

RESPONSE TO REQUEST FOR PROPOSALS FOR:
RFP – Route 1 North Preliminary Engineering

Falmouth, Maine

September 25, 2020



GPI

September 25, 2020

Mr. Nathan Poore, Town Manager
Town of Falmouth
271 Falmouth Road
Falmouth, Maine 04105

SUBJECT: RFP – Route 1 North Preliminary Engineering

Dear Mr. Poore:

On a Sunday a few weeks ago, I drove my family around Falmouth, showing them the Route 1 South and Route 100 projects, the Town Hall, and the Route 1 North project area. I told them that I've enjoyed investing a significant portion of my life into the Town's infrastructure, knowing that people will benefit from these improvements for many years. I also told them that the Town feels familiar to me; I care about it and appreciate its leaders and sense that I am well informed about its operations.

It's this personal sense of commitment and care that I brought to the Route 100 project and promise to bring again with the Route 1 North project if our team is provided the opportunity to develop preliminary design. I view the role of Project Manager as deeply involved in the design and communication, steering the project, and ensuring success for all parties. I care about being on time, on-schedule, and on-budget. I think attention to detail and follow through are essential, and I hope you saw those in the Route 100 project as we uncovered issues early in design that avoided surprises later. I also care about communicating regularly and well with property owners; I think we had a successful Route 100 design process and vote partly because those abutting the project sensed that they were well-informed. My goal was that you and Theo were regularly apprised of progress and issues as the Route 100 project progressed, and I strove to communicate proactively and respond to questions quickly and fully. I will provide the same level of service on Route 1 North.

We are proposing the same team that worked on the Route 100 project. Steve Babalis, Tim Whitney, and I are very familiar with how the Town likes to operate based upon our Route 100 experience and understand MaineDOT standards with years of experience working on their projects. We get things done and strive to do them with excellence. At GPI, we are backed by committed and talented professionals and senior leadership who are equally passionate about helping Falmouth make the most of this once-in-a-lifetime opportunity to improve this section of Route 1.

We also bring innovative ideas. Be sure to check the proposal scope for our highlighted concepts. Not only do we think that exploring these ideas could help the Town maximize the Tax Increment Filing (TIF) money, but they may also lead to better product longevity and aesthetics.

We have read and understand Addendum # 1 dated 9/23/2020 and Addendum #2 dated 9/24/2020. If we were given the privilege of assisting the Town with the design of Route 1 North, you have my personal pledge that we would eagerly and consistently deliver high quality service to the Town staff and the citizens of Falmouth. Thank you for considering our proposal.

Warm Regards,

GREENMAN-PEDERSEN, INC.



Mark Debowski, P.E.
Assistant Vice President/Director of Highway Engineering

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Section A

Firm Description

SECTION A:

FIRM DESCRIPTION

GPI is a leading engineering consulting and construction inspection firm that specializes in the innovative development, design and construction of infrastructure and building systems. Since its founding in 1966, GPI has grown from a two-person endeavor to a consulting firm with over 1,500 employees in 46 offices and is included among ENR's list of Top 100 National Design Firms.

GPI provides services to a wide variety of government agencies, municipalities, institutions, industries, architects and developers and is a recognized leader in highway and roadway design, traffic engineering, bridge design, traffic signal operations, traffic calming, transportation planning, landscape architecture, protective coatings design and inspections, ground survey, laser scanning and aerial mapping products. We attribute our long-lasting relationships with our clients to the talented, responsive, service-oriented professionals employed throughout the GPI organization. It is our people that set us apart from other consultants and is what truly makes this company unique.

We take pride in the many projects we have successfully completed and enjoy the challenge of new and challenging engineering issues requiring innovative, yet practical, cost-effective solutions. Our firm's commitment to provide quality engineering services and to work as a team with our clients is the reason they continue to turn to GPI for engineering solutions. Our values of teamwork, quality and commitment are the key elements for our growth and continued success.

Our corporate headquarters are located in Babylon, NY. The project manager and project team are located in GPI's Bedford, New Hampshire office and are focused on projects in Northern New England. This team has demonstrated the ability to get things done effectively in Falmouth and have committed to being regularly present in Falmouth so that distance is never an issue.

GPI is prequalified on MaineDOT's list of prequalified firms for highway design.







Section B

Project Team & Relevant Past Projects

SECTION B:

PROJECT TEAM & PAST RELEVANT PROJECTS

This project will be designed by the same team that designed the Route 100 project. The names, roles, and resumes of these individuals follow.



PROJECT MANAGER
Mark Debowski, P.E.

PROJECT ENGINEER
Steve Babalis, P.E.

HIGHWAY ENGINEER
Tim Whitney, P.E.

ADDITIONAL SUPPORT

SURVEY & PROPERTY RESEARCH
David Titcomb, P.L.S.

LIGHTING DESIGN & UTILITY COORDINATION
Albert Godfrey, Jr., P.E.

GPI SPECIALISTS AVAILABLE AS NEEDED

Environmental Engineering
Landscape Architecture
Structural Engineering
Right-Of-Way

KEY

GPI
Titcomb
TMSI

TEAM INTRODUCTION

Mark Debowski, P.E. will serve as **Project Manager**. Mark has extensive experiencing managing the design of arterial highway projects in Maine. He managed the Route 100 design in Falmouth and is personally enthusiastic about the possibility of continuing highway work in Falmouth. Mark takes a high level of responsibility for project management and has never missed a deadline or exceeded budget on a project under his management. Mark recently completed an MBA as part of his commitment to learning and further developing his skills.

Steve Babalis, P.E. will serve as **Project Engineer**. Steve excels in developing unique and practical engineering solutions with his traits of creativity and inquisitiveness. Steve's expertise in geometric design, traffic analysis and design, and drainage design gives him a wholistic and often unique perspective on design challenges. Mark and Steve have worked closely on dozens of projects for six years including Route 100 in Falmouth.

Tim Whitney, P.E. will serve as **Highway Engineer**. Tim has developed a broad expertise in three-dimensional design and modeling for transportation projects, leading to detailed cost estimates. Tim has worked closely with Mark and Steve on highway projects in New England for five years and served as highway engineer for the Route 100 project in Falmouth.

This core team of three will be supported by GPI environmental, landscape, structural, and right-of-way specialists who will provide their expertise to the project team. The GPI team will also be assisted by two subconsultants, Titcomb Associates and Terra Magna Services, Inc. (TMSI).

Titcomb Associates will provide survey and property research. The company was founded in 1969 by Robert P. Titcomb and is carried on today by his son, David E. Titcomb. Over the past 50 years Titcomb Associates has been engaged in all aspects of land surveying, including boundary location, topography, hydrography, site development, route and corridor surveys, Global Positioning System (GPS) applications, and 3D Terrestrial LiDAR (scanning). The company's client list includes federal, state, municipal, industrial, commercial and private entities, reflecting the breadth of experience, and diversity and talents, that have made the company a leader in the surveying profession. Titcomb Associates is located in Falmouth and worked with the project team described above on the Route 100 project.

Terra Magna Services, Inc. (TMSI) will provide lighting design and utility coordination. TMSI and its predecessor firm, Casey & Godfrey Engineers, have provided services to the Maine Department of Transportation continuously since 1989 for hundreds of projects for the Highway Program, Bridge Program, and Multimodal Program. Services include highway and roundabout design, lighting design, traffic signal design, highway signing design, utility coordination, and right-of-way research and mapping. The firm currently has a staff of five and is located in Gardiner, Maine. TMSI worked with the project team to develop the lighting design for the Route 100 project.

Resume

Mark J. Debowski, P.E.

