor** within four (4) weeks after the date of acceptance of the contract. All project records must be cataloged, indexed, packaged, and delivered to the **Sponsor** within five (5) weeks after the date of the acceptance of the contract.

Health & Safety/Work Zone Traffic Control

- The Consultant must ensure that all inspection staff assigned to the project are knowledgeable concerning the health and safety requirements of the contract per Sponsor policy, procedures and specifications and adhere to all standards. Individual inspectors must be instructed relative to the safety concerns for construction operations they are assigned to inspect to protect their personal safety, and to ensure they are prepared to recognize and address any contractor oversight or disregard of project safety requirements.
- 2) The Consultant is responsible for monitoring the Contractor's and Subcontractor's efforts to maintain traffic and protect the public from damage to person and property within the limits of, and for the duration of the contract.

¹⁸ https://www.dot.ny.gov/main/business-center/contractors/construction-division/forms-manuals-computer-applications-general-information

Monitoring Equal Opportunity/Labor Requirements

The **Consultant** must assign to one individual the responsibility of monitoring the Contractor's adherence to Equal Opportunity and Labor requirements contained in the contract. When monitoring the Contractor's Equal Opportunity and Labor compliance, the Consultant, will utilize the guidance contained in the contract, standard specifications and the **Sponsor's** policies. The Consultant is also to input required disadvantaged business enterprise (DBE) information into the NYSDOT maintained Equitable Business Opportunities (EBO) database¹⁹.

Section 10 - Estimating and Technical Assumptions

10.01 Estimating Assumptions

The following assumptions have been made for estimating purposes:

Section 1 Estimate 10 meetings during the life of this agreement.

Estimate 28 cost and progress reporting periods will occur during the

life of this agreement.

Section 2 Assume that GPS methods and equipment will be used to establish

local control points.

Estimate 25 accidents will require analysis.

Estimate 6 capacity analyses will be required.

Estimate 3 soil borings will be taken.

Section 3 Estimate 2 concepts will be evaluated.

Estimate 2 design alternative(s) will be analyzed in addition to the null

alternative.

Estimate 3 cost estimate(s) plus 2 updates will be required.

Estimate 0 bridges will be rehabilitated.

Section 4 Estimate 2 permits will be required.

Section 5 Estimate TBD properties will require title searches.

Estimate TBD ROW maps will be required.

Estimate TBD property acquisitions will be required.

Section 6 Detailed Design or Final Design

¹⁹ https://www.dot.ny.gov/dotapp/ebo

Final Design will include but not be limited to:

- Development of highway and bridge plans.
- Structural rehabilitation design.
- · Highway design.
- Preparation of right-of-way plans and acquisition maps.
- Development and design for public utilities.
- Maintenance and protection of traffic during construction.
- Preparation and submission of final Plans, Specifications, and Estimate (PS&E) for the project.

Estimate <u>3 cost estimate(s) plus <u>2</u> updates will be required.</u>

Estimate _____ bridges will be replaced and _____ will be rehabilitated.

Estimate 0_utility companies and 0 railroad agencies will be affected.

Section 7 Estimate 25 copies of the final contract bid documents will be needed for prospective bidders.

Estimate advertisements will be placed in $\underline{2}$ publications in addition to the NYS Contract Reporter.

Section 8 Construction Support will include but not be limited to:

- Providing technical support during construction on questions relating to the design.
- Providing assistance in construction bid proceedings.
- Analysis of bids.
- Review of shop drawings (if necessary).

Estimate <u>20</u> requests that require effort will be made during the construction phase of the project.

Section 9 Construction Inspection will include but not be limited to:

- Providing on-site construction inspection and oversight to ensure the quality of construction and conformity with the final plans and specifications.
- Preparation of as-built plans.

Estimate construction will begin on <u>April 1, 2014</u> and will be completed by August 30, 2014.

10.02 Technical Assumptions

The following Technical Assumptions have been made for estimating purposes:

Section 1 General

Two alternatives will be considered in addition to the null-alternative: a sidewalk within the right-of-way and a sidewalk in the preferred location.

Section 2 Data Collection and Analysis

2.07 Soil Investigation:

Two (2) soil borings will be obtained at localized areas to help determine the existing subsurface conditions. The geotechnical subcontractor will prepare subsurface investigation report with a pavement design recommendations.

2.08 Hydraulic Analysis:

Assume the drainage patterns will be similar to existing and analysis of the existing drainage system will not be required.

Section 3 Preliminary Design

3.02/3.03 Development of Alternatives:

Assumes preliminary estimate for two (2) reconstruction Alternatives and that the null-alternative does not meet the project objectives.

3.04 Preparation of Draft Design Approach Document:

It is assumed that this Project will classify as a (NEPA) Class II Action and will be progressed as a Categorical Exclusion with Support Documentation and will require FWHA concurrence. Further, it is assumed that it will classify as an Unlisted Action under (SEQRA).

3.05 Preparation of Final Design Approval Document:

Assume minimal changes to the Draft Design Approval Document will result from Advisory Agency Review and the Public Informational Meeting.

Section 7 Advertisement, Bid Opening and Award

Assume bid package will have more than one fiscal share

Section 8 Construction Support – construction will be completed in one season (approximately 3 months).

Section 9 Construction Inspection - construction will be completed in one season (approximately 3 months).