Assistant Vice President/Director of Highway Engineering

**Professional Profile**

Mr. Debowski manages GPI's Bedford, New Hampshire office and leads GPI's highway design in Northern New England. Mr. Debowski has extensive experience in highway design on various roadway and interstate highway projects throughout the Northeast. He has worked as a consulting engineer with the Departments of Transportation in New Hampshire, Maine, Massachusetts, Pennsylvania, Illinois and New York on highway, multimodal, and bridge projects. Mr. Debowski has a unique skill set, combining his passion for engineering with a practical approach and strong sense of community and place. As a result, he successfully manages projects, ensuring proper progress without sacrificing quality of design and balancing stakeholder interests.

**PROPOSED PROJECT
ASSIGNMENT: Project Manager****EDUCATION:**

MBA/2020
ThM/2005
MDiv/2005
BS/2000/Civil Engineering
BA/2000/Liberal Arts/Engineering

REGISTRATIONS:

2005/Professional Engineer/ME #10940
2006/Professional Engineer/PA #73762
2012/Professional Engineer/NH #13899
2018/Professional Engineer/MA #40086

YEARS WITH FIRM: 1**TOTAL YEARS' EXPERIENCE: 15****COURSEWORK/TRAINING:**

NHDOT LPA Certification #1900
MaineDOT LPA Certification
MaineDOT ADA Compliance (Co-Taught) / 2019
TRB Geometric Highway Design Process for the 21st Century / 2017
FHWA Performance Based Practical Design / 2016
FHWA Intersection and Interchange Geometrics Workshop / 2016
FHWA 3D Engineered Models for Construction Workshop / 2014

Project Experience

Maine Route 100/26 Infrastructure Improvements, Falmouth, ME; 2015-2019. Project Manager. Provided design services for highway reconstruction and widening; proposed sewer, water, and natural gas; landscaping; lighting; sidewalk; bike lanes; and two signalized intersections for one of the largest LPA projects in the state. The project included a neighborhood planning study for the town. The goal of these infrastructure improvements is to create a neighborhood atmosphere and spur development. *Client: Town of Falmouth*

US Route 1, Falmouth, ME; 2013-2017. Highway Engineer. Repaving and adjusting lane use along Route 1 including the addition of shared use paths, signage, lighting, and placing utilities underground. Handled design exceptions with MaineDOT, quality control based upon MaineDOT standards, modifications to signing after construction, and undergrounding of utilities. *Client: Town of Falmouth*

Turnpike Street/Route 139 Reconstruction, Stoughton, MA; 2019-Present. Project Manager. Providing engineering design services for the reconstruction of a portion of Turnpike Street (Route 139) that has been sinking and shifting significantly due to a thick peat layer underground. The improvements include a pile supported buried structure to support the proposed highway and eliminate future settlement. *Client: MassDOT*

Route 4 Culvert Study, Enfield, NH; 2020. Project Manager. Provided an evaluation of alternatives to replace an open-bottom culvert in poor condition conveying the Huntoon Brook under US-4. The assessment culminated in an evaluation report that included bridge design alternatives; highway approach design alternatives; temporary traffic control analysis with detour, diversion, and alternating one-way traffic options evaluated; environmental considerations; and construction cost estimates of the alternatives. *Client: NHDOT*

Route 28 Corridor Reconstruction, Falmouth, MA; 2020. Project Manager. Designing improvements over three miles of state highway in an urban and

suburban environment to improve intersection operations and safety, provide complete streets design for multiple types of roadway users, and balance transportation improvements with the residential community concerns. Responsibilities include coordination with MassDOT, Town staff, and community members; design oversight; and quality control. *Client: Town of Falmouth, MA*

Route 38 Improvements, Canton-Milton, MA; 2019. Highway Design Lead. Providing comprehensive planning, design and construction phasing for a 10-mile portion of State Route 138 through the towns of Milton and Canton. The project focused on addressing known safety issues at several HSIP locations as well as providing a Complete Street approach to the corridor to provide enhanced mobility for pedestrians and bicyclists. The project explores buffered bike lanes, separate multi use sidewalks, traditional bike shoulders, and an assessment and reconstruction of 12 signalized intersections and a major highway interchange. Extensive planning and public outreach are anticipated as well as roadway drainage enhancements, structural retaining walls, environmental permitting and civil/highway construction and structural modifications to the Route 138 bridge over I-95. Responsible for conceptual design of intersections and highway interchange and public hearing participation. *Client: MassDOT*

Maine Route 4 Reconstruction, Madrid and Phillips, ME; 2016-2019. Project Manager. Four miles of highway reconstruction and widening along an important salmon spawning river. Optimized the roadway design to minimize impacts to the adjacent slopes and river. The project includes two realigned and reconstructed bridges. *Client: MaineDOT*

US Route 302 Reconstruction, Fryeburg, ME; 2016-2019. Project Manager. Developed urban design through the plan impacts complete stage including reconstructed pavement, sidewalk, on-street parking, traffic signals, and highway drainage. Employed practical design to minimize the number of proposed catch basins, match existing building sills, and create positive drainage. *Client: MaineDOT*

US Route 302 Reconstruction, Fryeburg and Bridgton, ME; 2014-2019. Project Manager. Twelve miles of full highway reconstruction and widening from the New Hampshire state line to the east to add paved shoulders, correct deficiencies in pavement structure, improve subsurface and surface drainage, and increase roadway and intersection safety, and increase ride quality. This project included the reconstruction and realignment of four bridges, numerous intersections, sidewalk, on-street parking, and drainage. *Client: MaineDOT*

US Route 1 On Ramp, Belfast, ME; 2015-2019. Project Manager. Reconstruction of on ramp to US Route 1 to improve safety (HSIP). Developed alternatives and brought preferred design to final design. Design included drainage, weaving analysis, lighting, overhead sign structure, and grading. *Client: MaineDOT*

Route 236 and Depot Road Intersection, Eliot, ME. 2014-2015. Project Manager. Preliminary design of intersection to widen the Route 236 intersection and reconfigure the Cedar Road approach. Developed alternatives for a two-lane roundabout and a widened signalized intersection with traffic signal. *Client: MaineDOT*

I-295 Bridge over I-95, West Gardiner, ME; 2017-2018. Lead Highway Engineer. Rehabilitating the Exit 103 Bridge over the Maine Turnpike in the Town of West Gardiner, Maine. Work includes bridge, abutment and pier widening, concrete deck replacement, substructure modifications and repairs, approach work and paving, guardrail, bridge rails and maintenance of traffic. *Client: Maine Turnpike Authority*

I-95 Exit 130 Northbound On Ramp, West Gardiner, ME; 2017-2018. Project Manager. Conceptual plan design, traffic study, memo, and estimate for on-ramp widening from one to two lanes and extending acceleration area and taper. *Client: Maine Turnpike Authority*

New I-95 Interchange (Exit 124), Waterville and Sidney, ME; 2015-2017. Project Manager. New full-service interchange funded by a public-private partnership to spur economic development. Performed design in accelerated manner to meet DOT budgetary deadlines. Developed pier protection on I-95 and designed interchange to accommodate future widening of Trafton Road. *Client: MaineDOT*

Resume

Steven J. Babalis, P.E.

Project Manager



Professional Profile

Mr. Babalis is a motivated engineer with over 14 years of experience as a transportation engineer working on a variety of highway projects. With his depth of experience in traffic engineering and geometric design, he plays a pivotal role in project development and conceptual design for roadways and intersections. Mr. Babalis excels at developing innovative solutions to complex problems. He has a passion for expanding engineering knowledge and applying good engineering judgment to develop practical design solutions. Mr. Babalis is experienced at delivering presentations to multidisciplinary audiences, often involving explaining complex concepts to non-technical audiences.

Project Experience

PROPOSED PROJECT ASSIGNMENT: Project Engineer

EDUCATION:

BS/2006/Civil Engineering

REGISTRATIONS:

Professional Engineer/NH #13310

YEARS WITH FIRM: 1

TOTAL YEARS' EXPERIENCE: 14

COURSEWORK/TRAINING:

MTJ Engineering Roundabout Training Workshop/2017
NHI Intersection Safety Workshop/2014
NHI Road Safety Design/2013
HSM Safety Analyst Training/2012
FHA Safety Analysis of Freeways and Interchanges/2012
FHA Highway Safety Manual Practitioner Guide for Multi-lane Urban and Suburban Workshop/2011
NHI Highway Design: Applying Flexibility & Risk Management/2011
NHI Low Cost Safety Improvements: A Practitioner's Workshop/2010
NHI Safety and Operational Effects of Geometric Design Features/2009
NHI Fundamentals of Planning, Design and Approval of Interchange Improvements to the Interstate System/2008
NHI Road Safety Audits/Assessments/2008
NHI Access Management, Location and Design/2007
NHI Advanced Work Zone Management and Designs/2007
NHI Roundabout Design/2007

Route 100/26 Infrastructure Improvements, Falmouth, ME; 2015-

2019. Project Engineer. The project involved highway reconstruction and widening with complete street practices that improved experience for all road users including reconstructing two signalized intersections. The project included a neighborhood planning study for the town, and the goal of these infrastructure improvements is to create a neighborhood atmosphere and spur development. Responsible for design of roadway, drainage, traffic operations, and signals. Developed plans, estimate and specs. *Client: Town of Falmouth*

Route 38 Improvements, Canton-Milton, MA; 2019-Present.

Project Engineer. Providing comprehensive planning, design and construction phasing for a 10-mile portion of State Route 138 through the towns of Milton and Canton. The project focused on addressing known safety issues at several HSIP locations as well as to provide a Complete Street approach to the corridor to provide enhanced mobility for pedestrians and bicyclist. Extensive planning and public outreach is anticipated as well as roadway drainage enhancements, structural retaining walls, environmental permitting and civil/highway construction and structural modifications to the Route 138 bridge over I-93. The installation of single and multi-lane roundabouts is included in the intersection treatment alternatives review. Responsibilities include overseeing the preliminary design and traffic analysis of the project. *Client: MassDOT*

Sam Turner Roundabout, Falmouth, MA; 2019-Present.

Project Engineer. Developing preliminary and final design and construction documents for the design of a multilane roundabout at the intersection of Route 151, Sam Turner Road, Boxberry Hill Road and Cloverfield Way. *Client: Town of Falmouth, MA*

US Route 4 Culvert Replacement Study, Enfield, NH; 2020.

Project Engineer. Provided an assessment of an open-bottom culvert conveying tributary to the Mascoma River under US-4 in poor condition as part of the Route 4 highway project. *Client: NHDOT*

US Route 302 Reconstruction, Fryeburg, ME; 2016-2019. Project Engineer. Developed urban design through plan impacts complete including reconstructed pavement, sidewalk, on-street parking, Portland Street intersection traffic signals, and drainage. Single lane roundabout concept was investigated at the intersection of US Route 302 and ME Route 5. Employed practical design to minimize the number of proposed catch basins, match existing building sills, and create positive drainage. *Client: MaineDOT*

US Route 1 On Ramp, Belfast, ME. 2015-2019. Project Engineer. Reconstruction of on ramp to US Route 1 to improve safety. Developed alternatives and brought preferred design to final design. Design included drainage, weaving analysis, lighting, overhead sign structure, and grading *Client: MaineDOT*

US Route 302 Reconstruction, Bridgton & Fryeburg, ME; 2014-2019. Project Engineer. Project involved 12 miles of highway reconstruction and widening to correct deficiencies in pavement structure, improve subsurface and surface drainage, and increase roadway safety and ride quality. This project included the reconstruction and realignment of two bridges over the Saco River overflow. *Client: MaineDOT*

Exit 44 and I-295 Open Road Tolling Conversion, Scarborough, ME; 2017. Highway Design Engineer. Performed the preliminary design of alignments/profiles and roadway geometrics for I-295 open road tolling conversion project in Scarborough. Work consisted of replacing the existing toll plaza, construction of two northbound and two southbound open road tolling (ORT) lanes and two northbound and two southbound cash/E-ZPass lanes. *Client: Maine Turnpike Authority.*

New I-95 Interchange (Exit 124), Waterville and Sidney, ME; 2015-2017. Project Engineer. New full-service interchange funded by a public-private partnership to spur economic development. Performed design in accelerated manner to meet DOT budgetary deadlines. Developed pier protection on I-95 and designed interchange to accommodate future widening of Trafton Road. *Client: MaineDOT*

US Route 202 over I-95 Bridge Rehabilitation, Augusta, ME; 2017-2019. Project Engineer. The project proposed rehabilitating the US Route 202 bridge over I-95 at Exit 109. US Route 202 is the principal entrance to the State of Maine's capital city and is a crucial lifeline for the City's commerce. The bridge resides within a unique interchange layout that results in a complicated construction staging design. The preliminary design involved evaluating multiple detour alternatives, which included temporary ramp connections to the interchange. *Client: MaineDOT*

I-295 Bridge over I-95, West Gardiner, ME; 2017-2018. Project Highway Engineer. The project consisted of rehabilitating the Exit 103 Bridge over the Maine Turnpike in the Town of West Gardiner. The project was designed to be compatible with the future open road tolling installation south of the project. The work zone traffic control consisted of multiple construction stages while maintaining two travel lanes. The proximity of the interchange with I-95 to the north required it to part of traffic control plans. *Client: Maine Turnpike Authority.*

Maine Route 4 Reconstruction, Madrid and Phillips, ME; 2016-2019. Project Engineer. The project consisted of four miles of highway reconstruction and widening along a vital salmon spawning river including reconstruction of two bridges. Work zone traffic was maintained for the construction of the two bridges via a temporary bridge with alternating one-way traffic control. *Client: MaineDOT*

Exit 32, I-95/I-195 Interchange Improvements Study, Saco, ME; 2018-2019. Highway Design Engineer. Performed highway design for I-95/I-195 Interchange Improvements Study in Saco. Phase I contract currently under consideration from study findings. *Client: Maine Turnpike Authority*

Resume

Timothy Whitney, P.E.
Project Engineer**Professional Profile**

Mr. Whitney is a versatile project engineer with over 7 years of civil engineering experience. He is experienced in construction oversight, highway design, municipal roadway work and utility coordination. Mr. Whitney is also proficient in AutoCAD, Civil3D, Microstation, InRoads, and Microsoft Office.

Project Experience

Route 100 Reconstruction, Falmouth, ME; 2017-2019. Assistant Engineer for the Route 100 reconstruction project. The project involves reconstructing the Route 100 from Leighton Road to 200' north of Libby Bridge, adding pedestrian facilities to Leighton Road, Falmouth Road and Route 100, and intersection improvements. The purpose of the project is to replace the existing concrete roadway with a complete street for vehicular, pedestrian and bicycle traffic. Aided in the public hearing process, utility coordination and plan set production. *Client: Town of Falmouth, ME*

Route 4 Reconstruction, Madrid-Phillips, ME; 2017. Assistant Engineer for the Maine State Route 4 reconstruction project that included 4 miles of highway reconstruction and widening along the Sandy River. Assisted with the plan set production and cost estimate for the project. *Client: MaineDOT*

Route 302 Reconstruction, Fryeburg, ME; 2016. Assistant Engineer. The project involves reconstructing and rehabilitating 5.7 miles of US 302 from the New Hampshire border towards the Town of Bridgton to improve subsurface and surface drainage, increase road safety and ride quality, and correct deficiencies in pavement structure. Assisted in the plan set production and project cost estimate. *Client: MaineDOT*

US Route 302 Reconstruction, Fryeburg, ME; 2016-2019. Highway Engineer. Developed urban design through the plan impacts complete stage including reconstructed pavement, sidewalk, on-street parking, traffic signals, and highway drainage. Employed practical design to minimize the number of proposed catch basins, match existing building sills, and create positive drainage. *Client: MaineDOT*

Trafton Road Interchange, Waterville, ME; 2015. Assistant Engineer for the Trafton Road interchange project. The project involves constructing a new half clover leaf interchange on I-95 in Waterville ME. Work includes intersection improvements on Trafton and West River Road, drainage design, highway design, guardrail design, traffic analysis, and public participation. Aided in the plan production and cost estimate. *Client: MaineDOT*

Turnpike Street Reconstruction, Stoughton, MA; 2019-Present. Project Engineer. Providing PS&E engineering design and construction services for the reconstruction of a portion of Turnpike Street (Route 139) from the Pleasant Street intersection northerly for approximately 1,000 feet. The improvements enhance safety conditions, maintain pedestrian and bicycle amenities, meet current ADA standards and offer a permanent solution to

**PROPOSED PROJECT
ASSIGNMENT: Highway Engineer****EDUCATION:**

BS/2013/Civil Engineering

REGISTRATIONS:

*Professional Engineer/NH #15563
NH LPA Certification*

YEARS WITH FIRM: 1

TOTAL YEARS' EXPERIENCE: 7

eliminating future settlement and lateral wall movement. Work also involves environmental permitting, preparation of all contract documents, preliminary right of way plans, a construction cost estimate and specifications, and participation in a Design Public Hearing. Responsibilities include investigating multiple options for constructing the new roadway and recommending a preferred option. Responsibilities also include attending meetings with both the MassDOT and the town of Stoughton and presenting the preferred option. *Client: MassDOT*

Route 38 Improvements, Canton-Milton, MA; 2019-Present. Project Engineer. Providing comprehensive planning, design and construction stages for a 10-mile portion of State Route 138 through the towns of Milton and Canton. The project focused on addressing known safety issues at several HSIP locations as well as to provide a Complete Street approach to the corridor to provide enhanced mobility for pedestrians and bicyclist. The project explores buffered bike lanes, separate multi use sidewalks, traditional bike shoulders and an assessment and reconstruction of 12 signalized intersections. Extensive planning and Public Outreach is anticipated as well as roadway drainage enhancements, structural retaining walls, environmental permitting and civil/highway construction and structural modifications to the Route 138 bridge over I-95. Responsibilities include assisting in the design of the conceptual plans and conceptual cost estimates. *Client: MassDOT*

Route 4 Culvert Study, Enfield, NH; 2020. Project Engineer. Provided an assessment of an open-bottom culvert conveying tributary to the Mascoma River under US-4 in poor condition as part of the Route 4 highway project. The assessment looked at various hydraulic openings including ones to pass record storms and meet stream crossing guidelines to recommend the best solution. Profile modifications and traffic management were also included in the recommendations. The assessment determined whether the culvert should be replaced as part of the highway project or as a separate project and to assist in determining the final solution for the site. Responsibilities included assisting the hydrology and hydraulics team with the design of two different culvert options as well as the upstream and downstream channels. Responsibilities also included investigating traffic control options and producing preliminary construction plans. *Client: NHDOT*

Valley Cross Road Bridge Rehabilitation, Jackson, NH; 2019-2020. Project Engineer. Providing design services for the rehabilitation of the Municipal "Red Listed" bridge carrying Valley Cross Road over Wildcat Brook in the Town of Jackson. The primary goal of this project is to remove the bridge from the Municipal State Red List as a Municipally Managed State Bridge Aid Program Project. The anticipated bridge solution is a beam bridge that is supported on the existing abutments with wingwall replacements. The new superstructure includes a concrete deck and incorporates bridge railing, sidewalk, and curbs. The existing non-structural truss is being refurbished and reattached. The existing pedestrian railing will be replaced with similar railing meeting safety requirements. Responsibilities included furthering the conceptual design, plans, and estimate to a 25% design submission. *Client: Town of Jackson*

Route 302 & NH Route 10 over I-93 Bridge Rehabilitation, Littleton, NH; 2019. Project Engineer. Providing design and construction services relative to the preservation and maintenance of the Bridge. No. 187/065 that carries US Route 302 & NH Route 10 over I-93 in Littleton, NH. The primary goal of this project is to maximize the service life and minimize the life cycle costs of the bridge to remain efficiently in service in the transportation network. The bridge is a steel beam/concrete deck three-span superstructure supported by concrete abutments and piers. The bridge preservation will include strip seal expansion joint replacements at the abutments, partial depth deck and substructure repairs, removal/reconstruction of backwall and stubwall construction, replacement of membrane and pavement. Responsibilities include assisting in plan production of construction documents. *Client: NHDOT*

MA-24 and MA-140 Interchange, Taunton, MA; 2018-2019. Project Engineer. Redesign of the Route 24 and Route 140 interchange in Taunton. Tasked with designing various highway design items as well as incorporating them into the 3D model in AutoCAD Civil3D. *Client: MassDOT*

Mascoma River Greenway, Lebanon, NH; 2017. Project Engineer for the Central Segment of the City of Lebanon's planned Mascoma River Greenway. The project is a 2-mile section of new rail trail, including improvements to 4 bridges. Responsible for the development of plan set production as well as aiding in environmental permitting. *Client: City of Lebanon, NH*

Exit 44 On Ramp, Scarborough, ME; 2017. Assistant Engineer for the widening of the Exit 44 Southbound on Ramp on I-95 in Maine. Tasked with updating the design to minimize the amount of proposed guardrail needed for the project while also limiting wetland impacts. Also developed the traffic control plans for this project. *Client: Maine Turnpike Authority*

TEAM'S MAINE ARTERIAL PROJECT EXPERIENCE

Mark Debowski has worked on arterial highway projects in the State of Maine, primarily for MaineDOT, since 2001. He has worked closely with Steve Babalis and Tim Whitney on these projects for the last five years, with another firm, until July 2019 when they joined GPI together. The following recent projects are included in this team's experience.

Maine Route 100/26 Infrastructure Improvements, Falmouth, ME; 2015-2019. Highway reconstruction and widening; proposed sewer, water, and natural gas; landscaping; pedestrian lighting and crossings; sidewalk; bike lanes; stormwater treatment; and two signalized intersections. The project included a neighborhood planning study for the town and extensive coordination with abutting property owners. *Client: Town of Falmouth (Mark, Steve, Tim)*

US Route 1, Falmouth, ME; 2013-2017. Repaving and adjusting lane use along Route 1 including the addition of shared use paths, medians, a continuous two-way left-turn lane, signage, landscape, street and pedestrian lighting, pedestrian crossings, stormwater treatment, and access management. Three signalized intersections were improved, and utilities were placed underground. *Client: Town of Falmouth (Mark)*

Maine Route 4 Reconstruction, Madrid and Phillips, ME; 2016-2019. Four miles of highway reconstruction and widening along an important salmon spawning river. Optimized the roadway design to minimize impacts to the adjacent slopes and river. The project includes two realigned and reconstructed bridges. *Client: MaineDOT (Mark, Steve, Tim)*

US Route 302 Reconstruction, Fryeburg, ME; 2016-2019. Developed urban design of 1.2 miles of highway through the plan impacts complete stage including reconstructed pavement, sidewalk, on-street parking, traffic signals, and highway drainage. Employed practical design to minimize the number of proposed catch basins, match existing building sills, and create positive drainage. *Client: MaineDOT (Mark, Steve, Tim)*

US Route 302 Reconstruction, Fryeburg and Bridgton, ME; 2014-2019. Two separate projects totaling twelve miles of full highway reconstruction and widening from the New Hampshire state line to the east to add paved shoulders, correct deficiencies in pavement structure, improve subsurface and surface drainage, and increase roadway and intersection safety, and increase ride quality. This project included the reconstruction and realignment of four bridges, numerous intersections, sidewalk, on-street parking, and drainage. *Client: MaineDOT (Mark, Steve, Tim)*

US Route 1 On Ramp, Belfast, ME; 2015-2019. Reconstruction of on ramp to US Route 1 to improve safety. Developed alternatives and brought preferred design to final design. Design included drainage, weaving analysis, lighting, overhead sign structure, and grading. *Client: MaineDOT (Mark, Steve)*

New I-95 Interchange (Exit 124), Waterville and Sidney, ME; 2015-2017. New full-service interchange funded by a public-private partnership to spur economic development. Performed design in accelerated manner to meet DOT budgetary deadlines. Developed pier protection on I-95 and designed interchange to accommodate future widening of Trafton Road. *Client: MaineDOT (Mark, Steve, Tim)*

Route 236 and Depot Road Intersection, Eliot, ME. 2014-2015. Preliminary design of intersection to widen the Route 236 intersection and reconfigure the Cedar Road approach. Developed alternatives for a two-lane roundabout and a widened signalized intersection with traffic signal. *Client: MaineDOT (Mark)*



TERRA MAGNA SERVICES, INC.

NAME: Albert L. Godfrey, Jr., P.E.

TITLE/CLASSIFICATION: President/Project Manager

EDUCATION:

Bachelor of Science, Civil Engineering, University of Maine, Orono 1976

Graduate Studies in Business Administration, University of Southern Maine, Portland 1983-1986

Graduate Studies in Civil Engineering, University of Texas, Austin 1984

Federal Highway Administration and ITE Seminars in Transportation Engineering 1979-2018

Advanced Roundabout Analysis and Design, Barry Crown Seminar, Honolulu, Hawaii 2008

YEARS WITH FIRM: 14 (Company founder)

PROFESSIONAL LICENSES/CERTIFICATIONS:

Maine Registered Professional Engineer # 4226 (exp. 12/31/21)

Maine Real Estate Broker # BR917359 (exp. 12/31/21)

IMSA Traffic Signal Design/Engineering Level II (exp. 2/23/21)

IMSA Traffic Signal Field Level II (exp. 4/10/21)

IMSA Traffic Signal Construction Level II (exp. 4/10/21)

RELEVANT PROJECT EXPERIENCE AND QUALIFICATIONS:

Mr. Godfrey is responsible for managing design, right-of-way, and utility coordination services provided by the firm. He has provided engineering consulting services to the Maine Department of Transportation continuously since 1989, first as Senior Partner of Casey & Godfrey Engineers, from 1989 to 2006, and since 2006 with his current firm TMSI Engineers. He also is the lead designer for highway lighting, bridge lighting and traffic signal projects of the firm. Representative recent projects have included:

- Lighting design and construction coordination for the Casco Bay Bridge and approaches in Portland and South Portland (2017-2019);
- Design, utility coordination and construction coordination for high mast interchange lighting at Interstate 295 Exit 22 in Freeport and at Interstate 95 Exit 227 in T2R8 (2017-2019);
- Design of urban reconstruction of Route 201 through downtown Hallowell (2015-2018);

Albert L. Godfrey, Jr.
President

Terra Magna Services, Inc.

- Design of signalization and intersection improvements, utility coordination and construction coordination for replacement of the Maine Avenue and Bridge Street bridges over Cobbossee Stream in Gardiner (2016-2019);
- Design of reconstruction and widening and construction coordination for 0.85 mile of State Route 111 in Arundel (2014-2019);
- Design of reconstruction and construction coordination for 1.5 miles of Route 7 in Dexter (2014-2018);
- Design of reconstruction and construction coordination for 0.5 mile of Route 27 in Belgrade Lakes village (2015-2019);
- Design of lighting and signing and construction coordination for the Park Street (Route 2) roundabout at the University of Maine entrance in Orono (2016-2018);
- Design, utility coordination and construction coordination for urban reconstruction of 1.0 mile of Park Avenue in Auburn (2014-2017);
- And numerous other bridge lighting, interchange lighting, and intersection safety projects around the state. He has been the lead designer of traffic signals for numerous projects for MaineDOT. He also provides services to MaineDOT for review of utility relocations, right of way mapping, and proposed deeds for conveyance of new right of way and easements to the State that are associated with development plans submitted for State permitting.

Current MaineDOT projects for which Mr. Godfrey is responsible include: design of 1.5 miles of U.S. Route 202 reconstruction in Manchester and Augusta; design of 1.9 miles of U.S. Route 1 reconstruction in Searsport; development of preliminary roundabout and signalization alternatives for the intersection of U.S. Route 2 with Routes 7 and 11 in Newport; design and utility coordination for high mast interchange lighting at Interstate 295 Exit 28 in Brunswick; traffic signal design for two intersections on Route 1 in Arundel; traffic signal design for the intersection of Routes 109 and 9A in Wells; traffic signal design and utility coordination for the intersection of U.S. Routes 2 and 201 in Skowhegan; highway design quality review services and traffic signal design, lighting design, and signing design for the BUILD grant project for reconstruction of major routes in downtown Waterville; lighting and signing design for the I-395 Route 9 Connector project in Brewer; design, right of way mapping and utility coordination services for development of pedestrian facilities on Civic Center Drive in Augusta; and design, utility coordination, and construction coordination for signalization and intersection improvements on State Road in West Bath.

2008 – Present **NAI The Dunham Group.** Mr. Godfrey is a licensed real estate broker with NAI/The Dunham Group commercial brokerage. Under contract with CMP, he was responsible for acquisition of over 100 parcels of land for the MPRP transmission project in central Maine. He continues to provide real estate brokerage services for private sector clients and utilities.

David E. Titcomb

Professional Land Surveyor

Mr. Titcomb has over 40 years of experience in land surveying, starting out as a rodman working summers for his father, Robert P. Titcomb. He became president and owner of Titcomb Associates in 1985.

Mr. Titcomb's primary responsibilities with the company include supervision of survey projects and management of the firm. He has been involved with a vast array of projects including subdivision and development work, first order control projects, existing conditions surveys, boundary and topographic surveys, construction surveys, and route surveys. He is a hands-on surveyor actively participating in the projects in which he is involved.

Mr. Titcomb is actively involved in the profession; he recently finished serving as a member on the Maine State Board of Licensure for Land Surveyors for 23 years (10 years as chairman). He has also served as Chairman of the Legislative Committee of the Maine Society of Land Surveyors, Chairman of the MSLS Education Committee and is Past President of the local MSLS Chapter. Mr. Titcomb has served as a court appointed commissioner to resolve a boundary dispute, has provided testimony as an expert witness in court proceedings, and was appointed by the State to serve on a committee to study continuing education requirements for land surveyors. He also currently serves as a member of the Visitors Advisory Board to the Surveying Engineering Technology Program at the University of Maine at Orono.

Education

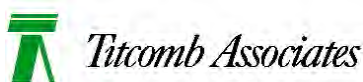
University of Maine, Orono, Maine
Bachelor of Science, Surveying Engineering - 1983

Registrations & Certifications

Maine Professional Land Surveyor #1273 (1984)
New Hampshire Licensed Land Surveyor #692 (1987)
Vermont Licensed Land Surveyor #691 (1998)
Transportation Worker Identification Credential (TWIC)

Professional Affiliations

Maine Society of Land Surveyors
New Hampshire Land Surveyors Association
Vermont Society of Land Surveyors
National Society of Professional Surveyors





Section C

Project Understanding

SECTION C:

Statement of Project Understanding

The Route 1 North Ad Hoc Committee, with assistance from VHB, developed a Route 1 North Vision Plan for 1.3 miles of Route 1 from the Falmouth Spur to the Cumberland town line. Among the components of the plan were recommendations for improvements to Route 1 and Johnson Road within the study area. The Town Council has approved preliminary engineering for these improvements to further refine project costs and provide information to determine next steps. These improvements will be designed in conformity to MaineDOT standards and procedures.

The recommended improvements for preliminary engineering, divided by section of roadway, elaborated upon in the scope section of the proposal, are as follows:

- **Route 1 – Falmouth Spur to Johnson Road:** Sidewalk, shared use path, bicycle lanes, street trees, lighting, sanitary force main upgrade, Metro bus stop improvements, and possible gateway improvements.
- **Route 1 and Johnson Road Intersection:** Auxiliary left turn lanes on Route 1, pedestrian and bicycle crossings, traffic signal modifications, and possible gateway improvements.
- **Route 1 – Johnson Road to Cumberland Town Line:** Shared use path, bicycle lanes, street trees, lighting, and possible gateway improvements.
- **Johnson Road – Middle Road to Route 1:** Sidewalk on the north side of the road to match MaineDOT's bridge project, street trees, and lighting.

Keys to project success will include the following:



Attention to Detail

- Accurate cost estimate, updated periodically to reflect current market conditions
- An accurate understanding of work needed (e.g. implications of moving roadway centerline, drainage, and two box culverts)



Creativity

- Innovative thinking that explores effective and cost saving options
- Ability to be nimble and adjust design to fit within budget constraints



Communication

- Effective coordination with MaineDOT to ensure design meets expectations
- Robust communication with abutting property owners to facilitate project understanding and trust
- Effective communication with the town citizens so that referendum voters understand the importance of the project
- Responsiveness and proactive communication with town staff so they are always well informed



Project Delivery

- On time
- Within budget
- High quality





Section D

Scope of Services, Approach, & Schedule

SECTION D:

SCOPE OF SERVICES & APPROACH

BASE SCOPE OF WORK

The scope of work below follows the Maine Department of Transportation (MaineDOT) project development process and elaborates upon the tasks listed in the RFP.

TASK 1 - EXISTING CONDITIONS PLAN, RIGHT-OF-WAY MAPPING, AND OUTREACH

1.1 Existing Conditions Plan

Titcomb Associates, in coordination with GPI, will provide ground survey of existing conditions for the following areas:

- Route 1 from the Falmouth Spur (I-495) to the Cumberland town line, within the existing right-of-way.
- Johnson Road from Middle Road to 100 feet past Route 1, from the southern edge of pavement to the right-of-way limit on the north side of the road, not including the bridge over I-295.

The following features will be located:

- Underground and overhead utilities (marked by others).
- Contours will be developed at one-foot contour intervals.
- Significant site features to be located include (but are not limited to): edge of pavement/gravel, curbing, striping, walls, drives, signs, poles, fences, mailboxes, buildings, and significant vegetation.
- Rim and invert elevations, pipe size, and pipe material for drain and sewer structures.
- Existing right-of-way lines.
- Abutting property owner information and approximate property lines based upon title reports received from MaineDOT, current deed descriptions, recorded plans, and tax maps.
- Environmental resources.

The survey work will be based on the Maine State Plane Coordinate System in conformance with the current horizontal and vertical datums established by MaineDOT. Existing conditions plans will be prepared in accordance with MaineDOT computer drafting standards in MicroStation format. Since Maine DOT has not completed any significant survey work in the area recently, we anticipate a full survey along the entire project length.

1.2 Preliminary Right-of-Way Plans

GPI will plot proposed permanent and temporary takings for easements and/or right-of-way, including dimensions and areas for every affected parcel within the project limits. These right-of-way impacts will be used to develop schedule and budget based upon the PDR-level design.

1.3 Outreach

GPI's project manager will personally contact each abutting property owner along the project with the potential of property impacts due to the project. The project manager will discuss the project and gauge receptivity regarding proposed right-of-way impacts. The project manager will document outreach and property owner communication and present a summary document to the town.

1.4 Environmental Coordination and Mapping

GPI will conduct preliminary coordination with the Maine Department of Environmental Protection, the US Army Corp of Engineers, and the Town of Falmouth to understand permitting and design requirements within the project limits. Understanding these requirements during preliminary design will allow a more accurate construction cost estimate to be developed. In particular, the culvert requirements at the stream crossings of Mill Creek at Route 1 and Chenery Brook at Johnson Road will be clarified. GPI will also coordinate with a subconsultant for environmental resource mapping.

1.5 Utility Coordination

TMSI, in coordination with GPI, will complete the required utility coordination for PDR-level design.

TASK 2 - PRELIMINARY DESIGN PLANS

The goal of preliminary design is to determine an accurate construction cost for the project. This accuracy will ensure that the project cost put before the voters will be a reasonable estimate of actual construction cost.

2.1 Field Visits

GPI will conduct field visits to understand existing conditions, evaluate design alternatives, assess culvert conditions, and investigate right-of-way impacts.

2.2 Meetings

GPI will attend all required meetings with no cap on the total of number of meetings included in the scope for preliminary design. GPI will prepare necessary materials for the meetings and submit to the town staff a summary of action items for each of the meetings. Meetings include the Route 1 North Committee, MaineDOT, town staff, and public meetings.

2.3 Highway Design Requirements (HDR) Forms

GPI will complete the Maine DOT HDR forms for US Route 1 and Johnson Road and gain approval from MaineDOT for US Route 1 and approval from the town for US Route 1 and Johnson Road. These forms identify the required standards with their references and document whether these required standards will be met in the design. HDR forms will be completed for:

- US Route 1 – Urban Major Collector; Corridor Priority 3 (State Aid – MaineDOT Jurisdiction)
- Johnson Road - Local Road; Corridor Priority 6 (Town Jurisdiction)

2.4 Horizontal Alignments

Horizontal alignments direct the path of the roadway in the horizontal direction and are the backbone of a roadway design model. We anticipate that the proposed horizontal alignments will match the existing roadway centerlines. The existing horizontal alignments will be evaluated to determine whether the horizontal curves meet the minimum radius, curve length, and sight line offset requirements. Existing roadway superelevation rates and transitions at horizontal curves will also be checked to ensure they meet minimum design requirements.



Innovative Idea

The Route 1 North Vision Plan proposes shifting the roadway centerline of Route 1. GPI believes there may be unintended cost consequences with this approach and would like to discuss a revised approach that may save the town significant cost and performance issues.

2.5 Vertical Alignments

Vertical alignments direct the path of the roadway in the vertical direction. We anticipate that the proposed vertical alignments will match the existing roadway elevations. The existing vertical alignments will be evaluated to determine whether the vertical alignments meet maximum and minimum grade requirements; to ensure that superelevation transitions in combination with vertical curves do not create a poorly drained roadway; and to evaluate whether the vertical curves meet the minimum length of curve, stopping sight distance, headlight sight distance, and comfort criteria.

2.6 Sidewalk and Shared Use Path Layout

GPI will evaluate the sidewalk and shared use path layout on Route 1 and Johnson Road as presented in the Route 1 North Vision Plan and will present design location options to the town staff and Route 1 North Committee for consideration. GPI's evaluation will include construction cost, environmental impact, property impact, and other appropriate considerations.



Innovative Idea

GPI would like to discuss a shared use path layout that may significantly reduce wetland impacts.

2.7 Pavement Design

GPI will coordinate with MaineDOT for Route 1 and Johnson Road pavement design.

2.8 Typical Sections

GPI will develop typical sections for each roadway segment that illustrate travel lane and shoulder widths, normal roadway cross slopes, superelevated roadway grading, typical side slopes, pavement design, loam location and depth, sidewalk and shared use path type and locations, and curb type and location.

2.9 Design Exceptions

At the earliest possible point in the design process, design exception requests will be prepared and submitted to MaineDOT for approval for the US Route 1 design. Design exceptions will be sought to minimize impacts to private property and environmental resources.

2.10 Driveways and Access Management

Each driveway and entrance being impacted by the design along Route 1 and Johnson Road will be evaluated, and a proposed horizontal and vertical design will be developed according to MaineDOT and Town of Falmouth standards as applicable. The design of driveways and entrances in plan view will consist of alignment, width, radii, surface type, and extent of impact. Driveways will also be designed in profile view for an accurate understanding of earthwork, grades, transitions, and tie-ins. Furthermore, driveways and entrances along Route 1 that require a design exception will be identified and the required design exception requests will be submitted to MaineDOT.

2.11 Intersection Design

GPI will provide horizontal and vertical layout of each intersection within the project limits. Intersection layouts will be checked for turning vehicle accommodation, right-of-way impacts, vehicle storage, turn lane layout, and intersection sight distance. Traffic signal equipment will be sized and located for accurate estimate purposes. Crosswalks and pedestrian signals will also be located. Traffic information from existing counts will be used for preliminary design.



Innovative Idea

GPI would like to discuss an intersection concept that may eliminate the need to widen Route 1 in the vicinity of Johnson Road while also creating a gateway opportunity.

2.12 Drainage Design

The addition of curbing along Route 1 and Johnson Road will cause a significant change to the flow of storm water within the project area and will be a large project cost due to the need for catch basins, outlets, upsized culverts, and storm water treatment. The first step in the design will be to develop a conceptual drainage plan, showing approximate locations and sizes for catch basins, pipe, stormwater treatment, and cross culverts. Finally, the drainage system, stormwater treatment areas, and culvert alternations will be designed to the extent that numbers, sizes, and locations are understood and can be accurately estimated.



Innovative Idea

GPI would like to discuss a proposed sidewalk and shared-use path concept along Route 1 that may reduce the need for a large closed drainage system and lower the overall project cost.

2.13 Sanitary Sewer Design

Preliminary design will be completed for upgrading the sanitary sewer force main along Route 1 south of Johnson Road from a 4-inch diameter main to an 8-inch diameter main.

2.14 Roadside Design

GPI will evaluate and provide design documentation for guardrail warrants within the project limits for both slope and fixed hazards. Guardrail limits will be established, and end types will be located and chosen. GPI will evaluate all objects (trees, boulders, ledge, poles, walls, drainage structures, fences) and steep slopes in the clear zone. Guardrail, removal, and design exception requests will be considered for each situation. Clear zone design exception requests will be submitted as necessary. Personal property removal will be noted in the design so discussions with property owners can take place. Vegetation clearing limit lines will be developed.

2.15 Retaining Walls and Slope Stabilization

GPI will evaluate the need for retaining walls and will provide conceptual design of needed walls including height, length, and location. The impact of each wall upon stopping sight distance and intersection sight distance will be evaluated.

Design will be provided for steep (1.5:1) embankments that will limit environmental and right-of-way impacts. The design will locate the size of the slope, the extent of impact, and the type of treatment for the steep slopes.

Geotechnical investigations, if needed, will be conducted during final design.

2.16 Metro Bus Stop Improvements

GPI will work with town staff and the Greater Portland Metro to determine the proper scope of proposed bus stop improvements. GPI will then provide preliminary design for these improvements.

2.17 Streetscape and Gateway Improvements

GPI, in coordination with TMSI, will develop and present preliminary street and pedestrian lighting (light fixtures, poles, and bases) options to the Town staff for discussion and selection. Factors in lighting selection will include fixture height, spacing, distribution patterns, cutoff, light color, minimum and maximum light levels, and aesthetics. Continuity with Route 1 South lighting is expected.

GPI will develop and present preliminary street tree and planting selection. Factors in street tree and planting selection will include cold hardiness, roadway tolerance, and maintenance needs. Continuity with the Route 1 South project is anticipated, though other options will be explored. Consideration will be given to preservation, relocation, and replacement of existing trees and plantings and personal property items of abutting landowners affected by the design. GPI will communicate with property owners to discuss design options.

GPI will evaluate and present options for gateway improvements at the north and south ends of the corridor and at the Johnson Road intersection in order to develop a preliminary design and cost.

2.18 Construction Cost Estimate

GPI will prepare a preliminary cost estimate by proposed item with quantity calculation backup. The estimate will also be divided so that the costs of standalone improvements are clear (e.g. Route 1 / Johnson Road intersection, sidewalk by roadway segment, shared use path by roadway segment, sanitary sewer force main).

2.19 Progress Reports

GPI will submit progress reports to the Town of Falmouth every two weeks in a format similar to those used for the Route 100 design project.

2.20 Quality Assurance / Quality Control

GPI will follow its internal Quality Assurance Plan and Maine DOT quality control checklists to review the design and estimate work. The quality control process involves a reviewer independent to the design who provides feedback to the design team.

2.21 Design Submittal Form and Checklist

GPI will complete the MaineDOT PDR submittal form and checklist, submitting them to the Town of Falmouth and MaineDOT for review.

2.22 PDR Plan Set

Following MaineDOT guidelines, GPI will develop a PDR plan set for submission to MaineDOT and the town.

2.23 Preliminary Design Report

Following the MaineDOT PDR report format, the document will be completed and submitted to the Town of Falmouth and MaineDOT.

2.24 Response to Comments

GPI will make changes to the design in response to comments from MaineDOT and the town.

POTENTIAL ADDITIONAL SCOPE OF WORK

TASK 3 - FINAL DESIGN PLANS AND SPECIFICATIONS

Final design will consist of detail design plan development, final construction cost estimating, and development of specifications. At this time the project is expected to be fully funded by the town and thus Local Project Administration (LPA) requirements do not apply..

3.1 Field Visits

GPI will conduct field visits to develop final design and investigate right-of-way impacts.

3.2 Meetings

GPI will attend all required meetings with no cap on the total of number of meetings included in the scope for preliminary design. GPI will prepare necessary materials for the meetings and submit to the town staff a summary of action items for each of the meetings. Meetings include: Route 1 North Committee, MaineDOT, town staff, public meetings, utility coordination, and environmental agencies.

3.3 Additional Survey

Titcomb Associates, in coordination with GPI, will provide additional ground survey of existing conditions needed to complete final design.

3.4 Property Owner Reports

Titcomb Associates, in coordination with GPI, will provide property owner reports in MaineDOT format for each property abutting the project corridor.

3.5 Traffic Counts

GPI will obtain traffic counts at the Route 1 / Johnson Road intersection for use in traffic analysis and intersection design at this intersection.

3.6 Geotechnical Investigations and Boring Logs

GPI will work with a subconsultant to obtain subsurface investigations that are needed for retaining wall, traffic signal, and large culvert design. Boring logs will be prepared for the plan set.

3.7 Special Details

GPI will develop special details not found in the MaineDOT standard details as needed to construct the project. An example of this detail is stormwater treatment.

3.8 General Notes

GPI will complete the needed general notes for the construction plan set. Standard MaineDOT notes will be included along with town-specific and project-specific notes.

3.9 Construction Notes

Construction notes will be provided on the plans and cross sections and construction note sheets as required by MaineDOT design standards.

3.10 Sign and Pavement Marking Plans

GPI will design signs and pavement markings for the project and present these on separate plan sheets.

3.11 Box Culvert Design

The modifications at the box culverts under Johnson Road and Route 1 will be designed.

3.12 Traffic Signal Design

GPI will develop signal timing, phasing, and equipment plans for the Johnson Road / Route 1 intersection.

3.13 Streetscape and Gateway Improvements

GPI will develop and present final street and pedestrian lighting, street tree, landscaping, and gateway options to the Route 1 North Committee for discussion and selection. Final design of each element will be completed.

3.14 Sanitary Sewer Design

Final design and details will be completed for upgrading the sanitary sewer force main along Route 1 south of Johnson Road from a 4-inch diameter main to an 8-inch diameter main.

3.15 Retaining Walls and Slope Stabilization

GPI will provide final design of retaining walls and slope stabilization. The results of the geotechnical investigations described above will inform the design.

3.16 Metro Bus Stop Improvements

GPI will continue work with town staff and the Greater Portland Metro to determine the proper scope of proposed bus stop improvements. GPI will provide final design for these improvements.

3.17 Design Submittal Forms and Checklists

GPI will complete the MaineDOT PIC and PSE submittal forms and checklists, submitting them to the Town of Falmouth and MaineDOT for review.

3.18 Construction Plan Sets

Following MaineDOT guidelines, GPI will develop PIC and PSE plan sets for submission to MaineDOT and the Town. The PIC plan set will delineate all impacts to private property and environmental resources and will identify all drainage outlets. The Final PSE plan set will be stamped and signed by the GPI project manager.

3.19 Final Drainage Design and Drainage Summary Sheet

GPI will finalize drainage details and calculations. GPI will complete the MaineDOT drainage summary sheet for inclusion in the construction plan set.

3.20 Construction Cost Estimate, Estimated Quantities Sheet, and Earthwork Summary Sheet

GPI will further refine the preliminary cost with quantity calculation backup and estimated unit prices for both PIC and PSE. The estimate will also be divided so that the costs of standalone improvements are clear.

3.21 Progress Reports

GPI will submit progress reports to the Town of Falmouth every two weeks in a format similar to those used for the Route 100 design project.

3.22 Quality Assurance / Quality Control

GPI will follow its internal Quality Assurance Plan and MaineDOT quality control checklists to review the design and estimate work. The quality control process involves a reviewer independent to the design who provides feedback to the design team.

3.23 Response to Comments

GPI will make changes to the design in response to comments from MaineDOT and the town for both the PIC and PSE submissions.

3.24 Final Specifications and Bid Documents

GPI will develop the specifications package including standard specifications and special provisions.

TASK 4 - PERMITTING AND COORDINATION

4.1 Environmental Permitting

GPI will complete the environmental permitting process as required in the for a project without federal money. GPI will prepare all necessary permit applications and attend regulatory meetings as necessary. The town will be responsible for permit fees. GPI is responsible for:

- Completing the Section 106 – Historic property process. Please note that this scope does not include the fees required for a qualified subconsultant for conducting an architectural survey. Due to the large possible variation in this scope, GPI feels that this scope and fee is best negotiated separately at the beginning of the final design process.
- Coordination with the Army Corp of Engineers for endangered species
- Obtaining all environmental permits
- Obtaining storm water permits
- Obtaining beneficial use permits

4.2 Utility Coordination

TMSI, in coordination with GPI, will complete the required utility coordination and the development of the utility special provision

4.3 Right-of-Way

Final design right-of-way services are not included in the scope per responses to questions during the RFP question period.

4.4 Amendments to Traffic Movement Permits and Site Plans

GPI will provide information for the amendments of traffic movement permits and site plans as requested by the town resulting from planned improvements as specified above.

TASK 5 - BID PROCESS

GPI will put the project out to bid including advertising, conducting a pre-bid conference, and responding to questions. GPI will review the construction bids submitted and will assist the town with bid selection.

SCHEDULE

This schedule assumes that survey work can be completed before significant snowpack in late 2020. It also assumes that a Horizontal and Vertical Alignments Complete milestone is not needed before the Draft PDR submission and review of the Draft PDR can be completed by the town and Maine DOT within six weeks and finalized by GPI within two weeks.

MILESTONE	LEAD ENTITY	DATE
Notice to Proceed	Town Manager	November 2020
Progress Reports	GPI	Every other Friday to Town of Falmouth
Draft PDR Plans and Cost Estimate	GPI	May 2021
Review Draft PDR	Town Staff & MaineDOT	June 2021
Final PDR Plans and Cost Estimate	GPI	July 2021
Preparation of Amendment of TIF District	Town Staff	July 2021
TIF Public Hearing	Town Council	August 2021
Submission of TIF Amendment to DECD	Town Staff	August 2021
Draft Referendum Question	Town Staff	August 2021
Authorize Referendum Question	Town Council	September 2021
Approval of TIF Amendment	DECD	September 2021
Referendum Vote	Falmouth Voters	November 2021

The following tentative schedule pertains to final design if authorized by the Town Council. It assumes that ROW takings and easements are needed on both Route 1 and Johnson Road.

MILESTONE	LEAD ENTITY	DATE
Notice to Proceed	Town Manager	February 2022
Draft Plan Impacts Complete Submission	GPI	June 2022
Review Draft Plan Impacts Complete Submission	Town Staff & MaineDOT	July-August 2022
Final Plan Impacts Complete Submission	GPI	September 2022
PS&E Draft Submission	GPI	June 2023
Review Draft PS&E Submission	Town Staff & MaineDOT	July-August 2023
PS&E Final	GPI	September 2023
Right-of-Way Certification	MaineDOT	September 2023 (12 months for Maine DOT ROW process from Final Plan Impacts Complete)
Utility and Environmental Certification	GPI	September 2023
Project Advertising	GPI	October 2023
Project Award	Town Manager	November 2023
Project Completion	Contractor	November 2024



Section E

Project Budget

SECTION E:

PROJECT BUDGET

The total project cost as an all-inclusive lump sum are as follows:

Base Scope (Tasks 1-2): \$138,000

Additional Scope (Tasks 3-5): \$146,000

The hourly rates for the project staff are as follows:

Role	Rate
GPI Project Director	\$170
GPI Project Manager	\$135
GPI Project Engineer	\$105
GPI Engineer	\$95
GPI Assistant Engineer	\$80
GPI Technician	\$85
TMSI Project Manager	\$125
TMSI Project Engineer	\$94
TMSI Junior Engineer / Technician	\$70
Titcomb Principal	\$100
Titcomb Professional Land Surveyor	\$90
Titcomb CADD Technician	\$75
Titcomb Survey Technician	\$70
Titcomb Researcher	\$60





Section F

References

SECTION F:

REFERENCES

Stephen Bodge

Assistant Highway Program Manager
Maine Department of Transportation
16 State House Square
Augusta, ME 04333-0016
Stephen.Bodge@maine.gov
207-441-6850

Bradford Foley

Highway Program Manager
Maine Department of Transportation
16 State House Square
Augusta, ME 04333-0016
Brad.Foley@maine.gov
207-624-3539

Aurele Gorneau, II

Senior Project Manager, Multimodal Program
Maine Department of Transportation
16 State House Square
Augusta, ME 04333-0016
Aurele.GorneauII@maine.gov
207-624-3553







Section G

Availability

SECTION G:

AVAILABILITY

Mark Debowski and other relevant personnel will be available to interview during the week of October 12, 2020.







Many Talents One firm

Greenman-Pedersen, Inc.
116 South River Road, Building B,
Suite 1
Bedford, NH
603-766-8259



www.gpinet.com